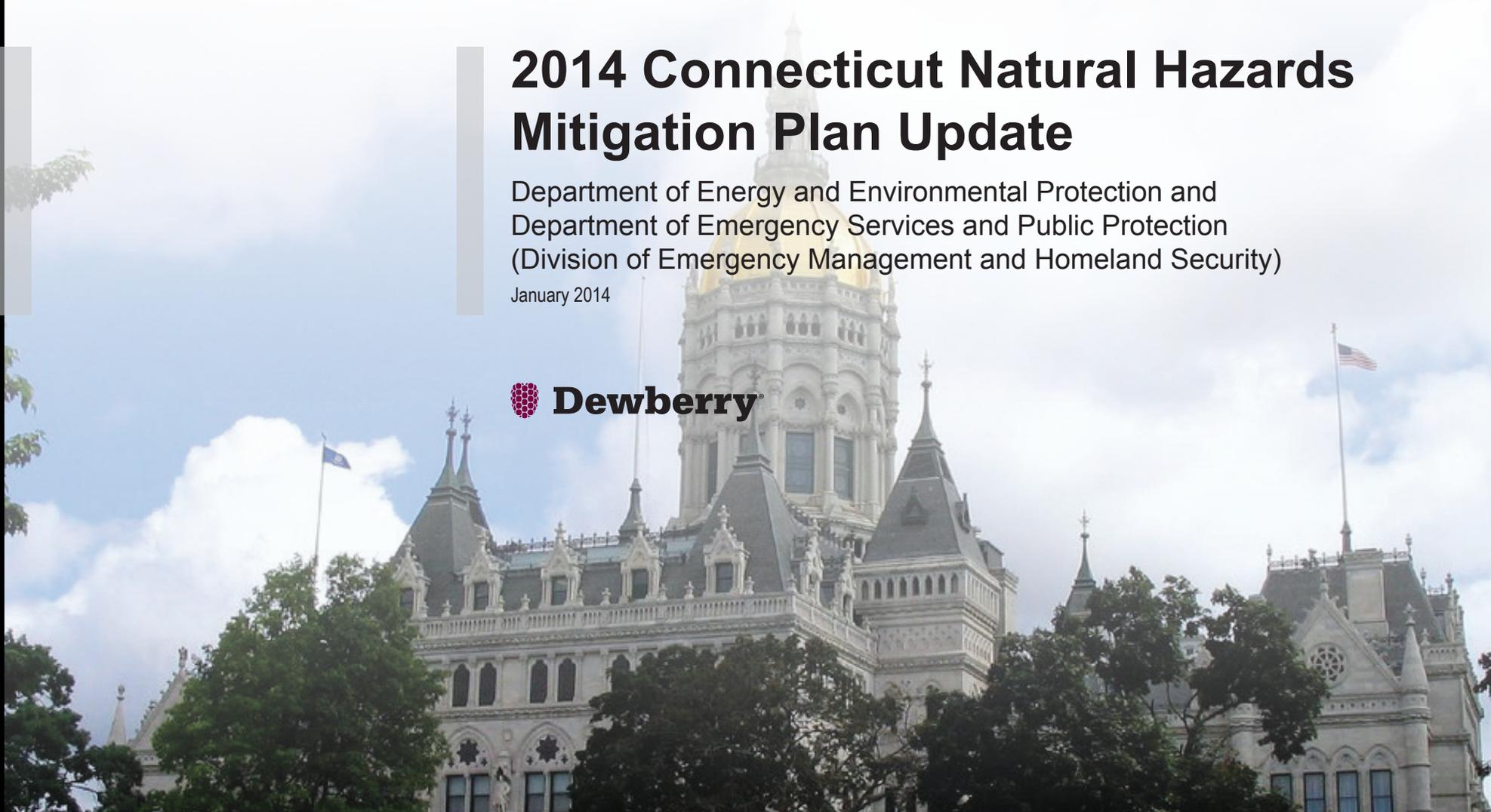




# 2014 Connecticut Natural Hazards Mitigation Plan Update

Department of Energy and Environmental Protection and  
Department of Emergency Services and Public Protection  
(Division of Emergency Management and Homeland Security)

January 2014





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## Executive Summary

The 2014 Connecticut State Hazard Mitigation Plan Update serves as guidance for hazard mitigation for the State of Connecticut. Its vision is supported by three central goals, each with an objective, a set of strategies and associated actions for Connecticut state government, stakeholders, and organizations that will reduce or prevent injury from natural hazards to people, property, infrastructure, and critical state facilities. Funding for this Plan was provided through a FEMA Hazard Mitigation Grant Program (HMGP) sub-grant (FEMA-DR-4023-CT-2P). This plan fulfills the standard state mitigation planning requirements (44 CFR §201.4) of the Disaster Mitigation Act of 2000 (DMA2000; Public Law 106-390, signed into law October 10, 2000). This plan was adopted by the State on and approved by FEMA on January 9, 2014.

## Planning Process

The development of this plan was led by the hazard mitigation staff at the Department of Energy and Environmental Protection (DEEP) and the Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security, with the assistance of Dewberry's consulting team. The Connecticut State Hazard Mitigation Planning Team (SHMPT) and a large group of stakeholders that include Connecticut state agencies, Federal government collaborators, Non-Governmental Organizations, and local representation attended four plan development meetings and provided comments on the plan draft. Staff from FEMA Region I's Joint Field Office (JFO) offices provided additional technical assistance and plan review. Public participation for the update of the Plan was primarily enabled through participation in an internet-based survey and posting of the Draft 2014 Connecticut State Hazard Mitigation Plan Update to DEEP's website.

## Natural Hazard Identification and Risk Assessment

The SHMPT identified natural hazards that threaten Connecticut and ranked them according to the relative extent of risk they pose to the lives and property of the state's residents and its economy. Vulnerability assessments and loss estimations, based on the history of occurrences and exposure, were developed to present an understanding of the potential impacts to the State from natural hazard events.

## Population

To fully understand the risks and potential impacts of natural hazard events, it is pertinent to understand the assets including facilities and population within the State that may be at risk. Section 2.2.2 presents a summary of Connecticut's demographics. The total state population estimate for 2012 was 3,590,347 people. Fairfield, Hartford, and New Haven have the greatest density of people per square mile. Two-thirds of the State's population and housing units are within Fairfield, Hartford, and New Haven counties.

## Facilities

The Connecticut Department of Administrative Services, Division of Construction Services provided available data on critical and state facilities. The assessed values for the buildings were derived from the JESTIR database. There are over 3, 300 state-owned facilities,



valued over \$8.7 billion. Hartford contains over 26% of the structures. There are over 1,400 identified critical facilities as presented in data files including law enforcement, fire stations, EMS, health departments, and correctional facilities and water pollution control facilities (WPCFs). Additionally, one nuclear power plant, Petroleum, Oil, and Lubricant (POL) terminals, storage facilities, and farms have been included as critical facilities. Fire stations account for 42% of the structures within the critical facilities dataset, followed by EMS (34%), and law enforcement (15%).

#### **Hurricane Sandy impacted:**

5 counties  
2 tribal nations  
12,380+ residents (registered for disaster assistance)  
\$11.5 million was approved for housing assistance  
\$32+ million was approved in low-interest disaster loans

### **Land Use and Development**

Existing and planned land use patterns greatly influence a community's hazard vulnerability. Future land use decisions should look at a community's potential hazards and vulnerability, and direct development towards those areas that are least vulnerable, creating a more disaster-resistant environment. Section 2.2.4 summarizes the current land use and development trends within Connecticut. The Center for Land Use Education and Research (CLEAR) at the University of Connecticut provides information, education, and assistance to land use decision makers, in support of balancing growth and natural resource protection. CLEAR provided a Statewide Land Cover map from 2006 which presents 12 different land cover types across categories such as developed land, forests, and grass. From 1985 to 2006 developed land increased almost 3% throughout the state and turf & grass increased 1.5%, while deciduous and coniferous forests decreased by 3.5% collectively. A significant amount of the development occurred along the shoreline, which is vulnerable to storm surge and flooding. Development also occurred along Route 91 in the center of the state and within denser municipalities. Based on the number of building permits issued in Connecticut, development slowed dramatically between 2007 and 2011.

### **Climate Change**

Climate change is both a present threat and an onsetting disaster. It acts as an amplifier of existing hazards. Extreme weather events have become more frequent over the past 40 to 50 years and this trend is projected to continue. Rising sea levels, coupled with potentially higher hurricane wind speeds, rainfall intensity, and storm surges are expected to have a significant impact on coastal communities. More intense heat waves may mean more heat-related illnesses, droughts and wildfires. This plan update includes discussions of how climate change is and will continue to impact the frequency, intensity and distribution of specific hazards. Several state-level committees and task forces have been established to address climate change and sea level rise issues. The progress of these groups is outlined in Chapter 3.

### **History of Natural Disasters**

Since 2010, Connecticut has experienced six major disaster declarations, while during the decade prior, the state had only experienced two major disaster declarations. There have been 19 State disaster declarations and 11 emergency declarations since 1954. These



disasters had significant impacts on Connecticut and its residents, such as loss of residences, property and possessions, loss of life and injury, lost wages and business revenue, in addition to psychological and sociological costs to disaster victims and their families. Historically, flooding has caused the most damage to the State and its citizens, along with recent wind and winter storm disaster events.

Section 2.3.1 presents a summary of disaster declarations in Connecticut including brief descriptions of major Disaster Declarations and Emergency Declarations since 2011. These include Winter Storm Nemo, Super Storm Sandy, Tropical Storm Irene, and several other weather events.

Section 2.3.2 details the records available within the National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC) database. NOAA has recorded an estimated 4,016 severe weather events for Connecticut in the NCDC storm events database, dating back to 1950. Since the 1950s, over 1.6 billion in property losses has been documented in NCDC. The majority of the documented damages are attributed to tornado, specifically in Hartford and New Haven counties. Thunderstorms represent 61% of the events within the database, followed by Winter Weather (20%) and Flood (15%). Litchfield has experienced the most events including thunderstorms, winter weather, and flooding. No losses have been recorded for drought.

### Review of Local Hazard Mitigation Plans

In preparation of this plan update, local hazard mitigation plans covering 156 communities were reviewed for three components: (1) identified hazards, (2) estimated potential losses, and (3) land use and development trends.

Estimations of potential losses were highly variable among the local plans. The majority of plans provided loss estimates based on historical damages from flooding, wind, or earthquake events. Table 2-13 summarizes the results.

Table 2-13. Local plan loss estimates by hazard type

Hazard Type	Total Loss Estimate	Number of Plans with Loss Estimates
1% Annual Chance Hurricane Wind	\$1,582,020,000	56
1938 Hurricane Wind (LCRVCOG)	\$4,181,000,000	17
1% Annual Chance Flood	\$3,137,146,000	53
Earthquake (Largest damage of four CT State Plan Scenarios)	\$6,248,160,000	47

A review of land use from the local hazard mitigation plans presents a closer look at where development is occurring across the state. Although Tolland and Windham Counties have largely remained rural, many of the other counties have seen development over the years



and may continue to see increased development moving forward. Many communities in Fairfield County are projecting that growth will occur near Metro-North stations, including Darien, Greenwich, New Canaan, Norwalk, Stamford, Weston and Westport. Additionally, it seems that there is growth in many towns like Easton and Fairfield, and although towns such as Fairfield are limiting development in natural hazard areas like the coast and, specifically, the Town of Monroe is looking to designate areas as open space, other communities, like the Town of Stratford, have indicated that growth has been directed to former industrial areas that are located within the coastal flood hazard area.

## Public Input

Public participation and input was gathered through an internet-based survey. Survey questions related to hazard identification and recent hazards events. Several important messages were provided by the survey responders. With equal emphasis, the top two messages are to:

- Address wind and snow damage to electrical lines that results in power outages, and
- Manage flood risk zones to reduce flood damage.

Responders would like the state, municipalities, and utilities to address wind and snow damage to electrical lines by requiring, facilitating, funding, encouraging, or accomplishing trimming of tree limbs, removal of trees, burying power lines, hardening power lines, and creation of microgrids and other redundancies. Responders would like the State and its municipalities to remove structures from flood zones, prevent new buildings in flood zones, and prevent rebuilding in flood zones after damage occurs. While many of the responders were speaking of inland and coastal flood zones, some of them chose to emphasize retreat from the shoreline. The public input was integrated into the development of state mitigation activities as presented in Chapter 5.

## Hazard Analysis and Ranking

A detailed hazard ranking methodology is presented in Section 2.6. This process incorporated 2010 population vulnerability, 2025 population projections, 2012 building permits, annualized events, annualized damages, injuries and/or deaths from previous events, local plan ranking, and geographic extent.

Section 2.7 contains descriptions of each type of natural hazard Connecticut may expect to experience. The descriptions include general information, past history, future risk and vulnerability. Supplemental information on past events and analysis is provided in Appendix 2.

The hazards determined to have a significant impact on the population and built environment of Connecticut are:

- **Thunderstorm related hazards**
  - High Wind
  - Severe Thunderstorm
- **Tropical Cyclone** (Hurricane and Tropical Storm)



- **Tornado**
- **Winter related hazards**
  - Blizzard
  - Freezing Rain
  - Ice Storm
  - Nor'easter
  - Sleet
  - Snow
  - Winter Storm
- **Flood related hazards**
  - Riverine Flooding
  - Coastal Flooding
  - Flash Flooding
  - Shallow Flooding
- **Sea Level Rise**
- **Wildland Fire**
- **Drought**
- **Earthquake**

Figure 2-69 depicts the results of the risk analysis. The composite ranking as shown, provides a tool for the State of Connecticut to prioritize appropriate mitigation actions within each county.

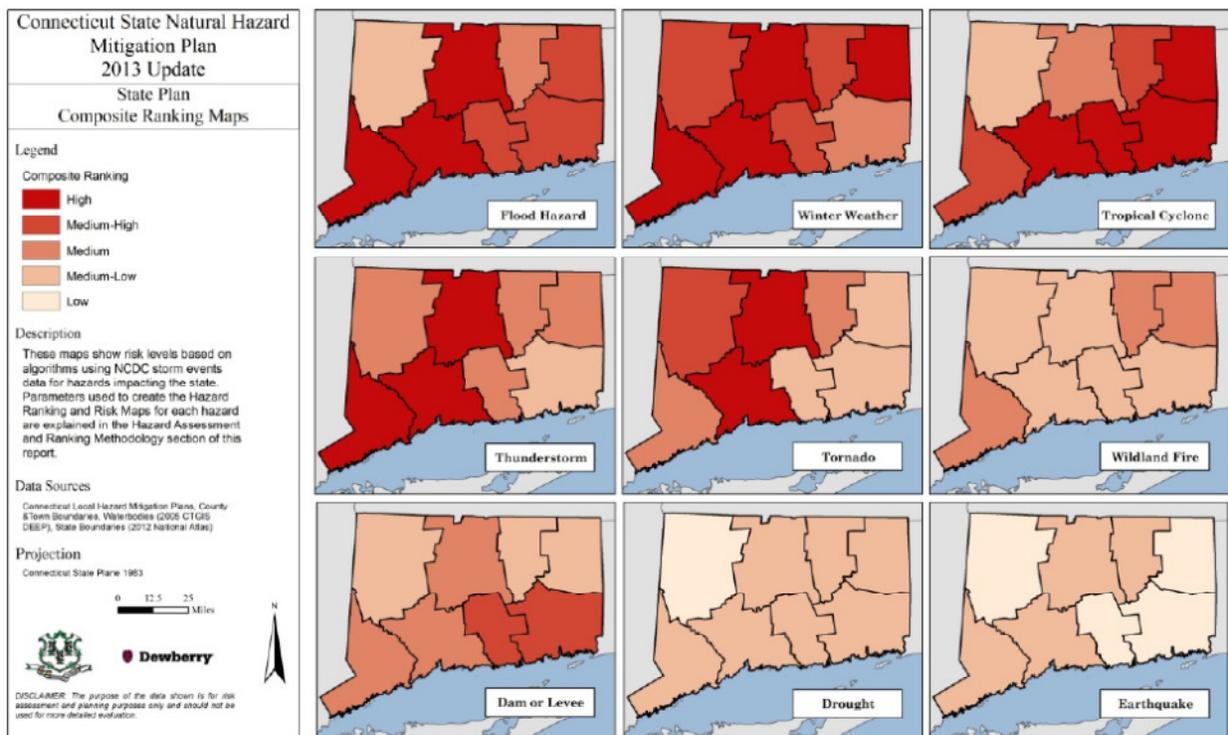


Figure 2-69. Composite hazard ranking maps, relative to Connecticut.



## Potential Losses and Anticipated Impacts

Based on information from the NCDC database, Connecticut has experienced over \$1.4 billion in property damages from the hazards profiled in this plan. The state can expect to experience approximately \$28,859,935 in annualized damages due to all the hazards that impact the State (excluding the NCDC hurricane events). Flooding and winter weather have the highest total annualized losses of the ranked hazards and together make up over 91% of the total NCDC annualized losses. Thunderstorm and winter weather occur the most frequently, at least 40 times a year statewide. Hartford and Litchfield can expect 8 thunderstorm related events in any given year while Fairfield and Litchfield will see over 5 flooding events per year.

## Capability Assessment

The State and local governments offer many policies, programs, and capabilities to support the implementation of mitigation actions. Chapter 3 presents in detail federal agencies, state agencies, and local agencies which continue to assist with mitigation and risk reduction activities across the State. This chapter outlines pertinent executive orders, programs, and policies at all levels of government which support the State's mitigation strategy. It also acknowledges capabilities available through utility providers, the University of Connecticut, The Nature Conservancy, Citizen Volunteer Organizations, and other groups such as the American Red Cross and the Salvation Army.

Some key committees and task forces established in recent years which support resiliency include:

- The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change (formed in 2008)
- The Governor's Two Storm Panel (formed in 2011)
- The Connecticut GIS Council's (now with the Office of Policy and Management) Storm Response and Recovery Assessment Group (formed in 2011)
- The Shoreline Preservation Task Force (formed in 2012)
- The State's Long-Term Recovery Committee (formed in 2012)
- The State Vegetation Management Task Force (formed in 2012)

Other new improvements to the state's capabilities in this regard include Risk MAP progress, updates to the State Building Code, and updates to the State Conservation and Development Policies Plan.

## Local Planning Coordination

The State of Connecticut continues to encourage and facilitate local planning efforts to ensure that local and multi-jurisdiction hazard mitigation plans are in place. Connecticut began assisting communities in the drafting of local hazard mitigation plans in 1997, utilizing Flood Mitigation Assistance (FMA) planning grant funds. The State of Connecticut's current approach is to work with regional planning organizations (RPOs) as frequently as possible to prepare multi-jurisdiction hazard mitigation plans. It is expected



that 100% of Connecticut communities will have a local plan in place by the time of the next State HMP update in 2016.

## **Hazard Mitigation Strategy for 2014**

During the 2014 plan update process, the State's planning team met on multiple occasions to discuss the goals, objectives, strategies, and activities required to minimize the identified natural hazard risks. Chapter 5 presents the detailed mitigation strategy which is based on the following goals and objectives. The complete mitigation strategy includes specific strategies for each goal as well as prioritized implementable actions.

**Goal 1** – Promote implementation of sound floodplain management and other natural hazard mitigation principals on a State and local level.

**Objective for Goal 1:** To increase general awareness of Connecticut's natural hazards and encourage State agencies, local communities, and the general public to be proactive in taking actions to reduce long-term risk to life and property.

**Goal 2** – Implementation of effective natural hazard mitigation projects on a state and local level

**Objective for Goal 2:** To enhance the ability of State agencies and local communities to reduce or eliminate risks to life and property from natural hazards through cost-effective hazard mitigation projects.

**Goal 3** – Increase research and planning activities for the mitigation of natural hazards on a state and local level

**Objective for Goal 3:** To increase general awareness of Connecticut's natural hazards and encourage State agencies, local communities, and the general public to be proactive in taking actions to reduce long-term risk to life and property.

## **Plan Monitoring, Maintenance, and Revision**

A Mitigation Action Tracker spreadsheet was created for tracking implementation of all new and "carry over" mitigation actions. Specific annual reporting and update targets have been established with firm due dates in the maintenance schedule presented in Section 6.2.3. Primary responsibility for plan monitoring and maintenance resides with the SHMO, within DEMHS. Standing, ad-hoc Mitigation Sub-Committees will be convened, surveyed or engaged periodically as necessary during the 2014–2016 plan implementation cycle.



## Acronym List

<b>Acronym</b>	<b>Definition</b>
ALERT	Connecticut Automated Flood Warning System
BFE	Base Flood Elevation
BOCA	Building Officials and Code Administration
C.G.S.	Connecticut General Statute
CAP	Community Assistance Program
CAV	Community Assistance Visit
CCMA	Connecticut Coastal Management Act
CEO	Council of Elected Officials
CFMA	Connecticut Floodplain Management Act
CFR	Code of Federal Register
CIHMC	Connecticut Interagency Hazard Mitigation Committee
CMI	Crop Moisture Index
COG	Council of Governments
CRREL	U.S. Army Cold Regions Research & Engineering Laboratory
CRVFCC	Connecticut River Valley Flood Control Compact
CT PHERP	Connecticut Public Health Emergency Response Plan
DEMHS	Connecticut Department of Emergency Management and Homeland Security
DAS	Department of Administrative Services
DCS	Division of Construction Services
DEMHS	Division of Emergency Management and Homeland Security
DEEP	Connecticut Department of Energy and Environmental Protection)
DESPP	Department of Emergency Services and Public Protection
DMA 2000	Disaster Mitigation Act of 2000
DOE	Connecticut Department of Education
DOH	Connecticut Department of Housing
DOT	Connecticut Department of Transportation
DPH	Connecticut Department of Public Health
EAS	Emergency Alert System
EOC	State Emergency Operations Center
EWP	Emergency Watershed Protection
FECB	Flood and Erosion Control Board
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMA	Flood Mitigation Assistance
FMP	Flood Management Program
FPMS	Floodplain Management Studies
GIS	Geographic Information System
GPS	Global Positioning System
HMA	Hazard Mitigation Assistance
HMGP	Hazard Mitigation Grant Program
HMGRC	Hazard Mitigation Grant Review Committee



IA	Individual Assistance
IBC	2003 International Building Code
IPCC	United Nations Intergovernmental Panel on Climate Change
IRC	2003 International Residential Code
IWRD	Inland Water Resources Division
LISICOS	Long Island Sound Integrated Coastal Observing System
MACOORA	Mid-Atlantic Coastal Ocean Observing Regional Association
MHFMMM	Multi-Hazard Flood Map Modernization Management Program
MIP	Management Information Portal
MOU	Memorandum of Understanding
NAWAS	National Warning System
NECIA	Northeast Climate Impacts Assessment group
NFIA	National Flood Insurance Act
NFIP	National Flood Insurance Program
NFIRS	National Fire Incident Reporting System
NGVD	National Geodetic Vertical Datum of 1929
NHMP	Natural Hazard Mitigation Plan
NOAA	National Oceanic & Atmospheric Administration
NRCS	National Resources Conservation Service
NU	Northeast Utilities
NWRAH	NOAA Weather Radio All Hazards
OIM	Connecticut DEEP's Office of Information Management
OLISP	Office of Long Island Sound Program
OPM	Connecticut Office of Policy and Management
OSBI	Connecticut Office of the State Building Inspector
PA	Public Assistance
PDM	Pre-Disaster Mitigation Program
PDSI	Palmer Drought Severity Index
RFC	Repetitive Flood Claims Grant Program
RPA	Regional Planning Agencies
RPO	Regional Planning Organization
SBA	Small Business Administration
SCEL	Stream Channel Encroachment Line
SHMO	State Hazard Mitigation Officer
SHSGP	State Homeland Security Grant Program
SLR	Sea level rise
SLOSH	Sea, Lake and Overland Surges from Hurricanes
TRVFCC	Thames River Valley Flood Control Compact
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDHS	U.S. Department of Homeland Security
USGS	U.S. Geological Survey
WUI	Wildland/Urban Interface



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# 1 Introduction and Planning Process

## 1.1 Purpose of the Connecticut State Hazard Mitigation Plan Update

The 2014 Connecticut State Hazard Mitigation Plan Update serves as guidance for hazard mitigation for the State of Connecticut. Its vision is supported by three central goals, each with an objective, a set of strategies and associated actions for Connecticut state government, stakeholders, and organizations that will reduce or prevent injury from natural hazards to people, property, infrastructure, and critical state facilities.

Funding for this Plan was provided through a Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) sub-grant (FEMA-DR-4023-CT-2P). The Department of Energy and Environmental Protection (DEEP) was a sub-grantee to the Department of Emergency Services and Public Protection (DESPP) for this planning grant. The areas of focus for the updated 2014 Plan are:

- Update the existing Plan to the standards contained within Section 322 of DMA 2000 for a standard state mitigation plan;
- Expand on the previous hazard identification and risk assessment section of the Plan, including the addition of analysis using state owned and critical facility data;
- Expand the Capabilities Assessment to include state government reorganization and the addition of numerous new initiatives;
- Expand the discussion on potential impacts due to climate change with regards to natural hazard mitigation in applicable hazard risk assessment sections;
- Inclusion of updated information within all chapters of the Plan;
- Reassessment of the goals, objectives, and activities presented in the 2010 Plan, and
- Increase State agency and other stakeholder participation.

### 1.1.1 Federal Authorities

This plan fulfills the standard state mitigation planning requirements (44 CFR §201.4) of the Disaster Mitigation Act of 2000 (DMA2000; Public Law 106-390, signed into law October 10, 2000). The DMA2000 amends the 1988 Robert T. Stafford Disaster Relief and Emergency Assistance Act, and reinforces the importance of mitigation planning, emphasizing planning for disasters before they occur. Section 322 of the act specifically addresses mitigation planning at state and local levels. New requirements are identified that allow Hazard Mitigation Grant Program (HMGP) funds to be used for mitigation activities and projects for states and localities with Hazard Mitigation Plans approved by November 1, 2004 and updated on a three year cycle. The 2014 Connecticut State Hazard Mitigation Plan Update is a standard plan meeting the requirements for a Standard State Plan detailed in Interim Rule 44 CRF 201.4, published by FEMA February 28, 2004 and



revised November 2, 2006. The Standard Plan was first approved by FEMA Region I during late 2004. Connecticut received approval for its first updated Plan in late 2007, then again in early 2011.

Meeting the requirements and criteria of section 322 regulations and rules enables Connecticut to remain qualified for all disaster-related assistance including categories C through G of the Public Assistance (PA) Program. This is an essential component of disaster recovery. In addition, the State will remain eligible for Hazard Mitigation Assistance (HMA) program funds: HMGP, Flood Mitigation Assistance (FMA), Pre-disaster Mitigation Program (PDM), Repetitive Flood Claims (RFC) and Fire Management Grants. The state also participates in the Community Assistance Program – State Support Services Element (CAP-SSSE) program.

The State of Connecticut is also in compliance with other related Federal authorities including:

- FEMA regulations - 44 CFR, Part 13, Uniform Administrative Requirements of Grants and Cooperative Agreements to State and Local Governments;
- FEMA regulations - 44 CFR, Part 14;
- Executive Order 12612, Federalism;
- Executive Order 11990, Protection of Wetlands;
- Executive Order 11988, Floodplain Management; and
- 44 CFR, Part 201.4 (c) (7) § 13.11 (c) and § 13.11 (d).

The State of Connecticut will continue to comply with all applicable Federal statutes and regulations during periods for which it receives grant funding, in compliance with 44 CFR 13.11(c), and will amend its plan whenever necessary to reflect changes in the State or Federal laws and statutes as required in 44 CFR 13.11(d).

### **1.1.2 State Authority**

The DEP (DEEP as of July 1, 2011) was established pursuant to Title 22a, Chapter 439 of the Connecticut General Statutes (C.G.S.) and given jurisdiction to preserve and protect the natural resources of the state. Chapter 476a of the C.G.S. authorizes flood management activities of the DEEP. Other related programs and authorities are addressed in detail in Chapter 3.

### **1.1.3 Disaster Mitigation Act of 2000 and Implementing Regulations**

Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S.C. 5165, was enacted under § 104 of the Disaster Mitigation Act of 2000, (DMA 2000) Public Law 106-390. DMA 2000 was intended to facilitate cooperation between state and local authorities. It encourages and rewards local



and state disaster planning in advance of disasters in order to promote sustainability of communities and services as a strategy to improve disaster resistance. This pre-disaster plan is intended to support state and local governments' efforts to articulate accurate and prioritized needs for hazard mitigation that will reduce exposure to natural hazards. This planning effort will result in timely allocation of funding and more effective risk reduction strategies and projects.

FEMA prepared an Interim Final Rule, published in the Federal Register on February 26, 2002 within 44 CFR Parts 201 and 206 that establishes planning and funding criteria for states. The Final Rule was published in October, 2009. The Guidance and Standard Plan Crosswalk were revised November 4, 2006 and was further updated to include requirements for 90%-10% Federal funding for the Severe Repetitive Loss (SRL) and Flood Mitigation Assistance (FMA) grant programs in January, 2009. The completed Crosswalk for the *2014 Connecticut Hazard Mitigation Plan Update* may be found in Appendix 1-1.

#### **1.1.4 44 Code of Federal Regulations Part 201**

44 CFR § 201.1 et seq. was promulgated by the Federal Emergency Management Agency, (FEMA) on February 26, 2002 in order to implement DMA 2000. The interim final rule was amended several times to address standard and enhanced state plans during 2007. Revised guidance for local plans was released July 1, 2008 with a major revision slated for September 2013. In addition, guidance for the Severe Repetitive Loss and Flood Mitigation Assistance Programs (44 CFR § 201.4 et seq.) requires amendment of state plans per a new crosswalk for these programs issued on January 14, 2008. The rule addresses state mitigation planning, and specifically in 44 CFR § 201.3 (c) identifies the states' mitigation planning responsibilities, which include:

1. Prepare and submit to FEMA a Standard Hazard Mitigation Plan following criteria established in 44 CFR § 201.4 as a condition of receiving Stafford Act assistance (except emergency assistance).
2. For consideration for 20 percent HMGP funding, prepare and submit an Enhanced State Mitigation Plan in accordance with 44 CFR § 201.5, which must be reviewed and updated, if necessary, every three years from the date of the approval of the previous plan.
3. Review and if necessary, update the Standard State Mitigation Plan by November 1, 2004, and every three years from the date of approval of the previous plan in order to continue program eligibility.
4. Make available the use of up to the seven percent of HMGP funding for planning in accordance with 44 CFR § 206.434. *See* 44 CFR § 201.3 (c).

*44 CFR § 201.4, Standard State Mitigation Plans*, lists the required elements of state hazard mitigation plans. Under 44 CFR § 201.4 (a), by November 1, 2004 states must have an approved Standard State Hazard Mitigation Plan that meets the requirements of the regulation to receive Stafford Act assistance. The planning process, detailed by 44 CFR §



201.4 (b), must include coordination with other state agencies, appropriate Federal agencies and interested groups. Guidance for state standard and enhanced plans and local and multi-jurisdictional plans has been updated several times to incorporate changes from the Katrina Reform Act, Unified Hazard Mitigation Assistance Grant Programs and “lessons learned” through the first cycle of state and local mitigation planning. Current state standard plan guidance and the state plan cross walk were used to inform the *2014 Connecticut State Hazard Mitigation Plan Update*.

*44 § 201.4 (c), Plan content*, identifies the following elements that must be included in a state hazard mitigation plan:

1. A description of the planning process used to develop the plan;
2. Risk assessments that provide the factual basis for activities proposed in the strategy portion of the mitigation plan;
3. A Mitigation Strategy that provides the state’s blueprint for reducing losses identified in the risk assessment;
4. A section describing Coordination of Local Mitigation Planning;
5. A Plan Maintenance Process, including a method and schedule for monitoring, evaluating and revising the plan; a system for monitoring implementation of mitigation strategies and projects; and a system for reviewing progress in achieving goals, objectives and strategies as well as project implementation;
6. A Plan Adoption Process for formal adoption by the State Prior to submittal to FEMA for final review and approval; and
7. Assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to grant funding periods, in compliance with 44 CFR 13.11( c ). The state must amend its plan whenever needed to reflect changes in state or federal laws and statutes as required by 44 CFR 13.11 (d).
8. Revisions to plans per guidance issued January 14, 2008 must include a program strategy for state eligibility for 90 percent federal funding for the Severe Repetitive Loss Program for FY 2008 and the Flood Mitigation Assistance Program for FY2009. Plan revisions must in compliance with 44CFR201.4.

#### *44 CFR Part 206*

On February 26, 2002, FEMA also changed *44 CFR Part 206* in order to implement DMA 2000 (See 67 Federal Register 8844 [February 26, 2002]). Changes to *44 CFR Part 206* authorize HMGP funds for planning activities and increase the amount of HMGP funds available to states that develop an Enhanced Mitigation Plan. FEMA amended Part 206 in 2006 following the passage of the Katrina Reform Act which restored HMGP funding to 15 percent of eligible disaster recovery costs for states with approved Standard Mitigation Plans.



*44 CFR Part 400*

*(a) As a condition of the receipt of any disaster assistance under the Stafford Act, the applicant shall carry out any repair or construction to be financed with the disaster assistance in accordance with applicable standards of safety, decency, and sanitation and in conformity with applicable codes, specifications and standards.*

*(b) Applicable codes, specifications, and standards shall include any disaster resistant building code that meets the minimum requirements of the National Flood Insurance Program (NFIP) as well as being substantially equivalent to the recommended provisions of the National Earthquake Hazards Reduction Program (NEHRP). In addition, the applicant shall comply with any requirements necessary in regards to Executive Order 11988, Floodplain Management, Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, and any other applicable Executive orders.*

*(c) In situations where there are no locally applicable standards of safety, decency and sanitation, or where there are no applicable local codes, specifications and standards governing repair or construction activities, or where the Regional Administrator determines that otherwise applicable codes, specifications, and standards are inadequate, then the Regional Administrator may, after consultation with appropriate State and local officials, require the use of nationally applicable codes, specifications, and standards, as well as safe land use and construction practices in the course of repair or construction activities.*

*(d) The mitigation planning process that is mandated by section 322 of the Stafford Act and 44 CFR part 201 can assist State and local governments in determining where codes, specifications, and standards are inadequate, and may need to be upgraded*



## 1.2 Assurances and Adoption



79 Elm Street • Hartford, CT 06106-5127



Connecticut Department of  
**EMERGENCY  
SERVICES & PUBLIC  
PROTECTION**

25 Sigourney Street, 6<sup>th</sup> Floor, Hartford, CT 06106-5042

January 9, 2014

Paul Ford, Acting Regional Administrator  
FEMA Region 1  
99 High Street, 6<sup>th</sup> Floor  
Boston, Massachusetts 02110-2132

RE: State Hazard Mitigation Plan Adoption

Dear Administrator Ford:

Enclosed for your review and formal approval is the updated Connecticut State Natural Hazard Mitigation Plan (NHMP). Through this letter, we, the Department of Energy and Environmental Protection (DEEP) and the Department of Emergency Services and Public Protection (DESPP) hereby adopt this plan on behalf of the State of Connecticut. The NHMP has been prepared pursuant to the Disaster Mitigation Act of 2000, and in accordance with the *November 2008 Plan Update Guidance* provided by FEMA.

This NHMP is the result of a collaborative process and represents a coordinated effort and commitment by our two state agencies, the State Hazard Mitigation Planning Team, regional planning agencies and others in Connecticut that are involved in pre-disaster mitigation efforts, emergency response to natural disasters, and post-disaster recovery after a major natural disaster. The NHMP is a comprehensive document describing the assessed risks associated with natural disasters in Connecticut and the existing mitigation measures our state has taken, and has proposed to undertake in the future to minimize the impact, damage and disruption caused by the occurrence of natural disasters within the State of Connecticut.

We believe that the updated Connecticut State Natural Hazard Mitigation Plan is in full compliance with the planning requirements of the Disaster Mitigation Act of 2000 and the Final Rule, Title 44 of the Code of Federal Regulations (CFR), Parts 201 and 208, thus keeping the State of Connecticut qualified to receive funding under all FEMA disaster assistance and hazard mitigation programs. The State of Connecticut will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c). Furthermore, the State of Connecticut will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(c) and (d).

As primary implementing agencies, DEEP and DESPP will work diligently with our CT Interagency Hazard Mitigation Committee and all of our hazard mitigation partners to implement the State Hazard Mitigation Strategy contained in the plan, thereby reducing Connecticut's vulnerability to natural hazards.

Sincerely,

Daniel C. Esty, Commissioner  
Department of Energy and Environmental Protection

William P. Shea, Deputy Commissioner  
Department of Emergency Services and  
Public Protection,



### 1.3 Planning Team

This plan was completed with planning assistance and support by the hazard mitigation staff at the Department of Energy and Environmental Protection (DEEP), DESPP's Division of Emergency Management and Homeland Security (DEMHS), and Dewberry, its consultant. The Connecticut State Hazard Mitigation Planning Team (SHMPT) and a large group of stakeholders that include Connecticut state agencies, Federal government collaborators, Non-Governmental Organizations, and local representation attended four plan development meetings and provided comments on the plan draft. Staff from FEMA Region I's Joint Field Office (JFO) offices provided additional technical assistance and plan review.

### 1.4 Overview of Plan

For the 2014 update, each chapter was reviewed and reinvigorated to highlight progress since the 2010 plan adoption. Many chapters of the plan were reorganized and combined. All of the chapters were re-formatted, new data integrated, and the overall plan was re-organized to better meet the needs of the state.

Each chapter begins with a brief introduction followed by relevant information, charts, tables, and maps, which fulfill regulation requirements. The main chapters of the plan follow primary requirements of the hazard mitigation planning law:

**Chapter 1.0 *Introduction and Planning Process*** describes the background and authorities governing the update of the plan, activities and work of the Connecticut DEEP, DEMHS, SHMPT, stakeholders invited to participate in the process, the primary consultant, Dewberry, and two sub-contractors, AECOM and Milone & MacBroom, Inc. The plan participants, planning process, planning products and relevance to other related plans or state functions is described.

**Chapter 2.0 *Hazard Identification and Risk Assessment*** has three primary components. A description of Connecticut is provided that includes: Identification, Risk Assessment and Vulnerability Analysis with the impacts of climate change discussed where appropriate. Natural hazards affecting the state are identified, including:

- Descriptions and histories of hazards;
- Assessment of geographic extent and risk of hazards;
- Hazard specific loss estimation for state facilities, where appropriate; and
- Amplifiers include sea level rise and climate change.

During the early formation of the 2014 plan update process it was decided to focus only on natural hazards. These were condensed into fewer categories to enable use of best available data.



The new vulnerability assessment was initiated in April 2013 with the objective of gathering and incorporating, where usable, data from local and regional plan Hazard Identification and Risk Assessments (HIRAs). The current county and municipal plans were analyzed and hazard rankings were captured. These were used in the state plan hazard ranking formula. Hazard information from the local plans was archived using a newly developed tracking spreadsheet. This tracker can be maintained as local plans are updated to facilitate the update of the 2016 Connecticut State Plan.

The new plan HIRA and associated vulnerability analysis now provides a more comprehensive look at natural hazards challenging Connecticut's people, property, critical facilities, and natural resources. Where data allowed, hazards were ranked comparatively on a county basis using algorithm-based evaluation methods using parameters such as population, population projections, building permit, hazard occurrence, probability, and local hazard mitigation plan scores. Where data was insufficient to provide a formula-based analysis a detailed hazard description is provided, the hazard is characterized geographically to the extent practicable. Data gaps are listed along with strategies to continue to develop analytical data sets for the hazards which require a more analytical analysis.

**Chapter 3.0 *Capability Assessment*** combines the previous Capability Assessment and Mitigation Programs Chapters into one. This chapter emphasizes the changes in State government agency organization in Connecticut and significantly expands on the capabilities and initiatives that have resulted from government reorganization and as a result of disaster activity since the 2010 plan. There is also emphasis in this chapter on programs available for technical assistance and funding of mitigation actions. It is expanded to include non-state and local programs that also influence mitigation in Connecticut.

**Chapter 4.0 *Coordination with Local Mitigation Planning Efforts*** describes a comprehensive three-year process to engage all Connecticut communities in hazard mitigation planning. It summarizes the status of plans in Connecticut, projects that have been implemented or funded by FEMA grant programs, and the process by which the State of Connecticut provides financial and technical assistance for local planning, as well as its review and approval process. A summary of vulnerability identified from rolling up the local plans is provided. Details on vulnerability data derived from the local plans is discussed in Chapter 2.

**Chapter 5.0 *Hazard Mitigation Strategy*** presents the mitigation goals, objectives, strategies and associated actions identified to reduce the risk from hazards across the state. The section presents the program strategies and projects with complete rankings for importance to reduce exposure to hazards, along with an analysis of their feasibility using the STAPLEE criteria. The table of identified actions further includes project leads, cost



estimates and other information. A complete listing of evaluated 2010 actions is also presented. The evaluation includes the status of the 2010 actions with explanations on progress. Many actions that were determined to be ongoing capabilities or standard operating activities were moved to Chapter 3 – Capability Assessment. Emphasis was placed on diversifying the actions to meet changing vulnerabilities and on expanding the entities involved in “owning” actions to a more diverse range of state agencies and others. A plan to address Repetitive and Severe Repetitive Loss properties is included in Chapter 2.0 with related strategies included in Chapter 5.0.

**Chapter 6.0 Plan Monitoring, Maintenance, and Revision** outlines implementation of the plan and development of the anticipated 2016 plan revision. Processes used to maintain and update data and information contained in the hazard identification and vulnerability assessment are described, as are implementation progress review and reporting techniques. This chapter has been expanded to detail progress reviews and to provide a detailed schedule for monitoring maintenance, implementation and revision.

**Appendices** may be found immediately following the plan. These provide detailed listings and agendas from each plan update meeting that was held, new MS Excel tracking tools, results from the surveys and other outreach, and other relevant documents supporting the plan or its production.

## 1.5 Planning Process

As noted in Section 1.3, the 2014 Connecticut State Hazard Mitigation Plan Update was conducted through a process which involved a review of the Plan by the staff of the Department of Energy and Environmental Protection (DEEP), DESPP's Division of Emergency Management and Homeland Security (DEMHS), and Dewberry, its consultant. Additionally, revisions to the Plan were made based upon the updated 2010 hazard analysis which was created based on new data and processes, as well as the results of the analysis of local mitigation plans. The process was also informed by the 2010 FEMA review crosswalk and with and with the input of a much more inclusive planning team.

## 1.6 Overview of the Planning Process

The planning process for the 2014 Connecticut State Hazard Mitigation Plan Update was initiated by the Connecticut DEEP and DESPP/DEMHS and supported by Dewberry, and two subcontractors, AECOM and Milone & MacBroom, Inc., who provided capacity and technical support to the State Mitigation staff. Based upon the expedited period of performance to complete the plan, a very aggressive plan update schedule was developed.



The contractor and Connecticut State Mitigation Planner concurred upon the following strategy to fast-track review of the plan:

1. Four meetings of the SHMPT and additional stakeholders would be conducted at DEEP Headquarters at pre-identified monthly intervals to maximize Team time, through completion of the first review draft;
2. A review draft would be made available within 6 months of project initiation;
3. Total overhaul of the HIRA and Vulnerability Analysis was a priority. All available data sets, including the National Climatic Data Center would be used;
4. All reasonable attempts would be made to incorporate state and critical facility data;
5. Stakeholder diversification and involvement would be a priority;
6. The local plan upload would include a MS Excel Tool to enable DESPP/DEMHS staff to maintain status as local plans are updated and mitigation actions are completed beyond this plan update; and
7. After posting the draft plan in mid-July 2013, for team, stakeholder and public comment, an August Final Plan Review meeting would be hosted in order to receive and discuss comments, prior to producing a revised draft for delivery to FEMA in early September 2013.

Many of the planning activities were completed concurrently throughout the spring and summer of 2013. Datasets from Connecticut and national open sources were gathered and databases to support GIS mapping were developed. Continued development of an inventory of state facilities, analysis of the recorded history of damage impacts due to natural hazards and synthesis of GIS layers for hazards led to the prediction of probability for incurred damages to state facilities from identified natural hazards. The planning process continued to evolve to ensure comprehensive agency responses, as data was being developed and analyzed.

## 1.7 Plan Coordination

Table 1-1 identifies the core group led data collection, coordination, stakeholder facilitation, analysis and drafting of the plan.



Table 1-1. Plan Core Team Participants.

<b>DEEP Staff Leads</b>
<b>Karen Michaels – State Hazard Mitigation Planner</b>
<b>Carla Feroni – Co-State Hazard Mitigation Officer</b>
<b>Diane Ifkovic – State NFIP Coordinator</b>
<b>Cheryl Chase – Director of Inland Water Resources</b>
<b>Jennifer Pagach –Climate Change, HIRA Review</b>
<b>DESPP/DEMHS Mitigation Staff</b>
<b>Emily Pysh, State Hazard Mitigation Officer</b>
<b>Gemma Fabris – Deputy State Hazard Mitigation Officer</b>
<b>DAS – Division of Construction Services</b>
<b>Jeff Bolton – Representing Office of the State Building Official– Facilities Data</b>
<b>Dewberry</b>
<b>Scott Choquette, PM</b>
<b>Rachael Heltz-Herman, HIRA Lead</b>
<b>James Mawby, Hazus Lead</b>
<b>Sara Margolis – HIRA and Planning Support</b>
<b>Ryan Towell – Climate Change</b>
<b>Corinne Bartshire – Management Support</b>
<b>AECOM</b>
<b>Darrin Punchard – Mitigation Strategy Support Lead</b>
<b>Michael Robinson – HIRA Support</b>
<b>Milone &amp; MacBroom, Inc.</b>
<b>David Murphy, PE, and</b> <b>Scott Bighinatti – Local Plan Role-Up, Capability Assessment, Mitigation</b> <b>Strategy input</b>

## 1.8 State Hazard Mitigation Planning Team

The SHMPT is a standing committee which advises the Connecticut Hazard Mitigation Program as participants in mitigation plan updates and other ad hoc program and policy issues. They served as the key technical advisors on mitigation program matters during this update. The SHMPT is made up of representatives of key state agencies whose programs and interests are integral to implementation of the state’s hazard mitigation program. The Committee met on several occasions to discuss the plan development process and guide the overall update of the 2014 plan document. Nearly every member of the SHMPT attended the April 2, May 1, June 5, and August 7, 2013 Stakeholder meetings and provided data, specific plan section reviews, and other technical support throughout the planning process. The members of the SHMPT are listed in Table 1-2.



Table 1-2. State Hazard Mitigation Planning Team

Team Member	Agency
George Bradner	CT Department of Insurance (Chair of Long Term Recovery Committee)
Cheryl Chase	CT DEEP – Inland Water Resources - Director
John Cimochowski	CT DEEP – State Parks Division
Art Christian	CT DEEP – Inland Water Resources – Dam Safety
Mark DeCaprio	CT DEEP – Emergency Response and Spill Prevention
Elizabeth Doran	DEEP – Office of Information Management
Mary Rose Duberek	CT DESPP-DEMHS
Gemma Fabris	CT DESPP-DEMHS
Lou Fazzino	DEEP – Office of Information Management
Carla Feroni	DEEP - Inland Water Resources
John Field	CT DESPP-DEMHS
Corinne Fitting	DEEP – Aquifer Protection
Dave Fox	DEEP – Planning and Standards
Denny Galloway	DEEP - Radiation
Douglas Glowacki	CT DESPP-DEMHS
Diane Ifkovic	DEEP - Inland Water Resources –NFIP State Coordinator
Kurt Kebschull	DEEP – Air Pollution Control
Eugene MacGillis	DEEP – MMCA – Engineering & Enforcement
Jennifer Pagach	DEEP – Office of Long Island Sound Programs
Emily Pysh	CT DESPP-DEMHS
David Sattler	DEEP – Water Protection and Land Reuse
Jeff Bolton	CT Dept. of Construction Services (and Office of State Building Inspector)
Sally Snyder	DEEP – Outdoor Recreation
Margaret Thomas	DEEP – Connecticut State Geologist
Bruce Wittchen	CT Office of Policy and Management (Municipal and RPO Ombudsman)
Sharon Yurasevecz	DEEP - Inland Water Resources

An extensive list of stakeholders was invited to each of the four working sessions. Those who came to meetings and participated in the process are included in Table 1-3.



Table 1-3. Participating Stakeholders

Participating Stakeholders	Organization
Stephen Anderson	CT Department of Agriculture
Major Edward Bunce	CT National Guard, Director of Military Support
Mike Caplet	CT DESPP-DEMHS
Carolyn Carlson	American Red Cross
Binu Chandy	CT Department of Economic and Community Development
Peggy Discenza	DEEP, Public Utility Regulatory Authority, Bureau of Energy Technology Policy
Kenneth Dumais	CT DESPP-DEMHS
John Filchack	Northeastern Connecticut Council of Governments
Daniel Forrest	State Historic Preservation Office
William Frederick	CT Department of Economic and Community Development
Moira Herbert	CT Department of Insurance
William Higgins	Commission on Fire Prevention and Control
Timothy Malone	Central Connecticut Regional Planning Agency
Henry Paszczuk	CT DESPP-DEMHS
Suzanne Piacentini	U.S. Department of Housing and Urban Development
Denise Savageau	Town of Greenwich – Conservation Director
Tom Cantwell	CT National Guard
Kevin Filchak	Town of Brooklyn, Emergency Management Director
Michael Licata	Town of Windham, Emergency Management Director
John Haggerty	CT Department of Transportation
Chris Brochu	CT Department of Transportation
Belinda Dougan	FEMA
Jonathan Best	CT Department of Public Health
Jennifer Perry	CT DEEP – Water Protection, Land Reuse
Susan Quincy	CT DEEP - Kellogg Environmental Center
Roslyn Reeps	CT DEEP – Office of Planning and Program Development
Virginia DeLima	U.S. Geologic Survey

## 1.9 Stakeholder Involvement and Meetings

The involvement of a large array of stakeholders during the planning process was considered a vital element to the success in developing a FEMA-compliant plan. Traditional agency stakeholders were sought from state and federal agencies and local jurisdictions across the state. These stakeholders provided critical input to each step in the



plan update process. They shared inventories of state facilities, database layers identifying risk to structures from various hazards, and participated in the refinement of the 2010 mitigation goal and development of 2014 mitigation actions.

Prior to the stakeholder kick-off meeting, the SHMT met six times between May 8, 2012 and March 3, 2013. Items covered at the six meetings included:

- May 8, 2012 – Overview of mitigation planning, planning timeframe, future meeting schedule, possible funding for consultant help;
- June 5, 2012 – Discussion of proposed revisions to Chapter 1 of the State Mitigation Plan, discussion of combining planning groups into one team to meet regularly;
- July 11, 2012 – Update on Request for Proposals (RFP) for consultant help, discussion on update of Chapter 2 of the plan;
- August 1, 2012 – Update on RFP for consulting services, discussion of Chapters 3 and 4 updates;
- October 3, 2012 – Brainstorming session on ideas for changes to the plan; and
- March 13, 2013 – Announcement of consultant selection, timeframe and upcoming meeting schedule, transition of plan to DEMHS after update, discussion on improvements to the plan.

On February 19, 2013 a contract between DEEP and Dewberry was fully executed and work commenced. The 2014 Connecticut State Hazard Mitigation Plan involved five Team/Stakeholder meetings:

- A preliminary project management meeting with DEEP and Dewberry
- The April 2, 2013 project Kick-off meeting with the SHMPT, Stakeholder, and Dewberry
- The May 1, 2013 Stakeholder Vulnerability Analysis/Mitigation Actions meeting
- The June 5, 2013 Stakeholder working session, presentation of HIRA and Mitigation Action Development Meeting
- The August 7, 2013 Plan Review Comment Working Meeting

Stakeholders participated in all of these meetings at DEEP headquarters, with nearly 45 people involved in the kick off meeting, during this five month planning process. These meetings provided a forum for discussion on hazard identification and assessment methods for a variety of hazards, and the refinement and development of the plan goals and strategies. Please refer to Appendix 1-2 for documentation on all of the Committee Meetings.



The following is a synopsis of the planning process meetings:

### **1.9.1 Preliminary Project Management Meeting**

**March 13, 2013**

On March 13, 2013 DEEP mitigation staff and the Dewberry Project Manager met to outline the tentative project schedule. At this time, DEEP outlined project expectations and the schedule necessary to ensure seamless state eligibility for the FEMA post-disaster Public Assistance Program as well as FEMA Hazard Mitigation Assistance (HMA) grant programs. Previously identified SHMPT priorities and desires for changes to the plan were reviewed and decisions reached on a revised format, methodologies for ensuring stakeholder and public input, map formats and meeting schedules.

### **1.9.2 Project Kick-off Meeting**

**April 4, 2013**

The kick-off meeting of the SHMPT and Stakeholders was hosted by the DEEP. At the kick-off meeting, the requirements of Section 322 of the 2000 Stafford Act were presented along with the project schedule, schedule of meetings, proposed HIRA methodologies and a review of the 2010 plan goals and objectives. Data collection needs were presented and participants were provided with worksheets designed to collect information on available data, capabilities, new initiatives and potential projects and actions. Previously identified hazards were discussed in consideration of disaster activity since the last plan and all natural hazards were reprioritized and grouped into categories.



Figure 1-1. Kick-Off Meeting  
Overview Presentation

Additional tools and templates were also presented and ranking formulas were confirmed so that the weighting algorithm could be finalized to hasten the hazard ranking process. Additional topics covered during the meeting included:

- FEMA state hazard mitigation plan update rule requirements
- HIRA and Vulnerability Analysis Update
- Data Needs
- Confirmation of hazards to profile (modified from 2008 plan)
- Ranking protocols
- Map templates
- Climate change and sea level rise



- Organization of HMA Grant data, MS Excel Workbooks, Tools
- Outreach Methods – Website, Public Survey, Regional Outreach Open Houses
- Communication, Next Steps

### 1.9.3 HIRA Progress/Capability Assessment/Local Plan Roll-Up Presentation and Goals and Strategies Development Meeting

May 1, 2013

Preliminary progress on the Hazard Identification, Risk Assessment (HIRA) and resultant Vulnerability Analysis was presented along with final data needs. The results of the local plan analysis and roll-up were also presented. Following these presentations, the goals, objectives and strategies reviewed at the April meeting were revisited in the context of the results of the local plan analysis. The second half of the meeting focused on the initial definition of mitigation actions in breakout groups arranged by departments.



Figure 1-2. Stakeholder Meeting No. 2

#### 2013 Connecticut State Hazard Mitigation Plan Update Goals

***GOAL 1 – Promote implementation of sound floodplain management and other natural hazard mitigation principals on a State and local level***

***GOAL 2 – Implementation of effective natural hazard mitigation projects on a state and local level***

***GOAL 3 – Increase research and planning activities for the mitigation of natural hazards on a state and local level***

Each breakout group was lead by an experience mitigation planner, either from DEEP, DESPP/DEMHS, or the consulting team. These individuals facilitated and recorded the group as they began to develop mitigation actions to address the natural hazard vulnerabilities presented at the meeting.



### **1.9.4 Full HIRA Review and Mitigation Action Development Workshop Meeting**

#### **June 5, 2013**

A full day working session was conducted on June 5th. In the morning, the final results of the public survey, the final capability assessment, and full results of the HIRA were presented to the SHMPT and stakeholders. A significant amount of discussion centered on the ranking of hazards and the methodology used for the ranking. Many stakeholders were concerned that limitations on National Climatic Data Center (NCDC) data used in the ranking skewed the results. Time was spent analyzing the algorithm used for the ranking and changes were made to adjust the results. A full discussion of the ranking is included in Chapter 2.

In the afternoon, a brainstorming session was held to finalize and adjust actions developed during the prior meeting and in the month in between. Review of the disposition of actions identified in the 2010 plan was conducted, and new actions further developed in light of the HIRA and Capability Assessment results.

### **1.9.5 Draft Plan Review Meeting**

#### **August 7, 2013**

The plan was distributed for SHMPT, Stakeholder, and public review on July 19, 2013. Following distribution to the Team and Stakeholders, the plan was also posted to the DEEP website for public comment on July 22, 2013. A link to the plan was also sent to all members of the Connecticut Chapter of the American Planning Association, via its list serve on July 24, 2013, to the Connecticut Environmental Leaders list serve on Yahoogroups.com, and to various local official email lists maintained by DEEP. On August 7, 2013 the SHMPT and stakeholders reconvened to discuss the disposition of all comments received prior to submittal to FEMA Region I for review. A working session was conducted to review changes to the 2013 updated hazard mitigation plan, receive comments from the SHMPT and stakeholders and to final review and rank (using the STAPLE/E methodology outlined in Chapter 5) all selected actions. The results of the ranking are included in Appendix 5-2. Table 1-4 shows the STAPLE/E criteria used in the ranking.



Table 1-4. STAPLE/E Review and Selection Criteria for Alternatives

<b>Social</b>
<ul style="list-style-type: none"> <li>• Is the proposed action socially acceptable to the community(ies)?</li> <li>• Are there equity issues involved that would mean that one segment of a community is treated unfairly?</li> <li>• Will the action cause social disruption?</li> </ul>
<b>Technical</b>
<ul style="list-style-type: none"> <li>• Will the proposed action work?</li> <li>• Will it create more problems than it solves?</li> <li>• Does it solve a problem or only a symptom?</li> <li>• Is it the most useful action in light of other community(s) goals?</li> </ul>
<b>Administrative</b>
<ul style="list-style-type: none"> <li>• Can the community(ies) implement the action?</li> <li>• Is there someone to coordinate and lead the effort?</li> <li>• Is there sufficient funding, staff, and technical support available?</li> <li>• Are there ongoing administrative requirements that need to be met?</li> </ul>
<b>Political</b>
<ul style="list-style-type: none"> <li>• Is the action politically acceptable?</li> <li>• Is there public support both to implement and to maintain the project?</li> </ul>
<b>Legal</b>
<ul style="list-style-type: none"> <li>• Is the community(ies) authorized to implement the proposed action? Is there a clear legal basis or precedent for this activity?</li> <li>• Are there legal side effects? Could the activity be construed as a taking?</li> <li>• Is the proposed action allowed by a comprehensive plan, or must a comprehensive plan be amended to allow the proposed action?</li> <li>• Will the community(ies) be liable for action or lack of action?</li> <li>• Will the activity be challenged?</li> </ul>
<b>Economic</b>
<ul style="list-style-type: none"> <li>• What are the costs and benefits of this action?</li> <li>• Do the benefits exceed the costs?</li> <li>• Are initial, maintenance, and administrative costs taken into account?</li> <li>• Has funding been secured for the proposed action? If not, what are the potential funding sources (public, non-profit, and private)?</li> <li>• How will this action affect the fiscal capability of the community(ies)?</li> <li>• What burden will this action place on the tax base or local economy?</li> <li>• What are the budget and revenue effects of this activity?</li> <li>• Does the action contribute to other community goals, such as capital improvements or economic development?</li> <li>• What benefits will the action provide?</li> </ul>
<b>Environmental</b>
<ul style="list-style-type: none"> <li>• How will the action affect the environment?</li> <li>• Will the action need environmental regulatory approvals?</li> <li>• Will it meet local and State regulatory requirements?</li> <li>• Are endangered or threatened species likely to be affected?</li> </ul>



Comments on the draft plan were received from the following individuals and entities and incorporated into the plan between August 9, 2013 and August 29, 2013:

- Karen Michaels – DEEP - IWRD
- Diane Ifkovic - DEEP – IWRD, State NFIP Coordinator
- Corinne Fitting – DEEP – Planning and Standards
- Kevin O'Brian – DEEP – OLISP
- Peggy Diaz – DEEP – BETP – PURA
- Margaret Thomas – DEEP – CT State Geologist
- Dave Fox – DEEP – Office of Planning and Program Development
- Jennifer Pagach – DEEP – OLISP – Climate Change Program
- Emily Pysh – DESPP/DEMHS – State Hazard Mitigation Officer
- Henry Paszczuk - DESPP/DEMHS
- John Haggerty – DOT
- David Elder – DOT
- Jeff Bolton – DAS – DCS –Office of the State Building Inspector
- Lizzette Peltier – Natural & Cultural Resources RSF Team
- Denise Savageau – Town of Greenwich
- Craig Mansfield – Town of East Haddam
- Emily Harrington – Town of Milford

## 1.10 Public Outreach

Public participation for the update of the Plan was primarily enabled through participation in an internet-based survey and posting of the Draft 2014 Connecticut State Hazard Mitigation Plan Update to DEEP's main webpage. Emails were also sent out to multiple stakeholder distribution lists on July 22, 2013 and to the Connecticut Chapter of the American Planning Association, via its list serve on July 24, 2013 and the Connecticut Environmental Leaders list serve on Yahoogroups.com, as previously noted. Distribution of the online survey is discussed in the subsection below.

### 1.10.1 Online Public Survey

The survey consisted of 15 questions and was available from May 14 through June 19, 2013. DEEP distributed hyperlinks to the survey via three sets of emails to the SHMPT and several municipal planning and public works mailing lists between 2 and 3 PM on May 14, 2013, resulting in at least 23 responses as of 5 PM on that same day. Figure 1-3 provides an example of part of the survey.



**Update to Connecticut Hazard Mitigation Plan**

1. Please indicate whether you are responding as a resident of Connecticut or as a representative of a state agency, municipality, or organization. You are encouraged to respond to the survey more than once if you wish to respond as a resident and a representative of an organization.

Resident  
 State Agency, Municipality, or Organization

2. If you are responding as a resident, please enter your five-digit zip code.

3. If you are responding as a representative of a state agency, municipality, or organization, please select one of the following.

State Agency  
 Federal Agency  
 Regional Planning Agency/Council of Government  
 Municipal Department  
 Municipal Government, Board, or Commission  
 Educational Institution  
 Business  
 Utility  
 Watershed or Conservation Organization  
 Other

Please enter the name of the agency, municipality, or organization

4. Were you aware that Connecticut maintains a Hazard Mitigation Plan?

Yes  
 No

Figure 1-3. Screen Shot of Survey

Announcements were posted in 27 editions of the Patch.com internet-based community newspapers beginning at 5 PM on May 14, 2013 and continuing through May 15, 2013. Figure 1-4 shows a sample announcement in Patch.com.



Figure 1-4. Sample Patch.com Notice



Hyperlinks to the survey were provided along with descriptions of the planning process on the following web pages: CT DEEP main page, CT DEEP Natural Hazard Mitigation Plan page, and ct.gov main page. Finally, a flyer with the survey link was distributed to approximately 35 municipal officials and staff at the NOAA/Sea Grant, UCONN/DEEP coastal climate adaptation training on May 15, 2013. As of the date of closing (June 19, 2013), a total of 135 people participated in the survey.

Questions 1 through 3 of the survey gathered basic information from the responders. The responders were generally divided equally with 51% representing residents, and 49% representing State agencies, municipalities, or other organizations. Of the latter, most of the responders were from State agencies, municipal staff, and municipal commissions and boards. One federal agency (FEMA) was represented, six regional planning organizations were represented, and five responders were from “other” organizations. None of the responders indicated that they were affiliated with an education institution, business, utility, tribal government, or watershed/conservation group. However, a review of the 48 written responses shows that at least one business, one trade organization, and the American Red Cross were represented. Figure 1-5 shows the breakdown of non-resident responders by organization type.

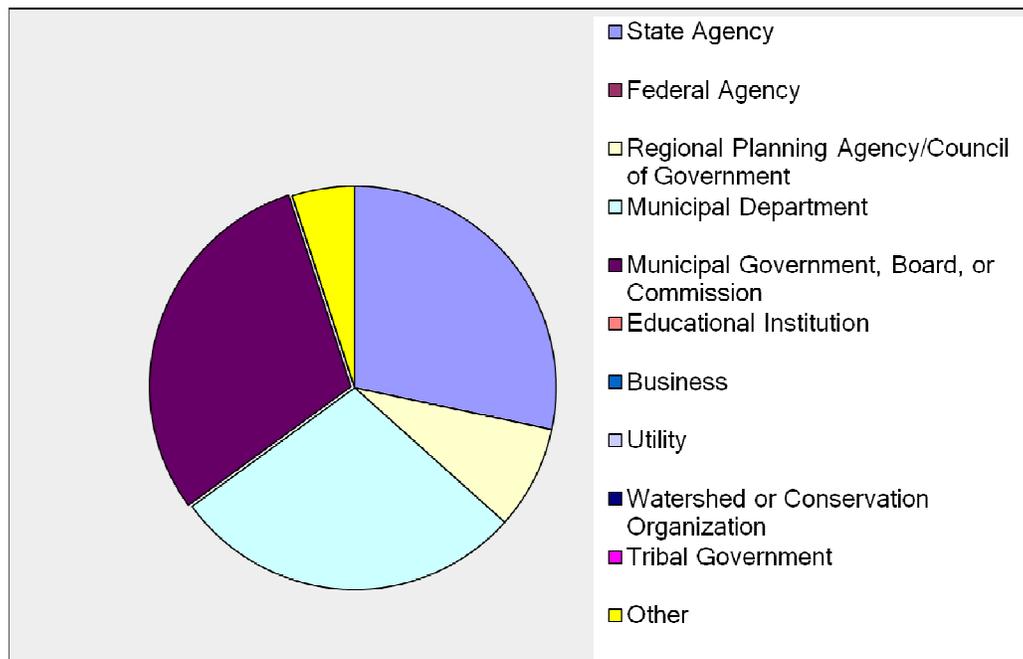


Figure 1-5. Responses by Organization Type

With regard to plan awareness (Questions 4 and 5), 70% of responders were aware that Connecticut maintains a hazard mitigation plan, but only 49% were aware if their own community maintains a local hazard mitigation plan.



Question 6 inquired the following: “If your awareness of natural hazards has increased in recent years, which events have contributed to this awareness?” Responders were permitted to select more than one answer, with the focus on recent event. The most popular responses were Hurricane Sandy of October 2012, Hurricane Irene of August 2011, and Winter Storm Alfred of October 2011. Winter Storm Nemo of February 2013, the snowstorms of January 2011, and the Springfield tornado of 2011 were the next-highest selected choices. All of these choices were selected by more than 40% of responders. Less than 20% of responders selected the Virginia earthquake of 2011, which was felt in many parts of Connecticut. Several write in responses are included in Appendix 1-3. Figure 1-6 shows the events that have raised awareness the most in recent years.

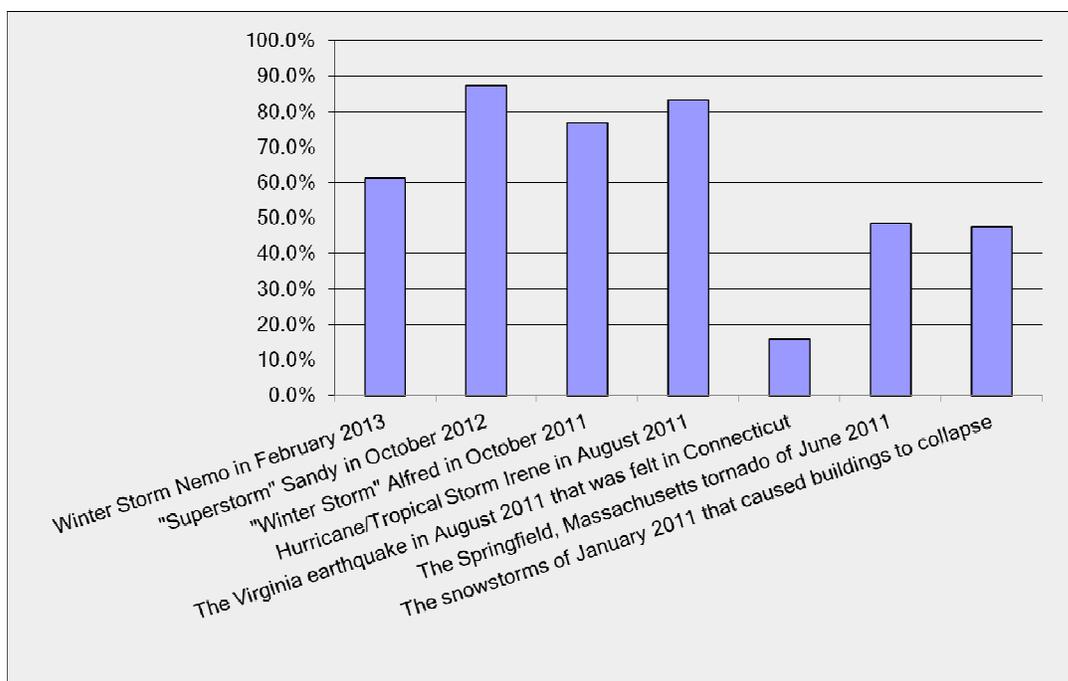


Figure 1-6. Awareness Generated by Recent Events

Question 7 asked responders to rate 13 hazards on a scale of 1 (no concern) to 3 (high concern) indicating the level of threat each presents to the responder's home or the functions of his or her organization. Responses are summarized in



*Rating the threats on a scale of 1 (no concern) to 3 (high concern)*

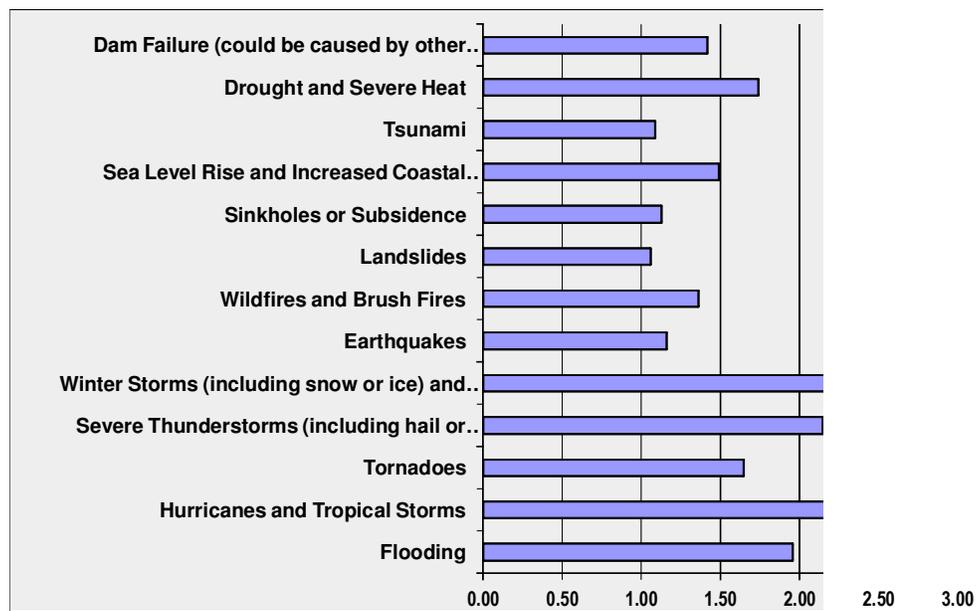


Figure 1-7. Survey Responses Regarding Hazard Ranking

Responses reflect the spatial characteristic of each hazard as well as their frequencies and intensities. For example, the threat reported for flooding was evenly split between low, medium, and high. This is presumably because only some of the housing stock is located in areas of flood risk. However, the threats were primarily reported as medium to high for hurricanes and winter storms, which can impact large areas. The low threats reported for earthquakes, wildfires, landslides, sinkholes/subsidence, and tsunamis are influenced by low frequencies and/or low geographic effects. The only hazard that was rated by more people as low and high instead of medium was sea level rise and increased coastal hazards. This is presumably because people either reside in coastal hazard zones, or do not, without many responders in zones of intermediate risk.

Question 8 asked responders which hazards have impacted them or their organization. Thus it is similar to Question 7, except it is less a measure of future risk and more a measure of what has already happened. More than 80% of responders indicated that hurricanes/tropical storms and winter storms/blizzards have impacted them. Approximately 50% of responders have been impacted by flooding and severe thunderstorms. About 22% of responders have been impacted by sea level rise and increased coastal hazards as well as droughts and severe heat. Wildfires, dam failure, and tornadoes each were selected by approximately 10% of responders. Smaller percentages were associated with geologic hazards such as earthquakes, landslides, and sinkholes. A



total of five responders reported having not been impacted by any of the hazards. Figure 1-8 shows the results of Question 8.

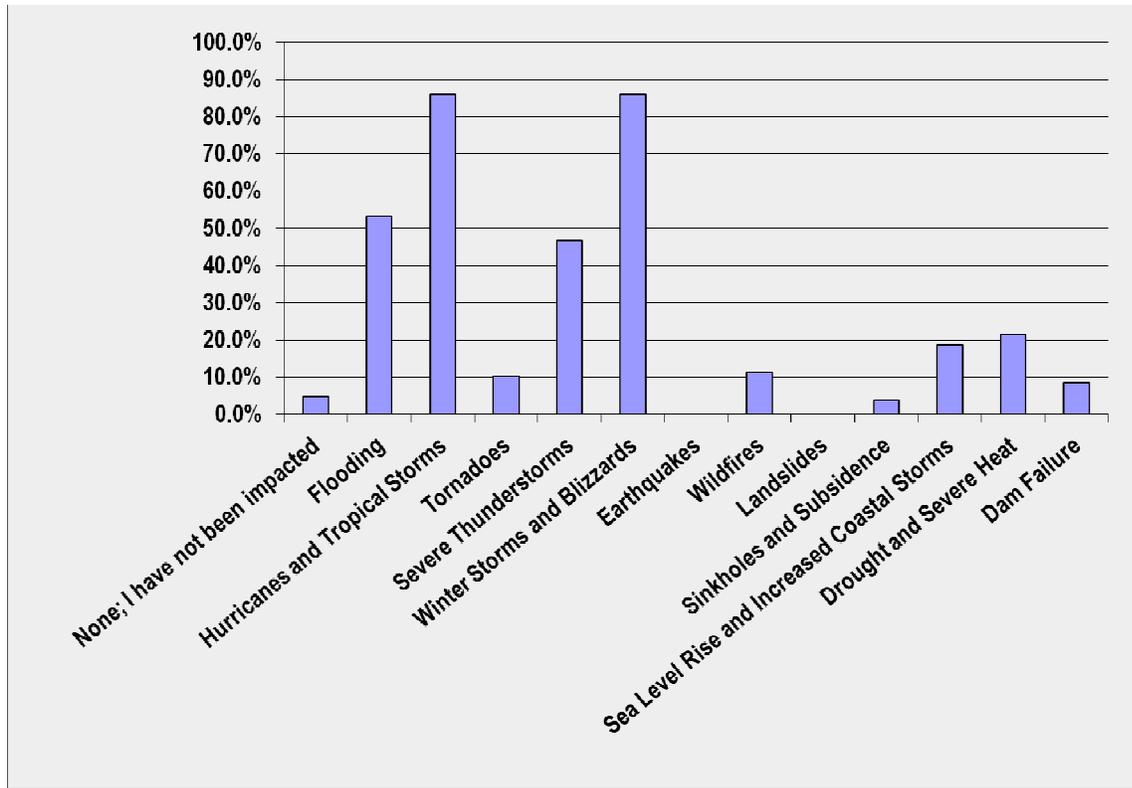


Figure 1-8. Recent Events Impacting Responders

Question 9 inquired whether any specific areas of the responder's community were vulnerable to any of the above hazards, and if so, to list them by location. Responses varied and included all areas of Connecticut. They are included in Appendix 1-3.

Question 10 asked what are the most important things that the State of Connecticut can do to help communities be prepared for a disaster, and become more resilient over time. Responses for the five provided choices are summarized in the table and written responses are below. Most of the five given choices were relatively popular among responders, with selections ranging from 47% to 74%. Results are included in .



**What can the State do to increase resilience and help communities be prepared?**

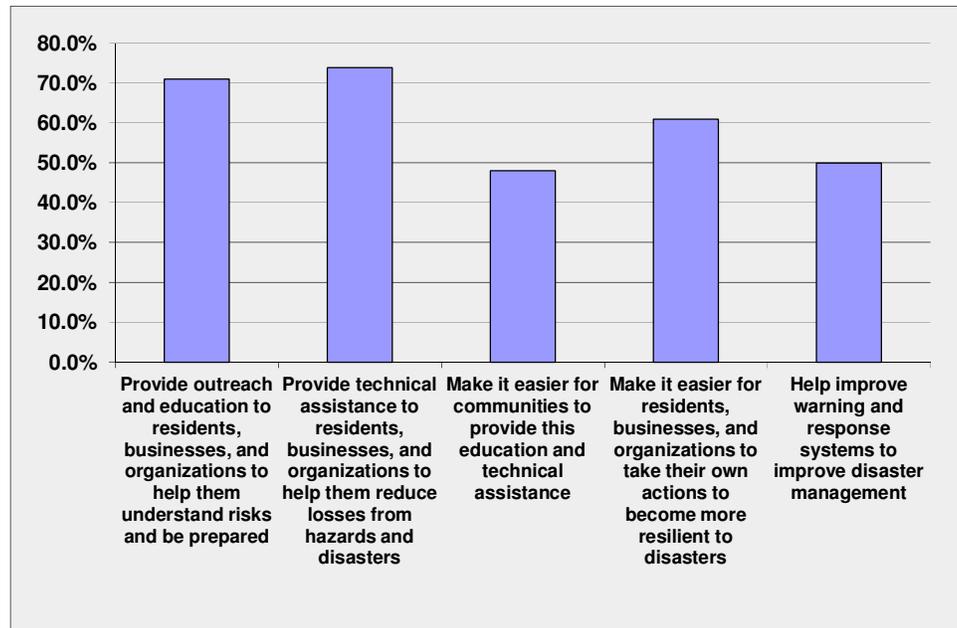


Figure 1-9. Survey Results on State Services Needed

Survey respondents provided many suggestions of ways the state could help communities prepare for a disaster and improve resilience. Respondents stated that while warning systems are good at the moment, they should be improved as new technology becomes available. Several individuals expressed the need for improved tree and infrastructure maintenance, including repairs to dams and drainage systems. Many respondents recommended burying power, cable, and phone infrastructure, improving the reliability of the electric grid, and changing regulations to prevent or discourage development within flood-prone areas. Interest was also expressed in increased funding for mitigation projects and review of municipal hazard mitigation plans at the local and state levels.

Question 11 asked what are the most important things that the responder's community can do to help its residents or organization be prepared for a disaster, and become more resilient over time. Responses for the six provided choices are summarized in the table and written responses are below. Most of the six given choices were relatively popular among responders, with selections ranging from 40% to 63%. The results are shown in Table 1-5.



Table 1-5. Survey Results on Local Services Needed

Provide outreach and education to residents, businesses, and organizations to help them understand risks and be prepared	63%
Provide technical assistance to residents, businesses, and organizations to help them reduce losses from hazards and disasters	50%
Conduct projects in the community, such as drainage and flood control projects, to mitigate for hazards and minimize impacts from disasters	60%
Make it easier for residents, businesses, and organizations to take their own actions to mitigate for hazards and become more resilient to disasters	55%
Improve warning and response systems to improve disaster management	40%
Enact and enforce regulations, codes, and ordinances such as zoning regulations and building codes	49%

The responses to Question 11 were similar to the responses for question 10. The respondents suggested tree cutting along roads, dam improvements, improved sheltering, emergency planning on the neighborhood level, and the installation of underground power lines. Other ideas included updating flood zone maps, preventing building in areas that are flood-prone, and incorporating resilience criteria into state and local processes and projects.

Question 12 asked if the responder has taken any actions to reduce the risk or vulnerability to his or her family, home, or organization, and if so, to please indicate. Responses for the ten provided choices are summarized in the table and written responses are below. The most common responses were cutting back vegetation and reducing snow loads. At least 22% of responders had not taken any actions. Table 1-6 includes the results of Question 12.



Table 1-6. Survey Results on Personal Actions

Elevated my home or business to reduce flood damage	3%
Floodproofed my business to reduce flood damage	3%
Installed storm shutters or structural/roof braces to reduce wind damage	1%
Taken measures to reduce snow build-up on roofs	43%
Cut back or removed vegetation from my overhead utility lines or roof	44%
Replaced my overhead utility lines with underground lines	2%
Managed vegetation to reduce risk of wildfire reaching my home or business	8%
Developed a disaster plan for my family, home, or business	31%
Maintain a disaster supply kit for my family, home, or business	36%
I have not taken any of these actions	22%

Question 13 asked “If you could choose one action that could be taken in the State of Connecticut to reduce its vulnerability to hazards and the disasters associated with these hazards, what would it be?” Choices were not provided; all responders were required to enter a response or skip the question. A total of 93 written responses were entered.

The most common responses were to cut trees along roads and power lines and to prevent building in flood zones. Individuals also suggested acquiring properties in flood prone areas and helping those residents relocate. The majority of the responses included recommendations already made in Questions 10 and 11; however some new ideas were presented. Respondents expressed interest in educating residents and businesses as well as land use commissioners and local decision makers, enforcing NFIP regulations, modifying state building codes to allow for sea level rise, mandating that people work from home to prevent driving during hazardous events, and acquiring and restoring floodplains. One responder would like regulations changed in order to encourage gas stations to maintain and operate generators to provide gas. Other responders suggested improving the electrical grid, providing funding and education for mitigation projects, providing incentives for residents to purchase emergency supplies, providing funding to elevate houses, protecting coastal marshes and wetlands, publicize state documents that explain mitigation projects and restoration initiatives, minimizing impervious surfaces, and enacting stormwater regulations.

Question 14 allowed the responder to provide any additional comments or questions to be addressed as the State updates its hazard mitigation plan. A total of 32 written responses



were entered, and were similar to those entered for Question 13. They are included in Appendix 1-3.

### **1.10.2 Survey Summary**

Several important messages were provided by the survey responders. With equal emphasis, the top two messages are to address wind and snow damage to electrical lines that results in power outages, and manage flood risk zones to reduce flood damage. Responders would like the state, municipalities, and utilities to address wind and snow damage to electrical lines by requiring, facilitating, funding, encouraging, or accomplishing trimming of tree limbs, removal of trees, burying power lines, hardening power lines, and creation of microgrids and other redundancies. Responders would like the State and its municipalities to remove structures from flood zones, prevent new buildings in flood zones, and prevent rebuilding in flood zones after damage occurs. While many of the responders were speaking of inland and coastal flood zones, some of them chose to emphasize retreat from the shoreline. A few responders requested technical or financial assistance for their own at-risk properties.

Aside from the recommendations for addressing power outages and flood risks, survey responders appeared to focus on themes such as increased education, improved emergency communication, and improved community resilience. It is notable that many of the responses to the survey were heavily influenced by the damage to power lines caused by Hurricane Irene and Winter Storm Alfred in 2011, and flooding caused by Hurricanes Irene and Sandy in 2011 and 2012, respectively.

## **1.11 Summary of Other Input**

Beginning on July 22, 2013, hyperlinks to the draft plan were provided on DEEP's webpage and an internal post on its intranet page. Figure 1-10 shows a screen shot of the Natural Hazard Mitigation Web Page, inviting public comment on the draft.

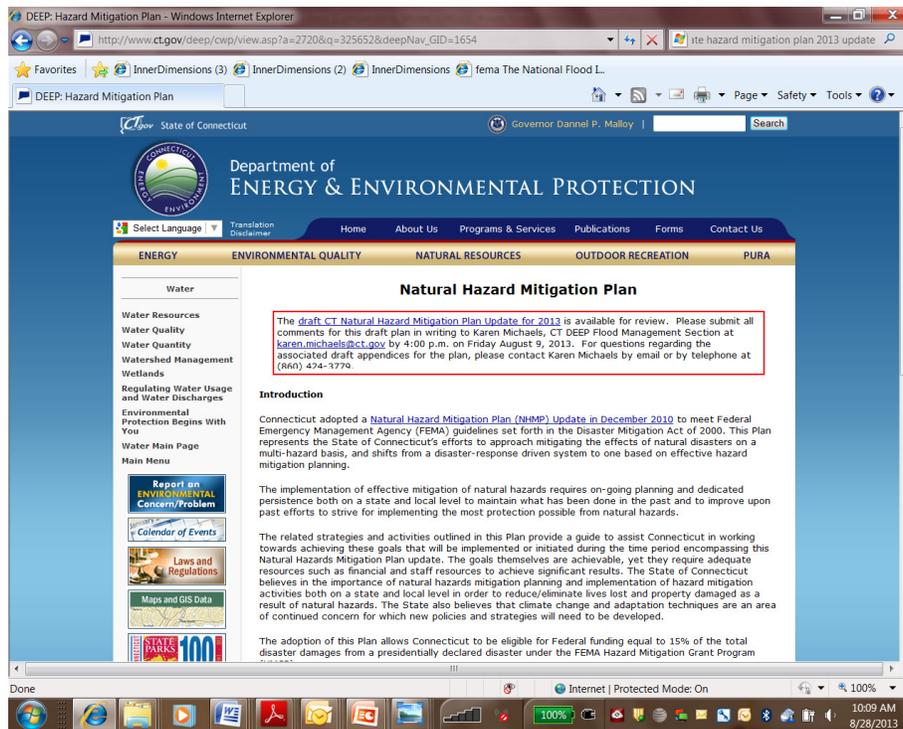


Figure 1-10. DEEP's Natural Hazard Mitigation Webpage

In addition to comments received from the public as a result of the public survey, and comments received from the SHMPT and larger stakeholder groups, comments were also received and incorporated from:

- Lizzette Peltier – Natural & Cultural Resources RSF Team
- Denise Savageau – Town of Greenwich
- Craig Mansfield – Town of East Haddam
- Emily Harrington – Town of Milford

These individuals are also included in the list of Stakeholder providing comments contained in Subsection 1.9.5.



## 2 Natural Hazard Identification and Risk Assessment

### 2.1 Introduction

In developing a comprehensive Natural Hazards Mitigation Plan, the first step is to determine what hazards threaten the state and the extent of the risk they pose to the lives and property of the state's residents and its economy. This chapter presents an overview of the hazard identification and risk assessment (HIRA) process. Once identified and analyzed, the hazards were ranked to determine the highest risks to Connecticut. Finally, based on the history of occurrences and exposure, the vulnerability assessment and loss estimates elaborate on the potential impacts of the hazards that pose the highest risks.

The hazards impacting Connecticut have been evaluated using geographic information systems (GIS) and available historical information. This allows for comparison between counties of the relative exposures to hazards and sets the groundwork for local hazard mitigation plan updates. It should be noted that the ranking and analysis in this plan is in terms of relative risk to other jurisdictions in the state. All the hazards addressed in this plan are only relative to Connecticut.

#### 2.1.1 HIRA update and changes

During the kick-off meeting for the plan update, the Hazard Mitigation Planning Team (SHMP Team) decided that the results and analysis should be done at a regional scale since the 156 local plans (out of 173 total communities<sup>1</sup>) provide community specific information. The state plan presents that general findings from the local plan and summarizes them at a county-wide and state-wide view. In addition, the majority of hazard and federal data is only available at the county-level. The risk assessment documented in 2011 found the state not to be at risk for landslide, land subsidence, or volcanoes; this observation remains valid and those hazards have not been included in this update.

To ensure a comprehensive risk assessment, the SHMP Team decided not to disqualify a hazard without at least conducting a preliminary hazard identification and risk assessment. During the initial kick-off meeting, several hazard groupings and naming conventions were changed to better reflect the hazard. The following hazards have been added to the risk assessment discussion: thunderstorm winds, erodible lands, and extreme heat. Climate change has been discussed throughout this section, risk assessment in subsection 2.75 and each hazard specific section as an amplifier.

CT DEEP Dam Safety indicated that ice jams have not occurred since 2010 and should be removed as a separate hazard in the HIRA. A recent project on the Salmon River has all but eliminated ice jams on that watercourse. Tsunamis were also removed from

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<sup>1</sup> Connecticut has 169 municipalities; the additional four communities include the two tribal governments and the political subdivisions of Groton and Stonington.



consideration due to their low probability of occurrence. Appendix 2 includes archived information on ice jams and tsunamis in Connecticut.

During the kickoff, it was mentioned that the Red Cross currently uses the analysis from the HIRA as the basis for their large scale disaster planning and that the current hazards address their needs for planning.

Local plans were also evaluated to make sure all hazards identified at the local level were included as part of this revision. Chapter 4 describes the hazards identified in local plans and how they are incorporated into the state mitigation plan.

The Hazard Identification, Risk Assessment and Vulnerability Analysis chapter of the 2014 plan update consolidates, updates, and streamlines content from the previous plan. Sections have been reorganized for ease of review for the reader. Chapter content was restructured to address a broad range of emerging hazards, vulnerabilities, and risk issues. Significant changes include:

- Standardizing terminology;
- Use of a new, GIS-based ranking methodology that assesses hazard risk by jurisdiction and integrates local plan rankings;
- New facility analysis for all major hazards;
- Development of annualized loss by county; and
- Review of local risk assessments, land use planning, and development.

In addition, hazard profiles were restructured, and new analyses were performed using updated NCDC Storm Events data as well as other data sources to capture hazard events that have occurred since 2011.

### **Data Collection**

To update the risk assessment, data was collected from a variety of sources. The assessment began with a thorough review of all the local hazard mitigation plans available in the state. Chapter 4 describes the local plan integration into the state plan. While the local plans were a valuable source for qualitative data, additional quantitative data sources were utilized in order to determine the jurisdictions most threatened by each hazard. Sources included national databases, published materials, expert interviews, and raw data from a number of state and federal agencies.

In order to assess the vulnerability of different jurisdictions to the hazards, data on past occurrences of damaging hazard events was gathered. So that one could compare the distribution of events between different hazards, the same data sources were used when possible to create hazard profile maps. Generally, the main source of information used to analyze past hazard events and to rank hazards was the National Climatic Data Center (NCDC) Storm Events database. Hazard data was supplemented with sources such as the



NWS weather station data, Connecticut Division of Construction Services, Connecticut Department of Transportation, DEEP Forestry Division and Geological Survey.

Chapter 3 provides in-depth information on the programs, policies, and task force/subcommittees Connecticut has in place that are associated with natural hazard mitigation.

Due to 2013 legislation, the **Connecticut GIS Council** has been dissolved and OPM is now the successor to the GIS Council. OPM is now responsible for coordinating, within available appropriations, a GIS capacity for the state, regional planning agencies, municipalities, and others as needed. OPM guides and assists state and local officials involved in transportation, economic development, land use planning, environmental, cultural, and natural resource management, public service delivery, and other areas as necessary.

Since natural hazard mitigation is intrinsically linked to location and geography, the following are past highlights of the work supported by the GIS Council and other independent councils and panels that are pertinent to this plan (additional details in Chapter 3):

- Critical Infrastructure and Key Resources (CI/KR) subcommittee
- Storm Response and Recovery Assessment Group
- The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change
- Two Storm Panel
- Shoreline Preservation task Force
- State Vegetation Management Task Force
- State-wide Long-term Recovery Committee

## 2.2 General Description of Connecticut

Connecticut is a "home rule" state and nearly all decisions are made at the municipal level. Planning and implementation of actions to reduce the impacts of hazards must happen at the local level. As outlined in Chapter 3, the State is providing significant guidance and assistance. The SHMP Team made a committee decision to complete vulnerability analysis and show results at a county-level for the SHMP. This is a result of the best available datasets for historical hazards and spatial hazard extents being compiled at the county-level (National datasets).

Connecticut has 169 municipalities, two tribal governments, and the political subdivisions of Groton and Stonington for a total of 173 local political entities. There are 156 local regional plans that provide community specific information related to risk, capabilities, and mitigation strategies. Table 2-1 summarizes the municipalities located within each County,



type of local mitigation plan, and expiration date. Connecticut is currently working with local municipalities to update and revise their local mitigation plans and address the gaps in their vulnerability assessments and loss estimates. This state plan presents that general findings from the local plan and summarizes them at a county-wide and state-wide view in each of the hazard specific sub-sections and in Chapter 4. The local mitigation tracking tool is available in Appendix 4. When available, municipality specific data have been provided in this update.

Table 2-1. Status of County and municipality local hazard mitigation plans. (MJ = Multi-Jurisdictional, S= Single, - = No plan currently approved).

County	Regional Planning Organization	Community or Tribe	Plan Type	Expiration Date
Fairfield	GBRC	Bridgeport	MJ	1/29/2012
		Easton	MJ	1/29/2012
		Fairfield	MJ	1/29/2012
		Monroe	MJ	1/29/2012
		Stratford	MJ	1/29/2012
		Trumbull	MJ	1/29/2012
	HVCEO	Bethel	-	-
		Brookfield	-	-
		Danbury	S	4/3/2017
		New Fairfield	S	8/23/2016
		Newtown	-	-
		Redding	-	-
		Ridgefield	-	-
		Sherman	S	7/18/2016
	SWRPA	Darien	MJ	6/9/2016
		Greenwich	MJ	6/9/2016
		New Canaan	MJ	6/9/2016
		Norwalk	MJ	6/9/2016
		Stamford	MJ	6/9/2016
		Weston	MJ	6/9/2016
		Westport	MJ	6/9/2016
		Wilton	MJ	6/9/2016
	VCOG	Shelton	MJ	2/14/2018
Hartford	CCRPA	Berlin	MJ	6/15/2016
		Bristol	MJ	6/15/2016
		Burlington	MJ	6/15/2016
		New Britain	MJ	6/15/2016
		Plainville	MJ	6/15/2016
		Southington	MJ	6/15/2016
	CRCOG	Avon	MJ	9/24/2013



County	Regional Planning Organization	Community or Tribe	Plan Type	Expiration Date
		Bloomfield	MJ	9/24/2013
		Canton	MJ	9/24/2013
		East Granby	MJ	9/24/2013
		East Hartford	MJ	9/24/2013
		East Windsor	MJ	9/24/2013
		Enfield	MJ	9/24/2013
		Farmington	MJ	9/24/2013
		Glastonbury	MJ	9/24/2013
		Granby	MJ	9/24/2013
		Hartford	MJ	9/24/2013
		Manchester	MJ	9/24/2013
		Marlborough	MJ	9/24/2013
		Newington	MJ	9/24/2013
		Rocky Hill	MJ	9/24/2013
		Simsbury	MJ	9/24/2013
		South Windsor	MJ	9/24/2013
		Suffield	MJ	9/24/2013
		West Hartford	MJ	9/24/2013
		Wethersfield	MJ	9/24/2013
		Windsor	MJ	9/24/2013
		Windsor Locks	MJ	9/24/2013
	LHCEO	Hartland	MJ	2/27/2012
Litchfield	CCRPA	Plymouth	MJ	6/15/2016
	COGCNV	Bethlehem	S	4/10/2014
		Thomaston	S	4/10/2014
		Watertown	S	4/6/2012
		Woodbury	S	4/6/2012
	HVCEO	Bridgewater	-	-
		New Milford	-	-
	LHCEO	Barkhamsted	MJ	2/27/2012
		Colebrook	MJ	2/27/2012
		Goshen	MJ	2/27/2012
		Harwinton	MJ	2/27/2012
		Litchfield	MJ	2/27/2012
		Morris	MJ	2/27/2012
		New Hartford	MJ	2/27/2012
		Norfolk	MJ	2/27/2012
Torrington		MJ	2/27/2012	
Winchester		MJ	2/27/2012	
NWCOG	Canaan	-	-	



County	Regional Planning Organization	Community or Tribe	Plan Type	Expiration Date
		Cornwall	-	-
		Kent	-	-
		North Canaan	-	-
		Roxbury	-	-
		Salisbury	-	-
		Sharon	-	-
		Warren	-	-
		Washington	-	-
Middlesex	LCRVCOG	Chester	MJ	1/18/2012
		Clinton	MJ	1/18/2012
		Cromwell	-	-
		Deep River	MJ	1/18/2012
		Durham	-	-
		East Haddam	-	-
		East Hampton	-	-
		Essex	MJ	1/18/2012
		Haddam	-	-
		Killingworth	MJ	1/18/2012
		Middlefield	-	-
		Middletown	-	-
		Old Saybrook	MJ	1/18/2012
		Portland	-	-
		Westbrook	MJ	1/18/2012
		New Haven	COGCNV	Beacon Falls
Cheshire	S			5/23/2013
Middlebury	S			5/29/2014
Naugatuck	S			9/9/2014
Oxford	S			4/6/2012
Prospect	S			8/6/2014
Southbury	S			4/10/2014
Waterbury	S			12/10/2012
Wolcott	S			9/30/2013
SCRCOG	Bethany		MJ	-
	Branford		MJ	-
	East Haven		S	6/4/2017
	Guilford		S	7/19/2017
	Hamden		MJ	-
	Madison		MJ	-
	Meriden		S	4/28/2018
	Milford		S	8/13/2012



County	Regional Planning Organization	Community or Tribe	Plan Type	Expiration Date
		New Haven	S	8/2/2016
		North Branford	MJ	-
		North Haven	MJ	-
		Orange	MJ	-
		Wallingford	MJ	-
		West Haven	MJ	-
		Woodbridge	MJ	-
	VCOG	Ansonia	MJ	2/14/2018
		Derby	MJ	2/14/2018
		Seymour	MJ	2/14/2018
New London	LCRVCOG	Lyme	MJ	1/18/2012
		Old Lyme	MJ	1/18/2012
	SCCOG	Bozrah	MJ	10/24/2017
		Colchester	MJ	10/24/2017
		East Lyme	MJ	10/24/2017
		Franklin	MJ	10/24/2017
		Griswold	MJ	10/24/2017
		Groton (City)	MJ	10/24/2017
		Groton (Town)	MJ	10/24/2017
		Ledyard	MJ	10/24/2017
		Lisbon	MJ	10/24/2017
		Montville	MJ	10/24/2017
		New London	MJ	10/24/2017
		North Stonington	MJ	10/24/2017
		Norwich	MJ	10/24/2017
		Preston	MJ	10/24/2017
		Salem	MJ	10/24/2017
		Sprague	MJ	10/24/2017
		Stonington (Borough)	MJ	10/24/2017
		Stonington (Town)	MJ	10/24/2017
		Voluntown	MJ	10/24/2017
	Waterford	MJ	10/24/2017	
	WRCOG	Lebanon	MJ	2/16/2012
Tolland	CRCOG	Andover	MJ	9/24/2013
		Bolton	MJ	9/24/2013
		Ellington	MJ	9/24/2013
		Hebron	MJ	9/24/2013
		Somers	MJ	9/24/2013
		Stafford	-	-



County	Regional Planning Organization	Community or Tribe	Plan Type	Expiration Date
		Tolland	MJ	9/24/2013
		Vernon	MJ	9/24/2013
	NECCOG	Union	-	-
	WRCOG	Columbia	MJ	2/16/2012
		Coventry	MJ	2/16/2012
		Mansfield	MJ	2/16/2012
		Willington	MJ	2/16/2012
	Windham	NECCOG	Ashford	MJ
Brooklyn			-	-
Canterbury			-	-
Eastford			-	-
Killingly			-	-
Plainfield			-	-
Pomfret			-	-
Putnam			-	-
Sterling			-	-
Thompson			-	-
Woodstock			-	-
WRCOG		Chaplin	MJ	2/16/2012
		Hampton	MJ	2/16/2012
		Scotland	MJ	2/16/2012
		Windham	MJ	2/16/2012
Unaffiliated		SCCOG	Mashantucket Pequot Tribal Nation	MJ
	Mohegan Tribe		MJ	10/24/2017

### 2.2.1 Geography

The geography of Connecticut contains a wide variety of landscapes. From the shores of Long Island Sound in southern Connecticut, the land gently slopes upward to rolling hills across the southern half of the State. More rugged terrain covers the northwestern and northeastern areas of Connecticut with forested hills and mountains climbing to elevations of over 2,000 feet. The Connecticut River Valley cuts through the center of the State, and several deep river valleys cut through the eastern and western sections of the State. All of these rivers generally flow from north to south and into Long Island Sound.

There are approximately 8,400 miles of rivers and streams, 6,000 lakes and ponds, 4,300 dams, and 332 miles of Long Island Sound fronting shoreline in Connecticut. Connecticut's shoreline and riverine areas were heavily developed for commercial, residential, and industrial uses during the past 200 years, since these areas are relatively flat, highly



desirable for construction purposes, and have the ability to provide an ample supply of hydropower, a major power source of early 19th Century industrialization.

The climate of Connecticut is moderate with annual rainfall averaging between 44 - 52 inches, and snowfall averaging between 30 inches at the coast of Long Island Sound up to 100 inches in the northwest hills. Temperatures range from highs in the 80's and 90's during the summer months, down to lows in the teens and single digits during the winter months.

Transcontinental storms (low pressure systems), and storms that form near the Gulf of Mexico and along the East Coast deliver most of the annual rain and snowfall to the State. Heavy short-duration rains are also caused by thunderstorm activity in all but the winter season. Occasional hurricanes, which typically occur between June 1st and December 1st, deliver heavy rains of longer duration. Less frequent in Connecticut are droughts, forest fires and earthquakes. Large-scale forest fires are rare in Connecticut. Fires are typically small underbrush and ground fires that rarely damage large numbers of buildings.

### 2.2.2 Demographics

Connecticut's demographics are a major factor in the risk posed by natural hazards. The 2010 U.S. Census Bureau population of Connecticut was 3,574,097, with 2012 estimates at 3,590,347. It is projected that this number will increase by 2% in 2015 and 4.7% by 2025.<sup>2</sup> Fairfield, Hartford, and New Haven have the greatest density of people per square mile. Connecticut has 169 municipalities within 8 counties covering 4,842 square miles of land area (Table 2-2). There are four additional communities including two tribal governments and the political subdivisions of Groton and Stonington. Two-thirds of the State's population and housing units are within Fairfield, Hartford, and New Haven counties. Figure 2-1 and Figure 2-2 show the 2010 population by census tract and municipality. Stamford, Norwalk, Bridgeport, New Haven, Waterbury, and Hartford have the largest municipality populations in Connecticut.

Table 2-2. Census Data for the State of Connecticut. Source: US Census Bureau.

County	Population (2010)	Housing Units (2011)	Land Area In Square Miles (2010)	Population Per Square Mile (2010)
Fairfield	916,829	362,739	624.89	1,467.2
Hartford	894,014	375,454	735.10	1,216.2
Litchfield	189,927	88,045	920.56	206.3
Middlesex	165,676	75,270	369.30	448.6
New Haven	862,477	363,231	604.51	1,426.7
New London	274,055	121,662	664.88	412.2
Tolland	152,691	58,273	410.21	372.2

<sup>2</sup> UCONN, Connecticut State Data Center (5/2013).



County	Population (2010)	Housing Units (2011)	Land Area In Square Miles (2010)	Population Per Square Mile (2010)
Windham	118,428	49,345	512.91	230.9
Total	3,574,097	1,494,019	4,842.36	738.09

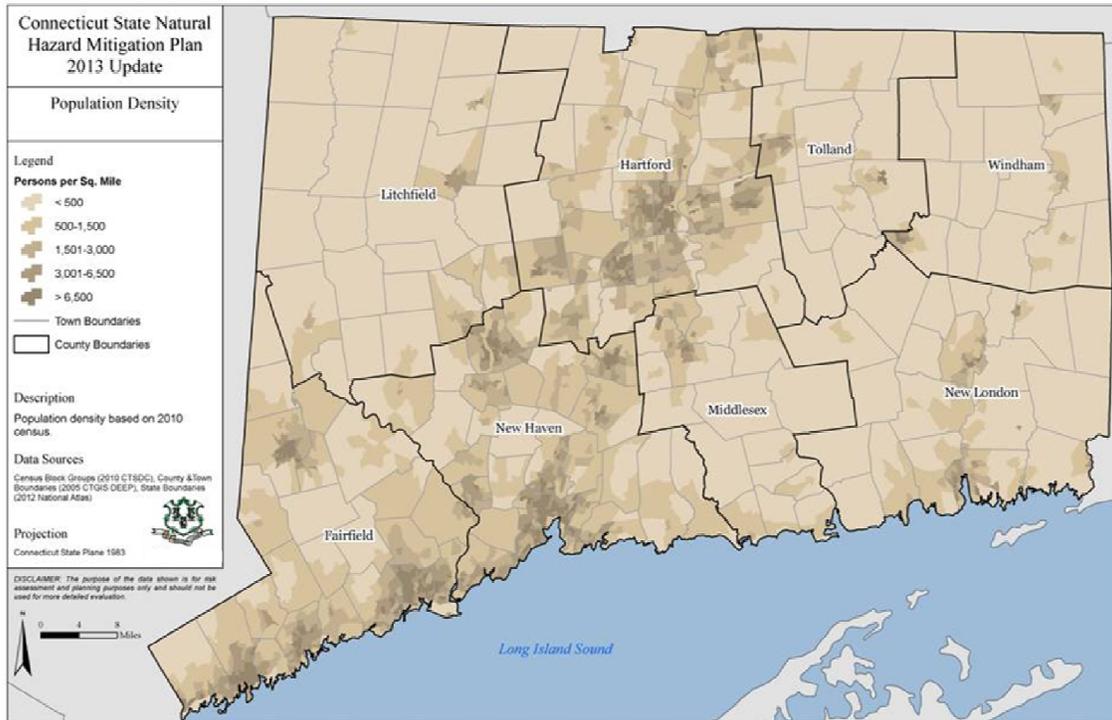


Figure 2-1. Population per square mile by census tract.

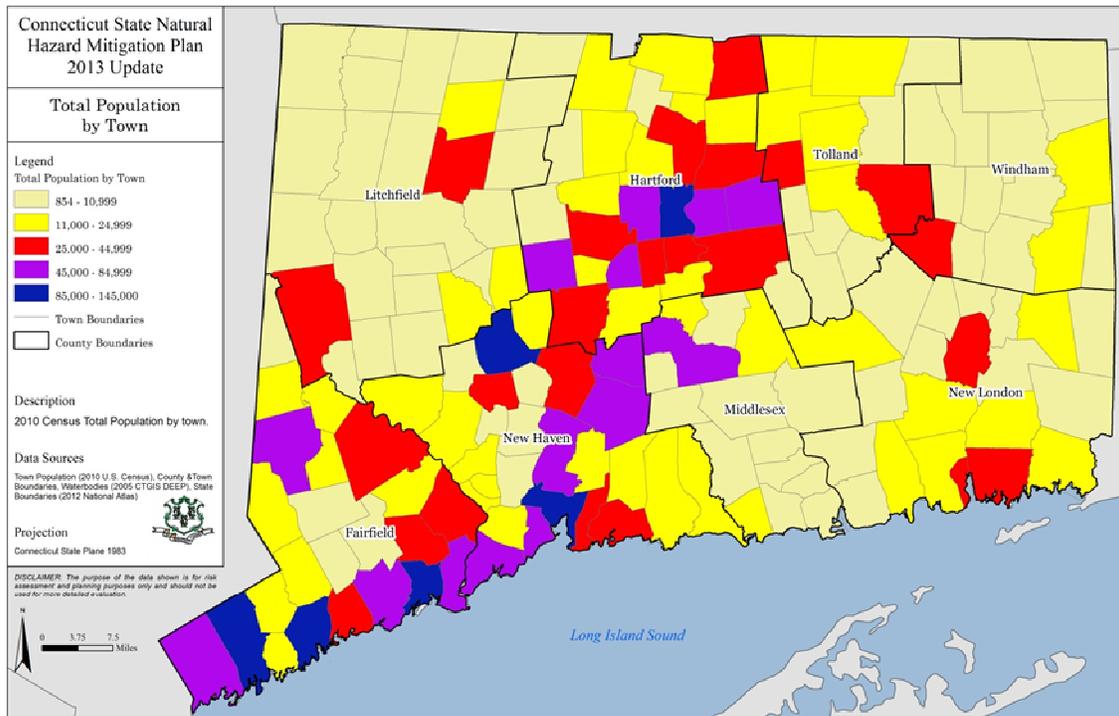


Figure 2-2. Total population distribution by municipality.

U.S. Census population statistics for 1980, 1990, 2000 and 2010 have been provided in Table 2-3. As detailed below, all eight counties in the state have seen an increase in population between 2000 and 2010, with New Haven County seeing the largest gain in total population, totaling 38,469 people, while Hartford and Fairfield Counties with 36,831 people and 34,262 people respectively.

Table 2-3. Population comparison for 1980, 1990, 2000, 2010. Source. U.S. Census Bureau.

County	Population (1980)	Population (1990)	Population (2000)	Population (2010)	Population Change from 2000 to 2010	Population Change from 2000 to 2010
Fairfield	807,143	827,645	882,567	916,829	34,262	+3.7%
Hartford	807,766	851,783	857,183	894,014	36,831	+4.1%
Litchfield	156,769	174,092	182,193	189,927	7,734	+4.1%
Middlesex	129,017	143,196	155,071	165,676	10,605	+6.4%
New Haven	761,337	804,219	824,008	862,477	38,469	+4.5%
New London	238,409	254,957	259,088	274,055	14,967	+5.5%
Tolland	114,823	128,699	136,364	152,691	16,327	+10.7%
Windham	92,312	102,525	109,091	118,428	9,337	+7.9%
Total	3,107,576	3,287,116	3,405,565	3,574,097	168,532	+4.7%



As discussed above and shown in Table 2-4, it is estimated that New Haven County will see the greatest increase in population in numbers between 2010 and 2025, followed by Hartford and Fairfield Counties.

Table 2-4. Population Projection by County, 2015, 2020, 2025. Source. U.S. Census Bureau, Census 2010; UCONN CT State Data Center.

County	Population (2010)	Population Projection 2015	Population Projection 2020	Population Projection 2025	Population Projection Change (2010 to 2025)
Fairfield	916,829	932,378	944,692	954,479	37,650
Hartford	894,014	910,921	925,491	936,811	42,797
Litchfield	189,927	192,189	193,114	193,113	3,186
Middlesex	165,676	168,834	170,517	170,976	5,300
New Haven	862,477	881,371	898,513	912,057	49,580
New London	274,055	279,756	283,666	285,773	11,718
Tolland	152,691	155,924	158,604	160,760	8,069
Windham	118,428	122,719	126,432	129,526	11,098
Total	3,574,097	3,644,092	3,701,029	3,743,495	169,398

As the 2010 plan noted, a review of local housing data and population estimates indicate that development has continued throughout the last decade, but slowed dramatically in years 2008 and 2009. However, development started to increase in 2012. In addition, it appears that when the economy strengthens, communities may begin to grow at a greater pace. It is anticipated that both populations and housing will begin to increase slowly in some communities. A review of the data also indicates that many smaller communities may begin to experience increased development pressures, especially when larger communities reach their build-out limits. This will increase the importance of hazard mitigation planning and natural resource management on a local level to help mitigate and/or reduce potential losses such development activities can create.

### 2.2.3 Facility and Infrastructure Datasets

Critical and state facilities and resultant analysis is new to the 2014 plan update. Facilities data was provided by the Connecticut Department of Administrative Services – Division of Construction Services (DAS-DCS) (now members of the SHMP Team). Mitigation strategies have been created to further expand on this dataset and collect additional attribute data. **The current data set has point locations for state and critical facilities throughout the state but has limited attribute information populated for building information.** Additional data should be collected (e.g. year built, first floor elevation, construction type, roof type, property value) to be able to provide in-depth analysis and mitigation strategies, including climate adaptation strategies, based on the HIRA results.



Assessed values for the buildings have been derived from the 2009 Joint Effort for State Inventory Reporting (JESTIR) database; this database is used to reimburse municipalities for their loss. These datasets and attribute information is under revision, newly built (2-3 years ) multi-million dollar structures are not currently in JESTIR. **Division of Construction Services (DCS) is working on updating and maintaining the datasets to include new building and collect information (for example., building assessment values) on existing buildings and infrastructure. The DCS infrastructure and building data is slated to be completed in the summer of 2014.** One example is the Gateway Community College in New Haven that has a construction amount of \$160 million and is not currently in JESTIR. Water and wastewater are critical to emergency operations of critical facilities and have been included in the facilities analysis. CT DEEP Bureau of Water Protection and Land Reuse provided the locations of State, municipal and private Water Pollution Control Facilities (WPCFs) across the state.

As mentioned above, these datasets are currently changing and mitigation actions have been created to address the gaps in the data and future analysis (see Chapter 5). Several facilities and infrastructure in the state and critical datasets may contain duplicates. The information should be used with caution as the critical facilities also include state run institutions and a handful of federal institutions.

### State Infrastructure and Facilities

There are 3,327 mapped state-owned facilities. Based on the 2009 JESTIR database, the estimated total value of state buildings is over \$8.7 Billion, with over \$1.7 billion in content value (see Table 2-5 and Figure 2-3). **As stated above, this dataset is currently under revision by DCS and is currently does not have a complete inventory of asset value. This will be available through DCS in the summer of 2014.** Appendix 2 includes a data security letter from the Director of Inland Water Resources Division regarding the Constellation/Automated Critical Asset Management System (C/ACAMS).

Hartford County accounts for over 26% of the structures, followed by Tolland (18.8%). Building values have not been linked to the mapped database for Fairfield, Hartford, Litchfield, Middlesex, and New Haven counties, therefore building value and hazard specific exposure estimates are incomplete at this time. In addition to the facilities provided by Division of Construction Services, UCONN water pollution control facility (WPCF) in Tolland County has been provided by CT DEEP Bureau of Water Protection and Land Reuse and is included as a state-owned facility. No building replacement value or building specific criteria is available for this structure.

In an attempt to quantify vulnerability to state facilities and infrastructure, an average value for facility was estimated based on the known building values in New London, Tolland, and Windham. For this purpose only it can be estimated that a facility/infrastructure within Connecticut is valued at approximately \$1.2 million dollars for building value and \$279,452 for contents value. This value has been derived by dividing known building value ((\$1.655 billion) by 1,304 facilities and contents value (\$363 million) by number of facilities. Each hazard specific section includes a vulnerability estimate derived from this value. **These extrapolated building values should only be used for relative comparison of exposed value between counties.** It should be noted that this



value, as shown in the table below, when validated against known exposures dramatically overestimate the value for New London and Windham and underestimate the values in Tolland County by \$809 million. Known building and contents values were used for New London, Tolland and Windham counties.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

Table 2-5. Number of state facility/infrastructure and building values.

County	Municipality	Number of Facilities	Total Known Building Value	Total Known Contents Value	Estimated Building Value*	Estimated Contents Value*
<b>Fairfield</b>	<b>Fairfield</b>	<b>205</b>	<b>\$0</b>	<b>\$0</b>	<b>\$259,452,104</b>	<b>\$57,287,561</b>
Fairfield	Bridgeport	26	\$0	\$0	\$32,906,121	\$7,265,739
Fairfield	Brookfield	2	\$0	\$0	\$2,531,240	\$558,903
Fairfield	Danbury	61	\$0	\$0	\$77,202,821	\$17,046,542
Fairfield	New Canaan	9	\$0	\$0	\$11,390,580	\$2,515,064
Fairfield	New Fairfield	11	\$0	\$0	\$13,921,820	\$3,073,967
Fairfield	Newtown	25	\$0	\$0	\$31,640,501	\$6,986,288
Fairfield	Norwalk	19	\$0	\$0	\$24,046,780	\$5,309,579
Fairfield	Ridgefield	7	\$0	\$0	\$8,859,340	\$1,956,161
Fairfield	Shelton	6	\$0	\$0	\$7,593,720	\$1,676,709
Fairfield	Stamford	11	\$0	\$0	\$13,921,820	\$3,073,967
Fairfield	Stratford	12	\$0	\$0	\$15,187,440	\$3,353,418
Fairfield	Westport	15	\$0	\$0	\$18,984,300	\$4,191,773
Fairfield	Wilton	1	\$0	\$0	\$1,265,620	\$279,452
<b>Hartford</b>	<b>Hartford</b>	<b>867</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,097,292,559</b>	<b>\$242,284,464</b>
Hartford	Avon	9	\$0	\$0	\$11,390,580	\$2,515,064
Hartford	Berlin	3	\$0	\$0	\$3,796,860	\$838,355
Hartford	Bloomfield	10	\$0	\$0	\$12,656,200	\$2,794,515
Hartford	Bristol	5	\$0	\$0	\$6,328,100	\$1,397,258
Hartford	Burlington	15	\$0	\$0	\$18,984,300	\$4,191,773
Hartford	Canton	1	\$0	\$0	\$1,265,620	\$279,452
Hartford	East Granby	87	\$0	\$0	\$110,108,942	\$24,312,282
Hartford	East Hartford	7	\$0	\$0	\$8,859,340	\$1,956,161
Hartford	East Windsor	23	\$0	\$0	\$29,109,260	\$6,427,385
Hartford	Enfield	60	\$0	\$0	\$75,937,201	\$16,767,091
Hartford	Farmington	47	\$0	\$0	\$59,484,141	\$13,134,221
Hartford	Glastonbury	15	\$0	\$0	\$18,984,300	\$4,191,773
Hartford	Granby	1	\$0	\$0	\$1,265,620	\$279,452
Hartford	Hartford	117	\$0	\$0	\$148,077,542	\$32,695,827



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County	Municipality	Number of Facilities	Total Known Building Value	Total Known Contents Value	Estimated Building Value*	Estimated Contents Value*
Hartford	Manchester	20	\$0	\$0	\$25,312,400	\$5,589,030
Hartford	New Britain	64	\$0	\$0	\$80,999,681	\$17,884,897
Hartford	Newington	57	\$0	\$0	\$72,140,341	\$15,928,736
Hartford	Rocky Hill	75	\$0	\$0	\$94,921,502	\$20,958,864
Hartford	Simsbury	10	\$0	\$0	\$12,656,200	\$2,794,515
Hartford	South Windsor	1	\$0	\$0	\$1,265,620	\$279,452
Hartford	Southington	10	\$0	\$0	\$12,656,200	\$2,794,515
Hartford	Suffield	33	\$0	\$0	\$41,765,461	\$9,221,900
Hartford	West Hartford	6	\$0	\$0	\$7,593,720	\$1,676,709
Hartford	Wethersfield	20	\$0	\$0	\$25,312,400	\$5,589,030
Hartford	Windsor	15	\$0	\$0	\$18,984,300	\$4,191,773
Hartford	Windsor Locks	156	\$0	\$0	\$197,436,723	\$43,594,436
<b>Litchfield</b>	<b>Litchfield</b>	<b>97</b>	<b>\$0</b>	<b>\$0</b>	<b>\$122,765,142</b>	<b>\$27,106,797</b>
Litchfield	Barkhamsted	4	\$0	\$0	\$5,062,480	\$1,117,806
Litchfield	Cornwall	26	\$0	\$0	\$32,906,121	\$7,265,739
Litchfield	Kent	23	\$0	\$0	\$29,109,260	\$6,427,385
Litchfield	Litchfield	9	\$0	\$0	\$11,390,580	\$2,515,064
Litchfield	North Canaan	2	\$0	\$0	\$2,531,240	\$558,903
Litchfield	Torrington	16	\$0	\$0	\$20,249,920	\$4,471,224
Litchfield	Warren	1	\$0	\$0	\$1,265,620	\$279,452
Litchfield	Washington	3	\$0	\$0	\$3,796,860	\$838,355
Litchfield	Winchester	13	\$0	\$0	\$16,453,060	\$3,632,870
<b>Middlesex</b>	<b>Middlesex</b>	<b>289</b>	<b>\$0</b>	<b>\$0</b>	<b>\$365,764,186</b>	<b>\$80,761,488</b>
Middlesex	Chester	2	\$0	\$0	\$2,531,240	\$558,903
Middlesex	Clinton	1	\$0	\$0	\$1,265,620	\$279,452
Middlesex	Cromwell	1	\$0	\$0	\$1,265,620	\$279,452
Middlesex	Deep River	1	\$0	\$0	\$1,265,620	\$279,452
Middlesex	Durham	2	\$0	\$0	\$2,531,240	\$558,903
Middlesex	East Haddam	68	\$0	\$0	\$86,062,161	\$19,002,703
Middlesex	East Hampton	8	\$0	\$0	\$10,124,960	\$2,235,612
Middlesex	Essex	4	\$0	\$0	\$5,062,480	\$1,117,806
Middlesex	Haddam	25	\$0	\$0	\$31,640,501	\$6,986,288
Middlesex	Killingworth	18	\$0	\$0	\$22,781,160	\$5,030,127
Middlesex	Middlefield	1	\$0	\$0	\$1,265,620	\$279,452
Middlesex	Middletown	121	\$0	\$0	\$153,140,023	\$33,813,633
Middlesex	Old Saybrook	6	\$0	\$0	\$7,593,720	\$1,676,709
Middlesex	Portland	20	\$0	\$0	\$25,312,400	\$5,589,030
Middlesex	Westbrook	11	\$0	\$0	\$13,921,820	\$3,073,967
<b>New Haven</b>	<b>New Haven</b>	<b>561</b>	<b>\$0</b>	<b>\$0</b>	<b>\$710,012,832</b>	<b>\$156,772,300</b>
New Haven	Ansonia	2	\$0	\$0	\$2,531,240	\$558,903



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County	Municipality	Number of Facilities	Total Known Building Value	Total Known Contents Value	Estimated Building Value*	Estimated Contents Value*
New Haven	Bethany	4	\$0	\$0	\$5,062,480	\$1,117,806
New Haven	Branford	6	\$0	\$0	\$7,593,720	\$1,676,709
New Haven	Cheshire	52	\$0	\$0	\$65,812,241	\$14,531,479
New Haven	Derby	7	\$0	\$0	\$8,859,340	\$1,956,161
New Haven	East Haven	17	\$0	\$0	\$21,515,540	\$4,750,676
New Haven	Guilford	8	\$0	\$0	\$10,124,960	\$2,235,612
New Haven	Hamden	40	\$0	\$0	\$50,624,801	\$11,178,061
New Haven	Madison	44	\$0	\$0	\$55,687,281	\$12,295,867
New Haven	Meriden	46	\$0	\$0	\$58,218,521	\$12,854,770
New Haven	Milford	8	\$0	\$0	\$10,124,960	\$2,235,612
New Haven	New Haven	140	\$0	\$0	\$177,186,803	\$39,123,212
New Haven	North Haven	7	\$0	\$0	\$8,859,340	\$1,956,161
New Haven	Oxford	20	\$0	\$0	\$25,312,400	\$5,589,030
New Haven	Seymour	1	\$0	\$0	\$1,265,620	\$279,452
New Haven	Southbury	136	\$0	\$0	\$172,124,323	\$38,005,406
New Haven	Wallingford	2	\$0	\$0	\$2,531,240	\$558,903
New Haven	Waterbury	11	\$0	\$0	\$13,921,820	\$3,073,967
New Haven	West Haven	2	\$0	\$0	\$2,531,240	\$558,903
New Haven	Wolcott	5	\$0	\$0	\$6,328,100	\$1,397,258
New Haven	Woodbridge	3	\$0	\$0	\$3,796,860	\$838,355
<b>New London</b>	<b>New London</b>	<b>489</b>	<b>\$22,037,766</b>	<b>\$4,536,660</b>	<b>\$618,888,190</b>	<b>\$136,651,791</b>
New London	Bozrah	2	\$0	\$0	\$2,531,240	\$558,903
New London	Colchester	12	\$3,864,285	\$3,546,150	\$15,187,440	\$3,353,418
New London	East Lyme	190	\$16,807,120	\$49,635	\$240,467,804	\$53,095,788
New London	Franklin	13	\$760,552	\$23,810	\$16,453,060	\$3,632,870
New London	Griswold	11	\$0	\$0	\$13,921,820	\$3,073,967
New London	Groton	57	\$0	\$0	\$72,140,341	\$15,928,736
New London	Lisbon	6	\$605,809	\$917,064	\$7,593,720	\$1,676,709
New London	Montville	13	\$0	\$0	\$16,453,060	\$3,632,870
New London	New London	7	\$0	\$0	\$8,859,340	\$1,956,161
New London	North Stonington	3	\$0	\$0	\$3,796,860	\$838,355
New London	Norwich	97	\$0	\$0	\$122,765,142	\$27,106,797
New London	Preston	3	\$0	\$0	\$3,796,860	\$838,355
New London	Voluntown	1	\$0	\$0	\$1,265,620	\$279,452
New London	Waterford	74	\$0	\$0	\$93,655,882	\$20,679,412
<b>Tolland</b>	<b>Tolland</b>	<b>628</b>	<b>\$1,604,033,369</b>	<b>\$358,141,727</b>	<b>\$794,809,373</b>	<b>\$175,495,552</b>
Tolland	Andover	1	\$0	\$0	\$1,265,620	\$279,452
Tolland	Bolton	3	\$2,205,510	\$1,329,169	\$3,796,860	\$838,355
Tolland	Columbia	5	\$284,474	\$0	\$6,328,100	\$1,397,258
Tolland	Coventry	7	\$0	\$0	\$8,859,340	\$1,956,161



County	Municipality	Number of Facilities	Total Known Building Value	Total Known Contents Value	Estimated Building Value*	Estimated Contents Value*
Tolland	Ellington	1	\$307,559	\$8,765	\$1,265,620	\$279,452
Tolland	Hebron	10	\$0	\$0	\$12,656,200	\$2,794,515
Tolland	Mansfield	527	\$1,554,975,730	\$347,279,248	\$666,981,751	\$147,270,949
Tolland	Somers	29	\$0	\$0	\$36,702,981	\$8,104,094
Tolland	Stafford	10	\$0	\$0	\$12,656,200	\$2,794,515
Tolland	Tolland	6	\$0	\$0	\$7,593,720	\$1,676,709
Tolland	Union	5	\$0	\$0	\$6,328,100	\$1,397,258
Tolland	Vernon	12	\$39,027,477	\$6,809,315	\$15,187,440	\$3,353,418
Tolland	Willington	12	\$7,232,619	\$2,715,229	\$15,187,440	\$3,353,418
<b>Windham</b>	<b>Windham</b>	<b>191</b>	<b>\$29,359,854</b>	<b>\$2,844,196</b>	<b>\$241,733,424</b>	<b>\$53,375,239</b>
Windham	Ashford	5	\$0	\$0	\$6,328,100	\$1,397,258
Windham	Brooklyn	14	\$25,099,775	\$374,653	\$17,718,680	\$3,912,321
Windham	Canterbury	4	\$1,544,332	\$1,297,666	\$5,062,480	\$1,117,806
Windham	Eastford	9	\$0	\$3,756	\$11,390,580	\$2,515,064
Windham	Killingly	36	\$0	\$0	\$45,562,321	\$10,060,255
Windham	Plainfield	29	\$0	\$0	\$36,702,981	\$8,104,094
Windham	Putnam	10	\$0	\$0	\$12,656,200	\$2,794,515
Windham	Thompson	12	\$0	\$0	\$15,187,440	\$3,353,418
Windham	Windham	70	\$2,416,193	\$1,116,392	\$88,593,401	\$19,561,606
Windham	Woodstock	2	\$299,554	\$51,730	\$2,531,240	\$558,903

*\*Building and Contents estimated based on known building and contents values in New London, Tolland, and Windham (Total Known Building Exposure/Number of Facilities)*

**The current dataset of state owned and operated facilities and infrastructure does not include well defined type or facility use attributes. This will be completed by DCS by summer of 2014.** To be able to better categorize the data, a type field will be included and linked as an attribute in the data currently being collected by DCS.

Using the best available facilities data, there are over 241 types of facilities included. Residences, education, and military infrastructure represent a large portion of the mapped facilities. Facility type/locations with more than 75 listed facilities/infrastructures include:

- University of Connecticut – Storrs Campus (441 facilities/infrastructures)
- Southbury Training School (136 facilities/infrastructures)
- Connecticut Valley Hospital (90 facilities/infrastructures)
- Robinson Correctional Institution (75 facilities/infrastructures)

In addition to the infrastructure and facilities included below, the Department of Transportation (DOT) maintains 3,990 bridges (75.6% of bridges within the State) and 4,103 miles of road (19.2% of mileage within the State). DOT has noted that damages documented for past events are an underrepresentation of infrastructure costs associated



with damages, pre-storm response, and reconstruction. DOT has provided the following information related to state infrastructure:

- Frequency and impacts of extreme events has increased within the past five years
- Fiscal Impacts:
  - Winter Storm Alfred (2011) \$40,339,301
  - Tropical Storm Irene (2011) \$10,548,389
  - Hurricane Sandy (2012) \$6,828,102
  - Intense Rain (2010) \$5,849,308

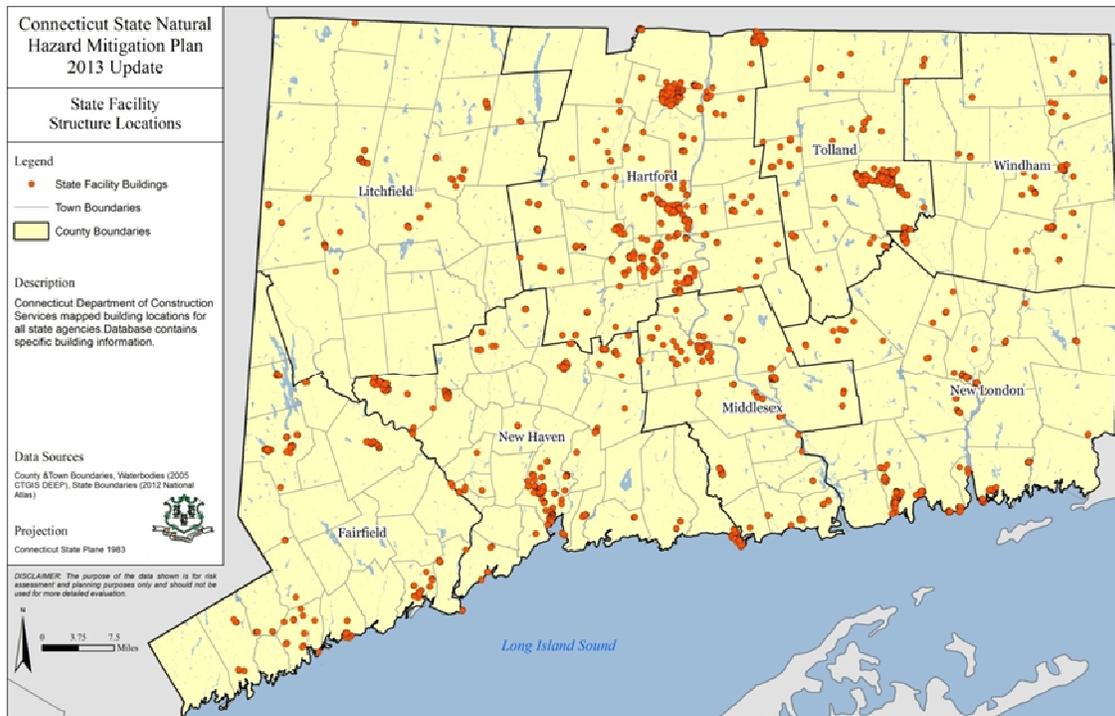


Figure 2-3. State facility data provided by CT Division of Construction Services.

## Critical Infrastructure and Facilities

Classification of what constitutes a “critical” facility/infrastructure can vary from federal, state, and local jurisdictions. Critical infrastructure and facilities includes systems and assets, whether physical or virtual, so vital to the State of Connecticut that the incapacitation or destruction of such systems and assets would have a debilitating impact on security, economic security, public health or safety, or any combination of those matters. As such, facilities and infrastructure presented in this section is not limited to only state facilities and infrastructure.

For the purpose of this plan update, discretion was used to identify specific types of infrastructure and facilities. However, this does not preclude other types of facilities/structures that may be deemed critical by government entities in the future, nor should it limit the use including other types of facilities that may be need to be assessed for natural hazards.



Using the facility definition above and data readily available from DCS, 1,401 facilities and infrastructure were identified critical facilities in Connecticut. Critical facilities include several different files that were provided by DCS and merged together via GIS for spatial analysis, infrastructure and facilities include:

- Law Enforcement
- Fire Stations
- EMS,
- Health Departments
- Correctional Facilities
- Nuclear Power Plants
- Petroleum, Oil and Lubricant (POL) infrastructure
- Storage Facilities, and Farms
- Water and Waste Water Treatment infrastructure (Public and Private)

Site specific information has been redacted from this plan, but is included in the hazard specific analysis. In addition to the 1,401 facilities provided by Division of Construction Services, 85 municipal and 12 privately owned WPCF were provided by CT DEEP Bureau of Water Protection and Land Reuse and are included as critical facilities.

Table 2-6 provides a breakdown of the numbers of critical facilities by county and municipality. Figure 2-4 shows the locations of the mapped facilities. Fire stations account for 42% of the structures within the critical facilities dataset, followed by EMS (34%), and law enforcement (15%).

Table 2-6. Number and type of critical facility structures.

County	Municipality	Correctional Institutions	EMS	Fire Stations	Health Departments	Law Enforcement	Nuclear Power Plant	Storage Tank Farm	WPCF – Privately Owned	WPCF – Municipality Owned
<b>Fairfield</b>	<b>Fairfield</b>	<b>4</b>	<b>116</b>	<b>113</b>	<b>20</b>	<b>34</b>	<b>0</b>	<b>7</b>	<b>6</b>	<b>16</b>
Fairfield	Bethel		2	2	1	1				
Fairfield	Bridgeport	2	2	8	1	8		5		2
Fairfield	Brookfield		3	2	1	1				
Fairfield	Danbury	1	17	17	1	2				1
Fairfield	Darien		4	3	1	1				
Fairfield	Easton		1	1	1	2				
Fairfield	Fairfield		6	7	1	1				1
Fairfield	Greenwich		8	7	1	1			4	2
Fairfield	Monroe		7	6		1				



County	Municipality	Correctional Institutions	EMS	Fire Stations	Health Departments	Law Enforcement	Nuclear Power Plant	Storage Tank Farm	WPCF – Privately Owned	WPCF – Municipality Owned
Fairfield	New Canaan		2	1	1	1				1
Fairfield	New Fairfield		3	3	1	2				
Fairfield	Newtown	1	7	6	1	1			1	1
Fairfield	Norwalk		5	5	1	1		1		1
Fairfield	Redding		7	4	1	1				1
Fairfield	Ridgefield		2	2	1	1				2
Fairfield	Shelton		5	4		1				1
Fairfield	Sherman		1	1	1	1				
Fairfield	Stamford		13	14	1	2		1		1
Fairfield	Stratford		6	5	1	1				1
Fairfield	Trumbull		3	7	1	1				
Fairfield	Weston		3	2		1				1
Fairfield	Westport		5	4	1	1				
Fairfield	Wilton		4	2	1	1			1	
<b>Hartford</b>	<b>Hartford</b>	<b>6</b>	<b>75</b>	<b>133</b>	<b>15</b>	<b>43</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>17</b>
Hartford	Avon			4	1	1				
Hartford	Berlin		3	4		1				
Hartford	Bloomfield		1	6	1	1				
Hartford	Bristol		1	5	1	1				1
Hartford	Burlington		4	4		1				
Hartford	Canton		3	3		1				1
Hartford	East Granby		1	3		1		1		
Hartford	East Hartford		5	6	1	1		2		1
Hartford	East Windsor		3	3		1		1		1
Hartford	Enfield	3	7	6	1	1		1		1
Hartford	Farmington		6	6		2				1
Hartford	Glastonbury		1	5	1	1				1
Hartford	Granby		1	3		1				
Hartford	Hartford	2	1	13	2	11				1
Hartford	Hartland		1	2						
Hartford	Manchester		10	9	1	2				1
Hartford	Marlborough		1	2		1				
Hartford	New Britain		1	6	1	2				
Hartford	Newington		1	5		1				
Hartford	Plainville			1	1	1				1
Hartford	Rocky Hill		1	3		1		1		1



County	Municipality	Correctional Institutions	EMS	Fire Stations	Health Departments	Law Enforcement	Nuclear Power Plant	Storage Tank Farm	WPCF – Privately Owned	WPCF – Municipality Owned
Hartford	Simsbury		7	6		1				1
Hartford	South Windsor		4	3	1	1				1
Hartford	Southington			4	1	1				1
Hartford	Suffield	1	1	4		1				1
Hartford	West Hartford		5	5		1				
Hartford	Wethersfield		1	3	1	1		2		
Hartford	Windsor		1	4	1	1				1
Hartford	Windsor Locks		4	5		3				1
<b>Litchfield</b>	<b>Litchfield</b>		<b>34</b>	<b>52</b>	<b>3</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>11</b>
Litchfield	Barkhamsted			3		2				
Litchfield	Bethlehem		1	1		1				
Litchfield	Bridgewater			1		1				
Litchfield	Canaan		1	1						
Litchfield	Colebrook			2						
Litchfield	Cornwall		2	2						
Litchfield	Goshen		1	1					1	
Litchfield	Harwinton		2	2		1				
Litchfield	Kent		1	1		1			1	
Litchfield	Litchfield		4	4		4				1
Litchfield	Morris		1	1						
Litchfield	New Hartford		1	3		1				1
Litchfield	New Milford		2	4	1	1				1
Litchfield	Norfolk		2	1		1				1
Litchfield	North Canaan		1	1		2				1
Litchfield	Plymouth		1	3		1				1
Litchfield	Roxbury		1	1		1				
Litchfield	Salisbury		2	1		1				1
Litchfield	Sharon		2	2						1
Litchfield	Thomaston		1	1		1				1
Litchfield	Torrington		1	6	1	1				1
Litchfield	Warren		1	1						
Litchfield	Washington		2	1	1	1			1	
Litchfield	Watertown		2	2		1				
Litchfield	Winchester		1	4		1				1
Litchfield	Woodbury		1	2		1				
<b>Middlesex</b>	<b>Middlesex</b>	<b>1</b>	<b>31</b>	<b>36</b>	<b>8</b>	<b>17</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>6</b>



County	Municipality	Correctional Institutions	EMS	Fire Stations	Health Departments	Law Enforcement	Nuclear Power Plant	Storage Tank Farm	WPCF – Privately Owned	WPCF – Municipality Owned
Middlesex	Chester		1	1		1				
Middlesex	Clinton		1	2		1				
Middlesex	Cromwell		3	3	1	1				1
Middlesex	Deep River		3	2		1				1
Middlesex	Durham		2	1	1	1				
Middlesex	East Haddam		4	3		1				1
Middlesex	East Hampton		1	3	1	1				1
Middlesex	Essex		1	2	1	2				
Middlesex	Haddam		1	4						
Middlesex	Killingworth		3	2		1				
Middlesex	Middlefield			1	1	1				
Middlesex	Middletown	1	6	6	1	2				1
Middlesex	Old Saybrook		1	1	1	1				
Middlesex	Portland		1	3		1		3		1
Middlesex	Westbrook		3	2	1	2				
<b>New Haven</b>	<b>New Haven</b>	<b>5</b>	<b>74</b>	<b>114</b>	<b>15</b>	<b>40</b>		<b>10</b>		
New Haven	Ansonia		1	5		1				1
New Haven	Beacon Falls		1	1		1				1
New Haven	Bethany		2	2		1				
New Haven	Branford		5	5	1	1				1
New Haven	Cheshire	3	1	3	1	1				1
New Haven	Derby		1	4		1				1
New Haven	East Haven		3	4		1		1		
New Haven	Guilford		1	5	1	1				
New Haven	Hamden		7	7		1				
New Haven	Madison		3	2	1	1				
New Haven	Meriden		7	6	1	2				1
New Haven	Middlebury		1	2	1	1				
New Haven	Milford		5	5	1	1			1	2
New Haven	Naugatuck		2	2		1				1
New Haven	New Haven	2	1	10	1	8		9		1
New Haven	North Branford		4	4		1				
New Haven	North Haven		4	4	1	1				
New Haven	Orange		2	2	1	1				
New Haven	Oxford		1	3		1				
New Haven	Prospect		1	1		1				



County	Municipality	Correctional Institutions	EMS	Fire Stations	Health Departments	Law Enforcement	Nuclear Power Plant	Storage Tank Farm	WPCF – Privately Owned	WPCF – Municipality Owned
New Haven	Seymour		1	2	1	1				
New Haven	Southbury		3	5	1	2			2	
New Haven	Wallingford		5	6	1	1				1
New Haven	Waterbury		1	10	1	4				1
New Haven	West Haven		10	10	1	2				1
New Haven	Wolcott		1	3		1				
New Haven	Woodbridge			1		1				
<b>New London</b>	<b>New London</b>	<b>1</b>	<b>75</b>	<b>65</b>	<b>12</b>	<b>29</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>10</b>
New London	Bozrah		1	1						
New London	Colchester		2	2	1	2				
New London	East Lyme	1	3	3		2				
New London	Franklin		1	1	1					
New London	Griswold		3	2	1	1				1
New London	Groton		14	12	1	4		1		1
New London	Lebanon		1	1	1	1				
New London	Ledyard		4	3	1	2				1
New London	Lisbon		1	1		1				
New London	Lyme		4	3						
New London	Montville		5	5	1	4				1
New London	New London		3	3		3		1		1
New London	North Stonington		2	1	1	1				
New London	Norwich		8	7	1	2				1
New London	Old Lyme		3	3	1	1				
New London	Preston		1	1		1				
New London	Salem		2	2	1	1				
New London	Sprague		1	1		1				1
New London	Stonington		7	6	1	1				1
New London	Voluntown		1	1						
New London	Waterford		8	6		1	1			
<b>Tolland</b>	<b>Tolland</b>	<b>3</b>	<b>34</b>	<b>35</b>	<b>2</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>
Tolland	Andover		1	1		1				
Tolland	Bolton		1	1						
Tolland	Columbia		1	1						
Tolland	Coventry		3	4		1				1
Tolland	Ellington		3	2		1				
Tolland	Hebron		3	3		1				



County	Municipality	Correctional Institutions	EMS	Fire Stations	Health Departments	Law Enforcement	Nuclear Power Plant	Storage Tank Farm	WPCF – Privately Owned	WPCF – Municipality Owned
Tolland	Mansfield	1	4	4	1	2			1	
Tolland	Somers	2	1	1	1	1				1
Tolland	Stafford		4	4		1				1
Tolland	Tolland		4	4		2				
Tolland	Union		1	1						
Tolland	Vernon		6	6		1				1
Tolland	Willington		2	3						
<b>Windham</b>	<b>Windham</b>	<b>1</b>	<b>40</b>	<b>37</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>
Windham	Ashford		2	2						
Windham	Brooklyn	1	3	3	1	1				
Windham	Canterbury		1	1						
Windham	Chaplin		1	1		1				
Windham	Eastford		1	1						
Windham	Hampton		1	1						
Windham	Killingly		7	6		2				1
Windham	Plainfield		5	4		1				2
Windham	Pomfret		1	1						
Windham	Putnam		3	2		2				1
Windham	Scotland		1	1						
Windham	Sterling		2	2		1				
Windham	Thompson		5	5						1
Windham	Windham		4	4		3				1
Windham	Woodstock		3	3						

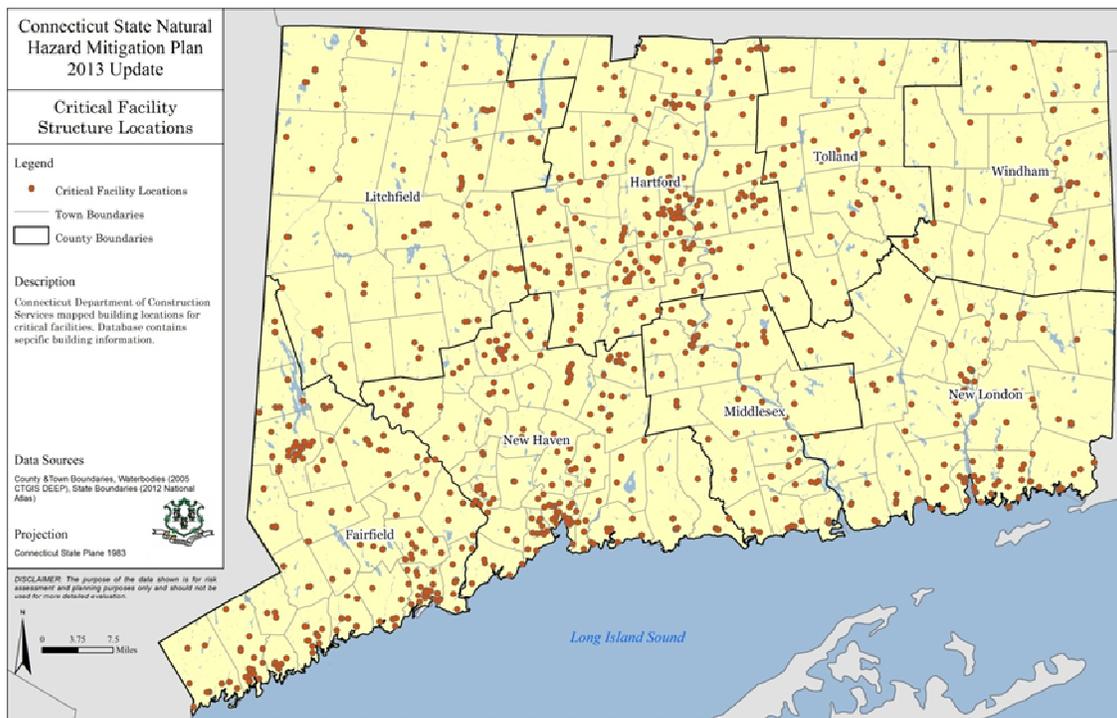


Figure 2-4. Critical facility data provided by CT Division of Construction Services.

## 2.2.4 Land Use and Development

Effective land use planning is a central component of any hazard mitigation plan, as existing and planned land use patterns greatly influence a community's hazard vulnerability. Thus, future land use decisions should look at a community's potential hazards and vulnerability, and direct development towards those areas that are least vulnerable, creating a more disaster-resistant environment. FEMA requires that state and local plans evaluate land use and development trends so that mitigation options can be considered in future land use decisions.

Most of the local hazard mitigation plans include a general overview of land uses and development trends. Each local hazard mitigation plan was reviewed for information on local trends. Detailed information pulled from each local plan is available in Appendix 4-2. Many communities in Fairfield County are projecting that growth will occur near Metro-North rail stations, including Darien, Greenwich, New Canaan, Norwalk, Stamford, Weston and Westport. Additionally, it seems that there is growth in many towns like Easton and Fairfield, and although towns such as Fairfield are limiting development in natural hazard areas like the coast and, specifically, the Town of Monroe is looking to designate areas as open space, other communities, like the Town of Stratford, have indicated that growth has been directed to former industrial areas that are located within the coastal flood hazard area. Outside of Fairfield County, most growth over the last three years has been very limited.



Review and compilation of local mitigation plans identified a significant gap in the accounting for land use and development in hazard prone areas. Connecticut DEEP/DESPP is committed to assisting local planning efforts to address this gap. As this information is available and analyzed at the local level, future revisions of the CT NHMP will use this to summarize land use and development in hazards prone areas.

The Center for Land Use Education and Research (CLEAR) at the University of Connecticut provides information, education and assistance to land use decision makers, in support of balancing growth and natural resource protection. CLEAR is a partnership between the Department of Natural Resources and the Environment and the Department of Extension, two units of the College of Agriculture and Natural Resources (CANR), and the Connecticut Sea Grant Program. CLEAR's 2006 Statewide Land Cover map is shown below in Figure 2-5. There are 12 land cover types:

- Developed land, indicated in red, illustrates high-density built-up areas typically associated with commercial, industrial and residential activities and transportation routes. These areas can be expected to contain a significant amount of impervious surfaces, roofs, roads, and other concrete and asphalt surfaces.
- Deciduous and Coniferous forests, shown in different shades of green, illustrate the southern New England mixed hardwood forests and softwood forests and scrub areas, in addition to some isolated low density residential areas.
- Turf and grass, shown in yellow, illustrate a compound category of undifferentiated maintained grasses associated mostly with developed areas. This class contains cultivated lawns typical of residential neighborhoods, parks, cemeteries, golf courses, turf farms, and other maintained grassy areas. Also includes some agricultural fields due to similar spectral reflectance properties.

Table 2-7 summarizes the statewide land cover and land cover change from 1985 to 2006. Over this 21 year period, developed land has increased almost 3% throughout the state and turf & grass has increased 1.5%, while deciduous and coniferous forests collectively have decreased by 3.5%. Connecticut has also lost almost 62 square miles, or 1.2%, of agricultural fields. Figure 2-6 clearly depicts the change in land cover from 1985 to 2006. As shown, agricultural fields and forests have been decreasing as development has increased.

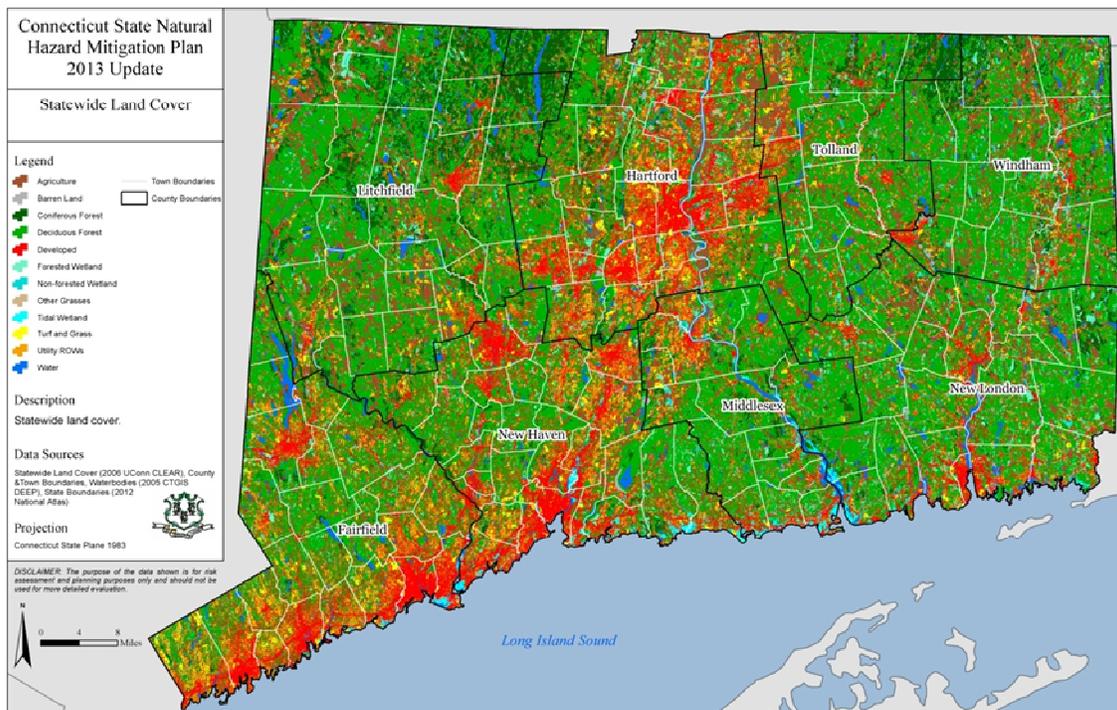


Figure 2-5. Statewide land cover. Source: CLEAR 2006.

Table 2-7. Statewide Land Cover and Land Cover Change. Source: UCONN Land Use Education and Research.

Land Cover	1985		1990		1995		2002		2006		Change (1985 - 2006)	
	Sq. Miles	% of State	Sq. Miles	% of State								
Developed	797.4	16%	862.3	17.4%	885.5	17.8%	922.8	18.6%	942.1	19%	+144.8	+2.9%
Turf & Grass	308.9	6.2%	325.9	6.6%	341.7	6.9%	362.5	7.3%	381.7	7.7%	+72.8	+1.5%
Other Grasses	65.3	1.3%	68.7	1.4%	76.1	1.5%	82.4	1.7%	86	1.7%	+20.8	+0.4%
Agricultural Field	425.2	8.6%	403.9	8.1%	391.8	7.9%	371.8	7.5%	363.4	7.3%	-61.8	-1.2%
Deciduous Forest	2467	49.6%	2410.5	48.5%	2379.7	47.9%	2338.2	47.1%	2307.3	46.4%	-159.8	-3.2%
Coniferous Forest	455.9	9.2%	452.4	9.1%	449.5	9%	445.2	9%	441.1	8.9%	-14.8	-0.3%
Water	173.1	3.5%	168.8	3.4%	164.1	3.3%	161.1	3.2%	161.2	3.2%	-11.9	-0.2%
Non-forested Wetland	20.2	0.4%	21.2	0.4%	21.2	0.4%	21.7	0.4%	21.1	0.4%	+1	0%
Forested Wetland	183.8	3.7%	177.8	3.6%	174.9	3.5%	173.8	3.5%	173.7	3.5%	-10.1	-0.2%



Land Cover	1985		1990		1995		2002		2006		Change (1985 - 2006)	
	Sq. Miles	% of State	Sq. Miles	% of State								
Tidal Wetland	22.6	0.5%	22.9	0.5%	23	0.5%	23.2	0.5%	22.9	0.5%	+0.3	0%
Barren	32.1	0.6%	37.3	0.8%	44.4	0.9%	49.1	1%	51.4	1%	+19.2	+0.4%
Utility (Forest)	17.6	0.4%	17.3	0.3%	17.3	0.3%	17	0.3%	17.1	0.3%	-0.5	0%

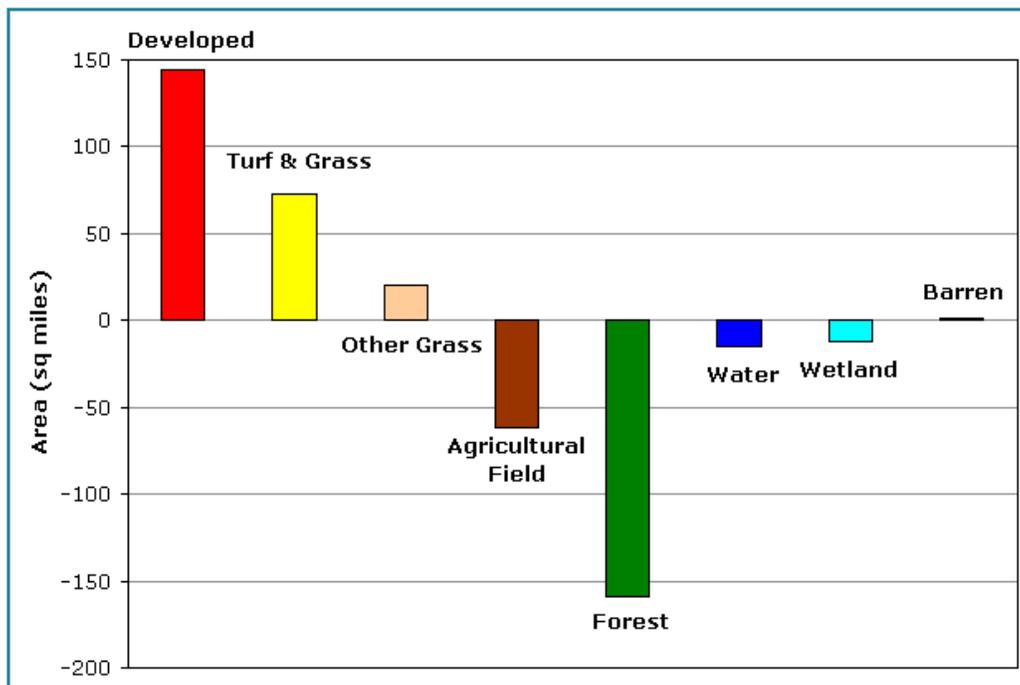


Figure 2-6. Land Cover Change, 1985-2006 Source: UCONN Landuse Edu and Research

Figure 2-7 illustrates the percent developed land in 1985 and 2006. This not only shows a significant amount of development along the shoreline, which is vulnerable to storm surge and flooding, and development along the center of the state along Route 91, a major transportation route, but also shows that the denser municipalities in 1985 have experienced increased development over time.

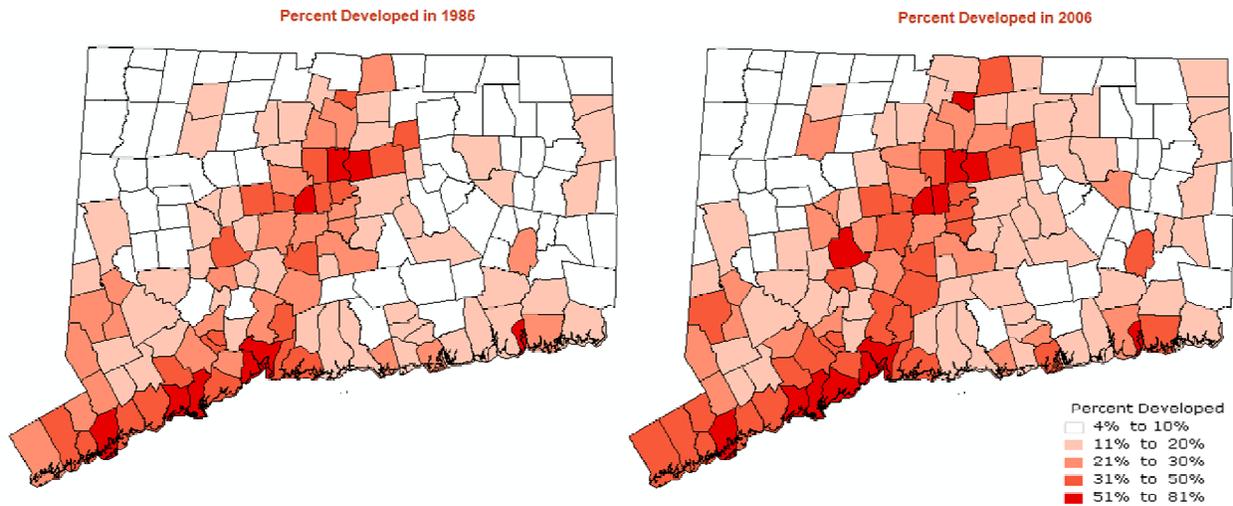


Figure 2-7. CLEAR comparison of developed land in 1985 and 2005.

Although development has continued throughout the last decade, the pace of development slowed dramatically during years 2007-2011, due to the economic downturn which not only affected Connecticut, but affected the United States as a whole. As the 2012 permit numbers show, however, development is starting to increase. Figure 2-8 shows this development trend for Connecticut as a whole.

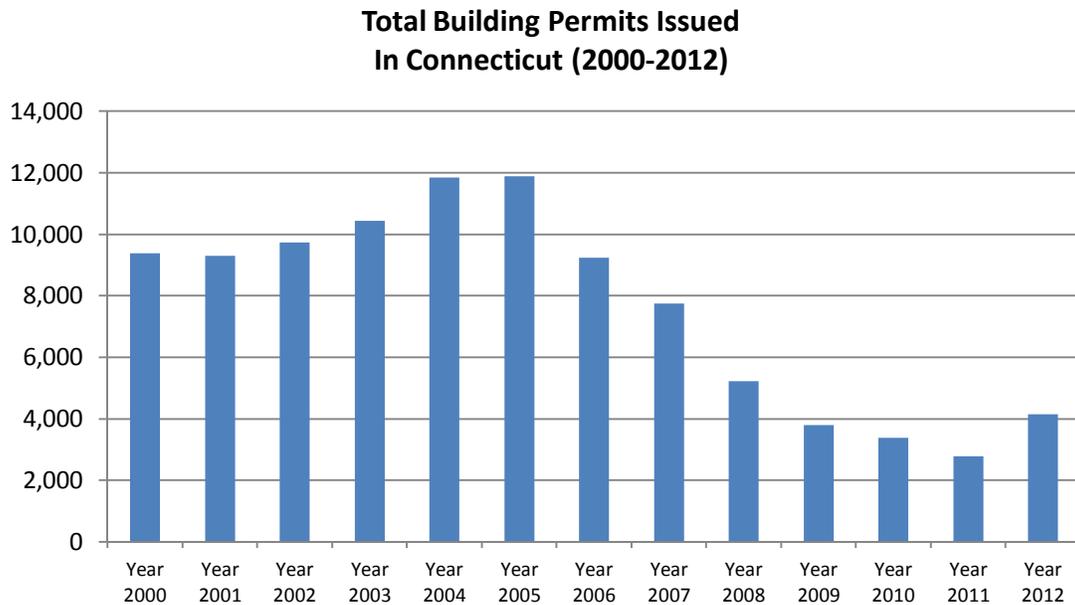


Figure 2-8. Total building permits by year (2000 – 2012). Source: CT DECD data

Table 2-8 provides the total number of building permits issued for years 2000-2012. The counties which continue to see the majority of development are Fairfield County and Hartford County. Fairfield County is a popular area of the state for housing for people who commute to New York City (NYC) for work, due to its proximity to NYC and the public transportation options available for commuters to NYC. With respect to Hartford County,



the City of Hartford is the State Capitol and many large companies are located in and around the city. Thus housing demands in this region of Connecticut are increased due to the increase in job opportunities.

Table 2-8. Total Building Permits Issued by County, 2000-2012 Source. CT DECD Data

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fairfield	2,278	2,220	1,879	1,964	2,495	3,119	1,939	2,290	1,814	1,199	790	858	2,007
Hartford	1,705	2,026	2,284	2,585	2,389	2,487	2,305	1,711	1,039	810	614	510	826
Litchfield	725	764	807	732	810	678	541	384	261	163	129	81	92
Middlesex	867	799	820	821	963	795	634	558	355	299	262	146	165
New Haven	1,918	1,586	1,701	1,826	2,534	2,251	1,654	1,256	920	509	902	682	513
New London	814	782	956	1,222	1,348	1,208	1,006	718	363	427	315	197	224
Tolland	693	679	742	731	706	754	699	526	297	229	182	260	235
Windham	376	434	542	554	592	593	458	303	171	150	191	103	78
Total	9,376	9,290	9,731	10,435	11,837	11,885	9,236	7,746	5,220	3,786	3,385	2,783	4,140

Building permit counts are an industry accepted measure of growth. However, building permits issued contains data for all building activity which requires a building permit (e.g., new construction, remodeling/additions, demolitions, reconstruction, etc.) and do not necessarily indicate new buildings in all cases. For that reason, a review of changes in housing inventory for the same years was also conducted. The results for were consistent in indicating the most growth being in Hartford and Fairfield Counties, with data showing additional growth in New Haven County. Table 2-9 shows housing inventory for the period between 2000 and 2012. As of 2012, Hartford County maintained the largest inventory of housing units in the state followed by New Haven and then Fairfield County.

Table 2-9. Housing Inventory by County, 2000-2012. Source. U.S. Census, CT DECD, ACS 5-year (2006-2011) estimates plus 2011 housing units net gain.

County	2000	2005	2010	2011*	2012
		347,877	353,175	358,671	360,423
Hartford	357,285	363,495	369,068	372,051	372,697
Litchfield	80,876	82,778	84,067	86,700	86,834
Middlesex	67,905	71,279	73,124	74,137	74,349
New Haven	344,652	348,703	352,914	360,012	360,445
New London	112,333	115,841	118,230	119,933	120,185
Tolland	51,954	55,105	56,899	57,589	57,807
Windham	43,993	46,491	47,628	48,589	48,656
Total	1,399,819	1,431,569	1,455,105	1,477,682	1,481,396



As the State reviews local mitigation plans in the regions where growth is being experienced, increased emphasis will be placed on defining the impacts of that growth on hazards. Improved data will be collected for incorporation into the next State plan update.

## Climate Change

Climate change is both a present threat and a slow-onset disaster. It acts as an amplifier of existing hazards. Extreme weather events have become more frequent over the past 40 to 50 years and this trend is projected to continue<sup>3</sup>. Already current acceleration in sea level rise rates – current and projected elevations in sea level, coupled with potentially higher hurricane wind speeds, rainfall intensity, and storm surges are expected to have a significant impact on coastal communities. More intense heat waves may mean more heat-related illnesses, droughts and wildfires. This plan update includes brief discussion of how climate change might impact the frequency, intensity and distribution of specific hazards. Additional data continues to come in to help us refine climate change projections. These refined projections will be taken into account in future updates of this plan.

Analysis related to climate change and sea level rise is in subsection 2.7.5 of this chapter. Chapter 3 outlines the significant progress made by state-level committees and tasks forces related to climate change and sea level rise including:

- The Adaption Subcommittee of the Governor's Steering Committee on Climate Change was formed in 2008 and was charged with the assessment of the impacts of climate change on Connecticut infrastructure, natural resources and ecological habitats, public health, and agriculture; and recommendation of adaptation strategies in accordance with the requirements of Public Act 08-98.
- Pursuant to Special Act 13-9, "An Act Concerning Climate Change and Data Collection," the State of Connecticut will be establishing a "Center for Coasts" that will conduct research, analysis, design, outreach and education projects to guide the development and implementation of technologies, methods and policies that increase the protection of ecosystems, coastal properties and other lands and attributes of the state that are subject to the effects of rising sea levels and natural hazards. The DEEP Office of Planning and Program Development and OLISP will be partnering with the University of Connecticut to pursue the Center for Coasts. DEEP and the University will deliver a work plan to the Connecticut General Assembly by early 2014.
- OLISP had 2010 cutting edge *Groton Coastal Climate Change Adaptation Workshops* using Groton as a model. The final report and presentations from the series that engaged over 100 people from local state and federal government is here: [Groton Workshops](#) As a result Groton has started considering climate change in their planning process (See [October 2010 Sound Outlook](#)). The final report contains lessons learned for other communities who would rather start saving than losing

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<sup>3</sup> Gutowski, W.J., G.C. Hegerl, G.J. Holland, T.R. Knutson, L.O. Mearns, R.J. Stouffer, P.J. Webster, M.F. Wehner, and F.W. Zwiers, 2008: Causes of observed changes in extremes and projections of future changes. In: *Weather and Climate Extremes in a Changing Climate: Regions of Focus: North America, Hawaii, Caribbean, and U.S. Pacific Islands* [Karl, T.R., G.A. Meehl, C.D. Miller, S.J. Hassol, A.M. Waple, and W.L. Murray (eds.)]. Synthesis and Assessment Product 3.3. U.S. Climate Change Science Program, Washington, DC, pp. 81-116.



money to poor planning. Through the modeling performed by the New England Financial Institute of even modest storm and sea-level acceleration, the most expensive alternative was to do nothing, and even a modest infrastructure enhancement saved many hundreds of thousands of dollars. The March 2010 500-year storm the day before the second workshop on vulnerabilities illustrated just how expensive business as usual is, as many eastern towns are still faced with expensive bridge, road, and other infrastructure repair bills.

- The Technical Services and Grant Programs section of OLISP has a staff member spearheading coastal and climate adaptation planning in Connecticut. Subsequent to the adoption of the last Connecticut Hazard Mitigation Plan, OLISP administered a climate change planning process in 2010 and 2011 that was funded by EPA's Climate Ready Estuaries (CRE) program and Long Island Sound Study (LISS), final report with recommendations for state and communities, and has a Climate Adaptation Resources Toolkit (CART). The CART is a tool for one stop shopping for climate adaptation tools, resources and strategies for Connecticut communities. It is searchable by profession type, resource type (funding, legal, education, communication tools) as well as where you are in the climate action and planning process.
- In a recent NOAA Grant to New England on "accelerating the pace of municipal response to coastal climate change", CT was only state to have more than one town selected for funding of adaptation projects, Guilford for workshops/town plan and Greenwich is mapping for enhanced emergency response.  
<http://www.csc.noaa.gov/magazine/2013/03/article1.html>
- Jennifer Pagach from OLISP presented at the first National Adaptation Forum in Denver, CO which convened over 500 climate change practitioners from around the country and world to learn from each other's experiences in this emerging profession. Jennifer presented in a workshop entitled "Climate Change Lessons Learned from the Northeast", on the many resources that the CT DEEP has for communities, including the Adaptation Resource Toolkit. She highlighted Connecticut community project success stories, such as Greenwich and Guilford who received funding through a regional RFP to improve coastal resiliency. All project write ups will be posted on StormSmartConnect.org
  - Resources from the national conference have been brought to CT towns for the Coastal Climate Change workshop at UConn Avery Point. Co-sponsored by NOAA, SeaGrant, CLEAR and DEEP, the 3 day intensive workshop was attended by over 30 municipal staff and an additional handful of consultants, students and NGOs. In addition to hands on community building activities, a beach impacts tour, and topical presentations, the workshop culminated in a panel presentation by state agency staff and a mixer with over a dozen partners that had resources to offer the communities. The presentations and resources are available online at:  
<http://collaborate.csc.noaa.gov/climateadaptation/UCONN%20Training/Forms/AllItems.aspx>
- The Sentinel Monitoring for Climate Change in Long Island Sound Program is a multidisciplinary scientific approach to provide early warning of climate change



impacts to Long Island Sound ecosystems, species and processes to facilitate appropriate and timely management decisions and adaptation responses. <http://longislandsoundstudy.net/research-monitoring/sentinel-monitoring/> . Current program successes include a strategic plan outlining key attributes of a sentinel and identifying 17 priority and 37 candidate sentinels for the LIS ecosystem, a website and a searchable data citation clearinghouse with links to all known LIS sentinel related data sets and local researchers, and funding for two pilot monitoring programs and a data synthesis grant that are currently underway. It has been such a successful collaborative project that Sentinel Monitoring is being scaled up for the entire Northeast and Gulf of Maine region through the joint Ecosystem Health Committee of Northeast Regional Ocean Council (NROC) and Northeast Regional Association of Coastal and Ocean Observing Systems (NERACOOS). With DEEP involvement and leadership, a regional Sentinel Monitoring Steering committee and 3 technical workgroups (benthic, pelagic and estuarine/nearshore) have been formalized, a kickoff meeting was held and the workgroups are busy developing information and database plans. With a scaled up Sentinel Monitoring program, CT and regional efforts can be leveraged to support key monitoring for discernible climate signals and impacts, as well as inform adaptation strategies to keep our ocean and coastal resources as healthy as possible.

- PA 12-101 the coastal omnibus bill was passed that has some changes for coastlines including the introduction of living shorelines, and a requirement for communities to consider Sea Level Rise in their plans of Conservation and Development. This was detailed more in the 2013 legislative session, and a bill to require Clean Water Act funded projects to consider climate was also passed.
- CT DEEP has a Municipal Climate Change Network of towns and state staff who are moving forward with cutting edge climate efforts, and a CT Climate Education Communication Committee which is a varied group of educators from the private, government and academic sector who meet virtually or in person every month to keep informed on best available science and educational practices  
<http://ctclimatechange.com/index.php/act/climate-change-education-communication-group/>  
CHAMP, a Coastal Hazards and Management Planning section of the DEEP website that contains choose your own inundation from SLR scenarios for all CT towns and information for what towns and the public can do  
[http://www.ct.gov/dep/cwp/view.asp?a=2705&q=480750&depNav\\_GID=2022](http://www.ct.gov/dep/cwp/view.asp?a=2705&q=480750&depNav_GID=2022)
- Connecticut Geological Survey has prepared digital geologic and soils data for hazards assessments and analyses through cooperative efforts with the NRCS and the U.S. Geological Survey. These data support agency assessments of inland and coastal flooding, shoreline erosion, and sea level rise. Information for these sources have been used in the risk assessment.
- OPM is required to incorporate consideration of natural hazards into the State POCD. Additional policies through this requirement include reducing the siting of new infrastructure and development in coastal areas prone to erosion and inundation from sea level rise or storms, encourage the preservation of undeveloped areas into which coastal wetlands can migrate, and undertake any development



activities within coastal areas in an environmentally sensitive manner consistent with statutory goals and policies set forth in the Connecticut Coastal Management Act.

## 2.3 Connecticut's History of Natural Disasters

Recent disasters have focused the attention of citizens and government officials on the impacts to humans, the environment and economy. Since 2010, Connecticut has experienced six major disaster declarations, while during the decade prior, the state had only experienced two major disaster declarations. There have been 19 State disaster declarations and 11 emergency declarations since 1954 (Table 2-10 and Figure 2-9).

These disasters had significant impacts on Connecticut and its residents, such as loss of residences, property and possessions, loss of life and injury, lost wages and business revenue, in addition to psychological and sociological costs to disaster victims and their families. Following Hurricane Sandy, more than 12,380 Connecticut residents in five counties and two tribal nations registered for federal disaster assistance; more than \$11.5 million had been approved for housing assistance, including short-term rental assistance and home repair costs; and more than \$32 million in low-interest disaster loans for homeowners, renters, businesses and private nonprofit organizations had been approved by the U.S. Small Business Administration; in addition to other aid flowing into the state such as medical and dental expenses and lost personal possessions, Disaster Unemployment Assistance, and Public Assistance grants.<sup>4</sup>

Historically, flooding has caused the most damage to the State and its citizens, along with recent wind and winter storm disaster events. Many figures throughout this plan address the distribution of hazard events and other data by county, as decided by the SHMP Team.

### 2.3.1 Disaster Declarations and Emergency Declarations in Connecticut

Local and State governments share the responsibility for protecting their citizens and for helping them recover when a disaster strikes. In some cases, a disaster is beyond the capabilities of the state and local government to respond. In 1988, the Robert T. Stafford Disaster Relief and Emergency Assistance Act was enacted to support state and local governments and their citizens when disasters overwhelm them and exhaust their resources. This law, as amended, established a process for requesting and obtaining a Presidential disaster declaration, defines the type and scope of assistance available from the Federal government, and sets the conditions for obtaining that assistance.<sup>5</sup> Federal disasters and emergencies are defined as follows:

**A Major Disaster** could result from a hurricane, earthquake, flood, tornado or major fire which the President determines warrants supplemental federal aid. The event must be

<sup>4</sup> FEMA, February 15, 2013.

<sup>5</sup> A Guide to the Disaster Declaration Process and Federal Disaster Assistance. FEMA March 4, 2008.



clearly more than state or local governments can handle alone. If declared, funding comes from the President's Disaster Relief Fund, which is managed by FEMA, and disaster aid programs of other participating federal agencies.

An **Emergency Declaration** is more limited in scope and without the long-term federal recovery programs of a Major Disaster Declaration. Generally, federal assistance and funding are provided to meet a specific emergency need or to help prevent a major disaster from occurring.

A **Presidential disaster declaration** could result from a hurricane, earthquake, flood, tornado, major fire or other event which the President determines warrants supplemental federal aid. The event must be undoubtedly more than the state or local governments can handle alone. If declared, funding comes from the President's Disaster Relief Fund, which is managed by FEMA, and disaster aid programs of other participating federal agencies.

The steps to a Presidential Disaster Declaration are as follows:

- Local governments respond, supplemented by neighboring communities through mutual aid agreements and volunteer agencies. If overwhelmed, the local government requests aid from the State;
- The State responds with state resources, such as its response team, the National Guard and other state agencies;
- A Rapid Needs Assessment (RNA) which focuses on lifesaving needs, imminent hazards, and critical lifelines is performed, usually within the first 24 hours of an event;
- An Initial Damage Assessment (IDA) is performed by the local government, which evaluates damages to residences, businesses, and public infrastructure (i.e., roads, bridges, public utilities, etc.);
- IDAs determine if there is sufficient damage to warrant a Joint Preliminary Damage Assessment (PDA) which consists of local, state, and federal staff verifying the IDAs to determine if enough damage exists to warrant federal recovery assistance;
- A Major Disaster Declaration is requested from the Governor to FEMA Region I which evaluates the request and provides recommendations to the President based on the RNA and PDAs and the type of federal assistance requested;
- Depending on the nature of the disaster and the type of assistance being requested, a Presidential declaration could be approved within hours or may take weeks;
- A Presidential Declaration can also be approved prior to an event (i.e. hurricane or significant winter storm) if it anticipated that the damage will be severe in order to pre-position resources; and Federal funds for post disaster Hazard Mitigation Grant Program projects is based on 15% of the Stafford Act disaster recovery assistance that is provided to the jurisdictions statewide.

Table 2-10. Federally Declared Disasters (1954 – May 2013) and Emergency Declarations (1978 – May 2013).



Disaster	Year	Incident Period	Disaster Types	Counties	IA \$	PA \$
DR-4106 EM-3361	2013	February 8- February 11	Severe winter storm and snow storm	All		
DR-4087 EM-3353	2012	October 27- November 8	Hurricane	Litchfield, Fairfield, New Haven, Middlesex, New London, Windham, Tolland		
DR-4046 EM-3342	2011	October 29- October 30	Severe Storm	Litchfield, Fairfield, New Haven, Middlesex, Windham, Tolland, Hartford		
DR-4023 EM-3331	2011	August 27- September 1	Tropical Storm/Hurricane	All		
DR-1958	2011	January 11- January 12	Snowstorm	Fairfield, Hartford, Litchfield, New Haven, New London, Tolland		13.6 M
DR-1904	2010	March 12- May 17	Severe Storms and Flooding	Fairfield, Middlesex, New London	5.3 M	8 M
DR-1700	2007	April 15- April 27	Severe Storms and Flooding	Fairfield, Hartford, Litchfield, Middlesex, New London, New Haven, Windham	2.6 M	4.9 M
EM-3266	2006	February 11-February 12	Snow	Fairfield, Hartford, New Haven, Tolland, Windham		
EM-3200	2005	January 22- January 23	Snow	All		
DR-1619	2005	October 14- October 15	Severe Storms and Flooding	Litchfield, New London, Tolland, Windham		3.7 M
EM-3246	2005	August 29- October 1	Hurricane	All		
EM-3192	2003	December 5-December 7	Snow	Fairfield, Hartford, Litchfield, New Haven, New London, Tolland, Windham		
EM-3176	2003	February 17-February 18	Snow	All		
DR-1302	1999	September 16- September 21	Tropical Storm	Fairfield, Hartford, Litchfield	913,507	1.9 M
DR-1092	1996	January 7- January 13	Blizzard	Not listed		
EM-3098	1993	March 13- March 17	Severe Winds and Blizzard, Snowfall	Not listed		
DR-972	1992	December 10-	Coastal Flooding, Winter Storm	Not listed		



Disaster	Year	Incident Period	Disaster Types	Counties	IA \$	PA \$
		December 13				
DR-916	1991	19-Aug	Hurricane	Not listed		
DR-837	1989	10-Jul	Severe Storms, Tornadoes	Not listed		
DR-747	1985	27-Sep	Hurricane	Not listed		
DR-711	1984	May 27-June 2	Severe Storms, Flooding	Not listed		
DR-661	1982	14-Jun	Severe Storms, Flooding	Not listed		
DR-608	1979	4-Oct	Tornado, Severe Storms	Not listed		
EM-3060	1978	7-Feb	Blizzards and Snowstorms	Not listed		
DR-42	1955	20-Aug	Hurricane, Torrential Rain, Floods	Not listed		
DR-25	1954	17-Sep	Hurricane	Not listed		

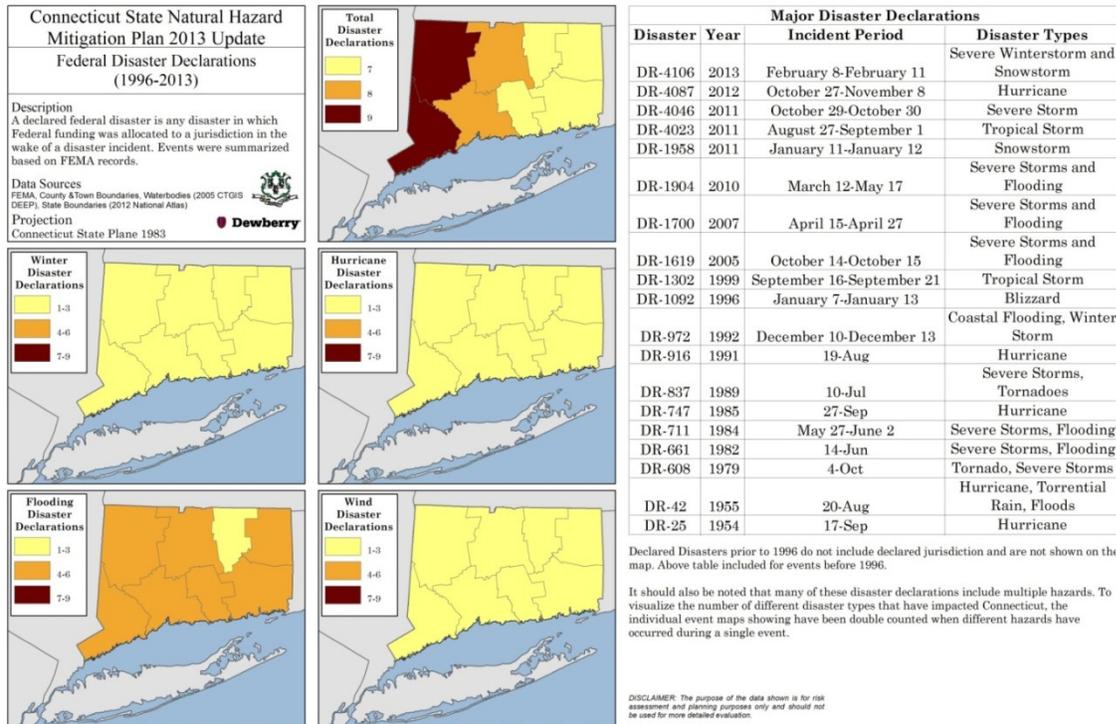


Figure 2-9. Federal declared disasters. Map of disasters during 1996 – 2013.

The following provides brief descriptions of major Disaster Declarations and Emergency Declarations in Connecticut that have occurred since 2011. Additional information on



declared disasters prior to 2010 is available in the hazard specific sections as well as in Appendix 2 of this plan.

**DR-4106 (EM-3361):** Winter Storm Nemo occurred February 8th through February 11th 2013 and hit much of the Northeast from New York to Maine, dumping around three feet of snow on Connecticut. Some called this the worst blizzard since 1888. Hamden, CT received 40 inches of snow, while the coast received about two feet of snow. It took some towns days to dig out their streets. The storm left hundreds of thousands without power throughout New England, and storm surge caused beach erosion and flooding along the coast. Roads were closed throughout the state, and 38,000 customers lost power. There were reportedly five weather related deaths in Connecticut.<sup>6</sup>

**DR-4087 (EM-3353):** Hurricane Sandy emergency declaration on October 28, 2012, followed by a disaster declaration on October 30, 2012. Coastal residents and business owners suffered from storm surge and its damage, and more than 360,000 people were evacuated from low-lying areas along the coast from Old Saybrook to Fairfield. At least three people died in coastal towns. Inland cities and towns saw widespread power failures, with more than 600,000 people without power. A travel ban was issued on state highways, and commuter rail and Amtrak service was canceled.<sup>7</sup>

**DR-4046 (EM-3342): 2011 October 29-30 Storm Alfred** hit the entire Northeast, but Connecticut was hit the hardest.<sup>8</sup> Wind and snow knocked down five times more trees than Tropical Storm Irene.<sup>9</sup> Although shoreline towns and cities largely escaped damage, upstate Connecticut was hard-hit. Significant portions of Litchfield, northern Fairfield and northern Hartford counties lost power, totaling about 880,000 people. It took more than a week to fully restore power to customers.<sup>10</sup>

**DR-4023 (EM-3331):** Tropical Storm Irene swept across the east coast, and hit Connecticut on August 28, 2011. Maximum wind gusts were 66 mph, while the average wind gust for the entire state was 52.3 mph. About “2-3 percent of trees within 50 feet of the center line of state roads were felled by the storm”. This storm killed two Connecticut residents and left hundreds of thousands of people without power. “At its peak, the tropical storm saw close to a million utility customers in the dark.” Some of whom were left in the dark for more than a week. The storm was particularly devastating along the coastal towns on the Long Island Sound, as storm surge occurred during high tide. However, the storm brought trees and power lines down throughout the state.<sup>11</sup>

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<sup>6</sup> The Weather Channel. The Latest: Nemo's Impact State by State. 02/11/2013

<sup>7</sup> The New York Times. State-by-State Guide to Hurricane Sandy. 10/29/2010

<sup>8</sup> The Huffington Post. October snowstorm outages remain, thousands in Connecticut enter second week without power. Dave Colline and Stephen Singer. 11/7/211.

<sup>9</sup> The Courant. Extreme Weather of 2011: October Snowstorm. Edmund Mahony. 12/28/2011.

<sup>10</sup> The CT Post. Damage from storm 'five times worse' than Irene. 10/30/2011.

<sup>11</sup> CT News Junkie. Tropical Storm Irene, one year later. Hugh McQuaid 8/27/2012.



**DR-1958** This 2011 winter storm resulted in as much as two and a half feet of snow, as areas in interior southern CT saw accumulations up to 30 inches in 12 hours. Fairfield and New Haven Counties were hardest hit.<sup>12</sup> The storm contributed to almost 60 inches of snow in January, which broke the record of 45 inches in 1945. Public transportation was suspended and airports were closed, and there were several travel bans throughout the state.<sup>13,14</sup>

**DR-1904** During the month of March three major rain events that occurred on March 12, 2010, March 23, 2010 and March 29-30, 2010 in combination caused severe flooding throughout Connecticut. The hardest hit area of the state impacted by flooding was southern Connecticut, specifically southeastern Connecticut including New London County. On April 9, 2010 Governor M. Jodi Rell requested a major disaster declaration from President Obama. The request was made for Fairfield and New London Counties. On April 12, 2010 Governor Rell amended the April 9, 2010 request a major disaster declaration for Middlesex, New Haven and Windham Counties. A more detailed description of these events can be found in the Flood Section.

### **Two Storm Panel**

Governor Dannel P. Malloy announced the formation of The State Team Organized for the Review of Management (“STORM”) of Tropical Storm Irene on September 13, 2011. The eight member Panel was charged with the following mission, “a broad, objective evaluation reviewing how Irene was handled in the state both in preparation and recovery, identify areas that can be improved upon and, most importantly, make recommendations for future disaster preparedness and response.” Following the October snow storm Alfred, the Governor expanded the work of the Panel, renamed it “The Two Storm Panel,” and directed it to report its findings to him by the first week of January, 2012.

The Two Storm Panel first reviewed the State Emergency Framework as well as several representative municipal emergency plans in order to benchmark state and local emergency planning. In addition, the Panel conducted eight days of hearings with over 100 witnesses providing written and/or oral testimony to the Panel. Panel hearings were also carried on CT-N so that they could be viewed by the public. In addition to the public hearings, many members of the public provided written comments to the Panel that were also considered in the preparation of the panel’s report. Additional information pertaining to this report is included in Chapter 3.

### **2.3.2 National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC)**

<sup>12</sup> National Weather Service Forecast Office New York, NY. January 11-12<sup>th</sup> 2011 Heavy Snow.

<sup>13</sup> NBC Connecticut. Record Snowfall – 4 feet, 11 inches. LeAnne Gendreau. 2/27/2011.

<sup>14</sup> NBC Connecticut. Massive Snowstorm Cripples State. LeAnne Gendreau. 2/12/2011.



NCDC *Storm Data* is published by the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, and was used for this update. The storm events database contains information on storms and weather phenomena that have caused loss of life, injuries, significant property damage, and/or disruption to commerce. Efforts are made to collect the best available information, but because of time and resource constraints, information may be unverified by the National Weather Service (NWS). The NWS does not guarantee the accuracy or validity of the information. Although the historical records in the database often vary widely in their level of detail, the NWS does have a set of guidelines for use in the preparation of event descriptions that were followed in preparation of this hazard analysis.<sup>15</sup>

In order to simply compare NCDC data, for the purposes of this HIRA, the county in which the event occurred was of primary interest, and the NCDC has provided this data in two methods:

- **County Name** – Event listed as individual record for each county in which it occurred
- **Zone** – Event listed by the zone or multiple zones, which contain multiple counties.

In the absence of better data it was decided to proceed with the records available in NCDC for these events. In most cases NCDC records for hurricane are significant under-representations of what has happened in Connecticut's past. Efforts were made to contact the correct State representative for each hazard to see if better data sources of historical accounts were available. To date, comprehensive digital databases do not exist for these hazards.

Since 1950, NOAA has recorded an estimated 4,016 severe weather events for Connecticut in the NCDC storm events database. Table 2-11 and Figure 2-10 provides the total number of severe weather events recorded for each jurisdiction. To accurately count the number of events occurring in a single county, the zonal data records were expanded into a set of individual county records, based on NCDC zone definitions. For example, if there were three political jurisdictions in a given zone, a record in the database for a winter storm covering that zone were replaced with three records for that storm, corresponding to each of the political jurisdictions. During this process, the damages associated with a storm event in a certain zone were divided evenly among the jurisdictions in that zone.

NCDC database provides information about events from 1950 to December 2012. Records for most weather events were reported starting in 1993, with the exception of tornado (reports date to 1950), thunderstorm winds (reports date to 1955), and hail (reports date to 1955).

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<sup>15</sup> National Weather Service Instruction 10-1605. Operations and Services Performance: Storm Data Preparation Guide. August 17, 2007. Available at: <http://www.nws.noaa.gov/directives/sym/pd01016005curr.pdf>  
Natural Hazard Identification and Risk Assessment



Table 2-11 summarizes the total property losses recorded from the 4,016 events. Since the 1950s, over 1.6 billion in property losses has been documented in NCDC. The majority of the documented damages are attributed to tornado, specifically in Hartford and New Haven counties. Thunderstorms represent 61% of the events within the database, followed by Winter Weather (20%) and Flood (15%). Litchfield has experienced the most events including thunderstorms, winter weather, and flooding. No losses have been recorded for drought.

Records on hurricanes were not complete in NCDC, as shown in Figure 2-10, therefore they are not reflective in the table's event totals. Since 1851, over 59 hurricane tracks, of varying intensities, have been recorded within 50 nautical miles of Connecticut. Information on number and the history of hurricanes is located in the hurricane hazard subsection of this chapter.

Chapter 3 includes in-depth information on the NWS capabilities and state severe weather warning system (see Table 3-5).

Table 2-11. NCDC hazard events per County.

County	Drought	Flood	Thunderstorms	Tornado	Winter Weather	Total
Fairfield	6	115	436	18	132	707
Hartford	1	97	477	18	80	673
Litchfield	2	115	486	31	160	794
Middlesex	6	42	147	9	87	291
New Haven	6	114	360	16	112	608
New London	6	86	196	4	83	375
Tolland	1	15	204	10	84	314
Windham	1	9	164	3	77	254
<b>Total</b>	<b>29</b>	<b>593</b>	<b>2,470</b>	<b>109</b>	<b>815</b>	<b>4,016</b>

*Note: Many events listed within this breakdown affect multiple counties, thus are counted in each affected county.*

Table 2-12. NCDC total property losses per County. Damages are expressed in 2012 dollars.

County	Flood	Thunderstorms	Tornado	Winter Weather	Total
Fairfield	\$16,217,563	\$11,390,438	\$8,205,773	\$ -	\$35,813,774
Hartford	\$10,402,823	\$6,886,740	\$826,361,795	\$19,055,273	\$862,706,631
Litchfield	\$11,607,373	\$3,373,007	\$97,541,112	\$1,943,022	\$114,464,514
Middlesex	\$592,103	\$1,711,468	\$2,265,164	\$0	\$4,568,735
New Haven	\$3,971,295	\$4,698,964	\$532,656,618	\$125,545	\$541,452,422
New London	\$7,014,097	\$2,218,583	\$ -	\$ -	\$9,232,681
Tolland	\$5,116,567	\$3,223,674	\$2,795,365	\$10,642,615	\$21,778,222



County	Flood	Thunderstorms	Tornado	Winter Weather	Total
Windham	\$1,063,360	\$2,727,504	\$5,334,943	\$8,648,821	\$17,774,628
Total	\$55,985,181	\$36,230,379	\$1,475,160,771	\$40,415,276	\$1,607,791,607

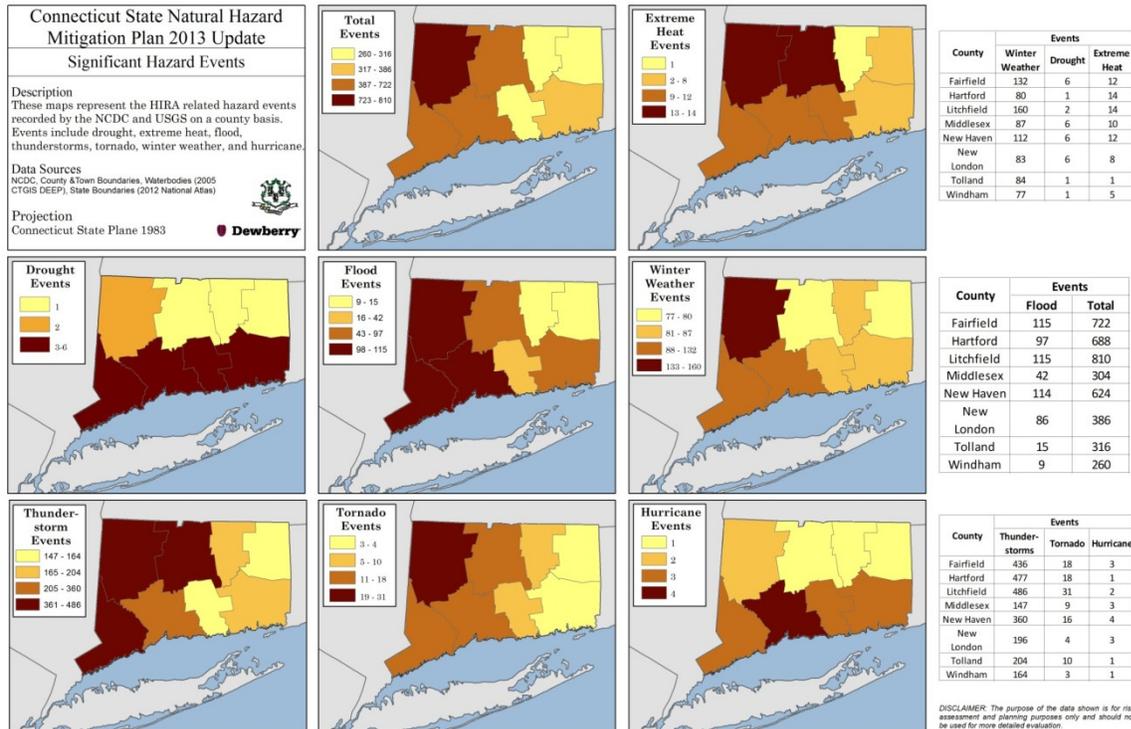


Figure 2-10. NCDC total significant events by hazard type.

## 2.4 Local Plan Hazard Identification and Integration

Chapter 4 describes the Local Planning Coordination in detail. The following information describes the local plan hazard identification, risk assessment, potential losses, and land use derived from the 156 communities (out of 173 total<sup>16</sup>) that have developed final hazard mitigation plans or have developed draft hazard mitigation plans<sup>17</sup>. Most of the individual community plans are multi-jurisdictional plans developed by regional planning organizations (RPO), with the remainder being developed by and for individual communities.

### 2.4.1 Local Hazard Identification

Local plans and multi-jurisdiction plan annexes identified 25 distinct hazards, although not all hazards were identified in every plan. Communities used a variety of approaches with a

<sup>16</sup> Connecticut has 169 municipalities; the additional four communities include the two tribal governments and the political subdivisions of Groton and Stonington.

<sup>17</sup> 126 local plans are approved and 30 local plans are in draft format through April 2013.



range of complexity to rank their identified hazards. Some plans used a blend of various techniques and discussion to determine their final hazard ranking. Several of the ranking/scoring techniques used in the local plans included:

- Quantitative scoring (based on available historical data, i.e. NCDC)
- Human judgment/knowledge of locality
- Numerical Scoring Worksheets (based on criteria, i.e. FEMA 386-2 worksheets)
- Interactive activities with Steering Committee Members

FEMA guidance indicates that the jurisdictions at greatest risk to specific hazards should be identified, considering both the characteristics of the hazard and the jurisdictions’ degree of vulnerability. A variety of analysis methods may be sufficient to meet these goals; FEMA does not mandate a specific analysis method. As a result, many local and state plans have developed their own ranking system.

None of the ranking techniques used in the local plans are incorrect, as there is no standard way to rank hazards that impact specific jurisdictions. Lack of available data for each hazard is often a driving factor in the ranking method’s degree of subjectivity. The numerical rankings were frequently performed by different plan preparers, and different data processing methodologies were used. The variability in the ranking systems made it challenging to directly compare local hazard rankings to the state risk assessment. Instead, the qualitative risk assessment information in the local plans was utilized as a component of the composite ranking maps as discussed in the Hazard Assessment and Ranking Methodology section of this chapter. Some plans provided a direct ranking of hazards in terms of overall risk from low to high, while others (mostly first-generation plans that have not been updated) only offered general information about hazard risk. In the latter case, a ranking was assumed based on the data provided.

Table 2-13 below ranks each hazard based on the percentage of localities that ranked the hazard as High, Moderate-High, Moderate, Low-Moderate, and Low. A score of one to five was assigned to each individual plan ranking (one being for low rank and five being for high rank), with an overall score being determined based on the mean of the individual ranks. Additional details on the local plan review, hazards assessed, loss estimation and tracking information, are available in Appendix 4-2.

Table 2-13. Local hazard mitigation plan results of hazard identification.

Hazard	Overall Ranking	Overall Score	Number of Local Plans
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Hazard	Overall Ranking	Overall Score	Number of Local Plans
Winter Storms / Snow / Blizzard	High	4.74	156
Flood, Flash	High	4.54	35
Ice	High	4.52	66
Hurricane	Moderate-High	4.44	146
Flood, Riverine	Moderate-High	4.17	156
Thunderstorms / Summer Storms	Moderate-High	4.09	104
Sea Level Rise	Moderate-High	4.07	43
Wind	Moderate-High	4.03	103
Flood, Coastal & Storm Surge	Moderate	3.44	50
Lightning	Moderate	3.39	71
Flood, Poor Drainage or Nuisance	Moderate	3.23	60
Tornado	Moderate	3.18	146
Dam or Levee Failure	Moderate	3.10	143
Extreme Cold	Moderate	3.00	18
Extreme Heat	Moderate	2.90	20
Hail	Moderate	2.70	74
Drought	Moderate	2.62	99
Tsunami	Moderate	2.60	10
Erosion	Moderate	2.55	22
Earthquake	Moderate	2.53	156
Landslide & Mudflow	Low-Moderate	2.20	10
Land Subsidence & Sinkholes	Low-Moderate	2.00	2
Ice Jam & Associated Flooding	Low-Moderate	1.93	27
Wildfire	Low-Moderate	1.78	129
Geomagnetic Storms	Low	1.00	8

Winter storms, riverine floods, and earthquakes are directly addressed and evaluated in the greatest number of local plans and multi-jurisdiction plan annexes (156 – this is all available plans and annexes). Hurricanes and tornadoes are addressed in 146 plans and annexes, although the fact that 103 plans address “wind” as a hazard demonstrates that hurricanes and tornadoes are indirectly addressed in many more plans. Dam/levee failure, thunderstorms, and wildfires are all addressed in more than 100 local plans or annexes.

At the other end of the range, land subsidence and sinkholes are addressed in only two local plans (Cheshire and New Haven). Geomagnetic storms were evaluated in the CRERPA plan (eight communities). Tsunamis were each addressed in ten coastal plans, and landslides were evaluated in ten plans for communities located primarily the Naugatuck Valley where old mill towns were developed on steep slopes flanking river valleys.

The range of possible “overall score” is one to five. Eight hazards scored greater than 4.0. These are flash floods, riverine floods, hurricanes, ice events, sea level rise, thunderstorms, wind events, and winter storms. Considered collectively, it is clear that floods, winter Natural Hazard Identification and Risk Assessment



storms, flood, hurricane, and wind events are of great concern to local communities, as shown in Figure 2-11.

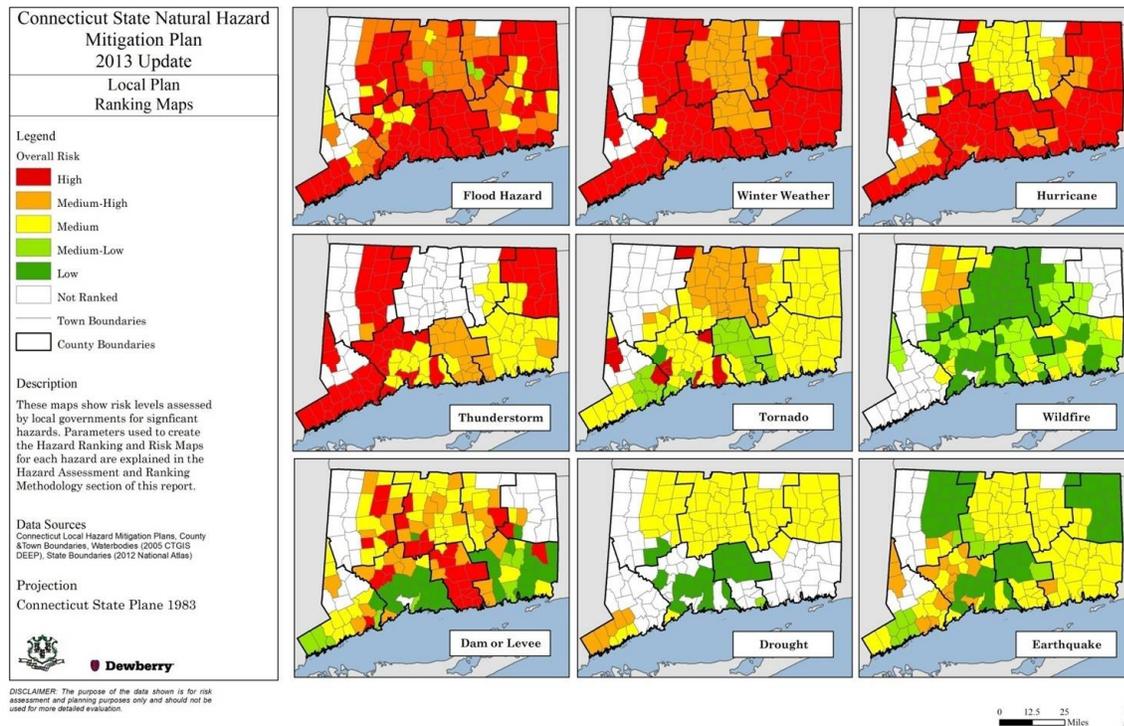


Figure 2-11. Local hazard mitigation plan hazard identification and ranking.

It is important to note that an overall score can be relatively high for a particular hazard even when only a handful of communities are at risk. One example is sea level rise, which is evaluated in only 43 coastal or estuarine communities. The relatively high score of 4.07 is possible because it is dependent only on the rankings within the local plans and annexes that include the hazard, rather than the score becoming diluted by averaging across all Connecticut communities.

Several of the hazard categories that were addressed in the local plans are not subject to detailed analysis in this State plan update. Of the hazards considered in this update, average rankings in local and state analysis are comparable. Several of the local plans discussed the hazards but did not qualitatively rank them; as a result these hazards were assigned rankings based on how they were described in detail in the local plans.

Future local plan updates may present an opportunity to address some of the ambiguity between hazard naming conventions if the State of Connecticut standardizes applicable hazard names or labeling. The State may encourage local plan revisions to approach classifying hazards in a similar fashion as done in the HIRA in this State plan update.

## 2.4.2 Local Plan Assessment of Potential Losses



Local hazard evaluations are highly variable. As a result, each one has its own set of criteria to develop monetary loss estimates. Many of the first-generation local plans and annexes contained loss estimates only from previous damage events, while plans developed subsequent to 2010 have begun to utilize FEMA's Hazus-MH program to model flooding, hurricane wind, and earthquake events and damages. It is expected that the majority of the local plans and annexes will include Hazus-MH results by the time of the *next* State plan update.

One continued goal of the State plan update is to standardize the data analysis process so that future state and local plan updates are consistent and comparable, including recommendations for assigning annualized loss estimates for hazards not included in the Hazus-MH software. Chapter 5 includes the relevant actions to reach this goal.

Local plans document loss estimation at \$1 billion to \$6 billion from the major hazards that could impact Plans in which loss estimation was conducted using the Hazus software have dollars adjusted to the date of the software release (close to plan dates). Most other local plans contain monetary data that is adjusted for the date of the plan. The monetary loss data that was aggregated for this analysis should reflect an approximate range of only 5 years. Connecticut as seen in Table 2-14. However, this represents less than one-third of the communities in Connecticut.

Table 2-14. Local plan loss estimates by hazard type

Hazard Type	Total Loss Estimate	Number of Plans with Loss Estimates
1% Annual Chance Hurricane Wind	\$1,582,020,000	56
1938 Hurricane Wind (LCRVCOG)	\$4,181,000,000	17
1% Annual Chance Flood	\$3,137,146,000	53
Earthquake (Largest damage of four CT State Plan Scenarios)	\$6,248,160,000	47

The majority of plans provided loss estimates that were based on historical damages. However, plans did not provide loss estimates for hazards that were not related to flooding, wind, or earthquake hazards. While analysis in local plans has improved since the last State plan update, more than two-thirds of the plans did not provide loss estimates. It is expected that future updates to local plans will include Hazus-MH results that will help support statewide analysis.

### 2.4.3 Local Land Use

Most of the local hazard mitigation plans include a general overview of land uses and development trends. Each local hazard mitigation plan was reviewed for information on local trends. Detailed information pulled from each local plan is available in Appendix 4-2.



The majority of the plans land use and development included population and the 2006 CLEAR data, similar to what is presented in section 2.1 of this chapter.

A review of land use from the local hazard mitigation plans presents a closer look at where development is occurring across the state. Although Tolland and Windham Counties have largely remained rural, many of the other counties have seen development over the years and may continue to see increased development moving forward.

Many communities in Fairfield County are projecting that growth will occur near Metro-North stations, including Darien, Greenwich, New Canaan, Norwalk, Stamford, Weston and Westport. Additionally, it seems that there is growth in many towns like Easton and Fairfield, and although towns such as Fairfield are limiting development in natural hazard areas like the coast and, specifically, the Town of Monroe is looking to designate areas as open space, other communities, like the Town of Stratford, have indicated that growth has been directed to former industrial areas that are located within the coastal flood hazard area.

Local comprehensive plans were also referenced by several local hazard mitigation plans. It is important to combine the comprehensive plan data with hazard mitigation, as future development will influence the degree to which citizens are prone to natural hazards. Future revisions of the local hazard mitigation plans should use the corresponding local comprehensive plan information regarding land use and development.

## 2.5 Public survey results

Public participation and input was gathered through an internet-based survey. Survey questions related to hazard identification and recent hazards events. Several important messages were provided by the survey responders. With equal emphasis, the top two messages are to:

- Address wind and snow damage to electrical lines that results in power outages, and
- Manage flood risk zones to reduce flood damage.

Responders would like the state, municipalities, and utilities to address wind and snow damage to electrical lines by requiring, facilitating, funding, encouraging, or accomplishing trimming of tree limbs, removal of trees, burying power lines, hardening power lines, and creation of microgrids and other redundancies. Responders would like the State and its municipalities to remove structures from flood zones, prevent new buildings in flood zones, and prevent rebuilding in flood zones after damage occurs. While many of the responders were speaking of inland and coastal flood zones, some of them chose to emphasize retreat from the shoreline. Additional information on the number of responders and an analysis of the results is included in Section 1. Additional information on how the survey results were captured in state mitigation activities is available in Chapter 5.



It is notable that many of the responses to the survey were heavily influenced by the damage to power lines caused by Hurricane Irene and Winter Storm Alfred in 2011, and flooding caused by Hurricanes Irene and Sandy in 2011 and 2012, respectively.

## **2.6 Hazard Analysis and Ranking Methodology**

The hazard identification and risk assessment provides a consistent basis for developing mitigation strategies and for prioritizing those jurisdictions that are most threatened and vulnerable to natural hazards. This section details the risk assessment process and the methods used to rank hazard risk. Results from this process and accompanying methods will be presented in hazard-specific sections that follow.

For the purposes of compliance with the Disaster Mitigation Act as further specified by the Final Rule 44 CFR Section 206.401(c)(2)(i), the plan update only fully addresses the hazards identified by the SHMP Team as significant in Connecticut. Additional hazards may be more formally addressed during future plan updates as their significance warrants.

### **2.6.1 Ranking Methodology**

For the purposes of this plan, a standardized methodology was developed to compare different hazards' risk on a jurisdictional (County) basis, as decided by the Mitigation Planning Team. This method prioritizes hazard risk based on a blend of quantitative factors extracted from NCDC and other available data sources. This risk assessment ranking is new to the 2014 plan update and has been structured to identify:

- 2010 population vulnerability (US Census)
- 2025 population projections (UCONN)
- 2012 Building Permits (CT DECD)
- Annualized events (NCDC)
- Annualized damages (NCDC)
- Injuries and/or deaths from previous events (NCDC)
- Local plan ranking
- Geographic extent (Hazard Specific)

Eight ranking parameters were used to determine jurisdiction based hazard rankings. Each parameter was rated on a scale of 1 through 4, with those rated 1 considered low risk and those rated at 4 considered high risk. Population vulnerability, projections and building permits are each weighted at 0.5 relative to all other parameters. Since building permit data and housing stock changes showed consistent results, building permits were used instead of changes in overall housing stock in order to better capture additional growth activity not captured by new structures alone. Geographic extent was weighted at 1.5 relative to all other parameters. Damages, events, death/injuries and local plan ranking were weighted 1.0 relative to the other parameters. These scores were summed by jurisdiction for each hazard separately, allowing for easy comparison between jurisdictions



for each hazard type. A summation of all the scores for all hazards in each jurisdiction provides a composite, “all-hazards” risk prioritization.

In order to simply comparison of NCDC data, events and damages were all annualized. This was accomplished by taking the parameter of interest and dividing by the length of record for each hazard. This annualized value provides an estimate of what can be expected in a given year. A summary of the parameters and the period of record used for each hazard can be found in the Section 2.3, where use of NCDC data is further described.

Comparing and prioritizing the risk posed by different hazards requires a system for equalizing the units of analysis. Since many of the hazards assessed in this plan do not have quantifiable probability or impact data, some semi-quantitative scoring were used in the ranking algorithm used to compare hazards. An overview of the parameters used in ranking follows. Appendix 2 includes the NCDC storm events data and ranking spreadsheet used for this analysis.

### **2.6.2 Population Vulnerability, Projections, and Building Permits**

Population density and projections are important factors in the risk assigned to a county. A hazard event that occurs in a highly populated area generally has a much higher impact compared to an event that takes place in a very rural, sparsely populated area. Three population related parameters were used to account for jurisdictions with high populations and jurisdictions with densely populated areas. Each of these parameters was given a weight of 0.5 in an effort to avoid biasing the composite ranking with population data. The 2014 plan update includes revised population values based on the 2010 U.S. Census. CT DECD was used for the 2012 building permits and UCONN CT state data center for the 2025 population projections.

Population parameters were calculated as the percent of the total population of Connecticut present in each jurisdiction. A value between one and four was assigned based on a geometric breaks pattern. By ranking jurisdictions in this fashion, those jurisdictions with significantly larger populations or potential future growth have effectively been given extra weight.

### **2.6.3 Probability of Future Events**

NCDC record of historical occurrences of hazards is an important factor in determining where hazards are likely to occur in the future, although it lacks a comprehensive dataset for all hazards. Annualizing this database provides a rough estimate of the number of times a jurisdiction might experience a particular hazard event in any given year. This was accomplished using an approach similar to the other methods described above. For each hazard type in each jurisdiction, the total number of events in the NCDC database was divided by the total years of record for each hazard to calculate an annualized events value. Table 2-15 shows the classifications used for establishing the probability of future events in Connecticut. Events with a 500-year recurrence interval were given a classification of low



for probability of future events and hazards with greater than 5 events in a year are classified as a high probability of occurrence.

When applicable, NCDC event totals have been supplemented with additional sources. Hurricane, wildland fire, dam failure, and earthquake were supplemented with information from the SHMP Team, CT Division of Forestry, NPDP, CT DEEP, and the CT State Geologist. The hazard specific sections further detail the probability of future events for the counties and State as a whole.

Table 2-15. Probability of future events classification.

Annualized Events	Probability of Future Occurrence
< .002 events/year	Low
0.002 – 1 events/year	Medium-Low
1 – 5 events/year	Medium-High
>5 events/year	High

#### 2.6.4 Property Damage

Property damage was analyzed separately, and each jurisdiction was assigned a score of 1 to 4 for each damage parameter. This data was obtained from the NCDC storm events database, inflated into 2012 dollars, and annualized according to the period of record for each event category. Hurricane damages were supplemented based on input from the NMPT at the June 2013 HIRA meeting. As of July 2013, no NCDC crop damage information was available for Connecticut.

#### 2.6.5 Deaths and Injuries

Examination of the historical record for events causing deaths and injuries is an important step in determining risk ranking. Hazards having no reported deaths or injuries were assigned a ranking of 1, and hazards resulting in at least one death or injury were assigned a 4.

#### 2.6.6 Local Mitigation Plan Ranking

Local mitigation plans were reviewed for ranking methodology, loss estimates, and risk to facilities (see Chapter 4). The parameter has been added as an effort to integrate local planning results into the state plan. Section 2.4 of this chapter provides information on how the plans were reviewed and summarized for incorporation into the ranking formula.

#### 2.6.7 Geographic Extent

Most hazards have defined geography where it is more likely the hazard will occur in the future. To be able to include this in the ranking system, each hazard has been assigned individual scores based on the available hazard data. Geographic extent was given a 1.5 weighting relative to the other parameters, as geographic extent was deemed critically important. Data sources for geographic extent are shown in Table 2-16.



Table 2-16. Sources for Geographic Extent.

Hazard	Data Source
Tropical Cyclone	Hazus-MH 100-year wind speeds
Tornadoes	NOAA NCDC Storm Events per square mile
Thunderstorm Wind	NOAA NCDC Storm Events per square mile
Winter Storm	NWS Weather station data average annual snowfall
Flood	FEMA DFIRMS and Hazus-MH derived floodplains (depth-grids)
Dam Failure	Number of NPDP/NID high or significant dams
Wildland Fire	Percent land areas within Wildland Urban Interface zones (interface or intermix)
Drought	Extent assumed to be uniform across Connecticut
Earthquake	Hazus-MH 500-year Peak Ground Acceleration

### 2.6.8 Composite Hazard Ranking

Composite risk for each jurisdiction was determined by adding the scores for population vulnerability, population projection, building permits, annualized events, property damage, crop damage, local plan rankings, geographic extent, and injuries and deaths together for each hazard.

The composite or total hazard score for the State was determined by calculating the average hazard risk for each of the counties and using quartiles to assign the ranking. Ranking results and analyses are available in section 2.8 of this chapter.

### 2.6.9 Limitations of Ranking

The NCDC data, described above, is not a complete data source. It was chosen for use in ranking because of its standardized collection of many of the hazards that impact Connecticut. Future plan updates and mitigation actions should assess the availability and creation of other data sources ensure the parameters are still valid for ranking the hazards.

The NWS does not guarantee the accuracy or validity of the information used for weather-related hazards. Although the historical records in the database often vary widely in their level of detail, the NWS does have a set of guidelines for use in the preparation of event descriptions.<sup>18</sup>

<sup>18</sup> National Weather Service Instruction 10-1605. Operations and Services Performance: Storm Data Preparation Guide. August 17, 2007. Available at: <http://www.nws.noaa.gov/directives/sym/pd01016005curr.pdf>



## 2.7 HIRA Hazard Specific Sections

The following subsections present a description of each type of natural hazard Connecticut may expect to experience, as determined by the SHMP team. The information presented in this chapter has been expanded upon and have been reorganize since 2010 for ease of review for the reader. Reorganization of information of general information, past history, future risk and vulnerability has been placed for each natural hazard under the respective natural hazard sub-category.

Thunderstorm wind related hazards have been added as a new section in the 2014 HIRA. Climate change will very likely have an increasingly significant impact on some types of natural disasters in Connecticut. The state and municipalities must consider scientists' projections of climate impacts on sea level, precipitation, storm intensity, flooding, drought, and other natural disasters as they plan for the future. Climate change and sea level rise has been added as a new section in the 2014 HIRA.

Climate change is both a present threat and an onsetting disaster. It acts as an amplifier of existing natural hazards.<sup>19</sup> Extreme weather events have become more frequent during the past half-century, and this trend is projected to continue<sup>20</sup>. Climate change is expected to have a significant impact on communities, including those in Connecticut. For instance, more frequent intense precipitation events may translate into more frequent flash flooding episodes. The National Climate Assessment and Development Committee has documented average temperature across the United States has increased 1.5°F since 1895 with the majority of the increase since 1980. Weather events have and will continue to become more intense, frequent, and will result in health and livelihood related impacts such as water supply, agriculture, transpiration and energy. The impact of dynamic storm events include but are not limited to more frequent and intense heat waves, increases in ocean and freshwater temperatures, frost-free-days, heavy downpours, floods, sea level rising, droughts and wildfires.<sup>21</sup>

As climate science evolves and improves, future updates to this plan might consider including climate change as a parameter in the ranking or scoring of natural hazards. The hazard specific sections, specifically flood (subsection 2.7.5), details the impacts and vulnerability from climate change and sea level rise as an amplifier of natural hazards.

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<sup>19</sup>*The Copenhagen Diagnosis, 2009: Updating the World on the Latest Climate Science.*

I. Allison, N.L. Bindoff, R.A. Bindshadler, P.M. Cox, N. de Noblet, M.H. England, J.E. Francis, N. Gruber, A.M. Haywood, D.J. Karoly, G. Kaser, C. Le Quéré, T.M. Lenton, M.E. Mann, B.I. McNeil, A.J. Pitman, S. Rahmstorf, E. Rignot, H.J. Schellnhuber, S.H. Schneider, S.C. Sherwood, R.C.J. Somerville, K. Steffen, E.J. Steig, M. Visbeck, A.J. Weaver. The University of New South Wales Climate Change Research Centre (CCRC), Sydney, Australia, 60pp.<http://www.copenhagendiagnosis.com/>

<sup>20</sup> IPCC, 2012 - Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (Eds.) Available from [Cambridge University Press](http://www.cambridge.org/9781107017144), The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU ENGLAND, 582 pp.

<sup>21</sup> National Climate Assessment and Development Advisory Committee (NCADAC) January 2013 Draft Climate Assessment Report. <http://ncadac.globalchange.gov/>



Published climate change studies discuss an increase in extreme precipitation frequency, and an actual change in precipitation types and intensity throughout the next century. Tools developed by Cornell University, Northeast Regional Climate Center and Natural Resource Conservation Service include interactive data for extreme precipitation and frequency estimates. Using these tools, Hartford and Fairfield counties are have a slightly higher estimate for precipitation extremes, relative to Connecticut.<sup>22</sup>

### 2.7.1 Thunderstorm related hazards

**High wind** - Sustained wind speeds of 40 mph or greater lasting for one hour or longer, or winds of 58 mph or greater for any duration.

**Severe thunderstorm** - having large hail, at least 3/4 inches (0.75 inches) in diameter, and/or damaging winds, at least 58 mph, or 50 knots.<sup>23</sup>

#### Hazard Profile

Thunderstorms are formed when the right atmospheric conditions combine to provide moisture, lift, and warm unstable air that can rise rapidly. Thunderstorms occur any time of the day and in all months of the year, but are most common during summer afternoons and evenings and in conjunction with frontal boundaries. The National Weather Service classifies a thunderstorm as severe if it produces hail at least one inch in diameter, winds of 58 mph or greater, or a tornado. About 10 percent of the estimated 100,000 annual thunderstorms that occur nationwide are considered severe.<sup>24</sup> Thunderstorms affect a smaller area compared with winter storms or hurricanes, but they can be dangerous and destructive for a number of reasons. Storms can form in less than 30 minutes, giving very little warning; they have the potential to produce lightning, hail, tornadoes, powerful straight-line winds, and heavy rains that produce flash flooding. Thunderstorms can contribute to other hazard events, such as flooding (section 2.7.5), strong straight-line winds, tornadoes (section 2.7.2), hail, and lightning, as well as the possibility of lightning-initiated fires.

Two basic types of damaging wind events other than tropical systems affect Connecticut: synoptic-scale winds and thunderstorm winds. Synoptic-scale winds are high winds that occur typically with cold frontal passages or Nor'easters. When thunderstorm winds exceed 58 mph, the thunderstorm is considered severe and a warning is issued. "Downbursts" cause the high winds in a thunderstorm. Downburst winds result from the sudden descent of cool or cold air toward the ground. As the air hits the ground, it spreads outward,

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<sup>22</sup> Cornell Extreme Precipitation in New York and New England. Version 1.12 Joint project between Northeast Regional Climate Center (NRCC) and Natural Resource Conservation Service (NRCS) <http://precip.eas.cornell.edu/> Assessed 8/26/2013.

<sup>23</sup> National Weather Service definition for severe weather.

<sup>24</sup> National Oceanic and Atmospheric Administration, <http://www.nws.noaa.gov/om/severeweather/resources/ttl6-10.pdf>.



creating high winds. Unlike tornadoes, downburst winds move in a straight line, without rotation. The term “microburst” refers to a small downburst with damaging winds up to 168 mph and less than 2.5 miles in length. The term “macroburst” refers to a large downburst that can extend greater than 2.5 miles with winds up to 134 mph and can last 5 to 30 minutes.

Another widespread thunderstorm wind event is known as a derecho. Derechos are associated with lines (squall lines) of fast-moving thunderstorms that might vary in length and have the potential to travel hundreds of miles. Winds in these types of events can rival those of “weaker” tornadoes with gusts of 80 to 100 mph covering a wide area. Based on historical tornado and hurricane data, FEMA has produced a map (Figure 2-12) that depicts maximum wind speeds for design of safe rooms. Connecticut is included in Wind Zone II (160 mph). Connecticut wind events can produce damage often associated with thunderstorms or tornadoes.

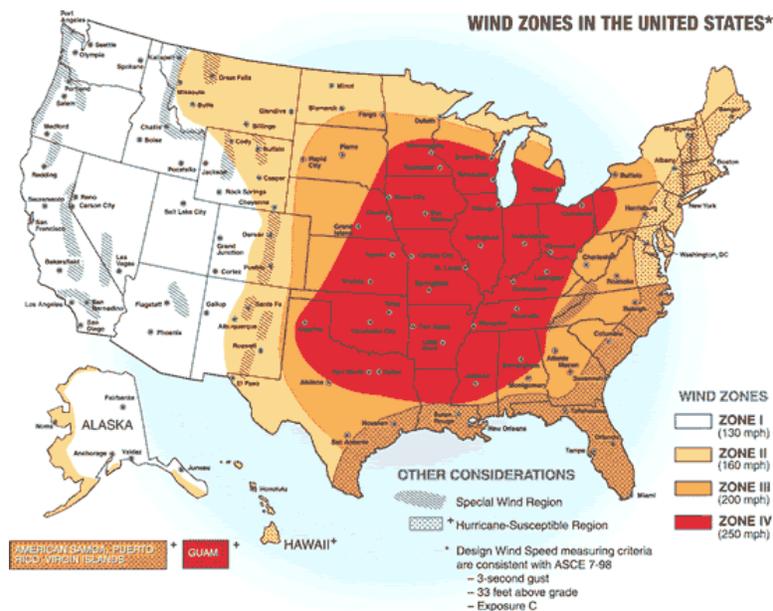


Figure 2-12. FEMA safe room design wind speed zones for the United States. Source: FEMA and ACSE 7-98.

All thunderstorms produce lightning, and therefore all thunderstorms are dangerous. Lightning often strikes outside of areas where it is raining, and may occur as far as 10 miles away from rainfall. It can strike from any part of the storm, and may even strike after the storm has seemed to pass. Hundreds of people across the nation are injured annually by lightning, most commonly when they are moving to a safe place but have waited too long to seek shelter. Lightning strike victims often suffer long-term effects such as memory loss, sleep disorders, weakness and fatigue, chronic pain, depression and muscle spasms. Lightning has the potential to start both house fires and wildland fires. Lightning causes an average of 55-60 fatalities, 400 injuries, and over \$1 billion in insured losses annually nationwide.



Hail is formed in towering cumulonimbus clouds (thunderheads) when strong updrafts carry water droplets to a height at which they freeze. Eventually, these ice particles become too heavy for the updraft to hold up, and they fall to the ground at speeds of up to 120 mph. Hail falls along paths called swaths, which can vary from a few square acres to up to 10 miles wide and 100 miles long.<sup>25</sup> Hail larger than ¾ inch in diameter can do great damage to both property and crops, and some storms produce hail over 2 inches in diameter. Hail causes about \$1 billion in damages annually in the U.S.

## History of Thunderstorm Occurrences in Connecticut

Connecticut is not known for experiencing the same frequency of severe thunderstorms as the Midwest and Southeast, but the state has observed a number of very destructive hail and lightning events over the years. Between 1955 and 2012, there were 2,470 wind events recorded in the NCDC database for Connecticut, an average of 42.6 events per year (Table 2-17). At least 19 fatalities and 154 injuries were reported from these events, of which several are attributed to Superstorm Sandy in October 2012. Figure 2-13 shows the location of all of the NCDC wind events with coordinates and those reported as greater than 65 knots in magnitude within Connecticut. Litchfield has experienced the most wind events, followed by Hartford and Fairfield.

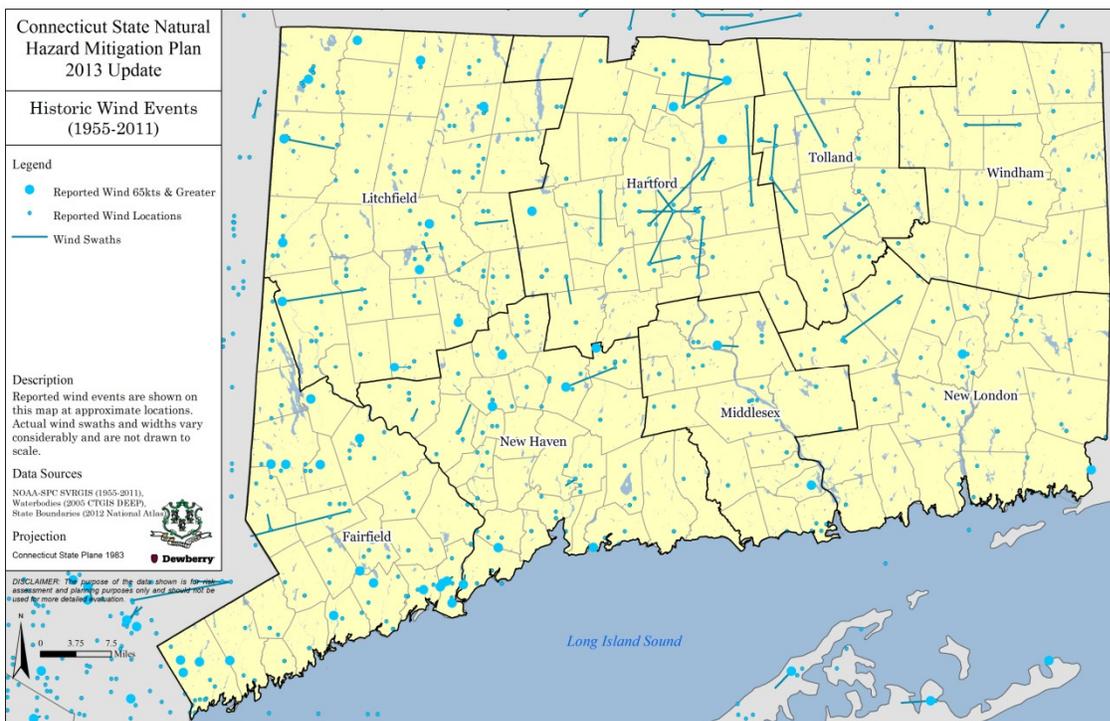


Figure 2-13. Historic wind events, Connecticut and adjacent states.

<sup>25</sup> University Corporation for Atmospheric Research, <http://www.ucar.edu/communications/factsheets/Hail.html>.



Table 2-17. NCDC total thunderstorm events, adjusted to 2012 dollars.\*

County	Number of Events	Number of Injuries	Number of Deaths	Property Damages
Fairfield	436	57	10	\$11,390,438
Hartford	477	33	2	\$6,886,740
Litchfield	486	17	2	\$3,373,007
Middlesex	147	6	5	\$ 1,711,468
New Haven	360	20	5	\$4,698,964
New London	196	21	3	\$2,218,583
Tolland	204	11	3	\$3,223,674
Windham	164	7	2	\$2,727,504
Total	2,470	154	19	\$36,230,379

\*Number of Injuries and Deaths are reported by NWS as zonal events and as a result the individual jurisdiction totals are not cumulative for the state.

Some notable wind events include:

- October 19, 1996:** a strong low pressure system developed on a cold front over the DelMarVa Peninsula. With a high pressure system in place across Northern New England, the low intensified and moved slowly off the Southern New Jersey Coast. As the difference in pressures increased, strong and gusty east winds developed across the region. Strong gusty winds and torrential rain combined to down trees and power lines. In New Canaan (Southern Fairfield County), a 40 year old man died when a tree fell on the pick-up truck he was driving on Route 23. His 13 year old daughter was treated for injury. High winds downed numerous trees and power lines from Greenwich east to Norwalk, including New Canaan. At Bridgeport Airport, the peak wind gust was 56 mph. High winds combined with high tides wrecked at least \$1 million worth of sail and power boats torn from the moorings off Wilson Cove. More than a dozen luxury yachts and assorted smaller boats were smashed against private sea walls and the Bell Island Bridge in Bell Island. In Southern New Haven County, the peak wind gust measured at Outer Island was 58 mph. In New Haven, a woman was taken to St. Raphael's hospital with minor injuries after being struck by a falling tree limb.
- June 24, 2010:** A cold front and strong upper level trough moved across the Tri-State, triggering severe thunderstorms across Southwest Connecticut. Including both supercells and squall lines, producing an EF-1 tornado with 100 mph winds in Bridgeport area just north of Interstate 95. In Bridgeport, straight line winds and the EF1 tornado, caused the collapse of 5 complete buildings, and damage to 9 other buildings. The winds also blew a billboard off an apartment building, blew out windows and off bricks from buildings, flipped over a tractor trailer on I-95 between exits 27 and 28, flipped over cars on Route 25 between exits 3 and 4. Around two dozen people were displaced by the storm. Significant tree damage was reported throughout the Southwest, with some falling on houses.
- October 29, 2012:** Sandy, a hybrid storm with both tropical and extra-tropical characteristics, brought high winds and coastal flooding to southern New England.



Record breaking high tides and wave action was combined with sustained winds of 40 to 60 mph and wind gusts of 80 to 90 mph. Emergency managers recommended mandatory evacuations of 362,000 people that lived in low lying areas. Widespread significant statewide power outages of 667,598 lasted up to 8 days. Subsection 2.72 and 2.75 include additional details on Superstorm Sandy.

## Probability of Future Occurrence

Due to the somewhat unpredictable nature (especially into the longer term) of damaging wind and thunderstorms in particular, it is difficult to quantitatively determine future probability of the hazard. Modeling of future occurrence is difficult and not practical for purposes of this plan. Instead, an examination of past events was performed using NCDC data that dates to 1950. Historically, wind events have occurred throughout the state, with more than 42 events expected in any given year, with western (Hartford, New Haven, Fairfield, and Litchfield) Connecticut experiencing the greatest number of events. Litchfield typically will see 8 events annually while Middlesex may see 3 events per year. Table 2-19 provides the annualized number of wind events by jurisdiction based on the NCDC historical record. It is reasonable to assume that Connecticut will continue to experience strong winds and is considered to have a high probability of future events. Table 2-19 summarizes the probability of future events by county (annualized events). Litchfield and Hartford counties each can expect more than 8 thunderstorm events per year. Figure 2-14 shows the ranking and risk parameters which includes the annualized events for each county.

It is worth noting that the differences in the number of reported events may be significantly related to population and population density. Regardless, based on this analysis, it is clear that wind is a significant hazard to Connecticut.

## Vulnerability and Loss Estimation

Wind poses a threat to Connecticut in many forms, including that produced by severe thunderstorms and tropical weather systems. The effects can include blowing debris, interruptions in elevated power and communications utilities and intensified effects of winter weather. Harm to people and animals as well as damage to property and infrastructure may be the result.

Building construction, location, and nearby trees or other tall structures will have a large impact on how vulnerable an individual facility is to a lightning strike. A rough estimate of a structure's likelihood of being struck by lightning can be calculated using the structure's ground surface area, height, and striking distance between the downward-moving tip of the stepped leader (negatively charged channel jumping from cloud to earth) and the object.<sup>26</sup> In general, buildings are more likely to be struck by lightning if they are located on high ground or if they have tall protrusions such as steeples or poles which the stepped leader

<sup>26</sup> Hasbrouck, P.E. *Determining the Probability of Lightning Striking a Facility*, National Lightning Safety Institute, [http://lightningsafety.com/nlsi\\_lhm/prbshort.html](http://lightningsafety.com/nlsi_lhm/prbshort.html) (April 2004).



can jump to. Electrical and communications utilities are also vulnerable to direct lightning strikes. Damage to these lines has the potential to cause power and communications outages for businesses, residencies, and critical facilities.

Structure vulnerability to hail is determined mainly by construction and exposure. Metal siding and roofing is better able to stand up to the damages of a hailstorm than many other materials, although it may also be damaged by denting. Exposed windows and vehicles are also susceptible to damage. Crops are extremely susceptible to hailstorm damage, as even the smallest hail stones can rip apart unsheltered vegetation.

Human vulnerability is largely determined by the availability and reception of early warnings for the approach of severe storms, and by the availability of nearby shelter. Individuals who immediately seek shelter in a sturdy building or metal-roofed vehicle are much safer than those who remain outdoors. Early warnings of severe storms are also vital for aircraft flying through the area. Table 2-17 gives a breakdown of injuries and deaths attributed to thunderstorms in Connecticut between 1955 and 2012. Fairfield County tops the list with 57 injuries and 10 fatalities.

Wind risk was assessed using historical data acquired from the NCDC’s U.S. Storm Events Database. Event data ranges from June 1955 through December 2012. Specific event types queried from the database are listed in Table 2-18.

Table 2-18.Events queried from NCDC U.S. Storm Events Database.

Event Type	
Wind	Thunderstorm Wind
Dry Microburst	Thunderstorm Winds
Gusty Wind	Thunderstorm Winds/Hail
Gusty Wind/Heavy Rain	Thunderstorm Winds/Heavy Rain
Gusty Wind/Rain	TSTM Wind
Gusty Winds	TSTM Wind/Hail
High Wind	Wet Microburst
High Wind and Seas	Wind
High Winds	Winds
Strong Wind	Thunderstorm winds
Strong Winds	

As discussed above, risk, as defined as probability multiplied by impact, cannot be fully estimated for damaging winds due to the lack of intensity-damage models for this hazard. Instead, financial impacts of damaging winds can be analyzed based on NCDC Storm Events data. Using this data, property damage adjusted for inflation (in 2012 dollars) related to wind events totaled nearly \$36.2 M or \$624,662 annually. Table 2-19 shows annualized loss information for the state by jurisdiction, including the annualized number



of events, and total annualized damages. Connecticut will experience, on average 42 events per year, resulting in over \$624,662 dollars in estimated damages.

As seen in Table 2-18, thunderstorm related events can be very costly. Fairfield has the highest annualized losses at \$196,387, with Hartford following with an average of \$118,737 in annual damages. These estimates are believed to be an underrepresentation of the actual losses experienced due to hazards as losses from events that go unreported or that are difficult to quantify are not likely to appear in the NCDC database.

Table 2-19. NCDC annualized events for the thunderstorm hazard.

County	Annualized Events	Annualized Damages
Fairfield	7.52	\$196,387
Hartford	8.22	\$118,737
Litchfield	8.38	\$58,155
Middlesex	2.53	\$29,508
New Haven	6.21	\$81,017
New London	3.38	\$38,251
Tolland	3.52	\$55,581
Windham	2.83	\$47,026
Total	42.59	\$624,662

**Exposure and Local Loss Estimate.** The location and construction of a facility plays a role in how it will be affected by lightning and hail incidents. If a structure is located on a hilltop, is tall or has other tall structures around it, or has large exposed windows, it may be damaged during a storm. Communications and power supplies may be compromised during thunderstorms, and some critical facilities might not be equipped with a backup power source.

While some correlation can be made between historical occurrences and the probability of future occurrences in the same area, there is no data or methodology currently available to identify buildings that are more at-risk to the thunderstorm hazard than others in a state-wide analysis. It is therefore assumed that all state-owned and critical facilities are equally exposed to wind hazard and that any potential damages, if not catastrophic, would depend upon building-specific and/or site-specific characteristics. As building specific information on construction and roof type is available, additional analysis can be completed.

Critical facilities, legacy structures and infrastructure throughout the state may be vulnerable to strong winds. In particular, structures that were built before building codes and use of construction design wind speeds and corresponding zones (Figure 2-12) may be vulnerable to wind damage. Critical and state facilities in western Connecticut can be assumed to be at a slightly greater risk due to thunderstorm related events. There are



currently 3,327 state-owned buildings totaling \$1,655,430,988 in known building value and 1,401 identified critical facilities that are exposed to thunderstorm related events.<sup>27</sup> It is assumed that the entire population of the state is equally vulnerable to a tornado, although population density is a factor as discussed throughout this section. Therefore, more densely populated areas of the state should be considered at higher risk overall from a given tornado occurrence.

Windham County NECCOG RPO was the only local plan to include loss estimates and was based on the NCDC property damages for significant events; \$1,048,387 in wind damages, \$10,400 in lightning damages, and \$15,600 in thunderstorm damages. The damages provided in the local plan are not loss estimates in the sense of what can be expected from future occurrences but only represent historic worst case single events.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for thunderstorm related winds using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of historical impact including injuries and deaths, property damage, and the number of reported events. Geographic extent is represented by the number of thunderstorms that have occurred per square mile of the jurisdiction. The composite thunderstorm hazard rank shows Hartford, Fairfield and New Haven counties have a higher risk due to thunderstorm based on geographic extent and the number of events that have resulted in injuries/deaths (Figure 2-14).

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<sup>27</sup> Building values are not currently available for Fairfield, Hartford, Litchfield, Middlesex, and New Haven counties, therefore exposure estimates are incomplete at this time.  
Natural Hazard Identification and Risk Assessment

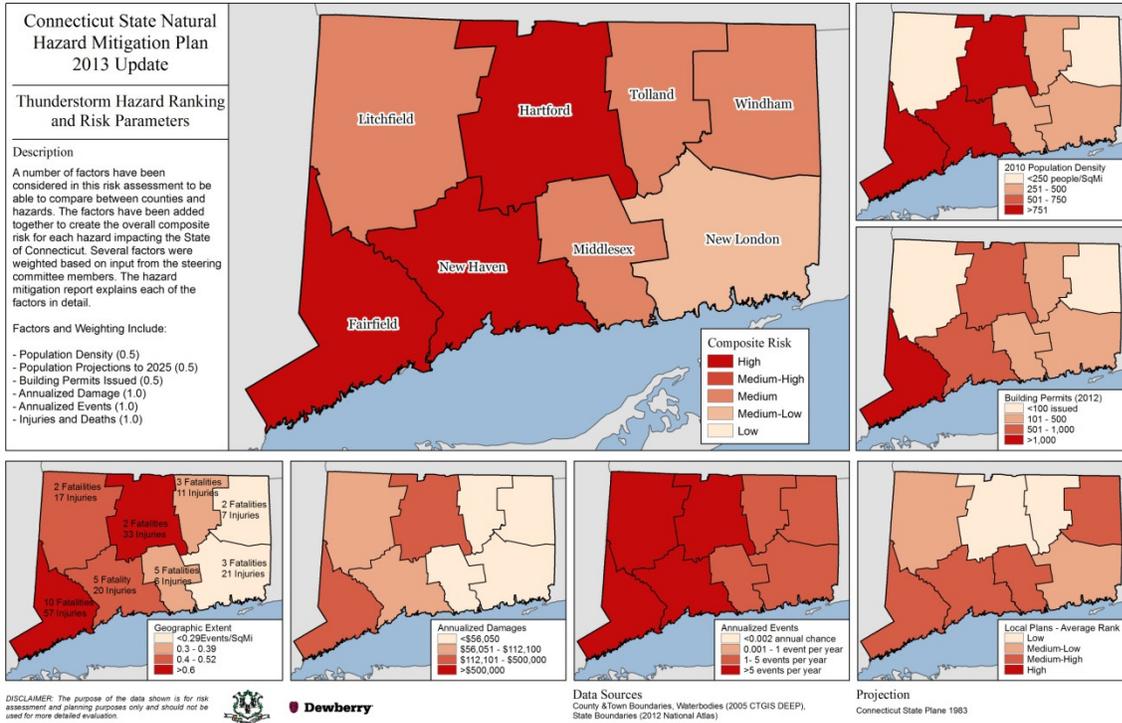


Figure 2-14. Thunderstorm wind relative ranking.



## 2.7.2 Tropical Cyclone (Hurricane and Tropical Storm)

Tropical Cyclone is a warm-core, low pressure system without any “front” attached, that develops over the tropical or subtropical waters, and has an organized circulation. In the Atlantic and Eastern Pacific Oceans the strongest of these cyclones is called a hurricane. Tropical cyclones include three types of systems which are differentiated primarily on wind speed:

- Tropical Depression – A system in which the maximum sustained surface wind is 33 knots (38 mph) or less.
- Tropical Storm – A system in which the maximum sustained surface wind ranges from 34 to 63 knots (39 – 73 mph).
- Hurricanes (also known as typhoons in the Western Pacific and cyclones in the Indian Ocean) – A system in which the maximum sustained surface wind is 64 or greater (74+ mph). This is the worst and strongest of all tropical systems.

Coastal hazards take many forms ranging from storm systems like tropical storms, hurricanes and Nor'easters that can cause storm surge inundation, heavy precipitation that may lead to flash flooding, and exacerbation of shoreline erosion to longer term hazards such as sea level rise.

### Hazard Profile

Connecticut is located along the Atlantic coastline and has experienced all three types of tropical cyclone systems including some of the worst hurricanes to make landfall within the United States. A hurricane strike to Connecticut has the potential to cause moderate to extensive damage within the State. The extent and location of the damage varies greatly depending on the track, intensity and duration of the hurricane. The Connecticut hurricanes of the 1930's, 40's and 50's were markedly more severe than the hurricanes that occurred between the 1960's and present time.

Figure 2-15 shows a diagram of the anatomy of a tropical cyclone (hurricane) which consists of:

1. An eye – the center of a hurricane which is the calmest part of the storm, and is typically 20-40 miles across;
2. An eye wall – surrounds the eye and consists of a ring of tall thunderstorms that produce heavy rains and usually the strongest winds; and
3. Rain bands – curved bands of clouds and thunderstorms that trail away from the eye wall in a spiral fashion. Rain bands are capable of producing high winds, heavy outburst of rain and tornadoes.

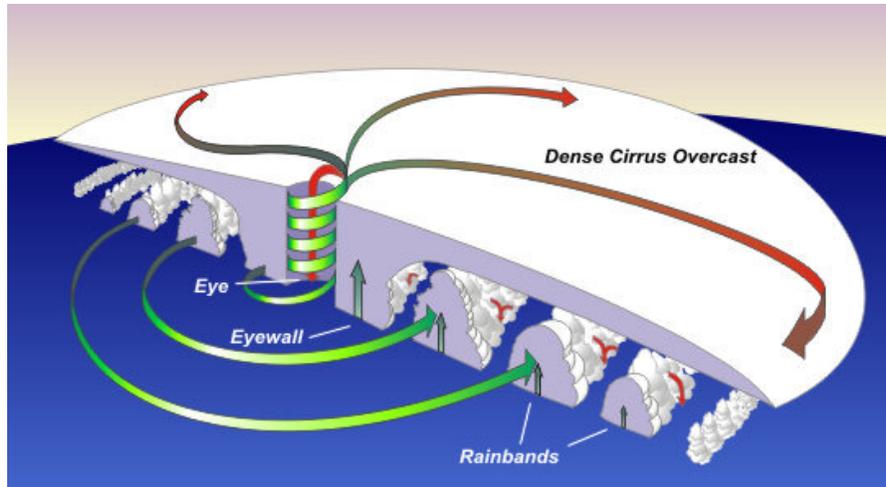


Figure 2-15. Diagram of a Tropical Cyclone (Hurricane)

There are several environmental conditions which must be present for a tropical cyclone to form:<sup>28</sup>

- Warm ocean waters (at least 80°F) throughout a depth of about 150 feet;
- An atmosphere which cools fast enough with height such that it is potentially unstable to moist convection;
- Relatively moist air near the mid-level of the troposphere;
- A minimum 300 mile distance from the equator;
- A pre-existing near surface disturbance; and
- Low values of vertical wind shear (change in wind speed with height) between the surface and the upper troposphere.

Several types of natural hazards may be associated with tropical cyclones including storm surge, flooding (both coastal and riverine), tornadoes, and high winds. The Saffir/Simpson scale (Table 2-20) was developed in 1971 by Herbert Saffir and Dr. Robert Simpson as a way to classify hurricanes. The scale rates the intensity of hurricanes based on wind speed and barometric pressure measurements. The scale gives an indication of the potential flooding and wind damages associated with each hurricane category. Prior to 2009 hurricane season, hurricanes were categorized by the Saffir-Simpson Hurricane Scale that incorporated central pressure and storm surge as components of the categories. Due to criticisms and confusion regarding this practice, in 2009, the scale was revised and is now called the Saffir-Simpson Hurricane Wind Scale.<sup>29</sup> This modified scale, which is more scientifically defensible, is predicated on wind speeds and removed both storm surge and central pressure as factors.

Table 2-20. Saffir/Simpson Hurricane Intensity Categories.<sup>30</sup>

<sup>28</sup> Source: NOAA website.

<sup>29</sup> Source NOAA website.

<sup>30</sup> Source: National Climatic Data Center, 2001. The Saffir/Simpson Hurricane Scale. Accessed 6/15/2013, <http://www.ncdc.noaa.gov/oa/satellite/satelliteseye/educational/saffir.html>.



Wind Speed	Typical Effects
<b>Category One Hurricane – Weak</b>	
74-95 mph (64-82kt)	Minimal Damage: Damage is primarily to shrubbery, trees, foliage, and unanchored mobile homes. No real damage occurs in building structures. Some damage is done to poorly constructed signs.
<b>Category Two Hurricane – Moderate</b>	
96-110 mph (83-95kt)	Moderate Damage: Considerable damage is done to shrubbery and tree foliage, some trees are blown down. Major structural damage occurs to exposed mobile homes. Extensive damage occurs to poorly constructed signs. Some damage is done to roofing materials, windows, and doors; no major damage occurs to the building integrity of structures.
<b>Category Three Hurricane – Strong</b>	
111-130 mph (96-113kt)	Extensive damage: Foliage torn from trees and shrubbery; large trees blown down. Practically all poorly constructed signs are blown down. Some damage to roofing materials of buildings occurs, with some window and door damage. Some structural damage occurs to small buildings, residences and utility buildings. Mobile homes are destroyed. There is a minor amount of failure of curtain walls (in framed buildings).
<b>Category Four Hurricane - Very Strong</b>	
131-155 mph (114-135kt)	Extreme Damage: Shrubs and trees are blown down; all signs are down. Extensive roofing material and window and door damage occurs. Complete failure of roofs on many small residences occurs, and there is complete destruction of mobile homes. Some curtain walls experience failure.
<b>Category Five Hurricane – Devastating</b>	
Greater than 155 mph (135kt)	Catastrophic Damage: Shrubs and trees are blown down; all signs are down. Considerable damage to roofs of buildings. Very severe and extensive window and door damage occurs. Complete failure of roof structures occurs on many residences and industrial buildings, and extensive shattering of glass in windows and doors occurs. Some complete buildings fail. Small buildings are overturned or blown away. Complete destruction of mobile homes occurs.

The National Weather Service (NWS) National Hurricane Center defines June 1 through November 30 as the Atlantic hurricane season. September is typically the most active month for tropical cyclones in Connecticut.

Tropical storms and hurricanes are accompanied by a storm surge, an abnormal local rise in sea level. The storm surge is caused by the difference in wind and barometric pressure between a tropical system and the environment outside the system. The end result is that water is pushed onto a coastline. The height of the surge is measured as the deviation from mean sea level and can reach over 25 feet in extreme circumstances. The most devastating storm surges occur just to the right of the eye of a land falling hurricane. For coastal areas, the storm surge is typically the most dangerous and damaging aspect of the storm. Howling winds associated with Nor'easters also have the potential to produce significant storm surge, similar to that of a Category One hurricane. In addition, these types of storms



can also produce wind gusts to near hurricane force as well as flooding rain and crippling snowfall.

The Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model is used to evaluate the potential impact of storm surge. Emergency managers use data from SLOSH to identify at-risk populations and determine evacuation areas. Storm surges also affect tidal rivers and creeks, potentially increasing evacuation areas. Figure 2-40 indicates the potential inland extent of storm surge as a function of hurricane category. It is readily apparent from this figure that Connecticut has significant vulnerability to storm surge. Additional analysis related to storm surge is available in the flood subsection 2.7.5 of this chapter.

### History of Hurricane Occurrences in Connecticut

Connecticut and New England are no strangers to tropical cyclone systems. Figure 2-16 show historic tracks for significant tropical storms and hurricanes within 50 nautical miles that have impacted Connecticut.<sup>31</sup> To date, a Category 3 hurricane was the most severe tropical cyclone that impacted Connecticut. However, many Category 3 hurricanes which have come up the Atlantic coast into the cooler waters off New England were downgraded to a Category 2 hurricane or lower when they made landfall in/near Connecticut.

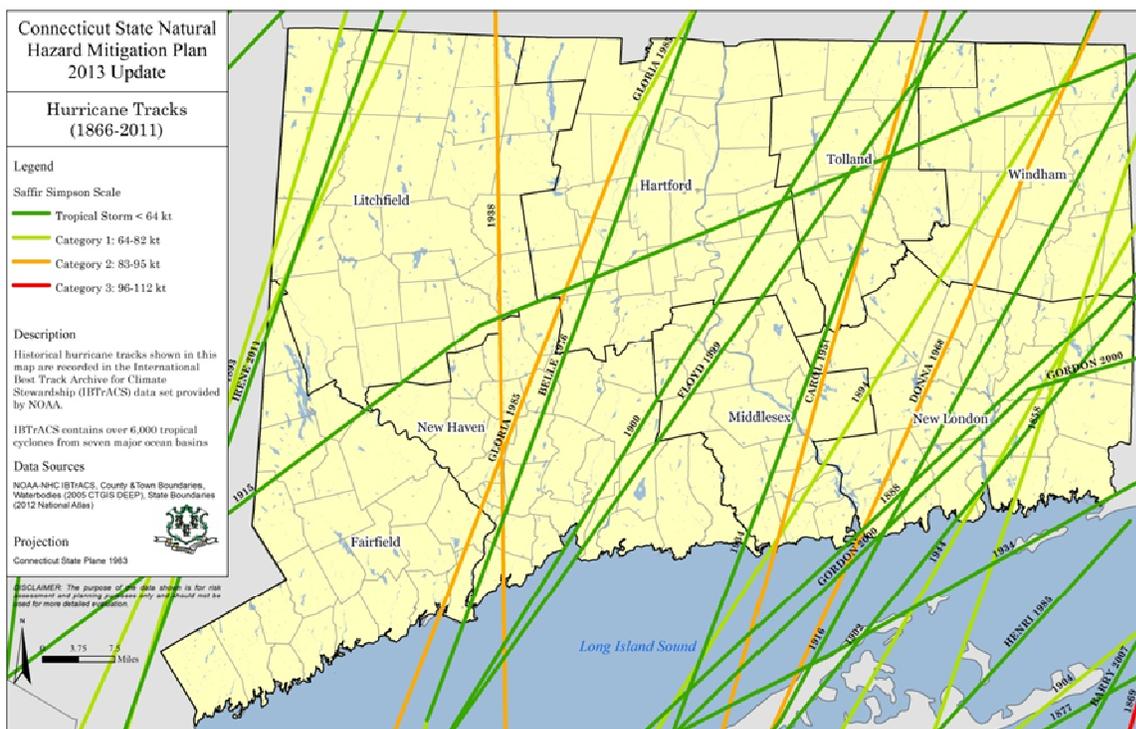


Figure 2-16. Significant Tropical cyclones tracking within 50 nautical miles of Connecticut.

The National Weather Service reports that: Since 1900, 49 tropical systems have impacted Southern New England. Twenty-five were hurricanes, while 18 were of tropical storm

<sup>31</sup> Source: NOAA website, interactive mapping tool.



strength. Any tropical storm or hurricane is capable of bringing a combination of high winds, large storm surges, and severe inland flooding along area rivers and streams. Of the 25 hurricanes, 9 made landfall along the Southern New England coast. Of those 9 landfalling hurricanes, 7 were either of a Category 2 or 3 intensity based on the Saffir-Simpson Hurricane Scale. Through the primary threat to New England is during August and September, the region has been affected as early as June and as late as mid-October.”

<sup>32</sup>

Historic tracks and peak wind gusts, from Hazus-MH, for the 1938 Hurricane, 1944 Hurricane, Hurricane Carol (1954), Hurricane Donna (1960), and Hurricane Gloria (1985) are shown in Figure 2-17.

Prior to Super Storm Sandy, the most intense Hurricane to strike Connecticut occurred on September 21, 1938 (unofficially known as the Great New England Hurricane of 1938, or the Long Island Express).<sup>33</sup> This Category 3 Hurricane made landfall in Connecticut in Milford, with the eye of the hurricane observed in New Haven Connecticut. Sustained winds of 91 mph with gusts of 121 mph were reported on Block Island, Rhode Island. The storm downed power lines in many areas of Connecticut and resulted in catastrophic fires in New London and Mystic, CT. Low pressures of 28.00 inches and 28.04 inches were reported in Middletown and Hartford, respectively. Storm tides of 14 to 18 feet were reported along the Connecticut coast with 18 to 25 foot tides reported from New London, Connecticut to Cape Cod, Massachusetts.

Inland flooding was another result of the hurricane and a substantial amount of rain which occurred several days prior to the hurricane. Three to six inches of rain fell throughout most of Connecticut with 14 to 17 inches reported in Central Connecticut, resulting in severe flooding of rivers and streams and roadways and rail lines being washed out. In Hartford the Connecticut River reached 35.4 feet, which was 19.4 feet above flood stage. Impacts on Southern New England from this storm were:

- 8,900 homes/cottages and buildings were destroyed, and 15,000 structures were damaged;
- An estimated \$38,000,000 (in 1938 dollars) in damages to property in Connecticut;
- 564 deaths and 1,700 injuries; and

<sup>32</sup> Source: National Weather Service Forecast Office, Boston, MA.

<sup>33</sup> Source: NWS, Boston Office; information describing this event was taken from the NWS Boston website. Pictures are from the Connecticut State Library online archives.



- 2,605 vessels destroyed and 3,369 vessels damaged.

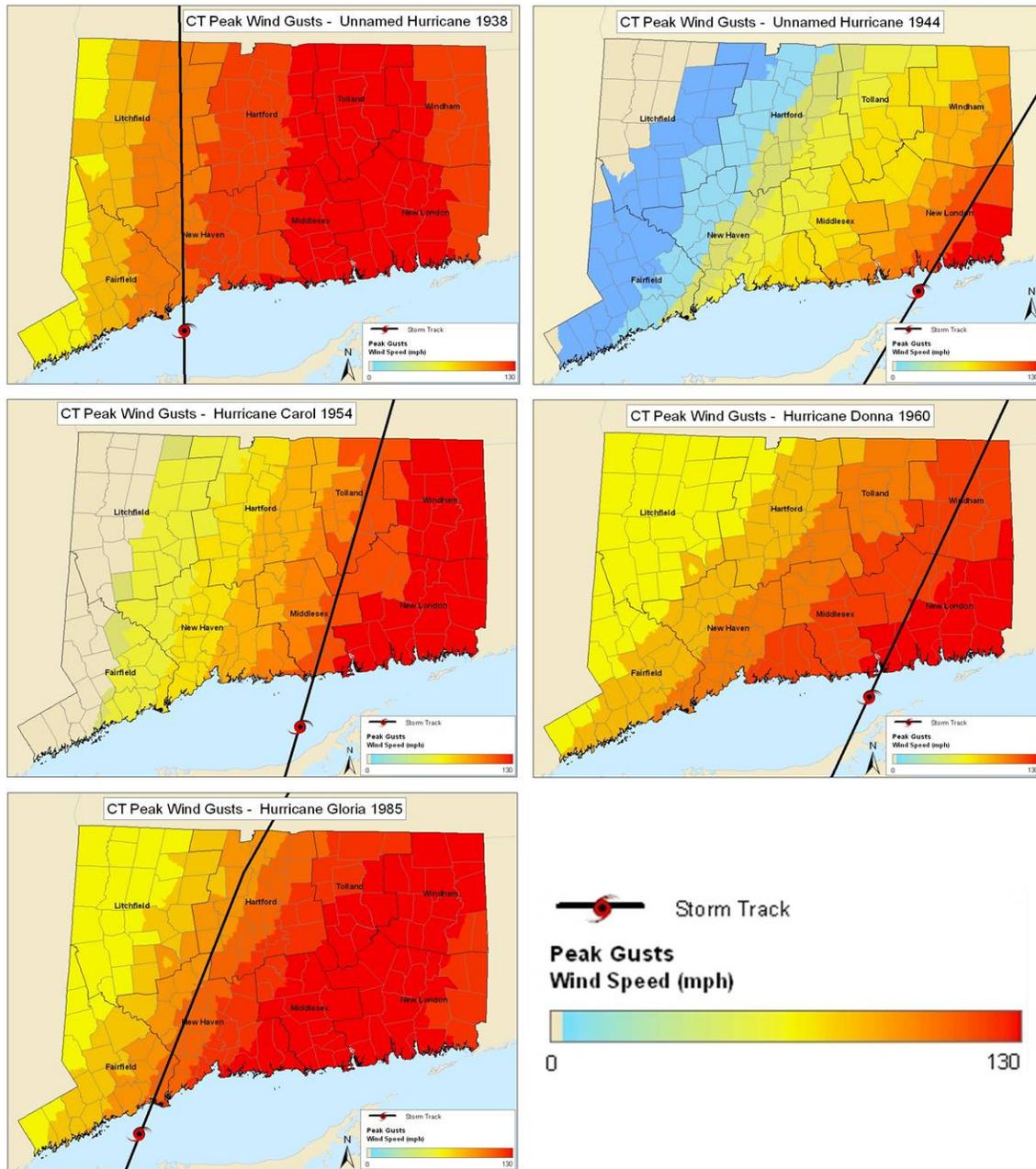




Figure 2-17. Historical hurricane tracts and peak wind gusts (Hazardus-MH derived).

Since the 2010 plan, there have been 2 significant hurricanes. Hurricane Irene occurred on August 28, 2011 and weakened to a tropical storm as it made landfall. The storm hit the coast at high tide, which caused a storm surge that flooded roads and homes from Fairfield to New London. The storm produced high winds (maximum wind gusts were 66 mph, while the average wind gust for the entire state was 52.3 mph), heavy rains and flash flooding, and left ten people dead in Connecticut. At times, winds reached hurricane force from Westport to Woods Hole Massachusetts.<sup>34</sup> The storm also destroyed many houses, particularly in East Haven, Milford and Fairfield.<sup>35</sup> Hundreds of thousands of people were without power due to Irene; Connecticut had the largest population without power, about 16% of customers.<sup>36</sup> Following the, trees, branches and power lines remained scattered across roads in every town in the state. About 2,000 residents were in shelters across the state<sup>37</sup> Additional details on this event are available in Section 2.3 on Connecticut's History of Natural Disasters and in the flood history section.

Super Storm Sandy occurred October 29-30, 2012, causing storm surges, wind and rain and devastating the Jersey Shore, Southern NYC, parts of Long Island and the Connecticut and Rhode Island coastlines. Coastal residents and business owners suffered from storm surge and its damage, and more than 360,000 people were evacuated from low-lying areas along the coast from Old Saybrook to Fairfield. Inland cities and towns saw widespread power failures. A travel ban was issued on state highways, and commuter rail and Amtrak service was canceled.<sup>38</sup>

Although one of the most damaging storms in Connecticut history, Super Storm Sandy was not a Hurricane by definition when it made landfall in Connecticut. It had both extratropical cyclone and nor'easter characteristics combined, illustrating the possibility of dangerous changes in storm dynamics. In Connecticut, all eight counties saw damages, with more than \$360 million in total damage (see Figure 2-18). At its peak, Sandy cut power to 640,000 homes and businesses, and it was reported to be at least 5 storm-related deaths. As of May 2013, more than \$367 million in federal assistance had been approved to help Connecticut with disaster expenses.

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<sup>34</sup> [http://en.wikipedia.org/wiki/List\\_of\\_New\\_England\\_hurricanes](http://en.wikipedia.org/wiki/List_of_New_England_hurricanes)

<sup>35</sup> Connecticut Post. Connecticut's worst hurricanes. 10/30/2012.

<sup>36</sup> World Socialist website. Power outages, flooding continues in wake of Hurricane Irene. 9/2/2011.

<sup>37</sup> The Hartford Courant. Home Destroyed, People Missing and 767,000 without power after Irene. 8/28/2011.

<sup>38</sup> The New York Times. State-by-State Guide to Hurricane Sandy. 10/29/2010



Figure 2-18. Milford, Connecticut after Hurricane Sandy (10/2012). Source: Daily News Hurricane Sandy death tolls reaches 74 in US. 11/1/2012.

### Probability of Future Occurrence

The Atlantic hurricane season begins on June 1 and runs through November 30 of each year. This is the time period when the environmental conditions are most favorable for a tropical cyclone to develop. The greatest risk of a hurricane impacting New England within this six-month period is from late August to mid-October.

In general it is impossible to predict when and where a hurricane will occur. Some researchers such as Klotzbach and Gray<sup>39</sup> develop forecasts and probabilities of landfall strikes for the annual Atlantic hurricane season. However, this forecast is revised throughout the season. Other researchers and Federal agencies like NOAA do not make such landfall predictions. NOAA states that, "Hurricane landfalls are largely determined by the weather patterns in places the hurricane approaches, which are only predictable when the storm is within several days of making landfall." NOAA does issue a seasonal hurricane outlook that "provides a general guide to the expected overall nature of the upcoming hurricane season." The outlook combines the impacts of three climate factors to analyze an expected level of activity for the season:

- The tropical multi-decadal signal;
- The El Niño/La Niña (ENSO – El Niño Southern Oscillation) cycle; and
- The tropical Atlantic sea surface temperatures.

Hurricanes have the greatest destructive potential of all natural disasters in Connecticut, due to the potential combination of high winds, storm surge and coastal erosion, heavy rain,

<sup>39</sup> Philip J. Klotzbach and William M. Gray run the Tropical Meteorology Project at Colorado State University. Information about and the actual hurricane season forecasts can be downloaded from website..



and flooding which can accompany this hazard.. According to the NOAA return periods previously presented, a Category 1 hurricane can be expected to make landfall in/near Connecticut once every ten to fifteen years. A Category 2 hurricane could be expected to make landfall in/near Connecticut once every twenty-three to thirty years, and a Category 3 hurricane has a calculated return period of forty-six to seventy-four years. With the last major hurricane (Hurricane Bob, Category 2,) to impact Connecticut occurring in 1991, we can expect the occurrence of another hurricane to impact the state within the foreseeable future.

Researchers have recently analyzed data that has indicated that the intensity of tropical cyclones (hurricanes and typhoons) has increased over the last thirty-five years. With changing weather patterns resulting from climate change, increases in frequency and intensity are also expected to continue. NOAA developed a series of hurricane return periods for the northeast based on historical data of events within 65 nautical miles of the storm tracks (Figure 2-19). NOAA methodology for this is as follows:

Hurricane return periods are the frequency at which a certain intensity or category of hurricane can be expected within 75 nautical miles(nm) or 86 statute miles of a given location. In simpler terms a return period of 20 years for a Category 3 or greater hurricane means that on average during the previous 100 years, Category 3 or greater hurricane passed within 75 nm (86 miles) of that location about five times. We would then expect, on average, an additional five Category 3 or greater hurricanes within that radius over the next 100 years. The basic idea is that a population of tropical cyclones falling within the 65 nm (75 miles) circle is obtained from the best-track file. For that set of storms, the maximum wind within the circle is found. Then, a count is conducted to find how many systems had winds of 30-34 knot (kt), 35-39 kt etc. Once the count is known, a function is used to "fit" the distribution. Since there are only a few intense tropical cyclones typically in the 100-year record for a particular site, the mathematical function helps to smooth this out and "fill in the holes". The smooth function is then used to estimate the number of systems that would occur over a longer time period.

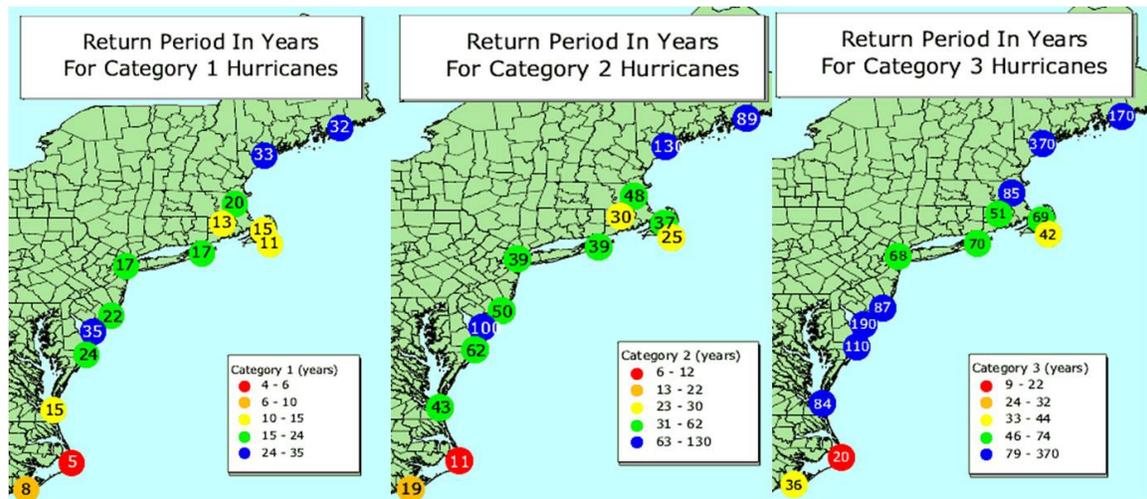


Figure 2-19. Return period for hurricane categories 1 – 3 in the Northeast. Source: NOAA.

Given the past history of major storms and a reasonable estimate of likely future scenarios, it would be prudent for Connecticut to expect that there will be forthcoming hurricanes which make landfall in or near Connecticut and they will be of a greater intensity and longer duration than in the past. This may mean a potential increase in all categories of hurricanes normally experienced in New England (e.g., tropical storm, category 1, category 2, a category 3. Category 3 is the maximum strength hurricane known historically to strike New England. Based on historical data for hurricane tracks within 50 miles of Connecticut, it is reasonable to assume that the state has a medium-low probability of future events (approximately 1 event per year). It should be noted that this probability is based on the historical hurricane tracks since 1900 and is medium-low on an annual basis but high based on recent events and perception. Figure 2-22 shows the ranking and risk parameters which includes the annualized events for each county.

## Vulnerability and Loss Estimation

Hurricanes are a very real and costly hazard to Connecticut. Based on historic event and storm scenario simulations generated with Hazus-MH in 2011 and 2013, the information shows that the entire state of Connecticut is vulnerable to the impacts of such an event. These impacts can be physical, emotional, and/or economic in nature. Hurricanes can disrupt the individual lives of Connecticut residents and create costly interruptions to businesses and commerce within the state. Past history has shown, and current evidence implies, that it is vital for state and local officials to plan and prepare for such events, and to implement effective mitigation procedures and post-event procedures to reduce, to the extent possible, loss of life and property.

Factors that may lead to increased vulnerability of tropical cyclones (hurricanes and tropical storms) include:

- Increasing in population within coastal communities;
- Local zoning and development patterns in highly vulnerable areas of the community;



- Locating state and local facilities (i.e. schools) within highly vulnerable areas; and
- Building codes currently in place and the age/number of structures located within highly vulnerable areas of a community.

Most of the existing housing stock in Connecticut was built before 1990 and is unaffected by the code changes. Since much of the existing housing stock predates recent building code updates,<sup>40</sup> many structures are highly susceptible to roof and window damage from high winds. In addition, homes located within FEMA designated significant flood hazard areas (SFHAs) are at risk from flooding as a result of heavy rain and storm surges from these types of major storms.

Analysis for the plan update included probabilistic runs for the all return periods with the 2010 inventory updates. Figure 2-20 below shows the estimated 100-year hurricane return period by census tract (analysis with 2010 population per census tract). The eastern counties, Middlesex, New London, Tolland, and Windham, show the highest estimated losses, with census tracts estimating a total of \$40 to \$75 million in losses.

Figure 2-21 shows the estimated 1000-year hurricane return period by census tract. In this scenario, the western counties are showing the highest estimated losses, between \$150 and \$320 million, the majority of which are in Fairfield and New Haven counties.

The estimated total losses for all hurricane return periods are shown in Table 2-21. This shows that Fairfield, New Haven and Hartford counties have the highest estimated total losses for all hurricane return periods combined, \$34 billion, \$32 billion, and \$23 billion respectively.

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<sup>40</sup> More information regarding Connecticut's building codes can be found at the following websites: [www.reedconstructiondata.com/building-codes/connecticut](http://www.reedconstructiondata.com/building-codes/connecticut), and [www.ct.gov/dps/cwp/view.asp?a=4447&q=521446&dcsNav+1](http://www.ct.gov/dps/cwp/view.asp?a=4447&q=521446&dcsNav+1).

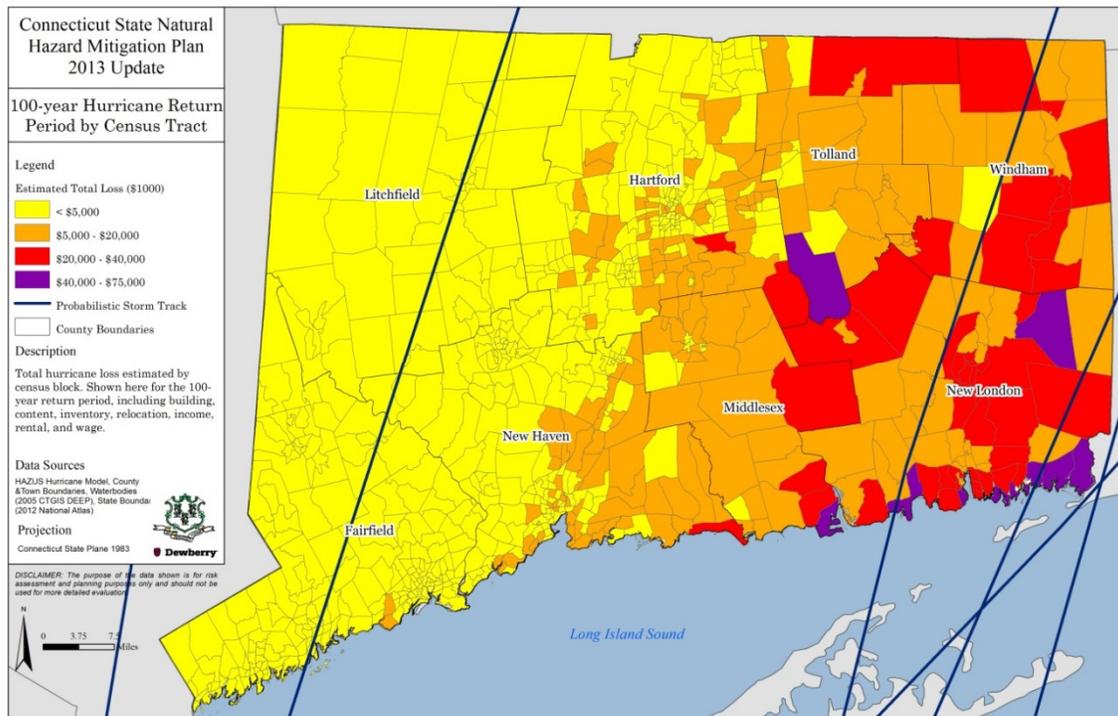


Figure 2-20. Estimated 100-year Hurricane Return Period by Census Tract.

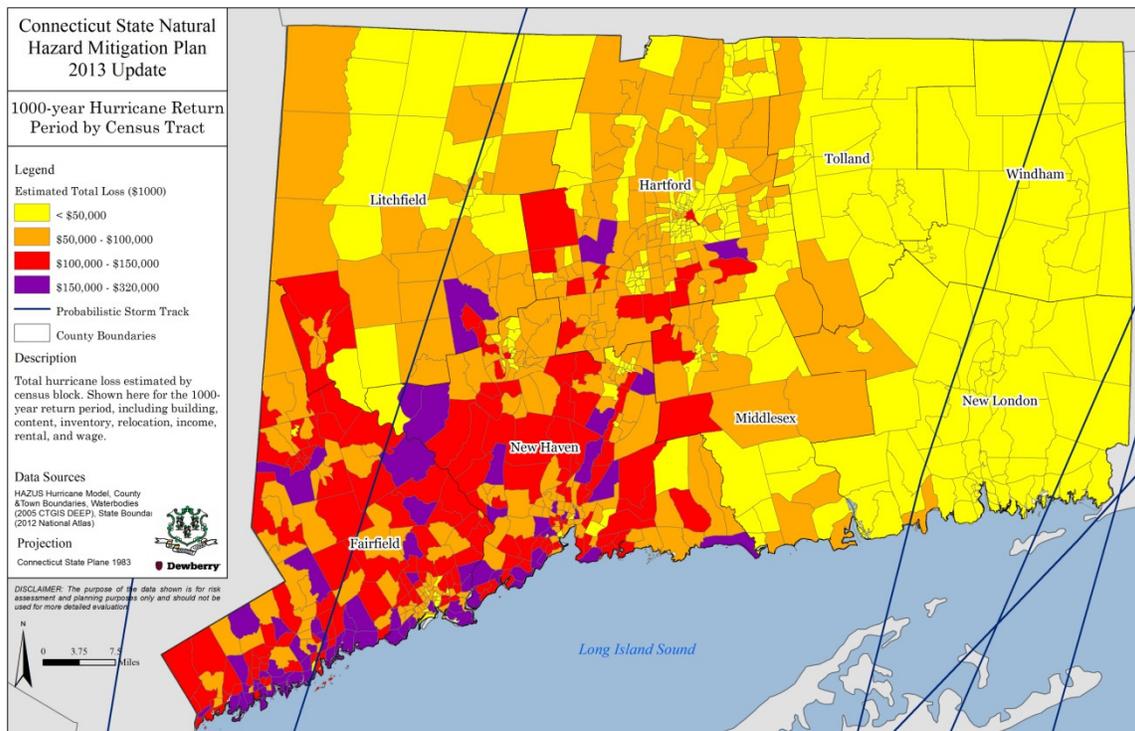


Figure 2-21. Estimated 1000-year Hurricane Return Period by Census Tract



Table 2-21. Estimated Total Losses for Hurricane Return Periods. Shown in thousands of dollars.

Jurisdiction	10-yr	20-yr	50-yr	100-yr	200-yr	500-yr	1,000-yr	Total
Fairfield	\$0	\$4,179	\$58,206	\$270,493	\$506,237	\$8,538,528	\$25,106,793	\$34,484,436
Hartford	\$0	\$475	\$343,737	\$885,615	\$1,845,610	\$8,939,867	\$11,497,613	\$23,512,916
Litchfield	\$0	\$0	\$12,932	\$36,328	\$63,467	\$1,349,979	\$3,334,781	\$4,797,487
Middlesex	\$0	\$14,023	\$100,915	\$369,412	\$906,201	\$1,556,899	\$1,861,141	\$4,808,593
New Haven	\$0	\$16,214	\$199,898	\$740,518	\$1,555,747	\$12,195,173	\$17,726,412	\$32,433,961
New London	\$2,661	\$120,808	\$478,602	\$1,562,636	\$4,709,816	\$462,606	\$812,602	\$8,149,729
Tolland	\$0	\$1,025	\$127,439	\$284,121	\$667,339	\$779,383	\$932,338	\$2,791,645
Windham	\$747	\$10,309	\$248,827	\$468,536	\$1,486,821	\$226,049	\$311,918	\$2,753,207
<b>Totals</b>	<b>\$3,408</b>	<b>\$167,033</b>	<b>\$1,570,555</b>	<b>\$4,617,659</b>	<b>\$11,741,237</b>	<b>\$34,048,484</b>	<b>\$61,583,598</b>	<b>\$113,731,975</b>

Hazus- MH simulations generated in 2011 were run for several historical storms and their associated storm tracks, based on 2010 Census data. The results of these simulations help to estimate potential maximum damages that would occur in the present day given the same track and characteristics of an individual event. It should be noted that Hazus-MH only considers wind damage for its hurricane simulation and does not account for rain and flooding effects. This is important to note because much of the historic impacts of hurricanes experienced by the state have come in the form of severe rain and flooding. Thus the damage estimations and shelter/displacement estimates have the potential of being higher for each scenario when one considers the potential threat of flooding that is associated with hurricanes.

Table 2-22 shows the estimated tonnage of debris that would be generated by wind damage for each storm scenario, based on Census 2000 structure data and other sources of data in Hazus-MH.

Table 2-23 shows storm debris for the three counties that were projected to generate the most wind damage debris for a given storm scenario. If one compares the figures showing peak wind gusts and hurricane track with these tables, one will see a correlation between the track and the counties which would be hardest hit by a potential storm scenario. Probabilistic analysis for the 100-year event, using 2010 inventory updates, indicate over 409 million tons of brick and wood debris, 860,000 of concrete and steel debris, and 2.1 billion in tree debris.



Table 2-22. Estimated Debris from Wind Damage by Material Type per Storm Scenario. Derived from 2011 analysis

Storm Scenario	Brick, Wood and Other (in tons)	Reinforced Concrete and Steel (in tons)	Eligible Tree Debris (in tons)	Total (in tons)
1938 Unnamed	1,359,888	8,667	1,201,839	2,570,394
1944 Unnamed	207,097	1,269	196,149	404,515
Carol	574,700	6,102	464,024	1,044,826
Donna	320,249	1,861	295,907	618,017
Gloria	626,349	2,076	598,782	1,227,207
Totals	3,088,283	19,975	2,756,701	5,864,959

Table 2-23. Counties Estimated to Generate the Greatest Amount of Debris for Hurricane Scenarios Based on Historical Storms. Derived from 2011 analysis

Storm Scenario	3 Counties with Greatest Amount of Debris	Total Amount (in tons) for 3 Counties for Wood, Brick, and Other	Percentage of Total Tonnage for Wood, Brick and Other	Total Amount (in tons) for 3 Counties for Tree Debris	Percentage of Total Tonnage for Tree Debris
1938 Unnamed	Hartford, New Haven, New London	934,633	69%	744,558	62%
1944 Unnamed	New London, Windham, Middlesex	179,430	87%	157,319	80%
Carol	New London, Windham, Middlesex	506,889	88%	368,996	80%
Donna	New London, New Haven, Middlesex	261,145	82%	213,978	72%
Gloria	Hartford, New Haven, New London	421,288	67%	376,940	63%

It is interesting to note that for certain storm scenarios, Hazus-MH has shown that often times one county will generate the majority of all estimated damage. This most likely is a result of the potential tracks that were used in the simulations for historic storms when they made landfall in Connecticut. The state as a whole is vulnerable to the property and economic losses resulting from hurricane strikes. Table 2-24 through Table 2-26 show various estimates statewide for property damages, economic losses, and sheltering needs of state residents as a result of a similar hurricane making landfall in Connecticut, as in the past. Again, the counties with the greatest need for sheltering,



hospital needs, emergency food and water requirements, and property damage (both in estimated values and total number of structures damaged) coincide with the figures showing the peak wind gusts and hurricane storm tracks. As stated previously, the damage estimates from Hazus-MH are based on wind damage by a hurricane and do not include damages and shelter needs from damages and property losses by flooding. This is important because depending on the characteristics of a potential hurricane (i.e., does it make landfall at low or high tide, does it pick up strength at the last moments before landfall, is there a stalled weather pattern and the storm produces more rain than anticipated, etc.), state and local officials will need to be aware and anticipate potential flooding that may accompany such a storm event.

Capital Stock Losses include the subcategories of building damages, contents damages, and inventory losses. Income losses include the subcategories of relocation costs, capital related losses, wage losses, and rental income losses. Loss estimates only consider costs and damages due to wind and due to the limitations of the Hazus-MH hurricane model, do not calculate estimates for damages and losses for flooding, which can be a major impact from a hurricane.

Table 2-24. Total Estimated Building Damages per Storm Scenario Statewide (number of structures).

Storm Scenario	None	Minor	Moderate	Severe	Destruction
1938 Unnamed	719,666	240,395	71,933	8,888	6,098
1944 Unnamed	995,184	38,999	10,431	1,409	956
Carol	937,748	69,535	28,529	6,502	4,665
Donna	969,893	58,683	14,977	2,033	1,393
Gloria	876,140	138,006	29,057	2,244	1,531

Table 2-25. Estimated Sheltering Needs For Historic Storm Simulations

Storm Scenario	Total number of Displaced Households	Total Number of People Requiring Short Term Shelter	County with the Greatest Number Displace Households and People Requiring Shelter
1938 Unnamed	21,034	5,241	Hartford (7,189 households, 1,877 people needing temp. shelter)
1944 Unnamed	2,729	630	New London (2,445 households, 567 people needing temp. shelter)
Carol	11,372	2,587	New London (7,434 households, 1,704 people needing temp. shelter)
Donna	3,984	933	New London (3,136 households, 729 people needing temp. shelter)



Storm Scenario	Total number of Displaced Households	Total Number of People Requiring Short Term Shelter	County with the Greatest Number Displace Households and People Requiring Shelter
Gloria	7,213	1,839	New Haven (2,281 households, 616 people needing temp. shelter)

Table 2-26. Estimated Direct Economic Losses for Buildings Statewide.

Storm Scenario	Capital Stock Losses	Income Losses	Total Estimated Losses
1938 Unnamed	\$10,536,386	\$1,537,527	\$12,073,913
1944 Unnamed	\$1,580,539	\$217,826	\$1,798,365
Carol	\$5,029,799	\$734,791	\$5,764,590
Donna	\$2,427,875	\$325,180	\$2,753,055
Gloria	\$4,280,478	\$592,060	\$4,872,538

**Exposure.** The type and age of construction plays a role in vulnerability of facilities to coastal hazard winds. In general, concrete, brick and steel-framed structures tend to fare better than older, wood-framed structures or manufactured homes.

Vulnerability to storm surge is determined by facility location in relation to storm surge inundation zones. Finally, not all critical facilities have redundant power sources and may not even be wired to accept a generator. Analysis was also performed to determine the number and values of state and critical facilities that are located within storm surge inundation zones as determined by Sea, Lake and Overland Surge from Hurricanes (SLOSH) model. Tables showing the complete results of this analysis can be found in subsection 2.7.5. The results depicted in this table are cumulative. For instance, a facility inundated in a Category 1 storm surge would also be included in the counts for the other hurricane category surges, since they imply a surge that reaches even further inland. Future plan updates should consider closer examination of critical facilities risk by looking at construction type of critical facilities in jurisdictions considered to be at higher risk of coastal hazard events.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.



**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for tropical cyclone using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of historical impact including injuries and deaths, property damage, and the number of reported events. Historic events were supplemented with the NOAA hurricane center data on tracks within 50 nautical miles of each jurisdiction. Property damage was supplemented by the SHMP team subject-matter experts to best represent risk in Connecticut. Geographic extent is represented by the average 100-year wind speed for each jurisdiction.

The composite tropical cyclone hazard rank shows Windham, New London, Middlesex, and New Haven with higher risk due to hurricanes based on the parameters and input from the SHMP team Local mitigation plan results support the ranking shown (Figure 2-22).

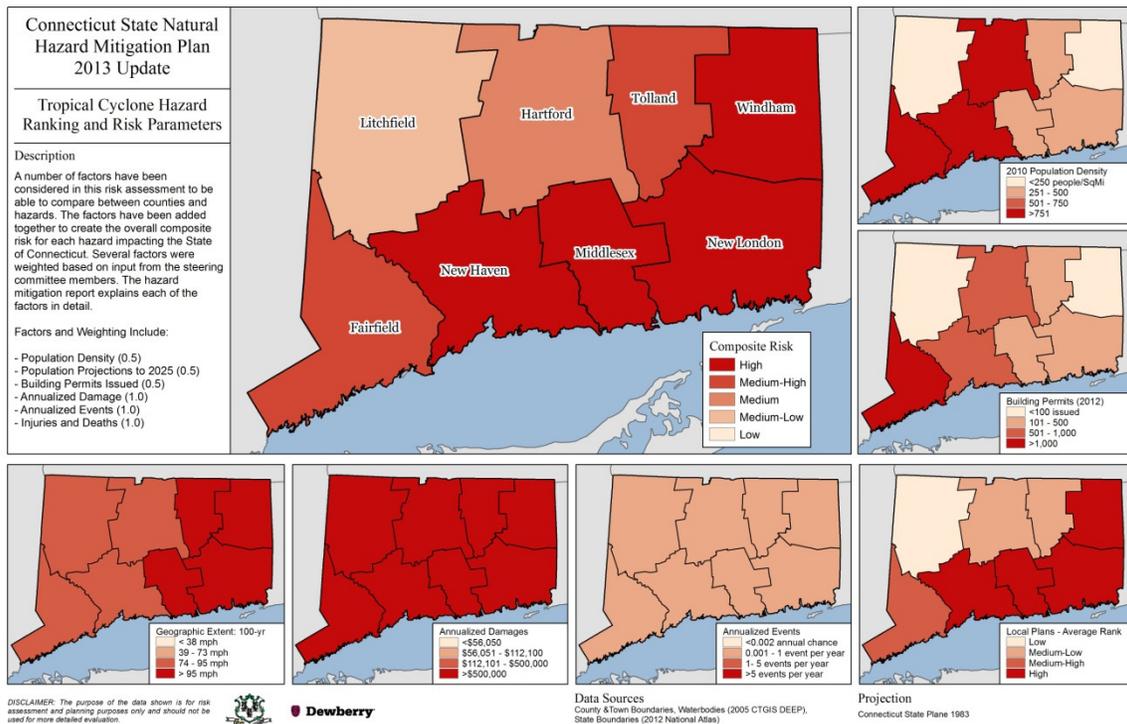


Figure 2-22. Tropical Cyclone relative ranking.

### 2.7.3 Tornado

**Tornado** – A narrow, violently rotating column of air that extends from the base of a thunderstorm to the ground.

#### Hazard Profile

There are two types of tornadoes—those that develop from supercell thunderstorms and those that do not. Figure 2-23 provides a visual presentation of windflow and physical breakdown of a tornado. Supercell thunderstorm tornadoes are the most common and most



dangerous type of tornado. NOAA defines this type of tornado as, “a long lived (greater than 1 hour) and highly organized storm feeding off an updraft that is tilted and rotating.”

Non-supercell thunderstorm tornadoes are defined by NOAA as, “circulations that form without a rotating updraft.” There are two types of non-supercell thunderstorm tornadoes:

1. Gustnado – a whirl of dust or debris at or near the ground with no condensation tunnel; and
2. Landspout – a narrow rope-like condensation funnel that forms when the thunderstorm cloud is still growing and there is no rotating updraft (the spinning motion originates near the ground). Waterspouts are similar to landspouts but occur over water rather than land.

There are still many unknowns regarding tornadoes and their development such as (1) exactly when will a storm event trigger a tornado (2) How do tornadoes dissipate and (3) How does cloud-seeding affect tornado development. The National Weather Service (NWS) is the official agency that forecasts tornadoes nationwide. Warnings are issued to specific geographic areas by local NWS offices. As of February 1, 2007 the original Fujita Scale (F Scale), which was developed by Dr. Tetsuya Theodore Fujita in 1971, was replaced with the Enhanced Fujita Scale (EF Scale) as shown in Table 2-27.

Table 2-27. Enhanced Fujita Scale.

Fujita Scale			Derived EF Scale		Operational EF Scale	
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)
0	40-72	45-78	0	65-85	0	65-85
1	73-112	79-117	1	86-109	1	86-110
2	113-157	118-161	2	110-137	2	111-135
3	158-207	162-209	3	138-167	3	136-165
4	208-260	210-261	4	168-199	4	166-200
5	261-318	262-317	5	200-234	5	Over 200

There are 28 damage indicators that are associated with the Enhanced Fujita Scale, as shown in Table 2-28. The EF Scale uses three-second gusts estimated at the point of damage based on a judgment of 8 levels of damage to the 28 indicators. NOAA provides detailed information for each damage indicator on its website such as average structure size, building construction and material characteristics, and damage descriptions per degrees of damage.

Table 2-28. Damage indicators associated with the EF Scale. Source: NOAA

Small barns, farm outbuildings	Large shopping mall	Institutional bldg. (hospital, government, university)
1- or 2-family residences	Large isolated retail bldg.	Metal building system
Single-wide mobile homes	Automobile showroom	Service station canopy
Double-wide mobile homes	Automotive service bldg.	Warehouse (tilt-up walls or
	School, 1-story elementary	



Apt., condo, or townhouse Motel Masonry apt. or motel Small retail bldg. (fast food) Small professional bldg (doctor's office, bank branch) Strip mall	(interior and exterior halls) School – junior or senior high school Low-rise bldg. (1-4 stories) Mid-rise bldg. (5-20 stories) High-rise bldg. (>20 stories)	heavy timber) Transmission line tower Free-standing tower Free standing pole (light, flag) Tree – hardwood Tree – softwood
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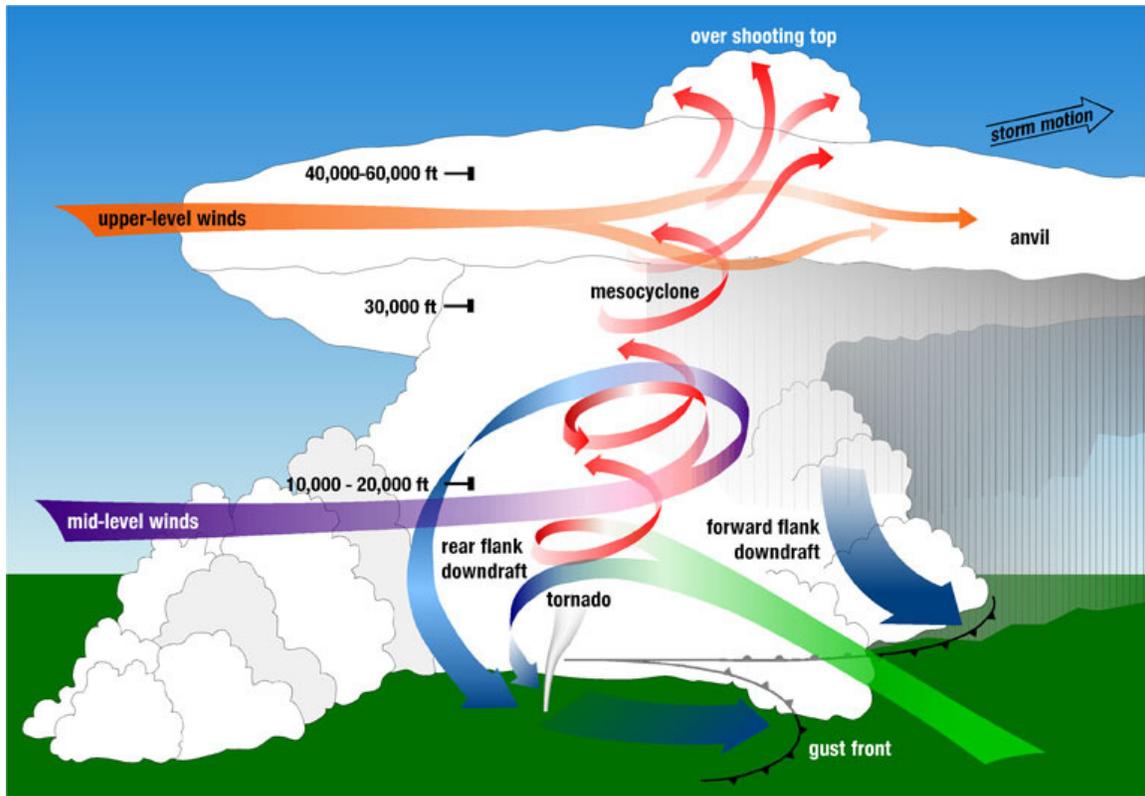


Figure 2-23. Visual diagram of a tornado. Source: NOAA

### History of Tornado Occurrences in Connecticut

Connecticut experienced 109 tornado events in the period from 1950 to 2012 (91 of these events are shown in Figure 2-24). Five of these events impacted people and property in two counties. NOAA does not have any historical record of a single tornado affecting more than two counties since 1950 (the date when NOAA began collecting data on tornadoes). Incidents of tornado activity have occurred throughout all of Connecticut during the months of April through October. These tornadoes have caused more than a billion dollars in adjusted damages, claimed at least four lives, and injured more than 700 people (Table 2-29).

Table 2-29. NCDC total tornado events, adjusted to 2012 dollars.

County	Number of Events	Number of Injuries	Number of Deaths	Property Damages
Fairfield	18	13	0	\$8,205,773
Hartford	18	507	3	\$826,361,795



County	Number of Events	Number of Injuries	Number of Deaths	Property Damages
Litchfield	31	34	0	\$97,541,112
Middlesex	9	8	0	\$2,265,164
New Haven	16	137	1	\$532,656,618
New London	4	0	0	\$0
Tolland	10	4	0	\$2,795,365
Windham	3	0	0	\$5,334,943
Total	109	703	4	\$1,475,160,771

Some of the most notable tornado occurrences in recent history in the state of Connecticut in terms of deaths, injuries, and/or property damages include the following (dollar values listed in the descriptions below are not adjusted for inflation):

- July 14, 1950 – This F2 tornado in Fairfield County injured several people and resulted in an estimated \$250,000 in property damages.
- August 21, 1951 – This F2 tornado in Litchfield County injured nine people and resulted in an estimated \$250,000 in property damages.
- May 10, 1954 – This F3 tornado in Tolland County resulted in at least two injuries and \$25,000 in property damages.
- September 7, 1958 – This F2 tornado resulted in at least two injuries and \$250,000 in property damages.
- May 24, 1962 – This F3 tornado in New Haven County killed one person and injured 50 people. The tornado had an estimated path length of 11.6 miles and was estimated to be 120 feet in width. Damage estimates for this event range from \$500,000 to \$5 million.
- October 3, 1970 – This F1 tornado in Hartford County resulted in one injury.
- July 29, 1971 – This F3 tornado in New Haven County caused at least two injuries and at least \$250,000 in property damages.
- June 28, 1973 – This F1 tornado in Hartford County resulted in one injury.
- October 3, 1979 – This F4 tornado in Hartford County is the deadliest tornado on record to strike Connecticut according to NOAA. It had an estimated path length of 11.3 miles and an estimated width of 1,400 feet. Damages were estimated between \$50 million and \$500 million. Five hundred people were injured and three people died from this event. As a result of this tornado, two towns were declared Federal disaster areas.
- July 10, 1989 – This F4 tornado cut a path through western Connecticut, from Salisbury to New Haven, in less than one hour. One person was reported as being killed, 110 people were injured, and 67 homes were destroyed. Damages totaled \$125 million and a Presidential Disaster Declaration was issued.
- August 29, 1990 – This F0 tornado caused seven injuries in Fairfield County and caused several thousand dollars in damages.



- June 23, 2001 – This F1 tornado in Litchfield County caused at least one injury and at least \$150,000 in property damages.
- June 26, 2009 – This EF1 tornado affected Wethersfield in Hartford County. On June 29, Governor M. Jodi Rell requested a FEMA preliminary damage assessment (PDA) as a result of the tornado, heavy winds, rain, and hail which were associated with severe thunderstorms on June 26. An estimated \$750,000 in reported property damages were recorded by NCDC.
- July 31, 2009 – This EF1 tornado touched down in Madison in New Haven County and in Shelton in Fairfield County. An estimated \$20,000 in property damages were reported between the two counties.
- June 24, 2010 – This EF1 tornado impacted Bridgeport in Fairfield County injuring three people and causing at least \$3,200,000 in reported property damages, according to NCDC records.
- July 21, 2010 – This EF1 tornado impacted Hartford and Litchfield counties causing at least \$584,000 in reported property damage, according to NCDC records. The tornado made brief touchdowns in Bristol in Hartford County and in East Litchfield, Thomaston, and Terryville in Litchfield County with damage mainly to hardwood and softwood trees.
- July 9, 2011 – A National Weather Service Storm Survey Team confirmed that a brief tornado touched down in Litchfield County. No damages were recorded as being associated with this EF1 tornado.
- July 1, 2013 - Three tornadoes touched down across the state; one in Fairfield County and two in Hartford County. Majority of impact limited to downed trees, though the EF1 caused notable structural damage near East Windsor
- July 10, 2013 - An EF1 tornado caused tree damage along an 11.2-mile (18.0 km) long intermittent path in Tolland County

### **Probability of Future Occurrence**

Since tornadoes occur on such small spatial scales and are a product of current weather patterns (they can occur with very little warning), it is difficult to provide a detailed and highly specific predictive analysis for this type of hazard event. Based on historical NCDC data, it is reasonable to assume that Connecticut has a medium-high probability of future events (approximately 1.77 events per year). Table 2-30 summarizes the probability of future events by county (annualized events). Figure 2-25 shows the ranking and risk parameters which includes the annualized events for each county.

In general, the pattern of occurrence and potential locations for tornadoes to occur in Connecticut is expected to remain relatively unchanged in the 21st Century. Based on NOAA's historical data, the northwest area of the state, namely Litchfield and Hartford counties, have the highest historical incidences of tornadoes and therefore may be considered to have a higher risk for the occurrence of future tornadoes. The second area of moderate to high risk based on historical occurrences is in Fairfield and New Haven counties. The counties of Middlesex, Tolland, and Windham have a moderate risk, while the

Natural Hazard Identification and Risk Assessment



counties of Windham and New London may be considered to have a low risk since tornadoes have historically occurred less frequently than in other counties in the state.

According to NOAA, it is uncertain whether climate change will directly influence the frequency and intensity of tornadoes.<sup>41</sup> However, climate change may directly increase the frequency and intensity of thunderstorms in the future. This potential future increase in thunderstorm activity will be the primary factor to affect the frequency and intensity of future tornado events. This in turn may increase the risk and occurrence of tornadoes within Connecticut. Therefore, climate change may act as an underlying influence on future tornado activity.

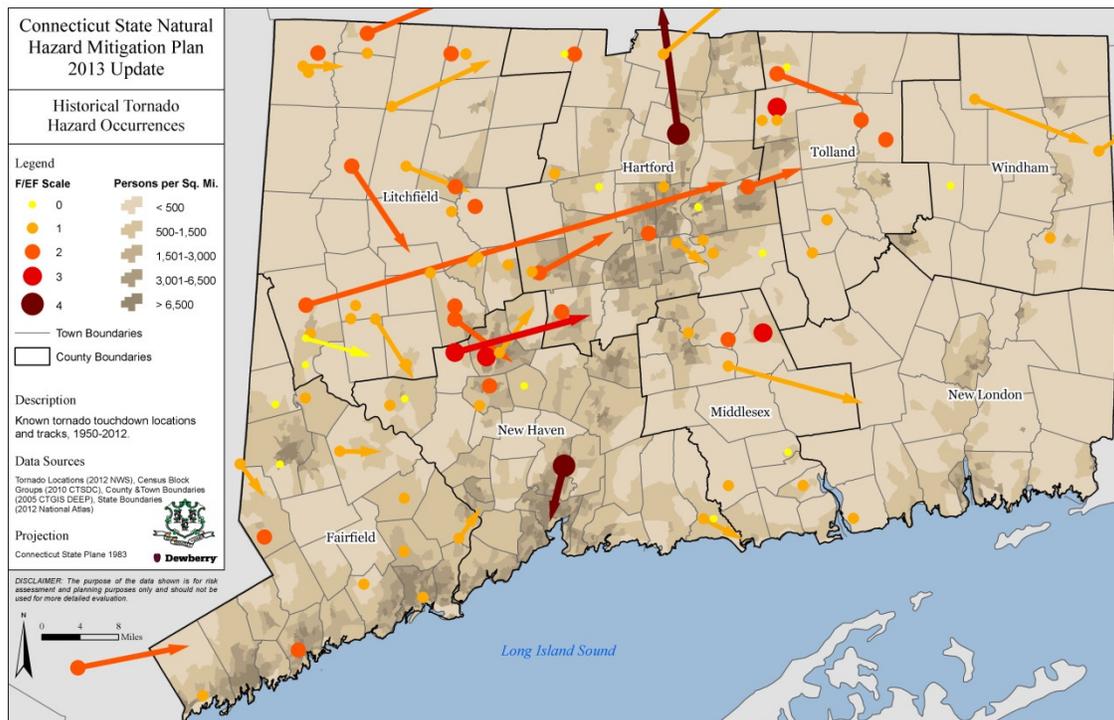


Figure 2-24. Historical Tornado Hazard Occurrences.

## Vulnerability and Loss Estimation

Tornadoes in Connecticut are expected to continue to occur more frequently in western and northwestern Connecticut, and less frequently in southeastern Connecticut. Although the frequency of tornadoes may be greater in western Connecticut, vulnerability may not be greatest in that part of the state due to relatively low population density. When the frequency and population density are combined, the highest vulnerability to damage exists in Hartford and New Haven counties.

The lowest vulnerability to tornado damage will likely continue to be along the southeast coast. Although this area is very densely populated, the frequency of tornado activity is low with only one confirmed tornado during the past 30 years in New London County. Even

<sup>41</sup> Source: The Online Tornado FAQ (NOAA Storm Prediction Center).



though tornadoes pose a real threat to public safety, their occurrence is not considered frequent enough in Connecticut to justify construction of tornado shelters at this time.

In lieu of a tornado shelter program, the State of Connecticut, through CT DEMHS, has chosen to provide NOAA weather radios to all public schools and to many municipalities for use in local government buildings. These radios are tuned into the NWS radio frequencies. When weather warnings are given by the NWS, the schools and local communities receive immediate notification of a storm event. Based on the type of warning provided, residents are advised to seek shelter or take appropriate precautions as directed by the NWS. NOAA radios have proven to be very popular with communities in Connecticut, as they serve to warn local populations of many types of weather events, not just tornado activity.

Advances in weather forecasting, use of Doppler radar and computer modeling have reduced the time for issuing tornado warnings and implementing tornado event preparations by local communities and the general public. However, warning times are still very short due to the nature of these types of events, and the impacts from tornado activity are still considered a significant threat to life and property.

Table 2-30 shows annualized loss information for the state by jurisdiction, including the annualized number of events, and total annualized damages.

Table 2-30. NCDC annualized events for the tornado hazard.

County	Annualized Events	Annualized Damages
Fairfield	0.29	\$130,250
Hartford	0.29	\$13,116,854
Litchfield	0.49	\$1,548,272
Middlesex	0.14	\$35,955
New Haven	0.25	\$8,454,867
New London	0.06	\$0
Tolland	0.16	\$44,371
Windham	0.05	\$84,682
Total	1.77	\$23,415,250

**Exposure.** While some correlation can be made between historical occurrences and the probability of future occurrences in the same area, there is no data or methodology currently available to identify buildings that are more at-risk to the tornado hazard than others in a state-wide analysis. It is therefore assumed that all state-owned and critical facilities are equally exposed to the tornado hazard and that any potential damages, if not catastrophic, would depend upon building-specific and/or site-specific characteristics.



It is assumed that the entire population of the state is equally vulnerable to a tornado, although population density is a factor as discussed throughout this section. Therefore, more densely populated areas of the state should be considered at higher risk overall from a given tornado occurrence.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for tornado using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter (Figure 2-55).

Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of historical impact including injuries and deaths, property damage, and the number of reported events. Geographic extent is represented by the number of tornadoes that have occurred per square mile of the jurisdiction.

The composite tornado hazard rank shows Hartford and New Haven counties have a higher risk due to tornado based on annualized damages and previous events resulting in deaths and injuries (Figure 2-25). Municipalities within Hartford, on average, ranked tornado higher than the other jurisdictions within the state. While some jurisdictions have a low tornado risk ranking, it is important to remember that tornadoes can occur spontaneously at any time in any jurisdiction.

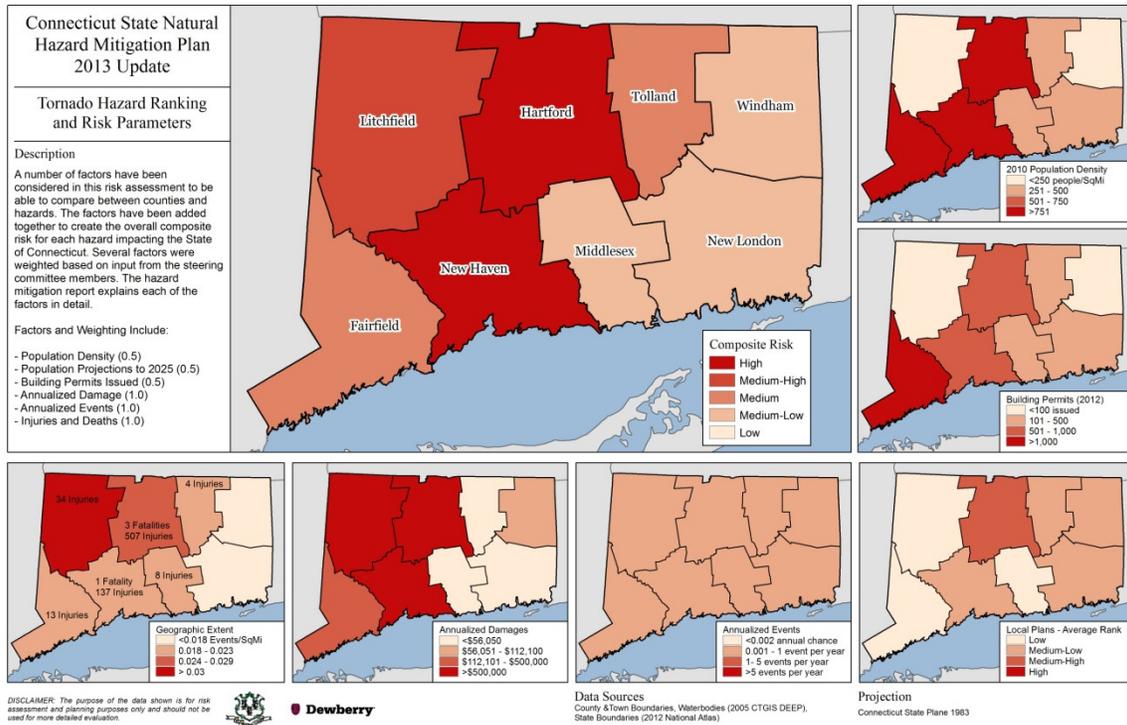


Figure 2-25. Tornado NCDC relative ranking.

### 2.7.4 Winter-related hazards

**Blizzard** – Includes winter storm conditions of sustained winds or frequent gusts of 35 mph or more that cause major blowing and drifting of snow, reducing visibility to less than one-quarter mile for three or more hours. Extremely cold temperatures often are associated with dangerous blizzard conditions.

**Freezing Rain** – Rain that freezes on objects such as trees, cars, or roads, and forms a coating or glaze of ice. Temperatures at higher levels are warm enough for rain to form, but surface temperatures are below 32 degrees Fahrenheit, causing the rain to freeze on impact.

**Ice Storm** – Liquid rain that falls and freezes on contact with cold objects creating ice build-ups of one-quarter inch or more that can cause severe damage.

**Nor'easter** – A low-pressure disturbance forming along the South Atlantic coast and moving northeast along the Middle Atlantic and the New England coasts to the Atlantic Provinces of Canada. It usually causes strong northeast winds with rain or snow. It is also referred to as a Nor'easter or Coastal Storm. Nor'easters normally occur between November 1 and April 1, however it is not highly unusual for a Nor'easter to occur during the mid to latter part of April (early spring).



**Sleet** – Rain drops that freeze into ice pellets before reaching the ground. Sleet usually bounces when hitting a surface and does not stick to objects. However, it can accumulate like snow and cause a hazard to motorists.

**Snow** – Frozen precipitation composed of ice particles in complex hexagonal patterns. Snow forms in cold clouds by the direct transfer of water vapor to ice.

**Winter Storm** – A heavy snow event which has a snow accumulation of more than six inches in 12 hours, or more than 12 inches in 24 hours.

### **Hazard Profile**

Winter weather generally includes the occurrence of snow, sleet, freezing rain, and cold temperatures. Three elements are needed to create any type of winter precipitation:

- Cold air – below freezing temperatures in the clouds and near the ground;
- Lift – something to raise the moist air to form the clouds and cause precipitation;  
and
- Moisture – needed to form clouds and precipitation.

According to the Northeast States Emergency Consortium (NESEC), winter weather can occur from late September through late April. The most severe storms and weather conditions usually occur within the time period of December through March.<sup>42</sup> Severe winter weather events may include ice storms, Nor'easters with coastal flooding, blizzards, and snow storms with large accumulations.

The Northeast Snowfall Impact Scale (NESIS), as shown in Table 2-31 is similar in effect to the Enhanced Fujita Scale (for tornadoes) and the Saffir-Simpson Scale (for hurricanes) in that it measures the severity of a given winter storm based on an algorithm, shown in Figure 2-26. As stated on the NOAA webpage, "The index differs from other meteorological indices in that it uses population information in addition to meteorological measurements. Thus NESIS gives an indication of a storm's societal impacts. This scale was developed because of the impact northeast snowstorms can have on the rest of the country in terms of transportation and economic impact. NESIS scores are a function of the area affected by the snowstorm, the amount of snow, and the number of people living in the path of the storm. The diagram below illustrates how NESIS values are calculated within a geographic information system (GIS). The aerial distribution of snowfall and population information are combined in an equation that calculates a NESIS score which varies from around 1 for smaller storms to over 10 for extreme storms."

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<sup>42</sup> Source: Northeast States Emergency Consortium (NESEC) website.



Table 2-31. Northeast Snowfall Impact Scale (NESIS).

Category	NESIS Value	Description
1	1 – 2.499	Notable
2	2.5 – 3.99	Significant
3	4 – 5.99	Major
4	6 – 9.99	Crippling
5	10+	Extreme

Approximately 33 of the most notable historic winter storms to impact the North and Northeast United States have been analyzed and categorized with respect to the NESIS. Many of these winter storms have impacted Connecticut to some extent.

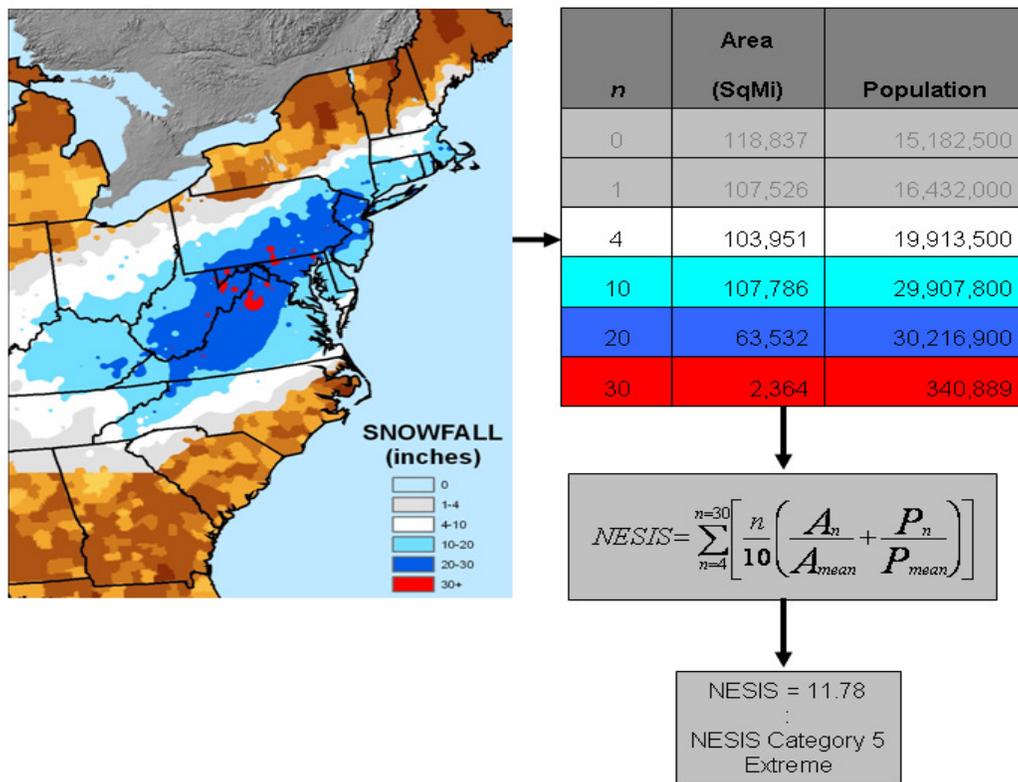


Figure 2-26. Algorithm to determine NESIS category of severity and example of results.<sup>43</sup>

### History of Winter Storm Occurrences in Connecticut

Being geographically located in the northeast portion of the United States, Connecticut residents can expect at least two or more severe winter weather events per winter season. These events include heavy snow storms, potential blizzards, Nor’easters, and potential ice storms (especially in the northern portion of the state). Table 2-32 and

<sup>43</sup> NOAA, National Climatic Data Center. In addition, an article written by the creators of the formula and associated scale can be found at [www.ncdc.noaa.gov/snow-and-ice/docs/kocin-uccellini.pdf](http://www.ncdc.noaa.gov/snow-and-ice/docs/kocin-uccellini.pdf).



Table 2-33 provide historic information on the number of severe winter weather events that impacted the state and average one to six day snow averages.

Table 2-32. Connecticut snowfall and snow depth extremes table Source NOAA NCDC.

Measure of Interest	Snow Amount (inches)	Location			Ending Date	Number of Years of Non-Missing Data	Data Period Analyzed
		COOP Station Number	Station Name	State			
Greatest daily snowfall	28	064767	MIDDLETOWN 4 W	CT	01/28/1897	61	1890-1997
Greatest 2-day snowfall (snowed both days)	30	062658	FALLS VILLAGE	CT	02/06/1920	59	1916-2003
Greatest 3-day snowfall (snowed all 3 days)	34	062658	FALLS VILLAGE	CT	02/07/1920	59	1916-2003
Greatest 4-day snowfall (snowed all 4 days)	32.7	065445	NORFOLK 2 SW	CT	12/08/1996	65	1884-2006
Greatest 5-day snowfall (snowed all 5 days)	32.7	065445	NORFOLK 2 SW	CT	12/08/1996	65	1884-2006
Greatest 6-day snowfall (snowed all 6 days)	26.4	065445	NORFOLK 2 SW	CT	12/17/1970	65	1884-2006
Greatest 7-day snowfall (snowed all 7 days)	27.6	065445	NORFOLK 2 SW	CT	12/18/1970	65	1884-2006
Greatest Aug-July snowfall total	152.5	065445	NORFOLK 2 SW	CT	1967	34	1886-2006
Greatest monthly snowfall total	73.6	065445	NORFOLK 2 SW	CT	03/1956	60	1886-2006
Greatest daily Snow Depth	55	065445	NORFOLK 2 SW	CT	02/05/1961	57	1942-2006

Table 2-33. Connecticut record 1-day, 2-day, and 3-day snowfall for winter.

County	Station Name	1-Day Snowfall	2-Day Snowfall	3-Day Snowfall	NYRS
Fairfield	BRIDGEPORT WSO ARPT	16.0	16.0	16.0	53



County	Station Name	1-Day Snowfall	2-Day Snowfall	3-Day Snowfall	NYRS
	DANBURY	24.0	24.0	24.0	63
	EASTON RESERVOIR	18.0	18.0	18.0	26
	NORWALK GAS PLANT	16.0	17.5	17.5	29
	STAMFORD 5 N	18.0	21.5	21.5	48
Hartford	BURLINGTON	20.0	20.0	20.0	40
	COLLINSVILLE 1 S	17.5	25.0	25.0	36
	HARTFORD BRAINARD FLD	16.2	17.0	21.6	67
	HARTFORD WSO AIRPORT	21.9	21.9	21.9	48
	SHUTTLE MEADOW RESVR	19.0	21.5	21.5	58
	WHIGVILLE RESERVOIR	20.0	21.5	21.5	26
Litchfield	CREAM HILL	18.0	25.0	25.0	65
	FALLS VILLAGE	24.0	30.0	34.0	68
	NORFOLK 2 SW	25.7	27.9	31.7	67
	SALISBURY	17.0	19.0	19.0	33
	SHEPAUG DAM	20.0	22.5	23.0	53
	WIGWAM RESERVOIR	16.0	17.0	17.0	46
	WOODBURY	20.0	20.0	20.0	40
Middlesex	COCKAPONSET RANGER STATION	19.8	20.1	20.1	48
	MIDDLETOWN 4 W	28.0	28.0	28.0	65
	WESTBROOK	17.0	23.5	23.5	39
New Haven	MOUNT CARMEL	19.4	23.6	23.8	63
	WOLCOTT RESERVOIR	17.0	18.0	19.0	26
New London	COLCHESTER 2 W	24.0	24.0	24.0	78
	GROTON	14.4	17.2	17.2	57
	NEW LONDON	14.0	23.0	26.0	56
Tolland	COVENTRY	14.0	18.0	18.0	36
	MANSFIELD HOLLOW LAKE	23.0	24.0	24.0	53
	STORRS	15.0	17.0	17.2	93
Windham	BROOKLYN	12.3	15.0	15.0	31
	PUTNAM	26.0	27.0	27.0	27
	WEST THOMPSON LAKE	20.0	24.0	24.0	35

According to NCDC records, there have been a total of 815 winter storm events in Connecticut from January 1993 to December 2012, 228 of which required a response from the Connecticut Department of Transportation (CTDOT). These events resulted in a total of \$40,415,276 in estimated property damages (in adjusted dollars) according to NCDC



records (Table 2-34). A total of 12 deaths and 53 injuries are attributed to these winter storm occurrences. A breakdown of deaths and injuries by county is not provided because of the regional (zonally recorded) nature in which NCDC reports this information.

Table 2-34. NCDC total winter storm events.

County	Number of Events	Property Damages
Fairfield	132	\$0
Hartford	80	\$19,055,273
Litchfield	160	\$1,943,022
Middlesex	87	\$0
New Haven	112	\$125,545
New London	83	\$0
Tolland	84	\$10,642,615
Windham	77	\$8,648,821
Total	815	\$40,415,276

As a further indicator of historical occurrences, CTDOT has recorded a total of 486 winter storm events since the winter of 1977 that have required a response from CTDOT. This is an average of 14 winter storm events per year that have required a response from CTDOT.

The most significant blizzard, known as the Great White Hurricane, to impact Connecticut was in 1888 and occurred March 11-14, 1888 (Figure 2-27). Snowfall in this event was estimated at 45 to 50 plus inches. Significantly high snow drifts were created and the storm shut down major cities throughout the Northeast states. It is recorded that over 400 people along the East Coast died as a result of the blizzard. Total damages were estimated at over \$20 million in 1888 dollars.



Figure 2-27. After the Blizzard of 1888.

(Left): Asylum Street in Hartford, Connecticut, after the Blizzard of 1888. Source: Northeast States Emergency Consortium (Right) Bank Street in Waterbury, Connecticut, after the Blizzard of 1888. Source: Connecticut Historical Society.

Since the 1888 blizzard, there have been numerous major winter storms which have impacted Connecticut to some degree. Some of these storms have claimed lives and produced damages in the millions of dollars. Some of the most notable winter storms in recent history that have impacted Connecticut include:

- Ice Storm Felix – Connecticut's most severe ice storm occurred on December 18, 1973 and resulted in two deaths and caused widespread power outages, lasting several days.
- Blizzard of 1978 – Occurred on February 5, 1978; record snowfall amounts were recorded in several areas of Connecticut. The State of Connecticut was essentially shut down for three days when Governor Grasso ordered all roads closed except for emergency travel.<sup>44</sup>
- Nor'easter of 1992 – Occurred on December 10-13, 1992. Three people were killed as a result of the storm and 26 homes were destroyed. Tides in Long Island Sound were stacked up by the continued strong east/northeast winds reaching 55 mph. This "stacking" of water resulted in the third highest tide (10.16 Feet NGVD as measured at Bridgeport, Connecticut) ever recorded in Long Island Sound and caused over \$4.3 million in damages in 1992 dollars to over 6,000 homes. Inland areas received up to four feet of snow in northeastern Connecticut. The heavy wet snow snapped tree limbs and power lines cutting power to 50,000 homes.
- Winter Storm Ginger – Occurred on January 8-9, 1996 with snowfall totals up to 27 inches recorded in Connecticut. The storm forced the state to shut down for 24 hours, with all roads shut except for emergency travel.
- December 5-7, 2003 – Heavy snowfall amounts were recorded in parts of Connecticut including as much as 20 inches in Windham County, 19 inches in Hartford County,

<sup>44</sup> Source: Wikipedia.



and 18 inches in Fairfield, New London, and Tolland counties. This event received a Presidential Emergency Declaration.

- January 22-23, 2005 Blizzard – Connecticut received a Presidential Emergency Declaration for this storm event. NOAA analyzed this storm and ranked it a Category 4 – Crippling event on its Northeast Snowfall Impact Scale.
- February 12-13, 2006 Nor'easter – Connecticut received record snowfall in parts of the state from this storm (second largest snowfall recorded since 1906), and received a Presidential Emergency Declaration. This storm is also known as the North American Blizzard of 2006. Governor M. Jodi Rell ordered state highways shut down to help facilitate efficient snow removal by State Department of Transportation snow removal crews. Figure 2-28 shows the recorded snowfall amounts and the NESIS rating for this storm.

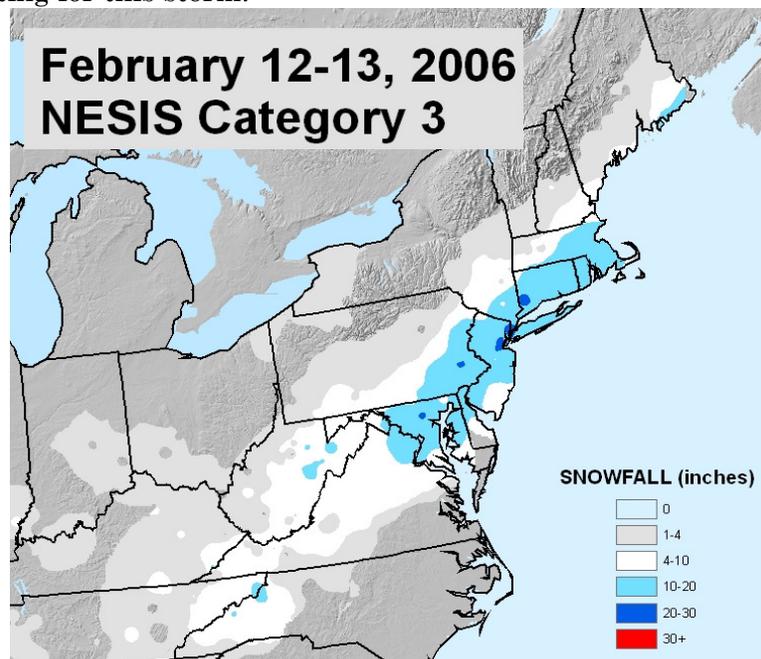


Figure 2-28. NESIS analysis rating of the February 12-13, 2006 winter storm.

- January 11-12, 2011 (Heavy Snow) – Very heavy snow developed across the region, producing snowfall rates of three to four inches per hour and snow totals ranging from 15 to 30 inches in southern Connecticut. The highest snowfall totals were seen across northern portions of Fairfield and New Haven counties. At least four roof collapses are known to have occurred during or shortly following this snow event.
- January 26-27, 2011 (Heavy Snowstorm) – A period of moderate to heavy snow moved through the region, producing two to five inches before a second round of precipitation, consisting of very heavy snow, moved across the area. This system boasted snowfall rates of three to four inches per hour over a four- to six-hour period, which raised snow totals to 12 to 20 inches of snow throughout much of the region. At least 19 roof collapses are known to have occurred during this snow event.
- February 1-2, 2011 “Groundhog Day Blizzard” – 3 to 5 inches of snow and sleet fell across interior portions of Southern Connecticut during this two-day storm, with 2 to 3 inches falling across southern portions. (Some reports indicate up to 10 inches in



some areas.) Between 1/4 and 3/4 of an inch of ice accreted across Southern Connecticut, with the highest amounts across far Southwestern Connecticut and interior Northeastern Connecticut. This storm event caused power outages, tree damage, the collapse or partial collapse of more than 100 roofs, and resulted in a reported \$5.25 million in property damage across four counties in particular (Hartford, New Haven, Tolland, and Windham) as recorded by the National Climatic Data Center.

- October 29-30, 2011 “Winter Storm Alfred” – A historic and unprecedented early-season winter storm impacted the area with more than one foot of heavy wet snow falling on interior portions of Southern Connecticut, while coastal areas received mainly rainfall during the event. In addition to the heavy rain and snow, strong winds were experienced along the immediate coastline. Hundreds of thousands of people across southern Connecticut lost power during this event as heavy snow accumulated on trees that still had partial to full foliage during mid-autumn. This caused extensive felling of trees and limbs across the region, which not only downed power lines but also resulted in many road closures, creating many dangerous situations of isolated residential areas with no ingress for emergency vehicles. Communications networks were also significantly disrupted (especially cellular networks). This was the first time a winter storm of this magnitude has ever occurred in October. The event resulted in a total of \$247 million in insurance claims including personal, commercial, and auto claims.”
- February 7-8, 2013 “Winter Storm Nemo” – By February 7, 2013, this powerful winter storm had prompted winter storm warnings and winter weather advisories for the entire northeastern United States, from the Upper Midwest to New England, including the state of Connecticut. A blizzard warning was also in effect for all of Connecticut and surrounding areas and a state of emergency was declared in Connecticut on February 8. The highest amount of snowfall in the United States recorded from this storm event was 40 inches in Hamden. More than 800 National Guard soldiers and airmen were activated in Connecticut, Massachusetts, and New York to support actions needed on state roads.

## Probability of Future Occurrence

The state of Connecticut will likely experience at least two or more major snow storms per winter season. Based on NCDC historical events, it is reasonable to assume that Connecticut has a medium-high probability of future events. Table 2-35 summarizes the probability of future events by county (annualized events). Figure 2-31 shows the ranking and risk parameters which includes the annualized events for each county.

Based on historical CTDOT records, an average of up to 14 events per winter season, whether classified as major or otherwise, could result in a response from CTDOT to address hazardous road conditions. (The 10-year average for winter storm events that prompted a response from CTDOT is 12 events per year.) Due to the nature of the winter season in New England, these winter weather events are automatically expected by New Englanders. However, Climate change is changing weather patterns. Due to climate change effects which will increase by mid to late century, the number of major snow storms and snow



covered days may decrease. In general, recent climate change studies have projected a shorter winter season for Connecticut (as much as two weeks), and less snow-covered days with a decreased overall snowpack. In addition, climate models have indicated that fewer but more intense precipitation events will occur during the winter period with more precipitation falling as rain rather than snow.<sup>45</sup>

This change in winter precipitation could result in less frequent but more intense snow storms with heavier (denser) snow. NOAA's Snowfall/Meltwater Table<sup>46</sup> shows that as temperatures increase the amount and weight of snowfall decreases. For example, 1 inch of meltwater at 34°-28° F is generally equal to 10 inches of snow. This same amount of meltwater is generally equal to 40 inches of snow at 9°-0° F.

In addition, the increasing change in the type of winter precipitation may also decrease the number of major snow storms experienced, but increase the number of ice storms occurring. This is an important issue that requires further study as a change in snow density or changeover to more freezing rain/ice could have a large impact on managing future winter storms and the impact of such storms on the residents of Connecticut (including travel and utility services).

Figure 2-29 shows average annual snowfall in inches for the state of Connecticut along with average January temperatures. Figure 2-30 shows historical maximum snow depths across the state.

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<sup>45</sup> Sources: U.S. Global Change Research Program, *Global Climate Change Impacts in the United States*, 2009; Northeast Climate Impacts Assessment Group, *Confronting Climate Change in the U.S. Northeast*, 2007; and U.S. Climate Change Science Program, *Weather and Climate Extremes in a Changing Climate*, 2008.

<sup>46</sup> NOAA website. The amounts listed in the table are general estimates and are noted to vary greatly between snowstorms, given the specific characteristics per storm event.

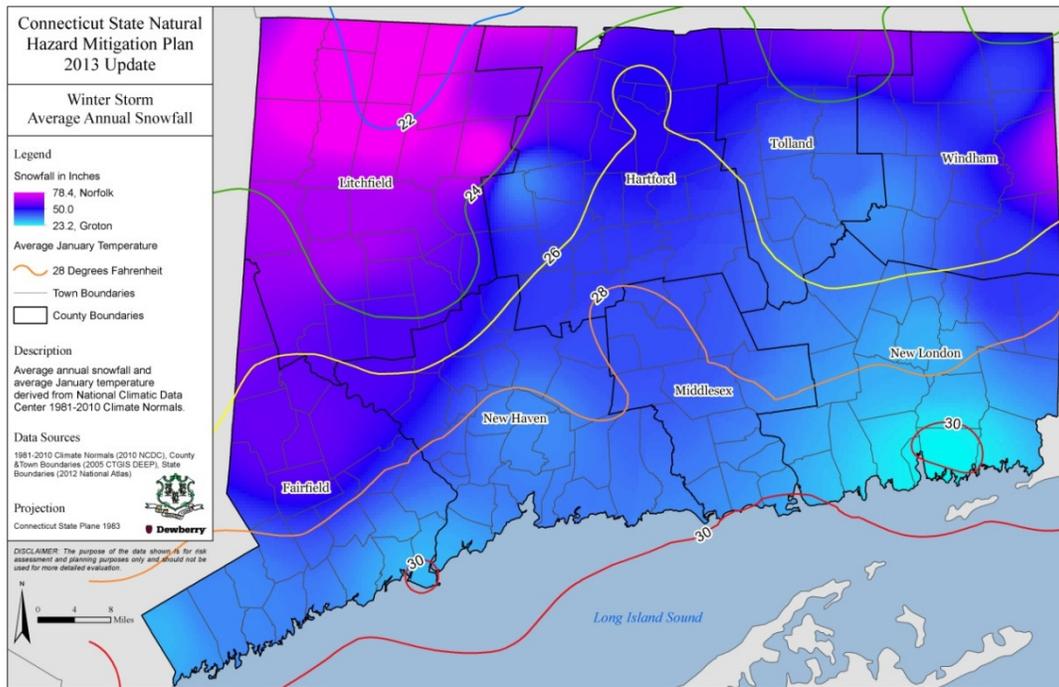


Figure 2-29. Average annual snowfall and average annual January temperatures.

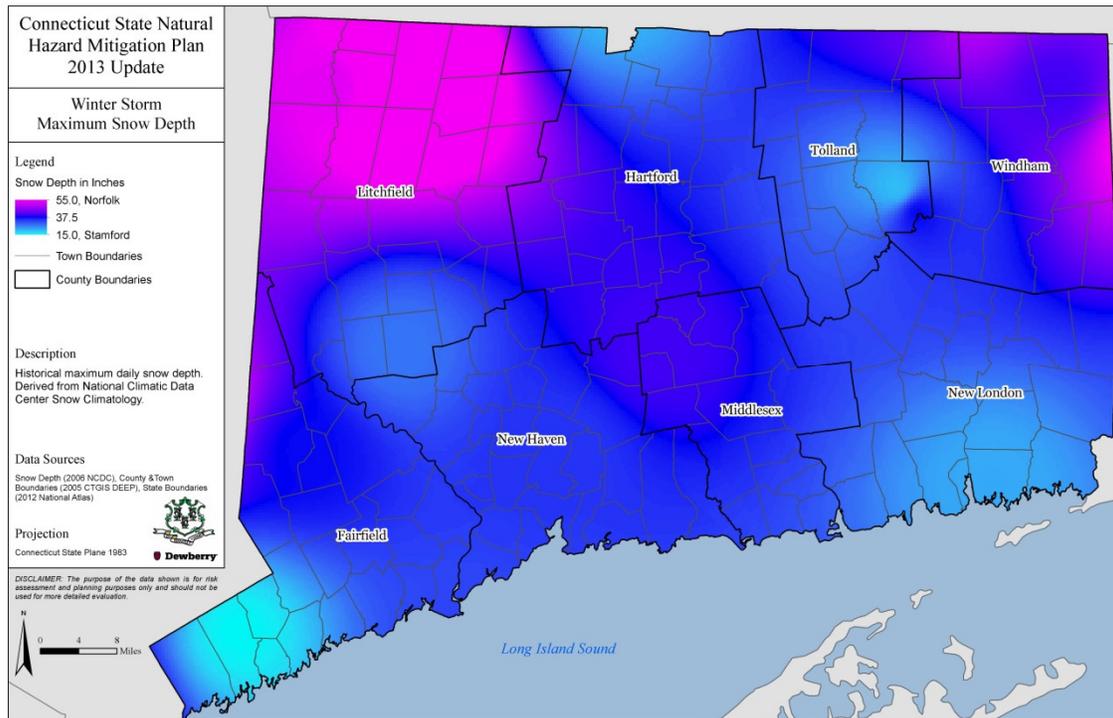


Figure 2-30. Historical maximum snow depth.

## Vulnerability and Loss Estimation

As Connecticut's population increases and more people move out of highly urban areas into more suburban and rural areas of the state, Connecticut and its residents will become more vulnerable to the effects of major winter storms due to the impacts these events have on



utility services and the state’s transportation infrastructure. People living in the more rural areas of the state are vulnerable to potential power losses and property damages which major winter storms can generate. In addition, Connecticut’s elderly population is also very vulnerable to the impacts created by winter storms due to resource needs (heat, power loss, safe access to food stores, etc.).

Furthermore it is anticipated that severe transportation gridlock during winter storms will continue to occur at times in the future. Severe traffic congestion can occur from a winter storm in two ways:

- Rapid onset of heavy snow over urban areas; and
- Icing of roadways as a result of lighter snow events that lead to freezing of water on roadways or the occurrence of freezing rain or ice storms that begin prior to rush hour traffic (morning and/or evening).

The traffic congestion and safe travel of people to and from work can be mitigated by the use of staggered timed releases from work, pre-storm closing of schools, and later start times for companies. Almost all employers and school districts already implement such practices. However, the costs associated with transportation disruptions and the loss of work and school time will continue to increase.

Table 2-35 shows annualized loss information for the state by jurisdiction, including the annualized number of events, and total annualized damages due to winter storm.

Table 2-35. NCDC annualized events for the winter storm hazard.

County	Annualized Events	Annualized Damages
Fairfield	6.60	\$0
Hartford	4.00	\$952,764
Litchfield	8.00	\$97,151
Middlesex	4.35	\$0
New Haven	5.60	\$6,277
New London	4.15	\$0
Tolland	4.20	\$532,131
Windham	3.85	\$432,441
Total	4.75	\$2,020,764

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.



**State Facilities Exposure.** The state contains 3,327 state-owned buildings totaling \$1,655,430,988 in known building value.<sup>47</sup> Table 2-36 and Table 2-37 provide a breakdown of the numbers and values of state-owned buildings that intersect with areas of the state with maximum recorded snow depths of 24-29 inches, 30-35 inches, and  $\geq 36$  inches. A total of 1,891 state-owned buildings (56.8% of the total number of state-owned buildings in the state) are located in an area of the state that has experienced a snow depth of at least 24 inches. This amounts to a total of \$29,359,854 in known building values exposed to severe snow accumulation (1.8% of the total known value of all state-owned buildings in the state).

Table 2-36. Numbers of state-owned buildings intersecting severe winter storm hazard areas.

County	Total State-Owned Buildings	Buildings with Snow Depth 24-29"	Buildings with Snow Depth 30-35"	Buildings with Snow Depth $\geq 36$ "	Total Buildings At Risk
Fairfield	205	139	11	0	150
Hartford	872	606	21	0	627
Litchfield	97	3	26	68	97
Middlesex	289	284	0	0	284
New Haven	556	411	0	0	411
New London	489	48	0	0	48
Tolland	628	78	5	0	83
Windham	191	91	100	0	191
Total	3,327	1,660	163	68	1,891

Table 2-37. Value of state-owned buildings intersecting winter storm hazard areas.

County	Total State-Owned Buildings	Buildings with Snow Depth 24-29"	Buildings with Snow Depth 30-35"	Buildings with Snow Depth $\geq 36$ "	Total Value At Risk
Fairfield	Not Available				
Hartford	Not Available				
Litchfield	Not Available				
Middlesex	Not Available				
New Haven	Not Available				
New London	\$22,037,766	\$5,230,646	\$0.00	\$0.00	\$0.00
Tolland	\$1,604,033,369	\$41,469,813	\$0.00	\$0.00	\$0.00
Windham	\$29,359,853	\$4,577,422	\$24,782,431	\$0.00	\$29,359,854

<sup>47</sup> Building values are not currently linked to the mapped data for Fairfield, Hartford, Litchfield, Middlesex, and New Haven counties, therefore exposure estimates are incomplete at this time.



County	Total State-Owned Buildings	Buildings with Snow Depth 24-29"	Buildings with Snow Depth 30-35"	Buildings with Snow Depth >=36"	Total Value At Risk
Total	\$1,655,430,988	\$51,277,880	\$24,782,431	\$0.00	\$29,359,854

**Population Exposure.** The total population for the state according to the 2010 census is 3,574,097. Table 2-38 provides a breakdown by county of the numbers of people intersecting winter storm hazard areas based on historical maximum snow depths ranging from 24 inches to greater than 36 inches. This analysis was conducted by intersecting census block groups with historical maximum snow depth data using GIS. In instances where only a portion of the census block group intersected the hazard area, only that same portion of the population is counted. For example, if 20% of the census block group intersects with a specific snow depth range, only 20% of the population number for that census block group is counted). This results in estimated values and there is potential for error with this methodology, however this is considered a more refined approach than assuming 100% of the population is contained within the 20% of the census block group that intersects the hazard area. The total population at risk is estimated at 2,403,404, which is 67.2% of the total population of the state.

Table 2-38. Population intersecting winter storm hazard areas.

County	Total Population	Pop within Snow Depth 24-29"	Pop within Snow Depth 30-35"	Pop within Snow Depth >=36"	Total Population At Risk
Fairfield	916,829	521,825	19,386	480	541,691
Hartford	894,014	542,974	53,962	431	597,367
Litchfield	189,927	50,937	16,312	81,745	148,994
Middlesex	165,676	77,701	0	0	77,701
New Haven	862,477	780,160	0	0	780,160
New London	274,055	64,061	10	0	64,071
Tolland	152,691	85,081	2,891	4	87,976
Windham	118,428	42,141	57,221	6,082	105,444
Total	3,574,097	2,164,880	149,782	88,742	2,403,404

**Critical Facilities Exposure.** The state contains 1,401 identified critical facilities in the categories of correctional institutions, EMS facilities, fire stations, health departments, law enforcement facilities, nuclear power plants, and storage tank farms. Table 2-39 provides a breakdown of the numbers of critical facilities that intersect with areas of the state with maximum recorded snow depths of 24-29 inches, 30-35 inches, and >=36 inches. A total of 1,050 critical facilities (74.9% of the total number of critical facilities in the state) are located in an area of the state that has experienced a snow depth of at least 24 inches.



Table 2-39. Numbers of critical facilities intersecting winter storm hazard areas.

County /Facility Types	Total Critical Facilities	Facilities within Snow Depth 24-29"	Facilities within Snow Depth 30-35"	Facilities within Snow Depth >=36"	Total Facilities At Risk
<b>Fairfield</b>					
Correctional Institutions	4	4	0	0	4
EMS	116	65	6	0	71
Fire Stations	113	67	6	0	73
Health Departments	20	11	2	0	13
Law Enforcement	34	22	3	0	25
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	7	5	0	0	5
Total	294	174	17	0	191
<b>Hartford</b>					
Correctional Institutions	6	5	0	0	5
EMS	75	58	9	0	67
Fire Stations	133	103	14	0	117
Health Departments	15	14	0	0	14
Law Enforcement	43	34	4	0	38
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	8	6	0	0	6
Total	280	220	27	0	247
<b>Litchfield</b>					
Correctional Institutions	0	0	0	0	0
EMS	34	8	8	14	30
Fire Stations	52	12	7	28	47
Health Departments	3	2	0	1	3
Law Enforcement	24	5	6	9	20
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	0	0	0	0	0
Total	113	27	21	52	100
<b>Middlesex</b>					
Correctional Institutions	1	1	0	0	1
EMS	31	30	0	0	30
Fire Stations	36	35	0	0	35
Health Departments	8	7	0	0	7
Law Enforcement	17	16	0	0	16



County /Facility Types	Total Critical Facilities	Facilities within Snow Depth 24-29"	Facilities within Snow Depth 30-35"	Facilities within Snow Depth >=36"	Total Facilities At Risk
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	3	3	0	0	3
<b>Total</b>	<b>96</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>92</b>
<b>New Haven</b>					
Correctional Institutions	5	5	0	0	5
EMS	74	71	0	0	71
Fire Stations	114	107	0	0	107
Health Departments	15	13	0	0	13
Law Enforcement	40	38	0	0	38
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	10	10	0	0	10
<b>Total</b>	<b>258</b>	<b>244</b>	<b>0</b>	<b>0</b>	<b>244</b>
<b>New London</b>					
Correctional Institutions	1	0	0	0	0
EMS	75	17	0	0	17
Fire Stations	65	16	0	0	16
Health Departments	12	4	0	0	4
Law Enforcement	29	6	0	0	6
Nuclear Power Plant	1	0	0	0	0
Storage Tank Farm	2	0	0	0	0
<b>Total</b>	<b>185</b>	<b>43</b>	<b>0</b>	<b>0</b>	<b>43</b>
<b>Tolland</b>					
Correctional Institutions	3	2	0	0	2
EMS	34	17	2	0	19
Fire Stations	35	15	3	0	18
Health Departments	2	1	0	0	1
Law Enforcement	11	5	0	0	5
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	0	0	0	0	0
<b>Total</b>	<b>85</b>	<b>40</b>	<b>5</b>	<b>0</b>	<b>45</b>
<b>Windham</b>					
Correctional Institutions	1	0	1	0	1
EMS	40	11	26	2	39
Fire Stations	37	11	23	2	36



County /Facility Types	Total Critical Facilities	Facilities within Snow Depth 24-29"	Facilities within Snow Depth 30-35"	Facilities within Snow Depth >=36"	Total Facilities At Risk
Health Departments	1	0	1	0	1
Law Enforcement	11	4	7	0	11
Nuclear Power Plant	0	0	0	0	0
Storage Tank Farm	0	0	0	0	0
Total	90	26	58	4	88
Statewide Total	1,401	866	128	56	1,050

**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for winter storm using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of historical impact including injuries and deaths, property damage, and the number of reported events. Geographic extent is represented by the average annual snowfall (Figure 2-29) for each jurisdiction.

The composite winter weather hazard rank shows the whole state of Connecticut equally at risk for winter storms. Local mitigation plan results support the ranking shown (Figure 2-31). The slightly lower score in New London can be attributed to population, events, and geographic extent.

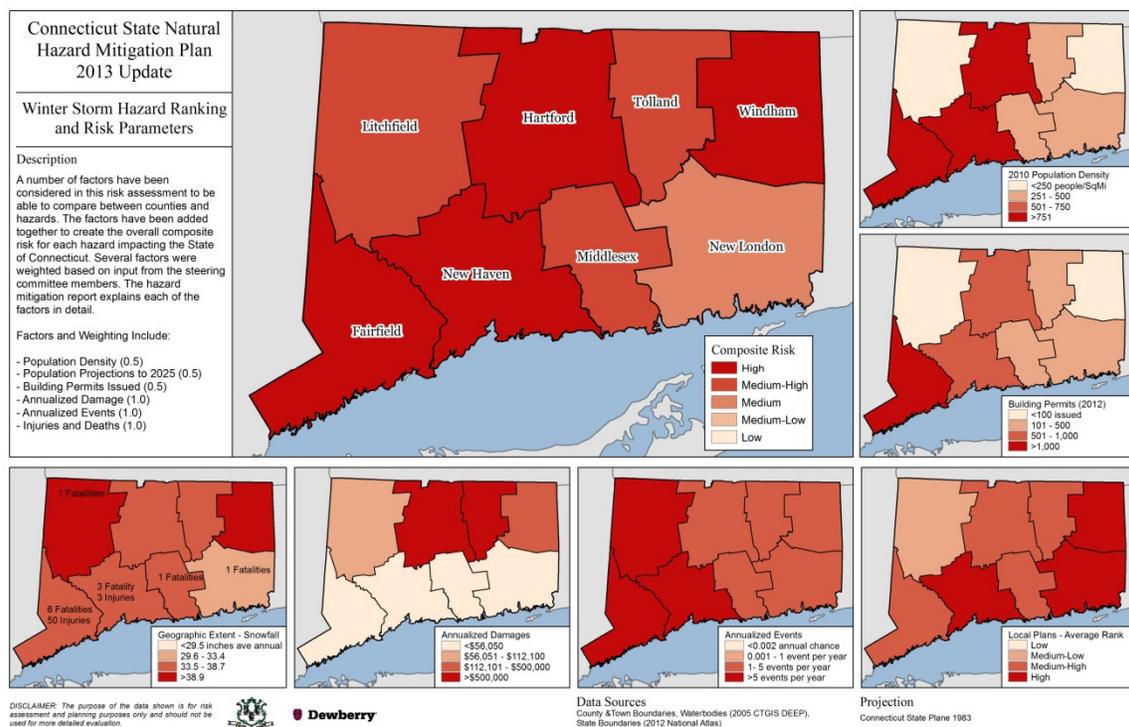


Figure 2-31. Winter weather NCDC relative ranking.



### 2.7.5 Flood-related hazards

**Flood** – Any high flow, overflow, or inundation by water which causes or threatens damage. There are several different types of flooding including:

**Riverine Flooding** – (also considered Overbank Flooding), occurs when water channels receive more rain or snowmelt from their watershed than normal, or the channel becomes blocked by an ice jam or debris. Excess water overloads the channel and flows out into the channel's floodplain area.

**Coastal Flooding** – can occur as a result of coastal storms which produce storm surges, destructive waters, and erosion of coastal areas.

**Flash Flooding** – a rapid rise of water along a water channel or low-lying urban area. Usually a result of an unusually large amount of rain and/or high velocity of water flow (especially in hilly areas) within a very short period of time. Flash floods can occur with very little warning.<sup>48</sup>

**Shallow Flooding** – occur in flat areas where a lack of a water channel results in water which cannot drain away from an area easily. There are three types of shallow flooding:

- Sheet Flow – water spreads out over a large area at a uniform depth;
- Ponding – runoff collects in depressions and cannot drain out; and
- Urban Flooding – when a drainage system, consisting of manmade features, is overloaded by a larger amount of water than the system was designed to accommodate.

### Hazard Profile

Flooding is the most frequently occurring natural hazard that impacts Connecticut. The Cornell University Extreme Precipitation in New York and New England modeling project (in collaboration with the Northeast Regional Climate Center (NRCC) and the Natural Resources Conservation Service (NRCS)) shows increases in flood frequency over the past 60-years. The occurrence of other natural hazards can result in flooding within the state including hurricanes, coastal storms, severe rains, occurrence of ice jams and dam failures. Flooding can cause extensive damage to property and risk of injury and loss of life. FEMA categorizes the potential damage which flooding can cause into five categories:<sup>49</sup>

1. Hydrodynamic forces - damage created by moving waters. There are three ways in which hydrodynamic forces can damage a structure's walls: by frontal impact to the walls (water striking the walls of a structure); drag effect (water running along side of a structure's walls); and, eddies or negative pressure (water passing the downstream side of a structure).

<sup>48</sup> Source FEMA publication FEMA-480 and NOAA's severe weather primer website: [http://www.nssl.noaa.gov/primer/flood/fld\\_basics.html](http://www.nssl.noaa.gov/primer/flood/fld_basics.html).

<sup>49</sup> Source: FEMA publication FEMA-480.



2. Debris Impact - includes damage by direct impact of any object that flood waters can pick up and move to another location.
3. Hydrostatic Forces – the pressure, both downward and sideways which standing water exerts on a structure's floor and walls. Hydrostatic pressure can also cause damage to structures due to buoyancy and flotation which can occur in flood waters.
4. Soaking – the warping, swelling and changes in a material's form and structure resulting from being submerged in flood waters.
5. Sediments and Contaminants – the sand, sediments, chemicals, and biological contaminants (such as untreated sewage) that flood waters can move and leave behind after the flood waters subside.

### History of Flooding Occurrences in Connecticut

Flooding is the most prevalent and frequent natural hazard that impacts the state. Though there is no distinct flood season in Connecticut and major river flooding can occur in any month of the year, NOAA has studied a number of past floods from the 1990's to 2000<sup>50</sup> and has noted three times of the year of particular importance with regard for the potential of flood activity to occur:

- Late winter/spring melt;
- Late summer/early fall; and
- Early winter.

According to FEMA's disaster declaration database, Connecticut has had fourteen major disaster declarations that resulted in severe flooding since 1954, with three events since 2010. Eight of the most notable flood disaster to affect Connecticut in the twentieth and beginning of the twenty-first centuries include:

- The Flood of 1936;
- The Flood of 1955 (discussed in subsection 2.7.2 of this chapter)
- The Flood of 1982;
- The Flood of October 2005;
- The Flood of April 2007;
- The Floods of March 2010;
- The Flood of 2011 (Tropical Storm Irene); and
- The Flood of 2012 (Super Storm Sandy).

**March 1936: Great Connecticut River Flood.** Was the result of a combination of melting snow and moderately heavy rains over a 13-day period. Rainfall amounts of six to eight inches occurred in Connecticut. Combined with melting snow a total of ten to thirty

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<sup>50</sup> Source: NOAA, *A river and Flash Flood Climatology of Southern New England: Results From 1994-2000*, website: <http://www.erh.noaa.gov/box/flood%20climatology.htm>.  
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inches of water flowed into rivers across the entire Northeast from Ohio to Maine and south to Virginia.

Three major rivers were affected in Connecticut: the Connecticut River; the Housatonic River; and the Thames River. Each of these rivers reached record flood heights. The Connecticut River rose 8.6 feet higher than had been historically observed in the recorded 300-year recorded history of the river. According to CT DOT maps, the flood along the Connecticut River was estimated to be a 500-year flood.<sup>51</sup>

The floodwaters left an estimated 14,000 people homeless and several people died as a result of this event. Epidemic disease from contaminated flood waters also threatened the population of Connecticut. In Connecticut, the flood resulted in an estimated twenty million dollars (1936 dollars) in property damage. Figure 2-32 show examples of the damage resulting from this flood event.



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Figure 2-32. Great Connecticut River Flood of 1936\*.

\*Left: Bushnell Park and State Capital Building Right: Street of Hartford. Source: CT History Online.

**The Flood of 1982.** From June 4 - 7, 1982 heavy rains totaling three to sixteen inches fell over most of Connecticut (Figure 2-33). The hardest hit area was south-central Connecticut, where flood frequencies between 200 and 500 year plus intervals were recorded.<sup>52</sup> CT DOT for its 2002 Drainage Manual maps show the hardest hit areas of the state and the estimated flood interval for particular sections of the state for each flood event.

The precipitation from this event occurred after a prior week of prolonged rainfall that had saturated the ground. Dam failures in the hardest hit area around the mouth of the

<sup>51</sup> Source: Section 6, Appendix E of CT DOT's May 2002 Drainage Manual. Flood maps and the estimated flood level were created for the : November 1927 Flood; March 1936 Flood; September 1938 Flood; January 1949 Flood; August 1955 Flood; October 1955 Flood; January 1978 Flood; January 1979 Flood; June 1982 Flood; June 1984 Flood; and June 1992 Flood.

<sup>52</sup> Realizing the Risk: A History of the June 1982 Floods in Connecticut, prepared for the CT DEP by L. R. Johnston Associates, 1983.



Connecticut River occurred in the towns of Chester, Haddam, Deep River, and Essex. A total of 30 dams failed or were partially breached during the storm.

Damages from the 1982 storm were estimated at more than \$276 million dollars (not inflated to present amounts). Eleven deaths were recorded as a result of this event. Over 15,000 homes were damaged (mostly by minor flooding) with 1,500 homes considered moderately damaged, and thirty-seven homes destroyed by the flood. In addition, over 400 commercial and industrial establishments were damaged. The flood also resulted in damages to state and local roads, bridges, dams, personal property, and utility infrastructure.

### June 4-7, 1982 Rainfall

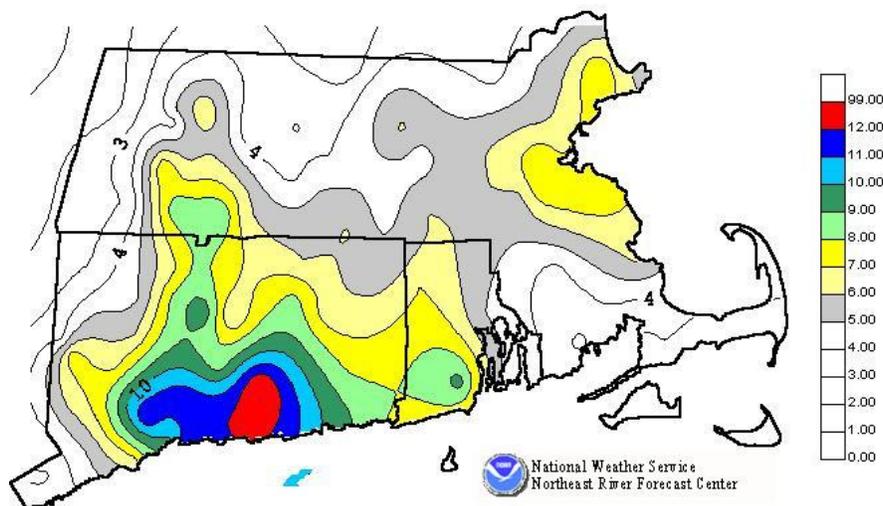


Figure 2-33. Rainfall amounts resulting in the Flood of 1982. Source: NOAA.

**The Flood of October 2005.** On October 8-9 and 13-15, 2005, nine to sixteen inches of rainfall resulted in major flooding in several basins in Hartford and Tolland Counties.<sup>53</sup> Flooding was minor during the October 7-9 event due to very dry soil and river conditions prior to the storm. This first rain event resulted in saturated soils and river basins measuring one half to three-quarters bank full conditions. This situation allowed for increased flood conditions to occur during the rains of October 13-15. A total of 14 dams completely or partially failed. Another 30 dams were damaged throughout Connecticut. Several bridges failed and several dozen roads were washed out or undermined. The total damages to state, municipal and non-profit properties was estimated at \$6.1 million, damages to businesses were estimated at \$6.9 million, and damages to private residences were estimated at \$29.6 million. Figure 2-34 show examples of the damages sustained by the combined flood events.

<sup>53</sup> CT DEP website publication *Heavy Rains and Flooding of Sub-Regional Drainage Basins: October 7-15, 2005*.  
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Figure 2-34. Flood of October 2005.\*

\*Left: Flooding in Enfield. Right: Road damage Miller Road, South Windsor.

**2007 April Nor'easter** . On April 15, 2007 a tropical low-pressure system formed in the Atlantic Ocean off the Carolinas and moved slowly northward towards New England. In anticipation of this developing storm, the NWS had issued flood watches on April 14, for all of Connecticut, and coastal flood warnings for coastal western Connecticut on April 15 and 16. High wind warnings were also posted for southeastern coastal Connecticut.

Portions of Connecticut received up to eight inches of rain within a 24- hour period. Highest tides occurred between 8:30 and 10:30 p.m. on April 15, resulting in some moderate coastal flooding along the western reaches of the Connecticut shoreline. Winds gusts reached 60 miles per hour and downed numerous trees and power lines. In the northwestern part of the state, heavy frozen precipitation accumulated on roads during the day on Sunday before changing completely over to rain. By early morning April 16, floodwaters, as well as downed trees and powerlines, had caused numerous state highway and local road closures. Over 44,000 customers lost electricity. Most rivers were receding slowly by April 17th. The only river still rising by April 17th was the Connecticut River at Hartford and Middletown. The storm resulted in major river flooding in central and western Connecticut.

Some rivers recorded return frequencies of 20 – 50 years, according to USGS. Bridges were washed out in Torrington and Weston, causing a potential increase in response times for emergency service vehicles covering sections of those municipalities. In New Haven and Bridgeport, many parks sustained damage; use of these facilities were limited until repairs are performed. Erosion along road shoulders in many municipalities required immediate repairs to prevent further erosion and loss of paved surfaces. Many municipalities had to defer capital projects and schedule these repairs of flood damage. Figure 2-35 show a couple of examples of the damages that resulted as a consequence of the flood.



Figure 2-35. April Nor'Easter of 2007.\*

\*Left: Erosion Along the Pomperaug River in Woodbury. Right: Nod Road adjacent to Farmington River in Avon.

Damages to state facilities included:

- National Guard reported \$40,500 in damages to Air National Guard facilities in Orange;
- CT DEEP reported \$327,591 in damages to facilities statewide;
- Department of Public Safety reported \$313,894 in damages to a firing range in Simsbury;
- DPW reported \$199,298 in storm-related damages to other buildings statewide; and
- DOT reported \$100,000 in damages to non-FEMA eligible bridges in Bristol and Wallingford (both in New Haven County). In addition, the DOT reported \$7,500 in costs related to washouts along the Danbury Branch Line of the Amtrak rail.

**March 2010 Severe Storms and Flooding.** During the month of March 2010, three major rain events occurred on March 12, March 23, and March 29-30, in combination caused severe flooding throughout Connecticut. The rain events were the result of the same two large scale weather systems (El Nino Jet Stream and an Omega Block) resulting in recording breaking monthly rainfalls for much of Southern New England. The hardest hit area of the state impacted by flooding was southern Connecticut, specifically southeastern Connecticut including New London County.

Many areas of the state received between 4 to 5 inches of rainfall in a 24 hour period and winds that gusted up to 75 miles per hour in Fairfield County in Southwestern Connecticut. In addition to the 4.05 inches of rainfall in Greenwich (which completely saturated soils and weakened the root systems of trees), documented wind gusts of 62 miles per hour and 75 miles per hour were recorded at the White Plains Airport and at JFK Airport. Local observations in Norwalk, Bridgeport (Success Hill), and Westport in coastal Fairfield County reported documented wind gusts of 65, 60 and 58 miles per hour, respectively.

The recorded wind speeds represent a range from a strong tropical storm to a Category I hurricane and combined with the saturated soils caused major tree damage in Fairfield



County. The severity of the weather can be measured in its impact on communities. In Greenwich, Fairfield County, 400 of 700 roads were impassable due to a combination of fallen trees and energized power lines. Public schools in six towns were closed for a week during the first March event; another seven closed for an extended period of time during the second event.

Additional heavy rainfall of 1.5 to 3.2 inches fell again on March 23<sup>rd</sup> and filled already swollen rivers, streams and saturated the soil in Connecticut. This episode is significant in that it did not allow the state's rivers to recover from the March 12 – 15 episode prior to the next heavy rainfall episode 6 days later. Finally, on March 29 - 30, the state was struck by a third and the most severe of the heavy rain episodes. During a 36-hour period, heavy rainfall totaling from 4 to 10 inches occurred across the state. "The heaviest rainfall occurred in Southeastern, CT where some locations received up to 10 inches of rain in 36-hours. Information from the USGS, and the CTDOT indicates that the flooding and subsequent damage in New London County, Connecticut ranged from the 25-year to the 500-year event on many rivers and streams. Specifically, in at least 8 different locations in New London County, the Connecticut Department of Transportation records indicate that 500-year water flows were reached.

**Tropical Storm Irene.** Swept across the east coast on August 28, 2011 with Connecticut being the hardest hit state. Maximum wind gusts were 66 mph, while average wind gusts for the entire state were 52.3 mph. The storm killed two Connecticut residents and left hundreds of thousands of people without power. The storm hit the coast at high tide, which caused a storm surge that flooded roads and homes from Fairfield to New London.

"The Mayor of East Haven, April Capone, said that at least 25 homes in the Cosey Beach neighborhood were a 'total loss' – swept out to sea, collapsed or missing entire sides." Although many people left before the storm, several people stayed and needed to be rescued. In Bristol, one man was rescued by the National Guard as his canoe capsized in the Pequabuck River. Along Fairfield Beach Road in Fairfield, waters surrounded homes, "with the waters of the Sound rising a quarter mile from the shoreline". Downed wires near a home in Prospect set a house on fire and killed a woman. In Milford, police and five dive teams rescued people from their homes, as high water rushed into the streets near the Bayview and Point Beach areas of the town.

Following the storm on August 29<sup>th</sup>, trees, branches and power lines remained scattered across roads in every town in the state. About 2,000 residents were in shelters across the state and the number of power outages was highest in most recent memory.<sup>54</sup>

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<sup>54</sup> The Hartford Courant. Home Destroyed, People Missing and 767,000 without power after Irene. 8/28/2011.



Figure 2-36. Hurricane Irene August 2011.\*

\*Left: Coastline of Connecticut. Right: Fairfield Beach Road.

**Super Storm Sandy.** An emergency declaration for Hurricane Sandy was issued on October 28, 2012, followed by a disaster declaration on October 30, 2012. The storm left about 30 percent of customers in the state without power. Three deaths were reported in Connecticut due to the storm.

Sandy began as a tropical wave in the Caribbean on October 19<sup>th</sup>, quickly developed into a tropical storm in just six hours, and ultimately upgraded to a hurricane on October 24<sup>th</sup> as maximum winds reached 74 mph. Although more widespread damage was seen in coastal areas of New Jersey and New York, Connecticut still experienced devastating damage due to the storm. As it reached Connecticut, it caused the Long Island Sound to flood basements and roads along the coast, and coupled with fallen trees many roads were impassable. Streets closest to the water in towns such as Fairfield, Westport and Norwalk remained submerged immediately after the storm. Millions of gallons of raw and partly untreated sewage were discharged into the Long Island Sound.<sup>55</sup> As of May 2013, more than \$367 million in federal assistance had been approved to help Connecticut with disaster expenses. Figure 2-37 is an aerial photo of Sandy storm damage near Fairfield Beach and Shoal Point in Fairfield.

FEMA Mapping Task Force provided Hurricane Sandy surge depth grids for coastal counties based on post-Sandy surveyed High Water Marks (HWM). Hazus-MH flood model was run for this plan update; \$3.1 billion in total damages, 52, 155 people needing short-term shelter and 246,133 tons of debris generated was simulated with the model. Appendix 2 includes additional analysis and related information.

<sup>55</sup> The Huffington Post. Hurricane Sandy: Connecticut Shoreline Damage Assessment Begins. 11/13/2012. Dave Collins.



Figure 2-37. Super Storm Sandy damage of Connecticut coastline (Fairfield). Source: Hartford Courant.

According to NCDC records, there have been a total of 593 flood events in Connecticut from January 1993 to December 2012. These events resulted in a total of \$55,985,181 in estimated property damages (in adjusted dollars) according to NCDC records (Table 2-40). A total of 10 deaths and 3 injuries are attributed to these flood occurrences. A breakdown of deaths and injuries by county is not provided because of the regional (zonally recorded) nature in which NCDC reports this information.

Table 2-40. NCDC total flood events.

County	Number of Events	Property Damages
Fairfield	115	\$16,217,563
Hartford	97	\$10,402,823
Litchfield	115	\$11,607,373
Middlesex	42	\$592,103
New Haven	114	\$3,971,295
New London	86	\$7,014,097
Tolland	15	\$5,116,567
Windham	9	\$1,063,360
Total	593	\$55,985,181

**National Flood Insurance Program (NFIP).** Floodplain management begins at the community level with operation of a community program of corrective and preventative measures for reducing flood damage. These measures take a variety of forms; for inclusion in the NFIP, communities adopt their flood hazards maps and the community Flood Insurance Study (FIS). In addition, a FEMA-compliant floodplain management ordinance that regulates activity in the floodplain is adopted and enforced.



A community's agreement to adopt and enforce floodplain management ordinances, including regulation of new construction in the Special Flood Hazard Area (SFHA) or 100-year floodplain, is a requirement for making flood insurance available to home and business owners. Currently more than 24,624 communities nationwide voluntarily adopt and enforce local floodplain management ordinances that provide flood loss reduction building standards for new and existing development. To address the threat of flood damage, many communities and residents participate in the NFIP. Homeowner insurance policies do not cover damage from flood.

As of April 30, 2013, 177 communities in Connecticut participated in the NFIP. Data on active NFIP policies was obtained from FEMA's BureauNet database. Table 2-41 shows NFIP flood policy and claim information by county. There are 41,256 policies in-force for Connecticut NFIP communities, paying nearly \$49 million annually in premiums for \$9.7 billion in coverage.

The coastal counties of Fairfield, Middlesex, New Haven and New London, along with Hartford County (due to the location of the Connecticut River within the center of the county), have the highest risk of flooding within the State. Fairfield has over 17,140 policies in place, and has had 11,243 losses and \$216 million in payment for those losses. New Haven has 10,465 policies in-force, 9,204 losses and \$148 million in payments for those losses. Appendix 2 includes the municipality specific information for the NFIP statistics.

Table 2-41. NFIP policy and claim information (as of 4/30/2013).

County	# of Policies In-Force	Insurance In-Force	Written Premium In-Force	# of Total Losses	Total Payments Since 1978
Fairfield	17,140	\$4,200,065,600	\$21,149,318	11,243	\$216,704,490
Hartford	4,035	\$876,778,500	\$3,962,998	1,684	\$13,414,612
Litchfield	1,309	\$284,751,300	\$1,398,724	471	\$5,925,227
Middlesex	3,575	\$857,154,700	\$4,409,196	2,185	\$33,166,972
New Haven	10,465	\$2,318,435,800	\$11,912,343	9,204	\$148,608,948
New London	4,185	\$1,122,356,900	\$5,498,180	2,070	\$25,699,486
Tolland	323	\$69,359,900	\$313,013	157	\$1,604,996
Windham	224	\$53,474,800	\$251,398	67	\$1,338,499
Total	41,256	\$9,782,377,500	\$48,895,170	27,081	\$446,463,228

**Addressing Repetitive Loss (RL ) and Severe Repetitive Loss (SRL) Properties.**

The Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 was signed into law by President George W. Bush on June 30, 2004. The Act (Public Law 108-264) revised the existing Flood Mitigation Assistance (FMA) Program by creating a Pilot Program at \$40 million per year to mitigate Repetitive Loss (RL) properties. The Severe Repetitive Loss (SRL) Program provides funds for local government to address the most egregious



floodprone properties with the most flood insurance claims. The program features a reduced non-Federal match (from 25% to 10%) with an approved mitigation plan that specifies the State's strategy to reduce the number of RL and SRL properties. The amendment authorizes scheduled increases in flood insurance premium rates to actuarial rates for those SRL property owners who refuse a formal and complete mitigation grant offer through the SRL grant program to mitigate an SRL structure. The three NFIP-funded flood mitigation programs, SRL, RFC and FMA were combined through the Biggert-Waters National Flood Insurance Reform Act of 2012, signed into law by President Barack Obama on July 6, 2012. Specific program guidance on the newly combined mitigation programs is pending.

Many flood insured properties have had more than one claim. A property that is currently insured for which two or more NFIP losses (occurring more than ten days apart) of at least \$1,000 each have been paid within any 10-year period since 1978 is defined as a "repetitive loss property" in the NFIP program. As of April 2013, Connecticut has approximately 3,119 total RL buildings, of which 2,571 are insured. These buildings have experienced 7,433 insured losses for \$218 million. The Town of Hamden has the most mitigation RL properties (34 structures), followed by Town of Westport (12) mitigated structures.

Residential SRL properties have received priority for mitigation funding through the Bunning-Bereuter-Blumenauer Reform Act (Public Law 108-264). The primary goal of the SRL Program has been to reduce excessive flood claim payments and reliance on the National Flood Insurance Fund (NFIF) for flood relief when mitigation is an option. Residential SRL properties are single-family structures consisting of one to four residences that have flood insurance that have:

- incurred flood related damages on four or more separate occasions with the amount of each claim exceeding \$5,000 and the cumulative amount of the total claims paid exceeding \$20,000; or
- cumulative amount of the claims exceeds the value of the property, when at least two separate claim payments have been made.

At least two losses must have occurred within a 10-year time span; claims must be more than 10 days apart. Thirty-six municipalities in Connecticut have at least one SRL property. City of Milford has 44 verified SRL properties followed by Town of East Haven with 29 properties. Additional information, site specific, on SRL and RL can be obtained by contacting CT DEEP. A complete listing of the number of RL and SRL properties by Jurisdiction is included in Appendix 2.

Connecticut state agencies and communities have taken many actions that are intended to reduce the number of repetitive loss properties and severe repetitive loss properties. Many of these actions are described in the capability assessment.

Nevertheless, the number of repetitive loss properties and severe repetitive loss properties has increased in recent years. For example, the number of repetitive loss properties in the town of Guilford increased from 12 listed in 2010 to 60 listed in 2013. While this is



attributed in part to coastal storms such as Tropical Storm Irene in 2011 and Super Storm Sandy in 2012, inland communities have also experienced an increase. For example, the number of repetitive loss properties in the town of Southbury increased from 10 listed in 2008 to 20 listed in 2013 due to a series of floods along the Pomperaug River.

The State of Connecticut intends to reduce the number of repetitive loss properties. The fundamental action needed to begin reducing the number is to enable and encourage the completion of local mitigation plans. Through the local planning process, local officials typically gain an understanding of the thresholds that define a RL and SRL, and learn where some of these properties are located. Thus, the planning process is a key critical first step for reducing the number of repetitive loss properties and severe repetitive loss properties.

Planning is nearly complete for Connecticut communities with repetitive loss properties and severe repetitive loss properties. Only seven municipalities with repetitive loss properties (Bethel, Brookfield, Kent, New Milford, Newtown, Warren, and Washington) have yet to develop local hazard mitigation plans. Of these seven, three (Kent, Warren, and Washington) have commenced plan development as of September 2013. The remaining four (Bethel, Brookfield, New Milford, and Newtown) are part of a pending multi-jurisdiction planning grant.

Connecticut DEEP and DESPP/DEMHS wish to identify, evaluate and prioritize cost-effective, environmentally sound, and technically feasible mitigation actions for repetitive loss properties. Before this can be done, two actions must be accomplished. First, the State and local communities must reality-check the repetitive loss and severe repetitive loss inventories in order to focus on those properties that could reasonably benefit from mitigation. This could be accomplished by field-verifying the properties on the lists and the information provided for each property. FEMA's National Flood Mitigation Data Collection Tool (NFMDC), known more succinctly as the National Tool could be used for this purpose.

Second, Connecticut DEEP and DESPP/DEMHS will prioritize the properties that should be targeted for local mitigation actions and reach out to the communities in which they are located. Emphasis will be placed on the ten communities with the highest number of listed properties (Milford, Westport, Norwalk, East Haven, Fairfield, Greenwich, Branford, Stamford, Old Saybrook, and Bridgeport) and the inland communities with the most listed properties (West Hartford, Danbury, and Meriden).

Once a number of "pilot communities" have been selected, property-specific mitigation action plans will be encouraged from the municipal officials in these communities. The action plan for each property should explain how the property is currently impacted by flooding or drainage problems, how the problem could be addressed, and what role the community would be able to take in mitigation (administration, funding, etc.).

As part of the State's Repetitive Loss Strategy, when funds are available, the State will pursue Federal grants to mitigate SRL and RL properties. The State will continue to act as the Applicant for FEMA HMA funds and support eligible Sub-applicants (typically municipalities and Tribal Governments). The State will encourage eligible Sub-Applicants to apply for funds to mitigate RL and SRL properties. The Flood Mitigation Assistance Program (FMA), when funded, provides one of the best mechanisms for mitigating NFIP-Natural Hazard Identification and Risk Assessment



insured properties. Through pre-determined cost share percentages, FEMA has already established priorities under this program. SRL properties can be funded at 100% of eligible project costs and RL properties can be funded at 90% of eligible project costs. FEMA has also established a Project Useful Life (PUL) for mitigation projects. The State will give priority to Sub-applications for projects with a higher PUL as defined by FEMA. The State will attempt to maximize funding under this program and, in keeping with FEMA’s prioritization, place higher priority on mitigating SRL properties under FMA. A Benefit Cost Analysis (BCA) is required to be run for projects submitted under the FMA program. Where projects are evenly ranked, those project sub- applications that receive a higher BCA result will be given a higher priority.

As Federal funding becomes more competitive, the State will make efforts to identify outside funding for mitigation. As part of the FEMA-approved Repetitive Loss Strategy, the State will continue its attempt to maximize funding under programs other than those managed by FEMA. This includes funding from the Natural Resource Conservation Service (NRCS) and as available under State bonding initiatives. DEMHS and DEEP will continue to advocate for the allocation of State Bond funds to support mitigation efforts. This includes the mitigation of SRL and RL properties as undertaken by either municipalities or private property owners.

The Pre-Disaster Mitigation Program (PDM) and the Hazard Mitigation Grant Program (HMGP), both a part of FEMA’s Hazard Mitigation Assistance (HMA) grants, can fund projects unrelated to flooding and can benefit structures without NFIP coverage. As these programs can fund a diverse range of project types, the aforementioned repetitive loss strategy will not apply to these funds. This will allow the State to determine priorities for these programs to address all hazards.

**Probability of Future Occurrence**

SFHAs are subject to inundation by a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year. Commonly referred to as the 100-year flood, 1% chance flood or base flood; 100-year flood is not a flood that occurs every 100 years. The 100-year flood has a 26 percent chance of occurring during a 30 year period, the typical length of many mortgages. It is also important to note that once a flood occurs, its chance of recurring remains the same. The 100-year flood is a regulatory standard used by Federal agencies, states and NFIP-participating communities to administer and enforce floodplain management programs. The 100-year flood is also used by the NFIP as the basis for insurance requirements nationwide<sup>56</sup>. The main recurrence intervals used on the FIRMS are shown in Table 2-42.

Table 2-42. Flood recurrence intervals.

Annual Chance of Occurrence	Recurrence Interval
10-year	0.1
50-year	0.02

<sup>56</sup> National Flood Insurance Program ([www.fema.gov](http://www.fema.gov))



Annual Chance of Occurrence	Recurrence Interval
100-year	0.01
500-year	.002

Flooding has had significant impacts on Connecticut in the past and is likely to impact the State in the future. An examination of NCDC data suggests that on an annual basis, approximately one to six events of some significance occur in any particular jurisdiction in Connecticut. It is reasonable to assume that Connecticut, based on historical information, has a high probability of future events. Fairfield and Litchfield have had the highest number of reported flood events, followed by Hartford and New London. Table 2-45 shows the total and annualized number of flood events by county based on the NCDC historical record.

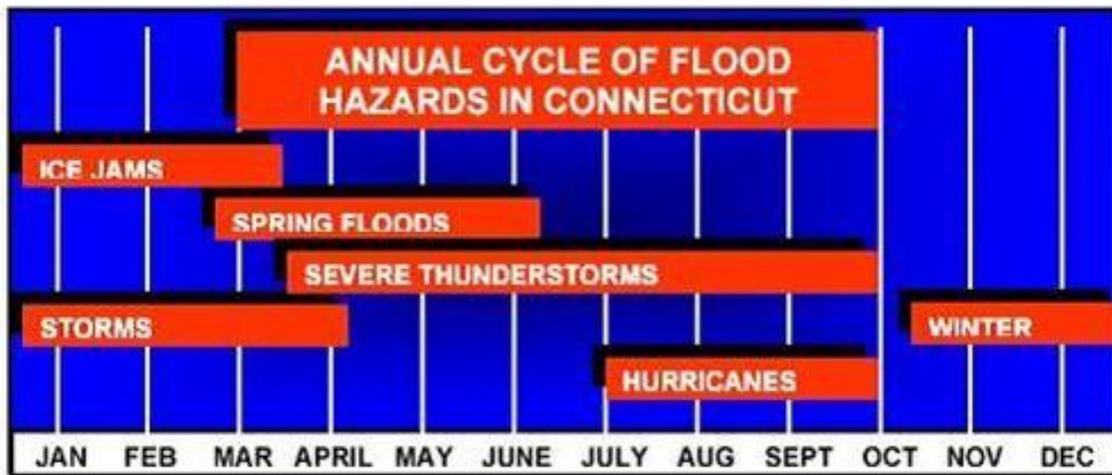


Figure 2-38. Annual Cycle of Flood Hazard in Connecticut

Flooding may occur during any time of the year in Connecticut. Figure 2-38 shows the type of natural hazard associated with flooding, and the months in which Connecticut is especially prone to the occurrence of a particular flood hazard.

Connecticut has over 235,000 acres of FEMA mapped special flood hazard areas (SFHAs) within the state and an additional 88,689 acres of floodplain as generated by Hazus-MH. Figure 2-39 shows the location of the 100-year floodplain in Connecticut. The floodplain area per jurisdiction has been used as the geographic extent for the flood ranking (see subsection 2.7.5.5). New Haven has over 59,200 acres of floodplain (93 square miles), followed by Hartford (78 square miles) and Fairfield (75 square miles). Within New Haven, communities with greater than 7,000 acres of floodplain include Madison, Milford and Guilford. The Town of Stratford in Fairfield has 6,256 acres of floodplain.

More intense rainfall, the result of climate change, is likely to increase peak flooding, particularly in urban environments in the future. The magnitude of this increase is



dependent on the level and rate of greenhouse gas emissions through the end of the century.

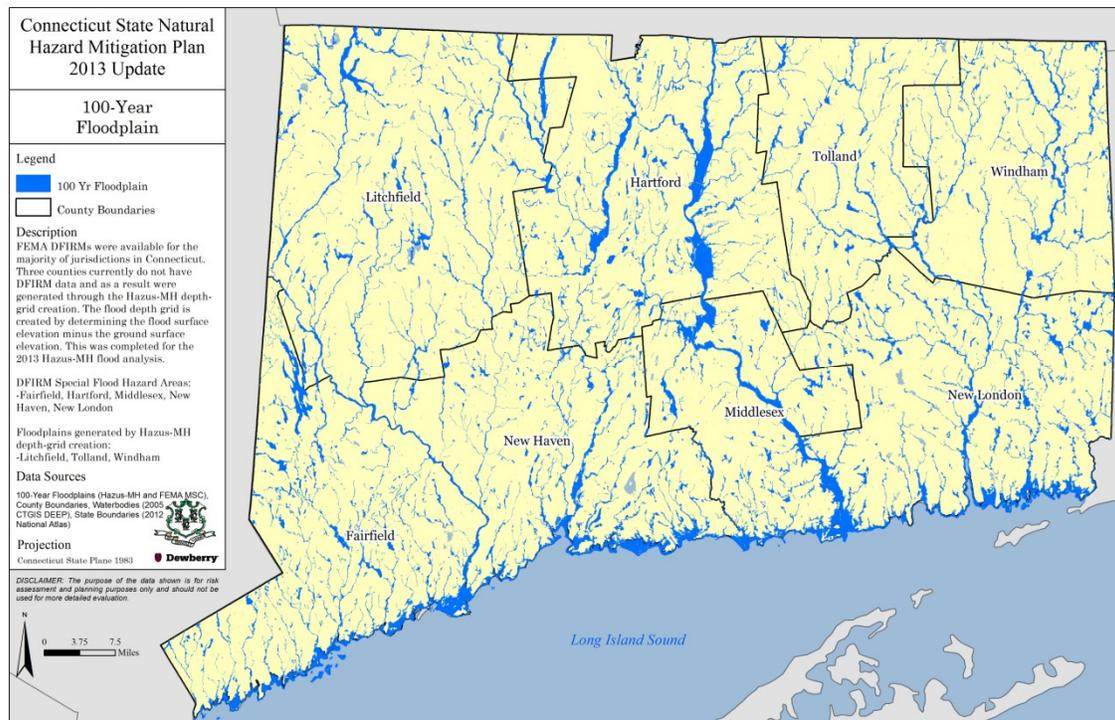


Figure 2-39. FEMA DFIRM and Hazus-MH derived floodplain.

### Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Study

U.S. Army Corp of Engineers' (USACE) Sea, Lake, and Overland Surges from Hurricanes (SLOSH) study is especially useful for flood risk analysis on a regional and local level. The SLOSH computer program is a numerical computer model, developed by the NWS, for the USACE, and designed to forecast the rise in water level caused by the wind and pressure forces of a hurricane. This rise in the water surface, which accompanies a hurricane, is referred to as the storm surge. The SLOSH model computes the storm surge over water and along the coastline and extends the computations inland over the coastal flood plain. The results of the model can be utilized along with topographic information to determine hurricane flood inundation zones. The SLOSH model calculates four inundation zones. The four zones correspond to Hurricane Categories I & II, III, and IV respectively on the Saffir/Simpson scale.

The SLOSH model is used to evaluate the potential impact of storm surge. Emergency managers use data from SLOSH to identify at-risk populations and determine evacuation areas. Storm surges also affect tidal rivers and creeks, potentially increasing evacuation areas. Figure 2-40 indicates the potential inland extent of storm surge as a function of hurricane category. It is readily apparent from this figure that Connecticut has significant vulnerability to storm surge.



In April 2004 FEMA, USACE, NOAA, and the Connecticut Office of Emergency Management (now DESPP/DEMHS) completed the Connecticut Hurricane Evacuation Study Technical Data Report with an Evacuation Map Atlas and an Inundation Map Atlas (utilizing the NWS' SLOSH model). This study is a decision-making tool which provides information on the extent and severity of potential flooding from hurricanes, the associated vulnerable population, capacity of shelters, estimated sheltering requirements, and evacuation time. This information has been provided to municipalities for local hazard mitigation plans.

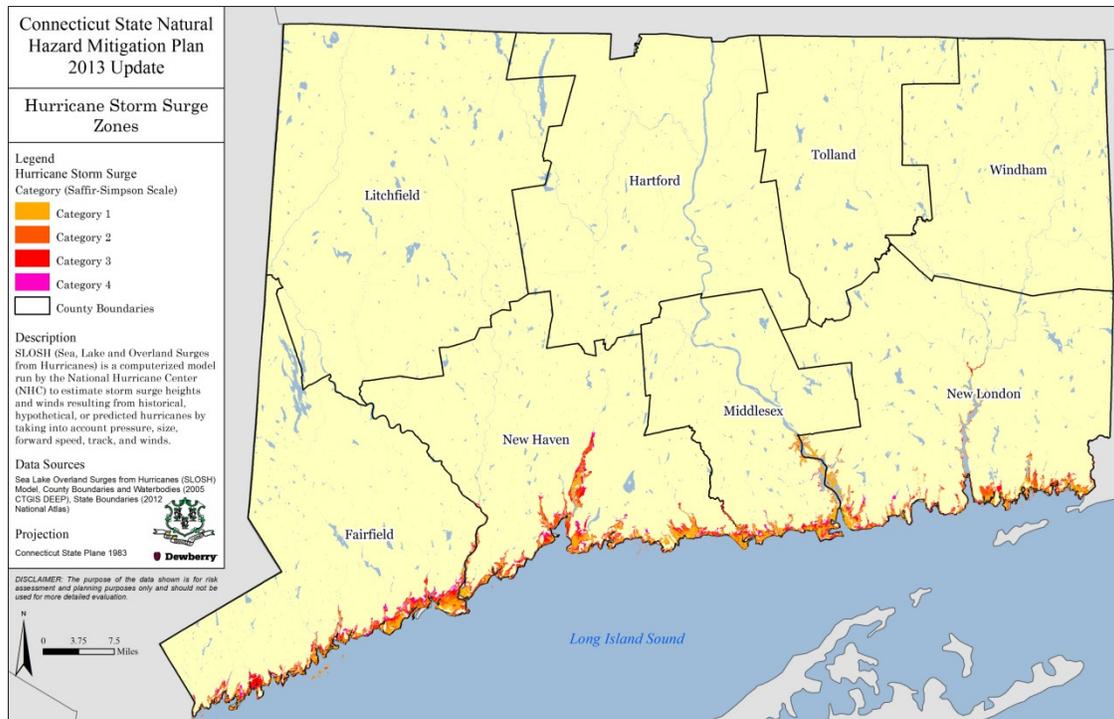


Figure 2-40. Potential storm surge inundation by hurricane category.

DEMHS has updated information on public shelters, medical and institutional facilities, and mobile home parks in the 25 coastal municipalities and produced updated Evacuation and Inundation Maps. The State and its municipalities use the study and maps to plan for a possible evacuation. An example of a resulting SLOSH map can be seen in Figure 2-44. SLOSH maps have been produced for all of Connecticut's coastal communities and are located in Appendix 2.

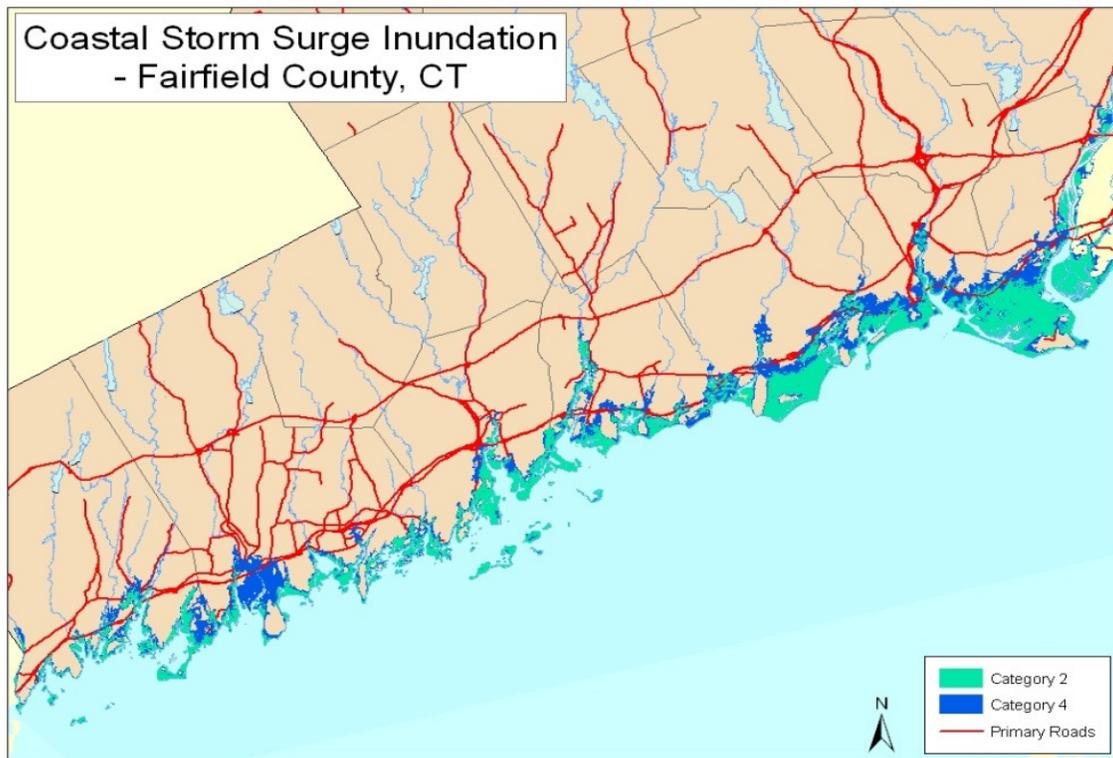


Figure 2-41. Example of jurisdiction specific storm surge mapping. Fairfield County is shown.

## Vulnerability and Loss Estimation

All areas of Connecticut continue to be vulnerable to flooding and the impacts associated with this natural hazard. There are many factors which continue to affect future vulnerability to flooding including:

- Connecticut is a water-rich state, in that it has many rivers, streams and brooks flowing within and between its boundaries and other states.
- Connecticut's past land use patterns and the continued use of structures within areas vulnerable to flooding will continue to promote future risk and vulnerability of flood impacts to structures and people. Local land use regulations and ordinances have done much to curb unregulated development within flood hazard areas. However, Connecticut is one of the older states in the nation with limited land resources. This places a high value on all property within the state. This limitation of land availability and high property values will continue to encourage the reuse of land and structures in areas vulnerable to flooding.
- Increases in flooding have occurred with increased impervious surfaces in watersheds. Some Connecticut watersheds drain from as far north as Canada. This, along with increases in precipitation, has resulted in increased flooding. Low Impact Development (LID) techniques and other onsite hydrology management techniques should be implemented wherever possible. LID is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible



- Flooding is often a result of the occurrence of other natural hazards such as hurricanes and tropical storm systems, winter and coastal storms, ice jams, dam failures, and severe precipitation events. Sea level rise and the increased intensity of frequency of storm surge due to climate change also contribute to the impacts of flooding. Connecticut has historically experienced all these other natural hazards at one time or another and can expect to experience them in the future.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

Flood loss estimates and risk to critical facilities have been derived using the FEMA Hazus-MH for riverine and coastal flood hazards. Flood hazard is defined by a relationship between depth of flooding and the annual chance of inundation to that depth. This assessment has been completed for Level 2 analysis with user-provided depth grids that were generated from provided terrain data, and FEMA Digital Flood Insurance Rate Maps (DFIRMs).

Loss estimation for this Hazus-MH module is based on specific input data. The type of data shown below includes information on the local economy that is used in estimating losses. Table 2-43 displays the economic loss categories used to calculate annualized losses by Hazus-MH.

Table 2-43. HAZUS direct economic loss categories and descriptions.

Category Name	Description of Data Input into Model	Hazus Output
Building	Cost per sq ft to repair damage by structural type and occupancy for each level of damage	Cost of building repair or replacement of damaged and destroyed buildings
Contents	Replacement value by occupancy	Cost of damage to building contents
Inventory	Annual gross sales in \$ per sq ft	Loss of building inventory as contents related to business activities
Relocation	Rental costs per month per sq ft by occupancy	Relocation expenses (for businesses and institutions)
Income	Income in \$ per sq ft per month by occupancy	Capital-related incomes losses as a measure of the loss of productivity, services, or sales
Rental	Rental costs per month per sq ft by occupancy	Loss of rental income to building owners
Wage	Wages in \$ per sq ft per month by occupancy	Employee wage loss as described in income loss

The flood model was used to run scenarios for both the 1-percent (i.e., 100 year) and 0.2-percent (i.e., 500 year) annual chance frequencies where the flood hazard is based on FIRM data. DFIRMS were available for Fairfield, Hartford, Middlesex, New Haven, and New Natural Hazard Identification and Risk Assessment



London. Floodplains derived using the Hazus-MH software was used to analyze Litchfield, Tolland, and Windham.

Table 2-44 shows the flood loss estimation values by building type. The contents value is the highest estimated damages, with over \$7 billion. The estimated damages to buildings follow with over \$5.5 billion.

Figure 2-42 and Figure 2-43 show the estimated total 100-year economic flood loss by census block and county. It is apparent that the coastal and riverine areas are at higher risk. Middlesex, New Haven and Fairfield counties each have census blocks with total estimated losses between \$37-106 million. Appendix 2 includes scenario and jurisdiction specific results from the Hazus-MH analysis. CT DEEP should be contacted for the supporting Hazus-MH data sets.

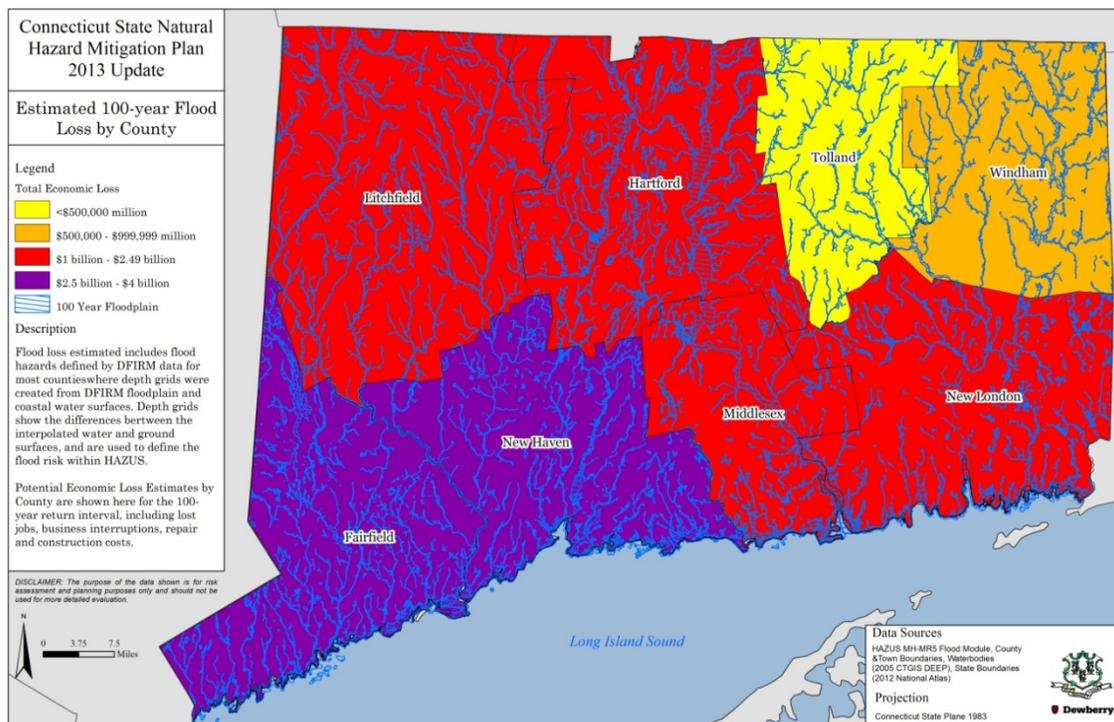


Figure 2-42. Estimated 100-year Flood Loss by County



Table 2-44. Hazus-MH 100-year flood loss estimation by building type. Shown in Thousands of Dollars.

County	Building	Contents	Inventory	Re-location	Income	Rental	Wage	Direct Loss	Total
Fairfield	\$1,672,242	\$2,185,833	\$85,146	\$2,316	\$5,382	\$1,035	\$7,462	\$20,857	\$3,980,273
Hartford	\$826,455	\$1,005,393	\$37,198	\$873	\$2,205	\$340	\$3,817	\$11,374	\$1,887,655
Litchfield	\$499,836	\$684,887	\$34,825	\$452	\$1,108	\$152	\$3,231	\$7,762	\$1,232,253
Middlesex	\$539,114	\$600,942	\$15,446	\$709	\$1,093	\$267	\$2,168	\$5,584	\$1,165,323
New Haven	\$1,140,229	\$1,432,815	\$58,101	\$1,522	\$3,061	\$606	\$4,759	\$14,100	\$2,655,193
New London	\$540,432	\$636,488	\$17,790	\$516	\$1,122	\$216	\$2,910	\$5,314	\$1,201,788
Tolland	\$126,511	\$181,201	\$11,069	\$73	\$328	\$63	\$732	\$1,583	\$321,560
Windham	\$207,762	\$283,652	\$17,906	\$138	\$262	\$43	\$1,465	\$2,128	\$513,356
Total	\$5,552,581	\$7,011,211	\$277,481	\$6,599	\$14,561	\$2,722	\$26,544	\$68,702	\$12,960,401

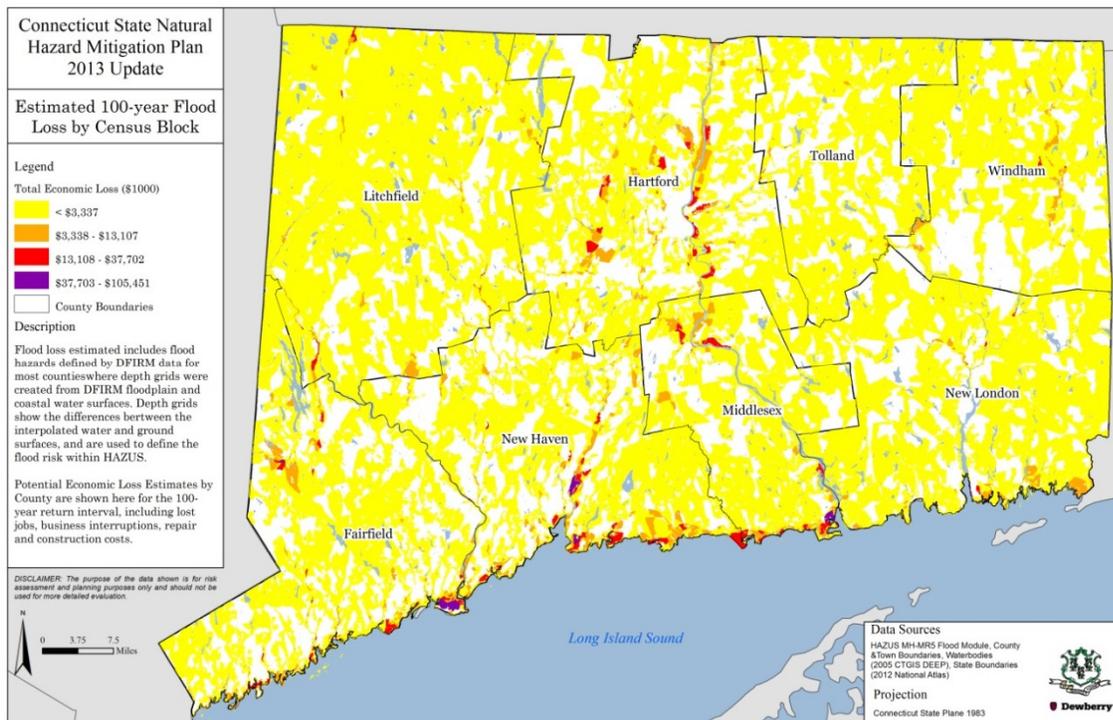


Figure 2-43. Hazus-MH estimated 100-year flood loss by Census Block.

Impacts and areas of vulnerability include:

- Out of the total number of essential facilities (fire stations, police stations, schools, and hospitals) located within a county, each individual county may expect a small number of these facilities to receive moderate damage, and in most cases just a couple of facilities are projected to obtain substantial damage. No loss of use was projected in any county.



- Building occupancy most affected by a 100-year flood event would be residential followed by commercial. In addition, the building material type in all counties that would obtain the most damage was calculated to be wood. Since damage to residential structures was modeled to be most prevalent in all county scenarios, it is apparent that safety concerns and homeowner education on proper clean up after flood waters recede would be very important during the post-disaster management phase.
- All counties may expect some level of emergency shelter needs post-disaster. Though current Hazus-MH simulations did not analyze shelter requirements for Windham and New London Counties, it is expected that shelter needs for Windham County will be similar to those of Tolland County, and that New London County shelter requirements would be similar, though possibly slightly higher, than those of Middlesex County (due to the fact that New London County has more lower lying coastal communities).

Hazus-MH does not calculate public health related impacts from natural hazards. Thus when reviewing this data, the reader should keep in mind the potential development of these non-quantified impacts. Complete Hazus-MH scenario generated reports for flooding can be found in Appendix 2.

As evidence in property loss figures (Table 2-45) obtained from NCDC and Hazus-MH, floods have the potential to be destructive and, although analysis varies, the overall trends are consistent. Total damages, on an annualized basis, range from more than \$53,168 in Windham to more than \$810,878 in Fairfield County using the NCDC data and from \$22,866 in Tolland and \$281,089 in Fairfield County with the FEMA Annualized Loss Hazus-MH study.

Table 2-45. Comparison of NCDC annualized events, Hazus-MH 100-yr losses and AAL Study for flood.

County	Annualized Events	Total Annualized Damages	Total 100-year Loss	Annualized Loss (AAL Study)
Fairfield	5.75	\$810,878	\$3,980,273	\$281,089
Hartford	4.85	\$520,141	\$1,887,655	\$151,523
Litchfield	5.75	\$580,369	\$1,232,253	\$61,183
Middlesex	2.10	\$29,605	\$1,165,323	\$60,946
New Haven	5.70	\$198,565	\$2,655,193	\$70,262
New London	4.30	\$350,705	\$1,204,788	\$77,270
Tolland	0.75	\$255,828	\$321,560	\$22,866
Windham	0.45	\$53,168	\$513,356	\$25,655
Total	29.65	\$2,799,259	\$12,960,401	\$750,794



**State Facilities Exposure.** The state contains 3,300 state-owned buildings totaling \$8.7 Billion in building values.<sup>57</sup> Table 2-46 provides a breakdown of the numbers of state-owned buildings intersecting the SFHA by county. A total of 198 state-owned buildings (just under 6% of the total number of state-owned buildings) are located within the Special Flood Hazard Area (A or V Zones). There are a total of 64 (just under 2% of the total number of state-owned buildings) state-owned buildings located within the 500 year floodplain. No state facilities with buildings values were located within the mapped floodplain. Connecticut Division of Construction Services provided CI/KR analysis for subwatersheds that experienced major flooding in March 2011. This information includes a breakdown of the subregional basin and CI/KR sector for facilities within flooded areas.

There are 1,606 (48% of the total number of state-owned buildings) state-owned buildings that intersect with the areas susceptible to erosion. Table 2-46 also summarizes the number of state-owned buildings in erosion susceptibility areas by county. Hartford County leads with a total of 594 state-owned buildings in erosion susceptibility areas, while New Haven and New London Counties follow with 291 and 257 respectively.

Table 2-46. State-owned buildings in the 100 and 500-year floodplain and erosion susceptibility areas.

County	# Buildings within 100-yr floodplain	Total Buildings in 500-year Floodplain	Total within mapped Floodplain	Total Buildings Erosion Areas
Fairfield	20	5	25	118
Hartford	19	6	25	594
Litchfield	13	0	13	43
Middlesex	21	6	27	119
New Haven	74	23	97	291
New London	30	24	54	257
Tolland	9	0	9	125
Windham	12	0	12	59
Total	198	64	262	1,606

**Critical Facilities Exposure.** In order to determine the number of critical facilities within FEMA’s SFHA, the critical facility points were intersected with the SFHL layer. This analysis, depicted below in Table 2-47, shows 162 critical facilities throughout the state in Zone A. Fairfield County has the most critical facilities within Zone A, with a total of 29, while New Haven and Litchfield follow closely behind with 22 and 21 critical facilities respectively.

<sup>57</sup> Based on the JESTIR database (OPM 2009). However, building values are not currently linked to the mapped data for Fairfield, Hartford, Litchfield, Middlesex, and New Haven counties, therefore exposure estimates are incomplete at this time.



Specific municipalities have a high number of critical facilities within SFHA. In Fairfield County, Bridgeport has 8 critical facilities in Zone A, while Danbury has seven critical facilities in Zone A. The facilities in Bridgeport at risk include four storage tank farms, two law enforcement facilities, one EMS facility, and one fire station. The facilities in Danbury at risk include four fire stations and three EMS facilities. In New Haven County, the City of New Haven has 11 critical facilities in Zone A, including nine storage tank farms, one fire station and one law enforcement facility.

WPCFs were also intersected with the floodplain boundaries, using a 30 foot spatial buffer around the point locations; 39 municipal and 2 privately owned facilities are located within the SFHA. Litchfield County has 10 of their 14 WPCF located within the floodplain, followed by Hartford with 8 facilities at risk.

Based on Hazus-MH analysis, there are 45 schools, 25 fire stations, 11 police stations, two EOCs, and one medical center within the 100-year floodplain. Discrepancies between Hazus and State facility data are common due in part to differing definitions of facilities and to which jurisdictions' facilities are counted.

Table 2-47. Critical Facilities in the Special Flood Hazard Area (SFHA).

County	EMS	Fire Station	Health Department	Law Enforcement	Storage Tank Farm	WPCF	County Totals
Fairfield	9	10	1	4	5	5	34
Hartford	0	3	0	2	2	8	15
Litchfield	7	9	0	5	0	10	31
Middlesex	3	2	0	0	2	2	9
New Haven	5	5	0	3	9	5	27
New London	6	6	1	4	0	3	20
Tolland	3	4	0	1	0	2	10
Windham	5	3	0	2	0	5	15
Totals	38	42	2	21	18	41	162

Table 2-48 shows the critical facilities within the 500 year floodplain. To determine the number of critical facilities within the 500 year floodplain, the buffered (30 feet) critical facility points were used and intersected with the FEMA 500-year floodplain. There are a total of 42, with Hartford County leading with 14 facilities, New Haven in second with 12 facilities, followed by Middlesex County with nine facilities within the 500-year floodplain.



Table 2-48. Critical Facilities in the 500 year Floodplain by County

County	EMS	Fire Station	Health Department	Law Enforcement	Storage Tank Farm	County Totals
Fairfield	1	2	0	1	1	5
Hartford	3	6	1	4	0	14
Middlesex	3	3	0	2	1	9
New Haven	3	4	1	4	0	12
New London	1	1	0	0	0	2
Totals	11	16	2	11	2	42

Connecticut has a total of 102 critical facilities within hurricane storm surge zones. In order to determine this number, the buffered critical facilities were intersected with Connecticut's storm surge layer. Table 2-49 provides totals for each hurricane category and jurisdiction. A Category 1 hurricane has maximum sustained wind speeds of 74-95 miles per hour (mph), Category 2 hurricanes have a maximum sustained wind speed of 96-110 mph, Category 3 hurricanes have a maximum sustained wind speed of 111-130 mph, and Category 4 hurricanes have a maximum sustained wind speed of 131-155 mph.

Fairfield County has the highest number of critical facilities within the storm surge zones. With a category 1 storm, Bridgeport has three storage tank farms and one law enforcement facility, Cos Cob has one fire station and one EMS facility, and Westport has one fire station and one EMS facility. A category 2 storm would put an additional 15 critical facilities within the storm surge zone: five critical facilities in Bridgeport, six facilities in Fairfield, three facilities in Norwalk, and one facility in Stamford. With a category 3 storm 13 more critical facilities would be at risk: two facilities in Bridgeport, two facilities in Norwalk, two facilities in Old Greenwich, six facilities in Stamford, and one facility in Stratford.

New Haven County has 29 critical facilities within hurricane storm surge zones 1 through 4. The majority of these critical facilities are located in the City of New Haven: a total of 14. Of the 14, six are located in Category 1, seven in Category 2 and one in Category 3.

Table 2-49. Critical Facilities in Hurricane Storm Surge Zones

County	Category 1	Category 2	Category 3	Category 4	Total (Cat 1-4)
Fairfield	8	15	13	7	43
Hartford	0	0	0	0	0
Litchfield	0	0	0	0	0
Middlesex	0	2	3	5	10
New Haven	6	13	3	7	29
New London	4	9	5	2	20



County	Category 1	Category 2	Category 3	Category 4	Total (Cat 1-4)
Total	18	39	24	21	102

In addition to SLOSH, the FEMA Modeling Task Force (MOTF) was able to provide over 1,300 surveyed high water marks from Hurricane Sandy storm surge that were used to create depth-grids and Hazus-MH analysis. Results of this analysis included 13 critical facilities within hurricane Sandy storm surge, five schools, six fire stations, and two police stations.

Out of the total 1,401 critical facilities in Connecticut, there are 752 that are located on areas susceptible to erosion. The four areas are: 1) Highly erodible soil and coarse grained erodible surficial materials, 2) Highly erodible soil and finer grained erodible surficial materials, 3) Erodeable surficial materials, and 4) Highly erodible soil. A breakdown of the types of critical facilities by county located on these areas is shown in Table 2-50. The table shows that EMS facilities and Fire Stations are most at risk, totaling 263 and 326 respectively. The counties with the highest number of critical facilities in areas susceptible to erosion are Hartford, New Haven and Fairfield, with 203, 152, and 128 facilities respectively.

Table 2-50. Critical Facility Types in Erosion Susceptibility Areas

County	EMS	Fire Station	Health Department	Law Enforcement	Storage Tank Farm	Total
Fairfield	53	51	5	17	2	128
Hartford	55	98	12	30	8	203
Litchfield	15	24	1	11	0	51
Middlesex	13	15	5	9	0	39
New Haven	48	64	10	29	1	152
New London	40	35	6	10	0	91
Tolland	15	15	1	3	0	34
Windham	24	24	0	6	0	54
Totals	263	326	40	112	11	752

Danbury and Stamford in Fairfield County have the highest number of critical facilities in areas susceptible to erosion. Danbury has 11 EMS facilities, 10 Fire Stations and 2 Law Enforcement facilities in these areas, while Stamford has 8 EMS Facilities, 10 Fire Stations, one Health Department facility, and two Law Enforcement facilities at risk. New Haven, Hartford and Manchester closely follow with 18 facilities located in areas susceptible to erosion.



**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for flood using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of historical impact including injuries and deaths, property damage, and the number of reported events. Annualized damages have been supplemented with NFIP claim information spanning 33 years of record. Geographic extent is represented by the percent floodplain area within each jurisdiction (Figure 2-42).

The composite flood hazard rank shows Hartford, New Haven and Fairfield as high risk, followed by Middlesex, New London and Windham as medium-high risk (Figure 2-44). Local plans in Windham and Middlesex, on average, have ranked flooding as high relative to the other jurisdictions.

Connecticut will continue to be at risk for flood events due to the geographic location along the Northeast Atlantic seaboard, abundance of waterways, and future projections by climate change models and studies that project an increase in more intense precipitation events punctuated by periods of drought conditions.<sup>58 59</sup>

Published climate change studies discuss an increase in extreme precipitation frequency, and an actual change in precipitation types and intensity throughout the next century. Tools developed by Cornell University, Northeast Regional Climate Center and Natural Resource Conservation Service include interactive data for extreme precipitation and frequency estimates. Using these tools, Hartford and Fairfield counties are have a slightly higher estimate for precipitation extremes, relative to Connecticut.<sup>60</sup> UCONN is currently completing regional models from this updated data.

The Sentinel Monitoring for Climate Change in Long Island Sound Program is a currently collecting, developing and synthesizing SLR products that will be stored on their data clearinghouse website.<sup>61</sup>

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<sup>58</sup> M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds) Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007

<sup>59</sup> Rosenzweig, C., G. Casassa, D.J. Karoly, A. Imeson, C. Liu, A. Menzel, S. Rawlins, T.L. Root, B. Seguin, P. Tryjanowski, 2007: Assessment of observed changes and responses in natural and managed systems. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 79-131.

<sup>60</sup> Cornell Extreme Precipitation in New York and New England. Version 1.12 Joint project between Northeast Regional Climate Center (NRCC) and Natural Resource Conservation Service (NRCS) <http://precip.eas.cornell.edu/> Assessed 8/26/2013.

<sup>61</sup> Sentinel Monitoring for Climate Change in Long Island Sound Program <http://longislandsoundstudy.net/research-monitoring/sentinel-monitoring/>

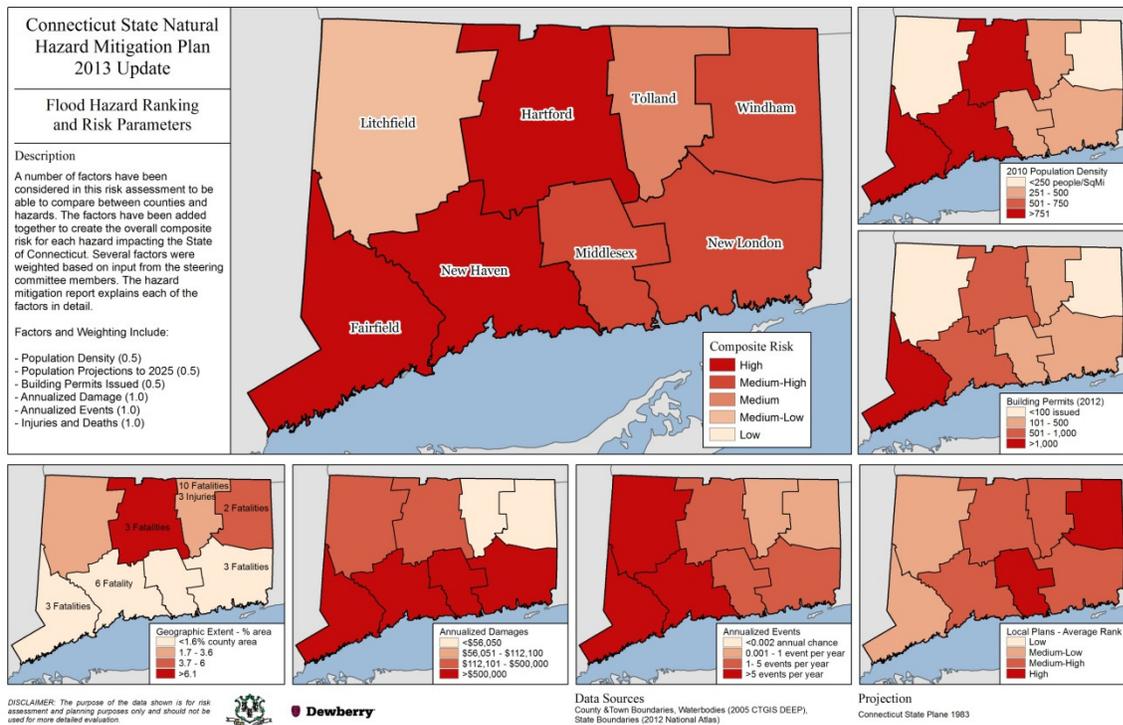


Figure 2-44. Flood NCDC relative ranking.

## 2.7.6 Sea Level Rise

Relative sea level rise (RSLR) presents a hazard that should be considered in long-term land use, development, and critical infrastructure planning. Relative sea level is the sea level related to the level of the continental crust. Relative sea level changes can thus be caused by absolute changes of the sea level and/or by absolute movements of the continental crust. Connecticut has large exposure to the potential impacts of RSLR, with over 618 miles of tidal shoreline on Long Island Sound and its inlets and significant areas of low elevation.<sup>62</sup>

The Sentinel Monitoring for Climate Change in Long Island Sound Program is a multidisciplinary scientific approach to provide early warning of climate change impacts to Long Island Sound ecosystems, species and processes to facilitate appropriate and timely management decisions and adaptation responses.<sup>63</sup> It has been such a successful collaborative project that Sentinel Monitoring is being scaled up for the entire Northeast and Gulf of Maine region through the joint Ecosystem Health Committee of Northeast Regional Ocean Council (NROC) and Northeast Regional Association of Coastal and Ocean Observing Systems (NERACOOS). With a scaled up Sentinel Monitoring program, CT and regional efforts can be leveraged to support key monitoring for discernible climate signals and impacts, as well as inform adaptation strategies to keep our ocean and coastal

<sup>62</sup> NOAA Office of Science and Technology webpage. New England summary of communities. July 2013.

<sup>63</sup> Sentinel Monitoring for Climate Change in Long Island Sound Program <http://longislandsoundstudy.net/research-monitoring/sentinel-monitoring/>



resources as healthy as possible. Data from this effort will be available on their data clearinghouse and will contain SLR data and trends.

Climate change, including the continued increase in global temperature, is projected to result in an acceleration of observed rates of RSLR. Projections in global increases in sea level by 2100 due to climate change range from 1-2 feet<sup>64</sup> up to 6.6 feet<sup>65</sup>. Although RSLR is a gradual process, impacts may be experienced in the near term. Some examples include increased frequency of low-level inundation, exacerbated flood elevations during storm events, increased rates of coastal erosion, and increased saltwater intrusion into groundwater. Continued coastal erosion from episodic events will result in more inundation on top of SLR, which is not just constant, but accelerating in Long Island Sound. Connecticut Department of Energy and Environmental Protection provided Mean High Water (MHW) Inundation data layers for analysis. Data includes MHW, and several variants using a simplistic approximation for the increase in sea level rise (Figure 2-45). It should be noted that the data is intended for planning purposes only and not to be used as regulatory or jurisdictional capacity.

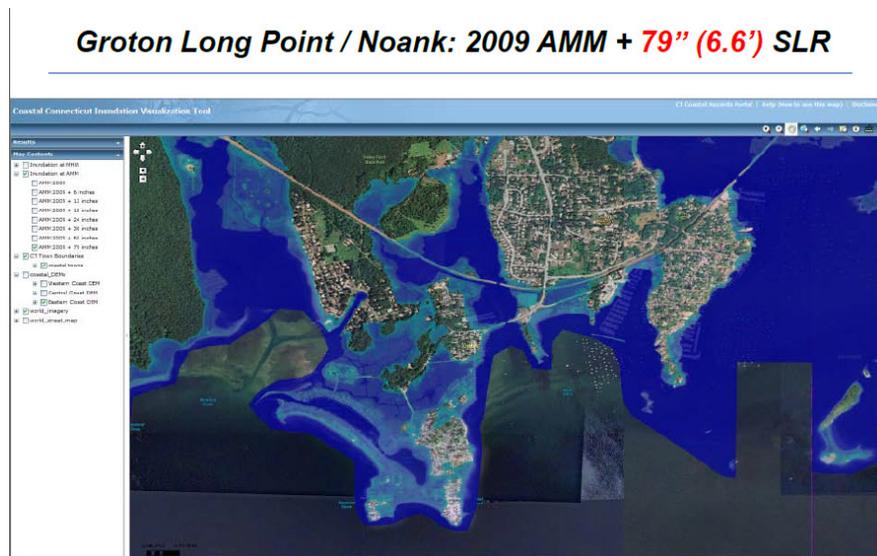


Figure 2-45. Sea Level Rise viewer. CTDEP-OLISP, NOAA Coastal Service Center and UCONN Marine Science Department

Heat waves, coastal flooding due to sea level rise, marine transgression, and river flooding due to more extreme precipitation event will pose a growing challenge to Connecticut. This will increase the vulnerability of the region's residents, especially those already disadvantaged. While several municipalities have already begun to incorporate the risk of

<sup>64</sup> IPCC, 2007: Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E.Hanson, Eds., Cambridge University Press, Cambridge, UK, 976pp.

<sup>65</sup> Pfeffer, W.T. et al, 2008: Kinematic Constraints on Glacier Contributions to 21st-Century Sea-Level Rise. Science 321, 1340.



climate change, implementation of adaption measures is still at early stages.<sup>66</sup> Effective October 1, 2013, climate change scenario planning needs to be considered as part of the requirements under CGS 28-5 subsection (g), and will therefore be included in future updates of this plan.

The Nature Conservancy's adaption decision-support tool shows projected inundation of land along the coast by the 2080s (Figure 2-46). The map show both building impacts and potential marsh ecosystem response as sea level rise.<sup>67</sup>

Many new and ongoing initiatives, including climate adaptation training for communities are outlined in Chapter 3.

Since natural hazards such as extreme storm events and flooding are expected to increase in frequency and magnitude with climate change, adaptation planning will be important to mitigate the effects of these hazards. The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change (GSC) is charged with the assessment of the impacts of climate change on Connecticut infrastructure, natural resources and ecological habitats, public health, and agriculture; and recommendation of adaptation strategies in accordance with the requirements of Public Act 08-98.

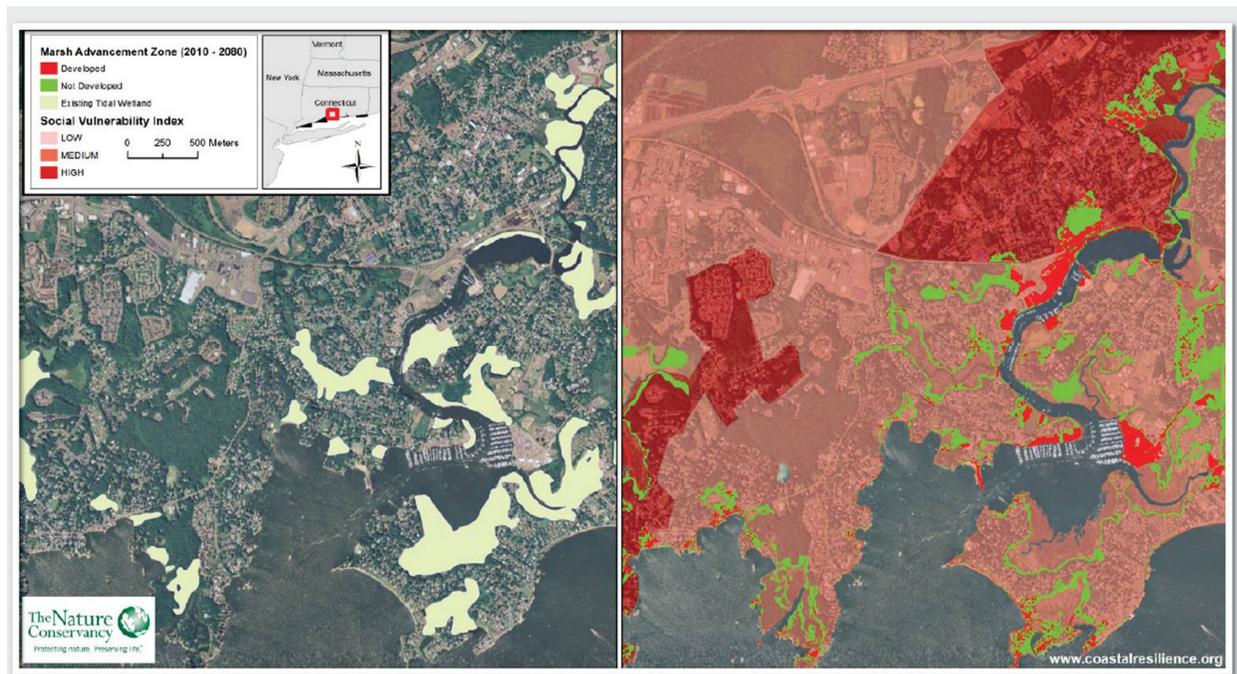


Figure 2-46. Connecticut coastline and expanding salt marshes.

<sup>66</sup> Global Change. Assess the US Climate. National Climate Assessment (NSA) Draft report Chapter 16 for the Northeast. V11 Jan 2013.

<sup>67</sup> The Nature Conservancy, 2012.



The Adaptation Subcommittee prepared the report “The Impacts of Climate Change on Connecticut Agriculture, Infrastructure, Natural Resources and Public Health” in 2010 as required by the Act. The report was organized into the four categories defined by the Act:

- Most of the agricultural features were found to be highly impacted by climate change, and most of these impacts were negative. The top five most imperiled agricultural planning areas or features in Connecticut were maple syrup, dairy, warm weather produce, shellfish and apple and pear production. There were opportunities for production expansion, including biofuel crops and witch hazel and grapes, with the future climate, as well as benefits identified for all agricultural planning areas.
- The infrastructure planning areas to be the most impacted by climate change were coastal flood control and protection, dams and levees, stormwater, transportation and facilities and buildings. Infrastructure planning areas were most affected by changes in precipitation and sea level rise, which could cause substantial structural and economic damage.
- The ecological habitats at the highest risk from climate change may be Cold Water Streams, Tidal Marsh, Open Water Marine, Beaches and Dunes, Freshwater Wetlands, Offshore Islands, Major Rivers, and Forested Swamps. These habitat types are broadly distributed from Long Island Sound and the coast to the upland watersheds and forests across Connecticut. The degree of impact will vary but, likely changes include conversion of rare habitat types (e.g., cold water to warm water streams, tidal marsh and offshore islands to submerged lands), loss and/or replacement of critical species dependent on select habitats, and the increased susceptibility of habitats to other on-going threats (e.g., fragmentation, degradation and loss due to irresponsible land use management, establishment of invasive species).
- Relative to public health, climate change will have the most impact on public health infrastructure, environmental justice communities, air quality and extreme heat ailments and vector-borne diseases. Climate change will impact public health infrastructure including hospitals, health departments, emergency medical services, private practices and shelters, due to direct impacts from extreme weather events, and increased use of resources to treat and shelter victims.

With the conclusion of the climate change impacts assessment phase, the Adaptation Subcommittee next developed recommended adaptation strategies for the most impacted features of Connecticut agriculture, infrastructure, natural resources and public health. The subcommittee's second report, “Connecticut Climate Change Preparedness Plan” (2011) is a response to the legislative requirement that the Adaptation Subcommittee identify strategies for adapting to the impacts of a changing climate in Connecticut. In this report, a number of strategies for addressing impacts to agriculture, infrastructure, natural resources, and public health. Much of the material for this section is derived from the Adaptation Subcommittee. Readers are referred to [www.ct.gov/deep.climatechange](http://www.ct.gov/deep.climatechange) for reports and detailed information on actions to date.



Communities (e.g. Bridgeport, Greenwich, Guilford, etc.) have or are developing adaptation plans. Since Connecticut is a “home rule” state and nearly all land use decision are made at the municipal level, planning and implementation of actions to reduce the impacts of SLR and climate change in general must happen at the local level. As outlined in Chapter 3, the State is providing significant guidance and assistance.

### Probability of Future Occurrence

It is difficult to assign quantitative probabilities to projections of sea level increases. Climate planning is being completed in an adaptive approach to allow for best available science to be continually updated. No widely accepted method is currently available for probabilistic projections at the regional or local level. Multiple scenarios allows for experts and decision makers to consider multiple future conditions and develop responses based on the information that may reduce future impacts and vulnerabilities.<sup>68</sup> While the science clearly indicates that SLR is occurring, using the probability range applied to the other hazards in this plan, Connecticut has a medium-low probability of future SLR events. The scenarios shown in Table 2-51 are based on four estimates of global SLR that reflect different degrees of ocean warming and ice sheet loss ranging from 0.2 meters (8 inches) to 2.0 meters (6.6 feet) by 2100. *These scenarios provide a set of plausible trajectories of global mean SLR for use in assessing vulnerability, impacts, and adaptation strategies. None of these scenarios should be used in isolation, and experts and coastal managers should factor in locally and regionally specific information on climatic, physical, ecological, and biological processes and on the culture and economy of coastal communities.*<sup>69</sup>

Table 2-51. Global SLR scenatios. \* Using mean sea level in 1992 as a starting point.

Scenario	SLR by 2100 (m)*	SLR by 2100 (ft)*
Highest	2.0	6.6
Intermediate-High	1.2	3.9
Intermediate-Low	0.5	1.6
Lowest	0.2	0.7

### Vulnerability and Loss Estimation

RSLR hazard layers were provided that represent inundation extents for generalized RSLR scenarios of 0.5, 1.0, 1.5, 2.0, 3.0, and 5.0 feet, relative to mean sea level. Exposure and risk to the three risk classes of RSLR were evaluated by intersecting the RSLR hazard layers with the critical and state-owned facility geospatial database. Reported values represent exposed assets in the inundation range of the hazard layer. Occurrence of a higher range scenario would accumulate risk in a step-wise fashion on top of a lower range scenario.

<sup>68</sup> Parris, A., P. Bromirski, V. Burkett, D. Cayan, M. Culver, J. Hall, R. Horton, K. Knuuti, R. Moss, J. Obeysekera, A. Sallenger, and J. Weiss. 2012. Global Sea Level Rise Scenarios for the US National Climate Assessment. NOAA Tech Memo OAR CPO-1. 37 pp.

<sup>69</sup> Parris, A., P. Bromirski, V. Burkett, D. Cayan, M. Culver, J. Hall, R. Horton, K. Knuuti, R. Moss, J. Obeysekera, A. Sallenger, and J. Weiss. 2012. Global Sea Level Rise Scenarios for the US National Climate Assessment. NOAA Tech Memo OAR CPO-1. 37 pp.



Exposed state-owned and critical facilities and exposed asset value were tabulated by county. Counties with no exposure were excluded from reporting. Counts of State Owned and Critical facilities are reported Table 2-52, Table 2-53 and Appendix 2.

Table 2-52. State facilities intersection with RSLR scenarios.

County	Number of State Facilities Intersecting SLR Scenario							
	6.5' SLR	5' SLR	3' SLR	2' SLR	1.5' SLR	1' SLR	0.5'SLR	MHW
Fairfield	10	5	0	0	0	0	0	0
New Haven	50	18	7	4	1	0	0	0
New London	20	8	4	4	4	3	3	3

Table 2-53. Critical facilities intersection with RSLR scenarios.

County	Facility Type	Number of Structures Intersecting SLR Scenario							
		6.5' SLR	5' SLR	3' SLR	2' SLR	1.5' SLR	1' SLR	0.5'SLR	MHW
Fairfield	Law Enforcement	2	0	0	0	0	0	0	0
	EMS	2	2	0	0	0	0	0	0
	Fire Station	2	2	0	0	0	0	0	0
	Storage Tank Farm	2	1	0	0	0	0	0	0
New Haven	EMS	2	1	0	0	0	0	0	0
	Fire Station	3	2	0	0	0	0	0	0
	Storage Tank Farm	2	2	0	0	0	0	0	0
New London	Law Enforcement	2	1	1	0	0	0	0	0
	EMS	3	2	2	0	0	0	0	0
	Fire Station	3	2	2	0	0	0	0	0

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

### 2.7.7 Dam Failure

**Dam Failure** – In hydrologic terms, a catastrophic event characterized by the sudden, rapid, and uncontrolled release of impounded water.<sup>70</sup>

#### Hazard Profile

Dam failures can result from natural events, human-induced events, or a combination of the two. Failures due to natural events such as prolonged periods of rainfall and flooding

<sup>70</sup> NOAA's online glossary of meteorology and climatology terms.  
Natural Hazard Identification and Risk Assessment



can result in overtopping, which is the most common cause of dam failure. Overtopping occurs when a dam's spillway capacity is exceeded and portions of the dam which are not designed to convey flow begin to pass water, erode away, and ultimately fail. Other causes of dam failure include design flaws, foundation failure, internal soil erosion, inadequate maintenance, or misoperation. Complete failure occurs if internal erosion or overtopping results in a complete structural breach, releasing a high-velocity wall of debris-laden water that rushes downstream, damaging or destroying everything in its path. An additional hazard concern is the cascading effect of one dam failure causing multiple dam failures downstream due to the sudden release of flow.

While dam failures that occur during flood events compound an already tenuous situation and are certainly problematic, the dam failures that occur on dry days are the most dangerous. These "dry day" dam failures typically occur without warning, and consequently, downstream property owners and others in the vicinity are more vulnerable to being unexpectedly caught in life threatening situations than failures during predicted flood events.

### **History of Dam Failure Occurrences in Connecticut**

Connecticut has experienced many dam failures, mainly resulting from major flood events. Historically, however, the consequences of dam failures have not been well documented. Descriptions of previous dam failure events provided in this section are based on anecdotal data from CT DEEP in combination with data available from the National Performance of Dams Program (NPDP) at Stanford University, the Association of State Dam Safety Officials, and NCDC.

One of the worst known dam failures in Connecticut occurred in March 1963, when Spaulding Pond Dam in Norwich (New London County) failed, causing six fatalities and more than \$6 million in damages (1963 dollars). Two years earlier, in April 1961, Crystal Lake Dam in Middletown (Middlesex County) burst, injuring three people, severely damaging 11 homes, and causing an estimated \$600,000 in damages (1961 dollars). On the weekend of June 5-6, 1982, Connecticut suffered one of its worst floods since 1955. Throughout the state, 17 dams failed and another 31 dams were seriously damaged due to a rainfall event that produced up to 18 inches of rain and resulted in damages totaling \$70 million. This event included the failure of the Bushy Mill Pond Dam in Deep River (Middlesex County), which caused an estimated \$1 million in damage according to the NPDP database (Figure 2-47).



Figure 2-47. Downstream damage due to the 1982 Bushy Hill Pond Dam Break.

In June 2001, torrential rainfall associated with the remnants of Tropical Storm Allison caused a private dam in Hampton (Windham County) to fail, which closed a portion of Route 97, but according to NCDC data resulted in no reported damages.

In October 2005, Connecticut experienced moderate to major flooding statewide. Major flooding occurred in several river basins in Hartford and Tolland counties and widespread moderate flooding was experienced across the rest of the state. Flood flow frequencies exceeded a 100-year event in parts of north-central and northeastern Connecticut. CT DEEP is aware of 14 dams which completely failed or partially failed in Hartford and Tolland counties. Another 30 dams were damaged throughout Connecticut. Several bridges failed and several dozen roads were washed out or undermined. Thousands of homes experienced flooded basements and evacuations were conducted in dozens of towns due to severe flooding. As a result of the flooding that resulted in an estimated \$42 million in damages, with more than 5,200 homes and 355 businesses impacted, President Bush declared Litchfield, New London, Tolland, and Windham counties disaster areas.

According to the NPDP database, there are 38 incidents recorded as dam failures in the state since 1877, of which 25 are attributed to the 1982 flood event. The NPDP database does not include any of the reported dam failure events from 2005. Further, exact numbers of dam failures caused by Connecticut's record flood events in 1938 and 1955 are not available, but anecdotal information suggests that many more dams were damaged during those storm events than in the more recent 1982 or 2005 flood events. Table 2-54 provides a history of recorded consequences for dam failure events in Connecticut according to the NPDP database.



County	Number of Events	Property Damages
Fairfield	2	\$ -
Hartford	2	\$870
Litchfield	1	\$0
Middlesex	14	\$7,258,996
New Haven	3	\$4,685,683
New London	7	\$44,397,208
Tolland	5	\$1,276,322
Windham	3	\$6,525,037
Total	38	\$64,144,116

### Probability of Future Occurrence

While generally considered an unlikely occurrence, the potential for dam failure in Connecticut is a significant concern given the large number of dams across the state and the fact there have been numerous dam failure events in the past. The probability of future dam failure events is not easily measured, but correlates to some extent with the probability of future major flood events coupled with preventative measures, including the routine inspection, maintenance, repair, and proper operation of dams by their owners, and as regulated by CT DEEP's Dam Safety Section. Based on historical NPDP information, it is reasonable to assume that Connecticut has a medium-low probability of future dam failure events.

The Dam Safety Section is tasked with monitoring the routine inspection and maintenance of those dams that present the greatest risk or are in need of structural repair. State regulations require that over 600 dams in Connecticut must be inspected annually, with priority placed on those dams which pose the greatest potential threat to downstream persons and properties. Other structures are inspected as time and funding permit, and upon notification of potentially significant deficiencies or emergency conditions. Dam owners are responsible for complying with maintenance and repair requirements and developing Emergency Operations Plans (EOPs), which are required for high and significant hazard dams.

Dams which receive construction permits for repair and/or reconstruction are designed to pass at least the 100-year rainfall event with one foot of freeboard (a factor of safety against overtopping). The most critical and hazardous dams are required to meet a spillway design standard much higher than passing the runoff from a 100-year rainfall event. Although not all of the dams under CT DEEP jurisdiction have been shown to be able to withstand the 100-year rainfall event, most of the dams meet this standard due to original design requirements or recent spillway upgrades. For the most part if smaller rainfall events (e.g., 10-year and 25-year events) occur more frequently there will be little impact on the ability of Connecticut dams to operate safely.



As more and more state-owned and privately owned dams are repaired, the number of dams that will not meet the State minimum requirements for spillway design diminishes. However, the average age of all dams in Connecticut continues to increase and thus the State must remain vigilant in administering its dam safety regulations and related programs.

There is no particular season or geographic location that is more susceptible to dam failures than another in Connecticut. However, CT DEEP has started to monitor climate change predictions as they affect the numbers of and severity of heavy rain events in Connecticut. Since dam overtopping caused by excessive rainfall is the leading cause of dam failures in Connecticut, it is appropriate to relate the future vulnerability of dams directly with the potential for increased rainfall in Connecticut.

### Vulnerability and Loss Estimation

Dams have been an important part of Connecticut’s water infrastructure for centuries. In addition to the historic economic benefits provided by dams, they are used for flood control, water supply, power generation, recreation, and for mitigating the impact of increased runoff typically caused by land use changes associated with property development. Today there are nearly 4,000 dams in the State of Connecticut (3,958), which because of their size and location pose a potential hazard to downstream properties. These dams are all regulated by CT DEEP under Connecticut General Statutes which require that permits be obtained to construct, repair or alter dams, and that existing dams be registered and periodically inspected to assure that their continued operation and use does not constitute a hazard to life, health or property. A failure of most of these dams would not be catastrophic, but 711 of these dams pose a possible or even a probable threat to human life upon failure. Information on dams is not provided for general public distribution due to security reasons. Requests for this information may be submitted either to the CT DEMHS or CT DEEP.

Two factors influence the severity of a dam failure: the amount of water impounded, and the density, type, and value of development and infrastructure located downstream. The potential severity of a dam failure may be classified for each dam according to its “hazard potential,” meaning the probable impact that would occur if the structure failed in terms of loss of human life and economic loss or environmental damage. The State of Connecticut classifies dam structures under its regulations according to hazard potential as described in Table 2-55. These classifications are based solely on the types of impacts expected if a dam were to fail—they are not related to the adequacy or structural integrity of the dams themselves.

Table 2-55. Classifications of Hazard Potential for Connecticut Dams.

Class	Hazard Potential	Description of Impacts
AA	Negligible	No measurable damage to roadways; no measurable damage to land and structures; negligible economic loss.



Class	Hazard Potential	Description of Impacts
A	Low	Damage to agricultural land; damage to unimproved roadways; minimal economic loss.
BB	Moderate	Damage to normally unoccupied storage structures; damage to low volume roadways; moderate economic loss.
B	Significant	Possible loss of life; minor damage to habitable structures, residences, hospitals, convalescent homes, schools, etc.; damage to or interruption of the use of service of utilities; damage to primary roadways and railroads; significant economic loss.
C	High	Probable loss of life; major damage to habitable structures, residences, hospitals, convalescent homes, schools, etc.; damage to main highways; great economic loss.

Table 2-56 provides a breakdown of the regulated dams in Connecticut by hazard potential. Of the total 3,958 dams, 266 are classified as having high hazard potential (major damage and probable loss of life) and 445 are classified as having a significant hazard potential (minor damage and possible loss of life). The remaining dams are not considered to pose a threat to life and safety following a failure, and only minimal to moderate damages or economic loss.

Table 2-56. State-regulated dams in Connecticut, by hazard potential.

Hazard Classification	Number of Dams	Percentage
C – High Hazard	266	7%
B – Significant Hazard	445	11%
BB – Moderate Hazard	543	14%
A – Low Hazard	1,704	43%
AA – Negligible Hazard	103	2%
Unclassified	897	23%
Total Regulated Dams	3,958	100%

Figure 2-48 shows the location of all state-regulated dams in Connecticut according to their assigned hazard potential along with mapped inundation areas for 177 dams. In addition, the 276 state-owned dams in the state are highlighted in green on the map. Table 2-57 lists the number of dams located in each county, according to their hazard potential.

Table 2-57. State-regulated dams in each county, by hazard potential.

County	High Hazard	Significant Hazard	Moderate Hazard	Low Hazard	Negligible Hazard
Fairfield	49	79	95	468	134
Hartford	48	50	66	224	147



County	High Hazard	Significant Hazard	Moderate Hazard	Low Hazard	Negligible Hazard
Litchfield	50	73	82	243	198
Middlesex	16	47	57	139	80
New Haven	59	78	72	186	109
New London	19	53	56	196	144
Tolland	14	36	45	123	92
Windham	11	29	70	125	96
Total	266	445	543	1,704	1,000

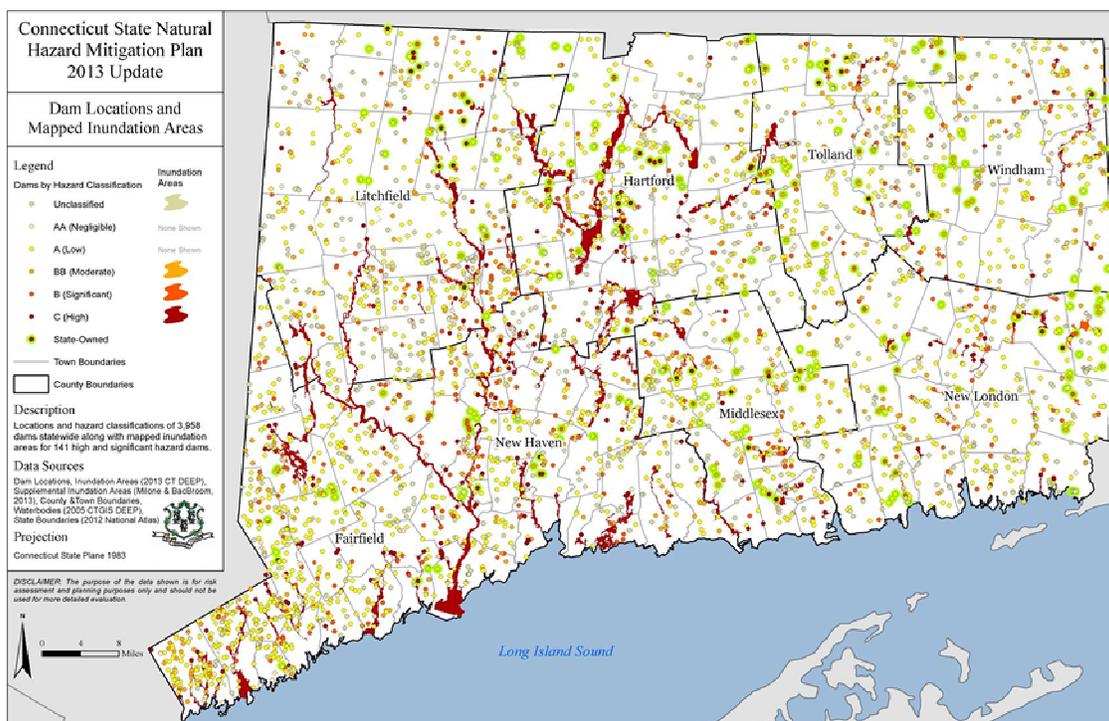


Figure 2-48. Locations of state-regulated dams and mapped inundation areas.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

**State Facilities Exposure.** The state contains over 3,300 state-owned buildings totaling \$8.7 Billion in building values.<sup>71</sup> Table 2-58 provide a breakdown of the numbers and values of state-owned buildings intersecting mapped dam failure inundation areas of high and significant hazard dams by county. A total of 68 state-owned buildings (2.0% of the total

<sup>71</sup> Building values are not currently mapped to the database for Fairfield, Hartford, Litchfield, Middlesex, and New Haven counties, therefore exposure estimates are incomplete at this time.



number of state-owned buildings in the state) are located within a known potential dam failure hazard area; 46 of these are in Fairfield County. It is important to note however that dam failure inundation mapping is only currently available for 177 of the 3,958 dams in the state and none of the buildings with known building value were within the dam inundation areas.

Table 2-58. Number of state-owned buildings within mapped dam inundation areas.

County	Total State-Owned Buildings	# Buildings High Hazard Dam Inundation	# Buildings Significant Hazard Dam Inundation	Total Buildings At Risk	Total Percent At Risk
Fairfield	205	44	2	46	22.4%
Hartford	872	1	0	1	0.1%
Litchfield	97	14	0	14	14.4%
Middlesex	289	1	0	1	0.3%
New Haven	556	6	0	6	1.1%
New London	489	0	0	0	0.0%
Tolland	628	0	0	0	0.0%
Windham	191	0	0	0	0.0%
Total	3,327	66	2	68	2.0%

**Population Exposure.** The total population for the state according to the 2010 US Census is 3,574,097. Table 2-59 provides a breakdown by county of the numbers of people intersecting mapped dam failure inundation areas. This analysis was conducted by intersecting census block groups with dam inundation layers using GIS. In instances where only a portion of the census block group intersected the hazard area, only that same portion of the population is counted. For example, if 20% of the census block group intersects with a dam inundation area, only 20% of the population number for that census block group is counted). This results in estimated values and there is potential for error with this methodology, but this is considered a more refined approach than assuming 100% of the population is contained within the 20% of the census block group that intersects the hazard area. The total population at risk is estimated at 108,095, which is 5.0% of the total population of the state. It is important to note however that dam failure inundation mapping is only currently available for 177 of the 3,958 dams in the state.

Table 2-59. Population within mapped dam inundation areas.

County	Total Population (2010)	High Hazard Dam Inundation		Significant Hazard Dam Inundation		Total Population At Risk	Total % At Risk
		Population at Risk	% Population at Risk	Population at Risk	% Population at Risk		
Fairfield	916,829	78,384	8.5%	1,082	0.1%	79,466	8.7%
Hartford	894,014	11,944	1.3%	0	0.0%	11,944	1.3%
Litchfield	189,927	12,477	6.6%	130	0.1%	12,607	6.6%



County	Total Population (2010)	High Hazard Dam Inundation		Significant Hazard Dam Inundation		Total Population At Risk	Total % At Risk
		Population at Risk	% Population at Risk	Population at Risk	% Population at Risk		
Middlesex	165,676	2,822	1.7%	0	0.0%	2,822	1.7%
New Haven	862,477	62,479	7.2%	1,062	0.1%	63,541	7.4%
New London	274,055	2,387	0.9%	2,264	0.8%	4,651	1.7%
Tolland	152,691	3,585	2.3%	565	0.4%	4,150	2.7%
Windham	118,428	914	0.8%	0	0.0%	914	0.8%
Total	3,574,097	174,992	4.9%	5,103	0.1%	180,095	5.0%

**Critical Facilities Exposure.** The state contains 1,401 identified critical facilities in the categories of correctional institutions, EMS facilities, fire stations, health departments, law enforcement facilities, nuclear power plants, and storage tank farms. Table 2-60 provides a breakdown of the numbers of critical facilities intersecting mapped dam failure inundation areas of high and significant hazard dams by county. A total of 54 critical facilities (3.9% of the total number of critical facilities in the state) are located within a known potential dam failure hazard area.

Table 2-60. Number of critical facilities within mapped dam inundation areas.

County/Facility Types	All Critical Facilities	High Hazard Dam Inundation		Significant Hazard Dam Inundation		Total # At Risk	Total % At Risk
		# Critical Facilities	% Critical Facilities	# Critical Facilities	% Critical Facilities		
Fairfield							
Correctional Institutions	4	1	25.0%	0	0.0%	1	25.0%
EMS	116	4	3.4%	1	0.9%	5	4.3%
Fire Stations	113	4	3.5%	1	0.9%	5	4.4%
Health Departments	20	1	5.0%	0	0.0%	1	5.0%
Law Enforcement	34	1	2.9%	0	0.0%	1	2.9%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	7	0	0.0%	0	0.0%	0	0.0%
Total	294	11	3.7%	2	0.7%	13	4.4%
Hartford							
Correctional Institutions	6	0	0.0%	0	0.0%	0	0.0%
EMS	75	1	1.3%	0	0.0%	1	1.3%
Fire Stations	133	1	0.8%	0	0.0%	1	0.8%
Health Departments	15	0	0.0%	0	0.0%	0	0.0%
Law Enforcement	43	0	0.0%	0	0.0%	0	0.0%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	8	0	0.0%	0	0.0%	0	0.0%



County/Facility Types	All Critical Facilities	High Hazard Dam Inundation		Significant Hazard Dam Inundation		Total # At Risk	Total % At Risk
		# Critical Facilities	% Critical Facilities	# Critical Facilities	% Critical Facilities		
Total	280	2	0.7%	0	0.0%	2	0.7%
<b>Litchfield</b>							
Correctional Institutions	0	0	0.0%	0	0.0%	0	0.0%
EMS	34	2	5.9%	0	0.0%	2	5.9%
Fire Stations	52	4	7.7%	0	0.0%	4	7.7%
Health Departments	3	1	33.3%	0	0.0%	1	33.3%
Law Enforcement	24	2	8.3%	0	0.0%	2	8.3%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	0	0	0.0%	0	0.0%	0	0.0%
Total	113	9	8.0%	0	0.0%	9	8.0%
<b>Middlesex</b>							
Correctional Institutions	1	0	0.0%	0	0.0%	0	0.0%
EMS	31	1	3.2%	0	0.0%	1	3.2%
Fire Stations	36	1	2.8%	0	0.0%	1	2.8%
Health Departments	8	0	0.0%	0	0.0%	0	0.0%
Law Enforcement	17	0	0.0%	0	0.0%	0	0.0%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	3	0	0.0%	0	0.0%	0	0.0%
Total	96	2	2.1%	0	0.0%	2	2.1%
<b>New Haven</b>							
Correctional Institutions	5	0	0.0%	0	0.0%	0	0.0%
EMS	74	9	12.2%	0	0.0%	9	12.2%
Fire Stations	114	7	6.1%	0	0.0%	7	6.1%
Health Departments	15	0	0.0%	0	0.0%	0	0.0%
Law Enforcement	40	4	10.0%	0	0.0%	4	10.0%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	10	0	0.0%	0	0.0%	0	0.0%
Total	258	20	7.8%	0	0.0%	20	7.8%
<b>New London</b>							
Correctional Institutions	1	0	0.0%	0	0.0%	0	0.0%
EMS	75	1	1.3%	0	0.0%	1	1.3%
Fire Stations	65	1	1.5%	0	0.0%	1	1.5%
Health Departments	12	0	0.0%	0	0.0%	0	0.0%
Law Enforcement	29	1	3.4%	0	0.0%	1	3.4%
Nuclear Power Plant	1	0	0.0%	0	0.0%	0	0.0%



County/Facility Types	All Critical Facilities	High Hazard Dam Inundation		Significant Hazard Dam Inundation		Total # At Risk	Total % At Risk
		# Critical Facilities	% Critical Facilities	# Critical Facilities	% Critical Facilities		
Storage Tank Farm	2	0	0.0%	0	0.0%	0	0.0%
Total	185	3	1.6%	0	0.0%	3	1.6%
Tolland							
Correctional Institutions	3	0	0.0%	0	0.0%	0	0.0%
EMS	34	1	2.9%	0	0.0%	1	2.9%
Fire Stations	35	2	5.7%	0	0.0%	2	5.7%
Health Departments	2	0	0.0%	0	0.0%	0	0.0%
Law Enforcement	11	1	9.1%	0	0.0%	1	9.1%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	0	0	0.0%	0	0.0%	0	0.0%
Total	85	4	4.7%	0	0.0%	4	4.7%
Windham							
Correctional Institutions	1	0	0.0%	0	0.0%	0	0.0%
EMS	40	0	0.0%	0	0.0%	0	0.0%
Fire Stations	37	0	0.0%	0	0.0%	0	0.0%
Health Departments	1	0	0.0%	0	0.0%	0	0.0%
Law Enforcement	11	1	9.1%	0	0.0%	1	9.1%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	0	0	0.0%	0	0.0%	0	0.0%
Total	90	1	1.1%	0	0.0%	1	1.1%
Statewide Total	1,401	52	3.7%	2	0.1%	54	3.9%

**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for dam inundation using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Annualized events, damages, and deaths/injuries have been supplemented with the NPDP data covering 135 years of record. Geographic extent is represented by the number of high or significant dams per jurisdiction. New London and Middlesex counties have a higher risk due to dam failure based on number of dams in the county and previous events resulting in deaths and injuries (Figure 2-49). The lower overall composite score for Litchfield County is primarily being driven by the population factors and building permit numbers, as compared to the rest of the state.

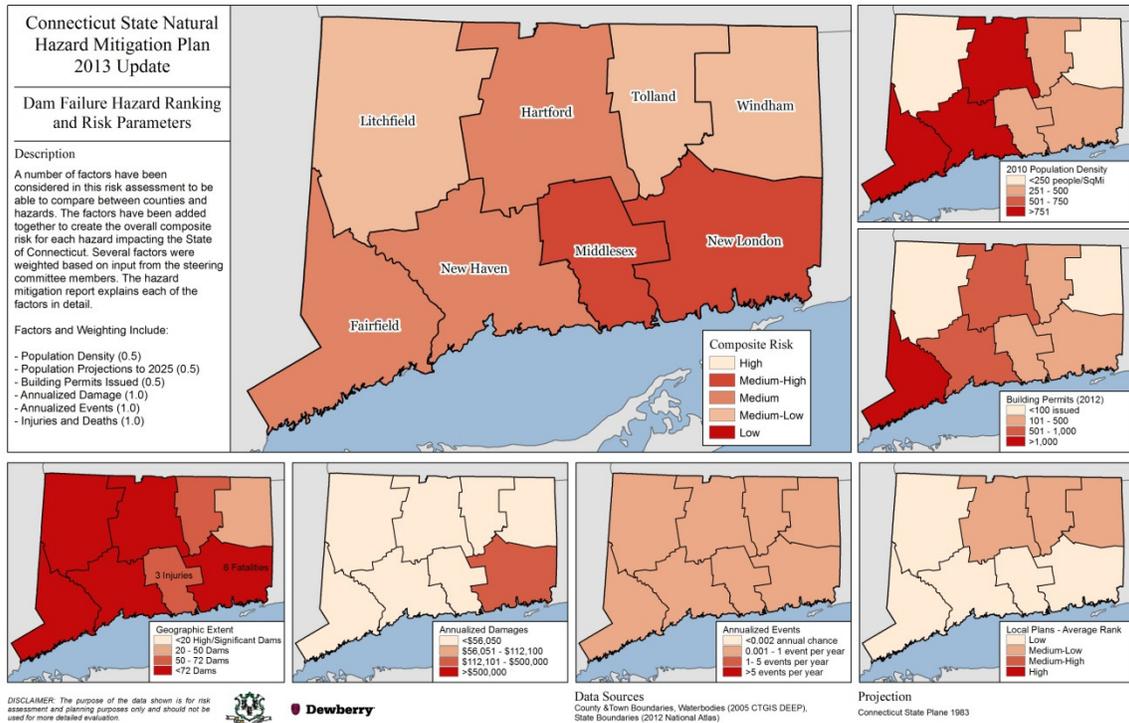


Figure 2-49. Dam Inundation relative ranking.

### 2.7.8 Wildland Fire

**Wildland Fire** – Any non-structure fire, other than prescribed fire, that occurs in the wildland.

**Wildland-Urban Interface** – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

### Hazard Profile

According to the U.S. Bureau of Land Management, in order to have any type of fire, wildland or otherwise, three elements must be present:

- Fuel – something which will burn (e.g., vegetation, houses, paper, etc.);
- Heat – enough to make the fuel burn (e.g., match, spark from a machine, or lightning); and
- Oxygen – air around us. (See Figure 2-50.)

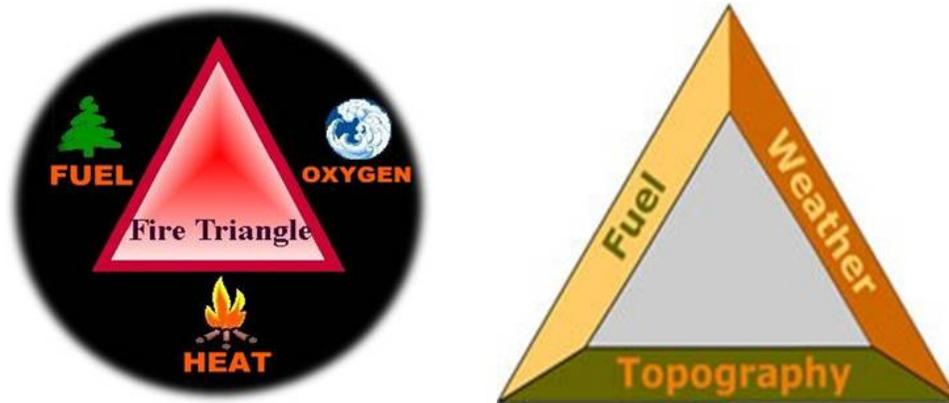


Figure 2-50. Wildland fire ignition and behavior. Left: Fire Triangle. Source USBLM. Right: Fire Behavior Triangle. Source NOAA

The cause of a wildland fire can be natural (e.g., lightning strike) or human induced (e.g., intentional acts of arson, negligently discarded cigarettes, unattended open burning of debris, unattended campfires, etc.). When not quickly detected and contained, wildland fires have the potential to cause extensive damage to property and threaten human life. Other impacts may include:<sup>72</sup>

- Increase in the potential for flooding, debris flows, or landslides;
- Increase in pollutants in the air that can cause significant health problems;
- Destruction of timber, forage, wildlife habitats, scenic vistas, and watershed, on a temporary basis;
- Development of long-term impacts such as reduced access to recreational areas, destruction of community infrastructure, and cultural and economic resources.

Firefighters are trained to fight either structural (building) fires or wildland fires, and they typically maintain a primary focus on one and a secondary focus on the other. Structural firefighting focuses on reducing the heat or the oxygen side of the fire triangle. With wildland fires, firefighters focus their main efforts on reducing the fuel side of the triangle.<sup>73</sup> There are four types of fuels which are a concern for wildland fires:<sup>74</sup>

- Ground Fuels – organic soils, forest floor duff, stumps, dead roots, and buried fuels;
- Surface Fuels – litter layer, downed woody materials, dead and live plants to two meters in height;
- Ladder Fuels – vine and draped foliage fuels; and
- Canopy Fuels – tree crowns.

The abundance of a specific fuel type will help to determine which wildland areas may be at higher risk for a specific class of wildland fire: surface fire (surface and ladder fuels); ground fire (ground fuels); or crown fire (ladder and canopy fuels).<sup>75</sup>

<sup>72</sup> Source: USGS factsheet, Wildfire Hazards, A National Threat.

<sup>73</sup> Source: South Carolina Forestry Commission website.

<sup>74</sup> Source: Forest Encyclopedia Network.

<sup>75</sup> FEMA, *Protecting Your Home or Small Business From Disasters*, December 2005, publication number IS-394.A. Natural Hazard Identification and Risk Assessment



An important aspect to any fire is how it behaves. The USDA Forest Service defines fire behavior as, “the manner in which fuel ignites, flame develops, and fire spreads as determined by the interaction of fuel, weather, and topography.” (See Figure 2-50). There are three important weather factors that affect fire start, fire spread, and fire weather danger:

- Wind – most important factor since it dries out fuel and drives a fire;
- Relative humidity – affects fuel moisture; and
- Precipitation.

A wildland fire becomes a very high concern and dangerous situation when it occurs or threatens to move into a geographic area commonly referred to as the wildland-urban interface (WUI). The WUI is comprised of two distinct areas: interface and intermix. For both areas, the housing density must be at least one structure per 40 acres (or 16 hectares). The difference between the two types of WUI areas is the relation of vegetation in association with structures. Intermix areas are described as areas where housing and vegetation intermingle, with at least 50 percent vegetation. Interface areas are described as areas with housing in the vicinity of contiguous wildland vegetation, having less than 50 percent vegetation, but within 1.5 miles of an area greater than 1,325 acres in size that is more than 75 percent vegetated.<sup>76</sup>

The magnitude of wildland fire events is often characterized by their speed of propagation, total number of acres burned, and potential destructive impacts to people and property. The severity and impact of a wildland fire is greatly dependent on how it behaves (as described above), in combination with fire detection, control, and suppression capabilities.

Fire suppression is the primary activity utilized at all levels of fire management (Federal, state, and local) to deal with wildland fires. Although fire suppression activities can reduce or eliminate the frequent threat of small wildland fires, it has also promoted the continued growth of vegetation in areas where regular intervals of fire would reduce fuel loads, increasing fire susceptibility.

In addition to fire suppression activities, State and local fire departments engage in many prevention activities, including public awareness activities and limitations on open burning, especially during increased fire danger levels. Some communities also proactively engage in local wildland fire mitigation programs that encourage fire safety and prevention activities at a neighborhood or property-owner level, including but not limited to fuel reduction, defensible space creation, fire resistant construction, and emergency planning.

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<sup>76</sup> Source: Silvis Lab, University of Wisconsin website.



## History of Wildland Fire Occurrences in Connecticut

Connecticut is one of the most heavily forested states in the nation. Forests and wildland cover 1.8 million acres of land, or approximately 60 percent of the state’s total land area (Figure 2-5). While wildland fires have historically, and continue to be, a very frequent occurrence, the Division of Forestry estimates that these incidents burn only approximately 1,300 acres per year—less than a fraction of one percent of the total forested acreage in the state. This is due to the fact that most wildland fires are quickly detected, contained, and suppressed before they are able to spread.

Connecticut traditionally experiences high forest fire danger in the spring from mid-March through May, but there are generally three different wildland fire seasons for the state:

- Spring Fire Season – mid-March to mid-May;
- Summer Fire Season – mid-May through September; and
- Fall Fire Season – October through snow fall.

The Division of Forestry maintains statistical records concerning wildland fire occurrences in the state. Reporting of wildland fires is based on the National Fire Incident Reporting System (NFIRS). This system has greatly improved the accuracy of reported data concerning wildland fires (cause, size, etc.). However, it is believed that many additional small fires have occurred but gone unreported.

Table 2-61 summarizes the NFIRS data on reported wildland fire events from 1991 to 2013. According to these records, there have been 5,415 events reported since 1991. The average fire size (total acres burned) per incident is very small at only 2.33 acres. According to the Division of Forestry, there are no significant property damages or human casualties attributed to past wildland fire events.

Table 2-61. Summary of reported wildland fire events. (2013)

County	Number of Events	Total Acres Burned	Average Fire Size	Primary Cause	Second Leading Cause
Fairfield	409	578.15	1.47	Incendiary	Unknown 2 <sup>nd</sup> , Campfire 3 <sup>rd</sup>
Hartford	357	1,431.65	4.21	Unknown	Incendiary
Litchfield	1,409	2,349.95	1.71	Unknown	Debris Burning
Middlesex	465	1,311.95	2.87	Unknown	Debris Burning
New Haven	1,371	3946.44	2.90	Unknown	Incendiary
New London	453	813.01	1.81	Unknown	Debris Burning
Tolland	387	592.81	1.53	Unknown	Debris Burning
Windham	564	1,161.15	2.08	Unknown	Incendiary
Total	5,415	12,185.11	2.33		

Only one wildland fire incident in the past 15 years burned greater than 300 acres. This occurred in October 1997. The vast majority of wildland fires in the state are less than 5 acres in size. The primary cause of wildland fires in seven of the eight counties in the state



is “unknown.” The secondary causes of wildland fires in Connecticut are incendiary (arson) and debris burning.

During the past 10 years, the worst wildland fire year in terms of number of fires was 2012 with 577 separate wildfire events. The worst year in terms of acres burned was 1999 when 2,267 acres burned.

### **Probability of Future Occurrence**

Wildland fires will continue to be a highly probable occurrence (>5 events per year) in Connecticut, though the size and severity of these events are deemed minimal due to the rapid detection, containment, and suppression of fire incidents.

Although the total land mass of Connecticut is much smaller in comparison to larger mid-western and western states, and recent history suggests that wildland fires are not currently a major hazard threat for the state overall, wildland fires may pose a greater threat in the future. This is due to a combination of factors, including but not limited to increasing population densities in WUI areas, increasing fuel loads due to disease, pests, and storm events that result in dieback of mature trees, and potentially drier, longer, and more severe fire seasons as a result of climate change. Each of these factors is described in more detail below.

Recent extreme weather events, including Tropical Storm Irene, Winter Storm Alfred, Winter Storm Nemo, and other snow/ice/wind events caused heavy damage and dieback to forested areas throughout the state. These impacts have resulted in a significantly increased amount of woody debris and fuel loads, increasing the probability of future wildfire occurrences.

The USDA Forest Service states that wildland and forest ecosystems are very complex and it is difficult to project what the exact impacts of climate change may be on such systems.<sup>77</sup> Climate change studies for the Northeast<sup>78</sup> indicate that over the next century, the existing forest habitat range may move 300 to 500 miles northward. Thus trees and vegetation currently found in the forests and wildland areas of Connecticut today would be replaced over the next century with tree species and vegetation more adapted to a warmer climate. This change in the flora composition will have an effect on the existing risk of wildland fires due to changes in the fuel load wildland areas will develop. In addition it has been projected that climate change will have an effect on the state's wildland areas by creating a warmer climate more conducive to invasive plant species and destructive vectors that will change the fire regime.

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<sup>77</sup> Source: USDA Forest Service webpage on climate change. *Research and Review*, vol.1 Summer 2007.

<sup>78</sup> Sources: NECIA's study *Confronting Climate Change in the Northeast*, and the USDA Forest Service article, *Global Climate Change: What Could Happen to Our Northern Forests?* *Research Review* vol.1, Summer 2007.



Currently Connecticut is experiencing climate conditions to support invading insects such as the Asian Longhorned Beetle and the Emerald Ash Borer. These insects are already a concern for today's wildland areas in Connecticut. Though not a direct threat to humans, these invasive pests are a threat to the existing ecosystem. These species have the ability to survive through Connecticut's current winter climate and threaten Connecticut's very mature forested areas across the state. The introduction of disease, pests, and invasive plants promotes the dieback of mature tree species thus creating increased available vegetative fuel loads in wildland areas. The direct threat to humans comes in the form of increased fire outbreaks in WUI areas which have the potential to burn hotter and greater amounts of acreage, thus putting people and their properties at increased risk.

Due to the composition of the flora species that exist today in Connecticut's wildland areas and the unknown rate of transference of species from the current forest and wildland species to more southern and invasive species, it is difficult to project the exact risk or potential increased number of fire outbreaks which may occur in the future. However, what is known from past research on the topic of WUI areas is that education of private property owners and the mitigation efforts implemented by homeowners will be significantly important as the risk of wildland fires increases in the future. These educational and mitigation efforts will require a collaboration between government agencies (Federal, state, and local) and private property owners.<sup>79</sup>

As the existing forests continue to change in age, structure, and species composition, wildfire danger will continue to be an issue. The problem of vast WUI areas does exist within the state, although not to the degree that it exists in western states. Factors which lessen the risk for WUI areas in Connecticut include fuel-loading levels which are significantly less than other parts of the country; weather patterns producing median annual precipitation of greater than 42 inches which is well distributed throughout the year; and a landscaping preference which emphasizes large expanses of lawn around buildings. However, a change in these factors may increase the risk and potential number of wildland fire outbreaks experienced within WUI areas.

## Vulnerability and Loss Estimation

In addition to being one of the most heavily forested states in the nation, Connecticut also ranks among the most densely populated, and in turn, among the highest in terms of percentage of land considered in WUI areas. According to 2010 U.S. Census data, Connecticut ranks as the fourth most densely populated state in the United States with more than 700 persons per square mile. In a 2005 study, Connecticut ranked number one in the nation with 72 percent of its land mass considered in WUI areas (ranking number 2 with 60 percent of its land mass considered located in intermix areas, and ranking number 3 with 12 percent of its land mass considered interface areas).<sup>80</sup> These high percentages of

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<sup>79</sup> Cohen, Jack, *The Wildland-Urban Interface Fire Problem*, Forest History Today, Fall 2008.

<sup>80</sup> *Wildland-Urban Interface in the United States*, by Susan Stewart, Volker Radeloff, and Roger B. Hammer. Ranking was based on 2000 Census data and WUI mapping.  
Natural Hazard Identification and Risk Assessment



WUI areas is a result of people's desire to move from the traditional highly urbanized geographic areas of the state to more suburban and rural wildland areas of the state.

Figure 2-51 illustrates wildland fire hazard areas based on 2010 WUI map products developed by the SILVIS Lab at the University of Wisconsin-Madison. The northeast and northwest corners of Connecticut are predominantly rural and forested, with other large sections of rural landscape in the southeast corner and south central parts of the state. Fuels are primarily hardwood leaf litter, as over 80 percent of the woodlands are hardwood species. Volatile fuels of concern include mountain laurel, huckleberry, greenbrier, and phragmites which are found along coastal and wetland areas. The northwestern corner has the steepest terrain.

The areas considered most vulnerable to wildland fire risks and losses are those classified as WUI areas. These areas and the people and structures located within these areas will continue to be vulnerable to the risk of fires. However, the risk of wildland fires in Connecticut is currently managed through a variety of State and local activities, such as declining requests for open burning, and less uncontrolled or unsupervised interaction with forests and the natural environment as a whole. Wildland fire risk is also routinely addressed by the State through fire danger monitoring and fire suppression activities, as described in Chapter 3 and Appendix 3-4.

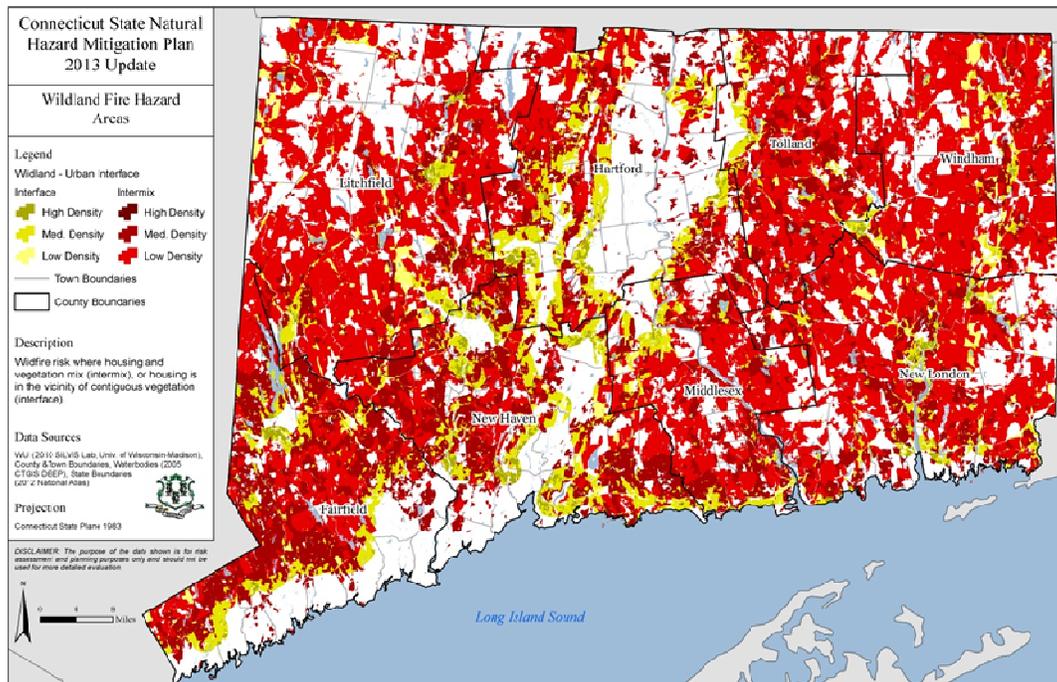


Figure 2-51. Wildland fire hazard areas.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2



includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

**State Facilities Exposure.** The state contains 3,327 state-owned buildings totaling \$1,655,430,988 in building values.<sup>81</sup> Table 2-62 and Table 2-63 provide a breakdown of the numbers and values of state-owned buildings intersecting wildland intermix and wildland interface areas by county. A total of 1,078 state-owned buildings (32.4% of the total number of state-owned buildings in the state) are located within a wildfire hazard area. This amounts to a total of \$669,558,957 in building values exposed to the wildland fire hazard (40.4% of the total value of all state-owned buildings in the state).

Table 2-62. Number of state-owned buildings intersecting wildland fire hazard areas.

County	Total State-Owned Buildings	Buildings Intersecting Intermix	Buildings Intersecting Interface	Total Buildings At Risk
Fairfield	205	42	15	57
Hartford	872	48	64	112
Litchfield	97	9	29	38
Middlesex	289	88	69	157
New Haven	556	121	73	194
New London	489	79	28	107
Tolland	628	104	169	273
Windham	191	51	89	140
Total	3,327	542	536	1,078

Table 2-63. Value of state-owned buildings intersecting wildland fire hazard areas.

County	Total State-Owned Buildings	Buildings Intersecting Intermix	Buildings Intersecting Interface	Total Buildings At Risk
Fairfield	0	0	0	0
Hartford	0	0	0	0
Litchfield	0	0	0	0
Middlesex	0	0	0	0
New Haven	0	0	0	0
New London	\$22,037,766	\$3,479,811	\$1,402,356	\$4,882,168
Tolland	\$1,604,033,369	\$22,926,841	\$612,390,094	\$635,316,936
Windham	\$29,359,854	\$2,460,783	\$26,899,071	\$29,359,854
Total	\$1,655,430,988	\$28,867,436	\$640,691,521	\$669,558,957

<sup>81</sup> Building values are not currently available for Fairfield, Hartford, Litchfield, Middlesex, and New Haven counties, therefore exposure estimates are incomplete at this time.



**Population Exposure.** The total population for the state according to the 2010 census is 3,574,097. Table 2-64 provides a breakdown by county of the numbers of people intersecting wildland fire hazard areas. This analysis was conducted by intersecting census block groups with wildland fire hazard data using GIS. In instances where only a portion of the census block group intersected the hazard area, only that same portion of the population is counted. For example, if 20% of the census block group intersects with an intermix area, only 20% of the population number for that census block group is counted). This results in estimated values and there is potential for error with this methodology, but this is considered a more refined approach than assuming 100% of the population is contained within the 20% of the census block group that intersects the hazard area. The total population at risk is estimated at 1,669,854, which is 46.7% of the total population of the state.

Table 2-64. Population intersecting wildland fire hazard areas.

County	Total Population	Population Intersecting Intermix	Population Intersecting Interface	Total Population At Risk
Fairfield	916,829	192,421	115,450	307,871
Hartford	894,014	135,160	179,282	314,442
Litchfield	189,927	96,382	57,082	153,464
Middlesex	165,676	71,671	36,379	108,050
New Haven	862,477	176,573	228,514	405,087
New London	274,055	119,349	59,478	178,827
Tolland	152,691	78,752	26,808	105,560
Windham	118,428	62,562	33,991	96,553
Total	3,574,097	932,870	736,984	1,669,854

**Critical Facilities Exposure.** The state contains 1,401 identified critical facilities in the categories of correctional institutions, EMS facilities, fire stations, health departments, law enforcement facilities, nuclear power plants, and storage tank farms. Table 2-65 provides a breakdown of the numbers of critical facilities intersecting wildland intermix and wildland interface areas by county. A total of 751 critical facilities (53.6% of the total number of critical facilities in the state) are located within a wildfire hazard area.

Table 2-65. Number of critical facilities intersecting wildland fire hazard areas.

County/Facility Types	All Critical Facilities	# within Intermix	% within Intermix	# within Interface	% within Interface	Total Facilities At Risk	Total Percent At Risk
Fairfield							
Correctional Institutions	4	1	25.0%	0	0.0%	1	25.0%
EMS	116	30	25.9%	30	25.9%	60	51.7%
Fire Stations	113	24	21.2%	26	23.0%	50	44.2%
Health Departments	20	5	25.0%	5	25.0%	10	50.0%
Law Enforcement	34	7	20.6%	4	11.8%	11	32.4%



County/Facility Types	All Critical Facilities	# within Intermix	% within Intermix	# within Interface	% within Interface	Total Facilities At Risk	Total Percent At Risk
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	7	0	0.0%	0	0.0%	0	0.0%
<b>Total for Fairfield</b>	<b>294</b>	<b>67</b>	<b>22.8%</b>	<b>65</b>	<b>22.1%</b>	<b>132</b>	<b>44.9%</b>
<b>Hartford</b>							
Correctional Institutions	6	1	16.7%	0	0.0%	1	16.7%
EMS	75	11	14.7%	18	24.0%	29	38.7%
Fire Stations	133	18	13.5%	29	21.8%	47	35.3%
Health Departments	15	0	0.0%	1	6.7%	1	6.7%
Law Enforcement	43	2	4.7%	8	18.6%	10	23.3%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	8	0	0.0%	2	25.0%	2	25.0%
<b>Total for Hartford</b>	<b>280</b>	<b>32</b>	<b>11.4%</b>	<b>58</b>	<b>20.7%</b>	<b>90</b>	<b>32.1%</b>
<b>Litchfield</b>							
Correctional Institutions	0	0	0.0%	0	0.0%	0	0.0%
EMS	34	12	35.3%	14	41.2%	26	76.5%
Fire Stations	52	22	42.3%	21	40.4%	43	82.7%
Health Departments	3	0	0.0%	3	100.0%	3	100.0%
Law Enforcement	24	9	37.5%	11	45.8%	20	83.3%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	0	0	0.0%	0	0.0%	0	0.0%
<b>Total for Litchfield</b>	<b>113</b>	<b>43</b>	<b>38.1%</b>	<b>49</b>	<b>43.4%</b>	<b>92</b>	<b>81.4%</b>
<b>Middlesex</b>							
Correctional Institutions	1	0	0.0%	0	0.0%	0	0.0%
EMS	31	14	16.2%	11	24.3%	30	40.5%
Fire Stations	36	15	14.0%	15	32.5%	53	46.5%
Health Departments	8	3	20.0%	4	20.0%	6	40.0%
Law Enforcement	17	4	12.5%	8	20.0%	13	32.5%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	3	0	0.0%	0	0.0%	0	0.0%
<b>Total for Middlesex</b>	<b>96</b>	<b>36</b>	<b>37.5%</b>	<b>38</b>	<b>39.6%</b>	<b>74</b>	<b>77.1%</b>
<b>New Haven</b>							
Correctional Institutions	5	0	0.0%	0	0.0%	0	0.0%
EMS	74	12	16.2%	18	24.3%	30	40.5%



County/Facility Types	All Critical Facilities	# within Intermix	% within Intermix	# within Interface	% within Interface	Total Facilities At Risk	Total Percent At Risk
Fire Stations	114	16	14.0%	37	32.5%	53	46.5%
Health Departments	15	3	20.0%	3	20.0%	6	40.0%
Law Enforcement	40	5	12.5%	8	20.0%	13	32.5%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	10	0	0.0%	0	0.0%	0	0.0%
<b>Total for New Haven</b>	<b>258</b>	<b>36</b>	<b>14.0%</b>	<b>66</b>	<b>25.6%</b>	<b>102</b>	<b>39.5%</b>
<b>New London</b>							
Correctional Institutions	1	0	0.0%	0	0.0%	0	0.0%
EMS	75	23	30.7%	23	30.7%	46	61.3%
Fire Stations	65	19	29.2%	18	27.7%	37	56.9%
Health Departments	12	3	25.0%	5	41.7%	8	66.7%
Law Enforcement	29	11	37.9%	6	20.7%	17	58.6%
Nuclear Power Plant	1	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	2	0	0.0%	0	0.0%	0	0.0%
<b>Total for New London</b>	<b>185</b>	<b>56</b>	<b>30.3%</b>	<b>52</b>	<b>28.1%</b>	<b>108</b>	<b>58.4%</b>
<b>Tolland</b>							
Correctional Institutions	3	1	33.3%	0	0.0%	1	33.3%
EMS	34	21	61.8%	8	23.5%	29	85.3%
Fire Stations	35	23	65.7%	7	20.0%	30	85.7%
Health Departments	2	0	0.0%	1	50.0%	1	50.0%
Law Enforcement	11	4	36.4%	3	27.3%	7	63.6%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	0	0	0.0%	0	0.0%	0	0.0%
<b>Total for Tolland</b>	<b>85</b>	<b>49</b>	<b>57.6%</b>	<b>19</b>	<b>22.4%</b>	<b>68</b>	<b>80.0%</b>
<b>Windham</b>							
Correctional Institutions	1	0	0.0%	1	100.0%	1	100.0%
EMS	40	26	65.0%	12	30.0%	38	95.0%
Fire Stations	37	25	67.6%	10	27.0%	35	94.6%
Health Departments	1	0	0.0%	1	100.0%	1	100.0%
Law Enforcement	11	3	27.3%	7	63.6%	10	90.9%
Nuclear Power Plant	0	0	0.0%	0	0.0%	0	0.0%
Storage Tank Farm	0	0	0.0%	0	0.0%	0	0.0%
<b>Total for Windham</b>	<b>90</b>	<b>54</b>	<b>60.0%</b>	<b>31</b>	<b>34.4%</b>	<b>85</b>	<b>94.4%</b>
<b>Total for Connecticut</b>	<b>1,401</b>	<b>373</b>	<b>26.6%</b>	<b>378</b>	<b>27.0%</b>	<b>751</b>	<b>53.6%</b>



**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for wildland fire using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of historical impact including injuries and deaths, property damage, and the number of reported events. Annualized damages and events have been supplemented with data provided by the DEEP Division of Forestry (Figure 2-52). Geographic extent is represented by the percent WUI are within interface or intermix zones. The composite wildland hazard rank shows Windham, Tolland and Fairfield as medium-high risk (Figure 2-52). Local plans, on average, have ranked wildland fire as low relative to the other jurisdictions and hazards in their plans.

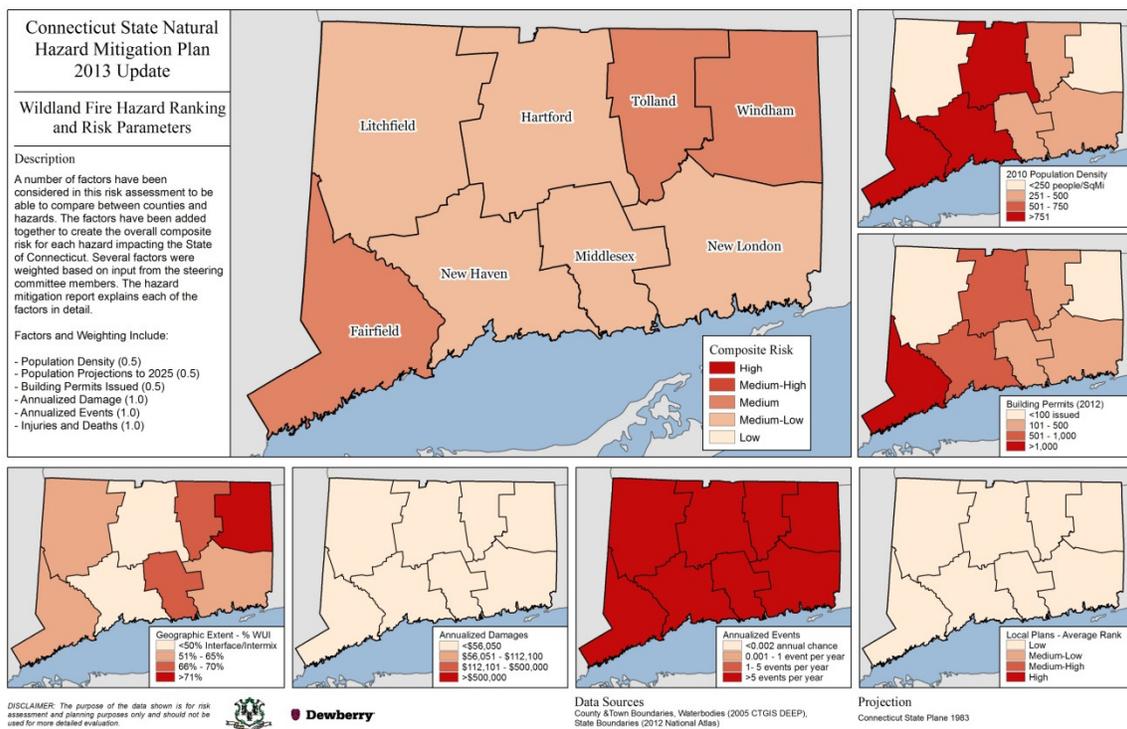


Figure 2-52. Wildland relative ranking.

### 2.7.9 Drought-related hazards

**Drought** – an extended period of deficient rainfall relative to the statistical mean for a region.<sup>82</sup>

#### Hazard Profile

Droughts can vary widely in duration, severity, and local impact. They may have widespread social and economic significance that require the response of numerous parties. Although associated with deficient precipitation, droughts are measured in a number of ways.

<sup>82</sup> Definition excerpted from Defining Drought Conditions, by Dr. Xiusheng Yang, Connecticut State Climatologist, 2002.



The Connecticut Drought Preparedness and Response Plan identifies seven criteria for assessing drought:

- Precipitation;
- Groundwater;
- Streamflow;
- Reservoir levels;
- Palmer Drought Severity Index (PDSI);
- Crop Moisture; and
- Fire Danger.

Other entities, such as water utilities, may measure drought conditions by these or other criteria, such as the duration in which their well pumps must operate in a day.

Four categories of drought are listed in the drought literature. The first three types of drought are physical in nature, while the fourth type of drought is measured by societal impact<sup>83</sup>:

1. Meteorological Drought – Is a measure of departure of precipitation from the normal. It is relatively regional in nature and affects a specific geographic area due to large variability of precipitation and climatic differences between geographic locations.
2. Hydrological Drought – Occurs when surface and subsurface water supplies are below normal.
3. Agricultural Drought – Refers to a situation where the amount of moisture in the soil no longer meets the needs of a particular crop grown in an area. The key to vulnerability to this type of drought is two-fold—severity and timing. This type of drought tends to be more serious if it occurs when plants are forming or filling their seed (mid-summer in Connecticut).<sup>84</sup>
4. Socioeconomic Drought – The situation that occurs when physical water shortages begin to affect people.

Although all droughts originate with a deficiency of precipitation, hydrologists are more concerned with how this deficiency plays out through the hydrologic system. Hydrological droughts are usually out of phase with the occurrence of meteorological and agricultural droughts. It takes longer for precipitation deficiencies to show up in components of the hydrological system such as soil moisture, streamflow, and ground water and reservoir levels. As a result, these impacts are out of phase with impacts in other economic sectors. For example, a precipitation deficiency may result in a rapid depletion of soil moisture that is almost immediately discernible to agriculturalists, but the impact of this deficiency on reservoir levels may not affect hydroelectric power production, drinking water supply availability, or recreational uses for many months.

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<sup>83</sup> Sources of information on the four drought categories include the National Weather Service Forecast Office, National Drought Mitigation Center, and the Connecticut State Climate Center.

<sup>84</sup> Miller, Dr. David. Drought, Forests, and Agriculture in Connecticut, 2002. The University of Connecticut.



Human actions can increase the risk of water shortage without any change in meteorological conditions. For instance, as the degree of imperviousness and water run-off is increased during land development, recharge of groundwater is reduced. This not only reduces the availability of groundwater to wells, it also reduces dry weather flows in streams.<sup>85</sup> Although weather condition is a primary contributor to hydrological drought, other factors such as changes in land use, land degradation, and the construction of dams all affect the hydrological characteristics of a water basin.

Connecticut's general climate has four main characteristics relevant to drought:<sup>86</sup>

- Equitable distribution of precipitation among the four seasons;
- Large ranges of temperature both daily and annually;
- Great differences in the same season or month of different years, and
- Considerable diversity of the weather over short periods of time.

From north to south of the state, the mean annual temperature difference is approximately 6 degrees Fahrenheit. The greatest temperature contrast occurs during the winter season. Precipitation is generally evenly distributed throughout all parts of the state, with Connecticut averaging 120 days of rainfall annually.

Three types of air affect the state, with the first two types influencing the state's climate the most:

- Cold, dry air coming down from sub-arctic North America;
- Warm, moist air flowing up overland from the Gulf of Mexico and sub-tropical waters of the Atlantic; and
- Cool damp air moving in from the Atlantic.

The state is divided into three climate divisions for purposes of computing the Palmer Drought Severity Index:

- Northwest Climate Division – Consisting of Litchfield County;
- Central Climate Division – Consisting of parts of Tolland, Windham, Hartford counties and portions of Fairfield, New Haven Middlesex, and New London counties; and
- Coastal Climate Division – Consisting of the coastal portions of Fairfield, New Haven, Middlesex, and New London counties.

The U.S. Drought Monitor is a related product produced in partnership between the National Drought Mitigation Center, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration (Figure 2-53).

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<sup>85</sup> The National Drought Mitigation Center website, *Understanding and Defining Drought*.

<sup>86</sup> Narration from Weather America 2001, and presented on Connecticut's State Climate Center website.  
Natural Hazard Identification and Risk Assessment

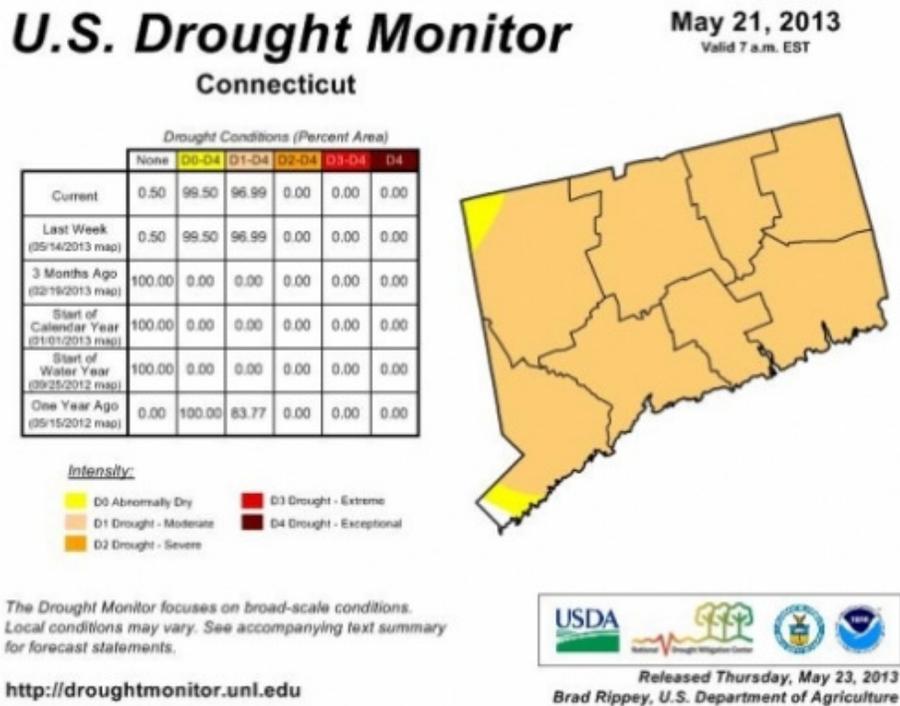


Figure 2-53. U.S. Drought Monitor for Connecticut as of May 21, 2013.

Since geographic areas of the state are interconnected by hydrologic systems, the impact of meteorological drought may extend well beyond the borders of the precipitation-deficient area.<sup>87</sup> For example, the Southwest Regional Pipeline interconnects most of the major public water supply systems in Fairfield County. This promotes the sharing of supply and distribution systems and can mitigate the effect of a drought or other water supply emergency in any one system. However, since the highly populated coastal area is dependent upon water resources reservoirs located further inland, meteorological drought inland may severely affect the sources of supply, resulting in the need for drought restrictions in the coastal service areas even if these areas are not experiencing meteorological drought.

There are three main categories of impacts associated with drought:

- Economic;
- Environmental; and
- Social.

Table 2-66 provides some of the most common impacts that may occur from drought. A more thorough and detailed list of potential drought impacts can be found at the National Drought Mitigation Center website.<sup>88</sup>

<sup>87</sup> The National Drought Mitigation Center website, *Understanding and Defining Drought*.

<sup>88</sup> The National Drought Mitigation Center website provides a detailed checklist for use by water use planners for drought planning. This checklist can also be found in the Western Drought Coordination Council's planning guide, *How to Reduce Drought Risk*. A link to this guide can be found on the National Drought Mitigation Center's website.



Table 2-66. Common types of drought impacts.

Economic	Environmental	Social
Agricultural	Animal/Plant	Stress and Health
Industry	Wetland	Nutrition
Tourism and Recreation	Water Quality	Recreation
Energy		Public Safety
Financial		Cultural Values
Transportation		Aesthetic Values

The first State Drought Preparedness and Response Plan for Connecticut was adopted on August 4, 2003 by the Water Planning Council (WPC), a group of Commissioners from four state agencies, Department of Energy & Environmental Protection (DEEP), Department of Public Health (DPH), Department of Public Utility Control (DPUC), and Office of Policy and Management (OPM). The plan was initiated due to record low ground water level during the spring of 2002. The plan was prepared by the Interagency Drought Working Group, comprised of staff from the DEEP, DPH, DPUC, OPM, Department of Agriculture, and Department of Emergency Management and Homeland Security (DEMHS) with assistance from the U.S. Geological Survey.

The disconnect that may arise between an area’s actual supply of water and people’s perception of that supply is a major consideration of the Drought Preparedness and Response Plan. The plan provides statewide guidance to assess and to minimize the impacts of a drought on Connecticut. In addition, the plan presents each participating state agency’s roles and responsibilities pre- and post-drought event. The plan is to be used as a flexible, non-regulatory guidance document. The State will also be able to mobilize state resources more quickly and efficiently during response efforts. For example, actions performed to date to mitigate potential impacts from droughts include:<sup>89</sup>

- The 81 water utilities that serve over 1,000 people or 250 customers have prepared water supply plans. As a part of these plans, each of these water utilities is required to have a water conservation component and an emergency contingency plan component.
- The individual water utility plans outline actions to be taken in response to local public water supply conditions.
- In 1989 a law was passed that required the sale of only low flow devices, such as shower heads and low flow toilets.
- In the same year a law was passed that required water utilities to make available, free of charge, many of these low flow devices to encourage their customers to retrofit their residences with water conserving devices.
- The 81 water utilities are now required by law to make an annual distribution of water conservation educational information to their customers.

<sup>89</sup> Actions excerpted from the 2003 State drought plan.



- In the late 1980s a program was established to retrofit state agency buildings with water saving fixtures and devices.
- An effective drought response program hinges on communication among state agencies and public water providers and the timely dissemination of clear and succinct information to the public. An effort has already been made to develop a comprehensive information dissemination system consisting of a dedicated web site with links to other state, federal, and private drought information.

Furthermore, the plan provides specifics for drought stage criteria, actions, monitoring, coordination, and preparedness for each of the following drought stages:

- Drought Advisory Stage;
- Drought Watch Stage;
- Drought Warning Stage;
- Drought Emergency Stage; and
- Post-Drought Actions.

The plan also provides details as to the allowance of non-essential uses of water during various drought stages, when a non-essential would be allowed, by whom, and a description of the non-essential use.

The plan is a living document and is being updated in response to the experience of its implementation during the state's 2007-2008 drought advisory. In addition, the Water Planning Council has approved the State of Connecticut Model Water Use Restriction Ordinance which can improve a community's ability to communicate and enforce any necessary drought responses.

Other drought preparedness and pre-mitigating actions that the state undertakes include:

- Maintains a webpage called [www.ct.gov/waterstatus](http://www.ct.gov/waterstatus) and provides information and data regarding droughts and drought monitoring, links to all state agencies participating on the Interagency Drought Workgroup, and links to other data monitoring sites.
- Department of Public Health annually reviews water utility reports and provides a summary of Statewide Reservoir Capacity Levels.
- The Drought Plan may be revised in the future to incorporate recommendations from the SHMP Team.

## History of Drought Occurrences in Connecticut

Considering just the Palmer Drought Severity Index (PDSI), severe droughts have occurred periodically in Connecticut, most recently during 1929-1931, 1957, 1964-1966, 2002, 2007-



2008, and 2012.<sup>90</sup> While the agricultural drought of 1957 was especially disastrous to the State’s agricultural interests it was also a severe meteorological drought for small reservoirs in the State. Other meteorological droughts of June 1929 through March 1931 and the mid-1960s were also very serious. Connecticut experienced its drought of record during the 1960s with rainfall deficits reaching their highest levels in the spring of 1965. This drought severely limited water resources throughout the state.

A meteorological drought was declared in 2012 as the result of precipitation that had been approximately one half of normal from January 2012 through April 2012. The main impact of the drought was periods of very high fire danger. In addition, small pond levels were reduced. While soil moisture was well below normal, this drought occurred prior to the beginning of the growing season. Thus, no agricultural impacts were realized. A total of 29 distinct drought events have been recorded in NCDC from 1993 to 2012, with at least one event impacting each of the state’s eight counties during this time. These 29 events did not have any deaths, injuries, or damages associated with them (Table 2-67).

Table 2-67. NCDC total drought events. (December 2012)

County	Number of Events
Fairfield	6
Hartford	1
Litchfield	2
Middlesex	6
New Haven	6
New London	6
Tolland	1
Windham	1
Total	29

### Probability of Future Occurrence

As noted by the National Drought Mitigation Center,<sup>91</sup> drought risk is based on four elements:

- Frequency;
- Severity;
- Physical nature of the drought; and
- The affected area’s vulnerability to the effects of the drought.

<sup>90</sup> NRCC Cornell drought monitoring website. Source of historic data for droughts consisting of a two or more month period of severe or extreme drought is.

<sup>91</sup> Information regarding risk elements was taken from the National Drought Mitigation Center’s website under the section titled, “Drought Impacts and Vulnerability.”



Predicting the future occurrence of a drought within a given time period is difficult. Other factors may also contribute to the degree of droughts and their impacts on Connecticut. These include projections of humidity levels (decrease), hotter temperatures and increased heat wave occurrences, transpiration rates, increased water demands by the general population, and industry sectors.

However there are indicators and tools available that can help indicate to scientists when a drought may occur and to monitor the duration of said drought. Connecticut, as with most states within the United States, use both the PDSI and the Crop Moisture Index (CMI) as indices for a drought occurrence.<sup>92</sup> The PDSI indicates prolonged and abnormal moisture deficiency or excess and helps climatologists evaluate the scope severity and frequency of prolonged periods of dryness, while the CMI (a derivative of the PDSI) provide information on the short-term or current status of purely agricultural drought or moisture surplus. The PDSI is most effective for determining long-term drought conditions, while the CMI is effective at helping determine short-term droughts.

Recent climate change studies<sup>93</sup> have indicated that although precipitation is projected to increase throughout this century, it will be in the form of short duration, intense, and less frequent events. In addition it is projected by the Northeast Climate Impact Assessment Group (NECIA) and the New York Panel on Climate Change (NPCC) that most of this increased precipitation may occur during colder times of the year (i.e., winter in the form of snow or ice). Furthermore, it is projected that the frequency and intensity of both long-term and short-term droughts in Connecticut, and throughout the Northeast, will increase throughout the century with the impacts beginning to occur with a greater degree of frequency beginning in the mid-century (2050s).

Currently Connecticut is proactively working, through the Adaptation Subcommittee of the Governor's Steering Committee on Climate Change, to assess the risks and impacts of climate change on the State of Connecticut.<sup>94</sup> Over the next 18 months, DEEP will use the strategies in the Connecticut Climate Preparedness Plan as a starting point to accomplish the resiliency and adaptation goals included in the document. Further information is included in Chapter 3. Further, effective October 1, 2013, climate change scenario planning needs to be considered as part of the requirements under CGS 28-5 subsection (g), and will therefore be included in future updates of this plan.

Based on historical data, it is reasonable to assume that Connecticut has a medium-high probability of future drought events. Table 2-69 summarizes the probability of future

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<sup>92</sup> Sources: NOAA Climate Prediction Center and National Drought Mitigation Center websites.

<sup>93</sup> Information derived from two recent studies: *Confronting Climate Change in the Northeast*, by the Northeast Climate Impact Assessment Group, July 2007, and *Climate Risk Information*, by the New York City Panel on Climate Change, 2/17/09.

<sup>94</sup> Risk Assessment and Impact Analysis Report publish date 2010, and Panel Recommendation Report publish date 2011. Please see Chapter 3 for more information regarding the Adaptation Subcommittee of the Governor's Steering Committee on Climate Change.



events by county (annualized events). Figure 2-55 shows the ranking and risk parameters which includes the annualized events for each county.

## Vulnerability and Loss Estimation

The entire state is susceptible and vulnerable to the occurrence of a drought event. Table 2-68 shows the percent of time spent in drought categories for the three climate divisions used for purposes of the Palmer Drought Severity Index. This data is current as of May 2013.

Figure 2-54 shows average annual precipitation for Connecticut. A drought will produce different impacts to the state depending on the extent and geographic location of the drought (e.g., affecting a local area or region, or occurring statewide). In highly developed areas drought impacts tend to be dominated by economic losses and possible potable water shortages and potential health threats. However, in the past, many of the state's cities developed large capacity water supplies to serve the rapidly growing industrial, commercial, and residential sector demands within their communities. The subsequent reduction of industrial demand has left some of the state's most intensively developed urban areas with extra water capacity. The opposite can be seen in some rural and suburban areas, which are now experiencing more rapid growth. These areas' water supplies may be limited, thus restraining future growth of these communities and placing increased demand on existing water resources.

In less densely populated areas of the state, the impacts from the occurrence of a drought are equally as high a threat. They include:

- Increased potential of brush and forest fire occurrences. Potential loss of natural resources in addition to the impacts to people living within or near heavily forested areas, who are at a higher risk for the impacts which can come from fires. Safe access/evacuation routes from the affected area, loss of personal belongings and economic losses, potential physical injury, and/or loss of life;
- Potential threat to levels and quality of municipal public water supplies (many of which are utilized by heavily urbanized areas of Connecticut along the coast and throughout the Connecticut River Valley, and impacts to small community and private potable water wells; and
- Reduction of available fresh water resources of existing wells, including increased threat of well contamination (bacterial or chemical) and increased need to drill deeper wells to adequately provide fresh water resources for the resident population and natural resource and agriculture management.

Economic impacts from a drought event may affect both elderly populations and families with children under 18 years of age. In addition, if current economic data are also taken into consideration at the time of a long-term drought (i.e., unemployment figures), the economic and social impacts from such an event could be significant for Connecticut. Due to a limitation in available data and methodologies at the time of this plan update,



demographic analysis for this hazard was limited. It is recommended that an additional analysis be performed for future plan updates as new information and approaches become available. However, the implementation of this recommendation will rely on available resources and secured funding sources to perform this work.

Connecticut is highly vulnerable to a drought occurrence, whether short- or long-term in duration. Impacts will be costly in both social and economic terms. The responsibility for drought planning lies with the Connecticut Water Planning Council.<sup>95</sup> It is recommended that future updates of the Connecticut Drought Preparedness and Response Plan include:

- Assessment of vulnerability aspects (social and economic) of the state;
- Identification of primary and secondary impacts which may arise from a drought (both long-term and short-term droughts), including underlying issues which may increase the state’s or a particular sector’s vulnerability to a drought;
- Inclusion of risk assessment and recommendation work performed by the Adaptation Subcommittee of the Governor’s Steering Committee on Climate Change; and
- Proposed mitigation measures and implementation of educational outreach, which may be performed to reduce the impacts from both short-term and long-term droughts.

Table 2-5 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values have been estimated for this plan and should not be used for other applications.** Appendix 2 includes the infrastructure and facilities datasets. Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

Table 2-68. Percent of time spent in drought categories in the State of Connecticut.

PDSI Category	Percent of Time in Drought Category	Cumulative Percent Time
Northwest Climate Division		
Extreme	2.5	2.5
Severe	5.4	7.9
Moderate	15.1	22.9
Mild	20.3	43.3
Incipient	11.0	54.3
Near Normal	10.8	65.0
Wet	35.0	100.0
Lowest PDSI in 1421 months	-5.39 in 7/1965	

<sup>95</sup> See section titled *Drought Preparedness and Response Planning in Connecticut* for more information regarding this group.



Central Climate Division		
Extreme	2.5	2.5
Severe	6.2	8.7
Moderate	15.3	24.0
Mild	20.2	44.2
Incipient	10.8	55.0
Near Normal	13.2	68.2
Wet	31.8	100.0
Lowest PDSI in 1421 months	-5.26 in 7/1911	
Coastal Climate Division		
Extreme	1.5	1.5
Severe	4.9	6.3
Moderate	13.4	19.7
Mild	21.5	41.2
Incipient	11.3	52.4
Near Normal	14.4	66.8
Wet	33.2	100.0
Lowest PDSI in 1421 months	-5.23 in 12/1965	

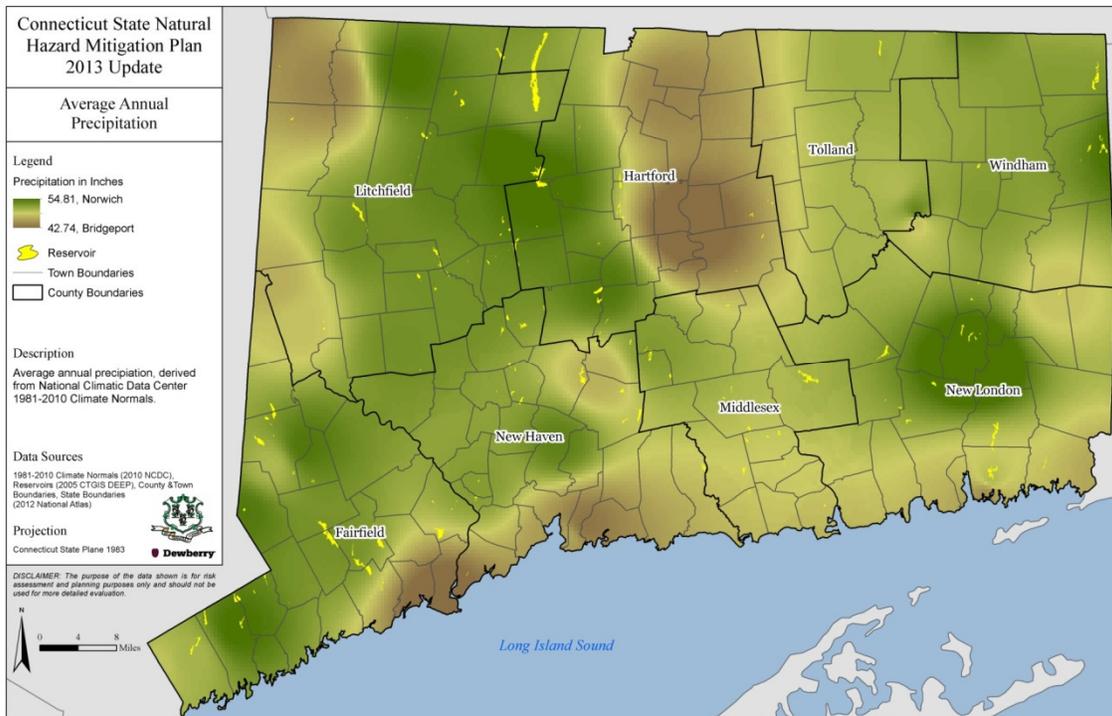


Figure 2-54. Average annual precipitation.

Table 2-69 shows annualized loss information for the state by county, damage information for drought was not available through NCDC.



Table 2-69. NCDC annualized events for the drought hazard. (December 2012)

County	Annualized Events	Total Annualized Damages
Fairfield	0.30	\$0
Hartford	0.05	\$0
Litchfield	0.10	\$0
Middlesex	0.30	\$0
New Haven	0.30	\$0
New London	0.30	\$0
Tolland	0.05	\$0
Windham	0.05	\$0
Total	1.45	\$0

**Exposure.** Even though there is some minor variation throughout the state in terms of areas potentially more prone to experience drought conditions, it is assumed that the drought hazard would impact buildings and people in a fairly uniform and negligible manner. It is assumed therefore that buildings would sustain very minor, if any, direct physical damage from exposure to drought conditions.

**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for drought using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter (Figure 2-55). As previously described, the entire state is uniformly at risk and has seen minimal damages from drought. The slightly lower overall composite score for Litchfield County is primarily being driven by the population factors and building permit numbers, as compared to the rest of the state.

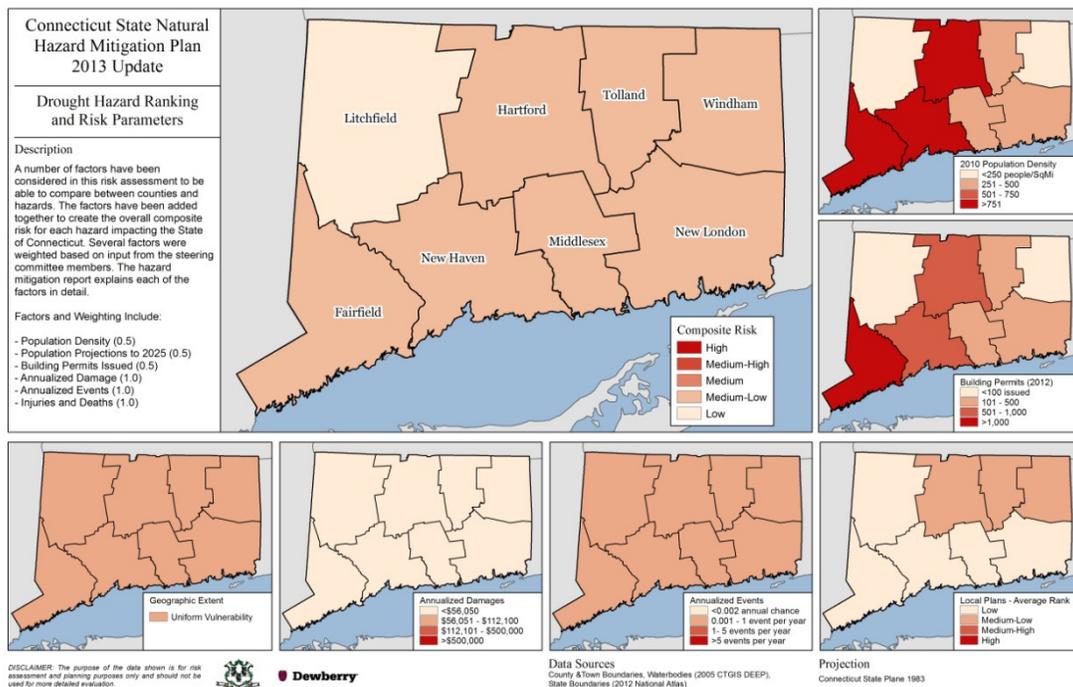


Figure 2-55. Drought NCDC relative ranking.

### 2.7.10 Earthquake

**Earthquake** – The sudden, cyclic movement of the earth caused by the release of strain inside the earth. This movement causes faulting.

#### Hazard Profile

An earthquake, also known as a seismic event, is a shaking of the ground caused by the sudden breaking and movement of large sections (tectonic plates) of the earth's rocky outermost crust. The edges of the tectonic plates are marked by faults (or fractures). Most earthquakes occur along the fault lines when the plates slide past each other or collide against each other. The shifting masses send out shock waves that may be powerful enough to:

- Alter the surface of the Earth, thrusting up cliffs and opening great cracks in the ground and
- Cause great damage ... collapse of buildings and other man-made structures, broken power and gas lines (and the consequent fire), landslides, snow avalanches, tsunamis (giant sea waves) and volcanic eruptions.

Although other natural hazards account for much greater annual loss in the United States earthquakes pose the largest risk in terms of sudden loss of life and property. Risk factors that impact the extent of damage include:

- Amount of seismic energy released: The greater the vibrational energy, the greater the chance for destruction.
- Duration of shaking: This is one of the most important parameters of ground motion for causing damage.



- Depth of focus, or hypocenter: The shallower the focus (the point of an earthquake's origin within the earth), usually the greater the potential for destructive shock waves reaching the earth's surface. Even stronger events of much greater depth typically produce only moderate shaking at ground level.
- Distance from epicenter: The potential for damage tends to be greatest near the epicenter (the point on the ground directly above the focus), and decreases away from it.
- Geologic setting: A wide range of foundation materials exhibits a similarly wide range of responses to seismic vibrations. For example, in soft unconsolidated material, earthquake vibrations last longer and develop greater amplitudes, which produce more ground shaking, than in areas underlain by hard bedrock. Likewise, areas having active faults are at greater risk.
- Geographic and topographic setting: This characteristic relates more to secondary effects of earthquakes than to primary effects such as ground shaking, ground rupture, and local uplift and subsidence. Secondary effects include landslides (generally in hilly or mountainous areas), seismic sea waves, or tsunamis (pretty much restricted to oceans and coastal areas), and fires (from ruptured gas lines and downed utility lines).
- Population and building density: In general, risk increases as population and building density increase. Types of buildings: Wooden frame structures tend to respond to earthquakes better than do more rigid brick or masonry buildings. Taller buildings are more vulnerable than one- or two-story buildings when located on soft, unconsolidated sediments, but taller buildings tend to be the more stable when on a hard bedrock foundation.
- Time of day: Experience shows there are fewer casualties if an earthquake occurs in late evening or early morning because most people are at home and awake and thus in a good position to respond properly.

Although California is widely known for its seismic activity, earthquakes, mostly with a magnitude of  $< 3.0$ , occur in a large frequency within the Northeast United States.<sup>96</sup> In fact, the Northeast States Emergency Consortium notes that from 1538 to 1989 1,215 earthquakes occurred in New England.<sup>97</sup>

Earthquakes that occur within the northeastern United States are called intraplate earthquakes.<sup>98</sup> The earthquake process itself is often described as complex in plate interiors. There are two important points that affect earthquake prediction in these areas (i.e., the where and when an earthquake will occur):

- There is no obvious relationship between earthquakes and geologically mapped faults in most intraplate areas; and
- It is not at all clear whether faults mapped at the earth's surface in the Northeast are the same faults along which the earthquakes are occurring.

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<sup>96</sup>Source of information is a paper entitled, *Why Does the Earth Quake in New England*, written by Alan L. Kafka and located on Boston College's Weston Observatory website

<sup>97</sup>.Source: NESEC website: [www.nesec.org/hazards/earthquakes.cfm](http://www.nesec.org/hazards/earthquakes.cfm)

<sup>98</sup> Source: see Kafka's paper *Why Does the Earth Quake in New England?*, located at Weston Observatory's website. Intraplate means within plates, in contrast to along plate boundaries.



The current accepted theory to explain the occurrence of earthquakes in the Northeast is that ancient zones of weakness are being reactivated in the present day stress field. The last major episode of geologic activity to affect New England bedrock occurred during the Mesozoic Era, approximately 100 million years ago.<sup>99</sup> The remains of the Mesozoic rifting episode can be found in a series of ancient continental rift zones in the Northeast, including the Hartford rift basin (located in central Connecticut and central Massachusetts), and the Newark rift basin (located in the greater New York area).<sup>100</sup> Figure 2-56 is the Connecticut seismic hazard map for 2% in 50-years PGA. Figure 2-57 shows recent seismic activity of the Northeast between 1975 and 2011.<sup>101</sup> Most earthquakes have a calculated magnitude of less than 3.0. This map also shows clusters of earthquakes occurring around the Portland-Haddam-East Haddam area, as well as the New Haven –Greenwich area of Connecticut.

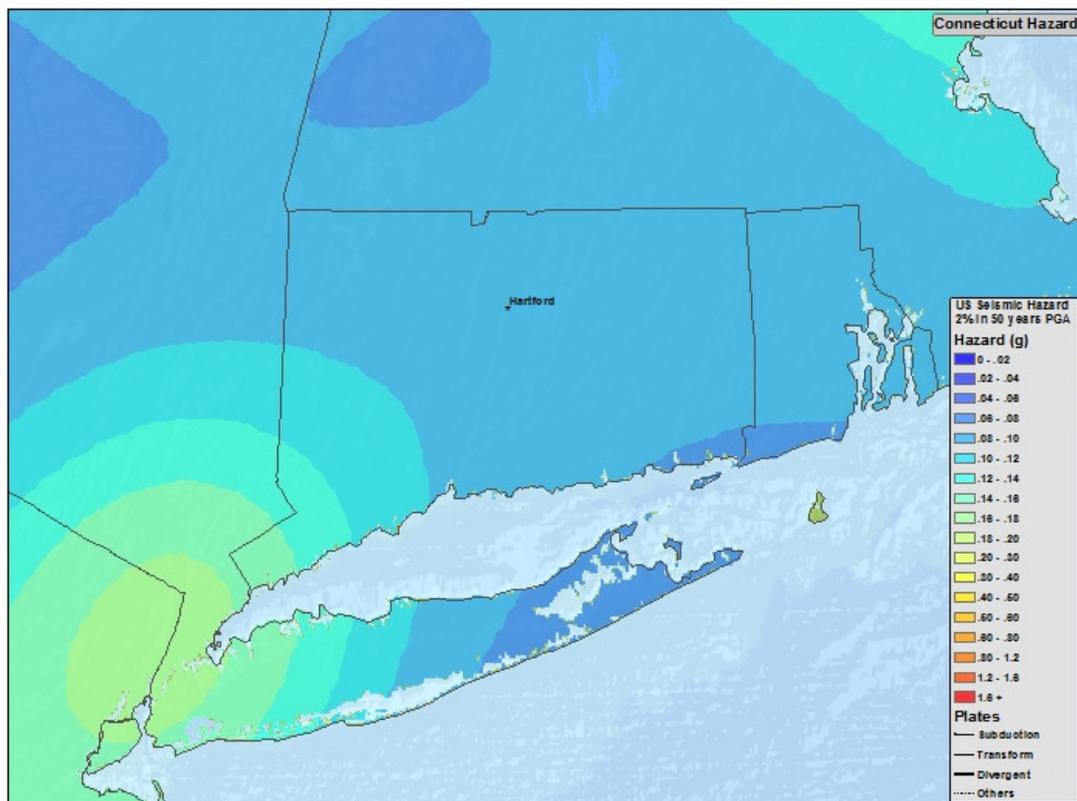


Figure 2-56. Connecticut Seismic Hazard Map. Source USGS.

<sup>99</sup> Source: see Kafka's paper *Why Does the Earth Quake in New England?*, located at Weston Observatory's website.

<sup>100</sup> Source: see Kafka's paper *Why Does the Earth Quake in New England?*, located at Weston Observatory's website.

<sup>101</sup> Map downloaded from the Weston Observatory website: [www.bc.edu/research/westonobservatory/](http://www.bc.edu/research/westonobservatory/).  
Natural Hazard Identification and Risk Assessment

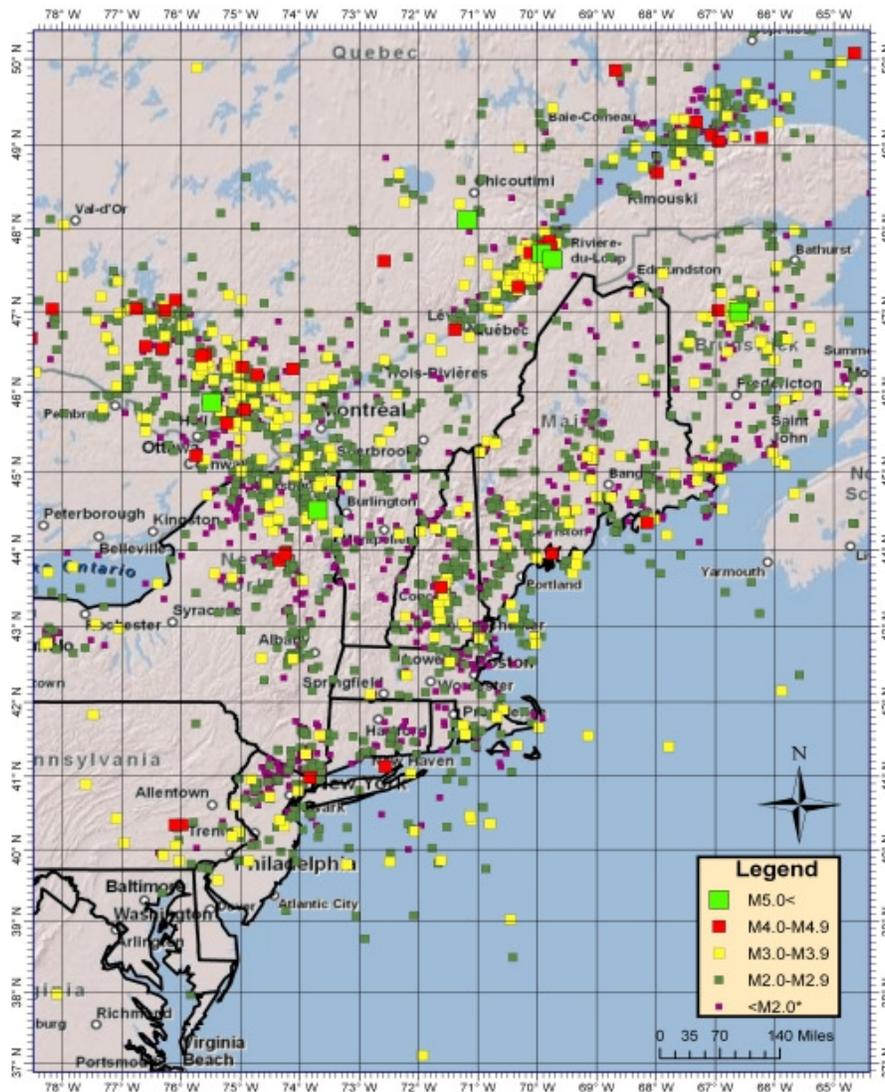


Figure 2-57. Northeast Seismicity 1975-2011. Source: Western Observatory.

A number of seismic stations have been established within New England and Canada. There are three seismic stations currently operating in Connecticut. One station is operated and maintained by the Weston Observatory, and is part of the observatory's New England seismic network. Two stations are operated and maintained by the Lamont-Doherty Cooperative Seismographic Network.<sup>102</sup>

The magnitude of an earthquake is a measure of the amount of energy released as seismic waves at the focus of an earthquake.<sup>103</sup> Each earthquake has a magnitude assigned to it.

<sup>102</sup> More information for both network can be found at the following websites: Lamont –Doherty Cooperative Seismographic Network – <http://www.ldeo.columbia.edu/LCSN/intro.html>; and the Weston Observatory – <http://www.bc.edu/research/westonobservatory/about/aboutwo.html>.

<sup>103</sup> Source of information is USGS's web page entitled *Magnitudes* located at [http://neic.usgs.gov/neis/epic/code\\_magnitude.html](http://neic.usgs.gov/neis/epic/code_magnitude.html).



The magnitudes of earthquakes which occur east of the Rocky Mountains and into Canada are often determined by the use of local or regional magnitude scales. Many earthquakes in Northeast earthquake catalogs calculate magnitude for such events based on the Coda-length magnitude scale or the Nuttli magnitude scale and use the Richter Scale as a default magnitude scale.<sup>104</sup> Nuttli is the most commonly used magnitude scale in the Northeast. It is computed from the vertical component 1-second Lg seismic-waves (short period surface waves).<sup>105</sup>

Once a magnitude for an earthquake event has been calculated using one of several scientifically accepted formulas, it can then be connected to an intensity measure. The intensity scale used in the United States and by the USGS is the Modified Mercalli Intensity Scale. The Richter Scale is not used to express damage. An earthquake in a densely populated area which results in many deaths and considerable damage may have the same magnitude as a shock in a remote area that has no direct impact. Large-magnitude earthquakes that occur beneath the oceans may not even be felt by humans.

The effect of an earthquake on the Earth's surface is called the intensity. The intensity scale consists of a series of certain key responses such as people awakening, movement of furniture, damage to chimneys, and, finally, total destruction. Although numerous intensity scales have been developed over the last several hundred years to evaluate the effects of earthquakes, the one currently used in the United States is the Modified Mercalli Intensity (MMI) Scale. It was developed in 1931 by the American seismologists Harry Wood and Frank Neumann. This scale, composed of 12 increasing levels of intensity that range from imperceptible shaking to catastrophic destruction, is designated by Roman numerals. It does not have a mathematical basis; instead, it is an arbitrary ranking based on observed effects. The MMI value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at a particular place.

The lower numbers of the intensity scale deal with the manner in which people feel the earthquake. The higher numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above. Table 2-70 shows the connection between computed magnitudes and related intensities of earthquake events.

Table 2-71 provides an abbreviated description of each intensity level of the Modified Mercalli Intensity Scale.

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<sup>104</sup> LCSN and Weston Observatory earthquake logs, being the most comprehensive for the Northeast utilize Nuttli or Coda-length magnitudes scale as the primary scale and Richter as the default scale.

<sup>105</sup> USGS's web page entitled *Magnitudes*



Table 2-70. Earthquake Magnitude/Mercalli Intensity Comparison. Source: USGS

Richter Magnitude Scale	Typical Maximum Modified Mercalli Intensity
1.0 – 3.0	I
3.0 – 3.9	II - III
4.0 – 4.9	IV - V
5.0 – 5.9	VI - VII
6.0 – 6.9	VII - IX
7.0 or higher	VIII or higher

Table 2-71. Modified Mercalli Intensity Scale. Source: USGS.

Intensity Level	Description of Effects on People, Structures, or Natural Environment
I	Not felt except by a very few under especially favorable conditions.
II	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.



Surficial earth materials behave differently in response to seismic activity. Unconsolidated materials such as sand and artificial fill can amplify the shaking associated with an earthquake. In addition, artificial fill material has the potential for liquefaction. Liquefaction is a phenomenon in which the strength and stiffness of a soil are reduced by earthquake shaking or other rapid loading. It occurs in soils at or near saturation, especially the finer textured soils. When liquefaction occurs, the strength of the soil decreases and the ability of soil to support building foundations and bridges is reduced. Increased shaking and liquefaction can cause greater damage to buildings and structures, and a greater loss of life.

Areas of fine sand and clay (glacial lake bottom deposits) are also vulnerable, and have been classified as having the highest risk for seismic wave amplification (NEHRP). The distribution of these glacial materials has been mapped on the Surficial Materials Map of Connecticut<sup>106</sup> and The Quaternary Geologic Map of Connecticut and The Long Island Sound Basin<sup>107</sup>. New England State Geologists have promoted the use of surficial geology in Hazus-MH loss estimations. Based on the distribution of surficial materials, a pilot NEHRP seismic risk classification has been prepared for Hartford County. Targeted geophysical surveys of these areas and similar areas statewide have the potential to better define the seismic risk and potential for ground failure. Figure 2-58 depicts Connecticut's surficial materials on the landscape. Figure 2-59 below depicts the Quaternary Geology of Connecticut. Areas of steep slopes can collapse during an earthquake, creating landslides. Seismic activity can also break utility lines, such as water mains, electric and telephone lines, and stormwater management systems. Dam failure can also pose a significant threat to developed areas during an earthquake. This shows a combination of materials including but not limited to artificial fill, course, stacked course and course over fine material. "Although the areas of highest seismic event frequency are to the southwest and southeast, the Hartford County area is largely underlain by glacial lake clays and fine sands that have a high liquefaction potential."<sup>108</sup> Structures in these areas are at increased risk from earthquakes due to amplification of seismic energy and/or collapse. The best mitigation for future development in areas of sandy or filled material may be application of the most stringent building codes, or possibly the prohibition of certain types of new construction.

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<sup>106</sup> Stone, J.R., Schafer, J.P., London, E.H. and Thompson, W.B., 1992. Surficial Materials Map of Connecticut. U.S. Geological Survey Special Map, 2 sheets, scale 1:125,000

<sup>107</sup> Stone, Janet Radway; Schafer, John P.; London, Elizabeth Haley; DiGiacomo-Cohen, Mary L.; Lewis, Ralph S.; Thompson, Woodrow B., 2005. Quaternary Geologic Map of Connecticut and Long Island Sound Basin. Geological Survey (U.S.) Scientific Investigations Map 2784, 5 maps on 2 sheets : col. ; 106 x 136 cm. and 34 x 42 cm., sheets 117 x 168 cm. and 99 x 139 cm., folded in envelope 30 x 23 cm. + 1 pamphlet (iv, 72 p. : ill., map ; 28 cm.); Includes text, 2 colored cross sections, 3 diagrams, and 8 colored photos [\[Link\]](#)

<sup>108</sup> Laurence R. Becker, Steven P. Patriarco, Robert G. Marvinney, Margaret A. Thomas, Stephen B. Mabee, and Edward S. Fratto, Improving seismic hazard assessment in New England through the use of surficial geologic maps and expert analysis *Geological Society of America Special Papers*, 2013, 493, p. 221-242, doi:10.1130/2012.2493(11)

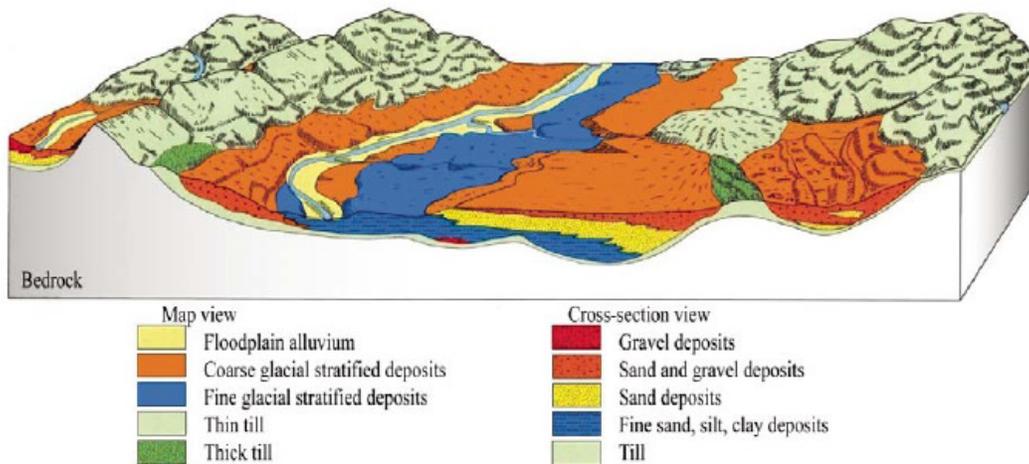


Figure 2-58. Block diagram depicting Connecticut surficial materials on the landscape<sup>109</sup>

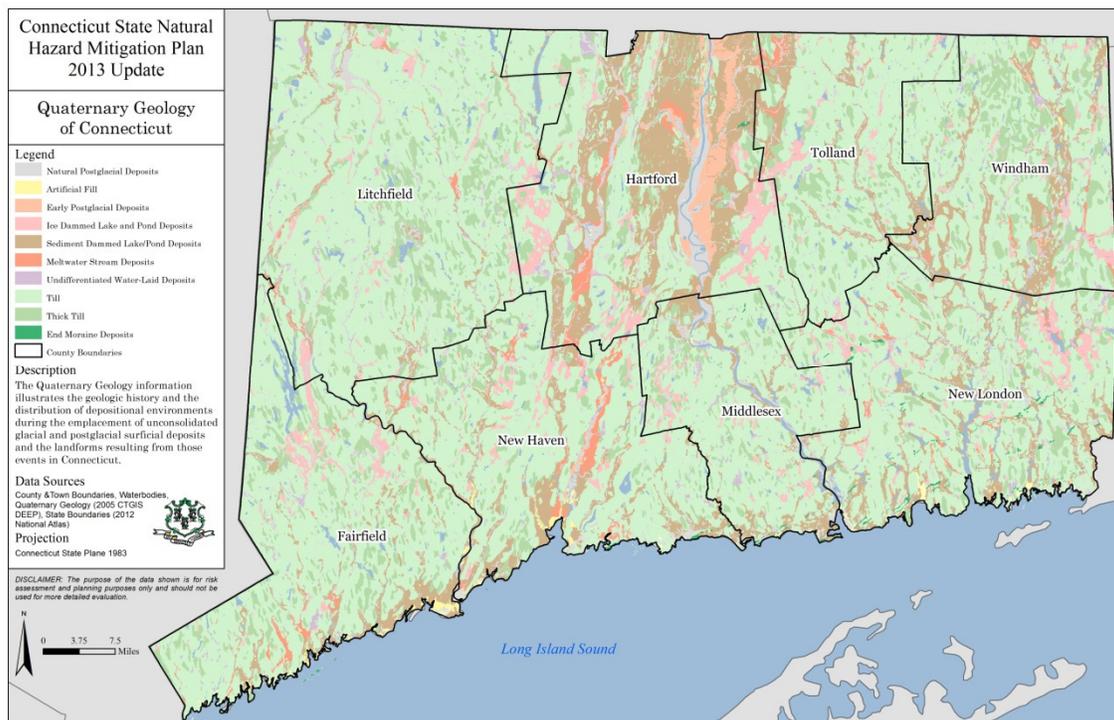


Figure 2-59. Map of Quaternary Geology in Connecticut

## History of Earthquakes in Connecticut

The USGS National Earthquake Information Center maintains a national database of significant earthquake epicenters from 1568-2010. USGS defines significant earthquakes as those that caused deaths, property damage, or geological effects, or that were experienced by populations in the epicentral area.<sup>110</sup> The Weston maintains the history of earthquakes

<sup>109</sup> Stone, J.R., Schafer, J.P., London, E.H. and Thompson, W.B., 1992. Surficial Materials Map of Connecticut. U.S. Geological Survey Special Map, 2 sheets, scale 1:125,000

<sup>110</sup> United States Geological Survey, <http://www.nationalatlas.gov/mld/quksigx.html> (June 2013).



in Northeast. Past earthquakes which occurred in and near Connecticut are presented in Figure 2-60. The list was compiled from several northeast earthquake catalog files. Several recent events include:

- The largest earthquake in Connecticut occurred in East Haddam on May 16, 1791. It was estimated to be a VII in intensity.<sup>111</sup> A description of the earthquake and the events that followed states: “It began at 8 o’clock p.m., with two very heavy shocks in quick succession. The first was the most powerful; the earth appeared to undergo very violent convulsions. The stone walls were thrown down, chimneys were untopped, doors, which were latched were thrown open, and a fissure in the ground of several rods in extent was afterwards discovered. Thirty lighter ones followed in a short time, and upwards of one hundred were counted in the course of the night.”<sup>112</sup>
- The next moderate earthquake occurred in Hartford in April 1837. This was followed by three subsequent earthquake events in 1840 (a few miles southeast of Hartford), June 1858 (occurred at New Haven), and the June 1875 (which have an estimated intensity level of a V and was felt within a general 2,000 square mile area of Connecticut and Massachusetts). Figure 2-60 shows earthquake activity for the Northeast, including Connecticut for the time period 1924 to 2006.
- The most recent noticeable earthquake to occur in Connecticut happened on March 11, 2008. It was a 2.0 magnitude with its epicenter three miles northwest of the center of Chester.
- A magnitude 5.0 earthquake struck at the Ontario-Quebec border region of Canada on June 23, 2010. This earthquake did not cause damage in Connecticut but was felt by residents in Hartford and New Haven Counties.
- A magnitude 3.9 earthquake occurred 117 miles southeast of Bridgeport, Connecticut on the morning of November 30, 2010. The quake did not cause damage in Connecticut but was felt by residents along Long Island Sound.
- On June 3, 2011, a 1.7 magnitude earthquake occurred near East Hartford about 3 miles below ground. It was pretty minimal, as many residents believed the shaking to be from nearby road construction.<sup>113</sup>
- A magnitude 5.8 earthquake occurred 38 miles from Richmond, Virginia on August 23, 2011. The quake was felt from Georgia to Maine and reportedly as far west as Chicago.

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<sup>111</sup> Note: Seismic recorders were not in use until the early 1900’s and routine reporting of earthquake activity was not implemented until the 1930’s for the Northeast region, hence intensity levels for early earthquakes (prior to 1900’s) were based on expert determinations based on damage and activity reports..

<sup>112</sup> Source: USGS, 2009, <http://earthquake.usgs.gov/regional/states/connecticut/history.php>.

<sup>113</sup> [http://articles.courant.com/2011-06-03/community/hc-east-hartford-earthquake-0604-20110603\\_1\\_water-heater-gas-line-road-construction](http://articles.courant.com/2011-06-03/community/hc-east-hartford-earthquake-0604-20110603_1_water-heater-gas-line-road-construction)



Many residents of Connecticut experienced the swaying and shaking of buildings and furniture during the earthquake although widespread damage was constrained to an area from central Virginia to southern Maryland. According to Cornell University, the August 23 quake was the largest event to occur in the east central United States since instrumental recordings have been available to seismologists.

- On September 8, 2012, a 2.1 magnitude, 4 km deep earthquake occurred near Stamford. Dozens of residents reported feeling the ground move, but no injuries were reported.

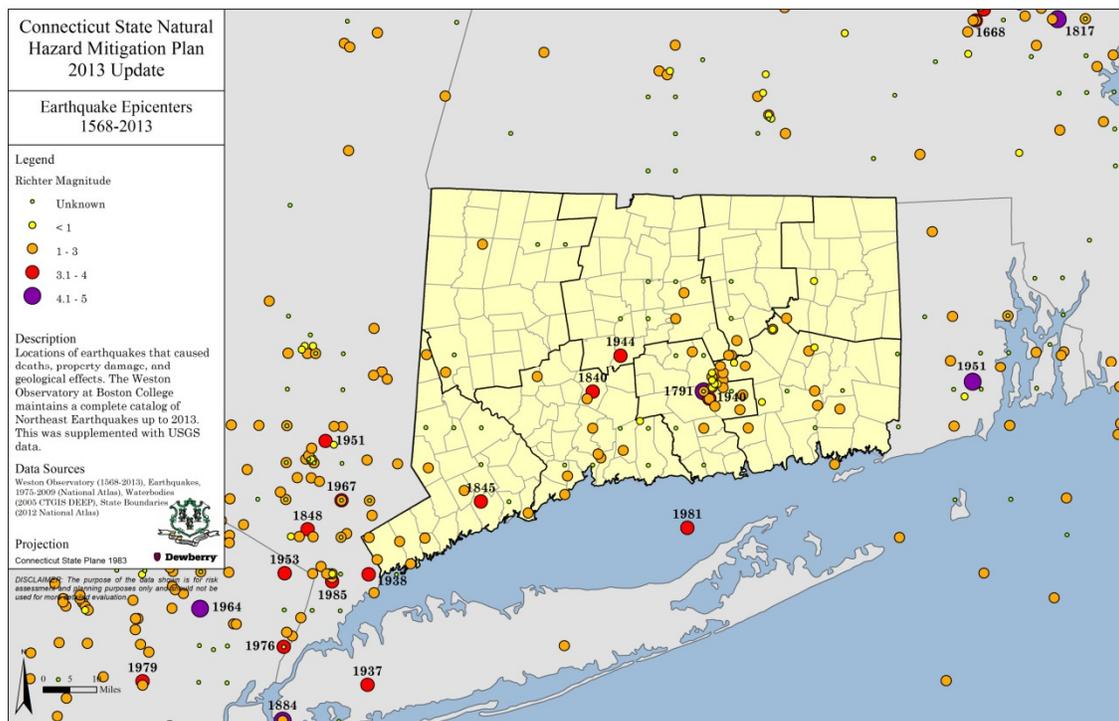


Figure 2-60. Earthquake epicenters near Connecticut (1568 – 2013).

## Probability of Future Occurrence

Earthquake events do occur in the state, though of much less intensity than elsewhere in the region or on the west coast. Additionally earthquake events are more likely to be felt as a result of an earthquake that occurs in the surrounding region rather than originating within Connecticut. Based on historical information, it is reasonable to assume that Connecticut has a medium-low probability of future earthquake events.

Probabilistic ground motion maps are typically used to assess the magnitude and frequency of seismic events. These maps measure the probability of exceeding a certain ground motion, expressed as percent peak ground acceleration (%PGA), over a specified period of years. The severity of earthquakes is site specific, and is influenced by proximity to the earthquake epicenter and soil type, among other factors. Average PGA, for the 100-year return period, has been used in the hazard ranking as the geographic extent parameter. The average PGA values for the state would result in no felt shaking or potential damage.



Connecticut may be categorized as having a low or moderate risk for an earthquake  $\geq 3.5$  occurring in the future and a moderate risk of an earthquake  $\leq 3.0$  occurring in the future. USGS currently ranks Connecticut as 43 out of 50 states for earthquake activity (based on geologic and historical data) and notes that no earthquake with a magnitude of  $\geq 3.5$  has occurred in Connecticut within at least the last 30 years.<sup>114</sup> As Kafka notes, it is impossible to predict when, where, and what magnitude would be for a future earthquake, especially in New England, due to this geographic area being located in an intraplate area of the United States.<sup>115</sup> However, future probabilities of potential events can be developed given geologic information and historical information on past events for a particular area.

The USGS earthquake hazard map in Figure 2-61 indicates a low probability of an earthquake occurring within Connecticut that would cause substantial damage within a fifty-year time period. The hazard map shows, “the distribution of earthquake shaking levels that have a certain probability of occurring in the United States.”<sup>116</sup> For the northeastern area of the United States, USGS suggests the use of either a 2% or 5%/50 year hazard map to provide higher, more realistic probabilities for planning purposes. Figure 2-62 shows that, depending upon the specific geographic area of Connecticut in question, the earthquake PGA (certain amount of mapped shaking distribution) that has a 2% chance of being exceeded in 50 years has a value between 7 – 15 % of %g (percent of gravity). Kafka notes that it requires more than 100% of the force of gravity to throw objects into the air. This is a relatively low probability since a 2% percent chance of exceedence means there is a 98% chance that the shaking will not exceed the indicated value of %g.

In addition, a series of probability maps were created using the USGS's interactive web-based mapping tools (see example in Figure 2-61) for East Haddam, Portland, and Haddam, and the New Haven to Greenwich area of the state. The maps were created to help analyze the probability of a magnitude  $\geq 5.0$  (shown as a magnitude  $\geq 4.75$ ), and a magnitude  $\geq 6.0$  earthquake occurring within 50, 100, 250 and 350 year time period. Since the probabilities were the same for Portland, Haddam and East Haddam, only one of these communities' map series (Haddam) along with the map series for Stamford are located in Appendix 2. Due to the relative historic infrequency of an earthquake of the selected magnitudes occurring within the state, USGS encourages the use of a longer time period to provide a truer projection of probabilities.

Table 2-72 and Table 2-73 present the projected percentages of such earthquake magnitudes occurring within Connecticut. The chance (percent) of a minimum 5.0 earthquake occurring within a 350-year time period (maximum mapped for this plan) is relatively moderate for the New Haven-Greenwich area of Connecticut. This may be a result of the geographic proximity of this area to a mesozoic rift basin.

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<sup>114</sup> Source: USGS

<sup>115</sup> Source: Kafka, Alan, L. Why Does the Earth Quake in New England.

<sup>116</sup> Sources: USGS and Weston Observatory



Table 2-72. Probability of an earthquake of specific magnitude occurring in the Haddam-East Haddam-Portland area of Connecticut

Timeframe (years)	Equal or Greater Than a 5.0 Quake	Equal or Greater Than a 6.0
50	3.00%	0.30%
100	8.00%	0.50%
250	20.00%	1.50%
350	20.00%	2.00%

Probability of earthquake with  $M \geq 4.75$  within 250 years & 50 km

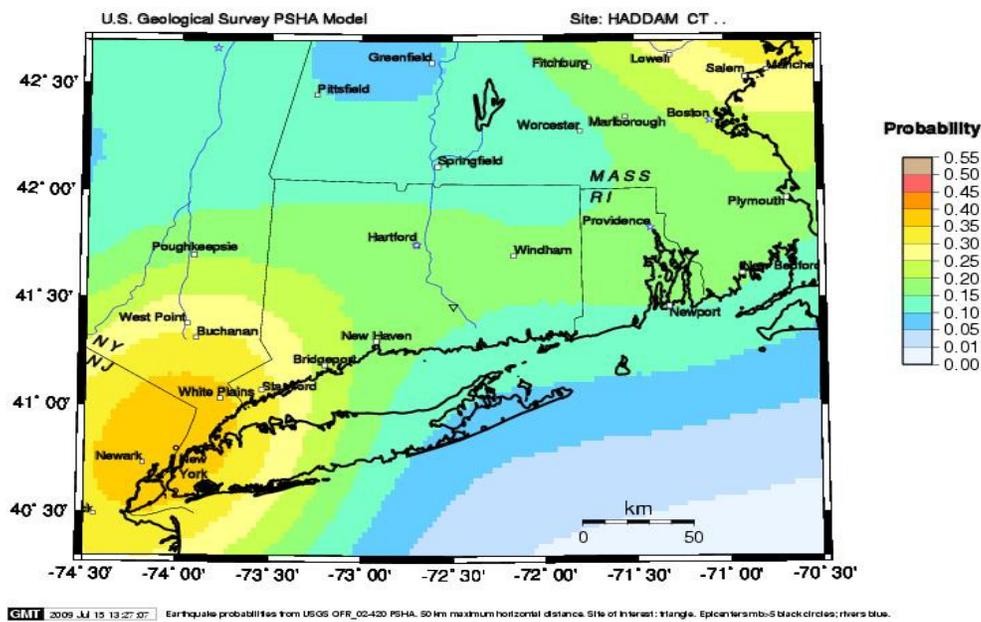


Figure 2-61. Example of Probability Maps Developed for Haddam-East Haddam-Portland and New Haven-Greenwich Areas of Connecticut

Table 2-73. Probability of an Earthquake of Specific Magnitude Occurring in the New Haven-Greenwich Area of Connecticut

Timeframe (years)	Greenwich		Stamford		Bridgeport		New Haven	
	$\geq 5.0$	$\geq 6.0$						
50	7.50%	0.70%	8.00%	0.70%	5.00%	0.50%	4.00%	0.30%
100	18.00%	1.50%	12.00%	1.00%	10.00%	1.00%	8.00%	0.50%
250	30.00%	3.50%	30.00%	3.50%	20.00%	2.50%	15.00%	1.50%
350	40.00%	5.00%	40.00%	4.50%	30.00%	3.00%	20.00%	2.50%

Based on the historic record of earthquakes and the information collected for this plan, one can make the following conclusion with regards to risk of a future earthquake event occurring in Connecticut:



- There are geographic areas within the state that have had seismic activity in the past;
- Although the risk is relatively very low, the long-term probability does exist of an earthquake with a magnitude  $\geq 5.0$  to occur within the state; and
- Although the probability of an earthquake with a magnitude  $\geq 5.0$  is extremely small (under 1%), based on Connecticut's historical record of earthquake events, it is likely that one or more earthquake(s) with a magnitude  $\leq 3.0$  will occur within the next hundred years.

## Vulnerability and Loss Estimation

Earthquakes are low probability, high-consequence events. Although earthquakes may occur infrequently they can have devastating impacts. Ground shaking can lead to the collapse of buildings and bridges; disrupt gas, life lines, electric, and phone service. Deaths, injuries, and extensive property damage are possible vulnerabilities from this hazard. Some secondary hazards caused by earthquakes may include fire, hazardous material release, landslides, flash flooding, avalanches, tsunamis, and dam failure. Moderate and even very large earthquakes are inevitable, although very infrequent, in areas of normally low seismic activity. Consequently, buildings in these regions are seldom designed to deal with an earthquake threat; therefore, they are extremely vulnerable.

Most property damage and earthquake-related injuries and deaths are caused by the failure and collapse of structures due to ground shaking. The level of damage depends upon the amplitude and duration of the shaking, which are directly related to the earthquake size, distance from the fault, site, and regional geology. Other damaging earthquake effects include landslides, the down-slope movement of soil and rock (mountain regions and along hillsides), and liquefaction, in which ground soil loses shear strength and the ability to support foundation loads. In the case of liquefaction, anything relying on the substrata for support can shift, tilt, rupture, or collapse.

An earthquake risk assessment is difficult because it is challenging to monetize the potential damages accurately. FEMA has developed a software suite, Hazards US Multi-Hazard (Hazus-MH), for estimating potential losses to natural disasters. The Hazus-MH earthquake model was utilized to estimate damages and losses to buildings, lifelines, and essential facilities from deterministic (scenario-based) and probabilistic earthquakes. The update to this section uses the 2010 inventory updates provided by FEMA Modeling Task Force (MOTF) and the parameters used in the 2011 plan update. It should be noted that the new probabilistic runs show no damages of any significance in Connecticut.

The two geographic areas most vulnerable to potential earthquakes in Connecticut are New Haven-Greenwich and Hartford-East Haddam-Haddam-Portland. Most at risk are people who work or live in unreinforced masonry buildings built on filled land or unstable soil.<sup>117</sup>

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<sup>117</sup> Source: The Northeast States Emergency Consortium website, [www.nesc.org/hazards/earthquakes.cfm](http://www.nesc.org/hazards/earthquakes.cfm).



Other population groups who may be more vulnerable to the impacts from a potential earthquake with a magnitude  $> 5.0$  in both geographic areas include the elderly, the very young (under 18 years of age), people with various special needs.

For this plan update, Hazus-MH simulations were re-run with 2010 inventory updates for the following earthquake scenarios:

- Magnitude 5.7, epicenter located in Portland (largest historic event, information within Hazus-MH database);
- Magnitude 5.7, epicenter located in Haddam (largest historic event, information within Hazus-MH database);
- Magnitude 6.4, epicenter located in East Haddam (largest historic event, information within Hazus-MH database); and
- Magnitude 5.7, epicenter located in Stamford (magnitude scenario based on probabilities calculated by USGS in their probability maps).

The magnitudes chosen for these simulations and this plan are the maximum plausible magnitude for a potential earthquake in the scenario areas. The following should be noted for the review and use of these scenarios:

No historic earthquake of a magnitude 5.0 or greater has been recorded for Fairfield County, however USGS potential probabilities for such an event are possible when calculated for a long time period (250 to 350 years); and the last large earthquake with a magnitude of 6.0 occurred around the Portland-Haddam-East Haddam area over 200 years ago. Seismographs were not in use at that time however, an expert determination was made based on damage reports and geographic extent to which the quaking was felt.

The results for each Hazus-MH earthquake simulation are located in Appendix 2. Each Hazus-MH simulation that was run included the entire state of Connecticut for its analysis region. Therefore, it should be noted that the damage and injury estimations are based on state-wide building and infrastructure inventories and Census 2010 population per census tract. These Hazus-MH scenarios were run for planning purposes of this plan to highlight potential areas that may warrant further analysis either at the state, regional or local level. It is very difficult to predict what the actual impacts would be to the State of Connecticut from these earthquake scenarios. The range of potential impacts for these scenarios is wide and extends from minor impact to the maximum potential impacts as presented as a result of the Hazus-MH analyses.

Table 2-74 presents the total estimated losses that may result from the earthquake scenarios created for this plan, as estimated by FEMA's Hazus-MH software. Though the projected economic impacts resulting from these simulations may appear low, the results do indicate that attention does need to be given to potential economic impacts from a magnitude  $\geq 5.7$ , since the earthquake epicenters would be located near highly urbanized



areas of the state. Thus economic losses should be anticipated from the physical impacts of an earthquake  $\geq 5.7$ .

Figure 2-62 through Figure 2-65 show the estimated total losses by census tract for all four earthquake scenarios: East Haddam, Haddam, Portland, and Stamford. Figure 2-62, depicting the East Haddam scenario, below shows the highest estimated losses (between \$370 million and \$900 million) occurring in the towns of East Haddam, East Hampton, Middletown, and Colchester. Figure 2-62 depicting the Haddam scenario, shows Haddam, East Haddam, Middlesex, East Hampton and Middletown with the highest estimated losses (between \$180 million and \$590 million). Figure 2-64, depicting the Portland scenario, shows the towns of Middletown and Glastonbury with the highest estimated losses (between \$360 million and \$603 million). Figure 2-65, depicting the Stamford scenario, shows the highest estimated losses (between \$270 million and \$710 million) occurring in the towns of Greenwich, Stamford, New Canaan, and Fairfield.

Table 2-74. Hazus-MH Estimated Direct Losses of Earthquake Scenario Events (shown in thousands of dollars).

Epicenter Location	Estimated Total Capital Losses (2000 Census)	Estimated Total Income Losses (2000 Census)	Estimated Total Losses (2000 Census)	Estimated Total Losses (2010 Census)
Stamford	\$4,982,162	\$1,001,880	\$5,984,042	\$16,074,259
Haddam	\$4,598,669	\$847,450	\$5,446,119	\$7,097,324
Portland	\$5,742,542	\$1,076,946	\$6,819,488	\$14,747,238
East Haddam	\$13,524,900	\$3,420,292	\$16,945,192	\$20,227,087

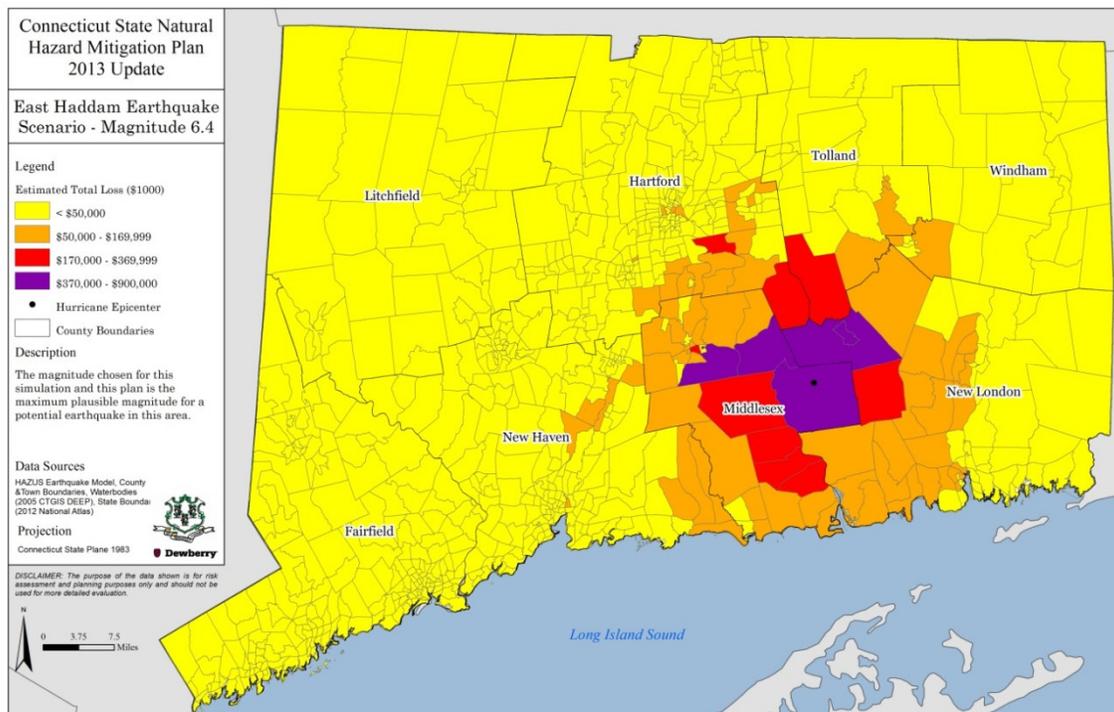




Figure 2-62. East Haddam Earthquake Scenario. Estimated Total Losses by 2010 US Census Tract

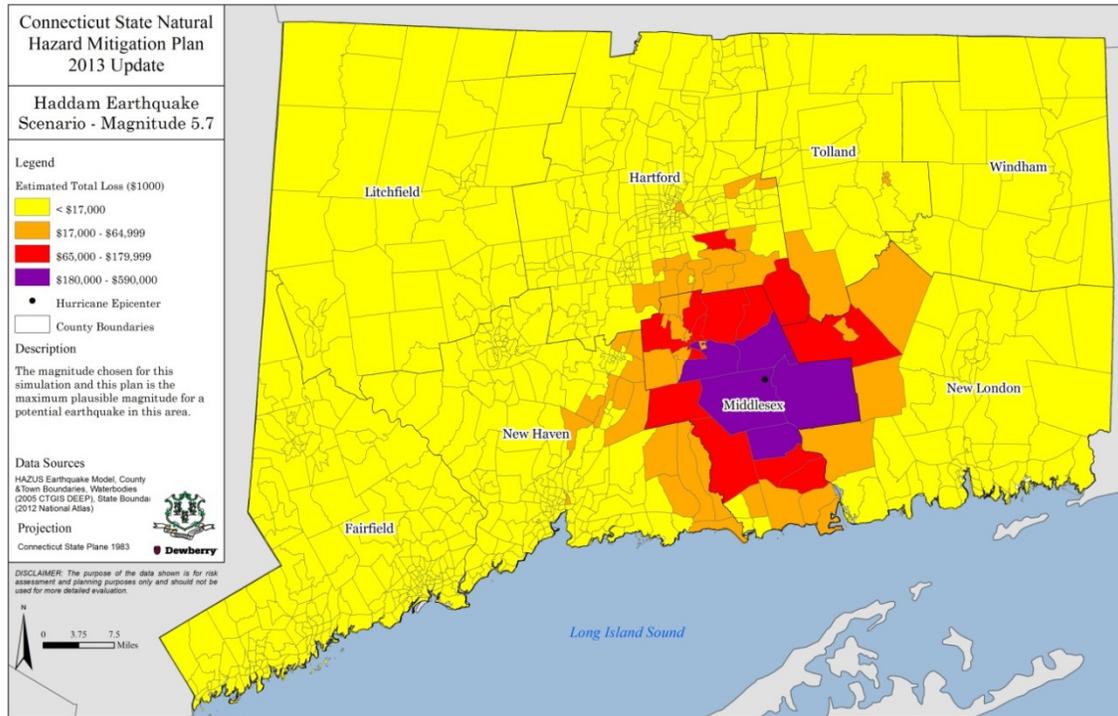


Figure 2-63. Haddam Earthquake Scenario – Estimated Total Losses by 2010 US Census Tract

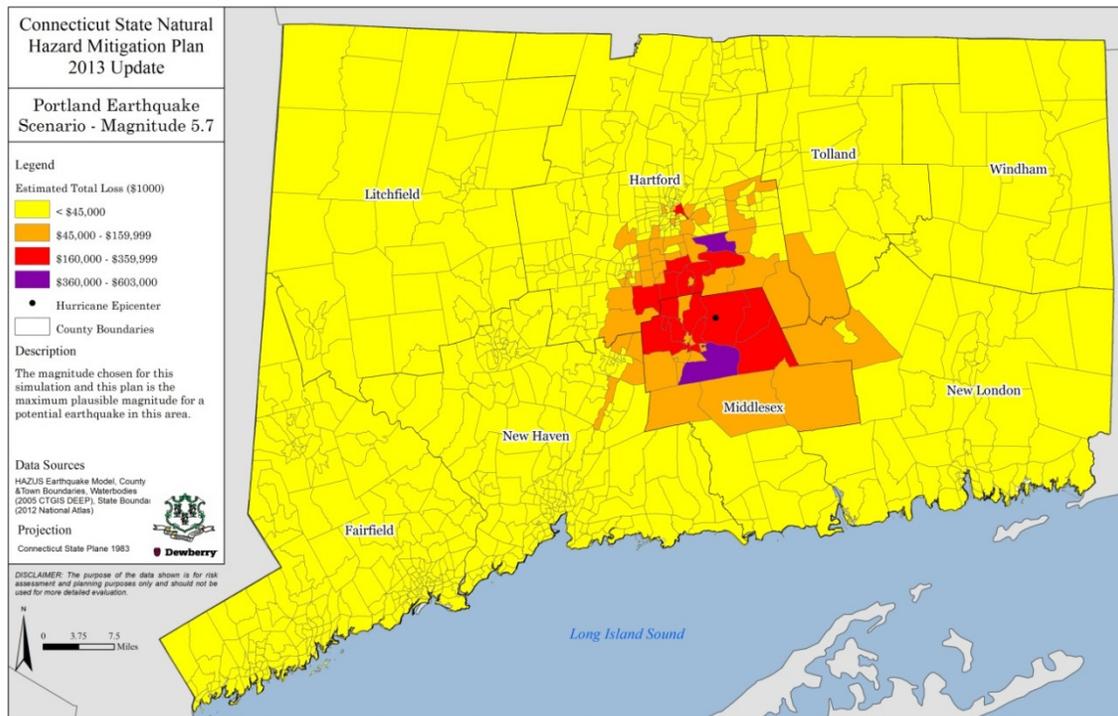


Figure 2-64. Portland Earthquake Scenario – Estimated Total Losses by 2010 US Census Tract

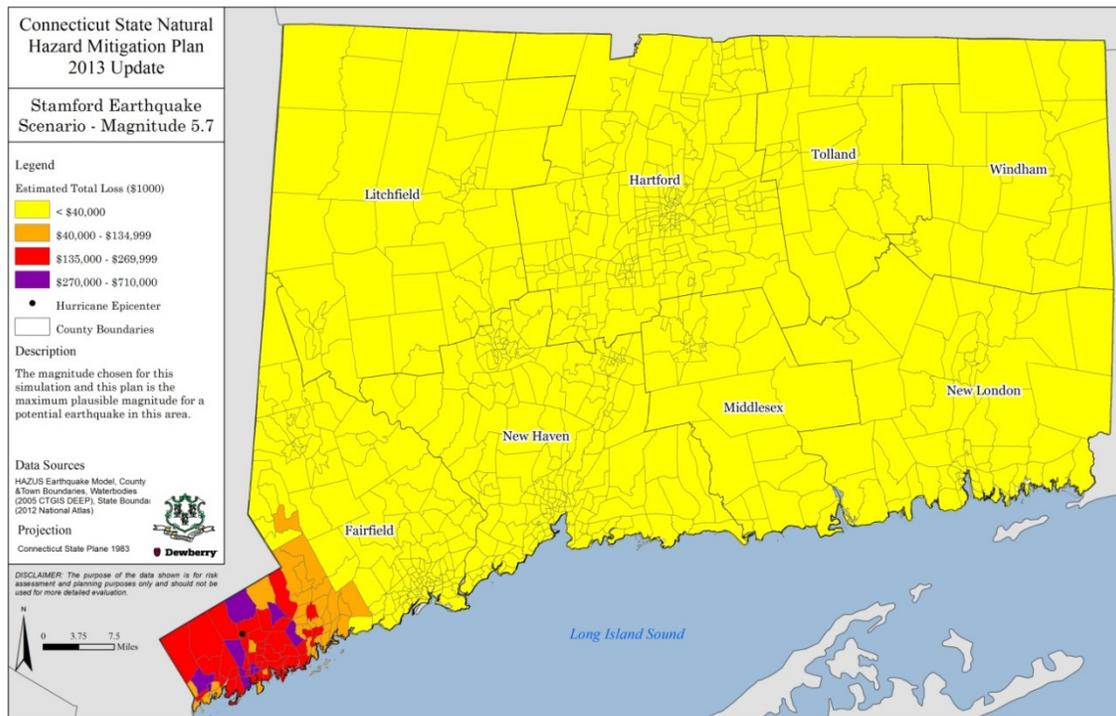


Figure 2-65. Stamford Earthquake Scenario – Estimated Total Losses by 2010 US Census Tract

Table 2-74 shows the projected estimated building damage. The estimated numbers in this table are based on the total building inventory for the state. A significant percentage of buildings damaged (88-96%) to any degree are estimated to be either one-family homes or other residential buildings (e.g., apartment buildings, 2 or 3-family homes, etc.). Though residential structures comprise the majority of building damages in the simulations, other building occupancy types will also experience damage. Other building occupancy types include agriculture, commercial, education, government, industrial, and religion. Though smaller in total number of buildings, these other occupancy types are vital to communities and impacts to these structures will be felt by a wide group of people within the immediate location and beyond.

Table 2-75. Total number of buildings damaged by expected degree of damage.

Expected Damage	East Haddam (magnitude 6.40)	Haddam (magnitude 5.70)	Portland (magnitude 5.70)	Stamford (magnitude 5.7)
None	774,225	936,908	921,755	964,960
Slight	174,334	81,860	90,374	55,357
Moderate	77,159	24,176	29,450	21,789
Extensive	17,595	3,589	4,754	4,199
Complete	3,665	446	646	675

People requiring short-term shelter is estimated to be between 2,000+ to over 11,000 people, depending on the specific scenario. In addition, the estimated the number of



displaced households ranged from almost 4,000 to a little over 11,000 in total. The estimates by Hazus-MH may be on the maximum end of an impact range, but do indicate that the potential does exist for individual assistance needs such as sufficient temporary shelter accommodations, and household relocation assistance (temporary or possibly permanent relocation).

For the simulations, Hazus-MH also calculated physical injuries to people by number per injury level. The injury levels are as follows:

- Severity Level 1 – injuries will require medical attention but hospitalization is not needed.
- Severity Level 2 – injuries will require hospitalization but are not considered life-threatening.
- Severity Level 3 – injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4 – victims are killed by the earthquake.

Injury estimates were developed for three times of day (i.e., 2:00 a.m., 2:00 p.m., 5:00 p.m.) representing various times of the day during which different community sectors are at their peak occupancy loads. The community sectors considered for the analysis were: commuting; educational; hotels; industrial; other residential; and single family. The vast majority of injuries projected for all scenarios (92-96%) fall within the Severity Level 1 or 2 categories. An analysis of potential fire ignitions resulting from each scenario is shown in Table 2-76.

Table 2-76. Potential Fire Impact from Each Earthquake Scenario

Epicenter Scenario	Number of Ignitions	Population Exposed	Value of Exposed Structures (thousands)
East Haddam	43	552	\$58,693
Haddam	71	619	\$62,797
Portland	25	351	\$38,240
Stamford	15	435	50482

For the Stamford scenario, all projected fire ignitions were located in Fairfield County. For the other three scenarios, the majority, were estimated to be within communities in Hartford, Middlesex, New Haven, and New London counties. The projected estimates for both injuries and fire starts directly related to a magnitude  $\geq 5.7$  earthquake indicate an increased demand on state and local medical and emergency services (including police and fire) for injuries ranging from non-life-threatening to loss of life.

**Hazard Ranking.** Quantitative risk assessment, to the degree possible, has been completed for earthquake using the methodology described in the Hazard Analysis and Ranking methodology Section 2.6 of this chapter. Scores for each jurisdiction were calculated based on population, building permits, average score from local plan rankings, and measures of



historical impact including injuries and deaths, property damage, and the number of reported events. Annualized events, dating back to 1568, have been supplemented with data provided by the Connecticut State Geologist. Geographic extent is represented by the average 500-year PGA. The composite earthquake rank shows all of Connecticut in the medium-low and low categories relative to the other hazards addressed in this plan (Figure 2-66).

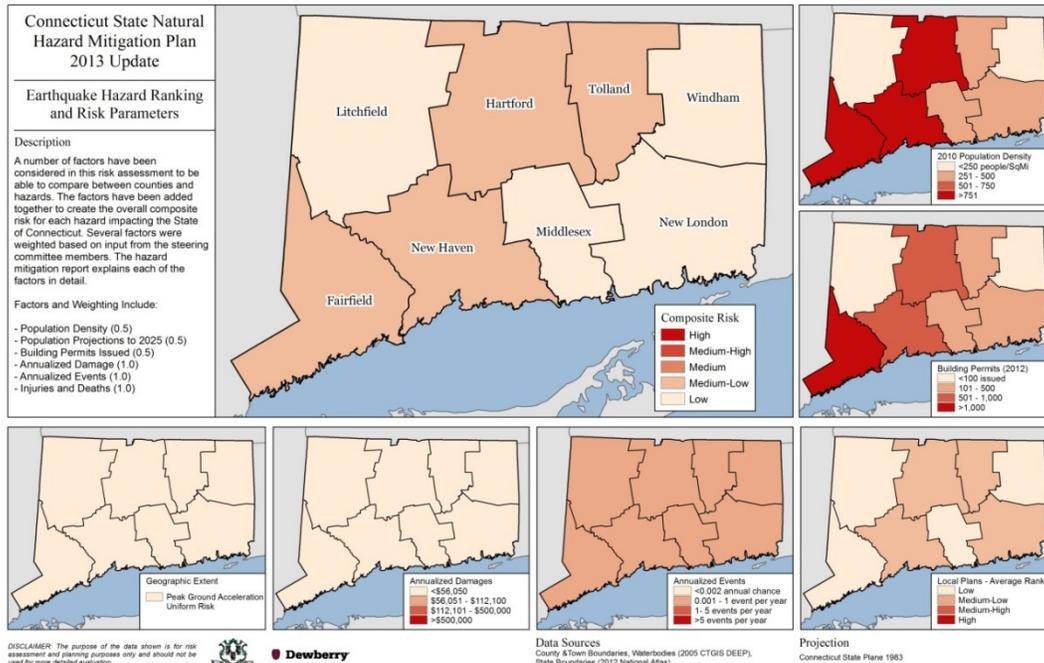


Figure 2-66. Earthquake relative ranking.

## 2.8 Summary of HIRA analysis and ranking

Section 2.7 discussed the probability, impacts, and risks for each of the natural hazards that have been determined to have a significant impact on the population and infrastructure in Connecticut. This final sub-section to the HIRA provides an overall assessment and summary of the individual hazard analyses.

GIS data for critical facilities and state facilities was used to the extent possible to determine risk for the infrastructure in the State; this analysis is new in the 2014 plan update. Section 2.2.3 fully describes the datasets that were used to create the datasets that are referred to as critical facilities and states facilities. Mitigation activities have also been created to maintain and expand on current datasets.

Vulnerability of state and critical facilities is discussed in each of the hazard sub-sections in the HIRA. The individual hazard sections highlight the results of the analysis completed for this plan. Refer to the tables in these sections to determine what facilities are at greater risk for each hazard type; analysis is based on GIS intersections of the facility data with the available hazard data. The data used for this analysis is available, through Connecticut Department of Construction Services, for localities to use to update their plans. This information is ideal for determining structural mitigation strategies.



### 2.8.1 Facility and Infrastructure Risk

The tables in each of the hazard specific hazard analysis sections can be used as a starting point for determining what types of mitigation actions would help to lower the vulnerability of state and critical facilities and infrastructure. Section 2.2.3 describes the facility types and sources that were used for the vulnerability analysis in each of the hazard specific sections.

As described in section 2.2.3, an attempt to quantify vulnerability to state facilities and infrastructure, was made using the average value for facility was estimated based on the known building values in New London, Tolland, and Windham counties. Table 2-77 includes the number of infrastructure/facilities, building value and contents value by municipality. **It should be noted that building and contents values and hazard specific loss estimates have been estimated for this plan and should not be used for other applications.** Table 2-77 includes the loss estimates by municipality for facilities located within the known hazard geographic extents.

Facilities point locations will be made available to localities through Connecticut Department of Construction Services and can be used at the local level to determine if the spatial locations are correct. If acceptable, this analysis could be used to identify and recommend mitigation projects.

### Effect of Changes in Development on Loss Estimates

The majority of development in Connecticut is regulated and occurring outside of the known/mapped hazard areas (for example, FEMA floodplains). The effect of this change would be positive and result in a decrease in the estimated losses of facilities and infrastructure. Since Hurricane Irene and Super Storm Sandy, many of the State's most vulnerable areas are beginning to see some retreat from highest hazard areas and a push to mitigate damaged structures.

Most of the local hazard mitigation plans include a general overview of land uses and development trends. Each local hazard mitigation plan was reviewed for information on local trends. Detailed information pulled from each local plan is available in Appendix 4-2. Information on changes in development available in both local plans and at the State level is not of sufficient detail to estimate quantifiable impacts on loss estimation. With the very low rate of development in the last three years, regulation of that development, and overall increase in awareness of hazards (particularly flood and wind), it is believed that the impact of development on losses is currently neutral or reducing. However, with the impact on hazard events caused by climate change and Sea Level Rise, suspected reduction of vulnerability gained by newer, better construction outside of hazard areas may be cancelled out by increases in vulnerability to existing buildings and infrastructure.



Many communities in Fairfield County are projecting that growth will occur near Metro-North stations, including Darien, Greenwich, New Canaan, Norwalk, Stamford, Weston and Westport. Additionally, it seems that there is growth in many towns like Easton and Fairfield, and although towns such as Fairfield are limiting development in natural hazard areas like the coast and, specifically, the Town of Monroe is looking to designate areas as open space, other communities, like the Town of Stratford, have indicated that growth has been directed to former industrial areas that are located within the coastal flood hazard area.

Review and compilation of local mitigation plans identified a significant gap in the accounting for land use and development in hazard prone areas. Connecticut DEEP/DESPP is committed to assisting local planning efforts to address this gap. As this information is available and analyses at the local level, future revisions of the CT NHMP will use this to summarize land use and development in hazards prone areas.



Table 2-77. Loss estimates by hazard for State facilities and infrastructure within hazard extents.

County	Municipality	Thunderstorm Losses	Hurricane Losses	Tornado Losses	Winter Weather Losses	Flood Losses	SLR Losses	Erosion Losses	Dam Inundation Losses	WUI Losses	Earthquake Losses
<b>Fairfield</b>	<b>Fairfield</b>	<b>\$2,340,764,229</b>	<b>\$631,334,002</b>	<b>\$668,789,780</b>	<b>\$78,025,474</b>	<b>\$197,057,037</b>		<b>\$224,394,430</b>	<b>\$14,011,820</b>	<b>\$887,326,197</b>	<b>\$34,677,989</b>
Fairfield	Bridgeport	\$256,667,740	\$58,313,853	\$73,333,640	\$8,555,591	\$49,359,181			\$292,499		\$3,802,485
Fairfield	Brookfield	\$1,518,744	\$1,508,882	\$433,927	\$50,625					\$1,518,744	\$22,500
Fairfield	Danbury	\$1,412,811,630	\$324,409,641	\$403,660,466	\$47,093,721	\$92,643,386		\$185,286,771	\$12,695,575	\$741,147,084	\$20,930,543
Fairfield	New Canaan	\$30,754,567	\$15,177,578	\$8,787,019	\$1,025,152					\$3,417,174	\$455,623
Fairfield	New Fairfield	\$45,942,007	\$33,639,194	\$13,126,288	\$1,531,400			\$8,353,092			\$680,622
Fairfield	Newtown	\$237,303,754	\$70,917,456	\$67,801,073	\$7,910,125			\$18,984,300		\$113,905,802	\$3,515,611
Fairfield	Norwalk	\$137,066,648	\$50,680,685	\$39,161,900	\$4,568,888	\$7,214,034		\$7,214,034	\$320,624		\$2,030,617
Fairfield	Ridgefield	\$18,604,614	\$10,384,659	\$5,315,604	\$620,154					\$18,604,614	\$275,624
Fairfield	Shelton	\$13,668,696	\$3,017,764	\$3,905,342	\$455,623	\$13,668,696			\$202,499		\$202,499
Fairfield	Stamford	\$45,942,007	\$12,781,119	\$13,126,288	\$1,531,400				\$433,123	\$8,353,092	\$680,622
Fairfield	Stratford	\$54,674,785	\$17,662,796	\$15,621,367	\$1,822,493			\$4,556,232	\$67,500		\$809,997
Fairfield	Westport	\$85,429,351	\$32,396,585	\$24,408,386	\$2,847,645	\$34,171,741					\$1,265,620
Fairfield	Wilton	\$379,686	\$443,789	\$108,482	\$12,656					\$379,686	\$5,625
<b>Hartford</b>	<b>Hartford</b>	<b>\$25,806,878,169</b>	<b>\$5,368,117,096</b>	<b>\$7,373,393,763</b>	<b>\$860,229,272</b>	<b>\$351,209,556</b>		<b>\$355,006,416</b>	<b>\$641,247</b>	<b>\$1,330,419,766</b>	<b>\$382,324,121</b>
Hartford	Avon	\$30,754,567	\$5,896,879	\$8,787,019	\$1,025,152			\$6,834,348		\$30,754,567	\$455,623
Hartford	Berlin	\$3,417,174	\$3,865,894	\$976,335	\$113,906					\$1,139,058	\$50,625
Hartford	Bloomfield	\$37,968,601	\$10,887,620	\$10,848,172	\$1,265,620			\$7,593,720		\$11,390,580	\$562,498
Hartford	Bristol	\$9,492,150	\$3,166,736	\$2,712,043	\$316,405					\$9,492,150	\$140,624
Hartford	Burlington	\$85,429,351	\$23,353,155	\$24,408,386	\$2,847,645			\$5,695,290		\$22,781,160	\$1,265,620
Hartford	Canton	\$379,686	\$4,102,581	\$108,482	\$12,656						\$5,625
Hartford	East Granby	\$2,873,843,382	\$581,964,714	\$821,098,109	\$95,794,779			\$132,130,730		\$132,130,730	\$42,575,458
Hartford	East Hartford	\$18,604,614	\$19,092,782	\$5,315,604	\$620,154						\$275,624
Hartford	East Windsor	\$200,853,897	\$48,442,017	\$57,386,828	\$6,695,130					\$139,724,450	\$2,975,613
Hartford	Enfield	\$1,366,869,623	\$265,982,577	\$390,534,178	\$45,562,321	\$45,562,321		\$45,562,321		\$45,562,321	\$20,249,920
Hartford	Farmington	\$838,726,388	\$162,572,669	\$239,636,111	\$27,957,546	\$107,071,454		\$107,071,454		\$499,666,784	\$12,425,576
Hartford	Glastonbury	\$85,429,351	\$20,197,323	\$24,408,386	\$2,847,645					\$17,085,870	\$1,265,620
Hartford	Granby	\$379,686	\$867,854	\$108,482	\$12,656					\$379,686	\$5,625
Hartford	Hartford	\$5,197,521,742	\$1,048,525,096	\$1,485,006,212	\$173,250,725	\$44,423,263					\$77,000,322
Hartford	Manchester	\$151,874,403	\$38,061,840	\$43,392,686	\$5,062,480				\$112,500	\$7,593,720	\$2,249,991
Hartford	New Britain	\$1,555,193,882	\$322,683,796	\$444,341,109	\$51,839,796	\$24,299,904			\$359,999	\$97,199,618	\$23,039,909
Hartford	Newington	\$1,233,599,835	\$245,444,814	\$352,457,096	\$41,119,994			\$21,642,102			\$18,275,553
Hartford	Rocky Hill	\$2,135,733,786	\$437,713,863	\$610,209,653	\$71,191,126			\$28,476,450		\$56,952,901	\$31,640,501
Hartford	Simsbury	\$37,968,601	\$30,927,151	\$10,848,172	\$1,265,620	\$11,390,580			\$168,749	\$26,578,020	\$562,498
Hartford	South Windsor	\$379,686	\$10,729,828	\$108,482	\$12,656						\$5,625
Hartford	Southington	\$37,968,601	\$8,047,371	\$10,848,172	\$1,265,620					\$18,984,300	\$562,498
Hartford	Suffield	\$413,478,061	\$78,422,419	\$118,136,589	\$13,782,602					\$213,003,850	\$6,125,601
Hartford	West Hartford	\$13,668,696	\$3,944,790	\$3,905,342	\$455,623						\$202,499
Hartford	Wethersfield	\$151,874,403	\$34,871,941	\$43,392,686	\$5,062,480						\$2,249,991



County	Municipality	Thunderstorm Losses	Hurricane Losses	Tornado Losses	Winter Weather Losses	Flood Losses	SLR Losses	Erosion Losses	Dam Inundation Losses	WUI Losses	Earthquake Losses
Hartford	Windsor	\$85,429,351	\$40,868,021	\$24,408,386	\$2,847,645						\$1,265,620
Hartford	Windsor Locks	\$9,240,038,652	\$1,917,483,366	\$2,640,011,043	\$308,001,288	\$118,462,034					\$136,889,462
<b>Litchfield</b>	<b>Litchfield</b>	<b>\$661,033,337</b>	<b>\$158,429,584</b>	<b>\$325,270,372</b>	<b>\$22,034,445</b>	<b>\$64,166,935</b>		<b>\$51,637,297</b>	<b>\$579,373</b>	<b>\$179,971,167</b>	<b>\$4,896,543</b>
Litchfield	Barkhamsted	\$6,074,976	\$4,260,373	\$2,989,274	\$202,499				\$33,750		\$45,000
Litchfield	Cornwall	\$256,667,740	\$37,574,122	\$126,296,825	\$8,555,591	\$29,615,508		\$39,487,345			\$1,901,243
Litchfield	Kent	\$200,853,897	\$30,710,188	\$98,832,870	\$6,695,130						\$1,487,807
Litchfield	Litchfield	\$30,754,567	\$41,344,551	\$15,133,199	\$1,025,152					\$13,668,696	\$227,812
Litchfield	North Canaan	\$1,518,744	\$5,858,013	\$747,318	\$50,625					\$1,518,744	\$11,250
Litchfield	Torrington	\$97,199,618	\$12,888,793	\$47,828,383	\$3,239,987			\$12,149,952	\$179,999	\$97,199,618	\$719,997
Litchfield	Warren	\$379,686	\$4,378,717	\$186,830	\$12,656						\$2,812
Litchfield	Washington	\$3,417,174	\$1,005,921	\$1,681,467	\$113,906					\$3,417,174	\$25,312
Litchfield	Winchester	\$64,166,935	\$20,408,908	\$31,574,206	\$2,138,898	\$34,551,427			\$365,624	\$64,166,935	\$475,311
<b>Middlesex</b>	<b>Middlesex</b>	<b>\$7,921,389,152</b>	<b>\$1,304,680,515</b>	<b>\$3,897,826,408</b>	<b>\$264,046,305</b>	<b>\$124,537,010</b>		<b>\$418,413,979</b>	<b>\$410,623</b>	<b>\$4,750,251,626</b>	<b>\$58,676,957</b>
Middlesex	Chester	\$1,518,744	\$4,142,029	\$747,318	\$50,625	\$1,518,744				\$1,518,744	\$11,250
Middlesex	Clinton	\$379,686	\$295,859	\$186,830	\$12,656					\$379,686	\$2,812
Middlesex	Cromwell	\$379,686	\$3,609,483	\$186,830	\$12,656						\$2,812
Middlesex	Deep River	\$379,686	\$473,375	\$186,830	\$12,656	\$379,686					\$2,812
Middlesex	Durham	\$1,518,744	\$4,142,029	\$747,318	\$50,625			\$1,518,744			\$11,250
Middlesex	East Haddam	\$1,755,668,094	\$279,231,937	\$863,900,173	\$58,522,270	\$51,637,297		\$51,637,297		\$1,471,662,961	\$13,004,949
Middlesex	East Hampton	\$24,299,904	\$14,970,477	\$11,957,096	\$809,997	\$3,037,488		\$9,112,464			\$179,999
Middlesex	Essex	\$6,074,976	\$3,491,139	\$2,989,274	\$202,499						\$45,000
Middlesex	Haddam	\$237,303,754	\$69,231,059	\$116,768,514	\$7,910,125	\$47,460,751		\$9,492,150	\$70,312	\$123,397,952	\$1,757,806
Middlesex	Killingworth	\$123,018,266	\$49,763,522	\$60,532,798	\$4,100,609	\$20,503,044					\$911,246
Middlesex	Middlefield	\$379,686	\$7,159,793	\$186,830	\$12,656						\$2,812
Middlesex	Middletown	\$5,558,982,820	\$831,305,253	\$2,735,372,499	\$185,299,427			\$321,594,047	\$340,311	\$3,078,114,454	\$41,177,651
Middlesex	Old Saybrook	\$13,668,696	\$4,437,888	\$6,725,866	\$455,623			\$2,278,116		\$11,390,580	\$101,250
Middlesex	Portland	\$151,874,403	\$25,562,237	\$74,731,849	\$5,062,480			\$22,781,160		\$30,374,881	\$1,124,996
Middlesex	Westbrook	\$45,942,007	\$6,864,436	\$22,606,384	\$1,531,400					\$33,412,369	\$340,311
<b>New Haven</b>	<b>New Haven</b>	<b>\$18,068,117,987</b>	<b>\$3,913,153,649</b>	<b>\$4,588,728,378</b>	<b>\$602,270,600</b>	<b>\$2,364,304,762</b>	<b>\$139,724,450</b>	<b>\$764,687,617</b>	<b>\$6,674,036</b>	<b>\$5,883,994,041</b>	<b>\$401,513,733</b>
New Haven	Ansonia	\$1,518,744	\$1,005,921	\$385,713	\$50,625					\$1,518,744	\$33,750
New Haven	Bethany	\$6,074,976	\$1,508,882	\$1,542,851	\$202,499					\$6,074,976	\$134,999
New Haven	Branford	\$13,668,696	\$2,933,937	\$3,471,415	\$455,623					\$13,668,696	\$303,749
New Haven	Cheshire	\$1,026,670,961	\$217,180,600	\$260,741,831	\$34,222,365					\$217,180,396	\$22,814,910
New Haven	Derby	\$18,604,614	\$22,633,231	\$4,724,981	\$620,154						\$413,436
New Haven	East Haven	\$109,729,256	\$51,876,582	\$27,867,748	\$3,657,642	\$71,001,283					\$2,438,428
New Haven	Guilford	\$24,299,904	\$9,472,426	\$6,171,404	\$809,997					\$24,299,904	\$539,998
New Haven	Hamden	\$607,497,610	\$148,038,095	\$154,285,107	\$20,249,920	\$15,187,440		\$151,874,403		\$273,373,925	\$13,499,947
New Haven	Madison	\$735,072,108	\$167,950,402	\$186,684,980	\$24,502,404	\$350,829,870	\$83,530,921			\$16,706,184	\$16,334,936
New Haven	Meriden	\$803,415,590	\$196,489,974	\$204,042,054	\$26,780,520			\$17,465,556	\$388,123	\$331,845,570	\$17,853,680
New Haven	Milford	\$24,299,904	\$24,142,113	\$6,171,404	\$809,997	\$15,187,440	\$3,037,488				\$539,998



County	Municipality	Thunderstorm Losses	Hurricane Losses	Tornado Losses	Winter Weather Losses	Flood Losses	SLR Losses	Erosion Losses	Dam Inundation Losses	WUI Losses	Earthquake Losses
New Haven	New Haven	\$7,441,845,726	\$1,542,496,590	\$1,889,992,565	\$248,061,524	\$1,807,305,390	\$53,156,041	\$159,468,123	\$5,906,227	\$691,028,532	\$165,374,349
New Haven	North Haven	\$18,604,614	\$4,778,126	\$4,724,981	\$620,154						\$413,436
New Haven	Oxford	\$151,874,403	\$40,404,508	\$38,571,277	\$5,062,480			\$22,781,160		\$136,686,962	\$3,374,987
New Haven	Seymour	\$379,686	\$1,005,921	\$96,428	\$12,656				\$8,437		\$8,437
New Haven	Southbury	\$7,022,672,374	\$1,455,232,912	\$1,783,535,841	\$234,089,079	\$103,274,594		\$413,098,375		\$4,130,983,750	\$156,059,386
New Haven	Wallingford	\$1,518,744	\$1,005,921	\$385,713	\$50,625					\$759,372	\$33,750
New Haven	Waterbury	\$45,942,007	\$18,358,065	\$11,667,811	\$1,531,400				\$371,249	\$29,235,822	\$1,020,933
New Haven	West Haven	\$1,518,744	\$2,514,803	\$385,713	\$50,625	\$1,518,744					\$33,750
New Haven	Wolcott	\$9,492,150	\$1,693,660	\$2,410,705	\$316,405					\$9,492,150	\$210,937
New Haven	Woodbridge	\$3,417,174	\$2,430,977	\$867,854	\$113,906					\$1,139,058	\$75,937
<b>New London</b>	<b>New London</b>	<b>\$16,978,196,130</b>	<b>\$3,950,928,526</b>	<b>\$1,077,980,707</b>	<b>\$565,939,871</b>	<b>\$1,262,835,657</b>	<b>\$93,023,072</b>	<b>\$632,285,740</b>		<b>\$3,216,266,066</b>	<b>\$880,350,910</b>
New London	Bozrah	\$1,518,744	\$3,740,154	\$96,428	\$50,625			\$759,372			\$78,750
New London	Colchester	\$10,271,750	\$28,231,902	\$652,175	\$342,392					\$1,054,742	\$532,609
New London	East Lyme	\$9,888,268,883	\$2,286,359,540	\$627,826,596	\$329,608,963	\$504,982,389		\$216,421,024		\$1,154,245,459	\$512,725,053
New London	Franklin	\$54,523,265	\$31,563,248	\$3,461,795	\$1,817,442			\$9,980,376		\$10,100,002	\$2,827,132
New London	Griswold	\$45,942,007	\$16,511,410	\$2,916,953	\$1,531,400					\$4,176,546	\$2,382,178
New London	Groton	\$1,233,599,835	\$281,150,091	\$78,323,799	\$41,119,994	\$432,842,047	\$64,926,307			\$259,705,228	\$63,964,436
New London	Lisbon	\$2,459,859	\$1,381,562	\$156,181	\$81,995					\$2,459,859	\$127,548
New London	Montville	\$64,166,935	\$20,798,904	\$4,074,091	\$2,138,898					\$49,359,181	\$3,327,174
New London	New London	\$18,604,614	\$12,223,917	\$1,181,245	\$620,154	\$15,946,812				\$2,657,802	\$964,684
New London	North Stonington	\$3,417,174	\$2,280,582	\$216,963	\$113,906						\$177,187
New London	Norwich	\$3,572,465,634	\$789,902,219	\$226,823,215	\$119,082,188			\$405,124,969		\$1,730,988,503	\$185,238,959
New London	Preston	\$3,417,174	\$2,098,135	\$216,963	\$113,906					\$1,139,058	\$177,187
New London	Voluntown	\$379,686	\$143,456	\$24,107	\$12,656					\$379,686	\$19,687
New London	Waterford	\$2,079,160,571	\$474,543,405	\$132,010,195	\$69,305,352	\$309,064,409	\$28,096,764				\$107,808,326
<b>Tolland</b>	<b>Tolland</b>	<b>\$54,995,008,066</b>	<b>\$11,352,089,234</b>	<b>\$8,729,366,360</b>	<b>\$1,833,166,936</b>	<b>\$814,565,322</b>		<b>\$4,668,035,416</b>		<b>\$24,506,825,989</b>	<b>\$2,036,852,151</b>
Tolland	Andover	\$379,686	\$710,062	\$60,268	\$12,656					\$379,686	\$14,062
Tolland	Bolton	\$2,939,769	\$631,166	\$466,630	\$97,992					\$2,939,769	\$108,880
Tolland	Columbia	\$7,679,062	\$7,810,684	\$1,218,899	\$255,969					\$7,679,062	\$284,410
Tolland	Coventry	\$18,604,614	\$3,392,519	\$2,953,113	\$620,154						\$689,060
Tolland	Ellington	\$92,268	\$4,733,748	\$14,646	\$3,076						\$3,417
Tolland	Hebron	\$37,968,601	\$8,710,085	\$6,026,762	\$1,265,620			\$7,593,720			\$1,406,244
Tolland	Mansfield	\$54,492,014,570	\$11,154,486,269	\$8,649,526,122	\$1,816,400,486	\$800,378,101		\$4,629,307,443		\$24,388,055,964	\$2,018,222,762
Tolland	Somers	\$319,315,931	\$88,126,601	\$50,685,068	\$10,643,864			\$22,021,788		\$55,054,471	\$11,826,516
Tolland	Stafford	\$37,968,601	\$9,940,870	\$6,026,762	\$1,265,620					\$7,593,720	\$1,406,244
Tolland	Tolland	\$13,668,696	\$6,785,038	\$2,169,634	\$455,623			\$9,112,464		\$13,668,696	\$506,248
Tolland	Union	\$9,492,150	\$1,659,973	\$1,506,691	\$316,405						\$351,561
Tolland	Vernon	\$20,820,707	\$8,394,451	\$3,304,874	\$694,024	\$4,556,232				\$11,313,342	\$771,137
Tolland	Willington	\$34,063,410	\$56,707,768	\$5,406,891	\$1,135,447	\$9,630,989				\$20,141,278	\$1,261,608
<b>Windham</b>	<b>Windham</b>	<b>\$2,841,645,250</b>	<b>\$618,333,587</b>	<b>\$135,316,440</b>	<b>\$94,721,508</b>	<b>\$127,574,498</b>		<b>\$3,796,860</b>		<b>\$2,307,427,039</b>	<b>\$63,147,672</b>



County	Municipality	Thunderstorm Losses	Hurricane Losses	Tornado Losses	Winter Weather Losses	Flood Losses	SLR Losses	Erosion Losses	Dam Inundation Losses	WUI Losses	Earthquake Losses
Windham	Ashford	\$9,492,150	\$2,196,755	\$452,007	\$316,405			\$3,796,860			\$210,937
Windham	Brooklyn	\$60,685,973	\$10,755,517	\$2,889,808	\$2,022,866					\$55,370,369	\$1,348,577
Windham	Canterbury	\$1,982,044	\$462,958	\$94,383	\$66,068					\$1,982,044	\$44,045
Windham	Eastford	\$30,754,567	\$10,027,210	\$1,464,503	\$1,025,152					\$10,251,522	\$683,435
Windham	Killingly	\$492,073,064	\$104,610,005	\$23,432,051	\$16,402,435	\$13,668,696				\$492,073,064	\$10,934,957
Windham	Plainfield	\$319,315,931	\$60,858,243	\$15,205,521	\$10,643,864	\$110,108,942				\$33,032,683	\$7,095,910
Windham	Putnam	\$37,968,601	\$13,668,696	\$1,808,029	\$1,265,620	\$3,796,860				\$34,171,741	\$843,747
Windham	Thompson	\$54,674,785	\$9,596,022	\$2,603,561	\$1,822,493					\$31,893,625	\$1,214,995
Windham	Windham	\$1,834,608,269	\$394,764,965	\$87,362,299	\$61,153,609					\$1,648,562,126	\$40,769,073
Windham	Woodstock	\$89,866	\$11,393,216	\$4,279	\$2,996					\$89,866	\$1,997



### 2.8.2 Composite Ranking Results

To determine the overall hazard ranking, the total ranking values (RS value) for each of the hazards were separately averaged to determine what hazards should be considered the most significant in Connecticut. Section 2.6 describes the ranking parameters that were used for this analysis. Table 2-78 summarizes each of the individual scores assigned for each county and hazard identified. Based on modifications to the ranking parameters, data processing, and committee feedback during the 2014 update, several changes to the overall hazard ranking were made for the statewide ranking and have been noted in the individual hazard sections of this chapter.

Section 3.6 describes the local plan ranking. As discussed, the local plan ranking compares agreeably to the new ranking that was developed for this report. Hazards that were considered low or negligible were included as textual descriptions in the major hazard sections. Table 2-79 shows the overall annualized loss values for each hazard.

As stated before, this analysis is only representative of the NCDC data that was used (Table 2-11). It is known that the time period of this data is small in comparison to the known historical events. The data does not fully represent geological hazards but in the absence of better data, NCDC was used to represent risk. Efforts were made to contact representatives for the geological hazards to determine if databases were available for past events. For example, Connecticut Geological Survey has actively participated in the plan update and has multiple mitigation strategies included in Chapter 5 to address data gaps.

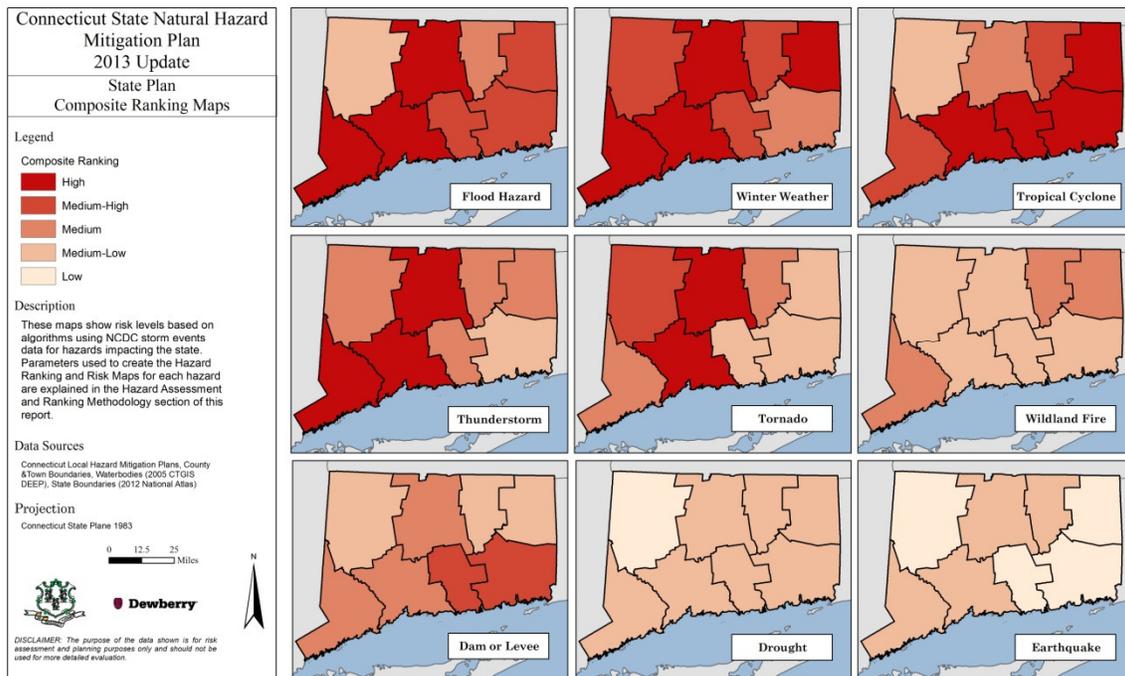


Figure 2-67. Composite hazard ranking maps, relative to Connecticut.



Table 2-78. Composite ranking results.

COUNTY	Background			Winter Weather					Flood					Hurricane				
	BP	PSqMi	P2025	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP
Fairfield County	H	H	ML	H	L	H	MH	MH	H	H	H	L	ML	ML	H	L	MH	MH
Hartford County	MH	H	ML	MH	H	L	MH	MH	MH	MH	H	H	MH	ML	H	L	MH	ML
Litchfield County	L	L	L	H	ML	H	H	ML	H	MH	L	ML	ML	ML	H	L	MH	L
Middlesex County	ML	ML	ML	MH	L	H	MH	MH	MH	H	H	L	H	ML	H	L	H	H
New Haven County	MH	H	MH	H	L	H	MH	H	H	H	H	L	MH	ML	H	L	MH	H
New London County	ML	ML	ML	MH	L	H	ML	H	MH	H	H	L	MH	ML	H	L	H	H
Tolland County	ML	ML	MH	MH	H	L	MH	MH	ML	L	H	ML	MH	ML	H	L	H	ML
Windham County	L	L	H	MH	MH	L	H	H	ML	L	H	MH	H	ML	H	L	H	H
COUNTY	Background			Thunderstorm					Tornado					Wildfire				
	BP	PSqMi	P2025	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP
Fairfield County	H	H	ML	H	MH	H	H	MH	ML	MH	H	ML	L	H	L	L	ML	L
Hartford County	MH	H	ML	H	MH	H	H	L	ML	H	H	MH	MH	H	L	L	L	L
Litchfield County	L	L	L	H	ML	H	MH	ML	ML	H	H	H	L	H	L	L	ML	L
Middlesex County	ML	ML	ML	MH	L	H	ML	MH	ML	L	H	ML	L	H	L	L	MH	L
New Haven County	MH	H	MH	H	ML	H	MH	MH	ML	H	H	ML	ML	H	L	L	L	L
New London County	ML	ML	ML	MH	L	H	L	ML	ML	L	H	L	ML	H	L	L	ML	L
Tolland County	ML	ML	MH	MH	L	H	ML	L	ML	L	H	ML	ML	H	L	L	MH	L
Windham County	L	L	H	MH	L	H	L	MH	ML	ML	H	L	ML	H	L	L	H	L
COUNTY	Background			Dam or Levee					Drought					Earthquake				
	BP	PSqMi	P2025	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP
Fairfield County	H	H	ML	ML	L	L	H	L	ML	L	L	ML	L	ML	L	L	L	L
Hartford County	MH	H	ML	ML	L	L	H	MH	ML	L	L	ML	ML	ML	L	L	L	ML
Litchfield County	L	L	L	ML	L	L	H	L	ML	L	L	ML	L	ML	L	L	L	L
Middlesex County	ML	ML	ML	ML	L	H	MH	H	ML	L	L	ML	L	ML	L	L	L	L
New Haven County	MH	H	MH	ML	L	L	H	L	ML	L	L	ML	L	ML	L	L	L	ML



COUNTY	Background			Dam or Levee					Drought					Earthquake				
	BP	PSqMi	P2025	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP	EV	PD	ID	GE	LP
New London County	ML	ML	ML	ML	MH	H	H	L	ML	L	L	ML	L	ML	L	L	L	ML
Tolland County	ML	ML	MH	ML	L	L	MH	ML	ML	L	L	ML	ML	ML	L	L	L	ML
Windham County	L	L	H	ML	L	L	ML	L	ML	L	L	ML	ML	ML	L	L	L	L

TABLE KEY:

BP: Building Permits  
 PSqMi: 2010 Population per square mile  
 P2025: 2025 Population projections (% changes from 2010)

Hazard specific default data : NCDC (unless noted below)

EV: Annualized events (Probability of Future Events)  
 Hurricane tracks from NOAA NHC tracks within 50 miles of Connecticut  
 Wildfire data from CT DOF  
 Dam data from NPDP  
 Earthquake data from CT State Geologist  
 PD: Annualized property damages  
 Flood property damages from NFIP claims paid  
 Hurricane property damages replaced with committee knowledge  
 Wildfire data from CT DOF  
 Dam data from NPDP  
 ID: Total injuries and deaths  
 Dam data from NPDP  
 GE: Geographic extents (hazard specific)  
 LP: Local plan average for county

RANKING SCORE:

L: Low  
 ML: Medium-Low  
 MH: Medium-High  
 H:High



### 2.8.3 Estimating Potential Losses

The local hazard mitigation plans were reviewed to determine if the local plan loss estimates could be summarized to create statewide loss estimates. During the review it was noticed that some plans did not include complete loss estimates and others were highly variable in the methodology used to compute loss. A summary of the local plan loss estimates is provided in Chapter 4. It was decided that the variability in the local loss estimates would limit the ability to integrate them into statewide vulnerability and loss estimate. Ideally, future revisions to the local plans will include a template for loss estimation that will allow the next revision of the state plan to be a representation of all of the local plans.

Rough estimates of annualized losses can be generated based on the NCDC Storm Events database, which documents the damage costs associated with the various hazards. Supplemental annualized loss values for flood, hurricane winds, wildfire and earthquake have also been derived from the other sources as described in each individual hazard section. NCDC did not include any historical information about damages due to drought and this is not included in the loss estimates.

Based on information from the NCDC database, Connecticut has experienced over \$1.4 billion in property damages, since 1950, from the hazards profiled in this plan. The state can expect to experience approximately **\$28,859,935** in annualized damages due to all the hazards that impact the State (excluding the NCDC hurricane events). As discussed in Section 2.2 this data has limitations due to the amount of historical data available, and reporting of significant events. NCDC wind damages (\$624,662) combines thunderstorm wind gusts (and tropical storm created winds) that can easily be over hurricane force and these events can and have impacted all sections of the State.

Table 2-79 illustrates the number of years of record for each hazard, total damages reported in 2012 dollars, and annualized loss values. Flooding and winter weather have the highest total annualized losses of the ranked hazards and together make up over 91% of the total NCDC annualized losses. Thunderstorm and winter weather occur the most frequently, at least 40 times a year statewide. Hartford and Litchfield can expect 8 thunderstorm related events in any given year while Fairfield and Litchfield will see over 5 flooding events per year. Based on this analysis, flood and thunderstorm related mitigation strategies should be a high priority.

Table 2-79 also includes the annualized loss values derived from supplemental sources for flood, high winds, earthquake, and wildfire. As shown, the Hazus-MH derived loss estimates are exponential compared to the NCDC annualized losses based on past recorded events. It should be noted that the estimates given for annualized loss are only based on the hazard categories that were determined to be significant types in Connecticut. Section 2.3 includes the NCDC categories that make up each of the established HIRA hazard types



used in this analysis. A complete listing of the NCDC categories would yield annualized loss values significantly different from what is listed in Table 2-79.

The NCDC information used was also used as parameters in the hazard ranking. The hazard specific sections include information regarding the annualized loss by county, where available. The ranking and risk parameter maps show the annualized damages as established using NCDC data. The hazards that used an established method other than sole use of NCDC loss data for calculating annualized loss are explained in detail in those sections. Appendix 2 includes the data used for ranking each jurisdiction.

Table 2-79. Annualized loss values statewide from NCDC and additional sources

Hazard Type	NCDC Storm Events data Annualized		Supplemental Damages	
	NCDC Annualized Events (years of record)	NCDC Annualized Damage	Damages	Source
Drought	1.45 (20)	\$ -	N/A	
Flood	29.65 (20)	\$2,799,259	\$750,794 (AAL) \$12,960,401 (100-year) \$3,121,033,000 (Hurricane Sandy)	Hazus-MH
Hurricane	N/A		\$113,731,975 \$4,617,659 (100-year) \$61,583,598 (1000-year)	Hazus-MH
Thunderstorm	42.59 (58)	\$624,662	N/A	
Tornado	1.73 (63)	\$23,415,250	N/A	
Winter Weather	40.75 (20)	\$2,020,764	N/A	
Earthquake	N/A		\$16,074,259,213 (Stanford) \$7,097,324,788 (Haddam) \$14,747,238,098 (Portland) \$20,227,087,421 (E.Haddam)	Hazus-MH

Local hazard mitigation plans lacked detailed information about land use and future development planning. Generalized information about land use planning has been made at the State level but really should be evaluated locally. Land use planning, completed at local level, can reduce risk to the population and infrastructure by addressing the hazards that impact the jurisdiction. It is necessary for this to be done at the jurisdictional level since this is where planning, regulation, and taxation occur. CT DEEP mitigation staff will be coordinating with localities to ensure that future revisions of their local plans will be standardized and will have the ability to be uploaded and used in the next revision of the statewide hazard analysis. Chapter 5: Hazard Mitigation Goals, Strategies, and Activities and Chapter 6: Plan Monitoring Maintenance and Revision include the process in which this will take place.



#### **2.8.4 Limitations of Data**

It should be noted that the data sources used in this ranking/prioritization are varied in their degree of completeness, accuracy, precision, etc; the ability to accurately prioritize some of the hazards would be improved with better information about them (e.g., flood, wildfire etc.). Further discussion on the data limitations and how the data was adapted for analysis is available in the hazard specific sections of this chapter. Data gaps are also identified as mitigation actions in Chapter 5: Hazard Mitigation Goals, Strategies, and Activities.

#### **2.8.5 Future Revisions to HIRA**

An attempt was made to include the “best available” data for this revision of the hazard mitigation plan. Spatial data is constantly changing and efforts are being made to increase the accuracy of this data by many local, state and federal agencies. As this data is made available it will be used in revisions to this plan; Chapter 3 identifies currently capabilities and plans underway that will be integrated in the HIRA as the information is available.

#### **2.8.6 Using HIRA results in Mitigation Strategies**

Data limitations have been fully noted throughout this chapter. Some of the issues can be resolved with closer coordination with federal, state, and local institutions. Data creation and management issues will take more time and effort to resolve and incorporate into revisions of this plan. The SHMP Team is dedicated to the long-term vision of this plan and are currently working towards the next revision.



### 3 Capability Assessment

This chapter outlines State and local natural hazard mitigation policies, programs, and capabilities. In particular, the roles and responsibilities are described for the various agencies, departments, and offices that participated in the NHMP planning process.

Several significant changes have occurred over the last three years with regard to this chapter and the State's capabilities analysis for this Plan. Many of these changes are related to the re-organization of state agencies that either directly or indirectly addresses natural hazards. In particular:

- The former Connecticut Department of Environmental Protection (DEP) was merged with the Department of Public Utility Control (DPUC) to form the Department of Energy and Environmental Protection (DEEP). The Public Utilities Regulatory Authority (PURA) within DEEP performs the former functions of the DPUC.
- The former Department of Emergency Management and Homeland Security (DEMHS) was combined with the former Department of Public Safety, forming the Department of Emergency Services and Public Protection (DESPP) with a Division of Emergency Management and Homeland Security (still known as DEMHS).
- The former Office of State Building Inspector (OSBI) and the State Building Code staff were merged into a new Department of Construction Services (DCS) which was then merged into the Department of Administrative Services (DAS) as of July 1, 2013.

Other changes to State capabilities include significant progress made by a number of state-level committees and task forces such as:

- The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change (formed in 2008);
- The Governor's Two Storm Panel (formed in 2011);
- The Connecticut GIS Council's Storm Response and Recovery Assessment Group (formed in 2011);
- The Shoreline Preservation Task Force (formed in 2012);
- The State's Long-Term Recovery Committee (formed in 2012);
- The State Vegetation Management Task Force (formed in 2012); and

The DEEP Office of Long Island Sound Programs (OLISP) has increased outreach and technical support to communities to assist with coastal adaptation, storm response and resilience. Planning for the establishment of a "Center for Coasts" is commencing in 2013 and will continue through 2014.

Aside from state agency changes and the activity of state-level committees and task forces, a number of other changes in capabilities have been underway such as Risk MAP progress,



updates to the State Building Code, and updates to the State Conservation and Development Policies Plan.

Although they do not represent new capabilities, this section of the plan has been expanded to describe the planning and technical assistance services provided by DCS Technical Services, the University of Connecticut, The Nature Conservancy, and other organizations that work with Connecticut's community leaders and officials.

Local capabilities are largely the same as they were in 2010, if not somewhat improved as a result of recent disasters that have forced communities to adapt. However, with the recognition that local communities have a significant role in disaster preparedness and implementation of hazard mitigation measures, this update to the plan provides more detail about these local capabilities.

The following sub-sections describe federal, state, intra-state regional, local (municipal), and non-governmental capabilities, in that sequence.

### **3.1 Federal Agencies and Programs for Disaster Response and Recovery, and Related Executive Orders**

This section describes the roles, executive orders and programs of the primary federal agencies that assist the State of Connecticut by providing funding for natural hazard mitigation and disaster response. This chapter does not serve as a grant administrative plan<sup>118</sup>, however the general grant administrative procedures for some grants (e.g., FEMA) are included in this chapter. The following descriptions of the grant programs and general administrative practices are not intended to dictate state policy or decision-making procedures or outcomes.

In general the potential financial support sources listed in this chapter have not changed from the 2010 Plan. The most pertinent change has been by FEMA with regards to the restructuring of all hazard mitigation assistance grant programs under one umbrella grant program and process, called the Hazard Mitigation Assistance Program (HMA).

#### **3.1.1 Federal Executive Orders**

The following Federal Executive Orders apply to DEEP projects that relate to natural hazard mitigation:

- Executive Order 11988 – Floodplain Management – This Executive Order requires Federal agencies to evaluate the potential effects of any Federal action that may affect floodplains and to eliminate or reduce any negative effects of that action.

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<sup>118</sup> DEMHS revised the former State Grant Administration Plan and developed it as a stand-alone state procedures plan for the HMGP, entitled *2008 HMGP Administration Plan*. A copy of the HMGP Administration Plan is located in Appendix 3-1 of this Plan.



- PL-566, Section 205 – This Public Law authorizes the USDA, NRCS and the USACE to undertake flood and erosion control projects in cooperation with the DEEP.
- Executive Order 11990 – Protection of Wetlands.

### **3.1.2 Federal Emergency Management Agency (FEMA)**

In March 2003, FEMA became a part of the newly established U.S. Department of Homeland Security under the Emergency Preparedness and Response Directorate.

FEMA sponsors the major flood related programs through the Federal Insurance Administration, the National Preparedness Programs Directorate, and the State and Local Programs Directorate. FEMA also provides disaster assistance under Section 404 of the Robert T. Stafford Disaster Assistance and Recovery Act and the Flood Mitigation Assistance Act, Part 78.

#### **FEMA Enabling Legislation**

FEMA regulations are mandated under the Code of Federal Regulations (CFR), Title 44 Part 14. CFR Title 44, Part 13 entitled Uniform Administrative Requirements of Grants and Cooperative Agreements to State and Local Governments authorized the original FMA Regulations and the eventual HMA umbrella program. Executive Orders 12612 (Federalism), 11990 (Protection of Wetlands), and 11988 (Floodplain Management) have further requirements to be followed by FEMA.

The NFIP is mandated under the CFR Title 44 Sections 59 - 80 inclusive. FEMA Law - Title V, The National Flood Insurance Reform Act of 1994, Subtitles D, E, and F also apply.

#### ***Robert T. Stafford Disaster Relief and Emergency Assistance Act***

On November 23, 1988, President Reagan signed the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 USC 5121 et seq.) into law. The Stafford Act provides disaster assistance to states and municipalities after major disasters through the Hazard Mitigation Grant Program (HMGP) and through individual assistance and public assistance aid programs. A major disaster is defined as a natural disaster that causes damage equal to or greater than \$1.00 per capita in a state. Based on current population information, this Act would normally be initiated for Connecticut after a disaster that caused greater than \$3.2 million in damages statewide. If several states are affected by the same disaster, the \$1.00 per capita standard may be waived.



## **FEMA Disaster Preparedness Programs**

### ***The National Flood Insurance Program (NFIP)***

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program administered by FEMA enabling property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

The State of Connecticut and all of its communities participate in the NFIP. Connecticut's NFIP coordinator is located within DEEP's IWRD. Participation in the NFIP is based on an agreement between local communities and the Federal government that states if a community adopts and enforces a floodplain management ordinance to reduce future flood risks to new construction in SFHAs, the Federal Government will make flood insurance available within the community as a financial protection against flood losses.

A major effort of FEMA is the continued implementation of the NFIP. This program seeks to limit flood losses and the significant federal cost related to those losses by requiring communities to properly manage their floodplain development. This is accomplished by:

- Conducting detailed engineering studies of most watercourses,
- Delineating floodways and floodway fringes showing flood conveyance and storage areas;
- Requiring communities to adopt floodplain management regulations;
- Subsidizing insurance for structures already in flood risk areas;
- Requiring insurance at actuarial rates for new structures proposed for flood risk areas;
- Joining the availability of disaster relief programs, federal grants and loans and federally backed mortgages to a community's willingness to participate in the program; and
- Requiring lending institutions to notify the purchaser or lessee of special flood hazard in advance of the signing of purchase or lease agreements.

The Biggert-Waters Flood Insurance Reform Act of 2012 is gradually phasing out subsidized and grandfathered rates for Pre-FIRM properties and properties mapped in the floodplain with the goal of making the NFIP more self-sufficient through the use of actuarial insurance rates for all properties. The next update to this plan will describe the implementation of the Act.



## Civil Preparedness Activities

These activities are funded in part by FEMA, and are described elsewhere in this chapter under the description for the Division of Emergency Management and Homeland Security (DEMHS).

### *FEMA Natural Hazard Mitigation Programs*

FEMA administers six major natural hazard mitigation programs:

- Hazard Mitigation Grant Program (HMGP);
- Pre-Disaster Mitigation (PDM);
- Flood Mitigation Assistance (FMA);
- Repetitive Flood Claims Program (RFC);
- Severe Repetitive Loss Program (SRL); and
- Emergency Management Performance Grant (EMPG).

The first five programs are administered under the Hazard Mitigation Assistance (HMA) umbrella program, while EMPG is administered separately. Each program is similar in its funding formula (75% federal / 25% State or Local) except the SRL, which may have a 90% federal and 10% state or local cost share. However, each program has different eligibility criteria and timelines for project completion. Each program also requires that all projects be cost-effective (i.e., at least one dollar of benefit must result from each dollar of cost). This is accomplished through the utilization of FEMA's Benefit-Cost Analysis (BCA) software.

FEMA consolidated RFC and SRL programs into the FMA program on July of 2013. However, a discussion of each of these programs is included below for reference.

### *The Hazard Mitigation Assistance Program*

HMA was created by FEMA to unify the application process of five of its hazard mitigation grant programs (HMGP, PDM, FMA, RFC, and SRL). As stated in the HMA Unified Guidance document, "these programs provide significant opportunities to reduce or eliminate potential losses to State, Tribal, and local assets through hazard mitigation planning and project grant funding. Each HMA program was authorized by separate legislative action, and as such, each program differs slightly in scope and intent". Table 3-1 summarizes the five hazard mitigation grant programs.

Potential projects under each program are shown in Table 3-2 as published in the 2010 HMA Unified Guidance Document.



Table 3-1. FEMA Grant Programs Available Under the Unified HMA Program.

<b>FEATURE / PROGRAM</b>	<b>HAZARD MITIGATION GRANT PROGRAM</b>	<b>FLOOD MITIGATION ASSISTANCE</b>	<b>REPETITIVE FLOOD CLAIMS GRANT</b>	<b>PRE-DISASTER MITIGATION</b>	<b>SEVERE REPETITIVE LOSS PROGRAM</b>
<b>AUTHORIZATION</b>	Section 409 of the Stafford Act Only available after a Presidentially Declared Disaster	44 Code of Federal Regulations Part 78	Authorized in Section 1323 of the NFI Act of 1968, as amended by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004.	Disaster Mitigation Act of 2000	Authorized in section 1361A of the Bunning-Blumenauer Flood Insurance Reform Act of 2004
<b>QUALIFYING CRITERIA</b>	Must be a project that mitigates damages from a current disaster or past disaster within Connecticut.	Must be a project that mitigates damages from flooding to insurable repetitive loss structures	Must be a project that reduces or eliminates the long-term risk of flooding of NFIP insured structures.	Full range of Natural Disaster Hazard in Connecticut, however, flood mitigation is preferred.	Must be one of the 81 properties in CT designated as a Severe Repetitive Loss property and which maintains an active NFIP policy.
<b>APPROVALS</b>	State approval based on recommendations from the CIHMC.  Federal approval from FEMA	State approval based on recommendations from the CIHMC.  Federal approval from FEMA	State approval based on recommendations from the CIHMC.  Federal approval from FEMA	State approval based on recommendations from the CIHMC.  Federal approval from FEMA	State approval based on recommendations from the CIHMC.  Federal approval from FEMA
<b>FUNDING LIMITS</b>	Tiered percentages based on estimated aggregate amounts of disaster assistance	\$20,000 for plans  \$20,000 for technical assistance  \$300,000 for projects	Up to 100% Federal Assistance for eligible projects, no dollar limits stated for projects	\$500,000 for construction of mitigation projects, public information and plans	Amount of funding is based on number of applications, minimal federal funding for CT is \$615,148
<b>TIME LIMITS</b>	2 Years for construction  3 Years for plans	2 Years for construction  3 Years for plans	2 Years for acquisition and demolition projects	2 Years for construction  3 Years for plans	3-5 years for construction



Table 3-2. Eligible Activities by Program

Eligible Activities	HMGP	PDM	FMA	RFC	SRL
Mitigation Projects	✓	✓	✓	✓	✓
Property Acquisition and Structure Demolition	✓	✓	✓	✓	✓
Property Acquisition and Structure Relocation	✓	✓	✓	✓	✓
Structure Elevation	✓	✓	✓	✓	✓
Mitigation Reconstruction					✓
Dry Floodproofing of Historic Residential Structures	✓	✓	✓	✓	✓
Dry Floodproofing of Non-Residential Structures	✓	✓	✓	✓	
Minor Localized Flood Protection Projects	✓	✓	✓	✓	✓
Structural Retrofitting of Existing Buildings	✓	✓			
Non-Structural Retrofitting of Existing Buildings and Facilities	✓	✓			
Safe Room Construction	✓	✓			
Infrastructure Retrofit	✓	✓			
Soil Stabilization	✓	✓			
Wildfire Mitigation	✓	✓			
Post-Disaster Code Enforcement	✓				
5% Initiative Projects	✓				
Hazard Mitigation Planning	✓	✓	✓		
Management Costs	✓	✓	✓	✓	✓

The following five subsections will provide a more detailed description of each of the grant programs which have been placed under this umbrella grant program for application process efficiency.

***The Hazard Mitigation Grant Program (HMGP)***

Section 404 of the Stafford Act created the HMGP, which provides federal grants to states and municipalities for post-disaster natural hazard mitigation. HMGP funding is allocated to a state by the use of a sliding scale calculation. The total grant funding from HMGP cannot exceed 15% (for a state with a FEMA approved Standard Natural Hazard Mitigation Plan) or 20% (for a state with a FEMA approved Enhanced Natural Hazard Mitigation Plan) of the total disaster damages for the first \$2 billion. After the total aggregate amount of \$2 billion in damages the amount of funding for subsequent aggregate damages is decreased according to FEMA's formula. This FEMA formula calculates the next portion of aggregate damages between \$2 billion and \$10 billion by 10%, and for the next portion of



aggregate damages between \$10 billion and \$35.333 billion, funding is calculated at 7.5%.<sup>119</sup> The monies from this federal grant are given to Connecticut to support local mitigation projects, with a cost share ratio of 75% federal and 25% local match.

The HMGP is active only after a presidentially declared disaster. The HMGP grant provides communities with up to 75% of the total cost of projects that reduce or prevent further damage from natural disasters. Projects may include, but are not limited to: acquisition, relocation, elevation or demolition of flood prone structures, construction of small scale flood control projects such as levees and small dams, retrofitting of structures to withstand wind and seismic forces and the drafting of plans that lead directly to the implementation of mitigation measures. Municipalities are not able to receive funding under the HMGP without an approved local hazard mitigation plan. In Connecticut, DEMHS administers the HMGP.

### ***Pre-Disaster Mitigation Program (PDM)***

The disaster experiences of the 1990s demanded that federal, state and local emergency managers reassess their approach to disaster response and recovery. It became apparent that the nation needed to shift its approach from a disaster-response driven system to a system based on pre-disaster or ongoing risk analysis so that the nation as a whole could become proactive rather than reactive to hazard events. This acknowledgement caused FEMA to re-evaluate its national strategy, resources and priorities. As a result of this evaluation, a unit for Natural Hazard Mitigation Planning was established in 1998 within FEMA to provide guidance and resources to states and local communities to promote and support the mitigation planning process. FEMA and the State of Connecticut place great value on the planning process as an approach to mitigation that must be promoted and supported in order to build sustainable, disaster resilient communities.

On October 20, 2000, Congress passed the Disaster Mitigation Act of 2000 (DMA 2000) (Public Law 106-390). This was the first major amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act since that law was initially passed in 1988. Through DMA 2000, Congress approved the creation of a new mitigation grant program, PDM, to provide a mitigation funding mechanism that is not dependent on a presidential disaster declaration and could fund both natural hazard mitigation construction projects and natural hazard mitigation planning initiatives. PDM funding has changed since its inception. In the program's initial years, a base allocation of funding was granted to each state and additional funds were provided using a population formula. Recently, FEMA has changed the program to a nationally competitive grant program where projects from all states compete against each other with FEMA choosing the winning projects that will receive funding. Eligible PDM projects include: state and local natural hazard mitigation

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<sup>119</sup> Information derived from FEMA Fact Sheet, *Hazards Mitigation Grant Program*, available at FEMA's website: [www.fema.gov](http://www.fema.gov).



planning, mitigation projects, and community outreach and education. The PDM grant is a 75% federal 25% local cost-share grant (e.g., cash, in-kind services, etc.).

For fiscal years 2002-2007, a main focus of the PDM program was on the development of local or regional natural hazard mitigation plans to help meet the new local natural hazard mitigation planning requirements of DMA 2000. Communities applying for any FEMA mitigation grant to conduct mitigation projects (e.g. home elevations, acquisitions) must have an adopted local natural hazard mitigation plan in place prior to receiving funds.

The PDM program is undergoing significant changes, and has not been supported in the last two years. FEMA anticipates that PDM will be available in the near future, although national funding levels may be reduced. In Connecticut, DEEP has typically administered the PDM program, although DEMHS will be administering the program going forward. The next update to this plan will describe changes in the PDM program.

### ***Flood Mitigation Assistance (FMA)***

In 1994 the United States Congress established FMA to assist state and local governments in funding cost-effective actions that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other insurable structures. The long-term goal of FMA is to reduce or eliminate claims under the NFIP through the use of mitigation activities with a specific focus on repetitive loss properties. Repetitive loss properties are those properties that suffer at least 2 claims of more than \$1,000 each for flood damage in a 10-year period.

The FMA program provides cost-share grants for three purposes: 1) planning grants to states and communities to assess the flood risk and identify actions to reduce that risk; 2) project grants to execute measures to reduce flood losses; and 3) technical assistance grants that states may use to fund staff salary and program expenses in order to administer the FMA program.

The next update to this plan will describe changes in the FMA program, including the consolidation of the RFC and SRL programs (described below) into the FMA program. In Connecticut, DEEP has typically administered the FMA program, although DEMHS will be administering the program going forward.

### ***Repetitive Flood Claims Grant Program (RFC)***

Authorization for the RFC is granted under the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (P.L. 108-264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al). The RFC program began in 2006 and provides funding to reduce or eliminate the long-term risk of flood damage to structures insured under the NFIP that have had one or more claim payments for flood damages. RFC funds may only mitigate structures that are located within a state or community that cannot meet



the requirements of the FMA program for either the 25% cost share or capacity to manage the activities.

The long-term goal of the RFC is to reduce or eliminate claims under the NFIP through mitigation activities. A municipality does not need a local hazard mitigation plan to apply for the RFC grant, however, a state must have a FEMA-approved hazard mitigation plan in order to submit an application. Eligible activities include only the acquisition of insured property that have one or more claim payments for flood damage; and the demolition or relocation of insured structures, with conversion of property to deed-restricted open space use. Property owners must have a current flood insurance policy on the applicable structure to be mitigated at the time of application and through the life of the award. All RFC grants are eligible for up to 100% Federal assistance. RFC grants are awarded nationally without reference to state allocations, quotas, or other formula-based allocations of funds.

The RFC program is seen as an important funding tool for use by the state and local communities to move towards more open space acquisition and less intensive uses of floodplain areas, while providing important local quality of life benefits by protecting those important resources. In Connecticut, DEEP has typically administered the RFC program, although DEMHS will be administering the program going forward as it is consolidated within FMA.

### ***Severe Repetitive Loss Grant Program (SRL)***

On October 31, 2007 FEMA issued an interim rule which became effective on December 3, 2007. The rule established a new grant program under the Bunning-Bereuter-Blumenauer Act of 2004 called the Severe Repetitive Loss grant program (SRL). The intention of SRL is to “provide mitigation assistance to address properties that have experienced repetitive flood losses and that are insured under the NFIP.” The SRL focuses on a subset of all repetitive flood loss properties (Federal Register, Vol. 72, No. 210).” Flood mitigation projects acceptable for funding under this new program include buyouts, elevation, relocation, mitigation reconstruction, or floodproofing. Final guidance for the pilot program was issued by FEMA on January 15, 2008.

The goal of the SRL program for Connecticut is to reduce the amount of future flood damage claims paid by the NFIP to the most severely flooded buildings. SRL projects seek to mitigate damage through one of three types of projects; elevation of the buildings, acquisition of the buildings or teardown and rebuilding (mitigation reconstruction) the structures to higher elevations. The SRL provides ninety percent Federal matching grants from the FEMA for the mitigation (reduction) of future flood damages insured by the NFIP, with the remaining ten percent of the project cost funded through local match.

The SRL program is available to mitigate flood damages to approximately 80 of the most severely and repetitively flood damaged residential homes and other buildings in



Connecticut. Approximately 25 communities in Connecticut contain the 80 SRL properties. As recently as 2008, DEMHS applied for and received \$2,945,381 in funding from FEMA under the SRL program to elevate eighteen residential homes in the communities of Mansfield, East Haven, Milford and Westport.

DEMHS currently administers the SRL program within the State of Connecticut, and will continue administering the program going forward as it is consolidated within FMA. The current State HMA Administrative Plan is included in Appendix 3-1.

### ***The Emergency Management Performance Grant Program (EMPG)***

The purpose of the EMPG Program is to make grants to States to assist State, local, territorial, and tribal governments in preparing for all hazards, as authorized by the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (42 U.S.C. 5121 et seq.). Title VI of the *Stafford Act* authorizes FEMA to make grants for the purpose of providing a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness jointly in the Federal Government, States, and their political subdivisions. The Federal Government, through the EMPG Program, provides necessary direction, coordination, and guidance, and provides necessary assistance, as authorized in this title so that a comprehensive emergency preparedness system exists at all levels for all hazards.

The FY 2013 EMPG supports core capabilities across the five mission areas of Prevention, Protection, Mitigation, Response, and Recovery based on allowable costs. Either the State Administering Agency (SAA) or the State's EMA are eligible to apply directly to FEMA for EMPG Program funds on behalf of State and local emergency management agencies, however only one application will be accepted from each State or territory. In Connecticut, the EMPG is administered by DEMHS.

### **3.1.3 Natural Resources Conservation Service**

The United States Department of Agriculture's (USDA) NRCS provides significant technical and engineering assistance to the DEEP, DEMHS, and other state agencies in the planning and implementation of activities. Most projects are conducted under Public Law (PL)-566, the Small Watershed Program Authorization and are related with soil erosion and flooding. A member of the NRCS is also appointed to the CIHMC (as discussed later).

NRCS projects are conducted under federal PL-566 and CGS Sections 22a-318 through 324 and provide the framework for state cooperation with the NRCS when utilizing the Watershed Protection and Flood Prevention Act, PL 83-566 Section 6, Statute 666 for planning and implementation of flood damage reduction projects on a watershed basis.

#### ***NRCS Water Resources Programs***



The Watershed Protection and Flood Prevention Act, P.A. 83-566, CGS 22a-318 through 22a-323, authorizes the Secretary of Agriculture to “cooperate with states and local agencies in the planning and carrying out of works of improvement for soil conservation and other purposes.” It provides for technical and financial assistance by the department through the NRCS to local organizations representing persons living in small watersheds (less than 250,000 acres). The Act provides for a project-type approach to solving land, water, and related resource problems. Flood prevention is an eligible purpose for which NRCS can pay 100% of the costs for planning studies, design and construction of structural solutions. The local sponsoring organization is solely responsible for land rights, operation and maintenance. Often these costs are equal to 1/2 the total costs of the project. For on-site measures such as flood proofing, the costs for implementation are divided 75% federal and 25% non-federal.

Federal Level Recommendation 3 of "A Unified National Program for Floodplain Management" and Section 6 of PL 83-566 provide the authorization to NRCS for Floodplain Management and Cooperative USDA River Basin studies.

Floodplain Management Studies (FPMS) authorized in Section 6 of PL-566 are a means of NRCS assisting state agencies and communities in the development, revision, and implementation of their floodplain management programs.

A FPMS can identify site-specific flood problem areas (or potential problem areas), inventories natural values, incorporates public participation, studies the community's management alternatives, and provides for study follow-up assistance. A FPMS may serve as the source of technical data for the community to implement local floodplain management programs.

### ***Emergency Watershed Protection (EWP)***

The Emergency Watershed Protection Program (EWP) is administered by the NRCS under Section 216, PL 81-516 and Section 403 of Title IV of the Agricultural Credit Act of 1978, PL 95-334. The EWP program provides the State and local units of government with technical and financial assistance to plan, design and implement measures that repair watershed impairments resulting from natural disasters. This program's objective is to assist in relieving imminent hazards to life and property from floods and the products of erosion created by natural disasters. Any corrective measure must prevent flooding or soil erosion, and reduce threats to life or property.

Authorized EWP technical and financial assistance may be made available when an emergency exists. Federal funds may bear a percentage of the construction costs of emergency measures in an exigency situation as well as in a non-exigency situation. Sponsors are responsible for obtaining any needed land rights and federal, state, and local permits. The numbers of EWP projects initiated after the most recent natural hazard events in Connecticut include:

Capability Assessment



- 37 EWP projects after the June 1982 floods;
- 1 EWP project after a thunderstorm in June 1989 in Franklin, Connecticut;
- 1 EWP project after the July 1989 tornadoes in western Connecticut;
- 5 EWP projects after Tropical Storm Floyd;
- 1 EWP project after the April 2005 storm in Danbury;
- 7 EWP projects after the October 2005 storm;
- 4 EWP projects after the April 2007 storm and floods;
- 10 EPW projects after Tropical Storm Irene in 2011; and
- 4 EWP projects after Storm Sandy in 2012.

### **3.1.4 United States Army Corps of Engineers (USACE)**

The USACE has undertaken several large flood control projects all across New England to reduce flood levels by retaining storm water runoff in upstream impoundments. These projects located in the Connecticut, Housatonic, Naugatuck, and Thames river basins. These structural measures have saved the State millions of dollars in flood damages.

The USACE has provided significant flood assistance to Connecticut and continues to do so. In its role as an assisting federal agency, the USACE has undertaken several flood and erosion control projects within the State since the 1950s.

The USACE has worked in Connecticut to develop several floodplain management studies. These studies include ice jam protection on the Salmon River in Haddam and East Haddam, and a feasibility study of flood protection on the West River in West Haven, Connecticut and New Haven, Connecticut.

Connecticut is able to undertake projects with the USACE as authorized under CGS Section 25-76 entitled "Small Flood Control, Tidal and Hurricane Protection and Navigation Projects; and State Cooperation with Federal and Municipal Governments," and through CGS Section 25-95 entitled "Agreements Concerning Navigation and Flood and Erosion Control."

The USACE, in cooperation with the DEEP and the city of Milford, elevated 36 residential structures under the authority of Section 205 of PL-858 in 2002 and 2003. The total cost of the project was estimated at \$3.4 million. The city and State contributed 35% of the cost and the USACE covered the remaining 65% of the construction costs. The project was completed in 2003.

Finally, the USACE works in cooperation with the DEEP by providing technical assistance on flood control and prevention projects, and assistance to the State's flood warning system.



### 3.1.5 United States Department of Agriculture (USDA)

Funding for state and local governments with regard to wildfire mitigation is available from the USDA Forest Service. Grant programs under this federal agency include the following:<sup>120</sup>

- Volunteer Fire Assistance - The Volunteer Fire Assistance program provides critical funding and technical assistance directly to local and volunteer fire departments that protect communities with populations under 10,000. Funds improve the ability of rural fire departments to respond to wildfires, especially in the wildland/urban interface. Funding can be used for training and equipment to complement federal firefighting commitments, so protection capabilities can be enhanced across ownerships. Delivery is through consolidated grants to the State Forester, and funds are cost-shared on a 50/50 basis.
- State Fire Assistance - The State Fire Assistance program provides technical training, financial assistance, and equipment to states to ensure that state and local firefighting crews can deliver a safe, effective, and coordinated response to wildland fire. Funding is available for preparedness, high priority prevention, and mitigation education programs including FIREWISE. These funds complement readiness levels at the federal level and are available through consolidated grants to State Foresters. Funds are cost-shared on a 50/50 basis.
- Community Planning - Funding is available for development and revision of communities' strategic, action, and fire risk management plans. The goal for these funds is to increase community resiliency and capacity while creating an environment for development and growth. Funding will be targeted to communities most impacted by fires. Delivery is through grants awarded directly to communities and to a variety of other partners including state, county, and tribal governments, and not-for-profit corporations identified by the National Forestry Service in conjunction with the State Department of Commerce. Funds are cost shared 80/20.

For a more complete listing of USDA Forest Service grant programs that have been administered in Connecticut since 2010, please see Appendix 3-2. When additional information becomes available, these resources will be added to this section.

## 3.2 State Hazard Mitigation Programs and Related Laws

Connecticut has many state statutes, regulations, policies and practices that achieve the goal of natural hazard mitigation in areas prone to natural hazards. During the past 100 years, flooding has caused more damage and loss of life than any other natural disaster in the State. Most of the State's programs and policies deal either directly (structural mitigation) or indirectly (non-structural methods through enforcement, education and monitoring) with flooding. These state programs and policies focus on damage prevention

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<sup>120</sup> Source: grant program descriptions excerpted from the USDA Forest Service website: <http://www.fs.fed.us/r1/pgr/afterfire/keypoint4/contacts.shtml>. This site provides a description of many of the USDA Forest Service grants available and links to other webpages that describe additional grant programs.



within special flood hazard areas (SFHAs) and in some cases the 500-year flood zones (0.2% annual chance flood zones). Since all municipalities within Connecticut contain mapped SFHAs areas within their political boundaries, these programs are implemented on a statewide basis and affect every municipality.

Structural flood mitigation projects in Connecticut have either dealt with the initial causes of flooding (e.g., construction of flood control projects to reduce the frequency of flooding) or the effects of the flooding (e.g., elevating or moving structures out of the floodplain). The DEEP has historically been the lead agency for the pursuance of flood hazard mitigation activities and administration of federal mitigation grants in Connecticut, although this responsibility will be transferred to DEMHS in 2013.

The distribution of state or federal funding requires full compliance with all regulations. Federal funding for the programs are provided through the smart-link system maintained between FEMA and DEMHS. Transfer invoices are utilized to channel approved funding to the eligible projects. A formal contract is entered into between the applicant and the State to ensure compliance with all applicable regulations.

### **3.2.1 State of Connecticut Enabling Legislation**

State participation in the NFIP, Stafford Act, and related actions are authorized under the Connecticut General Statutes Section 25-68b thru 25-68h and associated regulations. Other provisions of FEMA grant programs are authorized under Connecticut General Statutes Title 28, Chapter 517, Section 28-9, 28-15a, and 28-15b, Civil Preparedness and Emergency Services. Additional authorization is found in the Federal Aid Connecticut General Statutes, Title 4, Chapter 24, Section 4-28a, Management of State Agencies, State Properties and Funds, Advisory Commission, and Section 25-68b et seq. flood control projects.

#### ***State Floodplain Management Act***

The Flood Management Act as referenced in the Connecticut General Statutes (CGS) Section 25-68b to 25-68h outlines the flood management responsibilities of DEEP and lays out the rules and regulations to be used by all state agencies when undertaking or funding activities within or affecting floodplain areas, which are normally coincident with SFHAs in this context.

CGS Section 25-68b defines the terms (e.g., Floodplain, Base Flood, etc.) used in the Flood Management Act. Section 25-68c goes beyond the regulations contained within the National Flood Insurance Program (NFIP) in many aspects and references the NFIP standards as a minimum standard.

The Commissioner of DEEP has the following powers and duties under Section 25-68c:



- To coordinate, monitor and analyze the floodplain management activities of state and local agencies;
- To coordinate flood control projects within Connecticut and be the sole initiator of a flood control project with a federal agency;
- To act as the primary contact for federal funds for floodplain management activities sponsored by the State;
- To regulate actions by state agencies affecting floodplains except conversion by the University of Connecticut of commercial or office structures to an educational structure;
- To regulate proposed state actions that impact natural or man-made storm drainage facilities located on property that the commissioner determines to be controlled by the state, including, but not limited to, programs that regulate flood flows within a floodplain and site development that increases peak runoff rates;
- To designate a repository for all flood data within the State;
- To assist municipalities and state agencies in the development of comprehensive floodplain management programs;
- To determine the number and location of State-owned structures and uses by the State in the floodplain and to identify measures to make such structures and uses less susceptible to flooding including flood-proofing or relocation;
- To mark or post the floodplains within lands owned, leased or regulated by state agencies in order to delineate past and probable flood heights and to enhance public awareness of flooding;
- To designate the base flood elevation for a critical activity where no such base flood elevation is designated by the NFIP. The Commissioner may add a freeboard factor to any such designation; and
- To require that any flood control project be designated to provide protection equal to or greater than the base flood.

Section 25-68f mandates that if more than one floodplain designation exists for the same area, the most stringent designation shall be used to fulfill the provisions of sections 25-68b to 25-68h inclusive.



***An Act Concerning Floodplain Management and Hazard Mitigation***

During the 2004 session, the State legislature passed the Floodplain Management and Hazard Mitigation Act. This legislation covers many aspects of floodplain management. It requires municipalities to revise their current floodplain zoning regulations or ordinances to include new standards for compensatory storage and equal conveyance of floodwater. Municipalities were not required to make such revisions until they revise their regulations for another purpose. The DEEP has developed model regulation language which incorporates these new State requirements and has issued this model floodplain ordinance to communities for their use since 2007.

Other enabling State Legislation related to flood plain management includes:

- Sections 22a-36 through 22a-45, inclusive – Inland Wetlands and Watercourses Act;
- Section 22a-401 through 22a-410, inclusive – Dam Safety;
- Section 13a-94 – Construction Over and Adjacent to Streams;
- Section 25-84 through 25-98 – Flood & Erosion Control Board Statutes;
- Section 22a-318, 22a-321 – NRCS Statutes;
- Section 25-74 through 25-76 – Authorization to perform flood and erosion projects under Federal authority;
- Section 22a-342 through 22a-350 – Stream Channel Encroachment Line Program Statutes; and
- Section 22a-365 through 22a-378 – The Connecticut Water Diversion Policy Act.

Table 3-3 shows each state funded program related to floodplain management and whether it is associated with pre-disaster mitigation or post-disaster mitigation efforts.

Table 3-3 – State Funded Programs Related to Floodplain Management

State Funded or Staffed Program in Hazard Prone Area.	Pre or Post Disaster
Flood Management Section 25-68	Pre and Post Disaster
Dam Safety Section 22a-401 – 22a-410	Pre and Post Disaster
Flood and Erosion Control Boards Section 25-84	Pre and Post Disaster
National Flood Insurance Program	Pre-Disaster
Stream Channel Encroachment Line Program Section 22a-342 through 22a-350	Pre-Disaster
Section 22a-318, 22a-321 – NRCS Statutes	Pre and Post Disaster
Section 25-74 through 25-76 – Authorization to perform flood and erosion projects under Federal authority.	Pre and Post Disaster
Floodplain Management and Mitigation Act	Pre-Disaster
PDM Planning	Pre-Disaster



### ***An Act Concerning the Coastal Management Act and Shoreline Flood and Erosion Control Structures***

In 2012 the Connecticut General Assembly passed Public Act 12-101, An Act Concerning the Coastal Management Act and Shoreline Flood and Erosion Control Structures. This legislation combined a number of initiatives to address sea level rise and to revise the regulatory procedures applicable to shoreline protection. Through this Act, the concept of sea level rise was incorporated into the Connecticut Coastal Management Act (CCMA)'s general goals and policies of coastal planning for the very first time. The following goal was added to the CCMA:

- “To consider in the planning process the potential impact of a rise in sea level, coastal flooding and erosion patterns on coastal development so as to minimize damage to and destruction of life and property and minimize the necessity of public expenditure and shoreline armoring to protect future new development from such hazards” [CGS section 22a-92(a)(5), as amended]

The Act also allows the Commissioner of the Department of Energy and Environmental Protection to establish a pilot program to encourage “innovative and low-impact approaches to shoreline protection and adaptation to a rise in sea level. Such approaches may include living shorelines techniques utilizing a variety of structural and organic materials, including, but not limited to, tidal wetland plants, submerged aquatic vegetation, coir fiber logs, sand fill and stone to provide shoreline protection and maintain or restore coastal resources and habitat.” It is possible that some of these methods will be evaluated in the coming years, helping to build capabilities at the state and municipal levels to increase hazard mitigation.

PA 12-101 also contains a requirement for communities to consider Sea Level Rise in their plans of Conservation and Development. This was detailed more in the 2013 legislative session, and a bill to require Clean Water Act funded projects to consider climate was also passed.

### ***An Act Concerning Climate Change and Data Collection***

Pursuant to Special Act 13-9, “An Act Concerning Climate Change and Data Collection,” the State of Connecticut will be establishing a “Center for Coasts” that will conduct research, analysis, design, outreach and education projects to guide the development and implementation of technologies, methods and policies that increase the protection of ecosystems, coastal properties and other lands and attributes of the state that are subject to the effects of rising sea levels and natural hazards. Specifically, the Connecticut Center for Coasts will undertake the following activities:

- Mapping exercises to assess and visualize key characteristics of shoreline resiliency, such as shoreline changes,
- Pilot-scale engineering and impact assessment studies,



- Consensus building efforts to determine state-wide uniform guidelines for planning and development purposes, including the expected rate of sea level rise for the next 100 years,
- Ways to develop state-wide, science-based planning and management alternatives,
- Development in science and information-based outreach and technology transfer programs for state and local agencies and officials involved in planning and development,
- An assessment of soft shore protection strategies in Long Island Sound and the development of instructional guides for the use of such soft shore protection strategies,
- A comprehensive coastal infrastructure inventory and risk assessment,
- An analysis of the impact of seawalls in urban and rural communities,
- The development of uniform, state-wide models that predict inundation flood scenarios under slow, constant sea level rise and under storm surges,
- Projects that lead to the development of rapid storm damage assessment technology,
- Developing design guidelines for the construction and repair of structural and non-structural shore protection, and
- Developing tools for determining appropriate shore protection strategies and providing coastal protection information to a diverse range of end users.

The DEEP Office of Planning and Program Development and OLISP will be partnering with the University of Connecticut to pursue the Center for Coasts. DEEP and the University will deliver a work plan to the Connecticut General Assembly by early 2014. Effective October 1, 2013, climate change scenario planning needs to be considered as part of the requirements under CGS 28-5 subsection (g), and will therefore be included in future updates of this plan.

### **3.2.2 Connecticut State Agencies Associated with Natural Hazard Mitigation**

There are a number of state agencies that are associated with natural hazard mitigation within Connecticut. Some divisions and agencies such as DEMHS and DEEP share the roles and responsibilities for hazard mitigation. These are the two primary entities associated with natural hazard planning and mitigation efforts.

Other agencies are associated with natural hazard mitigation through their policies or plans in which they are charged with developing and implementing. The following is a presentation of the state agencies and their relative divisions associated with natural hazard mitigation in Connecticut. State capabilities and effectiveness of programs is shown in Table 3-4.

**Department of Emergency Services and Public Protection, Division of Emergency Management and Homeland Security (DEMHS)**



Title 28 of the Connecticut General Statutes outlines the roles and responsibilities of the DEMHS. DEMHS is responsible for:

- Providing a coordinated, integrated program for state-wide emergency management and homeland security;
- Directing the preparation of a comprehensive plan and program for the civil preparedness of the State;
- Coordinating with state and local government personnel, agencies, authorities, and the private sector to ensure adequate planning, equipment, training, and exercise activities;
- Coordinating emergency communications and communication systems of the state and local government personnel, agencies, authorities, the general public, and the private sector; and
- Distributing and coordinating the distribution of information and security warnings to state and local government personnel, agencies, authorities, and the general public.

The division assumes many roles for the State including:

- Maintains the local branch of the National Warning System (NAWAS);
- Serves as the Alternate State Warning Point (AWSP). DESPP serves as the Primary State Warning Point (PSWP).
- Develops and maintains various types of emergency operations plans for state government;
- Provides technical planning assistance to communities as requested or as needed;
- Provides emergency management and homeland security training programs for state and local governments;
- Conducts emergency operations drills and exercises;
- Works with the DEEP to administer the Hazard Mitigation Programs of the state (until such time that these duties fully transfer to DEMHS); and
- In times of disaster or emergency, alerts key state, federal and local response organizations and acts as a central coordination point for all state agencies at the State Emergency Operations Center (EOC) in Hartford, CT.

DEMHS and DESPP currently operate the state's "Alert" Emergency Notification System (ENS) which is powered by Everbridge. The Alert ENS utilizes the state's Enhanced 911 database for location-based notifications to the public for potentially life-threatening emergencies. The Enhanced 911 database includes traditional wire-line telephone numbers in the state (the "land line" phones). However, residents may register on-line at [www.ct.gov/despp](http://www.ct.gov/despp) for other means of communication to the Alert ENS, in addition to the



land line. Residents can receive emergency alerts on communication methods such as a mobile phone, e-mail, text message, or certain hearing impaired receiving devices.

At the present time, most of the state's municipalities subscribe to the Everbridge-powered Alert system. However, a handful of towns opted out of the system and utilize the CodeRED notification system, citing reasons such as cost and control of their abilities to distribute messages.

DEMHS currently administers FEMA's HMGP and SRL grant programs, although it will administer the other mitigation programs in the future. DEEP and DEMHS have entered into an agreement defining their respective roles for HMGP and the duties of the SHMO in the interim. Currently DEMHS develops a state application for both the SRL program and submits it for approval to FEMA. DEMHS also reviews and manages all approved structural projects which have received FEMA approval under grant programs. DEEP provides technical assistance to DEMHS on an as needed basis for the review of sub-applications and issues regarding flood management and the NFIP. As an agreed upon requirement of the SHMO/HMGP MOU, DEEP is currently responsible for managing any sub-applicant planning grants awarded by FEMA under the HMGP program, although this will also be shifting to DEMHS.

### ***DEMHS Disaster Preparedness Programs***

DEMHS is responsible for administering the State's disaster preparedness programs and for developing and implementing Connecticut's Natural Disaster Plan, which outlines the steps to be taken prior to, during and after the occurrence of a disaster event (a copy of this plan is provided within Appendix 3-3). In addition, DEMHS administers the following disaster preparedness programs:

- **State Homeland Security Grant Program** – DEMHS is the State Administering Agency (SAA) for Emergency Management and Homeland Security grants provided by the U.S. Department of Homeland Security (DHS) and FEMA. These grants include the State Homeland Security Grant Program (SHSGP) Emergency Management Performance Grant Program (EMPG). The Buffer Zone Protection Program and Urban Area Security Initiative are now contained under the SHSGP cadre of grants. Funds from these programs are used for providing planning and equipment grants to state, regional, and local government agencies. The purchase of interoperable communication systems has been a major activity in ensuring disaster preparedness.
- **Radiological Emergency Preparedness (REP) Program** – This program is responsible for off-site planning and preparedness in the event of an accident at either the Millstone Nuclear Power Stations in Waterford or the station at Indian Point, New York. The REP program develops and maintains radiological plans and procedures, which are regularly evaluated by FEMA. The REP network includes ten emergency planning zone communities including Fishers Island, five host communities, numerous key state agencies, and local emergency responders. In



addition, the REP program conducts other related activities such as annual conferences for public officials, media briefings, and training of state and local emergency workers.

## **Department of Energy and Environmental Protection**

Public Act 11-80, “An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut’s Energy Future” (Act), combined the former Department of Public Utility Control (DPUC) and an energy group from the Office of Policy Management (OPM) with the Department of Environmental Protection (DEP) to form the Department of Energy and Environmental Protection (DEEP) to better address the challenges of the modern environmental world and energy market. The former Department of Public Utility Control is now called the Public Utility Regulatory Authority (PURA) and continues to perform the regulatory functions of the former DPUC. The Act also required DEEP establish a Bureau of Energy and Technology Policy – the first energy policy office in decades for the state.

The DEP was established in 1971 at the dawn of the environmental movement, while the public utilities regulatory authority traces its roots back more than 150 years to the state’s Railroad Commission.

DEEP is charged with conserving, improving and protecting the natural resources and the environment of the state of Connecticut as well as making less expensive, cleaner and more reliable energy available for the people and businesses of the state. The DEEP is organized into three main branches and the Office of the Commissioner:

- The Environmental Quality Branch is comprised of the Bureaus of Air Management, Materials Management and Compliance Assurance, and Water Protection and Land Reuse. These bureaus protect the air, land and water resources of the state by regulating air emissions, wastewater discharges and solid and hazardous wastes. Tools used include the development of regulations, policies and standards; permitting and enforcement; air and water quality monitoring; and public outreach and education.
- The Environmental Conservation Branch consists of two bureaus. The Bureau of Natural Resources is charged with managing the state’s natural resources (particularly fish, wildlife, and forests) through a program of regulation, management, research, and public education. The Bureau of Outdoor Recreation is charged with the conservation and management of statewide recreation lands and resources through the acquisition of open space and the management of resources, including state parks, to meet the outdoor recreation needs of the public.
- The Energy Branch includes the Public Utilities Regulatory Authority (PURA) – formerly the Department of Public Utility Control – which reviews rates for electricity, water, cable television and other utilities as well as a Bureau of Energy and Technology Policy, which develops forward-looking energy efficiency, infrastructure and alternative power programs.



The Office of the Commissioner, including the Offices of Chief of Staff, Planning and Program Development, Information Management, Adjudications, Environmental Justice, and Legal Counsel, provides administrative management, staff assistance, and ancillary service to aid the Commissioner and Bureau Chiefs in their efforts to carry out the mission of the agency. In addition, the centralized Bureau of Financial and Support Services provides a wide array of services including financial management, human resource management and purchasing.

DEEP is the principal flood management agency in the State. Within DEEP, the Inland Water Resources Division (IWRD) is the lead division for planning and coordinating flood management and post natural disaster mitigation responses. Other assisting DEEP divisions are the Office of Information Management, Office of Long Island Sound Programs (OLISP), and the Forestry Division.

### **Inland Water Resources Division**

The IWRD consists of six major sections: Wetlands Management, Environmental Analysis, Dam Safety, Flood Management, Engineering Analysis, and Engineering Services. The Dam Safety, Flood Management, and Engineering Analysis and Services Sections are responsible for various aspects of Natural Hazard Mitigation Planning and floodplain management.

The following actions were undertaken by DEEP's IWRD and other state agencies in the 1980s and 1990s to improve the State's capability to respond to flood emergencies. These measures were taken as a result of recommendations formulated in the 1983 and 1989 Flood Hazard Mitigation Reports:

- State Sandbag Policy and Procedures (OCP, currently DEMHS 1984)
- Guidance for municipal flood emergency planning issued (1983)
- Operational Guide for the Connecticut Automated Flood Warning System (updated in 2000) prepared, Emergency Operations Guidelines prepared for the Flood Warning System (1987)
- Installations of Advanced Technology NOAA Weather Radios (A.K.A WRSAME) in schools, state parks, and command centers (1992-93)
- Expansion and upgrading of equipment and technology within the Automated Flood Warning System (1992, 2002)
- Installation of telemetry equipment to receive satellite and radar information (1993)
- Establishment of a fax/email weather warning system (1994).

Currently the title and duties of the SHMO are divided between DEEP and DEMHS. Currently DEEP is responsible for performing the general SHMO duties with regards to flood management within Connecticut, administration of the NFIP, and for purposes of administration of FEMA's FMA, RFC, and PDM grant programs. DEMHS is responsible



for the SHMO duties associated with the occurrence of a natural hazard event, and for administration of FEMA's HMGP and SRL grant programs. As noted elsewhere in this section, some of these duties will be transferred to DEMHS, where the SHMO resides. However, flood management within Connecticut and administration of the NFIP will remain with DEEP IRWR.

### **Dam Safety Section**

The Dam Safety Section regulates the operation and maintenance of all dams in the State, which would endanger life or property through failure. This Section reviews and approves permit applications for dam repair, modification or construction. This section has the statutory authority to enter onto private property to conduct inspections and when inspections lead to a finding that the dam is unsafe, this Section has the authority to order dam owners to make necessary repairs to correct unsafe structures. This can be accomplished by repairing the dam or by removing the dam. If an emergency condition exists which represents a clear and present danger to the public, Dam Safety can order the repair or removal of the structure. Should the dam owner fail to repair or remove the structure in the time specified by the order, the Department may do so and bill the owner for the costs.

Activities undertaken and the average annual number of actions performed (based on the last ten years of available data) by Dam Safety include the following:

- Inspections – 140 performed
- Orders for Dam Repairs – 2 issued
- Requests for Maintenance and Engineering – 40 approved
- Dam Construction Permit Applications – 15 received; and
- Dam Construction Permits Issued – 10 issued.

In addition, the Dam Safety Section has undertaken different activities over the past years to gain additional and improved data regarding the management of dams within the state, and the mitigation of potential effects from the associated flood hazard. Three activities during the last ten years have included performing an inventory of high hazard dams, critical facilities mapping, and the implementation of the DamWatch program throughout the state.



### ***Inventory of High Hazard Dams***

In 2003, Connecticut received a grant from FEMA to perform an inventory of 227 High Hazard Dams in the State. This inventory updated existing database information. Each dam was also photographed and its location recorded using the Global Positioning System (GPS).

In 2004/2005, construction plans for dams within the State were scanned and recorded in an electronic format. The plans are now readily accessible and retrievable for use during a flooding emergency and to assist IWRD staff and consultant engineers in dam design and repair.

### ***Emergency Operations Plans (EOPs) and Emergency Action Plans (EAPs)***

Guidelines for Dam Emergency Operations Plans were published by DEEP in 2012, creating a uniform approach for development of EOPs. As dam owners develop EOPs using the new guidance, DEEP anticipates that the quality of EOPs will improve, which will ultimately help reduce vulnerabilities to dam failures. Numerous local hazard mitigation plans have discussed the general lack of dam EOPs filed in the communities, and have included strategies to improve the development and filing of EOPs.

Important dam safety program changes are underway. House Bill 6441 passed in June 2013 and describes new requirements for dams related to registration, maintenance, and EOPs, which will be called EAPs moving forward. This bill requires owners of certain unregistered dams or similar structures to register them by October 1, 2015. It generally shifts regularly scheduled inspection and reporting requirements from the DEEP to the owners of dams. The bill also makes owners generally responsible for supervising and inspecting construction work and establishes new reporting requirements for owners when the work is completed.

Effective October 1, 2013, the owner of any high or significant hazard dam must develop and implement an emergency action plan (EAP) after the Commissioner of DEEP adopts regulations. The EAP shall be updated every two years, and copies shall be filed with DEEP and the chief executive officer of any municipality that would potentially be affected in the event of an emergency. New regulations shall establish the requirements for such EAPs, including but not limited to (1) criteria and standards for inundation studies and inundation zone mapping; (2) procedures for monitoring the dam or structure during periods of heavy rainfall and runoff, including personnel assignments and features of the dam to be inspected at given intervals during such periods; and (3) a formal notification system to alert appropriate local officials who are responsible for the warning and evacuation of residents in the inundation zone in the event of an emergency.



### **Flood Management Section**

The Flood Management Section is the state coordinating entity for the National Flood Insurance Program (NFIP). This section reviews and approves state agency activities within or affecting floodplains and conducts municipal NFIP compliance audits, training workshops, and provides assistance for the development of local floodplain ordinances. The Flood Management Section provides general technical assistance to municipalities on flood mapping and floodplain management inquiries. Furthermore, this section is responsible for the implementation of FEMA's Map Modernization Program at the state-level.

Through the year 2013, this section manages the FEMA Unified Hazard Mitigation Grant Program (which includes the grant programs FMA, RFC, and PDM). In future years, these functions will be carried out by DEMHS. DEMHS already manages HMGP and the SRL program.

### ***Map Modernization***

In the past, FEMA's NFIP re-mapping efforts have been limited by both technology and funding. In recognition of these limitations, Congress has committed to a Multi-Hazard Flood Map Modernization Management Program (MHFMMM); herein referred to as Map Modernization. Starting in fiscal year 2003 the goal of Map Modernization was to upgrade flood hazard data and mapping to create a more accurate digital product by 2010. Upgrading the maps was planned to improve floodplain management throughout the nation by providing more accurate flood data for use in planning and regulatory decision-making and by providing a product in a digital format that will be easily accessible to multiple users. By 2009, it was expected that digital flood hazard data would be available nationwide. The Map Modernization Program has been phased in over the course of several years with priority given to areas of greatest flood risk as determined by the State and approved by FEMA.

The purpose of this Map Modernization Plan; herein referred to as Business Plan, is to outline the DEEP's strategic approach for partnering with FEMA to participate in Map Modernization through DEEP's existing Floodplain Management Program (FMP). The Plan describes the FMP's current roles and responsibilities related to floodplain management, outlines its future role, organizational design, and execution strategy to meet the data and mapping needs of communities within the State of Connecticut.

The FMP currently includes a proactive approach that combines two key elements under one organization: (1) NFIP community compliance, and (2) technical assistance and outreach to communities and agencies. It is envisioned that the compliance element will expand significantly based on map modernization activities due to municipal floodplain management ordinance changes. This linkage of NFIP community status assurance from the existing NFIP Compliance efforts, within the DEEP Community Assistance Program (CAP), will complement and enhance the effectiveness of the expanded FMP. If fully



funded by FEMA, program management of the FMMP will be achieved through the expertise of a diverse, skilled project team complemented by external support from an independent state mapping contractor, and other state and federal partners. Program management will be centered on the identification of program goals and clear implementation and tracking of these goals during the program execution. Program management will be further enhanced by a data management system such as the Management Information Portal (MIP) provided by FEMA's National Service Provider.

The Business Plan addresses how Map Modernization will integrate with existing program needs over time, such as coastal erosion mapping, stream flow modeling for varying flow conditions, comprehensive land use planning, and others.

Education and outreach play a vital role in Map Modernization by promoting and building floodplain management capacity throughout the State, which includes training, workshops and presentations for local officials, lenders, insurance agents, land surveyors, engineers, regional planning commissions, and various state agencies and programs.

The success of the FMP and related programs within the DEEP is contingent on the receipt of adequate funding over multiple years from our Federal partners. Approximately \$1.45 million per year (on average) is required to implement this plan. Of that amount, the FMP anticipates that approximately \$480,000 per year may be available from state and partner contributions, which are mostly in-kind, and data matches. Total implementation costs over the five-year period are estimated to be \$8 million. In order to adequately pursue efforts to manage mapping activities and contractors a multiple year commitment from FEMA for funding for staff is essential.

### ***Risk MAP***

Risk Mapping, Assessment, and Planning (Risk MAP) is the FEMA program that provides communities with flood information and tools they can use to enhance their mitigation plans and take action to better protect their citizens. Risk MAP focuses on products and services beyond the traditional FIRM and works with officials to help put flood risk data and assessment tools to use, effectively communicating risk to citizens and enabling communities to enhance their mitigation plans and actions.

The initial Risk MAP products in Connecticut were associated with the new coastal flood mapping prepared by the STARR team for FEMA. These coastal maps were distributed to the communities of Fairfield, New London, New Haven, and Middlesex counties in 2011 as drafts and will be adopted by the communities in 2013. Along with the new FIRMs, the Risk MAP product "Changes Since Last FIRM" (CSLF) were distributed to the coastal communities. These maps were created as communication tools and were presented to the communities at meetings with the intent that communities will better understand the changes due to the updated coastal analysis.



### **Engineering Analysis Section**

The Engineering Analysis Section administers the Stream Channel Encroachment Line (SCEL) Program and State Flood Management Certification Program.

### ***Flood Management Certification***

The Flood Management Certification Program regulates all state actions in or affecting floodplains including regulating state sponsored changes to storm water drainage. Any state activity or grant funds supporting an activity located in a FEMA-mapped SFHA or 0.2% annual chance flood zone must certify to the DEEP that certain statutory and regulatory requirements have been met. These requirements always are equal to or exceed NFIP minimum standards (e.g., critical facilities and activities must be mitigated up to or elevated above the 500-year floodplain elevation, no increase in “intensity of use” in the floodplain without going through an exemption request demonstrating that the project is “in the public interest” and that the project “will not injure persons or damage property in the area of the project”, etc.).

### ***Stream Channel Encroachment Lines***

The SCEL Program predates the NFIP and is a state program that regulates the placement of encroachments and obstructions in the floodplains of certain watercourses by regulating these obstructions and encroachments riverward of legally established lines. A permit from the DEEP is required for any activity riverward of established encroachment lines.

Encroachment lines are generally based on a 100-year flood or the flood of record, whichever is greater. The initial line placement was determined by an engineering firm contracted by the DEP and the proposed lines were then presented at a public hearing in the affected communities. Following the public hearing the DEP Commissioner legally established the lines, and maps depicting the lines were filed with the affected communities. The lines encompass significant floodwater conveyance areas, areas of high velocity flows and areas subject to significant depths of flooding. The majority of the lines were established following the devastating floods of 1955. However, in 1982 an additional 12 miles were established on the highly flood damage prone Yantic River in southeastern Connecticut. More recently, the Norwalk River Basin was re-studied, and revised SCEL maps were established in 1997.

While the program has been successful in discouraging inappropriate development within the 273 river miles that have been delineated, the high cost of establishing new lines (between \$12,000 - \$14,000 per mile in 1997 dollars) ultimately reduced the ability of the State to extend lines along other flood prone rivers. Furthermore, the strong home rule ethos of municipalities in Connecticut has led many communities to regulate development in local floodplains through local zoning regulations and participation in the NFIP program.



DEEP's efforts to repeal the SCEL program due to its redundancy with the NFIP have been unsuccessful in recent years. However, Public Act 13-205 was passed in June 2013 to streamline the program. The bill allows, rather than requires, the DEEP commissioner to establish lines to restrict activity along certain tidal or inland waterways or flood-prone areas without authorization, and revokes any order establishing such lines. By eliminating the commissioner's authority to establish these lines, the bill potentially eliminates the related permitting program. The status of the SCEL program will be revisited when this plan is updated.

### ***Engineering Services Section***

The Engineering Services Section is responsible for the study, design, repair and maintenance of state owned and operated dams and flood control works. This Section coordinates with municipal flood and erosion control boards (FECB) on flood control and shore erosion projects. The Commissioner of DEEP is responsible for the coordination of flood control projects within the State and is to be the sole initiator of a flood control project with a federal agency. The Commissioner has designated this section of DEEP to coordinate with the NRCS and USACE on feasibility studies and flood control projects. The Engineering Services Section also provides technical assistance to municipalities and other state agencies to help address their flooding issues.

### ***DamWatch Program***

The Dam Safety Section of the Inland Water Resources Division within the Bureau of Water Protection and Land Reuse received a grant under the National Dam Safety Act in 2006, which is administered by the Federal Emergency Management Agency (FEMA), Department of Homeland Security. The grant was used to contract with US Engineering Solutions Corporation to provide the department with the DamWatch dam-monitoring application. Connecticut is the first state to use this technology for monitoring its DEEP-owned dams. The DamWatch program is currently the responsibility of the Engineering Services section.

DamWatch is a web based monitoring software product that allows DEEP personnel to respond to and monitor potentially destructive flood events. DamWatch continually reviews real-time rainfall and streamflow data sources such as the National Oceanic and Atmospheric Administration (NOAA), the National Weather Service (NWS), the United States Geological Survey (USGS) and archives this information. The system then compares specific rainfall and runoff data against established thresholds pertaining to spillway capacity at DEEP-owned dams and alerts staff of impending overtopping flows at these dams.

DamWatch has enabled the IWRD to effectively monitor DEEP-owned dams during potentially catastrophic events by gathering localized real time rainfall data, track movements of storms and evaluate the hydraulic capabilities of specific dams for



discharging the flood flows anticipated from a particular flood event. The system employs an automatic communications system that alerts users by various means, which include cellular phones, pagers, fax transmissions, e-mails or instant messaging which the user can monitor during critical flood events. DEEP staff can then be dispatched as needed during or after a flood event to those dams for which alerts were issued during a storm event.

### ***Automated Flood Warning Systems***

The original automated flood warning system was installed in Connecticut by the NRCS in cooperation with DEP in 1985 as a direct result of the June flooding of 1982. The flood warning system aided the NWS in issuing faster flood watches and warnings, and aided communities in responding more rapidly to impending flooding situations. In several communities flood audits were prepared by the NRCS. These flood audits identified which structures were in danger at specific water levels as measured by the water level gages in the warning system.

At its peak, the DEEP owned and maintained 45 ALERT gages. However, due to funding issues, staffing cuts, and obsolescence of the system, the ALERT program has been discontinued. DEEP and other flood response agencies rely on data from USGS and NOAA for information.

### **Office of Long Island Sound Programs**

The Office of Long Island Sound Programs (OLISP) administers Connecticut's Coastal Management Program, which is approved by NOAA (National Oceanic and Atmospheric Administration) under the federal Coastal Zone Management Act. Under the statutory umbrella of the Connecticut Coastal Management Act (CCMA) enacted in 1980, the Program ensures balanced growth along the coast, restores coastal habitat, improves public access, promotes water-dependent uses, public trust waters and submerged lands, promotes harbor management, and facilitates research. The Coastal Management Program also regulates work in tidal, coastal, and navigable waters and tidal wetlands under the CCMA (Section 22a-90 through 22a-112 of the Connecticut General Statutes), the Structures Dredging and Fill statutes (Section 22a-359 through 22a-363f), and the Tidal Wetlands Act (Section 22a-28 through 22a-35). Development of the shoreline is regulated at the local level through municipal planning and the zoning boards and commissions under the policies of the CCMA, with technical assistance and oversight provided by Program staff via the Coastal Management Manual.

The CCMA contains a number of strong policies encouraging the protection of natural shoreline sedimentation and erosion processes, and discouraging shoreline flood and erosion control structures (also known as "hard" structures or shoreline armoring, such as seawalls, bulkheads and revetments) except in certain specified conditions. In general, OLISP can authorize the repair of existing erosion control structures and, in limited circumstances, the construction of new erosion control measures in areas waterward of the



coastal jurisdiction through the Structures, Dredging and Fill statutes and Coastal Management Act standards. Currently, a hierarchy or checklist of considerations must be satisfied before a flood and erosion control structure can be authorized. The goal for new development, however, is one of prevention: designing and building with appropriate setbacks to prevent the need for such structures. Additionally recent activities by OLISP have advanced coastal hazard planning, notably:

- The acquisition of historic shoreline data for use in identifying and quantifying areas of erosion and accretion;
- The use of high-accuracy coastal elevation data to develop a series of visualization tools for assorted sea level rise scenarios;
- The development of a web site that centralizes various data relative to Connecticut's coastal hazard; and
- Establishing partnerships with various regional organizations such as the Northeast Regional Ocean Council (NROC) and the Northeast Regional Association Ocean Observing System (NERACOOS) all of whom have an active interest and role to play in regional hazard planning and mitigation.

The Program also provides key administration and guidance in the following areas:

- Coastal and Climate Resilience
- Urban Waterfront Revitalization
- Watershed Management/Nonpoint Source Control
- Protecting Water-Dependent Uses
- Improving Public Access
- Restoring Coastal Habitat
- Promoting Harbor Management
- Facilitating Research
- Managing and Protecting Coastal Resources
- Protecting the Public Trust
- Flood and Erosion Control/Coastal Hazards



### ***OLISP Regulatory Programs***

Relative to flood and erosion control, OLISP authorizes the repair of existing erosion control structures and, in limited circumstances, the construction of new erosion control measures in areas waterward of the coastal jurisdiction line (previously, OLISP used the high tide line) through the Structures, Dredging and Fill statutes and Coastal Management Act standards. The goal for new development, however, is one of prevention: designing and building with appropriate setbacks to prevent the need for such structures. Additionally recent activities by OLISP have advanced coastal hazard planning, notably:

- The acquisition of historic shoreline data for use in identifying and quantifying areas of erosion and accretion;
- The use of high-accuracy coastal elevation data to develop a series of visualization tools for assorted sea level rise scenarios;
- The development of a web site that centralizes various data relative to Connecticut's coastal hazard; and
- Establishing partnerships with various regional organizations such as the Northeast Regional Ocean Council (NROC) and the Northeast Regional Association Ocean Observing System (NERACOOS) all of whom have an active interest and role to play in regional hazard planning and mitigation

### ***OLISP Technical Services and Grant Programs***

The Technical Services and Grant Programs section of OLISP is spearheading coastal and climate adaptation planning in Connecticut. Subsequent to the adoption of the last Connecticut Hazard Mitigation Plan, OLISP administered a climate change planning process in 2010 and 2011 that was funded by EPA's Climate Ready Estuaries (CRE) program and Long Island Sound Study (LISS). The process included personnel from OLISP and focused on the town of Groton, Connecticut. OLISP partnered with the International Council for Local Environmental Initiatives (ICLEI) to host three workshops with the Town of Groton in 2010 focusing on (1) the climate adaptation planning process and projected global, regional and local climate changes; (2) identification of vulnerabilities from projected changes in global and regional climate; and (3) identification of potential actions that could be used to increase resilience towards existing and projected changes in global and regional climate.

The ICLEI/OLISP/Town planning process resulted in the report "Preparing for Climate Change in Groton, Connecticut: A Model Process for Communities in the Northeast" (April 2011). This report contains lessons learned that can be applied in all communities in Connecticut and beyond. After the workshops and report release, EPA recognized the success of this project as a model for other communities, and funded the development by OLISP and ICLEI of the CT Adaptation Resource Toolkit, or CART. This website, which has recently been migrated to the DEEP website, is one stop shopping for communities who are ready to reduce risk.



As a tangential benefit of this planning effort, the Town of Groton incorporated some of the findings and strategies into its part of the Southeastern Connecticut Multi-Jurisdiction Hazard Mitigation Plan update (2012), its Municipal Coastal Program update (2013), and its Plan of Conservation and Development update (2013).

There are several other communities OLISP has supported for adaptation programs and actions including Greenwich. The town of Greenwich recently evaluated coastal risks by cataloguing and analyzing elevation certificates for buildings in the coastal AE flood zones.

OLISP staff co-chair the CT Climate Education Communication Committee which engages over 50 members to provide resources, educational materials, and technical support to leverage efforts in the state.

OLISP partnered with UCONN/SeaGrant/CLEAR to offer multiple coastal resilience trainings and workshop in 2012-2013, as well as partnered with NOAA to bring a three-day training to ten communities to provide tools and strategies for land use and infrastructure decision makers.

OLISP continues to provide technical assistance, outreach, and education with regard to sea level rise, flooding, coastal hazards, and coastal adaptation planning. For example, OLISP met with the Towns of Greenwich, Guilford, and Groton in February 2013 to review the ongoing planning efforts in each town and determine what the possible next steps could be for implementing adaptation strategies.

OLISP staff chair and sit on the NROC/NERACOOS Ecosystem Health and Coastal Hazards Committees which have developed and leveraged multiple resources across the region, including a StormSmart Coast and StormSmart Connect websites, a Storm Reporter database, and Sentinel Monitoring for Climate Change for the whole region; and funded and supported projects across New England to increase the response of coastal communities to hazards and many other projects.

OLISP staff participates on the State of Connecticut Long Term Recovery Taskforce which is supporting long term decisions statewide with regional and local partners to mitigate risk to hurricanes and other disasters. For the first time ever in the U.S., there is a state level Recovery Support Function (RSF) activated, as a result of Superstorm Sandy, and recognition for increased planning, communication and leveraging of efforts statewide.

OLISP Staff co-chair one of the three RSFs convened in Connecticut – the Hurricane Sandy Recovery Coordination Natural and Cultural Resources (NCR) Taskforce – and have already secured over 40 partner organizations including NGOs, academic, environmental, state, regional and local government. The NCR Task Force has met twice, in May and June 2013, and is in the process of developing goals and objectives for facilitating recovery.



### ***Connecticut Center for Coasts***

As explained above in Section 3.2.1.4 (“An Act Concerning Climate Change and Data Collection”), the State of Connecticut will be establishing a “Center for Coasts” that will conduct research, analysis, design, outreach and education projects to guide the development and implementation of technologies, methods and policies that increase the protection of ecosystems, coastal properties and other lands and attributes of the state that are subject to the effects of rising sea levels and natural hazards. The DEEP Office of Planning and Program Development and OLISP will be partnering with the University of Connecticut to pursue the Center for Coasts.

### **DEEP Energy Branch**

The Public Utilities Regulatory Authority (PURA) replaced the former Department of Public Utility Control (DPUC) and, along with the Bureau of Energy and Technology Policy, is part of the Energy Branch of DEEP.

PURA is statutorily charged with regulating the rates and services of Connecticut's investor owned electricity, natural gas, water and telecommunication companies and is the franchising authority for the state's cable television companies. In the industries that are still wholly regulated, PURA balances the public's right to safe, adequate and reliable utility service at reasonable rates with the provider's right to a reasonable return on its investment. PURA also keeps watch over competitive utility services to promote equity among the competitors while customers reap the price and quality benefits of competition and are protected from unfair business practices.

The Bureau of Energy and Technology Policy is charged with developing forward-looking energy efficiency, infrastructure and alternative power programs. Together, PURA and the Bureau of Energy and Technology Policy have overseen several key efforts in the last few years:

- DEEP developed the first-ever Comprehensive Energy Strategy (CES) for the State of Connecticut. This is an assessment and strategy for all residential, commercial, and industrial energy issues, including energy efficiency, industry, electricity, natural gas, and transportation. The strategy was developed as called for in the milestone energy legislation, Public Act 11-80, passed in June of 2011 prior to the storms of 2011 (Tropical Storm Irene and Winter Storm Alfred) and 2012 (Sandy), and as amended by PA 13-303, that impacted energy utilities. Section 51 of this Act requires that DEEP, in consultation with the Connecticut Energy Advisory Board (CEAB), prepare a Comprehensive Energy Strategy for Connecticut every three years. The final Strategy was issued February 19, 2013
- Connecticut's Energy Assurance Plan (EAP) was developed in 2009-2012 using ARRA funds. This effort commenced at OPM and migrated to DEEP with the agency consolidations. The utility-damaging storms of 2011 and 2012 provided impetus to expand the EAP report. The EAP's structure is influenced by four phases



of emergency management – preparedness, response, recovery, and mitigation. Mitigation encompasses all activities throughout the preparedness, response, and recovery phases of emergency management that attempt to prevent energy supply disruptions from occurring or to reduce the impact of an energy supply disruption event. Mitigation activities include, for example, enforcing tree trimming standards (preparedness), administering the Lead By Example program (preparedness), building Microgrids in town centers (response), and incentivizing the inclusion of renewable technology during a rebuild of property (recovery).

- Natural gas utilities are an important aspect of energy. Although gas lines are mainly underground, shoreline flooding impacted a few hundred customers in 2012. Public Act 12-148 changed the way that PURA viewed recovery, requiring funding from gas companies. Docket 12-06-09 created performance standards.
- Docket 11-09-09 required many changes to the operations of the State's two major electric utilities, CL&P and UI. The NSTAR/CL&P merger resulted in a commitment of \$300 million from ratepayers to make hardening improvements. Docket 12-01-07 reviews the merger and lists the conditions of the merger. Status reports are also required. Docket 12-07-06 reflects the storm hardening program. The DEEP's vegetation management task force has also resulted from these dockets and acts.
- Docket 12-11-07 concerns Superstorm Sandy. As a result of this docket, PURA must investigate any storm that causes an outage that exceeds 48 hours.
- Another ongoing focus of PURA and ISO is the review of gas dependency for generating electricity. This effort is being undertaken by DEEP, PURA, ISO-New England and other regional entities as well as FERC to consider compelling issues with the electric and gas markets and potential shortages of gas during emergency outage situations.
- Microgrids are discussed in Docket 12-01-07 and Public Act 12-148. PURA is actively planning for redundant and hardened energy infrastructure such as microgrids and harden transmission lines. DEEP is conducting the Microgrid Grant and Loan Pilot Program which seeks projects that support local distributed energy generation for critical facilities during times of electric grid outages. To date, DEEP has selected nine projects to proceed in their development and construction and a second round of funding is expected as a result of PA 13-239 which commits the State to an additional thirty million in bonding revenue to support microgrids.

The Energy Efficiency Board (EEB) is a group of advisors who utilize their experience and expertise with energy issues to evaluate, advise, and assist the state's utility companies in developing and implementing comprehensive, cost-effective energy conservation and market transformation plans to help Connecticut consumers reduce energy use in their homes and businesses and to help Connecticut meet its changing and growing energy needs. The Board was created in 1998 by the Connecticut State Legislature, and now operates under a mandate in Public Act 11-80. The EEB has nine voting members and five non-voting representatives of Connecticut's electric and gas utility companies. By statute the Chairman of the EEB is Commissioner of the DEEP. Other members represent the



Office of the Attorney General, the Office of Consumer Council, statewide business, the environmental field, the manufacturing sector, and retail organizations, a chamber of commerce, and retail customers

### **Forestry Division**

There are 32 state forests (totaling nearly 170,000 acres) in the Connecticut state forest system managed by the Division of Forestry. These forests provide a variety of recreational experiences, natural diversity (including threatened, endangered and special concern species), and the preservation of unique sites (both geologic and archeological), the provision of raw materials as forest products, and the maintenance of wildlife and fisheries habitats. The Division's professional foresters work to insure that these forests remain healthy and vigorous while meeting the wide range of demands that the public places on these lands.

The Division of Forestry maintains an active forest fire prevention program and a specially trained force of fire fighting personnel to combat forest fires. The division also has crews ready to assist the USDA Forest Service in controlling large fires across the nation. The Division prepares a daily Forest Fire Danger Report. Division of Forestry programs and activities related to forest fire prevention include:

- Maintaining a fully trained and equipped crew of fire fighters "on call" for assistance both in-state and to the federal government in fighting fires in the other parts of the U.S.;
- Conducting a forest fire prevention program utilizing Smokey Bear as a focus;
- Coordinating the timely suppression of all forest fires in the state using trained DEEP personnel, the Connecticut Interstate Fire Crew, local fire departments, and the Connecticut National Guard;
- Administering the federally-funded Volunteer Fire Assistance Program, which provides federal funds for equipment and training to fire departments which serve small communities; and
- Participating in the Northeastern Forest Fire Protection Commission to coordinate mutual aid in fire prevention and suppression efforts among compact members.

Because prevention is still the primary means of reducing wildfire risks, the DEEP regularly posts updates about wildfire risk and circulates warnings to the press. For example on March 27, 2012 the following DEEP press release was issued and picked up by several news agencies:

*"DEEP Reminds State Residents of Spring Fire Danger – Forest Fire Danger Level is Very High*

*As firefighters battle a large brush fire that is threatening two homes near Devils Hopyard State Park, East Haddam, the Connecticut Department of Energy and Environmental*



*Protection (DEEP) today reminded residents that the Forest Fire Danger Level is currently VERY HIGH and that weather conditions will cause any brush fires to spread rapidly.*

*With this fire danger, open burning of brush is NOT allowed – even if a resident has a permit from the local open burning official.*

*In addition, the National Weather Service has issued a Red Flag Warning for Connecticut because of weather conditions conducive to the rapid spread of fire. Red Flag warnings are issued when high winds will be sustained or there will be frequent gusts above a certain threshold (normally 25 mph), as is expected to be the case today. Red Flag conditions are also defined by humidity levels, below 30%, and precipitation for the previous five days of less than ¼-inch.*

*Residents need to know that any permit to burn brush is not valid when the Forest Fire Danger is rated high, very high, or extreme," said DEEP Deputy Commissioner Susan Frechette. "Anyone spotting a forest fire should remain calm and dial 911 to report the fire as quickly as possible to the local fire Department."*

*DEEP's Division of Forestry constantly monitors the danger of forest fire to help protect Connecticut's 1.8 million acres of forested land. Forest fire danger levels are classified as low, moderate, high, very high or extreme.*

*DEEP firefighters are currently assisting local fire departments in fighting a fire in East Haddam in the vicinity of Devils Hopyard State Park. The first efforts to battle this blaze began Monday evening and continue today.*

### **Solid Waste Division – Debris Management Plan**

The DEEP's Solid Waste Division prepared the State of Connecticut Disaster Debris Management Plan in 2007 (the Plan) as a component in the State's overall comprehensive efforts to support and implement improved planning for disaster debris management. This Debris Plan was made an Annex to the State's Natural Disaster Plan (2006). The Plan establishes the framework for State agencies and municipalities to facilitate proper management of debris generated by a natural disaster. In addition to the Plan, the State has established pre-need and pre-event contracts to assist the State in disaster debris management preparedness. These contracts will be activated only by the Governor as the result of an emergency declaration and will cover debris removal operations and the monitoring of these operations.

The Plan is based on guidance provided by FEMA, EPA, USACE and lessons learned from the destructive hurricanes in the gulf coast states in 2004 and 2005. The Plan outlines the DEEP's processes to consider, approve or disapprove requests for authorizations, variances, and waivers as needed for rapid and environmentally sound waste management, specifically with regard to managing the natural-disaster debris waste stream. In addition, this Plan outlines debris removal and monitoring roles and responsibilities and presents an



overview of eligible federal reimbursable costs resulting from debris clean up and monitoring. State government agencies and municipalities will be the primary users of this Plan. Municipalities in particular, will make use of the information for planning pre-positioned contracts with waste haulers, as well as identifying disaster Temporary Debris Storage and Reduction Sites (TDSRS) that may be called into use during disaster recovery operations. Much of the information will also be useful to the waste management industry as they develop their own in-house plans for participating in a potential disaster recovery scenario.

The Disaster Debris Management Plan implemented by Connecticut state agencies and municipalities is based on recycling and material separation at the point of generation to the extent possible with additional segregation occurring at TDSRS in order to minimize disposal and reduce potential threats to human health and safety. TDSRS will be those sites that have been identified by local and state government, and which have been evaluated and approved by DEEP for the purposes of collection, volume reduction, and transfer to final permitted disposal and recycling facilities. The DEEP is responsible for the permitting of these sites. The goal will be to maximize potential processing and recycling options consistent with the State Solid Waste Management Plan. This strategy will be of highest priority and public education together with municipal, State, and federal cooperation will be imperative to effectively carry out this mission.

DEMHS has established pre-need and pre-event contracts to assist the State in disaster debris management preparedness. These contracts have been active on three occasions (Tropical Storm Irene, Winter Storm Alfred and Super Storm Sandy) in the past two years by the Governor, as the result of emergency declarations. These contracts cover debris removal operations and the monitoring of these operations.

### **State Parks Outdoor Recreation and Public Outreach**

The Bureau of Outdoor Recreation oversees programs and environmental education workshops for the general public, informal education centers and formal education districts throughout Connecticut. This division is the licensed provider for national curriculum materials such as Project WET- Water Education for Teachers. The focus of Project WET is to provide curriculum materials to teachers in the K-12 educational system, integrating current educational standards and objectives while advancing knowledge of natural resources and conservation activities. As such the Project WET workshops target understanding of water science through watersheds, human impacts and environmental changes that include climate change. A series of workshops currently provided to educators includes emergency preparedness materials for natural disaster planning, as well as using natural disasters as a teaching tool to highlight concepts of sea level rise, flooding, public health and safety, cost analysis and land use planning.

The application of educator workshops that combine DEEP materials and policy with Project WET activities helps illustrate the road to management decisions. The inclusion of Capability Assessment



such materials in school programs helps support the goals of DEEP and Connecticut's Environmental Literacy Plan – to provide for an environmentally literate citizen. The public outreach office also serves to connect DEEP's actions and policy with non-government organizations and educational centers through professional development workshops that support their educational outreach, in order to provide for current information and consistent messaging about resource policy and management decisions.

### **Office of Information Management**

DEEP's Office of Information Management (OIM) oversees the agency's information management and information technology systems. OIM plans, manages, and coordinates major information management and information technology projects within DEEP. In 2009 OIM completed and put into production the agency's integrated information management system, called SIMS (Site Information Management System). In addition, OIM participates in initiatives to monitor, research, and collect information about the State's land surface, earth materials, water resources, and climate.

In order to carry out its functions, OIM is organized into four sections, Administration, Information Technology, Project Management, and Business Support. There are several significant units within the Administration and Information Technology sections. The Information Technology Section includes Data Base Administration, Geographic Information Systems (GIS), Applications Development, Help Desk, Network & Telecommunications Administration and Applications Hosting. GIS is a key agency technology, used to integrate and analyze a range of environmental and natural resource information of interest to DEEP staff and other public and private sector entities. Among the programs located within OIM Administration are the Geological Survey portion of the Connecticut Geological and Natural History Survey, Field Data Collection, DEEP Records Center, and Records Management. The Business Support unit coordinates and oversees the development of eGovernment activities including eWorkflow and eForms.

### **Connecticut Geological Survey**

It is a role of the State Geologist and the Connecticut Geological Survey to reduce risks from geologic and seismic hazards through assessment and mapping of areas vulnerable to natural hazard events. Geologic research and field investigations support hazard assessments and assist policy makers to minimize damages of future events. These investigations are accomplished through cooperative efforts between the State Geological Survey of DEEP, Connecticut State Universities, private colleges and Universities, and other State and Federal agencies.

The following CT Geological Survey cooperative efforts are related to hazards:

- Surficial Geologic Mapping for NEHRP (National Earthquake Hazards Reduction Program) site effect classification in HAZUS-MH (NE SGs/NESEC) (2010)



- Geochemical Landscapes Soil Analyses and Mapping (DEEP/USGS) (2008-2010) – natural vs. anthropogenic geochemical information
- Subsurface Geologic Mapping from Well Completion Reports (DEEP/USGS) (2008/09) – ground water resource mapping
- Surficial Aquifer Potential Mapping (DEEP/EPA) (2006-2008) – water resource protection
- Characterization of Bedrock Aquifers (DEEP/USGS) (2002) – source water protection; surface/groundwater interactions
- State Geological Map of Connecticut digitized (DEEP/CT DEM) (1998-99) – seismic hazards mapping
- Indoor Radon Potential Mapping (DEEP/DPH/EPA) (1990-1997) – well water & indoor air radon distribution mapping

The Connecticut Geological Survey provided support for DEEP efforts involving erosion susceptibility (1:24,000 scale) as a planning tool for predicting terrace escarpment erosion. This mapping was derived from a synthesis of Quaternary geology and soil mapping characteristics. Field testing at 60 key locations enabled mapping methodology to be applied statewide. Erosion susceptibility mapping is available to environmental planners within DEEP through GIS and to the public through free data download.

The Connecticut Geological Survey has prepared digital geologic and soils data for hazards assessments and analyses through cooperative efforts with the NRCS and the U.S. Geological Survey. These data support agency assessments of seismic risk, inland and coastal flooding, shoreline erosion, and sea level rise.

The catalog of digital GIS data available from DEEP, including geologic and soils data is available through [www.ct.gov/deep/gisdata/](http://www.ct.gov/deep/gisdata/).

### **Department of Transportation (DOT)**

In addition to its overall responsibility to provide a safe, efficient and cost-effective transportation system that meets the mobility needs of its users, the Connecticut Department of Transportation (DOT) is responsible for several short- and long-term natural hazard mitigation objectives in Connecticut. The short-term objectives include plowing of roads during winter storms and repairing the public transportation network after natural disasters. DOT's long-term goals include the design of flood and earthquake resistant roads and bridges.

Four of DOT's major short-term mitigation efforts are their Storm Control Center, State Tracking Automated Request System (STARS), Advanced Traffic Management System (ATMS), and Bridge Inspection Program:

- The DOT Storm Control Center is operational during severe weather events ranging from winter storms to hurricanes. The Storm Control Center coordinates the



plowing operations of over 600 crews during winter storms, as well as tree and debris removal crews when deemed necessary during all other severe weather events winter or summer.

- The DOT has implemented STARS, a program to post road closures to the DOT's internet site for the public during major storms.
- The ATMS system is a network of cameras and road sensors that monitor road conditions and traffic flow on Connecticut's Interstate Highways. Using automated road signs, the ATMS system also warns drivers of traffic congestion, accidents or hazardous driving conditions.
- The Bridge Inspection program uses an automated computer based monitoring system that alerts DOT personnel when a scour critical bridge is experiencing a high rainfall or stream flow event. The system uses rain intensity and river gage information to trigger alerts so that bridge inspectors can be dispatched to the identified bridge(s). A plan of action has been developed for each scour critical bridge to aid the inspector in monitoring and possible closure of the structure.

Some of DOT's long-term mitigation efforts include:

- Improving the design of roads and bridges above the 100-year floodplain;
- Seismic resistant bridge retrofit projects and designing new bridges to resist earthquakes;
- Storm evacuation route planning; and
- Increasing the clear zone on all roadways where needed to prevent road closures and damage due to downed trees and limbs.

DOT commenced a "Climate Change and Extreme Weather Pilot Project" in 2013 using a grant from the Federal Highway Administration. The project will include vulnerability assessments of culverts and bridges in Litchfield County that are between six and 20 feet in length, with regard to flooding caused by increasing precipitation and extreme rainfall events. The assessment will evaluate the existing storm event design standards, the recent (ten year) historic actual rainfall intensity and frequency, and evaluate the hydraulic capacity of these structures using the projected increases in rainfall based on best available data and studies. Litchfield County was selected due to the inland flood damages observed in the northwest corner of the state over the last few years. The scope of this project was identified in the Connecticut Climate Change Preparedness Plan which was a product of a statewide effort that took place from 2005 through 2011.

In addition to the vulnerability assessment, the project will include a process that assigns a criticality value to the risk of failure. This will assist the Department in prioritizing replacement and reconstruction efforts to these structures where they pose the greatest risk to human health and safety, public and private property loss, and the economic risk of replacement after failure versus proactive replacement. This project will add to the existing framework by providing a model process for assessing the hydraulic capacity of smaller



structures in the rural urban fringe and the criticality of those assets in similar geographies.

DOT provides technical assistance to DEEP and DEMHS in reviewing projects concerned with implementing roadway construction projects and other related transportation issues. A member of the DOT is appointed to the CIHMC.

### **Department of Public Health (DPH)**

In the course of a day, more than 2.86 million Connecticut residents, as well as many others who visit the state, come into contact with drinking water provided by a public water system, whether community, non-community or non-transient, non-community. The CT Department of Public Health (DPH) Drinking Water Section (DWS) is responsible for ensuring that all public water supply systems provide a water supply of adequate quantity and quality to their consumers.

The DPH maintains the following two plans that relate to emergency response and mitigation: 1) Connecticut Public Health Emergency Response Plan and 2) DWS Emergency Contingency Plan. The DPH DWS also has the Water Emergency Assessment and Response (WEAR) team consisting of staff members trained to handle water system related incidents that follow a standard operating procedure (SOP) for addressing Public Water System Security Incidents and Public Water System Emergency Incidents. The WEAR team also provides Security & Emergency Response Guidelines to public water systems to be used in conjunction with their existing emergency response plans. These guidelines include information on handling a contamination event, whether it is due to intentional terrorist or criminal actions, accident, or deficient infrastructure.

DPH provides technical assistance to DEEP and DEMHS in reviewing projects with respect to drinking water issues including sources, adequacy, and infrastructure. A member of the DHCD may be appointed to the CIHMC.

### ***Connecticut Public Health Emergency Response Plan***

The DPH is the lead administrative and planning agency in Connecticut for public health initiatives including public health emergency preparedness. DPH works with federal, state, regional, and local partners to improve the State's ability to respond to public health emergencies. The Connecticut Public Health Emergency Response Plan (PHERP) identifies the appropriate DPH response activities during a public health emergency. This plan supports the public health and medical care component in existing state disaster and emergency plans.

The purpose of the PHERP is to support the following four functions of the Connecticut emergency response effort:

- Maximize the protection of lives and properties;

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- Identify the DPH procedures to implement when responding to a natural, biological, chemical, radiological, nuclear, or explosive emergency that threatens the public health of Connecticut;
- Contribute to emergency support functions, as appropriate, particularly emergency support function #8 of the PHERP (Health and Medical Services) at the state level to define policies and procedures for DPH and other public health partners in preparation for and in response to a public health emergency; and
- Enable the State of Connecticut to continue to operate and provide services as normally and effectively as possible in the event of a public health emergency.

### ***Connecticut Drinking Water Section Emergency Contingency Plan***

Acting on behalf of the DPH, the DWS protects public health through regulatory oversight of public water systems throughout the state. Implicit in this mission statement is providing immediate “emergency” support to water supplies and the public. It is part of the DPH’s mission to influence, through regulation and communication, the operation of public water systems so that all necessary precautions to protect and preserve sources and systems of supplies are taken.

The DPH DWS requires all public water systems serving 250 or more customers or 1,000 or more people to develop an Emergency Contingency Plan. The plan aims to avoid or address emergencies by evaluating vulnerabilities and how to mitigate potentially harmful events. The public water systems are encouraged to address risk prone items and areas where a system may fail and take steps to correct them. The DPH DWS addresses emergencies by communication with and responding to water quality issues at public drinking water systems through site visits, sampling and follow-up technical assistance as deemed necessary. Examples of site visits to the utility would occur when there are potential toxic spills into or leading into public drinking water sources or malicious acts such as unauthorized entry to the water system property. The plan also implements four stages of response ranging from advising customers to rationing of water. The plan is developed to address emergencies including contamination of water, power emergencies, drought, flooding, and/or failure of any or all critical water system components.

### ***The Connecticut (DPH) Water Emergency Assessment & Response (WEAR) Team***

The WEAR Team is trained and operates within the Incident Command System (ICS), the National Incident Management System (NIMS) and the National Response Plan. The WEAR Team consists of personnel with specific skill sets and has received additional specialized training in areas relating to security for the drinking water industry and potential emergency response situations that could occur at the various types of Public Water Systems. Specific skill sets include expertise in risk communication, radiological monitoring, surface water treatment, source water protection, mutual aid, cross connection control, water system operations and drinking water regulations. The WEAR Team also acts as a liaison to programs such as local health administration, food protection, day care



licensing, healthcare systems within the Department of Public Health during a drinking water or public health incident. The WEAR Team specifically addresses emergencies related to water quality and security issues.

### ***Connecticut Department of Public Health Drinking Water Section Incident Report Forms: Standard Operating Procedure***

There is a formal standard operating procedure (SOP) for the DWS Public Water System Security Incident Report Form and the DWS Public Water System Emergency Incident Report Form. The form describes the scope of public water system's distribution and storage. The procedure provides a consistent means for internal notification of staff on emergency and security situations at Public Water Systems. The Incident Report Forms also provide the DWS a means to notify key personnel within the Department of Public Health as well as other partners outside the Department of Public Health. Emergency and security situations at Public Water Systems can be divided into two categories, routine operating emergencies such as pipe breaks, pump malfunctions, acute risk water quality issues and power outages; and non-routine emergencies such as intentional acts of sabotage, chemical spills, floods, hurricanes, windstorms or droughts. The DWS Public Water System Security Incident Report Form and the DWS Public Water System Emergency Incident Report Form have been provided to capture all emergency scenarios.

### ***Connecticut Water Supply Planning***

All public water systems serving 1,000 or more persons, or 250 or more consumers are required by the DPH to prepare water supply plans in accordance with CGS 25-32d Sections 1a – 5 in order to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety and welfare. The water supply planning process provides for a coordinated approach to long-range water supply planning by addressing water quality and quantity issues from an area-wide perspective. In CT, there are approximately 80 water utilities that fall under this category. These 84 utilities must provide updates on the water supply plan every five years and plan their system viability over a five, 20, and 50-year period. The water supply plan also includes an emergency contingency plan section (described above).

Per Public Act 85-535, the State also has a program for Public Water Supply Coordination to maximize efficient and effective development of the state's public water supply systems and to promote public health, safety and welfare. This Act provides for a coordinated approach to long-range water supply planning by addressing water quality and quantity issues from an area-wide perspective. The process is designed to bring together public water system representatives and regional planning organizations to discuss long-range water supply issues and to develop a plan for dealing with those issues. The state has been divided into seven management areas based upon a number of factors, including similarity of water supply problems, proliferation of small water systems, groundwater contamination problems, and over-allocated water resources. To date, four of the seven areas have



completed coordinated planning and have water utility coordinating committees in place to continue region-wide planning.

### **Department of Administrative Services - Division of Construction Services**

Within the Department of Administrative Services is the Division of Construction Services (DCS). DCS consolidated services provided by the Bureau of Design and Construction from the former Department of Public Works, the Bureau of School Facilities from the State Department of Education and the Division of Fire and Building Services from the former Department of Public Safety, which includes the Office of the State Building Inspector, the Office of Education and Data Management and the Office of State Fire Marshal.

DAS is the state's primary agency for executive and judicial branches for facility planning, design, and construction-related services; administration of the state school construction grant program; and development, administration and training of state building and fire safety codes.

### **Office of Design and Construction**

The Office of Design and Construction (ODC) implements and administers state capital projects planning and management for the majority of state agencies by working with them in the areas of facilities planning, design, construction, and technical expertise. ODC administers and promotes the following:

- High Performance Building or Sustainable Design guidelines for capital projects;
- Design and implement energy retrofit projects to existing state buildings;
- Review and approve Life Cycle Cost Analysis submissions for all state-funded new buildings, additions or renovations;
- Provides technical expertise in regulatory compliance in the areas of permits, mitigation, hazardous materials (lead, asbestos, PCBs, mold), and soil contamination;
- Administers the State Asbestos Program; and
- Provides geographical information system (GIS) support for state agencies, including State real estate inventories.



### **DCS – Environmental Planning and GIS Services**

The Technical Services Unit within DCS provides important technical reviews and analysis of DCS administered State projects. This unit works closely with other state agencies when they are in the initial planning phases and in particular, siting a new facility. Part of this review involves assessing potential impacts relating to natural hazards, recommendations of alternatives to avoid, minimize or mitigate potential natural hazard impacts, and regulatory approvals (e.g., Flood Management Certification).

DCS offers GIS services to the majority of state agencies, which include custom maps/figures, geographic analysis for relocation of state facilities, assisting in overall statewide facility planning efforts, project pre-planning, and identification of potential environmental impacts for proposed projects. This Unit also maintains a GIS inventory of state land and buildings. In conjunction with DESPP and OPM staff, this unit is also involved with mapping of critical infrastructure and key resources data and conducting assessments of such resources as they relate to natural or man-made hazards.

### **Office of School Facilities**

The Office of School Facilities (OSF) is responsible for overseeing the local school construction grant program. In addition to design and construction oversight, OSF Code Reviewers and DCS Technical Services Unit evaluate building code and environmental requirements and determine adequacy and appropriateness of proposed new school facility sites. In addition, DDC Technical Services reviews and approves these local school construction projects for consistency with the State's Flood Management Act.

### **Fire and Building Services: Office of the State Building Inspector, Office of State Fire Marshal, and Office of Education and Data Management**

These offices provide the following functions: works with the State Codes and Standards Committee to develop, adopt and administer state building and fire safety codes and the fire prevention code, provide interpretations and clarifications of code language; act upon requests for code modifications and waivers; review construction drawings, issue building permits and inspect large state buildings; train and credential building and fire code officials; inspect and issue operating certificates for boilers and elevators; issue demolition and crane licenses; maintain burn injury and fire incident reporting systems; and provide technical assistance to state agencies, municipal code officials, design and construction professionals, and building owners.

### **Office of the State Building Inspector (OSBI)**

The lead authority for the adoption and administration of building code provisions for wind, flood, and seismic matters is OSBI. The 2005 State Building Code was adopted effective December 31, 2005. The 2003 International Residential Code (IRC) portion of this code  
Capability Assessment



regulates construction of all detached one- and two-family dwellings and all townhouses up to and including three-stories in height. The 2003 International Building Code (IBC) portion of this code regulates all other construction.

New rules found in the 2003 IRC include:

- Requirement that all residential structures are to have a structural system that provides a complete load path capable of transferring all loads from their point of origin through the load resisting elements to the foundation;
- Allowance for alternative compliance using Wood Frame Construction Manual or Standard for Cold-Formed Steel Framing;
- An engineering requirement for non-conventional elements of otherwise conventional construction (but only requires engineering for the non-conventional elements);
- New wind speeds utilizing three-second wind gusts have been adopted consistent with the ASCE-7 requirements. More accurate mapping of the State's wind speeds results in a more appropriate enforcement of the regulations;
- New design criteria for wind speeds that equal or exceed 110 MPH (the southern 1/3 of Connecticut) [the errata dated March 2007 must be checked when using this portion of the code, pending new pending revisions described below]
- Glazed opening protection requirement (or removable fitted wood structural panels with attachment hardware) in wind borne debris regions (municipalities with basic wind speed of 120 MPH) in southeastern Connecticut;
- Requirements for engineered design of masonry or concrete foundation walls, for walls subject to hydrostatic pressure from groundwater;
- Expanded crawl space ventilation information as defined in code R408.2; 1) additional materials approved to cover openings, 2) code now allows for under-floor space (crawl space) access through perimeter walls (16 x 24 areaway required if below grade) as option to openings through floor as defined in code R408.3; and
- Requirements for construction in A and V flood hazard areas, but all construction in floodways must follow the requirements of the IBC.

In an effort to be more readily used for making structures more resilient, OSBI developed a summary explaining the connection and sheathing requirements of the 2001 Wood Frame Construction Manual as they apply to wood frame dwellings constructed in municipalities with basic design wind speeds of 110 MPH or greater. This summary can be found on OSBI's web site.

The 2009 amendments to the 2005 State Building Code and the 2005 Connecticut State Fire Safety Code were effective on August 1, 2009. However, additional code amendments are underway. The proposed 2013 amendments adopting the 2009 IRC and the 2011 National Electrical Code were subject to a public hearing held on April 10, 2013. Included in the amendments are passages regarding substantial improvement/damage



determinations for structures in floodplains, wind speed design criteria, snow load design criteria, and seismic design criteria. A new appendix (R) specifies the wind and seismic criteria categories for each town in Connecticut. This Amendment will be in effect by the end of 2013.

The technical review process for adoption of the 2012 ICC code family is underway. It is anticipated that a new State Building Code based on this model will be adopted sometime in 2015. These codes contain the latest weather data and mitigation techniques.

OSBI provides technical assistance to DEEP and DEMHS in reviewing projects concerned with issues of post disaster housing, and building codes. A member of the OSBI may be appointed to the CIHMC.

### **Office of Policy and Management**

Given its role as the Governor's staff agency, OPM plays a central role in providing the information and analysis used in formulating state policy. OPM provides the Governor with an objective view of the issues and with an assessment of available policy alternatives. OPM also assists state agencies and municipalities in implementing policy decisions on behalf of the Governor. Integrating natural hazard mitigation considerations with development, resource management and public investment policies helps minimize the loss of life and property due to natural disasters.

Beyond its broader role in the development and implementation of state policy, OPM is responsible for coordinating drought management activities of state agencies. OPM is a member of the Interagency Drought Working Group and of the Water Planning Council. OPM also provides technical support to DEMHS and DEP in reviewing project applications. A member of OPM is appointed to the CIHMC.

OPM is responsible for the Connecticut Conservation and Development Policies Plan (informally known as the State Plan of Conservation and Development [POCD]) which identifies the state's development, resource management and public investment policies. The POCD identifies the policies that guide the state in (1) addressing human resource needs and development; (2) balancing economic growth with environmental protection and resource conservation concerns; and (3) coordinating the functional planning activities of state agencies to accomplish long-term effectiveness and economies in the expenditure of public funds.<sup>121</sup>

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<sup>121</sup> For a copy of the CT Plan of Conservation and Development and more information please see the following web page: <http://www.ct.gov/opm/cwp/view.asp?a=2990&q=383182>.



### ***Conservation & Development Policies, the Plan for Connecticut***

The Office of Policy and Management (OPM) is required to incorporate consideration of natural hazards into the revision of the State POCD as part of the compliance with the Floodplain Management and Hazard Mitigation Act. The update of the State POCD incorporates this requirement and was adopted in June 2013. The new natural hazards policy in the revised POCD entitled is *“Minimize the potential risks and impacts from natural hazards, such as flooding, high winds and wildfires, when siting infrastructure and developing property. Consider potential impacts of climate change on existing and future development.”*

Other relevant policies include:

- Minimize the siting of new infrastructure and development in coastal areas prone to erosion and inundation from sea level rise or storms, encourage the preservation of undeveloped areas into which coastal wetlands can migrate, and undertake any development activities within coastal areas in an environmentally sensitive manner consistent with statutory goals and policies set forth in the Connecticut Coastal Management Act.
- Allow redevelopment and rebuilding of coastal areas consistent with coastal area management principles and regulations and prevailing federal rules and requirements.
- Discourage new development activities within floodway and floodplain areas, manage any unavoidable activities in such areas in an environmentally sensitive manner and in compliance with applicable laws, and seek to prevent the loss of life and property by maintaining existing dikes, channels, dams, and other barriers, or removing such structures where removal would be a more cost-effective option for reducing threats to downstream property.
- Proactively address climate change adaptation strategies to manage the public health and safety risks associated with the potential increased frequency and/or severity of flooding and drought conditions, including impacts to public water supplies, air quality and agriculture/aquaculture production.

### **Other State Agencies**

Other state agencies assist in hazard mitigation planning and disaster response. For example, these include the Department of Housing (DOH) and Department of Economic and Community Development (DECD) as described below.

### **Department of Housing (DOH) and Department of Economic and Community Development (DHCD)**

In conjunction with DCS, DOH and DECD provide technical assistance to DEEP and DEMHS in reviewing projects concerned with improving construction practices, and building codes.



### Summary of State Agency Capabilities and Effectiveness

As detailed in the subsections above, there are a number of state agencies that are associated with natural hazard mitigation within Connecticut. Table 3-4 summarizes the state agencies and their policies or plans related to hazard mitigation, pre- and post-disaster capabilities and the overall effectiveness of the programs.

Table 3-4 – State pre- and post-disaster capabilities and effectiveness.

Agency and Division or Branch	Program, Section, or Additional Division	Pre-Disaster	Post-Disaster	Effectiveness
DESPP DEMHS	Various emergency preparedness and response functions	Yes	Yes	Effective. For example, DEMHS operates the state's EOC and hosts the CT Alert emergency notification system.
DESPP DEMHS	Disaster Preparedness Programs such as SHSGP, EMPG, and REP	Yes	No	Somewhat Effective. While the focus of these programs are more in preparedness, there are elements of overlap that result in mitigation
DESPP DEMHS	Mitigation Programs such as HMGP, PDM, and FMA	Yes	No	Effective. Administration of PDM and FMA is transitioning from DEEP, and new managers are assigned to HMGP. Future plan updates will continue to evaluate.
DEEP IWRD	Dam Safety	Yes	Yes	Effective. Changes in dam safety laws are being implemented, and dam owners are being compelled to commission inspections and failure analysis/EAPs.
DEEP IWRD	Flood Management	Yes	Yes	Effective. CAVs and technical assistance are frequent, and personnel are providing important resources for property owners learning about new flood insurance changes.
DEEP IWRD	Engineering Analysis	Yes	No	With the focus mainly on the analysis of state-funded projects through the FMC process, this section of IWRD has limited effectiveness in overall flood mitigation statewide. However the program ensures that state-funded projects are consistent with flood damage prevention regulations.
DEEP IWRD	Engineering Services	Yes	Yes	With no working capital



Agency and Division or Branch	Program, Section, or Additional Division	Pre-Disaster	Post-Disaster	Effectiveness
	Section			budget, programs have limited effectiveness. Repairs and improvements to state-owned dams occur as funded. Flood and Erosion Control Board has potential for flood mitigation projects, however also has limited funding, which must be sought from the State Bond Commission on a project specific basis.
DEEP OLISP	CZM/CCMA	Yes	No	Effective. Coastal zone management includes elements of coastal hazard mitigation.
DEEP OLISP	Regulatory programs	Yes	No	Effective. Appropriate regulation of coastal activities will mitigate for potential damage.
DEEP OLISP	Technical Services and Grant Programs	Yes	No	Effective. Much of the state's climate change and adaptation planning is occurring through this program.
DEEP Energy Branch	PURA	Yes	Yes	Effective. PURA has been working with utilities to harden and protect utility services.
DEEP Energy Branch	Bureau of Energy and Technology Policy	Yes	No	Effective. Bureau has been planning for increased efficiencies and alternative power such as microgrids.
DEEP Forestry	--	Yes	Yes	Effective. Addresses both pre-fire conditions as well as firefighting.
DEEP Solid Waste	Disaster Debris Management	Yes	Yes	Effective. With DEMHS, contracts for debris management have been used in recent years.
DEEP State Parks	Outdoor Recreation and Public Outreach	Yes	No	Limited effectiveness, as education is the primary objective.
DEEP OIM	Information Management	Yes	Yes	Effective in supporting other programs.
Connecticut Geological Survey	Various	Yes	Yes	Effective in supporting other programs.
DOT	Storm Control Center, STARS, ATMS, and	Yes	Yes	Effective. These programs provide critical information



Agency and Division or Branch	Program, Section, or Additional Division	Pre-Disaster	Post-Disaster	Effectiveness
	Bridge Inspection Program			just before, during, and after disasters and other events.
DOT	Long-term planning programs	Yes	No	Somewhat effective. These programs help ensure that roads and bridges resist flood and earthquake damage. Climate change is beginning to be recognized and considered.
DPH	Connecticut Public Health Emergency Response Plan	No	Yes	Effective when disasters include a public health threat.
DPH	Drinking Water Section Emergency Contingency Plan, WEAR, and Incident Reporting	No	Yes	Effective. Helps water providers recover and restore functions.
DPH	Water Supply Planning	Yes	Yes	Effective. Plans help ensure that water supplies are sufficient and also include local emergency procedures.
DAS/DCS ODC	Various programs	Yes	No	With the focus on state facilities, this office has limited effectiveness in overall hazard mitigation statewide. However the office ensures that state projects are hazard resilient.
DAS/DCS Environmental Planning and GIS Services	Various programs	Yes	No	With the focus on state facilities, this office has limited effectiveness in overall hazard mitigation statewide. However the office ensures that state projects are hazard resilient.
DAS/DCS OSF	Various programs	Yes	No	With the focus on schools, this office has limited effectiveness in overall hazard mitigation statewide. However the office ensures that schools are resilient.
DAS/DCS Fire and Building Services	Office of State Fire Marshal	Yes	Yes	Effective. Provides important functions such as adopting fire codes and training local communities in the fire codes.
DAS/DCS Fire and Building Services	Office of the State Building Inspector (OSBI)	Yes	Yes	Effective. Provides important functions such as adopting building codes (including wind, floods, and seismic) and training local communities in the building



Agency and Division or Branch	Program, Section, or Additional Division	Pre-Disaster	Post-Disaster	Effectiveness
				codes and substantial damage determinations.
OPM	Connecticut Conservation and Development Policies Plan	Yes	No	Effective. The updated plan (2013) specifically addresses hazard mitigation.
OPM	Drought Planning	Yes	Yes	Believed effective; very few drought emergencies are formally declared in the state.

### State Capabilities previously identified as Mitigation Strategies

This update of the State's Natural Hazard Mitigation Plan recognizes that some strategies and actions from prior editions of the plan may have been continued several times. Specifically, the timeframes assigned to these State Agency (DEEP and DESPP/DEMHS) action items have typically been "ongoing" or "to be continued." Because these actions are truly ongoing or meant to continue in perpetuity, they have become capabilities. The following ongoing and continued actions shown in Table 3-5 are considered state capabilities.

Table 3-5 – State capabilities previously identified as mitigation strategies in 2010 NHMP.

Activity #	Activity	Status	Description/Explanation
1.1.2	Provide local ordinance reviews for communities to provide them with an indication as to where existing ordinances require updates or enhancements to current standards.	To Be Continued	In conjunction with the Map Modernization Program, ordinance reviews were completed for communities in Middlesex, Hartford, New London, New Haven and Fairfield Counties. DEEP will continue as needed.
1.1.3	Perform community assistance visits (CAVs) each year to maximize efforts to provide technical guidance and educational materials to communities. This activity is important to promote compliance with NFIP minimum standards and any additional requirements as stated in local ordinances.	To Be Continued	Typically the program completes five CAVs per year. CAVs are normally performed with a community on the following intervals: at least once every five years for a coastal community and at least one visit every ten years for an inland community.
1.1.5	Investigate the feasibility of participating at local events such as home shows, fairs, etc. to provide information to the public regarding the NFIP and impacts from flooding and other natural hazards and ways individuals can help mitigate effects from these hazards. Investigate the feasibility of developing and	To Be Continued	Implementation of activity is dependent on available resources and funding. However, such actions were performed post-Irene and post-Sandy by DEEP and DESPP personnel along with FEMA Joint Field Office staff. Activity will be evaluated annually for possible incorporation into DESPP and DEEP program workplans.



Activity #	Activity	Status	Description/Explanation
	packaging educational materials for such events.		
1.1.6	Providing technical assistance to other state agencies, local communities and the public regarding natural hazard mitigation.	To Be Continued	Implementation of activity is dependent on available resources and funding. However, three mitigation courses were presented through the Sandy Joint Field Office which were available to various state agency personnel with respect to floodplain management which included: BCA training, project identification and development, hazard mitigation planning. In addition, CT DESPP and DEEP staff have participated on panels for various climate resiliency and hazard mitigation workshops held within the state.
1.2.1	Develop a series of workshops to take place over the next 3-year period that will include floodplain management 101 (presentation of FEMA floodplain management requirements and the NFIP), overview of elevation certificates, coastal construction standards, effective flood and other natural hazards mitigation measures, floodplain resource protection, and the use of DFIRMs.	Ongoing / Continuous	Typically 1-2 workshops per year focused on floodplain management activities. In addition, DEEP's training program for municipal inland wetlands commissioners and staff includes floodplain management activities as all floodplain soils are wetlands in CT. This program includes approximately 15 seminars per year. Educational workshops are developed and presented on an on-going basis for several natural hazard mitigation topics, especially with regards to floodplain management issues. Also, three mitigation courses were presented through the Sandy Joint Field Office which were available to various state agency personnel with respect to floodplain management which included: BCA training, project identification and development, hazard mitigation planning.
1.2.2 and 2.1.2	Act as a clearinghouse for FEMA-produced educational materials in the area of natural hazards mitigation including flood management and planning; as well as climate change and adaptation approaches.	Ongoing / Continuous	This activity is performed on a continuous basis by DEEP flood management staff. Approximately 40 information requests were received and processed per month. Currently, between DEEP Flood Management staff and OLISP Climate Change staff, it is estimated that the State now receives and processes 80+ inquiries per month.
1.2.3	Investigate the modification and update of the CT DEEP's flood management web pages to expand information and educational materials available to the general public.	Ongoing / Continuous	Modifications are dependent on available resources and funding. However, the web pages are intact and available to the public in the current format.
1.3.3	Utilize meetings with other state agencies, including pre-permitting conferences, as opportunities to	Ongoing / Continuous	Approximately two meetings are attended per month by DEEP staff. Strong working relationships have been developed between



Activity #	Activity	Status	Description/Explanation
	encourage responsible floodplain management and floodplain development activities, and natural hazards mitigation potential in proposed projects.		the flood management program and other IWRD sections and programs. OLISP is now linking efforts with climate change initiatives. There has also been a concerted effort by DEEP's Flood Management Section and OLISP to coordinate education and outreach efforts where possible for climate change and community resilience and hazard mitigation. Positive working relationships will continue to be pursued with other internal agency divisions and between DEEP and other State agencies.
2.1.1	Utilize meetings with other state agencies, including pre-permitting conferences, as opportunities to encourage responsible floodplain management and floodplain development activities, and natural hazards mitigation potential in proposed projects.	Ongoing / Continuous	This is an on-going activity performed by DEEP flood management staff. Approximately two meetings are attended per month.
2.2.4	Encourage use of EMI's independent study courses which people can access at their computer free-of-charge from EMI.	To Be Continued	This is an activity which is normally done by promoting available courses through DEEP's Flood Management newsletter.
3.1.3	Process technical assistance requests from communities and state agencies to FEMA for technical assistance in the area of project development.	Ongoing / Continuous	When DEEP receives requests from local communities for technical assistance in the area of hazard mitigation project development, it typically refers the request to Region 1 of FEMA for response and possible assistance to the community.
3.2.2	Provide planning workshops through FEMA assistance to promote planning and enhanced planning activities that communities can utilize to develop comprehensive hazard mitigation plans.	To Be Continued	Three mitigation courses were presented through the Sandy Joint Field Office which were available to various state agency personnel with respect to floodplain management which included: BCA training, project identification and development, hazard mitigation planning. This will continue when funding is available.
3.2.3	Encourage state agencies to perform research and planning activities in the area of natural hazards mitigation for their facilities and operations.	Ongoing / Continuous	An effort continues on the state level to continually improve communication between state agencies with regards to hazard mitigation. See comments regarding IWRD partnerships with OLISP, DESPP/DEMHS, and others.
3.2.6	Develop a communication process including webpage development and reminder notifications of potential grant opportunities to encourage continued project planning tasks by state agencies and	To Be Continued	Done on an annual basis (PDM, FMA) or when grant funding becomes available (HMGP).



Activity #	Activity	Status	Description/Explanation
	communities to develop highly competitive and effective mitigation projects.		

### 3.2.3 Connecticut Legislative and Executive Programs and State-Level Committees and Task Forces

There are a number of high-level programs and inter-agency planning groups that are associated with natural hazard mitigation within Connecticut. While some groups have a direct role, other inter-agency planning groups are associated with natural hazard mitigation through their policies or plans in which they are charged with developing and implementing. The following is a presentation of the inter-agency planning groups associated with natural hazard mitigation in Connecticut.

#### Connecticut Interagency Hazard Mitigation Committee (CIHMC)

As a result of a Federal disaster declaration in July 1989, the State of Connecticut formed the Hazard Mitigation Grant Review Committee (HMGRC). The purpose and goal of the HMGRC was to oversee the new post-disaster Hazard Mitigation Grant Program (HMGP) that became law with the passage of the Stafford Act in 1988.

The HMGRC consisted of representatives of the DEP (now DEEP), NWS, Connecticut Department of Education (DOE), Connecticut Office of Emergency Management (OEM, currently DEMHS), Connecticut OPM, Natural Resources and Conservation Service (NRCS), Small Business Administration (SBA), and FEMA. The Department of Transportation (DOT) and the Connecticut Department of the Military joined the HMGRC in the late 1990s. A private group, the Hartford Financial Services Group (Hartford Group) also joined the HMGRC to give private companies representation on the Committee.

During the 1990s the HMGRC met quarterly after each disaster and met annually in non-disaster years to review hazard mitigation project applications. The HMGRC began reviewing and approving applications for the newly developed Flood Mitigation Assistance (FMA) grant program in 1998.

The HMGRC was renamed to the Connecticut Interagency Hazard Mitigation Committee (CIHMC) in 1998. The Connecticut Interagency Hazard Mitigation Committee continued the duties of discussing and overseeing mitigation-related activities and issues within the State. Due to the group’s name change, the CIHMC developed a revised MOU that was signed by the top agency official of each participating state and federal agency in 2001. The five participating state agencies and divisions at this time are DEEP, DEMHS, OPM, Department of Transportation (DOT), and the Office of the State Building Inspector (OSBI).



The one participating federal agency is the NRCS. In addition, one private sector representative from the Hartford Life Insurance Company sits on the Committee.

The State of Connecticut's CIHMC reviews and approves projects submitted by eligible applicants for formal submission to FEMA under the State's grant application for FEMA grants programs FMA, PDM, and HMGP. The CIHMC meets annually, but may meet more frequently if necessary, to review and approve potential FEMA grant funded projects. Although the final responsibility for selection of projects remains with the SHMO, the CIHMC advises the SHMO. It is the responsibility of the SHMO to reconvene or re-staff the committee as necessary for future grant awards.

The CIHMC ranks potential projects for submission to FEMA. Projects must have a benefit to cost ratio of one-to-one (1:1) or greater for each project application. Projects must solve the problem being addressed. HMGP, FMA, RFC, PDM and SRL funding may not be used as a substitute or a cost share for any other federally funded projects. In addition, sub-grantees may secure funding from other state and local programs to provide their required cost share for a particular project.

Proposed sub-applicant and state projects are evaluated and selected for funding based on the degree to which they address the following stated criteria put forth in the State's annual PDM and FMA grant guidance documents, such as how a project will:

- Utilize the best strategy to ensure the success of the project goal;
- Allocate sufficient staff and resources for the successful implementation of the proposed mitigation project;
- Demonstrate that the proposed mitigation activity reduces the overall risks to the general population and structures;
- Result in a long-term solution to a flooding problem with minimal maintenance required;
- Provide a benefit to the general population of an area (ex. culvert upgrade, storm damage system upgrade, public education);
- Protect critical facilities;
- Leverage Federal/State/tribal/local/private partnerships to enhance the outcome of the proposed activity;
- Promote measures that prevent future construction or development in hazard-prone areas;
- Promote stormwater management practices according to CGS Section 25-68h;
- Are located in a community listed on the Public Investment Community Index with a PIC rank of 1-42 (OPM website);
- Have a multi-objective mitigation purpose;
- Are consistent with the State Natural Hazard Mitigation Plan; and
- Are consistent with Local or Regional Hazard Mitigation Plans.



Proposed projects are given a score base on several factors such as the ones stated above. Specific evaluation criteria may be modified for a particular grant year in response to FEMA stated requirements as set forth in FEMA grant guidance document for a particular grant and fiscal year, or based upon state mitigation grant priorities for any given year.

### **Connecticut GIS State Coordination (OPM)**

OPM is the lead agency for GIS coordination within the state and with other states; it is the successor to the CT GIS Council. OPM is responsible for coordinating, within available appropriations, a GIS capacity for the state, regional planning agencies, municipalities, and others as needed. OPM guides and assists state and local officials involved in transportation, economic development, land use planning, environmental, cultural, and natural resource management, public service delivery, and other areas as necessary.

Since natural hazard mitigation is intrinsically linked to location and geography, the following are highlights of the past GIS Council efforts and are anticipated to continue under the direction of OPM:

### **Critical Infrastructure and Key Resources (CI/KR) Subcommittee**

The purpose of this subcommittee is to be knowledgeable of all available CI/KR GIS data that exists at the federal, state, and local level within the state; and to develop data inventories and data development and maintenance protocols and procedures. Beginning in 2012 and through 2013, the CI/KR Subcommittee is working on a draft CI/KR Data Standards and Guidelines.

Critical infrastructure includes those assets, systems, networks, and functions – physical or virtual – that are vital to Connecticut, the region, and the country so that their incapacitation or destruction would have a debilitating impact on security, economic security, public health or safety, or any combination. Key resources are publicly or privately controlled resources essential to minimal operation of the government and economy.

The federal government has organized CI/KR into 16 sectors that together provide essential functions and services that support various aspects of State and local government, private entities, and the general public. For purposes of identifying and organizing Connecticut's CI/KR GIS data, the subcommittee has adopted the U.S. DHS data classification and taxonomy. The following are the 16 sectors which GIS data will be collected and organized:

- Food and Agriculture
- Financial Services
- Chemical
- Commercial Facilities



- Communications
- Critical Manufacturing
- Dams
- Defense Industrial Base
- Emergency Services
- Energy
- Government Facilities
- Healthcare and Public Health
- Information Technology
- Nuclear Reactors, Materials and Waste
- Transportation Systems
- Water Systems and Wastewater Pollution Control Facility (WPCF) Systems

It should be noted that within DEMHS is a Critical Infrastructure Unit that assesses, evaluates, and inventories CI/KR information, but not in a GIS-based database. This Unit acknowledges DHS's definitions and criteria for what constitutes CI/KR.

Recently, for purposes of establishing a "microgrid" grant and loan pilot program, Public Act 12-148 defined "critical facility" as, "any hospital, police station, fire station, water treatment plant, water pollution control facilities (WPCFs), public shelter or correctional facility, any commercial area of a municipality, a municipal center, as identified by the chief elected official of any municipality, or any other facility or area identified by the Department of Energy and Environmental Protection as critical..." For purposes of this plan, for developing mitigation strategies and other statewide programs/projects going forward, the more inclusive definitions and understandings of what constitutes CI/KR will take precedence over the above definition.

### **Storm Response and Recovery Assessment Group**

The GIS Council on November 17, 2011, established a Storm Response and Recovery Assessment Group ("Assessment Group"). The Assessment Group's purpose was to focus on various aspects of how GIS was used for during both Tropical Storm Irene and the October 2011 Winter Storm Alfred (pre-storm, storm, and post-storm) response and recovery efforts at the local, regional, utility, state, and federal levels. The Assessment Group's effort ran parallel to and in some cases went deeper into the findings of what the Governor's Two Storm Panel had identified.

During both storms' response and recovery efforts, the use of GIS served as an important decision making tool for those who used it. While there was and is general understanding of GIS and its benefit to emergency management, in the aftermath of both major natural events, anecdotal evidence began to surface about missed opportunities to utilize GIS in an



effective and efficient way. In particular, issues surrounding data sharing and coordination between municipalities and utility companies, as well as other GIS issues, became topics on the CT GIS List Serv. The Assessment Group created and sent out a questionnaire to the Connecticut GIS community to solicit more detailed information about what are barriers to success and recommendations for improvement.

In March 2012, the Assessment Group presented and the GIS Council approved the Findings Report (<http://ct.gov/gis/cwp/view.asp?a=2858&q=501796>). Within the Findings Report are specific recommendations that relate to natural hazard mitigation planning and response.

### **The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change (GSC)**

Since natural hazards such as extreme storm events and flooding are expected to increase in frequency and magnitude with climate change, adaptation planning will be important to mitigate the effects of these hazards. The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change (GSC) is charged with the assessment of the impacts of climate change on Connecticut infrastructure, natural resources and ecological habitats, public health, and agriculture; and recommendation of adaptation strategies in accordance with the requirements of Public Act 08-98.

The Adaptation Subcommittee prepared the report "The Impacts of Climate Change on Connecticut Agriculture, Infrastructure, Natural Resources and Public Health" in 2010 as required by the Act. The report was organized into the four categories defined by the Act:

- Most of the agricultural features were found to be highly impacted by climate change, and most of these impacts were negative. The top five most imperiled agricultural planning areas or features in Connecticut were maple syrup, dairy, warm weather produce, shellfish and apple and pear production. There were opportunities for production expansion, including biofuel crops and witch hazel and grapes, with the future climate, as well as benefits identified for all agricultural planning areas.
- The infrastructure planning areas to be the most impacted by climate change were coastal flood control and protection, dams and levees, stormwater, transportation and facilities and buildings. Infrastructure planning areas were most affected by changes in precipitation and sea level rise, which could cause substantial structural and economic damage.
- The ecological habitats at the highest risk from climate change may be Cold Water Streams, Tidal Marsh, Open Water Marine, Beaches and Dunes, Freshwater Wetlands, Offshore Islands, Major Rivers, and Forested Swamps. These habitat types are broadly distributed from Long Island Sound and the coast to the upland watersheds and forests across Connecticut. The degree of impact will vary but, likely changes include conversion of rare habitat types (e.g., cold water to warm water streams, tidal marsh and offshore islands to submerged lands), loss and/or



replacement of critical species dependent on select habitats, and the increased susceptibility of habitats to other on-going threats (e.g., fragmentation, degradation and loss due to irresponsible land use management, establishment of invasive species).

- Relative to public health, climate change will have the most impact on public health infrastructure, environmental justice communities, air quality and extreme heat ailments and vector-borne diseases. Climate change will impact public health infrastructure including hospitals, health departments, emergency medical services, private practices and shelters, due to direct impacts from extreme weather events, and increased use of resources to treat and shelter victims.

With the conclusion of the climate change impacts assessment phase, the Adaptation Subcommittee next developed recommended adaptation strategies for the most impacted features of Connecticut agriculture, infrastructure, natural resources and public health. The subcommittee's second report, "Connecticut Climate Change Preparedness Plan" (2011) is a response to the legislative requirement that the Adaptation Subcommittee identify strategies for adapting to the impacts of a changing climate in Connecticut. In this report there are a number of strategies for addressing impacts to agriculture, infrastructure, natural resources, and public health.

More information on the Adaptation Subcommittee, including copies of the above reports is posted DEEP website ([www.ct.gov/deep/climatechange](http://www.ct.gov/deep/climatechange)).

## **Two Storm Panel**

Governor Dannel P. Malloy announced the formation of The State Team Organized for the Review of Management ("STORM") of Tropical Storm Irene on September 13, 2011. The eight member Panel was charged with the following mission, "a broad, objective evaluation reviewing how Irene was handled in the state both in preparation and recovery, identify areas that can be improved upon and, most importantly, make recommendations for future disaster preparedness and response." Following the October snow storm Alfred, the Governor expanded the work of the Panel, renamed it "The Two Storm Panel," and directed it to report its findings to him by the first week of January, 2012.

The Two Storm Panel first reviewed the State Emergency Framework as well as several representative municipal emergency plans in order to benchmark state and local emergency planning. In addition, the Panel conducted eight days of hearings with over 100 witnesses providing written and/or oral testimony to the Panel. Panel hearings were also carried on CT-N so that they could be viewed by the public. In addition to the public hearings, many members of the public provided written comments to the Panel that were also considered in the preparation of the panel's report.

PURA docket 11-09-09 is the Report of the Two Storm Panel. The report acknowledged that "Tropical Storm Irene and the 'October Nor'easter' (Winter Storm Alfred) had tested



Connecticut's emergency resources in ways that they had not been tested in more than 25 years. In that intervening 25 years, Connecticut's infrastructure had increased significantly, while the manpower associated with the maintenance and repair of that infrastructure had decreased significantly."

The Report of the Two Storm Panel included 82 individual recommendations that have been shaping legislative initiatives and inter-agency policies since 2012, helping to increase capabilities in Connecticut. Some of these policies have already helped, as noted during Hurricane Sandy in October 2012. Although not all of the 82 recommendations can be listed here, those listed in the Executive Summary include:

- The need to develop reasonable performance standards for utility recovery and restoration after storms, and link recoverable costs to these standards;
- Revisions to State engineering standards to accommodate predicted increases in storm surge along coastal areas;
- The need for improved worst-case planning and staffing by the State's utilities;
- Connecticut's infrastructure needs to be better hardened to withstand natural disasters, and such work should begin as quickly as possible;
- The use of microgrids and other emerging technologies should be considered as potential methods for mitigation of impacts to infrastructure;
- Increased collaboration between municipalities, State resources, and electric utilities and telecommunications service providers with respect to tree trimming;
- Increased communication and planning between municipalities and utilities before a storm or disaster is imminent;
- Increased communication between labor and management in all utilities is strongly recommended;
- Additional emergency response training and exercises for municipalities, utilities and the State;
- A review of sheltering needs to ensure that at-risk populations can be served if sheltering is required for a significant length of time;
- The use of geographical information systems (GIS) should be better leveraged for both emergency planning and response purposes;
- The Public Utilities Regulatory Authority and the Connecticut Siting Council should be provided with additional enforcement resources;
- A Center for Research should be developed to study and make recommendations on storm hazard mitigation and power system resiliency; and
- Standards should be more clearly developed for backup power requirements and communication infrastructure hardening for wireless telecommunications.



## Shoreline Preservation Task Force

In February 2012, a bipartisan task force was formed to study and make legislative recommendations on storm impacts on shoreline homeowners and businesses. The task force was charged with looking at the impact of climate change on efforts to preserve shoreline communities. The task force was asked to make recommendations for legislation to:

- Assist those rebuilding and recovering from the 2011 storms (primarily Tropical Storm Irene, but including October storm Alfred);
- Develop new policies to address the needs of shoreline and waterfront residents and businesses regarding shoreline erosion, rising sea levels, and future storm planning; and
- Ensure that these policies complement existing laws regarding emergency communications between towns and the state, utility company preparedness, response and accountability, and insurance issues.

The task force held public hearings on July 9, 2012 in Branford; July 23, 2012 in Fairfield; and August 6, 2012 in Groton. The task force issued a wide range of recommendations regarding the DEEP regulatory programs, coastal structures, municipalities and land use, insurance and real estate, climate change and sea level rise, and education, among other things. It is expected that some of these recommendations will be addressed in the coming years, helping to build capabilities at the state and municipal levels to increase hazard mitigation. Public Act 12-101 in 2012 (described in Section 3.2.1.3) was influenced by the Shoreline Preservation Task Force findings.

It is important to note that the Shoreline Preservation Task Force completed the majority of its work prior to Hurricane Sandy. The occurrence of storm Sandy only underscored the importance of the work, but recovery efforts (described below in Section 3.2.3.7) have largely attracted more attention in the last year.

## The State Vegetation Management Task Force

On April 24, 2012, the State Vegetation Management Task Force held its inaugural meeting. The Mission of the Task Force is to develop standards for road side tree care in Connecticut, vegetation management practices and schedules for utility rights of way, tree/right place standards, and standards for tree wardens, municipal tree inventories and pruning schedules. This Task Force has been formed by the Commissioner of DEEP, as called for in the report of the Governor's Two Storm Panel. The goal is to develop consensus recommendations to DEEP within the stated mission.



## State-Wide Long-Term Recovery Committee

Established as part of Governor Malloy's Emergency Planning and Preparedness Initiative from 2012, the State of Connecticut identified the Department of Economic and Community Development (DECD) and Department of Insurance (DOI) to serve as co-chairs of the State's Long-term Recovery Committee. The purpose of the committee is to provide support for local and tribal governments, non-governmental organizations and the private sector, which will enable them to recover from significant incidents. This is accomplished by facilitating problem solving, improving access to resources and fostering coordination among State and Federal agencies and other stakeholders.

As part of this effort, the Long Term Recovery Committee is establishing working groups or Recovery Support Functions (RSFs) to address specific needs, which is consistent with those established at the federal level under the National Disaster Recovery Framework (NDRF). The NDRF is a guide that defines roles and responsibilities; promotes establishment of post-disaster organizations to manage recovery; promotes a deliberate, transparent process that provides well-coordinated support to the Community; and offers strong, focused recovery leadership at the State and Tribal level, supported by strong Federal recovery leadership.

Members of the RSF's consist of public, private, and non-profit organizations that work together to address the unmet needs of a community. The RSF's that have currently been established include:

- Individual Assistance, which includes a housing taskforce and volunteer organizations active in disasters;
- Natural and Cultural Resources (discussed above in Section 3.2.2.2 under the discussion related to OLISP capabilities);
- Economics; and
- Community Planning and Capacity Building.

The RSFs are designed to take advantage of private and public agencies' existing resources and fully integrate community planning, public works, economic development, housing, health and social services expertise and resources of other organizations. Through the RSFs, relevant stakeholders and experts are brought together during the pre-disaster planning stage and when activated post-disaster, and are used to identify and resolve recovery challenges that are not being met at the local level. Together, these RSFs help facilitate local stakeholder participation and promote intergovernmental and public-private partnerships, which ultimately support recovery and resiliency.

It is notable that the NDRF is being launched on a state level in Connecticut through the RSFs for the first time ever in the United States. Connecticut is the first state to ever partake in this type of effort.



**State Legislative, Executive Programs, and Committees and Task Force Effectiveness**

As detailed in the subsections above, there are a number of state legislative, executive programs, and State level committees and task forces that are associated with natural hazard mitigation within Connecticut. In general, the effectiveness of legislation and programs is evident in the ability of Connecticut to pass new regulations that are administered by a state agency. Each state agency has been evaluated for effectiveness in Table 3-4 and Table 3-5.

**3.2.4 State Funding Capabilities for Mitigation Projects**

Most of the programs identified in the previous two subsections contain some element of State funding which results in mitigation. Most is in the form of staff and technical resources. The majority of the State’s mitigation related funding pertains to flooding. The following are examples:

DEEP - Flood Management Section 25-68	State funded positions
DEEP - Dam Safety Section 22a-401 – 22a-410	State funded positions
DEEP -Flood and Erosion Control Boards Section 25-84	State funded technical assistance
DEEP - Section 22a-318, 22a-321 – NRCS Statutes	State funded technical assistance
DEEP -Section 25-74 through 25-76 – Authorization to perform flood and erosion projects under Federal authority.	State funded technical assistance and bond funded projects
DEEP - Floodplain Management and Mitigation Act	State funded grant program in statues but not yet funded or regulated
DOT – Hydraulics and Drainage	State funded positions responsible for not increasing flooding at DOT constructions sites and mitigating losses
DAS – Division of construction services	State funded positions now looking at mitigating risk to State properties and new construction

While there is no established funding source specifically identified for hazard mitigation projects, they are often funded by bonding, special legislation and special taxing, typically requiring approval by the Governor, OPM and state bonding commission. With the exception of regulated utilities, private funds are not often used for mitigation projects at the statewide level.

**3.2.5 Interstate Programs**

There are a number of interstate groups and compacts that are associated with natural hazard mitigation within Connecticut.

**Thames River and Connecticut River Flood Control Compacts**



There are two active interstate flood control commissions; the Thames River Valley Flood Control Compact (1957 TRVFCC), and the Connecticut River Valley Flood Control Compact (CRVFCC 1953). These compacts were enacted to provide the authority to create detention reservoirs. The creation of each of the compacts required an act of Congress and legislative authorization from each of the signatory states. The CRVFCC is composed of three representatives each, from Connecticut, Massachusetts, New Hampshire, and Vermont, while the TRVFCC has three representatives from Connecticut and three from Massachusetts.

Representatives of the CRVFCC are chosen by their respective governors, and in Connecticut, are appointed for six-year terms. The CRVFCC requires all states to share in the cost of the office located in Massachusetts, and to share in reimbursements of property tax losses to the 21 communities in which the reservoirs are located. The office fees and tax reimbursements are fixed in the Compact according to proportional benefits. Because Connecticut and Massachusetts benefit most from the upstream dams, they pay more relative to the other states. Although tax reimbursement proportions are fixed, while property assessments change, correspondingly yearly payments change.

The costs of building the 16 dams and 16 local protection projects works along the Connecticut River and its tributaries have been principally borne by the Federal government.

Similar to the CRVFCC, the TRVFCC assesses each state for the tax losses associated with the flood control benefits provided by upstream communities. DEEP pays for the two flood control commission assessments on behalf of the state through a dedicated budget line item. Figure 3-1 and Figure 3-2 show the land areas associated with both of these flood control compacts.

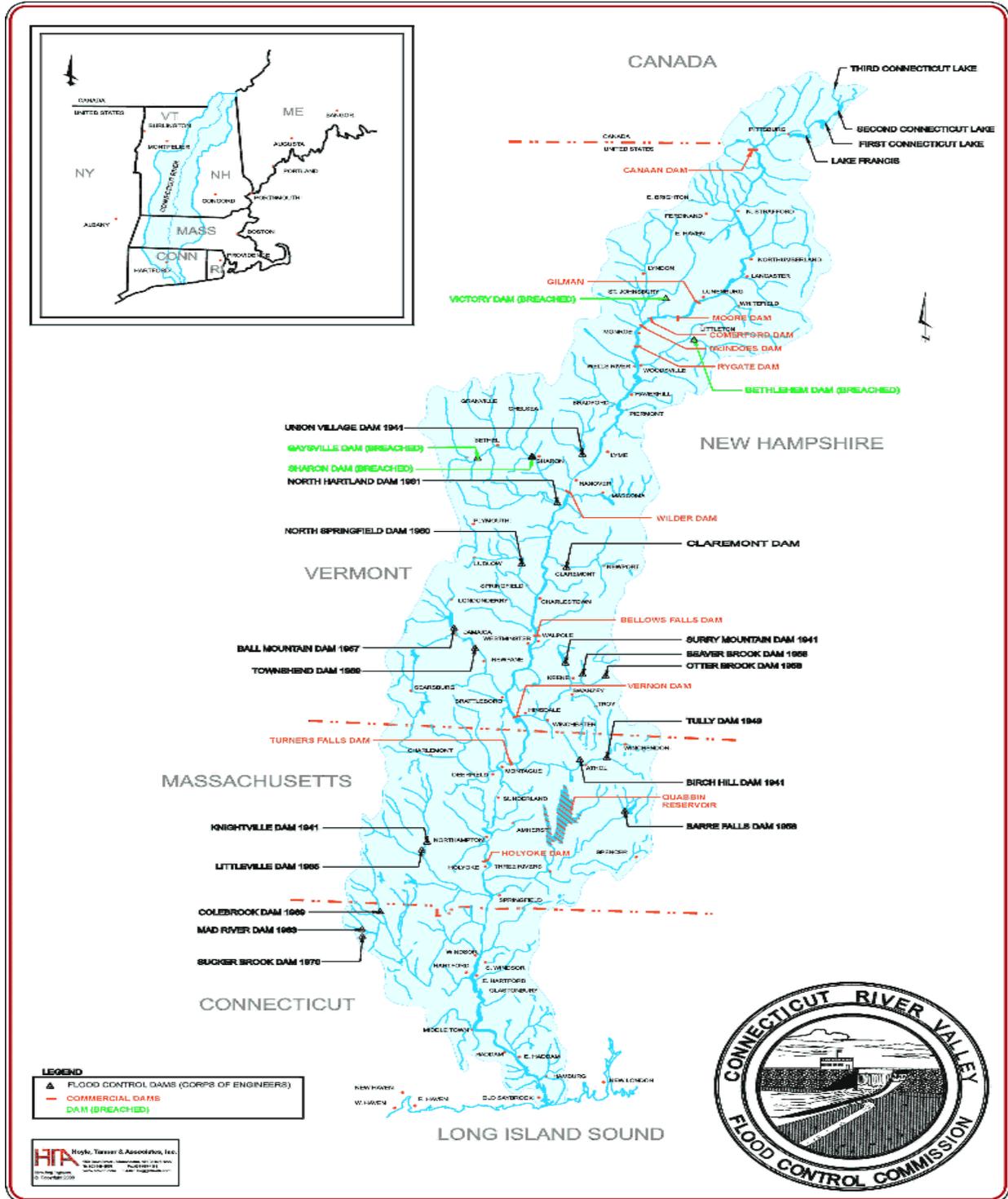


Figure 3-1. Map of Connecticut River Flood Control Facilities

Source CRVFCC website: [www.crvfcc.org/damprojects.htm](http://www.crvfcc.org/damprojects.htm)

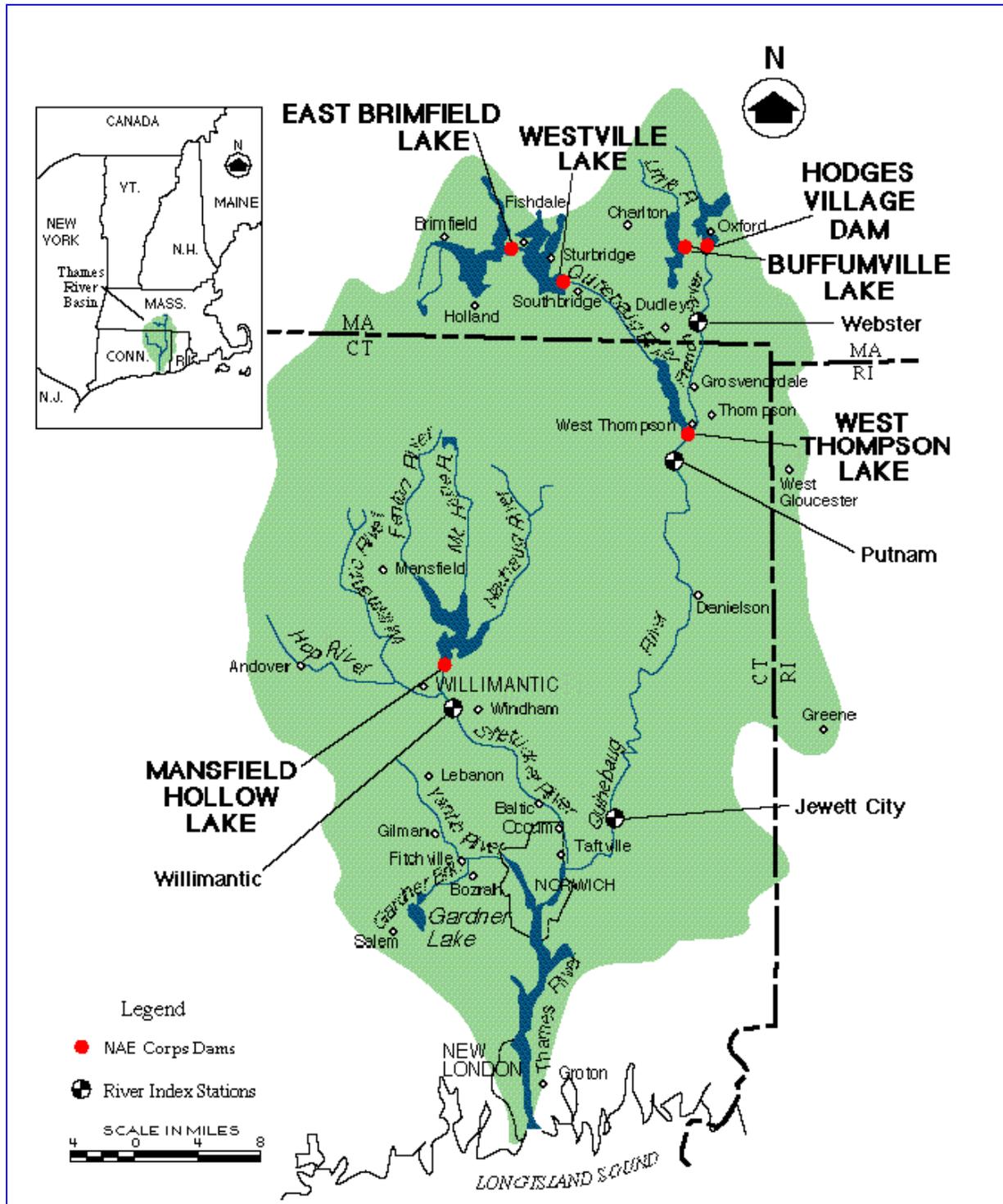


Figure 3-2. Map of Thames River Basin<sup>122</sup>

<sup>122</sup> Source: CT DEMHS.  
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## The National Weather Service and the State Severe Weather Warning System

NWS offices in Albany, NY, Upton, NY (on Long Island), and Taunton, MA share Forecast and warning operations for Connecticut (see Figure 3-3 for NWS Connecticut county responsibility). Connecticut's eight counties are sub-divided into 13 weather forecast zones to account for topography and climate variation across the State. See Figure 3-4 for a depiction of Connecticut forecast zones.

Each NWS office maintains sophisticated computer forecasting technology and Doppler radar for continuous weather and radar surveillance of Connecticut. NWS offices collaborate on forecast and warning services for Connecticut. Furthermore, each NWS office enlists the aid of volunteer severe weather observers through Skywarn training across the State.

Four NOAA Weather Radio All Hazards (NWRAH) transmitters are located in Connecticut. These transmitters are located in Cornwall, Meriden, Hartford, and New London. The Cornwall transmitter serves Litchfield County and is controlled by the NWS office in Albany, New York. In addition, NWRAH transmitters in neighboring states provide forecast and warning information for adjacent Connecticut municipalities. Computer-generated depictions of NWRAH coverage in Connecticut are provided in Figure 3-5. NWRAH is the official voice of the NWS and delivers weather forecasts, watches and warnings 24 hours per day, and as requested by emergency management officials other hazardous awareness information such as Civil Emergency Messages. Advisories, watches and warnings are defined in Table 3-6.

As a direct result of the 1989 western Connecticut tornado outbreak, the State purchased 300 advanced technology Specific Area Message Encoder (SAME) radios in 1992 and 1994. These SAME radios allow the NWS to issue watches and warnings to specific counties in Connecticut when severe weather threatens the State. In 2006 the U.S. Department of Homeland Security purchased 92,000 NWRAHs and provided one to every public school in the United States. In 2007-2008 the U.S. Department of Homeland Security purchased additional NWRAH's for all private schools in the United States.

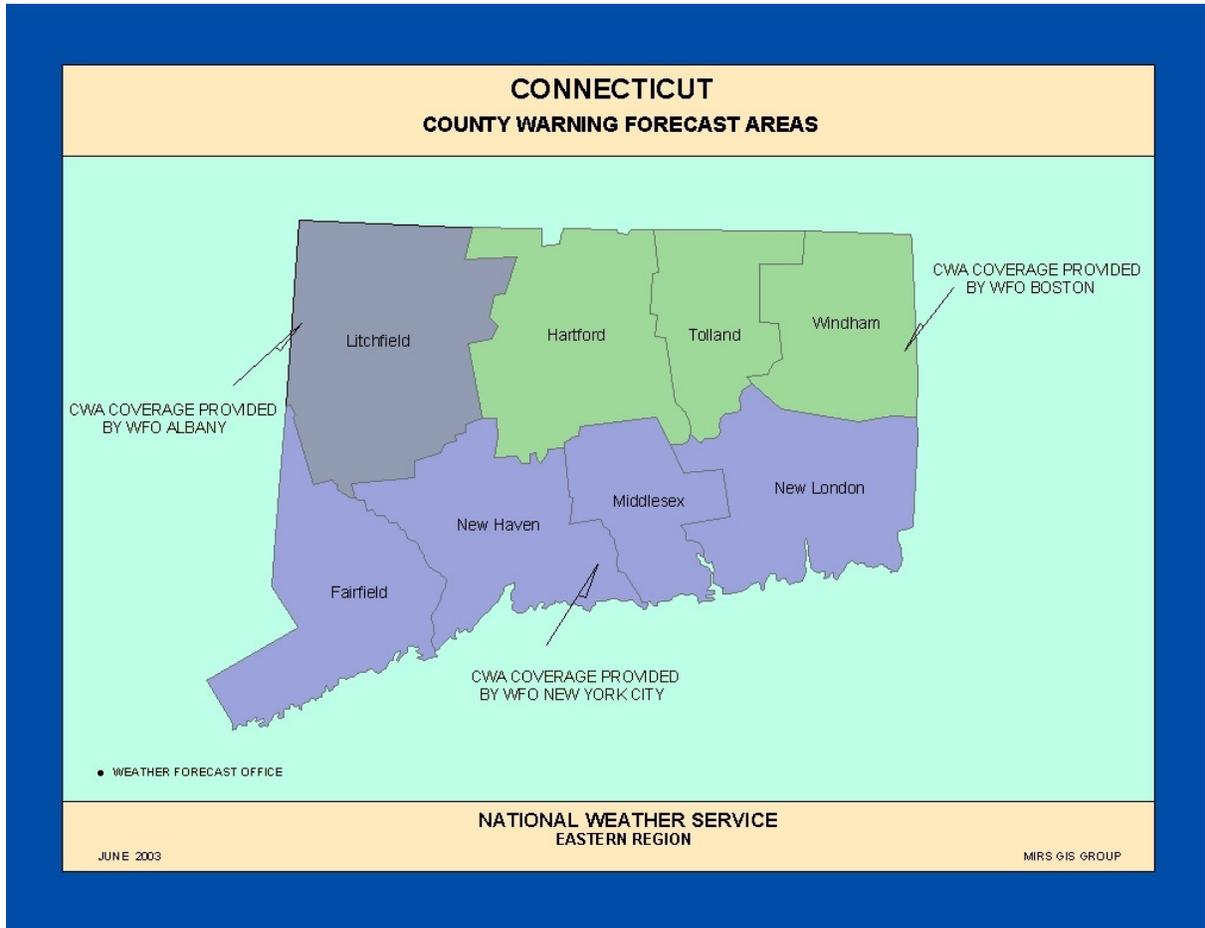


Figure 3-3. Map of NWS County Warning Forecast Areas in Connecticut.  
(Note: “WFO Boston” is actually “WFO Taunton, and “WFO New York City” is actually “WFO Upton”.)

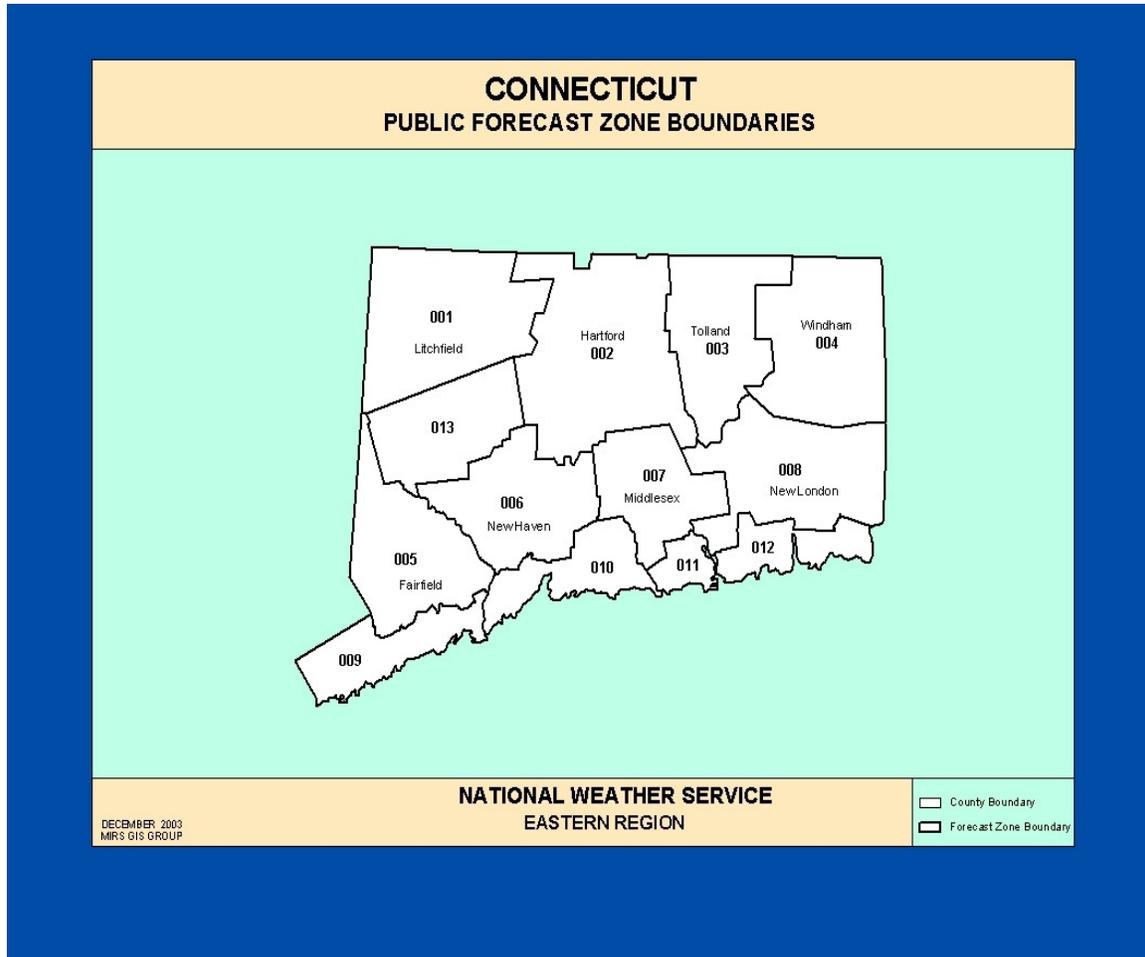


Figure 3-4. Depiction of Connecticut Forecast Zones

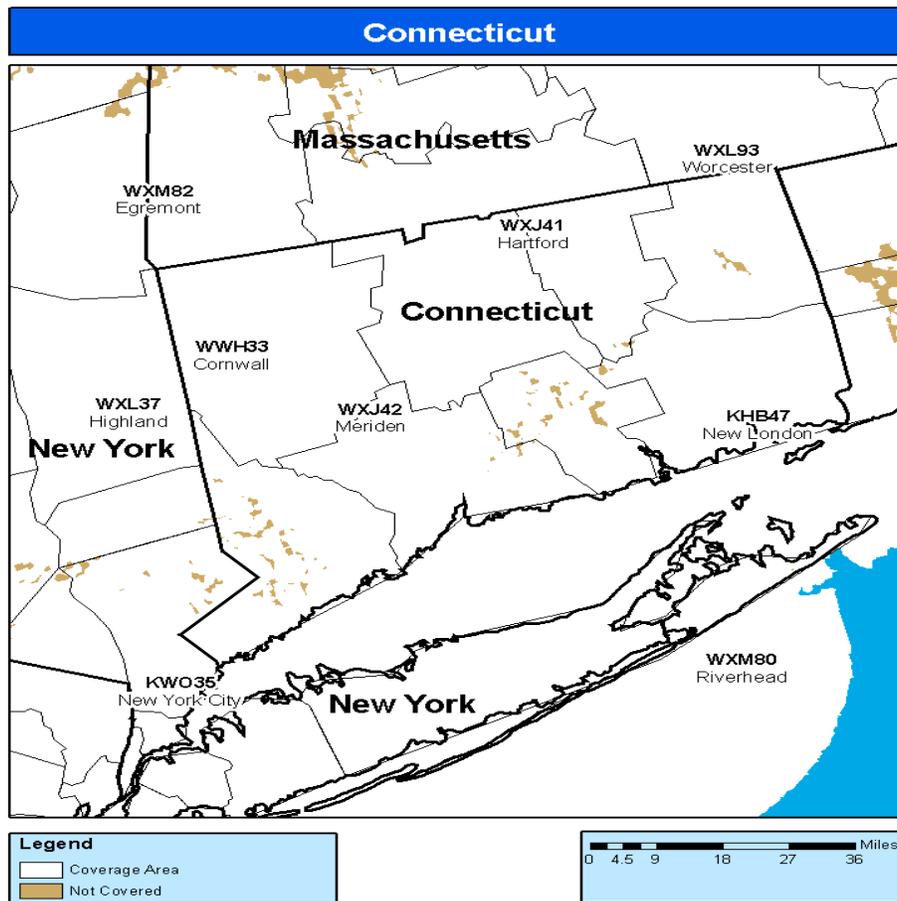


Figure 3-5. Depiction of NWRAH Coverage in Connecticut



Table 3-6. Reference Sheet for Warning/Advisory Thresholds (Last Updated April 23, 2013)

The following are National Weather Service criteria for issuing Advisories and Warnings for various weather events. Watches generally are issued with longer lead times in expectation of meeting Warning criteria.	
<u>TYPE OF ISSUANCE</u>	<u>WHEN ISSUED FOR CONNECTICUT</u>
<b>WINTER WEATHER ADVISORY</b>	<p><i>When any of the following is expected within the next 12 to 24 hours:</i></p> <p><b>More than one predominant hazard</b> Winter weather event having more than one predominant hazard (i.e., snow and ice, snow and sleet, or snow, ice &amp; sleet) meeting or exceeding advisory criteria for at least one of the precipitation elements, but remaining below warning criteria.</p> <p><b>Snow, Ocean Effect Snow, or Sleet</b></p> <ul style="list-style-type: none"> <li>• 3 inches averaged over a CT, MA, RI forecast zone in 12 hours</li> </ul> <p><b>Snow and Blowing Snow</b></p> <ul style="list-style-type: none"> <li>• Sustained or frequent gusts of 25 to 34 mph accompanied by falling and blowing snow occasionally reducing visibility to &lt; 1/4 mi for &gt; 3 hours</li> </ul> <p><b>Blowing Snow</b></p> <ul style="list-style-type: none"> <li>• Widespread or localized blowing snow reducing visibility to &lt; 1/4 mi with winds &lt; 35 mph</li> </ul> <p><b>Black Ice</b></p> <ul style="list-style-type: none"> <li>• A Special Weather Statement will usually be issued when sufficient moisture is expected to cause a thin layer of ice on road surfaces, typically on cloudless nights ("black ice"). At forecaster discretion a formal Winter Weather Advisory may be issued instead.</li> </ul>
<b>FREEZING RAIN ADVISORY</b>	Any accretion of freezing rain or freezing drizzle on road surfaces
<b>WIND CHILL ADVISORY</b>	Wind chill index between -15°F and -24°F for at least 3 hours using only the sustained wind.
<b>WINTER STORM WARNING</b>	<p><i>When any of the following is expected within the next 12 to 36 hours:</i></p> <p><b>More than one predominant hazard</b></p> <ul style="list-style-type: none"> <li>• Winter weather event having more than one predominant hazard, i.e. heavy snow and blowing snow (below blizzard conditions), snow and ice, snow and sleet, sleet and ice, or snow, sleet and ice} meeting or exceeding warning criteria for at least one of the precipitation elements.</li> </ul> <p><b>Snow, Ocean Effect Snow, or Sleet</b></p> <p>6 inches averaged over a forecast zone in a 12 hour period 8 inches averaged over a CT, MA, RI forecast zone in a 24 hour period</p>
<b>BLIZZARD WARNING</b>	Sustained winds or frequent gusts > 35 mph AND considerable falling and/or blowing snow frequently reducing visibility < 1/4 for > 3 hours Blizzard conditions need to be the <b><i>predominant condition over a 3 hour period</i></b>
<b>ICE STORM WARNING</b>	1/2 inch or greater accretion of freezing rain in any zone



<b>WIND CHILL WARNING</b>	Wind chill index < -25°F for at least 3 hours using only sustained wind
<b>WIND ADVISORY</b>	Sustained winds 31-39 mph (27-34 kts) for at least 1 hour; OR any gusts to 46-57 mph (40-49 kts)
<b>HIGH WIND WARNING</b>	Sustained winds 40-73 mph (≥35 kts) for at least 1 hour; OR any gusts ≥ 58 mph (≥50 kts)
<b>SMALL CRAFT ADVISORY</b>	Over the coastal waters...sustained winds 25-33 kts AND/OR Seas ≥ 5 feet within 24 hours
<b>GALE WARNING</b>	Over the coastal waters...sustained winds 34-47 kts within 24 hrs from a non-tropical system
<b>STORM WARNING</b>	Over the coastal waters...sustained winds 48-63 kts within 24 hours from a non tropical system
<b>HURRICANE FORCE WIND WARNING</b>	Sustained winds or frequent gusts ≥ 64 kts (> 2 hrs) within 24 hours from a non-tropical system
<b>TROPICAL STORM WARNING</b>	Sustained winds 39-73 mph (34-63 kts) (no gust criteria) <i>associated with a tropical storm</i> expected to affect a specified coastal zone within 24 hours
<b>TROPICAL STORM WIND WARNING (INLAND)</b>	Sustained winds 39-73 mph (34-63 kts) (no gust criteria) <i>associated with a tropical storm</i> affecting areas beyond coastal zone (inland) within 24 hours
<b>HURRICANE WARNING</b>	Sustained winds ≥ 74 mph (64 kts) (no gust criteria) <i>associated with a hurricane</i> expected to affect a specified coastal area within 24 hours
<b>HURRICANE WIND WARNING (INLAND)</b>	Sustained winds ≥ 74 mph (no gust criteria) <i>associated with a hurricane</i> affecting areas beyond coastal zone (inland) within 24 hours
<b>SPECIAL MARINE WARNING</b>	Brief/sudden occurrence of sustained wind or frequent gusts ≥ 34 knots, usually associated with thunderstorms; AND/OR hail ≥3/4" in diameter; also issued for waterspouts
<b>SEVERE THUNDERSTORM WARNING</b>	Thunderstorms with wind gusts ≥ 58 mph (50 kts) AND/OR hail ≥1" in diameter
<b>TORNADO WARNING</b>	Likelihood of a tornado within the given area based on radar or actual sighting; usually accompanied by conditions indicated above for "Severe Thunderstorm Warning"
<b>FLOOD ADVISORY</b>	Expected inundation of some low lying and poor drainage areas, resulting in a nuisance to the public but not a threat to life and property.
<b>FLASH FLOOD WARNING</b>	Rapid and extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within a short timeframe from the onset of heavy rain. A dam or levee failure, or water released from an ice jam is also considered



<b>FLOOD WARNING</b>	Expected overflow or inundation by water which causes or will cause damage and/or a threat to life
<b>RIVER FLOOD WARNING</b>	Water level at a River Forecast point along a main stem or larger tributary river (such as the Connecticut, Shetucket or Yantic) is expected to reach or exceed flood stage
<b>COASTAL FLOOD ADVISORY</b>	Minor coastal flooding expected within 12 hours. Examples include: splash over causing a few roads briefly impassable, standing water in parking lots, etc.
<b>COASTAL FLOOD WARNING</b>	Coastal flooding expected within 12 hours; widespread serious coastal flooding which damages property AND/OR is a threat to life
<b>EXCESSIVE HEAT WARNING</b>	Daytime heat indices of $\geq 105^{\circ}\text{F}$ for 2 or more hours
<b>HEAT ADVISORY</b>	Daytime heat indices of $100^{\circ}\text{F}$ - $104^{\circ}\text{F}$ for 2 or more hours
<b>HEAT WAVE</b>	Issued for non-criteria warning/advisory heat. A heat wave is defined as 3 or more days of $> 90^{\circ}\text{F}$ temperatures.
<b>DENSE FOG ADVISORY</b>	Widespread visibility $\leq 1/4$ mile for at least 3 hours
<b>FREEZING FOG ADVISORY</b>	Very light ice accumulation from predominantly freezing fog
<b>FROST ADVISORY</b>	Issued under clear, light wind conditions with forecast minimum shelter temperature $33$ - $36^{\circ}\text{F}$ during growing season
<b>FREEZE WARNING</b>	When minimum shelter temperature drops to $< 32^{\circ}\text{F}$ during growing season
<b>HIGH SURF ADVISORY</b>	When high surf poses a danger to life in the form RIP currents or breaking seas
<b>RED FLAG WARNING</b>	<p><i>High degree of confidence that dry fuels and weather conditions support extreme fire danger within 24 hours using the following criteria as a guide:</i></p> <ul style="list-style-type: none"> <li>• Winds sustained or with frequent gusts <math>&gt; 25</math> mph</li> <li>• Relative Humidity at or below 30% anytime during the day</li> <li>• Rainfall amounts for the previous 5 days less than 0.25 inches (except 3 days in pre-greenup)</li> <li>• Lightning after an extended dry period</li> <li>• Significant dry frontal passage</li> <li>• Dry thunderstorms</li> <li>• Keetch-Byram Drought Index values of 300 or greater (summer only)</li> </ul>

FEMA's National Warning System (NAWAS) is used by the NWS to disseminate warnings to the Connecticut State Warning System. The Connecticut State Warning System consists of four agencies; 1) DEMHS, 2) Connecticut State Police Warning Point, 3) Tolland County Fire Radio, and 4) National Weather Service. The Connecticut State Police Warning Point forwards these messages to 20 municipalities via the NAWAS State Circuit. These 20



municipalities are then responsible for conveying warnings or watches to all communities in their regions, thereby attaining 100% coverage of the State.

The four in-state networks operate as follows:

1. DEMHS
  - a. Acts as the Alternate State Warning Point. DEMHS will alert its own personnel through its own radio system, or via pagers and cell phones. In cases of extreme emergency the DEMHS may activate the Emergency Alerting System (EAS) to alert the general public directly, and disseminates warnings via NAWAS to 20 municipalities if Connecticut State Warning Point is unable to do this.
  - b. Connecticut State Warning Point
  - c. Receives the watch or warning from a NWS office. The NWS offices also issue flood warnings.
  - d. Disseminates the watch or warning via the Connecticut On-line Law Enforcement Telecommunications (COLLECT) teletype to 96 municipal police and fire departments.
  - e. Relays the watch or warning to DEP's IWRD.
  - f. Sends the warning message via the NAWAS State Circuit to 20 municipal police and fire departments, which are responsible for alerting all towns in their regions.
2. Tolland County Fire Radio Dispatch
  - a. Upon receipt of the watch or warning from the State NAWAS (i.e. State Warning Point or DEMHS) System, the State Fire Control Center at Tolland will transmit the information over the State and Tolland-Windham-New London-Hartford County Fire Radio Systems.
  - b. County fire control centers will then re-transmit the warning received from the State Fire Radio Systems to individual municipalities.
3. National Weather Service forecast offices in Taunton, Mass (Hartford, Tolland, Windham Counties), Albany NY (Litchfield County), and Upton NY (Fairfield, New Haven, Middlesex and New London Counties). Prepares weather and water related forecasts, watches, warnings and advisories. Notify Connecticut State Warning Point of weather and water related watches and warnings via NAWAS.

### 3.3 Regional Planning Organizations

Regional planning organizations (RPOs) in Connecticut include the Councils of Governments (COGs) and Regional Planning Agencies (RPAs). RPOs have traditionally conducted or overseen transportation planning, emergency planning, and some types of land use and environmental planning for their member communities. The RPOs may



provide land use guidance to municipalities and assist with drafting of ordinances or zoning regulations in the more rural communities of the state.

Several of the RPOs in Connecticut have been responsible for development of multi-jurisdiction hazard mitigation plans or single-jurisdiction hazard mitigation plans for member communities. The RPOs have administered the planning grants to develop these plans, then either developed the plans using in-house planning staff or contracted a consultant to develop the plans.

Legislation passed in June 2013 makes a number of changes to RPOs, including eliminating regional planning agencies and regional councils of elected officials after January 1, 2015, leaving regional COGs as the only type of RPO. The legislation was effective upon passage, except for the conforming changes which will be effective January 1, 2015.

In addition to becoming exclusively COGs, it is expected that the number and configuration of RPOs in Connecticut will be changing over the next few years as funding sources change. One likely scenario is that the number of RPOs will be decreased. Changes have already been occurring, with the consolidation of the Midstate Regional Planning Agency and the Connecticut River Estuary Planning Agency into the "River COG" in 2013.

### **3.4 Municipal Programs**

All municipalities within Connecticut have developed and implemented, locally or on a regional level, several sets of plans and regulations that are used to effectively manage natural resources on a community level. These plans and regulations are updated on a regular basis either due to a statutory requirement or through normal practices at the local level. Since all these mechanisms exist and are available to all municipalities, largely through the State's enabling legislation, the State understands that local communities maintain adequate capability for pursuing and implementing hazard mitigation activities.

Table 3-7 lists many of the plans, regulations, and ordinances that communities have developed and continue to maintain, the connection of these plans and regulations to hazard mitigation, and the overall effectiveness of the plans/regulations/ordinances. Additional details are provided after the table.



Table 3-7. Local Plans and Regulations Used by Communities

Plan or Regulations	Significance to Hazard Mitigation	Effective for Hazard Mitigation?
Emergency Operations Plans	Assist local communities in the preparation and implementation of resources prior to and during an emergency, including natural hazard events. The plans are updated annually and help local communities assess the locations of vulnerable areas within their communities and how to handle these areas during an emergency. This plan may be a good source of information for local risk assessment activities.	Not directly used for hazard mitigation, but the process of updating the local EOP will help inform vulnerability and risk assessments, and will help identify gaps in capabilities at the local level.
Floodplain Management Regulations/ Ordinance or Flood Damage Prevention Regulations/Ordinance	These regulations assist a community in effectively manage its floodplain areas and are typically organized similar to the NFIP regulations. These regulations are usually part of a community's land use regulations (described below). However, depending on the community, they may be a part of the municipal code of ordinances. These regulations may require specific minimum design/construction/or development elements which must be complied with for health and safety reasons.	Typically very effective. Some communities may benefit from updating these regulations and more strongly linking the municipal code and zoning regulations (when they are found in both). Local hazard mitigation plans typically recommend these types of modifications.
Zoning Regulations	Primary tool for community for shaping the character and development of a community. Zoning regulations may restrict particular uses or structures from being located in vulnerable areas in a community. These regulations may also require specific minimum design/construction/or development elements which must be complied with for health and safety reasons. If the flood damage prevention regulations are not in the municipal code of ordinances, they are typically in the Zoning Regulations.	Zoning Regulations are typically very effective for mitigating several hazards (flooding, geologic hazards, and wind hazards) because they guide development in flood zones, on slopes, and near sensitive resources; and because they regulate structures and accessories (such as signs) that can be damaged or cause damage during events.
Subdivision Regulations	Important tool for community for shaping the character and development of a community through subdivisions. These regulations often describe how floodprone areas must be addressed, specify minimum and maximum roadway dimensions, specify where utilities may be placed (underground vs. above-ground), and specify how fire protection will be provided. Some elements of the flood damage prevention regulations are often repeated in the Subdivision Regulations.	Subdivision Regulations are typically very effective for mitigating several hazards because they specify how roads and lots should be arranged and appropriately sized for safe access and egress. They may also specify how fire protection should be provided, which helps mitigate for wildfires and wildland fires.
Stormwater Regulations	Some communities have developed stormwater regulations or ordinances that are separate than the Zoning and Subdivision Regulations. Stormwater regulations provide requirements for addressing stormwater in connection with development, redevelopment, and road projects.	When available, these regulations are often very effective. Not all communities follow the same principles for managing stormwater. Therefore, local hazard mitigation plans typically include discussion about how to best



Plan or Regulations	Significance to Hazard Mitigation	Effective for Hazard Mitigation?
		manage stormwater.
Wetland Regulations	In Connecticut, all wetland regulations describe wetlands as necessary for a number of functions including flood management. These regulations help a community maintain and protection the integrity of its wetland resources. Wetland areas often coincide with FEMA delineated floodplain areas in a community.	Wetland regulations are most effective for mitigation of flood hazards when setbacks and review areas are very wide. Many communities enforce wide review areas, such as 100 feet or greater, which aids mitigation. Examples of 200 feet are found in some communities.
Local Adoption of CT State Building Code	Critical to maintain adequate safety and building integrity factors in construction. In addition, these codes may limit structure size, type or place additional requirements in the construction of structures located in a identified hazard area (i.e., high wind, coastal, floodplain, wildland/urban interface area, etc.).	Very effective. All local communities must adopt the state codes.
Local Plan of Conservation and Development	Primary plan that helps guide a community in its land use and management decisions with regard to development and conservation and/or preservation of open space.	These plans are effective when communities use them to modify zoning districts and regulations, acquire open space, and actively guide development and infrastructure expansions. Because the plans are updated once per decade, many communities are now incorporating discussions about natural hazards and climate change for the first time in the updated plans.
Local Municipal Coastal Programs	Assists local coastal communities ensure compliant development and management of coastal resources and to prevent adverse impacts on coastal resources. As the municipal coastal programs are updated, communities typically increase the emphasis on coastal hazard mitigation and management.	Many of the 1982-1983 editions of these plans do not address elements of hazard mitigation, but they typically address coastal hazards as they are updated. In communities that have updated their municipal coastal programs since the year 2000, these documents are very effective in helping the community mitigate for coastal hazards.

### 3.4.1 Local Boards, Commissions, and Departments

Most Connecticut communities are governed by a Board of Selectmen, Board of Aldermen, Town Council system, or City Council system. The chief elected official (for example, mayor or First Selectman) or his town/city manager oversees many of the municipal departments, commissions, and boards and are directly responsible for appointing members of many



commissions and boards that are involved with hazard mitigation. This governmental structure helps maintain overall effectiveness and enhances the community's capabilities.

Within each municipality, appropriate municipal departments, commissions, and boards are involved with natural hazard mitigation. The following subsections describe general departmental responsibilities and duties related to natural hazard mitigation within communities.

### **Emergency Management Department, Office, or Agency**

The typical mission of the local Emergency Management Department or Office (under an Emergency Management Director, or EMD) is to maximize survival of people, prevent and/or minimize injuries, and preserve property and resources in its jurisdiction by making use of all available manpower, equipment, and other resources in the event of natural or technological disasters or national security threats. In addition to coordinating activities during disasters, the Emergency Management Office typically coordinates all early warning activities and is involved in educating the public on how to react during emergency situations. The EMD is typically charged with developing and updating the community's Emergency Operations Plan (EOP). The Emergency Management Department is one of the primary agencies involved with hazard mitigation through the mitigation categories of "emergency services" and "public education."

In some communities, the Fire Chief or Police Chief is the director of the Emergency Management Department, although this is not always the case. DEMHS recommends that the EMD not be a Fire Chief or Police Chief or other major public official because, during an emergency, a Fire Chief or Police Chief that is also the EMD may become overwhelmed. Some communities have an Emergency Management Agency that includes the EMD and members of other departments, and the agency meets as needed prior to hurricanes, tropical storms, snowstorms, etc.

In Connecticut, the local Emergency Management Departments have significantly increased their effectiveness for addressing natural hazards in recent years. Many local EMDs are adept at both dealing with response (for example, preparing PA reimbursement requests) as well as mitigation (preparing HMGP applications for mitigation projects). Some communities provide a generous budget for EMDs whereas some do not. In communities with more modest budgets for the EMD, the EMD will utilize staff from other departments to assist with hazard mitigation.

### **Department of Fire/Rescue/EMS**

Local communities may have either full-time or volunteer fire companies. Larger cities or towns generally have several fire houses in different areas of the city or town to assure rapid emergency response. The Fire Department is one of the primary agencies involved with hazard mitigation through the mitigation categories of "emergency services" and  
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“public education.” As noted above, the Fire Chief is the EMD in some communities, although this is not required.

### **Police Department**

Police departments are found in most of the suburban and urban municipalities and tribes but not in all rural towns in Connecticut. Day-to-day duties of a Police Department include crime prevention, criminal investigations, traffic enforcement, motor vehicle accident investigations, and patrols. Duties related to natural hazard mitigation include planning and coordination of personnel, equipment, shelters, and other resources necessary during an emergency. Communication and coordination with the Fire Department is critical before, during, and after natural hazard emergencies. Many of the less-populated towns have resident state troopers in lieu of a municipal police department. As noted above, the Police Chief is the EMD in some communities, although this is less frequent than the Fire Chief serving as the EMD.

### **Public Works and Highway Departments**

Most Connecticut communities have a Public Works Department or Highway Department whose responsibilities include construction and maintenance of roadways, sidewalks, and drainage systems; maintenance of all parks and school properties; street sweeping, sanding, and snow removal; the preservation, care and removal of trees within the community's rights-of-way and/or public places; and maintenance of community vehicles and equipment. Larger communities will have a public works department while smaller communities will typically have a Highway department.

As is common throughout Connecticut, the public works departments are often charged with implementing numerous structural projects that are related to hazard mitigation. Specifically, roadway/infrastructure maintenance and complaint logging/tracking are the two primary duties of the Public Works departments. For example, a public works department may track, plan, prepare for, and respond to flooding, inundation, and/or erosion of roads and infrastructure. The public works departments also conduct snow removal and deicing on roads; tree and tree limb maintenance; and the appropriate maintenance and upgrades of storm drainage systems to prevent flooding caused by rainfall.

Because of the duties described above, the public works departments are often the “de facto” first responders during emergencies. The public works departments must maintain access for the Police and Fire Departments to respond to emergencies.

In some communities, a Public Works Commission manages the department and will develop budgets, make recommendations to other boards, and establish regulations. In Connecticut, the local Public Works and Highway Departments are very effective in addressing natural hazards. Historically, these are the departments and personnel that



have been assigned most of the duties related to hazard mitigation as noted above. In most communities, the public works budget is one of the largest budgets. Although a typical public works director cannot fund every project that may come up in a given year, he or she is typically able to prioritize improvements and accomplish projects that may mitigate for hazards. Examples include cleaning catch basins, upgrading drainage systems, and replacing undersized culverts.

### **Building Departments**

Local Building Departments administer a building inspection program adhering to and enforcing all code requirements of the State of Connecticut relating to building construction. Tribal governments have building departments that utilize the international building code. Additional responsibilities include administering and enforcing all related codes for the safety, health, and welfare of persons and properties in the jurisdiction, supervising departmental policies and procedures, and providing technical assistance to local officials.

The Building Official has a unique responsibility when it comes to hazard mitigation as he or she is responsible for overseeing a number of codes such as those related to wind damage prevention as well as those related to inland and coastal flood damage prevention. Although other departments and commissions may review development plans and develop or revise regulations, many important types of pre-disaster mitigation are funneled through and enforced by the Building Department. For example, the Building Department enforces A- and V-zone standards for floodproof construction and building elevations, maintains elevation certificates, and enforces building codes that protect against wind and fire damage. Thus, the types of mitigation that are administered by the Building Department include “prevention” and “property protection.”

Typically, the building department provides hazard mitigation assistance at the time of the building permit application. The primary role of the Building Department during disaster situations is to provide damage assessment, inspect damaged buildings and issue permits for temporary structures and actions necessary to maintain safety standards.

In some communities, the Building Official is the administrator of the local flood regulations under the NFIP. This person also has access to map information showing the location and extent of SFHAs in the community. This mapping is important in raising the public's awareness of natural hazards in the community.

The Building Departments are very effective in addressing natural hazards. However, these departments should continue to increase their effectiveness by ensuring that local building officials remain educated in areas related to hazard mitigation such as flood damage prevention. This is particularly important in coastal communities that have suffered significant damage from recent coastal storms.

### **Fire Marshal**



The local Fire Marshal administers a building inspection program adhering to and enforcing all code requirements of the State of Connecticut relating to Life Safety and Fire prevention. Tribal governments have fire marshal offices that utilize the international fire code. Additional responsibilities include administering and enforcing all related codes for the safety, health, and welfare of persons and properties in the jurisdiction, supervising departmental policies and procedures, and providing technical assistance to citizens and property owners.

Typically, the fire marshal's office provides hazard mitigation assistance at the time of the building permit application and during the construction of a structure. The primary role of the fire marshal's office during disaster situations is to provide assistance with damage assessments and actions necessary to maintain safety standards.

### **Engineering Department**

Many communities have Engineering Departments and/or a Town or City Engineer who plans, directs, and coordinates engineering contracts and construction projects, including roadway, bridge, sanitary, and marine development. The Engineer provides technical consultation to municipal boards and commissions and serves as the municipal liaison with various state agencies. As such, the Engineer will often need to review issues related to drainage, flood conveyance, and flood mitigation and related elements of structural hazard mitigation. The Engineer usually works closely with Public Works and Highway personnel. Typically, the Engineer or the Public Works / Highway Superintendent will have a list of floodprone areas in the community.

### **Planning and Zoning / Land Use Department**

The Planning and Zoning or Land Use Department of a jurisdiction enforces the local zoning and subdivision regulations, provides staff assistance to the Planning and Zoning Commission (or separate Planning Commission and Zoning Commission), and performs long term planning activities related to land use and community development. This department typically drafts, updates and implements the goals and objectives of the local Plan of Conservation and Development. The planning office provides assistance to local Health Departments and Building and Engineering Departments.

In many communities, the local planning department includes the administrator of the local flood regulations under the NFIP, if it is not the Building Official as discussed above. This person also has access to map information showing the location and extent of SFHAs in the community. This mapping is important in raising the public's awareness of natural hazards in the community.

Because the Planning Department typically directly assists the applicable commissions with administration of the Zoning Regulations, Subdivision Regulations, and Inland Wetland Regulations, the department is responsible for elements of almost all six facets of



mitigation (“prevention,” “property protection,” “natural resource protection,” “structural projects,” “emergency services,” and “public education”). For example, wetlands preservation is one of the purest forms of hazard mitigation due to the natural functions and values of wetlands including stream bank and shoreline stabilization and flood water storage.

In coastal communities, the Planning and Zoning / Land Use Department typically assists the local Harbor Management Commission in administering any Waterway Protection Line Ordinances, as well as reviewing coastal site plan applications for certain development types within the coastal management area defined by the State.

The Planning or Land Use Departments in Connecticut are generally effective in addressing natural hazards, although the communities with smaller department or part-time staff are somewhat less capable. All Planning and Land Use departments should continue to increase their effectiveness by ensuring that personnel remain educated in areas related to hazard mitigation such as flood damage prevention. This is particularly important in coastal communities that have suffered significant damage from recent coastal storms.

### **Tree Wardens**

Most Connecticut communities have designated an individual as Tree Warden and administer a tree-trimming program. The tree warden is typically the public works director or a staff member from the planning or engineering departments. Tree-trimming on municipally-owned property is typically conducted on an as-needed basis or following complaints by residents. Most tree-trimming is conducted with clean-up activities following storms. In general, local governments maintain small trees and downed branches and contract with tree companies to deal with larger trees.

In Connecticut, the tree wardens have significantly increased their effectiveness for addressing natural hazards in recent years. Almost all communities have increased their tree warden budgets in the last five years, partly in response to recent tropical storms and winter storms. Communities have stepped up their participation in tree trimming along roadways, which has benefited overhead utility lines.

### **Flood and Erosion Control Boards**

CGS Sections 25-85 through 25-98, inclusive, enable municipalities to form a municipal Flood and Erosion Control Board (FECB) with the power to plan, layout, acquire, construct, reconstruct, repair, maintain, supervise and manage flood and erosion control systems, flood control projects, and dam repair projects. These boards may also enter upon, take and hold by purchase, condemnation or otherwise, property which it determines necessary for use in connection with flood or erosion control systems; defray the cost of such systems by issuing bonds or other evidence debt, or from general taxation, special assessment or any Capability Assessment



combination thereof; and assess those properties benefiting from such project according to such rules as the FECB may adopt. The FECB is further empowered to negotiate, cooperate, and enter into agreement with: 1) The United States, 2) the United States and the State of Connecticut or 3) the State of Connecticut in order to satisfy the conditions imposed by the United States or the State of Connecticut in authorizing any system for the improvement of navigation of any harbor or river and for protection of property against damage by floods or by erosion, provided such system shall have been approved by DEEP Commissioner.

These statutes listed above enable a municipality, which has recognized a particular flood or erosion hazards potential and is dedicated to reducing or eliminating the hazards, to work with, and receive assistance from, federal and state agencies. The municipality must make a financial commitment based on federal cost-sharing requirements for a federal project. For a state/local project, the cost-sharing ratio is based on the ownership of the benefited property. The State will provide two-thirds of the project cost if the property protected is municipally owned. When the project benefits private properties, the State will provide one-third and the municipality will provide two-thirds of the project costs.

Although most of the municipalities in Connecticut possess the appropriate municipal code to enable the formation of FECBs, few FECBs are actively operating in Connecticut. Therefore, their statewide effectiveness for hazard mitigation is believed to be low. In some communities, the existing Inland Wetland and Watercourse Commission or Agency or Board of Selectmen may act as the FECB. In one community (Meriden), the local FECB has been the primary entity carrying out one of the state's largest flood mitigation projects (along Harbor Brook). Therefore, although statewide effectiveness may be low, the FECB may be very effective in communities that have enabled them.

### **Parks and Recreation Department**

The Parks and Recreation Department typically oversees community open space and parks. This responsibility includes the properties acquired by the community for hazard mitigation purposes and converted to open space.

### **Attorney**

A community's Attorney's office plays a critical role in hazard mitigation. The office typically reviews and helps to administer grant applications and projects under the HMA programs such as HMGP and PDM.

### **Commissions Related to Hazard Mitigation**

Many commissions are involved with hazard mitigation. These may include:



- Conservation Commissions – Charged with the development, conservation, supervision, and regulation of natural resources and water resources (hazard mitigation through the category of “natural resource protection”)
- Inland Wetlands and Watercourses Commissions – Charged with implementing and enforcing all provisions of the Connecticut General Statutes as regards the Inland Wetlands and Watercourses Act (hazard mitigation through “prevention,” “natural resource protection,” and “structural projects”)
- Planning and Zoning Commissions – Charged with establishing, implementing, and overseeing planning and zoning regulations as provided by the Connecticut General Statutes (hazard mitigation through “prevention,” “property protection,” “natural resource protection,” “structural projects,” “emergency services,” and “public education”)
- Public Works Commission – Charged with managing the department and developing budgets (hazard mitigation through “prevention” and “structural projects”).
- Land Acquisition Commission – Charged with determining and recommending to the Board of Selectmen or Council the feasibility of acquiring land, development rights, and conservation easements and prioritizing properties for acquisition by the Community (hazard mitigation through “natural resource protection”)
- Harbor Management Commission – For coastal communities, charged with the duty and purpose of developing a Harbor and Waterways Management Plan (hazard mitigation through “prevention,” “property protection,” “structural projects,” “emergency services,” and “public education”)
- Marina Commission – For coastal communities, charged with the control, development, management, operation, and maintenance of the municipal marina facilities (hazard mitigation through “property protection” and “emergency services”)

Because they consist of volunteers, the various commissions operating in a given community are typically as effective as the regulations and plans that they administer (Table 3-5) or the staff and departments that assist them. For example, a Planning and Zoning Commission with a full-time town planner, updated Plan of Conservation and Development, and updated Zoning Regulations (including flood damage prevention regulations) will be much more effective than a Planning and Zoning Commission that is assisted by a land use secretary and relies on flood damage prevention regulations that are partly in the municipal code and partly in the Zoning Regulations.

However, there are many exceptions to this rule. Some very small towns in Connecticut have benefited from the participation of knowledgeable volunteers who have served on their commissions for many years. Overall effectiveness of local land use commissions will increase over time as the State continues to train these volunteers through the many programs that are available to them, such as the Land Use Leadership Alliance (LULA) training.



### **Local Implementation of the National Flood Insurance Program (NFIP)**

The State of Connecticut reviews local flood management programs, local NFIP procedures, mitigation actions and local capabilities through the Community Assistance – State Support Services Element (CAP-SSSE) of the NFIP. Each year DEEP IWRD staff perform a number of Community Assistance Visits (CAVs). During the CAV, the community's ordinances are reviewed along with any variances, which have been granted in the floodplain. DEEP staff meet with the local floodplain coordinators and travel around local floodplain areas looking for compliance issues and checking on possible violations. DEEP staff prepare a written report on the CAV and submit it to FEMA. The report is placed in the community's NFIP file and becomes part of the participating community's compliance history.

CAVs are targeted for coastal communities once every five years due to their increased vulnerability to flooding. Inland communities normally receive a CAV once every ten years. Plans for potential future projects are also reviewed back at the DEEP to determine if they are in compliance with NFIP and State floodplain management regulations. The CAV program has uncovered violations and continues to allow the DEEP to more effectively monitor local municipal flood management regulations. Every municipality in Connecticut is a member of the NFIP and is required to submit to a CAV upon request. This has made the program very effective in assisting municipalities to monitor and prevent floodplain violations.



## Summary of Land Use Controls

Every municipality within Connecticut has some form of flood zone protection authority authorized by one of several Connecticut General Statutes (C.G.S.). Section 7-148 of the CGS gives municipalities authority to pass ordinances, and many communities have done so under this authority. CGS. Section 8-2 (et. seq.) provides authority for municipal zoning including provisions to use zoning to “secure from flood.” A zoning commission administers zoning and its actions in most municipalities, and is independent of a municipality’s legislative body. Some communities may have both a flood ordinance and flood zoning. Municipalities also have authorities, which allow them to purchase open space (7-13lb), to conduct comprehensive planning (8-18 et. seq.), to regulate inland wetlands (22a-36 et. seq.), to establish and maintain civil preparedness plans (28-7), and to regulate construction of buildings (29-260 et. seq.). As discussed above, coastal municipalities have additional authority and responsibility under the Connecticut Coastal Management Act including ensuring that development within coastal flood hazard areas are managed to minimize risks to life and property.

Although the State has a 100% participation rate of its municipalities in the NFIP, the real measure of success cannot be determined merely by participation in the program. The minimum regulations required for admission into the NFIP must be adequately understood and enforced at the local level. The Flood Management Section's CAP has enabled DEEP to greatly expand its technical and general assistance capabilities to local officials, residents, banks, insurance agents and engineers.

Available qualitative information and ongoing communications between IWRD programs and local governments indicate that local governments’ land use policies and the enforcement of these policies and local regulatory controls have been and continue to be effective with regards to the mitigation of natural hazards at the local level. Many communities have been proactive with regards to managing their local natural resources and in developing local strategies to mitigate and/or plan for post-disaster recovery. The majority of communities located within the state actively work with DEEP and DEMHS to develop and implement local hazard mitigation activities, and enhance and exercise evacuation and post-disaster plans of action

## The Effectiveness of Local Hazard Mitigation Plans

Connecticut’s local planning effort began in 2000. Once initially approved by FEMA, local hazard mitigation plans are required to be updated every five years. Through the year 2013, DEEP has reviewed local plans and submitted them to FEMA for final review and comment. Through this review process, DEEP has observed an evolution of the plans in that they are becoming more specific in nature as to the proposed hazard mitigation activities recommended for implementation on a local level.



In the future, the DEEP expects that local plans will continue to refine local risk analyses and recommended hazard mitigation strategies and activities. As updates as prepared, communities will need to identify each strategy and explain if it was cancelled, carried forward to the updated plan, or completed.

Beginning in 2013, local plan review will transfer from DEEP to DEMHS. DEMHS will evaluate effectiveness of the plans by the quality of the activities that result from the implementation of the adopted plans. Upon the submission of regular plan updates, the regulatory elements of the plan will continue to be analyzed as part of all future planning grants in those communities.

### **3.5 Activities of Other Entities Located in Connecticut**

#### **3.5.1 Electricity Providers**

As a result of Tropical Storm Irene in August 2011 and Winter Storm Alfred in October 2011, the state understands that communities now place a higher priority level on tree trimming and maintenance to protect utilities, roads, persons in transit, and structures as compared to its priority level several years ago. Planning has been vigorous, from the publication of James Lee Witt's report "Connecticut October 2011 Snowstorm Power Restoration" (December 2011) to meetings between utility companies and Connecticut municipalities that took place in 2011 and 2012 that resulted in the "Report of the Two Storm Panel" (January 2012). The Report of the Two Storm Panel included 82 individual recommendations that have been shaping legislative initiatives and inter-agency policies since 2012, helping to increase capabilities in Connecticut. Some of these policies have already helped, as noted during Hurricane Sandy in October 2012.

#### ***Northeast Utilities***

Northeast Utilities (NU) is the largest power utility company within Connecticut. NU has several short and long-term programs to reduce the impact of natural disasters on the general public. NU's short-term programs include using power restoration crews to restore power after small-scale storms. NU also has agreements with other states and Canada to bring in additional crews of linesmen after major disasters to restore power.

NU maintains an annual proactive program of tree trimming across the State. Trees are identified and property owners are notified that their trees that overhang or threaten power lines will be trimmed. Tree trimming reportedly saves millions of dollars in yearly damage to the power grid.

Aside from tree trimming, NU maintains other policies that build capabilities statewide. During the peak summer usage months, NU maintains agreements with large companies to curtail power usage during peak periods to prevent the need for brownouts or rolling



blackouts. NU also issues power watches and warnings when necessary to conserve energy. When a “power warning” is issued, NU asks customers to turn off all unnecessary electrical appliances, air conditioning, and lights during the peak hours of 11 a.m. to 4 p.m. This helps assure that sufficient power will be available for all.

### **United Illuminating**

United Illuminating (UI) is the second-largest electricity provider in Connecticut. Like NU, UI maintains a tree trimming program to protect its electricity transmission and distribution system. UI is also currently in the process of reinforcing its substations to withstand flooding in areas where the utility has infrastructure at risk.

### **3.5.2 CtWARN**

CtWARN is a Water/Wastewater Agency Response Network (WARN) comprised of utilities providing voluntarily assistance to one other in the form of personnel and resources during emergencies by means of pre-arranged mutual aid agreements. The mission of CtWARN is to support and promote statewide emergency preparedness, disaster response, and mutual assistance matters for public and private water and wastewater utilities. CtWARN accomplishes this mission by providing increased planning, coordination and enhanced access to specialized resources to enable rapid, short-term deployment of emergency services to restore critical operations of the affected water or wastewater utility. A total of 19 water and wastewater utilities and departments are members of CtWARN, covering more than half of Connecticut's geographic area.

### **3.5.3 University of Connecticut**

#### **Center for Land Use Education and Research**

The mission of the Center for Land Use Education and Research (CLEAR) is to provide information, education and assistance to land use decision makers, in support of balancing growth and natural resource protection. To achieve this goal, CLEAR conducts remote sensing research, develops landscape analysis tools and training, and conducts outreach education programs. CLEAR houses the following programs:

- NEMO (Nonpoint Education for Municipal Officials) provides information, education and assistance to local land use officials and other community groups on how they can accommodate growth while protecting their natural resources and community character.
- The Land Use Academy provides land use decision-makers the knowledge and skills needed to serve effectively on a land use board through a series of workshops.
- Geospatial Training program provides hands-on training courses for land use decision-makers to introduce new users to geographic information systems (GIS), global positioning systems (GPS) and remote sensing technologies.



- Forestry program provides information and assistance to private land owners and local communities on how to better manage their forest lands.
- LERIS (Laboratory for Earth Resources Information Systems) is the main research program of CLEAR, and the principal place at the University of Connecticut for conducting remote sensing and GIS research focused on natural resources, landscape characterization and change, and the interaction of the two.

The Land Use Academy is the primary vehicle for CLEAR's role in building capabilities in Connecticut for hazard mitigation. Most of the training sessions are geared toward local land use commissions and provide instructions on how to review land use proposals according to the regulations administered by the commission. Natural hazards such as flooding are routinely addressed by commissions, and the training helps commission members better understand these hazards.

The Land Use Academy also provides specialized training. For example, a new training session entitled "Climate Adaptation Training for Coastal Communities" commenced in spring 2013. This three day training course provides local officials and other interested individuals in coastal communities with the latest information and skills necessary to proactively adapt to the impacts of changing climate such as coastal flooding and coastal storms.

### **Connecticut Sea Grant**

The Sea Grant College Program is a partnership between the nation's universities and its primary ocean agency, the National Oceanic and Atmospheric Administration (NOAA). The University of Connecticut is Connecticut's Sea Grant College. Connecticut Sea Grant (CTSG) collaborates with maritime industries and coastal communities to identify needs, and fund research, outreach, and educational activities that have special relevance to Connecticut and Long Island Sound. The mission is to work towards achieving healthy coastal and marine ecosystems and consequent public benefits by supporting integrated locally and nationally relevant research, outreach and education programs in partnership with stakeholders. Program activities are focused into the areas of marine aquaculture and biotechnology; use and conservation of marine resources, ecosystems, and habitats; coastal land use and community planning; habitat restoration and enhancement; aquatic invasive species; use and conservation of marine resources; and marine and aquatic science literacy.

The Sea Grant program helps build capabilities in Connecticut through several programs related to its area of coastal land use and community planning. For example, no-cost technical assistance was available in 2012 for communities impacted by Hurricane Sandy. The Sea Grant program also coordinates with the CLEAR training described above.



### **3.5.4 The Nature Conservancy**

The Nature Conservancy (TNC) is actively engaged with several Connecticut communities in the area of coastal resilience planning. First and foremost, the Town of Guilford is working with TNC as a pilot community along Long Island Sound for instituting a coastal resilience planning process that will ultimately increase the Town's ability to accommodate coastal change in the future. TNC is also working with the Greater Bridgeport Regional Council (including the coastal communities of Fairfield, Bridgeport, and Stratford) and the Town of Old Saybrook to develop adaptation plans and strategies. These planning efforts are expected to continue through 2013 and 2014. The next update to this plan will describe progress in these areas.

### **3.5.5 Citizen Volunteer Organizations**

Some communities have a Citizens Emergency Response Team (CERT). The members of these teams have received training in many areas involving disaster situations such as first aid, sheltering management, and traffic control and commodities distribution along with other related tasks. These groups fill voids that exist especially during large scale incidents where standard public safety staffing cannot fulfill all the necessary operations.

### **3.5.6 Additional Groups**

In addition to municipal offices, the American Red Cross (ARC), the Salvation Army and the local health districts provide services related to mitigation and emergency management. The ARC and the Salvation Army help provide shelter and vital services during disasters and participates in public education activities. The local Health Districts become involved with water supply and sanitation issues that may arise during and after emergencies and natural disasters.

## **3.6 Activities for Future Updates**

DEMHS may enhance this section of the NHMP in future updates by performing the following:

- Continue reviews of any future agency/division organizational changes and their effect on the agency/divisions efforts relating to hazard mitigation;
- Continue evaluating state policies and programs associated with natural hazard mitigation; and
- Continue overviews of local hazard mitigation policy initiatives, where available.

This work, as stated above, will be performed through planning efforts supported by FEMA grants and possible other grant/funding sources that may become available to the State.



## 4 Local Planning Coordination

In response to the planning requirements of the Disaster Mitigation Act of 2000 (DMA 2000), the State of Connecticut has encouraged and facilitated local planning efforts to ensure that local and multi-jurisdiction hazard mitigation plans are in place. Unlike many states in the country, Connecticut does not have county governments, and local governments are the primary decision makers for land use. In Connecticut as well as the remainder of FEMA Region 1, the unit of local government is the town. Some towns are also incorporated as cities, but all local municipalities are towns.

Connecticut began assisting communities in the drafting of local hazard mitigation plans in 1997, utilizing Flood Mitigation Assistance (FMA) planning grant funds. The town of Westport was the first community to complete a local hazard mitigation plan in 1998. Due to limited FMA funding for planning activities, only one community each year was targeted to develop a plan under this grant program.

DEEP realized that the development of one community plan per year would not be an effective approach if the continued goal is to have a plan for every Connecticut community. The State of Connecticut's current approach is to work with regional planning organizations (RPOs) as frequently as possible to prepare multi-jurisdiction hazard mitigation plans. Connecticut RPOs currently include the following, although legislation passed in June 2013 will cause a reconfiguration of the RPOs:

- Capital Region Council of Governments (CRCOG)
- Central Connecticut Regional Planning Agency (CCRPA)
- Council of Governments of the Central Naugatuck Valley (COGCNV)
- Greater Bridgeport Regional Council (GBRC) (former Greater Bridgeport Regional Planning Agency, GBRPA)
- Litchfield Hills Council of Elected Officials (LHCEO)
- Lower Connecticut River Valley Council of Governments (RiverCOG) (recently created from a merge of the Connecticut River Estuary Regional Planning Agency (CRERPA) and the Mid-State Regional Planning Agency)
- Northeastern Connecticut Council of Governments (NECOG)
- Northwestern Connecticut Council of Governments (NWCOG)
- South Western Regional Planning Agency (SWRPA)
- Southeastern Connecticut Council of Governments (SCCOG)
- Windham Regional Council of Governments (WinCOG)

When FEMA Pre-Disaster Mitigation (PDM) or Hazard Mitigation Grant Program (HMGP) planning grant funds are made available, the State solicits grant sub-applications from eligible sub-applicants such as municipalities or RPOs. The sub-applications are reviewed



for eligibility and sub-application completeness by DEEP, and are then evaluated and ranked by the CIHMC. All municipalities can apply for local assistance. The State generally does not prioritize by community. Rather, it prioritizes on the merit and benefits of the projects received (e.g. if the project impacts multiple locations, and has a positive cost-benefit review). Each time grant applications are solicited, guidance is issued with the solicitation outlining priorities for the particular solicitation. Although Connecticut does not prioritize by community, it does take into consideration some community factors, such as a community's status as economic distressed. High risk communities and projects involving RL and SRL properties also receive priority, as do projects to prevent future risk in more rapidly developing hazard prone areas. Review of local assistance applications is typically completed within 45-days and sent back to communities for changes and comments.

Table 4-1 provides a list of planning projects funded in part by FEMA grants from Federal Fiscal Year 2000 to 20012.

Table 4-1. List of Past and Current Planning Activities Funded by FEMA

FEDERAL FISCAL YEAR	PROGRAM	DESCRIPTION	STATUS	FEDERAL FUNDING	LOCAL FUNDING
FFY 00	FMA	Drafting of a multi-jurisdiction Hazard Mitigation Plan by CRERPA	Completed	\$19,900.00	\$4,975.00
		Totals for FFY 00		\$19,900.00	\$4,975.00
FFY 01	FMA	Preparation of the third phase of the multi-jurisdiction Hazard Mitigation Plan by CRERPA.	Completed	\$19,400.00	\$4,850.00
	HMGP	Draft a mitigation plan in cooperation with CRERPA	Completed	\$20,000.00	\$9,000.00
		Totals for FFY 01		\$39,400.00	\$13,850.00
FFY 02	FMA	Prepare a multi-jurisdiction Hazard Mitigation Plan	Completed	\$19,600.00	\$6,533.33
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by SECCOG	Completed	\$76,133.37	\$25,377.89
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by SWRPA	Completed	\$37,461.79	\$12,487.26
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by NECCOG	Completed	\$17,790.94	\$5,930.31
		Totals for FFY 02		\$150,986.10	\$50,328.79
FFY 03	FMA	Prepare a multi-jurisdiction Hazard Mitigation Plan	Completed	\$20,000.00	\$6,667.69
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by CCRPA	Completed	\$50,878.20	\$17,007.00



FEDERAL FISCAL YEAR	PROGRAM	DESCRIPTION	STATUS	FEDERAL FUNDING	LOCAL FUNDING
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by COGCVN (3 communities)	Completed	\$51,676.66	\$17,225.55
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by GBRPA	Completed	\$70,845.00	\$23,615.00
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by WINCOG	Completed	\$70,000.00	\$23,333.00
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by CRERPA	Completed	\$33,635.74	\$10,471.03
		<b>Totals for FFY 03</b>		\$297,035.60	\$98,319.27
FFY 04	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by the COGCVN (4 communities)	Completed	\$101,050.00	\$33,690.00
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by NWCCOG	Declined	\$40,856.63	\$13,618.87
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by CRCOG	Completed	\$322,500.00	\$107,500.00
	PDM	Prepare a Hazard Mitigation Plan by City of New Haven	Completed	\$7,505.46	\$2,501.82
		<b>Totals for FFY 04</b>		\$471,912.09	\$157,310.69
FFY 05	FMA	Update existing Hazard Mitigation Plan, City of Milford	Completed	\$8,247.00	\$2,749.00
	FMA	Prepare a Hazard Mitigation Plan, Town of Hamden	Declined	\$0.00	\$0.00
		<b>Totals for FFY 05</b>		\$8,247.00	\$2,749.00
FFY06	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by COGCVN (6 communities)	Completed	\$95,000.00	\$31,667.00
		<b>Totals for FFY 06</b>		\$95,000.00	\$31,667.00
FFY07	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan by Midstate RPA	Completed	\$137,564.60	\$45,856.20
		<b>Totals for FFY 07</b>		\$137,564.60	\$45,856.20
FFY08	PDM	Prepare a Local Hazard Mitigation Plan by the Town of Sherman (contract with HVCEO)	Completed	\$21,000.00	\$7,000.00
		<b>Totals for FFY 08</b>		\$21,000.00	\$7,000.00



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FEDERAL FISCAL YEAR	PROGRAM	DESCRIPTION	STATUS	FEDERAL FUNDING	LOCAL FUNDING
FFY09	PDM	Prepare a Local Hazard Mitigation Plan by the Town of Guilford	Completed	\$30,040.00	\$10,531.00
	PDM	Prepare a Local Hazard Mitigation Plan by the City of Danbury	Completed	\$37,499.06	\$12,499.69
	PDM	Prepare a multi-jurisdiction Hazard Mitigation Plan Update by SWRPA	Completed	\$26,237.45	\$8,750.00
Totals for FFY 09				\$93,776.51	\$31,780.69
FFY10	PDM	Prepare a multi-jurisdiction hazard mitigation plan by VCOG	Completed	\$63,000.00	\$21,000.00
FFY10	PDM	Prepare a local hazard mitigation plan by the City of Meriden	Completed	\$30,000.00	\$10,000.00
FFY10	PDM	Prepare a multi-jurisdiction hazard mitigation plan update by RiverCOG (former CRERPA)	Underway	\$65,159.00	\$21,844.00
Totals for FFY 10				\$158,159.00	\$52,844.00
FFY11	PDM	Prepare a multi-jurisdiction hazard mitigation plan update by SCCOG	Completed	\$93,749.86	\$31,250.36
FFY11	PDM	Prepare a multi-jurisdiction hazard mitigation plan by SCRCOG	Underway	\$225,562.50	\$75,187.50
FFY11	PDM	Prepare a multi-jurisdiction hazard mitigation plan update by CRCOG	Underway	\$300,000.00	\$100,000.00
FFY11	PDM	Prepare a multi-jurisdiction hazard mitigation plan update by WINCOG	Underway	\$45,000.00	\$15,000.00
Totals for FFY 11				\$664,312.36	\$221,437.86
FFY12	PDM	Prepare a multi-jurisdiction hazard mitigation plan update by LHCEO	Underway	\$30,075.00	\$10,025.00
FFY12	PDM	Prepare a local hazard mitigation plan by the Town of Bethel	Underway	\$30,750.00	\$10,250.00
FFY12	PDM	Prepare a multi-jurisdiction hazard mitigation plan update by GBRPC	Underway	\$90,000.00	\$30,000.00
FFY12	PDM	Prepare three local hazard mitigation plan updates - grant to the Town of Watertown	Underway	\$18,000.00	\$6,000.00



FEDERAL FISCAL YEAR	PROGRAM	DESCRIPTION	STATUS	FEDERAL FUNDING	LOCAL FUNDING
FFY12	HMGP	Prepare four local hazard mitigation plan updates - grant to the City of Waterbury	Underway	\$24,000.00	\$8,000.00
FFY12	HMGP	Prepare six local hazard mitigation plan updates - grant to the Town of Southbury	Underway	\$43,853.00	\$14,618.00
Totals for FFY 12				\$236,678.00	\$78,893.00
FFY13	HMGP	Prepare nine local hazard mitigation plan updates by the Northwest Connecticut Council of Governments (NWCCOG)	Underway	\$48,750.00	\$16,250.00
FFY13	HMGP	Prepare a multi-jurisdiction hazard mitigation plan update by SWRPA	Awarded	\$41,700.00	\$13,900.00
Totals for FFY 13				\$90,450.00	\$30,150
--	HMGP	Prepare a multi-jurisdiction hazard mitigation plan update by CCRPA	FEMA review of grant application pending	\$84,502.00	\$28,167.00
--	HMGP	Prepare a multi-jurisdiction hazard mitigation plan by HVCEO; and incorporate updates for Danbury, New Fairfield, and Sherman	FEMA review of grant application pending	\$123,750.00	\$41,250.00
Total Pending				\$208,252	\$69,417

#### 4.1 Summary of Planning Efforts

As noted above, hazard mitigation planning is typically performed at the community level; this is true even when RPOs coordinate the planning efforts. Connecticut has 156 communities (out of 173 total<sup>123</sup>) that have developed final hazard mitigation plans or have developed draft hazard mitigation plans<sup>124</sup>. Most of the individual community plans are multi-jurisdictional plans developed by RPOs, with the remainder being developed by and for individual communities. Note the following:

- 11 of the 14 regional planning organizations have or are developing multi-jurisdictional plans. One of these regional planning organizations (SCRCOG) also has communities with individual plans.

<sup>123</sup> Connecticut has 169 municipalities; the additional four communities include the two tribal governments and the political subdivisions of Groton and Stonington.

<sup>124</sup> 126 local plans are approved and 30 local plans are in draft format through April 2013.



- Two regional planning organizations have communities with individual plans. One of these regional planning organizations (HVCEO) is preparing to begin the planning process for its remaining communities that lack local plans.
- One regional planning organization (NWCOG) is beginning the planning process for an initial multi-jurisdictional plan.

Subsequent the adoption of the 2010 state plan, many of the active local plans have expired or are near expiration. The recent disaster declarations in Connecticut have spurred local awareness of the need for hazard mitigation planning as well as the need to maintain an active plan in order to receive certain types of grant funding from FEMA. A total of 118 communities are currently developing their first plans or are updating their existing plans. At the date of this plan update, all RPOs either have, are developing or have applied for a grant to develop a plan (or set of local plans).

Based on the above, it is expected that 100% of Connecticut communities will have a local plan in place by the time of the next State HMP update in 2016. Appendix 4-1 lists the status of natural hazard mitigation planning in Connecticut communities as of April 30, 2013.

All established local plans and draft plans submitted to the State through April 2013 were utilized as a source and starting point for the update. Subsequent sections of this chapter address local hazard identification, vulnerability and potential losses based on estimates provided in local risk assessment. For the 2013 State plan update, the processed results from the local plan reviews were used in the statewide hazard ranking.

## 4.2 Local Planning Process

Development of a natural hazard mitigation plan at the community level is vital if the community plans to comprehensively address natural hazards. Communities cannot prevent disasters from occurring, however, they can lessen the impacts and associated damages from these disasters. An effective plan will improve a community's ability to deal with natural disasters and will document valuable local knowledge on the most efficient and effective ways to reduce losses. Preparing a plan to lessen the impact of a disaster before it happens will provide the following benefits to a community: reduce public and private damage costs; reduce social, emotional, and economic disruption; provide better access to funding sources for natural hazard mitigation projects; and improve their ability to implement post-disaster recovery projects.

DEEP and DEMHS provide technical assistance to sub-applicants for planning efforts and projects. Technical assistance includes meeting with local officials and RPOs to help guide them through the planning process, provide available planning guides and tools to assist them in developing a plan, and reviewing and providing feedback on draft plans submitted for FEMA approval. While DEEP has historically performed much of the local plan review work at the state level, DEMHS will be taking over these responsibilities in the second half



of 2013 and in the future. However, for the purposes of this plan, DEEP is referenced as the lead reviewing agency.

DEEP reviews and analyzes all single-jurisdictional and multi-jurisdictional plans when they are submitted to the agency prior to being forwarded to FEMA. DEEP plays an active role in the coordination of these reviews. DEEP is knowledgeable in the contents of each plan and through its review verifies that all plans are consistent with the CT NHMP and DEEP's mission. DEEP also provides comments to the community or RPO to ensure the single- or multi-jurisdictional plan is complete and consistent with all FEMA requirements. The FEMA crosswalk form was formerly utilized to provide comments to local officials, until it was supplanted by the Local Mitigation Plan Review Tool.

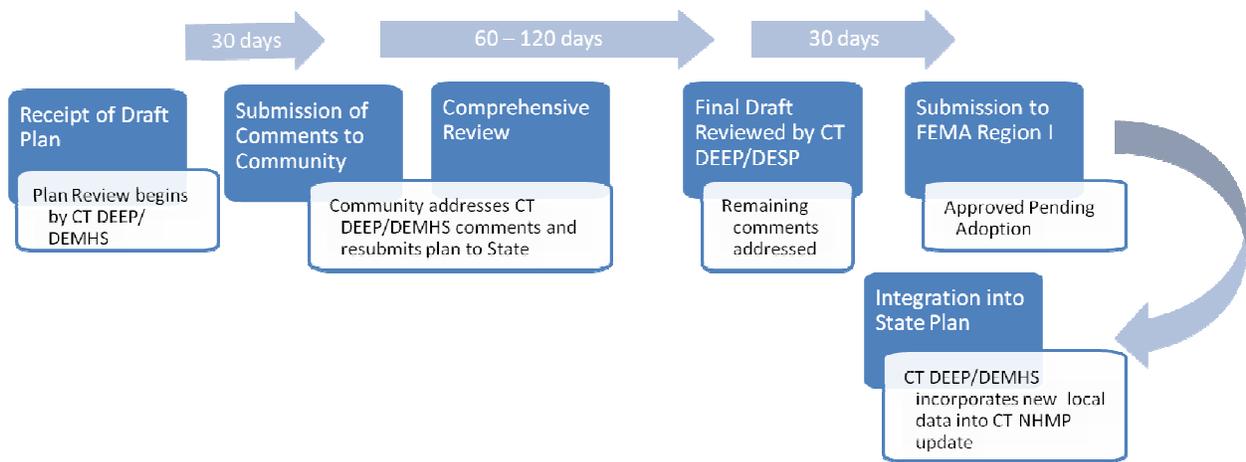


Figure 4-1. Local plan submittal process and integration into state NHMP.

The goals established for this process are shown in Figure 4-1 and as follows:

- Receipt of draft plan – Day 1;
- Initial plan review and submission of draft comments to community – within 30 days of receipt of draft plan;
- Comprehensive review, including time for community to revise plan based on initial comments – 60 to 120 days from submission of draft comments to community;
- DEEP submits plan and its comments to FEMA – within 30 days of receipt of final draft from community for the comprehensive review.
- Incorporate new data from FEMA approved local plan into the state's NHMP by the next update of the Plan.

Once the initial state review is completed, DEEP will forward the plan to FEMA for its initial review. If the plan meets all of the requirements to receive conditional approval, FEMA will send the RPO or the community an Approval Pending Adoption (APA). If the plan requires revisions, FEMA will forward comments to DEEP. DEEP will then send the



RPO and/or community a letter with both FEMA and the state's comments and will provide additional technical assistance to the community as it revises the plan. Once the revisions are made to the plan, the RPO and/or community will submit a final draft plan to DEEP. DEEP then will forward the final draft plan to FEMA for Conditional Approval. FEMA will then send a letter of APA to the RPO or the community when it is approvable.

At this point, the community will hold a public hearing and formally adopt the mitigation plan. A signed resolution of adoption will then be sent to DEEP. DEEP will then forward the adoption documentation to FEMA who will review and then issue a letter of approval to the community with a copy to the RPO and DEEP.

### **Additional State Technical Assistance**

In addition to the assistance provided as outlined above, since the 2010 plan, DEEP/DEMHS has provided technical assistance in the form of a FEMA sponsored G-318 mitigation plan developers training, taught by FEMA's Risk MAP contractor on March 5-6, 2013. Additionally DEEP met individually with all RPOs in plan update process, within the last three years, to go through the planning requirements, crosswalk and guidance. DEEP currently has a full time mitigation planner who provides ad-hoc technical assistance via telephone or meetings as requested.

It is the responsibility of the local community to update its local natural hazard mitigation plan at least once before expiration in five years, although the community may choose to update the plan more frequently. Risk assessments from the local plans will be used periodically to enhance Connecticut's hazard identification and risk assessment where applicable. Furthermore, DEEP considers actions common to all plans to target resources for mitigation outreach, technical assistance and grant offerings.

## **4.3 Local Hazard Identification and Risk Assessment**

Local plans and multi-jurisdiction plan annexes identified 25 distinct hazards, although not all hazards were identified in every plan. Communities used a variety of approaches with a range of complexity to rank their identified hazards. Some plans used a blend of various techniques and discussion to determine their final hazard ranking. Several of the ranking/scoring techniques used in the local plans included:

- Quantitative scoring (based on available historical data, i.e. NCDC)
- Human judgment/knowledge of locality
- Numerical Scoring Worksheets (based on criteria, i.e., FEMA 386-2 worksheets)
- Interactive activities with Steering Committee Members

FEMA guidance indicates that the jurisdictions at greatest risk to specific hazards should be identified, considering both the characteristics of the hazard and the jurisdictions' degree of vulnerability. A variety of analysis methods may be sufficient to meet these goals; FEMA



does not mandate a specific analysis method. As a result, many local and state plans have developed their own ranking system.

None of the ranking techniques used in the local plans are incorrect, as there is no standard way to rank hazards that impact specific jurisdictions. Lack of available data for each hazard is often a driving factor in the ranking method’s degree of subjectivity. The numerical rankings were frequently performed by different plan prepares, and different data processing methodologies were used. The variability in the ranking systems made it challenging to directly compare local hazard rankings to the state risk assessment. Instead, the qualitative risk assessment information in the local plans was utilized as a component of the composite ranking maps as discussed in the Hazard Assessment and Ranking Methodology section of this report.

Some plans provided a direct ranking of hazards in terms of overall risk from low to high, while others (mostly first-generation plans that have not been updated) only offered general information about hazard risk. In the latter case, a ranking was assumed based on the data provided.

Table 4-2 below ranks each hazard based on the percentage of localities that ranked the hazard as High, Moderate-High, Moderate, Low-Moderate, and Low. A score of one to five was assigned to each individual plan ranking (one being for low rank and five being for high rank), with an overall score being determined based on the mean of the individual ranks. Additional details on the local plan review, hazards assessed, loss estimation and tracking information, are available in Appendix 4-2.

Table 4-2. Summary of local plan hazard ranking

Overall Ranking	Overall Score	Number of Local Plans	Hazard
High	4.74	156	Winter Storms / Snow / Blizzard
High	4.54	35	Flood, Flash
High	4.52	66	Ice
Moderate-High	4.44	146	Hurricane
Moderate-High	4.17	156	Flood, Riverine
Moderate-High	4.09	104	Thunderstorms / Summer Storms
Moderate-High	4.07	43	Sea Level Rise
Moderate-High	4.03	103	Wind
Moderate	3.44	50	Flood, Coastal & Storm Surge
Moderate	3.39	71	Lightning
Moderate	3.23	60	Flood, Poor Drainage or Nuisance
Moderate	3.18	146	Tornado
Moderate	3.10	143	Dam or Levee Failure
Moderate	3.00	18	Extreme Cold
Moderate	2.90	20	Extreme Heat



Overall Ranking	Overall Score	Number of Local Plans	Hazard
Moderate	2.70	74	Hail
Moderate	2.62	99	Drought
Moderate	2.60	10	Tsunami
Moderate	2.55	22	Erosion
Moderate	2.53	156	Earthquake
Low-Moderate	2.20	10	Landslide & Mudflow
Low-Moderate	2.00	2	Land Subsidence & Sinkholes
Low-Moderate	1.93	27	Ice Jam & Associated Flooding
Low-Moderate	1.78	129	Wildfire
Low	1.00	8	Geomagnetic Storms

Winter storms, riverine floods, and earthquakes are directly addressed and evaluated in the greatest number of local plans and multi-jurisdiction plan annexes (156 – this is all available plans and annexes). Hurricanes and tornadoes are addressed in 146 plans and annexes, although the fact that 103 plans address “wind” as a hazard demonstrates that hurricanes and tornadoes are indirectly addressed in many more plans. Dam/levee failure, thunderstorms, and wildfires are all addressed in more than 100 local plans or annexes.

At the other end of the range, land subsidence and sinkholes are addressed in only two local plans (Cheshire and New Haven). Geomagnetic storms were evaluated in the CRERPA plan (eight communities). Tsunamis were each addressed in ten coastal plans, and landslides were evaluated in ten plans for communities located primarily the Naugatuck Valley where old mill towns were developed on steep slopes flanking river valleys.

The range of possible “overall score” is one to five. Eight hazards scored greater than 4.0. These are flash floods, riverine floods, hurricanes, ice events, sea level rise, thunderstorms, wind events, and winter storms. Considered collectively, it is clear that floods, wind events, winter storms, and sea level rise are of great concern to local communities.

It is important to note that an overall score can be relatively high for a particular hazard even when only a handful of communities are at risk. One example is sea level rise, which is evaluated in only 43 coastal or estuarine communities. The relatively high score of 4.07 is possible because it is dependent only on the rankings within the local plans and annexes that include the hazard, rather than the score becoming diluted by averaging across all Connecticut communities.

Several of the hazard categories that were addressed in the local plans are not subject to detailed analysis in this State plan update. Of the hazards considered in this update, average rankings in local and state analysis are comparable. Several of the local plans discussed the hazards but did not qualitatively rank them; as a result these hazards were assigned rankings based on how they were described in detail in the local plans.



Future local plan updates may present an opportunity to address some of the ambiguity between hazard naming conventions if the State of Connecticut standardizes applicable hazard names or labeling. The State may encourage local plan revisions to approach classifying hazards in a similar fashion as done in the HIRA in this State plan update.

#### 4.4 Assessment of Potential Losses

Local hazard evaluations are highly variable. As a result, each one has its own set of criteria to develop monetary loss estimates. Many of the first-generation local plans and annexes contained loss estimates only from previous damage events, while plans developed subsequent to 2010 have begun to utilize FEMA's HAZUS-MH program to model flooding, hurricane wind, and earthquake events and damages. It is expected that the majority of the local plans and annexes will include HAZUS-MH results by the time of the next State plan update.

One continued goal of the State plan update is to standardize the data analysis process so that future state and local plan updates are consistent and comparable, including recommendations for assigning annualized loss estimates for hazards not included in the HAZUS-MH software.

Local plans document loss estimation at \$1 billion to \$6 billion from the major hazards that could impact Connecticut as seen in Table 4-3. However, this represents less than one-third of the communities in Connecticut.

Table 4-3. Local plan loss estimates by hazard type

Hazard Type	Total Loss Estimate	Number of Plans with Loss Estimates
1% Annual Chance Hurricane Wind	\$1,582,020,000	56
1938 Hurricane Wind (LCRVCOG)	\$4,181,000,000	17
1% Annual Chance Flood	\$3,137,146,000	53
Earthquake (Largest damage of four CT State Plan Scenarios)	\$6,248,160,000	47

The results for individual communities are further broken down in Appendix 4-2. The majority of plans provided loss estimates that were based on historical damages. However, plans did not provide loss estimates for hazards that were not related to flooding, wind, or earthquake hazards. While analysis in local plans has improved since the last State plan update, more than two-thirds of the plans did not provide loss estimates. It is expected that future updates to local plans will include Hazus-MH results that will help support statewide analysis.



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## 5 Hazard Mitigation Strategy for 2014 –2017

### 5.1 Hazard Mitigation Goals, Objectives, and Strategies

The State of Connecticut is committed to reducing future damage from natural disasters through mitigation. The mission of Connecticut's Hazard Mitigation Program and this associated plan is to mitigate the effects of natural hazards by minimizing loss of life and property damage. In 2007, the State identified three primary goals to focus its hazards mitigation efforts to assist in accomplishing its mission. These three goals were reaffirmed in 2010 with slight modification, and included the following:

1. Promote implementation of sound floodplain management and other natural hazard mitigation principles on a state and local level.
2. Implementation of effective natural hazard mitigation projects on a state and local level.
3. Increase research and planning activities for the mitigation of natural hazards on a state and local level.

During the 2014 plan update process, the State's planning team met on multiple occasions to discuss current natural hazard risks as well as the goals, objectives, strategies, and activities required to minimize those risks. The planning team agreed to reaffirm the goal statements from 2010, but decided to make some revisions and additions to the objectives and strategies for each goal. These changes were made to better consolidate and eliminate some overlap among strategies, and to help clarify their specific meaning. In some instances they were also expanded to cover possible new mitigation activities under consideration by the planning team.



Figure 5-1. Connecticut's planning team used interactive brainstorming exercises and breakout sessions to identify and evaluate possible new mitigation activities.

The following goals, objectives, and strategies will serve as the road map for Connecticut to focus its hazard mitigation activities through 2016. The statements are based on (1) the review and consideration of previous mitigation goals, strategies and activities for 2010-2014; (2) the review of updated information for the hazard identification and risk



assessment; (3) input and recommendations shared by the planning team during stakeholder meetings for the 2014 plan update; and (4) results of the internet-based survey used for public participation.

It is anticipated that by working towards achieving the goals set out in this plan, effective natural hazards mitigation measures will be implemented to protect residents of Connecticut where appropriate, and will promote responsible natural hazards mitigation throughout the state on both a state and local level.

## 5.2 GOAL 1

### PROMOTE IMPLEMENTATION OF SOUND FLOODPLAIN MANAGEMENT AND OTHER NATURAL HAZARD MITIGATION PRINCIPLES ON A STATE AND LOCAL LEVEL

**Objective for Goal 1:** To increase general awareness of Connecticut's natural hazards and encourage State agencies, local communities, and the general public to be proactive in taking actions to reduce long-term risk to life and property.

#### Strategies for Goal 1:

- **Strategy 1.1** – Provide technical guidance to communities on existing hazard mitigation opportunities with an emphasis on new or improved development or redevelopment, including local floodplain ordinance enhancement and enforcement.
- **Strategy 1.2** – Conduct public outreach and provide educational opportunities to State agencies, local communities, and other stakeholders on existing natural hazards and the mitigation measures available to reduce hazard risks.
- **Strategy 1.3** – Support and enhance State policy and legislative efforts to mitigate the effects of natural hazards and adapt to climate change.
- **Strategy 1.4** – Increase coordination and leverage resources across State agencies by integrating hazard mitigation principles into other relevant plans, policies, or program activities, such as the recent incorporation of hazard mitigation into the State Conservation and Development Policies Plan and state agency capital improvement plans.

## 5.3 GOAL 2

### IMPLEMENTATION OF EFFECTIVE NATURAL HAZARD MITIGATION PROJECTS ON A STATE AND LOCAL LEVEL

**Objective for Goal 2:** To enhance the ability of State agencies and local communities to reduce or eliminate risks to life and property from natural hazards through cost-effective hazard mitigation projects, including avoidance.



### Strategies for Goal 2:

- **Strategy 2.1** – Refine State-level priorities and evaluation criteria for hazard mitigation project funding (with emphasis on RL and SRL properties) that is provided or administered by the State, including FEMA grant funds.
- **Strategy 2.2** – Identify, develop, and prioritize hazard mitigation projects including climate change adaptation strategies and relocation for State-owned facilities considered at risk to natural hazards.
- **Strategy 2.3** – Provide the best available data, training, and technical assistance to State agencies and local communities to assist in the identification, development, and implementation of cost-effective hazard mitigation projects, including relocation or siting of new facilities to avoid hazards, particularly when applying for Federal and State funds.
- **Strategy 2.4** – Increase and promote the availability of various funding mechanisms to support hazard mitigation project implementation, including Federal, State, and non-governmental sources.
- **Strategy 2.5** – Routinely monitor the implementation of hazard mitigation projects, tracking progress through project closeout and beyond to capture success stories (losses avoided) and lessons learned.

## 5.4 GOAL 3

### INCREASE RESEARCH AND PLANNING ACTIVITIES FOR THE MITIGATION OF NATURAL HAZARDS ON A STATE AND LOCAL LEVEL

**Objective for Goal 3:** To increase general awareness of Connecticut's natural hazards and encourage State agencies, local communities, and the general public to be proactive in taking actions to reduce long-term risk to life and property.

### Strategies for Goal 3:

- **Strategy 3.1** – Promote natural hazard mitigation research and planning activities that will improve hazard mitigation planning and implementation on a State and local level.
- **Strategy 3.2** – Conduct outreach and provide educational opportunities to state agencies, local communities, and other stakeholders to assist in translating research and planning activities into practice.
- **Strategy 3.3** – Investigate climate change adaptation strategies as they affect natural hazard mitigation and State investment policies, and link hazard mitigation activities with climate adaptation strategies when appropriate and possible.
- **Strategy 3.4** – Research methods and take action to better engage the private sector and non-profit organizations in hazard mitigation planning activities on a State and local level, including coordination with utility companies to better prepare for, mitigate against, and respond to natural hazard events.



## 5.5 Hazard Mitigation Activities for 2014–2017

Table 5-1 provides a summary of the recommended hazard mitigation activities developed by the planning team to achieve the above goals, objectives, and strategies, and to assist in reducing impacts from natural hazards which may impact the State. These include those activities which the State, including offices cutting across multiple departments and agencies, may implement as part of their ongoing work programs and contingent on available resources and/or funding, if applicable.

Table 5-1 includes the following information for each recommended activity:

1. **Activity #:** Identifies the unique number for the activity, with the first two digits correlating to the specific Goal and Strategy the activity is intended to help achieve. This helps to demonstrate how *each activity contributes to the overall State mitigation strategy*.
2. **Activity Description:** Provides a narrative description of the recommended mitigation activity. For activities that were carried over from the 2010 plan, the narrative also includes an update on the activity's current status in terms of implementation progress.
3. **Lead Agency:** Identifies the lead department and specific division/office assigned with primary responsibility for implementation of the activity.
4. **Estimated Cost (if applicable):** Provides a general estimate of the anticipated total costs required to complete the activity. In addition to dollar estimates, this may include "staff time" or "in-kind resources."
5. **Potential Funding Sources (if applicable):** Identifies potential funding sources to support implementation of the activity, including any known Federal, State or non-governmental sources.
6. **Timeframe for Completion:** Identifies the target timeline (duration) or specific completion date (month/year) for the activity. In some cases this may include the statement of "ongoing/continuous" for those actions already underway and/or to be continued as a *sustained* mitigation practice with no end date.
7. **Hazard(s) to be Addressed:** Identifies the specific natural hazard the recommended activity is designed to mitigate against. This may include a single, multiple, or all natural hazards identified in the plan.
8. **Priority Level:** Identifies the priority level (i.e., high, medium, low) assigned to the activity, based on the STAPLE-E evaluation and prioritization process described below.

## 5.6 Assessment of Recommended Mitigation Activities

As done in 2010, each mitigation activity listed in Table 5-1 was evaluated and prioritized according to the "STAPLE-E" evaluation method (Social, Technical, Administrative, Political, Legal, Economic, and Environmental). The specific criteria used in the



application of the STAPLE-E method are provided in Appendix 5-1. In addition, the planning team considered the following factors in its general assessment of recommended mitigation activities:

- Feasibility of implementation (both on a state and local level);
- Potential mitigation gains that could be achieved by the activity; and
- If the proposed activity would assist the State in achieving improved resource effectiveness and data collection, two current areas of constraint that have been noted within the current plan.

## **5.7 Implementation and Integration of Recommended Mitigation Activities**

All of the mitigation activities listed in Table 5-1 have been deemed feasible with respect to their implementation or performance on a state or local level. Appendix 5-2 includes a mitigation ranking and action tracker for each of the strategies identified in Table 5-1. Each of the potential activities can be implemented independently of other proposed activities. In addition, each activity will support the improvement of an increasingly effective and comprehensive plan. However, the implementation of any of the proposed activities listed in Table 5-1 is completely dependent up availability of resources both monetary and other (e.g., staff, technical, supplies, etc.). This dependence on available resources will be a significant factor regarding their implementation and performance over the next three to five years. A complete current listing of potential funding sources is included as Appendix 5-3. Further feasibility analysis of individual activities will be performed prior to the implementation and performance of any activity. Similarly, the implementation of any proposed activity is contingent on confirmation that it satisfies the aforementioned STAPLE-E evaluation criteria at the time of the proposed performance or implementation. This ensures the activity still has the necessary social, technical, administrative, political, legal, economic, and environmental support required even if conditions have changed since plan adoption.

The implementation of effective natural hazards mitigation requires on-going planning and dedicated persistence both on a state and local level to maintain what has been done in the past, and to improve upon past efforts to strive for implementing the most protection possible from natural hazards. Planning and implementation require the use of historical data. At all times the State of Connecticut will strive to ensure that historical data at both the state and local level is protected and maintained.

The related strategies and activities outlined in this plan provide a guide to assist the State of Connecticut in working towards achieving its three identified hazard mitigation goals, and they will be implemented or initiated during the time period encompassing this plan update. The goals themselves are achievable, yet they require adequate resources such as financial and staff resources to achieve significant results. They also require planning, policy, and program integration across multiple state agencies. Some key examples of this



integration are the incorporation of hazard data into the State Conservation and Development Plan and the integration of the Office of State Facilities (OSF) with the Division of Construction Services (DCS) Technical Services as described in Chapter 3. Such collaborative planning encourages routine integration between DCS, DEEP, SHPO, and other state agencies in the assessment of natural hazard risks and mitigation planning for state facilities.

The State also believes that climate change and adaptation techniques are an area of continued concern for which hazard mitigation strategies and activities must be linked. This will be accomplished through future coordination and plan integration across multiple state agencies, as deemed appropriate, and as identified and included in this plan as recommended hazard mitigation activities in support of Strategies 1.3 and 3.3.



Table 5-1. Recommended Hazard Mitigation Activities, 2014–2017

Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		
1	1.1	Provide model ordinances and sample higher standards language that communities can adopt into existing floodplain ordinances.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	Evaluate for currency annually						X					X	High
2	1.1	Conduct technical transfer and training associated with current extreme rainfall data.	USDA / Natural Resources Conservation Service	DEEP / Inland Water Resources	Staff time	Agency Operating Budgets	1-2 years						X	X				X	Medium
3	1.1	Conduct technical transfer and training associated with available LiDAR data.	USDA / Natural Resources Conservation Service	DEEP / Inland Water Resources	Staff time	Agency Operating Budgets	1-2 years						X						Medium
4	1.1	Encourage municipalities to adopt local water use restriction ordinances to ensure that proper water conservation measures are implemented during periods of severe to extreme drought and other water emergencies, in line with the Connecticut Drought Preparedness and Response Plan.	DPH / Drinking Water Section	Water Planning Council	Staff time; minimal expense for outreach materials	Agency Operating Budgets	During onset of drought conditions										X		High
5	1.1	Launch an outreach campaign to promote FEMA's Community Rating System (CRS) as a means for local communities to soften the likely increase in many flood insurance policy rates resulting from new reforms to the National Flood Insurance Program (NFIP) enacted by the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12).	DEEP / Inland Water Resources / Flood Management Section		Staff time; minimal expense for outreach materials	Agency Operating Budgets	1 Year						X						Medium
6	1.1	Encourage local hazard mitigation plans to consider continuity of agricultural operations during and following hazard events.	DESPP / Emergency Management and Homeland Security		Staff time; minimal expense for outreach materials	Agency Operating Budgets	1-5 years, initiated at each updated plan review				X						X	X	Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed									Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake		Climate Change
7	1.2	Communicate the importance of natural hazard mitigation to agricultural producers through the Department of Agriculture's weekly newsletter. This would consist of articles with links to useful websites such as DEEP and "ReadyAg" (available from PSU website).	DAG / Bureau of Agricultural Development & Resource Preservation		Staff time; minimal expense for outreach materials	Agency Operating Budgets	6 months, then annually thereafter	X	X	X	X	X	X	X	X	X	X	High
8	1.2	Develop a body of canned presentations and short workshop educational materials that could be utilized on a scheduled basis. While these could be developed for multiple hazards, the emphasis of this activity is on flood mitigation and climate change adaptation.	DEEP / Inland Water Resources/ Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time; minimal expense for outreach materials	Agency Operating Budgets	1 year, then 1 presentation annually					X					X	High
9	1.2	Investigate the possibility of holding the CFM exam on an annual basis for interested persons.	DEEP / Inland Water Resources/ Flood Management Section		Staff time	Agency Operating Budgets	1 year						X					High
10	1.2	Investigate the possibility of holding an annual short CFM refresher course for interested persons who desire to take the CFM exam.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	1 year, in combination with above activity					X						Medium to High
11	1.2	Develop educational materials on successful hazards mitigation projects, and integrate these with other readily available online resources such as StormSmart Coasts, etc.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources and Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1-year, then review annually for new examples	X	X	X	X	X	X	X	X	X	X	Medium to High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		
12	1.2	Investigate the development of a series of training media products that introduce, explain, and train interested persons on natural hazards, mitigation, NFIP program, reading flood maps, federal-state grant programs and other related issues	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management and Homeland Security; DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X	X	X	X	X	High
13	1.2 1.3 3.2	Develop educational tools to inform decision makers on the value of acquiring, maintaining, and increasing climatological data collection, including hydrologic (e.g. stream gage) data, and the continuation of OLISP's sentinel monitoring program to help provide early warning of climate change impacts. This activity is linked to Activity #28.	CHMC and Water Planning Council	DEEP / Inland Water Resources and Office of Long Island Sound Programs	Staff time; minimal expense for outreach materials	Agency Operating Budgets	1-2 years	X	X	X	X	X			X		X		High
14	1.3	Develop regulations and implementation guidance, and public outreach materials, for new legislation requiring inundation maps and Emergency Action Plans (EAPs) for high and significant hazard dams.	DEEP / Inland Water Resources / Dam Safety Section		Staff time; minimal expense for outreach materials	Agency Operating Budgets	2 years					X	X						High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change			
15	1.3	<p>Continue to improve on Statewide Repetitive Loss and Severe Repetitive Loss Strategy to mitigate and reduce the number of repetitive loss properties. As noted on pages 155-156 of this plan, CT will do the following:</p> <ul style="list-style-type: none"> <li>- Seek Federal funds to mitigate through elevation and acquisition, RL and SRL properties</li> <li>- Encourage sub applicants to prioritize RL and SRL properties</li> <li>- As grantee, give priority to RL and SRL properties</li> <li>- When BCAs of RL and SRL property applications are even, priority ranking will be given to RL and SRL properties</li> <li>- identify outside funding for mitigating RL and SRL properties</li> <li>- Continue to advocate for NRCS and State Bond Funding for mitigating RL and SRL properties</li> </ul>	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources / Flood Management Section	\$20-40k	FEMA (FMA, PDM, or HMGP); in-kind staff resources	1-2 years						X							High
16	1.3	Based on future forecast modeling for increased precipitation, storminess, and sea level rise, develop and propose policies to reduce risks for new development, including consideration towards relocating structures or reducing existing hazards within inundation areas with increasing risk. Policies should also address appropriate use of federal and state mitigation monies.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	1-2 years							X					X	Medium
17	1.4	Identify partners to help complete acquisition of LiDAR (processed to 1' contours or better) for 100% state coverage.	OPM	DEEP / Inland Water Resources	Staff time	Agency Operating Budgets	1 year						X					K a		Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed									Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake		Climate Change
18	1.4	Support the State-level Cultural and Natural Resources Recovery Function to increase resiliency of cultural and natural resources from disasters.	LTR Committee	DESPP / Emergency Management & Homeland Security; DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X	X	X	X	High
19	1.4	Implement and institutionalize a coordination program similar to the USACE's "Silver Jackets" between all federal and state agencies, including: NRCS, FEMA, USACE, Long Term Recovery Committee, Natural and Cultural Resources task force, etc.	DOI	DECD, USGS	Staff time	Agency Operating Budgets	2 years	X	X	X	X	X	X	X	X	X	X	Medium
20	1.4	Support and implement State-level Hurricane Sandy Supplemental Funding "Implementation Strategy" to facilitate interagency coordination between state and federal agencies.	LTR Committee	DESPP / Emergency Management & Homeland Security	Low	Hurricane Sandy Supplemental Funding	6 months	X				X						High
21	2.1	Develop implementation strategy for Public Act 13-15, which requires consideration of the ways in which a water pollution control project mitigates the effects of sea level rise. The Act also requires that the list of priority water quality projects include the necessity and feasibility of implementing measures designed to mitigate the impact of a rise in sea level over the projected life span of such project.	DEEP / Planning and Standards Division / Municipal Water Pollution Control Section	DEEP / Office of Long Island Sound Programs	Staff Time	CT Clean Water Fund	1-2 years	X				X					X	High
22	2.1	Develop project category priorities for hazard mitigation funding administered by the State regardless of funding source, and then design consistent evaluation criteria to be used during application reviews for various programs as required (i.e., HMGP Administrative Plan), recognizing there will be differences in program eligibility, etc.	DESPP / Emergency Management & Homeland Security	DAS / Division of Construction Services	Staff time	Agency Operating Budgets	Annually and post-disaster, whichever is more frequent	X	X	X	X	X	X	X	X	X	X	High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed									Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake		Climate Change
23	2.1	Through communications with other state agencies and communities with FEMA-approved Natural Hazard Mitigation Plans, develop a list of potential mitigation projects that can be maintained and assessed for further development upon availability of funding sources. This will also help assist in future NHMP planning by identifying when areas and facilities of concern exist.	DESPP / Emergency Management & Homeland Security	DAS / Division of Construction Services	Staff time	Agency Operating Budgets	Annually and post-disaster, whichever is more frequent, and routinely during plan reviews	X	X	X	X	X	X	X	X	X	X	Medium
24	2.1	Investigate the opportunity for FEMA to re-calculate the Cost/Benefit Analysis used in grant applications such that relocation of homes outside of floodplains is more frequently feasible in the context of hazard mitigation projects.	DEEP / Inland Water Resources	DESPP / Emergency Management & Homeland Security, in coordination with FEMA	Staff time	Agency Operating Budgets	1-2 years	X	X	X	X	X	X	X	X	X	X	Medium
25	2.2	Acquire and install emergency backup generators at state-owned critical facilities.	DAS / Division of Construction Services	DESPP / Emergency Management & Homeland Security; in coordination with FEMA	<\$75k/generator	FEMA (HMGP)	5 years	X	X	X	X	X	X	X	X	X	X	High
26	2.2	Conduct phragmites control/invasive plant control (herbicide and mowing) on state-owned land tidal and freshwater marshes to reduce fuel load and wildfire risk in tidal areas. Phragmites for three year period to control this invasive species. Reduce phragmites by 50% in year one; 40% in year two; 10% in year three with 100% reduction after three years.	DEEP / Bureau of Natural Resources	DAS / Division of Construction Services	\$600/acre  Total estimated cost is \$2.7 million over three years	Annual Operating Budgets	3 years							X				High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		
27	2.3	Continue to provide communities with tools to support improved local vulnerability and risk assessments to support hazard mitigation planning and the development of fundable hazard mitigation projects including RL and SRL acquisitions. Build on successful delivery of online Adaptation Resource Toolkit (ART) and related training workshops.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources / Flood Management Section and Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1-3 years	X	X	X	X	X	X	X	X	X	X	X	High
28	2.3	Convene a forum of state agencies to coordinate assess and evaluate gaps in climatological data, to establish priorities, and to identify strategies to secure funding for necessary enhancements. This activity is linked to Activities #13 and #39.	DPH	DEEP / Inland Water Resources, Water Planning Council	Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X				X	High
29	2.3	Promote the capture and use of hydrologic monitoring data for improved Benefit-Cost Analysis (BCA) model population at the state and local level (e.g. high water marks, gage data, historical damages from all events, recurrence intervals, etc). Also, expand efforts to include similar data for other hazards, and include the quantification of environmental benefits (according to FEMA Mitigation Policy #FP-108-024-01) to increase Benefit to Cost Ratios for eligible projects.	DESPP / Emergency Management & Homeland Security		Staff Time	Agency Operating Budgets	Annually, or, as data becomes available and in conjunction with BCA reviews							X					High
30	2.3	Encourage owners/operators of critical facilities, such as municipal water pollution control facilities (WPCFs), to pursue grant funds to elevate, relocate, floodproof, or otherwise protect electrical and mechanical systems to minimize or eliminate service disruption during and after potential hazard events.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	Conduct outreach on an annual basis, and incorporate into all notifications of funding availability	X			X	X						X	Medium
31	2.4	Create a central repository and web-based portal dedicated to identifying and procuring funding from all available sources. This activity is linked to Activity #33.	Governor's Office	LTR Committee	Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X	X	X	X	X	High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change				
32	2.4	Upon completion of DOT's systems-level vulnerability assessment in support of the Climate Change and Extreme Weather pilot project, allocate funds for increasing capacities of selected culverts in state roads. This activity is linked to Activity #44.	DOT		High	Agency Operating Budgets, FHWA	5 years				X			X						X	Medium to High
33	2.4	Through working with the State NHMP Planning Team, develop a list of potential funding sources available on a state and federal level for natural hazards mitigation planning activities and projects with emphasis on RL and SRL properties. This activity is linked to Activity #31.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources / Flood Management Section and Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X	X	X	X	X	X	X	Medium
34	2.4	Encourage communities and state agencies to pursue funding opportunities to develop advanced research and plans in the area of natural hazards mitigation. Planning activities included under this section would be: stand alone plans which can assist in enhancing existing Natural Hazards Mitigation Plans (e.g., debris management plans, evacuation and sheltering plans, hazards studies and evaluations (including recommendations) which are not part of existing approved plans).	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1-3 years, in sync with review or EM and MT plans, and during CAVs, workshops and other outreach activities	X	X	X	X	X	X	X	X	X	X	X	X	X	Medium to High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change	
35	2.4	Develop a State Climate Change Science plan to measure the rate of climate change including sea level rise, evapotranspiration increase, etc. as being tracked through OLISP's sentinel monitoring program, to support climate change adaptation planning and transportation Natural Hazards Mitigation Planning activities and research. Specific tasks include (1) consolidating climatological and ecological data which could be done by OLISP/WPC/USGS/UCONN; and 2) secure and leverage funding for enhanced Sentinel Monitoring for Climate Change program and development of a State Climate Science Plan which should be DEEP and UCONN. This activity is linked with Activity #45.	DEEP / Office of Long Island Sound Programs	Water Planning Council; USGS; University of Connecticut; DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	3 years	X	X	X	X	X	X	X	X	X	X	High
36	2.4	Encourage communities to pursue funding opportunities to develop FEMA approved Natural Hazards Mitigation Plans which promote addressing RL and SRL properties as well as the integration of climate adaptation strategies with conventional hazard mitigation techniques.	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management & Homeland Security; DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1-5 years as plan updates are completed and reviewed	X	X	X	X	X	X	X	X	X	X	High
37	2.5	Maintain a tracking system of submitted FEMA grant project/planning applications, to help analyze the types of projects and the mitigation needs that continue to exist within the State.	DESPP / Emergency Management & Homeland Security		\$60-80k	FEMA (HMGP)	1-2 years	X	X	X	X	X	X	X	X	X	X	Medium
38	2.5	Develop an evaluation process and implement said process to measure the results from the implementation of various activities as listed in the State NHMP.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X	X	X	X	Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed									Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake		Climate Change	
39	3.1	Pursue Federal funding to establish additional stream gauges for flood and drought planning purposes. This activity is linked to Activity #28.	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management & Homeland Security	Staff time	Agency Operating Budgets	1 year						X			X			Medium to High
40	3.1	Continue planning and development of a database to assist with the storage and maintenance of risk and hazard information from local and multi-jurisdictional hazard mitigation plans.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	1-5 years, with annual assessment during plan monitoring	X	X	X	X	X	X	X	X	X	X	X	Medium
41	3.1	Encourage municipalities to conduct watershed-based hydrologic and hydraulic studies to evaluate potential flood mitigation alternatives along river and stream corridors.	DEEP / Inland Water Resources / Flood Management Section		Staff time	State Bond Funds or other sources – although funding for implementation will have to be sought	1-5 years						X						Medium
42	3.1	Investigate actions of other states with regards to the develop of an interactive webpage or other medium for collecting flood information from the general public or other entities which would include photos and other types of information which would be a valuable asset in documenting impacts from natural hazards. This information can be utilized to support reporting damages to FEMA in a more efficient time frame, in combination with other available sources including but not limited to the StormSmart CHAMP and Connecticut StormReporter websites.	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management & Homeland Security; DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1 year	X	X	X	X	X	X	X	X	X	X	X	Medium to High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		
43	3.1	Develop Connecticut StormReporter Stakeholder Network to facilitate the rapid capture, delivery, and documentation of post-storm impacts to coastal areas by local teams and citizens in the field.	DEEP / Office of Long Island Sound Programs	DEEP / Inland Water Resources / Flood Management Section; DESPP / Emergency Management & Homeland Security	Staff time	Agency Operating Budgets	2 years	X			X	X						X	Medium
44	3.1	Upon completion of DOT's systems-level vulnerability assessment in support of the Climate Change and Extreme Weather pilot project in Litchfield County, repeat the process in the remainder of the state. This activity is linked to Activity #32.	DOT		High	FHWA	5 years			X		X						X	Medium to High
45	3.1	Increase hydrologic monitoring in the state relative to precipitation, surface groundwater, and tidal gauges to enhance the statewide data collection effort and improve long term trend analysis for climate change assessments, predictive modeling and hazard mitigation. This activity is linked with Activity #35.	DEEP / Inland Water Resources and Office of Long Island Sound Programs		High	Legislative Appropriation	5 years					X			X			X	Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change			
46	3.1	Develop updated/improved storm surge hazard modeling to supplement sea level rise inundation scenarios.	USACE	DESPP / Emergency Management & Homeland Security; DEEP / Inland Water Resources / Flood Management Section and Office of Long Island Sound Programs; University of Connecticut	Staff time	Agency Operating Budgets	3 years	X			X									Medium
47	3.1	Use shoreline transect data to map coastal erosion zones and develop applicable outreach products.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	3 years					X							X	Medium
48	3.1	Continue to identify head-of-tide habitat within Connecticut and monitor the change in this habitat due to climate change through sentinel monitoring in order to determine those communities that may endure increased risk from coastal storms and associated flooding. OLISP is currently funding multiple monitoring and data synthesis projects in support of this activity.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	1-2 years					X							X	Medium
49	3.1	Identify and map the locations of headwater, main stem and coastal dams, culverts, bridges, and other structures or land modifications that contribute to flood damage and act as barriers to habitat connectivity, and assess the feasibility of removal or modification of these structures. This activity is linked to Activity #55.	DEEP / Office of Long Island Sound Programs	DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	3 years					X								Medium
50	3.1	Evaluate the hazard potential in Connecticut of land subsidence or slope failures.	DEEP / Geological Survey		Staff time	Agency Operating Budgets	1-2 years													Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed									Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake		Climate Change	
51	3.1	Create a database of survey elevation points in coastal areas.	DOT		Medium	Agency Operating Budgets	3 years	X					X					X	Medium to High
52	3.2	Create a literature review of various FEMA publications to be placed on CT DEEP's flood management webpage. Include a short description of the publication and a direct link for convenient downloading of the document, or a note to contact CT DEEP's Flood Management Section to obtain a copy.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	3-5 years						X					X	Medium to High
53	3.2	Encourage dissemination and outreach of updated regional IPCC model scenarios, coupled with Northeast Regional Climate Center data and best emerging science, to communities and educators, and to inform all planning processes and statewide education.	DEEP / Office of Long Island Sound Programs	CT Climate Education/Communication Committee	Staff time	Agency Operating Budgets	2-4 years											X	High
54	3.2	Finalize StormSmart Coasts CT site and perform outreach to encourage use by local communities and others to reduce risk.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	2 years	X			X	X						X	High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed								Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought		Earthquake	Climate Change
55	3.3	Perform a feasibility analysis of the development and expansion of an inventory of infrastructure (including, but not limited to, key transportation, energy, water supply, wastewater and storm water conveyance and treatment structures, dams and levees) at risk from the effects of climate change and prioritize them based on a formalized list of criteria (TBD). In addition, investigate the feasibility of mapping the exact location and elevation of all coastal sewer outflows and coastal flood control structures and including this information in the inventory. Useful data that may be collected for this inventory project includes the exact location of the structure; elevation; structure condition and year built; and value of infrastructure vulnerable to coastal and riverine flooding hazards exacerbated by climate change. This effort should be coordinated with ongoing efforts by CT DOT and the EPA's Climate Ready Water Utilities (CRWU) programs being implemented by the water infrastructure sector. This activity is linked to Activity #49.	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs; DAS / Division of Construction Services	Staff time	Agency Operating Budgets	1-3 years											Medium to High
56	3.3	Perform an assessment of increased natural hazard vulnerability and risk from climate change (e.g., effects from increased flooding, sea level rise, and severe weather (e.g., wind, temperature, drought)). Assessment should be based on local risk and vulnerability assessments already prepared by local communities in coordination with DEEP.	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	2-5 years			X	X	X	X	X	X		X	Medium
57	3.3	In coordination with local communities, recommend categorical (e.g., wastewater, energy) and site-specific options for adaptation from the projected impacts of climate change and occurrence of natural hazards for public infrastructure (including flood protection structures). Adaptation and hazard mitigation alternatives should include the estimated costs associated with the options evaluated to be the most viable for implementation purposes.	DEEP / Office of Long Island Sound Programs	DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	2-5 years						X		X		X	Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed								Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought		Earthquake	Climate Change
58	3.3	Research and identify the legal authorities applicable to regulation and planning for climate change adaptation activities, especially at the local level. Identify opportunities to build on the success of Public Act 12-101, which combined a number of initiatives to address sea level rise and to revise the regulatory procedures applicable to shoreline protection (more fully described in Section 3.2.1.3).	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1-2 years						X			X		Medium
59	3.3	Encourage education and community participation in adaptation, low impact development, and flood management through existing networks and partnerships including the CT Climate Education Communication Committee. This includes coordinating OLISP's coastal community adaptation and risk mitigation work with educational place based student experiences through CT Green Leaf in K-12 to increase participation and maximize local solutions.	DEEP / Office of Long Island Sound Programs	CT Green LEAF	Staff time	Agency Operating Budgets	1-3 years	X			X	X					X	Medium
60	3.4	Develop and deliver Micro-grid Pilot Program Trainings.	DEEP / Bureau of Energy and Technology		\$25,000	Microgrid Grant and Loan Pilot Program; participating electric utilities	2 years	X	X	X	X							High
61	3.4	Coordinate with water utilities to more actively promote water conservation measures with their customers, especially now that new legislation allows them to recover revenue while encouraging conservation.	DPH / Drinking Water Section	Water Planning Council	Staff time	Agency Operating Budgets	Annually, but particularly during drought conditions or other water emergencies									X		Medium



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed								Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought		Earthquake	Climate Change
62	1.1 1.4 2.1 2.2 2.3 3.3	<p><b>Local School Construction Grant Program and School Safety Infrastructure Council:</b></p> <ul style="list-style-type: none"> <li>Identify and assess existing public school facilities that could be impacted by natural hazards (including climate change). Correlate identified schools with the School Building Project Priority Lists; identify mitigation strategies for these projects early on in the grant process.</li> <li>For new grants involving siting a new school, provide and encourage the use of an interactive web based mapping portal for local school districts to use during site selection. Encourage early coordination with DAS Environmental Planning and GIS Services Unit.</li> <li>Should facilities be located within natural hazard areas, request an assessment of “no feasible or prudent alternative;” encourage higher design standards above minimum criteria for new schools or “renovated as new.”</li> <li>Identify long-term climate change adaptation strategies for each structure/facility.</li> </ul>	DAS / Office of School Facilities	DESPP / Emergency Management & Homeland Security; DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	1-5 years		X		X	X	X				X	High
63	1.1 1.4 2.1 2.2 2.3 3.3	<p><b>Sustainable State Facilities Initiative:</b></p> <ul style="list-style-type: none"> <li>Identify, develop, and prioritize a plan for state facilities' potentially impacted by natural hazards (including climate change)</li> <li>Assess the risks in relation to the physical structures, the agency's long-term capital planning plans, building life span, etc.</li> <li>Develop specific mitigation strategies for each structure/facility as part of the plan utilizing existing hazard data, identify timeframe for implementing the strategies, and include estimated mitigation costs.</li> <li>Identify long-term climate change adaptation strategies for each structure/facility.</li> </ul>	DAS / Environmental Planning & GIS Services Unit		Staff time	Agency Operating Budgets	1-5 years		X		X	X	X				X	High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change	
64	1.1 1.2 1.3 1.4 2.3 2.4 3.1 3.2 3.3 3.4	Establish a Connecticut "Center for Coasts" that will conduct research, analysis, design, outreach and education projects to guide the development and implementation of technologies, methods and policies that increase the protection of ecosystems, coastal properties and other lands and attributes of the state that are subject to the effects of rising sea levels and natural hazards. More information on the specific activities proposed for the Center to undertake is provided in Chapter 3.	DEEP / Office of Planning and Program Development and Office of Long Island Sound Programs	University of Connecticut	High	DEEP and UConn will be looking to collaborate with NOAA and will continue to look for other sources.	Deliver a workplan to the General Assembly by early 2014, 1-year	X	X	X	X	X	X				X	High
65	1.1 1.3 1.4 2.2 2.3 3.1 3.3 3.4	Adopt a seismic station currently being installed in CT as part of EarthScope, a nationally funded research program, in order to continue seismic monitoring operations in the Moodus area of East Haddam, beyond the initial two year period. This will enable continuous seismic monitoring with special emphasis on these frequent events. Once adopted, the station will become part of the New England Seismic Network, under a maintenance and technical assistance agreement with Weston Observatory of Boston College.	DEEP / Geological Survey	Weston Observatory, Boston College, Office of Emergency Management ; State Academic Institutions; New England State Geologists	\$30-40K/station estimated purchase price; \$5K-8K/yr annual maintenance	Coalition of State Agencies	Seismic monitoring beginning 2013 for 2 years. Adoption of the Instrumentation available in 2015. Multi-year maintenance agreement recommended										X	High
66	1.1 1.3 1.4 2.2 2.3 3.1 3.3	Conduct geophysical research to investigate, classify, and map soil stability and susceptibility to liquefaction during seismic events to assist with future hazard mitigation planning efforts.	DEEP / Geological Survey	USGS	\$~50K/yr for 3 years	FEMA (NEHRP)	3 years from support received, with annual progress reporting						X			X	X	High



Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed									Priority Level		
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake		Climate Change	
67	1.3 1.4 2.2 2.3 3.1 3.2 3.3	Improve identification of escarpments susceptible to landslide and fluvial erosion risk, utilizing geologic, soils, and elevation data. This activity will provide improved landslide and mass wasting risk estimates, to produce a more comprehensive view of landscape stability during extreme weather events and subsequent impacts.	DEEP	USDA / Natural Resources Conservation Service	\$40-50K Estimated cost dependent on project scope and involvement of cooperative partners	USDA, FEMA	2 years from support received, with annual progress reporting						X			X	X	X	Medium
68	1.1 1.3 1.4 2.2 2.3 3.1 3.3	Identify and map extent of historic underground mining operations in the State; assess reclamation and current land use relative to risk of land subsidence and mine collapse for the estimated 23 historic underground mining operations in Connecticut. Project deliverables will include georeferenced site maps and assessment reports, as well as a summary of current conditions and potential ground collapse hazards in these areas.	DEEP / Geological Survey	Office of the State Archeologist; State Historic Preservation	\$40k	Agency Operating Budgets	12-18 months, contingent on funding and resource availability						X			X	X	X	Medium

**\*Estimated Cost:**

Low: Dependent on funding and project scope but <\$50,000

Medium: Dependent on funding and project scope with range \$50,000 - \$250,000

High: Dependent on funding and project scope with range >\$500,000



## 5.8 Progress in Hazard Mitigation Activities from 2010–2013

Table 5-2 provides a summary of the progress and current status of those hazard mitigation activities included in the previous (2010) plan. This includes activities which have been carried over for implementation in 2014-2016, as noted in the table under “Current Status.” A list of other past activities pursued for natural hazard mitigation by the State and local communities can be found in Appendix 5-4.

Table 5-2 includes the following information for each hazard mitigation activity:

1. **Activity #:** Identifies the unique number for the activity, with the first two digits correlating to the specific Goal and Strategy the activity was intended to help achieve from the 2010 plan.
2. **Activity Description:** Provides a narrative description of the mitigation activity from the 2010 plan.
3. **Lead Agency:** Identifies the lead department assigned with primary responsibility for implementation of the activity.
4. **Current Status:** Describes the current implementation status of the activity, including whether the action was completed, completed/to be continued, partially completed/in progress, deferred, deleted, or deemed an ongoing/continuous activity.
5. **Current Status Description:** Provides a narrative description of the implementation status in 2013.
6. **Priority Level:** Identifies the priority level (i.e., high, medium, low) assigned to the activity, based on the STAPLE-E evaluation and prioritization process completed for the 2010 plan.
7. **Carry Over?:** Identifies whether the activity is to be carried over from the 2010 plan to the 2014 plan.
8. **2014 Activity #:** For those activities to be carried over and/or integrated with an activity for implementation in 2014-2016, identifies the Activity # as listed within Table 5-1.
9. It is important to note that some previous activities, while they may be continued, have been moved to Chapter 3 (Capabilities Assessment) because they are more appropriately considered ongoing program activities. These activities have been highlighted with light gray shading. Any previous activities which have been deleted since the 2010 plan are highlighted in dark gray shading.



Table 5-2. Progress in Hazard Mitigation Activities, 2010–2014

2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
1.1.1	Provide model ordinances and sample higher standards language that communities can adopt into existing floodplain ordinances.	DEEP	Completed / To Be Continued	Target met. State will continue to perform activity on an as-needed basis as part of existing program work plans. Activity will be evaluated within the next five years or if FEMA NFIP requirements change, whichever occurs sooner. Communities are currently being encouraged to review and utilize to the extent possible the language and aspects of the State's model floodplain ordinance.	High	Yes	1
1.1.2	Provide local ordinance reviews for communities to provide communities an indication as to where existing ordinances requirement updates/enhancements to current standards.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Target met - completed in 2013. Activity will continue to be performed on an as-needed basis as part of existing program work plans, and as deemed necessary for communities that have their FIRMS updated and revised under RISK Map.	High	No	N/A
1.1.3	Perform community assistance visits (CAVs) each year to maximize efforts to provide technical guidance and educational materials to communities. This activity is important to promote compliance with FEMA's NFIP floodplain management minimum standards and those additional requirements as stated in local ordinances.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Target met on an annual basis as part of existing program work plans. A list of CAVs and CACs the State plans to perform is included in its CAP-SSSE work plan and reviewed by FEMA.	High	No	N/A
1.1.4	Investigate the feasibility of providing an introduction floodplain management workshop to interested State employees of various state agencies affected by floodplain management policies.	DEEP	Deleted	Redundant with Activity 1.2.1. (Target met - see Activity 1.2.1)	High	No	N/A
1.1.5	Investigate the feasibility of participating at local events such as home shows, fairs, etc. to provide information to the public regarding the NFIP and impacts from flooding and other natural hazards, and ways individuals can help mitigate effects from these hazards. Investigate the feasibility of developing and packaging educational materials for such events.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Target met. Activity completed to date as needed, and such actions were performed post-Irene and post-Sandy by DEEP and DESPP personnel, along with FEMA Joint Field Office staff. Activity will be evaluated annually for possible incorporation into existing DEEP and DESPP program work plans, and the need to perform this activity will continue to be evaluated after hazard events.	High	No	N/A



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
1.1.6	Providing technical assistance to other state agencies, local communities and the public regarding natural hazard mitigation.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Target met on an annual basis as part of existing program work plans. Three Hazard Mitigation courses with relevance to floodplain management were presented through the Sandy Joint Field Office (JFO), which were available to various state agency personnel. These courses included training on: Benefit-Cost Analysis training, Project Identification and Development, and Hazard Mitigation Planning. In addition, CT DESPP and DEEP staff have participated on panels for various climate resiliency and hazard mitigation workshops held within the state.	High	No	N/A
1.1.7	Perform a comparison and evaluation of current state building code standards and other Federal Agencies' building code standards (e.g., USACE) that could be improved to mitigate future natural hazards for flood hazard and high hazard areas.	Bldg. Insp. Office	Completed	Technical Reviews completed in 2013; adoptions anticipated in 2015.	High	Yes	N/A
1.2.1	Develop a series of workshops to take place over the next 3-year period that will include floodplain management 101 (presentation of FEMA floodplain management requirements and the NFIP), overview of elevation certificates, coastal construction standards, effective flood and other natural hazards mitigation measures, floodplain resource protection, and the use of the new FEMA digital FIRMS.	DEEP/FEMA	Completed / To Be Continued. Moved to Chapter 3.	Target met. This is an ongoing activity, with typically 1-2 workshops held per year focused on floodplain management activities. In addition, DEEP's training program for municipal inland wetlands commissioners and staff includes floodplain management activities as all floodplain soils are wetlands in CT. This program includes approximately 16 seminars per year. Educational workshops are developed and presented on an on-going basis for several natural hazard mitigation topics, especially with regard to floodplain management issues. Three Hazard Mitigation courses with relevance to floodplain management were presented through the Sandy Joint Field Office (JFO), which were available to various State agency personnel. These courses included training on: Benefit-Cost Analysis training, Project Identification and Development, and Hazard Mitigation Planning.	High	No	N/A
1.2.2	Act as a clearinghouse for FEMA produced educational materials in the area of natural hazards mitigation including	DEEP	Completed / To Be Continued.	Target met. This is an ongoing activity as part of existing program work plans for	High	No	N/A



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
	flood management and planning; as well as climate change and adaptation approaches.		Moved to Chapter 3.	Flood Management staff and OLISP Climate Change staff, with typically 80 information requests received and processed per month. The State will evaluate the performance of this activity on an annual basis. It is proposed that a tracking system for requests and materials be instituted.			
1.2.3	Investigate the modification and update of the CT DEEP's flood management web pages to expand information and educational materials available to the general public.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	High	No	N/A
1.3.1	Using IPCC climate change data sets, model floodplain changes associated with potential sea level rise.	DEEP / OLISP	Partially Completed / In Progress	80% complete. UCONN (Anji Seth) is almost done with regional IPCC projections. National Climate Assessment was redone and almost finalized, and Northeast Climate Center is formalized with projections. The State is using best emerging science, not just IPCC.	Medium	Yes	45
1.3.2	Based on sea level rise modeling, develop policies to reduce risks for new development, including consideration towards relocating structures or reducing existing hazards within inundation areas with increasing risk. Policies should also address appropriate use of federal and state mitigation monies.	DEEP / OLISP	Partially Completed / In Progress	30% complete. Public Act 12-201 was passed in 2012, which includes a number of initiatives to address sea level rise and to revise the regulatory procedures applicable to shoreline protection. General Assembly is continuing to work on better guidelines this legislative session. With NY & NE extreme precipitation information available, OLISP is not relying on future information to act, and already planning for more intense storms.	Medium	Yes	16



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
1.3.3	Utilize meetings with other state agencies, including pre-permitting conferences, as opportunities to encourage responsible floodplain management and floodplain development activities, and natural hazards mitigation potential in proposed projects.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Target met. This is an ongoing activity as part of existing program work plans, with an estimated two meetings attended per month. Strong working relationships have been developed between the Flood Management program and other Inland Water Resource Division sections/programs, and will continue to be pursued with other internal agency divisions and between DEEP and other State agencies. OLISP is now linking efforts with climate change initiatives. There has also been a concerted effort by DEEP's Flood Management Section and OLISP to coordinate education and outreach efforts where possible for climate change and community resiliency and hazard mitigation. The State will evaluate the performance of this activity on an annual basis.	High	No	N/A
1.3.4	Research existing inventory of state-owned facilities located in SFHAs or other natural hazard impact areas for risk analysis use.	DEEP/DEMHS	Deleted	This activity was significantly modified during the 2013 plan update process and is addressed under 2013 Activity #63.	Medium to High	Yes	N/A
1.3.5	Perform a feasibility analysis of the development and expansion of an inventory of infrastructure (including, but not limited to, key transportation, energy, water supply, wastewater and storm water conveyance and treatment structures, dams and levees) at risk from the effects of climate change and prioritize them based on a formalized list of criteria (TBD). In addition, investigate the feasibility of mapping the exact location and elevation of all coastal sewer outflows and coastal flood control structures and including this information in the inventory. Useful data that may be collected for this inventory project includes the exact location of the structure; elevation; structure condition and year built; and value of infrastructure vulnerable to coastal and riverine flooding hazards exacerbated by climate change.	DEEP	Deferred	Implementation of activity is dependent on available resources and funding. DEEP's Dam Safety Section had already performed an inspection and inventory project that included all State-owned dams (with the exception of CT DOT owned dams). In addition to this work, a GIS layer was developed that shows the location of all dams within Connecticut (both State-owned and privately-owned dams for all dam hazard classifications). The State will evaluate the performance of this activity within the next five years. Individual owners and operators of some utilities are engaged in similar efforts of their own.	Medium to High	Yes	55



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
1.3.6	Perform an assessment of increased natural hazard vulnerability and risk from climate change (e.g., effects from increased flooding, sea level rise, and severe weather (e.g., wind, temperature, drought)).	DEEP	Deferred	Implementation of activity is dependent on available resources and funding. DEEP has provided technical support to those communities who wish to perform this analysis and has been continually encouraging communities to perform such an analysis and to incorporate said analysis into their local hazard mitigation plans. OLISP has also supported local communities to perform such assessments. Other previous activities associated with this activity include sentinel monitoring of climate change in Long Island Sound as well as the performance of a Groton Climate Change Workshop Series that engages federal, state and local government and nongovernmental stakeholders to identify vulnerabilities to sea level rise and increased flooding and other coastal hazards and the development of adaptation strategies that will increase resiliency with regards to these hazards.	Medium	Yes	56
1.3.7	Development of categorical (e.g., wastewater, energy) and site-specific options for adaptation from the projected impacts of climate change and occurrence of natural hazards for public infrastructure (including flood protection structures). Adaptation and hazard mitigation alternatives should include the estimated costs associated with the options evaluated to be the most viable for implementation purposes.	DEEP	Partially Completed / In Progress	25% complete, based on activities being supported by DEEP and OLISP at the community level. Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity within the next five years.	Medium	Yes	57
1.3.8	Identification of the legal authorities applicable to regulation and planning for climate change adaptation activities, especially at the local level.	DEEP	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity within the next five years.	Medium	Yes	58
2.1.1	Utilize meetings with other state agencies, including pre-permitting conferences, as opportunities to encourage responsible floodplain management and floodplain development activities, and natural hazards mitigation potential in proposed projects.	DEEP	Deleted	Redundant with Activity 1.3.3. (Target met - see Activity 1.3.3)	High	No	N/A
2.1.2	Act as a clearinghouse for FEMA produced educational materials in the area of natural hazards mitigation including flood management and planning; as well as climate change and adaptation approaches.	DEEP	Deleted	Redundant with Activity 1.2.2. (Target met - see Activity 1.2.2)	High	No	N/A



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
2.1.3	Encouraging communities and state agencies to pursue funding opportunities to develop advanced research and plans in the area of natural hazards mitigation. Planning activities included under this section would be: stand alone plans which can assist in enhancing existing Natural Hazards Mitigation Plans (e.g., debris management plans, evacuation and sheltering plans, hazards studies and evaluations (including recommendations) which are not part of existing approved plans); Development of a State Climate Change Science plan to measure the rate of climate change including sea level rise, evapotranspiration increase, etc.; Climate Change adaptation planning; Transportation Natural Hazards Mitigation Planning activities and research;	DEEP	Completed / To Be Continued	Target met. Notification of FEMA grant opportunities is performed annually and all communities are encouraged to pursue natural hazard mitigation activities, whether it be planning activities and the development of a new or updated local hazard mitigation plan, or the implementation of hazard mitigation activities as indicated in an existing local hazard mitigation plan.	Medium to High	Yes	34
2.1.4	Encouraging communities to pursue funding opportunities to develop FEMA approved Natural Hazards Mitigation Plans.	DEEP	Completed / To Be Continued	As of the update of this plan, all CT communities will be involved in the development of hazard mitigation plans either in single or multi-jurisdictional forms. Currently at least 90% of communities are in the planning process for either development of a new hazard mitigation plan or updating an existing hazard mitigation plan. OLISP has supported communities to include climate change risk and adaptation in their plans.	High	Yes	36
2.1.5	Develop an evaluation process and implement said process to measure the results from the implementation of various activities as listed in the State NHMP.	DEEP	Deferred	At least the beginnings of this need to be developed for this plan update.	Medium	Yes	38
2.1.6	Work toward the expansion of the current planning process to promote participation by more stakeholders in the area of natural hazard mitigation.	DEEP	Completed	Target met. Participation in the planning process by various stakeholders was performed for the 2013 plan update.	Medium	No	N/A
2.1.7	Continue planning and development of a database to assist with the storage and maintenance of risk and hazard information from local and multi-jurisdictional hazard mitigation plans.	DEEP	Partially Completed / In Progress	Initial efforts were implemented during the 2007-2010 planning period, however due to resource constraints, current work has been temporarily stopped. Any additional work on this activity will include a substantial outlay of resources.	Medium	Yes	40
2.1.8	Develop a formal local/multi-jurisdictional plan review process to be used by staff on the State level to increase the efficiency and effectiveness of draft plan reviews. This may include the development of a checklist of minimum data and information to be included in such a plan.	DEEP	Completed	Completed. Formal review process has been developed.	Medium to High	No	N/A



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
2.1.9	Investigate the feasibility of participating in the Army Corps/FEMA joint initiative called the Silver Jackets.	DEEP/DEMHS	Deleted	The State is now opting for a newly proposed action in 2013 that proposes the creation of a similar State-level program modeled after the USACE Silver Jackets program in support of Strategy 2.4 (see Activity #19 in Table 5-1).	Medium	No	N/A
2.1.10	Identify areas ( e.g., tidal wetlands, floodplains, retreat areas) of Connecticut's shoreline for conservation purposes to help local communities and the State to sustain these areas and reduce the net loss of these areas which are so important in acting as barriers or buffers and in providing protection from the impacts of natural hazards (e.g., coastal storms, hurricanes, flooding, etc.).	DEEP	Completed	This activity is essentially complete, based on past efforts linked to the State's coastal management laws. The State will evaluate the performance of this activity within the next five years.	Medium	Yes	N/A
2.1.11	Identify head-of-tide habitat within Connecticut and monitor the change in this habitat due to climate change in order to determine those communities that may endure increased risk from coastal storms and associated flooding.	DEEP	Partially Completed / In Progress	40% complete. The Long Island Sound Study (LISS) has launched a Sentinel Monitoring for Climate Change program to provide early warning of climate change impacts to Long Island Sound ecosystems, species and processes. OLISP is currently funding multiple monitoring and data synthesis projects, with new monitoring programs beginning in 2013. The State will evaluate the performance of this activity on an annual basis.	Medium	Yes	48
2.1.12	Identify and map the locations of headwater, main stem and coastal dams, culverts, bridges, and other structures or land modifications that contribute to flood damage and act as barriers to habitat connectivity, and assess the feasibility of removal or modification of these structures.	DEEP	Partially Completed / In Progress	Current activities include habitat restoration programs. Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	Medium	Yes	49
2.1.13	Evaluate the hazard potential in Connecticut of land subsidence or slope failures.	DEEP	Deferred	Implementation of activity is dependent on available resources and funding. Land subsidence and slope failures were not addressed in the 2013 plan update, but may be considered in future updates based on available data and need. Local hazard mitigation plans are addressing these hazards on a case-by-case basis. The State will evaluate the performance of this activity on an annual basis.	Medium	Yes	50
2.1.14	Create a database of survey elevation points in coastal areas.	DOT/DEEP	Partially Completed / In Progress	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity	Medium to High	Yes	51



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
				on an annual basis.			
2.1.15	Provide communities with tools to support improved local vulnerability and risk assessments.	DEEP	Partially Completed / In Progress	80% completed with OLISP online Adaptation Resource Toolkit (ART) and resource portal, in addition to multiple community workshops. The State will evaluate the performance of this activity on an annual basis.	High	Yes	27
2.2.1	Develop a body of presentations and short workshop educational materials that could be utilized on a scheduled basis.	DEEP	Partially Completed / In Progress	30-45% completed. Additional presentations need to be developed with particular areas of interest to be targeted. OLISP has developed a large body of educational materials and presentations with respect to climate change, climate resiliency, and in essence, hazard mitigation.	High	Yes	8
2.2.2	Investigate the possibility of holding the CFM exam on an annual basis for interested persons.	DEEP	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	High	Yes	9
2.2.3	Investigate the possibility of holding an annual short CFM refresher course for interested persons who desire to take the CFM exam.	DEEP/ FEMA	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	Medium to High	Yes	10
2.2.4	Encourage use of EMI's independent study courses which people can access at their computer free-of-charge from EMI.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Implementation of activity is dependent on available resources and funding. This is an activity which is normally done by promoting available courses through DEEP's Flood Management newsletter ( <i>The Torrent</i> ) which is published annually to semi-annually. The State will evaluate the performance of this activity on an annual basis.	High	No	N/A
2.2.5	Investigate the development of a series of training media products that introduce, explain, and train interested persons on natural hazards, mitigation, NFIP program, reading flood maps, federal-state grant programs and other related issues	DEEP/DEMHS	Partially Completed / In Progress	Three Hazard Mitigation courses were held through the Sandy Joint Field Office (JFO), including training on Benefit-Cost Analysis training, Project Identification and Development, and Hazard Mitigation Planning. OLISP is working with Sea Grant on upcoming workshops that project flood maps for events (such as Sandy) on the fly for community planning, to be held in 2013. The State will evaluate the performance of this activity on an annual basis.	High	Yes	12



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
3.1.1	Develop a tracking system of submitted FEMA grant project/planning applications, to help analyze the types of projects and the mitigation needs that continue to exist within the State.	DESPP	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	Medium	Yes	37
3.1.2	Through communications with other state agencies and communities with approved FEMA Natural Hazards Mitigation Plans, develop a list of potential mitigation projects that can be maintained and assessed for further development upon availability of funding sources. This will also help assist in future NHMP planning by identifying when areas and facilities of concern exist.	DESPP	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	Medium	Yes	23
3.1.3	Process technical assistance requests from communities and state agencies to FEMA for technical assistance in the area of project development.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	DEEP estimates one request per month received. When DEEP receives requests from local communities for technical assistance in the area of hazard mitigation project development, it automatically refers the request to Region 1 of FEMA for response and possible assistance to the community. The State will evaluate the performance of this activity on an annual basis to determine how best to improve upon this activity and make it more effective and efficient.	Medium to High	No	N/A
3.1.4	Develop educational materials on successful hazards mitigation projects.	DEMHS and DEEP	Completed / To Be Continued	DESPP and DEEP have published a series of publications and fact sheets that are made available in hard copy form and posted to their Internet websites. DEEP also provided information through its newsletter ( <i>The Torrent</i> ) twice per year. The State will evaluate the performance of this activity on an annual basis to determine how best to improve upon this activity and make it more effective and efficient.	Medium to High	Yes	11
3.1.5	Create a literature review of various FEMA publications to be placed on CT DEEP's flood management webpage. Include a short description of the publication and a direct link for convenient downloading of the document, or a note to contact CT DEEP's Flood Management Section to obtain a copy.	DEEP	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	Medium to High	Yes	52
3.1.6	Investigate the opportunity for FEMA to re-calculate the Cost/Benefit Analysis used in grant applications such that relocation of homes outside of floodplains is more frequently feasible in the context of hazard mitigation	FEMA/DEEP	Deferred	Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis.	Medium	Yes	24



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
	projects.						
3.2.1	Through working with the NHMP Planning Team develop a list of potential funding sources available on a state and federal level for natural hazards mitigation planning activities and projects.	DEEP	Partially Completed / In Progress	List of funding sources is being developed for this plan update.	Medium	Yes	33
3.2.2	Provide planning workshops through FEMA assistance to promote planning and enhanced planning activities that communities can utilize to develop comprehensive hazard mitigation plans.	DEEP/FEMA	Completed / To Be Continued. Moved to Chapter 3.	Three Hazard Mitigation courses were held through the Sandy Joint Field Office (JFO), including training on Benefit-Cost Analysis training, Project Identification and Development, and Hazard Mitigation Planning. In addition, CT DESPP and DEEP staff have participated on panels for various climate resiliency and hazard mitigation workshops held within the state.	High	No	N/A
3.2.3	Encourage state agencies to perform research and planning activities in the area of natural hazards mitigation for their facilities and operations.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	DEEP estimates a minimum of two interactions per month with other state agencies with regard to this activity. A continued conscious effort continues on the state-level to continually improve communication between state agencies with regards to hazard mitigation. The State will evaluate the performance of this activity on an annual basis to determine how best to improve upon this activity and make it more effective and efficient. DAS-DCS has also been working on this on a project-by-project basis over the years.	Medium	No	N/A
3.2.4	Develop educational materials on successful natural hazards mitigation activities.	DESPP	Deleted	Redundant with Activity 3.1.4  OLISP was review/technical lead for NE region grants from NOAA/GOMC to accelerate the pace of municipal response to changing climate. Developed section of storm smart coast website that educates people on these successful strategies and projects, as well as Sea Grant NART Low cost adaptation strategy report.	Medium to High	No	N/A
3.2.5	Investigate the feasibility and scope of developing an inventory of state-owned critical facilities from existing state-owned facility lists.	DEEP/DEMHS/OPM	Completed	Target met. List is secured information and part of a security database. DAS-DCS continues with the collection of data.	Medium	No	N/A



2010 Activity #	Activity Description	Lead Agency	Current Status	Current Status Description	Priority Level	Carry Over ?	2014 Activity #
3.2.6	Develop a communication process including webpage development and reminder notifications of potential grant opportunities to encourage continued project planning tasks by state agencies and communities to develop highly competitive and effective mitigation projects.	DEEP	Completed / To Be Continued. Moved to Chapter 3.	Done on an annual basis or when grant funding becomes available. Implementation of activity is dependent on available resources and funding. The State will evaluate the performance of this activity on an annual basis to determine how best to improve upon this activity and make it more effective and efficient.	Medium	No	N/A
3.2.7	Pursue Federal funding to establish additional stream gauges for flood and drought planning purposes.	DEEP/DEMHS	Deferred	Implementation of activity is dependent on available resources and funding. This activity has been carried over and merged into 2013 plan update in support of Strategy 2.3 (see Activity 2.3.1 in Table 5-1)	Medium to High	Yes	39
3.2.8	Pursue Federal funding to secure the public drinking water supply in Connecticut.	DPH	Deleted	This (activity) is deleted, as it has been determined to be too vague, and while DEEP has not received input from DPH, the State does regulate and plan for water supply security (sophisticated WARN network, climate ready water utilities, minimum stream flow regulations, comprehensive drought strategy, etc.).	Medium	No	N/A
3.2.9	Investigate actions of other states with regards to the develop of an interactive webpage or other medium for collecting flood information from the general public or other entities which would include photos and other types of information which would be a valuable asset in documenting impacts from natural hazards. This information can be utilized to support reporting damages to FEMA in a more efficient time frame.	DEEP	Partially Completed / In Progress	CT DEEP has utilized the state library and local historical societies for such documentation of past hurricane and storm events. In addition work has begun to investigate what neighboring state has been working on regarding this activity. OLISP has CHAMP, a Storm Smart coast website coming soon, and a Storm Reporter site where people can upload real time photos- what is needed now is someone to organize volunteers after the platform is changed to Google so people can identify exact location. The State will evaluate the performance of this activity on an annual basis to determine how best to improve upon this activity and make it more effective and efficient.	Medium to High	Yes	42



## 5.9 Current and Potential Funding for Mitigation Activities

As noted in Chapter 4.0, (page 304) many State agencies, programs and initiatives provide elements of State funding that result in mitigation; most is in the form of staff and technical resources. Appendix 5-3 provides a comprehensive list of current Federal funding sources.

While there is currently no established State funding source specifically identified for hazard mitigation projects, they are often funded by bonding, special legislation and special taxing, approved by the Governor, Office of Policy and Management and/or State Bond Commission. As noted in Table 5-1, many mitigation activities are funded by department operating budgets. With the exception of regulated utilities, private funds are not often used for mitigation projects at the statewide level. Connecticut DOT routinely funds drainage improvements as part of its bridge and highway programs. DEEP funds mitigation through its staffing of the Flood Management Certification and Dam Safety programs.

Local funding for mitigation projects typically comes from Capital Improvement Plans (CIPs), special taxing districts, State bond funds, or property owner supplied match of Federal grants or State funds.

Potential non-FEMA funding sources for the activities identified in Table 5-1 include: Agency Operating Budgets, Hurricane Sandy Supplemental Funding, CT Clean Water Fund, State Bond Funds, Legislative Appropriations, Microgrid Grant and Loan Pilot Program; participating electric utilities, Coalition of State Agencies, USDA and NOAA.

Potential State funding for mitigation by property owners is currently being examined in the form of a pilot loan program. More information on that program will be provided during the next update of this plan.



## 6 Plan Monitoring, Maintenance, Evaluation & Revision

### 6.1 Plan Monitoring Procedures

Connecticut's first formal Natural Hazard Mitigation Plan (Section 406 Plan) was adopted on August 17, 1983 as a result of a major flooding event and disaster declaration (FEMA-661-DP) that occurred on June 6, 1982. Several municipalities participated in the planning process.

Several major recommendations of the first plan included updating local and state emergency operations plans, establishing an automated flood warning system, expanding the Dam Safety Section of the DEP (now DEEP), setting new standards for road and bridge culvert design, and pursuing several legislative initiatives that enhanced Connecticut's ability to regulate its floodplains.

The 406 Plan was updated in a regular succession subsequent to the occurrence of a major natural disaster, including the following years:

- 1985 - in response to a flooding event that also resulted in a Federal disaster declaration;
- 1989 – in response to a powerful tornado that caused extensive damage and two deaths in western Connecticut;
- 1990 – regularly scheduled update;
- 1992 - as a result of Hurricane Bob (FEMA-916-DR-CT) that struck Connecticut and New England on August 19, 1991;
- 1993 - as a result of Winter Storm Beth (FEMA-972-DR-CT), which occurred on December 10 – 13, 1992;
- 1999 – in response to the impact from Tropical Storm Floyd, which caused severe riverine flooding within the state;
- 2004 – a regular scheduled update in response to FEMA's new planning requirements under the Disaster Mitigation Act of 2000, Section 322 requirements issued in 2001;
- 2007 – a regularly scheduled update; and
- 2010 – a regularly scheduled update.

Chapter 1 details the planning process employed for the 2014 update. The 2014 plan is consistent with the latest FEMA Hazard Mitigation Plan guidance and Crosswalk, including Flood Mitigation Assistance planning requirements in order to qualify Connecticut to pursue 90% federal funding for severe repetitive loss structure mitigation funded through the Severe Repetitive Loss and Flood Mitigation Assistance grant



programs. Another notable change in the 2014 plan is the use, for the first time, of state owned and critical facility data in the risk and vulnerability analysis.

When considering continuity of critical operations in the context of state services and facilities, the impacts of natural hazards can be similar or identical to the potential impact of a human-caused event. For example, in the aftermath of severe floods or winter storms, tens of thousands of residents can be without power, some for as long as two weeks. A human-caused event that causes failure of a power plant due to operation error or terrorism would have similar impacts to Connecticut's critical facilities. While the plan does not specifically consider human-caused hazards, many of the strategies and projects included in the plan also strongly support reduction of exposure to them.

The 2010 plan contained 52 mitigation actions. In some cases they were indeed actions or projects; in others the ideas represented objectives; many were ongoing activities that represent existing programs or capabilities. Of the 52 identified actions, 13 ongoing activities were moved to Chapter 3 – Capability Assessment, and two were deleted. Many were determined to be partially complete or in progress and some completed. Many of the 2010 actions remain viable, or are evolving. As such, they were carried over into this update, as outlined in Chapter 5.

One FEMA critique from the 2010 plan review was that the identified actions were primarily owned by two state agencies. As described in Chapter 1, the State Hazard Mitigation Planning Team was expanded significantly for this update and many new stakeholders/entities have taken ownership of new actions. Twenty-four new actions, strategies and projects were developed by the Team during June and July, 2013. Combined with the archival 2010 continued activities, these comprise the mitigation action dataset for the 2014 plan.

The 2014 *Connecticut State Natural Hazard Mitigation Plan Update* provides guidance for hazard mitigation within Connecticut. Its vision is supported by three goals, each with a supporting objective, multiple strategies and associated actions. The actions and projects that support the objectives and strategies were submitted by Connecticut state agencies and stakeholders along with federal agency cooperators and related Non-Governmental organizations. As described in Chapter 5 and its associated appendices, projects were prioritized through at the August 7, 2013 SHMPT meeting using STAPLE/E where appropriate.

The 2014 mitigation strategies were wholly informed by the improved Vulnerability Analysis and renewed priorities of the State, following a very active three years of disaster activity. The completely new Hazard Identification & Risk Assessment (HIRA) and Vulnerability Analysis include state and critical facility data and consideration of the risk and vulnerability data evaluation from all local hazard mitigation plans. The continued relevance of current goals, objectives, and strategies and projects will again be evaluated



during the development of the next plan revision. Departments and stakeholders will continue to integrate mitigation activities with their planning efforts.

### 6.1.1 Tracking Actions and Projects

A Mitigation Action Tracker spreadsheet was created for tracking implementation of all new and “carry over” mitigation actions. This tool will provide all participants involved in implementation a simple and easy to use tracking and reporting mechanism, as well as assist with maintaining organization as staff changes inevitably occur. Specific annual reporting and update targets have been established with firm due dates in the maintenance schedule which follows in Section 6.2.3. **There is a movement at the federal level to increase the length of the update cycle from three to five years. Due to the unknown timing of this change and specifics of how it will be implemented, this plan update was developed assuming a three year update cycle and will be adjusted following the codification of any future changes.**

The mitigation staff, or action leads, will maintain the Mitigation Actions Tracker spreadsheet (see Figure 6-1) that has been developed in accordance with this plan. Primary responsibility for this task will reside with the SHMO, within DEMHS. Actions will be tracked and updated twice per year as outlined in Table 6-1 Section 6.2.3.

Timeframe for Completion	Hazard(s) to be Addressed										STAPLE-E Priority Results	Point of Contact	Status (including milestone dates)
	Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change			
1-2 years					X						High	Jeff Bolton (860) 713-5706 jeffrey.bolton@ct.gov	
Conduct outreach on an annual basis, and incorporate into all notifications of funding availability	X		X	X						X			
5 years	X	X	X	X	X	X	X	X	X	X			
2 years				X	X								

Figure 6-1 – Screen shot of Mitigation Actions Tracker Spreadsheet



In addition tracking progress on mitigation actions, other major aspects of this task during the three year cycle following plan approval will include:

- Continued development of protocol for local data input
- Inclusion of local mitigation plan databases from local HIRAs, Capability Assessments and local priority mitigation strategies
- Expansion of state hazard historical data
- Refinement of state agency facility inventories and critical facilities data

These items will be addressed annually and data stored for easy access and use during subsequent updates.

## 6.2 Plan Maintenance

The SHMPPT was expanded and enhanced since 2010 to support development of the plan in consideration of the changes in disaster related activity throughout the state and capabilities as outlined in Chapter 3. While planning committees are generally limited to twenty participants or less, the State broadened the number of stakeholders to include all who participated by attending Team meetings, sponsored projects, provided information and reviewed the plan draft. State staff emphasized participation in the manner that was appropriate for each agency and organization.

To develop the 2014 plan mitigation strategies, a sub-group structure was used to encourage departments and other entities, not traditionally as engaged in implementation to develop actions for their specific organizations.

Standing, ad-hoc Mitigation Sub-Committees will be convened, surveyed or engaged periodically as necessary during the 2014–2016 plan implementation cycle. These sub-committees will be responsible for:

- Mitigation of Structures
- Planning, Policy, Legislation and Funding
- Education and Outreach
- Risk Assessment and Data

The Connecticut DESPP, Division of Emergency Management and Homeland Security mitigation program staff, in consultation with key state agencies, federal partners and organizations will direct implementation of the plan. DESPP/DEMHS serves as the lead coordinating agency for emergency management in Connecticut, and thus will lead the mitigation planning effort, including plan maintenance. The DEMHS will track projects identified in both the State Hazard Mitigation plan (using the Mitigation Tracker spreadsheet) and in local plans.



The planning process timeline will be revised continually during the next three years to ensure that the 2016 plan revision can be prepared and submitted to FEMA within the required three-year time period. Special attention will continue to be focused on ensuring that businesses and special interest groups are included and have an input into the plan revision. State or federal legislative, regulatory or rule changes or additions that occur during the period following approval of the 2014 plan will be integrated into the 2016 update.

Should a specific plan element or section require revision or amendment prior to the subsequent plan revision due to state or federal legislation or policy change, DESPP/DEMHS staff will meet with all appropriate stakeholders and propose the change or addendum to FEMA as quickly as is practicable.

### **6.2.1 Reporting**

The sponsors of projects and actions funded through the FEMA Hazard Mitigation Assistance Program provide quarterly progress reporting to DESPP throughout the duration of the project. DESPP consolidates these reports into a quarterly summary that is provided to FEMA. Projects that support specific aspects of the Mitigation Plan will be tracked on the Mitigation Action Tracker spreadsheet so that specific FEMA-funded initiatives are tracked to achievement of Mitigation Plan Strategies. A copy of the Mitigation Action Tracker and brief narrative summary of progress will be provided annually to FEMA Region I.

### **6.2.2 Coordination of Mitigation Operations and related Initiatives**

The Connecticut Interagency Hazard Mitigation Committee (CIHMC) was formed in the 1990s with a primary focus on reviewing mitigation grant applications and providing feedback to the State Hazard Mitigation Officer and staff on policy and planning issues. Throughout the first decade of the 2000s, the CIHMC's role weakened some. Many of its members were involved in 2007 and 2010 plan updates, in a more passive role as reviewers or stakeholders. Participation of most member departments and stakeholders was increased significantly in this 2014 plan update and more active "buy-in" was encouraged. Since the 2010 plan update, with the winter snow disasters, Hurricane Irene and Super Storm Sandy, many new groups have been formed in Connecticut with varying missions (See Chapter 3). Notably, the following groups are currently active:

- The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change (formed in 2008);
- The Shoreline Preservation Task Force (formed in 2012);
- The State's Long-Term Recovery Committee (formed in 2012); and
- The State Vegetation Management Task Force (formed in 2012).

Coordination and information sharing between these groups will be part of Plan maintenance and implementation during this cycle. The CIHMC will be re-established and



membership expanded to include these and other relevant groups. The CIHMC will meet quarterly to share information and to review implementation of the mitigation actions identified in this plan.

### 6.2.3 Schedule for Plan Maintenance, Implementation and Revision

The monitoring, maintenance and implementation approach outlined above will be conducted in accordance with the schedule in Table 6-1. The 60-month timeline will act as the framework to ensure that the 2016 plan revision can be prepared and submitted to FEMA within the required three-year time period. Funding sources for the update process will be investigated and secured 6 months prior to the schedule start of the process to allow for ample data collection and interagency coordination. As highlighted in the table, the SHMPT will meet semi-annually to discuss plan implementation, changes in the plan, and progress on strategies and projects. The SHMPT meeting will also be used as a forum to discuss changes to the update process, committee members, what works well, what should be changed, and to assess the system (FEMA state plan cross-walk) used to evaluate the plan. At the start of the update, and throughout the implementation, ample time will be needed and allowed for the continued data collection for the vulnerability assessment, relying on information from local plans and new ongoing research (such as climate changes and sea level rise analysis).

Table 6-1. Schedule for Plan Monitoring, Maintenance, Implementation and Revision

Task	Responsibility	Time Frame
Refine Planning Process and timeline for 2016 plan development	DESPP/DEMHS Mitigation Staff	Ongoing
Collect and store expanded facilities, local plan risk data, and historical disaster data	Risk Assessment Sub-Committee	Ongoing with Quarterly Summaries beginning March 2014
Update Mitigation Action Tracker	Project Leads	Quarterly beginning March 2014
Review Action Tracker as a Team	SHMPT	June 2014 December 2014 June 2015 December 2015 June 2016
Report Progress to FEMA Region I using Action Tracker	SHMO	December 2014 December 2015
Consolidate list of known local plan implementation actions with tool similar to Mitigation Action Tracker	DESPP/DEMHS Mitigation Staff	Annually beginning June 2014
Convene the SHMPT or CIHMC to discuss plan implementation, the submittal of additional mitigation activities, and to lay the groundwork for future HIRA, Vulnerability Assessment and strategy changes to the State Plan	DESPP/DEMHS Mitigation Staff Mitigation Staff - ongoing Risk Assessment Sub-Committee Members	June 2014 December 2014 June 2015 December 2015 June 2016



Task	Responsibility	Time Frame
Evaluate progress on strategies and projects	DESPP/DEMHS Mitigation Staff Strategy & Project Sponsors	June 2014 December 2014 June 2015 December 2015 June 2016
Upload Local Plan Updates	DESPP/DEMHS Mitigation Staff	June 2014 June 2015 June 2016
Provide brief implementation progress report to FEMA Region I	DESPP/DEMHS Mitigation Staff	June 2014 June 2015 June 2016
Initiate Revision Process for 2016 Plan	DESPP/DEMHS Mitigation Staff	September 1, 2014
Review current regulatory requirements for plan revision	DESPP/DEMHS Mitigation Staff	September 1, 2014
Submit new Revised All-Hazard Mitigation Plan to FEMA	DESPP Commissioner	August 1, 2016

## 6.2.4 Process and Schedule for Plan Evaluation

### 2010 Plan Evaluation

Review of implementation of the 2010 plan, during the update process, revealed mixed results. Presidentially declared disasters, and disaster activity in general, during the 2010 plan horizon, exceeded disaster activity experienced during any previous plan cycle. This combined with a complete reorganization of State government and a down economy presented challenges toward implementation of the plan. However, along with those challenges came many enhancements to Connecticut's capabilities and programs, as outlined in Chapter 3.0.

Prior to initiation of the 2014 plan update process, little evaluation of the plan was conducted. As the plan was evaluated during the update process, the following observations were made:

- 21 of the 52 identified 2010 strategies were successfully completed;
- 12 of the 52 identified 2010 strategies were partially completed or underway; and,
- Remaining strategies were either deferred or deleted.

Although the 2010 plan identified a schedule for plan maintenance, monitoring and updating, it lacked a process for regular evaluation, particularly criteria for measuring progress and success and for identifying corrective measures for filling gaps in plan implementation success.



The Team agreed that resources were limited during the last plan update and its implementation and made adjustments for that gap by applying for a grant and hiring professional consulting assistance for the update.

Although not all directly attributable to the implementation of the 2010 plan, many positive developments for mitigation occurred during the 2010 planning cycle:

- The Adaptation Subcommittee of the Governor's Steering Committee on Climate Change, formed in 2008, grew in activity substantially after 2010;
- The Governor's Two Storm Panel was formed in 2011;
- The Connecticut GIS Council's Storm Response and Recovery Assessment Group was formed in 2011;
- The Shoreline Preservation Task Force was formed in 2012;
- The State's Long-Term Recovery Committee was formed in 2012;
- The State Vegetation Management Task Force was formed in 2012; and
- The DEEP Office of Long Island Sound Programs (OLISP) increased outreach and technical support to communities to assist with coastal adaptation, storm response and resilience. Planning for the establishment of a "Center for Coasts" is commencing in 2013 and will continue through 2014.

While these activities do not specifically evaluate or measure the success of the plan's implementation, they do illustrate a renewed emphasis and commitment on the State's behalf since the plan was written. In addition to these new programmatic strengths at the State level, activity at the local level increased significantly since the 2010 plan. Examples include:

- Increasing local plan coverage, or local plans underway to nearly all Connecticut municipalities;
- Local Emergency Management Departments have significantly increased their effectiveness for addressing natural hazards in recent years. Many local EMDs are adept at both dealing with response (for example, preparing PA reimbursement requests) as well as mitigation (preparing HMGP applications for mitigation projects); and
- Local tree wardens have significantly increased their effectiveness for addressing natural hazards in recent years. Almost all communities have increased their tree warden budgets in the last five years, partly in response to recent tropical storms and winter storms. Communities have stepped up their participation in tree trimming along roadways, which has benefited overhead utility lines.

For the 2014 planning cycle, a more structured process for evaluating the effectiveness and implementation of the plan has been created and is discussed below.



**Process for Evaluating the 2014 Plan**

Table 6-1 identifies meetings every 6 months to evaluate progress on mitigation strategies and projects, as shown in the excerpt below.

Evaluate progress on strategies and projects	DESPP/DEMHS Mitigation Staff Strategy & Project Sponsors	June 2014 December 2014 June 2015 December 2015 June 2016
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The SHMO, or responsible designee, will be responsible for evaluating not only the implementation of projects and activities, but also the overall effectiveness of the plan. The evaluation will occur at these meetings. Each member of the SHMPT responsible for actions in the plan will report out at the meetings. In addition to monitoring projects, as described in the previous section, the following five measures of plan success will be reviewed at each of the meetings:

1. Number of activities underway?
2. Number of activities complete?
3. Does recent disaster activity reflect accuracy of HIRA?
4. Have there been losses avoided as a result of implementation measures?
5. Have other state level plans or programs used, reference, or integrated the state mitigation plan?

The SHMO will prepare a summary report, in addition to the updated action tracker addressing each of the five measures following each meeting. The reports will be “rolled up” into the two annual progress reports to FEMA, also outlined in Table 6-1.

**6.3 Project Closeout**

*Project Closeout* is the process that finalizes a completed mitigation project that FEMA has funded. Project Closeouts will continue to be conducted based on FEMA Region I closeout procedures in accordance with national and regional FEMA guidance along with Connecticut financial management procedures. Projects and activities funded through other federal or state grant programs, state general funds or that can be achieved without targeted funding will be completed as dictated by the funding source or state program with administrative oversight for the activity of the project. The following description provides an overview of the closeout process. Details are included in the CT 2008 State Hazard Mitigation Grants Administrative Plan, included in Appendix 3-1.



### 6.3.1 Project Closeout Process

- The subgrantee will notify the State Hazard Mitigation Officer (SHMO) when a project is ready to be closed. It is recognized that, based upon performance period deadlines, the State Hazard Mitigation Officer (SHMO) may suggest project closure to FEMA.
- The seven steps to closure of a project are:
  1. Agreement between the subgrantee and the State that the project is ready to be closed. Should either not agree, the project manager or the State Hazard Mitigation Officer (SHMO) would request an extension, in writing, outlining the justification for the request.
  2. The sub-grantee, the State, and FEMA will coordinate to make sure that funds advanced through the program balance with funds expended by the State and sub-grantee. If there is disagreement between the expended funds and the grant amount, FEMA and the State take steps to reconcile and adjust final project expenditures and Grantee Management Costs..
  3. The State will submit a final project report that includes:
    - a. Final Financial and Progress Report to FEMA (if applicable)
    - b. Final Letter of Credit Payment Request.
    - c. FEMA Form 20-18, Report of Government Property
    - d. Photos, Property Survey Inventory spreadsheet, etc. to validate expenditures.
  4. The State will conduct site visits for all projects to ensure the approved scope of work was completed. Will provide FEMA with a letter confirming final inspection and that all final payments have been made to project.
  5. Subgrantee shall have 30 days to appeal if it does not agree with the State and FEMA's findings. The appeal process previously mentioned will be employed to appeal matters relating to closeout.
  6. FEMA and the State will coordinate their financial systems to record the amount and date of the final payment(s). Financial files will be closed and excess funds will be de-obligated.
  7. The State will provide FEMA with a letter requesting closure of the project. The information and enclosures:
    - a. Project name, Federal Project number, State identification number.
    - b. Financial summary of the project.
    - c. Certifications:
      - i. All eligible funds paid to subgrantee.
      - ii. All work completed according to FEMA and State requirements.
      - iii. All costs incurred as the result of eligible work.
      - iv. All work completed in accordance with provisions of the FEMA/State and State/Local agreements.
      - v. All payments made according to Federal and State legal and regulatory requirements.
        - ❖ No bills are outstanding.
        - ❖ No further requests for funding will be made for the project.



### 6.3.2 Program Closeout

1. When all projects under a single disaster are closed, the entire program is ready for closure. The steps that comprise program closeout are as follows:
  - a. Any mission assignments and technical assistance contracts will be closed out.
  - b. There will be agreement between FEMA and the State on the Final Claim Amount and concurrence date. The State will submit a concurrence letter and sign FEMA Form 425.
  - c. The HMGP will be closed in program and financial systems. FEMA and the State Hazard Mitigation Officer (SHMO) are responsible for ensuring that Federal and State records are available in the event of an audit.
2. State specific responsibilities for the HMA closeout process may be found in the *2010 HMA Unified Guidance* Part VI, D.1, D.2 and D.2.1
3. All records will be maintained for a minimum three years from the date the program is closed.



## 6.4 CT NHMP Summary

The 2014 Connecticut Natural Hazard Mitigation Plan provides guidance for hazard mitigation activities within the State and has undergone a full revision using the best available data and subject-matter experts for the required update. This plan fulfills the standard state mitigation planning requirements (44 CFR § 201.4).

The SHMPT is committed to a long-term strategy for reducing risks to natural hazards, as shown in the mitigation strategy set forth in this plan. Mitigation actions will reduce risk from natural hazards to citizens, state facilities, and critical facilities. Connecticut is committed to the implementation of the plan through continued involvement of the steering committee. Capabilities of agencies and programs within the state will allow for collaboration, integration of concurrent planning initiatives and progress on mitigation actions through to the 2016 plan update.

# Connecticut Natural Hazard Mitigation Plan Appendices

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**Appendix 1. Planning Process**

**Appendix 2. Hazard Identification and Risk Assessment**

**Appendix 3. Capability Assessment**

**Appendix 4. Local Plan Coordination**

**Appendix 5. Mitigation Strategy**

# Planning Process

## Appendix 1

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<b>APPENDIX 1-1. COMPLETE CROSSWALK</b>	<b>2</b>
<b>APPENDIX 1-2. MEETING DOCUMENTATION</b>	<b>3</b>
<b>APPENDIX 1-3. PUBLIC SURVEY</b>	<b>4</b>

**Appendix 1-1. Complete Crosswalk**

State: **CONNECTICUT**

Date of Plan: **2013 UPDATE**

**Standard State Hazard Mitigation Plan Review and Approval Status**

<b>State Point of Contact:</b> Karen Michaels <b>Title:</b> Hazard Mitigation Planner <b>Agency:</b> Department of Energy and Environmental Protection	<b>Address:</b>  79 Elm Street 3 <sup>rd</sup> Floor Hartford, CT 06106
<b>Phone Number:</b> 860-424-3779	<b>E-Mail:</b> <a href="mailto:Karen.Michaels@ct.gov">Karen.Michaels@ct.gov</a> <b>Date:</b> 8-30-2013

<b>FEMA Reviewers:</b> Brigitte Ndikum-Nyada Nan Johnson Marilyn Hilliard Ivy Frances, CFM, CEM.	<b>Titles:</b> Region 1 Community Planner Region 1 Community Planner Region 1 Senior Planner Region 1 Chief, Floodplain Management & Insurance Branch	<b>Dates:</b> September 9 <sup>th</sup> 2013 1 <sup>st</sup> Reviews: November 19, 2013
<b>Dates Received in FEMA Region I</b>	September 9, 2013.	
<b>Plan Not Approved</b>	November 19, 2013 - Requires Revisions Page numbers of changes made are in GREEN	
<b>Plan Approved</b>		
<b>Date Approved</b>		

**Important:** Page numbering sequence needs to reflect the correct sections of the Plan. This helps expedite the plan review process. Also need to do a better job referencing the Appendices.

**STANDARD STATE HAZARD MITIGATION PLAN SUMMARY CROSSWALK**

The plan cannot be approved if the plan has not been formally adopted.

Each requirement includes separate elements. All elements of the requirement must be rated "Satisfactory" in order for the requirement to be fulfilled and receive a score of "Satisfactory." Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A "Needs Improvement" score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer's comments must be provided for requirements receiving a "Needs Improvement" score.

**SCORING SYSTEM**

Please check one of the following for each requirement.

**N – Needs Improvement:** The plan does not meet the minimum for the requirement. Reviewer's comments must be provided.

**S – Satisfactory:** The plan meets the minimum for the requirement. Reviewer's comments are encouraged, but not required.

Prerequisite	NOT MET	MET
Adoption by the State: §201.4(c)(6) and §201.4(c)(7)		

Planning Process	N	S
Documentation of the Planning Process: §201.4(c)(1)		X
Coordination Among Agencies: §201.4(b)		X
Program Integration: §201.4(b)	X	

Risk Assessment	N	S
Identifying Hazards: §201.4(c)(2)(i)		X
Profiling Hazards: §201.4(c)(2)(i)	X	
Assessing Vulnerability by Jurisdiction: §201.4(c)(2)(ii)	X	
Assessing Vulnerability of State Facilities: §201.4(c)(2)(ii)	X	
Estimating Potential Losses by Jurisdiction: §201.4(c)(2)(iii)	X	
Estimating Potential Losses of State Facilities: §201.4(c)(2)(iii)	X	

**Mitigation Strategy**

- Hazard Mitigation Goals: §201.4(c)(3)(i)
- State Capability Assessment: §201.4(c)(3)(ii)
- Local Capability Assessment: §201.4(c)(3)(ii)
- Mitigation Actions: §201.4(c)(3)(iii)
- Funding Sources: §201.4(c)(3)(iv)

N	S
	X
X	
X	
X	
X	

**Coordination of Local Mitigation Planning**

- Local Funding and Technical Assistance: §201.4(c)(4)(i)
- Local Plan Integration: §201.4(c)(4)(ii)
- Prioritizing Local Assistance: §201.4(c)(4)(iii)

N	S
X	
	X
	X

**Severe Repetitive Loss Mitigation Strategy**  
*(only required for 90/10 under FMA & SRL)*

- Repetitive Loss Mitigation Strategy: §201.4(c)(3)(v)
- Coordination with Repetitive Loss Jurisdictions: §201.4(c)(3)(v)

N	S
X	
	X

**Plan Maintenance Process**

- Monitoring, Evaluating, and Updating the Plan: §201.4(c)(5)(i)
- Monitoring Progress of Mitigation Activities: §201.4(c)(5)(ii) and (iii)

N	S
X	
	X

**STANDARD STATE HAZARD MITIGATION PLAN APPROVAL STATUS**

PLAN NOT APPROVED	
PLAN APPROVED	X

See Reviewer's Comments

**PREREQUISITE**

**Adoption by the State**

**Requirement §201.4(c)(6):** The plan **must** be formally adopted by the State prior to submittal to [FEMA] for final review and approval.

**Requirement §201.4(c)(7):** The plan **must** include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c). The State will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Has the State formally adopted the <b>new or updated</b> plan?	Sect 1.2, Pg. 16-17	Provide a copy of the adoption letter or resolution that will be signed by the State to ensure this will meet the planning requirements per the FEMA Guidance. Identify (in the plan and/or letter) the State's established procedures for plan adoptions and those agencies with primary implementation responsibilities.		
B. Does the plan provide assurances that the State will <b>continue to</b> comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c), and will amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d)?	Section 1.2, Page 17	Be clear and consistent with the assurances that are located in different sections of the plan. "Comply/complies with ..." rather than for an update "Will continue to comply ..."		X
<b>SUMMARY SCORE</b>				

**PLANNING PROCESS:** §201.4(b): *An effective planning process is essential in developing and maintaining a good plan.*

**Documentation of the Planning Process**

**Requirement §201.4(c)(1):** *[The State plan must include a] description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the plan provide a narrative description of how the <b>new or updated</b> plan was prepared?	Section 1.0, particularly Subsections 1.3 – 1.9, pages 18-28	<b>Yes.</b> <b>Recommended Revision:</b> Be more clear and consistent in the description in terms of this being an update while recognizing the existing plan and process that's been ongoing for the last three years and since 2004. For example, the Executive Summary should be clearer about recognizing and highlighting the existing three years of planning, occurrences, and implementation as well as the highlights of what's new or changed with this plan update. The executive summary shouldn't have to repeat the basic elements about a plan that already exists unless it is put into context that this is an update and what has or has not changed. Another example is that there is little explanation/justification as to why the previous risk assessment was completely redone rather than building on the existing assessment and making changes/updates to it.		X
B. Does the <b>new or updated</b> plan indicate who was involved in the <b>current</b> planning process?	Subsections 1.7-1.10, pg. 21-39 Tables 1-1, 1-2, & 1-3 (pg. 21-23)	<b>Yes.</b>		X
C. Does the <b>new or updated</b> plan indicate how other agencies participated in the <b>current</b> planning process?	Subsections 1.7-1.10, pages 21-39	<b>Yes.</b> The team primarily consisted of DEEP whereas the "Stakeholders" included key State agencies such as CT DOT and CT Economic and Community Development. Why? Also, there is no discussion of which State agencies have the primary implementation responsibilities that participated and will be needed for adoption. Big Cities like Hartford, Milford, New London etc... did not make the stakeholders' list. Why?  <b>Explain why these key agencies were stakeholders rather than on the State's Mitigation Team.</b>		X
D. Does the updated plan document how the planning team reviewed and analyzed each section of the plan?	Subsection 1.9, pages 24-28	<b>Yes.</b>		X
E. Does the updated plan indicate for each section whether or not it was revised as part of the update process?	Within the narrative or each section	<b>Yes.</b>		X
<b>SUMMARY SCORE</b>				X

**Coordination Among Agencies**

**Requirement §201.4(b):** *The [State] mitigation planning process **should** include coordination with other State agencies, appropriate Federal agencies, interested groups, and ...*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe how Federal and State agencies were involved in the <b>current</b> planning process?	Subsections 1.7-1.10, pages 21-39	<b>Yes.</b>  <b>Recommendation:</b> Describe who Ms. Belinda Dougan of FEMA is. What role did she play and which branch or unit of FEMA does she work for?  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
B. Does the <b>new or updated</b> plan describe how interested groups (e.g., businesses, non-profit organizations, and other interested parties) were involved in the <b>current</b> planning process?	Subsections 1.7-1.10, pages 21-39	<b>Yes..</b>  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		X
<b>C. Does the updated plan discuss how coordination among Federal and State agencies changed since approval of the previous plan?</b>	Subsections 1.7-1.10, pages 21-39; Section 3.0. pages 214-299	<b>Yes.</b>		X
<b>SUMMARY SCORE</b>				X

**Program Integration**

**Requirement §201.4(b):** *[The State mitigation planning process **should**] be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe how the State mitigation planning process is integrated with other ongoing State planning efforts?		<b>No.</b> This information may be implied over several sections of the plan, but cannot be directly located or understood.  <b>Recommended Revisions:</b> Provide this information more directly rather than implying this can be found throughout pages 214-299 and other sections.  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>	X	
B. Does the <b>new or updated</b> plan describe how the State mitigation planning process is integrated with FEMA mitigation programs and initiatives?	214-299	<b>No.</b> This information may be implied over several sections of the plan, but cannot be directly located or understood.  <b>Recommended Revisions:</b> Provide this information more	X	

State: **CONNECTICUT**

Date of Plan: **2013 UPDATE**

		directly rather than implying this can be found throughout pages 214-299 and other sections.  <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		
<b>SUMMARY SCORE</b>			<b>X</b>	

**RISK ASSESSMENT:** §201.4(c)(2): *[The State plan must include a risk assessment] that provides the factual basis for activities proposed in the strategy portion of the mitigation plan. Statewide risk assessments must characterize and analyze natural hazards and risks to provide a statewide overview. This overview will allow the State to compare potential losses throughout the State and to determine their priorities for implementing mitigation measures under the strategy, and to prioritize jurisdictions for receiving technical and financial support in developing more detailed local risk and vulnerability assessments.*

**Identifying Hazards**

**Requirement §201.4(c)(2)(i):** *[The State risk assessment shall include an] overview of the type ... of all natural hazards that can affect the State ... .*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan provide a description of the type of <b>all natural hazards</b> that can affect the State? If the hazard identification omits (without explanation) any hazards commonly recognized as threats to the State, this part of the plan cannot receive a Satisfactory score.	Section 2 page 41- 43 Section 2.2.5 page 55 – 58 Section 2.3 page 58 - 67 Section 2.4.1 page 67 – 70 Section 2.7 page 76 - 77	<b>Yes.</b>		<b>X</b>
<b>SUMMARY SCORE</b>				<b>X</b>

**Profiling Hazards**

**Requirement §201.4(c)(2)(i):** *[The State risk assessment shall include an overview of the] location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate ... .*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the risk assessment identify the <b>location</b> (i.e., geographic area affected) of each natural hazards addressed in the <b>new or updated</b> plan?	Sect 2.3. pages 58 - 66 Sect 2.6.7 Geographic Extent page 75	<b>Yes.</b>		<b>X</b>
B. Does the <b>new or updated</b> plan provide information on <b>previous occurrences</b> of each hazard addressed in the plan?		<b>Yes.</b>		<b>X</b>
C. Does the <b>new or updated</b> plan include the <b>probability of</b>	Pg 88-89	<b>No.</b> Each hazard section has a "Probability" section. However,	<b>X</b>	

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<p><b>future events</b> (i.e., chance of occurrence) for each hazard addressed in the plan?</p>	<p>Table 2-15, Page 89 Table 2-78, Pages 235-236</p> <p>Hazard specifics: pgs. 96, 110, 121, 133, 155, 173, 177, 189, 204, 218</p>	<p>the plan either states that the probabilities for future events cannot be provided (e.g. page 82) or it is not clear what the probability is depending on the hazard.</p> <p><b>Required Revisions:</b> The probabilities of future events for each hazard can and must be provided for each of the hazards. This can be given a value or a range such as Low, Medium, or High for each hazard along with an explanation of how this was determined and what it means.</p> <p>Probability range defined and used throughout the HIRA. Probability is also shown in each of the "hazard ranking" maps</p>		
<b>SUMMARY SCORE</b>				<b>X</b>

**Assessing Vulnerability**

**Requirement §201.4(c)(2)(ii):** [The State risk assessment shall include an] overview and analysis of the State’s vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in local risk assessments as well as the State risk assessment. The State shall describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned critical or operated facilities located in the identified hazard areas shall also be addressed ...

**Requirement §201.4(d):** Plan must be reviewed and revised to reflect changes in development...

**Assessing Vulnerability by Jurisdiction**

Element	Location in the Plan (section or annex and page #)	Reviewer’s Comments	SCORE	
			N	S
<p>A. Does the <b>new or updated</b> plan describe the State’s vulnerability based on estimates provided in local risk assessments as well as the State risk assessment?</p>	<p>Section 2.4.2 page 70 Section 4.4 309 – 311 Appendix 4</p>	<p><b>Yes.</b></p>		<b>X</b>
<p>B. Does the <b>new or updated</b> plan describe the State’s vulnerability in terms of the jurisdictions most threatened and most vulnerable to damage and loss associated with hazard event(s)?</p>	<p>Pgs 42 – 57 Table 2-1 (pg 43) Table 2-5 (pg 53) Table 2-6 (pg 58) Table 2-77 (pg 230) Appendix 2</p>	<p><b>No.</b> Difficult to locate and understand this information. Descriptions are by county although noted to have been analyzed by municipality.</p> <p><b>Required Revisions:</b> Clearly describe this information and by jurisdiction (municipalities rather than counties).</p> <p>Tables have been expanded to show municipalities. Appendix 3 also includes all facility analysis summaries by municipality.</p>	<b>X</b>	
<p>C. Does the updated plan explain the process used to analyze the information from the local risk assessments, as necessary?</p>	<p>Pages 67 – 72; 307 – 308; 309 – 311 Appendix 4</p>	<p><b>Yes.</b></p>		<b>X</b>

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<p><b>D. Does the updated plan reflect changes in development for jurisdictions in hazard prone areas?</b></p>	<p>Pg 51 Pg 64 – 65 Pg 70</p>	<p><b>No.</b> Difficult to locate and understand this information. Descriptions are by county which are not by jurisdictions although noted to have been analyzed by municipality.</p> <p><b>Required Revisions: Clearly</b> describe this information and by jurisdiction (municipalities rather than counties).</p>	<p>X</p>	
<b>SUMMARY SCORE</b>			<p>X</p>	

**Assessing Vulnerability of State Facilities**

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
<p>A. Does the <b>new or updated</b> plan describe the types of State owned or operated critical facilities located in the identified hazard areas?</p>	<p>Pg 51 - 64 Table 2-5 (pg 53) Table 2-6 (pg 58) Table 2-77 (pg 230) Appendix 2</p>	<p><b>No.</b> Cannot be located or understood. Where is that defined or identified? There is no clear description of what these state facilities are and what it includes or not.</p> <p><b>Required Revisions: Clearly</b> describe the types of State owned AND operated critical facilities located in the identified hazard areas. For example, describe so it can be understood that the facilities include the airport(s), ports, major transportation/transit facilities, rail, health care and hospitals, State Guard facilities, major State employers, state water projects, universities, and others in the description.</p>	<p>X</p>	
<b>SUMMARY SCORE</b>			<p>X</p>	

**Estimating Potential Losses**

**Requirement §201.4(c)(2)(iii):** [The State risk assessment **shall** include an] overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State **shall** estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

**Requirement §201.4(d):** Plan must be reviewed and revised to reflect changes in development...

**Estimating Potential Losses by Jurisdiction**

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
<p>A. Does the <b>new or updated</b> plan present an overview and analysis of the potential losses to the identified vulnerable structures?</p>	<p>Table 2-77 (pg 230)</p>	<p><b>No.</b> Difficult to locate and understand this information. Descriptions are by county which are not by jurisdictions although noted to have been analyzed by municipality. Not clear what the vulnerable structures consist of.</p>	<p>X</p>	

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	Appendix 2	<b>Required Revisions:</b> Clearly describe this information and by jurisdiction (municipalities rather than counties).		
B. Are the potential losses based on estimates provided in local risk assessments as well as the State risk assessment?		<b>Yes.</b>		<b>X</b>
<b>C. Does the updated plan reflect the effects of changes in development on loss estimates?</b>	Pg 228 Also Pgs 51, 64, 65, 70	<b>No.</b> Not found.  <b>Required Revisions:</b> Clearly describe this information and by jurisdiction (municipalities rather than counties).	<b>X</b>	
<b>SUMMARY SCORE</b>			<b>X</b>	

**Estimating Potential Losses of State Facilities**

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan present an estimate of the potential dollar losses to State owned or operated <b>buildings, infrastructure, and critical facilities in the identified hazard areas?</b>	Table 2-77 (pg 230)  Appendix 2	<b>No.</b> See comments in A (Vulnerability of State Facilities) above. Plan only looked at building. Infrastructure is not addressed.  <b>Required Revisions:</b> Be clear what these estimates consist of and provide estimates for State owned or operated infrastructure.	<b>X</b>	
<b>SUMMARY SCORE</b>			<b>X</b>	

**MITIGATION STRATEGY:** §201.4(c)(3) [To be effective the plan must include a] Mitigation Strategy that provides the State's blueprint for reducing the losses identified in the risk assessment.

**Hazard Mitigation Goals**

**Requirement §201.4(c)(3)(i):** [The State mitigation strategy **shall** include a] description of State goals to guide the selection of activities to mitigate and reduce potential losses.

**Requirement §201.4(d):** Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Location in the

<b>SCORE</b>
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STANDARD STATE HAZARD MITIGATION PLAN REVIEW CROSSWALK

FEMA REGION 1

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Element	Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan provide a description of State mitigation <b>goals</b> that guide the selection of mitigation activities?	Subsections 5.1 – 5.4, pages 312-314	<b>Yes.</b>		X
<b>B. Does the updated plan demonstrate that the goals were assessed and either remain valid or have been revised?</b>	Pages 312-313; & page 27	<b>Yes.</b>		X
<b>SUMMARY SCORE</b>				X

**State Capability Assessment Requirement §201.4(c)(3)(ii):** *[The State mitigation strategy shall include a] discussion of the State’s pre-and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas [and] a discussion of State funding capabilities for hazard mitigation projects ... .*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan include an evaluation of the State’s <b>pre-disaster</b> hazard management policies, programs, and capabilities?	Table 3-4 (pg 289) Page 304	<b>No.</b> Not found. There is a lot of description, but no evaluation. There is no evaluation; only description or is hit/miss with any evaluation type comments. Cannot determine which are pre- or post-disaster.  <b>Required Revisions:</b> Provide an evaluation that indicates how these State Capabilities were and/or are working, their effectiveness, and any other analysis that evaluates capability for this next planning period. Clearly identify those that are pre- disaster capabilities.	X	
B. Does the <b>new or updated</b> plan include an evaluation of the State’s <b>post-disaster</b> hazard management policies, programs, and capabilities?	Table 3-4 (pg 289) Page 304	<b>No.</b> There is no evaluation; only description or is hit/miss with any evaluation type comments. Cannot determine which are pre- or post-disaster.  <b>Required Revisions:</b> Provide an evaluation that indicates how these State Capabilities were and/or are working, their effectiveness, and any other analysis that evaluates capability for this next planning period. Clearly identify those that are post- disaster capabilities.	X	
C. Does the <b>new or updated</b> plan include an evaluation of the State’s policies related to <b>development in hazard prone areas</b> ?	Table 3-4 (pg 280) Page 304	<b>No.</b> There is no evaluation; only description.  <b>Required Revisions:</b> Provide an evaluation that indicates how these State policies were and/or are working, their	X	

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		effectiveness, and any other analysis that evaluates capability for this next planning period. Clearly identify those that are related to development in hazard prone area capabilities.		
D. Does the <b>new or updated</b> plan include a discussion of State <b>funding capabilities</b> for hazard mitigation projects?	Page 304 Page 379	<b>No.</b> Cannot locate and/or found to be incomplete. Noted on the State's crosswalk to be in Section 3.2.2, but was not found in this Section. For example, what are the funding capabilities of CT DOT?  <b>Required Revisions:</b> Provide a complete discussion of the State funding capabilities. Be sure to include key agencies such as CT DOT.  <b>Recommended Revisions:</b> Include funding capabilities for staffing in the discussion.	<b>X</b>	
E. Does the updated plan address any hazard management capabilities of the State that have changed since approval of the previous plan?	Pages 227-274	<b>Yes.</b>		<b>X</b>
<b>SUMMARY SCORE</b>			<b>X</b>	

**Local Capability Assessment**

**Requirement §201.4(c)(3)(ii):** [The State mitigation strategy **shall** include] a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan present a general description of the local mitigation policies, programs, and capabilities?	Pages 286-295 & 307-311 See Table 3-5	<b>Yes</b>		<b>X</b>
B. Does the <b>new or updated</b> plan provide a general analysis of the effectiveness of local mitigation policies, programs, and capabilities?	Table 3-7 (pg 317)  Pgs 316 - 326	<b>No.</b> There is a lot of description of local capabilities, but no analysis on the effectiveness of these policies and programs.  <b>Required Revisions:</b> Provide a general analysis of the effectiveness of these local mitigation policies, programs, and capabilities (i.e., how these were and/or are working, how	<b>X</b>	

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		<p>well, strengths and challenges).</p> <p><b>Required Revisions:</b> Provide an analysis that addresses the local government's policies, programs, and capabilities to implement hazard mitigation. Include the local government's authorities, tools, resources (funding, staffing, local stakeholders/whole community involvement) for capabilities.</p> <ul style="list-style-type: none"> <li><b>Note:</b> The NFIP description on page 306 (293) is a description about CAVs, not how to implement the NFIP. This description does not really get at the implementation of the NFIP. Include the technical assistance, meetings and training that the state provides to the communities.</li> </ul> <p><b>Recommended Revision:</b> Include the following to the State of Connecticut compliance with other related Federal authorities: <b>44 CFR, Part 201.4 (c) (7) § 44 CFR Part 60 - floodplain management.</b></p> <p><b>Recommended Revision:</b> Are local comprehensive plans part of the local capabilities in CT? The plan does not mention this capability.</p>		
<b>SUMMARY SCORE</b>			<b>X</b>	

**Mitigation Actions**

*Requirement §201.4(c)(3)(iii): [State plans shall include an] identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local plans, where specific local actions and projects are identified.*

*Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...*

Element	Location in the Plan (section or annex and page #)		SCORE	
			N	S
A. Does the <b>new or updated</b> plan identify cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering?	Pages 314-334 & Appendix 5-1	<b>Yes.</b>		<b>X</b>

		<p><b>Recommended Revisions:</b> Consider better defined projects or activities that would be undertaken if there was a major disaster in CT in which the State received substantial funding for implementation (rather than general broad education and outreach action statements).</p> <p><b>Recommended Revisions:</b> While discussed under the funding section, there is little discussion regarding flood control projects regarding where they are located, the risk they pose, and who is maintaining them. This should be further addressed in the risk analysis as well as the mitigation strategy and evaluation.</p> <p><b>Recommended Revisions:</b> There are many urban streams in CT under various techniques to control these streams. Recommended in the strategy is a geomorphology assessment of these streams by watersheds or subwatersheds to help provide insight as to future programs and projects on a holistic basis.</p>		
B. Does the <b>new or updated</b> plan evaluate these actions and activities?	Table 5-1 (pg 350)	<p><b>No.</b> Incomplete and not evaluated. Evaluation is incomplete. Needs more info on some actions where the timelines are identified as “Continuing” and costs are identified as “Depends on funding availability.”</p> <p><b>Required Revisions:</b> Provide timeframes for those actions identified as “continuing” as this is not acceptable to assess “implementation progress as planned” through the updates. Provide cost estimates as “Depends on funding availability” is not acceptable since most depend on availability.</p> <p><b>Actions have a funding included. Will change language for assessment of previous actions. Level of activity is dependent on funding. Is it acceptable to include a H, M, or L level for funding?</b></p>	X	
C. Does the <b>new or updated</b> plan prioritize these actions and activities?	314-348 Appendix 5-1	<b>Yes.</b>		X
D. Does the <b>new or updated</b> plan explain how each activity contributes to the overall State mitigation strategy?	Subsection 5.7, Table 5-1, second column, pages 318-334	<b>Yes</b>		X
E. Does the mitigation strategy <b>in the new or updated</b> section reflect actions and projects identified in local plans?	Appendix 4-2, Actions tab.	<p><b>Yes.</b></p> <p><b>Recommended Revision:</b> Could use more connection to better understand how these local plans are reflected in the mitigation strategy.</p>		X
<b>SUMMARY SCORE</b>			X	

**Funding Sources**

*Requirement §201.4(c)(3)(iv): [The State mitigation strategy shall include an] identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan identify <b>current</b> sources of Federal, State, local, or private funding to implement mitigation activities?	Appendix 5-3 Page 304  Page 379	<b>No.</b> Incomplete. Federal resources are found in the publication within the appendices. The other current funding sources are not found or not distinguished as to what these are.  <b>Required Revisions:</b> Clearly identify and present the current sources of funding to implement mitigation activities.	<b>X</b>	
B. Does the <b>new or updated</b> plan identify <b>potential</b> sources of Federal, State, local, or private funding to implement mitigation activities?	Appendix 5-3 Page 304  Page 379	<b>No.</b> This is incomplete. Federal resources are found in the publication within the appendices. The other potential funding sources are not found or not distinguished as to what these are. Include potential State, Local, Private and other funding sources.  <b>Required Revisions:</b> Clearly identify and present the current sources of funding to implement mitigation activities.  <b>Required Revision:</b> Provide a complete identification of the various potential funding sources (not just FEMA) to implement the various mitigation activities identified in this plan update.  <b>Recommended Revision:</b> See comments above and below. Expand the identification of potential sources to the other State Agencies funding programs (such as CTDOT) for mitigation. Also, include other initiatives that have been made available to support mitigation activities such as land use, transportation, and infrastructure planning programs (including private initiatives and sources). Address the State's Capital Improvement Plan funding.	<b>X</b>	
C. Does the updated plan identify the sources of mitigation funding used to implement activities in the mitigation strategy since approval of the previous plan?	Appendix 5-4, Table 5-2, Page 334	<b>Yes.</b>  <b>Recommended Revisions:</b> Ensure that ALL sources of funding used in to implement mitigation actions during the last planning period other than just FEMA sources are		<b>X</b>

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		identified.		
<b>SUMMARY SCORE</b>			<b>X</b>	

**COORDINATION OF LOCAL MITIGATION PLANNING**

**Local Funding and Technical Assistance**

*Requirement §201.4(c)(4)(i): [The section on the Coordination of Local Mitigation Planning **must** include a] description of the State process to support, through funding and technical assistance, the development of local mitigation plans.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan provide a description of the State process to support, through funding and technical assistance, the development of local mitigation plans?	Pages 336-340	<b>Yes.</b>		<b>X</b>
<b>B. Does the updated plan describe the funding and technical assistance the State has provided in the past three years to assist local jurisdictions in completing approvable mitigation plans?</b>	Pg 339	<b>No.</b> Element is incomplete. No - incomplete. Technical Assistance such as training, plan development, G-318, staffing, contractor support, post-disaster technical assistance, etc. is not addressed.  <b>Required Revisions: Address technical assistance.</b>	<b>X</b>	
<b>SUMMARY SCORE</b>			<b>X</b>	

**Local Plan Integration**

*Requirement §201.4(c)(4)(ii): [The section on the Coordination of Local Mitigation Planning **must** include a] description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.*

*Requirement §201.4(d): Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan provide a description of the <b>process and timeframe</b> the State established to <b>review</b> local plans?	Page 305-306 Figure 4-1	<b>Yes</b>		<b>X</b>
B. Does the <b>new or updated</b> plan provide a description of the <b>process and timeframe</b> the State established to <b>coordinate and</b>	Page 305-306 & 354 Figure 4-	<b>Yes</b>		<b>X</b>

link local plans to the State Mitigation Plan?	1, Table 6.1		
<b>SUMMARY SCORE</b>			<b>X</b>

**Prioritizing Local Assistance**

**Requirement §201.4(c)(4)(iii):** [The section on the Coordination of Local Mitigation Planning **must** include] criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which **should** include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures.

Further, that for non-planning grants, a principal criterion for prioritizing grants **shall** be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.

**Requirement §201.4(d):** Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities...

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan provide a description of the criteria for prioritizing those communities and local jurisdictions that would receive planning and project grants under available mitigation funding programs?	Pages 300-301	<b>Yes.</b>		<b>x</b>
B. <b>For the new or updated plan, do</b> the prioritization criteria include, for non-planning grants, the consideration of the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated cost?	Pages 300-301	<b>Yes.</b>		<b>X</b>
C. <b>For the new or updated plan, do</b> the criteria include considerations for communities with the highest risk?	Section 4.0, pages 300-301	<b>Yes</b> <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		<b>X</b>
D. <b>For the new or updated plan, do</b> the criteria include considerations for repetitive loss properties?	Pages 300-301, Pages 135-137	<b>Yes</b> <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		<b>X</b>
E. <b>For the new or updated plan, do</b> the criteria include considerations for communities with the most intense development pressures?	Pages 300-301	<b>Yes.</b> <i>Note: A "Needs Improvement" score on this requirement will not preclude the plan from passing.</i>		<b>X</b>
<b>SUMMARY SCORE</b>				<b>X</b>

**PLAN MAINTENANCE PROCESS**

**Monitoring, Evaluating, and Updating the Plan Requirement §201.4(c)(5)(i):** *[The Standard State Plan Maintenance Process **must** include an] established method and schedule for monitoring, evaluating, and updating the plan.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe the method and schedule for monitoring the plan? (e.g., identifies the party responsible for <b>monitoring</b> , includes schedule for reports, site visits, phone calls, and/or meetings)	Pages 351, 353 – 354 Table 6-1	<b>Yes.</b>		<b>X</b>
B. Does the <b>new or updated</b> plan describe the method and schedule for <b>evaluating</b> the plan? (e.g., identifies the party responsible for evaluating the plan, includes the criteria used to evaluate the plan)	Pg 380– 388  Evaluation: pg 386 - 388	<b>No.</b> There is no method and schedule for evaluating the plan.  <b>Required Revisions:</b> Explain how the plan (has been for the update) gets evaluated (refer to how it has been per the last plan and now update) along with the schedule (i.e., who evaluates, what's the criteria for evaluating, how will this occur and how will be used for the next update, and when).  <b>Required Revision:</b> Element is looking for an established method and schedule for evaluating the Plan. It needs to include specific agencies' responsibilities for evaluating plan including a description of these agencies' evaluation, findings and recommendations.  Provide an evaluation on how well the process (coordination, identifying risk, implementing the strategies, building capabilities, etc.) is working or not. Provide a description of how, when and by whom it will be evaluated.	<b>X</b>	
C. Does the <b>new or updated</b> plan describe the method and schedule for <b>updating</b> the plan?	Section 6.2.3 page 353 – 354 and Table 6-1	<b>Yes.</b>		<b>X</b>
<b>D. Does the updated plan include an analysis of whether the previously approved plan's method and schedule worked, and what elements or processes, if any, were changed?</b>	Pg 386 (section 6.2.4)  Pgs 386-388	<b>No.</b> No analysis was provided. The State's crosswalk locates this on page 353, but this information is not found in this Section 6.2.3. Project closeouts do not address this element. There is a discussion of projects closeout instead of providing an analysis of what worked or did not work since last plan approval.  <b>Required Revisions:</b> Provide an analysis on the previously approved plan's method and schedule	<b>X</b>	

SUMMARY SCORE

X	
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**Monitoring Progress of Mitigation Activities Requirement §201.4(c)(5)(ii):** [The Standard State Plan Maintenance Process **must** include a] system for monitoring implementation of mitigation measures and project closeouts. **Requirement §201.4(c)(5)(iii):** [The Standard State Plan Maintenance Process **must** include a] system for reviewing progress on achieving goals as well as activities and projects in the Mitigation Strategy.

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
A. Does the <b>new or updated</b> plan describe how mitigation measures and project closeouts will be monitored?	Pages 354 – 356 Appendix 3-1	<b>Yes.</b>		X
B. Does the <b>new or updated</b> plan identify a system for reviewing progress on achieving goals in the Mitigation Strategy?	Page 350	<b>Yes</b>		X
<b>C. Does the updated plan describe any modifications, if any, to the system identified in the previously approved plan to track the initiation, status, and completion of mitigation activities?</b>	Pages 350 - 352	<b>Yes.</b> However it is not clear what previous system was.		X
D. Does the <b>new or updated</b> plan identify a system for reviewing progress on implementing activities and projects of the Mitigation Strategy?	Page 350	<b>Yes</b>		X
<b>E. Does the updated plan discuss if mitigation actions were implemented as planned?</b>	Pages 335 – 336 & 347 & 349 Table 5-1	<b>Yes</b> <i>Note: Related to §201.4 (c)(3)(iii)</i>		X
SUMMARY SCORE				X

**SEVERE REPETITIVE LOSS STRATEGY** (*only required for 90/10 under FMA & SRL*)

**Repetitive Loss Mitigation Strategy**

**Requirement §201.4(c)(3)(v):** A State may request the reduced cost share authorized under §79.4(c)(2) of this chapter for the FMA and SRL programs, if it has an approved State Mitigation Plan ... that also identifies specific actions the State has taken to reduce the number of repetitive loss properties (which **must** include severe repetitive loss properties), and specifies how the State intends to reduce the number of such repetitive loss properties.

Location in the

SCORE
-------

State: **CONNECTICUT**Date of Plan: **2013 UPDATE**

Element	Plan (section or annex and page #)	Reviewer's Comments	NOT	MET
			MET	MET
A. Does the new or updated plan describe State mitigation goals that support the selection of mitigation activities for repetitive loss properties (see also Part 201.4(c)(3)(i))?	Page 313	<b>Yes</b> <u>See Mitigation Strategy 2.1.</u> Strategy 2.1 – Refine State-level priorities and evaluation criteria for hazard mitigation project funding (with emphasis on RL and SRL properties) that is provided or administered by the State, including FEMA grant funds. (page 312)  [Note: Only required for SRL 90/10 under FMA & SRL]		X
B. Does the new or updated plan consider repetitive loss properties in its evaluation of the State's hazard management policies, programs, and capabilities and its general description of the local mitigation capabilities (see also Part 201.4(c)(3)(ii))?	Pages 218,219 & 222-223	<b>Yes</b> Approximately 25 communities represent 80% of SRLP in CT.  [Note: Only required for SRL 90/10 under FMA & SRL]		X
C. Does the new or updated plan address repetitive loss properties in its risk assessment (see also Part 201.4(c)(2))?	Pages 135-137, Appendix 2	<b>Yes</b>  [Note: Only required for SRL 90/10 under FMA & SRL]		X
D. Does the new or updated plan identify, evaluate and prioritize cost-effective, environmentally sound, and technically feasible mitigation actions for repetitive loss properties (see also Part 201.4(c)(3)(iii))?	Table 5-1, actions 15,27,33 and 36  Pg 152 - 155	<b>No.</b> Continue to improve is not an action. How is the State going to improve? What is the State going to do to improve?  <b>Recommended Revision:</b> Here is the State action "Continue to improve on Statewide Repetitive Loss and Severe Repetitive Loss Strategy to mitigate and reduce the number of repetitive loss properties". (page 319) The State needs to offer more to reduce repetitive loss. In the next update move beyond plans. An example of a proactive approach to keep to keep structures from becoming repetitive loss is to lower substantial threshold percentage in communities that have many Rep loss properties.  Consider better defined projects or activities that would be undertaken if there was a major disaster in CT in which the State received substantial funding for implementation (rather than general broad education and outreach action statements).  [Note: Only required for SRL 90/10 under FMA & SRL]	X	
E. Does the new or updated plan describe specific actions that have been implemented to mitigate repetitive loss properties, including actions taken to reduce the number of severe repetitive loss properties?	Pages 135 & 223 Appendix 5-4	<b>Yes</b>  [Note: Only required for SRL 90/10 under FMA & SRL]		X
F. Does the new or updated plan identify current and potential sources of Federal, State, local, or private funding to implement mitigation activities for repetitive loss properties (see also Part 201.4(c)(3)(iv))?	Pages 135-137 & 225 Appendix 5-3	<b>Yes</b> [What about USACE sources?]  [Note: Only required for SRL 90/10 under FMA & SRL]		X

SUMMARY SCORE

X	
---	--

**Coordination with Repetitive Loss Jurisdictions**

*Requirement §201.4(c)(3)(v): In addition, the plan **must** describe the strategy the State has to ensure that local jurisdictions with severe repetitive loss properties take actions to reduce the number of these properties, including the development of local mitigation plans.*

Element	Location in the Plan (section or annex and page #)	Reviewer's Comments	SCORE	
			N	S
<b>A. Does the new or updated plan provide a description of the State process to support, through funding and technical assistance, the development of local mitigation plans in communities with severe repetitive loss properties (see also Part 201.4(c)(4)(i))?</b>	Subsection 4.2, Pages 300, 305-307, & 135-137	<b>Yes.</b> <b>See page 300.</b>  <i>[Note: Only required for SRL 90/10 under FMA &amp; SRL]</i>		X
<b>B. Does the new or updated plan include considerations for repetitive loss properties in its criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available mitigation funding programs (see also Part 201.4(c)(3)(iii))?</b>	Pages 301, & 135-137	<b>Yes.</b>  <i>[Note: Only required for SRL 90/10 under FMA &amp; SRL]</i>		X
<b>SUMMARY SCORE</b>				X

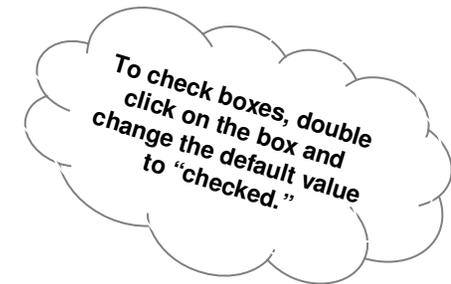
**Matrix A: Profiling Hazards**

This matrix can assist FEMA in scoring each hazard. States may find the matrix useful to ensure that their plan addresses each natural hazard that can affect the State.

**Completing the matrix is not required.**

*Note: First, check which hazards are identified in requirement §201.4(c)(2)(i). Then, place a checkmark in either the N or S box for each applicable hazard. An “N” for any element of any identified hazard will result in a “Needs Improvement” score for this requirement. List the hazard and its related shortcoming in the comments section of the Plan Review Crosswalk.*

Hazard Types Identified	Hazards Identified Per Requirement §201.4(c)(2)(i)	A. Location		B. Previous Occurrences		C. Probability of Future Events	
	Yes	N	S	N	S	N	S
Avalanche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Flooding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Storm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam Failure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drought related	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expansive Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extreme Heat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flooding-related hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hailstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurricane	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Subsidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Winter-related hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: <u>Thunderstorms</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Sea Level Rise</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Tornado</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tsunami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcano	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildland fire	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windstorm	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tropical Storm	X						



**Legend:**

§201.4(c)(2)(i) Profiling Hazards

A. Does the risk assessment identify the location (i.e., geographic area affected) of each natural hazard addressed in the **new or updated** plan?

B. Does the plan provide information on previous occurrences of each hazard addressed in the **new or updated** plan?

C. Does the plan include the probability of future events (i.e., chance of occurrence) for each hazard addressed in the **new or updated** plan?

## **Appendix 1-2. Meeting Documentation**

Advisory Group for the CT NHMP  
Meeting #1  
Tuesday 5/1/12, 10:00 a.m. to 12:00 p.m.  
Russell Room

<u>Time</u>	<u>Meeting Item</u>
10:00	Welcoming remarks, introduction
10:10	Overview of CT Natural Hazard Mitigation Plan What is it? Why is it important? What is the planning timeframe? Is their funding for potential outside consultant assistance?
11:00	Set meeting schedule
11:15	Wrap up and next steps.

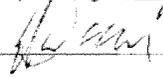
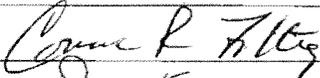
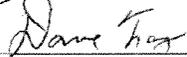
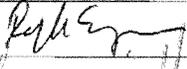
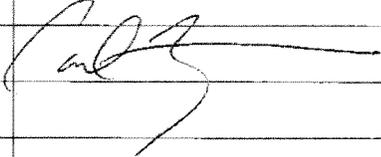
Meeting Attendance Sign-In Sheet  
NHMP Advisory Group  
May 1, 2012 Meeting  
10:00 a.m. to 12:00 p.m.

Name	Signature
John Cimoehowski	
Elizabeth Doran	
Carla Feroni	<i>Carla Feroni</i>
David Fox	<i>David Fox</i>
Denny Galloway	<i>DENNY GALLOWAY</i>
Douglas Glowacki	
Diane Ifkovic	
Kurt Kebschull	<i>Kurt Kebschull</i>
Karen Michaels	<i>Karen A. Michaels</i>
Jennifer Pagach	
Denise Ruzicka	
Sharon Yurasevecz	<i>Sharon Yurasevecz</i>

Working Group for the CT NHMP  
Meeting #1  
Tuesday 5/8/12, 10:00 a.m. to 12:00 p.m.  
Conference Room 2B

<u>Time</u>	<u>Meeting Item</u>
10:00	Welcoming remarks, introduction
10:10	Overview of CT Natural Hazard Mitigation Plan What is it? Why is it important? What is the planning timeframe? Is their funding for potential outside consultant assistance?
11:00	Set meeting schedule
11:15	Wrap up and next steps.

Meeting Attendance Sign-In Sheet  
 NHMP Working Group  
 May 8, 2012 Meeting  
 10:00 a.m. to 12:00 p.m.

Name	Signature
Mark DeCaprio	
Elizabeth Doran	
Lou Fazzino	
<del>Corinne</del> Fitting	
David Fox	
Douglas Glowacki	
Diane Ifkovic	
Eugene MacGillis	
Karen Michaels	
Jennifer Pagach	
Denise Ruzicka	
Ralph Scarpino	
Bruce Wittchen	
Sharon Yurasevecz	
Carl Zimmerman	

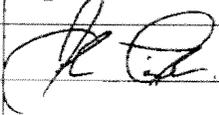
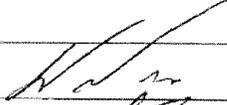
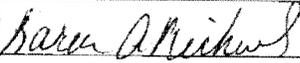
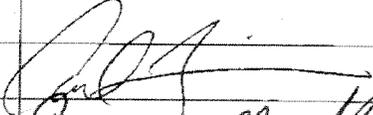
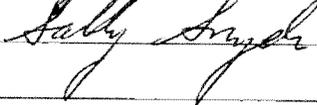
Agenda for both the Meetings of Advisory and Working Groups for the CT NHMP  
Meeting #2

Advisory Group Scheduled Meeting  
Tuesday 6/5/12, 10:00 a.m. to 12:00 p.m.  
Holcombe Room

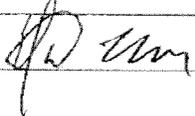
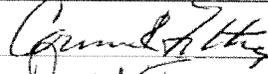
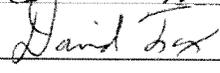
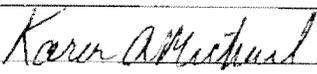
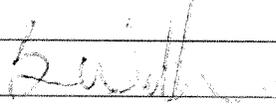
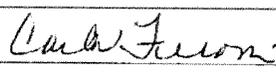
Working Group scheduled Meeting  
Wednesday 6/6/12, 10:30 a.m. to 12:00 p.m.  
Holcombe Room

<u>Time</u>	<u>Meeting Item</u>
10:00	Welcoming remarks, introduction
10:10	Discussion of proposed revisions to Chapter 1 of the CT NHMP
11:00	Discussion of combining both planning groups into one NHMP planning team to meet on Wednesdays
11:30	Wrap up and next steps.

Meeting Attendance Sign-In Sheet  
 NHMP Advisory Group  
 June 5, 2012 Meeting  
 10:00 a.m. to 12:00 p.m.

Name	Signature
John Cimoehowski	
✓ Elizabeth Doran	
Carla Feroni	
✓ David Fox	
Denny Galloway	
✓ Douglas Glowacki	
✓ Diane Ifkovic	
Kurt Keschull	
✓ Karen Michaels	
✓ Jennifer Pagach	
✓ Denise Ruzicka	
✓ Sharon Yurasevecz	
Carl Zimmerman	
Eugene Mac Gillis	
Sally Snyder	

Meeting Attendance Sign-In Sheet  
NHMP Working Group  
June 6, 2012 Meeting  
10:30 a.m. to 12:00 p.m.

Name	Signature
Mark DeCaprio	
Elizabeth Doran	
Lou Fazzino	
Corine Fitting	
David Fox	
Douglas Glowacki	
Diane Ifkovic	
Eugene MacGillis	
Karen Michaels	
Jennifer Pagach	
Denise Ruzicka	
Ralph Scarpino	
Bruce Wittchen	
Sharon Yurasevecz	
Carl Zimmerman	
Carla Feroni	

Agenda for CT NHMP Planning Team  
Meeting #3

Holcombe Room

Wednesday 7/11/12, 10:30 a.m. to 12:00 p.m.  
Holcombe Room

<u>Time</u>	<u>Meeting Item</u>
10:00	Welcoming remarks, introduction
10:05	Update for the CT NHMP RFP process
10:15	Discussion of proposed revisions to Chapter 1 of the CT NHMP and any comments from the group
10:20	Discussion of Chapter Two for next meeting
10:30	Wrap up and next steps for August's meeting

7/11/12 Sign-In Sheet  
CT NHMP Plumbing Team

Karen Michael	860-424- <del>3779</del> 3779
Sharon YURASEVICH	860-424-3861
Beth Doran	860-424-3721
Mark DeCaprio	860 424 3361
DAVE FOX	860-424-4111
Carl Zimmerman	860-424-3244
Leon Fuzzini	860-424-3309
Corinne Fitting	860-424-3724
Wah Simochowski	860-424-3229
Jerry Snyder	860-424-3869

Agenda for CT NHMP Planning Team  
Meeting #4

Holcombe Room

Wednesday 8/1/12, 10:30 a.m. to 12:00 p.m.  
Holcombe Room

<u>Time</u>	<u>Meeting Item</u>
10:00	Welcoming remarks, introduction
10:05	Update for the CT NHMP RFP process
10:15	Discussion of ideas to improve upon or refine Chapters 3&4
11:45	Wrap up and next steps for next meeting

Meeting Attendance Sign-In Sheet  
 NHMP Planning Team  
 August 1, 2012 Meeting  
 10:30 a.m. to 12:00 p.m.

Name	Signature
John Cimochowski	
Mark DeCaprio	
Elizabeth Doran	
Lou Fazzino	
Carla Feroni	
<del>Corinne</del> Fitting	<i>Corinne Fitting</i>
Corinne	
David Fox	<i>David Fox</i>
Denny Galloway	
Douglas Glowacki	
Diane Ifkovic	
Kurt Keschull	<i>Kurt Keschull</i>
Eugene MacGillis	
Karen Michaels	
Jennifer Pagach	<i>Karen Michaels</i>
Denise Ruzicka	
Ralph Scarpino	
Sally Snyder	<i>Sally Snyder</i>
Bruce Wittchen	<i>Bruce Wittchen</i>
Sharon Yurasevecz	<i>Sharon Yurasevecz</i>
Carl Zimmerman	<i>Carl Zimmerman</i>

No Agenda sent.

Meeting Attendance Sign-In Sheet  
NHMP Planning Team  
October 3, 2012 Meeting  
10:30 a.m. to 12:00 p.m.

Brainstorming session for ideas & suggestions for changes to the NHMP

Name	Signature
John Cimoehowski	
Mark DeCaprio	Mark DeCaprio
Elizabeth Doran	Doran
Lou Fazzino	
Carla Feroni	
Corrine Fitting	Corrine Fitting
David Fox	David Fox
Denny Galloway	Galloway
Douglas Glowacki	
Diane Ifkovic	Diane Ifkovic
Kurt Keschull	Kurt Keschull
Eugene MacGillis	
Karen Michaels	Karen Michaels
Jennifer Pagach	Jennifer Pagach
Ralph Scarpino	
Sally Snyder	Sally Snyder
Bruce Wittchen	
Sharon Yurasevecz	Sharon Yurasevecz
Carl Zimmerman	

Agenda for CT NHMP Planning Team  
Meeting #5

Holcombe Room

Wednesday 3/13/13, 10:00 a.m. to 12:00 p.m.

<u>Time</u>	<u>Meeting Item</u>
10:00	Welcoming remarks, introduction
10:30	Update for the CT NHMP <ul style="list-style-type: none"><li>• Contractor Selected</li><li>• Timeframe</li><li>• Kick-off Meeting – April Meeting</li><li>• Transition of Plan for next Plan update</li></ul>
10:35	Discussion of ideas to improve upon or refine the Plan (What would Team members like to see different in this plan update)
11:45	Wrap up and next steps for next meeting

Meeting Attendance Sign-In Sheet  
 NHMP Planning Team  
 March 13, 2013 Meeting  
 10:00 a.m. to 12:00 p.m.

Name	Signature
John Cimochowski	
Mark DeCaprio	
Elizabeth Doran	
Mary Rose Duberek	<i>Beth Doran</i>
Gemma Fabris	<i>Mary Rose Duberek</i>
Lou Fazzino	
Carla Feroni	
Corrine Fitting	
David Fox	
Denny Galloway	<i>David Fox</i>
Douglas Glowacki	
Diane Ifkovic	
Kurt Keschull	
Eugene MacGillis	<i>Kurt Keschull</i>
Karen Michaels	<i>Eugene Mac Gillis</i>
Jennifer Pagach	<i>Karen Michaels</i>
Emily Pysh	
Ralph Scarpino	<i>Emily Pysh</i>
Sally Snyder	
Bruce Wittchen	
Sharon Yurasevecz	
Maggie Tenorio	<i>Sharon Yurasevecz</i>
Belinda Dougan	<i>Maggie Tenorio</i>
George Bradner	<i>Belinda Dougan</i>
	<i>George Bradner</i>

## Ideas and Suggested Changes for the CT NHMP 2013 Update

Ideas regarding potential changes/modifications/revisions to the CT NHMP by the Planning Team:

- In Chapter 3, insert a table or graphic that shows all the various DEEP divisions and state agencies are related to the management of particular natural hazards and how efforts of these agencies are coordinated.
- Update information since much info is outdated.
- Investigate and possible use different models to assist in the risk assessment process.
- Clarify the roles and responsibilities of DEEP and other agencies with respect to hazard mitigation, provide recommendations with respect to management participation and direction for the plan, stronger inter-agency formal participation to provide data, information and necessary resources , and development of a formal evaluation process by a permanent planning team to evaluate various agencies and their divisional programs, plans and regulations with respect to hazard mitigation and incorporation of proposed hazard mitigation activities into said mechanisms.
- If possible include a more detailed focus on the last four disasters and what they have shown CT with respect to hazard mitigation; strengths, areas needing improvement, land use and building policy issues, and infrastructure protection and improvement.
- Incorporation of climate change and future projections of probability and risk for each natural hazard including a strengths and weakness (or lessons learned or what works/what needs improvement) at the beginning of the chapter.
- Use of more recent photos to emphasize recent events.
- Development of a tool or application of an existing tool which can be used to collect data on hazard mitigation activities that are implemented for use in their evaluation after implementation to monitor progress or completion to determine feasibility and effectiveness.
- Examine other potential overlaps/redundant efforts with respect to NHM planning including resiliency, sustainability, adaptation, etc. that includes the following:
  - Inclusion of lessons/ recommendations that come out of the FEMA Long Term Recovery Taskforce, insurance and reinsurance industry, Shoreline Preservation TaskForce <http://www.housedems.ct.gov/Shore/index.asp> and climate adaptation trainings including the Groton workshops and report <http://ctclimatechange.com/index.php/learn/adaptation/> and upcoming DEEP workshops with CLEAR/UCONN/Sea Grant workshops with Madison, Westbrook, Waterford and Greenwich.
  - Inclusion of adaptation progress and resources including CART, Ct's Adaptation Resource Toolkit, located at <http://ctclimatechange.com/index.php/towns/art-adaptation-resource-tool-kit-home-page/> (Password: ART)

Kick-off 4/2/13

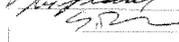
CT NHMP Update Kick-Off Meeting  
4/2/13

- 1st Floor sign-in  
sheet

Last Name	First Name	Organization	Email	Signature	Would you like to receive email updates regarding the NHMP Update? (Please check)	
					Yes	No
✓ Anderson	Stephen	CT Dept of Agriculture	<a href="mailto:stephen.anderson@ct.gov">stephen.anderson@ct.gov</a>	<i>Stephen Anderson</i>	✓	
✓ Baker	Chris	CT Red Cross	<a href="mailto:chris.baker@redcross.org">chris.baker@redcross.org</a>			
✓ Bolton	Jeffrey	CT DCS	<a href="mailto:jeffrey.bolton@ct.gov">jeffrey.bolton@ct.gov</a>	<i>J. Bolton</i>		✓
✓ Bradner	George	CT Dept. of Insurance	<a href="mailto:george.bradner@ct.gov">george.bradner@ct.gov</a>			✓
✓ Bunce, Major CTNG	Edward T	CT Air National Guard, Military Support	<a href="mailto:edward.t.bunce.mil@mail.mil">edward.t.bunce.mil@mail.mil</a>	<i>E/B</i>	✓	
✓ Caplet	Mike	CT DESPP	<a href="mailto:mike.caplet@ct.gov">mike.caplet@ct.gov</a>	<i>Mike Caplet</i>	✓	
✓ Carlson	Carolyn	Red Cross	<a href="mailto:carolyn.carlson@redcross.org">carolyn.carlson@redcross.org</a>	<i>Carolyn Carlson</i>	✓	
✓ Chandy	Binu	CT DECD	<a href="mailto:binu.chandy@ct.gov">binu.chandy@ct.gov</a>		✓	
✓ Discenza	Peggy	CT BETP	<a href="mailto:peggy.diaz@ct.gov">peggy.diaz@ct.gov</a>	<i>Peggy Discenza</i>	✓	
✓ Duberek	MaryRose	CT DESPP- DEMHS	<a href="mailto:MaryRose.duberek@ct.gov">MaryRose.duberek@ct.gov</a>	<i>Mary Rose Duberek</i>	✓	
✓ Dumais	Kenneth	CT DESPP	<a href="mailto:kenneth.dumais@ct.gov">kenneth.dumais@ct.gov</a>	<i>Kenneth Dumais</i>	✓	
✓ Fabris	Gemma	CT DESPP-DEMHS	<a href="mailto:gemma.fabris@ct.gov">gemma.fabris@ct.gov</a>	<i>Gemma Fabris</i>	✓	
○ Field	John	CT DESPP	<a href="mailto:john.field@ct.gov">john.field@ct.gov</a>		✓	
○ Filchak	John	NECCOG	<a href="mailto:john.filchak@neccog.org">john.filchak@neccog.org</a>	<i>John Filchak</i>	✓	
○ Forrest	Daniel	State Historic Preservation Office	<a href="mailto:daniel.forrest@ct.us">daniel.forrest@ct.us</a>	<i>Daniel Forrest</i>	✓	
○ Frederick	William P.	CT DECD	<a href="mailto:william.frederick@ct.gov">william.frederick@ct.gov</a>	<i>William P. Frederick</i>	✓	
○ Greci	Dennis	CT DEEP	<a href="mailto:dennis.greci@ct.gov">dennis.greci@ct.gov</a>	<i>Dennis Greci</i>	✓	
○ Herbert	Moira	CT Dept. of Insurance	<a href="mailto:Moira.herbert@ct.gov">Moira.herbert@ct.gov</a>	<i>Moira Herbert</i>		
○ Higgins	William	CT DESPP - Commission on Fire Prevention and Control	<a href="mailto:william.higgins@ct.gov">william.higgins@ct.gov</a>			
○ Izkovic	Diane	CT DEEP	<a href="mailto:diane.izkovic@ct.gov">diane.izkovic@ct.gov</a>	<i>Diane Izkovic</i>		
○ Lettieri	Michael	CT DECD	<a href="mailto:michael.lettieri@ct.gov">michael.lettieri@ct.gov</a>			
○ Malone	Timothy	CCRPA	<a href="mailto:tim@ccrpa.org">tim@ccrpa.org</a>	<i>Tim Malone</i>		
○ Muszynski	Michael	CT Conference of Municipalities	<a href="mailto:mmuszynski@ccm-ct.org">mmuszynski@ccm-ct.org</a>			

CT NHMP Update Kick-Off Meeting  
4/2/13

1st Floor sign-in sheet

Last Name	First Name	Organization	Email	Signature	Would you like to receive email updates regarding the NHMP Update? (Please check)	
					Yes	No
✓ Paszczuk	Henry	CT DESPP- DEMHS	<a href="mailto:henry.paszczuk@ct.gov">henry.paszczuk@ct.gov</a>		✓	
✓ Piacentini	Suzanne	HUD	<a href="mailto:suzanne.piacentini@hud.gov">suzanne.piacentini@hud.gov</a>		✓	
Rolleston	Christopher	FEMA	<a href="mailto:christopher.rolleston@fema.dhs.gov">christopher.rolleston@fema.dhs.gov</a>			
Santoro	Michael	CT DECD	<a href="mailto:michael.santoro@ct.gov">michael.santoro@ct.gov</a>			
Savageau	Denise	Town of Greenwich	<a href="mailto:denise.Savageau@greenwichct.org">denise.Savageau@greenwichct.org</a>		✓	
Tangney	Cynthia	CT DESPP-DEMHS	<a href="mailto:cynthia.tangney@ct.gov">cynthia.tangney@ct.gov</a>			









Meeting Attendance Sign-In Sheet  
 NHMP Update Planning Team  
 June 5, 2013 Meeting  
 9:00 a.m. to 3:00 p.m.  
 Holcombe Room, CT DEEP

Name	Signature
Jeffrey Bolton	
George Bradner	
Major Edward Bunce	
Carolyn Carlson	<i>Carolyn Carlson</i>
John Cimochoowski	
Binu Chandy	<i>Binu Chandy</i>
Mark DeCaprio	
Peggy Discenza	<i>Peggy Discenza</i>
Elizabeth Doran	
Mary Rose Duberek	
Ken Dumais	
Gemma Fabris	
Lou Fazzino	
Carla Feroni	<i>Carla Feroni</i>
Corrine Fitting	<i>Corrine Fitting</i>
Daniel Forrest	
David Fox	<i>David Fox</i>
William Frederick	
Denny Galloway	
Douglas Glowacki	
John Haggerty	<i>[Signature]</i>
Moirra Herbert	<i>Moirra Herbert</i>
Diane Ifkovic	<i>Diane Ifkovic</i>
Kurt Keschull	<i>Kurt Keschull</i>





Connecticut State Hazard Mitigation Plan Update Kick-Off Meeting



# Agenda

April 2, 2013 9:00 – 12:00 PM

CT DEEP -79Elm Street, Hartford, CT 06106

Phoenix Auditorium, 5<sup>th</sup> Floor

**Purpose:** *Getting Organized, Jump-starting the Revision Process*

Description	Lead	Time
Welcome, Introductions and How We'll Communicate <ul style="list-style-type: none"> <li>• Project Team</li> <li>• Expectations               <ul style="list-style-type: none"> <li>○ Mitigation Planning Committee, CIHMC, Stakeholders, Others</li> </ul> </li> <li>• Update Requirements</li> <li>• Improvements to 2010</li> <li>• Planning Purpose and Process</li> </ul>	Karen Michaels, DEEP, State Hazard Mitigation Planner  Scott Choquette, Dewberry	9:00 – 9:30
Updating the Hazard Identification & Risk Assessment <ul style="list-style-type: none"> <li>• Overview of HIRA Planning Process</li> <li>• Hazard Analysis consistent with State Hazards</li> <li>• New Hazards to Consider?</li> <li>• Data Needs               <ul style="list-style-type: none"> <li>○ Data discrepancies from previous plan, what can be improved?</li> <li>○ Critical Facilities and Assets</li> <li>○ Hazard Specific Data Sources</li> </ul> </li> <li>• Local Hazard Mitigation Plan Incorporation</li> <li>• Review of Existing Ranking</li> </ul>	Rachael Herman, Dewberry        David Murphy, Dewberry Team (Milone & MacBroom)	9:30 – 10:30        <b>Break – 10:30</b>
Evaluating 2010: <ul style="list-style-type: none"> <li>• Mitigation Actions</li> <li>• Program Capacity</li> <li>• Planning Integration</li> </ul>	Darrin Punchard, Dewberry Team (AECOM)  Dave Murphy, Dewberry Team (Milone & MacBroom)	10:45– 11:15
Wrap Up and Future Meetings <ul style="list-style-type: none"> <li>• Project Schedule - Milestones</li> <li>• Next Mitigation Committee Meeting</li> <li>• Overview of Action Items</li> </ul>	FEMA Region I Scott Choquette, Dewberry	11:15– 12:00

## Connecticut State Hazard Mitigation Plan 2013 Update – Kick Off Meeting

April 2, 2013

9:00 AM – 12:00 PM  
CT DEEP  
Phoenix Auditorium, 5<sup>th</sup> Floor  
79 Elm Street  
Hartford, CT 06066




## Meeting Agenda

- Welcome & Introductions
  - Why a hazard mitigation plan
  - Plan Update Requirements
  - Improvements to 2010
  - Plan Update Process
- Hazard Identification and Risk Assessment
  - Hazard Analysis
  - New Hazards to Consider
  - Data Availability
  - LHMP Incorporation
  - Hazard Re-Prioritization
- Mitigation Strategy and Capabilities
- Wrap Up and Future Meetings



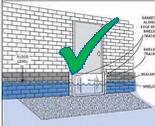

## Introductions

- Connecticut Hazard Mitigation Planning Committee: aka "the decision makers"
  - Interagency Hazard Mitigation Committee
  - Stakeholders
- FEMA Region I
- Dewberry Team
  - Scott Choquette – Project Manager
  - Rachael Herman – Deputy PM/ Technical Lead
  - David Murphy – Integration, Capabilities, and Outreach Lead
  - Darrin Punchard – Mitigation Strategies Lead & Technical Support
  - Sara Margolis – Mapping Lead



## What is Mitigation?

**Mitigation is any sustained action taken to reduce long-term risk to life and property from a hazard event**



**Mitigation**  
Flood proofing of non-residential buildings



**Mitigation**  
property acquisition



**Preparedness & Response**  
purchase of a police command vehicle



## Why a Hazard Mitigation Plan?

- Reduces or eliminates the need to respond
  - Lessening public resource burden
- Creates resiliency and sustainability
- Promotes Data sharing between different levels of government
  - Leadership by example
- Disaster Mitigation act of 2000
  - Certain Public Assistance
  - Hazard Mitigation Assistance Programs



## Plan Update Requirements

- Comprehensive planning process / foster relationships
  - Description of who is involved and how the plan is prepared
  - Established method for monitoring and updating the plan
- Hazard Identification and Risk Assessment update
  - Hazard profiles, vulnerabilities, potential losses, development trends
- Focus on mitigation strategy and actions
  - Goals, progress, evaluation of actions, implementation plan
- Improve mitigation capabilities
  - Discussion of current policies, programs, and capabilities to support LHMPs and reduce risk statewide
- Approval by FEMA and Adoption Every 3 Years



### Improving the 2010 Plan

- *What do you like about the current State plan?*
- *How can this plan help your agency?*
- *Suggested Improvements?*
- *Notable out-of-date information?*
- *Significant hazard events since 2010?*
- *Who else should be involved in the plan update?*

- Please document your comments on the Participant Worksheet.

Image: FEMA/interstateprograms



### Representative FEMA Recommended Revisions

Recommendation	2013 Approach
Consider providing an opportunity or invitations to the Members of the Interstate Programs, who are active in the Interstate Flood Control Commission for the Thames River Valley & Connecticut Valley River Flood Control Compacts to participate in the planning process....	
Provide more detail as to how the plan was reviewed/analyzed and how that influenced the plan update.	
Articulate specific updates for each section of the plan.	
Continue to broaden the stakeholders by involving new members having expertise in community development. For example Connecticut's Smart-Growth, Federal agencies (i.e. DOT, HUD, & EPA) providing significant resources for sustainable communities and watershed, smart growth, sustainability, climate change interests, etc.	

Image: FEMA/interstateprograms



### FEMA Recommended Revisions

Recommendation	2013 Approach
Ensure the use of best readily available data. If maps are to be used, then provide data and maps that are current and available.	
CT received new, updated Surge Inundation Maps in 2009. USACE 1994 SLOSH data needs to be updated.	
The hurricane watch/warning needs to be updated to the new criteria – watches are issued 48 hours out and warnings are 36 hours out. <a href="http://www.nhc.noaa.gov/watchwarn_changes.shtml">http://www.nhc.noaa.gov/watchwarn_changes.shtml</a>	
Reference more accurate numbers of Dams in the state – avoid inconsistent reporting.	

Image: FEMA/interstateprograms



### FEMA Recommended Revisions

Recommendation	2013 Approach
Include map showing counties affected by March 2010 flood events.	
Update the Map Modernization (Risk MAP) data in the Plan including the status of the new County DFIRMS.	
Expand the State's vulnerability description to all identified hazards and not just those with the HAZUS. Compare with findings from local plans.	
Provide an update from the Governor's Steering Committee on Climate Change (GSC) report on climate change impacts if this is related to development in hazard prone areas. Address the Department of Economic and Community Development's Responsible Growth Guidelines and the CT Environmental Policy Act.	

Image: FEMA/interstateprograms



### FEMA Recommended Revisions

Recommendation	2013 Approach
Address the Department of Economic and Community Development's Responsible Growth Guidelines and the CT Environmental Policy Act.	
Discuss the CT Responsible Growth Task Force, the Dept of Economic and Community Development, and the Office of the State Building Inspector.	
Provide more in-depth evaluation of how the mitigation actions are working (pros and cons).	
Articulate the connections between the risk assessment and the mitigation strategy.	

Image: FEMA/interstateprograms

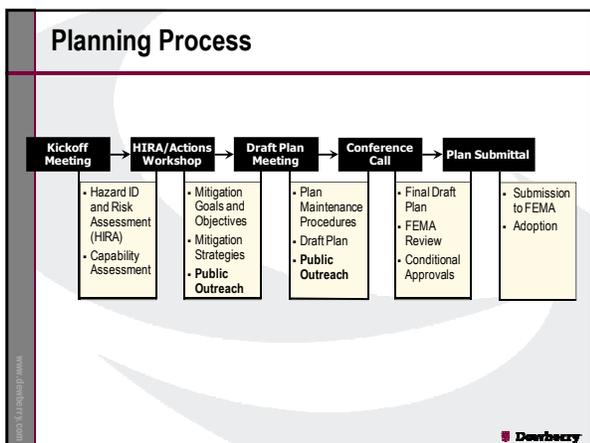


### FEMA Recommended Revisions

Recommendation	2013 Approach
Identify additional current non-government or private funding sources to implement mitigation activities.	
Expand discussion of State's support to local mitigation planning (G-318 training, tech assistance, EMI training, APA training, etc)	
Address Repetitive Loss Properties in the risk assessment and identify appropriate mitigation actions.	

Image: FEMA/interstateprograms





### It's Your Plan!

**We are here to:**

- ✓ Facilitate the process
- ✓ Lend technical expertise & consultation
- ✓ Do the heavy lifting

**You are here to:**

- Participate and contribute hazard information
- Make the final decisions
- Help ensure that we collectively create a plan that CT can and will use to reduce losses

### Hazard Identification & Risk Assessment

- **Purpose:** Provides a factual basis for prioritizing hazard mitigation activities
- **Major components:**
  - Profiles of natural hazards affecting the state
  - Vulnerability of jurisdictions and loss estimation
  - Vulnerability of state owned/operated facilities and critical facilities, and loss estimation
  - Integration of local hazard mitigation plan findings

### Hazard Prioritization

- Tropical Cyclone (Hurricane and Tropical Storm)
- Winter Storms
- Flooding
- Ice Jams
- Dam Failures
- Wildland Fires
- Tornadoes
- Drought
- Earthquakes
- Tsunami

*No prioritization noted in current plan.*

*Any additional hazards to consider?*

### Data Discrepancies: Discussion

- What can be improved?
- HIRA to inform mitigation projects/activities
- Does your agency have new data sources that have been created since the 2010 plan revision?
- What types of data would you like to see in the revision?
- Please document your comments on the Participant Worksheet.

### Data Needs: Building & Critical Facilities

- State Owned or Operated Facilities (Geospatial, addresses, types)
  - Building Specific (year, materials, value...)
  - Infrastructure
- Critical/Essential Facilities
  - Shelters, Police, Fire Dept, Hospitals
  - Local Facilities with Building Specific Parameters
  - Hazus-MH default Data

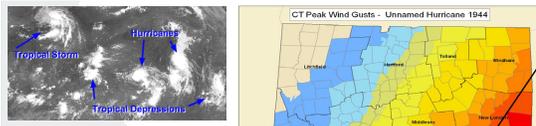
## Data Sources & Needs

- Demographics
  - 2010 Census Data
  - American Community Survey
- Hazard Data
  - Federally Declared Disasters and Significant Events (Tsunami & Hurricane Sandy)
  - Hazus-MH
  - NCDC
  - SVRGIS
  - FEMA FIRMs
  - FEMA Rep Loss
  - SLOSH
  - NWS station data
  - water supply/shortage reports
  - CT Geological Survey
  - USGS
  - National Atlas
- Land Use
  - State & Local Planning Efforts (population changes and/or shifts, changes in land use activities)
  - National Land Cover Data (NLCD)

*Other data sources?*



## Tropical Cyclone



Estimated losses for 5 scenarios based on HAZUS-MH



Highest Debris Estimations:

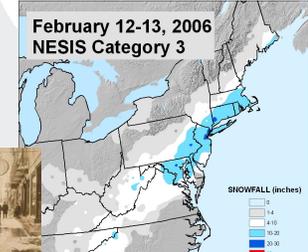
- Hartford County
- Middlesex County
- New Haven County
- New London County
- Windham County



## Winter Storms

- Blizzard, Freezing Rain, Ice Storm, Nor'easter, Sleet, Snow
- Two or more events per season

February 12-13, 2006  
NESIS Category 3



County	Total Number of Events
Connecticut (state)	255
Fairfield	62
Hartford	67
Litchfield	88
Middlesex	45
New Haven	58
New London	44
Tolland	67
Windham	61

SNOWFALL (inches)

- 0
- 1-4
- 4-10
- 10-30
- 30+



Blizzard 1888



## Flooding

- Riverine, Coastal, Flash Flooding, Shallow Flooding
- Many past events documented

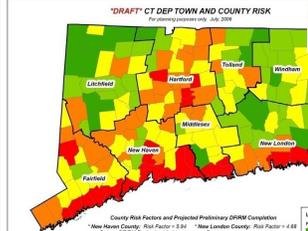


ANNUAL CYCLE OF FLOOD HAZARDS IN CONNECTICUT

WINTER FLOODS: JAN, FEB, MAR, APRIL, MAY, JUNE, JULY, AUG, SEPT, OCT, NOV, DEC

SEVERE DRAINAGE EVENTS: FEB, MAR, APRIL, MAY, JUNE, JULY, AUG, SEPT, OCT, NOV, DEC

WATERS: FEB, MAR, APRIL, MAY, JUNE, JULY, AUG, SEPT, OCT, NOV, DEC



County Risk Factors and Projected Preliminary DFIRM Completion

Legend

- Lowest Risk
- 1.00 - 1.10 (100%)
- 1.20 - 1.30 (100%)
- 1.40 - 1.50 (100%)
- 1.60 - 1.80 (100%)
- 1.90 - 2.00 (100%)
- 2.10 - 2.30 (100%)
- 2.40 - 2.50 (100%)
- 2.60 - 2.80 (100%)
- 2.90 - 3.00 (100%)
- 3.10 - 3.30 (100%)
- 3.40 - 3.60 (100%)
- 3.70 - 3.90 (100%)
- 4.00 - 4.20 (100%)
- 4.30 - 4.50 (100%)
- 4.60 - 4.80 (100%)
- 4.90 - 5.00 (100%)

DFIRM Data  
DFIRMs  
SLOSH  
Risk MAP Products



## Ice Jams

- a stationary accumulation that restricts or blocks stream flow
- 12 documented events since 1961
- 132 records of jams since 1902
- post-disaster reconnaissance study by the USACE estimated that the ice jam of 1994 resulted in flood damages of \$526,000 for 31 residential properties and 4 commercial properties.

No.	Rivers Name	Location
1	Shetucket River	Salis
2	Salton River	East Haddam
3	Pomperaug River	Southbury
4	Yantic River	Norwich
5	Mooseup River	Plainfield
6	Quanduck River	Sterling
7	Blackledge River	Marlborough
8	Williamtic River	Marsfield
9	Limekiln Brook	Bethel
10	Shepaug River	Stodbury
11	Blackberry River	North Canaan
12	Connecticut River	Hartford

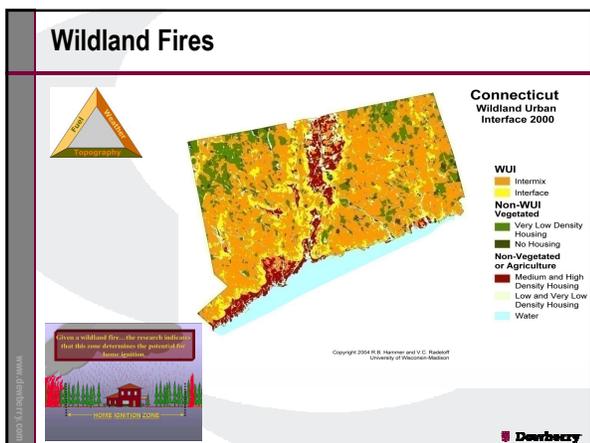


## Dam Failures

- a catastrophic event characterized by the sudden, rapid, and uncontrolled release of impounded water
- 4,000 + dams in CT, 500 pose a possible threat to human lives upon failure

Dam Hazard Classification	Number of Dams	Percentage
CC - High Hazard	242	6%
B - Significant Hazard	266	9%
BB - Moderate Hazard	699	23%
A - Low Hazard	1,804	62%
Total Regulated Dams	3,011	100%

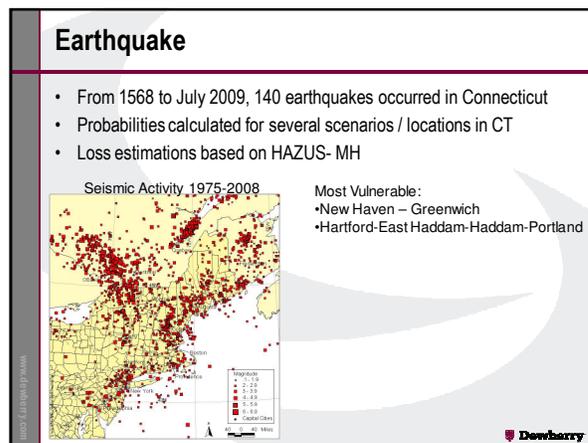
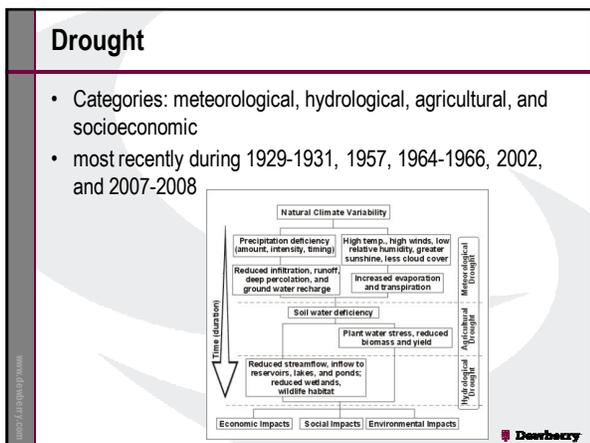




### Tornadoes

- 81 incidents from 1950 – 2008
- only 4 impacted people and property claiming six lives, injuring 700, and causing millions of dollars in damage
- Highest Vulnerabilities:
  - Hartford County
  - New Haven County

**Dewberry**



### Vulnerability Analysis and Loss Estimation

**Requirement §201.6(c)(2)(ii)(B):** [The plan should describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate ....

- Annualized loss to be based on:
  - NCDC Storm Events and other local, State and Federal data (NFIP claims)
  - Hazus
- Building Specific Analysis
  - Critical and State Facilities – Data Dependent
- Development Trends
  - Specific areas in high risk?
- Address vulnerabilities through mitigation actions

Image: State of West Virginia

### Example Hazard Specific Ranking

Image: State of West Virginia

### Example Ranking Comparison

Image: State of West Virginia

### Data Transfer to Dewberry

- Historical Data
- Hazard Specific Data (i.e. Dam Inundation)
- Facility (State and/or Critical)
- Insurance Claims
- Local Hazard Mitigation Plans
- Data used in previous plan and/or other planning efforts

Rachael Herman (585) 429-7448 rherman@dewberry.com

*\*Secure FTP site has been established for this project\**

Image: State of West Virginia

**HIRA** **Mitigation Strategies**

**Validate or Modify Mission Statement:**  
*"to mitigate the effects of natural hazards by minimizing loss of life and property damage"*

Image: State of West Virginia

### 2010 Mitigation Goals and Objectives

- **Goal 1:** Promote implementation of sound floodplain management and other natural hazard mitigation principles on a state and local level
  - **Objective:** Increase awareness by state agencies, local communities and the general public; encourage them to be proactive regarding mitigation
    - **Strategy 1:** Provide technical guidance
    - **Strategy 2:** Provide and promote educational opportunities
    - **Strategy 3:** Investigate climate change adaptation strategies

Image: State of West Virginia

## 2010 Mitigation Goals and Objectives

- **Goal 2:** Promote implementation of effective natural hazard mitigation projects on a state and local level
  - **Objective:** Maintain access to high quality, best available data for risk assessments and to base decision making for public policy
    - **Strategy 1:** Promote natural hazard mitigation research and planning activities to improve mitigation planning
    - **Strategy 2:** Promote educational opportunities



## 2010 Mitigation Goals and Objectives

- **Goal 3:** Increase research and planning activities for the mitigation of natural hazards on a state and local level
  - **Objective:** Develop the ability to be more resilient to the effects from natural hazards and maintain the ability to adapt to climatic changes
    - **Strategy 1:** Provide and promote educational opportunities
    - **Strategy 2:** Facilitate awareness of and access to various funding sources



## Mitigation Activities

- Updates to all prior activities (Table 5-1)
  - Completed, Partially Completed / Continuing, Deferred, Cancelled
  - Narratives explaining status
- Identify new activities based on updated HIRA and capabilities / program capacity
- Evaluate and prioritize all proposed activities for 2014–2016



## Program Capacity / Statewide Capabilities

- Updates to noted programs
  - Additional technical, personnel, or funding resources?
  - Progress achieved through noted programs
  - New programs to be included?
- Please review capabilities/programs reference to your agency for completeness and currency.
- Please document your comments on the Participant Worksheet.



## Planning Integration

- Discusses the State's support to the locals in developing local hazard mitigation plans and also regional hazard mitigation plans.
  - Provide an update on training conducted for locals, by the state
  - Discuss technical assistance
  - Update adoption dates
- Discuss funding availability to local jurisdictions in developing their mitigation plans.
- Discuss state support of local mitigation projects.



## Outreach

- Steering Committee HIRA focus groups & WebEx
  - Contacts for Capability Assessment
- Online Survey
  - Distribute via press release, email distribution, social media
- Social media updates
  - What works well?
- Plan link on CT DEEP website requesting review and feedback



### Wrap Up & Future Meetings

- Project Schedule
  - Data and Report Collection
  - HIRA Draft Review
  - Capability Assessment
- Next Committee Meeting
  - Review and brainstorm mitigation action plan based on early HIRA results – **May 1, 2013**
  - Draft HIRA Presentation & Mitigation Strategies Completion - **June 6, 2013**

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# Questions?

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**Connecticut State Hazard Mitigation Plan Update  
Stakeholder Meeting No. 2**



## Agenda

**May 1, 2013 10:00 AM – 12:00 PM**  
**CT DEEP -79Elm Street, Hartford, CT 06106**  
**Holcombe Room, 5<sup>th</sup> Floor**

**Purpose:** *Progress on the mitigation plan update: focus on mitigation goal, objective and action review.*

<b>Description</b>	<b>Lead</b>	<b>Time</b>
Welcome and Introductions <ul style="list-style-type: none"> <li>• Timeline for Review and Approval</li> <li>• Progress to Date               <ul style="list-style-type: none"> <li>○ Data Collection</li> <li>○ Overview of HIRA Ranking Methods and Analysis</li> <li>○ Local Plan Review</li> <li>○ Mitigation Strategy Development</li> </ul> </li> </ul>	Karen Michaels, DEEP, State Hazard Mitigation Planner  Scott Choquette, Dewberry	10:00 – 10:30
Local Plan Review and Public Outreach <ul style="list-style-type: none"> <li>• Local Plan Data and Information Capture               <ul style="list-style-type: none"> <li>○ Hazard Identification &amp; Loss Estimates</li> <li>○ Land Use &amp; Development</li> <li>○ Capabilities Assessments</li> <li>○ Mitigation Actions</li> </ul> </li> <li>• Public Outreach               <ul style="list-style-type: none"> <li>○ Survey:</li> </ul> </li> </ul> <p><a href="https://www.surveymonkey.com/s/cthazardmitigationplan">https://www.surveymonkey.com/s/cthazardmitigationplan</a></p>	David Murphy, Dewberry Team (Milone & MacBroom)	10:30 – 10:45
Mitigation Action Plan: Revision and Brainstorming <ul style="list-style-type: none"> <li>• Goal and Objective review</li> <li>• 2010 Action status</li> <li>• New 2013 Mitigation Action Brainstorming (Pending HIRA results adjustments)               <ul style="list-style-type: none"> <li>○ Development and revision will also be revisited during June 6 HIRA meeting.</li> </ul> </li> </ul>	Darrin Punchard, Dewberry Team (AECOM)	10:45 – 11:45
Wrap Up and Future Meetings <ul style="list-style-type: none"> <li>• Project Schedule - Milestones</li> <li>• Next Mitigation Committee Meeting</li> <li>• Overview of Action Items</li> </ul>	Scott Choquette, Dewberry	11:45– 12:00

## Connecticut State Hazard Mitigation Plan 2013 Update: Progress & Mitigation Action Plan

May 1st, 2013

10:00 AM – 12:00 PM  
CT DEEP  
Holcombe Room, 5<sup>th</sup> Floor  
79 Elm Street  
Hartford, CT 06066




## Meeting Agenda

- Welcome & Introductions
  - Timeline for Review and Approval
  - Progress to Date
- Hazard Identification and Risk Assessment
- Local Plan Incorporation
- Public Outreach
  - Survey
- Mitigation Strategy and Capabilities
- Wrap Up and Future Meetings



## Planning Process

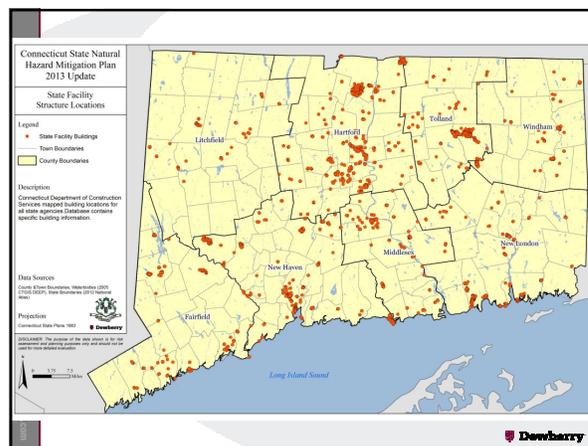


Kickoff Meeting	HIRA/Actions Workshop	Draft Plan Meeting	Conference Call	Plan Submittal
<ul style="list-style-type: none"> <li>• Hazard ID and Risk Assessment (HIRA)</li> <li>• Capability Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigation Goals and Objectives</li> <li>• Mitigation Strategies</li> <li>• Public Outreach</li> </ul>	<ul style="list-style-type: none"> <li>• Plan Maintenance Procedures</li> <li>• Draft Plan</li> <li>• Public Outreach</li> </ul>	<ul style="list-style-type: none"> <li>• Final Draft Plan</li> <li>• FEMA Review</li> <li>• Conditional Approvals</li> </ul>	<ul style="list-style-type: none"> <li>• Submission to FEMA</li> <li>• Adoption</li> </ul>

## Hazard Identification & Risk Assessment

- Progress to Date
  - Federal Disaster descriptions updated
    - New sub-section
  - Data Collection
  - Analysis Underway
    - State & Critical Facilities
    - Hazus
    - Ranking Methodology

Disaster Year	Incident Period	Disaster Types	Counties
DR-4106	2013 February 8-February 11	Severe winter storm and snow storm	All
DR-4087	2012 October 27-November 8	Hurricane	Litchfield, Fairfield, New Haven, Middlesex, New London, Windham, Tolland
DR-4046	2011 October 29-October 30	Severe Storm	Litchfield, Fairfield, New Haven, Middlesex, Windham, Tolland, Hartford
DR-4023	2011 August 27-September 1	Tropical Storm	All
DR-1958	2011 January 11-January 12	Snowstorm	Fairfield, Hartford, Litchfield, New Haven, New London, Tolland
DR-1904	2010 March 12-May 17	Severe Storms and Flooding	Fairfield, Middlesex, New London
DR-1700	2007 April 15-April 27	Severe Storms and Flooding	Fairfield, Hartford, Litchfield, Middlesex, New London, New Haven, Windham
DR-1619	2005 October 14-October 15	Severe Storms and Flooding	Litchfield, New London, Tolland, Windham
DR-1302	1999 September 16-September 21	Tropical Storm	Fairfield, Hartford, Litchfield
DR-1092	1996 January 7-January 13	Blizzard	Not listed
DR-972	1992 December 10-December 13	Coastal Flooding, Winter Storm	Not listed
DR-916	1991 19-Aug	Hurricane	Not listed
DR-897	1989 10-Jul	Severe Storms, Tornadoes	Not listed
DR-747	1985 27-Sep	Hurricane	Not listed
DR-711	1984 May 27-June 2	Severe Storms, Flooding	Not listed
DR-661	1982 14-Jun	Severe Storms, Flooding	Not listed
DR-608	1979 4-Oct	Tornado, Severe Storms	Not listed
1955	1955 20-Aug	Hurricane, Torrential Rain, Floods	Not listed
DR-25	1954 17-Sep	Hurricane	Not listed



### Hazard Identification

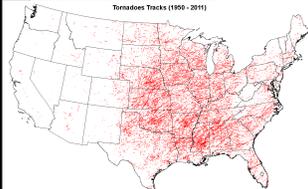
- Wind Related Hazards**
  - Tropical Cyclones
  - Tornadoes
  - Thunderstorms
- Wildland Fire**
- Drought**
- Earthquake**
- Winter Storm**
- Climate Change**
- Flood Related Hazards**
  - Flooding
  - Ice Jams
  - Dam Failures



### NCDC Storm Events Database

- 3,271 events
  - 1950\* - 2012
- Summarized by County

Event Category	Number of Events
Drought	6
Extreme Heat	31
Flood	528
Coastal	29
Flash	191
Flood	280
Urban	28
Hurricane	8
Thunderstorms	2,236
Hail	545
Lightning	146
Wind	1,545
Tornado	109
Funnel Cloud	15
Tornado	94
Winter Weather	353
Blizzard	14
Ice	14
Snow	171
Winter Storm	154




### Capabilities Assessment

- DEP/DEEP and DEMHS /DESPP – DEMHS
- Added:
  - Legislative program section
  - Adaptation Subcommittee of Gov's Climate Change Committee
  - Shoreline Preservation Task Force, OLISP adaptation planning
  - Risk MAP
  - UCONN (CLEAR, CT Sea Grant)
  - Nature Conservancy
  - Updates to State Building Codes and the CT Conservation and Development Policies Plan



### Capabilities Assessment

- Expanded:
  - NU/UI Discussion
  - Descriptions in the Local Communities Section
- Completed and ready for Agency Review!!*



### Program Capacity / Statewide Capabilities

- Updates to noted programs
  - Additional technical, personnel, or funding resources?
  - Progress achieved through noted programs?
  - New programs to be included?
- Please review capabilities/programs reference to your agency for completeness and currency.
- Please document your comments on the Participant Worksheet.
- Current Chapter 4 (Mitigation Programs) focuses primarily on FEMA programs, whereas others like NRCS are described in Chapter 3 – suggest merging



### Local Plan Integration

- Discusses the State's support to the locals in developing local hazard mitigation plans and also regional hazard mitigation plans.
  - Provide an update on training conducted for locals, by the state
  - Discuss technical assistance
  - Update adoption dates
- Discuss funding availability to local jurisdictions in developing their mitigation plans.
- Discuss state support of local mitigation projects.
- Review of Handout*



## Public Outreach

- Online Survey
  - <https://www.surveymonkey.com/s/cthazardmitigationplan>

The screenshot shows a survey form with the following sections:

1. Please indicate whether you are responding as a resident of Connecticut or as a representative of a state agency, municipality, or organization. You are encouraged to respond to the survey more than once if you wish to respond as a resident and a representative of an organization.
  - Resident
  - State Agency, Municipality, or Organization
2. If you are responding as a resident, please enter your five-digit zip code.
  -
3. If you are responding as a representative of a state agency, municipality, or organization, please select one of the following.
  - State Agency
  - Municipality
  - Regional Planning Agency/Council of Government
  - Historical Department
  - Municipal Government, Board, or Commission
  - Educational Institution
  - Business
  - Utility
  - Unaffiliated or Conservation Organization
  - Other
4. Where you aware that Connecticut maintains a Hazard Mitigation Plan?
  - Yes
  - No

## Mitigation Action Plan: Revision & Brainstorming

- **Chapter 5: Natural Hazard Mitigation Goals, Objectives, Strategies, and Activities for 2010-2013**
- 3 Goals / 3 Objectives / 9 Strategies
  - *Must be reaffirmed or updated based on current conditions*
- 53 Activities
  - *Must be evaluated in terms of implementation progress (status)*
  - *Must be updated or adjusted to reflect current conditions*

## 2010 Mitigation Goals and Objectives

- **Goal 1:** Promote implementation of sound floodplain management and other natural hazard mitigation principles on a state and local level (*18 activities*)
  - **Objective:** Increase awareness by state agencies, local communities and the general public; encourage them to be proactive regarding mitigation
    - **Strategy 1:** Provide technical guidance (*7 activities*)
    - **Strategy 2:** Provide and promote educational opportunities (*3 activities*)
    - **Strategy 3:** Investigate climate change adaptation strategies (*8 activities*)

## 2010 Mitigation Goals and Objectives

- **Goal 2:** Promote implementation of effective natural hazard mitigation projects on a state and local level (*20 activities*)
  - **Objective:** Maintain access to high quality, best available data for risk assessments and to base decision making for public policy
    - **Strategy 1:** Promote natural hazard mitigation research and planning activities to improve mitigation planning (*15 activities*)
    - **Strategy 2:** Promote educational opportunities (*5 activities*)

## 2010 Mitigation Goals and Objectives

- **Goal 3:** Increase research and planning activities for the mitigation of natural hazards on a state and local level (*15 activities*)
  - **Objective:** Develop the ability to be more resilient to the effects from natural hazards and maintain the ability to adapt to climatic changes
    - **Strategy 1:** Provide and promote educational opportunities (*6 activities*)
    - **Strategy 2:** Facilitate awareness of and access to various funding sources (*9 activities*)

## How have conditions changed since 2010?

- **State level priorities**
- **State level capabilities**
  - Changes in state laws, regulations, policies
  - Changes in funding and other program priorities
- **Natural hazard risk / vulnerabilities**
  - Disaster experience (Irene, Alfred, Sandy, Nemo, etc.)
  - New data / updated risk assessment information
  - Changes in growth or development patterns
- **Completion of new/updated local hazard mitigation plans**
- **Advancement or completion of mitigation activities**

### Revisit 2010 Mitigation Goals and Objectives

- **Goal 1:** Promote [implementation of sound floodplain management](#) and other natural hazard mitigation principles on a state and local level
  - **Objective:** Increase [awareness](#) by state agencies, local communities and the general public; encourage them to be proactive regarding mitigation
    - **Strategy 1:** Provide [technical guidance](#)
    - **Strategy 2:** Provide and promote [educational opportunities](#)
    - **Strategy 3:** Investigate [climate change adaptation strategies](#)

### Revisit 2010 Mitigation Goals and Objectives

- **Goal 2:** Promote [implementation of effective natural hazard mitigation projects](#) on a state and local level
  - **Objective:** Maintain [access to high quality, best available data](#) for risk assessments and to base decision making for public policy
    - **Strategy 1:** Promote natural hazard mitigation [research and planning activities](#) to improve mitigation planning
    - **Strategy 2:** Promote [educational opportunities](#)

### Revisit 2010 Mitigation Goals and Objectives

- **Goal 3:** Increase [research and planning activities](#) for the mitigation of natural hazards on a state and local level
  - **Objective:** [Develop the ability](#) to be more resilient to the effects from natural hazards and [maintain the ability](#) to adapt to climatic changes
    - **Strategy 1:** Provide and promote [educational opportunities](#)
    - **Strategy 2:** Facilitate [awareness of and access to various funding sources](#)

### 2010 Mitigation Goals and Objectives

- Are the 2010 Goals and Objectives still appropriate? Is anything missing?
  - Goals are broad, long-term policy statements designed to guide the selection of mitigation strategies and activities
  - Goals must be consistent with risk assessment findings and take into account existing State capabilities
- Should the 2010 Strategies be reaffirmed? Updated? Expanded?

### 2010 Mitigation Activities Progress Report

- Updates required for all prior activities (Table 5-1)
  - Current Implementation Status:
    - Completed
    - Completed / To Be Continued
    - Partially Completed / In Progress
    - Deferred
    - Deleted
    - Ongoing / Continuous
    - Unknown
  - Narratives explaining status

### 2010 Mitigation Activities Progress Report

- 2013 Mitigation Activities Update Spreadsheet

Activity #	Activity	Lead Agency	Current Status	Current Status Description/Explanation (2013)	2013 Status of Activity Item, ongoing, past, future
1.1	Provide model ordinances and sample higher standards language that communities can adopt into existing floodplain ordinances.	DEEP	Completed / To Be Continued	Target met. Same status as 2012 update. State will continue to provide activity on an as needed basis, and actively will be available within the next few years if FEMA NFIP requirements change, effective in 2013.	Past Work - Target met. Work on the existing model floodplain ordinance was performed during the last 3-year planning period. Finalization of the current floodplain model ordinance occurred in 2012. Communities are currently being encouraged to review and adjust to the extent possible the language and aspects of the state model floodplain ordinance.
1.2	Provide local ordinance reviews for communities to provide communities an indication as to where existing ordinances represent updates/increments to current standards.	DEEP	Completed / To Be Continued	Completed in 2013. Activity will be performed as deemed necessary for counties which have their FIRM panels revised from R001, Map.	Ongoing - FEMA completed in conjunction with the Map Modernization Program, ordinance reviews were completed for communities in Madison County in 2012, and Hartford County in 2013. Ordinance reviews for communities in New London, New Haven and Fairfield Counties will be completed in 2013.
1.3	Perform community assistance visits (CAVs) each year to measure efforts to provide technical guidance and educational materials to communities. This activity is required to promote compliance with FEMA's NFIP-Floodplain management minimum standards and those additional requirements as stated in local ordinances.	DEEP	Ongoing / Continuous	Target met on an annual basis. Same as 2012 update. All of the CAVs and CAV-TOs have been performed in accordance with the plan to perform in 2013. The CAV-TOs will be performed in 2013.	Ongoing - Typically the program completes the CAVs per year. CAVs are normally performed with a community on the following intervals: at least once every two years for a rural community and at least one time every two years for an urban (planned) community.
1.4	Investigate the feasibility of providing an innovative floodplain management solution to interested state employees of various state-agencies related to floodplain management policies.	DEEP	Completed / To Be Continued	Completed in 2012. Three Mitigation Council members (CT Dept. of Transportation, CT Dept. of Public Safety, and CT Dept. of Energy and Environmental Protection) were invited to participate in a meeting which included BSA training, expert discussion and development. Inland mitigation planning.	Future - estimated timeline is three to five years. Implementation of activity is dependent on available resources and funding.
1.5	Investigate the feasibility of participating in local events such as home shows, fairs, etc. to provide information to the public regarding the NFIP and impacts from flooding and other natural hazards, and how residents can help mitigate effects from these events. Investigate the feasibility of developing and participating in educational materials for such events.	DEEP	Completed / To Be Continued	Completed in 2012. DEEP presented at the CT DEEP and CT DEEP presentational along with FEMA and other staff.	Future - estimated timeline is three to five years. Implementation of activity is dependent on available resources and funding.

### 2010 Mitigation Activities Progress Report

- Preliminary results for current implementation status:
  - Completed: **2 activities**
  - Completed / To Be Continued: **10 activities**
  - Partially Completed / In Progress: **10 activities**
  - Deferred: **14 activities**
  - Deleted: **0 activities (still TBD)**
  - Ongoing / Continuous: **9 activities**
  - Unknown: **8 activities – most are incomplete, still require further evaluation, and may be deferred or deleted.**
- Final status updates for all prior activities will be completed before next committee meeting – including those to be carried forward for 2013–2016

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Deerberry

### Mitigation Brainstorming Exercise

- **Focus Question:**  
*What specific mitigation actions should the State be taking to make Connecticut safer from natural hazards?*
- **Guidelines:**
  - Assemble into 4-5 breakout groups. Elect a group leader.
  - Spend 5 minutes discussing the mitigation resources or activities that your agency/organization provides (or could/should provide)
  - Spend 10 minutes discussing possible new mitigation actions or activities for the 2013 Plan Update (*documented by group leader*)
  - Spend 5 minutes identifying the "Top 5" mitigation ideas for your breakout group
  - Focus on **mitigation** vs. preparedness/response activities

Image: iStockphoto.com

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### Mitigation Brainstorming Exercise

**Group Leaders:**

- Using markers and paper provided:
  - Write down brief summary of each "Top 5" mitigation idea (12 words or less)
  - **Write BIG**
  - One idea per sheet!

**Provide model language and sample higher standards for local flood ordinances**

Image: iStockphoto.com

Deerberry

### Wrap Up & Future Meetings

- Project Schedule
  - Data and Report Collection
  - HIRA Draft Review
  - Capability Assessment
- Next Committee Meeting
  - Draft HIRA Presentation & Mitigation Strategies Completion - June 6, 2013
  - Draft of 2013 Mitigation Plan to DEEP – July 19, 2013

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## Questions?



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Connecticut State Hazard Mitigation Plan Update  
Stakeholder Meeting No. 3



# Agenda

June 5<sup>th</sup>, 2013 9:00 AM –3:00 PM  
CT DEEP - 79 Elm Street, Hartford, CT 06106  
Holcombe Room, 5<sup>th</sup> Floor

**Purpose:** *Progress on the mitigation plan update: presentation of the hazard identification and risk assessment results and further development of the mitigation goals, objectives and actions.*

Description	Lead	Time
Welcome and Introductions <ul style="list-style-type: none"> <li>• Timeline for Review and Approval</li> <li>• Progress to Date               <ul style="list-style-type: none"> <li>○ Draft Plan Comments and Review Procedure</li> </ul> </li> </ul>	Karen Michaels, DEEP, State Hazard Mitigation Planner  Scott Choquette, Dewberry	9:00 – 9:30
Capabilities Assessment <ul style="list-style-type: none"> <li>• Incorporation of Comments</li> </ul> Public Outreach  <a href="https://www.surveymonkey.com/s/cthazardmitigationplan">https://www.surveymonkey.com/s/cthazardmitigationplan</a>	David Murphy, Dewberry Team (Milone & MacBroom)	9:30 – 9:45
Hazard Identification and Risk Assessment <ul style="list-style-type: none"> <li>• Review of Hazard Identification</li> <li>• Ranking Methodology               <ul style="list-style-type: none"> <li>○ Historical Events</li> <li>○ Critical &amp; State Facilities</li> <li>○ Local Plan Incorporation</li> </ul> </li> </ul>	Rachael Herman, Dewberry	9:45 – 10:45
<b>BREAK</b>		10:45 – 11:00
Summary of Hazard Specific Analysis <ul style="list-style-type: none"> <li>• Flood-related Hazards</li> <li>• Winter Weather</li> <li>• Wind-related Hazards</li> <li>• Wildfire</li> <li>• Drought</li> <li>• Earthquake</li> </ul>	Rachael Herman, Dewberry  Darrin Punchard, Dewberry Team (AECOM)	11:00 – 12:15
<b>LUNCH</b>		12:15-1:15
Mitigation Action Plan: Revision and Brainstorming <ul style="list-style-type: none"> <li>• Goal and Objective review</li> <li>• Mitigation Action Development &amp; Prioritization</li> </ul>	Darrin Punchard, Dewberry Team (AECOM)	1:15 – 1:30
Small Group Discussions: Mitigation Actions	Dewberry Team Members	1:30-2:45
Small Group Summaries	Scott Choquette, Dewberry	2:45-3:00
Wrap Up and Future Meetings <ul style="list-style-type: none"> <li>• Project Schedule - Milestones</li> <li>• Next Mitigation Committee Meeting</li> <li>• Overview of Action Items</li> </ul>		

## Connecticut State Hazard Mitigation Plan 2013 Update: Progress & Mitigation Action Plan

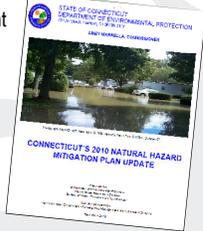
June 5th, 2013

9:00 AM – 3:00 PM  
CT DEEP  
Holcombe Room, 5th Floor  
79 Elm Street  
Hartford, CT 06066




## Meeting Agenda

- Welcome & Introductions
  - Timeline for Review and Approval
  - Progress to Date
- Capabilities Assessment & Public Outreach
- Hazard Identification & Risk Assessment
- Mitigation Action Plan
  - Goals
  - Objectives
  - Project Development
- Small Group Exercise
- Wrap Up and Future Meetings



## Planning Process



<b>Kickoff Meeting</b>	<b>HIRA/Actions Workshop</b>	<b>Draft Plan Meeting</b>	<b>Conference Call</b>	<b>Plan Submittal</b>
<ul style="list-style-type: none"> <li>• Hazard ID and Risk Assessment (HIRA)</li> <li>• Capability Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigation Goals and Objectives</li> <li>• Mitigation Strategies</li> <li>• <b>Public Outreach</b></li> </ul>	<ul style="list-style-type: none"> <li>• Plan Maintenance Procedures</li> <li>• Draft Plan</li> <li>• <b>Public Outreach</b></li> </ul>	<ul style="list-style-type: none"> <li>• Final Draft Plan</li> <li>• FEMA Review</li> <li>• Conditional Approvals</li> </ul>	<ul style="list-style-type: none"> <li>• Submission to FEMA</li> <li>• Adoption</li> </ul>

## Program Capacity / Statewide Capabilities

- Edits and suggestions received from state agency representatives
- Describes the following agency changes and their missions:
  - Connecticut Department of Environmental Protection (DEP) merged with Department of Public Utility Control (PDUC) to form the Department of Energy and Environmental Protection (DEEP)
  - PURA and the Bureau of Energy and Technology Policy
  - Department of Emergency Management and Homeland Security (DEMHS) combined with the Department of Public Safety, forming the Department of Emergency Services and Public Protection (DESPP) with a Division of Emergency Management and Homeland Security
  - Office of State Building Inspector (OSBI) and the State Building Code staff were merged into a new Department of Construction Services (DCS)

## Program Capacity / Statewide Capabilities

- The update describes the work of committees and task forces that are concerned with climate change and disaster recovery:
  - The Adaptation Subcommittee of the Governor’s Steering Committee on Climate Change
  - The Governor’s Two Storm Panel
  - The Connecticut GIS Council’s Storm Response and Recovery Assessment Group
  - The Shoreline Preservation Task Force
  - The State’s Long-Term Recovery Committee
  - The State Vegetation Management Task Force

## Program Capacity / Statewide Capabilities

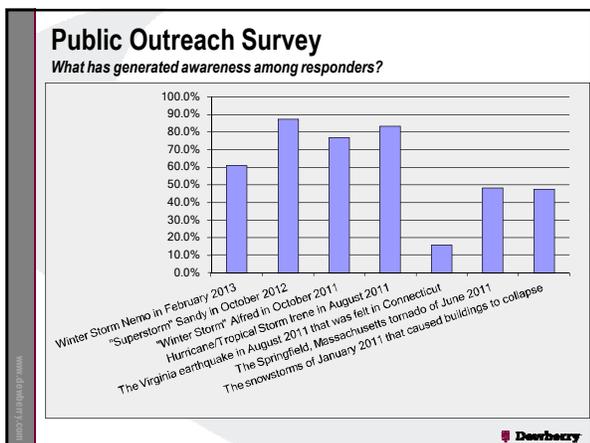
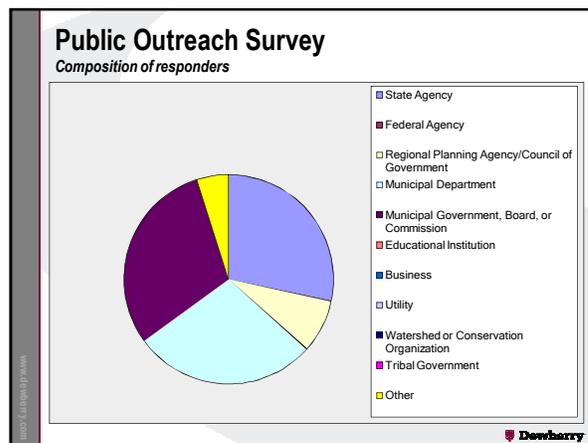
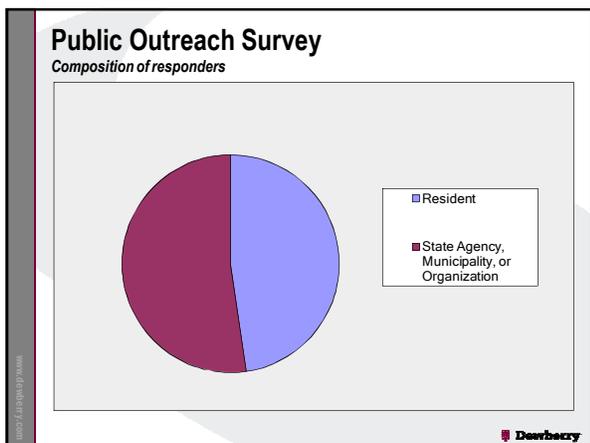
- The update expands the discussion for:
  - Municipal departments and commissions
  - Regional planning organizations (the COGs and RPAs)
- The update adds the following:
  - DEEP OLISP Technical Services and Grant Programs
  - RiskMAP
  - Updates to State Conservation and Development Policies Plan
  - University of Connecticut CLEAR/Sea Grant
  - The Nature Conservancy
  - ctWARN
  - Others

## Public Outreach

- Online Survey closes June 18
- <https://www.surveymonkey.com/s/cthazardmitigationplan>
- Links were posted on ct.gov and DEEP web pages
- Emails from Karen to municipal officials and RPOs
- Approximately 120 responders have taken the survey

## Public Outreach

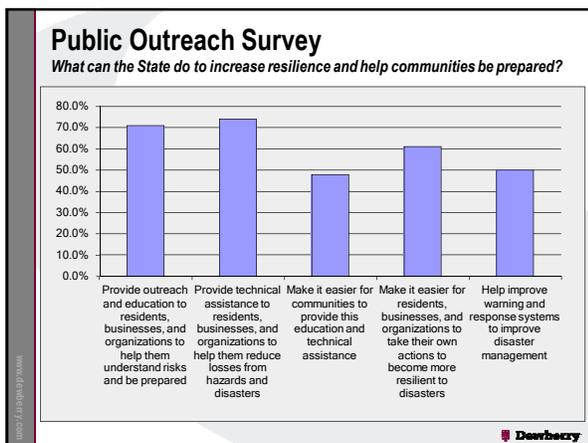
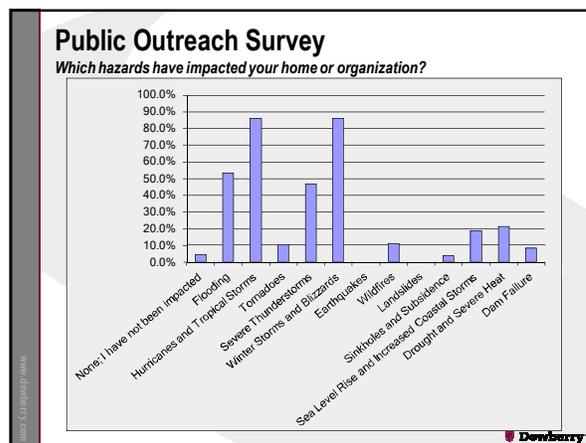
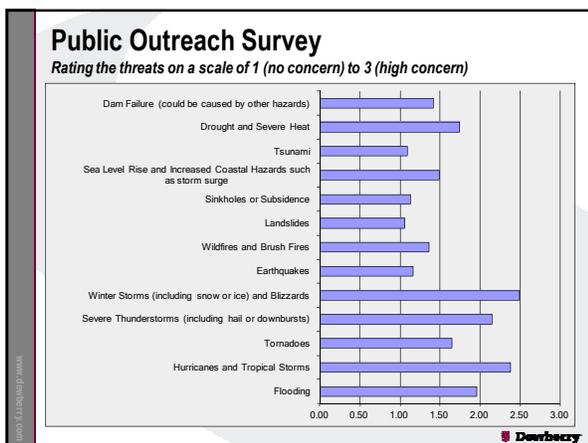
- Survey announcements posted to 27 editions of Patch.com



### Public Outreach Survey

What has generated awareness among responders?

- Additional Responses for Question 6
  - I've always know about them
  - The news
  - Job-related awareness
  - Hamden tornado of late 1980s
  - Bridgeport tornado
  - Wethersfield tornado of late 2009
  - Floods that close roads
  - October 2010 flooding following several days of rain
  - Mississippi River flooding and Midwest droughts
  - Japanese tsunami
  - Quickening of climate change



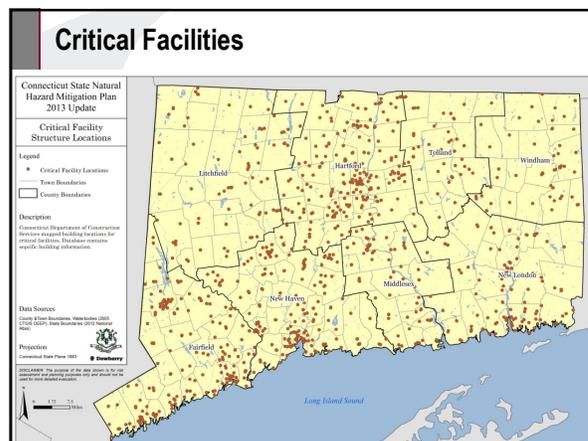
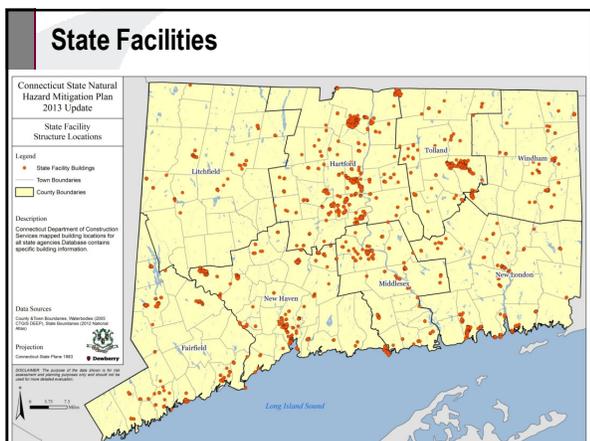
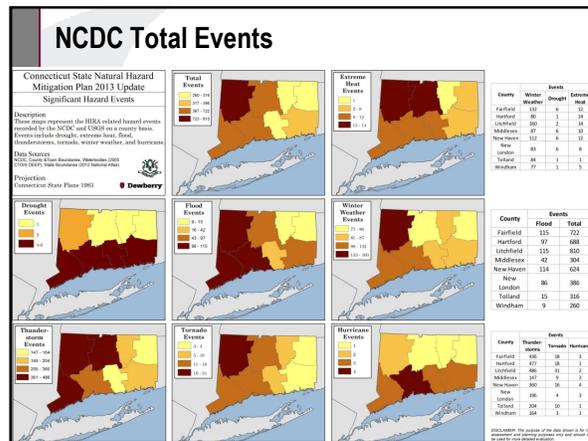
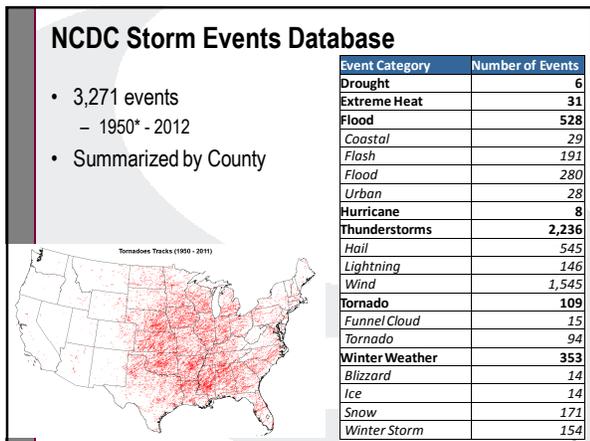
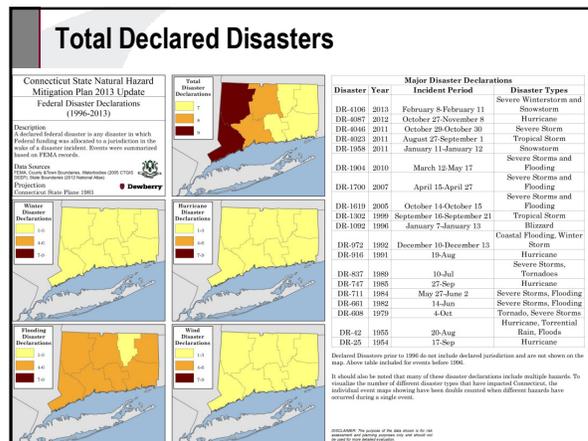
- ### Public Outreach Survey
- Summary of written responses and comments
- Stop development in flood risk areas, prevent rebuilding after flood damage, acquire homes, do not subsidize flood insurance, and retreat from the shoreline
  - Bury power lines, trim trees, make the utilities respond faster, create microgrids, and generally prevent the outages that have been occurring
  - Harden and protect other infrastructure (water, wastewater, roads)
  - Improve warning systems, communication, etc.
  - Foster individual and family preparedness, people working together, etc.

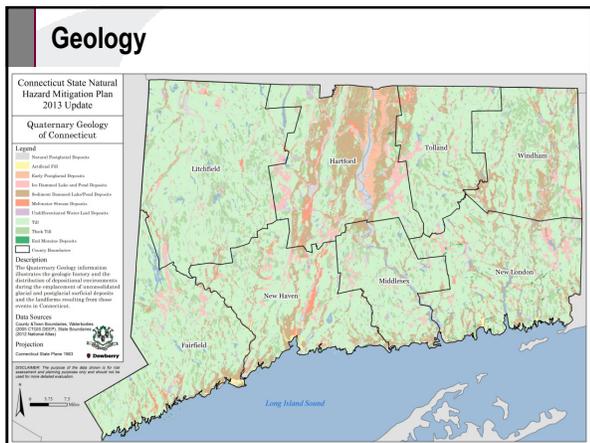
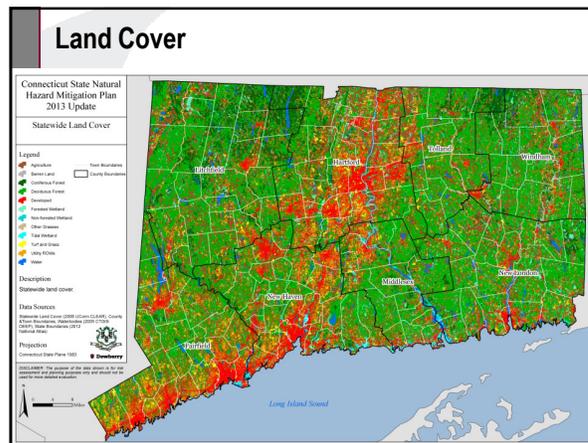
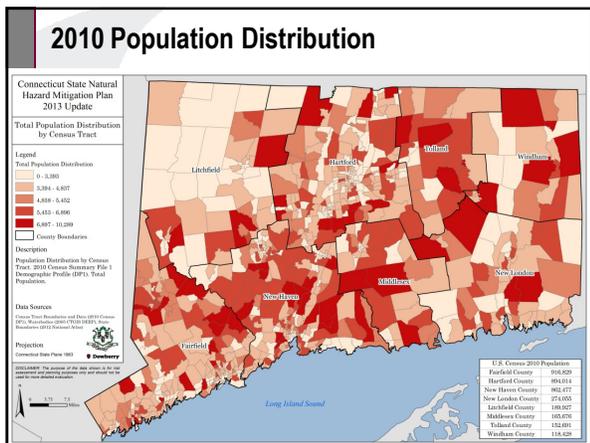
- ### Hazard Identification & Risk Assessment
- Purpose: Provides a factual basis for prioritizing hazard mitigation activities
  - Major components:
    - Identify and profile natural hazards affecting the state
    - Describe vulnerability to jurisdictions (cities and counties), and estimate losses
    - Describe vulnerability to state owned/operated facilities and critical facilities, and estimate losses
    - Incorporate findings of local and regional plans

- ### State Plan Update Requirements
- Must be updated every 3 years (may change to 5 years soon)
  - Re-assess Hazard Identification and Risk Assessment (HIRA)
    - Consider changes to hazards and vulnerability of people and assets
    - Address hazard events that have occurred since the last plan
  - Incorporate Regional planning efforts with CT State Plan
  - Report on progress with mitigation strategy to-date and discuss adjustments
  - Address weaknesses identified in previous plan review

### Federally Declared Disasters

Disaster	Year	Incident Period	Disaster Types	Counties
DR-4106	2013	February 8-February 11	Severe winter storm and snow storm	All
DR-4087	2012	October 27-November 8	Hurricane	Litchfield, Fairfield, New Haven, Middlesex, New London, Windham, Tolland
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DR-1700	2007	April 15-April 27	Severe Storms and Flooding	Fairfield, Hartford, Litchfield, Middlesex, New London, New Haven, Windham
DR-1619	2005	October 14-October 15	Severe Storms and Flooding	Litchfield, New London, Tolland, Windham
DR-1302	1999	September 16-September 21	Tropical Storm	Fairfield, Hartford, Litchfield
DR-1092	1996	January 7-January 13	Blizzard	Not listed
DR-972	1992	December 10-December 13	Coastal Flooding, Winter Storm	Not listed
DR-916	1991	19-Aug	Hurricane	Not listed
DR-837	1989	10-Jul	Severe Storms, Tornadoes	Not listed
DR-747	1985	27-Sep	Hurricane	Not listed
DR-711	1984	May 27-June 2	Severe Storms, Flooding	Not listed
DR-663	1982	14-Jun	Severe Storms, Flooding	Not listed
DR-608	1979	4-Oct	Tornado, Severe Storms	Not listed
1955	1955	20-Aug	Hurricane, Torrential Rain, Floods	Not listed
DR-25	1954	17-Sep	Hurricane	Not listed





### Regional HMP Integration

- Vulnerability and risk assessment results
- Hazard rankings incorporated into State plan hazard rankings
- Mitigation Strategies & Actions

**FEMA Guidance:**  
**Assessing Vulnerability by Jurisdiction**

A. Does the new or updated plan describe the State's vulnerability based on estimates provided in local risk assessments as well as the State risk assessment?

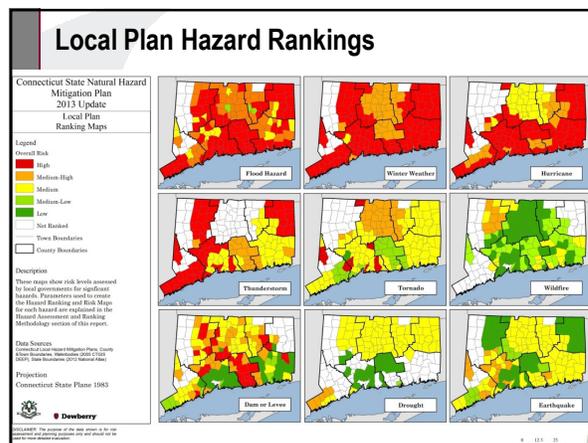
C. Does the updated plan explain the process used to analyze the information from the local risk assessments, as necessary?

**Dewberry**

### Results from Local Plan Reviews

Hazard	Rank	Score	Number of Plans
Storm Storm (Snow / Blizzard)	4.74	H	156
Flood, Flash	4.54	H	35
Ice	4.53	H	66
Wildfire	4.44	M-H	146
Flood, Riverine	4.37	M-H	156
Thunderstorm (Summer Storm)	4.09	M-H	104
Sea Level Rise	4.07	M-H	43
Wind	4.03	M-H	103
Flood, Coastal & Storm Surge	3.44	M	50
Lightning	3.39	M	71
Flood, Poor Drainage	3.23	M	69
Tornado	3.18	M	146
Dam or Levee Failure	3.10	M	143
Extreme Cold	3.00	M	18
Extreme Heat	2.90	M	20
Hail	2.70	M	74
Drought	2.62	M	99
Fluency	2.60	M	10
Erosion	2.55	M	22
Earthquake	2.53	M	156
Landslide & Mudflow	2.30	L-M	10
Land Subsidence & Sinkholes	2.00	L-M	2
Ice Jam & Associated Flooding	1.93	L-M	27
Wildfire	1.78	L-M	129
Coastal Storm	1.60	L	8

**Dewberry**



## 2013 Update HAZARD VULNERABILITIES AND COMPOSITE RANKING MAPS



### 2013 Ranking Parameters

- **“Semi-Quantitative” Scoring System**
  - Actual Data Values grouped in categories 1-4 based on statistics
- **Data with normalization (inflation ...)**
  - Limitations with probability & impact data
- **Parameters Used:**
  - Population Vulnerability and 2025 Population Projections (weight 0.5)
  - Building Permits Count (weight 0.2)
  - Annualized Events (weight 1)
  - Deaths & Injuries (weight 1)
  - Annualized Property Damage (weight 1)
  - Local Plan Hazard Rankings (weight 1)
  - Geographic Extent of Hazard (weight 1.5)



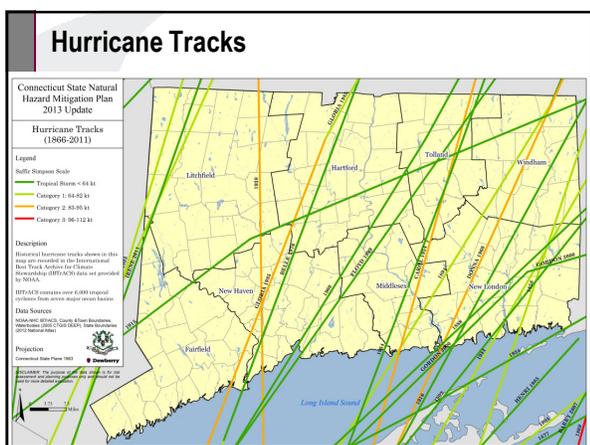
### Thunderstorm History

- 2,470 thunderstorm events from 1955 to 2012
- More than \$36.2 million dollars in adjusted damages statewide
- At least 19 fatalities
- More than 154 reported injuries
- Average of 42.59 events per year
- Annualized losses of \$624,662



### Hurricane History

- 18 hurricane events from 1950 to 2012
- More than \$61 million dollars in adjusted damages statewide
- Average of 0.9 events per year
- Annualized losses of \$3 million

### Wind Risk

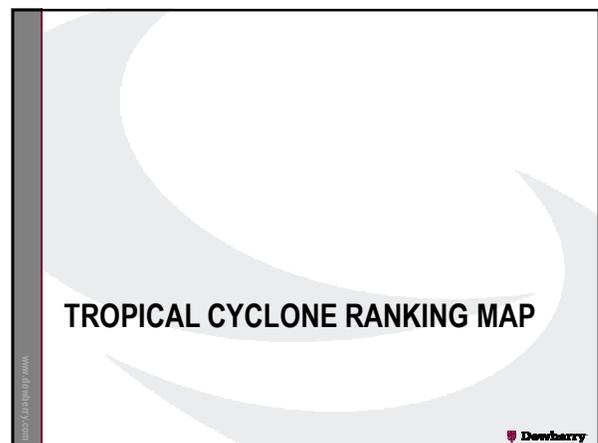
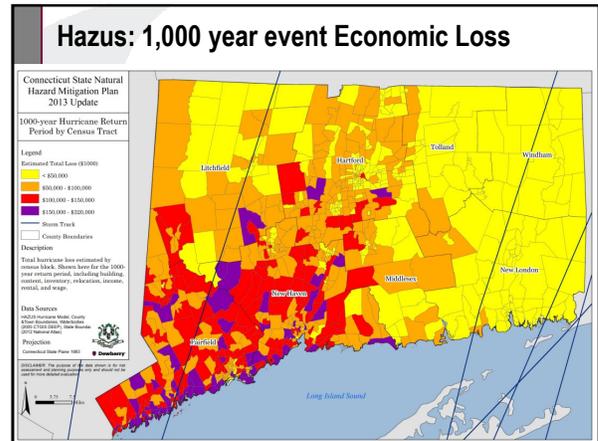
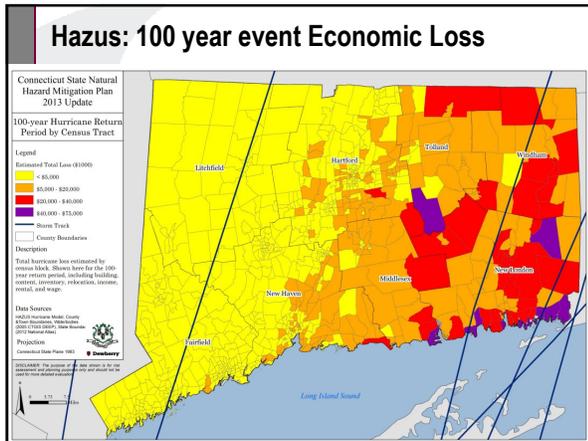
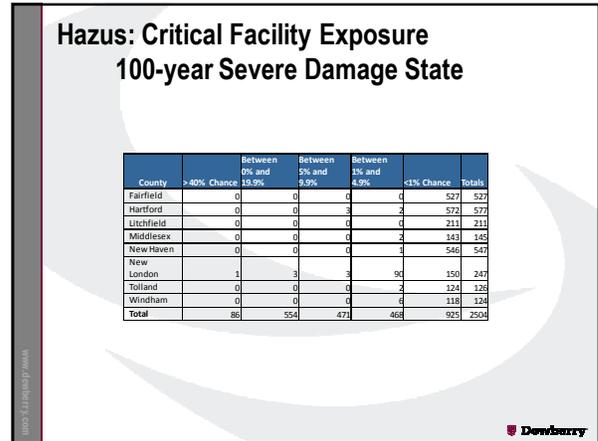
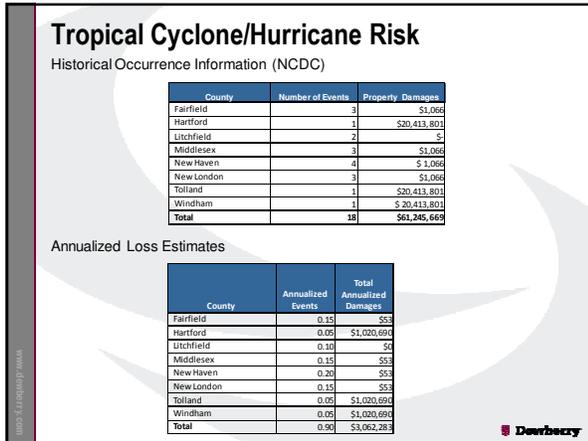
Historical Occurrence Information (NCDC)

County	Number of Events	Property Damages
Fairfield	436	\$11,390,438
Hartford	477	\$6,886,740
Litchfield	486	\$3,373,007
Middlesex	147	\$1,711,468
New Haven	360	\$4,698,964
New London	198	\$2,218,583
Tolland	204	\$3,223,674
Windham	164	\$2,727,504
<b>Total</b>	<b>2,470</b>	<b>\$36,230,379</b>

Annualized Loss Estimates

County	Annualized Events	Total Annualized Damages
Fairfield	7.52	\$156,387
Hartford	8.22	\$118,737
Litchfield	8.38	\$58,153
Middlesex	2.53	\$29,508
New Haven	6.21	\$81,017
New London	3.38	\$38,253
Tolland	3.52	\$55,581
Windham	2.83	\$47,026
<b>Total</b>	<b>42.59</b>	<b>\$624,662</b>





## Tornado History

- 109 tornado events from 1950 to 2012
- More than \$1 billion dollars in adjusted damages statewide
- At least 4 fatalities
- More than 700 reported injuries
- Average of 1.77 events per year
- Annualized losses of \$23 million

Image: FEMA.gov/epa.gov



## Tornado Touchdowns and Paths

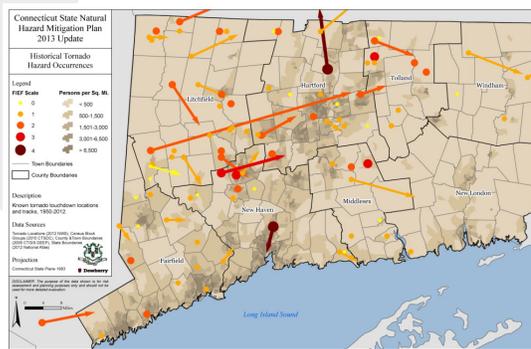


Image: FEMA.gov/epa.gov



## Tornado Risk

Historical Occurrence Information (NCDC)

County	Number of Events	Number of Injuries	Number of Deaths	Property Damages (In Adjusted Dollars)
Fairfield	18	13	0	\$8,205,773
Hartford	18	507	3	\$826,364,795
Litchfield	31	34	0	\$97,543,112
Middlesex	9	81	0	\$2,295,164
New Haven	16	137	1	\$532,656,618
New London	4	0	0	\$0
Tolland	40	4	0	\$3,795,365
Windham	3	0	0	\$5,334,943
<b>Total</b>	<b>109</b>	<b>703</b>	<b>4</b>	<b>\$1,475,160,771</b>

Annualized Loss Estimates

County	Annualized Events	Annualized Property Damages	Annualized Crop Damages	Total Annualized Damages
Fairfield	0.29	\$130,250	\$0	\$130,250
Hartford	0.29	\$13,116,854	\$0	\$13,116,854
Litchfield	0.49	\$3,548,272	\$0	\$3,548,272
Middlesex	0.14	\$35,955	\$0	\$35,955
New Haven	0.25	\$8,454,867	\$0	\$8,454,867
New London	0.06	\$0	\$0	\$0
Tolland	0.65	\$44,371	\$0	\$44,371
Windham	0.05	\$84,682	\$0	\$84,682
<b>Total</b>	<b>1.77</b>	<b>\$23,415,250</b>	<b>\$0</b>	<b>\$23,415,250</b>

Image: FEMA.gov/epa.gov



## TORNADO RANKING MAP

Image: FEMA.gov/epa.gov



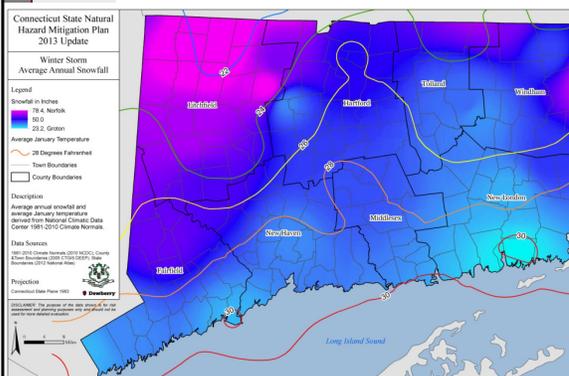
## Winter Storm History

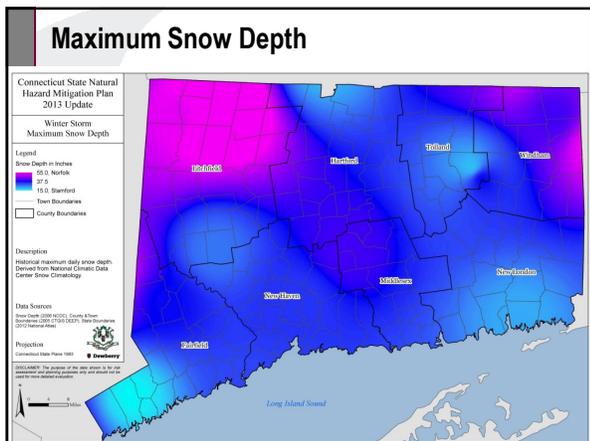
- 815 winter storm events from 1993 to 2012
- More than \$40 million in adjusted damages statewide
- At least 12 fatalities
- More than 53 reported injuries
- Average of 4.75 events per year
- Annualized losses of \$2 million

Image: FEMA.gov/epa.gov



## Average Annual Snowfall





### Winter Storm Risk

Historical Occurrence Information (NCDC)

County	Number of Events	Property Damages
Fairfield	132	\$0
Hartford	80	\$19,055,273
Litchfield	150	\$1,943,022
Middlesex	87	\$0
New Haven	112	\$125,545
New London	83	\$0
Tolland	84	\$10,642,615
Windham	77	\$8,646,821
<b>Total</b>	<b>815</b>	<b>\$40,415,276</b>

Annualized Loss Estimates

County	Annualized Events	Annualized Property Damages	Total Annualized Damages
Fairfield	6.60	\$0	\$0
Hartford	4.00	\$952,764	\$952,764
Litchfield	8.00	\$97,151	\$97,151
Middlesex	4.35	\$0	\$0
New Haven	5.60	\$6,277	\$6,277
New London	4.15	\$0	\$0
Tolland	4.20	\$532,131	\$532,131
Windham	3.85	\$432,441	\$432,441
<b>Total</b>	<b>40.75</b>	<b>\$2,020,764</b>	<b>\$2,020,764</b>

### State-Owned Buildings Exposure

Exposure (Numbers)

County	All State-Owned Buildings	Buildings with Snow Depth 24-29"	Percent with Snow Depth 24-29"	Buildings with Snow Depth 30-35"	Percent with Snow Depth 30-35"	Buildings with Snow Depth >=36"	Percent with Snow Depth >=36"	Total Buildings At Risk	Total Percent At Risk
Fairfield	205	139	67.8%	11	5.4%	0	0.0%	150	73.2%
Hartford	872	606	69.5%	21	2.4%	0	0.0%	627	71.9%
Litchfield	97	3	3.1%	26	26.8%	68	70.1%	97	100.0%
Middlesex	283	284	98.3%	0	0.0%	0	0.0%	284	98.3%
New Haven	556	411	73.9%	0	0.0%	0	0.0%	411	73.9%
New London	853	48	5.6%	0	0.0%	0	0.0%	48	5.6%
Tolland	628	78	12.4%	5	0.8%	0	0.0%	83	13.2%
Windham	191	91	47.6%	100	52.4%	0	0.0%	191	100.0%
<b>Total</b>	<b>3,327</b>	<b>1,660</b>	<b>49.9%</b>	<b>163</b>	<b>4.9%</b>	<b>68</b>	<b>2.0%</b>	<b>1,891</b>	<b>56.8%</b>

Exposure (Values)

County	All State-Owned Buildings	Buildings with Snow Depth 24-29"	Percent with Snow Depth 24-29"	Buildings with Snow Depth 30-35"	Percent with Snow Depth 30-35"	Buildings with Snow Depth >=36"	Percent with Snow Depth >=36"	Total Value At Risk	Total Percent At Risk
Fairfield	N/A	N/A	N/A	N/A	N/A	\$0.00	0.0%	N/A	N/A
Hartford	N/A	N/A	N/A	N/A	N/A	\$0.00	0.0%	N/A	N/A
Litchfield	N/A	N/A	N/A	N/A	N/A	\$0.00	0.0%	N/A	N/A
Middlesex	N/A	N/A	N/A	\$0.00	0.0%	\$0.00	0.0%	N/A	N/A
New Haven	N/A	N/A	N/A	\$0.00	0.0%	\$0.00	0.0%	N/A	N/A
New London	\$22,037,766	\$5,230,646	23.7%	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Tolland	\$1,604,033,369	\$4,469,813	2.6%	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Windham	\$29,359,853	\$4,577,422	15.6%	\$24,782,431	84.4%	\$0.00	0.0%	\$29,359,853	100.0%
<b>Total</b>	<b>\$1,655,430,988</b>	<b>\$51,277,880</b>	<b>3.1%</b>	<b>\$24,782,431</b>	<b>1.5%</b>	<b>\$0.00</b>	<b>0.0%</b>	<b>\$29,359,853</b>	<b>1.8%</b>

### Population Exposure

County	Total Population	Pop with Snow Depth 24-29"	Percent with Snow Depth 24-29"	Pop with Snow Depth 30-35"	Percent with Snow Depth 30-35"	Pop with Snow Depth >=36"	Percent with Snow Depth >=36"	Total Population At Risk	Total Percent At Risk
Fairfield	916,829	521,825	56.9%	19,386	2.1%	480	0.1%	541,691	59.1%
Hartford	894,014	542,974	60.7%	53,962	6.0%	431	0.0%	597,367	66.8%
Litchfield	189,927	50,937	26.8%	16,312	8.6%	81,745	43.0%	148,994	78.4%
Middlesex	165,076	77,701	46.9%	0	0.0%	0	0.0%	77,701	46.9%
New Haven	862,477	780,160	90.5%	0	0.0%	0	0.0%	780,160	90.5%
New London	274,065	64,061	23.4%	10	0.0%	0	0.0%	64,071	23.4%
Tolland	152,691	85,081	55.7%	2,891	1.9%	4	0.0%	87,976	57.6%
Windham	118,428	42,141	35.6%	57,221	48.3%	6,062	5.1%	105,424	89.0%
<b>Total</b>	<b>3,574,697</b>	<b>2,164,880</b>	<b>60.6%</b>	<b>145,792</b>	<b>4.2%</b>	<b>88,742</b>	<b>2.5%</b>	<b>2,403,404</b>	<b>67.2%</b>

### Critical Facilities Exposure

County	All Critical Facilities	Facilities with Snow Depth 24-29"	Percent with Snow Depth 24-29"	Facilities with Snow Depth 30-35"	Percent with Snow Depth 30-35"	Facilities with Snow Depth >=36"	Percent with Snow Depth >=36"	Total Facilities At Risk	Total Percent At Risk
Fairfield	294	174	59.2%	17	5.8%	0	0.0%	191	65.0%
Hartford	280	220	78.6%	27	9.6%	0	0.0%	247	88.2%
Litchfield	113	27	23.9%	21	18.6%	52	46.0%	100	88.5%
Middlesex	94	52	55.3%	0	0.0%	0	0.0%	52	55.3%
New Haven	258	244	94.6%	0	0.0%	0	0.0%	244	94.6%
New London	185	43	23.2%	0	0.0%	0	0.0%	43	23.2%
Tolland	65	60	92.3%	5	7.7%	0	0.0%	65	100.0%
Windham	90	26	28.9%	58	64.4%	4	4.4%	88	97.8%
<b>Total</b>	<b>1,401</b>	<b>866</b>	<b>61.8%</b>	<b>128</b>	<b>9.1%</b>	<b>56</b>	<b>4.0%</b>	<b>1,050</b>	<b>74.9%</b>



### Flood History

- 593 flood events from 1993 to 2012
- More than \$55.9 million in adjusted damages statewide
- At least 10 fatalities
- More than 3 reported injuries
- Average of 29.65 events per year
- Annualized losses of \$2.7 million



### Flood Risk

Historical Occurrence Information (NCDC)

County	Number of Events	Property Damages
Fairfield	115	\$16,217,563
Hartford	97	\$10,402,823
Litchfield	115	\$11,607,373
Middlesex	42	\$592,303
New Haven	114	\$3,971,295
New London	86	\$7,014,097
Tolland	15	\$5,116,567
Windham	9	\$1,063,360
<b>Total</b>	<b>991</b>	<b>\$55,985,181</b>

Annualized Loss Estimates

County	Annualized Events	Total Annualized Damages
Fairfield	5.7%	\$810,878
Hartford	4.8%	\$520,141
Litchfield	5.7%	\$580,369
Middlesex	2.1%	\$29,605
New Haven	5.7%	\$198,965
New London	4.3%	\$350,705
Tolland	0.7%	\$255,828
Windham	0.4%	\$53,168
<b>Total</b>	<b>29.65</b>	<b>\$2,799,259</b>



### State-Owned Buildings Exposure

Exposure (Numbers)

County	All State-Owned Buildings	Buildings Intersecting High Hazard Dam Foundation	Percent Intersecting High Hazard Dam Foundation	Buildings Intersecting Significant Hazard Dam Foundation	Percent Intersecting Significant Hazard Dam Foundation	Total Buildings At Risk	Total Percent At Risk
Fairfield	205						
Hartford	872						
Litchfield	197						
Middlesex	289						
New Haven	556						
New London	806						
Tolland	628						
Windham	191						
<b>Total</b>	<b>3,327</b>						

### Critical Facilities Exposure

County/Facility Types	All Critical Facilities	Facilities Intersecting High Hazard Dam Foundation	Percent Intersecting High Hazard Dam Foundation	Facilities Intersecting Significant Hazard Dam Foundation	Percent Intersecting Significant Hazard Dam Foundation	Total Facilities At Risk	Total Percent At Risk
Fairfield	294						
Hartford	280						
Litchfield	113						
Middlesex	96						
New Haven	258						
New London	181						
Tolland	85						
Windham	90						
<b>Total</b>	<b>1,403</b>						



### Hazus: 100-year Economic Loss & FEMA AAL (thousands of dollars)

County	Building	Contents	Inventory	Relocation	Income	Rental	Wage	Direct Loss	Total 100-year Loss	Annualized Loss (AAL Study)
Fairfield	1,672,242	2,185,833	85,146	2,316	5,382	1,035	7,402	20,857	3,980,273	\$281,089
Hartford	826,455	1,005,393	37,198	873	2,205	340	3,817	11,374	1,887,655	\$151,523
Litchfield	499,836	684,887	34,825	452	1,108	152	3,231	7,762	1,232,253	\$61,183
Middlesex	539,134	600,942	15,446	709	1,093	267	2,168	5,584	1,165,323	\$60,946
New Haven	1,140,229	1,432,815	58,101	1,522	3,061	606	4,759	14,100	2,655,193	\$70,262
New London	540,432	636,488	17,790	516	1,422	216	2,010	5,314	1,204,788	\$77,270
Tolland	126,511	181,201	11,009	73	838	63	732	1,583	321,560	\$22,866
Windham	207,762	283,652	17,906	138	262	43	1,465	2,128	513,356	\$25,655
<b>Grand Total</b>	<b>5,552,581</b>	<b>7,011,211</b>	<b>277,481</b>	<b>6,599</b>	<b>14,561</b>	<b>2,722</b>	<b>26,544</b>	<b>68,702</b>	<b>12,960,401</b>	<b>\$750,794</b>



### Hazus: Critical Facility Exposure 100-year Flood

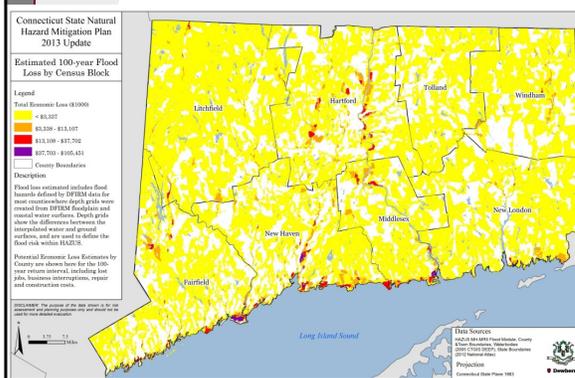
COUNTY	School	Fire Station	Police Station	Emergency Operation Center	Medical Care Facility	Totals
Fairfield	12	3	1	0	0	16
Hartford	4	1	1	0	0	6
Litchfield	9	8	2	1	0	20
Middlesex	3	2	0	0	1	6
New Haven	9	2	1	0	0	12
New London	3	0	3	1	0	7
Tolland	3	1	1	0	0	5
Windham	2	3	0	0	0	5
<b>Totals</b>	<b>45</b>	<b>29</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>97</b>

### Hazus: Critical Facility Exposure Hurricane Sandy Surge

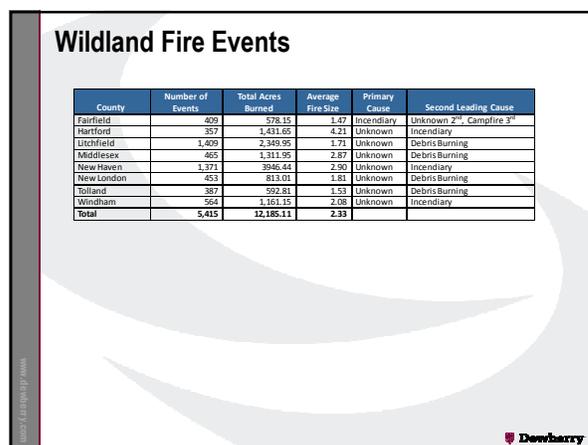
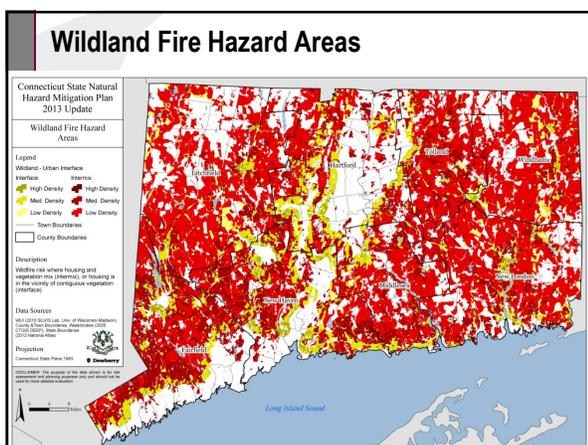
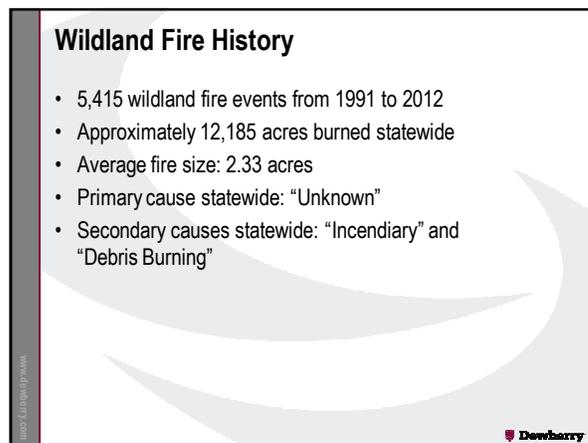
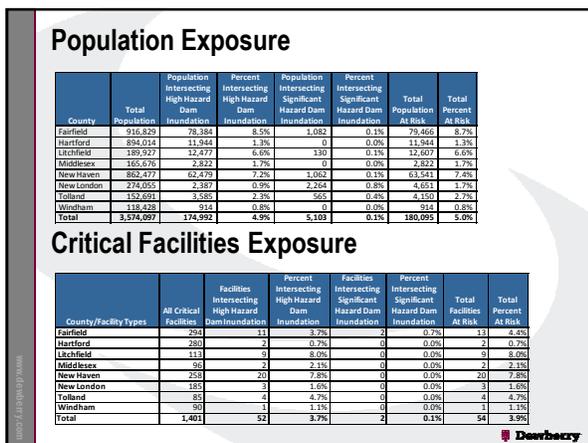
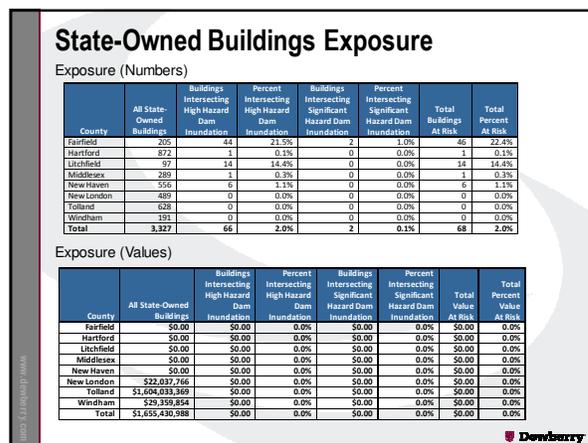
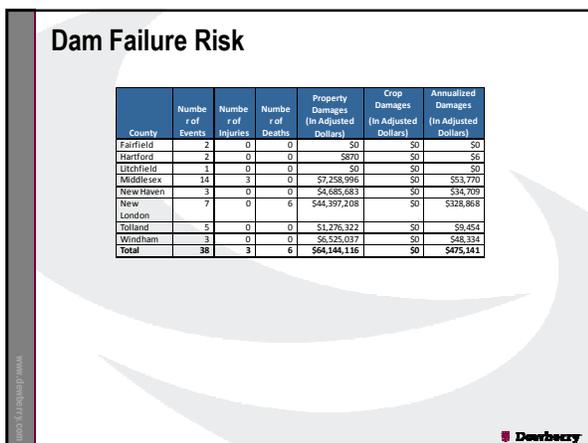
COUNTY	School	Fire Station	Police Station	Emergency Operation Center	Medical Care Facility	Totals
Fairfield	0	0	1	N/A	N/A	1
Hartford	N/A	N/A	N/A	N/A	N/A	0
Litchfield	N/A	N/A	N/A	N/A	N/A	0
Middlesex	0	0	0	N/A	N/A	0
New Haven	0	0	0	N/A	N/A	0
New London	0	0	1	N/A	N/A	1
Tolland	0	0	0	N/A	N/A	0
Windham	N/A	N/A	N/A	N/A	N/A	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>



### Hazus 100-yr Flood Loss by Census Block







### State-Owned Buildings Exposure

Exposure (Numbers)

County	All State-Owned Buildings	Buildings Intersecting Interests	Percent Intersecting Interests	Buildings Intersecting Interface	Percent Intersecting Interface	Total Buildings At Risk	Total Percent At Risk
Fairfield	205	42	20.5%	15	7.3%	57	27.8%
Hartford	872	46	5.3%	64	7.3%	132	12.8%
Litchfield	57	9	9.3%	29	29.9%	38	39.2%
Middlesex	289	88	30.4%	69	23.9%	157	54.3%
New Haven	356	123	21.8%	73	13.1%	184	24.9%
New London	489	79	16.2%	25	5.2%	107	21.9%
Tolland	628	104	16.6%	169	26.9%	273	43.6%
Windham	181	51	28.2%	89	49.2%	140	77.3%
<b>Total</b>	<b>3,327</b>	<b>542</b>	<b>16.3%</b>	<b>536</b>	<b>16.1%</b>	<b>1,078</b>	<b>32.4%</b>

Exposure (Values)

County	All State-Owned Buildings	Buildings Intersecting Interests	Percent Intersecting Interests	Buildings Intersecting Interface	Percent Intersecting Interface	Total Value At Risk	Total Percent Value At Risk
Fairfield	0	0	0	0	0	0	0
Hartford	0	0	0	0	0	0	0
Litchfield	0	0	0	0	0	0	0
Middlesex	0	0	0	0	0	0	0
New Haven	0	0	0	0	0	0	0
New London	\$2,037,766	\$3,479,811	15.8%	\$1,402,350	6.4%	\$4,682,168	22.2%
Tolland	\$1,604,033,369	\$22,926,841	1.4%	\$612,390,094	38.2%	\$635,316,936	39.6%
Windham	\$29,359,854	\$2,460,783	8.4%	\$26,899,071	91.6%	\$29,359,854	100.0%
<b>Total</b>	<b>\$1,655,430,938</b>	<b>\$28,867,436</b>	<b>1.7%</b>	<b>\$640,691,521</b>	<b>38.7%</b>	<b>\$669,558,957</b>	<b>40.4%</b>

### Population Exposure

County	Total Population	Population Intersecting Interests	Percent Intersecting Interests	Population Intersecting Interface	Percent Intersecting Interface	Total Population At Risk	Total Percent At Risk
Fairfield	316,929	192,421	21.0%	114,549	12.8%	309,871	33.6%
Hartford	894,014	135,160	15.1%	179,282	20.1%	314,442	35.2%
Litchfield	189,927	96,382	50.7%	57,082	30.1%	153,464	80.8%
Middlesex	165,676	71,671	43.3%	36,379	22.0%	108,050	65.2%
New Haven	862,477	176,573	20.5%	228,514	26.5%	405,087	47.0%
New London	274,055	119,349	43.5%	59,478	21.7%	178,827	65.3%
Tolland	152,691	78,752	51.6%	26,808	17.6%	102,560	69.1%
Windham	118,428	62,562	52.8%	33,991	28.7%	96,551	81.5%
<b>Total</b>	<b>3,574,097</b>	<b>932,870</b>	<b>26.1%</b>	<b>736,984</b>	<b>20.6%</b>	<b>1,669,854</b>	<b>46.7%</b>

### Critical Facilities Exposure

County	All Critical Facilities	Facilities Intersecting Interests	Percent Intersecting Interests	Facilities Intersecting Interface	Percent Intersecting Interface	Total Facilities At Risk	Total Percent At Risk
Fairfield	294	67	22.8%	65	22.1%	132	44.9%
Hartford	280	32	11.4%	58	20.7%	90	32.1%
Litchfield	113	43	38.1%	49	43.4%	92	81.4%
Middlesex	96	39	40.5%	38	39.6%	74	77.1%
New Haven	258	38	14.0%	66	25.6%	102	39.5%
New London	185	56	30.3%	52	28.1%	108	58.4%
Tolland	85	49	57.6%	19	22.4%	68	80.0%
Windham	90	54	60.0%	31	34.4%	85	94.4%
<b>Total</b>	<b>1,401</b>	<b>373</b>	<b>26.6%</b>	<b>378</b>	<b>27.0%</b>	<b>751</b>	<b>53.6%</b>

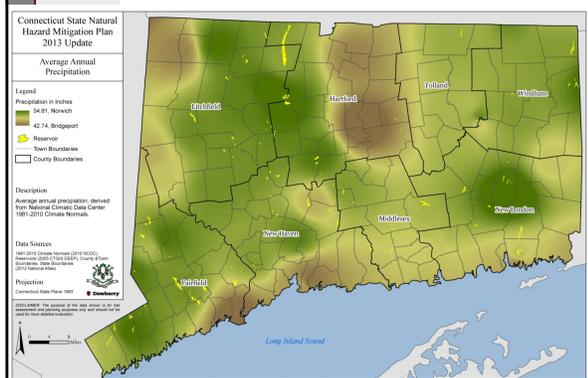
### WILDFIRE RANKING MAP

### Drought History and Risk

- 29 distinct drought events from 1993 to 2012
- No reported injuries, deaths, property damage or crop damage

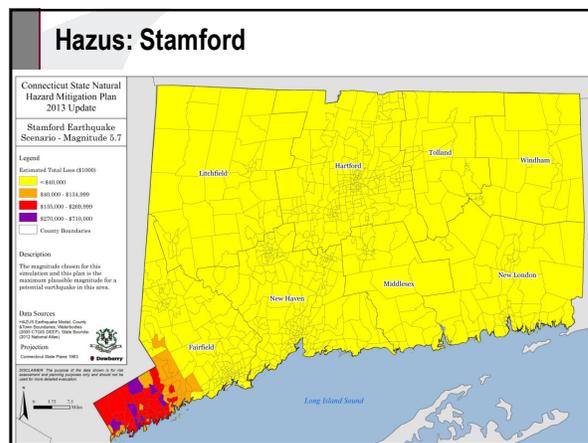
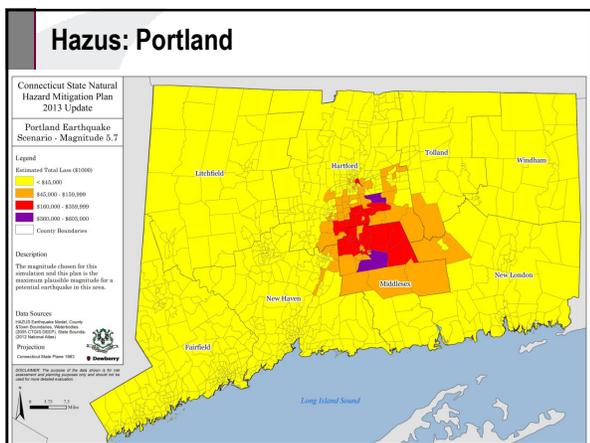
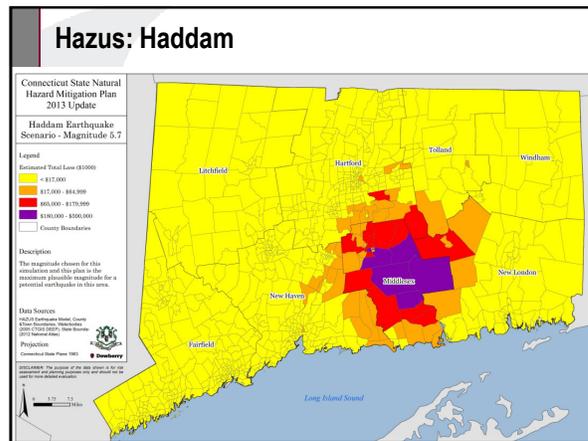
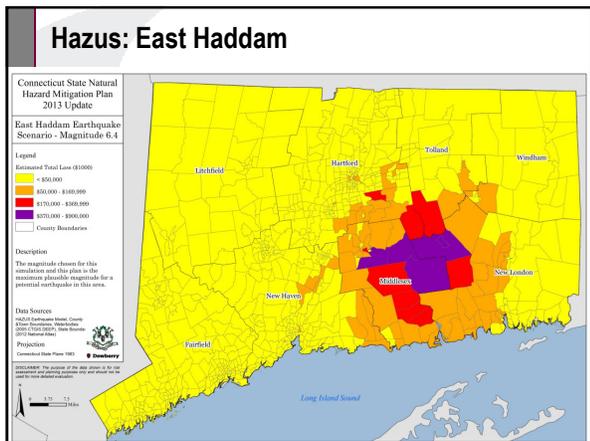
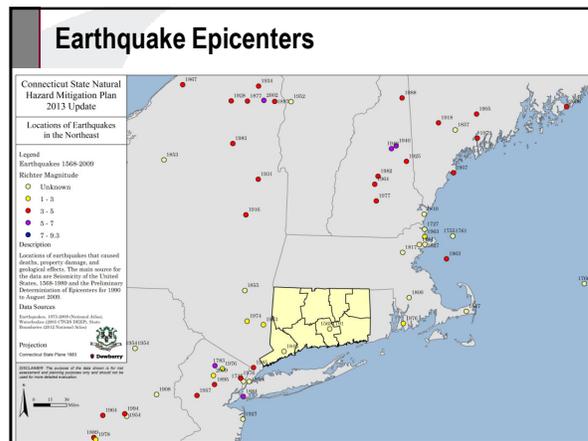
County	Number of Events	Annualized Events
Fairfield	6	0.30
Hartford	1	0.05
Litchfield	2	0.10
Middlesex	6	0.30
New Haven	6	0.30
New London	6	0.30
Tolland	1	0.05
Windham	1	0.05
<b>Total</b>	<b>29</b>	<b>1.45</b>

### Average Annual Precipitation



## Earthquake History

- Notable Events felt in Connecticut:
  - August 23, 2011: 5.8 magnitude (Richmond, VA)
  - November 30, 2010: 3.9 magnitude (117 mi SE Bridgeport)
  - June 23, 2010: 5.0 magnitude (Ontario-Quebec)
  - March 11, 2008: 2.0 magnitude (3 mi NW Chester)
- Hazus Analysis
  - 2010 Census Information Imported
  - 4 Probabilistic Scenarios:
    - East Haddam 6.4 magnitude
    - Haddam 5.7 magnitude
    - Portland 5.7 magnitude
    - Stamford 5.7 magnitude



### Hazus: Critical Facility Exposure

Portland 5.7 MM  
Damage State Probability of Extensive Damage (Number of EF Structures)

COUNTY	Over 40% Chance	Between 30% and 39.9%	Between 20% and 29.9%	Between 10% and 19.9%	Less Than 10% Chance	Totals
Fairfield	0	0	0	0	0	527
Hartford	23	131	144	112	167	577
Litchfield	0	0	0	0	0	211
Middlesex	8	81	4	18	32	145
New Haven	0	20	15	55	452	547
New London	0	1	3	8	235	247
Tolland	0	2	7	26	93	126
Windham	0	0	0	0	124	124
<b>Totals</b>	<b>31</b>	<b>235</b>	<b>175</b>	<b>219</b>	<b>1844</b>	

Stamford 5.7 MM  
Damage State Probability of Extensive Damage (Number of EF Structures)

COUNTY	Over 40% Chance	Between 30% and 39.9%	Between 20% and 29.9%	Between 10% and 19.9%	Less Than 10% Chance	Totals
Fairfield	8	162	30	65	262	527
Hartford	0	0	0	0	0	577
Litchfield	0	0	0	0	0	211
Middlesex	0	0	0	0	0	145
New Haven	0	0	0	0	0	547
New London	0	0	0	0	0	247
Tolland	0	0	0	0	0	126
Windham	0	0	0	0	0	124
<b>Totals</b>	<b>8</b>	<b>162</b>	<b>30</b>	<b>65</b>	<b>2289</b>	

### Hazus: Critical Facility Exposure

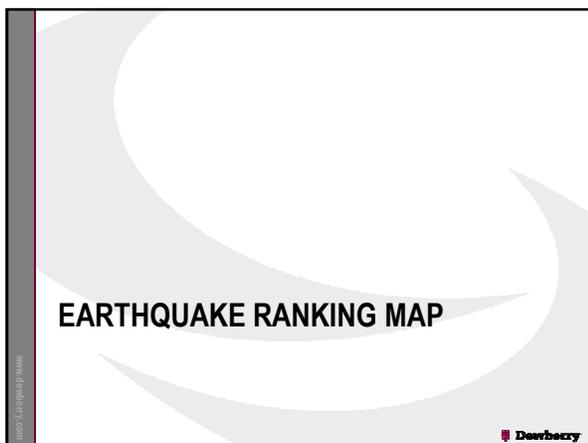
East Haddam 6.4 MM  
Damage State Probability of Extensive Damage (Number of EF Structures)

COUNTY	Over 40% Chance	Between 30% and 39.9%	Between 20% and 29.9%	Between 10% and 19.9%	Less Than 10% Chance	Totals
Fairfield	0	0	0	0	0	527
Hartford	8	172	237	134	46	577
Litchfield	0	0	0	0	0	203
Middlesex	40	74	20	14	0	145
New Haven	1	68	123	227	106	547
New London	33	148	46	20	0	247
Tolland	4	50	43	24	5	126
Windham	0	23	22	41	38	124
<b>Totals</b>	<b>86</b>	<b>554</b>	<b>471</b>	<b>468</b>	<b>925</b>	

Haddam 5.7 MM  
Damage State Probability of Extensive Damage (Number of EF Structures)

COUNTY	Over 40% Chance	Between 30% and 39.9%	Between 20% and 29.9%	Between 10% and 19.9%	Less Than 10% Chance	Totals
Fairfield	0	0	0	0	0	527
Hartford	0	4	20	68	485	577
Litchfield	0	0	0	0	0	211
Middlesex	15	94	16	20	0	145
New Haven	0	0	11	80	456	547
New London	0	17	2	31	197	247
Tolland	0	4	8	8	110	126
Windham	0	4	0	0	124	124
<b>Totals</b>	<b>15</b>	<b>115</b>	<b>57</b>	<b>207</b>	<b>2110</b>	



### Annualized Events

County	Drought	Flood	Hurricane	Thunderstorms	Tornado	Winter Weather	Grand Total
Fairfield	0.30	5.75	0.15	7.52	0.25	6.60	20.60
Hartford	0.05	4.85	0.05	8.22	0.28	4.00	17.46
Litchfield	0.10	5.75	0.10	8.38	0.49	8.00	22.82
Middlesex	0.30	2.10	0.15	2.53	0.14	4.35	9.58
New Haven	0.30	5.70	0.20	6.21	0.25	5.60	18.26
New London	0.30	4.30	0.15	3.38	0.00	4.15	12.34
Tolland	0.05	0.75	0.05	3.52	0.10	4.20	8.73
Windham	0.05	0.45	0.05	2.83	0.05	3.85	7.28
<b>Statewide Total</b>	<b>1.45</b>	<b>29.65</b>	<b>0.90</b>	<b>42.59</b>	<b>1.75</b>	<b>40.75</b>	<b>117.07</b>

### Annualized Losses

County	Drought	Flood	Hurricane	Thunderstorms	Tornado	Winter Weather	Grand Total
Fairfield		\$810,878	\$53	\$196,387	\$130,250	\$0	\$1,137,569
Hartford		\$520,141	\$1,020,690	\$118,737	\$13,116,854	\$952,764	\$15,729,186
Litchfield		\$580,369	\$0	\$58,155	\$1,548,272	\$97,151	\$2,289,947
Middlesex		\$29,005	\$53	\$29,508	\$35,955	\$0	\$95,121
New Haven		\$198,565	\$53	\$81,017	\$8,454,867	\$6,277	\$8,740,779
New London		\$350,705	\$53	\$38,251	\$0	\$0	\$389,010
Tolland		\$255,828	\$1,020,690	\$55,581	\$44,371	\$532,131	\$1,908,601
Windham		\$53,188	\$1,020,690	\$47,026	\$84,682	\$432,441	\$1,638,007
<b>Statewide Total</b>		<b>\$2,799,259</b>	<b>\$3,062,283</b>	<b>\$624,662</b>	<b>\$23,415,250</b>	<b>\$2,020,764</b>	<b>\$31,922,218</b>

- ### Using HIRA Results to Inform Strategies
- Development & maintenance of spatial data for critical & state facilities
    - Ongoing Progress
    - Hazus CDMS
  - Hazard Specific GIS data development (i.e. Dam Inundation areas)
  - Continue to mitigate RL & SRL properties
  - Climate Change & Sea Level Rise
    - Investigate properties within SLR scenarios

- ### Mitigation Action Plan: Brainstorming Results
- "Top" Mitigation Activity Ideas - Common Themes
    - Mitigation projects for existing at-risk structures
    - Regulations and building codes for new/improved structures
    - Mitigation funding
    - Utilities resiliency and hardening initiatives
    - Building community resiliency
    - Other
      - Debris management
      - Geology research projects
  - See handout for details

## Mitigation Action Plan: Revision & Brainstorming

- **Chapter 5: Natural Hazard Mitigation Goals, Objectives, Strategies, and Activities for 2013-2016**
- 3 Goals / 3 Objectives / 13 Strategies
- No major changes to current Goals, which were adopted in 2007 and reaffirmed in 2010 and 2013
- Some minor clarifications made to Objectives and Strategies, along with some newly added Strategies



## 2013 Mitigation Goals, Objectives, Strategies

- **Goal 1:** Promote implementation of sound floodplain management and other natural hazard mitigation principles on a state and local level
  - **Objective:** To increase general awareness of Connecticut's natural hazards and encourage State agencies, local communities, and the general public to be proactive in taking actions to reduce long-term risk to life and property.



## 2013 Mitigation Goals, Objectives, Strategies

### Strategies for Goal 1:

- **Strategy 1.1** – Provide **technical guidance** to communities on existing hazard mitigation opportunities with an emphasis on new or improved development or redevelopment, including local floodplain ordinance enhancement and enforcement.
- **Strategy 1.2** – Conduct **public outreach** and provide **educational opportunities** to State agencies, local communities, and other stakeholders on existing natural hazards and the mitigation measures available to reduce hazard risks.
- **Strategy 1.3** – Support and enhance **State policy and legislative efforts** to mitigate the effects of natural hazards and adapt to climate change.
- **Strategy 1.4** – Increase **coordination and leverage resources across State agencies** by integrating hazard mitigation principles into other relevant plans, policies, or program activities, such as the recent incorporation of hazard mitigation into the State Conservation and Development Policies Plan.



## 2013 Mitigation Goals, Objectives, Strategies

- **Goal 2:** Support the implementation of effective natural hazard mitigation projects on a state and local level
  - **Objective:** To enhance the ability of State agencies and local communities to reduce or eliminate risks to life and property from natural hazards through cost-effective hazard mitigation projects.



## 2013 Mitigation Goals, Objectives, Strategies

### Strategies for Goal 2:

- **Strategy 2.1** – Develop **State-level priorities and evaluation criteria** for hazard mitigation project funding that is provided or administered by the State, including FEMA grant funds.
- **Strategy 2.2** – Identify, develop, and prioritize hazard mitigation **projects for State-owned facilities** considered at risk to natural hazards.
- **Strategy 2.3** – **Provide the best available data, training, and technical assistance** to State agencies and local communities to assist in the identification, development, and implementation of **cost-effective** hazard mitigation projects, particularly when applying for Federal and State funds.
- **Strategy 2.4** – Increase and promote the availability of **various funding mechanisms** to support hazard mitigation project implementation, including Federal, State, and non-governmental sources.
- **Strategy 2.5** – Routinely **monitor the implementation of hazard mitigation projects**, tracking progress through project closeout and beyond to capture success stories (losses avoided) and lessons learned.



## 2013 Mitigation Goals, Objectives, Strategies

- **Goal 3:** Increase research and planning activities for the mitigation of natural hazards on a state and local level
  - **Objective:** To increase knowledge and enhance the capacity of State agencies and local communities to become more resilient to the effects of natural hazards, and to maintain the ability to adapt to climatic changes.



## 2013 Mitigation Goals, Objectives, Strategies

### Strategies for Goal 3:

- **Strategy 3.1** – Promote natural hazard mitigation research and planning activities that will **improve hazard mitigation planning and implementation** on a State and local level.
- **Strategy 3.2** – **Conduct outreach and provide educational opportunities** to state agencies, local communities, and other stakeholders to assist in translating research and planning activities into practice.
- **Strategy 3.3** – **Investigate climate change adaptation strategies** as they affect natural hazard mitigation and State investment policies, and **link hazard mitigation activities with climate adaptation strategies** when appropriate and possible.
- **Strategy 3.4** – Research methods and take action to better **engage the private sector and non-profit organizations** in hazard mitigation planning activities on a State and local level, including **coordination with utility companies** to better prepare for, mitigate against, and respond to natural hazard events.

## 2010 Mitigation Activities Progress Report

- Updates required for all prior activities (Table 5-1)
  - Current Implementation Status:
    - Completed
    - Completed / To Be Continued
    - Partially Completed / In Progress
    - Deferred
    - Deleted
    - Ongoing / Continuous
    - Unknown
  - Narratives explaining status

## 2010 Mitigation Activities Progress Report

### • 2013 Mitigation Activities Update Spreadsheet

Activity #	Activity	Lead Agency	Current Status	Current Status (Description/Estimation) (2013)	2010 Status of Activity (over, ongoing, past, future)
1.1	Provide model ordinances and design register standards language that communities can adopt into existing floodplain ordinances.	DEEP	Completed / To Be Continued	Final review - target date: Summer 2013. DEEP will continue to perform activity until an updated final and activity will be available within the next few years or FEMA/NFIP requirements change, whichever is sooner.	Final review - target date: Summer 2013. Review on the existing model floodplain ordinance was performed during the last FRM 3 year planning period. If updates of the current floodplain model ordinance occurred in 2012, Communities are currently being encouraged to review and update to the extent possible the language and aspects of the state model floodplain ordinance.
1.2	Provide local ordinance review for communities to provide comments on ordinance as to where existing ordinance requirement updates/requirements to current standards.	DEEP	Completed / To Be Continued	Completed in 2013. Activity will be performed as needed on a case-by-case basis for FRM panels received from FEMA.	Ongoing - 50% completed. In cooperation with the Flood Mitigation Program, ordinance review was completed for communities in Middlesex County in 2012, and Hartford County in 2010. Ordinance review to communities in these counties, New Haven and Fairfield Counties will be completed in 2013.
1.3	Perform community assistance visits (CAVs) each year to maximize efforts to provide technical guidance and educational materials to communities. This activity is important to ensure compliance with FEMA/NFIP floodplain management minimum standards and these additional requirements as states in local jurisdictions.	DEEP	Ongoing / Continue	Target: hold an annual event. Come as 2013 update. A list of CAVs and CAVC the last planning period is included in the CAP-SSDE website and reviewed by FEMA.	Ongoing - specific program completed for CAVs per year. CAVs are normally performed with a community on the following schedule: at least once every two years for a coastal community and at least one visit every ten years for an inland (inland) community.
1.4	Investigate the feasibility of providing an introduction floodplain management ordinance to reviewed state employees of various state agencies affected by floodplain management policies.	DEEP	Completed	Completed in 2010. Three Michigan (Michigan, Ohio, and Pennsylvania) were presented through the Joint Flood Office which were later in various state agencies. Followed with request to Michigan management which included FEMA training, project identification and development, hazard mitigation planning.	Future - estimated timeframe is three to five years. Implementation of activity is dependent on available resources and funding.
1.5	Investigate the feasibility of participating at local events such as home shows, fairs, etc. to provide information to the public regarding the RFP and requests from flooding and other natural hazards, and seek assistance on how to mitigate effects from these hazards. Investigate the feasibility of developing and producing educational materials for such events.	DEEP	Completed / To Be Continued	Performed post-2010 and post-2010 by CT DEEP and CT DEEP personnel along with FEMA Joint Flood Office staff.	Future - estimated timeframe is three to five years. Implementation of activity is dependent on available resources and funding.

## 2010 Mitigation Activities Progress Report

- Implementation status:
  - **Completed: 5 activities**
  - **Completed / To Be Continued: 8 activities**
  - **Partially Completed / In Progress: 12 activities**
  - **Deferred: 11 activities**
  - **Deleted: 1 activity**
  - **Ongoing / Continuous: 8 activities**
  - **Unknown: 8 activities – most are incomplete, still require further evaluation, and may be deferred or deleted.**
- 47 activities may be carried over for implementation in 2013-2016, though further evaluation and streamlining is encouraged

## Identifying NEW Mitigation Activities

- Organize into same breakout groups as last meeting
- Identify **specific mitigation activities** to include for 2013-2016
- Activities should be:
  - **Strategic** – linked to HIRA findings and aligned with existing Goal-Objective-Strategy(s)
  - **Actionable** – specific enough to be implemented
  - **Achievable** – technically feasible, legal, affordable and cost-effective, and socially and politically acceptable
  - **Measurable** – progress can be evaluated over time
- Activity information will be captured by group facilitators

## Identifying NEW Mitigation Activities

- Activity Information includes:
  - **Strategy #**
  - **Activity Description**
  - **Lead Agency**
  - **Estimated Cost (if applicable)**
  - **Potential Funding Sources (if applicable)**
  - **Timeframe for Completion**
  - **Hazard(s) to be Addressed**
  - **Point of Contact (Name, phone, email)**
  - **Notes**
- See handout, *Mitigation Action Worksheet*

### Prioritizing NEW Mitigation Activities

- Dewberry contractor team will coordinate with DEEP to prioritize all final mitigation activities using established criteria (STAPLE-E factors):
  - Social
  - Technical
  - Administrative
  - Political
  - Legal
  - Economic
  - Environmental
- Each mitigation activity will be scored and assigned *High*, *Medium*, or *Low* priority

Photo: iStockphoto.com



### Wrap Up & Future Meetings

- Project Schedule
  - Finalize Capabilities Assessment
  - Finalize & Prioritize Mitigation Strategies/Actions/Projects
    - Completed by your Small Group Leader
  - Hazard Mitigation Plan DRAFT Review – July 19, 2013
    - Comments Incorporated
    - 2<sup>nd</sup> Review
  - Submittal to FEMA

Photo: iStockphoto.com



## Questions?



Photo: iStockphoto.com





Connecticut State Hazard Mitigation Plan Update  
Stakeholder Meeting No. 4



# Agenda

August 7, 2013 10:00 AM – 12:00 PM  
CT DEEP -79Elm Street, Hartford, CT 06106  
Holcombe Room, 5<sup>th</sup> Floor

**Purpose:** *Receive State and Stakeholder comments on draft plan and rank all selected actions.*

Description	Lead	Time
Welcome and Introductions <ul style="list-style-type: none"> <li>Timeline for Review and Approval</li> </ul>	Karen Michaels, DEEP, State Hazard Mitigation Planner	10:00 – 10:10
Review of changes made since the 2010 plan. <ul style="list-style-type: none"> <li>Receipt and discussion of comments and edits</li> </ul>	Scott Choquette, Dewberry	10:10 – 11:10
Evaluation and ranking of selected actions <ul style="list-style-type: none"> <li>Final action input (additions/subtractions/modifications)</li> </ul>	Darrin Punchard, Dewberry Team (AECOM)	11:10– 11:55
Wrap Up and Next Steps	Scott Choquette, Dewberry	11:55– 12:00

## Connecticut Natural Hazard Mitigation Plan 2013 Update: Strategy Prioritization & Plan Review

August 7, 2013

10:00 AM – 12:00 PM  
CT DEEP  
Holcombe Room, 5<sup>th</sup> Floor  
79 Elm Street  
Hartford, CT 06066




### Meeting Agenda

- Welcome & Introductions
  - Timeline for Review and Approval
- Review of Changes made since 2010 NHMP
- Draft Plan Review
  - Comments due Friday August 9, 2013
- Evaluation and Prioritization of Strategies
- Wrap Up and Next Steps



### Planning Process



*Comments due 8/9/2013*



### Changes with NHMP since 2010

- Plan outline restructured:
  1. Introduction & Planning Process
  2. Natural Hazard Identification & Risk Assessment
  3. Capabilities Assessment
  4. Local Plan Coordination
  5. Hazard Mitigation Strategy for 2013 - 2016
  6. Plan Monitoring, Maintenance and Revision




### NHMP 2013 Update: Changes

- Chapter 1: Introduction & Planning Process
  - Expanded on Planning Process
    - Public Participation new in 2013
    - Future updates moved into Chapter 6
  - Local Plan coordination moved to and expanded on in new Chapter 4
- Chapter 2: Natural Hazard Identification & Risk Assessment
  - Completely restructured
    - Disaster Declarations Updated and NCDC data processed
    - Ranking Methodology
      - Local Plan Ranking and Loss Estimation Discussed
    - Hazard-Specific sections
      - Facility Analysis Completed



### NHMP 2013 Update: Changes

- Chapter 3: Capabilities Assessment
  - Completely new structure and content
    - 2010 Chapters 3 for Capability Assessment and Chapter 4 for Natural Hazard Mitigation Programs merged
    - Polices from 2010 Chapter 2 HIRA merged
    - State and Federal plans from 2010 Chapter 1 merged
- Chapter 4: Local Planning Coordination
  - New Chapter in 2013
    - Components of 2010 chapters merged
    - Complete Assessment of Local Plans for Hazard Identification, Ranking, Loss Estimation, Mitigation Actions, and Local Capabilities



### NHMP 2013 Update: Changes

- Chapter 5: Hazard Mitigation Strategy for 2013 – 2016
  - Updated Goals and Objectives
  - New Actions
  - Implementation recommendations
  - Progress on 2010 actions
- Chapter 6: Plan Monitoring, Maintenance, and Revision
  - New Chapter in 2013
    - Focus on Monitoring Procedures
    - Project Closeout Process
    - Method for Updating plan for 2016



### Prioritizing Mitigation Activities

- STAPLE-E criteria:
  - Social
  - Technical
  - Administrative
  - Political
  - Legal
  - Economic
  - Environmental
- Each mitigation activity scored and assigned *High*, *Medium*, or *Low* priority



### Wrap Up & Next Steps

- NHMP Comments – August 8, 2013
- NHMP to FEMA – NLT September 6, 2013
- CT DEEP & DESPP Signed Resolution
- FEMA Comments & Approval: Fall 2013
- Next Steps:
  - Continued participation of Steering Committee
    - Implementation & Maintenance of NHMP



### Questions?







Connecticut State Hazard Mitigation Plan Update  
Stakeholder Meeting No. 3



# Agenda

June 5<sup>th</sup>, 2013 9:00 AM –3:00 PM  
CT DEEP - 79 Elm Street, Hartford, CT 06106  
Holcombe Room, 5<sup>th</sup> Floor

**Purpose:** *Progress on the mitigation plan update: presentation of the hazard identification and risk assessment results and further development of the mitigation goals, objectives and actions.*

Description	Lead	Time
Welcome and Introductions <ul style="list-style-type: none"> <li>• Timeline for Review and Approval</li> <li>• Progress to Date               <ul style="list-style-type: none"> <li>○ Draft Plan Comments and Review Procedure</li> </ul> </li> </ul>	Karen Michaels, DEEP, State Hazard Mitigation Planner  Scott Choquette, Dewberry	9:00 – 9:30
Capabilities Assessment <ul style="list-style-type: none"> <li>• Incorporation of Comments</li> </ul> Public Outreach  <a href="https://www.surveymonkey.com/s/cthazardmitigationplan">https://www.surveymonkey.com/s/cthazardmitigationplan</a>	David Murphy, Dewberry Team (Milone & MacBroom)	9:30 – 9:45
Hazard Identification and Risk Assessment <ul style="list-style-type: none"> <li>• Review of Hazard Identification</li> <li>• Ranking Methodology               <ul style="list-style-type: none"> <li>○ Historical Events</li> <li>○ Critical &amp; State Facilities</li> <li>○ Local Plan Incorporation</li> </ul> </li> </ul>	Rachael Herman, Dewberry	9:45 – 10:45
<b>BREAK</b>		10:45 – 11:00
Summary of Hazard Specific Analysis <ul style="list-style-type: none"> <li>• Flood-related Hazards</li> <li>• Winter Weather</li> <li>• Wind-related Hazards</li> <li>• Wildfire</li> <li>• Drought</li> <li>• Earthquake</li> </ul>	Rachael Herman, Dewberry  Darrin Punchard, Dewberry Team (AECOM)	11:00 – 12:15
<b>LUNCH</b>		12:15-1:15
Mitigation Action Plan: Revision and Brainstorming <ul style="list-style-type: none"> <li>• Goal and Objective review</li> <li>• Mitigation Action Development &amp; Prioritization</li> </ul>	Darrin Punchard, Dewberry Team (AECOM)	1:15 – 1:30
Small Group Discussions: Mitigation Actions	Dewberry Team Members	1:30-2:45
Small Group Summaries	Scott Choquette, Dewberry	2:45-3:00
Wrap Up and Future Meetings <ul style="list-style-type: none"> <li>• Project Schedule - Milestones</li> <li>• Next Mitigation Committee Meeting</li> <li>• Overview of Action Items</li> </ul>		



Connecticut State Hazard Mitigation Plan Update  
Stakeholder Meeting No. 4



# Agenda

August 7, 2013 10:00 AM – 12:00 PM  
CT DEEP -79 Elm Street, Hartford, CT 06106  
Holcombe Room, 5<sup>th</sup> Floor

**Purpose:** *Receive State and Stakeholder comments on draft plan and rank all selected actions.*

Description	Lead	Time
Welcome and Introductions <ul style="list-style-type: none"> <li>Timeline for Review and Approval</li> </ul>	Karen Michaels, DEEP, State Hazard Mitigation Planner	10:00 – 10:10
Review of changes made since the 2010 plan. <ul style="list-style-type: none"> <li>Receipt and discussion of comments and edits</li> </ul>	Scott Choquette, Dewberry	10:10 – 11:10
Evaluation and ranking of selected actions <ul style="list-style-type: none"> <li>Final action input (additions/subtractions/modifications)</li> </ul>	Darrin Punchard, Dewberry Team (AECOM)	11:10– 11:55
Wrap Up and Next Steps	Scott Choquette, Dewberry	11:55– 12:00

Meeting Attendance Sign-In Sheet  
 NHMP Update Planning Team  
 August 7, 2013 Meeting  
 10:00 a.m. to 12:00 p.m.  
 Holcombe Room, CT DEEP

Name	Signature
Jeffrey Bolton	
George Bradner	
Major Edward Bunce	
Carolyn Carlson	<i>Carolyn Carlson</i>
John Cimochowski	
Binu Chandy	
Mark DeCaprio	
Peggy Discenza	
Elizabeth Doran	
Mary Rose Duberek	
Ken Dumais	
Gemma Fabris	
Lou Fazzino	
Carla Feroni	
<del>Corrine Fitting</del> <i>Corrine</i>	<i>Corrine Fitting</i>
Daniel Forrest	
David Fox	
William Frederick	<i>William Frederick</i>
Denny Galloway	
Douglas Glowacki	<i>[Signature]</i>
John Haggerty	
Moirra Herbert	
Diane Ifkovic	<i>Diane Ifkovic</i>
Kurt Kebschull	



## Appendix 1-3. Public Survey

Public participation for the the update of the Connecticut HMP was primarily enabled through participation in an internet-based survey. The survey consisted of 15 questions and was available from May 14 through June 19, 2013. DEEP distributed hyperlinks to the survey via three sets of emails to the planning team and several municipal planning and public works mailing lists between 2 and 3 PM on May 14, 2013, resulting in at least 23 responses as of 5 PM on that same day.

Announcements were posted in 27 editions of the Patch.com internet-based community newspapers beginning at 5 PM on May 14, 2013 and continuing through May 15, 2013. Hyperlinks to the survey were provided along with descriptions of the planning process on the following web pages: CT DEEP main page, CT DEEP Natural Hazard Mitigation Plan page, and ct.gov main page.

Finally, a flyer with the survey link was distributed to approximately 35 municipal officials and staff at the NOAA/Sea Grant coastal land use training on May 15, 2013.

As of the date of closing (June 19, 2013), a total of 135 people participated in the survey.

Questions 1 through 3 of the survey gathered basic information from the responders. The responders were generally divided equally with 51% representing residents, and 49% representing State agencies, municipalities, or other organizations. Of the latter, most of the responders were from State agencies, municipal staff, and municipal commissions and boards. One federal agency (FEMA) was represented, six regional planning organizations were represented, and five responders were from “other” organizations. None of the responders indicated that they were affiliated with an education institution, business, utility, tribal government, or watershed/conservation group. However, a review of the 48 written responses shows that at least one business, one trade organization, and the American Red Cross were represented.

With regard to plan awareness (Questions 4 and 5), 70% of responders were aware that Connecticut maintains a hazard mitigation plan, but only 49% were aware if their own community maintains a local hazard mitigation plan.

Question 6 inquired the following: “If your awareness of natural hazards has increased in recent years, which events have contributed to this awareness?” Responders were permitted to select more than one answer, with the focus on recent event. The most popular responses were Hurricane Sandy of October 2012, Hurricane Irene of August 2011, and Winter Storm Alfred of October 2011. Winter Storm Nemo of February 2013, the snowstorms of January 2011, and the Springfield tornado of 2011 were the next-highest selected choices. All of these choices were selected by more than 40% of responders. Less than 20% of responders selected the Virginia earthquake of 2011, which was felt in many parts of Connecticut. Written responses included the following:

- Information from CodeRED

- Many, many others
- All the crazy weather the whole country has been seeing, including the recent OK tornados
- Tornado in Hamden in late 80s
- I always watched weather as part of day to day scheduling in the tree care industry
- Floods that close roads
- All of the above
- Following the news
- No, winter storms and hurricanes are an aspect of weather I learned this in grade school.
- Job related awareness
- Mississippi River flooding and Midwest droughts
- The Bridgeport tornado
- With Storm Irene August 2011 (without power for 12 days)
- Work-related efforts since 2005
- Japanese tsunami, quickening of climate change
- October 2010 flooding following several days of rain
- Tornado that went through Wethersfield in 2009

Question 7 asked responders to rate 13 hazards on a scale of 1 (no concern) to 3 (high concern) indicating the level of threat each presents to the responder's home or the functions of his or her organization. Responses were as follows:

Hazard	Low Threat	Medium Threat	High Threat
Flooding	35%	32%	33%
Hurricanes and Tropical Storms	5%	48%	47%
Tornadoes	49%	38%	13%
Severe Thunderstorms (including hail or downbursts)	12%	57%	31%
Winter Storms (including snow or ice) and Blizzards	6%	36%	58%

Earthquakes	87%	10%	3%
Wildfires and Brush Fires	73%	10%	7%
Landslides	95%	4%	1%
Sinkholes or Subsidence	87%	12%	1%
Sea Level Rise and Increased Coastal Hazards such as storm surge	66%	13%	21%
Tsunami	93%	4%	3%
Drought and Severe Heat	35%	51%	15%
Dam Failure (could be caused by other hazards)	67%	21%	12%

Responses reflect the spatial characteristic of each hazard as well as their frequencies and intensities. For example, the threat reported for flooding was evenly split between low, medium, and high. This is presumably because only some of the housing stock is located in areas of flood risk. However, the threats were primarily reported as medium to high for hurricanes and winter storms, which can impact large areas. The low threats reported for earthquakes, wildfires, landslides, sinkholes/subsidence, and tsunamis are influenced by low frequencies and/or low geographic effects. The only hazard that was rated by more people as low and high instead of medium was sea level rise and increased coastal hazards. This is presumably because people either reside in coastal hazard zones, or do not, without many responders in zones of intermediate risk.

Written responses included the following:

- I'm concerned anything in this survey can and will be used to increase my taxes and or utility bills.
- 550 ft above sea level next to state forest - I'm taking down my trees close to house and getting more powerful backup generator
- Angry citizens, just kidding
- Increased stormwater runoff causes increase in toxic pollutants
- Rotting trees owned by the city falling onto and damaging my property.

Question 8 asked responders which hazards have impacted them or their organization. Thus it is similar to Question 7, except it is less a measure of future risk and more a measure of what has already happened. More than 80% of responders indicated that hurricanes/tropical storms and winter storms/blizzards have impacted them. Approximately 50% of responders have been impacted by flooding and severe thunderstorms. About 22% of responders have been impacted by sea level rise and increased coastal hazards as well as droughts and severe heat. Wildfires, dam failure, and

tornadoes each were selected by approximately 10% of responders. Smaller percentages were associated with geologic hazards such as earthquakes, landslides, and sinkholes. A total of five responders reported having not been impacted by any of the hazards. Written responses included the following:

- Power loss due to storms
- We keep a boat on the coast.
- Other high wind conditions not necessarily associated with tropical storm events
- Ice Jams

Question 9 inquired whether any specific areas of the responder's community were vulnerable to any of the above hazards, and if so, to list them by location. Responses varied and included all parts of Connecticut:

- The entire town is subject to either or both hurricane/flooding and blizzard/ice storms.
- Town of Clinton is on the shoreline
- South State Street; "Shippan" neighborhood
- Outlying areas are vulnerable to power loss in Manchester
- Bruce Avenue and West Avenue in Stratford
- Wilson
- Low lying areas prone to riverine and coastal flooding vary throughout town
- Naugatuck
- Route 191 Broad Brook and dam in the Broad Brook area
- Riverine and coastal flooding are a major concern in the south western part of the state. Greenwich, Stamford New Canaan, Norwalk, Weston, Westport and Wilton have all see an increase in flooding events over the past decade. With Hurricane Sandy downed trees as a result of high winds was also of major concern, in addition to significant storm surges that were also seen with Hurricane Irene
- The Still River in Danbury floods frequently impacting many businesses and Federal Road, for example, regularly experiences flooding which directly impacts many businesses there and closes main roads.
- Colchester
- Bridges at Lake Whitney - some are concrete and showing their age.
- Localized flooding throughout, blizzards, drought on the well systems, hurricanes causing flooding, tree damage and wind damage

- All areas of the City of Stamford - many large trees and coastal areas.
- Quinnipiac River in Meriden and Morris Cove in New Haven.
- Housatonic river in Kent
- Goldmine Brook in Norwich
- In the coastal management boundary area along coast of Westbrook (many streets/neighborhoods)
- Pomfret
- Flooding in Tunxis Avenue and Wynding Hills and flooding in Granbrook Park
- 1320 Main Street, Willimantic - flood zone was changed in 1998 after development was completed 8 yrs earlier; storm drainage empties into Tyler Square Plaza which is restricted by stone box culvert and railroad bed, resulting in flooding of building. Need another outlet to release water to River and avoid flood damage.
- Ferry Park
- The Maple Mews in Hartford
- Cooper Avenue, Milford, CT 06460 – Property flooded by significant storm surges due to Irene and Sandy. Damage so significant with Sandy that the house is substantially damaged and uninhabitable. The house was also flooded in the perfect storm of 1996. So three significant floods in 20 years.
- Old Lyme Beaches
- Flooding along rivers, especially the Pequabuck and Quinnipiac Storm; blizzards throughout the 7-town region; Tornadoes did hit downtown Bristol, but that may have been an isolated occurrence; Forest fires by Birges Pond in Bristol
- Shoreline Old Lyme
- Sperry Street, Merwin Avenue, Hillside Avenue, and Seabreeze Avenue in Milford
- West Cornwall Covered Bridge area,
- Sinkholes - near rivers, hills/inclines, newly developed areas microbursts - special to our area hills interfere with phone/family talk/policy and resident radios-poor reception in hilly areas valley results in range of precipitation - snow in one area, ice in another, rain in another
- Milford
- The portions of Bridgeport, Fairfield and Stratford that are along the coast and/or are located in a floodplain.

- We built the Danbury mall on swampland, and it floods. Across the street Danbury city used airport land to build some strip malls on swampland and they flood. Wal-Mart is on swampland and it floods. The bottom of West Lake dam floods on Franklyn Street and Middle River road intersection, lake Kenosia floods. Lake Avenue has a low area under a very old railroad bridge and it floods near the social security office. All floods stated, occur regularly without any need for a severe storm and you folks will never do anything about it. New condos are to be built in the Wooster School area on land that is swampland, and nothing will stop their being built, they will flood. The new land owners, and government bureaucrats will be surprised.
- Flooding along the Salmon Brook in Granby
- Red Top Drive in West Hartford runs alongside a brook that has caused flooding problems ever since Westfarms Mall was built and allowed to dump all their storm sewer runoff into the brook. They need to install a permeable parking lot surface.
- Sperry Street dips to sea level in the middle where we are so if there is a storm it fills up even in a heavy rain at high tide as the water can't get out
- Willowbrook Road, New Canaan; Some properties adjacent to Silvermine River; Some properties adjacent to Five Mile River
- New London. Although I live on high ground, much of New London is vulnerable to storm surges.
- North Haven Quinnipiac River flooding
- South End, Bridgeport Fairfield Beach area, Fairfield
- Town of Woodbridge West River Flooding
- Low lying coastal areas, tidal marshes
- south of Route 1, Westbrook
- Houses along the Pomperaug River;
- Downtown Mystic (Route 1), River Road in Mystic
- Chalker Beach, Old Saybrook Indiantown, Old Saybrook Saybrook Manor, Saybrook Acres, Old Saybrook Soundview Beach, Old Lyme Old Mail Trail, Westbrook Grove Beach, Westbrook
- milford coast is vulnerable to flooding, hurricanes and trop. storms and sea level rise.
- no

- Many areas with the 10 town Housatonic Region are vulnerable to the listed hazards. Did you know, for instance, that the area now known as Danbury was known as Swampfield until 1687?
- Wilton in general Arrow Head area, Route 7 south and along Norwalk River for flooding
- Areas along Farmington River most vulnerable and in particular the Meadow Road Corridor and parts of Route 4 north of the sewer treatment plant.
- Route 16 and Waterhole Road in Colchester/East Hampton line - numerous 60 -80 foot high trees which still need to be cut - Should these trees come down, power will be out and it will trap many families with no way to get out of the neighborhood- Storm Irene "trapped" neighbors until the homeowners with their own chainsaws cut up the downed trees themselves!
- coastal towns being squeezed by slr and upland flooding from precip changes and increase in impervious services
- West Hartland is vulnerable to dam failure and would have a short time to move out of harms way
- Flooding on Route 69 south from Bond Road to the Woodbridge town line with New Haven
- Statewide
- multipurpose rivertrail - erosion on river bank in Putnam, bridge at Rt 44 and Kennedy Dr intersection
- Floodplain areas of the Falls River and the Connecticut River.
- The entire coast, and riversides too.
- upper reaches of Quinnipiac River causing localized flooding. Wildfires in wooded area abutting new development
- coastal communities are vulnerable to flooding caused by tropical storms/hurricanes/storm surge.
- Route 9 and River Rd along the Ct River, there was a landslide along the Mattabassett that threatened apartments and homes.
- Coventry: Flooding along Brigham Tavern Road, Jones Crossing Road, Route 275, Flanders River Road along Willimantic River, and South Street and Hop River Road and Pucker Street along the Hop River were impassable roads into/out of most access roads in Coventry during October 2010 flooding event.
- flood prone areas in Simsbury - per FEMA flood maps

- Veteran's Park is susceptible to wildfire. Various sections of the East End are susceptible to flooding as is State St. Ext under I-95
- Hampton's bridges over the Little River
- old Wethersfield for flooding due to proximity to river. Other areas flood as well
- Loss of power in zip code 06905 [Stamford]
- South & North Water Street along the Connecticut River
- East Haven coast Old Saybrook Coast Old Lyme Coast coastal towns
- The center of Town where all the town offices, fire house, senior center, elementary school, market, post office and bank are located.
- General flooding in streets near waterbodies and streets without adequate drainage.
- Flooding - route 189 and Granbrook Park: Flooding -Floydville Bridge at Route 189 and Floydville Road. Storms have town wide impact
- Maples area along Housatonic River
- Almost entire LI Sound coastline, riverfront coastal areas.
- Simonzi Park (Kennedy Drive) and the entire Town of Putnam water system

Question 10 asked what are the most important things that the State of Connecticut can do to help communities be prepared for a disaster, and become more resilient over time. Responses for the five provided choices are summarized in the table and written responses are below. Most of the five given choices were relatively popular among responders, with selections ranging from 47% to 74%.

Provide outreach and education to residents, businesses, and organizations to help them understand risks and be prepared	68%
Provide technical assistance to residents, businesses, and organizations to help them reduce losses from hazards and disasters	74%
Make it easier for communities to provide this education and technical assistance	47%
Make it easier for residents, businesses, and organizations to take their own actions to become more resilient to disasters	59%
Help improve warning and response systems to improve disaster management	48%

- Hold corporations such as CL&P to standards. Lengthy periods of power loss are unacceptable. This is not the third world.
- Eliminate the "red tape" when implementing anything the state does to make it easier in #10.
- Education is best. And remember the most vulnerable population (elderly) probably can't use a computer or highly technical gadgets...
- Provide assistance with the types of grant, loan and assistance programs available, both for mitigation and recovery
- All of the above. Warning systems are very good now but can be improved as new tech comes online.
- Don't allow residents or businesses to build in the danger areas, specifically along the coast! ALL property between the parallel road and water should be considered a national park and no one should be allowed to build in this narrow band of land!
- Conduct infrastructure projects and maintenance, especially tree cutting along roads, drainage improvements, and repairs and maintenance to dams (state owned infrastructure) to mitigate for hazards and minimize disaster impacts.
- More quickly and easily provide hazard mitigation funds to allow residents to safeguard their home to avoid disaster.
- Encourage communities to foster neighborhood residents prep-planning together - "neighborhood prep" - watch out for each other - have neighborhood family radio systems they could talk to each other via radios/CB radios when phones down-important when live wires on roads avoid walking in dangerous areas and warn neighbors.
- Bury power, cable and phone infrastructure in areas that routinely fail due to flooding, wind, ice or other normal weather conditions.
- Modify assistance laws such that a property will be insured only once for an event type. If an event occurs, e.g., flooding, the site is highly susceptible and therefore should not be eligible for future payouts.
- Provide funding to implement mitigation projects.
- Review and monitor municipal plans for adequacy and practicality. Develop a network of mutual aid relationships for municipalities. Include planning for elderly, home convalescents, and pets.
- Improve reliability of electric grid and better coordination of repair efforts in response to storms.
- Cut down some of the trees, generators are no good without gas, and having homeowners cut up trees near down power lines will result in deaths. Will that be what it takes to get an effective response?

- I think empowering communities to take ownership and action is best.
- Improve utility response to out of service calls.
- Encourage moving critical infrastructure inland.
- Help local communities understand how proper and proactive municipal land use regulation can help minimize loss of life and property in severe but predicable storm events.
- Require towns to submit hazard mitigation plan to state.
- Help towns get all buildings out of flood zones.
- Low cost funding for home improvements and mitigation efforts by citizens.
- Move residents off the coast, stop towns from using real estate tax for funding government services as land is a fixed, inelastic commodity, switch the state to an income-based, progressive taxation system.
- Focus in upgrading infrastructure and use modern approaches to storm water management.
- Stop supporting growth or inappropriate development in risky areas.

Survey respondents provided many suggestions of ways the state could help communities prepare for a disaster and improve resilience. Respondents stated that while warning systems are good at the moment, they should be improved as new technology becomes available. One respondent expressed interest in CB radios that would allow neighborhood residents to communicate with each other without walking in areas where live wires may be on the roads. Several individuals expressed the need for improved tree and infrastructure maintenance, including repairs to dams and drainage systems. Many respondents recommended burying power, cable, and phone infrastructure, improving the reliability of the electric grid, and changing regulations to prevent or discourage development within flood-prone areas. Interest was also expressed in increased funding for mitigation projects and review of municipal hazard mitigation plans at the local and state levels.

Question 11 asked what are the most important things that the responder's community can do to help its residents or organization be prepared for a disaster, and become more resilient over time. Responses for the six provided choices are summarized in the table and written responses are below. Most of the six given choices were relatively popular among responders, with selections ranging from 40% to 63%.

Provide outreach and education to residents, businesses, and organizations to help them understand risks and be prepared	63%
Provide technical assistance to residents, businesses, and	50%

organizations to help them reduce losses from hazards and disasters	
Conduct projects in the community, such as drainage and flood control projects, to mitigate for hazards and minimize impacts from disasters	60%
Make it easier for residents, businesses, and organizations to take their own actions to mitigate for hazards and become more resilient to disasters	55%
Improve warning and response systems to improve disaster management	40%
Enact and enforce regulations, codes, and ordinances such as zoning regulations and building codes	49%

- Provide shelter to those impacted by violent weather and natural disaster.
- Keep it simple
- Tree cutting along roads and dam improvements.
- Encourage towns to foster neighbors planning on street areas-see 10.
- Stop any building in places that regularly flood (that is areas which will routinely be more than an inch under water within a 5 year period on average).
- Update flood zone maps.
- Public acquisition of vulnerable shore property for open space and shoreline access.
- Cut back the trees, "they" did more than what was necessary on Rt 2, CL&P has to address trees (cut) near power lines.
- Include resilience criteria into state and local processes and projects.
- if a website has this information, publicize it (state-level).
- Consider longer term resiliency planning in local land use regulation and local plans of conservation and development.
- Start using underground power lines.

The responses to Question 11 were similar to the responses for question 10. The respondents suggested tree cutting along roads, dam improvements, improved sheltering, emergency planning on the neighborhood level, and the installation of underground power lines. Other ideas included updating flood zone maps, preventing building in areas that are flood-prone, and incorporating resilience criteria into state and local processes and projects.

Question 12 asked if the responder has taken any actions to reduce the risk or vulnerability to his or her family, home, or organization, and if so, to please indicate. Responses for the ten provided choices are summarized in the table and written responses are below. The most common responses were cutting back vegetation and reducing snow loads. At least 22% of responders had not taken any actions.

Elevated my home or business to reduce flood damage	3%
Floodproofed my business to reduce flood damage	3%
Installed storm shutters or structural/roof braces to reduce wind damage	1%
Taken measures to reduce snow build-up on roofs	43%
Cut back or removed vegetation from my overhead utility lines or roof	44%
Replaced my overhead utility lines with underground lines	2%
Managed vegetation to reduce risk of wildfire reaching my home or business	8%
Developed a disaster plan for my family, home, or business	31%
Maintain a disaster supply kit for my family, home, or business	36%
I have not taken any of these actions	22%

- We are designing new multifamily buildings that are elevated to reduce damage potential
- Increased my insurance
- We maintain a hazard mitigation plan
- Landlords need to be proactive, also. I cannot trim foliage without permission, and sometimes is prohibited by the landlord.
- Installed a generator
- Built a french drain to divert street flooding away from my house
- Plan on getting generator.
- Amended Municipal Regulations to have higher flood standards
- Generator purchased and safely installed
- I will not be returning to rebuild in a known hazardous flood plain. It is appalling that the state of CT has not authorized the federal government buying these

properties and not permitting re-building in these locations. City of Milford is more concerned about revenue than the safety of its' citizens.

- I am in the process of elevating my home (I am over 50% damage between Irene and Sandy)
- encourage others to plan for disasters and have emergency supplies
- Installed an automatic standby generator, that can power my home for up to a month. Installed a new roof with weather sheeting to the top to prevent leaks, power and cable were relocated to run via underground conduits at my own expense. We have an auxiliary internet access via cell phone in the event our cable internet fails.
- Prepared regional natural hazard mitigation plan; held workshop on coastal resiliency
- HVCEO has applied for FEMA Planning Grant Funds to help develop Hazard Mitigation Plans for 7 municipalities and to update HMPs in three other municipalities.
- Installed emergency house generator
- Updated the municipal emergency management plan. Taking action to add another shelter facility in town.
- Chose home location that is not vulnerable to common threats!
- Woodbridge has removed/pruned trees for utility line clearance and is seeking the removal of the Pond Lily Dam in attempt to mitigate stormwater flooding on lower Route 69
- purchased home not in a flood plain
- bought flashlight

Question 13 asked “If you could choose one action that could be taken in the State of Connecticut to reduce its vulnerability to hazards and the disasters associated with these hazards, what would it be?” Choices were not provided; all responders were required to enter a response or skip the question. A total of 93 written responses were entered:

- Clear overhanging branches from power lines.
- Educate the citizenry about the future of sea change, and what that means to them.
- modify the electrical system to reduce power outages, whether it be to bury lines or some other method.

- Regular maintenance and/or improvement of infrastructure that is affected by these hazards (i.e. - pruning of trees along Merritt Parkway)
- Invest in infrastructure which would create jobs. We are past the point at which power lines should be underground. Invasive vegetation is compromising trees and endangering power lines. With so many people out of work, we have the human capital to take on these projects. We should take on these projects. CL&P should be held to the standard of addressing these issues. For years they have paid the CEOs and executives lots and lots of money for keeping costs down while not doing any work to improve infrastructure. With the recent extreme weather, the shortsightedness of this approach has been exposed. The State needs to regulate utilities and hold them to their promises to the people of Connecticut and that means better disaster preparedness.
- A warning system that notifies residents of flooded and impassible roads.
- replace overhead utility lines with underground lines
- Develop and enact storm-water management regulations/legislation
- Cut vegetation and particularly large trees within vicinity of power lines, lights, telephone poles, transformers, roadways, that have the potential of falling on them and damaging wires, etc. or blocking roads!
- increase early warnings
- acquisition of the most vulnerable structures
- Education to individuals so they can help THEMSELFS!!! Not expect the government to do EVERYTHING for them.
- proper tree maintenance and plantings (not mass cutting)
- Have more power line and tree workers on call!
- Community resilience
- Repair roads, dams bridges now and not after someone dies
- Even though I don't live there, enact legislation for better building codes along the shoreline and larger restrictions on where houses can be built or rebuilt.
- Educate residents and businesses to understand the risks and reduce losses from disasters.
- Educate people and perhaps provide an incentive for tree removal.
- You are doing it by revising the Hazard Mitigation Plan.
- Encourage utility companies to bury more of their lines where feasible. I know this would be an enormous task, but it could be phased in over many years.

- More rigorous enforcement of NFIP regulations.
- Eliminate all housing directly on the coast.
- Tree cutting along roads cannot be a one-off big push. Given the number and scope of trees along roads, it must be a continuous, perpetual maintenance program. Given the state-wide economic and safety effects of road blockages and power outages, this item I would pick first.
- Public Education on Climate Change and Sea Level Rise.
- Modify state building codes to allow for sea level rise.
- Create localized power distribution nets and harden power infrastructure in balance with tree trimming.
- Power lines underground.
- Provide hazard mitigation funding to avoid damage.
- Early warning and resources to mitigate disaster.
- Make it easier of residents, business and organizations to take their own actions to mitigate for hazards.
- Communication, keep vehicles off roads more by mandating private and public work from home.
- Provide funding.
- Do NOT allow re-building of properties in these hazardous locations. Learn lessons from NJ and NY and how they are not allowing re-building in these known flood prone areas. It is disgusting that CT has not mentioned one word about giving residents this option. I am well read and knowledgeable about the significant flood threat that the LI poses to the CT shoreline yet our useless government officials don't seem to exist on the same planet. Wake up!
- Get houses above the flood plain.
- Buy up and restore LOTS of floodplains. 2. Loosen anti-gouging laws so that gas stations that maintain and operate generators are allowed to charge more for gas during power outages (right now, there are NO financial incentives to keep costly generators, so nobody has them and thus, there's no gas when the power goes out).
- Do not allow building/rebuilding in flood zones.
- Improve electrical grid: add redundancies to system to reduce number of customers affected by outages; underground more lines; etc.
- The state needs to provide the communities with both the education and funding needed to provide better drainage systems, sea walls, etc. Our coastlines are being

ravaged by these storms, and rather than sit and wait for the next, it is imperative that we create a plan to safeguard against future storms.

- Provision of state funds to local governments for spending as needed.
- Help residents take their own actions to be prepared for disasters. See if you can find a way for residents/towns to purchase emergency supplies at discount rates; buy bulk-then residents could buy from town/state-give tax credit for emergency supplies purchases.
- Provide funding assistance for elevation of homes required by cities in accordance with FEMA regulations.
- Flood proof or reduce coastal development.
- Look for the 1% highest failure rates on telephone poles every year, and migrate them to underground conduit. Once you have removed 10% of existing telephone pole utilities underground, failure of utilities will be greatly reduced. The grid when going underground should have smart (automatic) multiple feed sources, in case of a single source failure.
- Our waterways are clogged with logjams. The State should provide some type of regulations, management programs, funding or other action to address this situation.
- With sea levels continuing to rise for the foreseeable future, buildings right on the beach should not be able to be re-built once destroyed.
- Provide assistance for elevating houses.
- Better State planning and coordination of state facilities.
- Educate families on "sheltering in place".
- Provide funding for low-income residents who want to trim vulnerable trees.
- Prohibit building in damage prone areas, e.g., coastal zones. No building should be allowed within a zone (e.g., 12', 15', or 20') above mean high water to reduce storm surge and flooding damage.
- Protect remaining coastal marsh and wetlands.
- Develop a plan to bury power lines over time. Starting with lines affecting critical hospitals, town centers, etc.
- Individual resident preparedness.
- Distributed generation, adequate staffing at utilities, and prohibition of construction and renovation activities in low lying areas. Harden basic infrastructure such as grocery stores and gas stations, and their wholesale supply networks. Include these

businesses in disaster planning by legislative mandate. Yes, Stop and Shop and similar chains are de facto Utilities, and should be so treated.

- Better publicize state documents that provide clear directions for how to approach mitigation projects as well as restoration initiatives.
- Bury electric lines.
- Trim or cut trees along roads.
- Underground utilities wherever practical.
- More "simple to understand" examples of potential hazards being mitigated, combined with expanded funding resources to facilitate local implementation of HM actions.
- Remove houses from the coastline and/or prevent the rebuilding of houses along the coastline because of the increasing threat of natural disasters.
- If the budget permitted, make grants available to either remove or retrofit structures in severe flood prone areas.
- Have to either cut down more trees or have underground power lines – my subdivision has underground lines but it doesn't matter if the overhead lines to it come down.
- Including resiliency criteria/climate storm awareness into policy and project decisions on state and local level.
- Decrease waiting time for utilities response to out of service calls. Trim trees before a major storm, not after when thousands of state residents have no power or heat in the winter.
- Provide financial help to municipalities so they can implement measures that would be specific to their own location and emergency.
- Tree cutting along power lines and roads.
- Prohibit the building and/or rebuilding in flood prone areas.
- Be proactive in reducing the housing and business structures located in riparian and coastal areas that are prone to storm surge and flooding.
- Teach people how to prepare for disaster and how they might need to react differently depending on the specific event.
- Streamline the process to access FEMA funding for elevation of homes in floodplains.
- Move critical infrastructure out of low lying areas subject to storm surge or flooding. Thinking we can protect it with engineering measures is pure hubris.

- Make the public aware of climate change, ongoing sea level rise, and that we will be experiences more frequent severe storms.
- Investment in resiliency planning and implementation.
- Improve weather forecasting and assure residents are prepared for the pending/associated hazards.
- Educating land use commissioners and local decision makers of the myriad values associated with protecting and enhancing natural landscape infrastructure in minimizing flood-related events.
- Get buildings out of flood zones – especially near Long Island Sound! We're ALL going to pay for them, eventually.
- Establish and complete monthly goals aimed at hazard mitigation and get the citizens involved in these efforts.
- Funding for towns to be able to supply residents with temporary power via generators when power is out for protracted periods, especially to the elderly. Town has no municipal water supply, only private wells.
- All power grids should be under ground.
- Create an acquisition fund at the state level to purchase floodprone property and demolish homes.
- Cut more trees.
- Have FEMA NFIP stop providing insurance for home owners to build new in V Velocity zones (let private market prevail). Grandfather existing, but disallow new once building is sold. This way, people would stop building in dangerous areas.
- Minimize impervious surfaces to reduce flooding, stop all shoreline construction, help local communities acquire shoreline homes, help those residents relocate; require all future utility projects to be underground.
- Address drainage.
- Continued tree clearing at utility poles and residences.
- Relocate or remove buildings in flood zones.
- Stop building in the flood hazard areas!
- Emphasize preventive steps that can be taken and access cost/value to the state.
- Provide template plans for municipalities to customize.
- Hardening infrastructure.

- Don't invest in or promote private investment in areas especially susceptible to flooding and tropical storms.
- Better communication between the state, the municipalities, and the utility companies to have a comprehensive approach to address the vulnerability issues associated with natural mitigation hazards.

The most common responses to Question 13 were to cut trees along roads and power lines and to prevent building in flood zones. Individuals also suggested acquiring properties in flood prone areas and helping those residents relocate. The majority of the responses included recommendations already made in Questions 10 and 11; however some new ideas were presented. Respondents expressed interest in educating residents and businesses as well as land use commissioners and local decision makers, enforcing NFIP regulations, modifying state building codes to allow for sea level rise, mandating that people work from home to prevent driving during hazardous events, and acquiring and restoring floodplains. One responder would like regulations changed in order to encourage gas stations to maintain and operate generators to provide gas. Other responders suggested improving the electrical grid, providing funding and education for mitigation projects, providing incentives for residents to purchase emergency supplies, providing funding to elevate houses, protecting coastal marshes and wetlands, publicize state documents that explain mitigation projects and restoration initiatives, minimizing impervious surfaces, and enacting stormwater regulations.

Question 14 allowed the responder to provide any additional comments or questions to be addressed as the State updates its hazard mitigation plan. A total of 32 written responses were entered, and were similar to those entered for Question 13:

- The State must consider how raising all new construction will look and feel. Will people want streets without storefronts and to only see parked cars at grade? It is not going to be uniform, and we need to consider what new ideas for new construction that will not destroy the streetscapes of current cities.
- As climate change and sea level rise become a growing concern, the issue of private property rights and real estate values need to be considered as they could change the socioeconomic fabric of Connecticut's shoreline communities.
- Cut more vegetation and trees!
- Keep trimming/cutting down trees that are too close to power lines.
- Does CT-HMP deal with major infrastructure failures: highway, rail, electric, etc.?
- As residential housing is destroyed along the coast, they should not be replaced. This world is getting too crowded, for just a few to enjoy our natural recourses.

- The state's warning systems before storms and information distribution during storms are good. However, it is very easy to lose good coordination between governor's office, state agencies and municipalities during post-storm clean-up, etc. This has to be a conscious priority in order to work well.
- Same
- Advocate for "once only" flood insurance payouts for any specific location, rebuild is at owners risk.
- State need to help FEMA update floodplain maps. FEMA flood maps were largely based off of old topo maps from 50 and 60's. Many of these areas have since been developed and while the homes are outside of the floodplain homeowners are being required to carry flood insurance or prove via expensive survey that their home is not in floodplain. Would seem like a worthwhile task of the state to update these areas so we can start to rely and set policies off of updated, accurate mapping.
- What about chemical spills, toxicity on land and in air.
- I want the option to sell my property to the government through the CBDG and move on with my life. I will not be returning to make ridiculous repairs after enduring two massive storms in one year; that is the definition of insanity.
- Low-density suburban/exurban development patterns contribute to a lack of resilience. They get disconnected very easily during a disaster, and they're hard to reach/service/reconnect. If we want faster, cheaper recovery, we need smarter growth.
- NFIP promotes building in vulnerable areas. This is not good planning.
- The City of Milford used all available means to force elevation of as many homes as possible after Superstorm Sandy. Lack of funds for mitigation/elevation is based on presumed Hazard Mitigation Grants. There will be no such grants available except for demolition and reconstruction. More than six months after the storm, the majority of those required to elevate in Milford remain displaced and have not been able to elevate and repair their homes, largely due to financial constraints. Further, rather than provide assistance in this process, the City of Milford delays plan permitting and enforces unreasonable ordinances that require fees. The mitigation process should be made easier, not more difficult for residents and again, financial assistance is essential.
- Too much building goes on in swampland. Hurricanes, winter storms, and what not are normal. We spend too much to maintain our existing infrastructure and would likely spend too much to make any improvement anyone could suggest (myself included). The theme of this survey seems to indicate a desire to spend taxpayer money on education.
- Tree trimming around power lines must continue and be done every other year at a minimum. Utility companies must be prodded to hire enough people.
- Please let me know if and when any assistance is available to elevate my house so I can be prepared for the next storm. I would also be interested if a buy-out program becomes available so I can move out of this flood area.

- Research soft infrastructure for storm surge mitigation (vegetation or oyster beds).
- Too much public money is spent protecting private property owners from anticipated storm damage or for reimbursement for damages received. Coastal zone development impedes natural coastal processes, damages the environment, and protects a privileged few from damages that they should expect to happen. If a structure is damaged and the state provides funds for repair, a lien should be attached that allows the state to seize the property should the property be damaged again beyond the insurance coverage attached to the structure; and then the state should convert the property to green space.
- Municipal planning must be more than paperwork, as unworkable plans, or plans without sufficient detail, add to the disaster. For instance, the Town of Branford ran out diesel fuel 3 days in to the storm, and had trouble being re-supplied. This should have been foreseen; the plan should have required additional on-hand storage, and pre-arranged sources of re-supply. Something this simple nearly put the shelters, EMS, Fire Service and DPW out of business.
- Appreciate all of your good efforts to keep us safe!!
- Proud that we are already 1 of only 2 states that included climate so continue to be adaptive and lead the way, include the FEMA Long Term Recovery and RSF taskforce work, include all partners and efforts to assist to leverage(maybe master list of who is doing what would be good appendix?)
- remember that many towns are so rural that they are not easily reached or assisted when it comes to supplies or equipment
- Better management of forest areas to reduce fire load for forest fires.
- The initiative to harden our energy infrastructure and provide for redundancy is a great first step; also, the periodic Statewide emergency exercises are very worthwhile
- Also discourage building in harm's way.
- Clear cutting of trees along road ways and rivers INCREASE FLOODING AND EROSION LEADING TO POOR WATER QUALITY.
- Provide incentives (tax credit?) to companies and/or homeowners to adequately prepare for hazards. Identify specific areas that need improvement and provide assistance as needed.
- swell
- Don't subsidize stupid decisions when folks build in the floodplain!
- Take away the cost benefit analysis when rating projects to fund.

## Survey Summary

Several important messages were provided by the survey responders. With equal emphasis, the top two messages are to *address wind and snow damage to electrical lines that results in power outages*, and *manage flood risk zones to reduce flood damage*. Responders would like the state, municipalities, and utilities to address wind and snow damage to electrical lines by requiring, facilitating, funding, encouraging, or accomplishing trimming of tree limbs, removal of trees, burying power lines, hardening power lines, and creation of microgrids and other redundancies. Responders would like the State and its municipalities to remove structures from flood zones, prevent new buildings in flood zones, and prevent rebuilding in flood zones after damage occurs. While many of the responders were speaking of inland and coastal flood zones, some of them chose to emphasize retreat from the shoreline. A few responders requested technical or financial assistance for their own at-risk properties.

Aside from the recommendations for addressing power outages and flood risks, survey responders appeared to focus on themes such as increased education, improved emergency communication, and improved community resilience.

It is notable that many of the responses to the survey were heavily influenced by the damage to power lines caused by Hurricane Irene and Winter Storm Alfred in 2011, and flooding caused by Hurricanes Irene and Sandy in 2011 and 2012, respectively.

# Hazard Identification and Risk Assessment Appendix 2

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## Declared Disasters prior to 2010

**DR-1700**The floods of April 2007, also known as the 2007 April Nor'easter, was a tropical low-pressure system formed in the Atlantic Ocean off the Carolinas on Sunday, April 15, 2007 and moved slowly northward towards New England. In anticipation of this developing storm, the National Weather Service (NWS) had issued flood watches on Saturday, April 14, for all of Connecticut, and coastal flood warnings for coastal western Connecticut on April 15 and 16. High wind warnings were also posted for southeastern coastal Connecticut on April 15. Portions of Connecticut received up to eight inches of rain within a twenty-four hour period. Wind gusts reached 60 miles per hour and downed numerous trees and power lines. Over 44,000 customers lost electricity Monday, April 16th.<sup>1</sup> Federal Disaster Aid funding issued by FEMA to Connecticut for this disaster totaled over \$6.4 million dollars. More detailed information on this event can be found in the Flood Section.

**DR-1619A** Presidentially Declared Disaster was issued for the events of October 14-15, 2005. FEMA designated the counties of Litchfield, New London, Tolland, and Windham as being affected by the floods. FEMA amended the disaster declaration to Hartford County on February 9, 2006. All Counties of the state were eligible to apply for assistance under the Hazard Mitigation Grant Program. More detailed information can be found in the Flood Section.

**DR-1302** A major Disaster Declaration was declared on September 23, 1999 for Tropical Storm Floyd. This storm impacted almost the entire east coast, with hurricane warnings being issued from Florida to Massachusetts. In Connecticut, flooding was significant with up to 15 inches in the Danbury area and the Connecticut River flooded in portions of Hartford. Total damage was approximately \$2 million.<sup>2</sup>

**DR-1092**The January 1996 blizzard, caused by cold air from Canada colliding with warmer winds from the Gulf of Mexico, resulted in an average of 12 to 24 inches of snowfall in Connecticut. Estimated damages in Litchfield County were \$40,000.<sup>3,4</sup>

**DR-972** This winter storm produced winds up to 55 mph, and recorded a high tide in Bridgeport, CT of 10.16 feet, the third highest record in the Long Island Sound when the storm hit. The storm destroyed 26 homes and killed three people.<sup>5</sup>

**DR-916**In August 1991 Hurricane Bob pummeled Rhode Island, but Connecticut was affected as well. Hurricane force winds were recorded as far west as the Connecticut River,

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<sup>1</sup> Source: USGS publication Flood of April 2007 and Flood –Frequency Estimates At Streamflow-Gaging Stations in Western Connecticut; Scientific Investigations Report 2009-5108.

<sup>2</sup> [http://www.wxedge.com/articles/20120202this\\_week\\_in\\_wx-september\\_17th\\_1999:\\_floyd](http://www.wxedge.com/articles/20120202this_week_in_wx-september_17th_1999:_floyd)

<sup>3</sup> [http://www.wxedge.com/articles/20140107blizzard\\_of\\_1996\\_january\\_6-8](http://www.wxedge.com/articles/20140107blizzard_of_1996_january_6-8)

<sup>4</sup> <http://www.history.com/this-day-in-history/blizzard-of-1996-begins>

<sup>5</sup> <http://www.ct.gov/deep/cwp/view.asp?A=2705&Q=475724>

as peak winds up to 125 mph were recorded in Wethersfield, CT. Bob was also responsible for six deaths in Connecticut.<sup>6,7</sup>

**DR-837** On July 10, 1989, a tornado cut a path through western Connecticut, from Salisbury to New Haven in less than one hour. Two people were killed, 110 people were injured and sixty-seven homes were destroyed. Damages totaled \$125 million (1989 dollars), and a Presidential Disaster Declaration was issued (FEMA-837-DR-CT).

**DR-747** In September 1985 Hurricane Gloria, a category 2 hurricane, made landfall in Westport. It was the strongest storm to hit Connecticut in more than 30 years when it made landfall. “Strong winds and torrential rains caused heavy damage to homes and businesses along the shore, particularly in a swath from Westport to Milford.”<sup>8</sup> Peak surge at New London Harbor was about 5.8 feet. “Had this occurred at high tide, flooding would have been much greater.”<sup>9</sup>

**DR-711** Preceded by heavy precipitation between February and April, this May 1984 storm caused severe flooding in Connecticut. The CT River in Hartford was 2 feet over the major flood threshold and the Housatonic River crested at 11 feet over flood stage.<sup>10</sup>

**DR-661** This June 1982 storm caused massive flooding throughout Connecticut, as three to 16 inches of rain fell across the state. Flooding reached the 200 and 500 year intervals in south-central Connecticut. Damages were estimated at more than \$276 million and over 15,000 homes and 400 commercial and industrial established were damaged. Additionally, state and local roads, bridges, dams, and utility infrastructure were damaged. Eleven deaths were recorded.<sup>11</sup> More detailed information on this disaster can be found in the Flood Section.

**DR-608** This tornado hit Windsor, Windsor Locks and Suffield in October 1979, and took apart homes and schools causing \$200 million in damage. The eastern part of Bradley Airport was destroyed, in addition to the Air National Guard base and the New England Air Museum. Three people lost their lives and 500 were injured. At that time, the tornado was ranked as the 6<sup>th</sup> most costly in the United States.<sup>12,13</sup>

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<sup>6</sup> [http://www.ct.gov/dEep/cwp/view.asp?a=2705&q=475720&deepNav\\_GID=2022](http://www.ct.gov/dEep/cwp/view.asp?a=2705&q=475720&deepNav_GID=2022)

<sup>7</sup> <http://www.erh.noaa.gov/box/hurricane/hurricaneBob.shtml>

<sup>8</sup> <http://www.ctpost.com/news/article/Connecticut-s-worst-hurricanes-3984238.php>

<sup>9</sup> [http://www.ct.gov/dEep/cwp/view.asp?a=2705&q=475720&deepNav\\_GID=2022](http://www.ct.gov/dEep/cwp/view.asp?a=2705&q=475720&deepNav_GID=2022)

<sup>10</sup> [http://www.wxedge.com/articles/20120202this week in wx-may 1984: flooding](http://www.wxedge.com/articles/20120202this%20week%20in%20wx-may%201984%3A%20flooding)

<sup>11</sup> [http://www.ct.gov/dEep/cwp/view.asp?a=2705&Q=470890&deepNav\\_GID=2022](http://www.ct.gov/dEep/cwp/view.asp?a=2705&Q=470890&deepNav_GID=2022)

<sup>12</sup> [http://www.wtnh.com/dpp/weather/severe\\_weather/summer-extremes-tornadoes](http://www.wtnh.com/dpp/weather/severe_weather/summer-extremes-tornadoes)

<sup>13</sup> <http://www.nbcconnecticut.com/news/local/Remembering-The-Windsor-and-Windsor-Locks-Tornado-30-Years-Later-62410147.html>

**DR-42** In 1955 two hurricanes impacted Connecticut within a week apart. On August 11-12, Hurricane Connie (downgraded to a tropical storm when it passed by New England) produced four to six inches of rain throughout Connecticut. On August 18-20, 1955 Hurricane Diane (also downgraded to a tropical storm by the time it reached New England) struck and produced another ten to twenty inches of rain. Severe flooding occurred throughout Connecticut as a result of these two back-to-back storms and included extreme damage such as road/bridge washouts, loss of drinking water, severe damage to utility and communication infrastructures. These two events resulted in 103 fatalities, 86,000 unemployed, over 1,000 families left homeless, 2,300 requiring temporary shelter, and at least \$1.5 billion in damages (1955 dollars).

**DR-25**The next hurricane to strike Connecticut occurred on August 31, 1954. Hurricane Carol (naming of hurricanes began in 1950) tracked across the southeastern corner of the State. It was reported that 48 people lost their lives and property damages and losses totaled at least one billion dollars (in 1954 dollars) for the Northeast.

**EM-3266** February 11-12, 2006 Nor'easter – Connecticut received record snowfall in parts of the state from this storm (second largest snowfall recorded since 1906)<sup>14</sup>, and received a Presidential Emergency Declaration. This storm is also known as the North American Blizzard of 2006. Governor M. Jodi Rell ordered state highways shut down to help facilitate efficient snow removal by State Department of Transportation snow removal crews.

**EM-3246**Hurricane Katrina affected areas along the east coast as well, and on September 14, 2005 President Bush declared a state of emergency in Connecticut to help people evacuate from their homes. Connecticut was one of 38 states to receive an emergency declaration.<sup>15</sup>

**EM-3200** January 22-23, 2005 Blizzard - Connecticut received a Presidential Emergency Declaration for this storm event. NOAA analyzed this storm and ranked it a Category 4 – Crippling event on its Northeast Snowfall Impact Scale.

**EM-3192** December 5-7, 2003 - Heavy snowfall amounts were recorded in parts of Connecticut including as much as twenty inches in Windham County, nineteen inches in Hartford County, and eighteen inches in Fairfield, New London, and Tolland Counties. This event received a Presidential Emergency Declaration.

**EM-3176**An emergency declaration was declared on March 11, 2003 for all counties in Connecticut to cover the costs of snow removal in the state due to the February 2003 storm.<sup>16</sup> Also known as the “President’s Day Blizzard”, this storm hit several states as it moved up the east coast. New Haven received 18.5 inches of snow,<sup>17</sup> Darien and New

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<sup>14</sup> [http://en.wikipedia.org/wiki/North\\_American\\_blizzard\\_of\\_2006](http://en.wikipedia.org/wiki/North_American_blizzard_of_2006).

<sup>15</sup> <http://www.fema.gov/news-release/2005/09/14/president-approves-emergency-declaration-connecticut>

<sup>16</sup> <http://www.fema.gov/news-release/2003/03/11/federal-funds-ordered-connecticut-snowstorm-recovery>

<sup>17</sup> [http://www.wxedge.com/articles/20130208is\\_it\\_2003\\_all\\_over\\_again](http://www.wxedge.com/articles/20130208is_it_2003_all_over_again)

Canaan measured the most snow at 20 inches and New Fairfield recorded two feet of snow.<sup>18</sup>

**EM-3098: March 1993 Superstorm** impacted a large area, from Florida all the way up through New England and as far west as Chicago.<sup>19</sup> In Connecticut, this blizzard left 2 dead, dozens injured, and 8 to 21 inches of snow. Bradley International Airport was closed for more than 19 hours, the longest closing since 1983 at the time.<sup>20</sup>

**EM-3060: Blizzard of 1978** occurred on February 5, 1978, record snowfall amounts were recorded in several areas of Connecticut. The State of Connecticut was essentially shut down for three days when Governor Grasso ordered all roads closed except for emergency travel.<sup>21</sup>

## Hazards Removed from Analysis

### Ice Jams

Ice Jam – In hydrologic terms, a stationary accumulation that restricts or blocks streamflow.<sup>22</sup>

#### Hazard Profile

An ice jam is an accumulation of ice in a river that restricts water flow and may cause backwater that floods low-lying areas upstream from the jam. Areas below the ice jam can also be affected when the jam releases, sending water and ice downstream. Ice jam damages can affect homes, buildings, roads, bridges and the environment (e.g., through erosion, sedimentation, bank scour, tree scarring, etc.)

According to the Special Report 94-7 Ice Jam Data Collection, by the US Army Cold Regions Research and Engineering Laboratory (CRREL) (March 1994), ice jams can be generally grouped into three categories: freeze-up jams, breakup jams, or a combination of both. Each has different ice jam characteristics and associated mitigation and control.

The following description of the types of ice jams, and mitigation and control techniques has been taken all or in part from Pamphlet No. 1110-1-11, Engineering and Design Ice Jam Flooding: Causes And Possible Solutions, US Army Corps of Engineers, November 1994.

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<sup>18</sup> <http://localweatherjournal.blogspot.com/2013/02/this-weekend-marks-10th-anniversary-of.html>

<sup>19</sup> [http://www.stormsurge.noaa.gov/event\\_history.html](http://www.stormsurge.noaa.gov/event_history.html)

<sup>20</sup> <http://www.courant.com/entertainment/hc-winter-storm031593.0.794678.story>

<sup>21</sup> [http://en.wikipedia.org/wiki/Northeastern\\_United\\_States\\_blizzard\\_of\\_1978](http://en.wikipedia.org/wiki/Northeastern_United_States_blizzard_of_1978).

<sup>22</sup> Source: NOAA's online glossary of meteorology and climatology terms; <http://www.weather.gov/glossary/>.

Freeze-up jams are composed primarily of frazil ice (often described as slush ice), with some fragmented ice included, and occur during early winter to midwinter. The floating frazil may slow or stop due to a change in water slope from steep to mild because it reaches an obstruction to movement such as a sheet ice cover, or because some other hydraulic occurrence slows the movement of the frazil. Jams are formed when floating frazil ice stops moving downstream, forms an “arch” across the river channel, and begins to accumulate. Freeze-up jams are characterized by low air and water temperatures, fairly steady water and ice discharges, and a consolidated top layer.

Breakup jams occur during periods of thaw, generally in late winter and early spring, and are composed primarily of fragmented ice formed by the breakup of an ice cover or freeze-up jam. The ice cover breakup is usually associated with a rapid increase in runoff and corresponding river discharge due to a significant rainfall event or snowmelt. In these cases, the increased river discharge causes the ice to rise and buckle or break apart. These broken pieces of ice are then moved downstream by the rising water. Late season breakup is often accelerated by sudden increases in air temperatures and solar radiation usually accompanying a rainfall/runoff event.

The broken, fragmented ice pieces move downstream until they encounter a strong intact downstream ice cover or other surface obstruction to flow (such as a dam or bridge), or other adverse hydraulic conditions such as a significant reduction in water surface slope, or a sudden rise in the river bed. Once they reach such a jam initiation point, the fragmented ice pieces stop moving, begin to accumulate, and form a jam. The ultimate size of the jam (i.e., its length and thickness) and the severity of the resulting flooding depend on the flow conditions, the available ice supply from upstream reaches of the river, and the strength and size of the ice pieces.

Midwinter thaw periods marked by flow increases may cause a minor breakup jam. The river flow subsides to normal winter level and the jammed ice drops with the water level as cold weather begins. The jam may become grounded as well as consolidated or frozen in place. During normal spring breakup, this location is likely to be the site of a severe jam. Combination jams involve both freeze-up and breakup jams. Causes of all ice jams include river geometries, weather characteristics, and floodplain land-use practices such as bridge obstructions or dams. Many times if building infrastructure is not located within close proximity to the location of the jam, the ice jams aren't noted, since they didn't cause flooding or other types of damages to personal property.

Ice jam mitigation techniques include both structural and non-structural measures. Some are permanent while others can be deployed under emergency conditions when a jam has formed and flooding is occurring. Ice jam mitigation measures are described in Pamphlet No. 1110-1-11.

The CRREL maintains a database of ice jam history, which draws largely from USGS river gauge information. This database includes 132 records of jams in Connecticut dating back to 1902. The database indicates that Connecticut experiences both freeze-up and breakup type events. Other sources of information include historical accounts, newspapers, personal interviews and CRREL files. However these sources of data while providing important

narrative information about ice events and related damage often lacks quantitative information of the type found in USGS sources.

### **History of Ice Jams in Connecticut**

#### ***Salmon River, East Haddam (Leesville)***

Ice jam related flooding has historically been a problem along the lower reach of the Salmon River in the Leesville area of East Haddam. Damaging ice jam occurred most recently in 2000 resulting in local road closure.

A similar event in 1994 was the result of a break-up of thick river ice in response to a sudden increase in discharge by snowmelt and rainfall. The ice jam formed about a half mile downstream of the Route 151 Bridge and progressed back to about 500 feet downstream of the dam. This jam caused water levels in the river to rise even more, flooding several homes and Powerhouse Road. The flood pool created by this ice jam eventually stabilized as the water carved itself a new path around the ice and into a riverbank.

Another ice jam event occurred in February 1982 when ice flowed over the dam and jammed at the Route 151 Bridge. Many residents in the area believe the lowering of the dam and removal of its control gates has resulted in increased ice jam activity in the area below the dam. Historical evidence supports this presumption as similar winter jams occurred in January 1910 and 1940 when structural damage to the dam allowed ice to flow out of the impoundment. In contrast to the years when the dam was in place and the conditions that result in ice jams existed, there was no ice jams noted downstream of the dam.

Based on available records for the Salmon River, it appears that severe ice jams events similar to 1982 and 1994 are likely to occur when ice thickness exceeds 9 inches and average daily discharge increases by 1,400 cubic feet per second (cfs) or more during a single day. The rule of thumb used by the USACE CRREL is that seasonal breakup events based on discharge occur when the one-day increases in stage is in excess of 1.5 times the ice thickness. Also, tides (tidally influenced back water from the Connecticut River) appear to influence the ice jams location and the ice jams form both above and downstream of the Route 151 Bridge.

#### ***Shetucket River, Sprague (Baltic)***

The village of Baltic, is a section of Sprague located along the Shetucket River about 9 miles upstream from the Thames River confluence. The total drainage area at Baltic is 460 square miles. There are two hydroelectric dams that affect river discharge. The Scotland Dam is located about 4 miles upstream and the Occum Dam is located about 2.2-miles downstream from the Main Street Bridge (Route 97).

Since 1956, the town has experienced several ice jams during mid to late winter, usually in January and February. Prior to 1956, no ice-related flooding was recorded in the village, probably because Baltic Dam, which breached in 1955, controlled the ice upstream of the populated area of the village.

These break-up jams form when solid ice cover on the Shetucket River breaks up and moves downstream. It appears as though most of the ice that causes the problems in Baltic comes from a 2-mile river reach between the Scotland Dam upstream on the Shetucket River and the village. The slope of the river through this reach is very flat and the channel meanders, causing ice floes to lose momentum and slow down. In addition, the backwater of Occum Dam, located about two miles downstream of the village, causes thick ice and a stable water surface elevation. As a result the ice jams tend to remain intact until sufficient pressure is built up behind them to dislodge the jam and move it downstream.

In the mid-1950's, the town requested assistance from the U.S. Army Corps of Engineers (USACE) for non-ice related flooding. As a result an earthen flood control berm was built along the low-lying residential area. This berm has a top elevation of about 77.5 feet NGVD, and a top width of about 8 feet. Although the berm does not tie into high ground, it does provide protection against an approximate 10-year flood event.

No.	Rivers Name	Location
1	Shetucket River	Baltic
2	Salmon River	East Haddam
3	Pomperaug River	Southbury
4	Yantic River	Norwich
5	Moosup River	Plainfield
6	Quanduck River	Sterling
7	Blackledge River	Marlborough
8	Willimantic River	Mansfield
9	Limekilm Brook	Bethel
10	Shepaug River	Roxbury
11	Blackberry River	North Canaan
12	Connecticut River	Hartford

On January 29, 1994, an ice jam occurred on the Shetucket River downstream of the Route 97 Bridge in Baltic. The ice jam, about three-fourths of a mile in length, was grounded in numerous locations. Although the average ice thickness was 18 to 20 inches, the jam appeared to be about 8 feet thick in several locations. Floodwaters behind the jam overtopped the flood control berm and inundated 31 houses and 4 commercial businesses. One house was severely damaged when the ice broke through the masonry block foundation wall. Eventually, a channel opened under the ice to allow some discharge to pass the jam and the flood area drained, but the jam remained in place.

This severe ice jam flood prompted a post-disaster reconnaissance study by the USACE, who estimated that the ice jam of 1994 resulted in flood damages of \$526,000 for 31 residential properties and 4 commercial properties. In addition, it was estimated that the flood stages experienced during the January 1994 flood could occur as a result of ice

affected flow approximately once in 12 years. The principal ice jam flood problem is located adjacent to Route 97. It extends a distance of about 2,200 linear feet from a drainage culvert under Route 97 that drains a low area south of the state highway to an area upstream of the Blanchette Field at River Drive. It is estimated that there are 84 structures in the 500-year flood plain, 77 of which are residential structures, 4 are commercial structures and 3 are public buildings.

### Vulnerability and Loss Estimation

Although limited data exists regarding historic damages associated with ice jams, the twelve well-documented ice jams (or ice jam years) since 1961 indicate that typical damages include road closures, bridge damages, evacuation, residential and commercial damage. Rivers in Connecticut susceptible to ice jam formation based on historic events are listed in Table 2-35. These rivers do not show any geographic or regional similarities. It should be noted that there is a greater knowledge of the series of events that can lead to ice jams, and with this knowledge Connecticut DEP and DEMHS are better prepared to proactively warn downstream residents in the event that ice is moving and has the potential to form an ice jam. Connecticut remains vulnerable to ice jams in areas where ice jams have traditionally occurred in the State. In addition, as older mill dams are breached or removed, attention must be given to the effects of these actions on ice conditions, especially where river widths and depths are sufficient to allow thick broad sheets of ice to become established. DEP intends to investigate potential grant funds for technical assistance from CRREL in performing an ice jam summary and analysis for Connecticut similar to one performed for the State of New Hampshire. In addition, when DEP becomes aware of an ice jam (regardless of whether or not it causes damages), DEP intends to file report forms to CRREL for the centralized national database. The USACE, in conjunction with DEP, has recently constructed a structure on the Salmon River to prevent or minimize ice jams in the most vulnerable locations on that river. The structure consisted of 9 large piers located in the river and many boulders situated in a way to force an ice jam to form at a less vulnerable location. A small ice jam was realized soon after the construction was complete and it was the conclusion of CRREL that additional construction work was needed to allow the structure to be fully functional. The additional construction has been completed along with the installation of a remote camera. DEP and CRREL are now waiting to view the Ice Control Structure during the next ice flow event.

## Tsunami

**Tsunami** – Also called seismic sea waves, tsunamis are a series of waves generated by seismic activity. Tsunamis are also popularly, but inaccurately, called tidal waves. When they reach shallow coastal regions, amplitudes may increase to several meters. The Pacific Ocean is particularly vulnerable to tsunamis.<sup>23</sup>

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<sup>23</sup> Definition is from the American Meteorological Society's Glossary of Meteorology. Website accessed on 6/23/09 at <http://msglossary.allenpress.com/glossary/search?p=1&query=tsunami>.

## Hazard Profile

Tsunamis along the East Coast are very rare events. The majority of tsunamis occur in the Pacific Ocean where the “ring of fire” exists (a series of mountain chains, deep ocean trenches and island arcs subject to volcanic and earthquake activity)<sup>24</sup>. According to NOAA, “tsunamis generally are caused by earthquakes, less commonly by submarine landslides, infrequently by submarine volcanic eruptions, and very rarely by a large meteorite impact in the ocean<sup>25</sup>.”

There is no record to date of a tsunami affecting Connecticut. The last documented case of a tsunami along the Atlantic coast induced by an earthquake occurred in Nova Scotia, Canada in 1929.

### Potential Risk of a Tsunami in Connecticut

Since the waves are ocean born, the communities immediately along the Connecticut coastline would be affected. Due to the relative seismic stability of the Atlantic Ocean in comparison with the Pacific Ocean, Connecticut’s geographic location and the protection provided to Connecticut’s coastline by Long Island Sound, the chances of a tsunami affecting Connecticut are low.

### Potential Future Vulnerability to a Tsunami

The most vulnerable coastal areas of Connecticut would be in New London County where communities could be impacted by a wave that skirts between Block Island and Long Island. The populations and land areas would be similar to those affected by a Category 1 hurricane. However, damages from a tsunami may be greater for immediate coastal locations than from a Category 1 hurricane. Since tsunamis present an extremely small risk of impacting Connecticut, no detailed analysis of possible populations and infrastructure at risk have been generated.

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<sup>24</sup> Source: NOAA website, <http://wcatwc.arh.noaa.gov/tsunami2.htm>.

<sup>25</sup> Information is from NOAA’s webpage, *What Causes Tsunamis?* Located at <http://wcatwc.arh.noaa.gov/tsunami2.htm>.

## NCDC Storm Events

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/14/1950	FAIRFIELD	5	100	2	0	0	3	\$2,381,670	Tornado
9/14/1956	FAIRFIELD	0	0		65	0	0	\$0	Thunderstorms
6/30/1957	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/15/1958	FAIRFIELD	0.2	67	1	0	0	0	\$19,861	Tornado
7/3/1961	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/29/1961	FAIRFIELD	0	0		165	0	0	\$0	Thunderstorms
8/29/1961	FAIRFIELD	0	0		66	0	0	\$0	Thunderstorms
5/19/1964	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/9/1968	FAIRFIELD	0	33	1	0	0	0	\$0	Tornado
10/15/1970	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/8/1971	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/19/1971	FAIRFIELD	1.5	33	2	0	0	0	\$141,724	Tornado
7/5/1973	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/28/1973	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/28/1973	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/18/1973	FAIRFIELD	0	33	1	0	0	0	\$0	Tornado
5/17/1974	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/30/1974	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
3/21/1976	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/6/1977	FAIRFIELD	0	0		51	0	0	\$0	Thunderstorms
8/5/1977	FAIRFIELD	0	0		60	0	0	\$0	Thunderstorms
8/6/1979	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/22/1980	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
9/2/1980	FAIRFIELD	0	0		59	0	0	\$0	Thunderstorms
9/2/1980	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/8/1981	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/8/1982	FAIRFIELD	0	0		175	0	0	\$0	Thunderstorms
8/25/1982	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/25/1982	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/25/1982	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/15/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/15/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/27/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/27/1983	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
7/15/1983	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/15/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/21/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/21/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/21/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/22/1983	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
4/23/1984	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/11/1984	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/31/1984	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/3/1984	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
11/20/1988	FAIRFIELD	0	0		53	0	0	\$0	Thunderstorms
6/29/1990	FAIRFIELD	0.2	10	0	0	0	7	\$4,392	Tornado
6/29/1990	FAIRFIELD	0	0		65	0	0	\$0	Thunderstorms
8/13/1990	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
10/18/1990	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
10/18/1990	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/30/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/30/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/16/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/16/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/23/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/23/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/23/1991	FAIRFIELD	0	0		51	0	0	\$0	Thunderstorms
8/18/1991	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/5/1992	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/5/1992	FAIRFIELD	0.3	20	0	0	0	0	\$0	Tornado
7/15/1992	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/29/1992	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/29/1992	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/4/1992	FAIRFIELD	0.2	10	1	0	0	0	\$409	Tornado
8/11/1992	FAIRFIELD	0	0		59	0	0	\$0	Thunderstorms
8/11/1992	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/11/1992	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
8/11/1992	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
9/3/1992	FAIRFIELD	0	0		0	0	3	\$0	Thunderstorms
9/3/1992	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/3/1992	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
3/4/1993	CTZ005	0	0		0	0	0	\$0	Thunderstorms
3/4/1993	CTZ005	0	0		0	0	0	\$0	Flood
3/13/1993	CTZ005	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/13/1993	CTZ005	0	0		0	0	0	\$132,407	Thunderstorms
3/14/1993	CTZ005	0	0		0	0	0	\$13,241	Thunderstorms
3/27/1993	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/28/1993	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	FAIRFIELD	0	0		51	0	0	\$0	Thunderstorms
8/28/1993	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
11/28/1993	CTZ009	0	0		0	0	0	\$397,220	Thunderstorms
12/4/1993	CTZ009	0	0		0	0	0	\$0	Not Included
12/26/1993	CTZ005	0	0		0	0	0	\$0	Thunderstorms
12/26/1993	CTZ009	0	0		0	0	0	\$0	Thunderstorms
1/7/1994	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/7/1994	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/8/1994	CTZ005	0	0		0	0	0	\$0	Not Included
1/8/1994	CTZ009	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ005	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ009	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ005	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ009	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ005	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ009	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/8/1994	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ005	0	0		0	0	0	\$0	Not Included
3/10/1994	CTZ009	0	0		0	0	0	\$0	Not Included
5/6/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/25/1994	FAIRFIELD	0	0		0	0	0	\$774,605	Thunderstorms
5/25/1994	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
5/25/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/25/1994	FAIRFIELD	0	0		175	0	0	\$0	Thunderstorms
6/12/1994	FAIRFIELD	0	0		0	0	1	\$77,461	Thunderstorms
6/27/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/29/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/29/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/8/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/9/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/27/1994	FAIRFIELD	0	0		0	0	0	\$0	Not Included
11/2/1994	CTZ005	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	CTZ009	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ005	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ009	0	0		0	0	0	\$0	Thunderstorms
11/7/1994	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
12/23/1994	CTZ005	0	0		0	0	0	\$595,850	Thunderstorms
12/23/1994	CTZ009	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/12/1995	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/13/1995	CTZ005	0	0		0	0	0	\$0	Not Included
1/13/1995	CTZ009	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ009	0	0		0	0	0	\$0	Flood
2/4/1995	FAIRFIELD	0	0		0	0	0	\$0	Flood
2/4/1995	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ005	0	0		0	0	0	\$0	Thunderstorms
2/5/1995	CTZ009	0	0		0	0	0	\$0	Thunderstorms
2/27/1995	CTZ005	0	0		0	1	0	\$0	Winter Weather
2/27/1995	CTZ009	0	0		0	1	0	\$0	Winter Weather
4/4/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	FAIRFIELD	0	0		0	0	0	\$38	Thunderstorms
4/4/1995	FAIRFIELD	0	0		55	0	1	\$0	Thunderstorms
4/4/1995	FAIRFIELD	0	0		55	0	1	\$0	Thunderstorms
4/5/1995	CTZ005	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ009	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ005	0	0		0	0	0	\$0	Not Included
5/24/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/24/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/25/1995	FAIRFIELD	0	0		0	0	0	\$301,303	Thunderstorms
7/15/1995	CTZ005	0	0		0	0	0	\$0	Extreme Heat
7/15/1995	CTZ009	0	0		0	0	0	\$0	Extreme Heat
7/23/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/27/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/27/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/2/1995	FAIRFIELD	0	0		60	0	0	\$0	Thunderstorms
8/2/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/2/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/5/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/5/1995	FAIRFIELD	0	0		0	0	0	\$0	Flood
10/14/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
11/11/1995	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
11/14/1995	FAIRFIELD	0	0		0	0	0	\$0	Flood
12/19/1995	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ009	0	0		0	0	0	\$0	Winter Weather
12/20/1995	CTZ009	0	0		0	0	0	\$0	Flood
1/3/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/12/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ005	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ009	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ005	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ009	0	0		0	0	0	\$0	Flood
1/19/1996	FAIRFIELD	0	0		53	0	1	\$0	Thunderstorms
1/27/1996	CTZ005	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	CTZ009	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
2/3/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/3/1996	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ005	0	0		0	0	0	\$0	Thunderstorms
2/25/1996	CTZ009	0	0		0	0	0	\$0	Thunderstorms
3/7/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/19/1996	CTZ009	0	0		0	0	0	\$0	Flood
4/9/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ009	0	0		0	0	0	\$0	Winter Weather
4/16/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
4/16/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
4/16/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
5/11/1996	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/21/1996	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/3/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/13/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/13/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/13/1996	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
7/8/1996	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
7/9/1996	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
7/9/1996	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	FAIRFIELD	0.4	67	1	0	0	0	\$0	Tornado
7/13/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/23/1996	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/23/1996	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/24/1996	FAIRFIELD	0	0		0	0	0	\$2,927	Thunderstorms
9/16/1996	FAIRFIELD	0	0		0	0	0	\$0	Not Included
10/8/1996	FAIRFIELD	0	0		0	0	0	\$0	Not Included
10/19/1996	CTZ009	0	0		0	0	0	\$0	Flood
10/19/1996	CTZ009	0	0		50	1	2	\$1,463,308	Thunderstorms
10/19/1996	CTZ005	0	0		0	0	0	\$0	Thunderstorms
10/19/1996	FAIRFIELD	0	0		0	0	0	\$0	Flood
11/26/1996	FAIRFIELD	0	0		0	0	0	\$0	Not Included
12/1/1996	FAIRFIELD	0	0		0	0	0	\$0	Not Included
12/6/1996	CTZ005	0	0		0	0	0	\$0	Flood
12/6/1996	CTZ009	0	0		0	0	0	\$0	Flood
12/7/1996	CTZ009	0	0		0	1	0	\$0	Flood
12/8/1996	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/13/1996	CTZ009	0	0		0	0	0	\$0	Flood
3/6/1997	CTZ005	0	0		66	0	1	\$0	Thunderstorms
3/6/1997	CTZ009	0	0		66	0	1	\$0	Thunderstorms
3/31/1997	CTZ009	0	0		0	1	0	\$0	Flood
4/1/1997	CTZ005	0	0		0	0	0	\$0	Winter Weather
5/6/1997	FAIRFIELD	0	0		58	0	0	\$0	Thunderstorms
5/6/1997	FAIRFIELD	0	0		0	0	0	\$0	Tornado
5/6/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/22/1997	FAIRFIELD	0	0		50	1	0	\$0	Thunderstorms
6/26/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/7/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/9/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/9/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/15/1997	FAIRFIELD	0	0		0	0	1	\$0	Thunderstorms
7/15/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/15/1997	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
7/24/1997	FAIRFIELD	0	0		0	0	0	\$0	Not Included
8/3/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/16/1997	FAIRFIELD	0	0		56	0	0	\$0	Thunderstorms
8/16/1997	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/20/1997	CTZ009	0	0		0	0	0	\$0	Flood
8/20/1997	FAIRFIELD	0	0		0	2	0	\$0	Not Included
9/20/1997	FAIRFIELD	0	0		50	0	3	\$0	Thunderstorms
11/1/1997	CTZ009	0	0		57	0	0	\$0	Thunderstorms
11/7/1997	FAIRFIELD	0	0		0	0	0	\$0	Not Included
11/13/1997	CTZ005	0	0		0	0	0	\$0	Not Included
11/14/1997	CTZ009	0	0		0	0	0	\$0	Flood
11/27/1997	CTZ005	0	0		0	0	0	\$0	Thunderstorms
11/27/1997	CTZ009	0	0		0	0	0	\$0	Thunderstorms
12/10/1997	CTZ009	0	0		0	1	0	\$0	Winter Weather
12/29/1997	CTZ009	0	0		59	0	0	\$0	Thunderstorms
1/15/1998	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/23/1998	FAIRFIELD	0	0		0	0	0	\$0	Flood
3/9/1998	FAIRFIELD	0	0		0	0	0	\$0	Flood
4/1/1998	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/9/1998	FAIRFIELD	0	0		0	0	0	\$0	Not Included
5/20/1998	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/29/1998	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/29/1998	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
5/29/1998	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
5/31/1998	FAIRFIELD	0	0		175	0	0	\$0	Thunderstorms
5/31/1998	FAIRFIELD	0	0		0	0	1	\$0	Thunderstorms
5/31/1998	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
6/13/1998	FAIRFIELD	0	0		0	0	0	\$0	Not Included
6/30/1998	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/23/1998	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
8/11/1998	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
8/18/1998	FAIRFIELD	0	0		60	0	0	\$0	Thunderstorms
8/25/1998	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
8/26/1998	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/7/1998	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
9/7/1998	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
10/1/1998	CTZ009	0	0		0	0	1	\$0	Thunderstorms
11/11/1998	CTZ005	0	0		55	0	0	\$0	Thunderstorms
11/11/1998	CTZ009	0	0		55	0	0	\$0	Thunderstorms
1/3/1999	FAIRFIELD	0	0		0	0	0	\$0	Flood
1/3/1999	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/15/1999	FAIRFIELD	0	0		0	0	0	\$0	Flood
1/15/1999	FAIRFIELD	0	0		0	0	0	\$0	Flood
1/18/1999	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
2/2/1999	FAIRFIELD	0	0		0	0	0	\$0	Not Included
3/15/1999	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/15/1999	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/21/1999	FAIRFIELD	0	0		0	0	0	\$0	Not Included
4/16/1999	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
5/19/1999	FAIRFIELD	0	0		0	0	0	\$0	Not Included
6/29/1999	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/4/1999	CTZ005	0	0		0	0	0	\$0	Extreme Heat
7/4/1999	CTZ009	0	0		0	0	0	\$0	Extreme Heat
8/14/1999	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
9/16/1999	FAIRFIELD	0	0		0	0	0	\$1,791,542	Flood
11/2/1999	CTZ005	0	0		56	0	0	\$0	Thunderstorms
11/2/1999	CTZ009	0	0		56	0	0	\$0	Thunderstorms
1/17/2000	CTZ005	0	0		0	0	0	\$0	Not Included
1/17/2000	CTZ009	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ005	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ009	0	0		0	0	0	\$0	Not Included
1/25/2000	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/25/2000	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/18/2000	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/11/2000	FAIRFIELD	0	0		0	0	0	\$0	Not Included
3/26/2000	FAIRFIELD	0	0		0	0	0	\$79,998	Thunderstorms
4/21/2000	FAIRFIELD	0	0		0	0	0	\$0	Flood
5/18/2000	FAIRFIELD	0	0		61	0	0	\$0	Thunderstorms
5/18/2000	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
5/24/2000	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
6/2/2000	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
6/2/2000	FAIRFIELD	0	0		52	0	1	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/6/2000	FAIRFIELD	0	0		0	0	0	\$0	Not Included
6/11/2000	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/11/2000	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
7/15/2000	FAIRFIELD	0	0		0	0	0	\$0	Flood
7/26/2000	FAIRFIELD	0	0		0	0	0	\$0	Not Included
8/11/2000	FAIRFIELD	0	0		0	0	0	\$7,999,756	Flood
8/12/2000	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/2/2000	FAIRFIELD	0	0		0	0	0	\$0	Flood
11/10/2000	FAIRFIELD	0	0		0	0	0	\$0	Not Included
12/12/2000	CTZ005	0	0		54	0	0	\$0	Thunderstorms
12/12/2000	CTZ009	0	0		54	0	0	\$0	Thunderstorms
12/30/2000	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/30/2000	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/9/2001	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/22/2001	FAIRFIELD	0	0		0	0	0	\$0	Flood
3/30/2001	FAIRFIELD	0	0		0	0	0	\$0	Flood
5/21/2001	CTZ005	0	0		0	0	0	\$0	Thunderstorms
5/21/2001	CTZ009	0	0		0	0	0	\$0	Thunderstorms
5/29/2001	FAIRFIELD	0	0		88	0	0	\$0	Thunderstorms
6/17/2001	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/20/2001	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
6/30/2001	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/30/2001	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/10/2001	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/8/2001	CTZ005	0	0		0	0	0	\$0	Extreme Heat
8/8/2001	CTZ009	0	0		0	0	0	\$0	Extreme Heat
8/10/2001	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/10/2001	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/10/2001	FAIRFIELD	0	0		0	0	1	\$0	Thunderstorms
8/10/2001	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
8/20/2001	FAIRFIELD	0	0		0	0	0	\$0	Tornado
8/20/2001	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/27/2001	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/27/2001	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/27/2001	FAIRFIELD	0	0		0	0	0	\$0	Flood
4/1/2002	CTZ005	0	0		0	0	0	\$0	Drought
4/1/2002	CTZ009	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ005	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ009	0	0		0	0	0	\$0	Drought
5/24/2002	FAIRFIELD	0	0		0	1	0	\$0	Thunderstorms
5/28/2002	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	FAIRFIELD	0.5	75	1	0	0	0	\$0	Tornado
5/31/2002	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
6/1/2002	CTZ005	0	0		0	0	0	\$0	Drought
6/1/2002	CTZ009	0	0		0	0	0	\$0	Drought
6/16/2002	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
6/26/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/2/2002	CTZ005	0	0		0	1	0	\$0	Extreme Heat
7/2/2002	CTZ009	0	0		0	1	0	\$0	Extreme Heat
7/9/2002	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
7/19/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/19/2002	FAIRFIELD	0	0		0	0	0	\$0	Flood
7/23/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/2/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/2/2002	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/2/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/2/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/16/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/16/2002	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/29/2002	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/2/2002	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/4/2002	FAIRFIELD	0	0		0	0	0	\$0	Thunderstorms
9/4/2002	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
9/11/2002	CTZ005	0	0		0	1	0	\$0	Thunderstorms
9/11/2002	CTZ009	0	0		0	1	0	\$0	Thunderstorms
9/26/2002	FAIRFIELD	0	0		0	0	0	\$0	Not Included
10/11/2002	FAIRFIELD	0	0		0	0	0	\$0	Not Included
11/27/2002	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ009	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/25/2002	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/25/2002	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/3/2003	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/3/2003	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ009	0	0		0	0	0	\$0	Winter Weather
8/17/2003	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/17/2003	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/22/2003	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
10/15/2003	CTZ009	0	0		33	0	0	\$124,779	Thunderstorms
10/27/2003	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
11/13/2003	CTZ005	0	0		65	0	0	\$0	Thunderstorms
11/13/2003	CTZ009	0	0		65	0	0	\$0	Thunderstorms
12/5/2003	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/5/2003	CTZ009	0	0		0	0	0	\$0	Winter Weather
12/14/2003	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/15/2004	CTZ005	0	0		0	0	0	\$0	Not Included
1/15/2004	CTZ009	0	0		0	0	0	\$0	Not Included
1/18/2004	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/19/2004	CTZ009	0	0		0	0	0	\$0	Winter Weather
5/23/2004	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
5/24/2004	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/20/2004	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/21/2004	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/21/2004	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/21/2004	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
9/8/2004	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/8/2004	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/18/2004	FAIRFIELD	0	0		0	0	0	\$0	Flood
1/6/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/22/2005	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/21/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/21/2005	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/25/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/24/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/28/2005	FAIRFIELD	0	0		0	0	0	\$0	Not Included
4/2/2005	FAIRFIELD	0	0		0	0	0	\$0	Not Included
4/28/2005	FAIRFIELD	0	0		56	0	0	\$0	Thunderstorms
5/27/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
5/29/2005	FAIRFIELD	0	0		88	0	0	\$0	Thunderstorms
5/29/2005	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
5/29/2005	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
5/29/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/6/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/22/2005	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
6/29/2005	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/29/2005	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/29/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/1/2005	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
7/18/2005	FAIRFIELD	0	0		0	0	0	\$0	Flood
7/18/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/27/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/12/2005	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/14/2005	FAIRFIELD	0	0		60	0	0	\$0	Thunderstorms
8/14/2005	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/15/2005	FAIRFIELD	0	0		0	0	0	\$0	Flood
10/8/2005	CTZ005	0	0		0	0	0	\$0	Flood
10/8/2005	CTZ009	0	0		0	0	0	\$0	Flood
10/11/2005	FAIRFIELD	0	0		0	0	0	\$0	Not Included
12/9/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/9/2005	CTZ009	0	0		0	0	0	\$0	Winter Weather
12/16/2005	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/3/2006	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/3/2006	CTZ009	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/15/2006	CTZ005	0	0		0	0	0	\$0	Winter Weather
1/18/2006	CTZ009	0	0		66	0	0	\$0	Thunderstorms
2/12/2006	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/12/2006	CTZ009	0	0		0	0	0	\$0	Winter Weather
2/17/2006	CTZ005	0	0		54	0	0	\$0	Thunderstorms
3/2/2006	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/2/2006	CTZ009	0	0		0	0	0	\$0	Winter Weather
4/23/2006	FAIRFIELD	0	0		0	0	0	\$0	Flood
6/1/2006	FAIRFIELD	0	0		0	0	1	\$0	Thunderstorms
6/1/2006	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/1/2006	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/2/2006	FAIRFIELD	0	0		0	0	0	\$0	Flood
7/4/2006	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
7/11/2006	FAIRFIELD	0	0		88	0	0	\$0	Thunderstorms
7/11/2006	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
7/12/2006	FAIRFIELD	2	100	1	0	0	0	\$2,277,708	Tornado
7/18/2006	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
7/18/2006	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
7/18/2006	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
7/28/2006	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
8/1/2006	CTZ005	0	0		0	0	0	\$0	Extreme Heat
8/1/2006	CTZ009	0	0		0	0	0	\$0	Extreme Heat
8/1/2006	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/3/2006	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
8/27/2006	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/2/2006	FAIRFIELD	0	0		0	0	0	\$0	Not Included
10/11/2006	FAIRFIELD	0	0		0	0	0	\$0	Flood
10/28/2006	FAIRFIELD	0	0		0	0	0	\$0	Flood
10/28/2006	FAIRFIELD	0	0		0	0	0	\$0	Flood
12/1/2006	CTZ009	0	0		50	0	0	\$0	Thunderstorms
12/1/2006	CTZ005	0	0		50	0	0	\$0	Thunderstorms
2/14/2007	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/2/2007	FAIRFIELD	0	0		0	0	0	\$0	Flood
3/16/2007	CTZ005	0	0		0	0	0	\$0	Winter Weather
3/16/2007	CTZ009	0	0		0	0	0	\$0	Winter Weather
4/15/2007	FAIRFIELD	0	0		0	0	0	\$0	Flood
4/15/2007	CTZ009	0	0		0	0	0	\$0	Flood
5/16/2007	FAIRFIELD	0	0		61	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
5/16/2007	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
5/16/2007	FAIRFIELD	5	100	1	0	0	0	\$0	Tornado
5/16/2007	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
5/16/2007	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
6/1/2007	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/1/2007	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/2/2007	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/5/2007	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/5/2007	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
6/16/2007	FAIRFIELD	0	0		88	0	0	\$0	Thunderstorms
6/16/2007	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
6/16/2007	FAIRFIELD	0	0		50	0	0	\$0	Thunderstorms
6/16/2007	FAIRFIELD	0	0		80	0	0	\$0	Thunderstorms
6/16/2007	FAIRFIELD	0	0		88	0	0	\$0	Thunderstorms
7/19/2007	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
7/19/2007	FAIRFIELD	0	0		55	0	0	\$0	Thunderstorms
7/29/2007	FAIRFIELD	0	0		0	0	0	\$0	Flood
10/11/2007	FAIRFIELD	0	0		0	0	0	\$2,214,631	Flood
10/19/2007	FAIRFIELD	0	0		0	0	0	\$0	Flood
12/13/2007	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/16/2007	CTZ009	0	0		0	0	0	\$0	Flood
2/13/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
2/22/2008	CTZ005	0	0		0	0	0	\$0	Winter Weather
2/22/2008	CTZ009	0	0		0	0	0	\$0	Winter Weather
3/8/2008	CTZ009	0	0		55	0	2	\$5,332	Thunderstorms
3/8/2008	CTZ005	0	0		50	0	0	\$0	Thunderstorms
3/8/2008	CTZ009	0	0		52	0	0	\$0	Thunderstorms
5/12/2008	CTZ005	0	0		50	0	0	\$0	Thunderstorms
6/8/2008	FAIRFIELD	0	0		52	0	0	\$2,666	Thunderstorms
6/8/2008	FAIRFIELD	0	0		52	0	0	\$2,133	Thunderstorms
6/8/2008	FAIRFIELD	0	0		52	0	0	\$800	Thunderstorms
6/8/2008	FAIRFIELD	0	0		0	0	0	\$5,332	Thunderstorms
6/8/2008	FAIRFIELD	0	0		52	0	0	\$533	Thunderstorms
6/10/2008	FAIRFIELD	0	0		61	0	0	\$3,199	Thunderstorms
6/10/2008	FAIRFIELD	0	0		61	0	0	\$3,199	Thunderstorms
6/10/2008	FAIRFIELD	0	0		52	0	0	\$2,133	Thunderstorms
6/14/2008	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
6/14/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/16/2008	FAIRFIELD	0	0		52	0	0	\$1,066	Thunderstorms
7/19/2008	FAIRFIELD	0	0		70	0	0	\$10,664	Thunderstorms
7/23/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
7/23/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/2/2008	FAIRFIELD	0	0		61	0	0	\$3,199	Thunderstorms
8/2/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/2/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/2/2008	FAIRFIELD	0	0		0	0	0	\$26,659	Thunderstorms
8/7/2008	FAIRFIELD	0	0		52	0	0	\$1,600	Thunderstorms
8/7/2008	FAIRFIELD	0	0		88	0	0	\$0	Thunderstorms
8/7/2008	FAIRFIELD	0	0		61	0	0	\$2,133	Thunderstorms
8/7/2008	FAIRFIELD	0	0		52	0	0	\$1,066	Thunderstorms
8/7/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/7/2008	FAIRFIELD	0	0		52	0	0	\$0	Thunderstorms
8/7/2008	FAIRFIELD	0	0		0	0	0	\$0	Tornado
8/7/2008	FAIRFIELD	0	0		0	0	0	\$26,659	Thunderstorms
8/7/2008	FAIRFIELD	0	0		65	0	0	\$26,659	Thunderstorms
8/7/2008	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
8/7/2008	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
8/7/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
8/7/2008	FAIRFIELD	0	0		61	0	0	\$0	Thunderstorms
8/7/2008	FAIRFIELD	0	0		52	0	0	\$1,600	Thunderstorms
8/7/2008	FAIRFIELD	0	0		52	0	0	\$800	Thunderstorms
8/7/2008	FAIRFIELD	0	0		75	0	0	\$0	Thunderstorms
8/7/2008	FAIRFIELD	0	0		52	0	0	\$1,600	Thunderstorms
8/8/2008	FAIRFIELD	0	0		52	0	0	\$2,666	Thunderstorms
9/3/2008	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
9/3/2008	FAIRFIELD	0	0		100	0	0	\$0	Thunderstorms
9/6/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/6/2008	FAIRFIELD	0	0		0	1	0	\$0	Flood
9/6/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
9/6/2008	CTZ005	0	0		0	0	0	\$533	Hurricane
9/6/2008	CTZ009	0	0		0	0	0	\$533	Hurricane
9/6/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
12/12/2008	FAIRFIELD	0	0		0	0	0	\$0	Flood
12/19/2008	CTZ005	0	0		0	0	0	\$0	Winter Weather
12/19/2008	CTZ009	0	0		0	0	0	\$0	Winter Weather
1/6/2009	CTZ005				0	1	3	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/6/2009	CTZ009				0	1	1	\$0	Winter Weather
2/12/2009	CTZ005				50	0	0	\$0	Thunderstorms
2/12/2009	CTZ009				50	0	0	\$0	Thunderstorms
3/1/2009	CTZ005				0	0	0	\$0	Winter Weather
3/1/2009	CTZ009				0	0	0	\$0	Winter Weather
3/29/2009	FAIRFIELD				88	0	0	\$0	Thunderstorms
5/24/2009	FAIRFIELD				52	0	0	\$1,070	Thunderstorms
5/24/2009	FAIRFIELD				52	0	0	\$1,070	Thunderstorms
5/24/2009	FAIRFIELD				0	0	3	\$0	Thunderstorms
5/24/2009	FAIRFIELD				88	0	0	\$0	Thunderstorms
6/18/2009	FAIRFIELD				0	0	0	\$0	Flood
6/26/2009	FAIRFIELD				52	0	0	\$2,140	Thunderstorms
6/26/2009	FAIRFIELD				52	0	0	\$2,140	Thunderstorms
6/26/2009	FAIRFIELD				0	0	0	\$0	Flood
6/26/2009	FAIRFIELD				0	0	0	\$0	Not Included
7/1/2009	FAIRFIELD				0	0	0	\$2,140	Thunderstorms
7/17/2009	FAIRFIELD				61	0	0	\$10,702	Thunderstorms
7/17/2009	FAIRFIELD				100	0	0	\$0	Thunderstorms
7/17/2009	FAIRFIELD				88	0	0	\$0	Thunderstorms
7/26/2009	FAIRFIELD				0	0	0	\$42,807	Thunderstorms
7/31/2009	FAIRFIELD	1	100	1	0	0	0	\$10,702	Tornado
7/31/2009	FAIRFIELD				61	0	0	\$5,351	Thunderstorms
7/31/2009	FAIRFIELD				52	0	1	\$3,211	Thunderstorms
7/31/2009	FAIRFIELD				61	0	0	\$16,053	Thunderstorms
7/31/2009	FAIRFIELD				61	0	0	\$10,702	Thunderstorms
7/31/2009	FAIRFIELD				61	0	0	\$4,281	Thunderstorms
7/31/2009	FAIRFIELD				52	0	0	\$1,605	Thunderstorms
7/31/2009	FAIRFIELD				52	0	1	\$8,026	Thunderstorms
8/10/2009	FAIRFIELD				56	0	0	\$0	Thunderstorms
8/10/2009	FAIRFIELD				0	0	0	\$5,351	Thunderstorms
8/10/2009	FAIRFIELD				52	0	0	\$37,456	Thunderstorms
8/12/2009	FAIRFIELD				0	0	0	\$0	Flood
8/21/2009	FAIRFIELD				0	0	0	\$0	Flood
8/21/2009	FAIRFIELD				52	0	0	\$1,605	Thunderstorms
8/23/2009	FAIRFIELD				0	0	0	\$0	Flood
10/7/2009	CTZ005				45	0	0	\$2,675	Thunderstorms
10/7/2009	CTZ009				45	0	0	\$2,675	Thunderstorms
10/18/2009	CTZ009				0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
11/13/2009	FAIRFIELD				0	0	0	\$6,956	Not Included
12/9/2009	CTZ009				43	0	1	\$1,070	Thunderstorms
12/13/2009	CTZ005				0	0	46	\$0	Winter Weather
12/19/2009	CTZ009				0	0	0	\$0	Winter Weather
12/19/2009	CTZ005				0	0	0	\$0	Winter Weather
1/25/2010	CTZ009				37	0	0	\$105,291	Thunderstorms
1/28/2010	CTZ005				0	0	0	\$0	Winter Weather
1/28/2010	CTZ009				0	0	0	\$0	Winter Weather
2/10/2010	CTZ009				0	0	0	\$0	Winter Weather
2/26/2010	CTZ005				0	0	0	\$0	Winter Weather
2/26/2010	CTZ009				0	0	0	\$0	Winter Weather
3/13/2010	CTZ009				50	2	0	\$1,052,908	Thunderstorms
3/13/2010	CTZ005				50	0	0	\$52,645	Thunderstorms
3/13/2010	CTZ009				0	0	0	\$0	Flood
3/13/2010	FAIRFIELD				0	0	0	\$0	Not Included
3/28/2010	FAIRFIELD				0	0	0	\$0	Not Included
3/30/2010	FAIRFIELD				0	0	0	\$2,105,817	Flood
3/30/2010	FAIRFIELD				0	0	0	\$2,105,817	Flood
3/30/2010	FAIRFIELD				0	0	0	\$0	Flood
6/1/2010	FAIRFIELD				88	0	0	\$0	Thunderstorms
6/3/2010	FAIRFIELD				0	0	0	\$6,317	Thunderstorms
6/6/2010	FAIRFIELD				52	0	0	\$6,317	Thunderstorms
6/6/2010	FAIRFIELD				52	0	0	\$3,159	Thunderstorms
6/6/2010	FAIRFIELD				52	0	0	\$8,423	Thunderstorms
6/6/2010	FAIRFIELD				61	0	0	\$36,852	Thunderstorms
6/24/2010	FAIRFIELD				52	0	0	\$526	Thunderstorms
6/24/2010	FAIRFIELD				70	0	0	\$31,587	Thunderstorms
6/24/2010	FAIRFIELD				70	0	0	\$5,265	Thunderstorms
6/24/2010	FAIRFIELD				65	0	0	\$52,645	Thunderstorms
6/24/2010	FAIRFIELD				68	0	0	\$0	Thunderstorms
6/24/2010	FAIRFIELD				0	0	0	\$0	Tornado
6/24/2010	FAIRFIELD				70	0	0	\$15,794	Thunderstorms
6/24/2010	FAIRFIELD				61	0	1	\$42,116	Thunderstorms
6/24/2010	FAIRFIELD				78	0	1	\$105,291	Thunderstorms
6/24/2010	FAIRFIELD				52	0	0	\$4,212	Thunderstorms
6/24/2010	FAIRFIELD				61	0	0	\$10,529	Thunderstorms
6/24/2010	FAIRFIELD				61	0	0	\$26,323	Thunderstorms
6/24/2010	FAIRFIELD				70	0	0	\$10,529	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/24/2010	FAIRFIELD				61	0	0	\$7,897	Thunderstorms
6/24/2010	FAIRFIELD				87	0	25	\$3,369,307	Thunderstorms
6/24/2010	FAIRFIELD				52	0	0	\$10,529	Thunderstorms
6/24/2010	FAIRFIELD	0	100	1	0	0	3	\$3,369,307	Tornado
7/13/2010	FAIRFIELD				0	0	0	\$0	Flood
7/19/2010	FAIRFIELD				52	0	0	\$26,323	Thunderstorms
7/21/2010	FAIRFIELD				70	0	0	\$26,323	Thunderstorms
7/21/2010	FAIRFIELD				65	0	0	\$15,794	Thunderstorms
7/21/2010	FAIRFIELD				100	0	0	\$0	Thunderstorms
7/21/2010	FAIRFIELD				175	0	0	\$0	Thunderstorms
7/21/2010	FAIRFIELD				88	0	0	\$0	Thunderstorms
7/21/2010	FAIRFIELD				61	0	0	\$15,794	Thunderstorms
7/21/2010	FAIRFIELD				52	0	0	\$4,212	Thunderstorms
7/21/2010	FAIRFIELD				70	0	0	\$15,794	Thunderstorms
8/16/2010	FAIRFIELD				52	0	0	\$5,265	Thunderstorms
8/22/2010	CTZ009				43	0	0	\$7,897	Thunderstorms
9/22/2010	FAIRFIELD				52	0	0	\$5,265	Thunderstorms
9/22/2010	FAIRFIELD				61	0	0	\$10,529	Thunderstorms
10/1/2010	FAIRFIELD				0	0	0	\$0	Flood
10/1/2010	FAIRFIELD				0	0	0	\$0	Flood
10/1/2010	FAIRFIELD				0	0	0	\$0	Flood
10/1/2010	CTZ005				40	0	0	\$52,645	Thunderstorms
10/1/2010	CTZ009				40	0	0	\$52,645	Thunderstorms
10/1/2010	FAIRFIELD				0	0	0	\$0	Not Included
10/1/2010	FAIRFIELD				0	0	0	\$0	Flood
10/4/2010	FAIRFIELD				150	0	0	\$0	Thunderstorms
10/4/2010	FAIRFIELD				175	0	0	\$0	Thunderstorms
12/26/2010	CTZ009				0	0	0	\$0	Winter Weather
12/26/2010	CTZ005				0	0	0	\$0	Winter Weather
1/7/2011	CTZ005				0	0	0	\$0	Winter Weather
1/7/2011	CTZ009				0	0	0	\$0	Winter Weather
1/11/2011	CTZ005				0	0	0	\$0	Winter Weather
1/11/2011	CTZ009				0	0	0	\$0	Winter Weather
1/18/2011	CTZ005				0	0	0	\$0	Winter Weather
1/19/2011	CTZ005				0	0	0	\$0	Winter Weather
1/26/2011	CTZ005				0	0	0	\$0	Winter Weather
1/26/2011	CTZ009				0	0	0	\$0	Winter Weather
2/1/2011	CTZ005				0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/1/2011	CTZ009				0	0	0	\$0	Winter Weather
2/1/2011	CTZ005				0	0	0	\$0	Winter Weather
2/1/2011	CTZ009				0	0	0	\$0	Winter Weather
2/3/2011	CTZ009				0	0	0	\$0	Winter Weather
2/17/2011	CTZ009				0	1	0	\$0	Winter Weather
3/7/2011	FAIRFIELD				0	0	0	\$0	Flood
6/9/2011	FAIRFIELD				52	0	0	\$3,062	Thunderstorms
6/9/2011	FAIRFIELD				52	0	0	\$1,531	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$12,759	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$7,655	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$12,759	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$5,103	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$12,759	Thunderstorms
6/9/2011	FAIRFIELD				70	0	0	\$76,552	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$20,414	Thunderstorms
6/9/2011	FAIRFIELD				61	0	0	\$10,207	Thunderstorms
6/9/2011	FAIRFIELD				75	0	0	\$0	Thunderstorms
6/9/2011	FAIRFIELD				75	0	0	\$0	Thunderstorms
6/17/2011	FAIRFIELD				0	0	0	\$1,021	Thunderstorms
6/23/2011	FAIRFIELD				0	0	0	\$0	Flood
6/23/2011	FAIRFIELD				26	1	2	\$7,655	Thunderstorms
7/22/2011	CTZ005				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ009				0	0	0	\$0	Extreme Heat
7/26/2011	FAIRFIELD				56	0	0	\$5,103	Thunderstorms
7/26/2011	FAIRFIELD				61	0	0	\$7,655	Thunderstorms
7/26/2011	FAIRFIELD				56	0	0	\$3,572	Thunderstorms
7/29/2011	FAIRFIELD				0	0	0	\$5,103	Thunderstorms
7/29/2011	FAIRFIELD				61	0	0	\$3,062	Thunderstorms
7/29/2011	FAIRFIELD				61	0	0	\$40,828	Thunderstorms
8/1/2011	FAIRFIELD				52	0	0	\$1,531	Thunderstorms
8/1/2011	FAIRFIELD				52	0	0	\$5,103	Thunderstorms
8/1/2011	FAIRFIELD				61	0	0	\$3,062	Thunderstorms
8/1/2011	FAIRFIELD				52	0	0	\$2,041	Thunderstorms
8/1/2011	FAIRFIELD				100	0	0	\$0	Thunderstorms
8/1/2011	FAIRFIELD				100	0	0	\$0	Thunderstorms
8/1/2011	FAIRFIELD				100	0	0	\$0	Thunderstorms
8/14/2011	FAIRFIELD				0	0	0	\$0	Flood
8/21/2011	FAIRFIELD				52	0	0	\$1,021	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/21/2011	FAIRFIELD				52	0	0	\$766	Thunderstorms
8/21/2011	FAIRFIELD				100	0	0	\$0	Thunderstorms
8/21/2011	FAIRFIELD				100	0	0	\$0	Thunderstorms
8/21/2011	FAIRFIELD				125	0	0	\$5,103	Thunderstorms
8/27/2011	FAIRFIELD				0	0	0	\$0	Flood
8/28/2011	CTZ009				0	0	0	\$0	Flood
8/28/2011	CTZ009				0	0	0	\$0	Hurricane
8/28/2011	FAIRFIELD				0	0	0	\$0	Flood
9/23/2011	FAIRFIELD				0	0	0	\$0	Flood
9/23/2011	FAIRFIELD				0	0	0	\$0	Flood
10/29/2011	CTZ005				0	0	0	\$0	Winter Weather
10/29/2011	CTZ009				0	0	0	\$0	Winter Weather
10/29/2011	CTZ005				0	0	0	\$0	Winter Weather
10/29/2011	CTZ009				0	0	0	\$0	Winter Weather
1/21/2012	CTZ005				0	0	0	\$0	Winter Weather
1/21/2012	CTZ009				0	0	0	\$0	Winter Weather
7/4/2012	FAIRFIELD				52	0	0	\$3,000	Thunderstorms
7/4/2012	FAIRFIELD				52	0	0	\$3,000	Thunderstorms
7/4/2012	FAIRFIELD				52	0	0	\$1,500	Thunderstorms
7/15/2012	FAIRFIELD				52	0	0	\$1,000	Thunderstorms
7/15/2012	FAIRFIELD				52	0	0	\$1,500	Thunderstorms
7/15/2012	FAIRFIELD				0	0	0	\$10,000	Thunderstorms
7/15/2012	FAIRFIELD				0	0	0	\$0	Flood
7/15/2012	FAIRFIELD				0	0	0	\$0	Flood
7/18/2012	FAIRFIELD				52	0	0	\$2,000	Thunderstorms
7/18/2012	FAIRFIELD				52	0	0	\$750	Thunderstorms
7/18/2012	FAIRFIELD				87	0	0	\$75,000	Thunderstorms
7/24/2012	FAIRFIELD				52	0	0	\$750	Thunderstorms
7/24/2012	FAIRFIELD				100	0	0	\$0	Thunderstorms
7/26/2012	FAIRFIELD				61	0	0	\$1,000	Thunderstorms
7/26/2012	FAIRFIELD				52	0	0	\$1,000	Thunderstorms
7/26/2012	FAIRFIELD				52	0	0	\$5,000	Thunderstorms
7/26/2012	FAIRFIELD				52	0	0	\$750	Thunderstorms
8/5/2012	FAIRFIELD				70	0	0	\$50,000	Thunderstorms
9/8/2012	FAIRFIELD				52	0	0	\$5,000	Thunderstorms
9/8/2012	FAIRFIELD				52	0	0	\$2,000	Thunderstorms
9/18/2012	FAIRFIELD				0	0	0	\$0	Flood
9/18/2012	FAIRFIELD				52	0	0	\$2,000	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/18/2012	FAIRFIELD				52	0	0	\$2,000	Thunderstorms
9/18/2012	FAIRFIELD				52	0	0	\$2,000	Thunderstorms
9/18/2012	CTZ009				43	0	0	\$10,000	Thunderstorms
9/28/2012	FAIRFIELD				0	0	0	\$0	Flood
9/28/2012	FAIRFIELD				0	0	0	\$0	Flood
9/28/2012	FAIRFIELD				0	0	0	\$0	Flood
10/29/2012	CTZ005				59	1	0	\$450,000	Thunderstorms
10/29/2012	CTZ009				59	1	0	\$450,000	Thunderstorms
11/7/2012	CTZ009				0	0	0	\$0	Winter Weather
11/7/2012	CTZ005				0	0	0	\$0	Winter Weather
12/29/2012	CTZ005				0	0	0	\$0	Winter Weather
12/29/2012	CTZ009				0	0	0	\$0	Winter Weather
5/10/1954	HARTFORD	0.8	17	2	0	0	0	\$21,338	Tornado
10/24/1955	HARTFORD	0.5	200	1	0	0	0	\$21,417	Tornado
8/8/1956	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/10/1957	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/19/1957	HARTFORD	0.3	367	1	0	0	0	\$2,042,642	Tornado
5/19/1958	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
5/30/1959	HARTFORD	0.2	3	1	0	0	0	\$19,724	Tornado
8/30/1960	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
6/10/1961	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/9/1961	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
9/2/1961	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/24/1962	HARTFORD	2.3	120	3	0	0	5	\$19,006,043	Tornado
6/18/1962	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
6/26/1962	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/17/1962	HARTFORD	0	0		150	0	0	\$0	Thunderstorms
8/17/1962	HARTFORD	0	0		56	0	0	\$0	Thunderstorms
5/20/1963	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/14/1963	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
8/11/1963	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/10/1964	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/10/1964	HARTFORD	0	0		65	0	0	\$0	Thunderstorms
6/10/1964	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/6/1966	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/19/1966	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/19/1966	HARTFORD	0	0		55	0	0	\$0	Thunderstorms
8/20/1968	HARTFORD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/20/1969	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/20/1969	HARTFORD	0	0		55	0	0	\$0	Thunderstorms
8/28/1970	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
10/3/1970	HARTFORD	6.4	17	1	0	0	1	\$147,934	Tornado
8/11/1971	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/28/1973	HARTFORD	0.2	23	1	0	0	1	\$12,928	Tornado
8/31/1973	HARTFORD	0	33	2	0	0	0	\$129,275	Tornado
9/6/1973	HARTFORD	3.3	33	2	0	0	0	\$12,927,534	Tornado
7/5/1974	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/6/1975	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
9/8/1975	HARTFORD	0	0		175	0	0	\$0	Thunderstorms
9/8/1975	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
3/21/1976	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
3/21/1976	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/5/1977	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
8/10/1979	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/10/1979	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
10/3/1979	HARTFORD	11.3	1400	4	0	3	500	\$790,609,504	Tornado
10/3/1979	HARTFORD	0	0		65	0	0	\$0	Thunderstorms
10/3/1979	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
2/11/1981	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/15/1983	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/27/1983	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/22/1983	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/13/1984	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/5/1984	HARTFORD	3	200	2	0	0	0	\$0	Tornado
8/7/1984	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/16/1984	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
5/13/1985	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/20/1985	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/20/1985	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
9/6/1985	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/24/1986	HARTFORD	0	0		0	0	1	\$0	Thunderstorms
6/30/1987	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/11/1988	HARTFORD	0	0		76	0	0	\$0	Thunderstorms
8/21/1989	HARTFORD	0	0		60	0	0	\$0	Thunderstorms
8/21/1989	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
10/14/1989	HARTFORD	0	0		75	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/18/1990	HARTFORD	0	0		62	0	0	\$0	Thunderstorms
10/18/1990	HARTFORD	0	0		63	0	0	\$0	Thunderstorms
10/18/1990	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	HARTFORD	0	0		53	0	1	\$0	Thunderstorms
7/21/1991	HARTFORD	0	0		65	0	0	\$0	Thunderstorms
7/21/1991	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/23/1991	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/23/1991	HARTFORD	0	0		63	0	0	\$0	Thunderstorms
7/23/1991	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/24/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/24/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/25/1992	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/27/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/14/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/14/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/29/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/4/1992	HARTFORD	1.2	10	0	0	0	0	\$0	Tornado
8/4/1992	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/4/1992	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
2/12/1993	CTZ002	0	0		0	0	0	\$39,722	Winter Weather
3/4/1993	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/13/1993	CTZ002	0	0		0	0	0	\$132,407	Thunderstorms
3/13/1993	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/14/1993	CTZ002	0	0		0	0	0	\$13,241	Thunderstorms
3/30/1993	HARTFORD AND MIDDLESEX	0	0		0	0	0	\$0	Flood
3/30/1993	HARTFORD	0	0		0	0	0	\$0	Flood
4/11/1993	HARTFORD	0	0		0	0	0	\$0	Flood
4/11/1993	HARTFORD	0	0		0	0	0	\$0	Flood
4/17/1993	HARTFORD	0	0		0	0	0	\$0	Flood
8/14/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/14/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/14/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/14/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/3/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
9/3/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
9/3/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
9/3/1993	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
12/4/1993	CTZ002	0	0		0	0	0	\$0	Not Included
12/26/1993	CTZ002	0	0		0	0	0	\$0	Thunderstorms
1/15/1994	CTZ002	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ002	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ002	0	0		0	0	0	\$0	Not Included
1/27/1994	CTZ002	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ002	0	0		0	0	0	\$0	Not Included
4/8/1994	CTZ002	0	0		0	0	0	\$0	Flood
4/8/1994	CTZ002	0	0		0	0	0	\$0	Flood
4/14/1994	CTZ002	0	0		0	0	0	\$0	Flood
4/14/1994	CTZ002	0	0		0	0	0	\$0	Flood
5/6/1994	HARTFORD	0	0		0	0	0	\$77,461	Thunderstorms
5/6/1994	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/6/1994	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/29/1994	HARTFORD	0.5	50	0	0	0	0	\$0	Tornado
6/29/1994	HARTFORD	0	0		0	0	0	\$77,461	Thunderstorms
6/29/1994	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/8/1994	CTZ002	0	0		0	0	0	\$0	Not Included
7/8/1994	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/8/1994	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/8/1994	HARTFORD	0	0		0	0	0	\$77,461	Thunderstorms
7/25/1994	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/28/1994	CTZ002	0	0		0	0	0	\$0	Not Included
8/13/1994	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
9/22/1994	CTZ002	0	0		0	0	0	\$0	Not Included
11/1/1994	CTZ002	0	0		0	0	0	\$3,873	Thunderstorms
11/1/1994	CTZ002	0	0		0	0	0	\$38,730	Thunderstorms
11/2/1994	CTZ002	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ002	0	0		0	0	0	\$0	Thunderstorms
11/21/1994	CTZ002	0	0		0	0	0	\$0	Not Included
12/23/1994	CTZ002	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ002	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/13/1995	CTZ002	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ002	0	0		0	0	0	\$0	Thunderstorms
2/28/1995	CTZ002	0	0		0	0	0	\$0	Winter Weather
4/4/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	HARTFORD	0	0		64	0	0	\$0	Thunderstorms
4/4/1995	HARTFORD	0	0		52	0	0	\$0	Thunderstorms
4/4/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ002	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ002	0	0		0	0	0	\$0	Not Included
5/29/1995	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
6/20/1995	HARTFORD	0	0		175	0	0	\$15	Thunderstorms
6/20/1995	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/20/1995	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/20/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
6/20/1995	HARTFORD	0	0		275	0	0	\$30	Thunderstorms
6/20/1995	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/11/1995	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/11/1995	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/11/1995	HARTFORD	0	0		0	0	0	\$0	Flood
7/11/1995	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/11/1995	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/15/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/15/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/15/1995	CTZ002	0	0		0	0	0	\$0	Extreme Heat
8/2/1995	CTZ002	0	0		0	0	0	\$0	Not Included
10/21/1995	CTZ002	0	0		0	0	0	\$0	Thunderstorms
10/28/1995	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
10/28/1995	CTZ002	0	0		0	0	0	\$0	Thunderstorms
10/28/1995	HARTFORD	0	0		53	0	0	\$0	Thunderstorms
11/12/1995	CTZ002	0	0		0	0	0	\$502,172	Thunderstorms
12/14/1995	CTZ002	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/2/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/19/1996	HARTFORD	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ002	0	0		50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/20/1996	CTZ002	0	0		0	0	0	\$0	Flood
1/27/1996	CTZ002	0	0		0	0	0	\$0	Flood
1/27/1996	CTZ002	0	0		0	0	0	\$0	Flood
1/27/1996	CTZ002	0	0		53	0	0	\$0	Thunderstorms
1/28/1996	CTZ002	0	0		0	0	0	\$0	Flood
1/28/1996	CTZ002	0	0		0	0	0	\$0	Flood
2/2/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/11/1996	HARTFORD	0	0		0	0	1	\$0	Thunderstorms
2/16/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ002	0	0		57	2	3	\$243,885	Thunderstorms
3/2/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/3/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/7/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ002	0	0		0	0	0	\$0	Winter Weather
4/16/1996	CTZ002	0	0		0	0	0	\$0	Flood
4/16/1996	HARTFORD	0	0		0	0	0	\$0	Not Included
4/16/1996	HARTFORD	0	0		0	0	0	\$0	Flood
4/17/1996	CTZ002	0	0		0	0	0	\$0	Flood
4/17/1996	CTZ002	0	0		0	0	0	\$0	Flood
4/17/1996	CTZ002	0	0		0	0	0	\$0	Flood
5/1/1996	CTZ002	0	0		0	0	0	\$0	Flood
5/1/1996	CTZ002	0	0		0	0	0	\$0	Flood
5/11/1996	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
5/12/1996	CTZ002	0	0		0	0	0	\$0	Flood
5/12/1996	CTZ002	0	0		0	0	0	\$0	Flood
5/21/1996	HARTFORD	0	0		54	0	0	\$0	Thunderstorms
5/21/1996	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/3/1996	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	HARTFORD	0	0		56	0	0	\$0	Thunderstorms
7/9/1996	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/9/1996	HARTFORD	0	0		0	0	0	\$0	Tornado
7/9/1996	HARTFORD	0	0		52	0	0	\$0	Thunderstorms
7/13/1996	HARTFORD	0	0		0	0	0	\$0	Not Included
7/13/1996	CTZ002	0	0		0	0	0	\$0	Flood
9/17/1996	HARTFORD	0	0		0	0	0	\$0	Not Included
10/20/1996	CTZ002	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/21/1996	CTZ002	0	0		0	0	0	\$0	Flood
12/2/1996	HARTFORD	0	0		0	0	0	\$0	Flood
12/2/1996	CTZ002	0	0		0	0	0	\$0	Flood
12/3/1996	CTZ002	0	0		0	0	0	\$0	Flood
12/6/1996	CTZ002	0	0		0	0	0	\$18,047	Winter Weather
12/7/1996	CTZ002	0	0		0	0	0	\$2,926,616	Winter Weather
1/24/1997	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/22/1997	CTZ002	0	0		0	0	0	\$0	Not Included
3/6/1997	CTZ002	0	0		0	0	0	\$0	Thunderstorms
3/6/1997	CTZ002	0	0		65	0	0	\$0	Thunderstorms
3/14/1997	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/31/1997	CTZ002	0	0		0	0	0	\$0	Thunderstorms
3/31/1997	CTZ002	0	0		0	0	0	\$0	Winter Weather
4/1/1997	CTZ002	0	0		0	0	0	\$476,829	Winter Weather
4/1/1997	CTZ002	0	0		0	0	0	\$0	Thunderstorms
4/8/1997	CTZ002	0	0		0	0	0	\$0	Flood
4/20/1997	CTZ002	0	0		0	0	0	\$0	Flood
5/6/1997	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
5/6/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/6/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/26/1997	HARTFORD	0	0		60	0	0	\$0	Thunderstorms
7/7/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/7/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/9/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/9/1997	HARTFORD	0	0		52	0	0	\$0	Thunderstorms
7/9/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/15/1997	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/15/1997	HARTFORD	0	0		80	0	0	\$14,305	Thunderstorms
8/3/1997	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
8/29/1997	HARTFORD	0	0		0	0	0	\$0	Not Included
8/29/1997	HARTFORD	0	0		0	0	0	\$715,243	Flood
11/1/1997	CTZ002	0	0		0	0	0	\$0	Not Included
11/27/1997	CTZ002	0	0		0	0	0	\$0	Thunderstorms
12/2/1997	CTZ002	0	0		0	0	0	\$0	Thunderstorms
12/10/1997	CTZ002	0	0		0	0	0	\$0	Winter Weather
12/14/1997	CTZ002	0	0		0	0	0	\$0	Thunderstorms
1/3/1998	CTZ002	0	0		0	0	0	\$0	Not Included
1/9/1998	CTZ002	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/15/1998	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/24/1998	CTZ002	0	0		0	0	0	\$0	Thunderstorms
3/8/1998	CTZ002	0	0		0	0	0	\$0	Not Included
3/9/1998	HARTFORD	0	0		0	0	0	\$0	Flood
3/9/1998	CTZ002	0	0		0	0	0	\$0	Thunderstorms
3/11/1998	CTZ002	0	0		0	0	0	\$0	Flood
3/18/1998	CTZ002	0	0		0	0	0	\$0	Not Included
3/21/1998	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/27/1998	CTZ002	0	0		0	0	0	\$0	Not Included
3/28/1998	CTZ002	0	0		0	0	0	\$0	Not Included
3/30/1998	CTZ002	0	0		0	0	0	\$0	Flood
3/31/1998	CTZ002	0	0		0	0	0	\$0	Not Included
4/1/1998	CTZ002	0	0		0	0	0	\$0	Flood
5/6/1998	CTZ002	0	0		0	0	0	\$0	Not Included
5/9/1998	CTZ002	0	0		0	0	0	\$0	Not Included
5/11/1998	CTZ002	0	0		0	0	0	\$0	Flood
5/29/1998	HARTFORD	0	0		0	0	0	\$28,171	Thunderstorms
5/29/1998	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/31/1998	HARTFORD	0	0		56	0	0	\$0	Thunderstorms
6/16/1998	CTZ002	0	0		0	0	0	\$0	Flood
6/30/1998	HARTFORD	0	0		0	0	0	\$0	Flood
6/30/1998	HARTFORD	0	0		0	0	0	\$0	Flood
7/1/1998	HARTFORD	0	0		0	0	0	\$0	Flood
7/1/1998	HARTFORD	0	0		0	0	0	\$0	Flood
7/20/1998	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
7/23/1998	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
7/23/1998	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/23/1998	HARTFORD	0	0		0	0	0	\$11,268	Thunderstorms
9/15/1998	CTZ002	0	0		0	0	0	\$0	Thunderstorms
9/27/1998	CTZ002	0	0		0	0	0	\$0	Extreme Heat
10/14/1998	HARTFORD	0	0		0	0	0	\$0	Not Included
11/11/1998	CTZ002	0	0		0	0	0	\$0	Thunderstorms
12/1/1998	CTZ002	0	0		0	0	0	\$0	Thunderstorms
12/7/1998	CTZ002	0	0		0	0	0	\$0	Not Included
12/29/1998	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/18/1999	CTZ002	0	0		0	0	0	\$0	Thunderstorms
1/24/1999	HARTFORD	0	0		0	0	0	\$0	Flood
2/2/1999	HARTFORD	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/12/1999	CTZ002	0	0		0	0	0	\$0	Not Included
3/4/1999	CTZ002	0	0		0	0	0	\$0	Thunderstorms
3/15/1999	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/18/1999	CTZ002	0	0		0	0	0	\$0	Not Included
3/22/1999	CTZ002	0	0		0	0	0	\$0	Thunderstorms
3/23/1999	CTZ002	0	0		0	0	0	\$0	Flood
6/7/1999	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/7/1999	CTZ002	0	0		0	0	0	\$0	Extreme Heat
6/7/1999	HARTFORD	0	0		125	0	0	\$0	Thunderstorms
6/7/1999	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/5/1999	CTZ002	0	0		0	0	0	\$0	Extreme Heat
7/6/1999	CTZ002	0	0		0	0	0	\$0	Extreme Heat
7/17/1999	CTZ002	0	0		0	0	0	\$0	Not Included
7/18/1999	HARTFORD	0	0		55	0	0	\$0	Thunderstorms
7/18/1999	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/19/1999	HARTFORD	0	0		52	0	0	\$0	Thunderstorms
7/24/1999	HARTFORD	0	0		150	0	0	\$0	Thunderstorms
7/24/1999	HARTFORD	0	0		55	0	0	\$0	Thunderstorms
8/5/1999	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
8/5/1999	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
9/7/1999	CTZ002	0	0		0	0	0	\$0	Not Included
9/10/1999	HARTFORD	0	0		0	0	0	\$0	Not Included
9/16/1999	HARTFORD	0	0		0	0	0	\$0	Flood
9/16/1999	CTZ002	0	0		0	0	0	\$0	Thunderstorms
9/16/1999	CTZ002	0	0		0	0	0	\$0	Flood
9/16/1999	CTZ002	0	0		0	0	0	\$0	Flood
9/16/1999	HARTFORD	0	0		0	0	0	\$0	Not Included
9/16/1999	HARTFORD	0	0		0	0	0	\$0	Flood
9/16/1999	HARTFORD	0	0		0	0	0	\$0	Flood
10/14/1999	CTZ002	0	0		0	0	0	\$0	Thunderstorms
11/2/1999	CTZ002	0	0		50	0	0	\$0	Thunderstorms
12/11/1999	CTZ002	0	0		0	0	0	\$0	Thunderstorms
12/20/1999	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/12/2000	CTZ002	0	0		0	0	0	\$0	Thunderstorms
1/13/2000	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/16/2000	CTZ002	0	0		0	0	0	\$0	Thunderstorms
1/25/2000	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/18/2000	CTZ002	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
4/6/2000	CTZ002	0	0		0	0	0	\$0	Flood
4/8/2000	CTZ002	0	0		50	0	1	\$0	Thunderstorms
4/12/2000	CTZ002	0	0		0	0	0	\$0	Flood
4/22/2000	HARTFORD	0	0		0	0	0	\$0	Flood
5/7/2000	CTZ002	0	0		0	0	0	\$0	Extreme Heat
5/8/2000	CTZ002	0	0		0	0	0	\$0	Extreme Heat
5/10/2000	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/18/2000	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
5/24/2000	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/24/2000	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
5/24/2000	HARTFORD	0	0		175	0	0	\$0	Thunderstorms
6/2/2000	HARTFORD	0	0		0	0	0	\$0	Tornado
6/2/2000	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
6/2/2000	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/6/2000	HARTFORD	0	0		0	0	0	\$0	Not Included
6/11/2000	HARTFORD	0	0		55	0	8	\$0	Thunderstorms
6/27/2000	HARTFORD	0	0		0	0	0	\$0	Thunderstorms
7/26/2000	HARTFORD	0	0		0	0	0	\$0	Not Included
8/10/2000	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
9/9/2000	HARTFORD	0	0		0	0	12	\$6,666	Thunderstorms
9/29/2000	CTZ002	0	0		0	0	0	\$0	Not Included
9/30/2000	CTZ002	0	0		0	0	0	\$0	Not Included
10/14/2000	CTZ002	0	0		0	0	0	\$0	Not Included
10/29/2000	CTZ002	0	0		0	0	0	\$0	Not Included
11/25/2000	CTZ002	0	0		0	0	0	\$0	Not Included
11/26/2000	CTZ002	0	0		0	0	0	\$0	Winter Weather
12/12/2000	CTZ002	0	0		50	0	0	\$0	Thunderstorms
12/17/2000	CTZ002	0	0		50	0	0	\$0	Thunderstorms
12/19/2000	CTZ002	0	0		0	0	0	\$0	Flood
12/30/2000	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/20/2001	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/30/2001	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/10/2001	CTZ002	0	0		0	0	0	\$0	Thunderstorms
2/17/2001	CTZ002	0	0		0	0	0	\$0	Thunderstorms
2/25/2001	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ002	0	0		0	0	0	\$2,160,672	Winter Weather
3/9/2001	CTZ002	0	0		0	0	0	\$864,269	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/22/2001	HARTFORD	0	0		0	0	0	\$0	Flood
3/30/2001	HARTFORD	0	0		0	0	0	\$0	Flood
4/13/2001	CTZ002	0	0		0	0	0	\$0	Flood
4/23/2001	CTZ002	0	0		0	0	0	\$0	Flood
5/4/2001	CTZ002	0	0		0	0	0	\$0	Extreme Heat
5/7/2001	CTZ002	0	0		0	0	0	\$0	Not Included
5/12/2001	CTZ002	0	0		0	0	0	\$0	Extreme Heat
6/11/2001	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
6/11/2001	HARTFORD	0	0		0	0	0	\$25,928	Thunderstorms
6/20/2001	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/20/2001	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/20/2001	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/20/2001	HARTFORD	0	0		0	0	0	\$12,964	Thunderstorms
6/23/2001	HARTFORD	0.3	80	0	0	0	0	\$25,928	Tornado
7/1/2001	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
8/28/2001	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
8/31/2001	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
5/31/2002	HARTFORD	0	0		50	0	0	\$2,552	Thunderstorms
5/31/2002	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	HARTFORD	0	0		150	0	0	\$5,105	Thunderstorms
5/31/2002	HARTFORD	0	0		50	0	0	\$5,105	Thunderstorms
6/6/2002	HARTFORD	0	0		0	0	0	\$2,552	Thunderstorms
6/16/2002	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/16/2002	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/15/2002	HARTFORD	0	0		52	0	1	\$25,525	Thunderstorms
7/19/2002	HARTFORD	0	0		50	0	0	\$2,552	Thunderstorms
7/19/2002	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/23/2002	HARTFORD	0	0		50	0	0	\$6,381	Thunderstorms
8/2/2002	HARTFORD	0	0		50	0	0	\$6,381	Thunderstorms
8/2/2002	HARTFORD	0	0		50	0	0	\$6,381	Thunderstorms
8/2/2002	HARTFORD	0	0		50	0	0	\$2,552	Thunderstorms
8/2/2002	HARTFORD	0	0		50	0	0	\$2,552	Thunderstorms
11/16/2002	CTZ002	0	0		0	0	0	\$1,595,282	Winter Weather
11/18/2002	CTZ002	0	0		50	0	0	\$31,906	Thunderstorms
11/27/2002	CTZ002	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ002	0	0		0	0	0	\$0	Winter Weather
12/25/2002	CTZ002	0	0		0	0	0	\$19,143	Winter Weather
1/3/2003	CTZ002	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/7/2003	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ002	0	0		0	0	0	\$0	Winter Weather
2/23/2003	CTZ002	0	0		50	0	0	\$18,717	Thunderstorms
3/6/2003	CTZ002	0	0		0	0	0	\$62,389	Winter Weather
5/26/2003	HARTFORD	0	0		0	0	0	\$0	Not Included
5/28/2003	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/28/2003	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/28/2003	HARTFORD	0	0		0	0	0	\$24,956	Flood
5/28/2003	HARTFORD	0	0		0	0	0	\$18,717	Thunderstorms
8/13/2003	HARTFORD	0	0		50	0	0	\$31,195	Thunderstorms
8/16/2003	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/16/2003	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
9/28/2003	HARTFORD	0	0		0	0	0	\$31,195	Flood
10/27/2003	CTZ002	0	0		50	0	0	\$37,434	Thunderstorms
11/13/2003	CTZ002	0	0		50	0	1	\$62,389	Thunderstorms
12/5/2003	CTZ002	0	0		0	0	0	\$0	Winter Weather
12/19/2003	CTZ002	0	0		0	0	0	\$0	Flood
12/19/2003	CTZ002	0	0		0	0	0	\$0	Flood
12/26/2003	CTZ002	0	0		0	0	0	\$0	Flood
12/26/2003	CTZ002	0	0		0	0	0	\$0	Flood
1/27/2004	CTZ002	0	0		0	0	0	\$0	Winter Weather
4/2/2004	CTZ002	0	0		0	0	0	\$0	Flood
4/2/2004	CTZ002	0	0		0	0	0	\$0	Flood
4/2/2004	CTZ002	0	0		0	0	0	\$0	Flood
5/23/2004	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	HARTFORD	0	0		150	0	0	\$0	Thunderstorms
5/23/2004	HARTFORD	0	0		50	0	0	\$6,077	Thunderstorms
5/23/2004	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/2/2004	HARTFORD	0	0		150	0	0	\$0	Thunderstorms
7/17/2004	HARTFORD	0	0		50	0	0	\$12,154	Thunderstorms
7/17/2004	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
8/21/2004	HARTFORD	0	0		50	0	0	\$6,077	Thunderstorms
12/1/2004	CTZ002	0	0		58	0	0	\$27,347	Thunderstorms
12/23/2004	CTZ002	0	0		58	0	0	\$30,386	Thunderstorms
1/5/2005	CTZ002	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/8/2005	CTZ002	0	0		0	0	0	\$58,780	Winter Weather
1/22/2005	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ002	0	0		50	0	1	\$26,451	Thunderstorms
3/8/2005	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/23/2005	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/31/2005	CTZ002	0	0		0	0	0	\$0	Flood
5/27/2005	HARTFORD	0	0		50	0	0	\$58,780	Thunderstorms
5/27/2005	HARTFORD	0	0		50	0	0	\$23,512	Thunderstorms
7/15/2005	HARTFORD	0	0		0	0	0	\$5,878	Flood
7/22/2005	HARTFORD	0	0		50	0	0	\$5,878	Thunderstorms
7/27/2005	HARTFORD	0	0		50	0	0	\$5,878	Thunderstorms
7/27/2005	HARTFORD	0	0		50	0	0	\$23,512	Thunderstorms
7/27/2005	HARTFORD	0	0		0	0	0	\$23,512	Flood
7/27/2005	HARTFORD	0	0		0	0	0	\$11,756	Thunderstorms
7/27/2005	HARTFORD	0	0		0	0	0	\$23,512	Thunderstorms
7/27/2005	HARTFORD	0	0		50	0	0	\$11,756	Thunderstorms
8/5/2005	HARTFORD	0	0		50	0	0	\$5,878	Thunderstorms
8/14/2005	HARTFORD	0	0		50	0	0	\$11,756	Thunderstorms
9/17/2005	HARTFORD	0	0		88	0	0	\$5,878	Thunderstorms
9/17/2005	HARTFORD	0	0		60	0	0	\$29,390	Thunderstorms
9/17/2005	HARTFORD	0	0		50	0	0	\$5,878	Thunderstorms
9/17/2005	HARTFORD	0	0		50	0	0	\$5,878	Thunderstorms
9/29/2005	CTZ002	0	0		58	0	0	\$29,390	Thunderstorms
10/15/2005	CTZ002	0	0		0	2	0	\$1,007,650	Flood
10/25/2005	CTZ002	0	0		58	0	0	\$11,756	Thunderstorms
1/15/2006	CTZ002	0	0		0	0	0	\$5,694	Winter Weather
1/18/2006	CTZ002	0	0		58	0	0	\$47,452	Thunderstorms
1/18/2006	CTZ002	0	0		58	0	0	\$47,452	Thunderstorms
2/12/2006	CTZ002	0	0		0	0	0	\$11,389	Winter Weather
2/17/2006	CTZ002	0	0		58	0	0	\$45,554	Thunderstorms
4/23/2006	HARTFORD	0	0		0	0	0	\$0	Not Included
5/21/2006	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/21/2006	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/21/2006	HARTFORD	0	0		50	0	0	\$9,111	Thunderstorms
5/21/2006	HARTFORD	0	0		50	0	0	\$11,389	Thunderstorms
6/1/2006	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
6/1/2006	HARTFORD	0	0		50	0	0	\$17,083	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/29/2006	HARTFORD	0	0		0	0	0	\$5,694	Flood
6/29/2006	HARTFORD	0	0		0	0	0	\$56,943	Thunderstorms
7/3/2006	HARTFORD	0	0		50	0	0	\$11,389	Thunderstorms
7/11/2006	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
7/11/2006	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
7/11/2006	HARTFORD	0	0		50	0	0	\$11,389	Thunderstorms
7/18/2006	HARTFORD	0	0		51	0	0	\$0	Thunderstorms
7/18/2006	HARTFORD	0	0		50	0	0	\$17,083	Thunderstorms
7/21/2006	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/26/2006	HARTFORD	0	0		50	0	0	\$28,471	Thunderstorms
7/26/2006	HARTFORD	0	0		0	0	0	\$17,083	Flood
7/28/2006	HARTFORD	0	0		50	0	0	\$11,389	Thunderstorms
7/28/2006	HARTFORD	0	0		50	0	0	\$5,694	Thunderstorms
10/1/2006	HARTFORD	0	0		50	0	0	\$17,083	Thunderstorms
10/20/2006	HARTFORD	0	0		50	0	0	\$4,555	Thunderstorms
10/29/2006	CTZ002	0	0		50	0	0	\$5,694	Thunderstorms
12/1/2006	HARTFORD	0	0		50	0	0	\$8,541	Thunderstorms
2/13/2007	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/16/2007	CTZ002	0	0		0	0	0	\$0	Winter Weather
4/16/2007	HARTFORD	0	0		0	0	0	\$55,366	Flood
5/16/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/2/2007	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
6/2/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/5/2007	HARTFORD	0	0		175	0	0	\$0	Thunderstorms
6/5/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/5/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/5/2007	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/11/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/16/2007	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/16/2007	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/16/2007	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
7/6/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/15/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/15/2007	HARTFORD	0	0		55	0	0	\$0	Thunderstorms
7/19/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
7/19/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
8/17/2007	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
12/2/2007	CTZ002	0	0		0	0	0	\$6,644	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/13/2007	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/14/2008	CTZ002	0	0		0	0	0	\$34,124	Winter Weather
2/13/2008	HARTFORD	0	0		0	0	0	\$21,327	Flood
2/22/2008	CTZ002	0	0		0	0	0	\$0	Winter Weather
3/5/2008	HARTFORD	0	0		0	0	0	\$0	Flood
3/8/2008	CTZ002	0	0		54	0	0	\$15,996	Thunderstorms
3/8/2008	HARTFORD	0	0		0	0	0	\$0	Flood
3/8/2008	HARTFORD	0	0		0	0	0	\$0	Flood
4/1/2008	HARTFORD	0	0		50	0	0	\$533	Thunderstorms
5/31/2008	HARTFORD	0	0		50	0	0	\$4,265	Thunderstorms
5/31/2008	HARTFORD	0	0		60	0	0	\$0	Thunderstorms
5/31/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
5/31/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/8/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/8/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
6/8/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/8/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/8/2008	HARTFORD	0	0		0	0	0	\$5,332	Thunderstorms
6/10/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/10/2008	HARTFORD	0	0		50	0	0	\$7,465	Thunderstorms
6/10/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/10/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
6/10/2008	HARTFORD	0	0		50	0	0	\$0	Thunderstorms
6/16/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
6/16/2008	HARTFORD	0	0		0	0	0	\$5,332	Thunderstorms
6/16/2008	HARTFORD	0	0		0	0	0	\$2,133	Thunderstorms
6/16/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
6/23/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
6/23/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/23/2008	HARTFORD	0	0		50	0	0	\$15,996	Thunderstorms
6/29/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
6/29/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
6/29/2008	HARTFORD	0	0		50	0	0	\$2,133	Thunderstorms
6/30/2008	HARTFORD	0	0		50	0	0	\$10,664	Thunderstorms
7/1/2008	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/1/2008	HARTFORD	0	0		50	0	0	\$15,996	Thunderstorms
7/1/2008	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
7/3/2008	HARTFORD	0	0		50	0	0	\$7,465	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/20/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
7/23/2008	HARTFORD	0	0		50	0	0	\$7,465	Thunderstorms
7/27/2008	HARTFORD	0	0		88	0	0	\$0	Thunderstorms
7/27/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
7/27/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
7/27/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
8/7/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/7/2008	HARTFORD	0	0		0	0	0	\$15,996	Thunderstorms
8/7/2008	HARTFORD	0	0		0	0	0	\$15,996	Thunderstorms
8/7/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/7/2008	HARTFORD	0	0		50	0	0	\$8,531	Thunderstorms
8/7/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/7/2008	HARTFORD	0	0		100	0	0	\$0	Thunderstorms
8/8/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/8/2008	HARTFORD	0	0		50	0	0	\$5,332	Thunderstorms
8/8/2008	HARTFORD	0	0		50	0	0	\$3,199	Thunderstorms
8/8/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
8/8/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
9/3/2008	HARTFORD	0	0		75	0	0	\$0	Thunderstorms
9/9/2008	HARTFORD	0	0		50	0	0	\$1,066	Thunderstorms
9/28/2008	HARTFORD	0	0		0	0	0	\$42,655	Flood
10/25/2008	CTZ002	0	0		52	0	0	\$10,664	Thunderstorms
12/12/2008	HARTFORD	0	0		0	0	0	\$3,199	Flood
12/12/2008	HARTFORD	0	0		0	0	0	\$0	Flood
12/19/2008	CTZ002	0	0		0	0	0	\$0	Winter Weather
1/7/2009	CTZ002				0	0	0	\$10,702	Winter Weather
1/28/2009	CTZ002				0	0	0	\$21,404	Winter Weather
3/1/2009	CTZ002				0	0	0	\$0	Winter Weather
5/24/2009	HARTFORD				50	0	0	\$32,105	Thunderstorms
5/24/2009	HARTFORD				50	0	0	\$10,702	Thunderstorms
5/24/2009	HARTFORD				50	0	0	\$16,053	Thunderstorms
5/24/2009	HARTFORD				50	0	0	\$16,053	Thunderstorms
5/24/2009	HARTFORD				75	0	0	\$0	Thunderstorms
5/24/2009	HARTFORD				88	0	0	\$0	Thunderstorms
5/24/2009	HARTFORD				75	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				0	0	0	\$32,105	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$42,807	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$267,545	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/26/2009	HARTFORD				50	0	0	\$107,018	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$53,509	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$53,509	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$80,263	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$53,509	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$107,018	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$160,527	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$53,509	Thunderstorms
6/26/2009	HARTFORD				50	0	0	\$53,509	Thunderstorms
6/26/2009	HARTFORD				175	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				75	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD	2	40	1	0	0	0	\$802,634	Tornado
6/26/2009	HARTFORD				100	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				100	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				75	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				200	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				88	0	0	\$0	Thunderstorms
6/26/2009	HARTFORD				175	0	0	\$53,509	Thunderstorms
6/30/2009	HARTFORD				50	0	0	\$2,140	Thunderstorms
6/30/2009	HARTFORD				50	0	0	\$2,140	Thunderstorms
6/30/2009	HARTFORD				100	0	0	\$0	Thunderstorms
6/30/2009	HARTFORD				88	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				50	0	0	\$535	Thunderstorms
7/7/2009	HARTFORD				50	0	0	\$7,491	Thunderstorms
7/7/2009	HARTFORD				50	0	0	\$5,351	Thunderstorms
7/7/2009	HARTFORD				50	0	0	\$1,070	Thunderstorms
7/7/2009	HARTFORD				100	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				75	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				100	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				100	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				100	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				75	0	0	\$0	Thunderstorms
7/7/2009	HARTFORD				100	0	0	\$0	Thunderstorms
7/26/2009	HARTFORD				75	0	0	\$0	Thunderstorms
7/27/2009	HARTFORD				50	0	0	\$1,070	Thunderstorms
7/27/2009	HARTFORD				50	0	0	\$10,702	Thunderstorms
7/27/2009	HARTFORD				50	0	0	\$16,053	Thunderstorms
7/27/2009	HARTFORD				50	0	0	\$10,702	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/27/2009	HARTFORD				50	0	0	\$42,807	Thunderstorms
7/31/2009	HARTFORD				50	0	0	\$535	Thunderstorms
8/21/2009	HARTFORD				50	0	0	\$10,702	Thunderstorms
8/21/2009	HARTFORD				50	0	0	\$5,351	Thunderstorms
8/21/2009	HARTFORD				50	0	0	\$16,053	Thunderstorms
8/21/2009	HARTFORD				50	0	0	\$21,404	Thunderstorms
1/25/2010	CTZ002				50	0	0	\$52,645	Thunderstorms
4/29/2010	CTZ002				49	0	0	\$263,227	Thunderstorms
6/1/2010	HARTFORD				50	0	0	\$2,106	Thunderstorms
6/5/2010	HARTFORD				50	0	0	\$15,794	Thunderstorms
6/5/2010	HARTFORD				52	0	0	\$105,291	Thunderstorms
6/5/2010	HARTFORD				50	0	0	\$52,645	Thunderstorms
6/5/2010	HARTFORD				50	0	0	\$8,423	Thunderstorms
6/5/2010	HARTFORD				88	0	0	\$0	Thunderstorms
6/6/2010	HARTFORD				50	0	0	\$1,053	Thunderstorms
6/6/2010	HARTFORD				50	0	0	\$5,265	Thunderstorms
6/6/2010	HARTFORD				50	0	0	\$1,053	Thunderstorms
6/6/2010	HARTFORD				50	0	0	\$5,265	Thunderstorms
6/6/2010	HARTFORD				175	0	0	\$0	Thunderstorms
7/6/2010	CTZ002				0	0	0	\$0	Extreme Heat
7/6/2010	CTZ002				0	0	0	\$0	Extreme Heat
7/7/2010	CTZ002				0	0	0	\$0	Extreme Heat
7/16/2010	HARTFORD				50	0	0	\$52,645	Thunderstorms
7/17/2010	HARTFORD				50	0	0	\$78,968	Thunderstorms
7/21/2010	HARTFORD				50	0	0	\$52,645	Thunderstorms
7/21/2010	HARTFORD				50	0	0	\$3,159	Thunderstorms
7/21/2010	HARTFORD				50	0	0	\$5,265	Thunderstorms
7/21/2010	HARTFORD				0	0	0	\$0	Flood
7/21/2010	HARTFORD				50	0	0	\$52,645	Thunderstorms
7/21/2010	HARTFORD				50	0	0	\$5,265	Thunderstorms
7/21/2010	HARTFORD				50	0	0	\$3,159	Thunderstorms
7/21/2010	HARTFORD	2	25	1	0	0	0	\$594,893	Tornado
7/21/2010	HARTFORD				100	0	0	\$0	Thunderstorms
7/21/2010	HARTFORD				100	0	0	\$0	Thunderstorms
7/21/2010	HARTFORD				88	0	0	\$0	Thunderstorms
10/1/2010	CTZ002				28	0	0	\$21,058	Thunderstorms
10/15/2010	CTZ002				27	0	3	\$21,058	Thunderstorms
12/1/2010	CTZ002				50	0	0	\$78,968	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/26/2010	CTZ002				0	0	0	\$26,323	Winter Weather
1/7/2011	CTZ002				0	0	0	\$0	Winter Weather
1/11/2011	CTZ002				0	0	0	\$0	Winter Weather
1/26/2011	CTZ002				0	0	0	\$0	Winter Weather
2/1/2011	CTZ002				0	0	0	\$2,551,725	Winter Weather
2/18/2011	HARTFORD				88	0	0	\$0	Thunderstorms
2/19/2011	CTZ002				38	0	0	\$40,828	Thunderstorms
3/7/2011	HARTFORD				0	0	0	\$102,069	Flood
3/7/2011	HARTFORD				0	0	0	\$51,035	Flood
6/9/2011	HARTFORD				50	0	0	\$30,621	Thunderstorms
7/6/2011	HARTFORD				50	0	0	\$5,103	Thunderstorms
7/21/2011	CTZ002				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ002				0	0	0	\$0	Extreme Heat
7/26/2011	HARTFORD				50	0	0	\$1,021	Thunderstorms
7/26/2011	HARTFORD				50	0	0	\$25,517	Thunderstorms
7/26/2011	HARTFORD				88	0	0	\$0	Thunderstorms
8/1/2011	HARTFORD				100	0	0	\$0	Thunderstorms
8/1/2011	HARTFORD				75	0	0	\$0	Thunderstorms
8/1/2011	HARTFORD				75	0	0	\$0	Thunderstorms
8/1/2011	HARTFORD				75	0	0	\$0	Thunderstorms
8/1/2011	HARTFORD				75	0	0	\$0	Thunderstorms
8/21/2011	HARTFORD				50	0	0	\$15,310	Thunderstorms
8/28/2011	CTZ002				0	0	0	\$20,413,801	Hurricane
8/28/2011	HARTFORD				0	0	0	\$0	Flood
8/28/2011	HARTFORD				0	1	0	\$8,165,520	Flood
9/8/2011	HARTFORD				0	0	0	\$18,372	Flood
9/8/2011	HARTFORD				0	0	0	\$102,069	Flood
9/8/2011	HARTFORD				0	0	0	\$0	Flood
10/29/2011	CTZ002				0	0	0	\$8,165,520	Winter Weather
12/21/2011	HARTFORD				50	0	0	\$20,414	Thunderstorms
1/21/2012	CTZ002				0	0	0	\$0	Winter Weather
2/24/2012	CTZ002				0	0	0	\$0	Winter Weather
2/29/2012	CTZ002				0	0	0	\$0	Winter Weather
4/12/2012	CTZ002				0	0	0	\$0	Drought
6/22/2012	HARTFORD				50	0	0	\$5,000	Thunderstorms
6/22/2012	HARTFORD				50	0	0	\$15,000	Thunderstorms
6/22/2012	HARTFORD				0	0	0	\$0	Flood
6/22/2012	HARTFORD				75	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/18/2012	HARTFORD				0	0	0	\$1,000	Thunderstorms
7/18/2012	HARTFORD				55	0	0	\$0	Thunderstorms
7/18/2012	HARTFORD				88	0	0	\$0	Thunderstorms
7/18/2012	HARTFORD				50	0	0	\$10,000	Thunderstorms
7/28/2012	HARTFORD				0	0	0	\$0	Flood
7/28/2012	HARTFORD				0	0	0	\$10,000	Flood
8/5/2012	HARTFORD				0	0	0	\$0	Flood
8/5/2012	HARTFORD				50	0	0	\$10,000	Thunderstorms
8/5/2012	HARTFORD				50	0	0	\$5,000	Thunderstorms
8/5/2012	HARTFORD				50	0	0	\$3,000	Thunderstorms
8/5/2012	HARTFORD				50	0	0	\$5,000	Thunderstorms
8/10/2012	HARTFORD				87	0	0	\$100,000	Thunderstorms
8/10/2012	HARTFORD				50	0	0	\$10,000	Thunderstorms
8/10/2012	HARTFORD				50	0	0	\$10,000	Thunderstorms
9/8/2012	HARTFORD				40	0	0	\$2,000	Thunderstorms
9/8/2012	HARTFORD				50	0	0	\$5,000	Thunderstorms
9/18/2012	HARTFORD				50	0	0	\$5,000	Thunderstorms
9/18/2012	HARTFORD				50	0	0	\$10,000	Thunderstorms
9/18/2012	HARTFORD				50	0	0	\$5,000	Thunderstorms
9/18/2012	HARTFORD				0	0	0	\$0	Flood
9/18/2012	HARTFORD				50	0	0	\$15,000	Thunderstorms
10/29/2012	CTZ002				62	0	0	\$1,200,000	Thunderstorms
11/7/2012	CTZ002				0	0	0	\$0	Winter Weather
12/29/2012	CTZ002				0	0	0	\$0	Winter Weather
8/21/1951	LITCHFIELD	43.9	100	2	0	0	9	\$2,207,625	Tornado
6/1/1956	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/15/1958	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/21/1958	LITCHFIELD	0.2	50	1	0	0	0	\$238	Tornado
5/12/1959	LITCHFIELD	0.5	100	2	0	0	0	\$19,724	Tornado
5/24/1962	LITCHFIELD	0	0		150	0	0	\$0	Thunderstorms
6/18/1962	LITCHFIELD	0.1	67	2	0	0	0	\$190,060	Tornado
6/19/1962	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/11/1963	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
5/17/1965	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/19/1966	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/11/1966	LITCHFIELD	2.7	100	2	0	0	0	\$177,155	Tornado
8/20/1968	LITCHFIELD	0	33	1	0	0	0	\$16,494	Tornado
7/25/1970	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/25/1970	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/7/1972	LITCHFIELD	9.3	150	1	0	0	0	\$1,373,164	Tornado
8/9/1972	LITCHFIELD	2	33	1	0	0	0	\$137,316	Tornado
6/12/1973	LITCHFIELD	1.5	23	2	0	0	0	\$155	Tornado
6/29/1973	LITCHFIELD	1.3	77	1	0	0	0	\$12,928	Tornado
8/28/1973	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/28/1973	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/28/1973	LITCHFIELD	0	0		150	0	0	\$0	Thunderstorms
8/28/1973	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/28/1973	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/28/1973	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/12/1974	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/3/1974	LITCHFIELD	5.1	40	1	0	0	0	\$11,643	Tornado
7/15/1974	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
7/15/1974	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/19/1975	LITCHFIELD	5.1	33	1	0	0	0	\$0	Tornado
7/20/1975	LITCHFIELD	0.3	30	1	0	0	0	\$10,669	Tornado
3/21/1976	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
3/21/1976	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
5/3/1976	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/30/1976	LITCHFIELD	1	100	2	0	0	0	\$100,876	Tornado
5/20/1982	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
5/20/1982	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/15/1983	LITCHFIELD	0	0		175	0	0	\$0	Thunderstorms
6/15/1983	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/27/1983	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/30/1983	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/1/1983	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/1/1983	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/16/1984	LITCHFIELD	0	0		56	0	0	\$0	Thunderstorms
9/3/1984	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/20/1985	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/20/1985	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/6/1985	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/13/1987	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/13/1987	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
7/11/1988	LITCHFIELD	0	0		70	0	0	\$0	Thunderstorms
7/11/1988	LITCHFIELD	0	0		70	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/2/1989	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/2/1989	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/7/1989	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/10/1989	LITCHFIELD	0	0		70	0	0	\$0	Thunderstorms
7/10/1989	LITCHFIELD	0	0		70	0	0	\$0	Thunderstorms
7/10/1989	LITCHFIELD	10	73	2	0	0	4	\$46,288,911	Tornado
7/10/1989	LITCHFIELD	2	100	2	0	0	20	\$46,288,911	Tornado
7/10/1989	LITCHFIELD	0	0		80	0	0	\$0	Thunderstorms
7/10/1989	LITCHFIELD	0	0		80	1	10	\$0	Thunderstorms
9/2/1990	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
10/18/1990	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/16/1991	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/21/1991	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/18/1991	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/18/1991	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/18/1991	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
8/18/1991	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
5/2/1992	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/24/1992	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/24/1992	LITCHFIELD	0	0		125	0	0	\$0	Thunderstorms
7/5/1992	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/29/1992	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
1/13/1993	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/12/1993	CTZ001	0	0		0	0	0	\$39,722	Winter Weather
3/4/1993	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/13/1993	CTZ001	0	0		0	0	0	\$132,407	Thunderstorms
3/13/1993	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/14/1993	CTZ001	0	0		0	0	0	\$13,241	Thunderstorms
3/28/1993	LITCHFIELD	0	0		0	0	0	\$0	Flood
4/4/1993	LITCHFIELD	0	0		0	0	0	\$0	Flood
4/30/1993	LITCHFIELD	0	0		175	0	0	\$0	Thunderstorms
8/28/1993	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
12/26/1993	CTZ001	0	0		0	0	0	\$0	Thunderstorms
12/26/1993	CTZ013	0	0		0	0	0	\$0	Thunderstorms
1/15/1994	CTZ001	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ013	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ001	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/18/1994	CTZ013	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ001	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ013	0	0		0	0	0	\$0	Not Included
1/27/1994	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/27/1994	CTZ001	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/8/1994	CTZ013	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ013	0	0		0	0	0	\$0	Winter Weather
3/3/1994	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ001	0	0		0	0	0	\$0	Not Included
3/10/1994	CTZ013	0	0		0	0	0	\$0	Not Included
5/6/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
5/12/1994	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/14/1994	LITCHFIELD	0	0		0	0	0	\$77,461	Flood
6/27/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/27/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
6/29/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/9/1994	LITCHFIELD	0	0		0	0	3	\$0	Thunderstorms
7/13/1994	CTZ001	0	0		0	0	0	\$0	Not Included
7/20/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/25/1994	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
7/25/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/25/1994	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/28/1994	LITCHFIELD	0	0		0	0	0	\$0	Not Included
8/21/1994	LITCHFIELD	0	0		0	0	0	\$7,746,053	Flood
11/2/1994	CTZ001	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	CTZ013	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ001	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ013	0	0		0	0	0	\$0	Thunderstorms
12/23/1994	CTZ001	0	0		0	0	0	\$595,850	Thunderstorms
12/23/1994	CTZ013	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/12/1995	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/13/1995	CTZ001	0	0		0	0	0	\$0	Not Included
1/13/1995	CTZ013	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ001	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/5/1995	CTZ013	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
4/4/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ001	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ013	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ001	0	0		0	0	0	\$0	Not Included
5/24/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
5/29/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/10/1995	LITCHFIELD	0	0		175	0	0	\$0	Thunderstorms
7/11/1995	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
7/11/1995	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
7/15/1995	LITCHFIELD	0	0		0	0	0	\$0	Thunderstorms
7/15/1995	CTZ001	0	0		0	0	0	\$0	Extreme Heat
7/15/1995	CTZ013	0	0		0	0	0	\$0	Extreme Heat
8/2/1995	CTZ001	0	0		0	0	0	\$0	Not Included
10/14/1995	LITCHFIELD	0	0		0	0	0	\$3,013	Thunderstorms
10/21/1995	CTZ001	0	0		61	0	0	\$0	Thunderstorms
10/21/1995	LITCHFIELD	0	0		0	0	0	\$15,065	Flood
10/28/1995	LITCHFIELD	0	0		0	0	0	\$30,130	Flood
10/28/1995	LITCHFIELD	0	0		0	0	0	\$0	Flood
11/11/1995	CTZ001	0	0		0	0	0	\$45,195	Thunderstorms
12/9/1995	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/14/1995	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/2/1996	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ001	0	0		0	0	0	\$117,065	Winter Weather
1/12/1996	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/19/1996	CTZ001	0	0		0	0	0	\$438,992	Flood
1/19/1996	CTZ001	0	0		0	0	0	\$14,633	Thunderstorms
1/24/1996	CTZ001	0	0		0	0	0	\$73,165	Flood
1/27/1996	CTZ001	0	0		0	0	0	\$292,662	Flood
1/27/1996	CTZ001	0	0		0	0	0	\$29,266	Thunderstorms
2/2/1996	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/24/1996	CTZ001	0	0		0	0	0	\$36,583	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/7/1996	CTZ001	0	0		0	0	0	\$0	Winter Weather
4/16/1996	LITCHFIELD	0	0		0	0	0	\$14,633	Flood
4/16/1996	CTZ001	0	0		0	0	0	\$21,950	Flood
5/11/1996	LITCHFIELD	0	0		0	0	0	\$11,706	Thunderstorms
5/21/1996	LITCHFIELD	0	0		0	0	0	\$29,266	Thunderstorms
5/21/1996	LITCHFIELD	0	0		0	0	0	\$14,633	Thunderstorms
5/21/1996	LITCHFIELD	0	0		0	0	0	\$7,317	Thunderstorms
5/21/1996	LITCHFIELD	0	0		0	0	0	\$14,633	Thunderstorms
5/21/1996	LITCHFIELD	0	0		0	0	0	\$11,706	Thunderstorms
7/3/1996	LITCHFIELD	0	0		0	0	0	\$14,633	Flood
7/9/1996	LITCHFIELD	0	0		75	0	0	\$2,927	Thunderstorms
7/13/1996	LITCHFIELD	0	0		0	0	0	\$7,317	Flood
7/16/1996	CTZ001	0	0		0	0	0	\$2,927	Flood
7/25/1996	LITCHFIELD	0	0		0	0	0	\$1,463	Thunderstorms
9/17/1996	CTZ001	0	0		0	0	0	\$8,780	Thunderstorms
10/20/1996	CTZ001	0	0		0	0	0	\$14,633	Thunderstorms
10/20/1996	LITCHFIELD	0	0		0	0	0	\$10,243	Flood
10/20/1996	LITCHFIELD	0	0		0	0	0	\$7,317	Flood
10/20/1996	CTZ001	0	0		0	0	0	\$4,390	Flood
11/9/1996	LITCHFIELD	0	0		0	0	0	\$7,317	Flood
12/2/1996	LITCHFIELD	0	0		0	0	0	\$17,560	Flood
12/2/1996	CTZ001	0	0		0	0	0	\$14,633	Flood
12/6/1996	CTZ001	0	0		0	0	0	\$21,950	Winter Weather
12/7/1996	CTZ001	0	0		0	0	0	\$21,950	Winter Weather
2/22/1997	CTZ001	0	0		0	0	0	\$8,583	Thunderstorms
3/14/1997	CTZ001	0	0		0	0	0	\$11,444	Winter Weather
3/31/1997	CTZ001	0	0		0	0	0	\$1,430,486	Winter Weather
4/1/1997	CTZ001	0	0		0	0	0	\$0	Winter Weather
5/19/1997	LITCHFIELD	0	0		0	0	0	\$2,861	Thunderstorms
7/7/1997	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
7/9/1997	LITCHFIELD	0	0		0	0	0	\$7,152	Thunderstorms
7/9/1997	LITCHFIELD	0	0		100	0	0	\$2,861	Thunderstorms
7/9/1997	LITCHFIELD	0	0		0	0	0	\$14,305	Flood
7/9/1997	LITCHFIELD	0	0		0	0	0	\$5,722	Thunderstorms
7/9/1997	LITCHFIELD	0	0		0	0	0	\$4,291	Thunderstorms
7/15/1997	LITCHFIELD	0	0		0	0	0	\$2,861	Thunderstorms
8/3/1997	LITCHFIELD	0	0		100	0	0	\$2,861	Thunderstorms
8/3/1997	LITCHFIELD	0	0		0	0	0	\$2,861	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/3/1997	LITCHFIELD	0	0		0	0	0	\$4,291	Thunderstorms
8/4/1997	LITCHFIELD	0	0		0	0	0	\$57,219	Thunderstorms
11/1/1997	CTZ001	0	0		0	0	0	\$8,583	Thunderstorms
11/4/1997	LITCHFIELD	0	0		0	0	0	\$28,610	Thunderstorms
11/14/1997	CTZ001	0	0		0	0	0	\$21,457	Winter Weather
12/10/1997	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/24/1997	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/8/1998	LITCHFIELD	0	0		0	0	0	\$35,214	Flood
1/15/1998	CTZ001	0	0		0	0	0	\$28,171	Winter Weather
2/4/1998	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/14/1998	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/21/1998	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/27/1998	CTZ001	0	0		0	0	0	\$0	Extreme Heat
5/29/1998	LITCHFIELD	0	0		0	0	0	\$4,226	Thunderstorms
5/29/1998	LITCHFIELD	0	0		0	0	0	\$4,226	Thunderstorms
5/31/1998	LITCHFIELD	0.3	17	1	0	0	0	\$5,634	Tornado
5/31/1998	LITCHFIELD	0	0		0	0	0	\$5,634	Thunderstorms
6/30/1998	LITCHFIELD	0	0		0	0	0	\$21,128	Flood
6/30/1998	LITCHFIELD	0	0		0	0	0	\$1,409	Thunderstorms
6/30/1998	LITCHFIELD	0	0		0	0	0	\$11,268	Thunderstorms
6/30/1998	LITCHFIELD	0	0		0	0	0	\$2,113	Thunderstorms
6/30/1998	LITCHFIELD	0	0		0	0	0	\$1,409	Thunderstorms
6/30/1998	LITCHFIELD	0	0		0	0	0	\$2,817	Thunderstorms
7/17/1998	LITCHFIELD	0	0		0	0	0	\$12,677	Thunderstorms
7/20/1998	LITCHFIELD	0	0		0	0	0	\$3,521	Thunderstorms
7/20/1998	LITCHFIELD	0	0		0	0	0	\$4,226	Thunderstorms
7/20/1998	LITCHFIELD	0	0		0	0	0	\$2,817	Thunderstorms
9/27/1998	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
10/1/1998	CTZ001	0	0		0	0	0	\$140,855	Thunderstorms
12/2/1998	CTZ001	0	0		0	0	0	\$0	Not Included
1/2/1999	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/14/1999	CTZ001	0	0		0	0	0	\$1,378	Winter Weather
1/19/1999	CTZ001	0	0		0	0	0	\$6,891	Flood
1/24/1999	CTZ001	0	0		0	0	0	\$9,647	Flood
2/2/1999	CTZ001	0	0		0	0	0	\$0	Flood
3/4/1999	CTZ001	0	0		0	0	0	\$0	Thunderstorms
3/14/1999	CTZ001	0	0		0	0	0	\$13,781	Winter Weather
4/1/1999	CTZ001	0	0		0	0	0	\$0	Drought

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/7/1999	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/7/1999	LITCHFIELD	0	0		150	0	0	\$6,891	Thunderstorms
6/7/1999	CTZ001	0	0		0	0	0	\$0	Extreme Heat
6/7/1999	LITCHFIELD	0	0		125	0	0	\$5,512	Thunderstorms
6/7/1999	LITCHFIELD	0	0		100	0	0	\$2,756	Thunderstorms
6/7/1999	LITCHFIELD	0	0		60	0	0	\$4,134	Thunderstorms
6/7/1999	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/7/1999	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/7/1999	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/28/1999	LITCHFIELD	0	0		0	0	0	\$68,905	Thunderstorms
7/4/1999	CTZ001	0	0		0	0	0	\$0	Extreme Heat
7/6/1999	LITCHFIELD	0	0		0	0	0	\$6,891	Thunderstorms
7/6/1999	LITCHFIELD	0	0		0	0	0	\$4,134	Thunderstorms
7/6/1999	LITCHFIELD	0	0		0	0	0	\$2,756	Thunderstorms
7/19/1999	LITCHFIELD	0	0		0	0	0	\$1,378	Thunderstorms
7/19/1999	LITCHFIELD	0	0		0	0	0	\$4,134	Thunderstorms
7/29/1999	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
7/29/1999	LITCHFIELD	0	0		0	0	0	\$689	Flood
7/29/1999	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/1/1999	CTZ001	0	0		0	0	0	\$0	Drought
8/5/1999	LITCHFIELD	0	0		0	0	0	\$55,124	Thunderstorms
9/16/1999	CTZ001	0	0		0	0	0	\$137,811	Thunderstorms
9/16/1999	CTZ001	0	0		0	0	0	\$137,811	Thunderstorms
9/16/1999	LITCHFIELD	0	0		0	0	0	\$1,515,920	Flood
11/2/1999	CTZ001	0	0		0	0	0	\$15,159	Thunderstorms
1/13/2000	CTZ001	0	0		0	0	0	\$12,000	Winter Weather
1/25/2000	CTZ001	0	0		0	0	0	\$33,332	Winter Weather
1/31/2000	CTZ001	0	0		0	0	0	\$16,000	Winter Weather
2/18/2000	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/8/2000	CTZ001	0	0		0	0	0	\$0	Not Included
4/9/2000	CTZ001	0	0		0	0	0	\$46,665	Winter Weather
5/10/2000	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/18/2000	LITCHFIELD	0	0		0	0	0	\$19,999	Thunderstorms
5/18/2000	LITCHFIELD	0	0		59	0	0	\$0	Thunderstorms
5/18/2000	LITCHFIELD	0	0		0	0	0	\$33,332	Thunderstorms
5/18/2000	LITCHFIELD	0	0		0	0	0	\$73,331	Thunderstorms
6/2/2000	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/2/2000	LITCHFIELD	0	0		0	0	0	\$55,998	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/2/2000	LITCHFIELD	0	0		0	0	0	\$129,329	Thunderstorms
6/2/2000	LITCHFIELD	0	0		100	0	0	\$1,333	Thunderstorms
6/7/2000	LITCHFIELD	0	0		0	0	0	\$0	Flood
6/11/2000	LITCHFIELD	0	0		0	0	1	\$0	Thunderstorms
6/11/2000	LITCHFIELD	0	0		0	0	0	\$79,998	Thunderstorms
6/11/2000	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/11/2000	LITCHFIELD	0	0		0	0	0	\$19,999	Thunderstorms
7/15/2000	LITCHFIELD	0	0		0	0	0	\$0	Flood
7/15/2000	LITCHFIELD	0	0		0	0	0	\$13,333	Flood
7/16/2000	CTZ001	0	0		0	0	0	\$0	Flood
12/12/2000	CTZ001	0	0		0	0	0	\$146,662	Thunderstorms
12/17/2000	LITCHFIELD	0	0		0	0	0	\$66,665	Flood
12/17/2000	CTZ001	0	0		0	0	0	\$33,332	Thunderstorms
12/17/2000	LITCHFIELD	0	0		0	0	0	\$99,997	Flood
12/30/2000	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/9/2001	CTZ001	0	0		0	0	0	\$0	Winter Weather
6/17/2001	LITCHFIELD	0	0		0	0	0	\$12,964	Flood
6/17/2001	LITCHFIELD	0	0		0	0	0	\$12,964	Flood
6/17/2001	LITCHFIELD	0	0		0	0	0	\$15,557	Flood
6/17/2001	LITCHFIELD	0	0		0	0	0	\$71,302	Flood
6/17/2001	LITCHFIELD	0	0		0	0	0	\$32,410	Flood
6/23/2001	LITCHFIELD	1	50	1	0	0	1	\$194,460	Tornado
6/23/2001	LITCHFIELD	0.5	200	2	0	0	0	\$324,101	Tornado
6/30/2001	LITCHFIELD	0	0		0	0	0	\$97,230	Thunderstorms
7/1/2001	LITCHFIELD	0	0		0	0	0	\$19,446	Thunderstorms
7/1/2001	LITCHFIELD	10	10	0	0	0	0	\$97,230	Tornado
7/10/2001	LITCHFIELD	0	0		0	0	0	\$19,446	Thunderstorms
8/28/2001	LITCHFIELD	0	0		0	0	0	\$10,371	Thunderstorms
10/17/2001	CTZ001	0	0		0	0	0	\$10,371	Thunderstorms
1/6/2002	CTZ001	0	0		0	0	0	\$0	Winter Weather
5/20/2002	CTZ001	0	0		0	0	0	\$0	Not Included
5/27/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		200	0	0	\$12,762	Thunderstorms
5/31/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
5/31/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		0	0	0	\$12,762	Thunderstorms
5/31/2002	LITCHFIELD	0	0		0	0	0	\$10,210	Thunderstorms
5/31/2002	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
5/31/2002	LITCHFIELD	0	0		0	0	0	\$11,486	Thunderstorms
6/5/2002	LITCHFIELD	0.1	50	1	0	0	0	\$51,049	Tornado
6/16/2002	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
6/16/2002	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
6/16/2002	LITCHFIELD	0.2	25	0	0	0	0	\$12,762	Tornado
6/16/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/16/2002	LITCHFIELD	0	0		125	0	0	\$0	Thunderstorms
6/26/2002	LITCHFIELD	0	0		0	0	0	\$12,762	Thunderstorms
7/5/2002	CTZ001	0	0		0	0	0	\$0	Not Included
7/19/2002	LITCHFIELD	0	0		0	0	0	\$6,381	Thunderstorms
7/23/2002	LITCHFIELD	0	0		0	0	0	\$31,906	Thunderstorms
7/23/2002	LITCHFIELD	0	0		0	0	0	\$6,381	Thunderstorms
8/2/2002	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
8/5/2002	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/8/2002	LITCHFIELD	0	0		0	0	0	\$12,762	Thunderstorms
9/11/2002	CTZ001	0	0		60	0	0	\$25,525	Thunderstorms
10/15/2002	CTZ001	0	0		0	0	0	\$0	Not Included
11/16/2002	CTZ001	0	0		0	0	0	\$127,623	Winter Weather
11/27/2002	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/25/2002	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/3/2003	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/21/2003	CTZ001	0	0		0	0	0	\$15,597	Flood
3/21/2003	CTZ001	0	0		0	0	0	\$15,597	Flood
5/18/2003	CTZ001	0	0		0	0	0	\$0	Not Included
5/18/2003	CTZ013	0	0		0	0	0	\$0	Not Included
7/21/2003	LITCHFIELD	0	0		60	0	0	\$1,248	Thunderstorms
8/4/2003	LITCHFIELD	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/16/2003	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
9/23/2003	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
9/23/2003	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
10/3/2003	CTZ001	0	0		0	0	0	\$0	Not Included
10/3/2003	CTZ013	0	0		0	0	0	\$0	Not Included
10/15/2003	CTZ013	0	0		60	0	0	\$0	Thunderstorms
10/29/2003	CTZ001	0	0		0	0	0	\$0	Flood
10/29/2003	CTZ001	0	0		0	0	0	\$0	Flood
10/29/2003	CTZ001	0	0		0	0	0	\$0	Flood
11/13/2003	CTZ001	0	0		60	0	0	\$0	Thunderstorms
12/6/2003	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/6/2003	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/11/2003	CTZ001	0	0		0	0	0	\$0	Flood
12/11/2003	CTZ013	0	0		0	0	0	\$0	Flood
12/14/2003	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/14/2003	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/18/2003	CTZ001	0	0		0	0	0	\$0	Flood
12/18/2003	CTZ013	0	0		0	0	0	\$0	Flood
12/18/2003	CTZ013	0	0		0	0	0	\$0	Flood
12/24/2003	CTZ001	0	0		0	0	0	\$0	Flood
12/24/2003	CTZ001	0	0		0	0	0	\$0	Flood
12/24/2003	CTZ001	0	0		0	0	0	\$0	Flood
1/15/2004	CTZ001	0	0		0	0	0	\$0	Not Included
1/15/2004	CTZ013	0	0		0	0	0	\$0	Not Included
1/28/2004	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ013	0	0		0	0	0	\$0	Winter Weather
5/5/2004	CTZ013	0	0		0	0	0	\$0	Not Included
5/18/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
5/23/2004	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
5/23/2004	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
5/23/2004	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/9/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/2/2004	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
7/2/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/5/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/11/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/20/2004	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/20/2004	LITCHFIELD	0	0		0	0	0	\$1,215	Thunderstorms
8/20/2004	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
8/20/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/20/2004	LITCHFIELD	0	0		70	0	0	\$0	Thunderstorms
8/21/2004	LITCHFIELD	0	0		0	0	0	\$0	Flood
8/21/2004	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
9/18/2004	CTZ013	0	0		0	0	0	\$0	Flood
10/6/2004	CTZ001	0	0		0	0	0	\$0	Not Included
10/6/2004	CTZ013	0	0		0	0	0	\$0	Not Included
1/6/2005	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/6/2005	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/14/2005	CTZ013	0	0		0	0	0	\$0	Flood
1/14/2005	CTZ013	0	0		0	0	0	\$0	Flood
1/14/2005	CTZ001	0	0		0	0	0	\$0	Flood
1/14/2005	CTZ001	0	0		0	0	0	\$0	Flood
1/23/2005	CTZ001	0	0		0	1	0	\$0	Winter Weather
1/23/2005	CTZ013	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ013	0	0		0	0	0	\$0	Winter Weather
3/12/2005	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/12/2005	CTZ013	0	0		0	0	0	\$0	Winter Weather
3/24/2005	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/28/2005	CTZ001	0	0		0	0	0	\$0	Flood
3/29/2005	CTZ001	0	0		0	0	0	\$0	Flood
3/29/2005	CTZ013	0	0		0	0	0	\$0	Flood
3/29/2005	CTZ013	0	0		0	0	0	\$0	Flood
5/5/2005	CTZ013	0	0		0	0	0	\$0	Not Included
5/13/2005	CTZ013	0	0		0	0	0	\$0	Not Included
5/27/2005	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/27/2005	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
5/27/2005	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/6/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/1/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/18/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/22/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/27/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/27/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/31/2005	LITCHFIELD	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/5/2005	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
9/29/2005	CTZ001	0	0		60	0	0	\$0	Thunderstorms
9/29/2005	CTZ013	0	0		60	0	0	\$0	Thunderstorms
10/9/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/9/2005	CTZ013	0	0		0	0	0	\$0	Flood
10/9/2005	CTZ013	0	0		0	0	0	\$0	Flood
10/14/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/14/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/14/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/14/2005	CTZ013	0	0		0	0	0	\$0	Flood
10/15/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/15/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/15/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/16/2005	CTZ001	0	0		60	0	0	\$0	Thunderstorms
10/21/2005	CTZ001	0	0		0	0	0	\$0	Not Included
10/25/2005	CTZ013	0	0		0	0	0	\$0	Flood
10/26/2005	CTZ001	0	0		0	0	0	\$0	Flood
10/27/2005	CTZ013	0	0		0	0	0	\$0	Not Included
1/3/2006	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/3/2006	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/14/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/14/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/14/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/14/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/15/2006	CTZ001	0	0		0	0	0	\$0	Flood
1/18/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/18/2006	CTZ001	0	0		60	0	0	\$0	Thunderstorms
1/18/2006	CTZ013	0	0		60	0	0	\$0	Thunderstorms
1/18/2006	CTZ001	0	0		0	0	0	\$0	Flood
1/18/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/18/2006	CTZ013	0	0		0	0	0	\$0	Flood
1/21/2006	CTZ001	0	0		60	0	0	\$0	Thunderstorms
2/12/2006	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/12/2006	CTZ013	0	0		0	0	0	\$0	Winter Weather
2/17/2006	CTZ001	0	0		60	0	0	\$0	Thunderstorms
2/17/2006	CTZ013	0	0		60	0	0	\$0	Thunderstorms
6/1/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
6/1/2006	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/1/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
6/1/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
6/19/2006	LITCHFIELD	0	0		175	0	0	\$0	Thunderstorms
7/3/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/3/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/11/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/18/2006	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
7/21/2006	LITCHFIELD	0	0		88	0	0	\$0	Thunderstorms
7/21/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/21/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/28/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
7/28/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/1/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/1/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/1/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
8/3/2006	LITCHFIELD	0	0		60	0	0	\$0	Thunderstorms
9/2/2006	CTZ001	0	0		40	0	0	\$0	Thunderstorms
10/28/2006	CTZ001	0	0		50	0	0	\$0	Thunderstorms
11/9/2006	LITCHFIELD	0	0		0	0	0	\$0	Flood
12/1/2006	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
12/1/2006	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
1/25/2007	CTZ001	0	0		0	0	0	\$0	Not Included
1/25/2007	CTZ013	0	0		0	0	0	\$0	Not Included
2/13/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/13/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
3/2/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/16/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
3/16/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
4/15/2007	LITCHFIELD	0	0		0	0	0	\$830,487	Flood
5/16/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
5/16/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
5/31/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
5/31/2007	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/1/2007	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/1/2007	LITCHFIELD	0	0		0	0	1	\$0	Thunderstorms
7/6/2007	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
7/15/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/15/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/15/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/19/2007	LITCHFIELD	0	0		56	0	0	\$0	Thunderstorms
7/19/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/19/2007	LITCHFIELD	0	0		78	0	0	\$0	Thunderstorms
7/19/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/19/2007	LITCHFIELD	0	0		0	0	0	\$0	Tornado
8/17/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
8/17/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
8/17/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
8/17/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
9/8/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
9/8/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
9/8/2007	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
11/20/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
11/20/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/9/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/9/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/13/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/13/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/16/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/16/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/23/2007	CTZ001	0	0		50	0	0	\$0	Thunderstorms
12/23/2007	CTZ013	0	0		50	0	0	\$0	Thunderstorms
12/30/2007	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/30/2007	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/1/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/1/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/13/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/13/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/13/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
1/13/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
2/1/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/6/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/6/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
2/9/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/12/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/12/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
2/13/2008	LITCHFIELD	0	0		0	0	0	\$1,066	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/22/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
2/22/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
3/5/2008	LITCHFIELD	0	0		0	0	0	\$0	Flood
3/8/2008	LITCHFIELD	0	0		0	0	0	\$3,199	Flood
3/8/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
3/8/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
4/29/2008	CTZ013	0	0		0	0	0	\$0	Not Included
5/1/2008	CTZ013	0	0		0	0	0	\$0	Not Included
5/31/2008	LITCHFIELD	0	0		0	0	0	\$26,659	Thunderstorms
6/8/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/8/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/8/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/8/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/9/2008	CTZ001	0	0		0	0	0	\$0	Extreme Heat
6/9/2008	CTZ013	0	0		0	0	0	\$0	Extreme Heat
6/10/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/10/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/10/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/10/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/10/2008	LITCHFIELD	0	0		87	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		0	0	0	\$0	Flood
6/14/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/14/2008	LITCHFIELD	0	0		0	0	0	\$0	Flood
6/14/2008	LITCHFIELD	0	0		56	0	0	\$0	Thunderstorms
6/16/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/23/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
6/23/2008	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
7/23/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/27/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/27/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
7/27/2008	LITCHFIELD	0	0		50	0	0	\$0	Thunderstorms
8/11/2008	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms
9/3/2008	LITCHFIELD	0	0		75	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/3/2008	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
9/3/2008	LITCHFIELD	0	0		100	0	0	\$0	Thunderstorms
9/6/2008	LITCHFIELD	0	0		0	0	0	\$106,637	Not Included
9/6/2008	LITCHFIELD	0	0		0	0	0	\$0	Flood
11/30/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
11/30/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/7/2008	CTZ001	0	0		45	0	0	\$533	Thunderstorms
12/7/2008	CTZ013	0	0		45	0	0	\$533	Thunderstorms
12/11/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/11/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/11/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/11/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/12/2008	LITCHFIELD	0	0		0	0	0	\$15,996	Flood
12/17/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/17/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/19/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/19/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/21/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/24/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/24/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
12/30/2008	CTZ001	0	0		43	0	0	\$4,265	Thunderstorms
12/30/2008	CTZ013	0	0		43	0	0	\$4,265	Thunderstorms
12/31/2008	CTZ001	0	0		0	0	0	\$0	Winter Weather
12/31/2008	CTZ013	0	0		0	0	0	\$0	Winter Weather
1/1/2009	CTZ001				0	0	0	\$0	Not Included
1/10/2009	CTZ001				0	0	0	\$0	Winter Weather
1/10/2009	CTZ013				0	0	0	\$0	Winter Weather
1/16/2009	CTZ001				0	0	0	\$0	Not Included
1/18/2009	CTZ001				0	0	0	\$0	Winter Weather
1/28/2009	CTZ001				0	0	0	\$0	Winter Weather
1/28/2009	CTZ013				0	0	0	\$0	Winter Weather
2/18/2009	CTZ001				0	0	0	\$0	Winter Weather
2/19/2009	CTZ001				0	0	0	\$0	Winter Weather
2/19/2009	CTZ013				0	0	0	\$0	Winter Weather
3/2/2009	CTZ001				0	0	0	\$0	Winter Weather
3/2/2009	CTZ013				0	0	0	\$0	Winter Weather
5/19/2009	CTZ001				0	0	0	\$0	Not Included
5/24/2009	LITCHFIELD				88	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/1/2009	CTZ001				0	0	0	\$0	Not Included
6/26/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/26/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/26/2009	LITCHFIELD				54	0	0	\$0	Thunderstorms
6/26/2009	LITCHFIELD				0	0	0	\$0	Flood
6/26/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/26/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/26/2009	LITCHFIELD				75	0	0	\$0	Thunderstorms
7/7/2009	LITCHFIELD				88	0	0	\$0	Thunderstorms
7/7/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/7/2009	LITCHFIELD				75	0	0	\$0	Thunderstorms
7/7/2009	LITCHFIELD				175	0	0	\$0	Thunderstorms
7/7/2009	LITCHFIELD				88	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				0	0	0	\$0	Flood
7/16/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				0	0	0	\$0	Flood
7/16/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				150	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				150	0	0	\$0	Thunderstorms
7/16/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/17/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/17/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/26/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/26/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/26/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/26/2009	LITCHFIELD				0	0	0	\$4,281	Thunderstorms
7/26/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/26/2009	LITCHFIELD				150	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				60	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/21/2009	LITCHFIELD				0	0	0	\$5,351	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				0	0	0	\$5,351	Thunderstorms
8/21/2009	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				75	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
8/21/2009	LITCHFIELD				100	0	0	\$0	Thunderstorms
10/7/2009	CTZ013				46	0	0	\$2,140	Thunderstorms
12/25/2009	CTZ001				0	0	0	\$0	Winter Weather
12/25/2009	CTZ013				0	0	0	\$0	Winter Weather
12/29/2009	CTZ013				50	1	0	\$0	Thunderstorms
1/3/2010	CTZ001				0	0	0	\$0	Winter Weather
1/25/2010	LITCHFIELD				0	0	0	\$0	Flood
1/25/2010	LITCHFIELD				0	0	0	\$0	Flood
2/16/2010	CTZ001				0	0	0	\$0	Winter Weather
2/16/2010	CTZ013				0	0	0	\$0	Winter Weather
2/16/2010	CTZ001				0	0	0	\$0	Winter Weather
2/16/2010	CTZ013				0	0	0	\$0	Winter Weather
2/23/2010	CTZ001				0	0	0	\$0	Winter Weather
2/26/2010	CTZ001				0	0	0	\$0	Winter Weather
2/26/2010	CTZ013				0	0	0	\$0	Winter Weather
3/30/2010	LITCHFIELD				0	0	0	\$0	Flood
3/30/2010	LITCHFIELD				0	0	0	\$0	Flood
4/12/2010	CTZ001				0	0	0	\$0	Not Included
4/12/2010	CTZ013				0	0	0	\$0	Not Included
4/14/2010	CTZ001				0	0	0	\$0	Not Included
4/14/2010	CTZ013				0	0	0	\$0	Not Included
4/15/2010	CTZ001				0	0	0	\$0	Not Included
4/15/2010	CTZ013				0	0	0	\$0	Not Included
4/24/2010	CTZ001				0	0	0	\$0	Not Included
4/28/2010	CTZ001				0	0	0	\$0	Not Included
4/28/2010	CTZ013				0	0	0	\$0	Not Included
4/29/2010	CTZ013				0	0	0	\$0	Not Included
4/29/2010	CTZ013				39	0	0	\$2,106	Thunderstorms
6/6/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/6/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/6/2010	LITCHFIELD				0	0	0	\$10,529	Thunderstorms
6/6/2010	LITCHFIELD				0	0	1	\$0	Thunderstorms
6/6/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/6/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/10/2010	LITCHFIELD				0	0	0	\$0	Tornado
6/10/2010	LITCHFIELD				0	0	1	\$0	Thunderstorms
6/10/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/10/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/24/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/6/2010	CTZ001				0	0	0	\$0	Extreme Heat
7/6/2010	CTZ013				0	0	0	\$0	Extreme Heat
7/17/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/17/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/17/2010	LITCHFIELD				55	0	0	\$31,587	Thunderstorms
7/21/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				0	0	0	\$0	Tornado
7/21/2010	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD	0	50	1	0	0	0	\$0	Tornado
7/21/2010	LITCHFIELD	0	50	1	0	0	0	\$0	Tornado
7/21/2010	LITCHFIELD	1	50	1	0	0	0	\$15,794	Tornado
7/21/2010	LITCHFIELD				78	0	0	\$5,265	Thunderstorms
7/21/2010	LITCHFIELD	0	100	1	0	0	0	\$4,212	Tornado
7/21/2010	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				175	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				88	0	0	\$0	Thunderstorms
7/21/2010	LITCHFIELD				175	0	0	\$0	Thunderstorms
9/13/2010	LITCHFIELD				75	0	0	\$0	Thunderstorms
9/30/2010	CTZ001				50	0	0	\$0	Thunderstorms
10/1/2010	CTZ013				50	0	0	\$0	Thunderstorms
11/24/2010	CTZ001				44	0	0	\$2,106	Thunderstorms
12/1/2010	CTZ001				50	0	0	\$0	Thunderstorms
12/1/2010	CTZ013				50	0	0	\$0	Thunderstorms
12/26/2010	CTZ001				0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/26/2010	CTZ013				0	0	0	\$0	Winter Weather
1/7/2011	CTZ001				0	0	0	\$0	Winter Weather
1/7/2011	CTZ013				0	0	0	\$0	Winter Weather
1/11/2011	CTZ001				0	0	0	\$0	Winter Weather
1/11/2011	CTZ013				0	0	0	\$0	Winter Weather
1/18/2011	CTZ001				0	0	0	\$0	Winter Weather
1/18/2011	CTZ013				0	0	0	\$0	Winter Weather
1/23/2011	CTZ001				0	0	0	\$0	Not Included
1/23/2011	CTZ013				0	0	0	\$0	Not Included
1/23/2011	CTZ001				0	0	0	\$0	Not Included
1/23/2011	CTZ013				0	0	0	\$0	Not Included
1/26/2011	CTZ013				0	0	0	\$0	Winter Weather
1/26/2011	CTZ001				0	0	0	\$0	Winter Weather
2/1/2011	CTZ001				0	0	0	\$0	Winter Weather
2/1/2011	CTZ013				0	0	0	\$0	Winter Weather
2/1/2011	CTZ001				0	0	0	\$0	Winter Weather
2/1/2011	CTZ013				0	0	0	\$0	Winter Weather
3/7/2011	LITCHFIELD				0	0	0	\$0	Flood
6/1/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/1/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/1/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/1/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/8/2011	LITCHFIELD				175	0	0	\$0	Thunderstorms
6/8/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/8/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/8/2011	LITCHFIELD				88	0	0	\$0	Thunderstorms
6/8/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD	0	30	1	0	0	0	\$0	Tornado
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				87	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				150	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				150	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				125	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				150	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/9/2011	LITCHFIELD				175	0	0	\$0	Thunderstorms
6/17/2011	LITCHFIELD				75	0	0	\$0	Thunderstorms
6/17/2011	LITCHFIELD				88	0	0	\$0	Thunderstorms
7/21/2011	CTZ001				0	0	0	\$0	Extreme Heat
7/21/2011	CTZ013				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ001				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ013				0	0	0	\$0	Extreme Heat
7/23/2011	CTZ013				0	0	0	\$0	Extreme Heat
8/1/2011	LITCHFIELD				100	0	0	\$0	Thunderstorms
8/19/2011	LITCHFIELD				0	0	0	\$0	Tornado
8/21/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/21/2011	LITCHFIELD				50	0	0	\$0	Thunderstorms
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	LITCHFIELD				0	0	0	\$0	Flood
8/28/2011	CTZ001				0	0	0	\$0	Hurricane
8/28/2011	CTZ013				0	0	0	\$0	Hurricane
9/6/2011	LITCHFIELD				0	0	0	\$0	Flood
9/6/2011	LITCHFIELD				0	0	0	\$0	Flood
9/8/2011	LITCHFIELD				0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/8/2011	LITCHFIELD				0	0	0	\$0	Flood
10/29/2011	CTZ001				0	0	0	\$0	Winter Weather
10/29/2011	CTZ013				0	0	0	\$0	Winter Weather
2/29/2012	CTZ001				0	0	0	\$0	Winter Weather
3/1/2012	CTZ001				0	0	0	\$0	Winter Weather
5/29/2012	LITCHFIELD				52	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				55	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				55	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				55	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/22/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
6/25/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
6/25/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				175	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				175	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				75	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				175	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				75	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/1/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/18/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/18/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/18/2012	LITCHFIELD				100	0	0	\$0	Thunderstorms
7/24/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/24/2012	LITCHFIELD				88	0	0	\$0	Thunderstorms
7/26/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
7/28/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
9/8/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/8/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
9/18/2012	CTZ013				50	0	0	\$0	Thunderstorms
9/18/2012	CTZ001				50	0	0	\$0	Thunderstorms
9/18/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
9/18/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
9/18/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
9/18/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
9/18/2012	LITCHFIELD				50	0	0	\$0	Thunderstorms
10/29/2012	CTZ013				61	0	0	\$0	Thunderstorms
10/29/2012	CTZ001				50	0	0	\$0	Thunderstorms
11/7/2012	CTZ001				0	0	0	\$0	Winter Weather
11/7/2012	CTZ013				0	0	0	\$0	Winter Weather
12/26/2012	CTZ013				0	0	0	\$0	Winter Weather
12/26/2012	CTZ001				0	0	0	\$0	Winter Weather
12/29/2012	CTZ001				0	0	0	\$0	Winter Weather
12/29/2012	CTZ013				0	0	0	\$0	Winter Weather
7/12/1950	MIDDLESEX	10	33	2	0	0	0	\$23,817	Tornado
8/21/1951	MIDDLESEX	0	33	3	0	0	8	\$2,207,625	Tornado
4/24/1960	MIDDLESEX	0	0		200	0	0	\$0	Thunderstorms
8/30/1960	MIDDLESEX	0	0		100	0	0	\$0	Thunderstorms
7/19/1963	MIDDLESEX	12.3	33	1	0	0	0	\$18,758	Tornado
8/1/1963	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
5/17/1965	MIDDLESEX	0	0		100	0	0	\$0	Thunderstorms
6/8/1971	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
7/21/1972	MIDDLESEX	1	50	1	0	0	0	\$13,732	Tornado
6/21/1974	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
6/27/1974	MIDDLESEX	0.5	100	1	0	0	0	\$1,164	Tornado
6/29/1976	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
8/10/1979	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
5/20/1982	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
7/30/1983	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
8/1/1983	MIDDLESEX	0.2	20	0	0	0	0	\$69	Tornado
9/6/1985	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
7/10/1989	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
8/9/1992	MIDDLESEX	0	0		100	0	0	\$0	Thunderstorms
4/11/1993	MIDDLESEX	0	0		0	0	0	\$0	Flood
12/4/1993	CTZ007	0	0		0	0	0	\$0	Not Included
12/4/1993	CTZ011	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/26/1993	CTZ007	0	0		0	0	0	\$0	Thunderstorms
12/26/1993	CTZ011	0	0		0	0	0	\$0	Thunderstorms
12/29/1993	CTZ007	0	0		0	0	0	\$0	Winter Weather
12/29/1993	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/3/1994	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/7/1994	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/7/1994	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/8/1994	CTZ007	0	0		0	0	0	\$0	Not Included
1/8/1994	CTZ011	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ007	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ011	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ007	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ011	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ007	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ011	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/8/1994	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ007	0	0		0	0	0	\$0	Not Included
3/10/1994	CTZ011	0	0		0	0	0	\$0	Not Included
4/8/1994	CTZ007	0	0		0	0	0	\$0	Flood
5/25/1994	MIDDLESEX	0	0		175	0	0	\$0	Thunderstorms
7/8/1994	CTZ007	0	0		0	0	0	\$0	Not Included
9/22/1994	CTZ007	0	0		0	0	0	\$0	Not Included
11/2/1994	CTZ007	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	CTZ011	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ007	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ011	0	0		0	0	0	\$0	Thunderstorms
12/23/1994	CTZ007	0	0		0	0	0	\$595,850	Thunderstorms
12/23/1994	CTZ011	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/12/1995	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/13/1995	CTZ007	0	0		0	0	0	\$0	Not Included
1/13/1995	CTZ011	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ011	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/5/1995	CTZ007	0	0		0	0	0	\$0	Thunderstorms
2/5/1995	CTZ011	0	0		0	0	0	\$0	Thunderstorms
2/27/1995	CTZ007	0	0		0	0	1	\$0	Winter Weather
4/4/1995	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ007	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ011	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ007	0	0		0	0	0	\$0	Not Included
5/29/1995	MIDDLESEX	0	0		95	0	0	\$0	Thunderstorms
5/29/1995	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
6/20/1995	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
6/20/1995	MIDDLESEX	0	0		275	0	0	\$1	Thunderstorms
7/15/1995	CTZ007	0	0		0	0	0	\$0	Extreme Heat
7/15/1995	CTZ011	0	0		0	0	0	\$0	Extreme Heat
10/14/1995	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
11/11/1995	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
11/15/1995	MIDDLESEX	0	0		0	0	0	\$0	Flood
12/19/1995	CTZ007	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ011	0	0		0	0	0	\$0	Winter Weather
12/20/1995	CTZ011	0	0		0	0	0	\$0	Flood
1/3/1996	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/12/1996	MIDDLESEX	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ007	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ011	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ007	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ011	0	0		0	0	0	\$0	Flood
1/27/1996	CTZ007	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	CTZ011	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	MIDDLESEX	0	0		0	0	0	\$0	Flood
2/3/1996	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/3/1996	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ007	0	0		0	0	0	\$0	Thunderstorms
2/25/1996	CTZ011	0	0		0	0	0	\$0	Thunderstorms
3/7/1996	CTZ007	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
4/9/1996	CTZ007	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ011	0	0		0	0	0	\$0	Winter Weather
4/16/1996	MIDDLESEX	0	0		0	0	0	\$0	Flood
4/16/1996	MIDDLESEX	0	0		0	0	0	\$0	Flood
5/21/1996	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
7/9/1996	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
7/9/1996	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
9/16/1996	MIDDLESEX	0	0		0	0	0	\$0	Not Included
9/28/1996	MIDDLESEX	0	0		0	1	0	\$0	Thunderstorms
10/8/1996	MIDDLESEX	0	0		0	0	0	\$0	Not Included
10/19/1996	MIDDLESEX	0	0		0	0	0	\$0	Not Included
10/19/1996	CTZ007	0	0		0	0	0	\$0	Thunderstorms
10/19/1996	CTZ011	0	0		0	0	0	\$0	Thunderstorms
11/26/1996	MIDDLESEX	0	0		0	0	0	\$0	Not Included
12/1/1996	MIDDLESEX	0	0		0	0	0	\$0	Not Included
12/6/1996	CTZ007	0	0		0	0	0	\$0	Flood
12/6/1996	CTZ011	0	0		0	0	0	\$0	Flood
12/7/1996	CTZ007	0	0		0	1	0	\$0	Flood
12/7/1996	CTZ011	0	0		0	1	0	\$0	Flood
3/6/1997	CTZ007	0	0		66	0	1	\$0	Thunderstorms
3/6/1997	CTZ011	0	0		66	0	1	\$0	Thunderstorms
4/1/1997	CTZ007	0	0		0	0	0	\$0	Winter Weather
4/1/1997	CTZ011	0	0		0	0	0	\$0	Winter Weather
6/26/1997	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
6/26/1997	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
7/24/1997	MIDDLESEX	0	0		0	0	0	\$0	Not Included
8/3/1997	MIDDLESEX	0	0		175	0	0	\$0	Thunderstorms
8/3/1997	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
8/5/1997	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
11/7/1997	MIDDLESEX	0	0		0	0	0	\$0	Not Included
1/10/1998	CTZ007	0	0		0	0	0	\$0	Flood
1/15/1998	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/24/1998	MIDDLESEX	0	0		0	0	0	\$0	Flood
3/9/1998	MIDDLESEX	0	0		0	0	0	\$0	Flood
4/23/1998	CTZ011	0	0		0	1	1	\$0	Thunderstorms
5/9/1998	MIDDLESEX	0	0		0	0	0	\$0	Not Included
6/2/1998	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
6/13/1998	MIDDLESEX	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/19/1998	MIDDLESEX	0	0		0	0	0	\$0	Flood
6/30/1998	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
6/30/1998	MIDDLESEX	0	0		55	0	0	\$0	Thunderstorms
6/30/1998	MIDDLESEX	0	0		55	0	0	\$0	Thunderstorms
6/30/1998	MIDDLESEX	0.1	33	1	63	0	0	\$0	Tornado
6/30/1998	MIDDLESEX	0.1	33	0	55	0	0	\$0	Tornado
8/17/1998	MIDDLESEX	0	0		0	0	0	\$0	Flood
1/15/1999	MIDDLESEX	0	0		0	0	0	\$0	Flood
2/2/1999	MIDDLESEX	0	0		0	0	0	\$0	Not Included
2/25/1999	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/15/1999	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/15/1999	CTZ011	0	0		0	0	0	\$0	Winter Weather
7/4/1999	CTZ007	0	0		0	0	0	\$0	Extreme Heat
7/4/1999	CTZ011	0	0		0	0	0	\$0	Extreme Heat
7/18/1999	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms
8/5/1999	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
9/16/1999	MIDDLESEX	0	0		0	0	0	\$0	Flood
1/17/2000	CTZ007	0	0		0	0	0	\$0	Not Included
1/17/2000	CTZ011	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ007	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ011	0	0		0	0	0	\$0	Not Included
2/18/2000	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/11/2000	MIDDLESEX	0	0		0	0	0	\$0	Not Included
5/10/2000	MIDDLESEX	0	0		0	1	0	\$0	Thunderstorms
5/10/2000	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
6/2/2000	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms
6/2/2000	MIDDLESEX	0	0		0	0	0	\$0	Tornado
6/2/2000	MIDDLESEX	0	0		70	0	0	\$0	Thunderstorms
6/6/2000	MIDDLESEX	0	0		0	0	0	\$0	Not Included
6/11/2000	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
6/27/2000	MIDDLESEX	0	0		0	0	1	\$0	Thunderstorms
6/27/2000	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
7/26/2000	MIDDLESEX	0	0		0	0	0	\$0	Not Included
12/12/2000	CTZ007	0	0		54	0	0	\$0	Thunderstorms
12/12/2000	CTZ011	0	0		54	0	0	\$0	Thunderstorms
12/17/2000	CTZ011	0	0		60	0	0	\$0	Thunderstorms
12/30/2000	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ007	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/21/2001	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/22/2001	MIDDLESEX	0	0		0	0	0	\$0	Flood
3/30/2001	MIDDLESEX	0	0		0	0	0	\$0	Flood
4/13/2001	CTZ007	0	0		0	0	0	\$0	Flood
4/23/2001	CTZ007	0	0		0	0	0	\$0	Flood
5/21/2001	CTZ011	0	0		0	0	0	\$0	Thunderstorms
6/11/2001	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
6/11/2001	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
6/17/2001	MIDDLESEX	0	0		0	0	0	\$0	Flood
7/1/2001	MIDDLESEX	0	0		0	0	2	\$0	Thunderstorms
7/1/2001	MIDDLESEX	0	0		60	0	0	\$0	Thunderstorms
8/8/2001	CTZ007	0	0		0	0	0	\$0	Extreme Heat
8/8/2001	CTZ011	0	0		0	0	0	\$0	Extreme Heat
8/10/2001	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
8/10/2001	MIDDLESEX	0	0		0	0	0	\$0	Thunderstorms
8/20/2001	MIDDLESEX	0	0		0	0	0	\$0	Flood
4/1/2002	CTZ007	0	0		0	0	0	\$0	Drought
4/1/2002	CTZ011	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ007	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ011	0	0		0	0	0	\$0	Drought
6/1/2002	CTZ007	0	0		0	0	0	\$0	Drought
6/1/2002	CTZ011	0	0		0	0	0	\$0	Drought
6/16/2002	MIDDLESEX	0	0		61	0	0	\$0	Thunderstorms
7/2/2002	CTZ007	0	0		0	1	0	\$0	Extreme Heat
9/11/2002	CTZ007	0	0		0	1	0	\$0	Thunderstorms
9/11/2002	CTZ011	0	0		0	1	0	\$0	Thunderstorms
9/26/2002	MIDDLESEX	0	0		0	0	0	\$0	Not Included
11/27/2002	CTZ007	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ007	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ011	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/6/2003	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ011	0	0		0	0	0	\$0	Winter Weather
9/28/2003	MIDDLESEX	0	0		0	0	0	\$0	Not Included
12/5/2003	CTZ007	0	0		0	0	0	\$0	Winter Weather
12/5/2003	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/15/2004	CTZ007	0	0		0	0	0	\$0	Not Included
1/15/2004	CTZ011	0	0		0	0	0	\$0	Not Included
1/28/2004	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ011	0	0		0	0	0	\$0	Winter Weather
7/2/2004	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
1/6/2005	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/6/2005	CTZ011	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/25/2005	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/25/2005	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/24/2005	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/28/2005	MIDDLESEX	0	0		0	0	0	\$0	Not Included
4/2/2005	MIDDLESEX	0	0		0	0	0	\$0	Not Included
7/19/2005	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
7/19/2005	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
7/27/2005	MIDDLESEX	0	0		60	0	0	\$0	Thunderstorms
7/27/2005	MIDDLESEX	0	0		55	0	0	\$0	Thunderstorms
10/8/2005	CTZ007	0	0		0	0	0	\$0	Flood
10/8/2005	CTZ011	0	0		0	0	0	\$0	Flood
10/11/2005	MIDDLESEX	0	0		0	0	0	\$0	Not Included
12/9/2005	CTZ007	0	0		0	0	0	\$0	Winter Weather
1/18/2006	CTZ007	0	0		66	0	0	\$0	Thunderstorms
2/12/2006	CTZ007	0	0		0	0	0	\$0	Winter Weather
2/12/2006	CTZ011	0	0		0	0	0	\$0	Winter Weather
2/17/2006	CTZ007	0	0		54	0	0	\$0	Thunderstorms
3/2/2006	CTZ007	0	0		0	0	0	\$0	Winter Weather
3/2/2006	CTZ011	0	0		0	0	0	\$0	Winter Weather
5/21/2006	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
6/2/2006	MIDDLESEX	0	0		0	0	0	\$0	Flood
7/28/2006	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/28/2006	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms
8/1/2006	CTZ007	0	0		0	0	0	\$0	Extreme Heat
8/3/2006	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
10/28/2006	MIDDLESEX	0	0		0	0	0	\$0	Flood
12/1/2006	CTZ011	0	0		50	0	0	\$0	Thunderstorms
3/2/2007	MIDDLESEX	0	0		0	0	0	\$0	Flood
3/16/2007	CTZ007	0	0		0	0	0	\$0	Winter Weather
4/15/2007	CTZ011	0	0		61	0	0	\$0	Thunderstorms
4/16/2007	CTZ011	0	0		0	0	0	\$0	Flood
5/16/2007	MIDDLESEX	0	0		56	0	0	\$0	Thunderstorms
5/16/2007	MIDDLESEX	0	0		56	0	0	\$0	Thunderstorms
7/6/2007	MIDDLESEX	0	0		55	0	0	\$0	Thunderstorms
7/19/2007	MIDDLESEX	0	0		55	0	0	\$0	Thunderstorms
7/28/2007	MIDDLESEX	0	0		50	0	0	\$0	Thunderstorms
3/5/2008	MIDDLESEX	0	0		55	0	0	\$0	Thunderstorms
5/12/2008	CTZ007	0	0		50	0	0	\$0	Thunderstorms
7/2/2008	MIDDLESEX	0	0		100	0	0	\$0	Thunderstorms
7/23/2008	MIDDLESEX	0	0		61	0	0	\$1,066	Thunderstorms
7/23/2008	MIDDLESEX	0	0		52	0	0	\$1,066	Thunderstorms
7/23/2008	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms
7/23/2008	MIDDLESEX	0	0		100	0	0	\$0	Thunderstorms
8/11/2008	MIDDLESEX	0	0		75	0	0	\$0	Thunderstorms
8/11/2008	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms
8/11/2008	MIDDLESEX	0	0		52	0	0	\$0	Thunderstorms
8/11/2008	MIDDLESEX	0	0		0	0	0	\$7,998	Thunderstorms
9/6/2008	CTZ007	0	0		0	0	0	\$533	Hurricane
9/6/2008	CTZ011	0	0		0	0	0	\$533	Hurricane
10/25/2008	CTZ007	0	0		45	0	0	\$5,332	Thunderstorms
12/12/2008	MIDDLESEX	0	0		0	0	0	\$0	Flood
12/12/2008	MIDDLESEX	0	0		0	0	0	\$0	Flood
12/19/2008	CTZ011	0	0		0	0	0	\$0	Winter Weather
3/1/2009	CTZ007				0	0	0	\$0	Winter Weather
3/1/2009	CTZ011				0	0	0	\$0	Winter Weather
7/3/2009	MIDDLESEX				0	0	0	\$0	Flood
7/3/2009	MIDDLESEX				52	0	0	\$535	Thunderstorms
7/3/2009	MIDDLESEX				75	0	0	\$0	Thunderstorms
7/3/2009	MIDDLESEX				88	0	0	\$0	Thunderstorms
7/16/2009	MIDDLESEX				52	0	0	\$8,026	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/31/2009	MIDDLESEX				52	0	0	\$1,070	Thunderstorms
7/31/2009	MIDDLESEX				61	0	0	\$8,026	Thunderstorms
7/31/2009	MIDDLESEX				61	0	0	\$8,026	Thunderstorms
12/19/2009	CTZ007				0	0	0	\$0	Winter Weather
2/10/2010	CTZ011				0	0	0	\$0	Winter Weather
3/30/2010	MIDDLESEX				0	0	0	\$331,666	Flood
3/30/2010	MIDDLESEX				0	0	0	\$5,265	Flood
7/19/2010	MIDDLESEX				0	0	0	\$10,529	Thunderstorms
7/19/2010	MIDDLESEX				0	0	0	\$52,645	Thunderstorms
7/19/2010	MIDDLESEX				0	0	0	\$21,058	Thunderstorms
7/21/2010	MIDDLESEX				100	0	0	\$0	Thunderstorms
7/21/2010	MIDDLESEX				96	0	0	\$78,968	Thunderstorms
7/21/2010	MIDDLESEX				0	0	0	\$31,587	Thunderstorms
7/21/2010	MIDDLESEX				0	0	0	\$7,897	Thunderstorms
12/26/2010	CTZ007				0	0	0	\$0	Winter Weather
12/26/2010	CTZ011				0	0	0	\$0	Winter Weather
1/7/2011	CTZ007				0	0	0	\$0	Winter Weather
1/11/2011	CTZ011				0	0	0	\$0	Winter Weather
1/26/2011	CTZ011				0	0	0	\$0	Winter Weather
1/26/2011	CTZ007				0	0	0	\$0	Winter Weather
6/1/2011	MIDDLESEX				75	0	0	\$0	Thunderstorms
6/8/2011	MIDDLESEX				56	0	0	\$0	Thunderstorms
6/8/2011	MIDDLESEX				88	0	0	\$0	Thunderstorms
6/9/2011	MIDDLESEX				52	0	0	\$766	Thunderstorms
7/8/2011	MIDDLESEX				0	0	0	\$0	Flood
7/8/2011	MIDDLESEX				0	0	0	\$255,173	Flood
7/8/2011	MIDDLESEX				52	0	0	\$5,103	Thunderstorms
7/22/2011	CTZ007				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ011				0	0	0	\$0	Extreme Heat
7/26/2011	MIDDLESEX				52	0	0	\$1,531	Thunderstorms
8/1/2011	MIDDLESEX				0	0	0	\$51,035	Thunderstorms
8/28/2011	CTZ011				0	0	0	\$0	Flood
8/28/2011	CTZ011				0	0	0	\$0	Hurricane
10/29/2011	CTZ007				0	0	0	\$0	Winter Weather
10/29/2011	CTZ007				0	0	0	\$0	Winter Weather
1/21/2012	CTZ011				0	0	0	\$0	Winter Weather
1/21/2012	CTZ007				0	0	0	\$0	Winter Weather
5/26/2012	MIDDLESEX				52	0	0	\$1,000	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
5/26/2012	MIDDLESEX				52	0	0	\$500	Thunderstorms
5/26/2012	MIDDLESEX				88	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				75	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				200	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				175	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				75	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				75	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				200	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				150	0	0	\$0	Thunderstorms
7/1/2012	MIDDLESEX				75	0	0	\$0	Thunderstorms
8/10/2012	MIDDLESEX				61	0	0	\$5,000	Thunderstorms
8/10/2012	MIDDLESEX				0	0	0	\$0	Flood
8/10/2012	MIDDLESEX				52	0	0	\$3,000	Thunderstorms
8/10/2012	MIDDLESEX				52	0	0	\$3,000	Thunderstorms
9/18/2012	MIDDLESEX				61	0	0	\$5,000	Thunderstorms
10/29/2012	CTZ007				50	0	0	\$200,000	Thunderstorms
11/7/2012	CTZ007				0	0	0	\$0	Winter Weather
12/29/2012	CTZ007				0	0	0	\$0	Winter Weather
12/29/2012	CTZ011				0	0	0	\$0	Winter Weather
10/24/1955	NEW HAVEN	0.5	200	2	0	0	0	\$21,417	Tornado
5/23/1957	NEW HAVEN	0	0		60	0	0	\$0	Thunderstorms
5/23/1957	NEW HAVEN	0	0		175	0	0	\$0	Thunderstorms
8/29/1959	NEW HAVEN	0.1	17		0	0	0	\$237	Tornado
7/3/1960	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
5/24/1962	NEW HAVEN	9.3	120	3	0	1	45	\$19,006,043	Tornado
6/18/1962	NEW HAVEN	0	0		150	0	0	\$0	Thunderstorms
6/18/1962	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/21/1962	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/5/1963	NEW HAVEN	0	0		100	0	0	\$0	Thunderstorms
5/17/1965	NEW HAVEN	0	0		100	0	0	\$0	Thunderstorms
5/17/1965	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/9/1968	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/9/1968	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/20/1968	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/17/1969	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/16/1969	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
6/8/1971	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/1/1971	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/19/1971	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
7/29/1971	NEW HAVEN	0	200	3	0	0	2	\$1,417,241	Tornado
9/18/1973	NEW HAVEN	0	117	2	0	0	0	\$0	Tornado
7/3/1974	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
7/15/1974	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
8/19/1976	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
5/20/1982	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/28/1982	NEW HAVEN	2.5	150	1	0	0	0	\$5,948	Tornado
8/17/1982	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/17/1982	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
6/15/1983	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/22/1983	NEW HAVEN	0	0		100	0	0	\$0	Thunderstorms
8/22/1983	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/22/1983	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/28/1983	NEW HAVEN	0	0		175	0	0	\$0	Thunderstorms
5/26/1984	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/31/1984	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
12/3/1984	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/10/1989	NEW HAVEN	3	100	2	0	0	50	\$46,288,911	Tornado
7/10/1989	NEW HAVEN	3	100	4	0	0	40	\$462,889,113	Tornado
6/12/1991	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/16/1991	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
6/16/1991	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/4/1992	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/4/1992	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/11/1992	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/11/1992	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
3/13/1993	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/13/1993	CTZ006	0	0		0	0	0	\$132,407	Thunderstorms
3/14/1993	CTZ006	0	0		0	0	0	\$13,241	Thunderstorms
5/11/1993	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
5/11/1993	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
5/11/1993	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
5/11/1993	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/16/1993	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/28/1993	NEW HAVEN	0	0		1	0	0	\$0	Thunderstorms
8/28/1993	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/12/1993	CTZ010	0	0		0	0	0	\$0	Not Included
10/12/1993	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
11/28/1993	CTZ010	0	0		0	0	0	\$397,220	Thunderstorms
12/4/1993	CTZ006	0	0		0	0	0	\$0	Not Included
12/4/1993	CTZ010	0	0		0	0	0	\$0	Not Included
12/26/1993	CTZ006	0	0		0	0	0	\$0	Thunderstorms
12/26/1993	CTZ010	0	0		0	0	0	\$0	Thunderstorms
1/7/1994	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/7/1994	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/8/1994	CTZ006	0	0		0	0	0	\$0	Not Included
1/8/1994	CTZ010	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ006	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ010	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ006	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ010	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ006	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ010	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/8/1994	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ006	0	0		0	0	0	\$0	Not Included
3/10/1994	CTZ010	0	0		0	0	0	\$0	Not Included
5/25/1994	NEW HAVEN	0	0		175	0	0	\$0	Thunderstorms
8/21/1994	NEW HAVEN	0	0		0	0	0	\$0	Flood
9/9/1994	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
9/9/1994	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
9/22/1994	CTZ006	0	0		0	0	0	\$0	Not Included
9/27/1994	NEW HAVEN	0	0		0	0	0	\$0	Not Included
11/1/1994	CTZ006	0	0		0	0	0	\$3,873	Thunderstorms
11/1/1994	CTZ006	0	0		0	0	0	\$38,730	Thunderstorms
11/2/1994	CTZ006	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	CTZ010	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ006	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ010	0	0		0	0	0	\$0	Thunderstorms
11/21/1994	CTZ006	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/23/1994	CTZ006	0	0		0	0	0	\$595,850	Thunderstorms
12/23/1994	CTZ010	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/12/1995	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/13/1995	CTZ006	0	0		0	0	0	\$0	Not Included
1/13/1995	CTZ010	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ006	0	0		0	0	0	\$0	Thunderstorms
2/5/1995	CTZ010	0	0		0	0	0	\$0	Thunderstorms
2/27/1995	CTZ006	0	0		0	1	0	\$0	Winter Weather
2/27/1995	CTZ010	0	0		0	1	0	\$0	Winter Weather
4/4/1995	NEW HAVEN	0	0		63	0	0	\$0	Thunderstorms
4/4/1995	NEW HAVEN	0	0		63	0	0	\$0	Thunderstorms
4/4/1995	NEW HAVEN	0	0		0	0	0	\$38	Thunderstorms
4/4/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ006	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ010	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ006	0	0		0	0	0	\$0	Not Included
5/29/1995	NEW HAVEN	2	75		0	0	0	\$15,065	Tornado
5/29/1995	NEW HAVEN	2	75	1	0	0	0	\$75,326	Tornado
5/29/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
5/29/1995	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
5/29/1995	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
7/11/1995	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
7/15/1995	CTZ006	0	0		0	0	0	\$0	Extreme Heat
7/15/1995	CTZ010	0	0		0	0	0	\$0	Extreme Heat
7/23/1995	NEW HAVEN	0.5	17	0	0	0	0	\$0	Tornado
7/28/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/29/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/29/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/2/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/2/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/5/1995	NEW HAVEN	0	0		0	0	0	\$0	Flood
10/14/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/21/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
10/28/1995	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
11/11/1995	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
11/14/1995	NEW HAVEN	0	0		0	0	0	\$0	Flood
12/19/1995	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ010	0	0		0	0	0	\$0	Winter Weather
12/20/1995	CTZ010	0	0		0	0	0	\$0	Flood
1/3/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/12/1996	NEW HAVEN	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ006	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ010	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ006	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ010	0	0		0	0	0	\$0	Flood
1/27/1996	CTZ006	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	CTZ010	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	CTZ006	0	0		0	0	0	\$0	Flood
1/27/1996	NEW HAVEN	0	0		0	0	0	\$0	Flood
2/3/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/3/1996	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ006	0	0		0	0	0	\$0	Thunderstorms
2/25/1996	CTZ010	0	0		0	0	0	\$0	Thunderstorms
3/7/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/19/1996	CTZ010	0	0		0	0	0	\$0	Flood
4/9/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ010	0	0		0	0	0	\$0	Winter Weather
4/16/1996	NEW HAVEN	0	0		0	0	0	\$0	Flood
4/16/1996	NEW HAVEN	0	0		0	0	0	\$0	Flood
4/16/1996	NEW HAVEN	0	0		0	0	0	\$2,194,962	Flood
5/11/1996	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
5/21/1996	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
5/21/1996	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
6/3/1996	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/3/1996	NEW HAVEN	0.5	100	1	0	0	0	\$2,926,616	Tornado
7/9/1996	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/23/1996	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/16/1996	NEW HAVEN	0	0		0	0	0	\$0	Not Included
10/8/1996	NEW HAVEN	0	0		0	0	0	\$0	Not Included
10/19/1996	CTZ010	0	0		0	0	0	\$0	Flood
10/19/1996	NEW HAVEN	0	0		0	0	0	\$0	Flood
10/19/1996	CTZ010	0	0		50	1	2	\$1,463,308	Thunderstorms
10/19/1996	CTZ006	0	0		0	0	0	\$0	Thunderstorms
11/26/1996	NEW HAVEN	0	0		0	0	0	\$0	Not Included
12/1/1996	NEW HAVEN	0	0		0	0	0	\$0	Not Included
12/6/1996	CTZ006	0	0		0	0	0	\$0	Flood
12/6/1996	CTZ010	0	0		0	0	0	\$0	Flood
12/7/1996	CTZ010	0	0		0	1	0	\$0	Flood
12/8/1996	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/13/1996	CTZ010	0	0		0	0	0	\$0	Flood
1/9/1997	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/6/1997	CTZ006	0	0		66	0	1	\$0	Thunderstorms
3/6/1997	CTZ010	0	0		66	0	1	\$0	Thunderstorms
3/31/1997	CTZ010	0	0		0	1	0	\$0	Flood
4/1/1997	CTZ006	0	0		0	0	0	\$0	Winter Weather
5/1/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
5/6/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
5/6/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/7/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/9/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/15/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/18/1997	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
7/18/1997	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
7/24/1997	NEW HAVEN	0	0		0	0	0	\$0	Not Included
8/3/1997	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/3/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/20/1997	CTZ010	0	0		0	0	0	\$0	Flood
8/20/1997	NEW HAVEN	0	0		0	0	0	\$0	Not Included
9/20/1997	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
11/1/1997	CTZ006	0	0		57	0	0	\$0	Thunderstorms
11/1/1997	CTZ010	0	0		57	0	0	\$0	Thunderstorms
11/7/1997	NEW HAVEN	0	0		0	0	0	\$0	Not Included
11/13/1997	CTZ006	0	0		0	0	0	\$0	Not Included
11/14/1997	CTZ010	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/29/1997	CTZ006	0	0		59	0	0	\$0	Thunderstorms
12/29/1997	CTZ010	0	0		59	0	0	\$0	Thunderstorms
12/29/1997	CTZ010	0	0		59	0	0	\$0	Thunderstorms
1/15/1998	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/23/1998	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/9/1998	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/9/1998	CTZ006	0	0		0	0	0	\$0	Flood
3/9/1998	CTZ010	0	0		0	0	0	\$0	Flood
5/9/1998	NEW HAVEN	0	0		0	0	0	\$0	Not Included
5/29/1998	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
5/31/1998	NEW HAVEN	0	0		88	0	0	\$0	Thunderstorms
6/13/1998	NEW HAVEN	0	0		0	0	0	\$0	Not Included
6/20/1998	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
6/30/1998	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
6/30/1998	NEW HAVEN	0	0		0	0	0	\$0	Flood
6/30/1998	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
6/30/1998	NEW HAVEN	0	0		60	0	0	\$0	Thunderstorms
6/30/1998	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
6/30/1998	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/1/1998	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/17/1998	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/20/1998	NEW HAVEN	0	0		56	0	0	\$0	Thunderstorms
8/11/1998	NEW HAVEN	0	0		61	0	2	\$0	Thunderstorms
8/17/1998	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/18/1998	NEW HAVEN	0	0		62	0	0	\$0	Thunderstorms
8/18/1998	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/25/1998	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/26/1998	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
8/26/1998	NEW HAVEN	0	0		0	0	0	\$126,769	Thunderstorms
9/7/1998	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
9/27/1998	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
11/11/1998	CTZ006	0	0		55	0	0	\$0	Thunderstorms
11/11/1998	CTZ010	0	0		55	0	0	\$0	Thunderstorms
1/3/1999	NEW HAVEN	0	0		0	0	0	\$0	Flood
1/3/1999	NEW HAVEN	0	0		0	0	0	\$0	Flood
1/3/1999	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/15/1999	NEW HAVEN	0	0		0	0	0	\$0	Flood
1/15/1999	NEW HAVEN	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/18/1999	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
1/18/1999	NEW HAVEN	0	0		0	0	1	\$0	Thunderstorms
1/24/1999	NEW HAVEN	0	0		0	0	0	\$0	Flood
2/2/1999	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/3/1999	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
3/15/1999	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/15/1999	CTZ010	0	0		0	0	0	\$0	Winter Weather
5/24/1999	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
7/4/1999	CTZ006	0	0		0	0	0	\$0	Extreme Heat
7/4/1999	CTZ010	0	0		0	0	0	\$0	Extreme Heat
7/24/1999	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/16/1999	NEW HAVEN	0	0		0	1	0	\$0	Flood
11/2/1999	CTZ006	0	0		56	0	0	\$0	Thunderstorms
11/2/1999	CTZ010	0	0		56	0	0	\$0	Thunderstorms
1/17/2000	CTZ006	0	0		0	0	0	\$0	Not Included
1/17/2000	CTZ010	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ006	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ010	0	0		0	0	0	\$0	Not Included
1/25/2000	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/18/2000	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/11/2000	NEW HAVEN	0	0		0	0	0	\$0	Not Included
4/21/2000	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
4/21/2000	NEW HAVEN	0	0		0	0	0	\$0	Flood
4/21/2000	NEW HAVEN	0	0		0	0	0	\$0	Flood
4/21/2000	NEW HAVEN	0	0		0	0	0	\$0	Flood
5/10/2000	NEW HAVEN	0	0		88	0	0	\$0	Thunderstorms
5/18/2000	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
5/18/2000	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/2/2000	NEW HAVEN	0	0		50	1	0	\$0	Thunderstorms
6/2/2000	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/6/2000	NEW HAVEN	0	0		0	0	0	\$0	Not Included
6/11/2000	NEW HAVEN	0	0		0	0	1	\$0	Thunderstorms
6/11/2000	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/11/2000	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
6/27/2000	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/27/2000	NEW HAVEN	0	0		0	0	2	\$0	Thunderstorms
6/27/2000	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/15/2000	NEW HAVEN	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/26/2000	NEW HAVEN	0	0		0	0	0	\$0	Not Included
8/11/2000	NEW HAVEN	0	0		0	0	0	\$0	Flood
11/10/2000	NEW HAVEN	0	0		0	0	0	\$0	Not Included
12/12/2000	CTZ006	0	0		54	0	0	\$0	Thunderstorms
12/12/2000	CTZ010	0	0		54	0	0	\$0	Thunderstorms
12/30/2000	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/30/2000	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/9/2001	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/22/2001	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/22/2001	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/30/2001	NEW HAVEN	0	0		0	0	0	\$0	Flood
5/21/2001	CTZ010	0	0		0	0	0	\$0	Thunderstorms
6/11/2001	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/17/2001	NEW HAVEN	0	0		0	0	0	\$0	Flood
6/30/2001	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
7/1/2001	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
8/8/2001	CTZ006	0	0		0	0	0	\$0	Extreme Heat
8/8/2001	CTZ010	0	0		0	0	0	\$0	Extreme Heat
8/10/2001	NEW HAVEN	0	0		0	0	1	\$0	Thunderstorms
8/10/2001	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/10/2001	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/28/2001	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
8/28/2001	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
9/21/2001	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
4/1/2002	CTZ006	0	0		0	0	0	\$0	Drought
4/1/2002	CTZ010	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ006	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ010	0	0		0	0	0	\$0	Drought
5/31/2002	NEW HAVEN	0.2	10	0	0	0	0	\$0	Tornado
5/31/2002	NEW HAVEN	0	0		0	0	0	\$0	Tornado
5/31/2002	NEW HAVEN	0	0		61	0	0	\$0	Thunderstorms
5/31/2002	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/1/2002	CTZ006	0	0		0	0	0	\$0	Drought
6/1/2002	CTZ010	0	0		0	0	0	\$0	Drought
6/16/2002	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
6/16/2002	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
6/16/2002	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
6/26/2002	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
7/2/2002	CTZ006	0	0		0	1	0	\$0	Extreme Heat
7/2/2002	CTZ010	0	0		0	1	0	\$0	Extreme Heat
7/19/2002	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/2/2002	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/2/2002	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/1/2002	NEW HAVEN	0	0		0	0	0	\$0	Not Included
9/11/2002	CTZ006	0	0		0	1	0	\$0	Thunderstorms
9/11/2002	CTZ010	0	0		0	1	0	\$0	Thunderstorms
9/26/2002	NEW HAVEN	0	0		0	0	0	\$0	Not Included
10/11/2002	NEW HAVEN	0	0		0	0	0	\$0	Not Included
10/19/2002	NEW HAVEN	0	0		0	2	0	\$0	Flood
11/27/2002	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ010	0	0		0	0	0	\$0	Winter Weather
12/25/2002	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/3/2003	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ010	0	0		0	0	0	\$0	Winter Weather
5/28/2003	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
6/30/2003	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
8/8/2003	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/13/2003	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/16/2003	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/16/2003	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/17/2003	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/28/2003	NEW HAVEN	0	0		0	0	0	\$0	Not Included
9/28/2003	CTZ006	0	0		0	0	0	\$0	Flood
10/27/2003	NEW HAVEN	0	0		60	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/27/2003	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
10/29/2003	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
11/13/2003	CTZ006	0	0		65	0	0	\$0	Thunderstorms
12/5/2003	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/5/2003	CTZ010	0	0		0	0	0	\$0	Winter Weather
12/14/2003	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/17/2003	CTZ006	0	0		0	0	0	\$0	Flood
1/15/2004	CTZ006	0	0		0	0	0	\$0	Not Included
1/15/2004	CTZ010	0	0		0	0	0	\$0	Not Included
1/18/2004	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ010	0	0		0	0	0	\$0	Winter Weather
7/2/2004	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
8/20/2004	NEW HAVEN	0	0		175	0	0	\$0	Thunderstorms
8/21/2004	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/21/2004	NEW HAVEN	0	0		0	0	0	\$0	Thunderstorms
8/21/2004	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/21/2004	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/21/2004	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/18/2004	NEW HAVEN	0	0		0	0	0	\$0	Flood
1/6/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/25/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/12/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/12/2005	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/24/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/28/2005	NEW HAVEN	0	0		0	0	0	\$0	Not Included
3/29/2005	CTZ006	0	0		0	0	0	\$0	Flood
4/2/2005	NEW HAVEN	0	0		0	0	0	\$0	Not Included
5/31/2005	NEW HAVEN	0	0		0	0	1	\$0	Thunderstorms
7/27/2005	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/17/2005	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
9/17/2005	NEW HAVEN	0	0		0	0	0	\$0	Flood
9/29/2005	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
10/8/2005	CTZ006	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/8/2005	CTZ010	0	0		0	0	0	\$0	Flood
10/11/2005	NEW HAVEN	0	0		0	0	0	\$0	Not Included
10/14/2005	CTZ006	0	0		0	0	0	\$0	Flood
10/16/2005	CTZ006	0	0		33	0	0	\$1,176	Thunderstorms
10/16/2005	CTZ010	0	0		33	0	0	\$1,176	Thunderstorms
12/9/2005	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/9/2005	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/3/2006	CTZ006	0	0		0	0	0	\$0	Winter Weather
1/18/2006	CTZ006	0	0		66	0	0	\$0	Thunderstorms
2/12/2006	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/12/2006	CTZ010	0	0		0	0	0	\$0	Winter Weather
2/17/2006	CTZ006	0	0		54	0	0	\$0	Thunderstorms
2/17/2006	CTZ010	0	0		54	0	0	\$0	Thunderstorms
3/2/2006	CTZ006	0	0		0	0	0	\$0	Winter Weather
3/2/2006	CTZ010	0	0		0	0	0	\$0	Winter Weather
4/23/2006	NEW HAVEN	0	0		0	1	0	\$0	Flood
5/13/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
5/13/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
6/2/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/4/2006	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/4/2006	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/18/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/18/2006	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
7/28/2006	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/28/2006	NEW HAVEN	0	0		52	0	0	\$0	Thunderstorms
8/1/2006	CTZ006	0	0		0	0	0	\$0	Extreme Heat
8/1/2006	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/1/2006	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
8/3/2006	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
8/27/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
9/2/2006	NEW HAVEN	0	0		0	0	0	\$0	Not Included
10/28/2006	CTZ010	0	0		57	0	0	\$0	Thunderstorms
10/28/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
10/28/2006	NEW HAVEN	0	0		0	0	0	\$0	Flood
12/1/2006	CTZ010	0	0		50	0	0	\$0	Thunderstorms
2/14/2007	CTZ010	0	0		0	0	0	\$0	Winter Weather
3/2/2007	NEW HAVEN	0	0		0	0	0	\$0	Flood
3/16/2007	CTZ006	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/16/2007	CTZ010	0	0		0	0	0	\$0	Winter Weather
4/15/2007	NEW HAVEN	0	0		0	0	0	\$0	Flood
4/15/2007	CTZ010	0	0		0	0	0	\$0	Flood
5/16/2007	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
5/16/2007	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
6/1/2007	NEW HAVEN	0	0		100	0	0	\$0	Thunderstorms
6/5/2007	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
6/5/2007	NEW HAVEN	0	0		175	0	0	\$0	Thunderstorms
6/5/2007	NEW HAVEN	0	0		0	0	0	\$0	Flood
6/5/2007	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
6/16/2007	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/19/2007	NEW HAVEN	0	0		55	0	0	\$0	Thunderstorms
7/19/2007	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/28/2007	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/28/2007	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
7/28/2007	NEW HAVEN	0	0		0	0	0	\$0	Flood
7/28/2007	NEW HAVEN	0	0		50	0	0	\$0	Thunderstorms
12/13/2007	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/16/2007	CTZ010	0	0		0	0	0	\$0	Flood
1/9/2008	CTZ006	0	0		45	0	0	\$5,332	Thunderstorms
2/13/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
2/13/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
2/22/2008	CTZ006	0	0		0	0	0	\$0	Winter Weather
2/22/2008	CTZ010	0	0		0	0	0	\$0	Winter Weather
5/27/2008	NEW HAVEN	0	0		0	0	0	\$639,823	Flood
6/8/2008	NEW HAVEN	0	0		0	1	4	\$0	Thunderstorms
6/8/2008	NEW HAVEN	0	0		52	0	0	\$1,066	Thunderstorms
6/8/2008	NEW HAVEN	0	0		52	0	0	\$2,666	Thunderstorms
6/8/2008	NEW HAVEN	0	0		61	0	0	\$5,332	Thunderstorms
6/8/2008	NEW HAVEN	0	0		52	0	0	\$1,066	Thunderstorms
6/8/2008	NEW HAVEN	0	0		88	0	0	\$0	Thunderstorms
6/8/2008	NEW HAVEN	0	0		52	0	0	\$1,066	Thunderstorms
6/8/2008	NEW HAVEN	0	0		61	0	0	\$10,664	Thunderstorms
6/8/2008	NEW HAVEN	0	0		70	0	0	\$31,991	Thunderstorms
6/14/2008	NEW HAVEN	0	0		52	0	0	\$1,066	Thunderstorms
7/1/2008	NEW HAVEN	0	0		75	0	0	\$0	Thunderstorms
7/1/2008	NEW HAVEN	0	0		100	0	0	\$0	Thunderstorms
7/19/2008	NEW HAVEN	0	0		61	0	0	\$2,133	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/19/2008	NEW HAVEN	0	0		70	0	0	\$2,133	Thunderstorms
7/19/2008	NEW HAVEN	0	0		61	0	0	\$3,199	Thunderstorms
7/31/2008	NEW HAVEN	0	0		52	0	0	\$1,066	Thunderstorms
8/2/2008	NEW HAVEN	0	0		52	0	0	\$533	Thunderstorms
8/2/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/2/2008	NEW HAVEN	0	0		0	0	0	\$15,996	Thunderstorms
8/7/2008	NEW HAVEN	0	0		61	0	0	\$7,998	Thunderstorms
8/7/2008	NEW HAVEN	0	0		52	0	0	\$2,666	Thunderstorms
8/7/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/7/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
8/7/2008	NEW HAVEN	0	0		65	0	0	\$37,323	Thunderstorms
8/8/2008	NEW HAVEN	0	0		100	0	0	\$0	Thunderstorms
8/15/2008	NEW HAVEN	0	0		0	0	0	\$10,664	Thunderstorms
9/6/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
9/6/2008	CTZ006	0	0		0	0	0	\$533	Hurricane
9/6/2008	CTZ010	0	0		0	0	0	\$533	Hurricane
9/7/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
12/12/2008	NEW HAVEN	0	0		0	0	0	\$0	Flood
12/19/2008	CTZ006	0	0		0	0	0	\$0	Winter Weather
12/19/2008	CTZ010	0	0		0	0	0	\$0	Winter Weather
1/6/2009	CTZ006				0	1	3	\$0	Winter Weather
2/12/2009	CTZ010				50	0	0	\$0	Thunderstorms
3/1/2009	CTZ006				0	0	0	\$0	Winter Weather
3/1/2009	CTZ010				0	0	0	\$0	Winter Weather
5/24/2009	NEW HAVEN				52	0	0	\$4,281	Thunderstorms
5/24/2009	NEW HAVEN				52	0	0	\$4,281	Thunderstorms
5/24/2009	NEW HAVEN				52	0	0	\$4,281	Thunderstorms
5/24/2009	NEW HAVEN				52	0	0	\$535	Thunderstorms
5/24/2009	NEW HAVEN				52	0	0	\$1,070	Thunderstorms
5/24/2009	NEW HAVEN				52	0	0	\$2,140	Thunderstorms
5/24/2009	NEW HAVEN				52	0	0	\$4,281	Thunderstorms
5/24/2009	NEW HAVEN				75	0	0	\$0	Thunderstorms
5/24/2009	NEW HAVEN				88	0	0	\$0	Thunderstorms
6/26/2009	NEW HAVEN				0	0	0	\$5,351	Thunderstorms
6/26/2009	NEW HAVEN				52	0	0	\$1,070	Thunderstorms
6/26/2009	NEW HAVEN				52	0	0	\$1,605	Thunderstorms
6/26/2009	NEW HAVEN				52	0	0	\$1,070	Thunderstorms
6/26/2009	NEW HAVEN				61	0	0	\$1,070	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/26/2009	NEW HAVEN				75	0	0	\$0	Thunderstorms
6/26/2009	NEW HAVEN				88	0	0	\$0	Thunderstorms
7/2/2009	NEW HAVEN				0	0	0	\$0	Flood
7/2/2009	NEW HAVEN				0	0	0	\$0	Flood
7/7/2009	NEW HAVEN				0	0	0	\$8,561	Thunderstorms
7/7/2009	NEW HAVEN				52	0	0	\$10,702	Thunderstorms
7/7/2009	NEW HAVEN				88	0	0	\$0	Thunderstorms
7/7/2009	NEW HAVEN				88	0	0	\$0	Thunderstorms
7/7/2009	NEW HAVEN				75	0	0	\$0	Thunderstorms
7/7/2009	NEW HAVEN				88	0	0	\$0	Thunderstorms
7/16/2009	NEW HAVEN				61	0	0	\$8,026	Thunderstorms
7/16/2009	NEW HAVEN				61	0	0	\$8,026	Thunderstorms
7/16/2009	NEW HAVEN				0	0	0	\$0	Flood
7/31/2009	NEW HAVEN	3	100	1	0	0	0	\$10,702	Tornado
7/31/2009	NEW HAVEN				83	0	0	\$10,702	Thunderstorms
7/31/2009	NEW HAVEN				70	0	0	\$16,053	Thunderstorms
7/31/2009	NEW HAVEN				52	0	0	\$535	Thunderstorms
7/31/2009	NEW HAVEN				61	0	0	\$16,053	Thunderstorms
7/31/2009	NEW HAVEN				61	0	0	\$8,026	Thunderstorms
7/31/2009	NEW HAVEN				50	0	0	\$0	Thunderstorms
7/31/2009	NEW HAVEN				61	0	0	\$13,377	Thunderstorms
8/2/2009	NEW HAVEN				0	0	0	\$16,053	Thunderstorms
8/12/2009	NEW HAVEN				0	0	0	\$0	Flood
10/18/2009	CTZ010				0	0	0	\$0	Flood
11/13/2009	NEW HAVEN				0	0	0	\$5,351	Not Included
11/20/2009	NEW HAVEN				0	0	1	\$0	Thunderstorms
11/28/2009	CTZ006				44	0	1	\$0	Thunderstorms
12/9/2009	CTZ006				0	0	0	\$0	Winter Weather
12/19/2009	CTZ010				0	0	0	\$0	Winter Weather
12/19/2009	CTZ006				0	0	0	\$0	Winter Weather
12/29/2009	CTZ006				49	0	0	\$4,281	Thunderstorms
1/25/2010	CTZ006				47	0	0	\$5,265	Thunderstorms
1/25/2010	CTZ006				47	0	0	\$52,645	Thunderstorms
1/28/2010	CTZ010				36	0	0	\$52,645	Thunderstorms
2/15/2010	CTZ006				0	0	0	\$0	Winter Weather
3/13/2010	CTZ006				50	0	0	\$52,645	Thunderstorms
3/13/2010	CTZ010				0	0	0	\$0	Flood
3/30/2010	NEW HAVEN				0	0	0	\$105,291	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/30/2010	NEW HAVEN				0	0	0	\$10,529	Flood
4/22/2010	NEW HAVEN				50	0	0	\$3,159	Thunderstorms
4/22/2010	NEW HAVEN				50	0	0	\$4,212	Thunderstorms
4/22/2010	NEW HAVEN				100	0	0	\$0	Thunderstorms
4/29/2010	CTZ006				40	0	0	\$21,058	Thunderstorms
6/24/2010	NEW HAVEN				52	0	0	\$15,794	Thunderstorms
6/24/2010	NEW HAVEN				0	0	0	\$0	Tornado
6/24/2010	NEW HAVEN				70	0	0	\$52,645	Thunderstorms
6/24/2010	NEW HAVEN				52	0	0	\$1,053	Thunderstorms
6/24/2010	NEW HAVEN				61	0	0	\$3,159	Thunderstorms
7/21/2010	NEW HAVEN				0	0	0	\$0	Thunderstorms
7/21/2010	NEW HAVEN				70	0	0	\$8,423	Thunderstorms
8/23/2010	CTZ010				43	0	0	\$10,529	Thunderstorms
9/16/2010	NEW HAVEN				52	0	0	\$526	Thunderstorms
9/30/2010	CTZ006				40	0	0	\$526,454	Thunderstorms
10/1/2010	NEW HAVEN				0	0	0	\$0	Flood
12/1/2010	CTZ006				50	0	0	\$0	Thunderstorms
12/26/2010	CTZ010				0	0	0	\$0	Winter Weather
12/26/2010	CTZ006				0	0	0	\$0	Winter Weather
1/7/2011	CTZ006				0	0	0	\$0	Winter Weather
1/7/2011	CTZ010				0	0	0	\$0	Winter Weather
1/11/2011	CTZ010				0	0	0	\$0	Winter Weather
1/11/2011	CTZ006				0	0	0	\$0	Winter Weather
1/18/2011	CTZ006				0	0	0	\$0	Winter Weather
1/20/2011	CTZ006				0	0	0	\$0	Winter Weather
1/26/2011	CTZ010				0	0	0	\$0	Winter Weather
2/2/2011	CTZ006				0	0	0	\$125,545	Winter Weather
2/7/2011	CTZ010				0	0	0	\$0	Winter Weather
2/7/2011	CTZ006				0	0	0	\$0	Winter Weather
3/7/2011	NEW HAVEN				0	0	0	\$0	Flood
6/9/2011	NEW HAVEN				0	0	1	\$0	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				52	0	0	\$1,021	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/9/2011	NEW HAVEN				61	0	0	\$12,759	Thunderstorms
6/9/2011	NEW HAVEN				52	0	0	\$1,021	Thunderstorms
6/9/2011	NEW HAVEN				50	0	0	\$0	Thunderstorms
6/9/2011	NEW HAVEN				53	0	0	\$3,062	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				0	0	0	\$3,062	Thunderstorms
6/9/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
6/9/2011	NEW HAVEN				0	0	1	\$0	Thunderstorms
6/17/2011	NEW HAVEN				75	0	0	\$0	Thunderstorms
6/23/2011	NEW HAVEN				0	0	0	\$0	Flood
6/23/2011	NEW HAVEN				0	0	0	\$0	Flood
7/8/2011	NEW HAVEN				0	0	0	\$1,020,690	Flood
7/8/2011	NEW HAVEN				61	0	0	\$15,310	Thunderstorms
7/8/2011	NEW HAVEN				56	0	0	\$3,572	Thunderstorms
7/22/2011	CTZ006				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ010				0	0	0	\$0	Extreme Heat
7/26/2011	NEW HAVEN				52	0	0	\$1,531	Thunderstorms
8/1/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
8/1/2011	NEW HAVEN				61	0	0	\$15,310	Thunderstorms
8/1/2011	NEW HAVEN				0	0	0	\$10,207	Thunderstorms
8/1/2011	NEW HAVEN				52	0	0	\$3,062	Thunderstorms
8/1/2011	NEW HAVEN				52	0	0	\$3,062	Thunderstorms
8/1/2011	NEW HAVEN				52	0	0	\$2,041	Thunderstorms
8/1/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
8/1/2011	NEW HAVEN				61	0	0	\$7,655	Thunderstorms
8/1/2011	NEW HAVEN				0	0	0	\$0	Flood
8/1/2011	NEW HAVEN				88	0	0	\$0	Thunderstorms
8/1/2011	NEW HAVEN				100	0	0	\$0	Thunderstorms
8/1/2011	NEW HAVEN				100	0	0	\$0	Thunderstorms
8/1/2011	NEW HAVEN				88	0	0	\$0	Thunderstorms
8/1/2011	NEW HAVEN				100	0	0	\$0	Thunderstorms
8/1/2011	NEW HAVEN				100	0	0	\$0	Thunderstorms
8/14/2011	NEW HAVEN				0	0	0	\$0	Flood
8/15/2011	NEW HAVEN				0	0	0	\$0	Flood
8/15/2011	NEW HAVEN				0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/21/2011	NEW HAVEN				52	0	0	\$1,531	Thunderstorms
8/28/2011	CTZ010				0	0	0	\$0	Flood
8/28/2011	NEW HAVEN				0	0	0	\$0	Flood
8/28/2011	CTZ006				0	0	0	\$0	Hurricane
8/28/2011	CTZ010				0	0	0	\$0	Hurricane
10/29/2011	CTZ006				0	0	0	\$0	Winter Weather
10/29/2011	CTZ006				0	0	0	\$0	Winter Weather
12/27/2011	CTZ010				53	0	0	\$0	Thunderstorms
1/21/2012	CTZ010				0	0	0	\$0	Winter Weather
1/21/2012	CTZ006				0	0	0	\$0	Winter Weather
6/4/2012	CTZ010				0	0	0	\$0	Flood
6/22/2012	NEW HAVEN				52	0	0	\$1,500	Thunderstorms
7/1/2012	NEW HAVEN				200	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				75	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				100	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				100	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				175	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				75	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				100	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				125	0	0	\$0	Thunderstorms
7/1/2012	NEW HAVEN				175	0	0	\$5,000	Thunderstorms
7/18/2012	CTZ006				0	0	0	\$0	Extreme Heat
7/18/2012	NEW HAVEN				100	0	0	\$0	Thunderstorms
7/24/2012	NEW HAVEN				52	0	0	\$5,000	Thunderstorms
7/24/2012	NEW HAVEN				61	0	0	\$3,000	Thunderstorms
7/26/2012	NEW HAVEN				52	0	0	\$1,000	Thunderstorms
7/26/2012	NEW HAVEN				52	0	0	\$1,500	Thunderstorms
7/26/2012	NEW HAVEN				52	0	0	\$1,500	Thunderstorms
8/1/2012	NEW HAVEN				0	0	0	\$0	Flood
8/1/2012	NEW HAVEN				0	0	0	\$0	Flood
8/10/2012	NEW HAVEN				0	0	0	\$0	Flood
8/10/2012	NEW HAVEN				50	0	0	\$0	Thunderstorms
8/10/2012	NEW HAVEN				52	0	0	\$0	Thunderstorms
8/10/2012	NEW HAVEN				61	0	0	\$10,000	Thunderstorms
9/8/2012	NEW HAVEN				52	0	0	\$1,500	Thunderstorms
9/18/2012	NEW HAVEN				0	0	0	\$0	Flood
9/18/2012	CTZ006				43	0	0	\$10,000	Thunderstorms
9/28/2012	NEW HAVEN				0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
9/28/2012	NEW HAVEN				0	0	0	\$0	Flood
9/28/2012	NEW HAVEN				0	0	0	\$0	Flood
9/28/2012	NEW HAVEN				0	0	0	\$0	Flood
11/7/2012	CTZ010				0	0	0	\$0	Winter Weather
11/7/2012	CTZ006				0	0	0	\$0	Winter Weather
12/29/2012	CTZ006				0	0	0	\$0	Winter Weather
12/29/2012	CTZ010				0	0	0	\$0	Winter Weather
7/5/1963	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
5/29/1969	NEW LONDON	0	0		275	0	0	\$0	Thunderstorms
5/29/1969	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
6/8/1971	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
7/5/1974	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
7/5/1974	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
3/13/1976	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
11/17/1977	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
6/13/1984	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
7/25/1987	NEW LONDON	0	0		60	0	0	\$0	Thunderstorms
6/26/1988	NEW LONDON	0	0		225	0	0	\$0	Thunderstorms
10/14/1989	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
10/18/1990	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
11/11/1991	NEW LONDON	0	0		175	0	0	\$0	Thunderstorms
11/11/1991	NEW LONDON	0	0		175	0	0	\$0	Thunderstorms
8/11/1992	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/11/1992	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/11/1992	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
8/11/1992	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
4/1/1993	NEW LONDON	0	0		0	0	1	\$0	Thunderstorms
4/1/1993	NEW LONDON	0	0		0	0	0	\$0	Flood
4/5/1993	NEW LONDON	0	0		0	0	0	\$0	Flood
5/11/1993	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
8/28/1993	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
11/28/1993	CTZ008	0	0		0	0	0	\$0	Not Included
12/4/1993	CTZ008	0	0		0	0	0	\$0	Not Included
12/4/1993	CTZ012	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/26/1993	CTZ008	0	0		0	0	0	\$0	Thunderstorms
12/26/1993	CTZ012	0	0		0	0	0	\$0	Thunderstorms
1/3/1994	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/3/1994	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/7/1994	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/7/1994	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/8/1994	CTZ008	0	0		0	0	0	\$0	Not Included
1/8/1994	CTZ012	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ008	0	0		0	0	0	\$0	Not Included
1/15/1994	CTZ012	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ008	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ012	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ008	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ012	0	0		0	0	0	\$0	Not Included
1/28/1994	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
1/30/1994	NEW LONDON	0	0		0	0	0	\$0	Flood
1/30/1994	NEW LONDON	0	0		0	0	0	\$0	Flood
2/8/1994	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/8/1994	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ012	0	0		0	0	0	\$0	Winter Weather
3/3/1994	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ008	0	0		0	0	0	\$0	Not Included
3/10/1994	CTZ012	0	0		0	0	0	\$0	Not Included
5/6/1994	NEW LONDON	0	0		0	0	0	\$775	Thunderstorms
5/25/1994	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
8/13/1994	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
9/22/1994	CTZ008	0	0		0	0	0	\$0	Not Included
11/2/1994	CTZ008	0	0		0	0	0	\$0	Thunderstorms
11/2/1994	CTZ012	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ008	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ012	0	0		0	0	0	\$0	Thunderstorms
12/23/1994	CTZ008	0	0		0	0	0	\$595,850	Thunderstorms
12/23/1994	CTZ012	0	0		0	0	0	\$595,850	Thunderstorms
12/24/1994	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
1/12/1995	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/12/1995	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/13/1995	CTZ008	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/13/1995	CTZ012	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/4/1995	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ008	0	0		0	0	0	\$0	Thunderstorms
2/5/1995	CTZ012	0	0		0	0	0	\$0	Thunderstorms
2/27/1995	CTZ008	0	0		0	1	0	\$0	Winter Weather
4/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ008	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ012	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ008	0	0		0	0	0	\$0	Not Included
5/29/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
6/20/1995	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
6/20/1995	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
6/20/1995	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms
6/20/1995	NEW LONDON	0	0		200	0	0	\$0	Thunderstorms
7/15/1995	CTZ008	0	0		0	0	0	\$0	Extreme Heat
7/15/1995	CTZ012	0	0		0	0	0	\$0	Extreme Heat
7/27/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		0	0	1	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		175	0	0	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
8/4/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
11/11/1995	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
12/19/1995	CTZ008	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ012	0	0		0	0	0	\$0	Winter Weather
12/20/1995	CTZ012	0	0		0	0	0	\$0	Flood
1/3/1996	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/12/1996	NEW LONDON	0	0		0	0	0	\$0	Flood
1/19/1996	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ008	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ012	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/19/1996	CTZ012	0	0		0	0	0	\$0	Thunderstorms
1/19/1996	CTZ008	0	0		0	0	0	\$0	Flood
1/19/1996	CTZ012	0	0		0	0	0	\$0	Flood
1/27/1996	CTZ008	0	0		0	0	0	\$0	Thunderstorms
1/27/1996	CTZ012	0	0		0	0	0	\$0	Thunderstorms
2/3/1996	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/3/1996	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ008	0	0		0	0	0	\$0	Thunderstorms
2/25/1996	CTZ012	0	0		0	0	0	\$0	Thunderstorms
3/2/1996	CTZ008	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ008	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ012	0	0		0	0	0	\$0	Winter Weather
4/16/1996	NEW LONDON	0	0		0	0	0	\$0	Flood
4/16/1996	NEW LONDON	0	0		0	0	0	\$0	Flood
5/21/1996	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
5/21/1996	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
7/9/1996	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
9/16/1996	NEW LONDON	0	0		0	0	0	\$0	Not Included
10/8/1996	NEW LONDON	0	0		0	0	0	\$0	Not Included
10/19/1996	NEW LONDON	0	0		0	0	0	\$0	Not Included
10/19/1996	CTZ008	0	0		0	0	0	\$0	Thunderstorms
10/19/1996	CTZ012	0	0		0	0	0	\$0	Thunderstorms
11/26/1996	NEW LONDON	0	0		0	0	0	\$0	Not Included
12/1/1996	NEW LONDON	0	0		0	0	0	\$0	Not Included
12/6/1996	CTZ008	0	0		0	0	0	\$0	Flood
12/6/1996	CTZ012	0	0		0	0	0	\$0	Flood
12/7/1996	CTZ008	0	0		0	0	1	\$0	Flood
12/7/1996	CTZ012	0	0		0	0	1	\$0	Flood
3/6/1997	CTZ008	0	0		66	0	1	\$0	Thunderstorms
3/6/1997	CTZ012	0	0		66	0	1	\$0	Thunderstorms
3/31/1997	CTZ012	0	0		0	1	0	\$0	Flood
4/1/1997	CTZ008	0	0		0	0	0	\$0	Winter Weather
5/1/1997	NEW LONDON	0	0		175	0	0	\$0	Thunderstorms
6/19/1997	NEW LONDON	0	0		0	1	0	\$0	Thunderstorms
6/26/1997	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
7/24/1997	NEW LONDON	0	0		0	0	0	\$0	Not Included
8/4/1997	NEW LONDON	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/9/1997	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
8/9/1997	NEW LONDON	0	0		88	0	0	\$0	Thunderstorms
8/9/1997	NEW LONDON	0	0		0	0	1	\$0	Thunderstorms
8/9/1997	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
11/1/1997	CTZ012	0	0		57	0	0	\$0	Thunderstorms
11/7/1997	NEW LONDON	0	0		0	0	0	\$0	Not Included
12/29/1997	CTZ012	0	0		59	0	0	\$0	Thunderstorms
1/24/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
3/9/1998	CTZ008	0	0		0	0	0	\$0	Flood
3/9/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
5/9/1998	NEW LONDON	0	0		0	0	0	\$0	Not Included
6/13/1998	NEW LONDON	0	0		0	0	0	\$0	Not Included
6/13/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
6/18/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
6/19/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
6/19/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
6/20/1998	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
6/20/1998	NEW LONDON	0	0		150	0	0	\$0	Thunderstorms
6/30/1998	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
6/30/1998	NEW LONDON	0	0		125	0	0	\$0	Thunderstorms
6/30/1998	NEW LONDON	0.1	17	1	66	0	0	\$0	Tornado
6/30/1998	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms
6/30/1998	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
8/17/1998	NEW LONDON	0	0		0	0	0	\$0	Flood
9/27/1998	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
11/11/1998	CTZ008	0	0		55	0	0	\$0	Thunderstorms
11/11/1998	CTZ012	0	0		55	0	0	\$0	Thunderstorms
1/3/1999	NEW LONDON	0	0		0	0	0	\$0	Flood
1/15/1999	NEW LONDON	0	0		0	0	0	\$0	Flood
2/2/1999	NEW LONDON	0	0		0	0	0	\$0	Not Included
2/25/1999	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/25/1999	CTZ012	0	0		0	0	0	\$0	Winter Weather
3/15/1999	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/15/1999	CTZ012	0	0		0	0	0	\$0	Winter Weather
7/4/1999	CTZ008	0	0		0	0	0	\$0	Extreme Heat
7/4/1999	CTZ012	0	0		0	0	0	\$0	Extreme Heat
7/18/1999	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
7/18/1999	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/19/1999	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
8/5/1999	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
8/5/1999	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
8/26/1999	NEW LONDON	0	0		0	0	0	\$0	Flood
9/16/1999	NEW LONDON	0	0		0	0	0	\$0	Not Included
1/17/2000	CTZ008	0	0		0	0	0	\$0	Not Included
1/17/2000	CTZ012	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ008	0	0		0	0	0	\$0	Not Included
1/21/2000	CTZ012	0	0		0	0	0	\$0	Not Included
2/18/2000	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/11/2000	NEW LONDON	0	0		0	0	0	\$0	Not Included
5/10/2000	NEW LONDON	0	0		88	0	0	\$0	Thunderstorms
6/2/2000	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms
6/2/2000	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
6/6/2000	NEW LONDON	0	0		0	0	0	\$0	Not Included
6/11/2000	NEW LONDON	0	0		88	0	0	\$0	Thunderstorms
6/11/2000	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
12/12/2000	CTZ008	0	0		54	0	0	\$0	Thunderstorms
12/12/2000	CTZ012	0	0		54	0	0	\$0	Thunderstorms
12/17/2000	CTZ012	0	0		60	0	0	\$0	Thunderstorms
1/21/2001	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/21/2001	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/22/2001	CTZ008	0	0		0	0	0	\$0	Flood
3/22/2001	CTZ012	0	0		0	0	0	\$0	Flood
3/22/2001	NEW LONDON	0	0		0	0	0	\$0	Flood
3/30/2001	NEW LONDON	0	0		0	0	0	\$0	Flood
3/30/2001	CTZ008	0	0		0	0	0	\$0	Flood
3/30/2001	CTZ012	0	0		0	0	0	\$0	Flood
5/21/2001	CTZ012	0	0		0	0	0	\$0	Thunderstorms
6/11/2001	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
6/17/2001	CTZ012	0	0		0	0	0	\$0	Flood
6/17/2001	NEW LONDON	0	0		0	0	0	\$0	Flood
7/1/2001	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms
8/8/2001	CTZ008	0	0		0	0	0	\$0	Extreme Heat
8/20/2001	NEW LONDON	0	0		0	0	0	\$0	Flood
9/28/2001	NEW LONDON	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
4/1/2002	CTZ008	0	0		0	0	0	\$0	Drought
4/1/2002	CTZ012	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ008	0	0		0	0	0	\$0	Drought
5/1/2002	CTZ012	0	0		0	0	0	\$0	Drought
5/31/2002	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
6/1/2002	CTZ008	0	0		0	0	0	\$0	Drought
6/1/2002	CTZ012	0	0		0	0	0	\$0	Drought
6/6/2002	NEW LONDON	0	0		0	0	0	\$0	Thunderstorms
6/6/2002	NEW LONDON	0	0		0	0	0	\$12,762	Thunderstorms
6/16/2002	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
6/16/2002	NEW LONDON	0.1	50	1	0	0	0	\$0	Tornado
7/2/2002	CTZ008	0	0		0	1	0	\$0	Extreme Heat
7/19/2002	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
9/11/2002	CTZ008	0	0		0	1	0	\$0	Thunderstorms
9/11/2002	CTZ012	0	0		0	1	0	\$0	Thunderstorms
9/26/2002	NEW LONDON	0	0		0	0	0	\$0	Not Included
11/27/2002	CTZ008	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ008	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ012	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ012	0	0		0	0	0	\$0	Winter Weather
8/8/2003	NEW LONDON	0	0		0	0	0	\$0	Flood
12/5/2003	CTZ008	0	0		0	0	0	\$0	Winter Weather
12/5/2003	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/15/2004	CTZ008	0	0		0	0	0	\$0	Not Included
1/15/2004	CTZ012	0	0		0	0	0	\$0	Not Included
1/28/2004	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/28/2004	CTZ012	0	0		0	0	0	\$0	Winter Weather
4/13/2004	NEW LONDON	0	0		0	0	0	\$0	Flood
7/2/2004	NEW LONDON	0	0		88	0	0	\$0	Thunderstorms
7/2/2004	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
7/2/2004	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
8/21/2004	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
8/21/2004	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/21/2004	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
1/6/2005	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/6/2005	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ008	0	0		0	0	0	\$0	Winter Weather
1/22/2005	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/25/2005	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/25/2005	CTZ012	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ012	0	0		0	0	0	\$0	Winter Weather
3/24/2005	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/28/2005	NEW LONDON	0	0		0	0	0	\$0	Not Included
4/2/2005	NEW LONDON	0	0		0	0	0	\$0	Not Included
5/31/2005	NEW LONDON	0	0		0	0	1	\$0	Thunderstorms
6/1/2005	NEW LONDON	0	0		0	0	1	\$0	Thunderstorms
7/19/2005	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
7/27/2005	NEW LONDON	0	0		60	0	0	\$0	Thunderstorms
7/27/2005	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
9/15/2005	NEW LONDON	0	0		0	0	0	\$0	Flood
9/17/2005	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
9/17/2005	NEW LONDON	0	0		0	0	2	\$0	Thunderstorms
10/8/2005	CTZ008	0	0		0	0	0	\$0	Flood
10/11/2005	NEW LONDON	0	0		0	0	0	\$0	Not Included
10/14/2005	CTZ008	0	0		0	0	0	\$0	Flood
10/25/2005	CTZ008	0	0		42	0	0	\$1,176	Thunderstorms
12/9/2005	CTZ008	0	0		0	0	0	\$0	Winter Weather
12/16/2005	CTZ012	0	0		49	0	0	\$5,878	Thunderstorms
12/16/2005	NEW LONDON	0	0		0	0	0	\$0	Flood
1/18/2006	CTZ008	0	0		66	0	0	\$0	Thunderstorms
2/12/2006	CTZ008	0	0		0	0	0	\$0	Winter Weather
2/12/2006	CTZ012	0	0		0	0	0	\$0	Winter Weather
2/17/2006	CTZ008	0	0		54	0	0	\$0	Thunderstorms
3/2/2006	CTZ008	0	0		0	0	0	\$0	Winter Weather
3/2/2006	CTZ012	0	0		0	0	0	\$0	Winter Weather
5/13/2006	NEW LONDON	0	0		0	0	0	\$0	Flood
5/21/2006	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
5/21/2006	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
7/18/2006	NEW LONDON	0	0		50	0	0	\$0	Thunderstorms
7/28/2006	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/28/2006	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms
8/3/2006	NEW LONDON	0	0		57	0	0	\$0	Thunderstorms
8/3/2006	NEW LONDON	0	0		55	0	0	\$0	Thunderstorms
10/28/2006	CTZ012	0	0		50	0	0	\$0	Thunderstorms
10/28/2006	NEW LONDON	0	0		0	0	0	\$0	Flood
10/28/2006	NEW LONDON	0	0		0	0	0	\$0	Flood
10/29/2006	CTZ012	0	0		50	0	0	\$0	Thunderstorms
12/1/2006	CTZ008	0	0		50	0	0	\$0	Thunderstorms
3/2/2007	NEW LONDON	0	0		0	0	0	\$0	Flood
3/2/2007	NEW LONDON	0	0		0	0	0	\$0	Flood
4/15/2007	CTZ012	0	0		61	0	0	\$0	Thunderstorms
4/16/2007	NEW LONDON	0	0		0	0	0	\$0	Flood
4/16/2007	CTZ012	0	0		0	0	0	\$0	Flood
7/6/2007	NEW LONDON	0	0		55	0	0	\$0	Thunderstorms
7/19/2007	NEW LONDON	0	0		55	0	0	\$0	Thunderstorms
2/13/2008	NEW LONDON	0	0		0	0	0	\$0	Flood
2/13/2008	NEW LONDON	0	0		0	0	0	\$0	Flood
3/8/2008	NEW LONDON	0	0		0	0	0	\$0	Flood
3/9/2008	CTZ012	0	0		54	0	0	\$0	Thunderstorms
4/12/2008	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
6/24/2008	NEW LONDON	0	0		61	0	0	\$2,133	Thunderstorms
7/2/2008	NEW LONDON	0	0		125	0	0	\$533	Thunderstorms
7/2/2008	NEW LONDON	0	0		100	0	0	\$0	Thunderstorms
7/2/2008	NEW LONDON	0	0		88	0	0	\$0	Thunderstorms
7/2/2008	NEW LONDON	0	0		52	0	0	\$1,600	Thunderstorms
7/2/2008	NEW LONDON	0	0		74	0	0	\$106,637	Thunderstorms
7/2/2008	NEW LONDON	0	0		75	0	0	\$0	Thunderstorms
7/23/2008	NEW LONDON	0	0		52	0	0	\$1,066	Thunderstorms
7/23/2008	NEW LONDON	0	0		0	0	1	\$0	Thunderstorms
8/11/2008	NEW LONDON	0	0		52	0	0	\$0	Thunderstorms
8/11/2008	NEW LONDON	0	0		0	0	0	\$0	Flood
9/6/2008	NEW LONDON	0	0		0	0	0	\$0	Flood
9/6/2008	CTZ008	0	0		0	0	0	\$533	Hurricane
9/6/2008	CTZ012	0	0		0	0	0	\$533	Hurricane
12/12/2008	NEW LONDON	0	0		0	0	0	\$0	Flood
12/19/2008	CTZ008	0	0		0	0	0	\$0	Winter Weather
12/19/2008	CTZ012	0	0		0	0	0	\$0	Winter Weather
1/6/2009	CTZ008				0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/1/2009	CTZ008				0	0	0	\$0	Winter Weather
3/1/2009	CTZ012				0	0	0	\$0	Winter Weather
5/12/2009	NEW LONDON				88	0	0	\$0	Thunderstorms
5/24/2009	NEW LONDON				75	0	0	\$0	Thunderstorms
6/26/2009	NEW LONDON				61	0	0	\$0	Thunderstorms
6/26/2009	NEW LONDON				75	0	0	\$0	Thunderstorms
6/27/2009	NEW LONDON				0	0	0	\$0	Flood
6/27/2009	NEW LONDON				88	0	0	\$0	Thunderstorms
7/1/2009	NEW LONDON				0	0	0	\$8,026	Not Included
7/1/2009	NEW LONDON				0	0	0	\$10,702	Thunderstorms
7/1/2009	NEW LONDON				0	0	0	\$0	Flood
7/1/2009	NEW LONDON				0	0	0	\$53,509	Flood
7/1/2009	NEW LONDON				0	0	0	\$53,509	Flood
7/1/2009	NEW LONDON				0	0	0	\$0	Flood
7/1/2009	NEW LONDON				0	0	0	\$0	Flood
7/1/2009	NEW LONDON				0	0	0	\$0	Flood
7/1/2009	NEW LONDON				0	0	0	\$0	Flood
7/1/2009	NEW LONDON				75	0	0	\$0	Thunderstorms
7/2/2009	NEW LONDON				0	0	0	\$0	Flood
7/7/2009	NEW LONDON				52	0	0	\$4,281	Thunderstorms
7/31/2009	NEW LONDON				52	0	0	\$5,351	Thunderstorms
7/31/2009	NEW LONDON				61	0	0	\$8,026	Thunderstorms
12/19/2009	CTZ008				0	0	0	\$0	Winter Weather
12/29/2009	CTZ012				44	0	0	\$4,281	Thunderstorms
1/25/2010	CTZ008				47	0	0	\$31,587	Thunderstorms
2/10/2010	CTZ008				0	0	0	\$0	Winter Weather
3/13/2010	CTZ012				51	0	0	\$0	Thunderstorms
3/14/2010	NEW LONDON				0	0	0	\$210,582	Flood
3/14/2010	NEW LONDON				0	0	0	\$0	Flood
3/14/2010	NEW LONDON				0	0	0	\$0	Flood
3/29/2010	NEW LONDON				0	0	0	\$10,529	Flood
3/29/2010	NEW LONDON				0	0	0	\$273,756	Flood
3/29/2010	NEW LONDON				0	0	0	\$210,582	Flood
3/29/2010	NEW LONDON				0	0	0	\$0	Flood
3/29/2010	NEW LONDON				0	0	0	\$26,323	Flood
3/29/2010	NEW LONDON				0	0	0	\$84,233	Flood
3/29/2010	NEW LONDON				0	0	0	\$173,730	Flood
3/30/2010	NEW LONDON				0	0	0	\$1,158,199	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/30/2010	NEW LONDON				0	0	0	\$526,454	Flood
3/30/2010	NEW LONDON				0	0	0	\$4,211,634	Flood
3/30/2010	NEW LONDON				0	0	0	\$0	Flood
3/30/2010	NEW LONDON				0	0	0	\$0	Flood
3/30/2010	NEW LONDON				0	0	0	\$21,058	Flood
4/1/2010	NEW LONDON				0	0	0	\$0	Flood
4/29/2010	CTZ008				40	0	0	\$105,291	Thunderstorms
7/19/2010	NEW LONDON				61	0	0	\$7,897	Thunderstorms
7/21/2010	NEW LONDON				61	0	0	\$10,529	Thunderstorms
7/21/2010	NEW LONDON				61	0	0	\$5,265	Thunderstorms
7/21/2010	NEW LONDON				61	0	0	\$5,265	Thunderstorms
7/24/2010	NEW LONDON				52	0	0	\$1,053	Thunderstorms
8/5/2010	NEW LONDON				0	0	0	\$10,529	Thunderstorms
8/5/2010	NEW LONDON				52	0	0	\$5,265	Thunderstorms
8/5/2010	NEW LONDON				0	0	0	\$0	Tornado
10/1/2010	NEW LONDON				0	0	0	\$0	Flood
10/16/2010	CTZ008				40	0	0	\$105,291	Thunderstorms
10/16/2010	CTZ012				40	0	0	\$52,645	Thunderstorms
12/26/2010	CTZ008				0	0	0	\$0	Winter Weather
12/26/2010	CTZ012				0	0	0	\$0	Winter Weather
1/7/2011	CTZ008				0	0	0	\$0	Winter Weather
1/12/2011	CTZ008				0	0	0	\$0	Winter Weather
1/12/2011	CTZ012				0	0	0	\$0	Winter Weather
1/26/2011	CTZ012				0	0	0	\$0	Winter Weather
2/1/2011	CTZ008				0	0	0	\$0	Winter Weather
2/8/2011	CTZ008				0	0	0	\$0	Winter Weather
6/1/2011	NEW LONDON				75	0	0	\$0	Thunderstorms
6/1/2011	NEW LONDON				100	0	0	\$0	Thunderstorms
6/1/2011	NEW LONDON				100	0	0	\$0	Thunderstorms
6/23/2011	NEW LONDON				0	0	0	\$0	Flood
7/22/2011	CTZ008				0	0	0	\$0	Extreme Heat
7/22/2011	CTZ012				0	0	0	\$0	Extreme Heat
7/26/2011	NEW LONDON				52	0	0	\$766	Thunderstorms
8/28/2011	CTZ012				0	0	0	\$0	Flood
8/28/2011	CTZ012				0	0	0	\$0	Hurricane
10/29/2011	CTZ008				0	0	0	\$0	Winter Weather
12/21/2011	NEW LONDON				52	0	0	\$1,021	Thunderstorms
12/22/2011	NEW LONDON				52	0	0	\$1,531	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
12/27/2011	CTZ012				53	0	0	\$0	Thunderstorms
1/21/2012	CTZ008				0	0	0	\$0	Winter Weather
1/21/2012	CTZ012				0	0	0	\$0	Winter Weather
6/3/2012	NEW LONDON				0	0	0	\$0	Tornado
6/25/2012	NEW LONDON				0	0	11	\$0	Thunderstorms
6/25/2012	NEW LONDON				0	0	0	\$0	Flood
7/1/2012	NEW LONDON				61	0	0	\$7,500	Thunderstorms
7/1/2012	NEW LONDON				125	0	0	\$0	Thunderstorms
7/1/2012	NEW LONDON				100	0	0	\$0	Thunderstorms
7/18/2012	NEW LONDON				52	0	0	\$750	Thunderstorms
7/18/2012	NEW LONDON				61	0	0	\$7,500	Thunderstorms
10/29/2012	CTZ012				65	0	0	\$300,000	Thunderstorms
11/7/2012	CTZ012				52	0	0	\$200,000	Thunderstorms
12/26/2012	CTZ008				50	0	0	\$2,000	Thunderstorms
12/29/2012	CTZ012				0	0	0	\$0	Winter Weather
12/29/2012	CTZ008				0	0	0	\$0	Winter Weather
8/20/1951	TOLLAND	0	50	2	0	0	0	\$220,763	Tornado
5/10/1954	TOLLAND	0.3	33	3	0	0	2	\$213,376	Tornado
8/8/1956	TOLLAND	0	50	0	0	0	0	\$2,110	Tornado
9/7/1958	TOLLAND	1.3	100	2	0	0	2	\$1,986,099	Tornado
8/27/1959	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
6/3/1960	TOLLAND	0	0		175	0	0	\$0	Thunderstorms
8/30/1960	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
4/26/1961	TOLLAND	0	33	1	0	0	0	\$19,197	Tornado
8/19/1965	TOLLAND	6.6	120	2	0	0	0	\$182,217	Tornado
7/7/1966	TOLLAND	0	0		175	0	0	\$0	Thunderstorms
7/7/1966	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
8/17/1968	TOLLAND	2.5	50	1	0	0	0	\$164,938	Tornado
6/20/1969	TOLLAND	0	0		113	0	0	\$0	Thunderstorms
10/6/1971	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
9/18/1973	TOLLAND	0	33	1	0	0	0	\$0	Tornado
6/13/1984	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
8/7/1984	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
5/13/1985	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/20/1985	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/20/1985	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
7/20/1990	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
10/18/1990	TOLLAND	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/18/1990	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/16/1991	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
7/21/1991	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
7/23/1991	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/27/1992	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
7/14/1992	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
7/14/1992	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
7/14/1992	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
8/4/1992	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
3/4/1993	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/13/1993	CTZ003	0	0		0	0	0	\$132,407	Thunderstorms
3/13/1993	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/14/1993	CTZ003	0	0		0	0	0	\$13,241	Thunderstorms
8/28/1993	TOLLAND	0	0		0	0	3	\$0	Thunderstorms
8/28/1993	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
9/3/1993	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
11/28/1993	CTZ003	0	0		0	0	0	\$0	Not Included
12/4/1993	CTZ003	0	0		0	0	0	\$0	Not Included
12/26/1993	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/29/1993	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/3/1994	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/15/1994	CTZ003	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ003	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ003	0	0		0	0	0	\$0	Not Included
1/27/1994	CTZ003	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ003	0	0		0	0	0	\$0	Not Included
5/23/1994	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
6/18/1994	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
7/8/1994	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
8/13/1994	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
9/22/1994	CTZ003	0	0		0	0	0	\$0	Not Included
11/2/1994	CTZ003	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/23/1994	CTZ003	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ003	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/13/1995	CTZ003	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ003	0	0		0	0	0	\$0	Thunderstorms
2/28/1995	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/4/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
4/4/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ003	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ003	0	0		0	0	0	\$0	Not Included
6/20/1995	TOLLAND	0	0		100	0	0	\$0	Thunderstorms
6/20/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/20/1995	TOLLAND	0	0		275	0	0	\$0	Thunderstorms
6/20/1995	TOLLAND	0	0		200	0	0	\$301,303	Thunderstorms
6/20/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/20/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
6/20/1995	TOLLAND	0	0		88	0	0	\$0	Thunderstorms
7/8/1995	TOLLAND	0	0		0	0	0	\$0	Flood
7/8/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
7/15/1995	CTZ003	0	0		0	0	0	\$0	Extreme Heat
8/2/1995	CTZ003	0	0		0	0	0	\$0	Not Included
8/2/1995	TOLLAND	0	0		0	0	0	\$0	Thunderstorms
10/21/1995	CTZ003	0	0		0	0	0	\$0	Thunderstorms
10/28/1995	CTZ003	0	0		0	0	0	\$0	Thunderstorms
11/12/1995	CTZ003	0	0		0	0	0	\$502,172	Thunderstorms
12/14/1995	CTZ003	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/2/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/19/1996	CTZ003	0	0		50	0	0	\$0	Thunderstorms
1/27/1996	CTZ003	0	0		53	0	0	\$0	Thunderstorms
2/2/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ003	0	0		57	2	3	\$243,885	Thunderstorms
3/2/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/3/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/7/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/7/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/16/1996	TOLLAND	0	0		0	0	0	\$0	Not Included

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
5/21/1996	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
7/13/1996	TOLLAND	0	0		0	0	0	\$0	Not Included
8/4/1996	TOLLAND	0	0		0	0	0	\$0	Not Included
8/23/1996	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
9/17/1996	TOLLAND	0	0		0	0	0	\$0	Not Included
12/6/1996	CTZ003	0	0		0	0	0	\$18,047	Winter Weather
12/7/1996	CTZ003	0	0		0	0	0	\$2,926,616	Winter Weather
1/24/1997	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/6/1997	CTZ003	0	0		0	0	0	\$0	Thunderstorms
3/14/1997	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/31/1997	CTZ003	0	0		0	0	0	\$0	Thunderstorms
3/31/1997	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/1/1997	CTZ003	0	0		0	0	0	\$476,829	Winter Weather
4/1/1997	CTZ003	0	0		0	0	0	\$0	Thunderstorms
7/15/1997	TOLLAND	0	0		50	0	0	\$4,291	Thunderstorms
11/1/1997	CTZ003	0	0		0	0	0	\$0	Not Included
11/27/1997	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/2/1997	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/10/1997	CTZ003	0	0		0	0	0	\$0	Winter Weather
12/14/1997	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/23/1997	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/15/1998	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/24/1998	CTZ003	0	0		0	0	0	\$0	Thunderstorms
3/8/1998	CTZ003	0	0		0	0	0	\$0	Not Included
3/9/1998	CTZ003	0	0		0	0	0	\$0	Thunderstorms
3/21/1998	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/2/1998	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
5/9/1998	CTZ003	0	0		0	0	0	\$0	Not Included
6/18/1998	TOLLAND	0	0		0	0	0	\$0	Not Included
9/15/1998	CTZ003	0	0		0	0	0	\$0	Thunderstorms
10/14/1998	TOLLAND	0	0		0	0	0	\$0	Not Included
12/1/1998	CTZ003	0	0		0	0	0	\$0	Thunderstorms
1/18/1999	CTZ003	0	0		0	0	0	\$0	Thunderstorms
2/25/1999	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/4/1999	CTZ003	0	0		0	0	0	\$0	Thunderstorms
3/15/1999	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/22/1999	CTZ003	0	0		0	0	0	\$0	Thunderstorms
7/6/1999	TOLLAND	0	0		50	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/18/1999	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
7/18/1999	TOLLAND	0	0		55	0	0	\$0	Thunderstorms
7/19/1999	TOLLAND	0	0		55	0	0	\$0	Thunderstorms
7/19/1999	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
7/24/1999	TOLLAND	0	0		175	0	0	\$0	Thunderstorms
7/24/1999	TOLLAND	0	0		55	0	0	\$0	Thunderstorms
9/10/1999	TOLLAND	0	0		0	0	0	\$0	Not Included
9/16/1999	CTZ003	0	0		0	0	0	\$0	Thunderstorms
9/16/1999	TOLLAND	0	0		0	0	0	\$0	Not Included
11/2/1999	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/20/1999	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/13/2000	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/25/2000	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/18/2000	CTZ003	0	0		0	0	0	\$0	Winter Weather
5/24/2000	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
5/24/2000	TOLLAND	0	0		100	0	0	\$0	Thunderstorms
6/2/2000	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
6/2/2000	TOLLAND	0	0		0	0	0	\$0	Flood
8/10/2000	TOLLAND	0	0		175	0	0	\$0	Thunderstorms
8/16/2000	TOLLAND	1.5	40	1	0	0	0	\$6,666	Tornado
11/26/2000	CTZ003	0	0		0	0	0	\$0	Winter Weather
12/12/2000	CTZ003	0	0		0	0	0	\$0	Thunderstorms
12/17/2000	CTZ003	0	0		50	0	0	\$0	Thunderstorms
12/30/2000	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/20/2001	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/30/2001	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/10/2001	CTZ003	0	0		0	0	0	\$0	Thunderstorms
2/25/2001	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ003	0	0		0	0	0	\$2,160,672	Winter Weather
3/9/2001	CTZ003	0	0		0	0	0	\$864,269	Winter Weather
6/20/2001	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
8/10/2001	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
8/10/2001	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
8/28/2001	TOLLAND	0	0		58	0	0	\$0	Thunderstorms
5/31/2002	TOLLAND	0	0		53	0	0	\$2,552	Thunderstorms
5/31/2002	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
6/16/2002	TOLLAND	0	0		100	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/23/2002	TOLLAND	0	0		50	0	0	\$3,829	Thunderstorms
8/2/2002	TOLLAND	0	0		50	0	0	\$2,552	Thunderstorms
11/16/2002	CTZ003	0	0		0	0	0	\$1,595,282	Winter Weather
11/27/2002	CTZ003	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/3/2003	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ003	0	0		0	0	0	\$62,389	Winter Weather
10/27/2003	CTZ003	0	0		50	0	0	\$37,434	Thunderstorms
11/13/2003	CTZ003	0	0		50	0	1	\$62,389	Thunderstorms
12/5/2003	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/27/2004	CTZ003	0	0		0	0	0	\$0	Winter Weather
5/23/2004	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
5/23/2004	TOLLAND	0	0		88	0	0	\$0	Thunderstorms
5/23/2004	TOLLAND	0	0		50	0	0	\$12,154	Thunderstorms
8/21/2004	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
1/5/2005	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/8/2005	CTZ003	0	0		0	0	0	\$58,780	Winter Weather
1/22/2005	CTZ003	0	0		0	0	0	\$0	Winter Weather
2/24/2005	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ003	0	0		0	0	0	\$0	Winter Weather
7/22/2005	TOLLAND	0	0		50	0	0	\$5,878	Thunderstorms
7/27/2005	TOLLAND	0	0		50	0	0	\$29,390	Thunderstorms
8/5/2005	TOLLAND	0	0		50	0	0	\$5,878	Thunderstorms
8/5/2005	TOLLAND	0	0		50	0	0	\$5,878	Thunderstorms
8/5/2005	TOLLAND	0	0		50	0	0	\$5,878	Thunderstorms
8/13/2005	TOLLAND	0	0		50	0	0	\$11,756	Thunderstorms
8/13/2005	TOLLAND	0	0		0	0	0	\$17,634	Thunderstorms
9/17/2005	TOLLAND	0	0		50	0	0	\$8,229	Thunderstorms
9/29/2005	CTZ003	0	0		58	0	0	\$29,390	Thunderstorms
10/15/2005	CTZ003	0	0		0	2	0	\$1,007,650	Flood
10/15/2005	CTZ003	0	0		0	2	0	\$1,007,650	Flood
10/15/2005	CTZ003	0	0		0	2	0	\$1,007,650	Flood
10/15/2005	CTZ003	0	0		0	2	0	\$1,007,650	Flood
10/15/2005	CTZ003	0	0		0	2	0	\$1,007,650	Flood
1/3/2006	CTZ003	0	0		0	0	0	\$11,389	Winter Weather
1/18/2006	CTZ003	0	0		58	0	0	\$47,452	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
2/12/2006	CTZ003	0	0		0	0	0	\$11,389	Winter Weather
5/21/2006	TOLLAND	0	0		50	0	0	\$5,694	Thunderstorms
5/21/2006	TOLLAND	0	0		50	0	0	\$9,111	Thunderstorms
5/21/2006	TOLLAND	0	0		50	0	0	\$5,694	Thunderstorms
5/21/2006	TOLLAND	0	0		50	0	0	\$5,694	Thunderstorms
6/1/2006	TOLLAND	0	0		50	0	0	\$11,389	Thunderstorms
6/1/2006	TOLLAND	0	0		100	0	0	\$0	Thunderstorms
7/18/2006	TOLLAND	0	0		150	0	0	\$0	Thunderstorms
7/18/2006	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
7/18/2006	TOLLAND	0	0		50	0	0	\$5,694	Thunderstorms
7/28/2006	TOLLAND	0	0		50	0	0	\$28,471	Thunderstorms
8/10/2006	TOLLAND	0	0		50	0	0	\$11,389	Thunderstorms
8/10/2006	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
10/29/2006	CTZ003	0	0		50	0	0	\$11,389	Thunderstorms
2/13/2007	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/16/2007	CTZ003	0	0		0	0	0	\$0	Winter Weather
4/15/2007	CTZ003	0	0		40	0	0	\$5,537	Thunderstorms
5/16/2007	TOLLAND	0	0		61	0	0	\$0	Thunderstorms
5/28/2007	TOLLAND	0	20	0	0	0	0	\$0	Tornado
6/11/2007	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
8/17/2007	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
8/17/2007	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
10/20/2007	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
10/20/2007	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
10/20/2007	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
12/13/2007	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/14/2008	CTZ003	0	0		0	0	0	\$26,659	Winter Weather
2/13/2008	TOLLAND	0	0		0	0	0	\$0	Flood
2/22/2008	CTZ003	0	0		0	0	0	\$0	Winter Weather
3/8/2008	CTZ003	0	0		42	0	0	\$10,664	Thunderstorms
3/8/2008	TOLLAND	0	0		0	0	0	\$0	Flood
4/1/2008	TOLLAND	0	0		50	0	0	\$3,199	Thunderstorms
6/10/2008	TOLLAND	0	0		50	0	0	\$0	Thunderstorms
6/10/2008	TOLLAND	0	0		50	0	0	\$5,332	Thunderstorms
6/14/2008	TOLLAND	0	0		50	0	0	\$5,332	Thunderstorms
6/29/2008	TOLLAND	0	0		50	0	0	\$3,199	Thunderstorms
7/1/2008	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
7/1/2008	TOLLAND	0	0		50	0	0	\$5,332	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
7/1/2008	TOLLAND	0	0		50	0	0	\$8,531	Thunderstorms
7/3/2008	TOLLAND	0	0		50	0	0	\$8,531	Thunderstorms
7/27/2008	TOLLAND	0	0		0	0	0	\$15,996	Flood
8/7/2008	TOLLAND	0	0		50	0	0	\$3,199	Thunderstorms
8/7/2008	TOLLAND	0	0		50	0	0	\$10,664	Thunderstorms
8/8/2008	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
8/8/2008	TOLLAND	0	0		0	0	0	\$15,996	Flood
8/8/2008	TOLLAND	0	0		75	0	0	\$0	Thunderstorms
8/8/2008	TOLLAND	0	0		50	0	0	\$5,332	Thunderstorms
9/7/2008	TOLLAND	0	0		0	0	0	\$21,327	Flood
9/9/2008	TOLLAND	0	0		50	0	0	\$8,531	Thunderstorms
9/9/2008	TOLLAND	0	0		50	0	0	\$3,199	Thunderstorms
10/25/2008	CTZ003	0	0		43	0	0	\$213	Thunderstorms
12/19/2008	CTZ003	0	0		0	0	0	\$0	Winter Weather
12/31/2008	CTZ003	0	0		0	0	0	\$0	Winter Weather
1/7/2009	CTZ003				0	0	0	\$5,351	Winter Weather
3/1/2009	CTZ003				0	0	0	\$0	Winter Weather
5/24/2009	TOLLAND				50	0	0	\$10,702	Thunderstorms
5/24/2009	TOLLAND				50	0	0	\$16,053	Thunderstorms
5/24/2009	TOLLAND				50	0	0	\$10,702	Thunderstorms
5/24/2009	TOLLAND				50	0	0	\$3,211	Thunderstorms
5/24/2009	TOLLAND				75	0	0	\$0	Thunderstorms
5/24/2009	TOLLAND				125	0	0	\$0	Thunderstorms
5/24/2009	TOLLAND				75	0	0	\$0	Thunderstorms
6/26/2009	TOLLAND				50	0	0	\$5,351	Thunderstorms
6/27/2009	TOLLAND				100	0	0	\$0	Thunderstorms
6/30/2009	TOLLAND				50	0	0	\$535	Thunderstorms
6/30/2009	TOLLAND				50	0	0	\$1,070	Thunderstorms
7/7/2009	TOLLAND				50	0	0	\$5,351	Thunderstorms
7/26/2009	TOLLAND				50	0	0	\$16,053	Thunderstorms
8/10/2009	TOLLAND				50	0	0	\$535	Thunderstorms
8/21/2009	TOLLAND				50	0	0	\$5,351	Thunderstorms
12/19/2009	CTZ003				0	0	0	\$0	Winter Weather
2/16/2010	CTZ003				0	0	0	\$0	Winter Weather
3/13/2010	CTZ003				50	0	0	\$52,645	Thunderstorms
6/5/2010	TOLLAND				50	0	0	\$15,794	Thunderstorms
6/5/2010	TOLLAND				50	0	0	\$15,794	Thunderstorms
6/5/2010	TOLLAND				50	0	0	\$1,053	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
6/5/2010	TOLLAND				50	0	0	\$31,587	Thunderstorms
6/5/2010	TOLLAND				75	0	0	\$0	Thunderstorms
7/16/2010	TOLLAND				0	0	0	\$78,968	Thunderstorms
7/16/2010	TOLLAND				50	0	0	\$31,587	Thunderstorms
7/17/2010	TOLLAND				50	0	0	\$26,323	Thunderstorms
12/1/2010	CTZ003				40	0	0	\$31,587	Thunderstorms
12/26/2010	CTZ003				0	0	0	\$26,323	Winter Weather
1/11/2011	CTZ003				0	0	0	\$0	Winter Weather
1/21/2011	CTZ003				0	0	0	\$0	Winter Weather
1/26/2011	CTZ003				0	0	0	\$0	Winter Weather
2/1/2011	CTZ003				0	0	0	\$867,587	Winter Weather
2/19/2011	CTZ003				51	0	0	\$20,414	Thunderstorms
3/7/2011	TOLLAND				0	0	3	\$0	Flood
7/26/2011	TOLLAND				50	0	0	\$3,062	Thunderstorms
8/28/2011	CTZ003				0	0	0	\$20,413,801	Hurricane
10/29/2011	CTZ003				0	0	0	\$0	Winter Weather
10/29/2011	CTZ003				0	0	0	\$1,531,035	Winter Weather
12/22/2011	TOLLAND				50	0	0	\$10,207	Thunderstorms
1/16/2012	CTZ003				0	0	0	\$0	Winter Weather
1/21/2012	CTZ003				0	0	0	\$0	Winter Weather
2/24/2012	CTZ003				0	0	0	\$0	Winter Weather
2/29/2012	CTZ003				0	0	0	\$0	Winter Weather
4/12/2012	CTZ003				0	0	0	\$0	Drought
6/22/2012	TOLLAND				50	0	0	\$10,000	Thunderstorms
6/22/2012	TOLLAND				45	0	0	\$10,000	Thunderstorms
6/22/2012	TOLLAND				50	0	0	\$30,000	Thunderstorms
6/22/2012	TOLLAND				88	0	0	\$0	Thunderstorms
6/22/2012	TOLLAND				88	0	0	\$0	Thunderstorms
6/22/2012	TOLLAND				100	0	0	\$0	Thunderstorms
6/22/2012	TOLLAND				75	0	0	\$0	Thunderstorms
7/1/2012	TOLLAND				50	0	0	\$10,000	Thunderstorms
7/2/2012	TOLLAND				0	0	1	\$10,000	Thunderstorms
7/18/2012	TOLLAND				100	0	0	\$0	Thunderstorms
7/28/2012	TOLLAND				0	0	0	\$25,000	Flood
8/10/2012	TOLLAND				50	0	0	\$4,000	Thunderstorms
8/10/2012	TOLLAND				50	0	0	\$10,000	Thunderstorms
8/10/2012	TOLLAND				50	0	0	\$3,000	Thunderstorms
8/10/2012	TOLLAND				0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/10/2012	TOLLAND				50	0	0	\$5,000	Thunderstorms
8/10/2012	TOLLAND				50	0	0	\$1,000	Thunderstorms
8/15/2012	TOLLAND				0	0	1	\$0	Thunderstorms
9/8/2012	TOLLAND				50	0	0	\$5,000	Thunderstorms
9/18/2012	TOLLAND				50	0	0	\$5,000	Thunderstorms
9/18/2012	TOLLAND				50	0	0	\$5,000	Thunderstorms
9/18/2012	TOLLAND				50	0	0	\$10,000	Thunderstorms
9/18/2012	TOLLAND				50	0	0	\$5,000	Thunderstorms
9/18/2012	TOLLAND				50	0	0	\$5,000	Thunderstorms
10/29/2012	CTZ003				50	1	2	\$439,000	Thunderstorms
11/7/2012	CTZ003				0	0	0	\$0	Winter Weather
12/29/2012	CTZ003				0	0	0	\$0	Winter Weather
7/14/1956	WINDHAM	0	0		58	0	0	\$0	Thunderstorms
8/20/1968	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
6/8/1971	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
7/8/1972	WINDHAM	0	0		175	0	0	\$0	Thunderstorms
6/19/1978	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
5/30/1979	WINDHAM	0	0		150	0	0	\$0	Thunderstorms
8/10/1979	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
6/3/1980	WINDHAM	0	0		61	0	0	\$0	Thunderstorms
6/13/1984	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
6/24/1985	WINDHAM	10	100	1	0	0	0	\$5,334,410	Tornado
6/24/1985	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/26/1985	WINDHAM	0.5	100	1	0	0	0	\$533	Tornado
9/6/1985	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/8/1986	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/12/1988	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
6/12/1991	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
6/27/1992	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
7/14/1992	WINDHAM	0.2	40	1	0	0	0	\$0	Tornado
7/14/1992	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/11/1992	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
3/4/1993	CTZ004	0	0		0	0	0	\$0	Thunderstorms
3/13/1993	CTZ004	0	0		0	0	0	\$132,407	Thunderstorms
3/13/1993	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/14/1993	CTZ004	0	0		0	0	0	\$13,241	Thunderstorms
8/4/1993	WINDHAM	0	0		0	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
8/28/1993	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/28/1993	WINDHAM	0	0		52	0	0	\$0	Thunderstorms
9/3/1993	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
11/28/1993	CTZ004	0	0		0	0	0	\$0	Not Included
12/4/1993	CTZ004	0	0		0	0	0	\$0	Not Included
12/26/1993	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/29/1993	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/3/1994	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/15/1994	CTZ004	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ004	0	0		0	0	0	\$0	Not Included
1/18/1994	CTZ004	0	0		0	0	0	\$0	Not Included
1/27/1994	CTZ004	0	0		0	0	0	\$0	Not Included
2/8/1994	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/11/1994	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/10/1994	CTZ004	0	0		0	0	0	\$0	Not Included
7/8/1994	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
7/8/1994	WINDHAM	0	0		100	0	0	\$0	Thunderstorms
8/13/1994	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
9/22/1994	CTZ004	0	0		0	0	0	\$0	Not Included
11/2/1994	CTZ004	0	0		0	0	0	\$0	Thunderstorms
11/6/1994	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/23/1994	CTZ004	0	0		0	0	0	\$595,850	Thunderstorms
1/12/1995	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/13/1995	CTZ004	0	0		0	0	0	\$0	Not Included
2/4/1995	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/5/1995	CTZ004	0	0		0	0	0	\$0	Thunderstorms
2/28/1995	CTZ004	0	0		0	0	0	\$0	Winter Weather
4/5/1995	CTZ004	0	0		0	0	0	\$0	Thunderstorms
4/5/1995	CTZ004	0	0		0	0	0	\$0	Not Included
7/15/1995	CTZ004	0	0		0	0	0	\$0	Extreme Heat
7/28/1995	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/4/1995	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
8/12/1995	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
10/21/1995	CTZ004	0	0		0	0	0	\$0	Thunderstorms
10/28/1995	CTZ004	0	0		0	0	0	\$0	Thunderstorms
11/12/1995	CTZ004	0	0		0	0	0	\$502,172	Thunderstorms
12/14/1995	CTZ004	0	0		0	0	0	\$0	Winter Weather
12/19/1995	CTZ004	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/2/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/7/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/19/1996	CTZ004	0	0		50	0	0	\$0	Thunderstorms
1/27/1996	CTZ004	0	0		53	0	0	\$0	Thunderstorms
2/2/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/16/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/25/1996	CTZ004	0	0		57	2	3	\$243,885	Thunderstorms
3/2/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/3/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/7/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
4/7/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
4/9/1996	CTZ004	0	0		0	0	0	\$0	Winter Weather
4/16/1996	WINDHAM	0	0		0	0	0	\$0	Not Included
5/21/1996	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
7/13/1996	WINDHAM	0	0		0	0	0	\$0	Not Included
9/17/1996	WINDHAM	0	0		0	0	0	\$0	Not Included
12/6/1996	CTZ004	0	0		0	0	0	\$18,047	Winter Weather
12/7/1996	CTZ004	0	0		0	0	0	\$2,926,616	Winter Weather
1/24/1997	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/6/1997	CTZ004	0	0		0	0	0	\$0	Thunderstorms
3/6/1997	CTZ004	0	0		65	0	0	\$0	Thunderstorms
3/31/1997	CTZ004	0	0		0	0	0	\$0	Thunderstorms
3/31/1997	CTZ004	0	0		0	0	0	\$0	Winter Weather
4/1/1997	CTZ004	0	0		0	0	0	\$476,829	Winter Weather
4/1/1997	CTZ004	0	0		0	0	0	\$0	Thunderstorms
5/1/1997	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
5/1/1997	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
8/3/1997	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
8/9/1997	WINDHAM	0	0		88	0	0	\$0	Thunderstorms
11/1/1997	CTZ004	0	0		0	0	0	\$0	Not Included
11/27/1997	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/2/1997	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/14/1997	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/23/1997	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/15/1998	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/24/1998	CTZ004	0	0		0	0	0	\$0	Thunderstorms
3/8/1998	CTZ004	0	0		0	0	0	\$0	Not Included
3/9/1998	WINDHAM	0	0		0	0	0	\$0	Flood

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/9/1998	CTZ004	0	0		0	0	0	\$0	Thunderstorms
5/9/1998	CTZ004	0	0		0	0	0	\$0	Not Included
6/14/1998	WINDHAM	0	0		0	0	0	\$0	Flood
6/20/1998	WINDHAM	0	0		100	0	0	\$0	Thunderstorms
9/15/1998	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/1/1998	CTZ004	0	0		0	0	0	\$0	Thunderstorms
1/18/1999	CTZ004	0	0		0	0	0	\$0	Thunderstorms
2/25/1999	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/4/1999	CTZ004	0	0		0	0	0	\$0	Thunderstorms
3/15/1999	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/22/1999	CTZ004	0	0		0	0	0	\$0	Thunderstorms
7/18/1999	WINDHAM	0	0		55	0	0	\$0	Thunderstorms
7/19/1999	WINDHAM	0	0		55	0	0	\$0	Thunderstorms
7/19/1999	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
7/19/1999	WINDHAM	0	0		0	0	0	\$0	Thunderstorms
7/19/1999	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
7/23/1999	WINDHAM	0	0		55	0	0	\$0	Thunderstorms
7/24/1999	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
7/24/1999	WINDHAM	0	0		100	0	0	\$0	Thunderstorms
8/5/1999	WINDHAM	0	0		150	0	0	\$0	Thunderstorms
8/5/1999	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
9/10/1999	WINDHAM	0	0		0	0	0	\$0	Not Included
9/16/1999	WINDHAM	0	0		0	0	0	\$0	Not Included
9/16/1999	CTZ004	0	0		0	0	0	\$0	Thunderstorms
11/2/1999	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/20/1999	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/13/2000	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/25/2000	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/18/2000	CTZ004	0	0		0	0	0	\$0	Winter Weather
5/24/2000	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
5/24/2000	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
6/2/2000	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
8/10/2000	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
11/26/2000	CTZ004	0	0		0	0	0	\$0	Winter Weather
12/12/2000	CTZ004	0	0		0	0	0	\$0	Thunderstorms
12/17/2000	CTZ004	0	0		50	0	0	\$0	Thunderstorms
12/30/2000	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/20/2001	CTZ004	0	0		0	0	0	\$0	Winter Weather

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
1/30/2001	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/5/2001	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/10/2001	CTZ004	0	0		0	0	0	\$0	Thunderstorms
2/25/2001	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/5/2001	CTZ004	0	0		0	0	0	\$2,160,672	Winter Weather
3/9/2001	CTZ004	0	0		0	0	0	\$864,269	Winter Weather
6/17/2001	WINDHAM	0	0		0	0	0	\$0	Flood
7/10/2001	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
7/10/2001	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
8/10/2001	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
8/10/2001	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
5/31/2002	WINDHAM	0	0		50	0	0	\$2,552	Thunderstorms
5/31/2002	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
8/2/2002	WINDHAM	0	0		50	0	0	\$2,552	Thunderstorms
8/16/2002	WINDHAM	0	0		50	0	0	\$2,552	Thunderstorms
11/27/2002	CTZ004	0	0		0	0	0	\$0	Winter Weather
12/5/2002	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/3/2003	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/7/2003	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/17/2003	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/6/2003	CTZ004	0	0		0	0	0	\$62,389	Winter Weather
5/26/2003	WINDHAM	0	0		0	0	0	\$0	Not Included
7/18/2003	WINDHAM	0	0		88	0	0	\$0	Thunderstorms
7/22/2003	WINDHAM	0	0		75	0	0	\$0	Thunderstorms
7/22/2003	WINDHAM	0	0		50	0	0	\$6,239	Thunderstorms
11/13/2003	CTZ004	0	0		50	0	1	\$62,389	Thunderstorms
12/5/2003	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/27/2004	CTZ004	0	0		0	0	0	\$0	Winter Weather
7/2/2004	WINDHAM	0	0		175	0	0	\$0	Thunderstorms
8/21/2004	WINDHAM	0	0		0	0	2	\$0	Thunderstorms
8/21/2004	WINDHAM	0	0		50	0	0	\$6,077	Thunderstorms
12/1/2004	CTZ004	0	0		58	0	0	\$27,347	Thunderstorms
1/5/2005	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/8/2005	CTZ004	0	0		0	0	0	\$58,780	Winter Weather
1/22/2005	CTZ004	0	0		0	0	0	\$0	Winter Weather
2/24/2005	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/1/2005	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/8/2005	CTZ004	0	0		50	0	1	\$26,451	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
3/23/2005	CTZ004	0	0		0	0	0	\$0	Winter Weather
7/19/2005	WINDHAM	0	0		50	0	0	\$5,878	Thunderstorms
8/5/2005	WINDHAM	0	0		50	0	0	\$5,878	Thunderstorms
8/5/2005	WINDHAM	0	0		50	0	0	\$5,878	Thunderstorms
8/13/2005	WINDHAM	0	0		50	0	0	\$5,878	Thunderstorms
9/29/2005	CTZ004	0	0		40	0	0	\$11,756	Thunderstorms
10/15/2005	CTZ004	0	0		0	2	0	\$1,007,650	Flood
10/25/2005	CTZ004	0	0		58	0	0	\$11,756	Thunderstorms
1/3/2006	CTZ004	0	0		0	0	0	\$11,389	Winter Weather
1/18/2006	CTZ004	0	0		58	0	0	\$47,452	Thunderstorms
1/18/2006	CTZ004	0	0		58	0	0	\$47,452	Thunderstorms
1/18/2006	CTZ004	0	0		58	0	0	\$47,452	Thunderstorms
2/12/2006	CTZ004	0	0		0	0	0	\$11,389	Winter Weather
5/21/2006	WINDHAM	0	0		50	0	0	\$5,694	Thunderstorms
5/21/2006	WINDHAM	0	0		50	0	0	\$9,111	Thunderstorms
6/1/2006	WINDHAM	0	0		50	0	0	\$17,083	Thunderstorms
7/3/2006	WINDHAM	0	0		100	0	0	\$0	Thunderstorms
7/3/2006	WINDHAM	0	0		61	0	0	\$56,943	Thunderstorms
7/18/2006	WINDHAM	0	0		50	0	0	\$17,083	Thunderstorms
7/18/2006	WINDHAM	0	0		50	0	0	\$5,694	Thunderstorms
7/18/2006	WINDHAM	0	0		88	0	0	\$0	Thunderstorms
7/18/2006	WINDHAM	0	0		50	0	0	\$5,694	Thunderstorms
7/28/2006	WINDHAM	0	0		50	0	0	\$5,694	Thunderstorms
8/2/2006	WINDHAM	0	0		50	0	0	\$2,278	Thunderstorms
8/2/2006	WINDHAM	0	0		50	0	0	\$11,389	Thunderstorms
10/28/2006	WINDHAM	0	0		0	0	0	\$2,278	Flood
10/29/2006	CTZ004	0	0		50	0	0	\$9,111	Thunderstorms
2/13/2007	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/16/2007	CTZ004	0	0		0	0	0	\$0	Winter Weather
5/16/2007	WINDHAM	0	0		61	0	0	\$0	Thunderstorms
10/20/2007	WINDHAM	0	0		50	0	0	\$1,107	Thunderstorms
10/20/2007	WINDHAM	0	0		50	0	0	\$0	Thunderstorms
12/13/2007	CTZ004	0	0		0	0	0	\$0	Winter Weather
1/14/2008	CTZ004	0	0		0	0	0	\$17,062	Winter Weather
2/13/2008	WINDHAM	0	0		0	0	0	\$21,327	Flood
3/5/2008	WINDHAM	0	0		50	0	0	\$2,133	Thunderstorms
3/8/2008	WINDHAM	0	0		0	0	0	\$0	Flood
3/8/2008	CTZ004	0	0		51	0	0	\$0	Thunderstorms

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
4/1/2008	WINDHAM	0	0		51	0	0	\$0	Thunderstorms
7/3/2008	WINDHAM	0	0		50	0	0	\$3,199	Thunderstorms
7/27/2008	WINDHAM	0	0		50	0	0	\$5,332	Thunderstorms
9/9/2008	WINDHAM	0	0		50	0	0	\$7,465	Thunderstorms
12/19/2008	CTZ004	0	0		0	0	0	\$0	Winter Weather
12/31/2008	CTZ004	0	0		0	0	0	\$0	Winter Weather
3/1/2009	CTZ004				0	0	0	\$0	Winter Weather
6/26/2009	WINDHAM				75	0	0	\$0	Thunderstorms
6/26/2009	WINDHAM				100	0	0	\$0	Thunderstorms
6/27/2009	WINDHAM				88	0	0	\$0	Thunderstorms
6/27/2009	WINDHAM				0	0	0	\$32,105	Flood
6/27/2009	WINDHAM				50	0	0	\$10,702	Thunderstorms
6/27/2009	WINDHAM				75	0	0	\$0	Thunderstorms
6/27/2009	WINDHAM				88	0	0	\$0	Thunderstorms
7/7/2009	WINDHAM				50	0	0	\$5,351	Thunderstorms
7/7/2009	WINDHAM				50	0	0	\$1,070	Thunderstorms
12/3/2009	CTZ004				50	0	0	\$5,351	Thunderstorms
12/19/2009	CTZ004				0	0	0	\$0	Winter Weather
3/29/2010	WINDHAM				0	0	0	\$0	Flood
6/10/2010	WINDHAM				50	0	0	\$5,265	Thunderstorms
6/10/2010	WINDHAM				50	0	0	\$10,529	Thunderstorms
6/10/2010	WINDHAM				50	0	0	\$15,794	Thunderstorms
7/6/2010	CTZ004				0	0	0	\$0	Extreme Heat
7/6/2010	CTZ004				0	0	0	\$0	Extreme Heat
7/7/2010	CTZ004				0	0	0	\$0	Extreme Heat
7/21/2010	WINDHAM				50	0	0	\$10,529	Thunderstorms
7/24/2010	WINDHAM				0	0	0	\$10,529	Thunderstorms
7/24/2010	WINDHAM				50	0	0	\$10,529	Thunderstorms
12/26/2010	CTZ004				0	0	0	\$0	Winter Weather
1/11/2011	CTZ004				0	0	0	\$0	Winter Weather
1/21/2011	CTZ004				0	0	0	\$0	Winter Weather
1/26/2011	CTZ004				0	0	0	\$0	Winter Weather
2/1/2011	CTZ004				0	0	0	\$510,345	Winter Weather
6/9/2011	WINDHAM				50	0	0	\$5,103	Thunderstorms
7/22/2011	CTZ004				0	0	0	\$0	Extreme Heat
7/26/2011	WINDHAM				50	0	0	\$30,621	Thunderstorms
7/26/2011	WINDHAM				50	0	0	\$76,552	Thunderstorms
8/28/2011	CTZ004				0	0	0	\$20,413,801	Hurricane

BGN_DATE	COUNTYNAME	LENGTH	WIDTH	F	MAG	FATALITIES	INJURIES	Property Damages (2012 Inflated)	HIRA_TYPE
10/29/2011	CTZ004				0	0	0	\$0	Winter Weather
10/29/2011	CTZ004				0	0	0	\$1,531,035	Winter Weather
12/22/2011	WINDHAM				50	0	0	\$10,207	Thunderstorms
12/22/2011	WINDHAM				50	0	0	\$10,207	Thunderstorms
12/27/2011	CTZ004				53	0	0	\$3,062	Thunderstorms
1/16/2012	CTZ004				0	0	0	\$0	Winter Weather
1/19/2012	CTZ004				0	0	0	\$0	Winter Weather
1/21/2012	CTZ004				0	0	0	\$0	Winter Weather
2/29/2012	CTZ004				0	0	0	\$0	Winter Weather
4/12/2012	CTZ004				0	0	0	\$0	Drought
6/22/2012	WINDHAM				50	0	0	\$30,000	Thunderstorms
6/22/2012	WINDHAM				50	0	0	\$30,000	Thunderstorms
6/22/2012	WINDHAM				50	0	0	\$15,000	Thunderstorms
6/22/2012	WINDHAM				100	0	0	\$0	Thunderstorms
7/1/2012	WINDHAM				75	0	0	\$0	Thunderstorms
7/18/2012	WINDHAM				175	0	0	\$0	Thunderstorms
7/18/2012	WINDHAM				175	0	0	\$0	Thunderstorms
7/18/2012	WINDHAM				175	0	0	\$0	Thunderstorms
7/18/2012	WINDHAM				75	0	0	\$0	Thunderstorms
7/18/2012	WINDHAM				88	0	0	\$0	Thunderstorms
8/10/2012	WINDHAM				50	0	0	\$10,000	Thunderstorms
9/18/2012	WINDHAM				50	0	0	\$5,000	Thunderstorms
10/29/2012	CTZ004				53	0	0	\$438,000	Thunderstorms
11/7/2012	CTZ004				0	0	0	\$0	Winter Weather
12/29/2012	CTZ004				0	0	0	\$0	Winter Weather

# NCDC Ranking

## LEGEND

PV - Population Vulnerability per SqMi(2010)  
 PP - Pop Projection 2025 (% Change from 2010)  
 EV- Annualized Events  
 PD - Property Damage (Annualized)  
 PM - Permits  
 I/D - Injuries and Deaths (Total)  
 LP - Local Plan  
 GE - Geographic Extent  
 RS - Risk

## Winter Weather

EV	PD	ID	GE	LP	RS	Rank
4	1	4	3	3	21.5	High
3	4	1	3	3	20	High
4	2	4	4	2	19.5	Med-High
3	1	4	3	3	18.5	Med-High
4	1	4	3	4	22.5	High
3	1	4	2	4	18	Med
3	4	1	3	3	19	Med-High
3	3	1	4	4	20	High

## Flood

## Hurricane

COUNTY	PM	PV	PP	EV	PD	ID	GE	LP	RS	Rank	EV	PD	ID	GE	LP	RS	Rank
Fairfield County	4	4	2	4	4	4	1	2	20.5	High	2	4	1	3	3	19.5	Med-High
Hartford County	3	4	2	3	3	4	4	3	23.5	High	2	4	1	3	2	18	Med
Litchfield County	1	1	1	4	3	1	2	2	14.5	Med-Low	2	4	1	3	1	14	Med-Low
Middlesex County	2	2	2	3	4	4	1	4	19.5	Med-High	2	4	1	4	4	20	High
New Haven County	3	4	3	4	4	4	1	3	21.5	High	2	4	1	3	4	20.5	High
New London County	2	2	2	3	4	4	1	3	18.5	Med-High	2	4	1	4	4	20	High
Tolland County	2	2	3	2	1	4	2	3	16.5	Med	2	4	1	4	2	18.5	Med-High
Windham County	1	1	4	2	1	4	3	4	18.5	Med-High	2	4	1	4	4	20	High

## Thunderstorm

## Tornado

COUNTY	PM	PV	PP	EV	PD	ID	GE	LP	RS	Rank	EV	PD	ID	GE	LP	RS	Rank
Fairfield County	4	4	2	4	3	4	4	3	25	High	2	3	4	2	1	18	Med
Hartford County	3	4	2	4	3	4	4	1	22.5	High	2	4	4	3	3	22	High
Litchfield County	1	1	1	4	2	4	3	2	18	Med	2	4	4	4	1	18.5	Med-High
Middlesex County	2	2	2	3	1	4	2	3	17	Med	2	1	4	2	1	14	Med-Low
New Haven County	3	4	3	4	2	4	3	3	22.5	High	2	4	4	2	2	20	High
New London County	2	2	2	3	1	4	1	2	14.5	Med-Low	2	1	4	1	2	13.5	Med-Low
Tolland County	2	2	3	3	1	4	2	1	15.5	Med	2	1	4	2	2	15.5	Med
Windham County	1	1	4	3	1	4	1	3	15.5	Med	2	2	4	1	2	14.5	Med-Low

## Wildfire

## Dam or Levee

COUNTY	PM	PV	PP	EV	PD	ID	GE	LP	RS	Rank	EV	PD	ID	GE	LP	RS	Rank
Fairfield County	4	4	2	4	1	1	2	1	15	Med	2	1	1	4	1	16	Med
Hartford County	3	4	2	4	1	1	1	1	13	Med-	2	1	1	4	3	17.5	Med

										Low							
Litchfield County	1	1	1	4	1	1	2	1	11.5	Med-Low	2	1	1	4	1	12.5	Med-Low
Middlesex County	2	2	2	4	1	1	3	1	14.5	Med-Low	2	1	4	3	4	18.5	Med-High
New Haven County	3	4	3	4	1	1	1	1	13.5	Med-Low	2	1	1	4	1	16	Med
New London County	2	2	2	4	1	1	2	1	13	Med-Low	2	3	4	4	1	19	Med-High
Tolland County	2	2	3	4	1	1	3	1	15	Med	2	1	1	3	2	14	Med-Low
Windham County	1	1	4	4	1	1	4	1	16	Med	2	1	1	2	1	11	Med-Low

**Drought**

**Earthquake**

COUNTY	PM	PV	PP	EV	PD	ID	GE	LP	RS	Rank	EV	PD	ID	GE	LP	RS	Rank
Fairfield County	4	4	2	2	1	1	2	1	13	Med-Low	2	1	1	1	1	11.5	Med-Low
Hartford County	3	4	2	2	1	1	2	2	13.5	Med-Low	2	1	1	1	2	12	Med-Low
Litchfield County	1	1	1	2	1	1	2	1	9.5	Low	2	1	1	1	1	8	Low
Middlesex County	2	2	2	2	1	1	2	1	11	Med-Low	2	1	1	1	1	9.5	Low
New Haven County	3	4	3	2	1	1	2	1	13	Med-Low	2	1	1	1	2	12.5	Med-Low
New London County	2	2	2	2	1	1	2	1	11	Med-Low	2	1	1	1	2	10.5	Low
Tolland County	2	2	3	2	1	1	2	2	12.5	Med-Low	2	1	1	1	2	11	Med-Low
Windham County	1	1	4	2	1	1	2	2	12	Med-Low	2	1	1	1	1	9.5	Low

## NFIP Statistics

comm_name	comm_stat	panel_dt	emer_dt	fhbm_dt	entry_dt	pfirm_dt	firm_dt	firm_st	crs_ind
BETHEL, TOWN OF	PARTICIPATING	18-Jun-10	25-Jul-75	05-Apr-74	15-Feb-84	15-Feb-84	18-Jun-10	02	N
BRIDGEPORT, CITY OF	PARTICIPATING	08-Jul-13	07-Aug-73	11-Feb-77	15-Oct-80	15-Oct-80	08-Jul-13	03	N
BROOKFIELD, TOWN OF	PARTICIPATING	18-Jun-10	25-Jun-75	26-Jul-74	15-Jun-79	15-Jun-79	18-Jun-10	02	N
DANBURY, CITY OF	PARTICIPATING	18-Jun-10	19-Nov-71	02-Aug-74	02-May-77	02-May-77	18-Jun-10	03	N
DARIEN, TOWN OF	PARTICIPATING	08-Jul-13	19-Jan-73	26-Jul-74	02-Jan-81	02-Jan-81	08-Jul-13	03	N
EASTON, TOWN OF	PARTICIPATING	18-Jun-10	07-Jan-75	18-Oct-74	30-Sep-83	30-Sep-83	18-Jun-10	02	N
FAIRFIELD, TOWN OF	PARTICIPATING	08-Jul-13	07-Apr-72	02-Aug-74	15-Aug-78	15-Aug-78	08-Jul-13	03	N
GREENWICH, TOWN OF	PARTICIPATING	08-Jul-13	04-Feb-72	18-Oct-74	30-Sep-77	30-Sep-77	08-Jul-13	03	N
MONROE, TOWN OF	PARTICIPATING	18-Jun-10	24-Apr-75	16-Aug-74	17-Apr-85	17-Apr-85	18-Jun-10	02	N
NEW CANAAN, TOWN OF	PARTICIPATING	18-Jun-10	07-Apr-72	19-Jul-74	16-May-77	16-May-77	18-Jun-10	03	N
NEWTOWN, TOWN OF	PARTICIPATING	18-Jun-10	28-Aug-75	18-Oct-74	15-Jun-79	15-Jun-79	18-Jun-10	02	Y
NORWALK, CITY OF	PARTICIPATING	08-Jul-13	10-Mar-72	25-Oct-74	03-Apr-78	03-Apr-78	08-Jul-13	03	Y
RIDGEFIELD, TOWN OF	PARTICIPATING	18-Jun-10	24-Jan-75	13-Sep-74	30-Sep-82	30-Sep-82	18-Jun-10	02	N
SHELTON, CITY OF	PARTICIPATING	18-Jun-10	31-Aug-73	24-May-74	29-Sep-78	29-Sep-78	18-Jun-10	03	N
STAMFORD, CITY OF	PARTICIPATING	08-Jul-13	10-Mar-72	02-Aug-74	16-Jan-81	16-Jan-81	08-Jul-13	03	Y
STRATFORD, TOWN OF	PARTICIPATING	08-Jul-13	18-Aug-72	28-Feb-75	01-Jun-78	01-Jun-78	08-Jul-13	03	N
TRUMBULL, TOWN OF	PARTICIPATING	18-Jun-10	15-Jan-74	28-Jun-74	04-Dec-79	04-Dec-79	18-Jun-10	03	N
WESTON, TOWN OF	PARTICIPATING	18-Jun-10	08-Sep-72	08-Mar-74	17-Oct-78	17-Oct-78	18-Jun-10	03	N
WESTPORT, TOWN OF	PARTICIPATING	08-Jul-13	08-Oct-71	19-Jul-74	02-Jul-80	02-Jul-80	08-Jul-13	03	Y
WILTON, TOWN OF	PARTICIPATING	18-Jun-10	31-Jul-74	15-Mar-74	17-Nov-82	17-Nov-82	18-Jun-10	03	N
AVON, TOWN OF	PARTICIPATING	26-Sep-08	06-Oct-72	23-Jan-74	16-May-77	16-May-77	26-Sep-08	03	N
BERLIN, TOWN OF	PARTICIPATING	26-Sep-08	14-Jan-75	16-Aug-74	16-Jul-80	16-Jul-80	26-Sep-08	03	N
BRISTOL, CITY OF	PARTICIPATING	26-Sep-08	02-May-75	17-May-74	18-Nov-81	18-Nov-81	26-Sep-08	02	N
COLLINSVILLE, TOWN OF	NOT A NFIP COMMUNITY	- -	- -	- -	- -	- -	- -	01	N
EAST GRANBY,	PARTICIPATING	26-Sep-	09-Apr-	31-May-	06-Jan-	06-Jan-	26-Sep-	03	N



comm_name	comm_stat	panel_dt	emer_dt	fhbm_dt	entry_dt	pfirm_dt	firm_dt	firm_st	crs_ind
TOWN OF	PARTICIPATING								
ROXBURY, TOWN OF	PARTICIPATING	03-Dec-87	19-Aug-75	07-Jun-74	03-Dec-87	03-Dec-87	03-Dec-87	02	N
SALISBURY, TOWN OF	PARTICIPATING	05-Jan-89	03-Oct-74	28-Jun-74	05-Jan-89	05-Jan-89	05-Jan-89	02	N
SHARON, TOWN OF	PARTICIPATING	16-Aug-88	17-Jan-75	02-Aug-74	16-Aug-88	16-Aug-88	16-Aug-88	02	N
TERRYVILLE, TOWN OF	NOT PARTICIPATING	- -	- -	- -	- -	- -	- -	01	N
THOMASTON, TOWN OF	PARTICIPATING	05-Jul-82	16-Jul-75	31-May-74	05-Jul-82	05-Jul-82	05-Jul-82	02	N
TOLLAND COUNTY	NOT A NFIP COMMUNITY	- -	- -	- -	- -	- -	- -	00	N
WASHINGTON, TOWN OF	PARTICIPATING	30-Sep-92	24-Jul-75	08-Mar-74	03-Jun-88	03-Jun-88	30-Sep-92	03	N
WATERTOWN, TOWN OF	PARTICIPATING	05-Nov-80	17-Dec-74	31-May-74	05-Nov-80	05-Nov-80	05-Nov-80	02	N
WINSTED, CITY OF	NOT A NFIP COMMUNITY	- -	- -	17-May-74	- -	- -	- -	01	N
CHESTER, TOWN OF	PARTICIPATING	28-Aug-08	12-Jan-73	07-Sep-73	16-Jul-80	16-Jul-80	28-Aug-08	03	N
CLINTON, TOWN OF	PARTICIPATING	06-Feb-13	02-Mar-73	01-Feb-74	30-Sep-80	30-Sep-80	06-Feb-13	03	N
DEEP RIVER, TOWN OF	PARTICIPATING	28-Aug-08	30-Mar-73	28-Dec-73	16-Jan-81	16-Jan-81	28-Aug-08	02	N
EAST HADDAM, TOWN OF	PARTICIPATING	28-Aug-08	10-Feb-75	23-Aug-74	01-Nov-79	01-Nov-79	28-Aug-08	02	N
EAST HAMPTON, TOWN OF	PARTICIPATING	28-Aug-08	21-Aug-74	10-May-74	16-Oct-79	16-Oct-79	28-Aug-08	02	N
ESSEX, TOWN OF	PARTICIPATING	06-Feb-13	09-Feb-73	26-Oct-73	16-Jul-80	16-Jul-80	06-Feb-13	03	N
HADDAM, TOWN OF	PARTICIPATING	28-Aug-08	23-May-75	31-May-74	16-Jan-80	16-Jan-80	28-Aug-08	02	N
MIDDLEFIELD, TOWN OF	PARTICIPATING	28-Aug-08	25-Oct-73	31-May-74	28-Mar-80	28-Mar-80	28-Aug-08	02	N
MIDDLETOWN, CITY OF	PARTICIPATING	28-Aug-08	16-Aug-74	16-Aug-74	16-Dec-80	16-Dec-80	28-Aug-08	03	N
OLD SAYBROOK, TOWN OF	PARTICIPATING	06-Feb-13	31-Mar-72	26-Jul-74	03-Jul-78	03-Jul-78	06-Feb-13	03	N
WESTBROOK, TOWN OF	PARTICIPATING	06-Feb-13	09-Mar-73	23-Nov-73	01-Dec-82	01-Dec-82	06-Feb-13	03	Y
ANSONIA, CITY OF	PARTICIPATING	17-Dec-10	02-Nov-74	03-May-74	02-Sep-81	02-Sep-81	17-Dec-10	03	N
BEACON FALLS, TOWN OF	PARTICIPATING	17-Dec-10	27-Jun-75	03-May-74	01-Mar-79	01-Mar-79	17-Dec-10	02	N
BRANFORD, TOWN OF	PARTICIPATING	08-Jul-13	05-Apr-73	26-Jul-74	15-Dec-77	15-Dec-77	08-Jul-13	03	N
CHESHIRE, TOWN OF	PARTICIPATING	17-Dec-10	13-Mar-75	05-Apr-74	16-Jul-81	16-Jul-81	17-Dec-10	03	Y
DERBY, CITY OF	PARTICIPATING	17-Dec-	04-Feb-	28-Jun-	15-Sep-	15-Sep-	17-Dec-	03	N

comm_name	comm_stat	panel_dt	emer_dt	fhbm_dt	entry_dt	pfirm_dt	firm_dt	firm_st	crs_ind
		10	72	74	77	77	10		
EAST HAVEN, TOWN OF	PARTICIPATING	08-Jul-13	19-Apr-73	28-Jun-74	01-Feb-78	01-Feb-78	08-Jul-13	03	Y
GUILFORD, TOWN OF	PARTICIPATING	08-Jul-13	20-Oct-72	02-Aug-74	01-May-78	01-May-78	08-Jul-13	03	N
HAMDEN, TOWN OF	PARTICIPATING	08-Jul-13	03-May-73	04-Jan-74	15-Jun-79	15-Jun-79	08-Jul-13	02	Y
MADISON, TOWN OF	PARTICIPATING	08-Jul-13	19-Jul-73	31-May-74	15-Sep-78	15-Sep-78	08-Jul-13	03	N
MIDDLEBURY, TOWN OF	PARTICIPATING	17-Dec-10	16-Jul-75	06-Sep-74	16-Oct-79	16-Oct-79	17-Dec-10	02	N
MERIDEN, CITY OF	PARTICIPATING	17-Dec-10	11-Apr-74	14-Jun-74	30-Sep-82	30-Sep-82	17-Dec-10	02	N
MILFORD, CITY OF	PARTICIPATING	08-Jul-13	14-Jan-72	02-Aug-77	29-Sep-78	29-Sep-78	08-Jul-13	03	Y
NEW LONDON COUNTY	NOT PARTICIPATING	- -	- -	- -	- -	- -	- -	00	N
NEW HAVEN, CITY OF	PARTICIPATING	08-Jul-13	25-Oct-73	07-Jun-74	16-Jul-80	16-Jul-80	08-Jul-13	03	N
NORTH BRANFORD, TOWN OF	PARTICIPATING	08-Jul-13	20-Oct-72	21-Jun-74	03-Jul-78	03-Jul-78	08-Jul-13	02	N
NORTH HAVEN, TOWN OF	PARTICIPATING	08-Jul-13	13-Jul-73	24-May-74	17-Sep-80	17-Sep-80	08-Jul-13	03	N
ORANGE, TOWN OF	PARTICIPATING	08-Jul-13	25-May-73	14-Sep-73	18-Mar-80	18-Mar-80	08-Jul-13	03	N
SEYMOUR, TOWN OF	PARTICIPATING	17-Dec-10	18-Dec-74	26-Jul-74	03-Jul-78	03-Jul-78	17-Dec-10	03	N
SOUTHBURY, TOWN OF	PARTICIPATING	17-Dec-10	31-Aug-73	08-Feb-74	28-Mar-80	28-Mar-80	17-Dec-10	02	N
WALLINGFORD, TOWN OF	PARTICIPATING	17-Dec-10	25-Jun-73	02-Aug-74	15-Sep-78	15-Sep-78	17-Dec-10	03	Y
WATERBURY, CITY OF	PARTICIPATING	17-Dec-10	23-May-75	22-Mar-74	01-Nov-79	01-Nov-79	17-Dec-10	02	N
WEST HAVEN, CITY OF	PARTICIPATING	08-Jul-13	06-Oct-72	31-May-74	17-Jan-79	17-Jan-79	08-Jul-13	03	N
WOLCOTT, TOWN OF	PARTICIPATING	17-Dec-10	06-Aug-75	03-May-74	05-Jul-82	05-Jul-82	17-Dec-10	02	N
BOZRAH, TOWN OF	PARTICIPATING	18-Jul-11	23-Apr-74	- -	30-Sep-81	30-Sep-81	18-Jul-11	03	N
COLCHESTER, TOWN OF	PARTICIPATING	18-Jul-11	21-May-75	02-Aug-74	15-Jun-82	15-Jun-82	18-Jul-11	03	N
EAST LYME, TOWN OF	PARTICIPATING	05-Aug-13	23-Oct-73	13-Sep-74	15-Jun-81	15-Jun-81	05-Aug-13	03	Y
GROTON, TOWN OF	PARTICIPATING	05-Aug-13	18-Feb-72	21-Feb-75	15-Apr-77	15-Apr-77	05-Aug-13	03	N
JEWETT CITY, BOROUGH OF	PARTICIPATING	18-Jul-11	15-Mar-76	10-Dec-76	03-Apr-85	03-Apr-85	18-Jul-11	02	N
MONTVILLE, TOWN OF	PARTICIPATING	05-Aug-13	27-Nov-73	18-Oct-74	02-Jul-80	02-Jul-80	05-Aug-13	03	N
NEW LONDON, CITY	PARTICIPATING	05-Aug-	24-Mar-	28-Jun-	02-May-	02-May-	05-Aug-	03	N

comm_name	comm_stat	panel_dt	emer_dt	fhbm_dt	entry_dt	pfirm_dt	firm_dt	firm_st	crs_ind
OF		13	72	74	77	77	13		
NORTH STONINGTON, TOWN OF	PARTICIPATING	18-Jul-11	15-Sep-75	13-Sep-74	03-Apr-85	03-Apr-85	18-Jul-11	02	N
NORWICH, CITY OF	PARTICIPATING	18-Jul-11	12-Apr-73	31-May-74	15-Jun-78	15-Jun-78	18-Jul-11	03	N
OLD LYME, TOWN OF	PARTICIPATING	05-Aug-13	10-Apr-73	04-Feb-77	16-Jul-80	16-Jul-80	05-Aug-13	03	N
POGUETANUCK, TOWN OF	NOT PARTICIPATING	- -	- -	- -	- -	- -	- -	01	N
SPRAGUE, TOWN OF	PARTICIPATING	18-Jul-11	14-Apr-75	10-May-74	03-Jan-85	03-Jan-85	18-Jul-11	02	N
STONINGTON, TOWN OF	PARTICIPATING	05-Aug-13	28-May-75	18-Oct-74	30-Sep-80	30-Sep-80	05-Aug-13	03	Y
WATERFORD, TOWN OF	PARTICIPATING	05-Aug-13	23-Aug-74	26-Jul-74	04-Feb-81	04-Feb-81	05-Aug-13	03	N
MOHEGAN TRIBE	NOT PARTICIPATING	- -	- -	- -	- -	- -	- -	00	N
BOLTON, TOWN OF	PARTICIPATING	01-Jun-81	04-Sep-75	07-Jun-74	01-Jun-81	01-Jun-81	01-Jun-81	02	N
COVENTRY, TOWN OF	PARTICIPATING	11-Jun-82	07-Jan-74	09-Aug-74	04-Jun-80	04-Jun-80	11-Jun-82	03	N
ROCKVILLE, CITY OF	NOT PARTICIPATING	- -	- -	- -	- -	- -	- -	01	N
SOMERS, TOWN OF	PARTICIPATING	16-Aug-06	25-Jul-75	02-Aug-74	17-Feb-82	17-Feb-82	16-Aug-06	03	N
STAFFORD SPRINGS, BOROUGH OF	DEFUNCT	01-Jun-82	05-Aug-75	28-Jun-74	01-Jun-82	01-Jun-82	01-Jun-82	02	N
DANIELSON, CITY OF	NOT PARTICIPATING	- -	- -	- -	- -	- -	- -	01	N
EASTFORD, TOWN OF	PARTICIPATING	16-May-83	26-Jun-75	15-Mar-74	16-May-83	16-May-83	16-May-83	02	N
PLAINFIELD, TOWN OF	PARTICIPATING	17-Jun-91	20-Feb-75	06-Sep-74	17-Jun-91	17-Jun-91	17-Jun-91	02	N
THOMPSON, TOWN OF	PARTICIPATING	01-Nov-84	26-Jun-75	17-May-74	01-Nov-84	01-Nov-84	01-Nov-84	02	N
STERLING, TOWN OF	PARTICIPATING	04-Mar-85	23-Jul-75	31-May-74	04-Mar-85	04-Mar-85	04-Mar-85	02	N
WINDHAM, TOWN OF	PARTICIPATING	06-Nov-98	26-Jun-75	12-Apr-74	03-Feb-82	03-Feb-82	06-Nov-98	02	N
WOODSTOCK, TOWN OF	PARTICIPATING	01-Nov-84	25-Sep-75	20-Sep-74	01-Nov-84	01-Nov-84	01-Nov-84	02	N
WILLIMANTIC, CITY OF	DEFUNCT	02-Aug-82	31-Jul-75	10-May-74	02-Aug-82	02-Aug-82	02-Aug-82	02	N
BLOOMFIELD, TOWN OF	PARTICIPATING	16-Sep-11	18-Feb-72	01-Feb-74	15-Aug-77	15-Aug-77	16-Sep-11	03	N
CROMWELL, TOWN OF	PARTICIPATING	28-Aug-08	15-Nov-73	22-Mar-74	15-Jun-78	15-Jun-78	28-Aug-08	03	N
GLASTONBURY,	PARTICIPATING	16-Sep-	15-Dec-	20-Apr-	15-Jun-	15-Jun-	16-Sep-	02	N

comm_name	comm_stat	panel_dt	emer_dt	fhbm_dt	entry_dt	pfirm_dt	firm_dt	firm_st	crs_ind
TOWN OF		11	72	73	78	78	11		
GRANBY, TOWN OF	PARTICIPATING	26-Sep-08	27-Sep-73	19-Jul-74	15-Feb-80	15-Feb-80	26-Sep-08	03	N
GROTON, CITY OF	PARTICIPATING	05-Aug-13	18-Sep-73	21-Feb-75	15-May-80	15-May-80	05-Aug-13	03	N
LYME, TOWN OF	PARTICIPATING	05-Aug-13	16-Aug-73	14-Jun-74	03-Jan-79	03-Jan-79	05-Aug-13	02	N
MANSFIELD, TOWN OF	PARTICIPATING	02-Jan-81	09-Mar-73	09-Jan-74	02-Jan-81	02-Jan-81	02-Jan-81	02	N
NOANK FIRE DISTRICT	PARTICIPATING	05-Aug-13	25-Sep-73	21-Feb-75	17-Sep-80	17-Sep-80	05-Aug-13	03	N
PORTLAND, TOWN OF	PARTICIPATING	28-Aug-08	31-Oct-73	15-Mar-74	03-Jul-78	03-Jul-78	28-Aug-08	02	N
VERNON, TOWN OF	PARTICIPATING	09-Aug-99	26-Jan-73	04-Jan-74	04-Dec-79	04-Dec-79	09-Aug-99	02	N
WINCHESTER, TOWN OF	PARTICIPATING	17-Jul-78	27-Oct-72	02-Aug-74	17-Jul-78	17-Jul-78	17-Jul-78	02	N
WOODBURY, TOWN OF	PARTICIPATING	20-Oct-78	18-Feb-72	12-Apr-74	05-Jan-78	05-Jan-78	20-Oct-78	02	N
BARKHAMSTED, TOWN OF	PARTICIPATING	17-Feb-82	28-Mar-75	30-Aug-74	17-Feb-82	17-Feb-82	17-Feb-82	02	N
CANTON, TOWN OF	PARTICIPATING	26-Sep-08	02-Mar-74	02-Aug-74	02-Aug-79	02-Aug-79	26-Sep-08	03	N
KILLINGLY, TOWN OF	PARTICIPATING	03-Jan-85	05-Sep-75	06-Sep-74	03-Jan-85	03-Jan-85	03-Jan-85	06	N
NAUGATUCK, BOROUGH OF	PARTICIPATING	17-Dec-10	26-Jun-75	28-Jun-74	15-Aug-79	15-Aug-79	17-Dec-10	02	N
PLYMOUTH, TOWN OF	PARTICIPATING	06-Nov-98	04-Sep-75	16-Aug-74	15-Oct-82	15-Oct-82	06-Nov-98	02	N
PRESTON, TOWN OF	PARTICIPATING	18-Jul-11	21-Aug-75	16-Aug-74	04-Mar-85	04-Mar-85	18-Jul-11	02	N
PUTNAM, CITY OF	DEFUNCT	- -	18-Jul-75	06-Sep-74	01-Nov-84	- -	- -	01	N
REDDING, TOWN OF	PARTICIPATING	18-Jun-10	23-Sep-74	23-Aug-74	15-Jun-82	15-Jun-82	18-Jun-10	02	N
ROCKY HILL, TOWN OF	PARTICIPATING	26-Sep-08	12-May-75	07-Jun-74	01-Aug-80	01-Aug-80	26-Sep-08	02	N
VOLUNTOWN, TOWN OF	PARTICIPATING	18-Jul-11	17-Jul-75	31-May-74	03-Jun-88	03-Jun-88	18-Jul-11	02	N
BETHANY, TOWN OF	PARTICIPATING	17-Dec-10	24-Jul-75	26-Jul-74	23-Aug-77	23-Aug-77	17-Dec-10	03	N
BURLINGTON, TOWN OF	PARTICIPATING	26-Sep-08	14-Apr-75	19-Jul-74	01-Jun-81	01-Jun-81	26-Sep-08	02	N
HARTLAND, TOWN OF	PARTICIPATING	26-Sep-08	14-Jan-75	28-Jun-74	16-Dec-80	16-Dec-80	26-Sep-08	02	N
HARWINTON, TOWN OF	PARTICIPATING	17-Feb-82	23-Jul-75	28-Jun-74	17-Feb-82	17-Feb-82	17-Feb-82	02	N
MARLBOROUGH, TOWN OF	PARTICIPATING	26-Sep-08	05-Feb-75	19-Jul-74	17-May-82	17-May-82	26-Sep-08	03	N
NORTH CANAAN,	PARTICIPATING	08-Jan-	21-Feb-	30-Aug-	18-Nov-	18-Nov-	08-Jan-	02	N

comm_name	comm_stat	panel_dt	emer_dt	fhbm_dt	entry_dt	pfirm_dt	firm_dt	firm_st	crs_ind
TOWN OF		08	75	74	88	88	08		
OXFORD, TOWN OF	PARTICIPATING	17-Dec-10	01-Jul-75	28-Jun-74	04-Dec-79	04-Dec-79	17-Dec-10	03	N
PROSPECT, TOWN OF	PARTICIPATING	17-Dec-10	01-Jul-75	21-Jun-74	04-Feb-77	04-Feb-77	17-Dec-10	03	N
STAFFORD, TOWN OF	PARTICIPATING	01-Jun-82	12-Jan-82	09-Aug-74	01-Jun-82	01-Jun-82	01-Jun-82	02	N
WOODBIDGE, TOWN OF	PARTICIPATING	17-Dec-10	18-Jun-75	28-Jun-74	16-Mar-81	16-Mar-81	17-Dec-10	03	N
FRANKLIN, TOWN OF	PARTICIPATING	18-Jul-11	23-Jul-75	01-Nov-74	01-Dec-81	01-Dec-81	18-Jul-11	02	N
LEBANON, TOWN OF	PARTICIPATING	18-Jul-11	27-May-76	24-Jan-75	03-Jun-88	03-Jun-88	18-Jul-11	02	N
SALEM, TOWN OF	PARTICIPATING	18-Jul-11	01-Jul-82	21-Feb-75	16-Jul-82	16-Jul-82	18-Jul-11	02	N
LEDYARD, TOWN OF	PARTICIPATING	05-Aug-13	22-Aug-78	21-Feb-75	01-Apr-81	01-Apr-81	05-Aug-13	02	N
ELLINGTON, TOWN OF	PARTICIPATING	05-Feb-97	29-Jul-75	01-Nov-74	15-Mar-82	15-Mar-82	05-Feb-97	03	N
WILLINGTON, TOWN OF	PARTICIPATING	15-Jun-82	13-Jan-76	20-Dec-74	15-Jun-82	15-Jun-82	15-Jun-82	02	N
COLUMBIA, TOWN OF	PARTICIPATING	16-Sep-82	04-Aug-75	08-Nov-74	16-Sep-82	16-Sep-82	16-Sep-82	02	N
ANDOVER, TOWN OF	PARTICIPATING	03-Feb-82	20-Nov-75	18-Apr-75	03-Feb-82	03-Feb-82	03-Feb-82	02	N
HEBRON, TOWN OF	PARTICIPATING	18-Mar-91	17-Oct-75	29-Nov-74	15-Oct-81	15-Oct-81	18-Mar-91	03	N
POMFRET, TOWN OF	PARTICIPATING	17-Apr-85	08-Oct-75	20-Sep-74	17-Apr-85	17-Apr-85	17-Apr-85	02	N
BROOKLYN, TOWN OF	PARTICIPATING	03-Jan-85	10-Feb-76	28-Feb-75	03-Jan-85	03-Jan-85	03-Jan-85	02	N
ASHFORD, TOWN OF	PARTICIPATING	01-Dec-81	01-Nov-74	08-Nov-74	01-Dec-81	01-Dec-81	01-Dec-81	02	N
SHERMAN, TOWN OF	PARTICIPATING	18-Jun-10	25-Jul-75	21-Feb-75	18-Jun-87	18-Jun-87	18-Jun-10	02	N
GROTON LONG POINT ASSOCIATION	PARTICIPATING	05-Aug-13	20-Aug-74	11-Apr-75	18-Mar-80	18-Mar-80	05-Aug-13	03	N
WOODMONT, BOROUGH OF	NOT PARTICIPATING	08-Jul-13	- -	- -	- -	- -	08-Jul-13	00	N
DANIELSON, BOROUGH OF	PARTICIPATING	01-Nov-84	17-Feb-76	24-Jan-75	01-Nov-84	01-Nov-84	01-Nov-84	02	N
HAMPTON, TOWN OF	PARTICIPATING	04-Dec-85	29-Dec-75	10-Jan-75	04-Dec-85	04-Dec-85	04-Dec-85	06	N
TOLLAND, TOWN OF	PARTICIPATING	01-Apr-82	29-May-75	31-Jan-75	01-Apr-82	01-Apr-82	01-Apr-82	02	N
LISBON, TOWN OF	PARTICIPATING	18-Jul-11	12-Jan-76	31-Jan-75	15-Feb-85	15-Feb-85	18-Jul-11	02	N
GRISWOLD, TOWN OF	PARTICIPATING	18-Jul-11	15-Mar-76	28-Feb-75	03-Jan-85	03-Jan-85	18-Jul-11	02	N





## Repetitive & Severe Repetitive Loss Properties

Community	Number of Repetitive Loss Properties	Number of Severe Repetitive Loss Properties
AVON	3	0
BERLIN	6	0
BETHEL	4	2
BLOOMFIELD	3	0
BRANFORD	122	3
BRIDGEPORT	92	0
BRISTOL	32	3
BROOKFIELD	3	0
BURLINGTON	1	0
CANTON	7	0
CHAPLIN	1	0
CHESHIRE	4	0
CHESTER	4	1
CLINTON	52	1
COLUMBIA	1	0
COVENTRY	1	0
CROMWELL	3	0
DANBURY	29	2
DARIEN	58	4
DEEP RIVER	2	0
DERBY	3	0
DURHAM	1	0
EAST HADDAM	3	0
EAST HAMPTON	1	0
EAST HARTFORD	6	1
EAST HAVEN	232	29

Community	Number of Repetitive Loss Properties	Number of Severe Repetitive Loss Properties
EAST LYME	23	0
ENFIELD	6	1
ESSEX	5	0
FAIRFIELD	212	16
FARMINGTON	6	0
FENWICK (Borough)	2	0
FRANKLIN	2	0
GRANBY	1	0
GREENWICH	129	12
GROTON LONG POINT ASSOCIATION	5	0
GROTON (City)	4	0
GROTON (Town)	4	0
GUILFORD	60	3
HADDAM	6	0
HAMDEN	50	2
HARTFORD	3	0
KENT	3	0
KILLINGWORTH	1	0
LEDYARD	3	0
LITCHFIELD	1	0
LYME	5	0
MADISON	85	2
MANCHESTER	2	0
MANSFIELD	4	2
MARLBOROUGH	1	0
MERIDEN	28	0

Community	Number of Repetitive Loss Properties	Number of Severe Repetitive Loss Properties
MIDDLEBURY	2	0
MIDDLETOWN	3	0
MILFORD	518	44
MONROE	1	0
MONTVILLE	2	0
MORRIS	1	0
NEW BRITAIN	13	0
NEW CANAAN	7	0
NEW HARTFORD	4	1
NEW HAVEN	52	2
NEW LONDON	16	2
NEW MILFORD	15	0
NEWINGTON	5	0
NEWTOWN	3	0
NORTH BRANFORD	9	0
NORTH HAVEN	19	4
NORTH STONINGTON	2	0
NORWALK	240	12
NORWICH	20	0
OLD LYME	37	3
OLD SAYBROOK	94	3
ORANGE	16	4
OXFORD	16	3
PLAINFIELD	1	0
PLAINVILLE	7	2
PLYMOUTH	3	0
POMFRET	1	0

Community	Number of Repetitive Loss Properties	Number of Severe Repetitive Loss Properties
PORTLAND	6	1
PUTNAM	1	0
RIDGEFIELD	6	0
ROCKY HILL	1	0
SEYMOUR	1	0
SHELTON	18	4
SIMSBURY	11	0
SOUTH WINDSOR	1	0
SOUTHBURY	20	5
SOUTHINGTON	10	0
STAMFORD	117	12
STONINGTON (Borough)	2	0
STONINGTON (Town)	17	0
STRATFORD	74	4
THOMASTON	1	0
TOLLAND	1	0
TORRINGTON	1	0
TRUMBULL	25	1
VERNON	3	0
WALLINGFORD	11	0
WARREN	2	0
WASHINGTON	2	0
WATERBURY	5	0
WATERFORD	10	0
WATERTOWN	4	0
WEST HARTFORD	33	0
WEST HAVEN	63	2

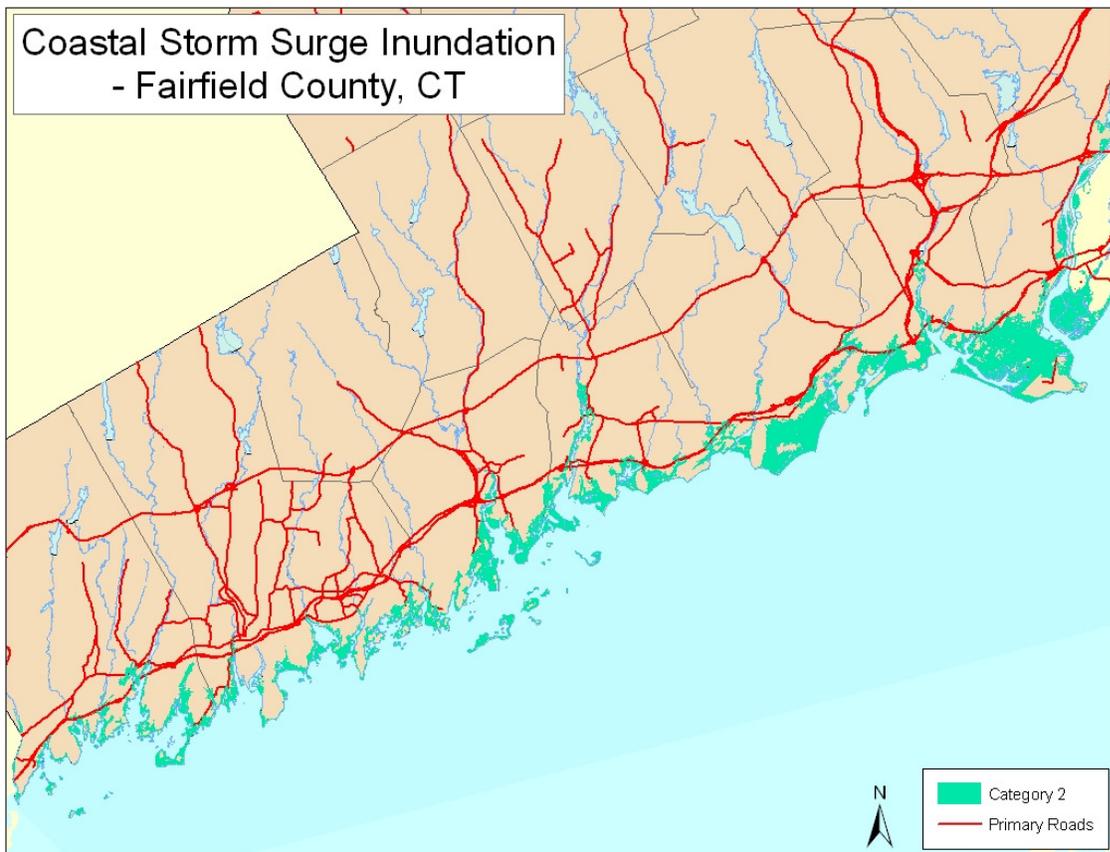
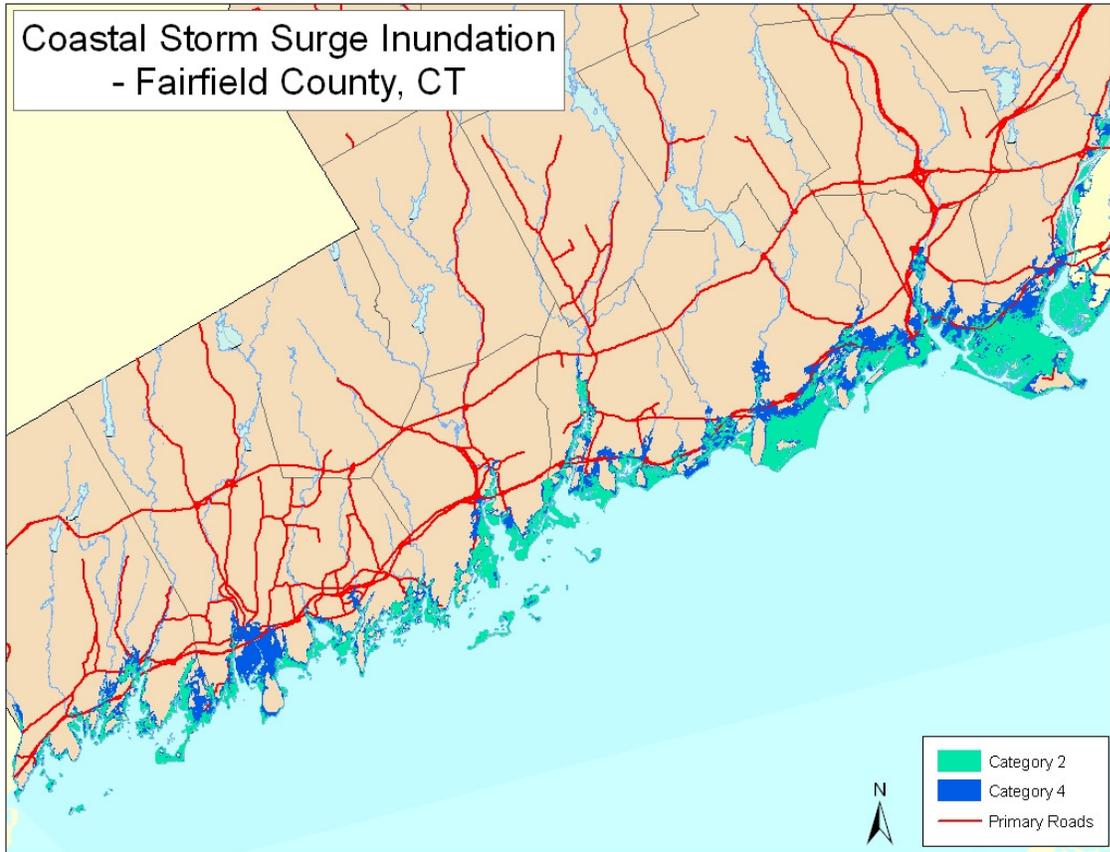
Community	Number of Repetitive Loss Properties	Number of Severe Repetitive Loss Properties
WESTBROOK	76	0
WESTON	15	0
WESTPORT	247	24
WETHERSFIELD	4	0
WILTON	16	1
WINDSOR LOCKS	1	0
WINDSOR	2	0
WOLCOTT	3	0
WOODBIDGE	7	0
WOODBURY	1	0
WOODSTOCK	1	0

## Sea Level Rise Facility Intersections

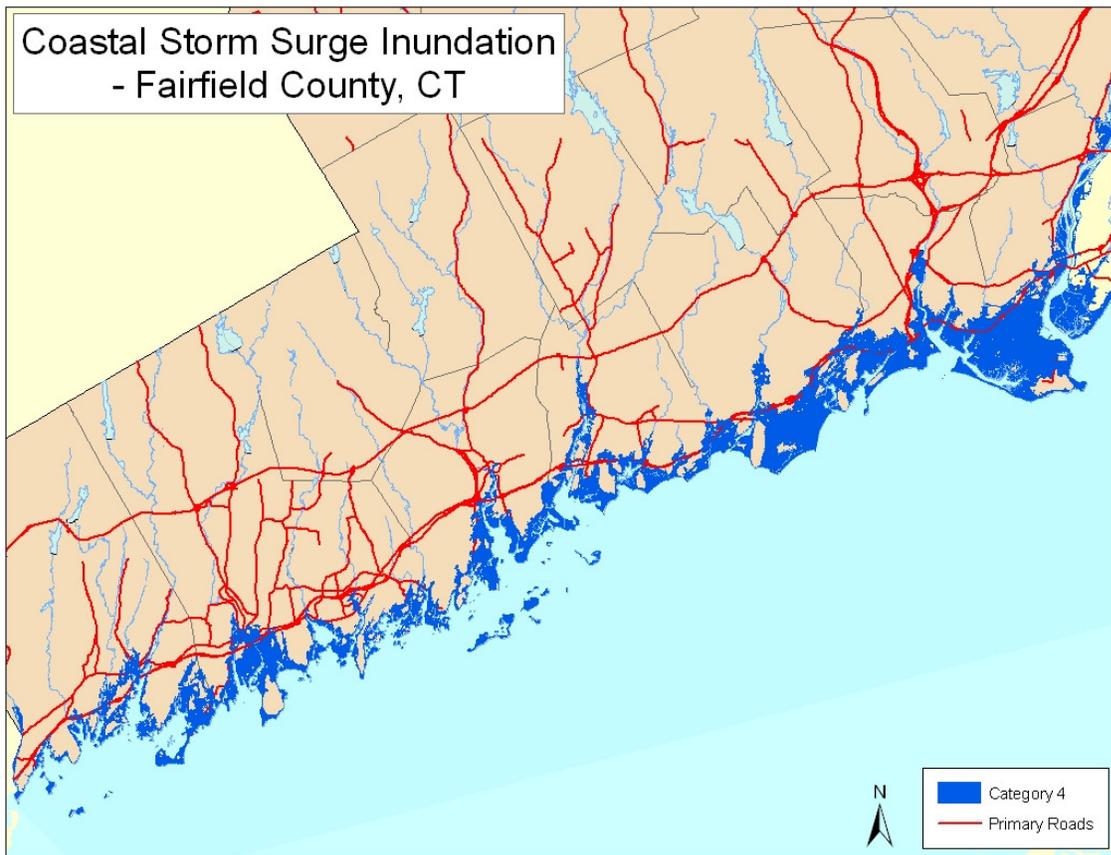
NAME	COUNTY	FACTYPE	Average_MHW_79IN	Average_MHW_60IN	Average_MHW_36IN
UNITED STATES CUSTOMS AND BORDER PROTECTION - BRIDGEPORT SUBSTATION	FAIRFIELD	Law Enforcement	16.297297	0	0
BRIDGEPORT PORT AUTHORITY	FAIRFIELD	Law Enforcement	32.540541	13.540541	0.243243
GREENWICH FIRE DEPARTMENT STATION 2 - COS COB	FAIRFIELD	EMS	19.513514	1.243243	0
WESTPORT FIRE DEPARTMENT - SAUGATUCK	FAIRFIELD	EMS	22.9	7.15	0
WESTPORT FIRE DEPARTMENT - SAUGATUCK	FAIRFIELD	Fire Station	22.9	7.15	0
GREENWICH FIRE DEPARTMENT STATION 2 - COS COB	FAIRFIELD	Fire Station	19.513514	1.243243	0
Global	FAIRFIELD	Storage Tank Farm	6.675676	0	0
Harborview	FAIRFIELD	Storage Tank Farm	45.72973	26.72973	0
WEST SHORE FIRE DISTRICT - HEADQUARTERS	NEW HAVEN	EMS	4	0	0
BRANFORD FIRE DEPARTMENT - INDIAN NECK COMPANY 9	NEW HAVEN	EMS	19.392857	2.285714	0
WEST SHORE FIRE DISTRICT - HEADQUARTERS	NEW HAVEN	Fire Station	4	0	0
NEW HAVEN FIRE DEPARTMENT ENGINE COMPANY 16	NEW HAVEN	Fire Station	48.081081	29.081081	5.27027
BRANFORD FIRE DEPARTMENT - INDIAN NECK COMPANY 9	NEW HAVEN	Fire Station	19.392857	2.285714	0
Gety	NEW HAVEN	Storage Tank Farm	27.162162	8.162162	0
Gulf Oil	NEW HAVEN	Storage Tank Farm	26.675676	7.675676	0
UNITED STATES CUSTOMS AND BORDER PROTECTION - PORT OF ENTRY - NEW LONDON	NEW LONDON	Law Enforcement	1	0	0
GROTON LONG POINT POLICE DEPARTMENT	NEW LONDON	Law Enforcement	47.902439	28.902439	4.902439

NAME	COUNTY	FACTYPE	Average_MHW_ 79IN	Average_MHW_ 60IN	Average_MHW_ 36IN
NEW LONDON FIRE DEPARTMENT - HEADQUARTERS	NEW LONDON	EMS	3.777778	0	0
GROTON LONG POINT FIRE DEPARTMENT	NEW LONDON	EMS	47.317073	28.317073	4.317073
QUIAMBAUG FIRE DEPARTMENT	NEW LONDON	EMS	24.864865	10.108108	1.837838
NEW LONDON FIRE DEPARTMENT - HEADQUARTERS	NEW LONDON	Fire Station	3.777778	0	0
GROTON LONG POINT FIRE DEPARTMENT	NEW LONDON	Fire Station	47.317073	28.317073	4.317073
QUIAMBAUG FIRE DEPARTMENT	NEW LONDON	Fire Station	24.864865	10.108108	1.837838

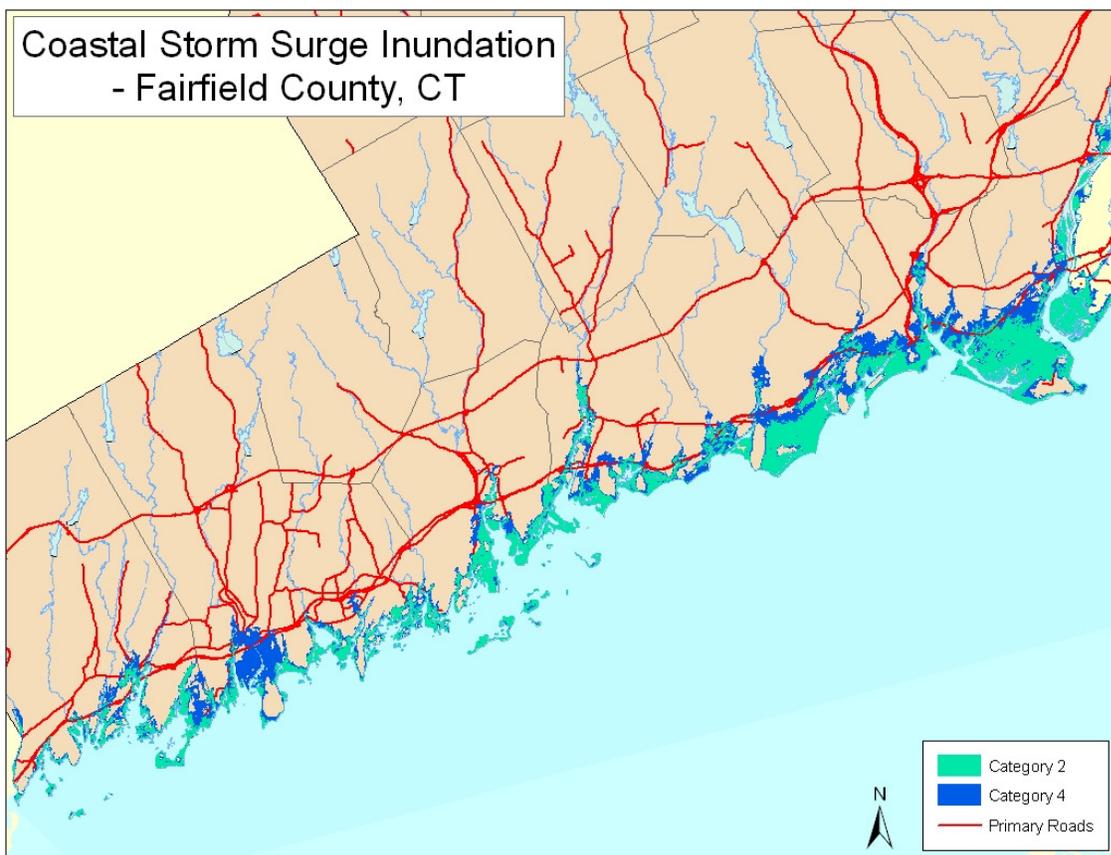
## SLOSH Mapping



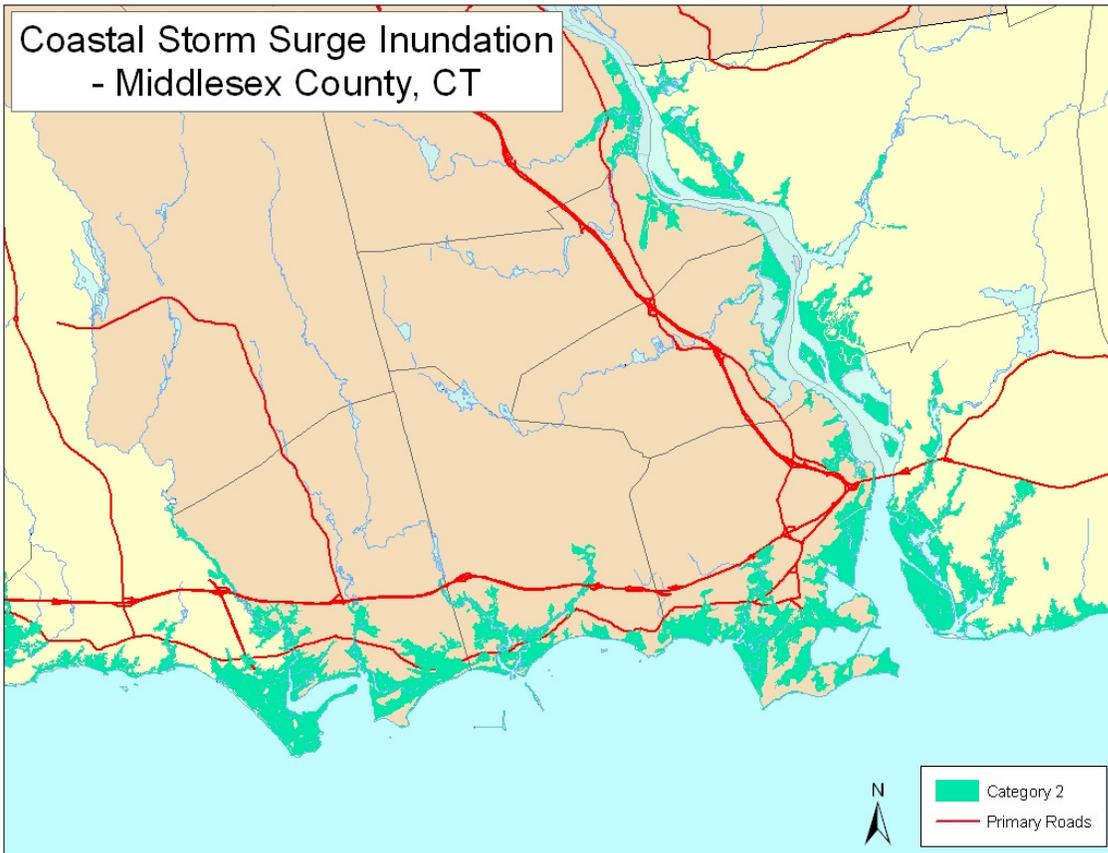
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- Fairfield County, CT



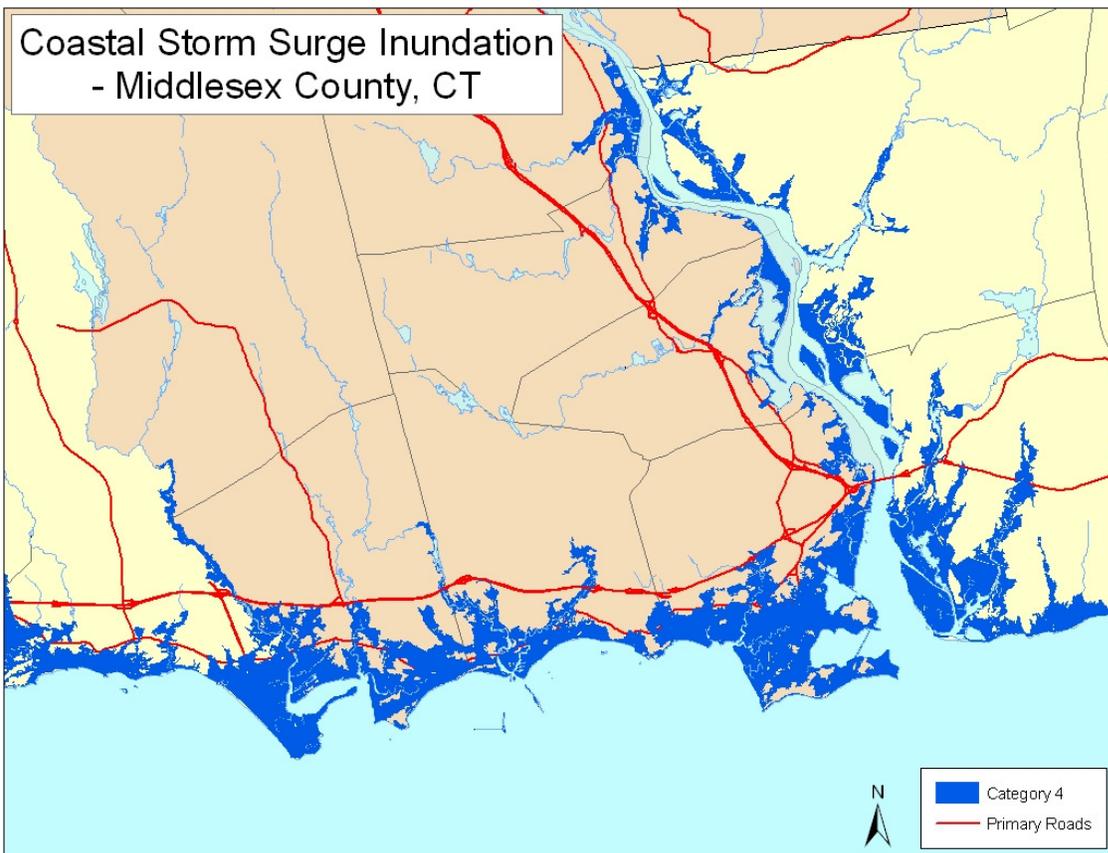
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- Fairfield County, CT



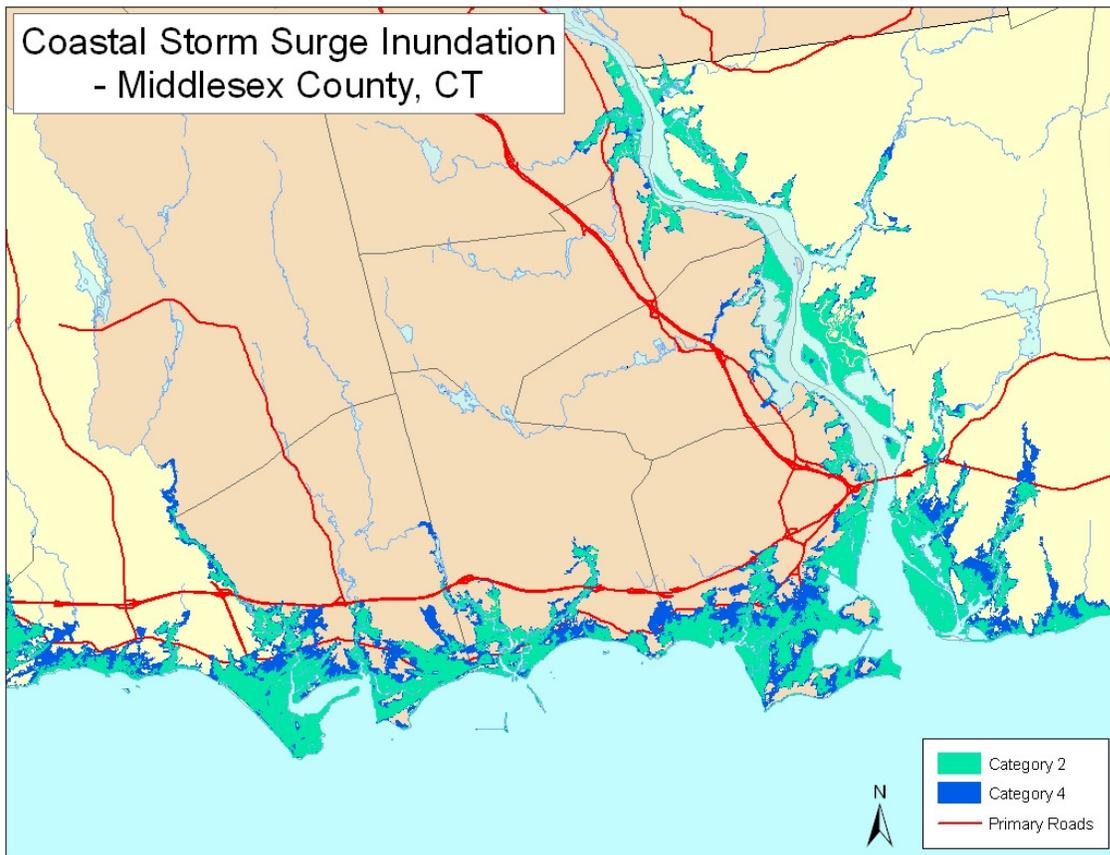
Coastal Storm Surge Inundation  
- Middlesex County, CT



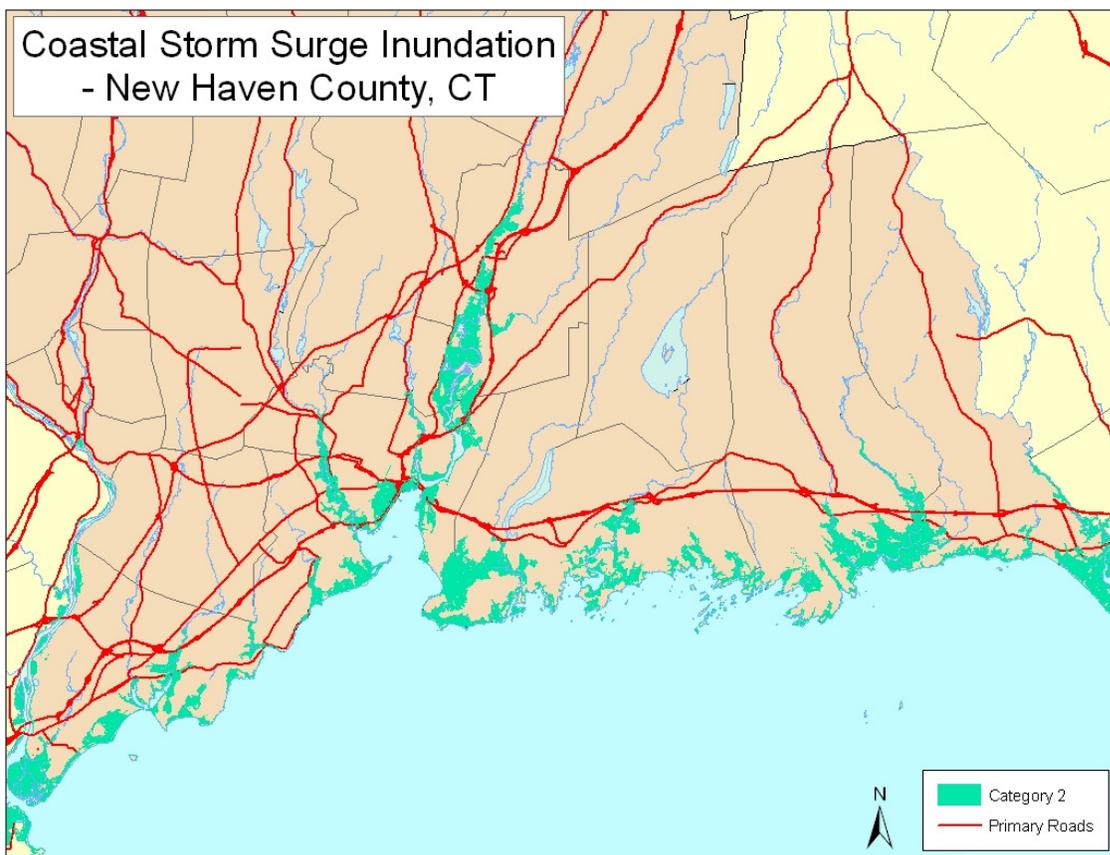
Coastal Storm Surge Inundation  
- Middlesex County, CT



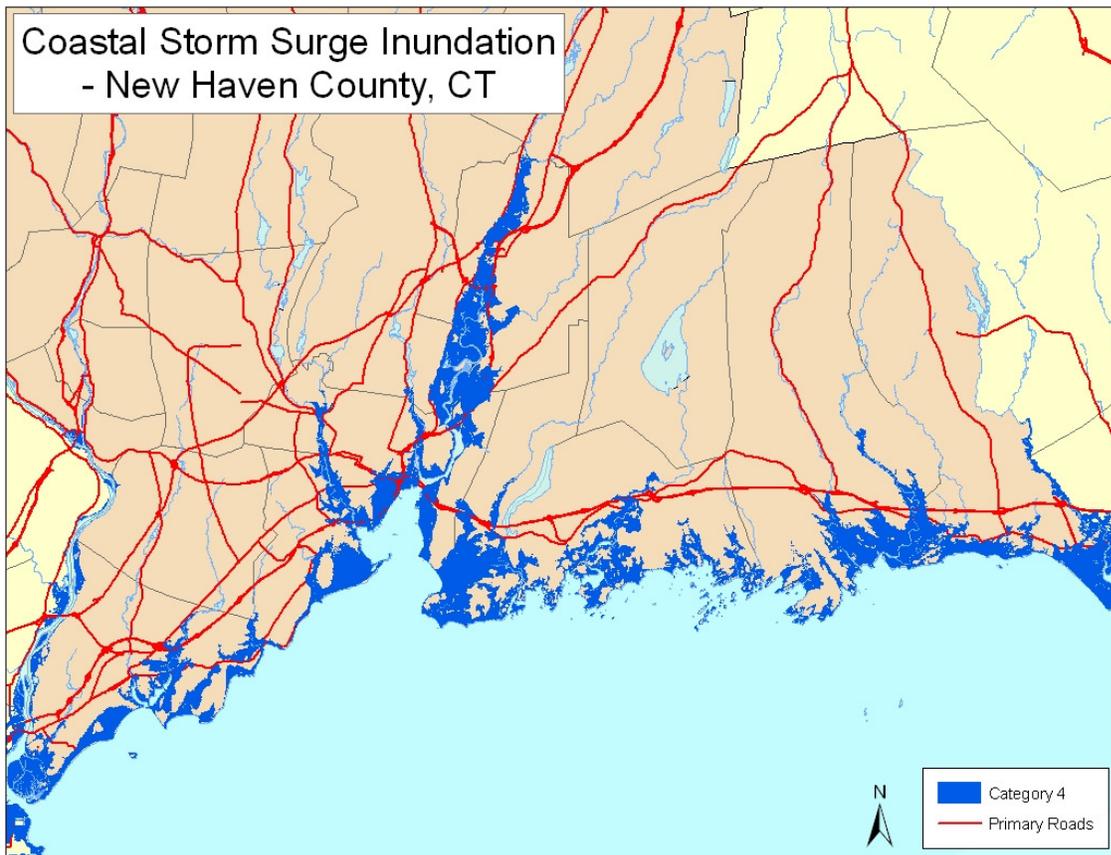
Coastal Storm Surge Inundation  
- Middlesex County, CT



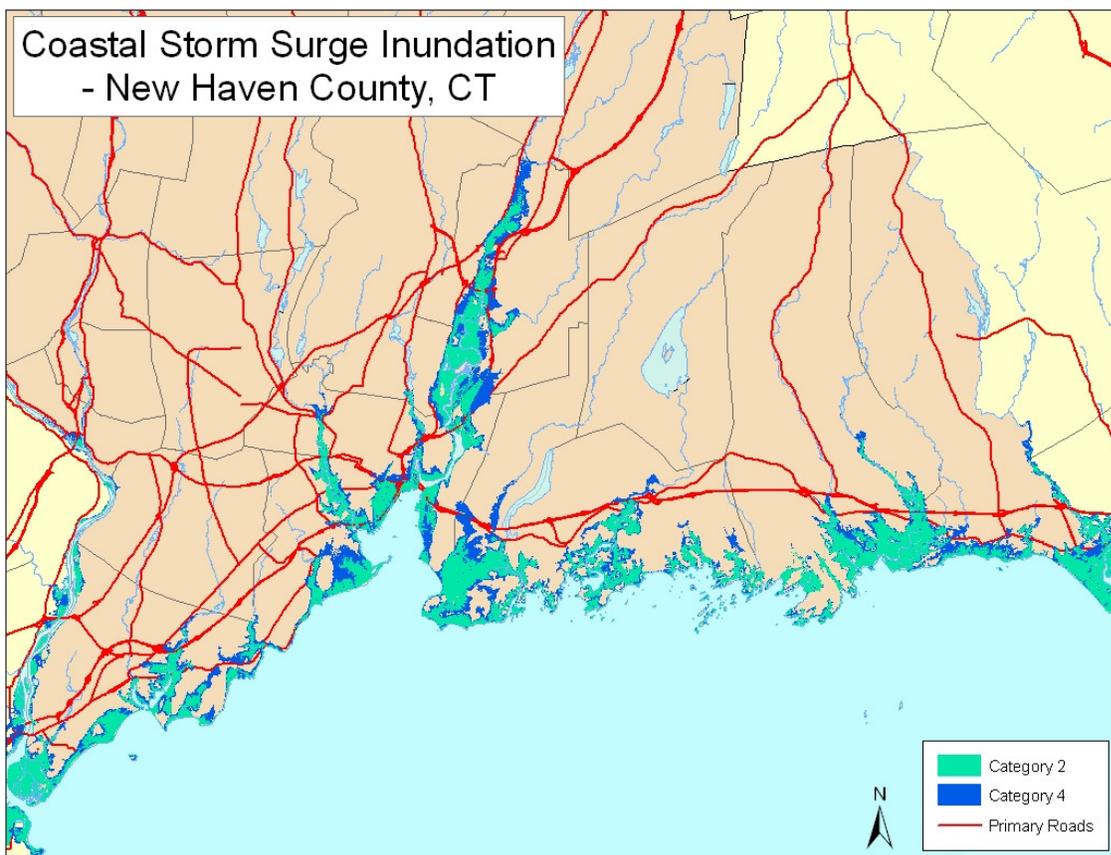
Coastal Storm Surge Inundation  
- New Haven County, CT



Coastal Storm Surge Inundation  
- New Haven County, CT



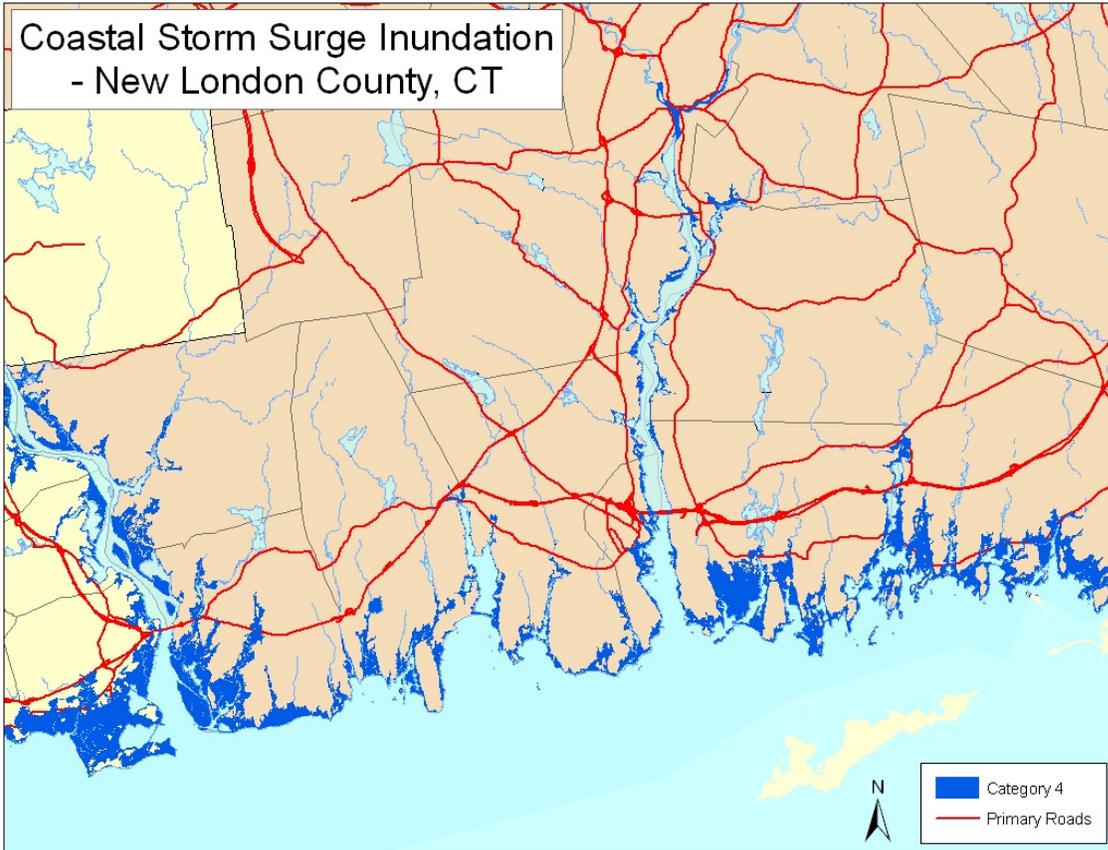
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- New Haven County, CT



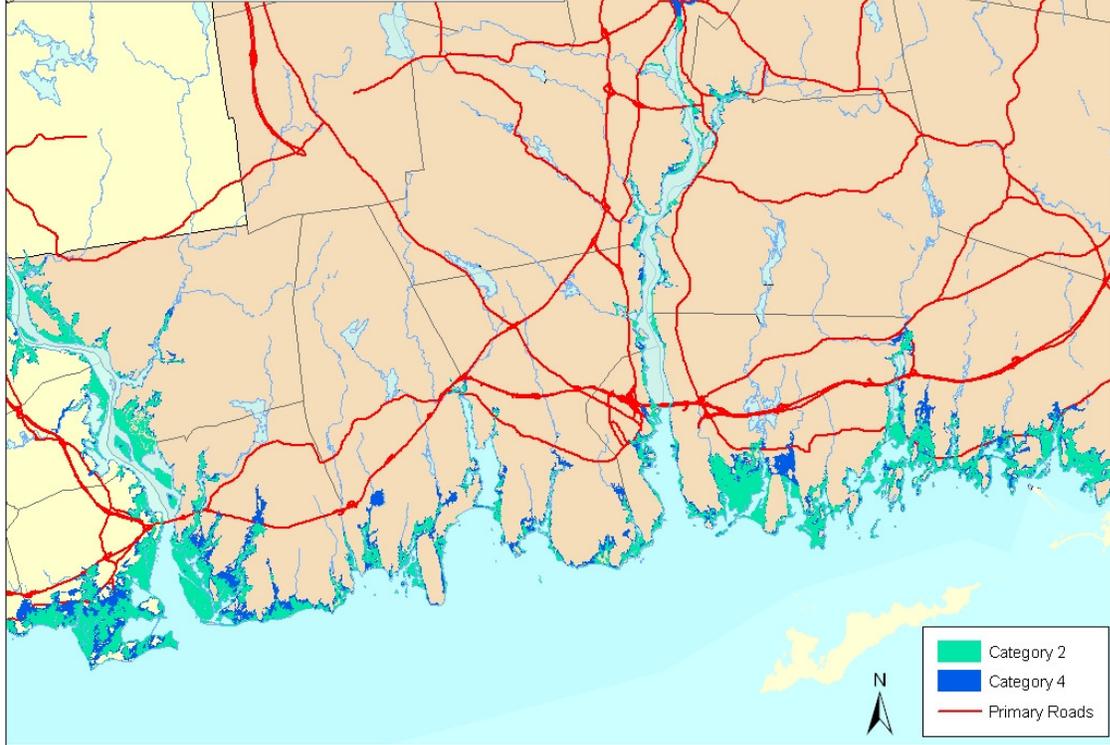
Coastal Storm Surge Inundation  
- New London County, CT



Coastal Storm Surge Inundation  
- New London County, CT



Coastal Storm Surge Inundation  
- New London County, CT



**Hazus-MH: Global Summary Reports**

# Hazus-MH: Earthquake Event Report

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**Region Name:** CT\_EQ2010Inv\_v21\_EastHaddam6\_4

**Earthquake Scenario:** EastHaddam\_Historical

**Print Date:** May 24, 2013

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

**Disclaimer:**

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.*

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## General Description of the Region

Hazus is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop earthquake losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from earthquakes and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 8 county(ies) from the following state(s):

Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 4,962.77 square miles and contains 815 census tracts. There are over 1,371 thousand households in the region which has a total population of 3,574,099 people (2002 Census Bureau data). The distribution of population by State and County is provided in Appendix B.

There are an estimated 1,193 thousand buildings in the region with a total building replacement value (excluding contents) of 475,388 (millions of dollars). Approximately 90.00 % of the buildings (and 76.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 87,750 and 7,466 (millions of dollars) , respectively.

## Building and Lifeline Inventory

### **Building Inventory**

Hazus estimates that there are 1,193 thousand buildings in the region which have an aggregate total replacement value of 475,388 (millions of dollars) . Appendix B provides a general distribution of the building value by State and County.

In terms of building construction types found in the region, wood frame construction makes up 84% of the building inventory. The remaining percentage is distributed between the other general building types.

### **Critical Facility Inventory**

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 45 hospitals in the region with a total bed capacity of 0 beds. There are 1,505 schools, 585 fire stations, 193 police stations and 176 emergency operation facilities. With respect to high potential loss facilities (HPL), there are 720 dams identified within the region. Of these, 229 of the dams are classified as 'high hazard'. The inventory also includes 905 hazardous material sites, 0 military installations and 2 nuclear power plants.

### **Transportation and Utility Lifeline Inventory**

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 95,216.00 (millions of dollars). This inventory includes over 4,431 kilometers of highways, 3,818 bridges, 65,659 kilometers of pipes.

**Table 1: Transportation System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations/ # Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Highway</b>	Bridges	3,818	57,716.30
	Segments	2,070	27,492.50
	Tunnels	1	0.30
		<b>Subtotal</b>	<b>85,209.10</b>
<b>Railways</b>	Bridges	63	7.60
	Facilities	20	53.30
	Segments	440	1,034.70
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>1,095.60</b>
<b>Light Rail</b>	Bridges	0	0.00
	Facilities	9	24.00
	Segments	17	204.40
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>228.40</b>
<b>Bus</b>	Facilities	61	76.50
		<b>Subtotal</b>	<b>76.50</b>
<b>Ferry</b>	Facilities	10	13.30
		<b>Subtotal</b>	<b>13.30</b>
<b>Port</b>	Facilities	96	191.70
		<b>Subtotal</b>	<b>191.70</b>
<b>Airport</b>	Facilities	13	138.50
	Runways	21	797.20
		<b>Subtotal</b>	<b>935.70</b>
		<b>Total</b>	<b>87,750.30</b>

**Table 2: Utility System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations / Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Potable Water</b>	Distribution Lines	NA	807.30
	Facilities	11	421.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>1,228.60</b>
<b>Waste Water</b>	Distribution Lines	NA	484.40
	Facilities	85	6,510.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>6,994.50</b>
<b>Natural Gas</b>	Distribution Lines	NA	322.90
	Facilities	2	0.00
	Pipelines	197	487.00
		<b>Subtotal</b>	<b>809.90</b>
<b>Oil Systems</b>	Facilities	0	0.00
	Pipelines	16	35.60
		<b>Subtotal</b>	<b>35.60</b>
<b>Electrical Power</b>	Facilities	380	0.00
		<b>Subtotal</b>	<b>0.00</b>
<b>Communication</b>	Facilities	113	13.00
		<b>Subtotal</b>	<b>13.00</b>
		<b>Total</b>	<b>9,081.60</b>

## Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.

<b>Scenario Name</b>	EastHaddam_Historical
<b>Type of Earthquake</b>	Arbitrary
<b>Fault Name</b>	NA
<b>Historical Epicenter ID #</b>	NA
<b>Probabilistic Return Period</b>	NA
<b>Longitude of Epicenter</b>	-72.40
<b>Latitude of Epicenter</b>	41.50
<b>Earthquake Magnitude</b>	6.40
<b>Depth (Km)</b>	10.00
<b>Rupture Length (Km)</b>	NA
<b>Rupture Orientation (degrees)</b>	NA
<b>Attenuation Function</b>	Central & East US (CEUS 2008)

## Building Damage

### Building Damage

Hazus estimates that about 92,531 buildings will be at least moderately damaged. This is over 8.00 % of the buildings in the region. There are an estimated 7,287 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Agriculture</b>	3,685	0.39	846	0.56	686	1.04	307	1.58	164	2.26
<b>Commercial</b>	49,415	5.20	11,136	7.38	9,971	15.15	4,355	22.40	2,064	28.33
<b>Education</b>	987	0.10	225	0.15	211	0.32	90	0.46	41	0.56
<b>Government</b>	1,541	0.16	391	0.26	427	0.65	206	1.06	101	1.39
<b>Industrial</b>	16,719	1.76	3,622	2.40	3,654	5.55	1,742	8.96	914	12.54
<b>Other Residential</b>	91,115	9.59	16,249	10.77	10,512	15.98	4,176	21.48	1,576	21.62
<b>Religion</b>	4,113	0.43	761	0.50	534	0.81	207	1.06	84	1.15
<b>Single Family</b>	782,259	82.36	117,675	77.98	39,809	60.50	8,357	42.99	2,343	32.16
<b>Total</b>	<b>949,833</b>		<b>150,906</b>		<b>65,805</b>		<b>19,439</b>		<b>7,287</b>	

**Table 4: Expected Building Damage by Building Type (All Design Levels)**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Wood</b>	831,840	87.58	123,044	81.54	38,978	59.23	7,181	36.94	1,546	21.22
<b>Steel</b>	33,920	3.57	7,555	5.01	8,885	13.50	4,385	22.56	2,217	30.42
<b>Concrete</b>	7,246	0.76	1,618	1.07	1,924	2.92	860	4.42	392	5.37
<b>Precast</b>	2,355	0.25	438	0.29	570	0.87	331	1.70	132	1.81
<b>RM</b>	14,113	1.49	1,849	1.23	2,055	3.12	977	5.03	274	3.75
<b>URM</b>	55,327	5.82	14,238	9.43	10,410	15.82	3,889	20.01	1,918	26.31
<b>MH</b>	5,032	0.53	2,163	1.43	2,983	4.53	1,815	9.34	810	11.12
<b>Total</b>	<b>949,833</b>		<b>150,906</b>		<b>65,805</b>		<b>19,439</b>		<b>7,287</b>	

\*Note:

RM Reinforced Masonry  
 URM Unreinforced Masonry  
 MH Manufactured Housing

## **Essential Facility Damage**

Before the earthquake, the region had 0 hospital beds available for use. On the day of the earthquake, the model estimates that only 0 hospital beds (29.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 43.00% of the beds will be back in service. By 30 days, 70.00% will be operational.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	45	30	1	12
Schools	1,505	894	33	456
EOCs	176	104	11	48
PoliceStations	193	117	10	54
FireStations	585	342	30	175

## Transportation and Utility Lifeline Damage

Table 6 provides damage estimates for the transportation system.

**Table 6: Expected Damage to the Transportation Systems**

System	Component	Locations/ Segments	Number of Locations_			
			With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	2,070	0	0	2,070	2,070
	Bridges	3,818	308	39	3,534	3,675
	Tunnels	1	0	0	1	1
Railways	Segments	440	0	0	440	440
	Bridges	63	0	0	63	63
	Tunnels	0	0	0	0	0
	Facilities	20	0	0	20	20
Light Rail	Segments	17	0	0	17	17
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	9	0	0	9	9
Bus	Facilities	61	1	0	60	60
Ferry	Facilities	10	2	0	8	8
Port	Facilities	96	9	0	89	91
Airport	Facilities	13	1	0	13	13
	Runways	21	0	0	21	21

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.

**Table 7 : Expected Utility System Facility Damage**

System	# of Locations				
	Total #	With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	11	0	0	11	11
Waste Water	85	6	0	57	84
Natural Gas	2	0	0	1	2
Oil Systems	0	0	0	0	0
Electrical Power	380	50	0	293	374
Communication	113	12	0	113	113

**Table 8 : Expected Utility System Pipeline Damage (Site Specific)**

System	Total Pipelines Length (kms)	Number of Leaks	Number of Breaks
Potable Water	40,366	4229	1057
Waste Water	24,220	2124	531
Natural Gas	946	47	12
Oil	128	7	2

**Table 9: Expected Potable Water and Electric Power System Performance**

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	1,371,089	74,299	54,588	26,490	0	0
Electric Power		482,338	174,452	44,875	8,880	1,371

### **Fire Following Earthquake**

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 8 ignitions that will burn about 0.20 sq. mi 0.00 % of the region's total area.) The model also estimates that the fires will displace about 1,299 people and burn about 126 (millions of dollars) of building value.

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 5.62 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 39.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 224,800 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

## Social Impact

### **Shelter Requirement**

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 12,450 households to be displaced due to the earthquake. Of these, 7,672 people (out of a total population of 3,574,099) will seek temporary shelter in public shelters.

### **Casualties**

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows;

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
<b>2 AM</b>	Commercial	5	1	0	0
	Commuting	0	0	0	0
	Educational	0	0	0	0
	Hotels	2	0	0	0
	Industrial	9	2	0	0
	Other-Residential	143	25	3	5
	Single Family	104	12	1	2
	<b>Total</b>	<b>263</b>	<b>40</b>	<b>4</b>	<b>8</b>
<b>2 PM</b>	Commercial	295	52	6	11
	Commuting	0	1	1	0
	Educational	284	52	6	12
	Hotels	0	0	0	0
	Industrial	63	12	1	3
	Other-Residential	28	5	1	1
	Single Family	18	2	0	0
	<b>Total</b>	<b>690</b>	<b>124</b>	<b>15</b>	<b>27</b>
<b>5 PM</b>	Commercial	224	40	4	8
	Commuting	18	23	40	8
	Educational	46	9	1	2
	Hotels	1	0	0	0
	Industrial	40	7	1	2
	Other-Residential	56	10	1	2
	Single Family	40	5	0	1
	<b>Total</b>	<b>425</b>	<b>94</b>	<b>48</b>	<b>23</b>

## Economic Loss

The total economic loss estimated for the earthquake is 24,186.19 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

### Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 20,227.09 (millions of dollars); 19 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 50 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

**Table 11: Building-Related Economic Loss Estimates**

(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
<b>Income Losses</b>							
	Wage	0.00	107.03	734.56	38.57	121.05	1,001.21
	Capital-Related	0.00	44.58	615.93	23.68	28.85	713.04
	Rental	92.17	223.25	354.63	13.75	38.57	722.36
	Relocation	336.19	138.37	579.84	64.46	381.67	1,500.51
	<b>Subtotal</b>	<b>428.35</b>	<b>513.22</b>	<b>2,284.96</b>	<b>140.46</b>	<b>570.14</b>	<b>3,937.12</b>
<b>Capital Stock Losses</b>							
	Structural	917.19	410.07	824.00	215.34	394.93	2,761.53
	Non_Structural	4,251.90	1,665.10	2,044.66	611.52	1,165.79	9,738.98
	Content	1,451.31	390.85	932.61	380.45	528.39	3,683.60
	Inventory	0.00	0.00	22.72	78.06	5.07	105.86
	<b>Subtotal</b>	<b>6,620.39</b>	<b>2,466.02</b>	<b>3,824.00</b>	<b>1,285.37</b>	<b>2,094.18</b>	<b>16,289.96</b>
	<b>Total</b>	<b>7,048.75</b>	<b>2,979.25</b>	<b>6,108.95</b>	<b>1,425.83</b>	<b>2,664.32</b>	<b>20,227.09</b>

## **Transportation and Utility Lifeline Losses**

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Hazus estimates the long-term economic impacts to the region for 15 years after the earthquake. The model quantifies this information in terms of income and employment changes within the region. Table 14 presents the results of the region for the given earthquake.

**Table 12: Transportation System Economic Losses**  
(Millions of dollars)

<b>System</b>	<b>Component</b>	<b>Inventory Value</b>	<b>Economic Loss</b>	<b>Loss Ratio (%)</b>
<b>Highway</b>	Segments	27,492.45	\$0.00	0.00
	Bridges	57,716.28	\$3419.73	5.93
	Tunnels	0.34	\$0.00	0.24
	<b>Subtotal</b>	<b>85209.10</b>	<b>3,419.70</b>	
<b>Railways</b>	Segments	1,034.75	\$0.00	0.00
	Bridges	7.62	\$0.11	1.38
	Tunnels	0.00	\$0.00	0.00
	Facilities	53.26	\$7.72	14.49
	<b>Subtotal</b>	<b>1095.60</b>	<b>7.80</b>	
<b>Light Rail</b>	Segments	204.42	\$0.00	0.00
	Bridges	0.00	\$0.00	0.00
	Tunnels	0.00	\$0.00	0.00
	Facilities	23.97	\$4.78	19.93
	<b>Subtotal</b>	<b>228.40</b>	<b>4.80</b>	
<b>Bus</b>	Facilities	76.46	\$9.14	11.96
	<b>Subtotal</b>	<b>76.50</b>	<b>9.10</b>	
<b>Ferry</b>	Facilities	13.31	\$3.22	24.16
	<b>Subtotal</b>	<b>13.30</b>	<b>3.20</b>	
<b>Port</b>	Facilities	191.71	\$38.78	20.23
	<b>Subtotal</b>	<b>191.70</b>	<b>38.80</b>	
<b>Airport</b>	Facilities	138.46	\$20.31	14.67
	Runways	797.24	\$0.00	0.00
	<b>Subtotal</b>	<b>935.70</b>	<b>20.30</b>	
	<b>Total</b>	<b>87750.30</b>	<b>3,503.80</b>	

**Table 13: Utility System Economic Losses**

(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.00	\$0.00	0.00
	Facilities	421.20	\$26.31	6.25
	Distribution Lines	807.30	\$19.03	2.36
	<b>Subtotal</b>	<b>1,228.57</b>	<b>\$45.34</b>	
Waste Water	Pipelines	0.00	\$0.00	0.00
	Facilities	6,510.20	\$396.00	6.08
	Distribution Lines	484.40	\$9.56	1.97
	<b>Subtotal</b>	<b>6,994.54</b>	<b>\$405.56</b>	
Natural Gas	Pipelines	487.00	\$0.21	0.04
	Facilities	0.00	\$0.00	0.00
	Distribution Lines	322.90	\$3.27	1.01
	<b>Subtotal</b>	<b>809.93</b>	<b>\$3.49</b>	
Oil Systems	Pipelines	35.60	\$0.02	0.06
	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>35.57</b>	<b>\$0.02</b>	
Electrical Power	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>0.00</b>	<b>\$0.00</b>	
Communication	Facilities	13.00	\$0.91	6.98
	<b>Subtotal</b>	<b>13.00</b>	<b>\$0.91</b>	
<b>Total</b>		<b>9,081.60</b>	<b>\$455.31</b>	

**Table 14. Indirect Economic Impact with outside aid**

(Employment as # of people and Income in millions of \$)

LOSS	Total	%

**Appendix A: County Listing for the Region**

Fairfield,CT

Hartford,CT

Litchfield,CT

Middlesex,CT

New Haven,CT

New London,CT

Tolland,CT

Windham,CT

**Appendix B: Regional Population and Building Value Data**

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
<b>Connecticut</b>	Fairfield	916,828	97,834	30,334	128,168
	Hartford	894,015	86,299	29,092	115,391
	Litchfield	189,921	22,117	5,744	27,861
	Middlesex	165,677	19,470	4,992	24,462
	New Haven	862,485	82,509	27,722	110,231
	New London	274,055	28,701	6,815	35,516
	Tolland	152,691	15,550	4,013	19,564
	Windham	118,427	10,954	3,236	14,190
<b>Total State</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>
<b>Total Region</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>

# Hazus-MH: Earthquake Event Report

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**Region Name:** CT\_EQ2010Inv\_v21Haddam5\_7

**Earthquake Scenario:** Haddam\_Historical

**Print Date:** May 24, 2013

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

**Disclaimer:**

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.*

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## General Description of the Region

Hazus is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop earthquake losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from earthquakes and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 8 county(ies) from the following state(s):

Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 4,962.77 square miles and contains 815 census tracts. There are over 1,371 thousand households in the region which has a total population of 3,574,099 people (2002 Census Bureau data). The distribution of population by State and County is provided in Appendix B.

There are an estimated 1,193 thousand buildings in the region with a total building replacement value (excluding contents) of 475,388 (millions of dollars). Approximately 90.00 % of the buildings (and 76.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 87,750 and 7,466 (millions of dollars) , respectively.

## Building and Lifeline Inventory

### **Building Inventory**

Hazus estimates that there are 1,193 thousand buildings in the region which have an aggregate total replacement value of 475,388 (millions of dollars) . Appendix B provides a general distribution of the building value by State and County.

In terms of building construction types found in the region, wood frame construction makes up 84% of the building inventory. The remaining percentage is distributed between the other general building types.

### **Critical Facility Inventory**

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 45 hospitals in the region with a total bed capacity of 0 beds. There are 1,505 schools, 585 fire stations, 193 police stations and 176 emergency operation facilities. With respect to high potential loss facilities (HPL), there are 720 dams identified within the region. Of these, 229 of the dams are classified as 'high hazard'. The inventory also includes 905 hazardous material sites, 0 military installations and 2 nuclear power plants.

### **Transportation and Utility Lifeline Inventory**

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 95,216.00 (millions of dollars). This inventory includes over 4,431 kilometers of highways, 3,818 bridges, 65,659 kilometers of pipes.

**Table 1: Transportation System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations/ # Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Highway</b>	Bridges	3,818	57,716.30
	Segments	2,070	27,492.50
	Tunnels	1	0.30
		<b>Subtotal</b>	<b>85,209.10</b>
<b>Railways</b>	Bridges	63	7.60
	Facilities	20	53.30
	Segments	440	1,034.70
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>1,095.60</b>
<b>Light Rail</b>	Bridges	0	0.00
	Facilities	9	24.00
	Segments	17	204.40
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>228.40</b>
<b>Bus</b>	Facilities	61	76.50
		<b>Subtotal</b>	<b>76.50</b>
<b>Ferry</b>	Facilities	10	13.30
		<b>Subtotal</b>	<b>13.30</b>
<b>Port</b>	Facilities	96	191.70
		<b>Subtotal</b>	<b>191.70</b>
<b>Airport</b>	Facilities	13	138.50
	Runways	21	797.20
		<b>Subtotal</b>	<b>935.70</b>
		<b>Total</b>	<b>87,750.30</b>

**Table 2: Utility System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations / Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Potable Water</b>	Distribution Lines	NA	807.30
	Facilities	11	421.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>1,228.60</b>
<b>Waste Water</b>	Distribution Lines	NA	484.40
	Facilities	85	6,510.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>6,994.50</b>
<b>Natural Gas</b>	Distribution Lines	NA	322.90
	Facilities	2	0.00
	Pipelines	197	487.00
		<b>Subtotal</b>	<b>809.90</b>
<b>Oil Systems</b>	Facilities	0	0.00
	Pipelines	16	35.60
		<b>Subtotal</b>	<b>35.60</b>
<b>Electrical Power</b>	Facilities	380	0.00
		<b>Subtotal</b>	<b>0.00</b>
<b>Communication</b>	Facilities	113	13.00
		<b>Subtotal</b>	<b>13.00</b>
		<b>Total</b>	<b>9,081.60</b>

## Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.

<b>Scenario Name</b>	Haddam_Historical
<b>Type of Earthquake</b>	Arbitrary
<b>Fault Name</b>	NA
<b>Historical Epicenter ID #</b>	NA
<b>Probabilistic Return Period</b>	NA
<b>Longitude of Epicenter</b>	-72.50
<b>Latitude of Epicenter</b>	41.50
<b>Earthquake Magnitude</b>	5.70
<b>Depth (Km)</b>	10.00
<b>Rupture Length (Km)</b>	NA
<b>Rupture Orientation (degrees)</b>	NA
<b>Attenuation Function</b>	Central & East US (CEUS 2008)

## Building Damage

### Building Damage

Hazus estimates that about 34,511 buildings will be at least moderately damaged. This is over 3.00 % of the buildings in the region. There are an estimated 1,537 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Agriculture</b>	4,753	0.44	498	0.64	302	1.11	101	1.73	35	2.25
<b>Commercial</b>	64,195	5.94	6,617	8.54	4,285	15.78	1,374	23.60	471	30.66
<b>Education</b>	1,300	0.12	132	0.17	86	0.32	27	0.46	10	0.63
<b>Government</b>	2,179	0.20	241	0.31	171	0.63	55	0.95	19	1.27
<b>Industrial</b>	22,052	2.04	2,196	2.83	1,604	5.91	576	9.89	223	14.53
<b>Other Residential</b>	108,355	10.02	9,215	11.89	4,607	16.97	1,151	19.77	300	19.50
<b>Religion</b>	4,912	0.45	442	0.57	247	0.91	74	1.28	24	1.54
<b>Single Family</b>	873,514	80.79	58,160	75.05	15,852	58.38	2,463	42.31	455	29.62
<b>Total</b>	<b>1,081,258</b>		<b>77,500</b>		<b>27,153</b>		<b>5,821</b>		<b>1,538</b>	

**Table 4: Expected Building Damage by Building Type (All Design Levels)**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Wood</b>	926,679	85.70	59,373	76.61	14,574	53.67	1,798	30.90	164	10.66
<b>Steel</b>	47,070	4.35	4,598	5.93	3,587	13.21	1,236	21.23	470	30.58
<b>Concrete</b>	10,023	0.93	968	1.25	740	2.73	226	3.88	83	5.39
<b>Precast</b>	3,078	0.28	295	0.38	290	1.07	128	2.19	36	2.32
<b>RM</b>	16,889	1.56	1,073	1.38	901	3.32	340	5.85	64	4.19
<b>URM</b>	68,307	6.32	9,426	12.16	5,686	20.94	1,739	29.88	625	40.64
<b>MH</b>	9,213	0.85	1,766	2.28	1,376	5.07	354	6.08	96	6.22
<b>Total</b>	<b>1,081,258</b>		<b>77,500</b>		<b>27,153</b>		<b>5,821</b>		<b>1,538</b>	

\*Note:

RM Reinforced Masonry  
 URM Unreinforced Masonry  
 MH Manufactured Housing

## **Essential Facility Damage**

Before the earthquake, the region had 0 hospital beds available for use. On the day of the earthquake, the model estimates that only 0 hospital beds (63.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 76.00% of the beds will be back in service. By 30 days, 91.00% will be operational.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	45	4	0	31
Schools	1,505	154	12	1,075
EOCs	176	27	4	123
PoliceStations	193	29	3	132
FireStations	585	78	10	417

## Transportation and Utility Lifeline Damage

Table 6 provides damage estimates for the transportation system.

**Table 6: Expected Damage to the Transportation Systems**

System	Component	Locations/ Segments	Number of Locations_			
			With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	2,070	0	0	2,070	2,070
	Bridges	3,818	65	3	3,757	3,777
	Tunnels	1	0	0	1	1
Railways	Segments	440	0	0	440	440
	Bridges	63	0	0	63	63
	Tunnels	0	0	0	0	0
	Facilities	20	0	0	20	20
Light Rail	Segments	17	0	0	17	17
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	9	0	0	9	9
Bus	Facilities	61	1	0	61	61
Ferry	Facilities	10	2	0	10	10
Port	Facilities	96	9	0	91	96
Airport	Facilities	13	1	0	13	13
	Runways	21	0	0	21	21

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.

**Table 7 : Expected Utility System Facility Damage**

System	# of Locations				
	Total #	With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	11	0	0	11	11
Waste Water	85	4	0	79	84
Natural Gas	2	0	0	2	2
Oil Systems	0	0	0	0	0
Electrical Power	380	19	0	353	380
Communication	113	3	0	113	113

**Table 8 : Expected Utility System Pipeline Damage (Site Specific)**

System	Total Pipelines Length (kms)	Number of Leaks	Number of Breaks
Potable Water	40,366	1093	273
Waste Water	24,220	549	137
Natural Gas	946	13	3
Oil	128	2	1

**Table 9: Expected Potable Water and Electric Power System Performance**

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	1,371,089	9,844	3,097	0	0	0
Electric Power		272,602	84,869	23,777	5,372	1,371

### **Fire Following Earthquake**

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 6 ignitions that will burn about 0.07 sq. mi (0.00 % of the region's total area.) The model also estimates that the fires will displace about 465 people and burn about 37 (millions of dollars) of building value.

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 1.88 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 47.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 75,360 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

## Social Impact

### **Shelter Requirement**

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 3,736 households to be displaced due to the earthquake. Of these, 2,313 people (out of a total population of 3,574,099) will seek temporary shelter in public shelters.

### **Casualties**

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows;

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
<b>2 AM</b>	Commercial	1	0	0	0
	Commuting	0	0	0	0
	Educational	0	0	0	0
	Hotels	1	0	0	0
	Industrial	2	0	0	0
	Other-Residential	46	7	1	1
	Single Family	33	4	0	1
	<b>Total</b>	<b>83</b>	<b>11</b>	<b>1</b>	<b>2</b>
<b>2 PM</b>	Commercial	76	11	1	2
	Commuting	0	0	0	0
	Educational	73	11	1	2
	Hotels	0	0	0	0
	Industrial	15	2	0	0
	Other-Residential	9	1	0	0
	Single Family	6	1	0	0
	<b>Total</b>	<b>179</b>	<b>26</b>	<b>3</b>	<b>5</b>
<b>5 PM</b>	Commercial	58	9	1	1
	Commuting	2	2	4	1
	Educational	12	2	0	0
	Hotels	0	0	0	0
	Industrial	9	1	0	0
	Other-Residential	18	3	0	1
	Single Family	13	1	0	0
	<b>Total</b>	<b>112</b>	<b>18</b>	<b>5</b>	<b>4</b>

## Economic Loss

The total economic loss estimated for the earthquake is 8,280.46 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

### Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 7,097.32 (millions of dollars); 18 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 52 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

**Table 11: Building-Related Economic Loss Estimates**

(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
<b>Income Losses</b>							
	Wage	0.00	34.54	247.70	14.63	38.38	335.26
	Capital-Related	0.00	14.38	199.21	8.96	8.74	231.29
	Rental	31.12	80.10	117.33	5.34	11.08	244.97
	Relocation	113.54	49.66	196.55	24.30	115.11	499.16
	<b>Subtotal</b>	<b>144.66</b>	<b>178.68</b>	<b>760.80</b>	<b>53.23</b>	<b>173.32</b>	<b>1,310.68</b>
<b>Capital Stock Losses</b>							
	Structural	315.40	148.07	254.82	77.05	114.04	909.36
	Non_Structural	1,573.06	603.22	669.78	233.42	348.18	3,427.66
	Content	596.84	148.09	335.51	153.35	173.98	1,407.77
	Inventory	0.00	0.00	6.70	33.98	1.17	41.85
	<b>Subtotal</b>	<b>2,485.30</b>	<b>899.37</b>	<b>1,266.81</b>	<b>497.80</b>	<b>637.36</b>	<b>5,786.64</b>
	<b>Total</b>	<b>2,629.96</b>	<b>1,078.05</b>	<b>2,027.61</b>	<b>551.03</b>	<b>810.68</b>	<b>7,097.32</b>

## **Transportation and Utility Lifeline Losses**

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Hazus estimates the long-term economic impacts to the region for 15 years after the earthquake. The model quantifies this information in terms of income and employment changes within the region. Table 14 presents the results of the region for the given earthquake.

**Table 12: Transportation System Economic Losses**  
(Millions of dollars)

<b>System</b>	<b>Component</b>	<b>Inventory Value</b>	<b>Economic Loss</b>	<b>Loss Ratio (%)</b>
<b>Highway</b>	Segments	27,492.45	\$0.00	0.00
	Bridges	57,716.28	\$913.51	1.58
	Tunnels	0.34	\$0.00	0.03
	<b>Subtotal</b>	<b>85209.10</b>	<b>913.50</b>	
<b>Railways</b>	Segments	1,034.75	\$0.00	0.00
	Bridges	7.62	\$0.04	0.53
	Tunnels	0.00	\$0.00	0.00
	Facilities	53.26	\$4.11	7.72
	<b>Subtotal</b>	<b>1095.60</b>	<b>4.20</b>	
<b>Light Rail</b>	Segments	204.42	\$0.00	0.00
	Bridges	0.00	\$0.00	0.00
	Tunnels	0.00	\$0.00	0.00
	Facilities	23.97	\$2.87	11.98
	<b>Subtotal</b>	<b>228.40</b>	<b>2.90</b>	
<b>Bus</b>	Facilities	76.46	\$5.09	6.66
	<b>Subtotal</b>	<b>76.50</b>	<b>5.10</b>	
<b>Ferry</b>	Facilities	13.31	\$2.01	15.11
	<b>Subtotal</b>	<b>13.30</b>	<b>2.00</b>	
<b>Port</b>	Facilities	191.71	\$24.48	12.77
	<b>Subtotal</b>	<b>191.70</b>	<b>24.50</b>	
<b>Airport</b>	Facilities	138.46	\$12.67	9.15
	Runways	797.24	\$0.00	0.00
	<b>Subtotal</b>	<b>935.70</b>	<b>12.70</b>	
	<b>Total</b>	<b>87750.30</b>	<b>964.80</b>	

**Table 13: Utility System Economic Losses**

(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.00	\$0.00	0.00
	Facilities	421.20	\$12.65	3.00
	Distribution Lines	807.30	\$4.92	0.61
	<b>Subtotal</b>	<b>1,228.57</b>	<b>\$17.57</b>	
Waste Water	Pipelines	0.00	\$0.00	0.00
	Facilities	6,510.20	\$196.97	3.03
	Distribution Lines	484.40	\$2.47	0.51
	<b>Subtotal</b>	<b>6,994.54</b>	<b>\$199.44</b>	
Natural Gas	Pipelines	487.00	\$0.06	0.01
	Facilities	0.00	\$0.00	0.00
	Distribution Lines	322.90	\$0.85	0.26
	<b>Subtotal</b>	<b>809.93</b>	<b>\$0.91</b>	
Oil Systems	Pipelines	35.60	\$0.01	0.02
	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>35.57</b>	<b>\$0.01</b>	
Electrical Power	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>0.00</b>	<b>\$0.00</b>	
Communication	Facilities	13.00	\$0.42	3.27
	<b>Subtotal</b>	<b>13.00</b>	<b>\$0.42</b>	
<b>Total</b>		<b>9,081.60</b>	<b>\$218.35</b>	

**Table 14. Indirect Economic Impact with outside aid**

(Employment as # of people and Income in millions of \$)

LOSS	Total	%

**Appendix A: County Listing for the Region**

Fairfield,CT

Hartford,CT

Litchfield,CT

Middlesex,CT

New Haven,CT

New London,CT

Tolland,CT

Windham,CT

**Appendix B: Regional Population and Building Value Data**

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
<b>Connecticut</b>	Fairfield	916,828	97,834	30,334	128,168
	Hartford	894,015	86,299	29,092	115,391
	Litchfield	189,921	22,117	5,744	27,861
	Middlesex	165,677	19,470	4,992	24,462
	New Haven	862,485	82,509	27,722	110,231
	New London	274,055	28,701	6,815	35,516
	Tolland	152,691	15,550	4,013	19,564
	Windham	118,427	10,954	3,236	14,190
<b>Total State</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>
<b>Total Region</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>

# Hazus-MH: Earthquake Event Report

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**Region Name:** CT\_EQ2010Inv\_v21Portland5\_7

**Earthquake Scenario:** Portland\_Historical

**Print Date:** May 24, 2013

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

**Disclaimer:**

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.*

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## General Description of the Region

Hazus is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop earthquake losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from earthquakes and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 8 county(ies) from the following state(s):

Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 4,962.77 square miles and contains 815 census tracts. There are over 1,371 thousand households in the region which has a total population of 3,574,099 people (2002 Census Bureau data). The distribution of population by State and County is provided in Appendix B.

There are an estimated 1,193 thousand buildings in the region with a total building replacement value (excluding contents) of 475,388 (millions of dollars). Approximately 90.00 % of the buildings (and 76.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 87,750 and 7,466 (millions of dollars) , respectively.

## Building and Lifeline Inventory

### **Building Inventory**

Hazus estimates that there are 1,193 thousand buildings in the region which have an aggregate total replacement value of 475,388 (millions of dollars) . Appendix B provides a general distribution of the building value by State and County.

In terms of building construction types found in the region, wood frame construction makes up 84% of the building inventory. The remaining percentage is distributed between the other general building types.

### **Critical Facility Inventory**

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 45 hospitals in the region with a total bed capacity of 0 beds. There are 1,505 schools, 585 fire stations, 193 police stations and 176 emergency operation facilities. With respect to high potential loss facilities (HPL), there are 720 dams identified within the region. Of these, 229 of the dams are classified as 'high hazard'. The inventory also includes 905 hazardous material sites, 0 military installations and 2 nuclear power plants.

### **Transportation and Utility Lifeline Inventory**

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 95,216.00 (millions of dollars). This inventory includes over 4,431 kilometers of highways, 3,818 bridges, 65,659 kilometers of pipes.

**Table 1: Transportation System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations/ # Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Highway</b>	Bridges	3,818	57,716.30
	Segments	2,070	27,492.50
	Tunnels	1	0.30
		<b>Subtotal</b>	<b>85,209.10</b>
<b>Railways</b>	Bridges	63	7.60
	Facilities	20	53.30
	Segments	440	1,034.70
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>1,095.60</b>
<b>Light Rail</b>	Bridges	0	0.00
	Facilities	9	24.00
	Segments	17	204.40
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>228.40</b>
<b>Bus</b>	Facilities	61	76.50
		<b>Subtotal</b>	<b>76.50</b>
<b>Ferry</b>	Facilities	10	13.30
		<b>Subtotal</b>	<b>13.30</b>
<b>Port</b>	Facilities	96	191.70
		<b>Subtotal</b>	<b>191.70</b>
<b>Airport</b>	Facilities	13	138.50
	Runways	21	797.20
		<b>Subtotal</b>	<b>935.70</b>
		<b>Total</b>	<b>87,750.30</b>

**Table 2: Utility System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations / Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Potable Water</b>	Distribution Lines	NA	807.30
	Facilities	11	421.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>1,228.60</b>
<b>Waste Water</b>	Distribution Lines	NA	484.40
	Facilities	85	6,510.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>6,994.50</b>
<b>Natural Gas</b>	Distribution Lines	NA	322.90
	Facilities	2	0.00
	Pipelines	197	487.00
		<b>Subtotal</b>	<b>809.90</b>
<b>Oil Systems</b>	Facilities	0	0.00
	Pipelines	16	35.60
		<b>Subtotal</b>	<b>35.60</b>
<b>Electrical Power</b>	Facilities	380	0.00
		<b>Subtotal</b>	<b>0.00</b>
<b>Communication</b>	Facilities	113	13.00
		<b>Subtotal</b>	<b>13.00</b>
		<b>Total</b>	<b>9,081.60</b>

## Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.

<b>Scenario Name</b>	Portland_Historical
<b>Type of Earthquake</b>	Arbitrary
<b>Fault Name</b>	NA
<b>Historical Epicenter ID #</b>	NA
<b>Probabilistic Return Period</b>	NA
<b>Longitude of Epicenter</b>	-72.60
<b>Latitude of Epicenter</b>	41.60
<b>Earthquake Magnitude</b>	5.70
<b>Depth (Km)</b>	10.00
<b>Rupture Length (Km)</b>	NA
<b>Rupture Orientation (degrees)</b>	NA
<b>Attenuation Function</b>	Central & East US (CEUS 2008)

## Building Damage

### Building Damage

Hazus estimates that about 58,380 buildings will be at least moderately damaged. This is over 5.00 % of the buildings in the region. There are an estimated 3,712 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Agriculture</b>	4,497	0.44	553	0.55	401	0.93	164	1.43	73	1.98
<b>Commercial</b>	59,243	5.73	7,515	7.43	6,259	14.48	2,735	23.93	1,190	32.05
<b>Education</b>	1,197	0.12	151	0.15	127	0.29	54	0.48	25	0.67
<b>Government</b>	1,958	0.19	273	0.27	263	0.61	120	1.05	51	1.38
<b>Industrial</b>	20,437	1.98	2,453	2.42	2,239	5.18	1,050	9.19	473	12.75
<b>Other Residential</b>	101,473	9.82	11,900	11.76	7,057	16.32	2,378	20.81	819	22.06
<b>Religion</b>	4,607	0.45	528	0.52	357	0.83	145	1.27	62	1.66
<b>Single Family</b>	840,319	81.29	77,788	76.90	26,535	61.37	4,782	41.84	1,019	27.46
<b>Total</b>	<b>1,033,730</b>		<b>101,160</b>		<b>43,239</b>		<b>11,429</b>		<b>3,713</b>	

**Table 4: Expected Building Damage by Building Type (All Design Levels)**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Wood</b>	890,707	86.16	81293	80.36	26,213	60.62	3,954	34.60	422	11.35
<b>Steel</b>	42,962	4.16	5052	4.99	5,233	12.10	2,550	22.31	1,164	31.36
<b>Concrete</b>	8,997	0.87	1072	1.06	1,180	2.73	559	4.89	232	6.24
<b>Precast</b>	2,833	0.27	316	0.31	375	0.87	221	1.93	82	2.21
<b>RM</b>	15,563	1.51	1291	1.28	1,438	3.33	780	6.82	195	5.25
<b>URM</b>	63,697	6.16	10393	10.27	7,320	16.93	2,900	25.38	1,473	39.66
<b>MH</b>	8,971	0.87	1743	1.72	1,480	3.42	464	4.06	145	3.91
<b>Total</b>	<b>1,033,730</b>		<b>101,160</b>		<b>43,239</b>		<b>11,429</b>		<b>3,713</b>	

\*Note:

RM Reinforced Masonry  
URM Unreinforced Masonry  
MH Manufactured Housing

## **Essential Facility Damage**

Before the earthquake, the region had 0 hospital beds available for use. On the day of the earthquake, the model estimates that only 0 hospital beds (52.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 65.00% of the beds will be back in service. By 30 days, 82.00% will be operational.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	45	17	3	25
Schools	1,505	354	50	982
EOCs	176	31	5	121
PoliceStations	193	40	5	129
FireStations	585	128	21	387

## Transportation and Utility Lifeline Damage

Table 6 provides damage estimates for the transportation system.

**Table 6: Expected Damage to the Transportation Systems**

System	Component	Locations/ Segments	Number of Locations_			
			With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	2,070	0	0	2,070	2,070
	Bridges	3,818	119	10	3,708	3,736
	Tunnels	1	0	0	1	1
Railways	Segments	440	0	0	440	440
	Bridges	63	0	0	63	63
	Tunnels	0	0	0	0	0
	Facilities	20	0	0	20	20
Light Rail	Segments	17	0	0	17	17
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	9	0	0	9	9
Bus	Facilities	61	3	0	58	61
Ferry	Facilities	10	2	0	8	10
Port	Facilities	96	12	0	85	96
Airport	Facilities	13	0	0	13	13
	Runways	21	0	0	21	21

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.

**Table 7 : Expected Utility System Facility Damage**

System	# of Locations				
	Total #	With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	11	1	0	10	11
Waste Water	85	7	0	68	81
Natural Gas	2	1	0	1	2
Oil Systems	0	0	0	0	0
Electrical Power	380	33	0	330	376
Communication	113	9	0	110	113

**Table 8 : Expected Utility System Pipeline Damage (Site Specific)**

System	Total Pipelines Length (kms)	Number of Leaks	Number of Breaks
Potable Water	40,366	1350	338
Waste Water	24,220	678	170
Natural Gas	946	26	6
Oil	128	7	2

**Table 9: Expected Potable Water and Electric Power System Performance**

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	1,371,089	10,269	1,347	0	0	0
Electric Power		356,748	130,466	34,139	5,967	1,371

### **Fire Following Earthquake**

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 8 ignitions that will burn about 0.09 sq. mi 0.00 % of the region's total area.) The model also estimates that the fires will displace about 570 people and burn about 55 (millions of dollars) of building value.

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 4.11 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 40.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 164,400 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

## Social Impact

### **Shelter Requirement**

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 11,304 households to be displaced due to the earthquake. Of these, 7,138 people (out of a total population of 3,574,099) will seek temporary shelter in public shelters.

### **Casualties**

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows;

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
<b>2 AM</b>	Commercial	6	1	0	0
	Commuting	0	0	0	0
	Educational	0	0	0	0
	Hotels	3	1	0	0
	Industrial	11	2	0	1
	Other-Residential	178	38	5	10
	Single Family	88	12	1	2
	<b>Total</b>	<b>285</b>	<b>55</b>	<b>7</b>	<b>13</b>
<b>2 PM</b>	Commercial	327	71	9	18
	Commuting	0	0	1	0
	Educational	322	72	10	19
	Hotels	1	0	0	0
	Industrial	80	18	3	5
	Other-Residential	35	8	1	2
	Single Family	15	2	0	0
	<b>Total</b>	<b>781</b>	<b>172</b>	<b>24</b>	<b>44</b>
<b>5 PM</b>	Commercial	248	54	7	13
	Commuting	11	15	26	5
	Educational	60	14	2	4
	Hotels	1	0	0	0
	Industrial	50	12	2	3
	Other-Residential	70	15	2	4
	Single Family	34	5	0	1
	<b>Total</b>	<b>474</b>	<b>115</b>	<b>39</b>	<b>30</b>

## Economic Loss

The total economic loss estimated for the earthquake is 16,925.73 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

### Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 14,747.24 (millions of dollars); 18 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 49 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

**Table 11: Building-Related Economic Loss Estimates**

(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
<b>Income Losses</b>							
	Wage	0.00	68.96	514.02	28.82	73.00	684.79
	Capital-Related	0.00	28.67	421.05	17.89	18.72	486.33
	Rental	55.09	179.07	255.13	10.37	26.25	525.90
	Relocation	203.10	109.82	420.29	45.68	250.02	1,028.91
	<b>Subtotal</b>	<b>258.20</b>	<b>386.52</b>	<b>1,610.48</b>	<b>102.75</b>	<b>367.98</b>	<b>2,725.93</b>
<b>Capital Stock Losses</b>							
	Structural	540.54	317.33	613.09	158.89	236.88	1,866.73
	Non_Structural	2,746.31	1,467.16	1,609.18	496.48	779.76	7,098.89
	Content	1,078.31	377.13	796.99	328.51	382.93	2,963.87
	Inventory	0.00	0.00	20.60	69.46	1.76	91.82
	<b>Subtotal</b>	<b>4,365.17</b>	<b>2,161.62</b>	<b>3,039.86</b>	<b>1,053.33</b>	<b>1,401.33</b>	<b>12,021.31</b>
	<b>Total</b>	<b>4,623.37</b>	<b>2,548.14</b>	<b>4,650.34</b>	<b>1,156.08</b>	<b>1,769.31</b>	<b>14,747.24</b>

## **Transportation and Utility Lifeline Losses**

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Hazus estimates the long-term economic impacts to the region for 15 years after the earthquake. The model quantifies this information in terms of income and employment changes within the region. Table 14 presents the results of the region for the given earthquake.

**Table 12: Transportation System Economic Losses**  
(Millions of dollars)

<b>System</b>	<b>Component</b>	<b>Inventory Value</b>	<b>Economic Loss</b>	<b>Loss Ratio (%)</b>
<b>Highway</b>	Segments	27,492.45	\$0.00	0.00
	Bridges	57,716.28	\$1733.69	3.00
	Tunnels	0.34	\$0.00	0.06
	<b>Subtotal</b>	<b>85209.10</b>	<b>1,733.70</b>	
<b>Railways</b>	Segments	1,034.75	\$0.00	0.00
	Bridges	7.62	\$0.14	1.79
	Tunnels	0.00	\$0.00	0.00
	Facilities	53.26	\$5.42	10.18
	<b>Subtotal</b>	<b>1095.60</b>	<b>5.60</b>	
<b>Light Rail</b>	Segments	204.42	\$0.00	0.00
	Bridges	0.00	\$0.00	0.00
	Tunnels	0.00	\$0.00	0.00
	Facilities	23.97	\$1.78	7.42
	<b>Subtotal</b>	<b>228.40</b>	<b>1.80</b>	
<b>Bus</b>	Facilities	76.46	\$7.03	9.19
	<b>Subtotal</b>	<b>76.50</b>	<b>7.00</b>	
<b>Ferry</b>	Facilities	13.31	\$1.96	14.76
	<b>Subtotal</b>	<b>13.30</b>	<b>2.00</b>	
<b>Port</b>	Facilities	191.71	\$25.32	13.21
	<b>Subtotal</b>	<b>191.70</b>	<b>25.30</b>	
<b>Airport</b>	Facilities	138.46	\$11.98	8.65
	Runways	797.24	\$0.00	0.00
	<b>Subtotal</b>	<b>935.70</b>	<b>12.00</b>	
	<b>Total</b>	<b>87750.30</b>	<b>1,787.30</b>	

**Table 13: Utility System Economic Losses**

(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.00	\$0.00	0.00
	Facilities	421.20	\$17.92	4.25
	Distribution Lines	807.30	\$6.08	0.75
	<b>Subtotal</b>	<b>1,228.57</b>	<b>\$23.99</b>	
Waste Water	Pipelines	0.00	\$0.00	0.00
	Facilities	6,510.20	\$362.19	5.56
	Distribution Lines	484.40	\$3.05	0.63
	<b>Subtotal</b>	<b>6,994.54</b>	<b>\$365.24</b>	
Natural Gas	Pipelines	487.00	\$0.15	0.03
	Facilities	0.00	\$0.00	0.00
	Distribution Lines	322.90	\$1.05	0.32
	<b>Subtotal</b>	<b>809.93</b>	<b>\$1.19</b>	
Oil Systems	Pipelines	35.60	\$0.02	0.06
	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>35.57</b>	<b>\$0.02</b>	
Electrical Power	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>0.00</b>	<b>\$0.00</b>	
Communication	Facilities	13.00	\$0.72	5.58
	<b>Subtotal</b>	<b>13.00</b>	<b>\$0.72</b>	
<b>Total</b>		<b>9,081.60</b>	<b>\$391.17</b>	

**Table 14. Indirect Economic Impact with outside aid**

(Employment as # of people and Income in millions of \$)

LOSS	Total	%

## **Appendix A: County Listing for the Region**

Fairfield,CT

Hartford,CT

Litchfield,CT

Middlesex,CT

New Haven,CT

New London,CT

Tolland,CT

Windham,CT

**Appendix B: Regional Population and Building Value Data**

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
<b>Connecticut</b>	Fairfield	916,828	97,834	30,334	128,168
	Hartford	894,015	86,299	29,092	115,391
	Litchfield	189,921	22,117	5,744	27,861
	Middlesex	165,677	19,470	4,992	24,462
	New Haven	862,485	82,509	27,722	110,231
	New London	274,055	28,701	6,815	35,516
	Tolland	152,691	15,550	4,013	19,564
	Windham	118,427	10,954	3,236	14,190
<b>Total State</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>
<b>Total Region</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>

# Hazus-MH: Earthquake Event Report

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**Region Name:** CT\_EQ2010Inv\_v21Stamford5\_7

**Earthquake Scenario:** Stamford\_5.7

**Print Date:** May 24, 2013

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

**Disclaimer:**

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.*

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## General Description of the Region

Hazus is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop earthquake losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from earthquakes and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 8 county(ies) from the following state(s):

Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 4,962.77 square miles and contains 815 census tracts. There are over 1,371 thousand households in the region which has a total population of 3,574,099 people (2002 Census Bureau data). The distribution of population by State and County is provided in Appendix B.

There are an estimated 1,193 thousand buildings in the region with a total building replacement value (excluding contents) of 475,388 (millions of dollars). Approximately 90.00 % of the buildings (and 76.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 87,750 and 7,466 (millions of dollars) , respectively.

## Building and Lifeline Inventory

### **Building Inventory**

Hazus estimates that there are 1,193 thousand buildings in the region which have an aggregate total replacement value of 475,388 (millions of dollars) . Appendix B provides a general distribution of the building value by State and County.

In terms of building construction types found in the region, wood frame construction makes up 84% of the building inventory. The remaining percentage is distributed between the other general building types.

### **Critical Facility Inventory**

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 45 hospitals in the region with a total bed capacity of 0 beds. There are 1,505 schools, 585 fire stations, 193 police stations and 176 emergency operation facilities. With respect to high potential loss facilities (HPL), there are 720 dams identified within the region. Of these, 229 of the dams are classified as 'high hazard'. The inventory also includes 905 hazardous material sites, 0 military installations and 2 nuclear power plants.

### **Transportation and Utility Lifeline Inventory**

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 95,216.00 (millions of dollars). This inventory includes over 4,431 kilometers of highways, 3,818 bridges, 65,659 kilometers of pipes.

**Table 1: Transportation System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations/ # Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Highway</b>	Bridges	3,818	57,716.30
	Segments	2,070	27,492.50
	Tunnels	1	0.30
		<b>Subtotal</b>	<b>85,209.10</b>
<b>Railways</b>	Bridges	63	7.60
	Facilities	20	53.30
	Segments	440	1,034.70
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>1,095.60</b>
<b>Light Rail</b>	Bridges	0	0.00
	Facilities	9	24.00
	Segments	17	204.40
	Tunnels	0	0.00
		<b>Subtotal</b>	<b>228.40</b>
<b>Bus</b>	Facilities	61	76.50
		<b>Subtotal</b>	<b>76.50</b>
<b>Ferry</b>	Facilities	10	13.30
		<b>Subtotal</b>	<b>13.30</b>
<b>Port</b>	Facilities	96	191.70
		<b>Subtotal</b>	<b>191.70</b>
<b>Airport</b>	Facilities	13	138.50
	Runways	21	797.20
		<b>Subtotal</b>	<b>935.70</b>
		<b>Total</b>	<b>87,750.30</b>

**Table 2: Utility System Lifeline Inventory**

<b>System</b>	<b>Component</b>	<b># Locations / Segments</b>	<b>Replacement value (millions of dollars)</b>
<b>Potable Water</b>	Distribution Lines	NA	807.30
	Facilities	11	421.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>1,228.60</b>
<b>Waste Water</b>	Distribution Lines	NA	484.40
	Facilities	85	6,510.20
	Pipelines	0	0.00
		<b>Subtotal</b>	<b>6,994.50</b>
<b>Natural Gas</b>	Distribution Lines	NA	322.90
	Facilities	2	0.00
	Pipelines	197	487.00
		<b>Subtotal</b>	<b>809.90</b>
<b>Oil Systems</b>	Facilities	0	0.00
	Pipelines	16	35.60
		<b>Subtotal</b>	<b>35.60</b>
<b>Electrical Power</b>	Facilities	380	0.00
		<b>Subtotal</b>	<b>0.00</b>
<b>Communication</b>	Facilities	113	13.00
		<b>Subtotal</b>	<b>13.00</b>
		<b>Total</b>	<b>9,081.60</b>

## Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.

<b>Scenario Name</b>	Stamford_5.7
<b>Type of Earthquake</b>	Arbitrary
<b>Fault Name</b>	NA
<b>Historical Epicenter ID #</b>	NA
<b>Probabilistic Return Period</b>	NA
<b>Longitude of Epicenter</b>	-73.56
<b>Latitude of Epicenter</b>	41.11
<b>Earthquake Magnitude</b>	5.70
<b>Depth (Km)</b>	10.00
<b>Rupture Length (Km)</b>	NA
<b>Rupture Orientation (degrees)</b>	NA
<b>Attenuation Function</b>	Central & East US (CEUS 2008)

## Building Damage

### Building Damage

Hazus estimates that about 49,852 buildings will be at least moderately damaged. This is over 4.00 % of the buildings in the region. There are an estimated 5,235 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Agriculture</b>	4,732	0.44	340	0.55	318	0.95	181	1.62	117	2.23
<b>Commercial</b>	63,280	5.85	4,528	7.26	4,323	12.94	2,858	25.51	1,953	37.31
<b>Education</b>	1,339	0.12	79	0.13	66	0.20	42	0.37	29	0.54
<b>Government</b>	2,345	0.22	115	0.18	97	0.29	65	0.58	44	0.85
<b>Industrial</b>	22,252	2.06	1,426	2.28	1,363	4.08	952	8.50	659	12.59
<b>Other Residential</b>	109,717	10.15	6,894	11.05	4,169	12.48	1,810	16.15	1,037	19.81
<b>Religion</b>	4,825	0.45	351	0.56	265	0.79	154	1.37	105	2.00
<b>Single Family</b>	872,527	80.71	48,670	77.99	22,812	68.27	5,142	45.89	1,292	24.68
<b>Total</b>	<b>1,081,016</b>		<b>62,402</b>		<b>33,413</b>		<b>11,204</b>		<b>5,236</b>	

**Table 4: Expected Building Damage by Building Type (All Design Levels)**

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
<b>Wood</b>	922,545	85.34	50912	81.59	23,649	70.78	4,832	43.13	651	12.43
<b>Steel</b>	47,227	4.37	2791	4.47	2,940	8.80	2,324	20.74	1,680	32.08
<b>Concrete</b>	10,121	0.94	556	0.89	580	1.74	464	4.14	319	6.09
<b>Precast</b>	3,114	0.29	195	0.31	222	0.66	174	1.55	122	2.33
<b>RM</b>	16,528	1.53	731	1.17	889	2.66	759	6.78	360	6.88
<b>URM</b>	69,946	6.47	6458	10.35	4,751	14.22	2,563	22.87	2,064	39.42
<b>MH</b>	11,535	1.07	759	1.22	382	1.14	87	0.78	40	0.77
<b>Total</b>	<b>1,081,016</b>		<b>62,402</b>		<b>33,413</b>		<b>11,204</b>		<b>5,236</b>	

\*Note:

RM Reinforced Masonry  
URM Unreinforced Masonry  
MH Manufactured Housing

## **Essential Facility Damage**

Before the earthquake, the region had 0 hospital beds available for use. On the day of the earthquake, the model estimates that only 0 hospital beds (82.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 88.00% of the beds will be back in service. By 30 days, 93.00% will be operational.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	45	4	2	38
Schools	1,505	160	77	1,224
EOCs	176	10	3	160
PoliceStations	193	13	4	170
FireStations	585	48	22	504

## Transportation and Utility Lifeline Damage

Table 6 provides damage estimates for the transportation system.

**Table 6: Expected Damage to the Transportation Systems**

System	Component	Locations/ Segments	Number of Locations_			
			With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	2,070	0	0	2,070	2,070
	Bridges	3,818	56	1	3,763	3,774
	Tunnels	1	0	0	1	1
Railways	Segments	440	0	0	440	440
	Bridges	63	0	0	63	63
	Tunnels	0	0	0	0	0
	Facilities	20	2	0	19	20
Light Rail	Segments	17	0	0	17	17
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	9	0	0	9	9
Bus	Facilities	61	4	0	58	61
Ferry	Facilities	10	2	0	10	10
Port	Facilities	96	0	0	96	96
Airport	Facilities	13	0	0	13	13
	Runways	21	0	0	21	21

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.

**Table 7 : Expected Utility System Facility Damage**

System	# of Locations				
	Total #	With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	11	0	0	11	11
Waste Water	85	7	0	75	82
Natural Gas	2	0	0	2	2
Oil Systems	0	0	0	0	0
Electrical Power	380	25	0	351	380
Communication	113	8	0	106	113

**Table 8 : Expected Utility System Pipeline Damage (Site Specific)**

System	Total Pipelines Length (kms)	Number of Leaks	Number of Breaks
Potable Water	40,366	1015	254
Waste Water	24,220	510	128
Natural Gas	946	12	3
Oil	128	0	0

**Table 9: Expected Potable Water and Electric Power System Performance**

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	1,371,089	18,293	8,977	306	0	0
Electric Power		196,610	94,887	37,801	8,350	1,371

### **Fire Following Earthquake**

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 14 ignitions that will burn about 0.91 sq. mi 0.02 % of the region's total area.) The model also estimates that the fires will displace about 5,189 people and burn about 615 (millions of dollars) of building value.

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 4.25 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 39.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 170,040 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

## Social Impact

### **Shelter Requirement**

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 13,088 households to be displaced due to the earthquake. Of these, 7,892 people (out of a total population of 3,574,099) will seek temporary shelter in public shelters.

### **Casualties**

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows;

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
<b>2 AM</b>	Commercial	83	23	4	7
	Commuting	0	0	1	0
	Educational	0	0	0	0
	Hotels	30	9	1	3
	Industrial	90	26	4	8
	Other-Residential	1,541	438	69	137
	Single Family	790	164	19	37
	<b>Total</b>	<b>2,534</b>	<b>660</b>	<b>98</b>	<b>192</b>
<b>2 PM</b>	Commercial	4,536	1,287	195	382
	Commuting	2	3	5	1
	Educational	2,718	784	125	244
	Hotels	6	2	0	1
	Industrial	668	191	29	57
	Other-Residential	282	81	13	25
	Single Family	150	32	4	7
	<b>Total</b>	<b>8,362</b>	<b>2,380</b>	<b>372</b>	<b>716</b>
<b>5 PM</b>	Commercial	3,085	877	135	258
	Commuting	65	98	152	30
	Educational	306	88	14	27
	Hotels	9	3	0	1
	Industrial	418	119	18	35
	Other-Residential	613	176	29	54
	Single Family	314	67	8	15
	<b>Total</b>	<b>4,810</b>	<b>1,428</b>	<b>356</b>	<b>421</b>

## Economic Loss

The total economic loss estimated for the earthquake is 17,128.15 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

### Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 16,074.26 (millions of dollars); 18 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 48 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

**Table 11: Building-Related Economic Loss Estimates**

(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
<b>Income Losses</b>							
	Wage	0.00	94.19	545.10	18.32	49.72	707.34
	Capital-Related	0.00	39.15	518.79	11.03	14.15	583.13
	Rental	56.52	179.99	301.67	6.93	16.94	562.06
	Relocation	209.53	102.48	461.06	33.13	177.28	983.47
	<b>Subtotal</b>	<b>266.05</b>	<b>415.82</b>	<b>1,826.62</b>	<b>69.41</b>	<b>258.10</b>	<b>2,835.99</b>
<b>Capital Stock Losses</b>							
	Structural	603.61	275.81	740.96	126.13	217.21	1,963.72
	Non_Structural	3,031.54	1,472.15	2,262.55	436.90	708.47	7,911.61
	Content	1,191.98	378.72	1,096.67	284.97	339.73	3,292.06
	Inventory	0.00	0.00	19.46	49.15	2.27	70.88
	<b>Subtotal</b>	<b>4,827.13</b>	<b>2,126.68</b>	<b>4,119.63</b>	<b>897.14</b>	<b>1,267.69</b>	<b>13,238.26</b>
	<b>Total</b>	<b>5,093.17</b>	<b>2,542.50</b>	<b>5,946.25</b>	<b>966.56</b>	<b>1,525.78</b>	<b>16,074.26</b>

## Transportation and Utility Lifeline Losses

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Hazus estimates the long-term economic impacts to the region for 15 years after the earthquake. The model quantifies this information in terms of income and employment changes within the region. Table 14 presents the results of the region for the given earthquake.

**Table 12: Transportation System Economic Losses**  
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Highway	Segments	27,492.45	\$0.00	0.00
	Bridges	57,716.28	\$787.37	1.36
	Tunnels	0.34	\$0.00	0.00
	<b>Subtotal</b>	<b>85209.10</b>	<b>787.40</b>	
Railways	Segments	1,034.75	\$0.00	0.00
	Bridges	7.62	\$0.03	0.40
	Tunnels	0.00	\$0.00	0.00
	Facilities	53.26	\$3.58	6.73
	<b>Subtotal</b>	<b>1095.60</b>	<b>3.60</b>	
Light Rail	Segments	204.42	\$0.00	0.00
	Bridges	0.00	\$0.00	0.00
	Tunnels	0.00	\$0.00	0.00
	Facilities	23.97	\$0.41	1.69
	<b>Subtotal</b>	<b>228.40</b>	<b>0.40</b>	
Bus	Facilities	76.46	\$5.88	7.69
	<b>Subtotal</b>	<b>76.50</b>	<b>5.90</b>	
Ferry	Facilities	13.31	\$1.61	12.10
	<b>Subtotal</b>	<b>13.30</b>	<b>1.60</b>	
Port	Facilities	191.71	\$5.67	2.96
	<b>Subtotal</b>	<b>191.70</b>	<b>5.70</b>	
Airport	Facilities	138.46	\$3.55	2.57
	Runways	797.24	\$0.00	0.00
	<b>Subtotal</b>	<b>935.70</b>	<b>3.60</b>	
	<b>Total</b>	<b>87750.30</b>	<b>808.10</b>	

**Table 13: Utility System Economic Losses**

(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.00	\$0.00	0.00
	Facilities	421.20	\$8.13	1.93
	Distribution Lines	807.30	\$4.57	0.57
	<b>Subtotal</b>	<b>1,228.57</b>	<b>\$12.70</b>	
Waste Water	Pipelines	0.00	\$0.00	0.00
	Facilities	6,510.20	\$229.50	3.53
	Distribution Lines	484.40	\$2.30	0.47
	<b>Subtotal</b>	<b>6,994.54</b>	<b>\$231.80</b>	
Natural Gas	Pipelines	487.00	\$0.06	0.01
	Facilities	0.00	\$0.00	0.00
	Distribution Lines	322.90	\$0.79	0.24
	<b>Subtotal</b>	<b>809.93</b>	<b>\$0.84</b>	
Oil Systems	Pipelines	35.60	\$0.00	0.00
	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>35.57</b>	<b>\$0.00</b>	
Electrical Power	Facilities	0.00	\$0.00	0.00
	<b>Subtotal</b>	<b>0.00</b>	<b>\$0.00</b>	
Communication	Facilities	13.00	\$0.45	3.49
	<b>Subtotal</b>	<b>13.00</b>	<b>\$0.45</b>	
<b>Total</b>		<b>9,081.60</b>	<b>\$245.79</b>	

**Table 14. Indirect Economic Impact with outside aid**

(Employment as # of people and Income in millions of \$)

LOSS	Total	%

**Appendix A: County Listing for the Region**

Fairfield,CT

Hartford,CT

Litchfield,CT

Middlesex,CT

New Haven,CT

New London,CT

Tolland,CT

Windham,CT

**Appendix B: Regional Population and Building Value Data**

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
Connecticut	Fairfield	916,828	97,834	30,334	128,168
	Hartford	894,015	86,299	29,092	115,391
	Litchfield	189,921	22,117	5,744	27,861
	Middlesex	165,677	19,470	4,992	24,462
	New Haven	862,485	82,509	27,722	110,231
	New London	274,055	28,701	6,815	35,516
	Tolland	152,691	15,550	4,013	19,564
	Windham	118,427	10,954	3,236	14,190
<b>Total State</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>
<b>Total Region</b>		<b>3,574,099</b>	<b>363,434</b>	<b>111,948</b>	<b>475,383</b>

**Data Security and Assessing Vulnerability and Potential Losses for Infrastructure and Facilities**



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Affirmative Action/Equal Opportunity Employer

January 3, 2014

Ms. Marilyn Hilliard, Senior Planner  
FEMA Region 1  
99 High Street, 6<sup>th</sup> Floor  
Boston, Massachusetts 02110-2132

RE: 2014 Connecticut Natural Hazard Mitigation Plan Update (CT NHMP)  
Response to FEMA Plan Review Crosswalk Comments for Assessing Vulnerability and Potential  
Losses of State Facilities

Dear Ms. Hilliard:

The purpose of this letter is to inform the Federal Emergency Management Agency (FEMA) and to serve as a response to the FEMA reviewer's comments as noted in the above referenced Crosswalk received December 3, 2013, regarding State of Connecticut Facilities for the Connecticut 2014 Natural Hazard Mitigation Plan Update (CT NHMP). Specifically, on pages 8 through 10, which addresses *Assessing Vulnerability of State Facilities and Estimating Potential Losses of State Facilities*, FEMA has requested additional detail than what has been provided regarding the description of State owned or operated critical facilities located in hazard areas, and an estimate of the potential dollar losses to the State for such facilities. As stated in the 2010 CT NHMP, due to state of Connecticut security concerns, the availability of such information was not available then nor is this data available to be included in the 2013 CT NHMP.

During the drafting of the Plan, the Department of Energy and Environmental Protection (DEEP) and its consultant obtained all available information for State owned and operated facilities and state critical facilities through the CT Department of Administrative Services, Division of Construction Services (DCS). This referenced agency in conjunction with the Department of Emergency Services and Public Protection's (DESPP) Office of Counter Terrorism Division (OCTD), which houses the Critical Infrastructure Protection Unit (CIPU) is responsible for the maintenance and analysis of both state owned and operated facilities and state critical facility infrastructure. The CIPU maintains a computerized system known as the Automated Critical Asset Management System (ACAMS) which contains, among other things, lists of Critical Infrastructure and Key Resources (CIKR). A description of the ACAMS is attached to this letter.

At the time of the 2010 CT NHMP, DEEP made a request through DESPP requesting this information from the CIPU's most current infrastructure database for inclusion into the CT NHMP. The response to such request from the CIPU identified that this information is Protected Critical Infrastructure Information and is not subject to the disclosure requirements of government documents pursuant to the Connecticut Freedom of Information Act. Subsequently, such information is protected from public disclosure. The State of Connecticut considers the protection of this information critical to the protection of the life and property of the state and our citizens and for this reason cannot include this information into the CT NHMP.

The DCS has assisted with efforts to provide as much available data as possible to allow for a limited analysis to be performed with respect to state owned and operated facilities and infrastructure. This data is also protected from public disclosure since the State of Connecticut considers the protection of this information critical to the protection of the life and property of the state and our citizens and for this reason cannot include this information into the CT NHMP. All available data provided by DCS has been analyzed and presented in a format which both provides for an analysis and presentation of the available data yet protects such critical information. DCS is currently working on several projects to expand the total amount of data it maintains for state owned and operated facilities and a statewide analysis of said data once it is obtained. When said analysis of this data is complete, it is proposed that it be included, no matter how limited in nature due to security reasons, in a future update of the CT NHMP. No timeline as to the completion of this analysis is available at the time of this letter.

I hope that this letter provides you an adequate explanation of this issue and serves as an acceptable response to the Crosswalk comments noted in the above first paragraph. Should you have any further questions regarding this matter, please feel free to contact me at 860-424-3860.

Sincerely,



Cheryl Chase  
Director  
Inland Water Resources Division

CC/kam

Encl: Description of the Constellation/Automated Critical Asset Management System (C/ACAMS)

cc: Betsey Wingfield

# Constellation/Automated Critical Asset Management System (C/ACAMS)

The Constellation/Automated Critical Asset Management System (C/ACAMS) is a Web-enabled information services portal that helps state and local governments build critical infrastructure/key resource (CIKR) protection programs in their local jurisdictions.

C/ACAMS provides a set of tools and resources that help law enforcement, public safety and emergency response personnel

- Collect and use CIKR asset data,
- Assess CIKR asset vulnerabilities,
- Develop all-hazards incident response and recovery plans, and
- Build public-private partnerships.

Using C/ACAMS also provides state and local jurisdictions with a practical way to implement the [National Infrastructure Protection Plan \(NIPP\)](#), including the NIPP Risk Management Framework.

## Key Features

- Programmable, role-based access
- Comprehensive CIKR asset inventory, inventory management and assessment tools
- Sector-specific protective measure recommendations for each Homeland Security Advisory System (HSAS) level
- Automatically generated standard and customized reports
- Built-in Asset Manager Questionnaires
- Built-in Buffer Zone Plan development tools
- Department-approved CIKR asset taxonomy classification tool
- Access to live and historical law enforcement and counter-terrorism news feeds
- Integrated robust mapping and geospatial functionality using the [Integrated Common Analytical Viewer \(iCAV\)](#)
- Comprehensive electronic CIKR reference document library
- Approved for [Protected Critical Infrastructure Information \(PCII\)](#) storage

## **Capabilities**

C/ACAMS users have access to two resources: the Constellation analytical tool and the Automated Critical Asset Management System (ACAMS). The Constellation portion of C/ACAMS is an information gathering and analysis tool that allows users to search a range of free and subscription reporting sources to find relevant information tailored to their jurisdiction's needs. ACAMS is a secure, online database and database management platform that allows for the collection and management of CIKR asset data; the cataloging, screening and sorting of this data; the production of tailored infrastructure reports; and the development of a variety of pre- and post-incident response plans useful to strategic and operational planners and tactical commanders.

## **Cost**

The Department of Homeland Security's Office of Infrastructure Protection (IP) provides C/ACAMS to state and local jurisdictions at no cost.

## **Users**

C/ACAMS is used by a wide variety of organizations responsible for building, implementing, and operating CIKR protection programs at the state and local level. Individual users are typically state and local emergency responders, such as infrastructure protection planners, homeland security officials, law enforcement personnel, and emergency managers. These users have official infrastructure protection or homeland security responsibilities and have completed C/ACAMS and PCII training. Users in more than 29 U.S. states and territories participate in the C/ACAMS program.

## **Access to C/ACAMS**

C/ACAMS is a Web-based tool accessible via an unclassified, password-protected Internet portal. C/ACAMS accounts are granted by the Department to authorized state and local emergency responders, emergency managers, homeland security officials and other personnel with official infrastructure protection responsibilities following authorized C/ACAMS training.

# Infrastructure and Facilities Analysis Results

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Simsbury	Hartford	Not Specified	Range	Not Specified	DPS	0	0	C	0.0148 14815	56249. 77873	INTE RMIX	37968 60.064	28.938 89046	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0		DFI RM	4. 8 5	37968 60.064	0		0	
2000-30	Simsbury	Hartford	Range	Range	Not Specified	DPS	0	0	C	0.0148 14815	56249. 77873	INTE RMIX	37968 60.064	28.938 89046	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0		DFI RM	4. 8 5	37968 60.064	0		0	
	Simsbury	Hartford	Not Specified	Range	Not Specified	DPS	0	0	C	0.0148 14815	56249. 77873	INTE RMIX	37968 60.064	29.039 87312	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	19723 94.838		0		DFI RM	4. 8 5	37968 60.064	0		0	
5000-458	Haddam	Middlesex	Salt Bin	Not Specified	Not Specified		0	0	C	0.0074 07407	70312. 22341	INTE RMIX	94921 50.16	28.724 16687	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	53254 6.6064		0					0		0	
3100-2388	Avon	Hartford	Radio	Not Specified	Not Specified		0	0				INTE RMIX	34171 74.058	29.254 72832	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0					4	34171 74.058	0	
3100-1913	Avon	Hartford	Cistern	Not Specified	Not Specified		0	0				INTE RMIX	34171 74.058	29.254 72832	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	78895 7.9354		0					4	34171 74.058	0	
3100-1915	Bloomfield	Hartford	Pavillion	Not Specified	Not Specified		0	0				INTE RMIX	37968 60.064	29.254 72832	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0					4	37968 60.064	0	
2000-486	Bloomfield	Hartford	Talcott Radio Tower	Not Specified	Not Specified		0	0				INTE RMIX	37968 60.064	29.254 72832	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	48126 43.406		0					4	37968 60.064	0	
(none)	Danbury	Fairfield	Softball Field Structure	Western Connecticut State University - Westside Campus	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.436 90109	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0	
(none)	Danbury	Fairfield	Softball Field Structure	Western Connecticut State University - Westside Campus	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0	
(none)	Danbury	Fairfield	Softball Field Structure	Western Connecticut State University - Westside Campus	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7803-4444	Danbury	Fairfield	Ella Grasso Hall	Western Connecticut State University - Westside Campuses	Student Life	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0
7803-16444	Danbury	Fairfield	Pinney Hall	Western Connecticut State University - Westside Campuses	Student Life	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0
7803-7641	Danbury	Fairfield	Athletics Complex	Western Connecticut State University - Westside Campuses	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0
7803-7643	Danbury	Fairfield	Parking Garage	Western Connecticut State University - Westside Campuses	Parking Garage	CSU	0	0				INTE RMIX	23160 846.39	28.585 59608	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					4	23160 846.39	0
7803-7642	Danbury	Fairfield	Centennial Hall	Western Connecticut State University - Westside Campuses	Student Life	CSU	0	0				INTE RMIX	23160 846.39	28.585 59608	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	77219 25.793		0					4	23160 846.39	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
3400-4	East Granby	Hartford	Guardhouse	Old Newgate Prison	Not Specified	CT Historical Commission	0	0				INTE RMIX	33032 682.56	21.697 72339	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					4	33032 682.56	0
3400-6	East Granby	Hartford	New Gate Cottage	Not Specified	Not Specified		0	0				INTE RMIX	33032 682.56	21.697 72339	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					4	33032 682.56	0
3400-7	East Granby	Hartford	Newgate Cape Cod House	Not Specified	Not Specified		0	0				INTE RMIX	33032 682.56	21.697 72339	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					4	33032 682.56	0
3400-5	East Granby	Hartford	Newgate Reception Area	Not Specified	Not Specified		0	0				INTE RMIX	33032 682.56	21.697 72339	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	22553. 62909		0					4	33032 682.56	0
4125-404126	Franklin	New London	Holton Rd.	Not Part Of A Facility	Residence		36179 7.8	4066.8 4				INTE RMIX	10853 9.34	25.870 40329	3617.9 78	X	10853 9.34	X	0.0634 92063	6891.3 86667	X	0.0518 51852	5627.9 65778	0.2402 5974	22805 81.532		0					4	10853 9.34	0
5000-823	Haddam	Middlesex	Storage Building	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	28.724 16687	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	31183 562.4		0					4	94921 50.16	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTE RMIX	20009 4525.4	18.143 48793	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTE RMIX	20009 4525.4	18.342 49306	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTE RMIX	20009 4525.4	18.342 49306	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RMIX	20009 4525.4	19.905 31921	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	95463 91.018		0					4	20009 4525.4	0
4400-57	Middle town	Middlesex	Cottage 18 (Brooks Cottage)	Not Specified	Not Specified		0	0				INTE RMIX	45942 006.77	29.611 90796	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					4	45942 006.77	0
4400-55	Middle town	Middlesex	Cottage 18 Shed (Brooks Shed)	Not Specified	Not Specified		0	0				INTE RMIX	45942 006.77	29.611 90796	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					4	45942 006.77	0
4400-127	Middle town	Middlesex	Water Filtration Point	Not Specified	Not Specified		0	0				INTE RMIX	45942 006.77	29.636 71303	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					4	45942 006.77	0
4400-128	Middle town	Middlesex	Water Filtration Plant Pump House	Not Specified	Not Specified		0	0				INTE RMIX	45942 006.77	29.636 71303	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					4	45942 006.77	0
4125-84125	Middle town	Middlesex	Olympus Parkway Group Home	Not Specified	Not Specified		0	0				INTE RMIX	45942 006.77	29.998 18611	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	57396 68.98		0					4	45942 006.77	0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					4	36829 542.62	0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					4	36829 542.62	0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					4	36829 542.62	0
	Norwich	New	Not Specified	Not	Not Specified		0	0				INTE RMIX	36829	22.151	12276	X	36829	X	0.0634	23383	X	0.0518	19096	0.2402	88486		0					4	36829	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	ch	London		Specified								RMIX	542.62	38626	51.421		542.62		92063	83.658		51852	79.988	5974	56.344							542.62		
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	54733 9.5677		0					4	36829 542.62	0
5000-736	Old Saybrook	Middlesex	Salt Shed	Not Specified	Not Specified		0	0				INTE RMIX	22781 16.038	23.587 32986	75937. 20128	X	22781 16.038	X	0.4920 63492	11209 77.733	X	0.0074 07407	16874. 93362	0.1558 44156	11834 36.903		0					4	22781 16.038	0
	Oxford	New Haven	Airport Management/ARFF/Maintenance	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.743 40248	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					4	75937 20.128	0
	Oxford	New Haven	Airport Management/ARFF/Maintenance	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.743 40248	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					4	75937 20.128	0
	Oxford	New Haven	Not Specified	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.743 40248	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	62870 08.548		0					4	75937 20.128	0
5000-582	Rocky Hill	Hartford	Bus Shelter	Not Specified	Not Specified		0	0				INTE RMIX	28476 450.48	28.969 73801	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	10729 827.92		0					4	28476 450.48	0
4101-129	Southbury	New Haven	Staff House 5	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.168 88618	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0
4101-27	Southbury	New Haven	Cottage 17	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0
4101-28	Southbury	New Haven	Cottage 18	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0
4101-37	Southbury	New Haven	Cottage 28	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0
4101-112	Southbury	New Haven	Pump House #5	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0
4101-73	Southbury	New Haven	Master Antenna Building	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0
4101-137	Southbury	New Haven	Ampitheatre/Storage Building	Southbury Training	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.733 72078	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					4	51637 296.87	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				g School																														
4101-125	Southbury	New Haven	Staff House 1	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	50296 0.6838		0						4 51637 296.87	0	
	Tolland	Tolland	Radio Tower Support Building	Troop C	Communications	DESPP	0	0				INTE RMIX 22781 16.038	22.668 86902	75937. 20128	X	22781 16.038	X	0.1587 30159	36160 5.7204	X	0.0370 37037	84374. 66809	0.2077 92208	47337 4.7612		0						4 22781 16.038	0	
2000-507	Tolland	Tolland	Radio Tower	Troop C	Communications	DESPP	0	0				INTE RMIX 22781 16.038	22.668 86902	75937. 20128	X	22781 16.038	X	0.1587 30159	36160 5.7204	X	0.0370 37037	84374. 66809	0.2077 92208	47337 4.7612		0						4 22781 16.038	0	
	Tolland	Tolland	Shed	Troop C	Shed	DESPP	0	0				INTE RMIX 22781 16.038	22.668 86902	75937. 20128	X	22781 16.038	X	0.1587 30159	36160 5.7204	X	0.0370 37037	84374. 66809	0.2077 92208	28402 48.567		0						4 22781 16.038	0	
(none)	Killingly	Windham	Not Specified	H.H. Ellis Technical High School	Sports/Gymnasium	DOE	0	0				INTE RMIX 13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	49630 38.512		0		Ha zus	0. 4 5	13668 696.23	3		0	
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX 23160 846.39	28.149 23859	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0		DFI RM	5. 7 5	23160 846.39	3		0	
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX 23160 846.39	28.149 23859	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	88757. 76773		0		DFI RM	5. 7 5	23160 846.39	3		0	
5000-806	Andover	Tolland	Bus Shelter	DOT Andover Park & Ride	Bus Shelter	DOT	0	0				INTE RMIX 37968 6.0064	22.866 05835	12656. 20021	X	37968 6.0064	X	0.1587 30159	60267. 62006	X	0.0370 37037	14062. 44468	0.2077 92208	71006 2.1418		0						3		0
5000-741	Avon	Hartford	Salt Shed	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX 34171 74.058	29.716 32195	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0						3		0
5000-79	Avon	Hartford	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX 34171 74.058	29.731 58264	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0						3		0
2201-8	Avon	Hartford	Derrin House Museum	Not Specified	Not Specified	Military Department	0	0				INTE RMIX 34171 74.058	30.822 22557	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0						3		0
2201-6	Avon	Hartford	Old Stable	Not Specified	Not Specified	Military Department	0	0				INTE RMIX 34171 74.058	30.822 22557	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0						3		0
2201-4754	Avon	Hartford	Horse Stable	Not Specified	Not Specified	Military Department	0	0				INTE RMIX 34171 74.058	30.643 88847	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0						3		0
2201-7118	Avon	Hartford	Administration	Not Specified	Not Specified	Military Department	0	0				INTE RMIX 34171 74.058	30.643 88847	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	71006 2.1418		0						3		0
	Avon	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0				INTE RMIX 34171 74.058	30.643 88847	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2077 92208	13748 6.3339		0						3		0
5000-510	Bolton	Tolland	Maintenance Garage	Bolton DOT Garage	Maintenance/Repair Shop	DOT	22055 09.94	13291 69.38				INTE RMIX 66165 2.982	24.083 34541	22055. 0994	X	66165 2.982	X	0.1587 30159	10502 4.2829	X	0.0370 37037	24505. 666	0.2077 92208	23668 7.3806		0						3		0

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				and Storage																														
5000-701	Bolton	Tolland	Salt Storage	Bolton DOT Garage and Storage	Salt Storage	DOT	0	0				INTE RMIX	11390 58.019	24.083 34541	37968. 60064	X	11390 58.019	X	0.1587 30159	18080 2.8602	X	0.0370 37037	42187. 33404	0.2077 92208	23668 7.3806		0					3		0
5000-396	Bolton	Tolland	Salt Shed	Bolton DOT Garage and Storage	Salt Shed	DOT	0	0				INTE RMIX	11390 58.019	24.083 34541	37968. 60064	X	11390 58.019	X	0.1587 30159	18080 2.8602	X	0.0370 37037	42187. 33404	0.2077 92208	15779 1.5871		0					3		0
	Brookfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	75937 2.0128	28.472 12219	25312. 40043	X	75937 2.0128	X	0.2857 14286	21696 3.4322	X	0.0148 14815	11249. 95575	0.2337 66234	17751 5.5355		0					3		0
	Brookfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	75937 2.0128	28.472 12219	25312. 40043	X	75937 2.0128	X	0.2857 14286	21696 3.4322	X	0.0148 14815	11249. 95575	0.2337 66234	13313 66.516		0					3		0
3100-43	Burlington	Hartford	Foreman's Reside	Not Specified	Not Specified		0	0				INTE RMIX	56952 90.096	32.925 69733	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0					3		0
3100-47	Burlington	Hartford	Garage Storage	Not Specified	Not Specified		0	0				INTE RMIX	56952 90.096	32.962 53204	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0					3		0
3100-40	Burlington	Hartford	Storage	Not Specified	Not Specified		0	0				INTE RMIX	56952 90.096	32.925 69733	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0					3		0
3100-39	Burlington	Hartford	Storage	Not Specified	Not Specified		0	0				INTE RMIX	56952 90.096	32.758 6174	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	41025 81.264		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Canine Building	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Canine Building	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Canine Building	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Administration Building	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Garage	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Shed	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Residence	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
(non e)	Cheshire	New Haven	Not Specified	DPS Cheshire	Future Expansion Area	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0
	Cheshire	New Haven	Not Specified	Waterbury	Not Specified	DDS	0	0				INTE RMIX	19743 672.33	27.550 7431	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
		n		Regional Center																															
	Cheshire	New Haven	Not Specified	Waterbury Regional Center	Not Specified	DDS	0	0				INTE RMIX	19743 672.33	27.550 7431	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	48014. 82296		0					3		0	
2000-14	Colchester	New London	Fleet	Facility Not Listed	Maintenance/Repair Shop		72492 9.68	15562 7				INTE RMIX	21747 8.904	25.281 31676	7249.2 968	X	21747 8.904	X	0.0634 92063	13808. 18438	X	0.0518 51852	11276. 68391	0.2402 5974	62031 81.767		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.281 65245	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.281 65245	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.281 65245	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.281 65245	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					3		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0						3		0



JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Lyme	London		Specified								RMIX	341.22	51526	78.041		341.22		92063	39.125		51852	10.285	5974	419.64										
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	21.080 52444	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	21.080 52444	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	42874 93.28		0						3		0
5000-723	Farlington	Hartford	Salth Shed	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	17845 242.3	29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	10256 45.316		0						3		0
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	25.453 41873	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	91223. 26128		0						3		0
4122-254122	Granby	Hartford	65 Salmon Brook Road	Not Specified	Not Specified		0	0				INTE RMIX	37968 6.0064	24.125 1812	12656. 20021	X	37968 6.0064	X	0.2857 14286	10848 1.7161	X	0.0148 14815	5624.9 77873	0.2077 92208	86785 3.7289		0						3		0
4125-434126	Griswold	New London	Fogarty Rd.	Fogarty Rd.	Residential	DDS	0	0				INTE RMIX	41765 46.07	26.866 63628	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	22805 81.532		0						3		0
5000-7106	Haddam	Middlesex	Salt Shed	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.877 06566	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0						3		0
5000-193	Haddam	Middlesex	Maintenance Garage	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.877 06566	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0						3		0
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.877 06566	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0						3		0
	Haddam	Middlesex	Not Specified	Agriculture Center	Not Specified	UCONN	0	0				INTE RMIX	94921 50.16	27.422 92786	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0						3		0
	Haddam	Middlesex	Not Specified	Agriculture Center	Not Specified	UCONN	0	0				INTE RMIX	94921 50.16	27.422 92786	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	21301 86.426		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE	13668	34.130	45562	X	13668	X	0.0476	65089	X	0.0222	30374	0.2142	29290		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	y	ham		Specified								RMIX	696.23	9967	3.2077		696.23		19048	0.2967		22222	8.8051	85714	06.335									
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.130 9967	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
7001-5	Killingly	Windham	Main Campus Building	H.H. Ellis Technical High School	Education	DOE	0	0				INTE RMIX	13668 696.23	34.260 25772	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
(none)	Killingly	Windham	Service Garage	H.H. Ellis Technical High School	Maintenance/Repair Shop	DOE	0	0				INTE RMIX	13668 696.23	33.869 64417	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
(none)	Killingly	Windham	Not Specified	H.H. Ellis Technical High School	Shed	DOE	0	0				INTE RMIX	13668 696.23	34.209 01489	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
(none)	Killingly	Windham	Not Specified	H.H. Ellis Technical High School	Softball Field Structure	DOE	0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
(none)	Killingly	Windham	Not Specified	H.H. Ellis Technical High School	Softball Field Structure	DOE	0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
(none)	Killingly	Windham	Not Specified	H.H. Ellis Technical High School	Softball Field Structure	DOE	0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.260 25772	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.869 64417	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.260 25772	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.260 25772	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	34.209 01489	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0						3		0
5000-29	Lisbon	New London	Repair Garage And Office	Not Part Of A Facility	Maintenance/Repair Shop		42248 7.07	86063 0.04				INTE RMIX	12674 6.121	24.602 45895	4224.8 707	X	12674 6.121	X	0.0634 92063	8047.3 72762	X	0.0518 51852	6572.0 21089	0.2402 5974	8334.5 6474		0						3		0
5000-78	Lisbon	New London	Maintenance Garage	Not Part Of A Facility	Maintenance/Repair Shop		11563 2.7	53752. 6				INTE RMIX	34689. 81	24.602 45895	1156.3 27	X	34689. 81	X	0.0634 92063	2202.5 27619	X	0.0518 51852	1798.7 30889	0.2402 5974	208.31 38442		0						3		0
5000-799	Lisbon	New London	Cold Storage Building	Not Part Of A Facility	Not Specified		2890.1 2	2681.5 7				INTE RMIX	867.03 6	24.628 90053	28.901 2	X	867.03 6	X	0.0634 92063	55.049 90476	X	0.0518 51852	44.957 42222	0.2402 5974	2962.9 10026		0						3		0
5000-28	Lisbon	New London	Boiler House	Facility Not Listed	Other		41107. 04	0				INTE RMIX	12332. 112	24.628 90053	411.07 04	X	12332. 112	X	0.0634 92063	782.99 12381	X	0.0518 51852	639.44 28444	0.2402 5974	1707.6 43461		0						3		0
5000-409	Lisbon	New London	Jet Hangar (4 Bays)	Not Part Of A Facility	Not Specified		23691. 63	0				INTE RMIX	7107.4 89	24.628 90053	236.91 63	X	7107.4 89	X	0.0634 92063	451.26 91429	X	0.0518 51852	368.53 64667	0.2402 5974	54733 9.5677		0						3		0
	Lisbon	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	22781 16.038	24.602 45895	75937. 20128	X	22781 16.038	X	0.0634 92063	14464 2.2882	X	0.0518 51852	11812 4.5353	0.2402 5974	82100 9.3515		0						3		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	34171 74.058	32.968 32657	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	31183 562.4		0						3		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RMIX	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0						3		0
	Mansfield	Tolland	Not Specified	University of	Not Specified		0	0				INTE RMIX	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Connecticut - Depot																															
	Mansfield	Tolland	Barn	University of Connecticut - Depot	Barn		0	0				INTE RMIX	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	10256 45.316		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.123 806	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.123 806	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.123 806	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.123 806	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.123 806	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.123 806	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					3		0	
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.316 37192	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	22805 81.532		0					3		0	
	Newtown	Fairfield	Not Specified	Garner Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	94921 50.16	26.964 57291	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Garner Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	94921 50.16	26.964 57291	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.964 57291	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.964 57291	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.964 57291	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.886 83319	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.886 83319	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					3		0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	26.886 83319	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	86095 03.47		0					3		0	

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	22.548 79189	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	22.548 79189	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	22.548 79189	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	54733 9.5677		0					3		0
5000-46	Old Saybrook	Middlesex	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	23.799 35646	75937. 20128	X	22781 16.038	X	0.4920 63492	11209 77.733	X	0.0074 07407	16874. 93362	0.1558 44156	35503 1.0709		0					3		0
5000-676	Old Saybrook	Middlesex	Bus Shelter	Not Specified	Not Specified		0	0				INTE RMIX	22781 16.038	23.799 35646	75937. 20128	X	22781 16.038	X	0.4920 63492	11209 77.733	X	0.0074 07407	16874. 93362	0.1558 44156	35503 1.0709		0					3		0
5000-470	Old Saybrook	Middlesex	Salt Bin	Not Specified	Not Specified		0	0				INTE RMIX	22781 16.038	23.815 78064	75937. 20128	X	22781 16.038	X	0.4920 63492	11209 77.733	X	0.0074 07407	16874. 93362	0.1558 44156	17751 5.5355		0					3		0
	Preston	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	11390 58.019	21.154 60014	37968. 60064	X	11390 58.019	X	0.0634 92063	72321. 14408	X	0.0518 51852	59062. 26766	0.2402 5974	91223 2.6128		0					3		0
7302-7811	Simsbury	Hartford	Simsbury-UMG	Not Specified	Not Specified		0	0				INTE RMIX	37968 60.064	28.871 94252	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	10729 827.92		0					3		0
4101-133	Southbury	New Haven	Staff House 11	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-478	Southbury	New Haven	Garage 2	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-52	Southbury	New Haven	Garage for Staff House	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-77	Southbury	New Haven	Personnel Village 2	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-79	Southbury	New Haven	Personnel Village 4	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-80	Southbury	New Haven	Personnel Village 5	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				School																														
4101-81	Southbury	New Haven	Personnel Village 6	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-82	Southbury	New Haven	Personnel Village 7	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-98	Southbury	New Haven	Personnel Village 27	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-99	Southbury	New Haven	Personnel Village 28	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-78	Southbury	New Haven	Personnel Village 3	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-132	Southbury	New Haven	Staff House 10	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.703 71437	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-108	Southbury	New Haven	Fire Dept. Garage Building #3	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-70	Southbury	New Haven	Maintenance Shops	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-128	Southbury	New Haven	Staff House 4	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-68	Southbury	New Haven	Main Storehouse	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	83826 7.8063	0						3		0
5000-4269	Stafford	Tolland	Personnel Shelter	Stafford Salt Storage	Shelter	DOT	0	0				INTE RMIX	37968 60.064	27.432 58858	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					3		0
5000-4194	Stafford	Tolland	Sand/Salt Storage Shed	Stafford Salt Storage	Storage	DOT	0	0				INTE RMIX	37968 60.064	27.432 58858	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	26035 61.187	0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Storage																															
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0	
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.840 9996	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				on																														
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.670 89844	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.794 35349	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	12529 638.21	18.546 80252	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	12529 638.21	18.546 80252	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	12529 638.21	18.546 80252	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	78895. 79354		0					3		0
5000-4199	Voluntown	New London	Sand/Salt Storage Shed	DOT Griswold Sand & Salt Storage	Storage	DOT	0	0				INTE RMIX	37968 6.0064	25.859 43794	12656. 20021	X	37968 6.0064	X	0.0634 92063	24107. 04803	X	0.0518 51852	19687. 42255	0.2402 5974	14345 6.2176		0					3		0
5000-192	Willington	Tolland	Repair Garage	Willington DOT Garage	Maintenance/Repair Shop	DOT	19902 93.47	16056 07.1				INTE RMIX	59708 8.041	22.041 65459	19902. 9347	X	59708 8.041	X	0.1587 30159	94775. 87952	X	0.0370 37037	22114. 37189	0.2077 92208	21838 0.1766		0					3		0
5000-7118	Willington	Tolland	Maintenance Garage	Willington DOT Garage	Maintenance/Repair Shop	DOT	35031 82	10804 42.46				INTE RMIX	10509 54.6	22.318 92395	35031. 82	X	10509 54.6	X	0.1587 30159	16681 8.1905	X	0.0370 37037	38924. 24444	0.2077 92208	94674 9.5225		0					3		0
5000-439	Willington	Tolland	Salt Shed	Willington DOT Garage	Salt Shed	DOT	0	0				INTE RMIX	45562 32.077	22.318 92395	15187 4.4026	X	45562 32.077	X	0.1587 30159	72321 1.4408	X	0.0370 37037	16874 9.3362	0.2077 92208	53649 13.961		0					3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	30769 35.948		0		DFI RM	5. 7 25818 648.44	1		0	
(none)	Cheshire	New Haven	Not Specified	DPS Cheshire	Maintenance Building	DPS	0	0				INTE RMIX	19743 672.33	28.287 0121	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	57002 21.083		0				1		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					1		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					1		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	27810 76.722		0					1		0
7701-8349	Farlington	Hartford	Farmington House	Not Specified	Not Specified		0	0				INTE RMIX	17845 242.3	29.681 87523	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	10729 827.92		0					1		0
4101-38	Southbury	New Haven	Cottage 29	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					1		0
4101-67	Southbury	New Haven	Lumber Shed	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	10059 21.368		0					1		0
	Willington	Tolland	Shed	Willington DOT Garage	Shed	DOT	0	0				INTE RMIX	45562 32.077	22.318 92395	15187 4.4026	X	45562 32.077	X	0.1587 30159	72321 1.4408	X	0.0370 37037	16874 9.3362	0.2077 92208	41578 083.19		0					1		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RMIX	20009 4525.4	20.341 16554	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0		Haus	0.7 5	20009 4525.4	0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RMIX	20009 4525.4	20.304 21066	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0		Haus	0.7 5	20009 4525.4	0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RMIX	20009 4525.4	20.304 21066	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	15779 1.5871		0		Haus	0.7 5	20009 4525.4	0		0
5000-295	Chester	Middlesex	Ferry Office	Not Specified	Not Specified		0	0				INTE RMIX	75937 2.0128	25.677 96707	25312. 40043	X	75937 2.0128	X	0.4920 63492	37365 9.2444	X	0.0074 07407	5624.9 77873	0.1558 44156	11834 3.6903	A E	0		DFI RM	5.7 5	75937 2.0128	0		1
5000-7236	Chester	Middlesex	Storage	Not Specified	Not Specified		0	0				INTE RMIX	75937 2.0128	25.677 96707	25312. 40043	X	75937 2.0128	X	0.4920 63492	37365 9.2444	X	0.0074 07407	5624.9 77873	0.1558 44156	40236 85.47	A E	0		DFI RM	5.7 5	75937 2.0128	0		1
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	80473 70.941		0		DFI RM	5.7 5	25818 648.44	0		0
4101-109	Southbury	New Haven	Pump House 1	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0		DFI RM	5.7 5	51637 296.87	0		0
4101-110	Southbury	New Haven	Pump House 2	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	33530 7.1225		0		DFI RM	5.7 5	51637 296.87	0		0
	Bethany	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	15187 44.026	26.084 8465	50624. 80085	X	15187 44.026	X	0.2539 68254	38571 2.7684	X	0.0222 22222	33749. 86724	0.2207 79221	33530 7.1225		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Bethany	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	15187 44.026	26.084 8465	50624. 80085	X	15187 44.026	X	0.2539 68254	38571 2.7684	X	0.0222 22222	33749. 86724	0.2207 79221	33530 7.1225		0					0		0
	Bethany	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	15187 44.026	26.084 8465	50624. 80085	X	15187 44.026	X	0.2539 68254	38571 2.7684	X	0.0222 22222	33749. 86724	0.2207 79221	33530 7.1225		0					0		0
	Bethany	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	15187 44.026	26.084 8465	50624. 80085	X	15187 44.026	X	0.2539 68254	38571 2.7684	X	0.0222 22222	33749. 86724	0.2207 79221	50296 0.6838		0					0		0
	Branford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	26.119 05861	75937. 20128	X	22781 16.038	X	0.2539 68254	57856 9.1526	X	0.0222 22222	50624. 80085	0.2207 79221	50296 0.6838		0					0		0
	Branford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	26.119 05861	75937. 20128	X	22781 16.038	X	0.2539 68254	57856 9.1526	X	0.0222 22222	50624. 80085	0.2207 79221	50296 0.6838		0					0		0
	Branford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	26.128 98636	75937. 20128	X	22781 16.038	X	0.2539 68254	57856 9.1526	X	0.0222 22222	50624. 80085	0.2207 79221	50296 0.6838		0					0		0
	Branford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	26.128 98636	75937. 20128	X	22781 16.038	X	0.2539 68254	57856 9.1526	X	0.0222 22222	50624. 80085	0.2207 79221	50296 0.6838		0					0		0
	Branford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	26.128 98636	75937. 20128	X	22781 16.038	X	0.2539 68254	57856 9.1526	X	0.0222 22222	50624. 80085	0.2207 79221	50296 0.6838		0					0		0
	Branford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	22781 16.038	26.128 98636	75937. 20128	X	22781 16.038	X	0.2539 68254	57856 9.1526	X	0.0222 22222	50624. 80085	0.2207 79221	41913 3.9032		0					0		0
7001-3	Bristol	Hartford	Bristol Technical Education Center	Not Specified	Not Specified		0	0				INTE RMIX	18984 30.032	29.557 39784	63281. 00107	X	18984 30.032	X	0.2857 14286	54240 8.5806	X	0.0148 14815	28124. 88936	0.2077 92208	19975. 01361		0					0		0
2000-7108	Brooklyn	Windham	Brooklyn Radio Tower	Not Part Of A Facility	Radio/Communications		32043 2.51	36432 7				INTE RMIX	96129. 753	29.967 20314	3204.3 251	X	96129. 753	X	0.0476 19048	4577.6 07286	X	0.0222 22222	2136.2 16733	0.2142 85714	19058. 44757		0					0		0
4122-134123	Brooklyn	Windham	Windham Road	Not Part Of A Facility	Residence		29646 4.74	10326				INTE RMIX	88939. 422	29.292 60254	2964.6 474	X	88939. 422	X	0.0476 19048	4235.2 10571	X	0.0222 22222	1976.4 316	0.2142 85714	11390 58.019		0					0		0
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	53156 04.09	30.940 6662	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	7557.5 60357		0					0		0
5000-172	Canterbury	Windham	Maintenance Garage	Not Part Of	Maintenance/Repair Shop		11756 2.05	12843 42.59				INTE RMIX	35268. 615	27.625 24414	1175.6 205	X	35268. 615	X	0.0476 19048	1679.4 57857	X	0.0222 22222	783.74 7	0.2142 85714	62798. 52343		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				A Facility																														
3400-18	Canterbury	Windham	Prudence Crandall House	Prudence Crandall Museum	Museum		976865.92	13323				INTE RMIX	293059.776	28.21139526	9768.6592	X	293059.776	X	0.047619048	13955.22743	X	0.022222222	6512.439467	0.214285714	28922.4	0					0		0	
3400-8336	Canterbury	Windham	Carter House	Prudence Crandall Museum	Historic Attraction		449904	0				INTE RMIX	134971.2	28.21139526	4499.04	X	134971.2	X	0.047619048	6427.2	X	0.022222222	2999.36	0.214285714	325445.1483	0					0		0	
3400-8337	Canterbury	Windham	Carter House Barn	Prudence Crandall Museum	Storage/Warehouse		0	0				INTE RMIX	1518744.026	28.21139526	50624.80085	X	1518744.026	X	0.047619048	72321.14408	X	0.022222222	33749.86724	0.214285714	45792.39729	0					0		0	
5000-165	Colchester	New London	Maintenance Garage	Not Part Of A Facility	Maintenance/Repair Shop		712326.18	2123626.63				INTE RMIX	213697.854	25.31323242	7123.2618	X	213697.854	X	0.063492063	13568.11771	X	0.051851852	11080.62947	0.24025974	21860.04448	0					0		0	
4125-394126	Colchester	New London	Joseph Lane GH	Not Part Of A Facility	Residence		303283.5	53031.83				INTE RMIX	90985.05	24.93298721	3032.835	X	90985.05	X	0.063492063	5776.828571	X	0.051851852	4717.743333	0.24025974	26878.68604	0					0		0	
4125-384126	Colchester	New London	Colchester Gh	Not Part Of A Facility	Residence		372911.5	10986.9				INTE RMIX	111873.45	25.23101425	3729.115	X	111873.45	X	0.063492063	7103.07619	X	0.051851852	5800.845556	0.24025974	20504.28183	0					0		0	
4122-164123	Columbia	Tolland	80 Route 66	DDS - 80 Route 66	Residence	DDS	284473.82	0				INTE RMIX	85342.146	23.75916481	2844.7382	X	85342.146	X	0.158730159	13546.37238	X	0.037037037	3160.820222	0.207792208	394478.9677	0					0		0	
4122-154123	Columbia	Tolland	Deer Hill	DDS - Deer Hill	Not Specified	DDS	0	0				INTE RMIX	1898430.032	24.54164696	63281.00107	X	1898430.032	X	0.158730159	301338.1003	X	0.037037037	70312.22341	0.207792208	394478.9677	0					0		0	
4122-144123	Columbia	Tolland	Scalise Drive	DDS - Scalise Drive	Residential	DDS	0	0				INTE RMIX	1898430.032	24.74566841	63281.00107	X	1898430.032	X	0.158730159	301338.1003	X	0.037037037	70312.22341	0.207792208	394478.9677	0					0		0	
	Columbia	Tolland	Barn	DDS - Scalise Drive	Out Building	DDS	0	0				INTE RMIX	1898430.032	24.74566841	63281.00107	X	1898430.032	X	0.158730159	301338.1003	X	0.037037037	70312.22341	0.207792208	4812643.406	0					0		0	
(none)	Danbury	Fairfield	Communications Tower	Western Connecticut State University - Westside Campuses	Facilities	CSU	0	0				INTE RMIX	23160846.39	28.43690109	772028.213	X	23160846.39	X	0.285714286	6617384.683	X	0.014814815	343123.6502	0.233766234	5414223.832	0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7803-482	Danbury	Fairfield	Maintenance Garage	Western Connecticut State University - Westside Campuses	Facilities	CSU	0	0				INTE RMIX	23160 846.39	28.436 90109	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
(non e)	Danbury	Fairfield	Water Tower	Western Connecticut State University - Westside Campuses	Facilities	CSU	0	0				INTE RMIX	23160 846.39	28.436 90109	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
7803-18444	Danbury	Fairfield	Ives Concert Park - Gazebo	Western Connecticut State University - Westside Campuses	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.835 98328	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
(non e)	Danbury	Fairfield	Ives Concert Park	Western Connecticut State University - Westside Campuses	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.835 98328	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
(non e)	Danbury	Fairfield	Ives Concert Park	Western Connecticut State University - Westside Campuses	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.835 98328	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
(non e)	Danbury	Fairfield	Softball Field Structure	Western Connecticut State University - Westside Campuses	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Connecticut State University - Westside Campuses																														
7803-478	Danbury	Fairfield	O'Neill Center	Western Connecticut State University - Westside Campuses	Athletics/Recreation	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
7803-7648	Danbury	Fairfield	Westside Campus Center	Western Connecticut State University - Westside Campuses	Student Life	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
7803-1444	Danbury	Fairfield	Westside Classroom Building	Western Connecticut State University - Westside Campuses	Academics	CSU	0	0				INTE RMIX	23160 846.39	28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	60355 28.206		0					0		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.124 25232	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.124 25232	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.124 25232	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.124 25232	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	25818 648.44	27.124 25232	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	11242 650.58		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	21.080 52444	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	21.065 03105	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	21.065 03105	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	72140 341.22	21.080 52444	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	82100 9.3515		0					0		0
3100-391	Eastford	Windham	Warehouse Office	Nassahogon State Forest	Not Specified		0	2700				INTE RMIX	34171 74.058	25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	73225 1.5838		0					0		0
3100-176	Eastford	Windham	Gatehouse	Nassahogon State Forest	Not Specified		0	0				INTE RMIX	34171 74.058	25.012 26234	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	73225 1.5838		0					0		0
3100-395	Eastford	Windham	Pole Garage - Workshop	Nassahogon State Forest	Not Specified		0	0				INTE RMIX	34171 74.058	25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	48816 77.225		0					0		0
	Enfield	Hartford	Not Specified	Armory	Not Specified	Military Department	0	0				INTE RMIX	22781 160.38	24.526 75438	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Armory	Not Specified	Military Department	0	0				INTE RMIX	22781 160.38	24.526 75438	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	24857. 40468		0					0		0
4125-414126	Franklin	New London	Franklin Gh	Not Part Of A Facility	Residence		39875 4.2	19743. 3				INTE RMIX	11962 6.26	25.138 94272	3987.5 42	X	11962 6.26	X	0.0634 92063	7595.3 18095	X	0.0518 51852	6202.8 43111	0.2402 5974	11859 02.397		0					0		0
4125-8338	Franklin	New London	Franklin Maintenance Garage	South Central Region	Maintenance/Repair Shop		0	0				INTE RMIX	49359 18.083	25.138 94272	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New	Not Specified	Not	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	n	London		Specified								RMIX	102.37	9559	3.4122		102.37		92063	01.737		51852	83.086	5974	25.893									
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	21642 102.37	19.114 9559	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	22805 81.532		0					0		0
5000-34	Haddam	Middlesex	Repair Garage and Office	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	28.724 16687	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0					0		0
5000-798	Haddam	Middlesex	Maintenance Garage	Not Specified	Not Specified		0	0				INTE RMIX	94921 50.16	28.621 92535	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	21301 86.426		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.746 23108	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					0		0
(none)	Killingly	Windham	Not Specified	H.H. Ellis Technical High School	Softball Field Structure	DOE	0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.454 70428	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	13668 696.23	33.820 54901	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	73225 1.5838		0					0		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	34171 74.058	34.739 93683	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	53254 6.6064		0					0		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	34171 74.058	37.155 89905	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	22011 8.2691		0					0		0
7301-515	Mansfield	Tolland	0433 Ice Arena	University of Connecticut -	Not Specified		47080 85.2	20260 6.99				INTE RMIX	14124 25.56	18.293 9949	47080. 852	X	14124 25.56	X	0.1587 30159	22419 4.5333	X	0.0370 37037	52312. 05778	0.2077 92208	4963.2 08104		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Storrs Campu s																															
7301-1117	Mansfield	Tolland	0377 Soccer Press Box	University of Connecticut - Storrs Campu s	Not Specified		79618.13	171765.64				INTE RMIX	23885.439	18.2939949	796.1813	X	23885.439	X	0.158730159	3791.339524	X	0.037037037	884.6458889	0.207792208	20297.42525							0	0	0	
7301-229	Mansfield	Tolland	0411 Nayden Physical Therapy Clinic	University of Connecticut - Storrs Campu s	Office		325604.53	103447.36				INTE RMIX	97681.359	18.1155777	3256.0453	X	97681.359	X	0.158730159	15504.97762	X	0.037037037	3617.828111	0.207792208	41444.736							0	0	0	
7301-280	Mansfield	Tolland	1036 Northwood Apartments, Bldg 1	University of Connecticut - Storrs Campu s	Not Specified		664842.64	17554.95				INTE RMIX	199452.792	18.83913422	6648.4264	X	199452.792	X	0.158730159	31659.17333	X	0.037037037	7387.140444	0.207792208	17983.25174							0	0	0	
4122-24123	Mansfield	Tolland	505 Middle Turnpike	Not Part Of A Facility	Residence		288481.33	1209				INTE RMIX	86544.399	19.29481316	2884.8133	X	86544.399	X	0.158730159	13737.20619	X	0.037037037	3205.348111	0.207792208	103274.5122							0	0	0	
7301-232	Mansfield	Tolland	0350 Campus Shopping Plaza	University of Connecticut - Storrs Campu s	Not Specified		1656695.3	0				INTE RMIX	497008.59	18.1155777	16566.953	X	497008.59	X	0.158730159	78890.25238	X	0.037037037	18407.72556	0.207792208	40912.7121							0	0	0	
7301-284	Mansfield	Tolland	1040 Northwood Apartments, Bldg 5	University of Connecticut - Storrs Campu s	Not Specified		656308.09	0				INTE RMIX	196892.427	18.83913422	6563.0809	X	196892.427	X	0.158730159	31252.76619	X	0.037037037	7292.312111	0.207792208	40912.7121							0	0	0	
7301-285	Mansfield	Tolland	1041 Northwood Apartments, Bldg 6	University of Connecticut - Storrs Campu s	Not Specified		656308.09	0				INTE RMIX	196892.427	18.83913422	6563.0809	X	196892.427	X	0.158730159	31252.76619	X	0.037037037	7292.312111	0.207792208	40912.7121							0	0	0	
7301-282	Mansfield	Tolland	1038 Northwood Apartments, Bldg 3	University of Connecticut - Storrs Campu s	Not Specified		656308.09	0				INTE RMIX	196892.427	18.83913422	6563.0809	X	196892.427	X	0.158730159	31252.76619	X	0.037037037	7292.312111	0.207792208	40912.7121							0	0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-283	Mansfield	Tolland	1039 Northwood Apartments, Bldg 4	University of Connecticut - Storrs Campuses	Not Specified		656308.09	0				INTE RMIX	196892.427	18.83913422	6563.0809	X	196892.427	X	0.158730159	31252.76619	X	0.037037037	7292.312111	0.207792208	40912.7121		0				0		0	
7301-281	Mansfield	Tolland	1037 Northwood Apartments, Bldg 2	University of Connecticut - Storrs Campuses	Not Specified		656308.09	0				INTE RMIX	196892.427	18.83913422	6563.0809	X	196892.427	X	0.158730159	31252.76619	X	0.037037037	7292.312111	0.207792208	39556.92156		0				0		0	
7301-286	Mansfield	Tolland	1042 Northwood Apartments, Bldg 7	University of Connecticut - Storrs Campuses	Not Specified		634558.95	0				INTE RMIX	190367.685	18.83913422	6345.5895	X	190367.685	X	0.158730159	30217.09286	X	0.037037037	7050.655	0.207792208	39382.33184		0				0		0	
7301-290	Mansfield	Tolland	1046 Northwood Apartments, Bldg 11	University of Connecticut - Storrs Campuses	Not Specified		631758.24	0				INTE RMIX	189527.472	18.83913422	6317.5824	X	189527.472	X	0.158730159	30083.72571	X	0.037037037	7019.536	0.207792208	38821.62327		0				0		0	
7301-291	Mansfield	Tolland	1047 Northwood Apartments, Bldg 12	University of Connecticut - Storrs Campuses	Not Specified		622763.54	0				INTE RMIX	186829.062	18.83913422	6227.6354	X	186829.062	X	0.158730159	29655.40667	X	0.037037037	6919.594889	0.207792208	38821.62327		0				0		0	
7301-289	Mansfield	Tolland	1045 Northwood Apartments, Bldg 10	University of Connecticut - Storrs Campuses	Not Specified		622763.54	0				INTE RMIX	186829.062	18.83913422	6227.6354	X	186829.062	X	0.158730159	29655.40667	X	0.037037037	6919.594889	0.207792208	38821.55345		0				0		0	
7301-288	Mansfield	Tolland	1044 Northwood Apartments, Bldg 9	University of Connecticut - Storrs Campuses	Not Specified		622762.42	0				INTE RMIX	186828.726	18.83913422	6227.6242	X	186828.726	X	0.158730159	29655.35333	X	0.037037037	6919.582444	0.207792208	38821.55283		0				0		0	
7301-287	Mansfield	Tolland	1043 Northwood Apartments, Bldg 8	University of Connecticut - Storrs Campuses	Not Specified		622762.41	0				INTE RMIX	186828.723	18.83913422	6227.6241	X	186828.723	X	0.158730159	29655.35286	X	0.037037037	6919.582333	0.207792208	7105.898805		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-158	Mansfield	Tolland	0243 House 55	University of Connecticut - Storrs Campuses	Residence		113990.46	0				INTE RMIX	34197.138	18.18969154	1139.9046	X	34197.138	X	0.158730159	5428.17143	X	0.037037037	1266.560667	0.207792208	2157.121247						0		0	
7301-1149	Mansfield	Tolland	0431 Shuttlebus Shelter - I Lot	University of Connecticut - Storrs Campuses	Not Specified		34603.82	0				INTE RMIX	10381.146	18.2939949	346.0382	X	10381.146	X	0.158730159	1647.800952	X	0.037037037	384.4868889	0.207792208	1055.438961						0		0	
7301-1128	Mansfield	Tolland	0396 Shuttlebus Shelter 1-NorthWD	University of Connecticut - Storrs Campuses	Not Specified		16931	0				INTE RMIX	5079.3	18.83913422	169.31	X	5079.3	X	0.158730159	806.2380952	X	0.037037037	188.122222	0.207792208	182.3158442						0		0	
7301-246	Mansfield	Tolland	0366 Soccer Ticket Booth North	University of Connecticut - Storrs Campuses	Not Specified		2924.65	0				INTE RMIX	877.395	18.2939949	29.2465	X	877.395	X	0.158730159	139.2690476	X	0.037037037	32.49611111	0.207792208	122.5963636						0		0	
7301-1116	Mansfield	Tolland	0367 Soccer Ticket Booth South	University of Connecticut - Storrs Campuses	Not Specified		1966.65	0				INTE RMIX	589.995	18.2939949	19.6665	X	589.995	X	0.158730159	93.65	X	0.037037037	21.85166667	0.207792208	41578083.19						0		0	
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	200094525.4	18.00018692	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19						0		0	
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	200094525.4	18.00018692	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19						0		0	
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Greenhouse		0	0				INTE RMIX	200094525.4	18.00018692	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19						0		0	
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Greenhouse		0	0				INTE RMIX	200094525.4	18.00018692	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19						0		0	
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	200094525.4	18.00018692	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19						0		0	
	Mansfield	Tolland	Not Specified	UConn	Not Specified		0	0				INTE	20009	18.000	66698	X	20009	X	0.1587	31761	X	0.0370	74109	0.2077	41578						0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	eld	nd		- Spring Hill Farm								RMIX	4525.4	18692	17.512		4525.4		30159	035.77		37037	08.347	92208	083.19									
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	20009 4525.4	18.003 50571	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	20009 4525.4	18.003 50571	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTE RMIX	20009 4525.4	18.115 5777	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	20009 4525.4	18.000 18692	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	UConn - Spring Hill Farm	Not Specified		0	0				INTE RMIX	20009 4525.4	18.003 50571	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-294	Mansfield	Tolland	1050 House 49	University of Connecticut - Storrs Campuses	Residential		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	1050 House 49 Garage	University of Connecticut - Storrs Campuses	Garage		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-263	Mansfield	Tolland	1011 House 46	University of Connecticut - Storrs Campuses	Residential	UConn	0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	1011 House 46 Garage	University of Connecticut - Storrs Campuses	Garage	UConn	0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of	Not Specified		0	0				INTE RMIX	20009 4525.4	18.143 48793	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Connecticut - Storrs Campu s																															
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.143 48793	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.143 48793	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.022 2435	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RMIX	20009 4525.4	18.143 48793	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ticut - Storrs Campu s																														
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Barn		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Barn		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Barn		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Barn		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Barn		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.704 43726	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.504 48036	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.504 48036	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.704 43726	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.704 43726	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.704 43726	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.704 43726	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.704 43726	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	20009 4525.4	19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-267	Mansfield	Tolland	1016 House 44	University of Connecticut - Storrs Campuses	Residential		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-268	Mansfield	Tolland	1017 House 45	University of Connecticut - Storrs Campuses	Residential		0	0				INTE RMIX	20009 4525.4	19.041 46385	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	36292 06.503		0					0		0
	Meriden	New Haven	Not Specified	Connecticut Police Academy	Not Specified	DPS	0	0				INTE RMIX	17465 556.29	29.966 56799	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
	Meriden	New Haven	Not Specified	Connecticut Police Academy	Not Specified	DPS	0	0				INTE RMIX	17465 556.29	29.966 56799	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
	Meriden	New Haven	Not Specified	Connecticut Police Academy	Not Specified	DPS	0	0				INTE RMIX	17465 556.29	29.966 56799	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	10143 040.46		0					0		0
7701-8	Middletown	Middlesex	Maintenance Building	Middlesex	Not Specified	Board of	0	0				INTE RMIX	45942 006.77	29.623 73543	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Community College		Trustees- CT Community Technical Colleges																												
7701-9	Middletown	Middlesex	Snow Hall	Middlesex Community College	Not Specified	Trustees- CT Community Technical Colleges	0	0				INTE RMIX	45942 006.77	29.623 73543	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	76923 3.987		0					0		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.943 50243	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					0		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.943 50243	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					0		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.943 50243	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0					0		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	49359 18.083	20.943 50243	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	82100 9.3515		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	34171 74.058	15.460 40249	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2337 66234	86095 03.47		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	22.111 27853	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Hospital																														
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
1326-534	Norwich	New London	Nurse's Homes Old & New	Uncas-on-Thames Hospital	Building No. 7	DPW	0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.899 87373	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Martin House	Uncas-on-Thames Hospital	Not Specified	DPW	0	0				INTE RMIX	36829 542.62	21.899 87373	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	21.899 87373	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	21.899 87373	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	36829 542.62	22.111 27853	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	54733 9.5677		0					0		0
5000-185	Old Saybrook	Middlesex	Maintenance Repair Garage	Not Specified	Not Specified		0	0				INTE RMIX	22781 16.038	23.572 44301	75937. 20128	X	22781 16.038	X	0.4920 63492	11209 77.733	X	0.0074 07407	16874. 93362	0.1558 44156	11834 36.903		0					0		0
	Oxford	New Haven	Not Specified	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.488 30414	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Not Specified	Waterbury-Oxford	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.488 30414	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Airport																														
	Oxford	New Haven	Executive Flight	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.488 30414	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	T-Hanger	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.488 30414	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	T-Hanger	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.731 60553	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	T-Hanger	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.731 60553	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Not Specified	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.731 60553	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Fuel Farm	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.613 26408	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Keystone Hanger & FBO	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.613 26408	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Keystone Hangers C, D, E	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.743 40248	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Key Air Hanger F	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.731 60553	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Double Diamond	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.731 60553	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Resturant	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.858 45566	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Hanger G	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.858 45566	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	16765 35.613		0					0		0
	Oxford	New Haven	Not Specified	Waterbury-Oxford Airport	Not Specified	DOT	0	0				INTE RMIX	75937 20.128	23.877 54822	25312 4.0043	X	75937 20.128	X	0.2539 68254	19285 63.842	X	0.0222 22222	16874 9.3362	0.2207 79221	24309 76.638		0					0		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	11010 894.19	33.865 1619	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	11010 894.19	33.865 1619	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0					0		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	11010 894.19	33.865 1619	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	56952 9.0096		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.215 27863	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.215 27863	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.215 27863	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.326 0994	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.215 27863	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.215 27863	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
	Ridgefield	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	26578 02.045	24.215 27863	88593. 40149	X	26578 02.045	X	0.2857 14286	75937 2.0128	X	0.0148 14815	39374. 84511	0.2337 66234	62130 4.3741		0					0		0
5000-578	Rocky Hill	Hartford	Bus Shelter	Not Specified	Not Specified		0	0				INTE RMIX	28476 450.48	29.041 88156	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	22879 78.013		0					0		0
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	11010 894.19	26.528 04184	36702 9.8062	X	11010 894.19	X	0.1587 30159	17477 60.982	X	0.0370 37037	40781 0.8958	0.2077 92208	22879 78.013		0					0		0
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	11010 894.19	26.528 04184	36702 9.8062	X	11010 894.19	X	0.1587 30159	17477 60.982	X	0.0370 37037	40781 0.8958	0.2077 92208	22879 78.013		0					0		0
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	11010 894.19	26.528 04184	36702 9.8062	X	11010 894.19	X	0.1587 30159	17477 60.982	X	0.0370 37037	40781 0.8958	0.2077 92208	22879 78.013		0					0		0
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	11010 894.19	26.528 04184	36702 9.8062	X	11010 894.19	X	0.1587 30159	17477 60.982	X	0.0370 37037	40781 0.8958	0.2077 92208	10729 827.92		0					0		0
4101-	South	New	Personnel Village	Southb	Not Specified	DDS	0	0				INTE RMIX	51637	22.865	17212	X	51637	X	0.2539	13114	X	0.0222	11474	0.2207	11400		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
95	bury	Have n	24	ury Trainin g School								RMIX	296.87	4232	43.229		296.87		68254	234.13		22222	95.486	79221	442.17									
4101-96	South bury	New Have n	Personnel Village 25	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-97	South bury	New Have n	Personnel Village 26	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-100	South bury	New Have n	Personnel Village 29	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-101	South bury	New Have n	Personnel Village 30	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-127	South bury	New Have n	Staff House 3	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.703 71437	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
	South bury	New Have n	50,000 Gal. Water Tower	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-48	South bury	New Have n	Cottage Farm II	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.168 88618	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-53	South bury	New Have n	Garage for Staff House 16	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.168 88618	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-131	South bury	New Have n	Staff House 7	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.146 16203	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-58	South bury	New Have n	Horse Barn Shed	Southbury Trainin g School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.985 50606	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-50	South bury	New Have n	Cow and Hay Barn	Southbury	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.985 50606	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
		n		Training School																														
4101-57	Southbury	New Haven	Heifer Barn W/2/Stalls	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.985 50606	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-136	Southbury	New Haven	Storage Barn	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.985 50606	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-102	Southbury	New Haven	Piggery	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.985 50606	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-1	Southbury	New Haven	Abatoir	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-10	Southbury	New Haven	Cassidy Barn	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-114	Southbury	New Haven	Range Shelters	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-103	Southbury	New Haven	Poultry House	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-104	Southbury	New Haven	Old Poultry Plant	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.685 11009	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-130	Southbury	New Haven	Staff House 6 & 8	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-51	Southbury	New Haven	Garage for Staff House 6 & 8	Training School	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.685 11009	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
	Southbury	New Haven	Radio Tower Transmitter	Training	Not Specified	DDS	0	0				INTE RMIX 296.87	51637	22.685 11009	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				g School																														
4101-8	Southbury	New Haven	Boiler House	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.824 32365	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0	
4101-72	Southbury	New Haven	Milk Processing Plant	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.985 50606	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-109	Southbury	New Haven	Pump House	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	23.146 16203	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-135	Southbury	New Haven	Staff House Apt. 80/81/82	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	23.146 16203	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-24	Southbury	New Haven	Cottage 14	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-25	Southbury	New Haven	Cottage 15	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-26	Southbury	New Haven	Cottage 16	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-44	Southbury	New Haven	Cottage 35	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.733 72078	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-41	Southbury	New Haven	Cottage 32	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.733 72078	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-42	Southbury	New Haven	Cottage 33	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.733 72078	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0
4101-43	Southbury	New Haven	Cottage 34	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX 51637 296.87	22.733 72078	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0						0		0

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				School																														
4101-40	Southbury	New Haven	Cottage 31	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-39	Southbury	New Haven	Cottage 30	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-33	Southbury	New Haven	Cottage 24	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.639 08195	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-3	Southbury	New Haven	Activity Site Bunk House #1	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.733 72078	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-4	Southbury	New Haven	Activity Site Bunk House #2	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.848 55843	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-5	Southbury	New Haven	Activity Site Bunk House #3	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.848 55843	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-47	Southbury	New Haven	Cottage 42	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	23.152 92358	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-11	Southbury	New Haven	Cottage 1	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-13	Southbury	New Haven	Cottage 3	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-15	Southbury	New Haven	Cottage 5	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-124	Southbury	New Haven	Sheltered Workshop (Boys' It)	Southbury Training School	Not Specified	DDS	0	0				INTE RMIX	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	92209 4.587		0					0		0

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	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	15.001 83105	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445		0					0		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	15.011 6291	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	29290 06.335		0					0		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.955 86967	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					0		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.955 86967	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					0		0
	Suffield	Hartford	Not Specified	MacDugall-Walker Correctional Institution	Not Specified	DOC	0	0				INTE RMIX	12529 638.21	23.955 86967	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	94674 9.5225		0					0		0
	Thompson	Windham	Thompson Radio Tower Support Building	Thompson Radio Tower	Communications	Dept of Emergency Services Public Protection	0	0				INTE RMIX	45562 32.077	30.428 45535	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					0		0
2000-514	Thompson	Windham	Thompson Radio Tower	Thompson Radio Tower	Communications	Dept of Emergency Services Public Protection	0	0				INTE RMIX	45562 32.077	30.428 45535	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					0		0
	Thompson	Windham	Thompson Radio Tower Support Building	Thompson Radio Tower	Communications	Dept of Emergency Services Public Protection	0	0				INTE RMIX	45562 32.077	30.428 45535	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	48816 7.7225		0					0		0
2000-41	Tolland	Tolland	CSP operations	Troop C	Offices	DESPP	0	0				INTE RMIX	22781 16.038	22.668 86902	75937. 20128	X	22781 16.038	X	0.1587 30159	36160 5.7204	X	0.0370 37037	84374. 66809	0.2077 92208	47337 4.7612		0					0		0
	Tolland	Tolland	Pump Station	Troop C	Fuel	DESPP	0	0				INTE RMIX	22781 16.038	22.668 86902	75937. 20128	X	22781 16.038	X	0.1587 30159	36160 5.7204	X	0.0370 37037	84374. 66809	0.2077 92208	12623 32.697		0					0		0
7301-369	Torrington	Litchfield	3501 Torrington Classroom Building	UCONN Torrington Branch	Not Specified	UCONN	0	0				INTE RMIX	60749 76.102	45.969 35272	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-370	Torrington	Litchfield	3502 Maintainers Residence	UCONN Torrington Branch	Not Specified	UCONN	0	0				INTE RMIX	60749 76.102	45.466 85791	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
7301-371	Torrington	Litchfield	3503 Torrington Warehouse	Not Specified	Not Specified		0	0				INTE RMIX	60749 76.102	45.969 35272	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
	Torrington	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	60749 76.102	45.969 35272	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
	Torrington	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	60749 76.102	45.969 35272	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
	Torrington	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	60749 76.102	45.466 85791	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	65089 0.2967		0					0		0
7701-36	Waterbury	New Haven	Kinney Hall	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	24.170 5761	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	92209 4.587		0					0		0
5000-4236	Westbrook	Middlesex	Salt/Storage Shed	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	25.137 743	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	65089 0.2967		0					0		0
5000-7251	Westbrook	Middlesex	Salt/Storage Shed	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	25.137 743	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	65089 0.2967		0					0		0
5000-72	Westbrook	Middlesex	Maintenance Garage	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	25.137 743	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	65089 0.2967		0					0		0
	Westbrook	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	41765 46.07	25.137 743	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	65089 0.2967		0					0		0
2000-26	Westbrook	Middlesex	Troop F	Troop F	Not Specified	DPS	0	0				INTE RMIX	41765 46.07	24.353 5881	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	65089 0.2967		0					0		0
2000-25	Westbrook	Middlesex	Troop F Westbrook Garage	Troop F	Not Specified	DPS	0	0				INTE RMIX	41765 46.07	24.353 5881	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	65089 0.2967		0					0		0
2000-502	Westbrook	Middlesex	Troop F Radio Tower	Troop F	Not Specified	DPS	0	0				INTE RMIX	41765 46.07	24.353 5881	13921 8.2023	X	41765 46.07	X	0.4920 63492	20551 25.844	X	0.0074 07407	30937. 3783	0.1558 44156	501.61 55844		0					0		0
5000-379	Willington	Tolland	Radio Shack	Willington DOT Cell Tower	Communications	DOT	10729	10384.42				INTE RMIX	3218.7	21.717 93556	107.29	X	3218.7	X	0.1587 30159	510.90 47619	X	0.0370 37037	119.21 11111	0.2077 92208	94674 9.5225		0					0		0
	Willington	Tolland	Cell Tower	Willington DOT Cell Tower	Communications	DOT	0	0				INTE RMIX	45562 32.077	21.717 93556	15187 4.4026	X	45562 32.077	X	0.1587 30159	72321 1.4408	X	0.0370 37037	16874 9.3362	0.2077 92208	78895. 79354		0					0		0
	Wilton	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RMIX	37968 6.0064	17.879 07791	12656. 20021	X	37968 6.0064	X	0.2857 14286	10848 1.7161	X	0.0148 14815	5624.9 77873	0.2337 66234	44378 8.8387		0					0		0
	Wolcott	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	18984 30.032	27.417 39845	63281. 00107	X	18984 30.032	X	0.2539 68254	48214 0.9605	X	0.0222 22222	42187. 33404	0.2207 79221	41913 3.9032		0					0		0
	Wolcott	New Haven	Not Specified	Department of	Not Specified	DOT	0	0				INTE RMIX	18984 30.032	27.533 56934	63281. 00107	X	18984 30.032	X	0.2539 68254	48214 0.9605	X	0.0222 22222	42187. 33404	0.2207 79221	41913 3.9032		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
		n		Transportation																														
	Wolcott	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	18984 30.032	27.533 56934	63281. 00107	X	18984 30.032	X	0.2539 68254	48214 0.9605	X	0.0222 22222	42187. 33404	0.2207 79221	41913 3.9032							0		0
	Wolcott	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	18984 30.032	27.533 56934	63281. 00107	X	18984 30.032	X	0.2539 68254	48214 0.9605	X	0.0222 22222	42187. 33404	0.2207 79221	41913 3.9032							0		0
	Wolcott	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RMIX	18984 30.032	27.533 56934	63281. 00107	X	18984 30.032	X	0.2539 68254	48214 0.9605	X	0.0222 22222	42187. 33404	0.2207 79221	17124. 47532							0		0
5000-519	Woodsstock	Windham	Personnel Shelter	Woodstock Salt Storage	Not Specified	DOT	25854 6	51729. 67				INTE RMIX	77563. 8	31.047 41096	2585.4 6	X	77563. 8	X	0.0476 19048	3693.5 14286	X	0.0222 22222	1723.6 4	0.2142 85714	2636.2 18286							0		0
5000-521	Woodsstock	Windham	Salt Shed	Woodstock Salt Storage	Not Specified	DOT	41007. 84	0				INTE RMIX	12302. 352	31.047 41096	410.07 84	X	12302. 352	X	0.0476 19048	585.82 62857	X	0.0222 22222	273.38 56	0.2142 85714	11390 580.19							0		0
(none)	New Haven	New Haven	Ethnic Heritage Center	Southern Connecticut State University	Building No.17, Education	CSU	0	0	C	0.0222 22222	11812 45.353	INTE RFAC E	53156 040.9	26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29			DFI RM	5. 7	53156 040.9	3		0	
(none)	New Haven	New Haven	Ethnic Heritage Center	Southern Connecticut State University	Building No. 17, Education	CSU	0	0	C	0.0222 22222	11812 45.353	INTE RFAC E	53156 040.9	26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	51134 33.619			DFI RM	5. 7	53156 040.9	3		0	
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.025 87318	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-479	Danbury	Fairfield	Alumni Hall	Western Connecticut State University - Middtown Campus	Administration/Student Services	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-481	Danbury	Fairfield	University Hall	Western Connecticut	Administration	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				State University - Midtown Campuses																														
7803-7644	Danbury	Fairfield	Science Building	Western Connecticut State University - Midtown Campuses	Academics	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-7640	Danbury	Fairfield	Roberts Avenue Elementary School	Western Connecticut State University - Midtown Campuses	Magnet School	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-7645	Danbury	Fairfield	Holy Trinity Church	Western Connecticut State University - Midtown Campuses	Chapel	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-7647	Danbury	Fairfield	Richa Property	Western Connecticut State University - Midtown Campuses	Residence	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
(none)	Danbury	Fairfield	Not Specified	Western Connecticut State University	Garage	CSU	0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ity - Midtown Campu s																														
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	34312 3.6502	INTE RFAC E	23160 846.39	28.024 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	12426 087.48		0					3		0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Guard Shack	CSU	0	0	C	0.0222 22222	11812 45.353	INTE RFAC E	53156 040.9	26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	13412 28.49		0					3		0
	Torrington	Litchfield	Former Timken Corporate HQ	Proposed Torrington Courthouse	Not Specified	DPW	0	0	C	0.0074 07407	44999. 82298	INTE RFAC E	60749 76.102	41.032 59277	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					3		0
1326-8527	Torrington	Litchfield	Not Specified	Armory	Not Specified	Military Department	0	0	C	0.0074 07407	44999. 82298	INTE RFAC E	60749 76.102	39.800 41122	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	76923 3.987		0					3		0
7701-8348	Winchester	Litchfield	Art and Science Building	Northwestern Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0	C	0.0074 07407	36562. 35617	INTE RFAC E	49359 18.083	47.128 1395	16453 0.6028	X	49359 18.083	X	0.4920 63492	24287 85.089	X	0.0074 07407	36562. 35617	0.1558 44156	76923 3.987		0		Ha zus	5. 7 5	49359 18.083	0		0
7701-26	Winchester	Litchfield	English House	Northwestern Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0	C	0.0074 07407	36562. 35617	INTE RFAC E	49359 18.083	46.980 03387	16453 0.6028	X	49359 18.083	X	0.4920 63492	24287 85.089	X	0.0074 07407	36562. 35617	0.1558 44156	76923 3.987		0		Ha zus	5. 7 5	49359 18.083	0		0
7701-17	Winchester	Litchfield	White Fine Art Building	Northwestern Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0	C	0.0074 07407	36562. 35617	INTE RFAC E	49359 18.083	46.980 03387	16453 0.6028	X	49359 18.083	X	0.4920 63492	24287 85.089	X	0.0074 07407	36562. 35617	0.1558 44156	76923 3.987		0		Ha zus	5. 7 5	49359 18.083	0		0
7701-10	Winchester	Litchfield	North Building	Northwestern Commu	Not Specified	Board of Trustee	0	0	C	0.0074 07407	36562. 35617	INTE RFAC E	49359 18.083	46.980 03387	16453 0.6028	X	49359 18.083	X	0.4920 63492	24287 85.089	X	0.0074 07407	36562. 35617	0.1558 44156	76923 3.987		0		Ha zus	5. 7 5	49359 18.083	0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				nity College		s- CT Community Technical Colleges																												
7701-19	Winchester	Litchfield	Learning Resource Center	Not Specified	Not Specified		0	0	C	0.007407407	36562.35617	INTE RFAC E	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	769233.987		0	Ha zus	5.75	4935918.083	0		0	
7701-24	Winchester	Litchfield	Maintenance Garage/ Storage	Not Specified	Not Specified		0	0	C	0.007407407	36562.35617	INTE RFAC E	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	3609482.554		0	Ha zus	5.75	4935918.083	0		0	
7803-480	Danbury	Fairfield	Parking Garage	Western Connecticut State University - Middtown Campuses	Parking Garage	CSU	0	0	C	0.014814815	343123.6502	INTE RFAC E	23160846.39	28.01109886	772028.213	X	23160846.39	X	0.285714286	6617384.683	X	0.014814815	343123.6502	0.233766234	10739689.9		0					0		0
7104-4	Middletown	Middlesex	Middletown Library Service Center	Library	Not Specified	State Library	0	0	C	0.007407407	340311.1613	INTE RFAC E	45942006.77	29.918293	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	946749.5225		0					0		0
4124-1821	Torrington	Litchfield	Migeon Hall Group Home	DMR	Not Specified	DDS	0	0	C	0.007407407	44999.82298	INTE RFAC E	6074976.102	41.57040405	202499.2034	X	6074976.102	X	0.492063492	2989273.955	X	0.007407407	44999.82298	0.155844156	946749.5225		0					0		0
4124-1921	Torrington	Litchfield	Migeon Hall Garage	Not Specified	Not Specified		0	0	C	0.007407407	44999.82298	INTE RFAC E	6074976.102	41.72072983	202499.2034	X	6074976.102	X	0.492063492	2989273.955	X	0.007407407	44999.82298	0.155844156	769233.987		0					0		0
7701-64	Winchester	Litchfield	Goulet House	Northwestern Community College	Not Specified	Board of Trustees - CT Community Technical Colleges	0	0	C	0.007407407	36562.35617	INTE RFAC E	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	769233.987		0					0		0
7701-15	Winchester	Litchfield	Founders Hall	Northwestern Community College	Not Specified	Board of Trustees - CT Community Technical Colleges	0	0	C	0.007407407	36562.35617	INTE RFAC E	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	769233.987		0					0		0
7701-16	Winchester	Litchfield	Founders Hall Annex	Northwestern Community	Not Specified	Board of Trustees - CT	0	0	C	0.007407407	36562.35617	INTE RFAC E	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	769233.987		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				College		Community Technical Colleges																												
7701-14	Winchester	Litchfield	Administration Building	Not Specified	Not Specified		0	0	C	0.007407407	36562.35617	INTE RFAC E	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	3609482.554		0				0		0	
7803-5381	Danbury	Fairfield	Armory	Western Connecticut State University	Education	CSU	0	0	B	0.014814815	343123.6502	INTE RFAC E	23160846.39	28.04697037	772028.213	X	23160846.39	X	0.285714286	6617384.683	X	0.014814815	343123.6502	0.233766234	5414223.832		0		DFI RM	5.75	23160846.39	0		0
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0	B	0.014814815	343123.6502	INTE RFAC E	23160846.39	28.04697037	772028.213	X	23160846.39	X	0.285714286	6617384.683	X	0.014814815	343123.6502	0.233766234	4171615.083		0		DFI RM	5.75	23160846.39	0		0
7302-10	Farlington	Hartford	Warehouse	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845242.3	29.18780899	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0		DFI RM	4.85	17845242.3	4	17845242.3	0
7302-20	Farlington	Hartford	Firehouse	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845242.3	29.18780899	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0					4	17845242.3	0
7302-12	Farlington	Hartford	Creative Child Care Center	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845242.3	29.18780899	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0					4	17845242.3	0
7302-30	Farlington	Hartford	Green House	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845242.3	29.18780899	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0					4	17845242.3	0
7302-21	Farlington	Hartford	Fire House Addition	Not Specified	Not Specified		0	0				INTE RFAC E	17845242.3	29.18780899	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0					4	17845242.3	0
7302-22	Farlington	Hartford	Flammable Storage	Not Specified	Not Specified		0	0				INTE RFAC E	17845242.3	29.18780899	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	205125.5931		0					4	17845242.3	0
7301-7188	Mansfield	Tolland	0443 Grasso Hall, Hilltop Apt. 10	University of Connecticut - Storrs Campuses	Residence		3290556.39	0				INTE RFAC E	987166.917	18.47380447	3290556.39	X	987166.917	X	0.158730159	156693.1614	X	0.037037037	36561.73767	0.207792208	8230.109922		0					4	987166.917	0
7301-136	Mansfield	Tolland	0219 House 06	University of Connecticut - Storrs Campuses	Residence		132024.68	0				INTE RFAC E	39607.404	18.27236176	13202468	X	39607.404	X	0.158730159	6286.889524	X	0.037037037	1466.940889	0.207792208	1588.211532		0					4	39607.404	0
7301-1173	Mansfield	Tolland	2116 Depot - Farm Office Complex	University of Connecticut - Depot	Not Specified		25477.56	0				INTE RFAC E	7643.268	20.08613205	2547756	X	7643.268	X	0.158730159	1213.217143	X	0.037037037	283.084	0.207792208	1588.211532		0					4	7643.268	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-438	Mansfield	Tolland	2104 Depot - Birch Cottage	University of Connecticut - Depot	Not Specified		25477.56	0				INTERFAC E	7643.268	20.10560799	254.7756	X	7643.268	X	0.158730159	1213.217143	X	0.037037037	283.084	0.207792208	41578083.19		0					4	7643.268	0
	Mansfield	Tolland	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	200094525.4	19.90928078	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					4	200094525.4	0
	Mansfield	Tolland	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	200094525.4	19.90928078	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					4	200094525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	200094525.4	18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					4	200094525.4	0
4122-479	Mansfield	Tolland	Birch House	University of Connecticut - Depot	Residential	DDS	0	0				INTERFAC E	200094525.4	20.08613205	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					4	200094525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	200094525.4	18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					4	200094525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	200094525.4	18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	3629206.503		0					4	200094525.4	0
2000-1	Meriden	New Haven	Building #1	Mulcahy Complex	Not Specified	DPS	0	0				INTERFAC E	17465556.29	29.75429535	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	10143040.46		0					4	17465556.29	0
8102-7347	Middletown	Middlesex	Storage Shed	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					4	45942006.77	0
4400-118	Middletown	Middlesex	Sewage Disposal (old)	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.83556366	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	1479296.129		0					4	45942006.77	0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	9492150.16	27.33129311	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	8609503.47		0					4	9492150.16	0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	36829542.62	21.41152763	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0					4	36829542.62	0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	36829542.62	21.41152763	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	1824465.226		0					4	36829542.62	0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Portland	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	75937 20.128	29.735 9333	25312 4.0043	X	75937 20.128	X	0.4920 63492	37365 92.444	X	0.0074 07407	56249. 77873	0.1558 44156	35503 1.0709		0					4	75937 20.128	0	
5000-527	Tolland	Tolland	Bus Shelter	DOT Tolland Park & Ride Lot	Bus Shelter	DOT	0	0				INTERFAE	22781 16.038	22.593 66417	75937. 20128	X	22781 16.038	X	0.1587 30159	36160 5.7204	X	0.0370 37037	84374. 66809	0.2077 92208	12623 32.697		0					4	22781 16.038	0	
4124-1721	Torrington	Litchfield	Tunick House Group Home	Not Specified	Not Specified		0	0				INTERFAE	60749 76.102	41.049 83521	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					4	60749 76.102	0	
4124-1621	Torrington	Litchfield	Tunick Hall/Garage	Not Specified	Not Specified		0	0				INTERFAE	60749 76.102	41.049 83521	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	41312. 47652		0					4	60749 76.102	0	
5000-157	Willington	Tolland	Visitors Center	I-84 Rest Area EB	Rest Area/Information/Office Building		88362 7.97	5914.4 5				INTERFAE	26508 8.391	22.909 28268	8836.2 797	X	26508 8.391	X	0.1587 30159	42077. 52238	X	0.0370 37037	9818.0 88556	0.2077 92208	94674 9.5225		0		Haus	0. 7 5	26508 8.391	3		0	
	Willington	Tolland	Shed	I-84 Rest Area EB	Storage		0	0				INTERFAE	45562 32.077	22.909 28268	15187 4.4026	X	45562 32.077	X	0.1587 30159	72321 1.4408	X	0.0370 37037	16874 9.3362	0.2077 92208	39447 8.9677		0		Haus	0. 7 5	45562 32.077	3		0	
5000-677	Bristol	Hartford	Bus Shelter	Not Specified	Not Specified		0	0				INTERFAE	18984 30.032	29.172 6265	63281. 00107	X	18984 30.032	X	0.2857 14286	54240 8.5806	X	0.0148 14815	28124. 88936	0.2077 92208	39447 8.9677		0					3		0	
5000-564	Bristol	Hartford	Bus Shelter	Not Specified	Not Specified		0	0				INTERFAE	18984 30.032	29.172 6265	63281. 00107	X	18984 30.032	X	0.2857 14286	54240 8.5806	X	0.0148 14815	28124. 88936	0.2077 92208	39447 8.9677		0					3		0	
3500-2	Bristol	Hartford	Thorpe House	Not Specified	Not Specified		0	0				INTERFAE	18984 30.032	29.157 18269	63281. 00107	X	18984 30.032	X	0.2857 14286	54240 8.5806	X	0.0148 14815	28124. 88936	0.2077 92208	11045 41.11		0					3		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						3		0
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	81361. 28709		0						3		0
5000-754	Clinton	Middlesex	Passenger Shelter with Wheelchair Lift	Not Specified	Not Specified		0	0				INTERFAE	37968 6.0064	25.178 8826	12656. 20021	X	37968 6.0064	X	0.4920 63492	18682 9.6222	X	0.0074 07407	2812.4 88936	0.1558 44156	29585 9.2258		0					3		0	
5000-544	Columbia	Tolland	Bus Shelter	Not Specified	Bus Shelter	DOT	0	0				INTERFAE	18984 30.032	23.593 86826	63281. 00107	X	18984 30.032	X	0.1587 30159	30133 8.1003	X	0.0370 37037	70312. 22341	0.2077 92208	18146 03.251		0					3		0	
8102-484	East Windsor	Hartford	Maple	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3		0	
8102-485	East Windsor	Hartford	Spruce	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3		0	
8102-482	East Windsor	Hartford	Oak	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3		0	
8102-72	East Windsor	Hartford	Education/Recreation	State Receiving	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Home																														
8102-75	East Windsor	Hartford	Old Administration/Dining Hall	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0						3	0
8102-7964	East Windsor	Hartford	Shipping and Receiving	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0						3	0
8102-79	East Windsor	Hartford	Willow Hall	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
8102-7965	East Windsor	Hartford	Pool pump house	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
8102-7967	East Windsor	Hartford	Willow Hall Storage	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
8102-74	East Windsor	Hartford	White House/Brick House	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
8102-7348	East Windsor	Hartford	Maintenance Storage Building	State Receiving Home	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
	East Windsor	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAE	87327 78.147	24.774 2691	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
	East Windsor	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAE	87327 78.147	24.774 2691	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
	East Windsor	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAE	87327 78.147	24.774 2691	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0					3	0	
8102-7966	East Windsor	Hartford	Generator House	Not Specified	Not Specified		0	0				INTERFAE	87327 78.147	24.688 45367	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	37081 02.296		0					3	0	
7701-28	Farington	Hartford	Academic East	Not Specified	Not Specified		0	0				INTERFAE	17845 242.3	29.681 87523	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					3	0	
7701-30	Farington	Hartford	Faculty/Student Services	Not Specified	Not Specified		0	0				INTERFAE	17845 242.3	29.681 87523	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					3	0	
7701-8346	Farington	Hartford	Tunxis Phase II 700	Not Specified	Not Specified		0	0				INTERFAE	17845 242.3	29.713 78517	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	11834 36.903		0					3	0	

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5000-5	Glastonbury	Hartford	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	5695290.096	27.71301842	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0			
5000-376	Glastonbury	Hartford	Jet Hangar	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	5695290.096	27.71301842	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0						3		0		
5000-797	Glastonbury	Hartford	Salt Shed	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	5695290.096	27.71301842	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	631166.3483		0						3		0		
	Guilford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	3037488.051	26.13497162	101249.6017	X	3037488.051	X	0.253968254	771425.5368	X	0.022222222	67499.73447	0.220779221	670614.2451		0							3		0	
5000-71	Guilford	New Haven	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	3037488.051	26.13497162	101249.6017	X	3037488.051	X	0.253968254	771425.5368	X	0.022222222	67499.73447	0.220779221	670614.2451		0							3		0	
5000-538	Guilford	New Haven	Salt Shed	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	3037488.051	26.13497162	101249.6017	X	3037488.051	X	0.253968254	771425.5368	X	0.022222222	67499.73447	0.220779221	2095669.516		0								3		0
3100-175	Haddam	Middlesex	Barn	Not Specified	Not Specified		0	0				INTERFAC E	9492150.16	27.87816048	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	2366873.806		0								3		0
7804-479	Hamden	New Haven	Facilities Operations	Southern Connecticut State University	Building No. 1, Office and Storage	CSU	0	0				INTERFAC E	15187440.26	26.03919029	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0								3		0
7804-480	Hamden	New Haven	Facilities Garage	Southern Connecticut State University	Maintenance Garage	CSU	0	0				INTERFAC E	15187440.26	26.03919029	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0								3		0
7804-37	Hamden	New Haven	North Campus Residence Complex - Townhouse B	Southern Connecticut State University	Building No. 34, Residence	CSU	0	0				INTERFAC E	15187440.26	26.03784561	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0								3		0
7804-7102	Hamden	New Haven	North Campus Residence	Southern Connecticut State University	Building No. 34, Residence	CSU	0	0				INTERFAC E	15187440.26	26.03784561	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0								3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
		n	Complex - Townhouse A	Connecticut State University								E																						
7804-38	Hamden	New Haven	North Campus Residence Complex - Townhouse C	Southern Connecticut State University	Building No. 34, Residence	CSU	0	0				INTE RFAC E	15187 440.26	26.037 84561	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
7804-31	Hamden	New Haven	North Campus Residence Complex	Southern Connecticut State University	Building No. 34, Residence	CSU	0	0				INTE RFAC E	15187 440.26	26.037 84561	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
(none)	Hamden	New Haven	Not Specified	Eli Whitney Technical High School	Guard Shack	DOE	0	0				INTE RFAC E	15187 440.26	26.037 58049	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
7001-8	Hamden	New Haven	Main Campus Building	Eli Whitney Technical High School	Education	DOE	0	0				INTE RFAC E	15187 440.26	26.037 58049	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
(none)	Hamden	New Haven	Not Specified	Eli Whitney Technical High School	Shed	DOE	0	0				INTE RFAC E	15187 440.26	26.037 58049	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
(none)	Hamden	New Haven	Not Specified	Eli Whitney Technical High School	Maintenance/Repair Shop	DOE	0	0				INTE RFAC E	15187 440.26	26.037 58049	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
7001-81	Hamden	New Haven	Service Garage	Eli Whitney Technical High School	Maintenance/Repair Shop	DOE	0	0				INTE RFAC E	15187 440.26	26.037 58049	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					3		0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	15187 440.26	26.043 58864	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	75444 1.0257		0					3		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	34171 74.058	32.968 32657	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	26035 61.187		0					3		0
	Madison	New	Not Specified	Mosque	Not Specified	DPH	0	0				INTE	16706	25.379	55687	X	16706	X	0.2539	42428	X	0.0222	37124	0.2207	16765		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	on	Have n		to Control								RFAC E	184.28	63486	2.8094		184.28		68254	40.453		22222	8.5396	79221	35.613									
4122-7102	Manchester	Hartford	Spring Street Cla	Not Specified	Not Specified		0	0				INTE RFAC E	75937 20.128	25.119 61555	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	3841.6 8561		0					3		0
7301-1177	Mansfield	Tolland	2184 Depot - Incinerator	University of Connecticut - Depot	Not Specified		61627.04	0				INTE RFAC E	18488.112	20.086 13205	616.27 04	X	18488.112	X	0.1587 30159	2934.6 20952	X	0.0370 37037	684.74 48889	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Barn - Quonset Hut	University of Connecticut - Depot	Barn		0	0				INTE RFAC E	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Barn - Quonset Hut	University of Connecticut - Depot	Barn		0	0				INTE RFAC E	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Barn - Quonset Hut	University of Connecticut - Depot	Barn		0	0				INTE RFAC E	20009 4525.4	20.086 13205	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Barn	University of Connecticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	20.086 13205	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Barn	University of Connecticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	20.086 13205	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	20.086 13205	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	20.105 60799	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	95463 91.018		0					3		0
5000-4	Middle town	Middlesex	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	45942 006.77	29.761 91711	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					3		0
	Middle	Midd	Not Specified	Depart	Not Specified		0	0				INTE	45942	29.970	15314	X	45942	X	0.4920	22606	X	0.0074	34031	0.1558	82840		0					3		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	town	lesex		ment of Transportation								RFAC E	006.77	82138	00.226		006.77		63492	384.29		07407	1.1613	44156	58.322									
7804-4868	New Haven	New Haven	Admissions House	Southern Connecticut State University	Building No. 18, Office	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Guard Shack	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
7804-14	New Haven	New Haven	Schwartz Hall	Southern Connecticut State University	Building No. 16, Residence Hall and Housing Office	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
7804-23	New Haven	New Haven	Lang Social Work House	Southern Connecticut State University	Building No. 19, Education	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
7804-40	New Haven	New Haven	Connecticut Hall	Southern Connecticut State University	Building No. 15, Food Service	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Garage	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
7804-30	New Haven	New Haven	Orlando Public Health Building	Southern Connecticut State University	Building No. 20, Office	CSU	0	0				INTE RFAC E	53156040.9	26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
7804-15	New Haven	New Haven	Brownell Hall	Southern Connecticut	Building No. 21, Residence	CSU	0	0				INTE RFAC E	53156040.9	26.07032967	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	167653.5613		0					3		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				State University																															
	North Canaan	Litchfield	Not Specified	Troop B	Not Specified	DPS	0	0				INTE RFAC E	75937 2.0128	45.491 28723	25312. 40043	X	75937 2.0128	X	0.4920 63492	37365 9.2444	X	0.0074 07407	5624.9 77873	0.1558 44156	11834 3.6903		0					3		0	
	North Canaan	Litchfield	Not Specified	Troop B	Not Specified	DPS	0	0				INTE RFAC E	75937 2.0128	45.491 28723	25312. 40043	X	75937 2.0128	X	0.4920 63492	37365 9.2444	X	0.0074 07407	5624.9 77873	0.1558 44156	57396 68.98		0					3		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	21.210 42824	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
(non e)	Norwich	New London	Not Specified	Norwich Technical High School	Gazebo	DOE	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
(non e)	Norwich	New London	Garage	Norwich Technical High School	Garage	DOE	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
(non e)	Norwich	New London	Not Specified	Norwich Technical High School	Shed	DOE	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
7001-14	Norwich	New London	Main Campus Building	Norwich Technical High School	Education	DOE	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
7001-141	Norwich	New London	Service Garage	Norwich Technical High School	Maintenance/Repair Shop	DOE	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
(non e)	Norwich	New London	Thames Valley Campus	Three Rivers Community College	Garage	Board of Trustees-CT Community Technical Colleges	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	
7701-34	Norwich	New London	Thames Valley Campus	Three Rivers Community College	Education	Board of Trustees-CT Community	0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
						Technical Colleges																												
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	22.195 35828	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	91223 2.6128		0					3		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.524 09744	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					3		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.524 09744	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					3		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.524 09744	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					3		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.524 09744	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					3		0
5000-1	Simsbury	Hartford	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	37968 60.064	25.476 54152	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0					3		0
5000-4198	Simsbury	Hartford	Sand/Salt Shed	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	37968 60.064	25.476 54152	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	10729 827.92		0					3		0
4101-54	Southbury	New Haven	Garden House	Southbury Training School	Not Specified	DDS	0	0				INTE RFAC E	51637 296.87	22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-56	Southbury	New Haven	Green House	Southbury Training School	Not Specified	DDS	0	0				INTE RFAC E	51637 296.87	22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-126	Southbury	New Haven	Staff House 2	Southbury Training School	Not Specified	DDS	0	0				INTE RFAC E	51637 296.87	22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-63	Southbury	New Haven	Lake Stibbs Pavillion	Southbury Trainin	Not Specified	DDS	0	0				INTE RFAC E	51637 296.87	22.703 71437	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				g School																														
4101-121	Southbury	New Haven	Restroom in Park	Southbury Training School	Not Specified	DDS	0	0				INTE RFAC E	51637 296.87	22.703 71437	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	51637 296.87	22.908 28896	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	51637 296.87	22.915 34042	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	83826 7.8063		0					3		0
2201-66	Southington	Hartford	Readness Center	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	29.107 17201	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0					3		0
2201-67	Southington	Hartford	Oms Shop	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	29.107 17201	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0					3		0
2201-8021	Southington	Hartford	Cold Storage Building	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	29.107 17201	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0					3		0
	Southington	Hartford	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	29.107 17201	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354		0					3		0
	Southington	Hartford	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	29.107 17201	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	94674 9.5225		0					3		0
3100-480	Thompson	Windham	Concession Building	Quaddick State Park	Not Specified	Department of Energy and Environmental Protection	0	0				INTE RFAC E	45562 32.077	32.123 76022	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					3		0
3100-483	Thompson	Windham	Ticket Booth	Quaddick State Park	Not Specified	Department of Energy and Environmental Protection	0	0				INTE RFAC E	45562 32.077	32.040 91263	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	76751. 33786		0					3		0
5000-173	Vernon	Tolland	Maintenance Garage & Office	Vernon DOT Garage and Storage	Maintenance/Repair Shop	DOT	11939 09.7	23450 97.58				INTE RFAC E	35817 2.91	24.657 65572	11939. 097	X	35817 2.91	X	0.1587 30159	56852. 84286	X	0.0370 37037	13265. 66333	0.2077 92208	32516 9.5337		0					3		0
9001-28	Vernon	Tolland	JD Courthouse	Not Part Of A Facility	Court		52162 61.27	20485 51				INTE RFAC E	15648 78.381	23.873 21854	52162. 6127	X	15648 78.381	X	0.1587 30159	24839 3.3938	X	0.0370 37037	57958. 45856	0.2077 92208	19727. 78556		0					3		0
5000-535	Vernon	Tolland	Salt Shed	Vernon DOT Garage	Salt Shed	DOT	31646 6.56	99692. 68				INTE RFAC E	94939. 968	24.657 65572	3164.6 656	X	94939. 968	X	0.1587 30159	15069. 83619	X	0.0370 37037	3516.2 95111	0.2077 92208	4944.4 53195		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				and Storage																														
5000-107	Vernon	Tolland	Storage Building	Vernon DOT Garage and Storage	Storage Building	DOT	79317.27	12743.66				INTE RFAC E	23795.181	24.63833237	793.1727	X	23795.181	X	0.158730159	3777.012857	X	0.037037037	881.303	0.207792208	313.4967273							3		0
5000-776	Vernon	Tolland	Mobile Office Trailer	Vernon DOT Garage and Storage	Mobile Office Trailer	DOT	5029.01	484				INTE RFAC E	1508.703	24.65765572	50.2901	X	1508.703	X	0.158730159	239.4766667	X	0.037037037	55.87788889	0.207792208	5388.297351							3		0
4122-74123	Vernon	Tolland	49 Tunnel Road	Hartford Center	Residence	DDS	86437.27	0				INTE RFAC E	25931.181	24.43654823	864.3727	X	25931.181	X	0.158730159	4116.060476	X	0.037037037	960.4141111	0.207792208	157791.5871							3		0
	Wallingford	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	759372.0128	26.21870804	25312.40043	X	759372.0128	X	0.253968254	192856.3842	X	0.022222222	16874.93362	0.22079221	922094.587							3		0
2201-73	Westbrook	Middlesex	State Armory	Not Specified	Not Specified		0	0				INTE RFAC E	4176546.07	24.48808289	139218.2023	X	4176546.07	X	0.492063492	2055125.844	X	0.007407407	30937.3783	0.155844156	769233.987							3		0
7701-25	Winchester	Litchfield	Child Daycare Center	Not Specified	Not Specified		0	0				INTE RFAC E	4935918.083	47.1281395	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	112964.8717							3		0
9001-27	Windham	Windham	JD Courthouse	Not Part Of A Facility	Court		2416193.09	1116392				INTE RFAC E	724857.927	26.45765495	24161.9309	X	724857.927	X	0.047619048	34517.04414	X	0.022222222	16107.95393	0.214285714	5695290.096							3		0
	Windham	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	26578020.45	26.33815384	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096							3		0
7805-5367	Windham	Windham	Noble Hall	Eastern Connecticut State University	Building No. 1	CSU	0	0				INTE RFAC E	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	244083.8613							3		0
3100-296	Berlin	Hartford	Garage - Office - Residence	Not Specified	Not Specified		0	0				INTE RFAC E	1139058.019	29.74445915	37968.60064	X	1139058.019	X	0.285714286	325445.1483	X	0.014814815	16874.93362	0.207792208	1577915.871							1		0
	Portland	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	7593720.128	29.7359333	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	710062.1418							1		0
3100-2693	Thompson	Windham	Pavillion	Quaddick State Park	Not Specified	Department of Energy and Environmental Protection	0	0				INTE RFAC E	4556232.077	32.12376022	151874.4026	X	4556232.077	X	0.047619048	216963.4322	X	0.022222222	101249.6017	0.214285714	976335.445							1		0
	Thompson	Windham	Toilet Building	Quaddick State Park	Not Specified	Department of Energy	0	0				INTE RFAC E	4556232.077	32.04091263	151874.4026	X	4556232.077	X	0.047619048	216963.4322	X	0.022222222	101249.6017	0.214285714	813612.8709							1		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
						and Environmental Protection																													
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	3796860.064	30.07144928	126562.0021	X	3796860.064	X	0.047619048	180802.8602	X	0.022222222	84374.66809	0.214285714	1057696.732		0	Hausus	0.45	3796860.064	0		0		
7701-23	Winchester	Litchfield	Green Woods Hall	Northwestern Community College	Not Specified	Board of Trustees - CT Community Technical Colleges	0	0				INTERFAE	4935918.083	46.98003387	164530.6028	X	4935918.083	X	0.492063492	2428785.089	X	0.007407407	36562.35617	0.155844156	2781076.722		0	Hausus	0.57	4935918.083	0		0		
7302-28	Farington	Hartford	Building 18	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTERFAE	17845242.3	29.22670174	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0	DFIRM	0.48	17845242.3	0		0		
7302-9	Farington	Hartford	Dowling South	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTERFAE	17845242.3	29.23014832	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0	DFIRM	0.48	17845242.3	0		0		
5000-404	Farington	Hartford	Salt Shed	Not Specified	Not Specified		0	0				INTERFAE	17845242.3	29.17583847	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0	DFIRM	0.48	17845242.3	0		0		
7302-19	Farington	Hartford	7 Lab	Not Specified	Not Specified		0	0				INTERFAE	17845242.3	29.22670174	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296		0	DFIRM	0.48	17845242.3	0		0		
5000-120	Farington	Hartford	Maintenance Garage	Not Specified	Not Specified		0	0				INTERFAE	17845242.3	29.17583847	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	1972394.838		0	DFIRM	0.48	17845242.3	0		0		
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	9492150.16	26.76136398	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	1479296.129		0	DFIRM	0.57	9492150.16	0		0		
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	9492150.16	26.76136398	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	118343.6903		0	DFIRM	0.57	9492150.16	0		0		
7001-1	Ansonia	New Haven	Main Campus Building	Emmet O'Brien Technical High School	Education	DOE	0	0				INTERFAE	759372.0128	26.0715847	25312.40043	X	759372.0128	X	0.253968254	192856.3842	X	0.022222222	16874.93362	0.220779221	167653.5613		0				0		0		
7001-1111	Ansonia	New Haven	Service Garage	Emmet O'Brien Technical High School	Maintenance/Repair Shop	DOE	0	0				INTERFAE	759372.0128	26.06874657	25312.40043	X	759372.0128	X	0.253968254	192856.3842	X	0.022222222	16874.93362	0.220779221	838267.8063		0				0		0		
4122-164122	Bloomfield	Hartford	52 Brown Street	Not Specified	Not Specified		0	0				INTERFAE	3796860.064	27.74718666	126562.0021	X	3796860.064	X	0.285714286	1084817.161	X	0.014814815	56249.77873	0.207792208	394478.9677		0				0		0		
2201-14	Bristol	Hartford	State Armory	Not Specified	Not Specified		0	0				INTERFAE	1898430.032	29.10907555	63281.00107	X	1898430.032	X	0.285714286	542408.5806	X	0.014814815	28124.88936	0.207792208	1253262.377		0				0		0		

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category		
				d								E																								
8000-301	Brooklyn	Windham	300 Bed Dorm & Support	Brooklyn Correctional Center	Corrections		20104 417.29	0				INTE RFAC E	60313 25.187	30.529 65164	20104 4.1729	X	60313 25.187	X	0.0476 19048	28720 5.9613	X	0.0222 22222	13402 9.4486	0.2142 85714	28147 2.4382		0					0		0		
8000-300	Brooklyn	Windham	Old Jail	Brooklyn Correctional Center	Not Specified		43784 60.15	0				INTE RFAC E	13135 38.045	30.529 65164	43784. 6015	X	13135 38.045	X	0.0476 19048	62549. 43071	X	0.0222 22222	29189. 73433	0.2142 85714	11390 58.019		0						0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 04.09	30.529 65164	17718 6.803	X	53156 04.09	X	0.0476 19048	25312 4.0043	X	0.0222 22222	11812 4.5353	0.2142 85714	11390 58.019		0						0		0	
2000-20	Colchester	New London	Troop K Colchester	Facility Not Listed	Troop Barracks		51619 0.34	54964 3				INTE RFAC E	15485 7.102	25.220 07561	5161.9 034	X	15485 7.102	X	0.0634 92063	9832.1 96952	X	0.0518 51852	8029.6 27511	0.2402 5974	14448. 26815		0						0		0	
2000-510	Colchester	New London	Troop K Radio Tower	Facility Not Listed	Radio/Communications		20045 3.45	22265 8				INTE RFAC E	60136. 035	25.220 07561	2004.5 345	X	60136. 035	X	0.0634 92063	3818.1 60952	X	0.0518 51852	3118.1 64778	0.2402 5974	25794. 41425		0							0		0
2000-18	Colchester	New London	Troop K Emergency Service Garage	Facility Not Listed	Troop Barracks		35786 8.45	13058 2				INTE RFAC E	10736 0.535	25.220 07561	3578.6 845	X	10736 0.535	X	0.0634 92063	6816.5 41905	X	0.0518 51852	5566.8 42556	0.2402 5974	23630. 30852		0							0		0
2000-19	Colchester	New London	Troop K Garage	Facility Not Listed	Troop Barracks		32784 3.92	46191				INTE RFAC E	98353. 176	25.220 07561	3278.4 392	X	98353. 176	X	0.0634 92063	6244.6 46095	X	0.0518 51852	5099.7 94311	0.2402 5974	17332 419.64		0							0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	72140 341.22	20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	20981 35.009		0							0		0
	East Windsor	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	87327 78.147	24.657 62329	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	37081 02.296		0							0		0
7302-5	Farington	Hartford	Administrative Services Building	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845 242.3	29.226 70174	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0							0		0
7302-7815	Farington	Hartford	Farmington Surgery Center	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845 242.3	29.187 80899	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0							0		0
7302-	Farington	Hartford	Building 6	UCONN	Not Specified	UCONN	0	0				INTE	17845	29.230	59484	X	17845	X	0.2857	50986	X	0.0148	26437	0.2077	37081		0							0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
18	gton	ord		HEALTH CENTER								RFAC E	242.3	14832	1.41		242.3		14286	40.657		14815	3.96	92208	02.296									
7302-17	Farmin gton	Hartf ord	Building 5	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845 242.3	29.230 14832	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-15	Farmin gton	Hartf ord	3 Pharm	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845 242.3	29.230 14832	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-13	Farmin gton	Hartf ord	1 Pharm	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845 242.3	29.230 14832	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-14	Farmin gton	Hartf ord	2 Pharm	UCONN HEALTH CENTER	Not Specified	UCONN	0	0				INTE RFAC E	17845 242.3	29.230 14832	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
1326-488	Farmin gton	Hartf ord	Office of Chief Medical Examiner	Not Specified	Not Specified		0	0				INTE RFAC E	17845 242.3	29.187 80899	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-27	Farmin gton	Hartf ord	Grounds Maintenance	Not Specified	Not Specified		0	0				INTE RFAC E	17845 242.3	29.187 80899	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-7	Farmin gton	Hartf ord	Dowling North	Not Specified	Not Specified		0	0				INTE RFAC E	17845 242.3	29.226 70174	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-16	Farmin gton	Hartf ord	4 Lab	Not Specified	Not Specified		0	0				INTE RFAC E	17845 242.3	29.230 14832	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0					0		0
7302-7816	Farmin gton	Hartf ord	16 Munson Road	Not Specified	Not Specified		0	0				INTE RFAC E	17845 242.3	29.204 71191	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	63116 6.3483		0					0		0
3400-15	Guilfor d	New Have n	Henry Whitfield House	Henry Whitfield House	Not Specified	CT Historic al Commi ssion	0	0				INTE RFAC E	30374 88.051	26.049 66736	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451		0					0		0
3400-16	Guilfor d	New Have n	Whitfield Barn	Henry Whitfield House	Not Specified	CT Historic al Commi ssion	0	0				INTE RFAC E	30374 88.051	26.049 66736	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451		0					0		0
3400-17	Guilfor d	New Have n	Whitfield Cottage	Henry Whitfield House	Not Specified	CT Historic al Commi ssion	0	0				INTE RFAC E	30374 88.051	26.049 66736	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451		0					0		0
3400-16	Guilfor d	New Have n	STORAGE SHED	Not Specified	Not Specified		0	0				INTE RFAC E	30374 88.051	26.049 66736	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451		0					0		0
3400-17	Guilfor d	New Have n	STORAGE GARAGE	Not Specified	Not Specified		0	0				INTE RFAC E	30374 88.051	26.049 66736	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	33530 71.225		0					0		0
7804-39	Hamden	New Have n	North Campus Residence Complex - Townhouse D	Southern Connecticut State University	Building No. 34, Residence	CSU	0	0				INTE RFAC E	15187 440.26	26.037 84561	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	15187 440.26	26.056 87332	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0		0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	15187 440.26	26.043 58864	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0		0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	15187 440.26	26.043 58864	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0		0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	15187 440.26	26.031 36635	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0		0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	15187 440.26	26.048 02895	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	30177 64.103		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	13668 696.23	35.114 70413	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	13668 696.23	35.114 70413	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	29290 06.335		0					0		0
	Killingly	Windham	Not Specified	Not Specified	Not Specified		0	0				INTERFAE	13668 696.23	35.114 70413	45562 3.2077	X	13668 696.23	X	0.0476 19048	65089 0.2967	X	0.0222 22222	30374 8.8051	0.2142 85714	51593 52.285		0					0		0
7301-244	Mansfield	Tolland	0364 Babbidge Library (Homer)	University of Connecticut - Storrs Campus	Library		80256 591.1	10002 9759.4				INTERFAE	24076 977.33	18.202 20947	80256 5.911	X	24076 977.33	X	0.1587 30159	38217 42.433	X	0.0370 37037	89173 9.9011	0.2077 92208	66004 4.0428		0					0		0
7301-7101	Mansfield	Tolland	0383 Thomas J. Dodd Research Center	University of Connecticut - Storrs Campus	Not Specified		10588 206.52	39055 314.95				INTERFAE	31764 61.956	18.202 20947	10588 2.0652	X	31764 61.956	X	0.1587 30159	50420 0.3105	X	0.0370 37037	11764 6.7391	0.2077 92208	19956 43.214		0					0		0
7301-7216	Mansfield	Tolland	0434 Information Technology Building	University of Connecticut - Storrs Campus	Education		32013 443.22	54567 38.39				INTERFAE	96040 32.966	18.323 10104	32013 4.4322	X	96040 32.966	X	0.1587 30159	15244 49.677	X	0.0370 37037	35570 4.9247	0.2077 92208	29873 60.477		0					0		0
7301-253	Mansfield	Tolland	0374 Gampel Pavilion - Sports Center	University of Connecticut - Storrs Campus	Not Specified		47922 240.98	37946 86.96				INTERFAE	14376 672.29	18.323 10104	47922 2.4098	X	14376 672.29	X	0.1587 30159	22820 11.475	X	0.0370 37037	53246 9.3442	0.2077 92208	46190 2.1018		0					0		0
7301-7157	Mansfield	Tolland	0175 Young Bldg (Col of Ag & Nr)	University of Connecticut	Education		74096 79.55	26127 92.3				INTERFAE	22229 03.865	18.373 32344	74096. 7955	X	22229 03.865	X	0.1587 30159	35284 1.8833	X	0.0370 37037	82329. 77278	0.2077 92208	15521 12.262		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ticut - Storrs Campu s																														
7301-7183	Mansfield	Tolland	0414 School of Business	University of Connecticut - Storrs Campu s	Education		24898467.54	2187166.67				INTE RFAC E	7469540.262	18.32310104	248984.6754	X	7469540.262	X	0.158730159	1185641.311	X	0.037037037	276649.6393	0.207792208	1780709.23							0	0	0
7301-7149	Mansfield	Tolland	0148 Field House/Physical Education	University of Connecticut - Storrs Campu s	Sports/Gymnasium		28565543.9	2184710.25				INTE RFAC E	8569663.17	18.32310104	285655.439	X	8569663.17	X	0.158730159	1360263.995	X	0.037037037	317394.9322	0.207792208	461774.1974							0	0	0
7301-208	Mansfield	Tolland	0324 Whetten Graduate Center	University of Connecticut - Storrs Campu s	Education		7407627.75	1063095.44				INTE RFAC E	2222288.325	18.20220947	74076.2775	X	2222288.325	X	0.158730159	352744.1786	X	0.037037037	82306.975	0.207792208	309810.1103							0	0	0
7301-214	Mansfield	Tolland	0330 Phillips, DC Building (Communic Sci)	University of Connecticut - Storrs Campu s	Education		4969870.52	1011462.99				INTE RFAC E	1490961.156	18.20220947	49698.7052	X	1490961.156	X	0.158730159	236660.501	X	0.037037037	55220.78356	0.207792208	686060.6487							0	0	0
7301-522	Mansfield	Tolland	0428 Rpm Commons /South D Rome	University of Connecticut - Storrs Campu s	Cafeteria/Food Service		11005556.24	837961.44				INTE RFAC E	3301666.872	18.20220947	110055.5624	X	3301666.872	X	0.158730159	524074.1067	X	0.037037037	122283.9582	0.207792208	177218.7803							0	0	0
7301-1119	Mansfield	Tolland	0382 Tasker Admissions	University of Connecticut - Storrs Campu s	Office		2842884.6	750348.73				INTE RFAC E	852865.38	18.38605309	28428.846	X	852865.38	X	0.158730159	135375.4571	X	0.037037037	31587.60667	0.207792208	423757.968							0	0	0
7301-224	Mansfield	Tolland	0342 Bishop Center (Cont. Ed)	University of Connecticut - Storrs Campu s	Education		6797784.07	611945.23				INTE RFAC E	2039335.221	18.1155777	67977.8407	X	2039335.221	X	0.158730159	323704.0033	X	0.037037037	75530.93411	0.207792208	1168732.427							0	0	0
7301-174	Mansfield	Tolland	0263 McMahon Hall & Dining Facility	University of Connecticut -	Residence		18748416.02	580428.06				INTE RFAC E	5624524.806	18.32310104	187484.1602	X	5624524.806	X	0.158730159	892781.7152	X	0.037037037	208315.7336	0.207792208	272638.2951							0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Storrs Campu s																															
7301-527	Mansfield	Tolland	0212 Ratcliffe Hicks	University of Connecticut - Storrs Campu s	Education		43735 72.65	24254 2.64				INTE RFAC E	13120 71.795	18.373 32344	43735. 7265	X	13120 71.795	X	0.1587 30159	20826 5.3643	X	0.0370 37037	48595. 25167	0.2077 92208	60391 8.0249		0					0		0	
7301-228	Mansfield	Tolland	0346 Putnam Refectory	University of Connecticut - Storrs Campu s	Residence		96878 51.65	23411 1.12				INTE RFAC E	29063 55.495	18.473 80447	96878. 5165	X	29063 55.495	X	0.1587 30159	46132 6.269	X	0.0370 37037	10764 2.7961	0.2077 92208	21677 2.4297		0					0		0	
7301-52	Mansfield	Tolland	0127 Whitney Hall & Cafeteria	University of Connecticut - Storrs Campu s	Residence		34773 91.06	22454 7.19				INTE RFAC E	10432 17.318	18.272 36176	34773. 9106	X	10432 17.318	X	0.1587 30159	16559 0.0505	X	0.0370 37037	38637. 67844	0.2077 92208	59831 9.7519		0					0		0	
7301-7152	Mansfield	Tolland	0159 McConaughy Hall, Nc 11	University of Connecticut - Storrs Campu s	Residence		95980 46.02	21774 4.75				INTE RFAC E	28794 13.806	18.610 48126	95980. 4602	X	28794 13.806	X	0.1587 30159	45704 9.8105	X	0.0370 37037	10664 4.9558	0.2077 92208	38156 5.0142		0					0		0	
7301-32	Mansfield	Tolland	0043 Lakeside Building	University of Connecticut - Storrs Campu s	Residence		61209 38.77	21766 7.95				INTE RFAC E	18362 81.631	18.479 08592	61209. 3877	X	18362 81.631	X	0.1587 30159	29147 3.2748	X	0.0370 37037	68010. 43078	0.2077 92208	11156 54.186		0					0		0	
7301-190	Mansfield	Tolland	0295 Buckley Hall	University of Connecticut - Storrs Campu s	Residence		17896 952.56	21289 1.84				INTE RFAC E	53690 85.768	18.115 5777	17896 9.5256	X	53690 85.768	X	0.1587 30159	85223 5.8362	X	0.0370 37037	19885 5.0284	0.2077 92208	30378 7.1171		0					0		0	
7301-223	Mansfield	Tolland	0341 Human Development Center	University of Connecticut - Storrs Campu s	Education		48732 51.67	20505 3.72				INTE RFAC E	14619 75.501	18.165 07912	48732. 5167	X	14619 75.501	X	0.1587 30159	23205 9.6033	X	0.0370 37037	54147. 24078	0.2077 92208	66422 3.5356		0					0		0	
7301-521	Mansfield	Tolland	0427 Snow Hall / South Camp. C	University of Connecticut - Storrs	Residence		10655 252.55	17061 5.16				INTE RFAC E	31965 75.765	18.202 20947	10655 2.5255	X	31965 75.765	X	0.1587 30159	50739 2.9786	X	0.0370 37037	11839 1.695	0.2077 92208	73867 3.0697		0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Campus																															
7301-519	Mansfield	Tolland	0425 Wilson Hall /South Camp.A	University of Connecticut - Storrs Campus	Residence		11849547.16	163372.72				INTERFACE	3554864.148	18.20220947	118495.4716	X	3554864.148	X	0.158730159	564264.1505	X	0.037037037	131661.6351	0.207792208	677315.1048						0	0	0	0	
7301-169	Mansfield	Tolland	0256 Towers Dorms, Building 4 (A-D)	University of Connecticut - Storrs Campus	Residence		10865263.14	143673.24				INTERFACE	3259578.942	18.47908592	108652.6314	X	3259578.942	X	0.158730159	517393.4829	X	0.037037037	120725.146	0.207792208	754463.2937							0	0	0	0
7301-520	Mansfield	Tolland	0426 Rosebrooks Hall /South Camp. B	University of Connecticut - Storrs Campus	Residence		12102848.67	108095.95				INTERFACE	3630854.601	18.20220947	121028.4867	X	3630854.601	X	0.158730159	576326.1271	X	0.037037037	134476.0963	0.207792208	477392.6974							0	0	0	0
7301-226	Mansfield	Tolland	0344 Hale Hall	University of Connecticut - Storrs Campus	Education		7658174.52	103022.42				INTERFACE	2297452.356	18.47380447	76581.7452	X	2297452.356	X	0.158730159	364674.9771	X	0.037037037	85090.828	0.207792208	826972.7707							0	0	0	0
7301-172	Mansfield	Tolland	0261 Shippee Hall & Dining Facility	University of Connecticut - Storrs Campus	Residence		13266021.53	99498.96				INTERFACE	3979806.459	18.1155777	132660.2153	X	3979806.459	X	0.158730159	631715.311	X	0.037037037	147400.2392	0.207792208	376912.8343							0	0	0	0
7301-167	Mansfield	Tolland	0254 Towers Dorms, Building 2 (A,B)	University of Connecticut - Storrs Campus	Residence		6046310.05	98774.59				INTERFACE	1813893.015	18.47908592	60463.1005	X	1813893.015	X	0.158730159	287919.5262	X	0.037037037	67181.22278	0.207792208	129017.29							0	0	0	0
7301-1151	Mansfield	Tolland	0435 Visitors Center / Lodewick	University of Connecticut - Storrs Campus	Office		2069652.36	92846.12				INTERFACE	620895.708	18.52710152	20696.5236	X	620895.708	X	0.158730159	98554.87429	X	0.037037037	22996.13733	0.207792208	189144.9737							0	0	0	0
7301-73	Mansfield	Tolland	0149 Hartford Hall, Nc 1	University of Connecticut - Storrs Campus	Residence		3034200.62	80993.67				INTERFACE	910260.186	18.38605309	30342.0062	X	910260.186	X	0.158730159	144485.7438	X	0.037037037	33713.34022	0.207792208	671686.7508							0	0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-168	Mansfield	Tolland	0255 Towers Dorms, Building 3 (A-D)	University of Connecticut - Storrs Campuses	Residence		10774974.96	78165.34				INTERFAE	3232492.488	18.47908592	107749.7496	X	3232492.488	X	0.158730159	513094.0457	X	0.037037037	119721.944	0.207792208	158898.5486							0	0	0
7301-24	Mansfield	Tolland	0030 Natural History Museum	University of Connecticut - Storrs Campuses	Storage/Warehouse		2548997.55	74892.61				INTERFAE	764699.265	18.32310104	25489.9755	X	764699.265	X	0.158730159	121380.8357	X	0.037037037	28322.195	0.207792208	436454.4125							0	0	0
7301-7232	Mansfield	Tolland	0476 Gelfenbien Towers Central Dining	University of Connecticut - Storrs Campuses	Cafeteria/Food Service		7001456.2	69269.42				INTERFAE	2100436.86	18.47908592	70014.562	X	2100436.86	X	0.158730159	333402.6762	X	0.037037037	77793.95778	0.207792208	225045.0913							0	0	0
7301-140	Mansfield	Tolland	0223 Alsop Hall (A,B) W.C. 1	University of Connecticut - Storrs Campuses	Not Specified		3610098.34	67508.98				INTERFAE	1083029.502	18.20220947	36100.9834	X	1083029.502	X	0.158730159	171909.4448	X	0.037037037	40112.20378	0.207792208	138766.8686							0	0	0
7301-141	Mansfield	Tolland	0224 Hollister Hall (A,B) W.C. 2	University of Connecticut - Storrs Campuses	Not Specified		2226051.85	60126.05				INTERFAE	667815.555	18.20220947	22260.5185	X	667815.555	X	0.158730159	106002.469	X	0.037037037	24733.90944	0.207792208	233124.8272							0	0	0
7301-63	Mansfield	Tolland	0139 Sprague Hall	University of Connecticut - Storrs Campuses	Residence		3739710.77	57869.44				INTERFAE	1121913.231	18.27236176	37397.1077	X	1121913.231	X	0.158730159	178081.4652	X	0.037037037	41552.34189	0.207792208	455993.9632							0	0	0
7301-7215	Mansfield	Tolland	0418 Uconn CO-OP	University of Connecticut - Storrs Campuses	Other		7314903.16	53897.31				INTERFAE	2194470.948	18.32310104	73149.0316	X	2194470.948	X	0.158730159	348328.7219	X	0.037037037	81276.70178	0.207792208	248134.449							0	0	0
7301-44	Mansfield	Tolland	0069 Holcomb Hall	University of Connecticut - Storrs Campuses	Residence		3980490.12	46399.52				INTERFAE	1194147.036	18.27236176	39804.9012	X	1194147.036	X	0.158730159	189547.1486	X	0.037037037	44227.668	0.207792208	390628.3275							0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-171	Mansfield	Tolland	0258 Towers Dorms, Building 6 (A,B)	University of Connecticut - Storrs Campuses	Residence		6266329.42	42304.9				INTERFACE	1879898.826	18.47908592	62663.2942	X	1879898.826	X	0.158730159	298396.639	X	0.037037037	69625.88244	0.207792208	13054.46338							0	0	0
7301-9	Mansfield	Tolland	0011 House 12	University of Connecticut - Storrs Campuses	Education		209415.35	35284.84				INTERFACE	62824.605	18.20220947	2094.1535	X	62824.605	X	0.158730159	9972.159524	X	0.037037037	2326.837222	0.207792208	393001.1944							0	0	0
7301-170	Mansfield	Tolland	0257 Towers Dorms, Building 5 (A,B)	University of Connecticut - Storrs Campuses	Residence		6304394.16	31180.25				INTERFACE	1891318.248	18.47908592	63043.9416	X	1891318.248	X	0.158730159	300209.2457	X	0.037037037	70048.824	0.207792208	378515.4097							0	0	0
7301-166	Mansfield	Tolland	0253 Towers Dorms, Building 1 (A,B)	University of Connecticut - Storrs Campuses	Residence		6072018.03	30290.57				INTERFACE	1821605.409	18.47908592	60720.1803	X	1821605.409	X	0.158730159	289143.7157	X	0.037037037	67466.867	0.207792208	157745.4508							0	0	0
7301-81	Mansfield	Tolland	0157 Hurley Hall, Nc 9	University of Connecticut - Storrs Campuses	Residence		2530499.94	28739.55				INTERFACE	759149.982	18.61048126	25304.9994	X	759149.982	X	0.158730159	120499.9971	X	0.037037037	28116.666	0.207792208	137022.8297							0	0	0
7301-222	Mansfield	Tolland	0339 Towers Dorms Student Center	University of Connecticut - Storrs Campuses	Residence		2198074.56	27617.55				INTERFACE	659422.368	18.47908592	21980.7456	X	659422.368	X	0.158730159	104670.2171	X	0.037037037	24423.05067	0.207792208	388774.2589							0	0	0
7301-99	Mansfield	Tolland	0176 Hicks Hall	University of Connecticut - Storrs Campuses	Residence		6236587.07	26566.29				INTERFACE	1870976.121	18.27236176	62365.8707	X	1870976.121	X	0.158730159	296980.3367	X	0.037037037	69295.41189	0.207792208	184104.4812							0	0	0
7301-77	Mansfield	Tolland	0153 Windham Hall, Nc 5	University of Connecticut - Storrs Campuses	Residence		2953342.72	24699.94				INTERFACE	886002.816	18.38605309	29533.4272	X	886002.816	X	0.158730159	140635.3676	X	0.037037037	32814.91911	0.207792208	30300.92821							0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-1118	Mansfield	Tolland	0379 Daily Campus Building	University of Connecticut - Storrs Campuses	Not Specified		486077.39	24310.65				INTE RFAC E	145823.217	18.1155777	4860.7739	X	145823.217	X	0.158730159	23146.54238	X	0.037037037	5400.859889	0.207792208	194574.7443							0	0	0
7301-78	Mansfield	Tolland	0154 Litchfield Hall, Nc 6	University of Connecticut - Storrs Campuses	Residence		3121303.19	24275.06				INTE RFAC E	936390.957	18.47908592	31213.0319	X	936390.957	X	0.158730159	148633.4852	X	0.037037037	34681.14656	0.207792208	184104.4812							0	0	0
7301-80	Mansfield	Tolland	0156 Tolland Hall, Nc 8	University of Connecticut - Storrs Campuses	Residence		2953342.72	24248.5				INTE RFAC E	886002.816	18.47908592	29533.4272	X	886002.816	X	0.158730159	140635.3676	X	0.037037037	32814.91911	0.207792208	184104.4812							0	0	0
7301-75	Mansfield	Tolland	0151 New London Hall, Nc 3	University of Connecticut - Storrs Campuses	Residence		2953342.72	23592.3				INTE RFAC E	886002.816	18.38605309	29533.4272	X	886002.816	X	0.158730159	140635.3676	X	0.037037037	32814.91911	0.207792208	224674.3318							0	0	0
7301-7217	Mansfield	Tolland	0461 Foster Hall (VT)	University of Connecticut - Storrs Campuses	Residence		3604150.74	22621.29				INTE RFAC E	1081245.222	18.72038651	36041.5074	X	1081245.222	X	0.158730159	171626.2257	X	0.037037037	40046.11933	0.207792208	173634.1471							0	0	0
7301-79	Mansfield	Tolland	0155 Middlesex Hall, Nc 7	University of Connecticut - Storrs Campuses	Residence		2785381.11	22270.52				INTE RFAC E	835614.333	18.61048126	27853.8111	X	835614.333	X	0.158730159	132637.1957	X	0.037037037	30948.679	0.207792208	84512.59948							0	0	0
7301-131	Mansfield	Tolland	0214 Floriculture Building	University of Connecticut - Storrs Campuses	Other		1355722.95	20578.06				INTE RFAC E	406716.885	18.37332344	13557.2295	X	406716.885	X	0.158730159	64558.23571	X	0.037037037	15063.58833	0.207792208	133800.3285							0	0	0
7301-142	Mansfield	Tolland	0225 Hook Hall (A,B) W.C. 3	University of Connecticut - Storrs Campuses	Not Specified		2146380.27	18683.97				INTE RFAC E	643914.081	18.20220947	21463.8027	X	643914.081	X	0.158730159	102208.5843	X	0.037037037	23848.66967	0.207792208	139737.595							0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-143	Mansfield	Tolland	0226 Spencer Hall (A,B) W.C. 4	University of Connecticut - Storrs Campuses	Not Specified		2241623.92	18318.84				INTERFACE	672487.176	18.20220947	22416.2392	X	672487.176	X	0.158730159	106743.9962	X	0.037037037	24906.93244	0.207792208	184104.4819							0	0	0
7301-76	Mansfield	Tolland	0152 Fairfield Hall, Nc 4	University of Connecticut - Storrs Campuses	Residence		2953342.73	18166.54				INTERFACE	886002.819	18.38605309	29533.4273	X	886002.819	X	0.158730159	140635.3681	X	0.037037037	32814.91922	0.207792208	389482.1243							0	0	0
7301-100	Mansfield	Tolland	0177 Grange Hall	University of Connecticut - Storrs Campuses	Residence		6247942.41	17160.84				INTERFACE	1874382.723	18.27236176	62479.4241	X	1874382.723	X	0.158730159	297521.0671	X	0.037037037	69421.58233	0.207792208	185630.2354							0	0	0
7301-74	Mansfield	Tolland	0150 New Haven Hall, Nc 2	University of Connecticut - Storrs Campuses	Residence		2977818.36	16264.66				INTERFACE	893345.508	18.38605309	29778.1836	X	893345.508	X	0.158730159	141800.8743	X	0.037037037	33086.87067	0.207792208	155655.2833							0	0	0
7301-82	Mansfield	Tolland	0158 Baldwin Hall, Nc 10	University of Connecticut - Storrs Campuses	Residence		2496970.17	10953.17				INTERFACE	749091.051	18.47908592	24969.7017	X	749091.051	X	0.158730159	118903.3414	X	0.037037037	27744.113	0.207792208	225773.6098							0	0	0
7301-7219	Mansfield	Tolland	0463 Thompson Hall (ME)	University of Connecticut - Storrs Campuses	Residence		3621784.99	7648				INTERFACE	1086535.497	18.61048126	36217.8499	X	1086535.497	X	0.158730159	172465.9519	X	0.037037037	40242.05544	0.207792208	12094.43034							0	0	0
7301-7231	Mansfield	Tolland	0475 Husky Village Director's House	University of Connecticut - Storrs Campuses	Residence		194014.82	7192.93				INTERFACE	58204.446	18.59910965	1940.1482	X	58204.446	X	0.158730159	9238.800952	X	0.037037037	2155.720222	0.207792208	911772.849							0	0	0
7301-7184	Mansfield	Tolland	0417 South Parking Garage	University of Connecticut - Storrs Campuses	Other		14626356.12	3993				INTERFACE	4387906.836	18.32310104	146263.5612	X	4387906.836	X	0.158730159	696493.1486	X	0.037037037	162515.068	0.207792208	48469.71055							0	0	0

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7301-114	Mansfield	Tolland	0191 Mansfield Apartments Building 15 (6 Units)	University of Connecticut - Storrs Campuses	Residence		777534.94	3767.4				INTERFACE	233260.482	18.07470894	7775.3494	X	233260.482	X	0.158730159	37025.47333	X	0.037037037	8639.277111	0.207792208	37172.23044							0	0	0
7301-112	Mansfield	Tolland	0189 Mansfield Apartments Building 13 (4 Units)	University of Connecticut - Storrs Campuses	Residence		596304.53	3019.48				INTERFACE	178891.359	18.07470894	5963.0453	X	178891.359	X	0.158730159	28395.45381	X	0.037037037	6625.605889	0.207792208	37172.23044							0	0	0
7301-105	Mansfield	Tolland	0182 Mansfield Apartments Building 05 (4 Units)	University of Connecticut - Storrs Campuses	Residence		596304.53	2308.65				INTERFACE	178891.359	18.07470894	5963.0453	X	178891.359	X	0.158730159	28395.45381	X	0.037037037	6625.605889	0.207792208	48581.92083							0	0	0
7301-116	Mansfield	Tolland	0193 Mansfield Apartments Building 17 (6 Units)	University of Connecticut - Storrs Campuses	Residence		779334.98	1119.48				INTERFACE	233800.494	18.07470894	7793.3498	X	233800.494	X	0.158730159	37111.18952	X	0.037037037	8659.277556	0.207792208	37364.16062							0	0	0
7301-109	Mansfield	Tolland	0186 Mansfield Apartments Building 10 (4 Units)	University of Connecticut - Storrs Campuses	Residence		599383.41	1119.48				INTERFACE	179815.023	18.07470894	5993.8341	X	179815.023	X	0.158730159	28542.06714	X	0.037037037	6659.815667	0.207792208	37172.23044							0	0	0
7301-110	Mansfield	Tolland	0187 Mansfield Apartments Building 11 (4 Units)	University of Connecticut - Storrs Campuses	Residence		596304.53	1119.48				INTERFACE	178891.359	18.07470894	5963.0453	X	178891.359	X	0.158730159	28395.45381	X	0.037037037	6625.605889	0.207792208	270928.3262							0	0	0
7301-7218	Mansfield	Tolland	0462 Hoisington Hall (NH)	University of Connecticut - Storrs Campuses	Residence		4346141.9	0				INTERFACE	1303842.57	18.61048126	43461.419	X	1303842.57	X	0.158730159	206959.1381	X	0.037037037	48290.46556	0.207792208	180618.8821							0	0	0
7301-7220	Mansfield	Tolland	0464 Brown Hall (CT)	University of Connecticut - Storrs Campuses	Residence		2897427.9	0				INTERFACE	869228.37	18.61048126	28974.279	X	869228.37	X	0.158730159	137972.7571	X	0.037037037	32193.64333	0.207792208	180618.8821							0	0	0

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7301-7221	Mansfield	Tolland	0465 Hubbard Hall (RI)	University of Connecticut - Storrs Campuses	Residence		28974 27.9	0				INTE RFAC E	86922 8.37	18.610 48126	28974. 279	X	86922 8.37	X	0.1587 30159	13797 2.7571	X	0.0370 37037	32193. 64333	0.2077 92208	18061 8.8821		0					0		0	
7301-7222	Mansfield	Tolland	0466 Hough Hall (MA)	University of Connecticut - Storrs Campuses	Residence		28974 27.9	0				INTE RFAC E	86922 8.37	18.610 48126	28974. 279	X	86922 8.37	X	0.1587 30159	13797 2.7571	X	0.0370 37037	32193. 64333	0.2077 92208	66979. 63761		0						0		0
7301-7230	Mansfield	Tolland	0474 Husky Village/Greek F1,F2	University of Connecticut - Storrs Campuses	Residence		10744 65.02	0				INTE RFAC E	32233 9.506	18.479 08592	10744. 6502	X	32233 9.506	X	0.1587 30159	51165. 00095	X	0.0370 37037	11938. 50022	0.2077 92208	49194. 01496		0						0		0
7301-111	Mansfield	Tolland	0188 Mansfield Apartments Building 12 (6 Units)	University of Connecticut - Storrs Campuses	Residence		78915 3.99	0				INTE RFAC E	23674 6.197	18.074 70894	7891.5 399	X	23674 6.197	X	0.1587 30159	37578. 76143	X	0.0370 37037	8768.3 77667	0.2077 92208	48634. 13174		0						0		0
7301-103	Mansfield	Tolland	0180 Mansfield Apartments Building 03 (6 Units)	University of Connecticut - Storrs Campuses	Residence		78017 2.53	0				INTE RFAC E	23405 1.759	18.074 70894	7801.7 253	X	23405 1.759	X	0.1587 30159	37151. 07286	X	0.0370 37037	8668.5 83667	0.2077 92208	48469. 71055		0						0		0
7301-106	Mansfield	Tolland	0183 Mansfield Apartments Building 06 (6 Units)	University of Connecticut - Storrs Campuses	Residence		77753 4.94	0				INTE RFAC E	23326 0.482	18.074 70894	7775.3 494	X	23326 0.482	X	0.1587 30159	37025. 47333	X	0.0370 37037	8639.2 77111	0.2077 92208	37364. 16062		0						0		0
7301-102	Mansfield	Tolland	0179 Mansfield Apartments Building 02 (4 Units)	University of Connecticut - Storrs Campuses	Residence		59938 3.41	0				INTE RFAC E	17981 5.023	18.074 70894	5993.8 341	X	17981 5.023	X	0.1587 30159	28542. 06714	X	0.0370 37037	6659.8 15667	0.2077 92208	37287. 95034		0						0		0
7301-107	Mansfield	Tolland	0184 Mansfield Apartments Building 07 (4 Units)	University of Connecticut - Storrs Campuses	Residence		59816 0.87	0				INTE RFAC E	17944 8.261	18.074 70894	5981.6 087	X	17944 8.261	X	0.1587 30159	28483. 85095	X	0.0370 37037	6646.2 31889	0.2077 92208	37287. 95034		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-108	Mansfield	Tolland	0185 Mansfield Apartments Building 09 (4 Units)	University of Connecticut - Storrs Campuses	Residence		59816.087	0				INTE RFAC E	17944.8261	18.07470894	5981.6087	X	17944.8261	X	0.158730159	28483.85095	X	0.037037037	6646.231889	0.207792208	37287.17735		0				0	0	0	
7301-104	Mansfield	Tolland	0181 Mansfield Apartments Building 04 (4 Units)	University of Connecticut - Storrs Campuses	Residence		59814.847	0				INTE RFAC E	17944.4541	18.07470894	5981.4847	X	17944.4541	X	0.158730159	28483.26048	X	0.037037037	6646.094111	0.207792208	37172.23044		0				0	0	0	
7301-113	Mansfield	Tolland	0190 Mansfield Apartments Building 14 (4 Units)	University of Connecticut - Storrs Campuses	Residence		59630.453	0				INTE RFAC E	17889.1359	18.07470894	5963.0453	X	17889.1359	X	0.158730159	28395.45381	X	0.037037037	6625.605889	0.207792208	37172.23044		0				0	0	0	
7301-115	Mansfield	Tolland	0192 Mansfield Apartments Building 16 (4 Units)	University of Connecticut - Storrs Campuses	Residence		59630.453	0				INTE RFAC E	17889.1359	18.07470894	5963.0453	X	17889.1359	X	0.158730159	28395.45381	X	0.037037037	6625.605889	0.207792208	17466.74556		0				0	0	0	
4122-114123	Mansfield	Tolland	1279 Stafford Road	University of Connecticut - Depot	Residence		28019.571	0				INTE RFAC E	84058.713	19.88272858	2801.9571	X	84058.713	X	0.158730159	13342.65286	X	0.037037037	3113.285667	0.207792208	7421.197091		0				0	0	0	
7301-144	Mansfield	Tolland	0227 House 47, 14 Eastwood Rd	University of Connecticut - Storrs Campuses	Not Specified		11904.837	0				INTE RFAC E	35714.511	18.16507912	1190.4837	X	35714.511	X	0.158730159	5668.97	X	0.037037037	1322.759667	0.207792208	6503.933299		0				0	0	0	
7301-11	Mansfield	Tolland	0013 House 13	University of Connecticut - Storrs Campuses	Office		10433.393	0				INTE RFAC E	31300.179	18.20220947	1043.3393	X	31300.179	X	0.158730159	4968.282381	X	0.037037037	1159.265889	0.207792208	1004.211117		0				0	0	0	
7301-117	Mansfield	Tolland	0194 Sewage Station-Mansfield Apt	University of Connecticut - Storrs Campuses	Residence		16109.22	0				INTE RFAC E	4832.766	18.07470894	161.0922	X	4832.766	X	0.158730159	767.1057143	X	0.037037037	178.9913333	0.207792208	910.6672208		0				0	0	0	
7301-	Mansfield	Tolland	0272 Pit	Univers	Other		14608.	0				INTE	4382.5	18.479	146.08	X	4382.5	X	0.1587	695.64	X	0.0370	162.31	0.2077	41578		0				0	0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
178	eld	nd	Greenhouse	ity of Connecticut - Storrs Campu s			62					RFAC E	86	08592	62		86		30159	85714		37037	8	92208	083.19									
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.074 70894	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.074 70894	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.074 70894	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.202 20947	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.202 20947	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.202 20947	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connecticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Connecticut - Storrs Campuses								E																						
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.202 20947	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.202 20947	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ticut - Storrs Campu s																														
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.323 10104	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.386 05309	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.386 05309	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0				INTERFAC E	20009 4525.4	18.479 08592	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut -	Not Specified		0	0				INTERFAC E	20009 4525.4	18.296 74721	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Storrs Campu s																															
	Mansfi eld	Tolla nd	Not Specified	Univer sity of Connec ticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.272 36176	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univer sity of Connec ticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.272 36176	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univer sity of Connec ticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.296 74721	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univer sity of Connec ticut - Storrs Campu s	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.296 74721	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Barn	Univer sity of Connec ticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	19.882 72858	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
7301-460	Mansfi eld	Tolla nd	2128 Depot - Hilltop Cottage	Univer sity of Connec ticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	19.882 72858	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Shed	Univer sity of Connec ticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	19.882 72858	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Barn	Univer sity of Connec ticut - Depot	Not Specified		0	0				INTE RFAC E	20009 4525.4	19.882 72858	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univer sity of Connec ticut - Storrs Campu	Not Specified		0	0				INTE RFAC E	20009 4525.4	18.373 32344	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.37332344	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.37332344	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.37332344	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFAE	200094525.4	18.47380447	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.85383224	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.76350784	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.76350784	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACE	200094525.4	18.76350784	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACTOR	200094525.4	18.32310104	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0				INTERFACTOR	200094525.4	18.20220947	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	3629206.503		0						0		0
2000-7101	Meriden	New Haven	Forensics Laboratory	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-8	Meriden	New Haven	Building #9	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-9	Meriden	New Haven	Building # 10	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-10	Meriden	New Haven	Building #11	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-2	Meriden	New Haven	Building #2	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-5	Meriden	New Haven	Building #5	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.75429535	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-4	Meriden	New Haven	Building #4	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-3	Meriden	New Haven	Building #3	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-11	Meriden	New Haven	Building #13	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-7	Meriden	New Haven	Building #7	Mulcahy Complex	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.68605042	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0
2000-	Meriden	New	Building #6	Mulcahy	Not Specified	DPS	0	0				INTERFACTOR	17465556.29	29.75429535	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
6	en	Have n		y Comple x								RFAC E	556.29	29535	5.2098		556.29		68254	96.837		22222	3.4732	79221	31.909									
	Meriden	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	17465 556.29	29.919 10744	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
	Meriden	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	17465 556.29	29.919 10744	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
	Meriden	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	17465 556.29	29.919 10744	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
	Meriden	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	17465 556.29	29.919 10744	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
	Meriden	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	17465 556.29	29.919 10744	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	10143 040.46		0					0		0
4400-68	Middletown	Middlesex	Cottage 30	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.824 2054	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-43	Middletown	Middlesex	Cottage 7	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.824 2054	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-45	Middletown	Middlesex	Cottage 8	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.824 2054	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-102	Middletown	Middlesex	Merritt Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.835 56366	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-117	Middletown	Middlesex	Russell Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.835 56366	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-79	Middletown	Middlesex	Dutton Home	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-346	Middletown	Middlesex	Whiting Forensic Institute	Connecticut Valley	Not Specified	DMHAS	0	0				INTERFAC E	45942 006.77	29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Hospital																														
4400-104	Middle town	Middlesex	Noble Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-80	Middle town	Middlesex	Daycare	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.825634	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-87	Middle town	Middlesex	Greenhouse	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.825634	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-90	Middle town	Middlesex	Haviland Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-31	Middle town	Middlesex	Battell Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-132	Middle town	Middlesex	Woodward Hall Infirmary	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-119	Middle town	Middlesex	Shepherd Home	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.8242054	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-42	Middle town	Middlesex	Cottage 05 & 06 Duplex	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-41	Middle town	Middlesex	Cottage 03 And 04 Duplex	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-40	Middle town	Middlesex	Cottage 02	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	
4400-38	Middle town	Middlesex	Cottage 01	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4400-39	Middle town	Middlesex	Cottage 01 & Cottage 02 Garage	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-44	Middle town	Middlesex	Cottage 7 Garage	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.8242054	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-130	Middle town	Middlesex	Weeks Hall Garage	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.83556366	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-37	Middle town	Middlesex	Chlorinating Pl	Connecticut Valley Hospital	Not Specified		0	0				INTERFAC E	45942006.77	29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-74	Middle town	Middlesex	Cottage 36	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-73	Middle town	Middlesex	Cottage 35	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-71	Middle town	Middlesex	Cottage 33	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-72	Middle town	Middlesex	Cottage 34	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-65	Middle town	Middlesex	Cottage 27	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-63	Middle town	Middlesex	Cottage 25	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-60	Middle town	Middlesex	Cottage 21	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4400-61	Middle town	Middlesex	Cottage 22	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-59	Middle town	Middlesex	Cottage 20	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-58	Middle town	Middlesex	Cottage 19	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-64	Middle town	Middlesex	Cottage 26	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-66	Middle town	Middlesex	Cottage 28	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
1312-36	Middle town	Middlesex	Cemetery-Middletown	Not Specified	Not Specified	DVA	0	0				INTERFAC E	45942006.77	29.78512573	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
7701-10	Middle town	Middlesex	Wheaton Hall	Middlesex Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0				INTERFAC E	45942006.77	29.62373543	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
7701-12	Middle town	Middlesex	Chapman Hall	Middlesex Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0				INTERFAC E	45942006.77	29.67869568	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
7701-11	Middle town	Middlesex	Founders Hall	Middlesex Community College	Not Specified	Board of Trustees-CT Community Technical College	0	0				INTERFAC E	45942006.77	29.67869568	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
8102-66	Middle town	Middlesex	Kiwani Bldg. #4	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-69	Middle town	Middlesex	Silvermine Hall Bldg #1	Connecticut Valley Hospital	Not Specified	DMHAS	0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
5000-539	Middle town	Middlesex	Salt Shed	Department of Transportation	Not Specified	DOT	0	0				INTERFAC E	45942006.77	29.76191711	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-67	Middle town	Middlesex	Quinnipiac Bldg #3	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-65	Middle town	Middlesex	Riverview School/ West Bldg#5	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-68	Middle town	Middlesex	Lakota Bldg # 2	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-7340	Middle town	Middlesex	Storage Shed at Kiwani Bldg #4	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-70	Middle town	Middlesex	Pin Oaks Shelter/ Bldg #6	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.66063118	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-7342	Middle town	Middlesex	Storage Shed by Tennis Courts	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-7341	Middle town	Middlesex	Storage Shed by Blg West	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-7343	Middle town	Middlesex	Storage Shed at Bldg #2	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-7345	Middle town	Middlesex	Storage Shed at School West Maintenance	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
8102-7344	Middle town	Middlesex	Storage Shed by Ballfield	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.7119236	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
	Middle town	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.9527092	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
	Middle town	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	45942006.77	29.9527092	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
7001-171	Middle town	Middlesex	Vinal Red Garage/Service Build	Vinal Technical High School	Not Specified	DOE	0	0				INTERFAC E	45942006.77	29.95763588	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Middle town	Middlesex	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	45942 006.77	29.957 63588	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	37869 98.09		0					0		0
(non e)	New Britain	Hartford	Not Specified	E.C. Goodwin Technical High School	Not Specified	DOE	0	0				INTE RFAC E	24299 904.41	29.300 78316	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
(non e)	New Britain	Hartford	Not Specified	E.C. Goodwin Technical High School	Not Specified	DOE	0	0				INTE RFAC E	24299 904.41	29.305 07088	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
(non e)	New Britain	Hartford	Not Specified	E.C. Goodwin Technical High School	Not Specified	DOE	0	0				INTE RFAC E	24299 904.41	29.309 60083	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
(non e)	New Britain	Hartford	Not Specified	E.C. Goodwin Technical High School	Not Specified	DOE	0	0				INTE RFAC E	24299 904.41	29.309 60083	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	11045 411.1		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 040.9	26.037 41455	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	53156 040.9	26.037 41455	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	58678 7.4644		0					0		0
	New London	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	26578 02.045	19.105 40962	88593. 40149	X	26578 02.045	X	0.0634 92063	16874 9.3362	X	0.0518 51852	13781 1.9579	0.2402 5974	22805 81.532		0					0		0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	94921 50.16	27.206 04134	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	22189 44.193		0					0		0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	94921 50.16	27.019 10019	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	86095 03.47		0					0		0
7301-7207	Norwich	New London	Norwich Cooperative Extension	University of Connecticut	Office	UCONN	0	0				INTE RFAC E	36829 542.62	22.403 98788	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	22.403 98788	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New	Not Specified	Not	Not Specified		0	0				INTE	36829	21.618	12276	X	36829	X	0.0634	23383	X	0.0518	19096	0.2402	88486		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	ch	London		Specified								RFAC E	542.62	20984	51.421		542.62		92063	83.658		51852	79.988	5974	56.344									
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	36829 542.62	21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	18244 65.226		0					0		0
	Portland	Middlesex	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	75937 20.128	29.815 87791	25312 4.0043	X	75937 20.128	X	0.4920 63492	37365 92.444	X	0.0074 07407	56249. 77873	0.1558 44156	11834 36.903		0					0		0
5000-3	Portland	Middlesex	Machine Shop	Department of Transportation	Not Specified	DOT	0	0				INTE RFAC E	75937 20.128	29.815 87791	25312 4.0043	X	75937 20.128	X	0.4920 63492	37365 92.444	X	0.0074 07407	56249. 77873	0.1558 44156	59171 8.4515		0					0		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.263 75389	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					0		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.263 75389	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					0		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.267 65251	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					0		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	30.263 75389	12656 2.0021	X	37968 60.064	X	0.0476 19048	18080 2.8602	X	0.0222 22222	84374. 66809	0.2142 85714	81361 2.8709		0					0		0
4122-264122	Simsbury	Hartford	38 Great Pond Road	Not Specified	Not Specified		0	0				INTE RFAC E	37968 60.064	27.735 54039	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	12623 32.697		0					0		0
7001-11	Torrington	Litchfield	Main Campus Building	Oliver Wolcott Technical High School	Not Specified	DOE	0	0				INTE RFAC E	60749 76.102	41.234 50851	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
4124-1042	Torrington	Litchfield	Oak/Maple Building 2	Northwest Regional Center	Not Specified	DDS	0	0				INTE RFAC E	60749 76.102	42.342 47589	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
4124-421	Torrington	Litchfield	Northwest Center Administrative Building	Northwest Regional Center	Not Specified	DDS	0	0				INTE RFAC E	60749 76.102	42.342 47589	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	94674 9.5225		0					0		0
4124-521	Torrington	Litchfield	Spruce/Pine - Building 1	Northwest Regional Center	Not Specified	DDS	0	0				INTE RFAC E	60749 76.102	42.342 47589	20249 9.2034	X	60749 76.102	X	0.4920 63492	29892 73.955	X	0.0074 07407	44999. 82298	0.1558 44156	24387 7.1503		0					0		0
9001-28	Vernon	Tolland	Tolland Judicial District Superior	Tolland Judicial	Courthouse	JUD	52162 61.27	20485 51				INTE RFAC E	15648 78.381	24.470 82138	52162. 6127	X	15648 78.381	X	0.1587 30159	24839 3.3938	X	0.0370 37037	57958. 45856	0.2077 92208	14451 97.929		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
			Court	District								E																							
9001-32	Vernon	Tolland	Tolland Criminal Court Complex	GA 19 at Rockville	Court		23183383.44	248659				INTERFAE	6955015.032	24.47082138	231833.8344	X	6955015.032	X	0.158730159	1103970.64	X	0.037037037	257593.1493	0.207792208	150487.738							0		0	
9001-7102	Vernon	Tolland	GA19 Parking Garage	GA 19 at Rockville	Garage		2414074.13	2500				INTERFAE	724222.239	24.55194855	24140.7413	X	724222.239	X	0.158730159	114955.911	X	0.037037037	26823.04589	0.207792208	236687.3806								0		0
	Washingt	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAE	1139058.019	29.00850868	37968.60064	X	1139058.019	X	0.492063492	560488.8666	X	0.007407407	8437.466809	0.155844156	177515.5355								0		0
	Washingt	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAE	1139058.019	29.00850868	37968.60064	X	1139058.019	X	0.492063492	560488.8666	X	0.007407407	8437.466809	0.155844156	177515.5355								0		0
	Washingt	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0				INTERFAE	1139058.019	29.00850868	37968.60064	X	1139058.019	X	0.492063492	560488.8666	X	0.007407407	8437.466809	0.155844156	650890.2967								0		0
7701-37	Waterbury	New Haven	Phase II (A, S, & L Buildings)	Naugatuck Valley Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0				INTERFAE	4176546.07	24.1705761	139218.2023	X	4176546.07	X	0.253968254	1060710.113	X	0.022222222	92812.1349	0.220779221	922094.587								0		0
7701-7106	Waterbury	New Haven	Technology Building	Naugatuck Valley Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0				INTERFAE	4176546.07	24.36403847	139218.2023	X	4176546.07	X	0.253968254	1060710.113	X	0.022222222	92812.1349	0.220779221	922094.587								0		0
7701-48	Waterbury	New Haven	Founders Hall formally WSTC	Naugatuck Valley Community College	Not Specified	Board of Trustees-CT Community Technical Colleges	0	0				INTERFAE	4176546.07	24.36403847	139218.2023	X	4176546.07	X	0.253968254	1060710.113	X	0.022222222	92812.1349	0.220779221	922094.587								0		0
7701-7103	Waterbury	New Haven	Ekstrom Parking Garage	Not Specified	Not Specified		0	0				INTERFAE	4176546.07	24.36403847	139218.2023	X	4176546.07	X	0.253968254	1060710.113	X	0.022222222	92812.1349	0.220779221	922094.587								0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7701-39	Waterbury	New Haven	Elkstrom Hall	Not Specified	Not Specified		0	0				INTERFAE	41765 46.07	24.423 97499	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	92209 4.587		0					0		0
7701-47	Waterbury	New Haven	Founders Hall WSTC Hall Annex	Not Specified	Not Specified		0	0				INTERFAE	41765 46.07	24.423 97499	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	10897 48.148		0					0		0
	Winchester	Litchfield	Joyner Learning Center	Northwestern Community College	Not Specified	Board of Trustees- CT Community Technical Colleges	0	0				INTERFAE	49359 18.083	46.813 28583	16453 0.6028	X	49359 18.083	X	0.4920 63492	24287 85.089	X	0.0074 07407	36562. 35617	0.1558 44156	41420 29.161		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Garage	CSU	0	0				INTERFAE	26578 020.45	26.333 69827	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
(unknown)	Windham	Windham	Not Specified	Eastern Connecticut State University	?	CSU	0	0				INTERFAE	26578 020.45	26.430 05943	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
(unknown)	Windham	Windham	Not Specified	Eastern Connecticut State University	?	CSU	0	0				INTERFAE	26578 020.45	26.430 05943	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-7824	Windham	Windham	372 High Street	Eastern Connecticut State University	Building No. 47	CSU	0	0				INTERFAE	26578 020.45	26.430 05943	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-482	Windham	Windham	Niejadlik Hall	Eastern Connecticut State University	Building No. 37	CSU	0	0				INTERFAE	26578 020.45	26.430 05943	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-9	Windham	Windham	Hurley Hall/Dining Services	Eastern Connecticut State University	Building No. 40	CSU	0	0				INTERFAE	26578 020.45	26.430 05943	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-25	Windham	Windham	Facilities Management, Planning &	Eastern Connecticut	Building No. 45	CSU	0	0				INTERFAE	26578 020.45	26.430 05943	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
			Maintenance	State University																														
7805-6	Windham	Windham	Winthrop Hall	Eastern Connecticut State University	Building No. 13	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-5379	Windham	Windham	Not Specified	Eastern Connecticut State University	Garage	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-5379	Windham	Windham	Women's Center	Eastern Connecticut State University	Building No. 9	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-5378	Windham	Windham	Johnson Unity Center	Eastern Connecticut State University	Building No. 10	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-5370	Windham	Windham	192 High Street/Counseling Services	Eastern Connecticut State University	Building No. 11	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Garage	CSU	0	0				INTERFAE	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-13	Windham	Windham	High Rise Apartments	Eastern Connecticut State University	Building No. 19, Residence	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-19	Windham	Windham	Low Rise E	Eastern Connecticut State University	Building No. 17	CSU	0	0				INTERFAE	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-15	Windham	Windham	Low Rise A	Eastern Connecticut State University	Building No. 17	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7805-18	Windham	Windham	Low Rise D	Eastern Connecticut State University	Building No. 17	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
(unknown)	Windham	Windham	Not Specified	Eastern Connecticut State University	?	CSU	0	0				INTERFAC E	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-3	Windham	Windham	Interfaith Center	Eastern Connecticut State University	Building No. 12; Knight House	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-7101	Windham	Windham	333 Prospect Street	Eastern Connecticut State University	Building No. 7	CSU	0	0				INTERFAC E	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-481	Windham	Windham	Grant House	Eastern Connecticut State University	Building No. 8	CSU	0	0				INTERFAC E	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-5375	Windham	Windham	University Police	Eastern Connecticut State University	Building No. 25	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-487	Windham	Windham	Softball Field Facility	Eastern Connecticut State University	Physical Education Building	CSU	0	0				INTERFAC E	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
(unknown)	Windham	Windham	Not Specified	Eastern Connecticut State University	?	CSU	0	0				INTERFAC E	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-24	Windham	Windham	Occum Hall	Eastern Connecticut State University	Building No. 38	CSU	0	0				INTERFAC E	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Shed	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				State University																														
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Shed	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Shed	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-20	Windham	Windham	Sports Center	Eastern Connecticut State University	Building No. 33	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Spector Softball Field Structure	CSU	0	0				INTERFAE	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Spector Softball Field Structure	CSU	0	0				INTERFAE	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-484	Windham	Windham	Mead Hall	Eastern Connecticut State University	Building No. 44	CSU	0	0				INTERFAE	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-12	Windham	Windham	Heating Plant, North	Eastern Connecticut State University	Building No. 28	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-14	Windham	Windham	Wickware Planetarium	Eastern Connecticut State University	Building No. 26	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-489	Windham	Windham	Clock Tower	Eastern Connecticut State University	Clock Tower	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Shed	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Shed	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-5371	Windham	Windham	Webb Hall	Eastern Connecticut State University	Building No. 21	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-483	Windham	Windham	J. Eugene Smith Library	Eastern Connecticut State University	Building No. 23	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-485	Windham	Windham	Admissions Building	Eastern Connecticut State University	Building No. 24	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-21	Windham	Windham	Media Building	Eastern Connecticut State University	Building No. 29	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-7814	Windham	Windham	Gelsi-Young Hall	Eastern Connecticut State University	Building No. 31	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	CL&P Building	CSU	0	0				INTERFACE	26578020.45	26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-8	Windham	Windham	Wood Support Services Center	Eastern Connecticut State University	Building No. 30	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0
7805-7827	Windham	Windham	Laurel Hall	Eastern Connecticut State University	Building No. 15	CSU	0	0				INTERFACE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				State University																															
7805-7826	Windham	Windham	Nutmeg Hall	Eastern Connecticut State University	Building No. 16	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
7805-7825	Windham	Windham	Wilson Child & Family Development Complex	Eastern Connecticut State University	Building No. 46	CSU	0	0				INTERFAE	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
7805-7821	Windham	Windham	Constitution Hall	Eastern Connecticut State University	Building No. 14	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Temporary Bookstore	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
7805-7817	Windham	Windham	Parking Garage	Eastern Connecticut State University	Building No. 41	CSU	0	0				INTERFAE	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Walkway between Building Nos. 36, 39 & 40	CSU	0	0				INTERFAE	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
7805-5366	Windham	Windham	Health Services	Eastern Connecticut State University	Building No. 18		0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Ramp to Building No. 32	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	
7805-22	Windham	Windham	Student Center	Eastern Connecticut State University	Building No. 32	CSU	0	0				INTERFAE	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096		0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
7805-10	Windham	Windham	Crandall Hall	Eastern Connecticut State University	Building No. 39	CSU	0	0				INTERFAC E	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0					0		0	
7805-11	Windham	Windham	Burnap Hall	Eastern Connecticut State University	Building No. 36	CSU	0	0				INTERFAC E	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0						0		0
(none)	Windham	Windham	Not Specified	Eastern Connecticut State University	Proposed Police Facility	CSU	0	0				INTERFAC E	26578020.45	26.43005943	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0						0		0
7805-7	Windham	Windham	Goddard Hall	Eastern Connecticut State University	Building No. 27	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0						0		0
7805-16	Windham	Windham	Low Rise B	Eastern Connecticut State University	Building No. 17	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	5695290.096		0						0		0
7805-17	Windham	Windham	Low Rise C	Eastern Connecticut State University	Building No. 17	CSU	0	0				INTERFAC E	26578020.45	26.33369827	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.02222222	590622.6766	0.214285714	244083.8613		0						0		0
	Woodbridge	New Haven	Not Specified	Not Specified	Not Specified		0	0				INTERFAC E	1139058.019	26.06748009	37968.60064	X	1139058.019	X	0.253968254	289284.5763	X	0.02222222	25312.40043	0.220779221	2179496.296		0						0		0
(none)	Bridgeport	Fairfield	Not Specified	Superior Court and Center for Juvenile Matters	Courthouse and Juvenile Detention	Judicial Department	0	0	C	0.014814815	146249.4247		24.94743729	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961	A E	0		DFI RM	5.75	9871836.166	3		2		
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.014814815	146249.4247		24.94743729	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	5680497.135	A E	0		DFI RM	5.75	9871836.166	3		2		
7802-34	New Britain	Hartford	Grounds Building	Central Connecticut State University	Building No. 34, Facilities Management	CSU	0	0	C	0.014814815	359998.5838		29.25514793	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	473374.7612		0		DFI RM	4.85	24299904.41	3		0		

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Shelton	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	33749. 86724			26.081 78139	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2337 66234	53254 6.6064		0		DFI RM	5. 7 5	22781 16.038	3		0
	Shelton	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	33749. 86724			26.081 78139	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2337 66234	53254 6.6064		0		DFI RM	5. 7 5	22781 16.038	3		0
	Shelton	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	33749. 86724			26.081 78139	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2337 66234	53254 6.6064		0		DFI RM	5. 7 5	22781 16.038	3		0
	Shelton	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	33749. 86724			26.091 08543	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2337 66234	53254 6.6064		0		DFI RM	5. 7 5	22781 16.038	3		0
	Shelton	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	33749. 86724			26.085 58273	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2337 66234	53254 6.6064		0		DFI RM	5. 7 5	22781 16.038	3		0
	Shelton	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	33749. 86724			26.085 58273	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2337 66234	35503 1.0709		0		DFI RM	5. 7 5	22781 16.038	3		0
	Barkhamsted	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0	C	0.0074 07407	11249. 95575			39.407 47452	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	23668 7.3806		0					3		0
	Barkhamsted	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0	C	0.0074 07407	11249. 95575			39.407 47452	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	23668 7.3806		0					3		0
	Barkhamsted	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0	C	0.0074 07407	11249. 95575			39.407 47452	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	36094 82.554		0					3		0
7803-484	Danbury	Fairfield	Truman A. Warner Hall	Western Connecticut State University - Midtown Campus	Academics	CSU	0	0	C	0.0148 14815	34312 3.6502			28.024 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-9444	Danbury	Fairfield	Ruth Haas Library	Western Connecticut State University - Midtown Campus	Library	CSU	0	0	C	0.0148 14815	34312 3.6502			28.024 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-	Danbury	Fairfield	Old Main	Western Connecticut State University - Midtown Campus	Administration/S	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
13444	ry	eld		n Connecticut State University - Midtown Campuses	tudent Services					14815	3.6502			09886	8.213		846.39		14286	84.683		14815	3.6502	66234	23.832									
(none)	Danbury	Fairfield	Not Specified	Western Connecticut State University - Midtown Campuses	Stairwell	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-7444	Danbury	Fairfield	Higgins Hall	Western Connecticut State University - Midtown Campuses	Academics	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-14444	Danbury	Fairfield	White Hall	Western Connecticut State University - Midtown Campuses	Academics/Administration	CSU	0	0	C	0.0148 14815	34312 3.6502			28.024 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-7646	Danbury	Fairfield	Parking Garage	Western Connecticut State University - Midtown Campuses	Parking Garage	CSU	0	0	C	0.0148 14815	34312 3.6502			28.024 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-11444	Danbury	Fairfield	Midtown Student Center	Western Connecticut State University - Midtown Campuses	Student Services	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ticut State University - Midtown Campuses																														
(none)	Danbury	Fairfield	Not Specified	Western Connecticut State University - Midtown Campuses	Storage Shed (?)	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-6444	Danbury	Fairfield	Fairfield Hall Addition	Western Connecticut State University - Midtown Campuses	Student Life	CSU	0	0	C	0.0148 14815	34312 3.6502			28.024 14513	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-3444	Danbury	Fairfield	Boiler House	Western Connecticut State University - Midtown Campuses	Facilities/Police Dept	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-1244	Danbury	Fairfield	Newbury Hall	Western Connecticut State University - Midtown Campuses	Student Life	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
7803-5444	Danbury	Fairfield	Fairfield Hall	Western Connecticut State	Student Life	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				University - Midtown Campuses																														
7803-2444	Danbury	Fairfield	Berkshire Hall	Western Connecticut State University - Midtown Campuses	Academics/Athletics/Recreation	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-8444	Danbury	Fairfield	Higgins Annex	Western Connecticut State University - Midtown Campuses	Academics	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7803-10444	Danbury	Fairfield	Litchfield Hall	Western Connecticut State University - Midtown Campuses	Student Life	CSU	0	0	C	0.0148 14815	34312 3.6502			28.011 09886	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7001-4	Danbury	Fairfield	Main Campus Building	Henry Abbott Technical High School	Education	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
(none)	Danbury	Fairfield	Not Specified	Henry Abbott Technical High School	Storage	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
(none)	Danbury	Fairfield	Not Specified	Henry Abbott Technical High School	Shed	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
7001-41	Danbury	Fairfield	Renovated Service Garage	Henry Abbott Technical	Maintenance/Repair Shop	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				al High School																														
(non e)	Danbury	Fairfield	Renovated Main Campus Building	Henry Abbott Technical High School	Education	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832							3		0
4125-24125	Meriden	New Haven	Camp St Group Home	Camp Street Group Home	Residence	DDS	0	0	C	0.0222 22222	38812 3.4732			29.735 8799	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	15927 08.832							3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	10687 4.5796			16.544 71207	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587							3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	10687 4.5796			16.544 71207	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587							3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	10687 4.5796			16.544 71207	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	97633 5.445							3		0
7001-13	Stamford	Fairfield	Main Campus Building	J.M. Wright Technical High School	Education	DOE	0	0	C	0.0148 14815	61874. 7566			15.793 69926	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
7001-131	Stamford	Fairfield	Service Garage	J.M. Wright Technical High School	Maintenance/Repair Shop	DOE	0	0	C	0.0148 14815	61874. 7566			15.793 69926	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
(non e)	Stamford	Fairfield	Not Specified	J.M. Wright Technical High School	Shed	DOE	0	0	C	0.0148 14815	61874. 7566			15.793 69926	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	61874. 7566			15.793 69926	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	61874. 7566			15.793 69926	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	61874. 7566			15.781 22616	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	61874. 7566			15.781 22616	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445							3		0
7301-7233	Waterbury	New Haven	University of Connecticut-Waterbury	UCONN WATER BURY	Not Specified	UCONN	0	0	C	0.0222 22222	92812. 1349			25.315 8226	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	92209 4.587							3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
			Branch	BRANCH																														
	Waterbury	New Haven	Not Specified	Not Specified	Not Specified		0	0	C	0.0222 22222	92812. 1349			25.132 99942	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	51134 33.619		0					3		0
(none)	Danbury	Fairfield	Not Specified	Henry Abbott Technical High School	Not Specified	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					0		0
(none)	Danbury	Fairfield	Not Specified	Henry Abbott Technical High School	Not Specified	DOE	0	0	C	0.0148 14815	34312 3.6502			28.075 27161	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	17751 55.355		0					0		0
7001-91	Manchester	Hartford	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	11249 9.5575			25.961 28654	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	11045 411.1		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified	DOT	0	0	C	0.0222 22222	11812 45.353			26.059 30138	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0	C	0.0222 22222	11812 45.353			26.059 04388	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	83826. 78063		0					0		3
	Seymour	New Haven	Not Specified	Not Specified	Not Specified		0	0	C	0.0222 22222	8437.4 66809			26.000 494	12656. 20021	X	37968 6.0064	X	0.2539 68254	96428. 1921	X	0.0222 22222	8437.4 66809	0.2207 79221	10059 21.368		0					0		0
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0	C	0.0148 14815	67499. 73447			25.258 22449	15187 4.4026	X	45562 32.077	X	0.2857 14286	13017 80.593	X	0.0148 14815	67499. 73447	0.2337 66234	97633 5.445		0					0		3
7001-10	Waterbury	New Haven	Warren F. Kaynor Regional Vocational Technical School	Warren F. Kaynor Technical High School	Not Specified	DOE	0	0	C	0.0222 22222	92812. 1349			24.653 33366	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	92209 4.587		0					0		0
7001-101	Waterbury	New Haven	Garage/Service Bldg.	Not Specified	Not Specified		0	0	C	0.0222 22222	92812. 1349			24.458 60291	13921 8.2023	X	41765 46.07	X	0.2539 68254	10607 10.113	X	0.0222 22222	92812. 1349	0.2207 79221	47781 26.496		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.031 45599	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	51997 25.893	V E	33.317 07317	21642 102.37	DFI RM	4. 3	21642 102.37	0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.031 45599	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	40138 23.496	V E	30.170 73171	21642 102.37	DFI RM	4. 3	21642 102.37	0		0
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.251 08337	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	11735 749.29	V E	12.135 13514	16706 184.28	DFI RM	5. 7	16706 184.28	3		1
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.854 56085	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	47781 26.496	A E	12.135 13514	53156 040.9	DFI RM	5. 7	53156 040.9	0		1
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.031 45599	72140 3.4122	X	21642 102.37	X	0.0634 92063	13741 01.737	X	0.0518 51852	11221 83.086	0.2402 5974	40138 23.496	V E	9.825	21642 102.37	DFI RM	4. 3	21642 102.37	0		1

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.25108337	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	6203181.767	V E	7.216216216	16706184.28	DFI RM	5.7	16706184.28	3		1
1326-503	Waterford	New London	Bath House	Seaside Regional Center	Not Specified	DPW	0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	729786.0902	V E	7	28096764.47	DFI RM	4.3	28096764.47	0		3
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.11250305	101249.6017	X	3037488.051	X	0.253968254	771425.5368	X	0.02222222	67499.73447	0.220779221	3688378.348	A E	4.378378378	3037488.051	DFI RM	5.7	3037488.051	0		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.37662125	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	3688378.348	V E	2.243243243	16706184.28	DFI RM	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.33296776	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	3688378.348	V E	2.081081081	16706184.28	DFI RM	5.7	16706184.28	3		1
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.20949745	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	419133.9032		1.85	16706184.28				0		4
	Ashford	Windham	Not Specified	Not Specified	Not Specified		0	0						29.24251556	63281.00107	X	1898430.032	X	0.047619048	90401.4301	X	0.02222222	42187.33404	0.214285714	406806.4354		0					4	1898430.032	0
	Ashford	Windham	Not Specified	Not Specified	Not Specified		0	0						29.24251556	63281.00107	X	1898430.032	X	0.047619048	90401.4301	X	0.02222222	42187.33404	0.214285714	162722.5742		0					4	1898430.032	0
	Bozrah	New London	Not Specified	Not Specified	Not Specified		0	0						24.11106491	25312.40043	X	759372.0128	X	0.063492063	48214.09605	X	0.051851852	39374.84511	0.24025974	1368348.919		0					4	759372.0128	0
5000-7198	Burlington	Hartford	Salt Shed	Not Specified	Not Specified		0	0						33.50276947	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	2051290.632		0					4	5695290.096	0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.39220428	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	1538467.974		0					4	9871836.166	0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.39220428	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	1538467.974		0					4	9871836.166	0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.39220428	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	1538467.974		0					4	9871836.166	0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.58824921	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	118343.6903		0					4	9871836.166	0
3100-1662	Durham	Middlesex	Guest House	Not Specified	Not Specified		0	0						29.41615677	25312.40043	X	759372.0128	X	0.492063492	373659.2444	X	0.007407407	5624.977873	0.155844156	118343.6903		0					4	759372.0128	0
3100-1661	Durham	Middlesex	Family Residence	Not Specified	Not Specified		0	0						29.41615677	25312.40043	X	759372.0128	X	0.492063492	373659.2444	X	0.007407407	5624.977873	0.155844156	4023685.47		0					4	759372.0128	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						24.89264297	860621.6145	X	25818648.44	X	0.492063492	12704414.31	X	0.007407407	191249.2477	0.155844156	4023685.47		0					4	25818648.44	0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						24.89264297	860621.6145	X	25818648.44	X	0.492063492	12704414.31	X	0.007407407	191249.2477	0.155844156	473374.7612		0					4	25818648.44	0
	East Hampton	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.45636177	101249.6017	X	3037488.051	X	0.492063492	1494636.978	X	0.007407407	22499.91149	0.155844156	473374.7612		0					4	3037488.051	0
	East Hampton	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.45636177	101249.6017	X	3037488.051	X	0.492063492	1494636.978	X	0.007407407	22499.91149	0.155844156	473374.7612		0					4	3037488.051	0
	East Hampton	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.45636177	101249.6017	X	3037488.051	X	0.492063492	1494636.978	X	0.007407407	22499.91149	0.155844156	11242650.58		0					4	3037488.051	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.9083004	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					4	72140341.22	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.53788185	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					4	72140341.22	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.53788185	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	5473395.677		0					4	72140341.22	0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0					4	22781160.38	0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.95446205	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	1025645.316		0					4	22781160.38	0
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.45341873	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	1185902.397		0					4	4935918.083	0
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.45341873	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	3648930.451		0					4	4935918.083	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.02769089	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0					4	15187440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.02543831	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0					4	15187440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.04802895	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0					4	15187440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.04802895	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0					4	15187440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.02294731	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0					4	15187440.26	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					4	15187 440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					4	15187 440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					4	15187 440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.062 20818	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					4	15187 440.26	0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.062 20818	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	83826 7.8063		0					4	15187 440.26	0
5000-7111	Hebron	Tolland	Salt Shed	DOT Hebron Salt Storage	Salt Shed	DOT	0	0						24.337 71515	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					4	37968 60.064	0
5000-4184	Hebron	Tolland	Personnel Shelter	DOT Hebron Salt Storage	Shelter	DOT	0	0						24.397 49718	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	58381 8.0642		0					4	37968 60.064	0
7301-28	Mansfield	Tolland	0038 Beach Hall	University of Connecticut - Storrs Campuses	Education		93654 14.78	31113 52.35						18.272 36176	93654. 1478	X	28096 24.434	X	0.1587 30159	44597 2.1324	X	0.0370 37037	10406 0.1642	0.2077 92208	17245 47.798		0					4	28096 24.434	0
7301-152	Mansfield	Tolland	0238 College of Liberal Arts and Sciences	University of Connecticut - Storrs Campuses	Education		27664 620.93	20619 50.47						18.272 36176	27664 6.2093	X	82993 86.279	X	0.1587 30159	13173 62.901	X	0.0370 37037	30738 4.677	0.2077 92208	56053 9.44		0					4	82993 86.279	0
7301-1	Mansfield	Tolland	0001 Storrs Hall	University of Connecticut - Storrs Campuses	Education		89919 86.85	76744 5.65						18.386 05309	89919. 8685	X	26975 96.055	X	0.1587 30159	42818 9.85	X	0.0370 37037	99910. 965	0.2077 92208	37164 5.6148		0					4	26975 96.055	0
7301-440	Mansfield	Tolland	2106 Depot - Brown Building	University of Connecticut - Depot	Not Specified		59618 15.07	48808 7.93						19.675 93193	59618. 1507	X	17885 44.521	X	0.1587 30159	28389 5.9557	X	0.0370 37037	66242. 38967	0.2077 92208	12820 5.6206		0					4	17885 44.521	0
7301-354	Mansfield	Tolland	1126 Kellogg Dairy Center	University of Connecticut - Storrs Campuses	Not Specified		20566 31.83	17184 9.51						18.502 43759	20566. 3183	X	61698 9.549	X	0.1587 30159	97934. 84905	X	0.0370 37037	22851. 46478	0.2077 92208	46826. 30712		0					4	61698 9.549	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-7224	Mansfield	Tolland	0468 Charter Oaks Comm. Center	University of Connecticut - Storrs Campuses	Other		751172.01	87036.75						18.72038651	7511.7201	X	225351.603	X	0.158730159	35770.09571	X	0.037037037	8346.355667	0.207792208	26623.83335							4	225351.603	0
7301-7201	Mansfield	Tolland	0456 Hilltop Community Center	University of Connecticut - Storrs Campuses	Other		427090.66	32028.23						18.47380447	4270.9066	X	128127.198	X	0.158730159	20337.65048	X	0.037037037	4745.451778	0.207792208	143020.5893							4	128127.198	0
7301-7195	Mansfield	Tolland	0450 Bethune Hall, Hilltop Apt. 17	University of Connecticut - Storrs Campuses	Residence		2294288.62	7279.2						18.4550209	2294.28862	X	688286.586	X	0.158730159	109251.839	X	0.037037037	25492.09578	0.207792208	198468.5716							4	688286.586	0
7301-7199	Mansfield	Tolland	0454 Crawford Hall, Hilltop Apt. 21	University of Connecticut - Storrs Campuses	Residence		3183766.67	0						18.4550209	31837.6667	X	955130.001	X	0.158730159	151607.9367	X	0.037037037	35375.18522	0.207792208	198468.5716							4	955130.001	0
7301-7194	Mansfield	Tolland	0449 Crandall Hall, Hilltop Apt. 16	University of Connecticut - Storrs Campuses	Residence		3183766.67	0						18.4550209	31837.6667	X	955130.001	X	0.158730159	151607.9367	X	0.037037037	35375.18522	0.207792208	198468.5716							4	955130.001	0
7301-7192	Mansfield	Tolland	0447 Beard Hall, Hilltop Apt. 14	University of Connecticut - Storrs Campuses	Residence		3183766.67	0						18.4550209	31837.6667	X	955130.001	X	0.158730159	151607.9367	X	0.037037037	35375.18522	0.207792208	198468.5716							4	955130.001	0
7301-7190	Mansfield	Tolland	0445 Novello Hall, Hilltop Apt. 12	University of Connecticut - Storrs Campuses	Residence		3183766.67	0						18.47380447	31837.6667	X	955130.001	X	0.158730159	151607.9367	X	0.037037037	35375.18522	0.207792208	189887.3386							4	955130.001	0
7301-7198	Mansfield	Tolland	0453 Wheeler Hall, Hilltop Apt. 20	University of Connecticut - Storrs Campuses	Residence		3046109.39	0						18.4550209	30461.0939	X	913832.817	X	0.158730159	145052.8281	X	0.037037037	33845.65989	0.207792208	149621.5399							4	913832.817	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
7301-7200	Mansfield	Tolland	0455 Woodhouse Hall, Hilltop Apt. 22	University of Connecticut - Storrs Campuses	Residence		2400178.87	0						18.2939949	24001.7887	X	720053.661	X	0.158730159	114294.2319	X	0.037037037	26668.65411	0.207792208	143020.5893							4	720053.661	0	
7301-7193	Mansfield	Tolland	0448 La Flesche Hall, Hilltop Apt. 15	University of Connecticut - Storrs Campuses	Residence		2294288.62	0						18.2939949	22942.8862	X	688286.586	X	0.158730159	109251.839	X	0.037037037	25492.09578	0.207792208	143020.5893								4	688286.586	0
7301-7191	Mansfield	Tolland	0446 French Hall, Hilltop Apt. 13	University of Connecticut - Storrs Campuses	Residence		2294288.62	0						18.47380447	22942.8862	X	688286.586	X	0.158730159	109251.839	X	0.037037037	25492.09578	0.207792208	143020.5893								4	688286.586	0
7301-7189	Mansfield	Tolland	0444 Stowe Hall, Hilltop Apt. 11	University of Connecticut - Storrs Campuses	Residence		2294288.62	0						18.47380447	22942.8862	X	688286.586	X	0.158730159	109251.839	X	0.037037037	25492.09578	0.207792208	143020.5887								4	688286.586	0
7301-7196	Mansfield	Tolland	0451 Merritt Hall, Hilltop Apt. 18	University of Connecticut - Storrs Campuses	Residence		2294288.61	0						18.4550209	22942.8861	X	688286.583	X	0.158730159	109251.8386	X	0.037037037	25492.09567	0.207792208	126738.2469								4	688286.583	0
7301-7197	Mansfield	Tolland	0452 Wu Hall, Hilltop Apt. 19	University of Connecticut - Storrs Campuses	Residence		2033092.71	0						18.4550209	20330.9271	X	609927.813	X	0.158730159	96813.93857	X	0.037037037	22589.919	0.207792208	4137.475948								4	609927.813	0
7301-494	Mansfield	Tolland	2173 Depot - Wayside Cottage	University of Connecticut - Depot	Not Specified		66372.01	0						19.69792747	663.7201	X	19911.603	X	0.158730159	3160.571905	X	0.037037037	737.4667778	0.207792208	41578083.19								4	19911.603	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19								4	200094525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19								4	200094525.4	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Not Specified	DOC	0	0						19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0						4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.272 36176	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0						4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.502 43759	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0						4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.957 87621	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0						4	20009 4525.4	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.905 31921	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	86785 3.7289		0						4	20009 4525.4	0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.343 23883	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	97633 5.445		0						4	41765 46.07	0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.343 23883	13921 8.2023	X	41765 46.07	X	0.2857 14286	11932 98.877	X	0.0148 14815	61874. 7566	0.2337 66234	12426 087.48		0						4	41765 46.07	0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.826 45988	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0						4	53156 040.9	0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0						4	53156 040.9	0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.070 19806	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	47781 26.496		0						4	53156 040.9	0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.030 16663	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	19723 94.838		0						4	21642 102.37	0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.148 08273	31640 5.0053	X	94921 50.16	X	0.2857 14286	27120 42.903	X	0.0148 14815	14062 4.4468	0.2337 66234	16863 97.587		0						4	94921 50.16	0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						16.544 71207	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	86095 03.47		0						4	72140 34.122	0
1326-	Norwalk	New	Stone House	Uncas-	Building No. 11	DPW	0	0						21.941	12276	X	36829	X	0.0634	23383	X	0.0518	19096	0.2402	88486		0						4	36829	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
544	ch	London		on-Thames Hospital										69235	51.421		542.62		92063	83.658		51852	79.988	5974	56.344							542.62		
1326-542	Norwich	New London	Paint Shop	Uncas-on-Thames Hospital	Building No. 15	DPW	0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				4	36829542.62	0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				4	36829542.62	0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.94169235	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	1824465.226		0				4	36829542.62	0	
3100-101	Portland	Middlesex	Storage	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0				4	7593720.128	0	
3100-90	Portland	Middlesex	Saw Mill Shed	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1715983.509		0				4	7593720.128	0	
8000-13	Somers	Tolland	Well Pump House 3	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				4	11010894.19	0	
8000-14	Somers	Tolland	Well Pump House 2	Osborn Correctional Institution	Not Specified	DOC	0	0						26.52804184	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	946749.5225		0				4	11010894.19	0	
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.14094353	151874.4026	X	4556232.077	X	0.285714286	1301780.593	X	0.014814815	67499.73447	0.233766234	2307701.961		0				4	4556232.077	0	
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.37485123	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	1538467.974		0		Ha zus	5. 7 5	9871836.166	3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.37485123	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	1538467.974		0		Ha zus	5. 7 5	9871836.166	3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.37485123	329061.2055	X	9871836.166	X	0.492063492	4857570.177	X	0.007407407	73124.71234	0.155844156	710062.1418		0		Ha zus	5. 7 5	9871836.166	3		0
	Willington	Tolland	Not Specified	I-84 Rest Area WB	Storage		0	0						22.90928268	151874.4026	X	4556232.077	X	0.158730159	723211.4408	X	0.037037037	168749.3362	0.207792208	2051290.632		0		Ha zus	0. 7 5	4556232.077	3		0
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.94743729	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	1508882.051	A E	0		DFI RM	5. 7 5	9871836.166	3		2
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.97360802	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271		0		DFI RM	5. 7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.97360802	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271		0		DFI RM	5. 7	6454662.109	3		0

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	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.99635124	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.99635124	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	1425055.271		0		DFIRM	5.7	6454662.109	3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.97360802	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.02222222	143436.9358	0.220779221	15927088.32		0		DFIRM	5.7	6454662.109	3		4
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.75653076	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64	A	0		DFIRM	4.3	72140341.22	3		2
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.75653076	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64	A	0		DFIRM	4.3	72140341.22	3		2
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.87870026	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	5473395.677	A	0		DFIRM	4.3	72140341.22	3		3
	Enfield	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0						24.43341255	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4497060.232		0		DFIRM	4.85	22781160.38	3		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00274849	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00274849	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00274849	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00454712	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	3		2
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00115585	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	4013823.496	A	0		DFIRM	4.3	21642102.37	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.37662125	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.33523369	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.33523369	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.33523369	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.37662125	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	V	0		DFIRM	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.2923851	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.2923851	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.2923851	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.33296776	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	V	0		DFIRM	5.7	16706184.28	3		2

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Park																														
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.2923851	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	3688378.348	A	0		DFI	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.2923851	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	3688378.348	A	0		DFI	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.24991417	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	3688378.348	A	0		DFI	5.7	16706184.28	3		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.2923851	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.02222222	371248.5396	0.220779221	11735749.29	A	0		DFI	5.7	16706184.28	3		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.9847908	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.02222222	1181245.353	0.220779221	11735749.29	A	0		DFI	5.7	53156040.9	3		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.9847908	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.02222222	1181245.353	0.220779221	11735749.29	A	0		DFI	5.7	53156040.9	3		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.9847908	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.02222222	1181245.353	0.220779221	1592708.832	A	0		DFI	5.7	53156040.9	3		2
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DDS	0	0						18.59915161	240467.8041	X	7214034.122	X	0.285714286	2061152.606	X	0.014814815	106874.5796	0.233766234	177515.5355	A	0		DFI	5.7	7214034.122	3		2
	West Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.74752808	25312.40043	X	759372.0128	X	0.253968254	192856.3842	X	0.02222222	16874.93362	0.220779221	1257401.71	A	0		DFI	5.7	759372.0128	3		2
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.39980316	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516	A	0		DFI	5.7	5695290.096	3		2
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.39980316	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516	A	0		DFI	5.7	5695290.096	3		2
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.39980316	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516	A	0		DFI	5.7	5695290.096	3		2
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.39980316	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	355031.0709	A	0		DFI	5.7	5695290.096	3		2
	Barkhamsted	Litchfield	Not Specified	Department of Transportation	Not Specified	DOT	0	0						39.40747452	50624.80085	X	1518744.026	X	0.492063492	747318.4888	X	0.007407407	11249.95575	0.155844156	177515.5355		0					3		0
5000-7213	Berlin	Hartford	Salt Shed	Not Specified	Not Specified		0	0						29.49926567	37968.60064	X	1139058.019	X	0.285714286	325445.1483	X	0.014814815	16874.93362	0.207792208	236687.3806		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
5000-7212	Berlin	Hartford	Storage	Not Specified	Not Specified		0	0						29.499 26567	37968. 60064	X	11390 58.019	X	0.2857 14286	32544 5.1483	X	0.0148 14815	16874. 93362	0.2077 92208	20512 90.632		0						3		0
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.916 89682	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961		0						3		0
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.922 30606	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961		0						3		4
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.929 21448	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961		0						3		4
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.922 30606	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961		0						3		4
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.922 30606	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961		0						3		4
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.922 30606	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961		0						3		4
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.899 29771	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	13313 66.516		0						3		4
3100-2697	Burlington	Hartford	Conservation Center	Not Specified	Not Specified		0	0						31.450 79613	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-556	Burlington	Hartford	4 Bay Garage South	Not Specified	Not Specified		0	0						31.251 68228	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-558	Burlington	Hartford	Overnight Lodge	Not Specified	Not Specified		0	0						31.450 79613	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-562	Burlington	Hartford	Flammable Materials Shed	Not Specified	Not Specified		0	0						31.450 79613	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-559	Burlington	Hartford	Caretakers Lodge	Not Specified	Not Specified		0	0						31.251 68228	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-47	Burlington	Hartford	Garage Storage	Not Specified	Not Specified		0	0						31.251 68228	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-560	Burlington	Hartford	Not Specified	Not Specified	Not Specified		0	0						31.172 34802	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
3100-557	Burlington	Hartford	Workshop/Necropsy	Not Specified	Not Specified		0	0						31.172 34802	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0						3		0
5000-7199	Burlington	Hartford	Personnel Shelter	Not Specified	Not Specified		0	0						33.502 76947	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	41025 81.264		0						3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.445 76263	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0						3		0
8000-168	Cheshire	New Haven	Cottage A	Not Specified	Not Specified	DOC	0	0						27.445 76263	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	43589 92.593		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
8000-169	Cheshire	New Haven	Cottage B	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-170	Cheshire	New Haven	Cottage C	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-171	Cheshire	New Haven	Cottage D	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-172	Cheshire	New Haven	Cottage E	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-173	Cheshire	New Haven	Cottage F	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-174	Cheshire	New Haven	Cottage G	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-175	Cheshire	New Haven	Cottage H	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-176	Cheshire	New Haven	Cottage I	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-177	Cheshire	New Haven	Cottage J	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.65777016	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
8000-7102	Cheshire	New Haven	Complex 2 K-9 Unit	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Waterbury Regional Center	Not Specified	DDS	0	0						27.5507431	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2462368	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2462368	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2462368	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2462368	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.246 2368	65812 2.4111	X	19743 672.33	X	0.2539 68254	50142 65.989	X	0.0222 22222	43874 8.2741	0.2207 79221	21794 96.296		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.374 85123	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.374 85123	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.374 85123	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.374 85123	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.374 85123	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						43.281 34537	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						43.281 34537	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						43.281 34537	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	15384 67.974		0					3		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						43.281 34537	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	36094 82.554		0					3		0
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0						28.013 27133	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0						28.021 78574	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	54142 23.832		0					3		0
	Danbury	Fairfield	Not Specified	Not Specified	Not Specified		0	0						28.021 78574	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	62130 4.3741		0					3		0
	Derby	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.065 73105	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					3		0
	Derby	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.070 92857	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	72929 29.915		0					3		0
	East Granby	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.010 16808	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.010 16808	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.010 16808	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East	Hartford	Not Specified	Bradley	Not Specified	DOT	0	0						23.010	11010	X	33032	X	0.2857	94379	X	0.0148	48937	0.2077	68639		0					3		0





JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Granby	ord		International Airport										04625	89.419		682.56		14286	09.302		14815	3.0749	92208	34.038									
	East Granby	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.925 95482	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.925 95482	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.164 00146	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.400 91515	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.336 88354	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.092 88025	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.092 88025	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.336 88354	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.336 88354	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.336 88354	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.336 88354	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.400 91515	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0					3	0	
	East	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010	11010	X	33032	X	0.2857	94379	X	0.0148	48937	0.2077	68639		0					3	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category		
	Granby	ord		Specified										16808	89.419		682.56		14286	09.302		14815	3.0749	92208	34.038											
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.579 04625	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.528 56827	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.818 48335	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.867 88368	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.867 88368	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.775 21896	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.054 37279	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.054 37279	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	68639 34.038		0						3		0	
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.054 37279	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	53649 13.961		0						3		0	
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0							3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0							3		0
	East Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.263 64326	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	47337 4.7612		0							3		0
	East Hampton	Middlesex	Not Specified	Department of Transp	Not Specified	DOT	0	0						28.655 64346	10124 9.6017	X	30374 88.051	X	0.4920 63492	14946 36.978	X	0.0074 07407	22499. 91149	0.1558 44156	47337 4.7612		0							3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				ortation																															
	East Hampton	Middlesex	Not Specified	Department of Transportation	Not Specified	DOT	0	0						28.65564346	101249.6017	X	3037488.051	X	0.492063492	1494636.978	X	0.007407407	22499.91149	0.155844156	414202.9161							3		0	
5000-705	East Hartford	Hartford	Salt Shed	Department of Transportation	Not Specified	DOT	0	0						27.15196991	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	552270.5548								3		0
5000-60	East Hartford	Hartford	Sign/Garage	Department of Transportation	Not Specified	DOT	0	0						27.15196991	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	552270.5548								3		0
5000-186	East Hartford	Hartford	Paint Storage Building	Department of Transportation	Not Specified	DOT	0	0						27.15196991	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	552270.5548								3		0
5000-112	East Hartford	Hartford	Maintenance Garage	Department of Transportation	Not Specified	DOT	0	0						27.15196991	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	552270.5548								3		0
5000-7120	East Hartford	Hartford	Sign Storage	Not Specified	Not Specified		0	0						27.15196991	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	552270.5548								3		0
1310-709	East Hartford	Hartford	Rentschler Field Stadium	Not Specified	Not Specified		0	0						27.2963562	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	1341228.49								3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271								3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.98900986	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271								3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.97360802	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271								3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.99635124	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271								3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.99635124	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	1425055.271								3		0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.99635124	215155.4036	X	6454662.109	X	0.253968254	1639279.266	X	0.022222222	143436.9358	0.220779221	71631.81818								3		0
2201-8023	East Lyme	New London	Warehouse/Maint. Bldg.	Camp Rell	Storage/Warehouse		1081500	39615						19.69664955	10815	X	324450	X	0.063492063	20600	X	0.051851852	16823.33333	0.24025974	108352.1909								3		0
2201-205	East Lyme	New London	Barracks - 200 Person	Camp Rell	Troop Barracks		1503264.63	2725						19.69664955	15032.6463	X	450979.389	X	0.063492063	28633.612	X	0.051851852	23384.11647	0.24025974	89501.97697								3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
2201-209	East Lyme	New London	In Door Firearms Training Simulator	Camp Rell	Military		1241739.14	1757						19.7898922	12417.3914	X	372521.742	X	0.063492063	23652.1741	X	0.051851852	19315.94218	0.24025974	200011.0456		0					3	0	
2201-165	East Lyme	New London	Quarters Building	Camp Rell	Troop Barracks		2774928.02	0						19.69664955	27749.2802	X	832478.406	X	0.063492063	52855.77181	X	0.051851852	43165.54698	0.24025974	108352.1909		0					3	0	
2201-204	East Lyme	New London	Barracks - 200 Person	Camp Rell	Troop Barracks		1503264.63	0						19.7898922	15032.6463	X	450979.389	X	0.063492063	28633.612	X	0.051851852	23384.11647	0.24025974	104137.5562		0					3	0	
2201-206	East Lyme	New London	Barracks - 160 Person	Camp Rell	Troop Barracks		1444791.32	0						19.69664955	14447.9132	X	433437.396	X	0.063492063	27519.83467	X	0.051851852	22474.53164	0.24025974	103760.6261		0					3	0	
2201-8013	East Lyme	New London	Nett Hall	Camp Rell	Other		1439561.84	0						19.7898922	14395.6184	X	431868.552	X	0.063492063	27420.22552	X	0.051851852	22393.18418	0.24025974	85706.00618		0					3	0	
2201-207	East Lyme	New London	Barrack - 160 Person	Camp Rell	Troop Barracks		1189074.32	0						19.69664955	11890.7432	X	356722.296	X	0.063492063	22649.03467	X	0.051851852	18496.71164	0.24025974	24778.51126		0					3	0	
2201-166	East Lyme	New London	Fitness Center	Camp Rell	Sports/Gymnasium		343773.94	0						19.69664955	34377.394	X	103132.182	X	0.063492063	6548.075048	X	0.051851852	5347.594622	0.24025974	20497.33712		0					3	3	
2201-203	East Lyme	New London	Post Dispensary	Camp Rell	Military		284377.47	0						19.69664955	28437.747	X	85313.241	X	0.063492063	5416.713714	X	0.051851852	4423.649533	0.24025974	15489.27444		0					3	0	
2201-208	East Lyme	New London	Post HQ	Camp Rell	Military		214896.24	0						19.70480347	2148.9624	X	64468.872	X	0.063492063	4093.261714	X	0.051851852	3342.8304	0.24025974	13142.95068		0					3	0	
2201-184	East Lyme	New London	Female Barracks	Camp Rell	Troop Barracks		182343.64	0						19.70480347	1823.4364	X	54703.092	X	0.063492063	3473.21219	X	0.051851852	2836.456622	0.24025974	12296.13816		0					3	0	
2201-199	East Lyme	New London	TAC- Office	Camp Rell	Military		170595.07	0						19.70480347	1705.9507	X	51178.521	X	0.063492063	3249.429905	X	0.051851852	2653.701089	0.24025974	12202.82969		0					3	0	
2201-7102	East Lyme	New London	Training Shelter #1, Old# 22	Camp Rell	Other		169300.52	0						19.70480347	1693.0052	X	50790.156	X	0.063492063	3224.77181	X	0.051851852	2633.563644	0.24025974	10711.11871		0					3	0	
2201-151	East Lyme	New London	Class Room	Camp Rell	Military		148604.71	0						19.69664955	1486.0471	X	44581.413	X	0.063492063	2830.565905	X	0.051851852	2311.628822	0.24025974	10492.37951		0					3	0	
2201-148	East Lyme	New London	Class Room	Camp Rell	Military		145569.95	0						19.69664955	1455.6995	X	43670.985	X	0.063492063	2772.760952	X	0.051851852	2264.421444	0.24025974	10193.10405		0					3	0	
2201-150	East Lyme	New London	Class Room	Camp Rell	Military		141417.84	0						19.69664955	1414.1784	X	42425.352	X	0.063492063	2693.673143	X	0.051851852	2199.833067	0.24025974	10193.10405		0					3	0	
2201-149	East Lyme	New London	Class Room	Camp Rell	Military		141417.84	0						19.69664955	1414.1784	X	42425.352	X	0.063492063	2693.673143	X	0.051851852	2199.833067	0.24025974	9462.544578		0					3	0	
2201-155	East Lyme	New London	Mess Hall	Camp Rell	Cafeteria/Food Service		131282.15	0						19.69664955	1312.8215	X	39384.645	X	0.063492063	2500.612381	X	0.051851852	2042.166778	0.24025974	8751.795		0					3	0	
2201-173	East Lyme	New London	Task Force Husky Bldg.	Camp Rell	Military		121421.3	0						19.69664955	1214.213	X	36426.39	X	0.063492063	2312.786667	X	0.051851852	1888.775778	0.24025974	8608.084597		0					3	0	
2201-	East	New	Admin. / Supply	Camp	Military		11942	0						19.782	1194.2	X	35828.	X	0.0634	2274.8	X	0.0518	1857.7	0.2402	8383.3		0					3	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
139	Lyme	Landon		Rell			7.48							02248	748		244		92063	09143		51852	608	5974	0311										
2201-201	East Lyme	New Landon	169th Leadership Supplu /Office	Camp Rell	Storage/Warehouse		11630.8.89	0						19.789.8922	1163.0.889	X	34892.667	X	0.0634.92063	2215.4.07429	X	0.0518.51852	1809.2.494	0.2402.5974	6571.1.30805							3		0	
2201-178	East Lyme	New Landon	Admin Office	Camp Rell	Troop Barracks		91167.04	0						19.789.8922	911.67.04	X	27350.112	X	0.0634.92063	1736.5.15048	X	0.0518.51852	1418.1.53956	0.2402.5974	6308.1.855								3		0
2201-152	East Lyme	New Landon	Mess Hall	Camp Rell	Military		87518.97	0						19.696.64955	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-146	East Lyme	New Landon	Orderly Room	Camp Rell	Education		87518.97	0						19.696.64955	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-145	East Lyme	New Landon	Storage	Camp Rell	Military		87518.97	0						19.696.64955	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-143	East Lyme	New Landon	Classroom	Camp Rell	Military		87518.97	0						19.696.64955	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-142	East Lyme	New Landon	Classroom	Camp Rell	Military		87518.97	0						19.696.64955	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-200	East Lyme	New Landon	169th Leadership Office	Camp Rell	Military		87518.97	0						19.704.80347	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-192	East Lyme	New Landon	BOQ-(Male)	Camp Rell	Troop Barracks		87518.97	0						19.704.80347	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-195	East Lyme	New Landon	Classroom	Camp Rell	Education		87518.97	0						19.704.80347	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-196	East Lyme	New Landon	Classroom	Camp Rell	Education		87518.97	0						19.704.80347	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6308.1.855								3		0
2201-202	East Lyme	New Landon	169th Leadership Admin. Office	Camp Rell	Troop Barracks		87518.97	0						19.704.80347	875.18.97	X	26255.691	X	0.0634.92063	1667.0.28	X	0.0518.51852	1361.4.062	0.2402.5974	6178.3.18383								3		0
2201-160	East Lyme	New Landon	Training Support Bldg	Camp Rell	Storage/Warehouse		85717.21	0						19.704.80347	857.17.21	X	25715.163	X	0.0634.92063	1632.7.08762	X	0.0518.51852	1333.3.78822	0.2402.5974	6163.1.74812								3		0
2201-159	East Lyme	New Landon	Shower-Latrine old#51	Camp Rell	Bath House/Restrooms		85507.11	0						19.704.80347	855.07.11	X	25652.133	X	0.0634.92063	1628.7.06857	X	0.0518.51852	1330.1.106	0.2402.5974	6061.7.59013								3		0
2201-172	East Lyme	New Landon	Post Exchange	Camp Rell	Military		84100.08	0						19.696.64955	841.00.08	X	25230.024	X	0.0634.92063	1601.9.06286	X	0.0518.51852	1308.2.23467	0.2402.5974	4205.1.50669								3		0
2201-147	East Lyme	New Landon	Class Room	Camp Rell	Military		58341.73	0						19.696.64955	583.41.73	X	17502.519	X	0.0634.92063	1111.2.71048	X	0.0518.51852	907.53.80222	0.2402.5974	4205.1.50669								3		0
2201-141	East Lyme	New Landon	Classroom	Camp Rell	Military		58341.73	0						19.696.64955	583.41.73	X	17502.519	X	0.0634.92063	1111.2.71048	X	0.0518.51852	907.53.80222	0.2402.5974	4205.1.50669								3		0
2201-138	East Lyme	New Landon	Admin. /Supply	Camp Rell	Military		58341.73	0						19.782.02248	583.41.73	X	17502.519	X	0.0634.92063	1111.2.71048	X	0.0518.51852	907.53.80222	0.2402.5974	4205.1.50669								3		0

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2201-153	East Lyme	New London	Mess Hall	Camp Rell	Military		58341.73	0						19.69664955	583.4173	X	17502.519	X	0.063492063	1111.271048	X	0.051851852	907.5380222	0.24025974	4205.150669		0					3		0
2201-154	East Lyme	New London	Laundry/Storage	Camp Rell	Military		58341.73	0						19.69664955	583.4173	X	17502.519	X	0.063492063	1111.271048	X	0.051851852	907.5380222	0.24025974	4205.150669		0					3		0
2201-193	East Lyme	New London	Leadership Hall	Camp Rell	Troop Barracks		58341.73	0						19.70480347	583.4173	X	17502.519	X	0.063492063	1111.271048	X	0.051851852	907.5380222	0.24025974	4205.150669		0					3		0
2201-194	East Lyme	New London	Female OCS Barracks	Camp Rell	Troop Barracks		58341.73	0						19.70480347	583.4173	X	17502.519	X	0.063492063	1111.271048	X	0.051851852	907.5380222	0.24025974	4205.150669		0					3		0
2201-197	East Lyme	New London	169th Male OCS Barracks	Camp Rell	Troop Barracks		58341.73	0						19.70480347	583.4173	X	17502.519	X	0.063492063	1111.271048	X	0.051851852	907.5380222	0.24025974	4205.150669		0					3		0
2201-198	East Lyme	New London	169th Male OCS Barracks	Camp Rell	Troop Barracks		58341.73	0						19.70480347	583.4173	X	17502.519	X	0.063492063	1111.271048	X	0.051851852	907.5380222	0.24025974	3765.683649		0					3		0
2201-7106	East Lyme	New London	Training Shelter#2	Not Part Of A Facility	Other		52244.62	0						19.7898922	522.4462	X	15673.386	X	0.063492063	995.135619	X	0.051851852	812.6940889	0.24025974	1576.300188		0					3		0
2201-175	East Lyme	New London	Public Info. Office	Camp Rell	Military		21869.39	0						19.69664955	218.6939	X	6560.817	X	0.063492063	416.5598095	X	0.051851852	340.1905111	0.24025974	1231.135597		0					3		0
2201-144	East Lyme	New London	Latrine	Camp Rell	Bath House/Restrooms		17080.62	0						19.69664955	170.8062	X	5124.186	X	0.063492063	325.3451429	X	0.051851852	265.6985333	0.24025974	323.0611753		0					3		0
2201-167	East Lyme	New London	Emergenct Operations Bldg.	Camp Rell	Military		4482.11	0						19.69664955	44.8211	X	1344.633	X	0.063492063	85.37352381	X	0.051851852	69.72171111	0.24025974	237.5536948		0					3		0
2201-135	East Lyme	New London	Guard Post NW Enterance	Camp Rell	Military		3295.79	0						19.78202248	32.9579	X	988.737	X	0.063492063	62.77695238	X	0.051851852	51.26784444	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.7898922	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.78202248	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.78202248	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.69664955	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.69664955	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.70480347	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.70480347	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East	New	Not Specified	Not	Not Specified		0	0						19.69664955	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0

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	Lyme	Landon		Specified										64955	78.041		341.22		92063	39.125		51852	10.285	5974	419.64										
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						19.696 64955	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						19.704 80347	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						19.789 8922	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						19.789 8922	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						19.789 8922	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.409 99222	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.649 83559	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0
	East Lyme	New Landon	Not Specified	Not Specified	Not Specified		0	0						20.649 83559	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.529 67262	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.653 28026	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.653 28026	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.672 17255	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.550 05264	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.660 74371	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.660 74371	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.660 74371	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.706 72035	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.065 03105	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.065 03105	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.065 03105	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.065 03105	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0						3	0
	East	New	Not Specified	Not	Not Specified		0	0						21.065	24046	X	72140	X	0.0634	45803	X	0.0518	37406	0.2402	17332		0						3	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Lyme	Landon		Specified										03105	78.041		341.22		92063	39.125		51852	10.285	5974	419.64									
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.06503105	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.06503105	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.05370712	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.06503105	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.20440865	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.06503105	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.06503105	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.20440865	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.08052444	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.72974205	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		4
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.72974205	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		4
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.70672035	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		4
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.70672035	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					3		4
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.70672035	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	2098135.009		0					3		4
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.37892342	291092.6049	X	8732778.147	X	0.285714286	2495079.471	X	0.014814815	129374.4911	0.207792208	1814603.251		0					3		0
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.37892342	291092.6049	X	8732778.147	X	0.285714286	2495079.471	X	0.014814815	129374.4911	0.207792208	1814603.251		0					3		0
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.37892342	291092.6049	X	8732778.147	X	0.285714286	2495079.471	X	0.014814815	129374.4911	0.207792208	1814603.251		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.378 92342	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0						3	0
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.504 64439	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0						3	0
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.857 22923	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	18146 03.251		0						3	0
	East Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.833 59528	29109 2.6049	X	87327 78.147	X	0.2857 14286	24950 79.471	X	0.0148 14815	12937 4.4911	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.954 46205	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.954 46205	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.954 46205	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0						3	0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	31558 3.1742		0						3	0
3100-6837	Essex	Middlesex	Grain Building	Not Specified	Not Specified		0	0						24.368 00766	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	23668 7.3806		0						3	0
3100-6832	Essex	Middlesex	Witch Hazel Building	Not Specified	Not Specified		0	0						24.368 00766	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	23668 7.3806		0						3	0
3100-6836	Essex	Middlesex	Yellow Label Building	Not Specified	Not Specified		0	0						24.368 00766	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	23668 7.3806		0						3	0
3100-2071	Essex	Middlesex	Depot-Essex	Not Specified	Not Specified		0	0						24.368 00766	50624. 80085	X	15187 44.026	X	0.4920 63492	74731 8.4888	X	0.0074 07407	11249. 95575	0.1558 44156	27810 76.722		0						3	0
7701-451	Farmington	Hartford	Bidstrup Building	Not Specified	Not Specified		0	0						29.681 87523	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category		
7701-27	Farlington	Hartford	Academic West	Not Specified	Not Specified		0	0						29.681 87523	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
7701-8338	Farlington	Hartford	Tunxis Phase I 600	Not Specified	Not Specified		0	0						29.681 87523	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-566	Farlington	Hartford	Tarplin House	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-1361	Farlington	Hartford	Chicken Coop	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-565	Farlington	Hartford	Tarplin Barn	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-567	Farlington	Hartford	Workshop and Storage	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-564	Farlington	Hartford	Garage and Open	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-2698	Farlington	Hartford	Fire Equipment Storage	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	37081 02.296		0						3	0		
3100-570	Farlington	Hartford	Oil Shed	Not Specified	Not Specified		0	0						29.621 28448	59484 1.41	X	17845 242.3	X	0.2857 14286	50986 40.657	X	0.0148 14815	26437 3.96	0.2077 92208	10256 45.316		0						3	0		
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.527 94838	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0							3	0	
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.527 94838	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0							3	0	
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.453 41873	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	11859 02.397		0							3	0	
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.453 41873	16453 0.6028	X	49359 18.083	X	0.0634 92063	31339 1.6243	X	0.0518 51852	25593 6.4932	0.2402 5974	13683 48.919		0							3	0	
	Glastonbury	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.096 59576	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0								3	0
	Glastonbury	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.096 59576	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0								3	0
	Glastonbury	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0						27.755 44167	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0								3	0
4122-224122	Glastonbury	Hartford	2955 Main Street	Department of Transportation	Not Specified	DOT	0	0						27.755 44167	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	11834 36.903		0								3	0
	Glastonbury	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0						27.848	18984	X	56952	X	0.2857	16272	X	0.0148	84374.	0.2077	11834		0								3	0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	nbury	ord		ment of Transp ortatio n										42682	3.0032		90.096		14286	25.742		14815	66809	92208	36.903									
	Glasto nbury	Hartf ord	Not Specified	Depart ment of Transp ortatio n	Not Specified	DOT	0	0						27.848 42682	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	86785 3.7289							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.994 83299	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.994 83299	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0
	Griswo ld	New Lond on	Not Specified	Griswol d Researc h Center	Not Specified	CT Agricult ural Experi ment Station	0	0						25.805 75371	13921 8.2023	X	41765 46.07	X	0.0634 92063	26517 7.5283	X	0.0518 51852	21656 1.6481	0.2402 5974	10034 55.874							3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Griswold	New London	Not Specified	Griswold Research Center	Not Specified	CT Agricultural Experiment Station	0	0						25.80575371	139218.2023	X	4176546.07	X	0.063492063	265177.5283	X	0.051851852	216561.6481	0.24025974	1003455.874		0					3		0	
	Griswold	New London	Proposed Butler Building	Griswold Research Center	Lab	CT Agricultural Experiment Station	0	0						25.99483299	139218.2023	X	4176546.07	X	0.063492063	265177.5283	X	0.051851852	216561.6481	0.24025974	5199725.893		0						3		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0						3		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0						3		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00454712	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0						3		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00454712	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0						3		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0						3		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.0032692	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0						3		4
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.00454712	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	2280581.532		0						3		2
8000-335	Haddam	Middlesex	Old Jail- Haddam	Not Specified	Not Specified		0	0						27.7127285	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	2366873.806		0						3		0
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0528965	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	3353071.225		0						3		2
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0528965	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	9807733.334		0						3		3
(none)	Hartford	Hartford	Not Specified	Governor's Residence	Not Specified	DPW	0	0						28.29894638	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0						3		0
1326-8525	Hartford	Hartford	Not Specified	Governor's Residence	Annex/Guest House	DPW	0	0						28.29894638	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0						3		0
(none)	Hartford	Hartford	Not Specified	Governor's Residence	Annex/Guest House	DPW	0	0						28.29894638	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0						3		0
1326-8523	Hartford	Hartford	Not Specified	Governor's	Annex/Guest House	DPW	0	0						28.29894638	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Residence																														
(non e)	Hartford	Hartford	Not Specified	Governor's Residence	Annex/Guest House and Garage	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
1326-31	Hartford	Hartford	Not Specified	Governor's Residence	Residence	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(non e)	Hartford	Hartford	Not Specified	Governor's Residence	Deck	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(non e)	Hartford	Hartford	Not Specified	Governor's Residence	Deck	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(non e)	Hartford	Hartford	Not Specified	Governor's Residence	Not Specified	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(non e)	Hartford	Hartford	Not Specified	Governor's Residence	Not Specified	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
1326-8524	Hartford	Hartford	Not Specified	Governor's Residence	Shed	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(non e)	Hartford	Hartford	Not Specified	Governor's Residence	Not Specified	DPW	0	0						28.298 94638	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
4400-479	Hartford	Hartford	51 Coventry Street	Blue Hills Hospital	Not Specified	DMHAS, Region 4	0	0						27.601 27831	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
7301-365	Hartford	Hartford	School of Law - Hosmer Hall	University of Connecticut	Not Specified	UCONN	0	0						28.295 52078	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
7301-501	Hartford	Hartford	School of Law - Library	University of Connecticut	Library	UCONN	0	0						28.295 52078	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
7301-367	Hartford	Hartford	School of Law - Knight Hall	University of Connecticut	Office	UCONN	0	0						28.295 52078	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
7301-366	Hartford	Hartford	School of Law - Cheryl A. Chase Hall	University of Connecticut	Not Specified	UCONN	0	0						28.295 52078	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
7301-7168	Hartford	Hartford	School of Law - William F. Starr	University of	Office	UCONN	0	0						28.295 52078	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
			Hall	Connecticut																														
1326-1	Hartford	Hartford	School of Law - MacKenzie Hall	University of Connecticut	Office	UCONN	0	0						28.29552078	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
7001-20	Hartford	Hartford	Main Campus Building	A.I. Prince Technical High School	Education	DOE	0	0						28.63974571	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
(none)	Hartford	Hartford	Service Garage	A.I. Prince Technical High School	Maintenance/Repair Shop	DOE	0	0						28.69428253	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-36	Hartford	Hartford	Not Specified	Capitol Annex	Not Specified	Secretary of the State	0	0						28.01643181	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
9001-9	Hartford	Hartford	Not Specified	Appellate Court	Not Specified	Judicial Department	0	0						27.94802475	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
2201-50	Hartford	Hartford	Not Specified	Hartford Armory	Not Specified	Military Department	0	0						28.08305359	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1001-7101	Hartford	Hartford	Not Specified	Legislative Office Building & Parking Garage	Not Specified	Military Department	0	0						28.01643181	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
2201-51	Hartford	Hartford	Not Specified	OMS Shop	Maintenance/Repair Shop	DOT	0	0						27.9492321	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1001-7102	Hartford	Hartford	Not Specified	Maintenance Garage (Military)	Not Specified	DOT	0	0						28.01643181	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-32	Hartford	Hartford	Not Specified	Department of Environmental Protection	Not Specified	DEP	0	0						28.01643181	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-25	Hartford	Hartford	Not Specified	Old Treasury Building	Not Specified	DEP	0	0						28.01643181	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-28	Hartford	Hartford	Not Specified	DPH Laboratory	Not Specified	DEP	0	0						28.01643181	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1310-7108	Hartford	Hartford	Former Hartford Times Building	Not Specified	Not Specified	CT Develop	0	0						27.87763596	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				d		ment Authority																												
7701-7107	Hartford	Hartford	Old G. Fox Building	Capital Community College	Education		0	0						27.808 17223	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(none)	Hartford	Hartford	Not Specified	Not Specified	Not Specified	DOT	0	0						27.879 60052	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(none)	Hartford	Hartford	Not Specified	Not Specified	Not Specified	DOT	0	0						27.879 60052	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(none)	Hartford	Hartford	Not Specified	Not Specified	Not Specified	DOT	0	0						27.879 60052	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
	Hartford	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
1326-480	Hartford	Hartford	Not Specified	State of Connecticut Office Building	DSS Main Office	DSS	0	0						28.148 09227	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
1326-8532	Hartford	Hartford	Not Specified	CT Community Colleges System Office	Office	Board of Trustees- CT Community Technical Colleges	0	0						28.085 99854	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(none)	Hartford	Hartford	Cement Deck	CT Community Colleges System Office	Not Specified	Board of Trustees- CT Community Technical Colleges	0	0						28.085 99854	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
7701-13	Hartford	Hartford	Carriage House Structure	CT Community Colleges System Office	Education	Board of Trustees- CT Community Technical Colleges	0	0						28.085 99854	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					3		0
(none)	Hartford	Hartford	Not Specified	CT	Not Specified	Board	0	0						28.085	14807	X	44423	X	0.2857	12692	X	0.0148	65812	0.2077	92308		0					3		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
e)	rd	ord		Community College System Office		of Trustees- CT Community Technical Colleges								99854	75.425		262.75		14286	360.79		14815	2.4111	92208	07.844									
	Hartford	Hartford	Not Specified	Not Specified	Not Specified		0	0						28.08599854	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
(none)	Hartford	Hartford	Not Specified	University of Connecticut	Not Specified	CSU	0	0						28.14937973	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-35	Hartford	Hartford	School of Insurance	University of Connecticut	Office	CSU	0	0						28.14937973	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-7957	Hartford	Hartford	Day Care/Laboratory School	Not Specified	Not Specified		0	0						28.08599854	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-483	Hartford	Hartford	Not Specified	State of Connecticut Office Building	(multiple - see comments)	DPW	0	0						28.08305359	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
(none)	Hartford	Hartford	Not Specified	Parking Lot	Guard Shack	DOT	0	0						27.9492321	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-7	Hartford	Hartford	Not Specified	Department of Revenue Services	State Tax Building	DRS	0	0						28.01726723	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-484	Hartford	Hartford	450 Capitol Ave	Not Specified	Not Specified		0	0						28.08305359	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-485	Hartford	Hartford	460 Capitol Ave	Not Specified	Not Specified		0	0						28.14809227	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
1326-485	Hartford	Hartford	470 Capitol Ave	Not Specified	Not Specified		0	0						28.14809227	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
(unknown)	Hartford	Hartford	Amos Bull House	Amos Bull House	Not Specified	CT Historical Commission	0	0						28.01630783	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	9230807.844		0					3		0
4400-336	Hartford	Hartford	Capital Region Mental Health Center	Blue Hills Hospital	Not Specified	DMHAS, Region 4	0	0						27.60127831	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	1814603.251		0					3		0
	Kent	Litch	Not Specified	Not	Not Specified		0	0						35.743	29109	X	87327	X	0.4920	42970	X	0.0074	64687.	0.1558	13609		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
		field		Specified										92319	2.6049		78.147		63492	81.311		0.0074	24554	44156	52.439										
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						35.536026	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0					3		0	
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						35.536026	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						35.53731155	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						35.74392319	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						35.75184631	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						37.5833931	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						36.42124176	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						36.42124176	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						36.42124176	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1360952.439		0						3		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						36.42124176	291092.6049	X	8732778.147	X	0.492063492	4297081.311	X	0.007407407	64687.24554	0.155844156	1065093.213		0						3		0
3100-52	Killingworth	Middlesex	Entrance Building	Not Specified	Not Specified		0	0						26.6680603	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0
3100-128	Killingworth	Middlesex	Dwelling	Not Specified	Not Specified		0	0						26.58926773	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0
3100-127	Killingworth	Middlesex	Dwelling	Not Specified	Not Specified		0	0						26.58926773	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.71207809	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.71207809	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.79352188	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.79352188	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.793 52188	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	10650 93.213		0						3		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.793 52188	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	10650 93.213		0						3		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.793 52188	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	53254 6.6064		0						3		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0						33.599 72763	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	26035 61.187		0						3		0
	Madison	New Haven	Not Specified	Mosquito Control	Not Specified	DPH	0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Mosquito Control	Not Specified	DPH	0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		0
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		4
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		4
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		4
	Madison	New Haven	Not Specified	Hamm onasset Beach State	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0						3		4

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Park																														
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		4
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.379 63486	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		4
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.335 23369	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.292 3851	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					3		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.249 91417	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	16765 35.613		0					3		3
7001-19	Manchester	Hartford	Not Specified	Howell Cheney Technical High School	Not Specified	DOE	0	0						25.961 28654	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					3		0
2201-52	Manchester	Hartford	State Armory	Armory	Not Specified	Military Department	0	0						25.278 63503	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					3		0
2201-53	Manchester	Hartford	Oms Shop	Armory	Not Specified	Military Department	0	0						25.278 63503	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					3		0
	Manchester	Hartford	Not Specified	Armory	Not Specified	Military Department	0	0						25.278 63503	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					3		0
2201-	Manchester	Hartford	Grease-Oil Shed	Armory	Not Specified	Military	0	0						25.278	25312	X	75937	X	0.2857	21696	X	0.0148	11249	0.2077	15779		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
54	ester	ord				Department								63503	4.0043		20.128		14286	34.322		14815	9.5575	92208	15.871									
4122-94123	Manchester	Hartford	West Center Street	Not Specified	Not Specified		0	0						25.60850525	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
9001-13	Manchester	Hartford	GA 12 Courthouse	Not Specified	Not Specified		0	0						25.60850525	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-7101	Manchester	Hartford	Learning Resource Center	Manchester Community College	Not Specified	Board of Trustees- CT Community Technical Colleges	0	0						26.2561264	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-49	Manchester	Hartford	Frederick W. Lowe Building	Manchester Community College	Not Specified	Board of Trustees- CT Community Technical Colleges	0	0						26.19100189	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
	Manchester	Hartford	Not Specified	Manchester Community College	Not Specified	Board of Trustees- CT Community Technical Colleges	0	0						26.13946724	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-7102	Manchester	Hartford	AS&T	Not Specified	Not Specified		0	0						26.2561264	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-8340	Manchester	Hartford	Village Building #1	Not Specified	Not Specified		0	0						26.2561264	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-8341	Manchester	Hartford	Village Building #2	Not Specified	Not Specified		0	0						26.19100189	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-8342	Manchester	Hartford	Village Building #3	Not Specified	Not Specified		0	0						26.2561264	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-8343	Manchester	Hartford	Village Building #4	Not Specified	Not Specified		0	0						26.19100189	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0
7701-8344	Manchester	Hartford	Village Building #5	Not Specified	Not Specified		0	0						26.2561264	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7701-8345	Manchester	Hartford	Village Building #6	Not Specified	Not Specified		0	0						26.256 1264	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					3		0
4122-104123	Manchester	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.139 46724	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	18801 7.263		0					3		0
5000-175	Mansfield	Tolland	Maintenance Garage	DOT Mansfield Garage and Storage	Maintenance/Repair Shop	DOT	30161 10.26	24056 14.58						26.838 08708	30161. 1026	X	90483 3.078	X	0.1587 30159	14362 4.2981	X	0.0370 37037	33512. 33622	0.2077 92208	13274 2.9484		0					3		0
7805-478	Mansfield	Tolland	Athletic Complex	Eastern Connecticut State University - Mansfield Sports Complex	Sports/Gymnasium	ECSU	21294 18.13	2719						26.594 35463	21294. 1813	X	63882 5.439	X	0.1587 30159	10140 0.8633	X	0.0370 37037	23660. 20144	0.2077 92208	41578 083.19		0					3		0
3100-345	Mansfield	Tolland	Toilet Building	Mansfield Hollow State Park	Toilets	DEEP	0	0						27.887 84218	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
5000-4189	Mansfield	Tolland	Mix Shed	DOT Mansfield Garage and Storage	Not Specified	DOT	0	0						26.838 08708	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Not Specified	DOT Mansfield Garage and Storage	Not Specified	DOT	0	0						26.838 08708	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
5000-497	Mansfield	Tolland	Salt Shed	DOT Mansfield Garage and Storage	Salt Storage	DOT	0	0						27.092 30614	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Not Specified	DOT Mansfield Garage and Storage	Not Specified	DOT	0	0						27.092 30614	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0
	Mansfield	Tolland	Not Specified	Eastern Connecticut State University	Not Specified	ECSU	0	0						26.594 35463	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				ity - Mansfield Sports Complex																															
	Mansfield	Tolland	Not Specified	Eastern Connecticut State University - Mansfield Sports Complex	Not Specified	ECSU	0	0						26.59435463	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					3		0	
	Mansfield	Tolland	Not Specified	Eastern Connecticut State University - Mansfield Sports Complex	Not Specified	ECSU	0	0						26.59435463	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						3		0
	Mansfield	Tolland	Not Specified	Eastern Connecticut State University - Mansfield Sports Complex	Not Specified	ECSU	0	0						26.59435463	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						3		0
	Mansfield	Tolland	Not Specified	Not Specified	Not Specified		0	0						19.69792747	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						3		0
	Mansfield	Tolland	Not Specified	Not Specified	Not Specified		0	0						19.69792747	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						3		0
	Mansfield	Tolland	Not Specified	Not Specified	Not Specified		0	0						19.69792747	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						3		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						20.10560799	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	3629206.503		0						3		0
(none)	Meriden	New Haven	Service Garage	H.C. Wilcox Technical High	Maintenance/Repair Shop	DOE	0	0						28.9554615	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				School																															
7001-18	Meriden	New Haven	Main Campus Building	H.C. Wilcox Technical High School	Education	DOE	0	0						28.9554615	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.02222222	388123.4732	0.220779221	10143040.46							3		0	
8102-7958	Middletown	Middlesex	General Population Housing Bldg 5	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.75803375	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264								3		0
8102-7957	Middletown	Middlesex	General Population Housing Bldg 6	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.79917336	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	769233.987								3		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0						20.123806	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	1185902.397								3		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0						20.94350243	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	1185902.397								3		0
	Montville	New London	Not Specified	Not Specified	Not Specified		0	0						20.94350243	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	5838288.722								3		0
7401-1	New Britain	Hartford	Charter Oak State College	Charter Oak State College	Building No. 28, Education	CSU	0	0						29.31630898	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786								3		0
7802-7105	New Britain	Hartford	Early Learning Center	Not Specified	Not Specified		0	0						29.31559181	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786								3		0
7802-7103	New Britain	Hartford	Arute Stadium Press Box	Central Connecticut State University	Building No. 21, Sports/Gymnasium	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786								3		0
7802-27	New Britain	Hartford	East Hall	Central Connecticut State University	Building No. 26, Facilities Management	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786								3		0
7802-37	New Britain	Hartford	South Pump House	Central Connecticut State University	Building No. 44, Facilities Management	CSU	0	0						29.31630898	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786								3		0
7802-16	New Britain	Hartford	Frank J. DiLoreto Hall	Central Connecticut State University	Building No. 15, Education	CSU	0	0						29.31630898	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786								3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7802-531	New Britain	Hartford	F. Don James Hall	Central Connecticut State University	Building No. 36, Residence	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-7113	New Britain	Hartford	ATM Kiosk	Central Connecticut State University	Building No. 67, ATM	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-20	New Britain	Hartford	Mildred Barrows Hall	Central Connecticut State University	Building No. 19, Residence	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-12	New Britain	Hartford	Emma Hart Willard Hall	Central Connecticut State University	Building No. 11, Education	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-10	New Britain	Hartford	Seth North Hall	Central Connecticut State University	Building No. 10, Residence	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-8	New Britain	Hartford	Catherine Beecher Hall	Central Connecticut State University	Building No. 8, Residence	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-11	New Britain	Hartford	Clarence Carroll Hall	Central Connecticut State University	Building No. 4, Residence	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-3	New Britain	Hartford	Marcus White Hall	Central Connecticut State University	Building No. 3, Education	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-1	New Britain	Hartford	Lawrence J. Davidson Hall	Central Connecticut State University	Building No. 1, Office	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	
7802-7101	New Britain	Hartford	Robert C. Vance Academic Center	Central Connecticut State University	Building No. 37, Education	CSU	0	0						29.316 30898	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					3	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				State University																															
7802-7102	New Britain	Hartford	Vance Garage	Central Connecticut State University	Building No. 39, Garage	CSU	0	0						29.31630898	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3		0	
7802-29	New Britain	Hartford	Public Safety Building	Central Connecticut State University	Building No. 29, Police Department	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-13	New Britain	Hartford	Maria Sanford Hall	Central Connecticut State University	Building No. 12, Education	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-5	New Britain	Hartford	Henry Barnard Hall	Central Connecticut State University	Building No. 5, Education	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-19	New Britain	Hartford	Memorial Hall	Central Connecticut State University	Building No. 18, Education	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-42	New Britain	Hartford	East Pump House	Central Connecticut State University	Building No. 47, Facilities Management	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-2	New Britain	Hartford	Power House	Central Connecticut State University	Building No. 2, Facilities Management	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-24	New Britain	Hartford	Nicholas Copernicus Hall	Central Connecticut State University	Building No. 23, Education	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-18	New Britain	Hartford	Copernicus Parking Garage	Central Connecticut State University	Building No. 17, Garage	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7802-26	New Britain	Hartford	James. J. Maloney Hall	Central Connecticut State University	Building No. 25, Education	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-7110	New Britain	Hartford	Energy Center	Central Connecticut State University	Building No. 43, Facilities Management	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
(none)	New Britain	Hartford	Energy Center Cooling Tower	Central Connecticut State University	Facilities Management	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-7104	New Britain	Hartford	Welte Parking Garage	Central Connecticut State University	Building No. 40, Garage	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-6	New Britain	Hartford	Herbert D. Welte Hall	Central Connecticut State University	Building No. 6, Theater/Auditorium	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-23	New Britain	Hartford	Elihu Burritt Library	Central Connecticut State University	Building No. 22, Library	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-28	New Britain	Hartford	North Pump House	Central Connecticut State University	Building No. 27, Facilities Management	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-9	New Britain	Hartford	Samuel J. May Hall	Central Connecticut State University	Building No. 9, Residence	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-15	New Britain	Hartford	Robert E. Sheridan Hall	Central Connecticut State University	Building No. 14, Residence	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-7	New Britain	Hartford	Harrison J. Kaiser Hall	Central Connecticut State University	Building No. 7, Sports/Gymnasium	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				State University																															
7802-17	New Britain	Hartford	Thomas A. Gallaudet Hall	Central Connecticut State University	Building No. 16, Residence	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3		0	
7802-21	New Britain	Hartford	Robert Vance Hall	Central Connecticut State University	Building No. 20, Residence	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-33	New Britain	Hartford	Student Center Parking Garage	Central Connecticut State University	Building No. 33, Garage	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-35	New Britain	Hartford	Kaiser Hall Annex	Central Connecticut State University	Building No. 35, Sports/Gymnasium	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
7802-14	New Britain	Hartford	Student Center	Central Connecticut State University	Building No. 13, Education	CSU	0	0						29.28864861	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
(none)	New Britain	Hartford	Shed	Central Connecticut State University	Police Department	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
(none)	New Britain	Hartford	Balf-Savin Field/Bottalico Baseball	Central Connecticut State University	Building No. 42, Dugout	CSU	0	0						29.24735451	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
(none)	New Britain	Hartford	Balf-Savin Field/Bottalico Baseball	Central Connecticut State University	Building No. 42, Dugout	CSU	0	0						29.25514793	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0
(none)	New Britain	Hartford	Public Safety Building	Central Connecticut State University	Police Department	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7802-7109	New Britain	Hartford	Public Safety Building	Central Connecticut State University	Police Department	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					3	0	
7802-7108	New Britain	Hartford	Chemical Storage Building	Central Connecticut State University	Building No. 77, Storage	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3	0
7802-7107	New Britain	Hartford	Athletic Support Facility	Central Connecticut State University	Building No. 75, Sports/Gymnasium	CSU	0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3	0
(none)	New Britain	Hartford	Newman House	Central Connecticut State University	Not Specified		0	0						29.31559181	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3	0
7802-4	New Britain	Hartford	Marcus White Annex	Not Specified	Not Specified		0	0						29.31630898	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0						3	0
7802-7115	New Britain	Hartford	East Hall Storage Shed	Not Specified	Not Specified		0	0						29.28500748	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	11045411.1		0						3	0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Concession Building	CSU	0	0						26.03784561	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
7804-34	New Haven	New Haven	University Police and Granoff Student Health Center	Southern Connecticut State University	Building No. 28, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
7804-4871	New Haven	New Haven	Temporary Building TE4	Southern Connecticut State University	Building No. 29, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Guard Shack	CSU	0	0						26.03784561	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7804-3	New Haven	New Haven	Temporary Building TE5	Southern Connecticut State University	Building No. 29, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3	0	
7804-13	New Haven	New Haven	Hickerson Hall	Southern Connecticut State University	Building No. 25, Residence	CSU	0	0						26.06728554	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
(none)	New Haven	New Haven	Wintergreen Building	Southern Connecticut State University	Building No. 32, Education	CSU	0	0						26.03784561	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Guard Shack	CSU	0	0						26.03784561	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
7804-16	New Haven	New Haven	Moore Fieldhouse	Southern Connecticut State University	Building No. 31, Sports/Gymnasium	CSU	0	0						26.03784561	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
7804-7114	New Haven	New Haven	Energy Center	Southern Connecticut State University	Building No. 30, Other	CSU	0	0						26.03784561	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
7804-7105	New Haven	New Haven	Temporary Building TE6	Southern Connecticut State University	Building No. 29, Office	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0
7804-12	New Haven	New Haven	Neff Hall	Southern Connecticut State University	Building No.26, Residence	CSU	0	0						26.06728554	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
7804-7115	New Haven	New Haven	West Campus Residence Complex	Southern Connecticut State University	Building No. 27, Residence	CSU	0	0						26.06728554	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29							3		0	
7804-7116	New Haven	New Haven	Parking Garage (West Campus)	Southern Connecticut State University	Garage	CSU	0	0						26.07032967	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
7804-2	New Haven	New Haven	Chase Hall	Southern Connecticut State University	Building No. 24, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
7804-4865	New Haven	New Haven	Wilkinson Hall	Southern Connecticut State University	Building No. 23, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
7804-11	New Haven	New Haven	Farnham Hall	Southern Connecticut State University	Building No. 22, Residence	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.06484413	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
7804-22	New Haven	New Haven	Lyman Center	Southern Connecticut State University	Building No. 12, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Softball Field Structure	CSU	0	0						26.03919029	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0
7804-10	New Haven	New Haven	Pelz Gymnasium	Southern Connecticut State University	Building No. 4, Sports/Gymnasium	CSU	0	0						26.03919029	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29								3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				ticut State University																															
7804-20	New Haven	New Haven	Davis Hall	Southern Connecticut State University	Building No. 3, Education	CSU	0	0						26.03919029	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0	
7804-7118	New Haven	New Haven	Nursing Classroom Building	Southern Connecticut State University	Building No. 2, Education	CSU	0	0						26.03919029	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
7804-27	New Haven	New Haven	Buley Library	Southern Connecticut State University	Building No. 11, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
7804-24	New Haven	New Haven	Student Center	Southern Connecticut State University	Building No. 9, Education	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
7804-7119	New Haven	New Haven	Bookstore	Southern Connecticut State University	Education	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
7804-28	New Haven	New Haven	Earl Hall	Southern Connecticut State University	Building No. 13, Education	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
7804-29	New Haven	New Haven	Seabury Hall	Southern Connecticut State University	Building No. 8, Education	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
7804-25	New Haven	New Haven	Jennings Hall	Southern Connecticut	Building No. 6, Education	CSU	0	0						26.03919029	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				State University																														
(none)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Green House	CSU	0	0						26.039 19029	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
7804-7104	New Haven	New Haven	Parking Garage (Fitch Street)	Southern Connecticut State University	Garage	CSU	0	0						26.039 19029	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
7804-7113	New Haven	New Haven	Temporary Building TE7	Southern Connecticut State University	Building No. 5, Temporary IT Building	CSU	0	0						26.039 19029	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
7804-7117	New Haven	New Haven	Michael J. Adanti Student Center	Southern Connecticut State University	Building No. 14, Education	CSU	0	0						26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
7804-27	New Haven	New Haven	Buley Library (addition)	Southern Connecticut State University	Education	CSU	0	0						26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
7804-19	New Haven	New Haven	Engleman Hall	Southern Connecticut State University	Building No. 10, Education	CSU	0	0						26.039 86168	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	CERAMIC OR GLASS BLOWING?	CSU	0	0						26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	Garage CERAMIC OR GLASS BLOWING?	CSU	0	0						26.037 79411	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				University																															
7804-7103	New Haven	New Haven	Plant Maintenance Warehouse #6	Southern Connecticut State University	Maintenance/Repair Shop (demolished)	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0	
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	(demolished)	CSU	0	0						26.03919029	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	(demolished)	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	(demolished)	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	(demolished)	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	(demolished)	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0
(unknown)	New Haven	New Haven	Not Specified	Southern Connecticut State University	(demolished)	CSU	0	0						26.03779411	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7804-26	New Haven	New Haven	Morrill Hall	Southern Connecticut University	Building No. 7, Education	CSU	0	0						26.03986168	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0381546	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0381546	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0381546	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0381546	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0337944	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.03857422	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
4400-339	New Haven	New Haven	Not Specified	Connecticut Mental Health Center	Hospital	DMHAS	0	0						26.01766777	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
(none)	New Haven	New Haven	Not Specified	Connecticut Mental Health Center	Shed	DMHAS	0	0						26.01766777	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.01766777	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.03132439	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.03857422	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.02459145	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		4
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.0007534	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					3		3
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.9847908	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	4778126.496		0					3		3
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						28.97018814	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
5000-131	Newington	Hartford	Region 1 Office & Garage	Department of Transportation	Not Specified	DOT	0	0						29.21148109	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0	
5000-98	Newington	Hartford	Storage Garage	Department of Transportation	Not Specified	DOT	0	0						29.26296234	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
5000-178	Newington	Hartford	Training Center	DOT Headquarters	Not Specified	DOT	0	0						29.35288048	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
5000-23	Newington	Hartford	Information Systems	DOT Headquarters	Not Specified	DOT	0	0						29.35288048	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
5000-4252	Newington	Hartford	Administration Building	DOT Headquarters	Not Specified	DOT	0	0						29.35288048	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
5000-4253	Newington	Hartford	Motor Pool Office	DOT Headquarters	Not Specified	DOT	0	0						29.38872528	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
5000-4254	Newington	Hartford	P&F Maintenance Garage	DOT Headquarters	Not Specified	DOT	0	0						29.37971115	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
5000-4209	Newington	Hartford	Central Files	Not Specified	Not Specified		0	0						29.38872528	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.39502907	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
1326-7103	Newington	Hartford	Chief State Attorney's Office	Not Specified	Not Specified		0	0						29.38872528	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.3544693	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
4122-532241	Newington	Hartford	395 Church Street	Not Specified	Not Specified		0	0						29.48909569	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
4122-134122	Newington	Hartford	85 Mountain Road	Hartford Regional Center	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
4122-154122	Newington	Hartford	87 Mountain Road	Hartford Regional Center	Not Specified		0	0						29.03016663	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0
4122-14122	Newington	Hartford	DMR No. Central Newington office	Hartford Regional Center	Not Specified		0	0						29.03016663	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0						3		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.03016663	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-104122	Newington	Hartford	77 Mountain Road	Hartford Regional Center	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-124122	Newington	Hartford	81 Mountain Road	Hartford Regional Center	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.10727882	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.0852108	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.10727882	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.21148109	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-114122	Newington	Hartford	79 Mountain Road	Not Specified	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-144122	Newington	Hartford	83 Mountain Road	Not Specified	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-241229	Newington	Hartford	Storage Building	Not Specified	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-541229	Newington	Hartford	Green House	Not Specified	Not Specified		0	0						29.05480576	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-194122	Newington	Hartford	242 Mountain Road	Not Specified	Not Specified		0	0						28.97490883	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	4497060.232		0					3		0
4122-314122	Newington	Hartford	318 Mountain Road	Not Specified	Not Specified		0	0						28.91952324	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	1972394.838		0					3		0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						26.93600082	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193		0					3		0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						26.93600082	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193		0					3		0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193		0					3		0
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.07357407	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	621304.3741		0					3		0
	North	New	Not Specified	Not	Not Specified		0	0						26.140	88593.	X	26578	X	0.2539	67499	X	0.0222	59062.	0.2207	58678		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Haven	Haven		Specified										36369	40149		02.045		68254	7.3447		22222	26766	79221	7.4644									
	North Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.140 36369	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					3		0
	North Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.140 36369	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					3		0
	North Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.140 36369	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					3		0
	North Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.140 36369	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	15927 08.832		0					3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DOT	0	0						17.171 39816	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		0
	Norwalk	Fairfield	Not Specified	Courthouse	Not Specified	Judicial Department	0	0						17.381 57845	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		0
7701-7	Norwalk	Fairfield	West Campus	Norwalk Community College	Education	Board of Trustees-CT Community Technical Colleges	0	0						16.130 8136	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						16.088 9225	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						16.130 8136	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DDS	0	0						18.445 57381	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DOT	0	0						17.214 46991	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					3		4
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DOT	0	0						17.214 46991	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	86095 03.47		0					3		4
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.41152763	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0					3		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.38150978	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	547339.5677		0						3		0
2101-10	Old Saybrook	Middlesex	Old Saybrook Branch	Not Specified	Not Specified		0	0						24.14523315	75937.20128	X	2278116.038	X	0.492063492	1120977.733	X	0.007407407	16874.93362	0.155844156	1183436.903		0						3		0
	Oxford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.29380608	253124.0043	X	7593720.128	X	0.253968254	1928563.842	X	0.022222222	168749.3362	0.220779221	2430976.638		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.78855896	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.15201187	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						3		0
	Putnam	Windham	Not Specified	Not Specified	Not Specified		0	0						30.08966827	126562.0021	X	3796860.064	X	0.047619048	180802.8602	X	0.022222222	84374.66809	0.214285714	6102096.531		0						3		0
5000-562	Rocky Hill	Hartford	Bus Shelter	Not Specified	Not Specified		0	0						29.17920303	949215.016	X	28476450.48	X	0.285714286	8136128.709	X	0.014814815	421873.3404	0.207792208	5917184.515		0						3		0
1312-18	Rocky Hill	Hartford	Employer Support of the Guard and Reserve	Veteran's Home &	Building No. 18	DVA	0	0						29.30882645	949215.016	X	28476450.48	X	0.285714286	8136128.709	X	0.014814815	421873.3404	0.207792208	5917184.515		0						3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Hospital																															
(none)	Rocky Hill	Hartford	Not Specified	Veteran's Home & Hospital	Incinerator Dumpster	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
1312-35	Rocky Hill	Hartford	Incinerator	Veteran's Home & Hospital	Building No. 61	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
1312-20	Rocky Hill	Hartford	Maintenance Garage	Veteran's Home & Hospital	Building No. 20	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
1312-8	Rocky Hill	Hartford	Physical Plant	Veteran's Home & Hospital	Building No. 8	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
1312-7107	Rocky Hill	Hartford	Mechanical Building	Not Specified	Not Specified		0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
5000-184	Rocky Hill	Hartford	Storage Warehouse & Office PR	Department of Transportation	Not Specified	DOT	0	0						29.569 11087	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
5000-109	Rocky Hill	Hartford	Stores Equipment Storage	Department of Transportation	Not Specified	DOT	0	0						29.569 11087	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
5000-187	Rocky Hill	Hartford	Stores Central Storage Warehouse	Department of Transportation	Not Specified	DOT	0	0						29.569 11087	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
5000-109	Rocky Hill	Hartford	Storage Warehouse & Office PR	Department of Transportation	Not Specified	DOT	0	0						29.616 13274	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
5000-791	Rocky Hill	Hartford	Salt Shed	Department of Transportation	Not Specified	DOT	0	0						29.616 13274	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	
5000-7114	Rocky Hill	Hartford	Storage Container	Not Specified	Not Specified		0	0						29.569 11087	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
5000-7113	Rocky Hill	Hartford	Storage Container	Not Specified	Not Specified		0	0						29.569 11087	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0
5000-7224	Rocky Hill	Hartford	Storage Container	Not Specified	Not Specified		0	0						29.616 13274	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0
5000-7227	Rocky Hill	Hartford	Storage Container	Not Specified	Not Specified		0	0						29.616 13274	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0
5000-174	Rocky Hill	Hartford	Sign Shop	Department of Transportation	Not Specified	DOT	0	0						29.592 22984	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					3		0
5000-169	Rocky Hill	Hartford	District I Office Building	Department of Transportation	Not Specified	DOT	0	0						29.592 22984	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	22879 78.013		0					3		0
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0						26.340 38162	36702 9.8062	X	11010 894.19	X	0.1587 30159	17477 60.982	X	0.0370 37037	40781 0.8958	0.2077 92208	10729 827.92		0					3		0
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.293 80608	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.134 96399	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.134 96399	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0						24.923 20824	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-106	Southbury	New Haven	Prefab Building #1	Southbury Training School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-107	Southbury	New Haven	Prefab Building #2	Southbury Training School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4104-105	Southbury	New Haven	Power House	Southbury Training School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-87	Southbury	New Haven	Personnel Village 16	Southbury Training School	Not Specified	DDS	0	0						22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				School																														
4101-88	Southbury	New Haven	Personnel Village 17	Southbury Training School	Not Specified	DDS	0	0						22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-89	Southbury	New Haven	Personnel Village 18	Southbury Training School	Not Specified	DDS	0	0						23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-90	Southbury	New Haven	Personnel Village 19	Southbury Training School	Not Specified	DDS	0	0						23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-94	Southbury	New Haven	Personnel Village 23	Southbury Training School	Not Specified	DDS	0	0						22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-83	Southbury	New Haven	Personnel Village 12	Southbury Training School	Not Specified	DDS	0	0						22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-84	Southbury	New Haven	Personnel Village 13	Southbury Training School	Not Specified	DDS	0	0						22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-85	Southbury	New Haven	Personnel Village 14	Southbury Training School	Not Specified	DDS	0	0						22.865 4232	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-93	Southbury	New Haven	Personnel Village 22	Southbury Training School	Not Specified	DDS	0	0						23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-92	Southbury	New Haven	Personnel Village 21	Southbury Training School	Not Specified	DDS	0	0						23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-91	Southbury	New Haven	Personnel Village 20	Southbury Training School	Not Specified	DDS	0	0						23.047 25266	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0
4101-55	Southbury	New Haven	Gate House	Southbury Training School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					3		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4101-19	Southbury	New Haven	Cottage 8	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-22	Southbury	New Haven	Cottage 11	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-23	Southbury	New Haven	Cottage 12	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-12	Southbury	New Haven	Cottage 2	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-17	Southbury	New Haven	Cottage 7	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-18	Southbury	New Haven	Cottage 7a	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-60	Southbury	New Haven	Housekeeping Store	Southbury Training School	Not Specified	DDS	0	0						22.96100235	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-122	Southbury	New Haven	SP Pump House	Southbury Training School	Not Specified	DDS	0	0						23.04725266	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-61	Southbury	New Haven	Incinerator	Southbury Training School	Not Specified	DDS	0	0						23.15292358	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-46	Southbury	New Haven	Cottage 41	Southbury Training School	Not Specified	DDS	0	0						23.15292358	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-45	Southbury	New Haven	Cottage 40	Southbury Training School	Not Specified	DDS	0	0						23.15292358	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					3	0	
4101-	South	New	Drying Building	Southb	Not Specified	DDS	0	0						23.152	17212	X	51637	X	0.2539	13114	X	0.0222	11474	0.2207	11400		0					3	0	

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
120	bury	Have n		ury Trainin g School										92358	43.229		296.87		68254	234.13		22222	95.486	79221	442.17									
4101-119	South bury	New Have n	SP Digester Bldg	Southb ury Trainin g School	Not Specified	DDS	0	0						23.152 92358	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17							3		0
4101-21	South bury	New Have n	Cottage 10	Southb ury Trainin g School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17							3		0
4101-14	South bury	New Have n	Cottage 4	Southb ury Trainin g School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17							3		0
4101-20	South bury	New Have n	Cottage 9	Southb ury Trainin g School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17							3		0
4101-74	South bury	New Have n	P1- Crawford Hall	Southb ury Trainin g School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17							3		0
4101-7	South bury	New Have n	Administration Building	Southb ury Trainin g School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	83826 7.8063							3		0
5000-142	Southi ngton	Hartf ord	Maintenance Service Center Garage	Not Specifie d	Not Specified		0	0						28.633 28934	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354							3		0
5000-683	Southi ngton	Hartf ord	Salt Shed	Not Specifie d	Not Specified		0	0						28.633 28934	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354							3		0
5000-775	Southi ngton	Hartf ord	Mobile Office Trailer	Not Specifie d	Not Specified		0	0						28.633 28934	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354							3		0
	Staffor d	Tolla nd	Not Specified	Furnac e Brook-Middle River Flood Control Site 5	Shed	DEEP	0	0						29.141 5329	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	94674 9.5225							3		0
	Stratfo rd	Fairfi eld	Not Specified	Not Specifie d	Not Specified		0	0						25.000 83542	15187 4.4026	X	45562 32.077	X	0.2857 14286	13017 80.593	X	0.0148 14815	67499. 73447	0.2337 66234	10650 93.213							3		4
	Stratfo rd	Fairfi eld	Not Specified	Not Specifie d	Not Specified		0	0						25.000 83542	15187 4.4026	X	45562 32.077	X	0.2857 14286	13017 80.593	X	0.0148 14815	67499. 73447	0.2337 66234	10650 93.213							3		4

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.000 83542	15187 4.4026	X	45562 32.077	X	0.2857 14286	13017 80.593	X	0.0148 14815	67499. 73447	0.2337 66234	10650 93.213		0					3		4
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.000 83542	15187 4.4026	X	45562 32.077	X	0.2857 14286	13017 80.593	X	0.0148 14815	67499. 73447	0.2337 66234	29290 06.335		0					3		4
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.450 17242	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.450 17242	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.875 52261	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.084 63478	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.546 80252	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.546 80252	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.546 80252	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.607 35512	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.607 35512	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.607 35512	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						18.607 35512	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					3		0
3100-482	Thompson	Windham	Bath House	Quaddick State Park	Not Specified	Department of Energy and Environmental Protection	0	0						32.123 76022	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					3		0
3100-2365	Vernon	Tolland	Cabin	Belding Wildlife Area	Not Specified	DEEP	0	0						24.004 93622	15187 4.4026	X	45562 32.077	X	0.1587 30159	72321 1.4408	X	0.0370 37037	16874 9.3362	0.2077 92208	58382 88.722		0					3		0
1326-500	Waterford	New London	Main Hospital Building	Seaside Region	Not Specified	DPW	0	0						19.287 4527	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
		on		al Center																														
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	547339.5677		0					3	0	
7301-364	West Hartford	Hartford	Landscape Garage - Gr Htfd	UCONN LAW SCHOOL	Not Specified	UCONN	0	0						28.5090332	75937.20128	X	2278116.038	X	0.285714286	650890.2967	X	0.014814815	33749.86724	0.207792208	473374.7612		0					3	0	
7301-361	West Hartford	Hartford	3201 Hartford Undergraduate Building	UCONN LAW SCHOOL	Not Specified	UCONN	0	0						28.5090332	75937.20128	X	2278116.038	X	0.285714286	650890.2967	X	0.014814815	33749.86724	0.207792208	473374.7612		0					3	0	
7301-362	West Hartford	Hartford	3202 School of Social Work	UCONN LAW SCHOOL	Not Specified	UCONN	0	0						28.5090332	75937.20128	X	2278116.038	X	0.285714286	650890.2967	X	0.014814815	33749.86724	0.207792208	473374.7612		0					3	0	
7301-7204	West Hartford	Hartford	3205 Computer Center and Classroom	UCONN LAW SCHOOL	Not Specified	UCONN	0	0						28.5090332	75937.20128	X	2278116.038	X	0.285714286	650890.2967	X	0.014814815	33749.86724	0.207792208	473374.7612		0					3	0	
7301-363	West Hartford	Hartford	3203 Hartford Campus H. Trecker Library	UCONN LAW SCHOOL	Not Specified	UCONN	0	0						28.56218338	75937.20128	X	2278116.038	X	0.285714286	650890.2967	X	0.014814815	33749.86724	0.207792208	1183436.903		0					3	0	
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.06453514	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0					3	3	
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.37026787	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1775155.355		0					3	2	
(none)	Wethersfield	Hartford	Not Specified	State Institute for the Blind	Not Specified	DPW	0	0						28.66644287	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3	0	
1320-8	Wethersfield	Hartford	State Surplus Warehouse	Office Building	Not Specified		0	0						28.39124107	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3	0	
1320-4	Wethersfield	Hartford	State Surplus Car Pool Garage	Office Building	Not Specified		0	0						28.39124107	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3	0	
2101-16	Wethersfield	Hartford	Shack (pump house)	Office Building	Not Specified		0	0						28.39124107	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3	0	
2101-15	Wethersfield	Hartford	Wethersfield Inspection Lane	Office Building	Not Specified		0	0						28.46668243	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0					3	0	
2101-14	Wethersfield	Hartford	Wethersfield Main Branch	Office Building	Not Specified		0	0						28.46668243	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	946749.5225		0					3	0	
	Willington	Tolland	Not Specified	I-84 Rest Area WB	Storage		0	0						22.90928268	151874.4026	X	4556232.077	X	0.158730159	723211.4408	X	0.037037037	168749.3362	0.207792208	946749.5225		0					3	0	
5000-	Willington	Tolland	Bus Shelter	Willington	Shelter	DOT	0	0						23.149	15187	X	45562	X	0.1587	72321	X	0.0370	16874	0.2077	11834		0					3	0	

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697	ton	nd		on I-84 Commuter Lot										15085	4.4026		32.077		30159	1.4408		37037	9.3362	92208	36.903									
	Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.49275398	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
5000-77	Windsor	Hartford	Maintenance Garage	Not Specified	Not Specified	DOT	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
5000-732	Windsor	Hartford	Salt Shed	Not Specified	Not Specified	DOT	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
	Windsor	Hartford	Not Specified	Not Specified	Not Specified	DOA	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
3601-12	Windsor	Hartford	Headhouse Greenhouse	Not Specified	Not Specified	DOA	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
3601-11	Windsor	Hartford	Valley Laboratory	Not Specified	Not Specified	DOA	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
3601-13	Windsor	Hartford	Pesticide Shed	Not Specified	Not Specified	DOA	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
	Windsor	Hartford	Not Specified	Not Specified	Not Specified	DOA	0	0						26.57485771	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
	Windsor	Hartford	Not Specified	Railroad ROW	Not Specified	DOT	0	0						26.2585907	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
	Windsor	Hartford	Not Specified	Railroad Row	Not Specified	DOT	0	0						26.2585907	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
	Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.98136902	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
1326-479	Windsor	Hartford	DEP	DEP Testing Labs	Not Specified	DEP	0	0						27.52086067	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903		0					3		0
4122-344122	Windsor	Hartford	265 Kennedy	Not Specified	Not Specified		0	0						26.04672432	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	12307743.79		0					3		0
2201-4758	Windsor Locks	Hartford	Aviation Battalion Headquarters	Not Specified	Not Specified	Military Department	0	0						23.50345421	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0
2201-90	Windsor Locks	Hartford	Ordinance Maint	Not Specified	Not Specified	Military Department	0	0						23.59924126	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0
2201-88	Windsor Locks	Hartford	Oms Shop	Not Specified	Not Specified	Military Department	0	0						23.59924126	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0
2201-89	Windsor Locks	Hartford	Mob Stock	Not Specified	Not Specified	Military Department	0	0						23.59924126	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0
2201-103	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.50345421	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0
2201-	Windsor	Hartford	Storage/Fitness	Not Specified	Not Specified	Military	0	0						23.503	19743	X	59231	X	0.2857	16923	X	0.0148	87749	0.2077	12307		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
108	or Locks	ord	Center/Frame Shop	Specified		Department								45421	67.233		017		14286	147.71		14815	6.5481	92208	743.79									
2201-85	Winds or Locks	Hartford	712th Armory	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-116	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-118	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-112	Winds or Locks	Hartford	Classroom Administrative	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-111	Winds or Locks	Hartford	Barracks	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-113	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.599 24126	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-91	Winds or Locks	Hartford	Wood Shop	Not Specified	Not Specified	Military Department	0	0						23.599 24126	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-126	Winds or Locks	Hartford	Storage Csd	Not Specified	Not Specified	Military Department	0	0						23.599 24126	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-99	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-120	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-121	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-100	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified	Military Department	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-101	Winds or Locks	Hartford	Warehouse-Csd	Not Specified	Not Specified		0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-102	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-104	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.599 24126	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-105	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.599 24126	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
2201-119	Winds or Locks	Hartford	Administration	Not Specified	Not Specified		0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Winds or Locks	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0						23.914 46877	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Department of Transportation	Not Specified	DOT	0	0						23.994 16924	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.047 17636	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.982 80144	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.982 80144	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.982 80144	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.867 88368	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or	Hartford	Not Specified	Bradley Interna	Not Specified	DOT	0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Locks			tional Airport																															
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.92284775	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.92284775	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.83821297	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.62608719	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.62608719	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.4114666	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.62608719	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.83821297	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.04717636	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.04717636	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.04717636	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.01016808	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.01016808	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.01016808	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	
	Winds	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.01016808	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0					3		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	or Locks	ord		Specified										16808	67.233		017		14286	147.71		14815	6.5481	92208	743.79									
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.100 06142	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.010 16808	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.838 21297	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.626 08719	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.047 17636	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.047 17636	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.982 80144	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.982 80144	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.635 82039	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.698 31848	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.546 08154	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.546 08154	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.241 17851	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.100 06142	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.100 06142	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.867 88368	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.867 88368	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.867 88368	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.867 88368	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0						3	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Locks			d																														
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.922 84775	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.096 34018	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.360 24475	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.360 24475	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.143 70728	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.096 34018	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.195 90187	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.195	19743	X	59231	X	0.2857	16923	X	0.0148	87749	0.2077	12307		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	or Locks	ord		Specified										90187	67.233		017		14286	147.71		14815	6.5481	92208	743.79									
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.360 24475	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.360 24475	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.838 21297	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.626 08719	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.626 08719	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.195 0798	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.195 0798	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.294 66629	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.503 45421	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						23.838 21297	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.047 17636	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Bradley International Airport	Not Specified	DOT	0	0						24.252 35748	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.195 0798	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.195 0798	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.411 4666	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.626 08719	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.626 08719	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.710 27946	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3	0	
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.710	19743	X	59231	X	0.2857	16923	X	0.0148	87749	0.2077	12307		0					3	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	or Locks	ord		Specified										27946	67.233		017		14286	147.71		14815	6.5481	92208	743.79									
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.710 27946	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.710 27946	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.710 27946	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.626 08719	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.914 46877	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.914 46877	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.914 46877	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.914 46877	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.914 46877	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79		0					3		0
	Winds or Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.047 17636	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	44970 60.232		0					3		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						28.956 80237	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	11834 36.903		0					2		0
	Winds or	Hartford	Not Specified	Not Specified	Not Specified	DOT	0	0						26.110 73685	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2077 92208	20512 90.632		0					2		0
	Cornwall	Litchfield	Not Specified	Not Specified	Not Specified		0	0						42.374 85123	32906 1.2055	X	98718 36.166	X	0.4920 63492	48575 70.177	X	0.0074 07407	73124. 71234	0.1558 44156	41420 2.9161		0					1		0
	Derby	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.065 73105	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	72929 29.915		0					1		0
	East Granby	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.818 48335	11010 89.419	X	33032 682.56	X	0.2857 14286	94379 09.302	X	0.0148 14815	48937 3.0749	0.2077 92208	6787.5 94597		0					1		0
2201-129	East Lyme	New London	Distingus Visitors Quarters	Camp Rell	Military		10888 4.33	4490						19.704 80347	1088.8 433	X	32665. 299	X	0.0634 92063	2073.9 87238	X	0.0518 51852	1693.7 56244	0.2402 5974	5046.8 38442		0					1		0
2201-161	East Lyme	New London	Senior Officers Quarters	Camp Rell	Military		70019. 2	1048						19.704 80347	700.19 2	X	21005. 76	X	0.0634 92063	1333.6 99048	X	0.0518 51852	1089.1 87556	0.2402 5974	12514. 64887		0					1		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
2201-162	East Lyme	New London	Point	Camp Rell	Military		173626.66	0						19.70480347	1736.2666	X	52087.998	X	0.063492063	3307.174476	X	0.051851852	2700.859156	0.24025974	5473395.677		0					1		4
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.95446205	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	1025645.316		0					1		0
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.45341873	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	1185902.397		0					1		0
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.45341873	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	1185902.397		0					1		0
	Franklin	New London	Not Specified	Not Specified	Not Specified		0	0						25.45341873	164530.6028	X	4935918.083	X	0.063492063	313391.6243	X	0.051851852	255936.4932	0.24025974	10673121.57		0					1		0
(none)	Hartford	Hartford	Not Specified	Governor's Residence	Not Specified	DPW	0	0						28.29894638	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	1420124.284		0					1		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.71207809	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	31183562.4		0					1		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.58071709	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	5049330.786		0					1		0
(none)	New Britain	Hartford	Softball Field	Central Connecticut State University	Building No. 64, Dugout	CSU	0	0						29.28018379	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					1		0
(none)	New Britain	Hartford	Softball Field	Central Connecticut State University	Building No. 64, Dugout	CSU	0	0						29.28018379	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	5049330.786		0					1		0
(none)	New Britain	Hartford	Balf-Savin Field/Bottalico Baseball	Central Connecticut State University	Shed	CSU	0	0						29.24735451	809996.8137	X	24299904.41	X	0.285714286	6942829.831	X	0.014814815	359998.5838	0.207792208	1499020.077		0					1		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						16.54471207	240467.8041	X	7214034.122	X	0.285714286	2061152.606	X	0.014814815	106874.5796	0.233766234	1775155.355		0					1		0
	Oxford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.29380608	253124.0043	X	7593720.128	X	0.253968254	1928563.842	X	0.022222222	168749.3362	0.220779221	2430976.638		0					1		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.152	36702	X	11010	X	0.0476	52432	X	0.0222	24468	0.2142	24408		0					1		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	eld	ham		Specified										01187	9.8062		894.19		19048	8.2946		22222	6.5375	85714	3.8613										
	Preston	New London	Not Specified	Not Specified	Not Specified		0	0						20.93949127	37968.60064	X	1139058.019	X	0.063492063	72321.14408	X	0.051851852	59062.26766	0.24025974	273669.7838		0					1		0	
	Preston	New London	Not Specified	Not Specified	Not Specified		0	0						21.15460014	37968.60064	X	1139058.019	X	0.063492063	72321.14408	X	0.051851852	59062.26766	0.24025974	912232.6128		0						1		0
3100-623	Simsbury	Hartford	Rangers House	Not Specified	Not Specified		0	0						29.26893616	126562.0021	X	3796860.064	X	0.285714286	1084817.161	X	0.014814815	56249.77873	0.207792208	788957.9354		0						1		0
3100-627	Simsbury	Hartford	Headquarters Shed	Not Specified	Not Specified		0	0						29.26893616	126562.0021	X	3796860.064	X	0.285714286	1084817.161	X	0.014814815	56249.77873	0.207792208	788957.9354		0						1		0
3100-628	Simsbury	Hartford	Garage	Not Specified	Not Specified		0	0						29.26893616	126562.0021	X	3796860.064	X	0.285714286	1084817.161	X	0.014814815	56249.77873	0.207792208	2287978.013		0						1		0
8000-12	Somers	Tolland	Well Pump House 4	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	10729827.92		0						1		0
4101-76	Southbury	New Haven	P4-Thompson Hall	Southbury Training School	Not Specified	DDS	0	0						23.15292358	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0						1		0
4101-86	Southbury	New Haven	Personnel Village 15	Southbury Training School	Not Specified	DDS	0	0						22.8654232	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	1257401.71		0						1		0
4122-284122	Windsor	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.53615761	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	12307743.79		0						1		0
	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.19590187	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79		0						1		0
	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.63582039	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	41578083.19		0						1		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						20.30421066	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	2287978.013		0		Ha	0.75	200094525.4	0		0	
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.57067299	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0		Ha	0.45	11010894.19	0		0	
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.57067299	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0		Ha	0.45	11010894.19	0		0	
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.86011124	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0		Ha	0.45	11010894.19	0		0	
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.860	36702	X	11010	X	0.0476	52432	X	0.0222	24468	0.2142	23594		0		Ha	0.	11010	0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	eld	ham		Specified										11124	9.8062		894.19		19048	8.2946		22222	6.5375	85714	77.326				zus	45	894.19				
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.860 11124	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0		Ha zus	45	11010 894.19	0			0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.860 11124	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0		Ha zus	45	11010 894.19	0			0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						31.294 43359	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0		Ha zus	45	11010 894.19	0			0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.860 11124	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0		Ha zus	45	11010 894.19	0			0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.860 11124	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	23594 77.326		0		Ha zus	45	11010 894.19	0			0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.860 11124	36702 9.8062	X	11010 894.19	X	0.0476 19048	52432 8.2946	X	0.0222 22222	24468 6.5375	0.2142 85714	97633 5.445		0		Ha zus	45	11010 894.19	0			0
	Vernon	Tolland	Not Specified	Belding Wildlife Area	Not Specified	DEEP	0	0						24.004 93622	15187 4.4026	X	45562 32.077	X	0.1587 30159	72321 1.4408	X	0.0370 37037	16874 9.3362	0.2077 92208	52662. 0399		0		Ha zus	75	45562 32.077	0			0
5000-158	Willington	Tolland	Visitors Center	I-84 Rest Area WB	Rest Area/Information/Office Building		84478 6.89	12881						22.909 28268	8447.8 689	X	25343 6.067	X	0.1587 30159	40227. 94714	X	0.0370 37037	9386.5 21	0.2077 92208	20512 90.632		0		Ha zus	75	25343 6.067	0			0
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.955 19638	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961	A E	0		DFI RM	75	98718 36.166	0			3
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.955 19638	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	88757. 76773	A E	0		DFI RM	75	98718 36.166	0			3
3100-2072	Deep River	Middlesex	Depot-Deep River	Not Specified	Not Specified		0	0						25.251 65749	12656. 20021	X	37968 6.0064	X	0.4920 63492	18682 9.6222	X	0.0074 07407	2812.4 88936	0.1558 44156	47337 4.7612	A E	0		DFI RM	75	37968 6.0064	0			3
3100-6842	East Hampton	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.835 59036	10124 9.6017	X	30374 88.051	X	0.4920 63492	14946 36.978	X	0.0074 07407	22499. 91149	0.1558 44156	10059 21.368		0		DFI RM	75	30374 88.051	0			0
	East Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.996 35124	21515 5.4036	X	64546 62.109	X	0.2539 68254	16392 79.266	X	0.0222 22222	14343 6.9358	0.2207 79221	15927 088.32		0		DFI RM	75	64546 62.109	0			4
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64	A E	0		DFI RM	43	72140 341.22	0			2
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64	A E	0		DFI RM	43	72140 341.22	0			2
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64	A E	0		DFI RM	43	72140 341.22	0			2
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.687 51526	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	54733 95.677	A E	0		DFI RM	43	72140 341.22	0			2
	Enfield	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.856 03333	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	44970 60.232		0		DFI RM	48	22781 160.38	0			0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category		
				Not Specified																																5
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	V	0		DFIRM	4.3	21642102.37	0			2	
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	V	0		DFIRM	4.3	21642102.37	0			2	
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	0			2	
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03145599	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	0			3	
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03145599	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	A	0		DFIRM	4.3	21642102.37	0			2	
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03145599	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893	V	0		DFIRM	4.3	21642102.37	0			1	
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	2280581.532	V	0		DFIRM	4.3	21642102.37	0			3	
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.76136398	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	1479296.129		0		DFIRM	5.7	9492150.16	0			0	
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.76136398	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	1479296.129		0		DFIRM	5.7	9492150.16	0			0	
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.76136398	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	2366873.806		0		DFIRM	5.7	9492150.16	0			0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.01631546	506248.0085	X	15187440.26	X	0.253968254	3857127.684	X	0.022222222	337498.6724	0.220779221	9807733.334		0		DFIRM	5.7	15187440.26	0			0	
(none)	Hartford	Hartford	Not Specified	CT Community Colleges System Office	Shed	Board of Trustees- CT Community Technical Colleges	0	0						28.08599854	1480775.425	X	44423262.75	X	0.285714286	12692360.79	X	0.014814815	658122.4111	0.207792208	1420124.284		0		DFIRM	4.85	44423262.75	0			0	
3100-1781	Killingworth	Middlesex	Barn	Not Specified	Not Specified		0	0						26.58926773	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0		DFIRM	5.7	6834348.115	0			0	
3100-2130	Killingworth	Middlesex	Mitchell House	Not Specified	Not Specified		0	0						26.58926773	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	1065093.213		0		DFIRM	5.7	6834348.115	0			0	
3100-1782	Killingworth	Middlesex	Woodshop	Not Specified	Not Specified		0	0						26.58926773	227811.6038	X	6834348.115	X	0.492063492	3362933.2	X	0.007407407	50624.80085	0.155844156	2603561.187		0		DFIRM	5.7	6834348.115	0			0	
	Madison	New Haven	Not Specified	Hammasset Beach	Not Specified		0	0						25.20949745	556872.8094	X	16706184.28	X	0.253968254	4242840.453	X	0.022222222	371248.5396	0.220779221	3688378.348	A	0		DFIRM	5.7	16706184.28	0			2	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				State Park																														
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.170 62759	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348	V E	0		DFI RM	5. 7	16706 184.28	0		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.091 79497	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348	V E	0		DFI RM	5. 7	16706 184.28	0		2
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.091 79497	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	67061 4.2451	V E	0		DFI RM	5. 7	16706 184.28	0		2
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.112 50305	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451	A E	0		DFI RM	5. 7	30374 88.051	0		2
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.112 50305	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451	A E	0		DFI RM	5. 7	30374 88.051	0		2
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.055 29785	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451	A E	0		DFI RM	5. 7	30374 88.051	0		2
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.055 29785	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	30374 88.051	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.009 38797	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.009 38797	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.009 38797	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.009 38797	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.009 38797	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.009 38797	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.994 43245	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.994 43245	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.966 04156	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.966 04156	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29	A E	0		DFI RM	5. 7	53156 040.9	0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.854 56085	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	58678 7.4644	A E	0		DFI RM	5. 7	53156 040.9	0		2

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	New London	New London	Not Specified	Not Specified	Not Specified		0	0						19.04088974	88593.40149	X	2657802.045	X	0.063492063	168749.3362	X	0.051851852	137811.9579	0.24025974	638562.829	A	0		DFIRM	4.3	2657802.045	0		2
	New London	New London	Not Specified	Not Specified	Not Specified		0	0						19.04088974	88593.40149	X	2657802.045	X	0.063492063	168749.3362	X	0.051851852	137811.9579	0.24025974	638562.829	A	0		DFIRM	4.3	2657802.045	0		2
	New London	New London	Not Specified	Not Specified	Not Specified		0	0						19.03728485	88593.40149	X	2657802.045	X	0.063492063	168749.3362	X	0.051851852	137811.9579	0.24025974	638562.829	A	0		DFIRM	4.3	2657802.045	0		2
	New London	New London	Not Specified	Not Specified	Not Specified		0	0						19.06239891	88593.40149	X	2657802.045	X	0.063492063	168749.3362	X	0.051851852	137811.9579	0.24025974	638562.829	A	0		DFIRM	4.3	2657802.045	0		2
	New London	New London	Not Specified	Not Specified	Not Specified		0	0						19.03728485	88593.40149	X	2657802.045	X	0.063492063	168749.3362	X	0.051851852	137811.9579	0.24025974	638562.829	A	0		DFIRM	4.3	2657802.045	0		2
	New London	New London	Not Specified	Not Specified	Not Specified		0	0						19.06239891	88593.40149	X	2657802.045	X	0.063492063	168749.3362	X	0.051851852	137811.9579	0.24025974	6750521.335	A	0		DFIRM	4.3	2657802.045	0		2
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.18946648	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	V	0		DFIRM	4.3	28096764.47	0		4
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.18946648	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	V	0		DFIRM	4.3	28096764.47	0		1
1326-501	Waterford	New London	Municipal Wastewater Pump Station	Seaside Regional Center	Sewage Pumping Station	DPW	0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	A	0		DFIRM	4.3	28096764.47	0		4
1326-504	Waterford	New London	Former Private Wastewater Pump Station	Seaside Regional Center	Pump House No. 1	DPW	0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	A	0		DFIRM	4.3	28096764.47	0		4
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	A	0		DFIRM	4.3	28096764.47	0		4
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	A	0		DFIRM	4.3	28096764.47	0		4
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.18946648	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	V	0		DFIRM	4.3	28096764.47	0		2
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.18946648	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335	V	0		DFIRM	4.3	28096764.47	0		2
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.18946648	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	182446.5226	V	0		DFIRM	4.3	28096764.47	0		2
	West Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.74752808	25312.40043	X	759372.0128	X	0.253968254	192856.3842	X	0.022222222	16874.93362	0.220779221	1257401.71	A	0		DFIRM	5.7	759372.0128	0		2
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.6678524	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516	V	0		DFIRM	5.7	5695290.096	0		2

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.667 8524	18984 3.0032	X	56952 90.096	X	0.2857 14286	16272 25.742	X	0.0148 14815	84374. 66809	0.2337 66234	13846 211.77	V E	0		DFI RM	5. 7 5	56952 90.096	0		2
	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.051 8322	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	12307 743.79	0		DFI RM	4. 8 5	59231 017	0		0	
	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						25.051 8322	19743 67.233	X	59231 017	X	0.2857 14286	16923 147.71	X	0.0148 14815	87749 6.5481	0.2077 92208	39447 8.9677	0		DFI RM	4. 8 5	59231 017	0		0	
	Ashford	Windham	Not Specified	Not Specified	Not Specified		0	0						29.242 51556	63281. 00107	X	18984 30.032	X	0.0476 19048	90401. 4301	X	0.0222 22222	42187. 33404	0.2142 85714	40680 6.4354	0					0		0	
	Ashford	Windham	Not Specified	Not Specified	Not Specified		0	0						29.242 51556	63281. 00107	X	18984 30.032	X	0.0476 19048	90401. 4301	X	0.0222 22222	42187. 33404	0.2142 85714	40680 6.4354	0					0		0	
	Ashford	Windham	Not Specified	Not Specified	Not Specified		0	0						29.242 51556	63281. 00107	X	18984 30.032	X	0.0476 19048	90401. 4301	X	0.0222 22222	42187. 33404	0.2142 85714	40680 6.4354	0					0		0	
4122-274122	Bloomfield	Hartford	26 Marguerite Avenue	Not Specified	Not Specified		0	0						27.624 62616	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354	0					0		0	
3100-448	Bloomfield	Hartford	Big Barn Storage	Not Specified	Not Specified		0	0						27.864 21204	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354	0					0		0	
3100-447	Bloomfield	Hartford	Open Shelter	Not Specified	Not Specified		0	0						27.704 92172	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354	0					0		0	
3100-445	Bloomfield	Hartford	Office	Not Specified	Not Specified		0	0						27.864 21204	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354	0					0		0	
3100-443	Bloomfield	Hartford	Flush Toilet	Not Specified	Not Specified		0	0						27.704 92172	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354	0					0		0	
3100-446	Bloomfield	Hartford	Pole Barn	Not Specified	Not Specified		0	0						27.864 21204	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	78895 7.9354	0					0		0	
3100-444	Bloomfield	Hartford	Pump House	Not Specified	Not Specified		0	0						27.864 21204	12656 2.0021	X	37968 60.064	X	0.2857 14286	10848 17.161	X	0.0148 14815	56249. 77873	0.2077 92208	15779 1.5871	0					0		0	
	Bozrah	New London	Not Specified	Not Specified	Not Specified		0	0						24.071 52748	25312. 40043	X	75937 2.0128	X	0.0634 92063	48214. 09605	X	0.0518 51852	39374. 84511	0.2402 5974	23718 04.793	0					0		0	
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.928 90167	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961	0					0		0	
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.928 90167	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961	0					0		0	
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.928 90167	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961	0					0		0	
	Bridgeport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.899 29771	32906 1.2055	X	98718 36.166	X	0.2857 14286	28205 24.619	X	0.0148 14815	14624 9.4247	0.2337 66234	23077 01.961	0					0		4	
	Bridge	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.899	32906	X	98718	X	0.2857	28205	X	0.0148	14624	0.2337	23077	0					0		4	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	port	eld		Specified										29771	1.2055		36.166		14286	24.619		14815	9.4247	66234	01.961									
	Bridge port	Fairfield	Not Specified	DMR SW Regional Office	Not Specified	Southwest Regional Office	0	0						25.06268692	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.01885033	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.01885033	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.01885033	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.02472115	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.01885033	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.99779892	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.99779892	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	2307701.961		0				0		0	
	Bridge port	Fairfield	Not Specified	Not Specified	Not Specified		0	0						24.92921448	329061.2055	X	9871836.166	X	0.285714286	2820524.619	X	0.014814815	146249.4247	0.233766234	1242608.748		0				0		0	
	Brooklyn	Windham	Not Specified	Not Specified	Not Specified		0	0						30.39871025	177186.803	X	5315604.09	X	0.047619048	253124.0043	X	0.022222222	118124.5353	0.214285714	1220419.306		0				0		0	
3200-46	Burlington	Hartford	Trout Hatchery	Not Specified	Not Specified		0	0						32.7586174	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	78895.79354		0				0		0	
5000-7129	Canton	Hartford	Werner Woods Barn	Not Specified	Not Specified		0	0						31.57060814	12656.20021	X	379686.0064	X	0.285714286	108481.7161	X	0.014814815	5624.977873	0.207792208	4102581.264		0				0		0	
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.44576263	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0				0		0	
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0				0		0	
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0				0		0	
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0				0		0	
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.022222222	438748.2741	0.220779221	4358992.593		0				0		0	

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.2280941	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
8000-220	Cheshire	New Haven	Main Building	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	4358992.593		0					0		0
	Cheshire	New Haven	Not Specified	Not Specified	Not Specified	DOC	0	0						27.33845329	658122.4111	X	19743672.33	X	0.253968254	5014265.989	X	0.02222222	438748.2741	0.220779221	21223.45196		0					0		0
2000-509	Colchester	New London	Colchester Radio Tower	Facility Not Listed	Radio/Communications		320432.51	253804						25.05586815	3204.3251	X	96129.753	X	0.063492063	6103.476381	X	0.051851852	4984.505711	0.24025974	2021.437578		0					0		0
3100-79	Colchester	New London	Shelter	Day Pond State Park	Not Specified		28045.17	0						26.19019508	280.4517	X	8413.551	X	0.063492063	534.1937143	X	0.051851852	436.2582	0.24025974	1094679.135		0					0		0
3100-77	Colchester	New London	Dressing Rooms	Day Pond State Park	Not Specified		0	0						26.19019508	151874.4026	X	4556232.077	X	0.063492063	289284.5763	X	0.051851852	236249.0707	0.24025974	1094679.135		0					0		0



JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				State Forest																														
	Coven try	Tolla nd	Cabin	Nathan Hale State Forest	Cabin	DEEP	0	0						21.855 32379	88593. 40149	X	26578 02.045	X	0.1587 30159	42187 3.3404	X	0.0370 37037	98437. 11277	0.2077 92208	78895. 79354		0					0		0
4125- 1141 25	Crom well	Midd lesex	Shunpike Rd Group Home	Not Specified	Not Specified		0	0						29.848 15598	12656. 20021	X	37968 6.0064	X	0.4920 63492	18682 9.6222	X	0.0074 07407	2812.4 88936	0.1558 44156	36094 82.554		0					0		0
7803- 1544 44	Danbu ry	Fairfi eld	Observatory	Wester n Connec ticut State Univers ity - Westsi de Campu s	Academics	CSU	0	0						28.612 63466	77202 8.213	X	23160 846.39	X	0.2857 14286	66173 84.683	X	0.0148 14815	34312 3.6502	0.2337 66234	62130 4.3741		0					0		0
	Derby	New Have n	Not Specified	Not Specified	Not Specified		0	0						26.064 19563	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					0		0
	Derby	New Have n	Not Specified	Not Specified	Not Specified		0	0						26.064 19563	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					0		0
	Derby	New Have n	Not Specified	Not Specified	Not Specified		0	0						26.064 19563	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	58678 7.4644		0					0		0
	Derby	New Have n	Not Specified	Not Specified	Not Specified		0	0						26.066 87164	88593. 40149	X	26578 02.045	X	0.2539 68254	67499 7.3447	X	0.0222 22222	59062. 26766	0.2207 79221	57002 21.083		0					0		0
3100- 106	East Hadda m	Midd lesex	Caretakers House	Not Specified	Not Specified		0	0						24.834 52034	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
3100- 107	East Hadda m	Midd lesex	Maintenance SHop	Not Specified	Not Specified		0	0						24.834 52034	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
	East Hadda m	Midd lesex	Not Specified	Not Specified	Not Specified		0	0						24.834 52034	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
3100- 110	East Hadda m	Midd lesex	Geer House Gar	Not Specified	Not Specified		0	0						24.606 32896	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
3100- 109	East Hadda m	Midd lesex	Geer House	Not Specified	Not Specified		0	0						24.606 32896	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	40236 85.47		0					0		0
3100- 111	East Hadda m	Midd lesex	Mitchel Pond Building	Not Specified	Not Specified		0	0						24.606 32896	86062 1.6145	X	25818 648.44	X	0.4920 63492	12704 414.31	X	0.0074 07407	19124 9.2477	0.1558 44156	47337 4.7612		0					0		0
5000- 708	East Hampt on	Midd lesex	Salt Shed	Depart ment of Transp ortatio n	Not Specified	DOT	0	0						28.655 64346	10124 9.6017	X	30374 88.051	X	0.4920 63492	14946 36.978	X	0.0074 07407	22499. 91149	0.1558 44156	47337 4.7612		0					0		0
5000-	East	Midd	Personnel Shelter	Depart	Not Specified	DOT	0	0						28.655	10124	X	30374	X	0.4920	14946	X	0.0074	22499.	0.1558	41420		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4183	Hampton	Ilexon		ment of Transportation										64346	9.6017		88.051		63492	36.978		07407	91149	44156	2.9161									
7302-7814	East Hartford	Hartford	East Hartford-UMG	Not Specified	Not Specified		0	0						27.65918541	88593.40149	X	2657802.045	X	0.285714286	759372.0128	X	0.014814815	39374.84511	0.207792208	14990200.77		0				0		0	
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.06503105	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.29446411	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.29446411	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.43865204	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.29446411	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.29446411	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.43865204	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.43865204	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.43865204	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.43865204	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.15247345	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.15247345	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						21.18507004	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.53788185	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.53788185	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.53788185	2404678.041	X	72140341.22	X	0.063492063	4580339.125	X	0.051851852	3740610.285	0.24025974	17332419.64		0					0		0
	East	New	Not Specified	Not	Not Specified		0	0						20.418	24046	X	72140	X	0.0634	45803	X	0.0518	37406	0.2402	17332		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Lyme	Landon		Specified										88046	78.041		341.22		92063	39.125		51852	10.285	5974	419.64									
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.409 99222	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.409 99222	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.409 99222	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.409 99222	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.525 47836	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.525 47836	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.537 88185	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.878 70026	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		0
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						19.891 71028	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		3
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.830 62744	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	17332 419.64		0					0		3
	East Lyme	New London	Not Specified	Not Specified	Not Specified		0	0						20.706 72035	24046 78.041	X	72140 341.22	X	0.0634 92063	45803 39.125	X	0.0518 51852	37406 10.285	0.2402 5974	82100 9.3515		0					0		3
3100-392	Eastford	Windham	Machine Shop	Nassahgon State Forest	Not Specified		0	1056						25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	73225 1.5838		0					0		0
3100-2690	Eastford	Windham	Manager's Residence	Nassahgon State Forest	Not Specified		0	0						25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	73225 1.5838		0					0		0
3100-	Eastford	Wind	Lumber Shed #3	Nassahgon State Forest	Not Specified		0	0						25.767	11390	X	34171	X	0.0476	16272	X	0.0222	75937.	0.2142	73225		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
393	rd	ham		egon State Forest										25388	5.8019		74.058		19048	2.5742		22222	20128	85714	1.5838									
3100-394	Eastford	Windham	Pump House	Nassahgon State Forest	Not Specified		0	0						25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	73225 1.5838		0					0		0
3100-396	Eastford	Windham	Oil Shed	Nassahgon State Forest	Not Specified		0	0						25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	73225 1.5838		0					0		0
3100-398	Eastford	Windham	Woodshed	Nassahgon State Forest	Not Specified		0	0						25.767 25388	11390 5.8019	X	34171 74.058	X	0.0476 19048	16272 2.5742	X	0.0222 22222	75937. 20128	0.2142 85714	19771. 6365		0					0		0
4122-194123	Ellington	Tolland	Residence	Not Specified	Residential	DDS	30755 8.79	8765						25.208 31108	3075.5 879	X	92267. 637	X	0.1587 30159	14645. 65667	X	0.0370 37037	3417.3 19889	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
8000-102	Enfield	Hartford	Housing Unit #1	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
8000-104	Enfield	Hartford	Housing Unit #2	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
8000-105	Enfield	Hartford	Housing Unit #3	Enfield Correctional Institution	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Institution																															
8000-106	Enfield	Hartford	Housing Unit #4	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0					0		0	
8000-107	Enfield	Hartford	Housing Unit #5	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
8000-108	Enfield	Hartford	Housing Unit #6	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.95446205	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.97579002	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.95446205	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.95446205	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				on																															
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.954 46205	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						25.954 46205	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.353 00827	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.353 00827	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.168 01071	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.168 01071	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.168 01071	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.154 41513	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Enfield Correctional Institution	Not Specified	DOC	0	0						26.168 01071	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						25.975 79002	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.126 12724	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.126 12724	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.126 12724	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.126 12724	75937 2.0128	X	22781 160.38	X	0.2857 14286	65089 02.967	X	0.0148 14815	33749 8.6724	0.2077 92208	47337 47.612		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category		
		ord		Specified										12724	2.0128		160.38		14286	02.967		14815	8.6724	92208	47.612											
	Enfield	Hartford	Not Specified	Not Specified	Not Specified	DOC	0	0						26.35300827	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	4733747.612							0		0		
	Enfield	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.34705162	759372.0128	X	22781160.38	X	0.285714286	6508902.967	X	0.014814815	337498.6724	0.207792208	3708102.296									0		0
7302-4	Farlington	Hartford	Clinic Building	UCONN HEALTH CENTER	Not Specified	UCONN	0	0						29.19603157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-8	Farlington	Hartford	John Dempsey Hospital	UCONN HEALTH CENTER	Not Specified	UCONN	0	0						29.23014832	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-1	Farlington	Hartford	Academic Building	UCONN HEALTH CENTER	Not Specified	UCONN	0	0						29.19603157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-3	Farlington	Hartford	Building B	UCONN HEALTH CENTER	Not Specified	UCONN	0	0						29.19603157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-29	Farlington	Hartford	Building 20	UCONN HEALTH CENTER	Not Specified	UCONN	0	0						29.19603157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-478	Farlington	Hartford	Academic Research Building	UCONN HEALTH CENTER	Not Specified	UCONN	0	0						29.19603157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-11	Farlington	Hartford	L Laboratory	UCONN Health Center	Not Specified	UCONN	0	0						29.19603157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-7813	Farlington	Hartford	The Exchange	Not Specified	Not Specified		0	0						29.22670174	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	3708102.296									0		0
7302-7817	Farlington	Hartford	400 Farmington Ave	Not Specified	Not Specified		0	0						29.26520157	594841.41	X	17845242.3	X	0.285714286	5098640.657	X	0.014814815	264373.96	0.207792208	1183436.903									0		0
5000-380	Glastonbury	Hartford	Radio Shack	Not Specified	Not Specified		0	0						24.99802399	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903									0		0
2000-505	Glastonbury	Hartford	John Tom Hill Road Radio Tower	Not Specified	Not Specified		0	0						24.99802399	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903									0		0
	Glastonbury	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.47802734	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903									0		0
	Glastonbury	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.47802734	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903									0		0
	Glastonbury	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.47802734	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	1183436.903									0		0
	Glastonbury	Hartford	Not Specified	Not Specified	Not Specified		0	0						26.47802734	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.207792208	4497060.232									0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893									0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03687096	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		0
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		4
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		4
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.02742004	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	5199725.893		0					0		3
	Groton	New London	Not Specified	Not Specified	Not Specified		0	0						19.03145599	721403.4122	X	21642102.37	X	0.063492063	1374101.737	X	0.051851852	1122183.086	0.24025974	2280581.532		0					0		4
8000-334	Haddam	Middlesex	Generator Garage-Haddam	Not Specified	Not Specified		0	0						27.7127285	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	1479296.129		0					0		0
8000-337	Haddam	Middlesex	Tractor Shed-Haddam	Not Specified	Not Specified		0	0						27.7127285	316405.0053	X	9492150.16	X	0.492063492	4670740.555	X	0.007407407	70312.22341	0.155844156	1479296.129		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
8000-336	Haddam	Middlesex	Classroom-Haddam	Not Specified	Not Specified		0	0						27.712 7285	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0					0	0	
3100-72	Haddam	Middlesex	Oil House	Not Specified	Not Specified		0	0						27.586 37238	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0					0	0	
3100-69	Haddam	Middlesex	Headquarters Garage	Not Specified	Not Specified		0	0						27.586 37238	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0					0	0	
3100-68	Haddam	Middlesex	Clark House	Not Specified	Not Specified		0	0						27.586 37238	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0					0	0	
3100-73	Haddam	Middlesex	Headquarters Barn	Not Specified	Not Specified		0	0						27.586 37238	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	14792 96.129		0					0	0	
	Haddam	Middlesex	Not Specified	Not Specified	Not Specified		0	0						27.411 87859	31640 5.0053	X	94921 50.16	X	0.4920 63492	46707 40.555	X	0.0074 07407	70312. 22341	0.1558 44156	23668 73.806		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.013 55171	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.013 55171	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 02895	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.062 20818	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.062 20818	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	33530 71.225		0					0	0	
	Hamden	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.022 94731	50624 8.0085	X	15187 440.26	X	0.2539 68254	38571 27.684	X	0.0222 22222	33749 8.6724	0.2207 79221	98077 33.334		0					0	0	
(none)	Hartford	Hartford	none	Blue Hills Hospital	Not Specified	DMHAS , Region 4	0	0						27.673 29597	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0	0	
(none)	Hartford	Hartford	Not Specified	Troop H Garage	Garage and Service Center	DPS	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0	0	
1001-2	Hartford	Hartford	Not Specified	State Capitol Buildin	Not Specified	Legislative Manag	0	0						28.016 43181	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
(non e)	Hartford	Hartford	Not Specified	Troop H Barracks	Barracks	DPS	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
1326-26	Hartford	Hartford	Not Specified	State Office Building	Not Specified	DPW	0	0						28.016 43181	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
1326-7104	Hartford	Hartford	Not Specified	Parking Garage	Also Maintenance Garage	DPW	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-483	Hartford	Hartford	Not Specified	Hartford Community Court	Courthouse	Judicial Department	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-211326	Hartford	Hartford	Not Specified	Judicial	Administration	DPS	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
1326-17	Hartford	Hartford	Grounds Division	Not Specified	Not Specified		0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-7108	Hartford	Hartford	Family Court; Administrative Offices	Not Specified	Not Specified		0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
(non e)	Hartford	Hartford	Not Specified	Convention Center	Not Specified	OPM	0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-7222	Hartford	Hartford	Electronic Communications Facility	Not Specified	Not Specified	DOT	0	0						27.808 17223	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Not Specified	Not Specified		0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Science Center	Not Specified	CT Development Authority	0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Science Center	Not Specified	CT Development Authority	0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Adriaen's	Not Specified	OPM	0	0						27.877 63596	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Landing																														
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.020 02716	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3002-6	Hartford	Hartford	Building C	Regional Market	Not Specified	DOA	0	0						27.945 87135	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3002-5	Hartford	Hartford	Building B	Regional Market	Not Specified	DOA	0	0						27.945 87135	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3002-4	Hartford	Hartford	Building A	Regional Market	Not Specified	DOA	0	0						28.018 8427	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3002-2	Hartford	Hartford	Watchman	Regional Market	Not Specified	DOA	0	0						28.018 8427	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.020 02716	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3002-3	Hartford	Hartford	Farmer's Shed	Regional Market	Not Specified	DOA	0	0						28.018 8427	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-200	Hartford	Hartford	Office	Brainard Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-199	Hartford	Hartford	Maintenance Garage	Brainard Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.020 02716	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.020 02716	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainard Airport	Not Specified	DOT	0	0						28.095	14807	X	44423	X	0.2857	12692	X	0.0148	65812	0.2077	92308		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	rd	ord		d Airport										53909	75.425		262.75		14286	360.79		14815	2.4111	92208	07.844									
	Hartford	Hartford	Not Specified	Brainerd Airport	Not Specified	DOT	0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainerd Airport	Not Specified	DOT	0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainerd Airport	Not Specified	DOT	0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainerd Airport	Not Specified	DOT	0	0						28.171 65184	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-198	Hartford	Hartford	Hangar (Corporate)	Brainerd Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-197	Hartford	Hartford	Headquarters	Brainerd Airport	Not Specified	DOT	0	0						27.945 18089	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3002-1	Hartford	Hartford	Restraunt	Regional Market	Not Specified	DOA	0	0						28.018 8427	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Brainerd Airport	Not Specified	DOT	0	0						28.020 02716	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
7001-7102	Hartford	Hartford	Connecticut Aero Tech School	Not Specified	Not Specified		0	0						28.095 53909	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-8	Hartford	Hartford	Not Specified	Hartford Juvenile Matters Courthouse	Courthouse	Judicial Department	0	0						28.148 36121	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-7104	Hartford	Hartford	Hartford Juvenile Detention	Hartford Juvenile Matters Courthouse	(unknown)	Judicial Department	0	0						28.148 36121	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-17104	Hartford	Hartford	Not Specified	State of Connecticut Supreme Court & State Library	Courthouse	Judicial Department	0	0						28.016 43181	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-11	Hartford	Hartford	Not Specified	State of Connecticut Superior	Courthouse	Judicial Department	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				r Court																														
1326-8531	Hartford	Hartford	Church	Second Church of Christ	Other	DPW	0	0						28.016 43181	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
9001-10	Hartford	Hartford	GA 14 And JD Courthouse	Not Specified	Not Specified		0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
1326-19	Hartford	Hartford	21 Grand Street	Not Specified	Not Specified		0	0						28.148 36121	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
1326-481	Hartford	Hartford	Hudson Park	State of Connecticut Office Building	Not Specified	DPW	0	0						28.083 31871	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
3500-7643	Hartford	Hartford	DAS fleet vehicle facility	Not Specified	Not Specified	DPW	0	0						27.946 46454	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
(none)	Hartford	Hartford	office	Not Specified	Not Specified	DPW	0	0						27.946 46454	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-11	Hartford	Hartford	Maintenance Garage	Not Specified	Not Specified	DOT	0	0						27.298 95592	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
8000-163	Hartford	Hartford	Hartford Correctional Center	Hartford Correctional Center	Not Specified	DOC	0	0						27.381 52313	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
8000-7980	Hartford	Hartford	Dorms 1 & 2	Hartford Correctional Center	Not Specified	DOC	0	0						27.309 27658	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
	Hartford	Hartford	Not Specified	Not Specified	Not Specified	DOT	0	0						27.298 95592	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	92308 07.844		0					0		0
5000-240	Hartford	Hartford	Bus Facility	Not Specified	Not Specified	DOT	0	0						27.447 43156	14807 75.425	X	44423 262.75	X	0.2857 14286	12692 360.79	X	0.0148 14815	65812 2.4111	0.2077 92208	78895 7.9354		0					0		0
3100-554	Hebron	Tolland	Gay City Supervisor Residence	Gay City State Park	Residence	DEEP	0	0						24.141 39175	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0
3100-148	Hebron	Tolland	Toilet and Bath	Gay City State Park	Not Specified	DEEP	0	0						24.251 55258	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0
	Hebron	Tolland	Gay City Supervisor Shed	Gay City State Park	Shed	DEEP	0	0						24.141 39175	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0
3100-555	Hebron	Tolland	Gay City Supervisor 2 Car	Gay City	Garage	DEEP	0	0						24.141 39175	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
			Garage	State Park																														
	Hebron	Tolland	Meetings Building	Gay City State Park	Not Specified	DEEP	0	0						24.174 81041	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0
	Hebron	Tolland	Not Specified	Gay City State Park	Not Specified	DEEP	0	0						24.251 55258	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0
	Hebron	Tolland	Not Specified	Gay City State Park	Not Specified	DEEP	0	0						24.141 39175	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	78895 7.9354		0					0		0
	Hebron	Tolland	Not Specified	Gay City State Park	Not Specified	DEEP	0	0						24.174 81041	12656 2.0021	X	37968 60.064	X	0.1587 30159	60267 6.2006	X	0.0370 37037	14062 4.4468	0.2077 92208	18146 03.251		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.591 86935	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	13609 52.439		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.975 7576	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	13609 52.439		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.975 7576	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	13609 52.439		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.975 7576	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	13609 52.439		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.591 86935	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	13609 52.439		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.591 86935	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	13609 52.439		0					0		0
	Kent	Litchfield	Not Specified	Not Specified	Not Specified		0	0						32.591 86935	29109 2.6049	X	87327 78.147	X	0.4920 63492	42970 81.311	X	0.0074 07407	64687. 24554	0.1558 44156	10650 93.213		0					0		0
3100-126	Killingworth	Middlesex	Dwelling	Not Specified	Not Specified		0	0						26.589 26773	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	10650 93.213		0					0		0
3100-133	Killingworth	Middlesex	Mill Works	Not Specified	Not Specified		0	0						26.632 50923	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	10650 93.213		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.712 07809	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	10650 93.213		0					0		0
	Killingworth	Middlesex	Not Specified	Not Specified	Not Specified		0	0						26.793 52188	22781 1.6038	X	68343 48.115	X	0.4920 63492	33629 33.2	X	0.0074 07407	50624. 80085	0.1558 44156	53254 6.6064		0					0		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0						33.599 72763	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	53254 6.6064		0					0		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0						33.002 41089	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	53254 6.6064		0					0		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0						33.002 41089	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	53254 6.6064		0					0		0
	Litchfield	Litchfield	Not Specified	Not Specified	Not Specified		0	0						33.002 41089	11390 5.8019	X	34171 74.058	X	0.4920 63492	16814 66.6	X	0.0074 07407	25312. 40043	0.1558 44156	26035 61.187		0					0		0
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.091 79497	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	36883 78.348		0					0		3
	Madison	New Haven	Not Specified	Hamm onasset Beach State Park	Not Specified		0	0						25.091 79497	55687 2.8094	X	16706 184.28	X	0.2539 68254	42428 40.453	X	0.0222 22222	37124 8.5396	0.2207 79221	10512 82.063		0					0		4
7301-217	Mansfield	Tolland	0331C Math Sciences	University of Connecticut - Storrs Campuses	Education		15872 297.82	18182 168.07						18.386 05309	15872 2.9782	X	47616 89.346	X	0.1587 30159	75582 3.7057	X	0.0370 37037	17635 8.8647	0.2077 92208	14433 48.539		0					0		0
7301-215	Mansfield	Tolland	0331A Materials Science, Institute Of	University of Connecticut - Storrs Campuses	Education		23153 716.14	16621 479.72						18.386 05309	23153 7.1614	X	69461 14.842	X	0.1587 30159	11025 57.911	X	0.0370 37037	25726 3.5127	0.2077 92208	40728 95.304		0					0		0
7301-510	Mansfield	Tolland	0409 Chemistry Building	University of Connecticut - Storrs Campuses	Education		65336 028.84	11907 423.84						18.386 05309	65336 0.2884	X	19600 808.65	X	0.1587 30159	31112 39.469	X	0.0370 37037	72595 5.876	0.2077 92208	97268. 76468		0					0		0
7301-442	Mansfield	Tolland	2108 Depot - Chaplin Cottage	University of Connecticut - Depot	Not Specified		15603 53.1	10463 666.53						19.461 60507	15603. 531	X	46810 5.93	X	0.1587 30159	74302. 52857	X	0.0370 37037	17337. 25667	0.2077 92208	59041 86.178		0					0		0
7301-	Mansfield	Tolland	0415 Pharmacy /	University of Connecticut - Depot	Education		94712	10342						18.386	94712	X	28413	X	0.1587	45101	X	0.0370	10523	0.2077	25177		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
1140	eld	nd	Biology	ity of Connecticut - Storrs Campu s			986.61	568.69						05309	9.8661		895.98		30159	42.22		37037	66.518	92208	48.865									
7301-7143	Mansfi eld	Tolla nd	0126 Wilbur Cross	University of Connecticut - Storrs Campu s	Education		40388 888.04	10141 685.17						18.272 36176	40388 8.8804	X	12116 666.41	X	0.1587 30159	19232 80.383	X	0.0370 37037	44876 5.4227	0.2077 92208	36528 1.0766		0					0		0
7301-23	Mansfi eld	Tolla nd	0029 Benton Museum Of Art	University of Connecticut - Storrs Campu s	Museum		58597 17.27	76402 11.49						18.386 05309	58597. 1727	X	17579 15.181	X	0.1587 30159	27903 4.1557	X	0.0370 37037	65107. 96967	0.2077 92208	68686 1.1111		0					0		0
7301-1138	Mansfi eld	Tolla nd	0410 Central Warehouse	University of Connecticut - Storrs Campu s	Storage/Wareho use		11018 396.99	73089 56.26						18.527 10152	11018 3.9699	X	33055 19.097	X	0.1587 30159	52468 5.571	X	0.0370 37037	12242 6.6332	0.2077 92208	24706 4.7179		0					0		0
7301-257	Mansfi eld	Tolla nd	0380 Police & Fire Complex	University of Connecticut - Storrs Campu s	Not Specified		39633 29.85	65970 72.8						18.527 10152	39633. 2985	X	11889 98.955	X	0.1587 30159	18872 9.9929	X	0.0370 37037	44036. 99833	0.2077 92208	53410 4.5895		0					0		0
7301-153	Mansfi eld	Tolla nd	0239 Engineering II	University of Connecticut - Storrs Campu s	Education		85679 27.79	57165 95.45						18.386 05309	85679. 2779	X	25703 78.337	X	0.1587 30159	40799 6.5614	X	0.0370 37037	95199. 19767	0.2077 92208	61394 8.1872		0					0		0
7301-353	Mansfi eld	Tolla nd	1125 Depot - Longley School	University of Connecticut - Depot	Not Specified		98487 52.17	51598 46.85						19.469 53201	98487. 5217	X	29546 25.651	X	0.1587 30159	46898 8.1986	X	0.0370 37037	10943 0.5797	0.2077 92208	12318 30.926		0					0		0
7301-216	Mansfi eld	Tolla nd	0331B Physics Building	University of Connecticut - Storrs Campu s	Education		19760 621.1	51492 52.68						18.386 05309	19760 6.211	X	59281 86.33	X	0.1587 30159	94098 1.9571	X	0.0370 37037	21956 2.4567	0.2077 92208	20967 90.744		0					0		0
7301-165	Mansfi eld	Tolla nd	0252 Torrey Life Sciences	University of Connecticut -	Laboratory		33636 018.18	50213 03.3						18.386 05309	33636 0.1818	X	10090 805.45	X	0.1587 30159	16017 15.151	X	0.0370 37037	37373 3.5353	0.2077 92208	12135 18.635		0					0		0

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				Storrs Campu s																															
7301-231	Mansfield	Tolland	0349 Bousfield, W A Building (Psych)	University of Connecticut - Storrs Campu s	Education		19466861.43	4777067.79						18.20220947	194668.6143	X	5840058.429	X	0.158730159	926993.4014	X	0.037037037	216298.4603	0.207792208	1067730.651						0	0	0	0	
7301-7145	Mansfield	Tolland	0133 Castleman	University of Connecticut - Storrs Campu s	Education		17128179.19	3725939.49						18.38605309	171281.7919	X	5138453.757	X	0.158730159	815627.5805	X	0.037037037	190313.1021	0.207792208	2160216.567							0	0	0	0
7301-7783	Mansfield	Tolland	0480 Burton Football Complex & Shenkman	University of Connecticut - Storrs Campu s	Sports/Gymnasium		34653474.1	3336629.35						18.32310104	346534.741	X	10396042.23	X	0.158730159	1650165.433	X	0.037037037	385038.6011	0.207792208	1372700.938							0	0	0	0
7301-161	Mansfield	Tolland	0246 Ctr for Undergraduate Ed	University of Connecticut - Storrs Campu s	Education		22020410.88	2865988.27						18.38605309	220204.1088	X	6606123.264	X	0.158730159	1048590.994	X	0.037037037	244671.232	0.207792208	569072.5883							0	0	0	0
7301-205	Mansfield	Tolland	0318 Bronwell Building (Arthur B.)	University of Connecticut - Storrs Campu s	Not Specified		9128872.77	2865268.68						18.38605309	91288.7277	X	2738661.831	X	0.158730159	434708.2271	X	0.037037037	101431.9197	0.207792208	5171901.063							0	0	0	0
7301-7159	Mansfield	Tolland	0213 Student Union	University of Connecticut - Storrs Campu s	Other		82965912.88	2811558.91						18.38605309	829659.1288	X	24889773.86	X	0.158730159	3950757.756	X	0.037037037	921843.4764	0.207792208	43597.74608							0	0	0	0
7301-204	Mansfield	Tolland	0317 Motor Pool & Vehicle Maintenance	University of Connecticut - Storrs Campu s	Maintenance/Repair Shop		699380.51	2720812.73						18.61048126	6993.8051	X	209814.153	X	0.158730159	33303.83381	X	0.037037037	7770.894556	0.207792208	1351671.695							0	0	0	0
7301-162	Mansfield	Tolland	0247 Gentry Building (School Of Education)	University of Connecticut - Storrs	Education		21683066.77	2671298.33						18.38605309	216830.6677	X	6504920.031	X	0.158730159	1032526.989	X	0.037037037	240922.9641	0.207792208	535731.0346							0	0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Campus																														
7301-248	Mansfield	Tolland	0369 United Technologies Eng Building	University of Connecticut - Storrs Campus	Education		8594018.68	2427993.61						18.38605309	85940.1868	X	2578205.604	X	0.158730159	409238.9848	X	0.037037037	95489.09644	0.207792208	9971.584208						0	0	0	0
7301-25	Mansfield	Tolland	0031 Landscaping Bldg	University of Connecticut - Storrs Campus	Other		159960.83	1788906.22						18.37332344	1599.6083	X	47988.249	X	0.158730159	7617.182381	X	0.037037037	1777.342556	0.207792208	457903.5285						0	0	0	0
7301-139	Mansfield	Tolland	0222 White Building (Anim Industries)	University of Connecticut - Storrs Campus	Laboratory		7345535.77	1662318.15						18.37332344	73455.3577	X	2203660.731	X	0.158730159	349787.4176	X	0.037037037	81617.06411	0.207792208	899200.0283						0	0	0	0
7301-7163	Mansfield	Tolland	0221 Jorgensen Center for Performing	University of Connecticut - Storrs Campus	Theater/Auditorium		14424667.12	1437146.78						18.38605309	144246.6712	X	4327400.136	X	0.158730159	686888.9105	X	0.037037037	160274.0791	0.207792208	608427.6112						0	0	0	0
7301-7138	Mansfield	Tolland	0040 Atwater Lab	University of Connecticut - Storrs Campus	Education		9760192.93	1320723.51						18.38605309	97601.9293	X	2928057.879	X	0.158730159	464771.0919	X	0.037037037	108446.5881	0.207792208	628938.9644						0	0	0	0
7301-148	Mansfield	Tolland	0234 Music Building	University of Connecticut - Storrs Campus	Education		10089229.22	1131882.17						18.1155777	100892.2922	X	3026768.766	X	0.158730159	480439.4867	X	0.037037037	112102.5469	0.207792208	509163.4672						0	0	0	0
7301-150	Mansfield	Tolland	0236 Monteith Building (Soc. Sciences)	University of Connecticut - Storrs Campus	Education		8167830.62	1104988.43						18.20220947	81678.3062	X	2450349.186	X	0.158730159	388944.3152	X	0.037037037	90753.67356	0.207792208	312757.3546						0	0	0	0
7301-154	Mansfield	Tolland	0240 Jones Building (Nutr Sciences)	University of Connecticut - Storrs Campus	Education		5017149.23	1093559.88						18.37332344	50171.4923	X	1505144.769	X	0.158730159	238911.8681	X	0.037037037	55746.10256	0.207792208	528510.4538						0	0	0	0

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7301-7210	Mansfield	Tolland	0421B Advanced Technology Lab	University of Connecticut - Storrs Campuses	Laboratory		8478188.53	1078510.69						18.37332344	84781.8853	X	2543456.559	X	0.158730159	403723.2633	X	0.037037037	94202.09478	0.207792208	245141.1553						0	0	0	
7301-4	Mansfield	Tolland	0004 Koons Hall	University of Connecticut - Storrs Campuses	Education		3932472.7	1050869						18.27236176	39324.727	X	1179741.81	X	0.158730159	187260.6048	X	0.037037037	43694.14111	0.207792208	106852.2315						0	0	0	
7301-97	Mansfield	Tolland	0174 Pathology Lab	University of Connecticut - Storrs Campuses	Laboratory		1714087.88	966608.4						18.38605309	17140.8788	X	514226.364	X	0.158730159	81623.23238	X	0.037037037	19045.42089	0.207792208	504718.4004						0	0	0	
7301-488	Mansfield	Tolland	2166 Depot - Thomson Hall	University of Connecticut - Depot	Not Specified		8096524.34	932763.99						19.46953201	80965.2434	X	2428957.302	X	0.158730159	385548.7781	X	0.037037037	89961.38156	0.207792208	378486.6009						0	0	0	
7301-149	Mansfield	Tolland	0235 Arjona Building (Humanities)	University of Connecticut - Storrs Campuses	Education		6071555.89	877695.68						18.20220947	60715.5589	X	1821466.767	X	0.158730159	289121.709	X	0.037037037	67461.73211	0.207792208	38231.7974						0	0	0	
7301-5	Mansfield	Tolland	0005 Dairy Barn & Silo	University of Connecticut - Storrs Campuses	Other		613301.75	806960						18.37332344	6133.0175	X	183990.525	X	0.158730159	29204.84524	X	0.037037037	6814.463889	0.207792208	227241.6804						0	0	0	
7301-96	Mansfield	Tolland	0172 Budds Building (Administration)	University of Connecticut - Storrs Campuses	Office		3645335.29	796924.45						18.27236176	36453.3529	X	1093600.587	X	0.158730159	173587.3948	X	0.037037037	40503.72544	0.207792208	464819.808						0	0	0	
7301-147	Mansfield	Tolland	0233 Drama Music Building	University of Connecticut - Storrs Campuses	Education		7456484.42	770017.07						18.1155777	74564.8442	X	2236945.326	X	0.158730159	355070.6867	X	0.037037037	82849.82689	0.207792208	647128.1018						0	0	0	
7301-	Mansfield	Tolland	0329 Ryan Refec	Univers	Residence		10381	73624						18.202	10381	X	31143	X	0.1587	49433	X	0.0370	11534	0.2077	33244						0	0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
213	eld	nd	(Alum Dining HI)	ity of Connecticut - Storrs Campu s			013.3	5.76						20947	0.133		03.99		30159	3.9667		37037	4.5922	92208	0.9365									
7301-245	Mansfield	Tolland	0365 School Of Fine Arts	University of Connecticut - Storrs Campu s	Education		5332906.69	730704.55						18.1155777	53329.0669	X	1599872.007	X	0.158730159	253947.9376	X	0.037037037	59254.51878	0.207792208	225871.1906						0	0	0	0
7301-7155	Mansfield	Tolland	0171 WMS Health Srvs / Infirmary	University of Connecticut - Storrs Campu s	Education		3623350.35	588408.56						18.38605309	36233.5035	X	1087005.105	X	0.158730159	172540.4929	X	0.037037037	40259.44833	0.207792208	450421.0554						0	0	0	0
7301-518	Mansfield	Tolland	0412 Music Library	University of Connecticut - Storrs Campu s	Education		7225504.43	527163.98						18.1155777	72255.0443	X	2167651.329	X	0.158730159	344071.6395	X	0.037037037	80283.38256	0.207792208	128141.2064						0	0	0	0
7301-155	Mansfield	Tolland	0241 Jones Annex Bldg	University of Connecticut - Storrs Campu s	Cafeteria/Food Service		2055598.52	517320.61						18.37332344	20555.9852	X	616679.556	X	0.158730159	97885.64381	X	0.037037037	22839.98356	0.207792208	160145.2812						0	0	0	0
7301-463	Mansfield	Tolland	2131 Depot - Kennedy Cottage	University of Connecticut - Depot	Maintenance/Repair Shop		2568997.22	494608.73						19.46953201	25689.9722	X	770699.166	X	0.158730159	122333.201	X	0.037037037	28544.41356	0.207792208	256017.317						0	0	0	0
7301-62	Mansfield	Tolland	0138 Family Studies Bldg / DRM	University of Connecticut - Storrs Campu s	Education		4106944.46	487909.25						18.27236176	41069.4446	X	1232083.338	X	0.158730159	195568.7838	X	0.037037037	45632.71622	0.207792208	195927.1562						0	0	0	0
7301-2	Mansfield	Tolland	0002 Gulley Hall	University of Connecticut - Storrs Campu s	Office		3142998.13	442228.3						18.27236176	31429.9813	X	942899.439	X	0.158730159	149666.5776	X	0.037037037	34922.20144	0.207792208	212353.8078						0	0	0	0
7301-54	Mansfield	Tolland	0130 Manchester Hall	University of Connecticut -	Education		3406509	413137.56						18.27236176	34065.09	X	1021952.7	X	0.158730159	162214.7143	X	0.037037037	37850.1	0.207792208	545363.6727						0	0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Storrs Campu s																														
7301-7182	Mansfield	Tolland	0331D Gant Plaza	University of Connecticut - Storrs Campu s	Education		87485 42.25	40291 2.99						18.386 05309	87485. 4225	X	26245 62.675	X	0.1587 30159	41659 7.25	X	0.0370 37037	97206. 025	0.2077 92208	19287 7.407		0					0		0
7301-55	Mansfield	Tolland	0131 Wood Hall	University of Connecticut - Storrs Campu s	Education		30940 75.07	36575 2.82						18.386 05309	30940. 7507	X	92822 2.521	X	0.1587 30159	14733 6.9081	X	0.0370 37037	34378. 61189	0.2077 92208	19893 1.8153		0					0		0
7301-160	Mansfield	Tolland	0245 Von Der Mehden Recital Hall	University of Connecticut - Storrs Campu s	Residence		31911 97.87	34109 7.6						18.115 5777	31911. 9787	X	95735 9.361	X	0.1587 30159	15196 1.8033	X	0.0370 37037	35457. 75411	0.2077 92208	71780. 50971		0					0		0
7301-456	Mansfield	Tolland	2124 Depot - Hampton Cottage	University of Connecticut - Depot	Not Specified		11514 79.01	32954 4.05						19.461 60507	11514. 7901	X	34544 3.703	X	0.1587 30159	54832. 33381	X	0.0370 37037	12794. 21122	0.2077 92208	48467. 05184		0					0		0
7301-7	Mansfield	Tolland	0007 Klinck - Ag Egr Lab	University of Connecticut - Storrs Campu s	Laboratory		77749 2.29	24361 5.25						18.373 32344	7774.9 229	X	23324 7.687	X	0.1587 30159	37023. 44238	X	0.0370 37037	8638.8 03222	0.2077 92208	12790 4.3489		0					0		0
7301-6	Mansfield	Tolland	0006 Hawley Armory	University of Connecticut - Storrs Campu s	Office		20517 98.93	23285 5.97						18.272 36176	20517. 9893	X	61553 9.679	X	0.1587 30159	97704. 71095	X	0.0370 37037	22797. 76589	0.2077 92208	34988. 86629		0					0		0
7301-491	Mansfield	Tolland	2169 Depot - Union Cottage	University of Connecticut - Depot	Not Specified		56127 9.73	21988 9.6						19.469 53201	5612.7 973	X	16838 3.919	X	0.1587 30159	26727. 60619	X	0.0370 37037	6236.4 41444	0.2077 92208	632.10 38961		0					0		0
7301-7781	Mansfield	Tolland	0388 Sewage Sta Control Bldg	University of Connecticut - Storrs Campu s	Maintenance/Repair Shop		10140	16092 4.95						18.527 10152	101.4	X	3042	X	0.1587 30159	482.85 71429	X	0.0370 37037	112.66 66667	0.2077 92208	23447 66.086		0					0		0
7301-7147	Mansfield	Tolland	0141 Heating & Power Plant	University of	Maintenance/Repair Shop		37613 955.97	15696 1.12						18.386 05309	37613 9.5597	X	11284 186.79	X	0.1587 30159	17911 40.76	X	0.0370 37037	41793 2.8441	0.2077 92208	35498. 96665		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Connecticut - Storrs Campu s																														
7301-469	Mansfield	Tolland	2137 Depot - Manchester Cottage	University of Connecticut - Depot	Not Specified		569462.59	106870.09						19.46953201	5694.6259	X	170838.777	X	0.158730159	27117.26619	X	0.037037037	6327.362111	0.207792208	4802.318338		0				0		0	
7301-1137	Mansfield	Tolland	0405 Baseball Bleachers & Press Box	University of Connecticut - Storrs Campu s	Not Specified		77037.19	86094.5						18.2939949	770.3719	X	23111.157	X	0.158730159	3668.437619	X	0.037037037	855.9687778	0.207792208	988767.9958		0				0		0	
7301-7223	Mansfield	Tolland	0467 Busby Suites	University of Connecticut - Storrs Campu s	Residence		15861486.6	61440.44						18.61048126	158614.866	X	4758445.98	X	0.158730159	755308.8857	X	0.037037037	176238.74	0.207792208	658388.3445		0				0		0	
7301-89	Mansfield	Tolland	0165 Russell Hall (A-D) Nw Qd 3	University of Connecticut - Storrs Campu s	Residence		10561646.36	55546.46						18.52710152	105616.4636	X	3168493.908	X	0.158730159	502935.541	X	0.037037037	117351.6262	0.207792208	634848.7605		0				0		0	
7301-467	Mansfield	Tolland	2135 Depot - Lebanon Cottage	University of Connecticut - Depot	Not Specified		1018403.22	48288.05						19.46160507	10184.0322	X	305520.966	X	0.158730159	48495.39143	X	0.037037037	11315.59133	0.207792208	28476.13652		0				0		0	
7301-445	Mansfield	Tolland	2111 Depot - Columbia Cottage	University of Connecticut - Depot	Not Specified		456804.69	46916.43						19.46953201	4568.0469	X	137041.407	X	0.158730159	21752.60429	X	0.037037037	5075.607667	0.207792208	575675.9439		0				0		0	
7301-512	Mansfield	Tolland	0413 Parking Garage/ North	University of Connecticut - Storrs Campu s	Not Specified		9234801.6	44057.03						18.38605309	92348.016	X	2770440.48	X	0.158730159	439752.4571	X	0.037037037	102608.9067	0.207792208	102138.7262		0				0		0	
7301-37	Mansfield	Tolland	0049 Rosebrooks House	University of Connecticut - Storrs Campu s	Office		163847.54	43819.28						18.59910965	1638.4754	X	49154.262	X	0.158730159	7802.26381	X	0.037037037	1820.528222	0.207792208	660296.3589		0				0		0	
7301-90	Mansfield	Tolland	0166 Batterson Hall (A-D) Nw Qd	University of	Residence		10592254.09	42875.04						18.52710152	105922.5409	X	3177676.227	X	0.158730159	504393.0519	X	0.037037037	117691.7121	0.207792208	330603.13		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
			4	Connecticut - Storrs Campuses																														
7301-87	Mansfield	Tolland	0163 Hanks Hall (A,B) Nw Qd 1	University of Connecticut - Storrs Campuses	Residence		5303425.21	40867.93						18.52710152	53034.2521	X	1591027.563	X	0.158730159	252544.0576	X	0.037037037	58926.94678	0.207792208	1891.054753						0	0	0	
7301-249	Mansfield	Tolland	0370 Facilities Trailer	University of Connecticut - Storrs Campuses	Not Specified		30335.67	37332.33						18.76350784	303.3567	X	9100.701	X	0.158730159	1444.555714	X	0.037037037	337.063	0.207792208	325636.5089						0	0	0	
7301-88	Mansfield	Tolland	0164 Goodyear Hall (A,B) Nw Qd 2	University of Connecticut - Storrs Campuses	Residence		5223752.33	36448.58						18.52710152	52237.5233	X	1567125.699	X	0.158730159	248750.111	X	0.037037037	58041.69256	0.207792208	24893.60166						0	0	0	
7301-484	Mansfield	Tolland	2160 Depot - Stafford Cottage	University of Connecticut - Depot	Not Specified		399334.86	35137.25						19.46953201	3993.3486	X	119800.458	X	0.158730159	19015.94571	X	0.037037037	4437.054	0.207792208	5127.508987						0	0	0	
7301-17	Mansfield	Tolland	0023 House 27	University of Connecticut - Storrs Campuses	Office		82253.79	35097.76						18.20220947	822.5379	X	24676.137	X	0.158730159	3916.847143	X	0.037037037	913.931	0.207792208	51606.97496						0	0	0	
7301-7127	Mansfield	Tolland	2170 Depot - Vernon Cottage	University of Connecticut - Depot	Office		827861.89	31942.37						19.46953201	8278.6189	X	248358.567	X	0.158730159	39421.99476	X	0.037037037	9198.465444	0.207792208	23580.64457						0	0	0	
7301-489	Mansfield	Tolland	2167 Depot - Tolland Cottage	University of Connecticut - Depot	Not Specified		378272.84	25764.79						19.46953201	3782.7284	X	113481.852	X	0.158730159	18012.99238	X	0.037037037	4203.031556	0.207792208	514467.5003						0	0	0	
7301-209	Mansfield	Tolland	0325 Watson Hall, Alum Quad 1	University of Connecticut - Storrs Campuses	Residence		8252916.15	25511						18.20220947	82529.1615	X	2475874.845	X	0.158730159	392996.0071	X	0.037037037	91699.06833	0.207792208	494838.0866						0	0	0	
7301-212	Mansfield	Tolland	0328 Brock Hall, Alum Quad 4	University of	Residence		7938027.64	25297.69						18.20220947	79380.2764	X	2381408.292	X	0.158730159	378001.3162	X	0.037037037	88200.30711	0.207792208	82419.75647						0	0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Connecticut - Storrs Campu s																														
7301-151	Mansfield	Tolland	0237 Andre Schenker(Ss) Lect Hall	University of Connecticut - Storrs Campu s	Education		1322150.26	24223.39						18.27236176	13221.5026	X	396645.078	X	0.158730159	62959.53619	X	0.037037037	14690.55844	0.207792208	7383.021506						0	0	0	
7301-38	Mansfield	Tolland	0051 Rosebrooks Barn / Silo	University of Connecticut - Storrs Campu s	Other		118435.97	22988.44						18.59910965	1184.3597	X	35530.791	X	0.158730159	5639.808095	X	0.037037037	1315.955222	0.207792208	326499.0508						0	0	0	
7301-92	Mansfield	Tolland	0168 Rogers Hall (A,B) Nw Qd 6	University of Connecticut - Storrs Campu s	Residence		5237588.94	22837.18						18.52710152	52375.8894	X	1571276.682	X	0.158730159	249408.9971	X	0.037037037	58195.43267	0.207792208	509189.247						0	0	0	
7301-210	Mansfield	Tolland	0326 Belden Hall, Alum Quad 2	University of Connecticut - Storrs Campu s	Residence		8168244.17	21213.36						18.20220947	81682.4417	X	2450473.251	X	0.158730159	388964.0081	X	0.037037037	90758.26856	0.207792208	283217.5057						0	0	0	
7301-7782	Mansfield	Tolland	0478 Nafe Katter Theatre	University of Connecticut - Storrs Campu s	Theater/Auditorium		4543280.82	17537.78						18.1155777	45432.8082	X	1362984.246	X	0.158730159	216346.7057	X	0.037037037	50480.898	0.207792208	36224.51096						0	0	0	
7301-173	Mansfield	Tolland	0262 Facility Maintenance/Storage	University of Connecticut - Storrs Campu s	Storage/Warehouse		581101.53	16800						18.52710152	5811.0153	X	174330.459	X	0.158730159	27671.50143	X	0.037037037	6456.683667	0.207792208	4215.511481						0	0	0	
7301-18	Mansfield	Tolland	0024 Urban Research Institute	University of Connecticut - Storrs Campu s	Office		67623.83	16575.86						18.20220947	676.2383	X	20287.149	X	0.158730159	3220.182381	X	0.037037037	751.3758889	0.207792208	23811.78951						0	0	0	
7301-457	Mansfield	Tolland	2125 Depot - Hebron Cottage	University of Connecticut	Not Specified		381980.79	16500						19.46953201	3819.8079	X	114594.237	X	0.158730159	18189.56143	X	0.037037037	4244.231	0.207792208	23580.64457						0	0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ticut - Depot																														
7301-470	Mansfield	Tolland	2138 Depot - Mansfield Cottage	University of Connecticut - Depot	Not Specified		378272.84	15880.97						19.46953201	3782.7284	X	113481.852	X	0.158730159	18012.99238	X	0.037037037	4203.031556	0.207792208	560491.8028						0		0	0
7301-211	Mansfield	Tolland	0327 Eddy Hall, Alum Quad 3	University of Connecticut - Storrs Campuses	Residence		8991222.67	14036.98						18.20220947	89912.2267	X	2697366.801	X	0.158730159	428153.4605	X	0.037037037	99902.47411	0.207792208	20852.19117						0		0	0
7301-498	Mansfield	Tolland	2177 Depot - Windham Cottage	University of Connecticut - Depot	Not Specified		334503.9	13534.45						19.46953201	3345.039	X	100351.17	X	0.158730159	15928.75714	X	0.037037037	3716.71	0.207792208	116166.2581						0		0	0
7301-7228	Mansfield	Tolland	0472 Husky Village/Greek D1,D2	University of Connecticut - Storrs Campuses	Residence		1863500.39	12284.88						18.47908592	18635.0039	X	559050.117	X	0.158730159	88738.11381	X	0.037037037	20705.55989	0.207792208	327679.6239						0		0	0
7301-91	Mansfield	Tolland	0167 Terry Hall (A,B) Nw Qd 5	University of Connecticut - Storrs Campuses	Residence		5256527.3	12047.95						18.52710152	52565.273	X	1576958.19	X	0.158730159	250310.8238	X	0.037037037	58405.85889	0.207792208	116166.2581						0		0	0
7301-7225	Mansfield	Tolland	0469 Husky Village/Greek A1, A2	University of Connecticut - Storrs Campuses	Residence		1863500.39	11802.66						18.59910965	18635.0039	X	559050.117	X	0.158730159	88738.11381	X	0.037037037	20705.55989	0.207792208	23289.03896						0		0	0
7301-19	Mansfield	Tolland	0025 House 23	University of Connecticut - Storrs Campuses	Office		373595	9317.96						18.20220947	3735.95	X	112078.5	X	0.158730159	17790.2381	X	0.037037037	4151.055556	0.207792208	57885.57506						0		0	0
7301-493	Mansfield	Tolland	2172 Depot - Walters Cottage	University of Connecticut - Depot	Not Specified		928581.1	9182.34						19.46953201	9285.811	X	278574.33	X	0.158730159	44218.14762	X	0.037037037	10317.56778	0.207792208	66908.82764						0		0	0
7301-7229	Mansfield	Tolland	0473 Husky Village/Greek E1,E2	University of Connecticut - Storrs	Residence		1073329.11	9110.15						18.47908592	10733.2911	X	321998.733	X	0.158730159	51110.91	X	0.037037037	11925.879	0.207792208	116166.2581						0		0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Campus																														
7301-7226	Mansfield	Tolland	0470 Husky Village/Greek B1,B2	University of Connecticut - Storrs Campus	Residence		1863500.39	8712.73						18.59910965	18635.0039	X	559050.117	X	0.158730159	88738.11381	X	0.037037037	20705.55989	0.207792208	23580.64457						0	0	0	0
7301-496	Mansfield	Tolland	2175 Depot - Willington Cottage	University of Connecticut - Depot	Not Specified		378272.84	6541.97						19.46953201	3782.7284	X	113481.852	X	0.158730159	18012.99238	X	0.037037037	4203.031556	0.207792208	23580.64395						0	0	0	0
7301-448	Mansfield	Tolland	2114 Depot - Ellington Cottage	University of Connecticut - Depot	Not Specified		378272.83	5997.84						19.46953201	3782.7283	X	113481.849	X	0.158730159	18012.9919	X	0.037037037	4203.031444	0.207792208	23580.64457						0	0	0	0
7301-495	Mansfield	Tolland	2174 Depot - Willimantic Cottage	University of Connecticut - Depot	Not Specified		378272.84	5945.43						19.46953201	3782.7284	X	113481.852	X	0.158730159	18012.99238	X	0.037037037	4203.031556	0.207792208	116166.2581						0	0	0	0
7301-7227	Mansfield	Tolland	0471 Husky Village/Greek C1,C2	University of Connecticut - Storrs Campus	Residence		1863500.39	4768.04						18.47908592	18635.0039	X	559050.117	X	0.158730159	88738.11381	X	0.037037037	20705.55989	0.207792208	63177.8587						0	0	0	0
7301-444	Mansfield	Tolland	2110 Depot - Colchester Cottage	University of Connecticut - Depot	Not Specified		1013478.15	4393.95						19.46160507	10134.7815	X	304043.445	X	0.158730159	48260.86429	X	0.037037037	11260.86833	0.207792208	2258.176831						0	0	0	0
7301-198	Mansfield	Tolland	0308 Baseball Dugout 1st Base	University of Connecticut - Storrs Campus	Not Specified		36224.92	2620.13						18.2939949	362.2492	X	10867.476	X	0.158730159	1724.99619	X	0.037037037	402.4991111	0.207792208	10118.04031						0	0	0	0
7301-16	Mansfield	Tolland	0019 House 22	University of Connecticut - Storrs Campus	Office		162310.23	1789						18.20220947	1623.1023	X	48693.069	X	0.158730159	7729.058571	X	0.037037037	1803.447	0.207792208	10167.86494						0	0	0	0
7301-10	Mansfield	Tolland	0012 House 29	University of Connecticut - Storrs Campus	Office		163109.5	1703						18.20220947	1631.095	X	48932.85	X	0.158730159	7767.119048	X	0.037037037	1812.327778	0.207792208	6503.021299						0	0	0	0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-12	Mansfield	Tolland	0014 House 28	University of Connecticut - Storrs Campuses	Office		104319.3	1625						18.20220947	1043.193	X	31295.79	X	0.158730159	4967.585714	X	0.037037037	1159.103333	0.207792208	1801.193766							0		0
7301-1131	Mansfield	Tolland	0399 Shuttlebus Shelter 4-W Lot	University of Connecticut - Storrs Campuses	Not Specified		28894.15	1411.88						18.59910965	288.9415	X	8668.245	X	0.158730159	1375.911905	X	0.037037037	321.0461111	0.207792208	7651.021091							0		0
7301-1120	Mansfield	Tolland	0385 Athletic Equipment Storage Building (Moon)	University of Connecticut - Storrs Campuses	Sports/Gymnasium		122735.13	1258						18.2939949	1227.3513	X	36820.539	X	0.158730159	5844.53	X	0.037037037	1363.723667	0.207792208	50859.33319							0		0
7301-39	Mansfield	Tolland	0054 Jacobson Barn	University of Connecticut - Storrs Campuses	Other		815868.47	0						18.59910965	8158.6847	X	244760.541	X	0.158730159	38850.87952	X	0.037037037	9065.205222	0.207792208	47289.28831							0		0
7301-492	Mansfield	Tolland	2171 Depot - Wallace Hall	University of Connecticut - Depot	Not Specified		758599	0						19.67593193	7585.99	X	227579.7	X	0.158730159	36123.7619	X	0.037037037	8428.877778	0.207792208	40683.29392							0		0
7301-434	Mansfield	Tolland	2100 Depot - Andover Cottage	University of Connecticut - Depot	Not Specified		652627.84	0						19.46953201	6526.2784	X	195788.352	X	0.158730159	31077.51619	X	0.037037037	7251.420444	0.207792208	37050.87771							0		0
4122-479	Mansfield	Tolland	Birch House	University of Connecticut - Depot	Residence		594357.83	0						19.8819313	5943.5783	X	178307.349	X	0.158730159	28302.75381	X	0.037037037	6603.975889	0.207792208	29851.03418							0		0
7301-490	Mansfield	Tolland	2168 Depot - Tredgold Hall	University of Connecticut - Depot	Not Specified		478860.34	0						19.67593193	4788.6034	X	143658.102	X	0.158730159	22802.87333	X	0.037037037	5320.670444	0.207792208	27613.2081							0		0
7301-446	Mansfield	Tolland	2112 Depot - Coventry Cottage	University of Connecticut - Depot	Not Specified		442961.88	0						19.46953201	4429.6188	X	132888.564	X	0.158730159	21093.42286	X	0.037037037	4921.798667	0.207792208	20632.71273							0		0
7301-439	Mansfield	Tolland	2105 Depot - Bolton Cottage	University of Connecticut -	Not Specified		330983.1	0						19.46953201	3309.831	X	99294.93	X	0.158730159	15761.1	X	0.037037037	3677.59	0.207792208	20632.71273							0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Depot																														
7301-435	Mansfield	Tolland	2101 Depot - Ashford Cottage	University of Connecticut - Depot	Not Specified		330983.1	0						19.46953201	3309.831	X	99294.93	X	0.158730159	15761.1	X	0.037037037	3677.59	0.207792208	9716.434286		0				0		0	
7301-450	Mansfield	Tolland	2118 Depot - Fernside Cottage	University of Connecticut - Depot	Not Specified		155867.8	0						19.67593193	1558.678	X	46760.34	X	0.158730159	7422.27619	X	0.037037037	1731.864444	0.207792208	6671.09174		0					0		0
7301-453	Mansfield	Tolland	2121 Depot - Greenhouses	University of Connecticut - Depot	Not Specified		107015.43	0						19.50448036	1070.1543	X	32104.629	X	0.158730159	5095.972857	X	0.037037037	1189.060333	0.207792208	4754.098286		0					0		0
7301-7107	Mansfield	Tolland	0441 Shuttlebus Shelter - Student Union	University of Connecticut - Storrs Campuses	Not Specified		76263.66	0						18.38605309	762.6366	X	22879.098	X	0.158730159	3631.602857	X	0.037037037	847.374	0.207792208	4745.809247		0					0		0
7301-7105	Mansfield	Tolland	0439 Shuttlebus Shelter - Gilbert Rd/ North	University of Connecticut - Storrs Campuses	Not Specified		76130.69	0						18.20220947	761.3069	X	22839.207	X	0.158730159	3625.270952	X	0.037037037	845.8965556	0.207792208	4214.037818		0					0		0
7301-15	Mansfield	Tolland	0017 House 25	University of Connecticut - Storrs Campuses	Office		67600.19	0						18.20220947	676.0019	X	20280.057	X	0.158730159	3219.056667	X	0.037037037	751.1132222	0.207792208	3616.773195		0					0		0
7301-146	Mansfield	Tolland	0232 Planetarium	University of Connecticut - Storrs Campuses	Education		58019.07	0						18.38605309	580.1907	X	17405.721	X	0.158730159	2762.812857	X	0.037037037	644.6563333	0.207792208	2302.738286		0					0		0
7301-1133	Mansfield	Tolland	0401 Shuttlebus Shelter 6-F Lot	University of Connecticut - Storrs Campuses	Not Specified		36939.76	0						18.52710152	369.3976	X	11081.928	X	0.158730159	1759.03619	X	0.037037037	410.4417778	0.207792208	2302.738286		0					0		0
7301-1132	Mansfield	Tolland	0400 Shuttlebus Shelter 5-F Lot	University of Connecticut - Storrs	Not Specified		36939.76	0						18.52710152	369.3976	X	11081.928	X	0.158730159	1759.03619	X	0.037037037	410.4417778	0.207792208	2258.176831		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Campus																															
7301-199	Mansfield	Tolland	0309 Baseball Dugout 3rd Base	University of Connecticut - Storrs Campus	Not Specified		36224.92	0						18.2939949	362.2492	X	10867.476	X	0.158730159	1724.99619	X	0.037037037	402.4991111	0.207792208	1942.598026						0		0	0	
7301-1175	Mansfield	Tolland	2180 Depot - Athletic Field Toilet - Female	University of Connecticut - Depot	Not Specified		31162.51	0						19.46953201	311.6251	X	9348.753	X	0.158730159	1483.929048	X	0.037037037	346.2501111	0.207792208	1942.598026							0		0	0
7301-1174	Mansfield	Tolland	2179 Depot - Athletic Field Toilet - Male	University of Connecticut - Depot	Not Specified		31162.51	0						19.46953201	311.6251	X	9348.753	X	0.158730159	1483.929048	X	0.037037037	346.2501111	0.207792208	1801.193766							0		0	0
7301-1130	Mansfield	Tolland	0398 Shuttlebus Shelter 3-W Lot	University of Connecticut - Storrs Campus	Not Specified		28894.15	0						18.59910965	288.9415	X	8668.245	X	0.158730159	1375.911905	X	0.037037037	321.0461111	0.207792208	41578083.19							0		0	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.50243759	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19							0		0	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19							0		0	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19							0		0	0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19							0		0	0
	Mansfield	Tolland	Not Specified	University of Connecticut	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19							0		0	0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ticut - Storrs Campu s																														
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut -	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Storrs Campu s																															
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.434 04961	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.434 04961	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.434 04961	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.296 74721	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.189 69154	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.434 04961	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs Campu s	Not Specified		0	0						18.296 74721	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	
	Mansfi eld	Tolla nd	Not Specified	Univers ity of Connec ticut - Storrs	Not Specified		0	0						18.296 74721	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0	

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Campus																															
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campus	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.43404961	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.39779663	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.29674721	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.86193085	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						19.85574532	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.86193085	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.07470894	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.07470894	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.20220947	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.27236176	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.27236176	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.27236176	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.38605309	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.38605309	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.38605309	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.38605309	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.38605309	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.38605309	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.37332344	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.37332344	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.47908592	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.59910965	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.599 10965	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.599 10965	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.272 36176	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.272 36176	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.599 10965	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.599 10965	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.599 10965	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.599 10965	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				s																															
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0	
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-436	Mansfield	Tolland	2102 Depot - Baker Hall	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-472	Mansfield	Tolland	2140 Depot - Matthews Hall	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-468	Mansfield	Tolland	2136 Depot - Main Kitchen	University of Connecticut - Depot	Not Specified		0	0						19.46953201	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-452	Mansfield	Tolland	2120 Depot - Goddard Hall	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46953201	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-449	Mansfield	Tolland	2115 Depot - Employee Cafeteria	University of Connecticut - Depot	Not Specified		0	0						19.67593193	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-465	Mansfield	Tolland	2133 Depot - LaMoure Hall	University of Connecticut - Depot	Not Specified		0	0						19.67593193	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
7301-486	Mansfield	Tolland	2163 Depot - Storehouse (DRL Warehouse)	University of Connecticut - Depot	Storehouse		0	0						19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-480	Mansfield	Tolland	2149 Depot - Powerhouse	University of Connecticut - Depot	Old Powerhouse		0	0						19.673 07281	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-462	Mansfield	Tolland	2130 Depot - Johnstone Hall	University of Connecticut - Depot	Not Specified		0	0						19.673 07281	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-447	Mansfield	Tolland	2113 Depot - Dimock House	University of Connecticut - Depot	Not Specified		0	0						19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.675 93193	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.469 53201	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.469 53201	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.504 48036	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.504 48036	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-482	Mansfield	Tolland	2158 Depot - Seguin Hall	University of Connecticut - Depot	Not Specified		0	0						19.673 07281	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
7301-451	Mansfield	Tolland	2119 Depot - Garage	University of Connecticut - Depot	Not Specified		0	0						19.673 07281	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.673	66698	X	20009	X	0.1587	31761	X	0.0370	74109	0.2077	41578		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	eld	nd		ity of Connecticut - Depot										07281	17.512		4525.4		30159	035.77		37037	08.347	92208	083.19									
7301-476	Mansfield	Tolland	2145 Depot - Physical Plant	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
7301-494	Mansfield	Tolland	2173 Depot - Wayside Cottage	Not Specified	Not Specified		0	0						19.88272858	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Storage Tank	DOC	0	0						19.70443726	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Storage Tank	DOC	0	0						19.70443726	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	Bergin Correctional Institution	Storage Tank	DOC	0	0						19.70443726	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
7301-479	Mansfield	Tolland	2148 Depot - Plumbing Shop	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
7301-478	Mansfield	Tolland	2147 Depot - Pipe Storage Building	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut -	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				Depot																															
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0					0		0	
	Mansfield	Tolland	Not Specified	Not Specified	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.46953201	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.50448036	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Depot	Not Specified		0	0						19.50448036	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-464	Mansfield	Tolland	2132 Depot - Knight Hospital	University of Connecticut - Depot	Not Specified		0	0						19.67307281	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
7301-492	Mansfield	Tolland	2171 Depot - Wallace Hall	University of Connecticut - Depot	Not Specified		0	0						19.46160507	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.52710152	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.61048126	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campuses	Not Specified		0	0						18.61048126	6669817.512	X	200094525.4	X	0.158730159	31761035.77	X	0.037037037	7410908.347	0.207792208	41578083.19		0						0		0
	Mansfield	Tolland	Not Specified	Univers	Not Specified		0	0						18.610	66698	X	20009	X	0.1587	31761	X	0.0370	74109	0.2077	41578		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ity of Connecticut - Storrs Campu s										48126	17.512		4525.4		30159	035.77		37037	08.347	92208	083.19									
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.610 48126	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.610 48126	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.527 10152	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.527 10152	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.610 48126	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.763 50784	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.690 72914	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of	Not Specified		0	0						18.527 10152	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Connecticut - Storrs Campu s																														
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.610 48126	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.610 48126	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.610 48126	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.527 10152	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	41578 083.19		0					0		0
	Mansfield	Tolland	Not Specified	University of Connecticut - Storrs Campu s	Not Specified		0	0						18.527 10152	66698 17.512	X	20009 4525.4	X	0.1587 30159	31761 035.77	X	0.0370 37037	74109 08.347	0.2077 92208	36292 06.503		0					0		0
1326-528	Meriden	New Haven	White Hall #2	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.341 81976	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-518	Meriden	New Haven	Gibson #1	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.341 81976	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
1326-519	Meriden	New Haven	Garage #7A (Blue)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.341 81976	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-511	Meriden	New Haven	Residence #5 (Gray) (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.341 81976	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-517	Meriden	New Haven	Residence #7 (Blue) (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.341 81976	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-523	Meriden	New Haven	Highland House #5	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.341 81976	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-8521	Meriden	New Haven	Garage #14	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.447 09206	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-525	Meriden	New Haven	Cliff House #4	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.447 09206	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0
1326-524	Meriden	New Haven	Residence #8, Phys. Cottage (Red)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.447 09206	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	38560 31.909		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
1326-522	Meriden	New Haven	Kimball Hall	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
4125-304125	Meriden	New Haven	Residential Units (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
4125-284125	Meriden	New Haven	Activity Building (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.54262161	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-527	Meriden	New Haven	Residence #9 (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-519	Meriden	New Haven	Residence #11 (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-526	Meriden	New Haven	Residence #10 (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-514	Meriden	New Haven	Residence #12 (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4125-274125	Meriden	New Haven	Maintenance Building (DDS)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-8528	Meriden	New Haven	Water Tank (Demolished)	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.34181976	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
4125-224125	Meriden	New Haven	Generator Building	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-518	Meriden	New Haven	Unnamed Structure	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-518	Meriden	New Haven	Switch House #16	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
1326-513	Meriden	New Haven	Storage Shed #14A	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	
	Meriden	New Haven	Pump House #15	Henry D. Altobello Children & Youth Center	Not Specified	DPW	0	0						29.44709206	582185.2098	X	17465556.29	X	0.253968254	4435696.837	X	0.022222222	388123.4732	0.220779221	3856031.909		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Meriden	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0						29.467 22221	58218 5.2098	X	17465 556.29	X	0.2539 68254	44356 96.837	X	0.0222 22222	38812 3.4732	0.2207 79221	83826. 78063		0					0		0
	Middlefield	Middlesex	Not Specified	Connecticut Police Academy	Not Specified	DPS	0	0						29.978 36304	12656. 20021	X	37968 6.0064	X	0.4920 63492	18682 9.6222	X	0.0074 07407	2812.4 88936	0.1558 44156	71597 93.264		0					0		0
2000-31	Middletown	Middlesex	DPS Headquarters	Department of Public Safety Headquarters	Not Specified	DPS	0	0						29.991 64581	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
	Middletown	Middlesex	Not Specified	Department of Transportation	Not Specified		0	0						29.991 64581	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
	Middletown	Middlesex	Not Specified	Department of Transportation	Not Specified		0	0						29.995 51773	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
	Middletown	Middlesex	Not Specified	Department of Transportation	Not Specified		0	0						29.995 51773	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4125-124125	Middletown	Middlesex	Westfield St Group Home	Not Specified	Not Specified		0	0						29.984 53331	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4125-74125	Middletown	Middlesex	Old Mill Road Group Home	Not Specified	Not Specified		0	0						29.979 05731	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
	Middletown	Middlesex	Not Specified	Not Specified	Not Specified		0	0						29.979 05731	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
9001-14	Middletown	Middlesex	GA and J9 Courthouse	Not Specified	Not Specified		0	0						29.891 56914	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
5000-675	Middletown	Middlesex	Bus Shelter	Not Specified	Not Specified		0	0						29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-121	Middletown	Middlesex	Smith Home	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-129	Middletown	Middlesex	Weeks Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.835 56366	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4400-77	Middle town	Middlesex	Dix Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825634	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-120	Middle town	Middlesex	Shew Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825634	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-110	Middle town	Middlesex	Page Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-76	Middle town	Middlesex	Cotter Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-34	Middle town	Middlesex	Carpenter Pnt	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-78	Middle town	Middlesex	Dutcher Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-112	Middle town	Middlesex	Power House	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-98	Middle town	Middlesex	Leak Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-105	Middle town	Middlesex	North Barn	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-96	Middle town	Middlesex	Kraut Storage Shed	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-111	Middle town	Middlesex	Paint Shop	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0
4400-	Middle	Middle	Processing	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.78660583	1531400.226	X	45942006.77	X	0.492063492	22606384.29	X	0.007407407	340311.1613	0.155844156	7159793.264		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
482	town	lesex	Center	ticut Valley Hospital										60583	00.226		006.77		63492	384.29		07407	1.1613	44156	93.264									
4400-88	Middle town	Middlesex	Grounds Garage	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-134	Middle town	Middlesex	Chapel	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-125	Middle town	Middlesex	Superintendent's Garage	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-124	Middle town	Middlesex	Superintendent's House	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-49	Middle town	Middlesex	Cottage 16	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-108	Middle town	Middlesex	Old Tin Shop	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-32	Middle town	Middlesex	Beers Hall	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.825 634	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-107	Middle town	Middlesex	CSEA Credit Union	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-131	Middle town	Middlesex	Weeks Hall Infirmary	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.835 56366	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-84	Middle town	Middlesex	Farm Wagon Shed	Not Specified	Not Specified		0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-33	Middle town	Middlesex	Blacksmith Shop	Not Specified	Not Specified		0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-	Middle town	Middlesex	Root Cellar	Not Specified	Not Specified		0	0						29.786	15314	X	45942	X	0.4920	22606	X	0.0074	34031	0.1558	71597		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
116	town	lesex		Specified										60583	00.226		006.77		63492	384.29		07407	1.1613	44156	93.264									
2730	Middle town	Middlesex	Grounds Office	Not Specified	Not Specified		0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
8102-7955	Middle town	Middlesex	Support Services Bldg 3	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
8102-7956	Middle town	Middlesex	Transitional Housing	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.742 47551	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
8102-7954	Middle town	Middlesex	Special Housing	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.742 47551	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
8102-7953	Middle town	Middlesex	Administration Bld #1	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.799 17336	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
8102-7959	Middle town	Middlesex	Support Services - Green House	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.799 17336	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-81	Middle town	Middlesex	Eddy Home	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.799 17336	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-69	Middle town	Middlesex	Cottage 31	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.799 17336	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-47	Middle town	Middlesex	Cottage 9	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.786 60583	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-70	Middle town	Middlesex	Cottage 32	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.799 17336	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
4400-46	Middle town	Middlesex	Cottage 9 Garage	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.799 17336	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
8102-	Middle town	Middlesex	Building 8 East	Connecticut Valley Hospital	Not Specified	DMHAS	0	0						29.711	15314	X	45942	X	0.4920	22606	X	0.0074	34031	0.1558	71597		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
64	town	Iselex	Campus	ticut Valley Hospital										9236	00.226		006.77		63492	384.29		07407	1.1613	44156	93.264									
8102-7339	Middle town	Middlesex	Garage	Not Specified	Not Specified		0	0						29.711 9236	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
3100-653	Middle town	Middlesex	Caretakers House	Not Specified	Not Specified		0	0						29.981 48537	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
3100-652	Middle town	Middlesex	Storage Barn	Not Specified	Not Specified		0	0						29.981 48537	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
3100-651	Middle town	Middlesex	Garage Workshop	Not Specified	Not Specified		0	0						29.981 48537	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	71597 93.264		0					0		0
7001-17	Middle town	Middlesex	Vinal Regional Vocational Technical School	Vinal Technical High School	Not Specified	DOE	0	0						29.957 63588	15314 00.226	X	45942 006.77	X	0.4920 63492	22606 384.29	X	0.0074 07407	34031 1.1613	0.1558 44156	47337 4.7612		0					0		0
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.496 54007	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451		0					0		0
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.349 27368	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	67061 4.2451		0					0		0
	Milford	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.314 68773	10124 9.6017	X	30374 88.051	X	0.2539 68254	77142 5.5368	X	0.0222 22222	67499. 73447	0.2207 79221	53649 13.961		0					0		0
2201-58	New Britain	Hartford	State Armory	Not Specified	Not Specified		0	0						29.373 01445	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
(none)	New Britain	Hartford	Not Specified	E.C. Goodwin Technical High School	Not Specified	DOE	0	0						29.300 78316	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
7001-15	New Britain	Hartford	EC Goodwin Technical High School	E.C. Goodwin Technical High School	Not Specified	DOE	0	0						29.300 78316	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
7802-41	New Britain	Hartford	Institution of Technology and Business Development	Not Specified	Not Specified		0	0						29.379 36783	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
9001-484	New Britain	Hartford	New Britain Superior Court	Not Specified	Not Specified		0	0						29.394 84787	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	50493 30.786		0					0		0
1326-489	New Britain	Hartford	10 Franklin Square	Not Specified	Not Specified		0	0						29.379 36783	80999 6.8137	X	24299 904.41	X	0.2857 14286	69428 29.831	X	0.0148 14815	35999 8.5838	0.2077 92208	71006 2.1418		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified	Military Depart	0	0						15.059 7477	11390 5.8019	X	34171 74.058	X	0.2857 14286	97633 5.445	X	0.0148 14815	50624. 80085	0.2337 66234	79881 9.9096		0					0		0

JESTR_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified	Military Department	0	0						15.0597477	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified	Military Department	0	0						15.0946703	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified	Military Department	0	0						15.0946703	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.35836411	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.46040249	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.35836411	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Canaan	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.35486031	113905.8019	X	3417174.058	X	0.285714286	976335.445	X	0.014814815	50624.80085	0.233766234	798819.9096		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						30.9246006	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						30.9246006	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.34323883	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.34323883	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.34323883	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.44284821	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.44284821	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.44284821	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	New Fairfield	Fairfield	Not Specified	Not Specified	Not Specified		0	0						31.34323883	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	12426087.48		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.06748009	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.06484413	1771868.03	X	53156040.9	X	0.253968254	13499946.89	X	0.022222222	1181245.353	0.220779221	11735749.29		0					0		0
	New	New	Not Specified	Not	Not Specified		0	0						26.064	17718	X	53156	X	0.2539	13499	X	0.0222	11812	0.2207	11735		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Haven	Haven		Specified										84413	68.03		040.9		68254	946.89		22222	45.353	79221	749.29									
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.064 84413	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.048 23112	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.854 56085	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		0
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		3
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.021 6465	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		3
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		3
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.000 7534	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.966 04156	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.966 04156	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	11735 749.29		0					0		2
	New Haven	New Haven	Not Specified	Not Specified	Not Specified		0	0						25.842 44728	17718 68.03	X	53156 040.9	X	0.2539 68254	13499 946.89	X	0.0222 22222	11812 45.353	0.2207 79221	47781 26.496		0					0		1
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.354 4693	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.354 4693	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.399 9958	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.399 9958	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.266 38222	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.266 38222	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.266 38222	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.266 38222	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.266 38222	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.305 04036	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4122-1741-22	Newington	Hartford	515 Maple Hill Avenue	Not Specified	Not Specified		0	0						29.311 42616	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4122-1841-22	Newington	Hartford	521 Maple Hill Ave	Not Specified	Not Specified		0	0						29.311 42616	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Not Specified	Not Specified		0	0						29.355 27992	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
5000-575	Newington	Hartford	Bus Shelter	Not Specified	Not Specified		0	0						29.353 91617	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-352	Newington	Hartford	Cottage #14	Cedarcrest Hospital	Not Specified		0	0						28.919 52324	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-355	Newington	Hartford	Cottage #25	Cedarcrest Hospital	Not Specified		0	0						28.887 10022	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-356	Newington	Hartford	Cottage #26	Cedarcrest Hospital	Not Specified		0	0						28.887 10022	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-357	Newington	Hartford	Cottage #27	Cedarcrest Hospital	Not Specified		0	0						28.887 10022	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-358	Newington	Hartford	Cottage #28	Cedarcrest Hospital	Not Specified		0	0						28.887 10022	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-359	Newington	Hartford	Cottage #34	Cedarcrest Hospital	Not Specified		0	0						28.887 10022	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-350	Newington	Hartford	Building #11	Cedarcrest Hospital	Not Specified		0	0						28.887 10022	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-351	Newington	Hartford	Building #29	Cedarcrest Hospital	Not Specified		0	0						28.945 158	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-361	Newington	Hartford	Hospital 2	Cedarcrest Hospital	Not Specified		0	0						28.945 158	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
4400-363	Newington	Hartford	Main Building (Hosp 1)	Cedarcrest Hospital	Not Specified		0	0						28.945 158	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0
	Newington	Hartford	Not Specified	Cedarcrest Hospital	Not Specified		0	0						28.945 158	72140 3.4122	X	21642 102.37	X	0.2857 14286	61834 57.819	X	0.0148 14815	32062 3.7387	0.2077 92208	44970 60.232		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
4400-366	Newington	Hartford	Morgue	Cedarcrest Hospital	Not Specified		0	0						28.945158	721403.4122	X	21642102.37	X	0.285714286	6183457.819	X	0.014814815	320623.7387	0.207792208	1972394.838							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.14808273	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	2218944.193							0	0	
	Newtown	Fairfield	Not Specified	Not Specified	Not Specified		0	0						27.2717495	316405.0053	X	9492150.16	X	0.285714286	2712042.903	X	0.014814815	140624.4468	0.233766234	621304.3741							0	0	
	North Haven	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0						26.00525284	88593.40149	X	2657802.045	X	0.253968254	674997.3447	X	0.022222222	59062.26766	0.220779221	586787.4644							0	0	
	North Haven	New Haven	Not Specified	Department of Transportation	Not Specified	DOT	0	0						26.00525284	88593.40149	X	2657802.045	X	0.253968254	674997.3447	X	0.022222222	59062.26766	0.220779221	251480.3419							0	0	
5000-127	North Stonington	New London	Rest Area And Information Center	DOT North Stonington Rest Center	Visitors Center	DOT	0	0						21.43893623	37968.60064	X	1139058.019	X	0.063492063	72321.14408	X	0.051851852	59062.26766	0.24025974	273669.7838							0	0	
5000-778	North Stonington	New London	Storage Shed	DOT North Stonington Rest Center	Storage Shed	DOT	0	0						21.43893623	37968.60064	X	1139058.019	X	0.063492063	72321.14408	X	0.051851852	59062.26766	0.24025974	273669.7838							0	0	
	North Stonington	New London	Storage Shed	DOT North Stonington Rest	Storage Shed	DOT	0	0						21.43893623	37968.60064	X	1139058.019	X	0.063492063	72321.14408	X	0.051851852	59062.26766	0.24025974	1733241.964							0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Center																														
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.951 98059	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					0		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.910 2087	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					0		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DMV	0	0						17.704 19884	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					0		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified	DOT	0	0						17.458 79555	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	16863 97.587		0					0		0
	Norwalk	Fairfield	Not Specified	Not Specified	Not Specified		0	0						16.088 9225	24046 7.8041	X	72140 34.122	X	0.2857 14286	20611 52.606	X	0.0148 14815	10687 4.5796	0.2337 66234	86095 03.47		0					0		0
1326-536	Norwich	New London	Warehouse	Uncas-on-Thames Hospital	Building No. 8	DPW	0	0						21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
1326-553	Norwich	New London	Allis	Uncas-on-Thames Hospital	Building No. 5	DPW	0	0						21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0						21.941 69235	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Staff House	Uncas-on-Thames Hospital	Building No. 6	DPW	0	0						22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
1326-537	Norwich	New London	Carpenter Shop	Uncas-on-Thames Hospital	Building No. 12	DPW	0	0						22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
1326-547	Norwich	New London	Tool Shed/Garage	Uncas-on-Thames Hospital	Building No. 13	DPW	0	0						22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
1326-551	Norwich	New London	Machine Shop	Uncas-on-Thames Hospital	Building No. 14	DPW	0	0						22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
1326-530	Norwich	New London	Southeastern Mental Health Authority	Uncas-on-Thames Hospital	Not Specified	DPW	0	0						22.151 38626	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Norwich	New London	Not Specified	Uncas-on-Thames Hospital	Not Specified	DPW	0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
1326-535	Norwich	New London	Phelps Clinic	Uncas-on-Thames Hospital	Building No. 1	DPW	0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
1326-555	Norwich	New London	Employees	Uncas-on-Thames Hospital	Building No. 2	DPW	0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.94169235	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						22.15138626	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.94169235	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.41152763	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.41152763	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.38150978	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.38150978	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.41152763	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	8848656.344		0				0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.669 26003	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.669 26003	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.381 50978	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.381 50978	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.411 52763	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
	Norwich	New London	Not Specified	Not Specified	Not Specified		0	0						21.618 20984	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
7701-35	Norwich	New London	Mohegan Campus	Three Rivers Community College	Education	Board of Trustees- CT Community Technical Colleges	0	0						24.045 66574	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0
(none)	Norwich	New London	Mohegan Campus	Three Rivers Community College	Shed	Board of Trustees- CT Community Technical College	0	0						24.055 54581	12276 51.421	X	36829 542.62	X	0.0634 92063	23383 83.658	X	0.0518 51852	19096 79.988	0.2402 5974	88486 56.344		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
	Norwich	New London	Not Specified	Not Specified	Not Specified	s	0	0						24.04566574	1227651.421	X	36829542.62	X	0.063492063	2338383.658	X	0.051851852	1909679.988	0.24025974	2645474.577		0					0		0	
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						33.8651619	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						0		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.12522697	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						0		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						30.12522697	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	2359477.326		0						0		0
	Plainfield	Windham	Not Specified	Not Specified	Not Specified		0	0						29.96552277	367029.8062	X	11010894.19	X	0.047619048	524328.2946	X	0.022222222	244686.5375	0.214285714	1627225.742		0						0		0
	Portland	Middlesex	Not Specified	Not Specified	Not Specified		0	0						28.1378231	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
	Portland	Middlesex	Not Specified	Not Specified	Not Specified		0	0						28.1378231	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-98	Portland	Middlesex	Administrative	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-97	Portland	Middlesex	Butler Building St.	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-94	Portland	Middlesex	Warehouse	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-92	Portland	Middlesex	Dwelling	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-95	Portland	Middlesex	Pump House	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-85	Portland	Middlesex	Small Saw Mill	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-88	Portland	Middlesex	Garage and Storage	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-89	Portland	Middlesex	Tool Shed	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-87	Portland	Middlesex	Storage Garage Supply	Not Specified	Not Specified		0	0						29.13349915	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-100	Portland	Middlesex	Paint/Carpenter	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-96	Portland	Middlesex	Umbrella Shed	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	1183436.903		0						0		0
3100-	Portland	Middlesex	Lumber Shed	Not Specified	Not Specified		0	0						29.0392971	253124.0043	X	7593720.128	X	0.492063492	3736592.444	X	0.007407407	56249.77873	0.155844156	44378		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
91	nd	lesex		Specified										2971	4.0043		20.128		63492	92.444		07407	77873	44156	88.387									
5000-579	Rocky Hill	Hartford	Bus Shelter	Not Specified	Not Specified		0	0						29.025 51079	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-2	Rocky Hill	Hartford	Commissary	Veteran's Home & Hospital	Building No. 2	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-7	Rocky Hill	Hartford	Veteran's Services	Veteran's Home & Hospital	Building No. 7	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-25	Rocky Hill	Hartford	Recovery Center	Veteran's Home & Hospital	Building No. 50	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-37	Rocky Hill	Hartford	Oxygen Shed	Veteran's Home & Hospital	Building No. 59	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-5	Rocky Hill	Hartford	Healthcare Facility	Veteran's Home & Hospital	Building No. 5	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-24	Rocky Hill	Hartford	Garage	Veteran's Home & Hospital	Building No. 49	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-22	Rocky Hill	Hartford	Garage	Veteran's Home & Hospital	Building No. 44	DVA	0	0						29.287 25815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-26	Rocky Hill	Hartford	Apartments	Veteran's Home & Hospital	Building No. 51	DVA	0	0						29.287 25815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-34	Rocky Hill	Hartford	Apartments	Veteran's Home	Building No. 60	DVA	0	0						29.287 25815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				& Hospital																															
1312-32	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 57	DVA	0	0						29.407 13501	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-31	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 56	DVA	0	0						29.407 13501	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-30	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 55	DVA	0	0						29.407 13501	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-29	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 54	DVA	0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-19	Rocky Hill	Hartford	Group Home 1	Veteran's Home & Hospital	Building No. 19	DVA	0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-28	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 53	DVA	0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-7108	Rocky Hill	Hartford	Electrical Building	Veteran's Home & Hospital	State Police	DVA	0	0						29.274 39117	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-3	Rocky Hill	Hartford	West Domicile	Veteran's Home & Hospital	Building No. 3	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
(none)	Rocky Hill	Hartford	Garage	Veteran's Home & Hospital	Building No. 13 Garage	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
1312-13	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 13	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
(none)	Rocky Hill	Hartford	Garage	Veteran's Home & Hospital	Building Nos. 15 & 17 Garage	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-15	Rocky Hill	Hartford	Residence (Duplex)	Veteran's Home & Hospital	Building No. 15	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-17	Rocky Hill	Hartford	Residence (Duplex)	Veteran's Home & Hospital	Building No. 17	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-10	Rocky Hill	Hartford	Security	Veteran's Home & Hospital	Building No. 10	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-12	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 12	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
(none)	Rocky Hill	Hartford	Garage	Veteran's Home & Hospital	Building No. 12 Garage	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-14	Rocky Hill	Hartford	Residence (Duplex)	Veteran's Home & Hospital	Building No. 14	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-16	Rocky Hill	Hartford	Residence (Duplex)	Veteran's Home & Hospital	Building No. 16	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
(none)	Rocky Hill	Hartford	Garage	Veteran's Home	Building Nos. 14 & 16 Garage	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				& Hospital																															
1312-1	Rocky Hill	Hartford	Administration	Veteran's Home & Hospital	Building No. 1	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-27	Rocky Hill	Hartford	Transitional Living Residence	Veteran's Home & Hospital	Building No. 52	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
(none)	Rocky Hill	Hartford	Storage (by stack)	Veteran's Home & Hospital	Building No. 37	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-6	Rocky Hill	Hartford	Power Plant	Veteran's Home & Hospital	Building No. 6	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-4	Rocky Hill	Hartford	East Domicile	Veteran's Home & Hospital	Building No. 4	DVA	0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-21	Rocky Hill	Hartford	Pump House	Veteran's Home & Hospital	Building No. 40		0	0						29.274 39117	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-33	Rocky Hill	Hartford	Cemetery Vault	Veteran's Home & Hospital	Building No. 58	DVA	0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
1312-23	Rocky Hill	Hartford	Garage	Veteran's Home & Hospital	Building No. 48	DVA	0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
5000-22	Rocky Hill	Hartford	Research Laboratory	DOT Records Storage	Not Specified	DOT	0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0	
5000-	Rocky	Hartford	Storage Building	DOT	Not Specified	DOT	0	0						29.369	94921	X	28476	X	0.2857	81361	X	0.0148	42187	0.2077	59171		0					0		0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
190	Hill	ord		Records Storage										0815	5.016		450.48		14286	28.709		14815	3.3404	92208	84.515									
7104-3	Rocky Hill	Hartford	State Records Center	Not Specified	Not Specified	DDS	0	0						29.326 50375	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
7104-2	Rocky Hill	Hartford	Library for the Blind	Not Specified	Not Specified		0	0						29.326 50375	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
5000-413	Rocky Hill	Hartford	Chemical Solvent Storage	Not Specified	Not Specified		0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-9	Rocky Hill	Hartford	Auditorium	Not Specified	Not Specified		0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-7103	Rocky Hill	Hartford	Water Tank Large	Not Specified	Not Specified		0	0						29.274 39117	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-7102	Rocky Hill	Hartford	Water Tank Small	Not Specified	Not Specified		0	0						29.274 39117	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-7105	Rocky Hill	Hartford	John Levitow Memorial Adult Care Facility	Not Specified	Not Specified		0	0						29.308 82645	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
11500	Rocky Hill	Hartford	Exhibit Hall	Not Specified	Not Specified		0	0						29.407 13501	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
3100-102	Rocky Hill	Hartford	Guard House	Not Specified	Not Specified		0	0						29.407 13501	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
3100-105	Rocky Hill	Hartford	Maintenance Building	Not Specified	Not Specified		0	0						29.407 13501	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
5000-580	Rocky Hill	Hartford	Bus Shelter	Not Specified	Not Specified		0	0						29.369 0815	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1312-11	Rocky Hill	Hartford	Residence	Veteran's Home & Hospital	Building No. 11	DVA	0	0						29.348 58131	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
1326-7102	Rocky Hill	Hartford	Office of the Chief State's Attorney	Not Specified	Not Specified		0	0						29.491 95862	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
3100-104	Rocky Hill	Hartford	Dwelling	Not Specified	Not Specified		0	0						29.440 89699	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
4122-204122	Rocky Hill	Hartford	1021 Maple Street	Not Specified	Not Specified		0	0						29.284 51157	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	59171 84.515		0					0		0
4122-214122	Rocky Hill	Hartford	1069 Maple Street	Not Specified	Not Specified		0	0						29.284 51157	94921 5.016	X	28476 450.48	X	0.2857 14286	81361 28.709	X	0.0148 14815	42187 3.3404	0.2077 92208	22879 78.013		0					0		0
8000-154	Somers	Tolland	Cybulski Correctional	Osborn Correct	Not Specified	DOC	0	0						26.340 38162	36702 9.8062	X	11010 894.19	X	0.1587 30159	17477 60.982	X	0.0370 37037	40781 0.8958	0.2077 92208	22879 78.013		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
			Institution	ional Institution																															
8000-136	Somers	Tolland	Staff House 5	Osborn Correctional Institution	Residential	DOC	0	0						26.53293991	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
8000-135	Somers	Tolland	Staff House 6	Osborn Correctional Institution	Residential	DOC	0	0						26.53293991	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
8000-133	Somers	Tolland	Staff House 7	Osborn Correctional Institution	Residential	DOC	0	0						26.53293991	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
8000-134	Somers	Tolland	Staff House 8	Osborn Correctional Institution	Residential	DOC	0	0						26.53293991	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
	Somers	Tolland	Osborn Correctional	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
8000-495	Somers	Tolland	Northern Correctional Institution	Osborn Correctional Institution	Not Specified	DOC	0	0						26.70142365	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
8000-17	Somers	Tolland	Boiler House R	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
	Somers	Tolland	Water Storage Tanks	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		
	Somers	Tolland	Water Storage Tanks	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0		

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Institution																														
8000-15	Somers	Tolland	Somers Vehicle Maintenance Facility	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0				0		0	
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0						26.52804184	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0					0		0
	Somers	Tolland	Water Tank	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0					0		0
8000-8	Somers	Tolland	Well Pump House 1	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0					0		0
	Somers	Tolland	Not Specified	Osborn Correctional Institution	Not Specified	DOC	0	0						26.53078651	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0					0		0
	Somers	Tolland	Soapstone MT Radio Tower Support Building	Shenipsit State Forest	Communications	DESPP	0	0						26.85411453	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0					0		0
2000-489	Somers	Tolland	Soapstone MT Radio Tower	Shenipsit State Forest	Communications	DESPP	0	0						26.85411453	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	2287978.013		0					0		0
3100-579	Somers	Tolland	Observation Tower	Shenipsit State Forest	Tower	DEEP	0	0						26.85411453	367029.8062	X	11010894.19	X	0.158730159	1747760.982	X	0.037037037	407810.8958	0.207792208	78895.79354		0					0		0
4122-294122	South Windsor	Hartford	310 Beezlebub Road	Not Specified	Not Specified		0	0						25.38110542	12656.20021	X	379686.0064	X	0.285714286	108481.7161	X	0.014814815	5624.977873	0.207792208	10729827.92		0					0		0
4101-49	Southbury	New Haven	Cottage Farm I	Southbury Training School	Not Specified	DDS	0	0						22.98550606	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					0		0
4101-62	Southbury	New Haven	Generator Shed	Southbury Training School	Not Specified	DDS	0	0						22.98550606	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					0		0
4101-139	Southbury	New Haven	Transformer Vault	Southbury Training School	Not Specified	DDS	0	0						22.78949928	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					0		0
4101-2	Southbury	New Haven	Cottage 36	Southbury	Not Specified	DDS	0	0						22.78949928	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
		n		Training School																														
4101-59	Southbury	New Haven	Health Care Center	Southbury Training School	Not Specified	DDS	0	0						22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-75	Southbury	New Haven	P2-Fleck Hall	Southbury Training School	Not Specified	DDS	0	0						22.894 41109	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-29	Southbury	New Haven	Cottage 20	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-30	Southbury	New Haven	Cottage 21	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-31	Southbury	New Haven	Cottage 22	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-32	Southbury	New Haven	Cottage 23	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-34	Southbury	New Haven	Cottage 25	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-35	Southbury	New Haven	Cottage 26	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-36	Southbury	New Haven	Cottage 27	Southbury Training School	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-16	Southbury	New Haven	Cottage 6	Southbury Training School	Not Specified	DDS	0	0						22.961 00235	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0
4101-118	Southbury	New Haven	Roselle School	Southbury Training	Not Specified	DDS	0	0						22.789 49928	17212 43.229	X	51637 296.87	X	0.2539 68254	13114 234.13	X	0.0222 22222	11474 95.486	0.2207 79221	11400 442.17		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				g School																														
4101-8	Southbury	New Haven	Bobwick Pavillion	Southbury Training School	Not Specified	DDS	0	0						22.78949928	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	11400442.17		0				0		0	
	Southbury	New Haven	Not Specified	Not Specified	Not Specified		0	0						23.98319626	1721243.229	X	51637296.87	X	0.253968254	13114234.13	X	0.022222222	1147495.486	0.220779221	838267.8063		0					0		0
5000-135	Southington	Hartford	Rest Area	Not Specified	Not Specified		0	0						28.06809998	126562.0021	X	3796860.064	X	0.285714286	1084817.161	X	0.014814815	56249.77873	0.207792208	788957.9354		0					0		0
5000-803	Southington	Hartford	Storage Shed	Not Specified	Not Specified		0	0						28.06809998	126562.0021	X	3796860.064	X	0.285714286	1084817.161	X	0.014814815	56249.77873	0.207792208	788957.9354		0					0		0
	Stafford	Tolland	Not Specified	Shenipsit State Forest	Not Specified	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	788957.9354		0					0		0
3100-578	Stafford	Tolland	Civilian Conservation Corp Museum	Shenipsit State Forest	Museum	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	788957.9354		0					0		0
3100-572	Stafford	Tolland	Rangers Headquarters House	Shenipsit State Forest	Not Specified	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	788957.9354		0					0		0
3100-576	Stafford	Tolland	Headquarters Garage	Shenipsit State Forest	Garage	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	788957.9354		0					0		0
	Stafford	Tolland	Not Specified	Shenipsit State Forest	Storage	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	788957.9354		0					0		0
	Stafford	Tolland	Not Specified	Shenipsit State Forest	Storage	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	788957.9354		0					0		0
3100-577	Stafford	Tolland	Oil Shed	Shenipsit State Forest	Shed	DEEP	0	0						27.43556976	126562.0021	X	3796860.064	X	0.158730159	602676.2006	X	0.037037037	140624.4468	0.207792208	867853.7289		0					0		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.00183105	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	976335.445		0					0		0
	Stamford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						15.00183105	139218.2023	X	4176546.07	X	0.285714286	1193298.877	X	0.014814815	61874.7566	0.233766234	1065093.213		0					0		0
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.14094353	151874.4026	X	4556232.077	X	0.285714286	1301780.593	X	0.014814815	67499.73447	0.233766234	1065093.213		0					0		0
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.14094353	151874.4026	X	4556232.077	X	0.285714286	1301780.593	X	0.014814815	67499.73447	0.233766234	1065093.213		0					0		0
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.14094353	151874.4026	X	4556232.077	X	0.285714286	1301780.593	X	0.014814815	67499.73447	0.233766234	1065093.213		0					0		0
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.14094353	151874.4026	X	4556232.077	X	0.285714286	1301780.593	X	0.014814815	67499.73447	0.233766234	1065093.213		0					0		0
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.14094353	151874.4026	X	4556232.077	X	0.285714286	1301780.593	X	0.014814815	67499.73447	0.233766234	1065093.213		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	rd	eld		Specified										94353	4.4026		32.077		14286	80.593		14815	73447	66234	93.213									
	Stratford	Fairfield	Not Specified	Not Specified	Not Specified		0	0						25.140 94353	15187 4.4026	X	45562 32.077	X	0.2857 14286	13017 80.593	X	0.0148 14815	67499. 73447	0.2337 66234	29290 06.335		0					0		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.875 52261	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					0		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.875 52261	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					0		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.875 52261	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	26035 61.187		0					0		0
	Suffield	Hartford	Not Specified	Not Specified	Not Specified		0	0						22.992 55562	41765 4.607	X	12529 638.21	X	0.2857 14286	35798 96.632	X	0.0148 14815	18562 4.2698	0.2077 92208	94674 9.5225		0					0		0
3100-481	Thompson	Windham	House & Garage	Quaddick State Park	Not Specified	Department of Energy and Environmental Protection	0	0						32.123 76022	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					0		0
5000-4193	Thompson	Windham	Sand/Salt Storage Shed	Thompson Salt Storage	Shed	Department of Transportation	0	0						30.147 69173	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					0		0
5000-4222	Thompson	Windham	Calsalt Shed	Thompson Salt Storage	Shed	Department of Transportation	0	0						30.147 69173	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	97633 5.445		0					0		0
5000-4185	Thompson	Windham	Personnel Shelter	Thompson Salt Storage	Shed	Department of Transportation	0	0						30.147 69173	15187 4.4026	X	45562 32.077	X	0.0476 19048	21696 3.4322	X	0.0222 22222	10124 9.6017	0.2142 85714	40680 6.4354		0					0		0
5000-504	Union	Tolland	Inspection Pit	Union Weigh and Inspection Station	Weigh and Inspection Station	Department of Transportation	0	0						32.331 79474	63281. 00107	X	18984 30.032	X	0.1587 30159	30133 8.1003	X	0.0370 37037	70312. 22341	0.2077 92208	39447 8.9677		0					0		0
5000-2	Union	Tolland	Maintenance Garage	Union Salt Storage and Garage	Not Specified	DOT	0	0						31.879 28581	63281. 00107	X	18984 30.032	X	0.1587 30159	30133 8.1003	X	0.0370 37037	70312. 22341	0.2077 92208	39447 8.9677		0					0		0
5000-706	Union	Tolland	Salt Shed	Union Salt Storage and Garage	Not Specified	DOT	0	0						31.879 28581	63281. 00107	X	18984 30.032	X	0.1587 30159	30133 8.1003	X	0.0370 37037	70312. 22341	0.2077 92208	39447 8.9677		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
5000-502	Union	Tolland	WIM Booth (Weigh In Motion)	Union Weigh and Inspection Station	Weigh and Inspection Station	Department of Transportation	0	0						32.33179474	63281.00107	X	1898430.032	X	0.158730159	301338.1003	X	0.037037037	70312.22341	0.207792208	394478.9677		0					0	0	
5000-508	Union	Tolland	Scale House	Union Weigh and Inspection Station	Weigh and Inspection Station	Department of Transportation	0	0						32.53751373	63281.00107	X	1898430.032	X	0.158730159	301338.1003	X	0.037037037	70312.22341	0.207792208	82057.37205		0					0	0	
2201-71	Vernon	Tolland	State Armory	Rockville Armory	Military	Military Department	1316337.01	3036						24.65860748	13163.3701	X	394901.103	X	0.158730159	62682.71476	X	0.037037037	14625.96678	0.207792208	157791.5871		0					0	0	
	Wallingford	New Haven	Not Specified	Not Specified	Not Specified		0	0						27.87059402	25312.40043	X	759372.0128	X	0.253968254	192856.3842	X	0.022222222	16874.93362	0.220779221	83826.78063		0					0	0	
	Warren	Litchfield	Not Specified	Not Specified	Not Specified		0	0						33.9921875	12656.20021	X	379686.0064	X	0.492063492	186829.6222	X	0.007407407	2812.488936	0.155844156	4378716.541		0					0	0	
1326-507	Waterford	New London	Superintendent's House	Seaside Regional Center	Not Specified	DPW	0	0						19.3283844	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
1326-505	Waterford	New London	Duplex House	Seaside Regional Center	Not Specified	DPW	0	0						19.3283844	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
1326-497	Waterford	New London	Duplex Garage	Seaside Regional Center	Not Specified	DPW	0	0						19.3283844	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
1326-498	Waterford	New London	Employee Building No. 2	Seaside Regional Center	Not Specified	DPW	0	0						19.3283844	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
1326-499	Waterford	New London	Employee Building No. 1	Seaside Regional Center	Not Specified	DPW	0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
(none)	Waterford	New London	Maintenance Building No. 2	Seaside Regional Center	Not Specified	DPW	0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
1326-493	Waterford	New London	Fenn Building	Seaside Regional Center	Not Specified	DPW	0	0						19.2874527	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
(none)	Waterford	New London	Butler Building	Seaside Regional Center	Not Specified	DPW	0	0						19.3283844	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	
1326-494	Waterford	New London	Generator Building	Seaside Regional Center	Not Specified	DPW	0	0						19.3283844	936558.8158	X	28096764.47	X	0.063492063	1783921.554	X	0.051851852	1456869.269	0.24025974	6750521.335		0					0	0	

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				Center																														
1326-506	Waterford	New London	Maintenance Building No. 1	Seaside Regional Center	Not Specified	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
1326-99993	Waterford	New London	Sewage Treatment Plant	Seaside Regional Center	Not Specified	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
1326-492	Waterford	New London	Greenhouse	Seaside Regional Center	Not Specified	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
(none)	Waterford	New London	Butler Building	Seaside Regional Center	Not Specified	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
4125-495	Waterford	New London	Incinerator Building	Seaside Regional Center	Not Specified	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
(none)	Waterford	New London	Renovated Garage	Seaside Regional Center	Workshop	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
4125-244126	Waterford	New London	Community Living Arrangement	Seaside Regional Center	Not Specified	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
1326-502	Waterford	New London	Water Pump Station	Seaside Regional Center	Pump House No. 3	DPW	0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.287 4527	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.328 3844	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.287 4527	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.287 4527	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.287 4527	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New London	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New	Not Specified	Not	Not Specified		0	0						19.177	93655	X	28096	X	0.0634	17839	X	0.0518	14568	0.2402	67505		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
	ord	Lond on		Specified										1965	8.8158		764.47		92063	21.554		51852	69.269	5974	21.335									
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.177 1965	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	67505 21.335		0					0		0
	Waterford	New Lond on	Not Specified	Not Specified	Not Specified		0	0						19.157 54318	93655 8.8158	X	28096 764.47	X	0.0634 92063	17839 21.554	X	0.0518 51852	14568 69.269	0.2402 5974	54733 9.5677		0					0		0
5000-615	West Hartford	Hartford	Bus Shelter	Not Specified	Not Specified		0	0						28.310 64796	75937. 20128	X	22781 16.038	X	0.2857 14286	65089 0.2967	X	0.0148 14815	33749. 86724	0.2077 92208	86785 3.7289		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
5000-180	Westbrook	Middlesex	Tourism Center/Rest Area	Not Specified	Not Specified		0	0						24.33283234	139218.2023	X	4176546.07	X	0.492063492	2055125.844	X	0.007407407	30937.3783	0.155844156	650890.2967		0					0		0	
5000-703	Westbrook	Middlesex	Storage Shed (mini)	Not Specified	Not Specified		0	0						24.33283234	139218.2023	X	4176546.07	X	0.492063492	2055125.844	X	0.007407407	30937.3783	0.155844156	650890.2967		0						0		0
5000-703	Westbrook	Middlesex	Storage Shed (mini)	Not Specified	Not Specified		0	0						24.33283234	139218.2023	X	4176546.07	X	0.492063492	2055125.844	X	0.007407407	30937.3783	0.155844156	887577.6773		0						0		0
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.39980316	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0						0		3
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.95583153	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0						0		4
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.06453514	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0						0		4
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.64515114	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0						0		3
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.59269142	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0						0		0
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.59269142	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1331366.516		0						0		0
	Westport	Fairfield	Not Specified	Not Specified	Not Specified		0	0						21.39980316	189843.0032	X	5695290.096	X	0.285714286	1627225.742	X	0.014814815	84374.66809	0.233766234	1775155.355		0						0		0
4400-354	Wethersfield	Hartford	Cottage #17	Cedarcrest Hospital	Not Specified		0	0						28.88710022	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0
4400-353	Wethersfield	Hartford	Cottage #16	Cedarcrest Hospital	Not Specified		0	0						28.88710022	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0
4400-364	Wethersfield	Hartford	Maintain Boiler Building	Cedarcrest Hospital	Not Specified		0	0						28.945158	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0
4400-369	Wethersfield	Hartford	Pump House	Cedarcrest Hospital	Not Specified		0	0						28.945158	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0
(none)	Wethersfield	Hartford	Not Specified	State Institute for the Blind	Not Specified	DPW	0	0						28.66644287	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0
1326-27	Wethersfield	Hartford	Department of Labor	Headquarters	Not Specified	DPW	0	0						28.56654358	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0
5000-587	Wethersfield	Hartford	Bus Shelter	Department of Transp	Not Specified	DOT	0	0						28.4972229	253124.0043	X	7593720.128	X	0.285714286	2169634.322	X	0.014814815	112499.5575	0.207792208	1577915.871		0						0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category
				ortation																														
1326-490	Wethersfield	Hartford	24 Wolcott Hill Road	Department of Transportation	Not Specified	DOT	0	0						28.440 27519	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					0		0
5000-598	Wethersfield	Hartford	Bus Shelter	Department of Transportation	Not Specified	DOT	0	0						28.497 2229	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					0		0
1326-491	Wethersfield	Hartford	38 Wolcott Hill Rd	Department of Transportation	Not Specified	DOT	0	0						28.440 27519	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					0		0
5000-375	Wethersfield	Hartford	Salt Shed	Department of Transportation	Not Specified	DOT	0	0						29.092 63611	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					0		0
5000-122	Wethersfield	Hartford	Storage Building	Department of Transportation	Not Specified	DOT	0	0						29.092 63611	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					0		0
5000-116	Wethersfield	Hartford	Maintenance and Repair Garage	Department of Transportation	Not Specified	DOT	0	0						29.092 63611	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	15779 15.871		0					0		0
5000-530	Wethersfield	Hartford	Storage Shed	Not Specified	Not Specified		0	0						29.092 63611	25312 4.0043	X	75937 20.128	X	0.2857 14286	21696 34.322	X	0.0148 14815	11249 9.5575	0.2077 92208	55227 05.548		0					0		0
7805-5380	Windham	Windham	Greenhouse	Eastern Connecticut State University	Building No. 6	CSU	0	0						26.235 77881	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-5380	Windham	Windham	Greenhouse	Eastern Connecticut State University	Building No. 6	CSU	0	0						26.235 77881	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-486	Windham	Windham	High Street Garage	Eastern Connecticut State University	Garage next to Heating Plant, South	CSU	0	0						26.235 77881	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0
7805-4	Windham	Windham	Shafer Hall	Eastern Connecticut	Building No. 3	CSU	0	0						26.235 77881	88593 4.0149	X	26578 020.45	X	0.0476 19048	12656 20.021	X	0.0222 22222	59062 2.6766	0.2142 85714	56952 90.096		0					0		0

JESTI R_ID	Town	County	Structure name	Property Name	Structure Use	Agency	Building Value	Contents value	Dam Inundation	Dam Failure Probability	Est. Dam Losses	Wildfire Interface	Wildfire Loss	Snow Depth (inches)	Winter Losses	Vulnerability	Thunderstorm Losses	Tornado Vulnerability	Tornado Probability	Tornado Loss	Drought Probability	EQ Probability	EQ Losses	Hurricane Probability	Hurricane Losses	Coastal Flood Zone	SLR Ave_MHW_36 (inches)	SLR Losses	Flood Data	Flood Probability	Flood Losses	Erosion Category	Erosion Loss	Storm Surge Category	
				State University																															
7805-2	Windham	Windham	Beckert Hall	Eastern Connecticut State University	Building No. 2	CSU	0	0						26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096							0		0	
7805-5	Windham	Windham	Heating Plant, South	Eastern Connecticut State University	Building No. 4	CSU	0	0						26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	5695290.096								0		0
7805-1	Windham	Windham	Burr Hall	Eastern Connecticut State University	Building No. 5	CSU	0	0						26.23577881	885934.0149	X	26578020.45	X	0.047619048	1265620.021	X	0.022222222	590622.6766	0.214285714	12692360.79								0		0
	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						24.92326355	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	12307743.79								0		0
	Windsor Locks	Hartford	Not Specified	Not Specified	Not Specified		0	0						23.4114666	1974367.233	X	59231017	X	0.285714286	16923147.71	X	0.014814815	877496.5481	0.207792208	236687.3806								0		0
	Woodbridge	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.06748009	37968.60064	X	1139058.019	X	0.253968254	289284.5763	X	0.022222222	25312.40043	0.220779221	251480.3419								0		0
	Woodbridge	New Haven	Not Specified	Not Specified	Not Specified		0	0						26.06748009	37968.60064	X	1139058.019	X	0.253968254	289284.5763	X	0.022222222	25312.40043	0.220779221	0							0		0	

# Hazus-MH: Flood Event Report

**Region Name:** FairfieldCT\_FLD\_v21

**Flood Scenario:** Year100

**Print Date:** Monday, May 20, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 626 square miles and contains 11,504 census blocks. The region contains over 324 thousand households and has a total population of 882,567 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 299,248 buildings in the region with a total building replacement value (excluding contents) of 88,722 million dollars (2006 dollars). Approximately 88.93% of the buildings (and 70.51% of the building value) are associated with residential housing.

### General Building Stock

Hazus estimates that there are 299,248 buildings in the region which have an aggregate total replacement value of 88,722 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1**  
**Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	62,553,857	70.5%
Commercial	18,566,541	20.9%
Industrial	4,452,906	5.0%
Agricultural	286,571	0.3%
Religion	1,359,745	1.5%
Government	455,523	0.5%
Education	1,047,285	1.2%
<b>Total</b>	<b>88,722,428</b>	<b>100.00%</b>

**Table 2**  
**Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	26,255,731	68.8%
Commercial	8,141,152	21.3%
Industrial	2,375,252	6.2%
Agricultural	145,101	0.4%
Religion	578,268	1.5%
Government	172,895	0.5%
Education	472,840	1.2%
<b>Total</b>	<b>38,141,239</b>	<b>100.00%</b>

### Essential Facility Inventory

For essential facilities, there are 8 hospitals in the region with a total bed capacity of 1,794 beds. There are 354 schools, 62 fire stations, 37 police stations and 11 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	FairfieldCT_FLD_v21
<b>Scenario Name:</b>	Year100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

## General Building Stock Damage

Hazus estimates that about 6,323 buildings will be at least moderately damaged. This is over 54% of the total number of buildings in the scenario. There are an estimated 721 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	10	7.58	95	71.97	19	14.39	6	4.55	2	1.52	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	13	48.15	10	37.04	3	11.11	1	3.70	0	0.00
Religion	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	397	6.43	1,577	25.56	1,764	28.59	1,711	27.73	721	11.69
<b>Total</b>	<b>10</b>		<b>509</b>		<b>1,606</b>		<b>1,773</b>		<b>1,714</b>		<b>721</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	6	85.71	1	14.29	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	100.00
Masonry	2	1.08	30	16.13	60	32.26	41	22.04	43	23.12	10	5.38
Steel	6	6.74	59	66.29	16	17.98	7	7.87	1	1.12	0	0.00
Wood	1	0.02	403	6.70	1,518	25.25	1,723	28.66	1,666	27.71	701	11.66

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 1,794 hospital beds available for use. On the day of the scenario flood event, the model estimates that 1,794 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	62	3	0	3
Hospitals	8	0	0	0
Police Stations	37	3	0	2
Schools	354	12	0	10

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 364,019 tons of debris will be generated. Of the total amount, Finishes comprises 35% of the total, Structure comprises 40% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 14,561 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 21,238 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 49,213 people (out of a total population of 882,567) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 3,959.42 million dollars, which represents 10.38 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 3,943.22 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 41.05% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	1,020.09	455.87	164.85	31.44	1,672.24
	Content	603.80	1,030.23	398.76	153.05	2,185.83
	Inventory	0.00	23.80	58.88	2.47	85.15
	<b>Subtotal</b>	<b>1,623.89</b>	<b>1,509.90</b>	<b>622.48</b>	<b>186.96</b>	<b>3,943.22</b>
<b><u>Business Interruption</u></b>						
	Income	0.04	5.05	0.03	0.26	5.38
	Relocation	0.97	1.20	0.05	0.10	2.32
	Rental Income	0.25	0.78	0.00	0.01	1.04
	Wage	0.13	4.75	0.05	2.53	7.46
	<b>Subtotal</b>	<b>1.39</b>	<b>11.78</b>	<b>0.12</b>	<b>2.90</b>	<b>16.20</b>
<b>ALL</b>	<b>Total</b>	<b>1,625.27</b>	<b>1,521.68</b>	<b>622.60</b>	<b>189.86</b>	<b>3,959.42</b>

## **Appendix A: County Listing for the Region**

Connecticut  
- Fairfield

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Fairfield	882,567	62,553,857	26,168,571	88,722,428
<b>Total</b>	<b>882,567</b>	<b>62,553,857</b>	<b>26,168,571</b>	<b>88,722,428</b>
<b>Total Study Region</b>	<b>882,567</b>	<b>62,553,857</b>	<b>26,168,571</b>	<b>88,722,428</b>

# Hazus-MH: Flood Event Report

**Region Name:** HartfordCT\_FLD\_v21

**Flood Scenario:** Yr100

**Print Date:** Tuesday, May 21, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

**Note:**

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 735 square miles and contains 10,918 census blocks. The region contains over 335 thousand households and has a total population of 857,183 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 291,267 buildings in the region with a total building replacement value (excluding contents) of 79,726 million dollars (2006 dollars). Approximately 90.41% of the buildings (and 69.65% of the building value) are associated with residential housing.

## General Building Stock

Hazus estimates that there are 291,267 buildings in the region which have an aggregate total replacement value of 79,726 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	55,530,571	69.7%
Commercial	16,504,026	20.7%
Industrial	4,468,857	5.6%
Agricultural	237,585	0.3%
Religion	1,247,114	1.6%
Government	669,951	0.8%
Education	1,067,588	1.3%
<b>Total</b>	<b>79,725,692</b>	<b>100.00%</b>

**Table 2  
Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	19,763,881	67.7%
Commercial	6,041,800	20.7%
Industrial	2,106,030	7.2%
Agricultural	122,145	0.4%
Religion	408,433	1.4%
Government	197,797	0.7%
Education	549,122	1.9%
<b>Total</b>	<b>29,189,208</b>	<b>100.00%</b>

## Essential Facility Inventory

For essential facilities, there are 12 hospitals in the region with a total bed capacity of 3,036 beds. There are 362 schools, 51 fire stations, 37 police stations and 8 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	HartfordCT_FLD_v21
<b>Scenario Name:</b>	Yr100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

## General Building Stock Damage

Hazus estimates that about 2,432 buildings will be at least moderately damaged. This is over 40% of the total number of buildings in the scenario. There are an estimated 1,349 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	11	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	4	80.00	0	0.00	0	0.00	0	0.00	1	20.00
Religion	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	35	1.45	75	3.10	409	16.93	549	22.72	1,348	55.79
<b>Total</b>	<b>1</b>		<b>50</b>		<b>75</b>		<b>409</b>		<b>549</b>		<b>1,349</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	192	100.00
Masonry	0	0.00	4	12.12	1	3.03	0	0.00	4	12.12	24	72.73
Steel	0	0.00	9	90.00	0	0.00	0	0.00	0	0.00	1	10.00
Wood	0	0.00	30	1.38	73	3.35	407	18.66	545	24.99	1,126	51.63

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 3,036 hospital beds available for use. On the day of the scenario flood event, the model estimates that 3,036 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	51	1	0	1
Hospitals	12	0	0	0
Police Stations	37	1	0	1
Schools	362	4	0	3

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 170,191 tons of debris will be generated. Of the total amount, Finishes comprises 31% of the total, Structure comprises 39% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 6,808 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 11,325 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 24,137 people (out of a total population of 857,183) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 1,876.28 million dollars, which represents 6.43 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 1,869.05 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 44.60% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	533.33	192.86	70.41	29.86	826.46
	Content	302.84	437.12	156.67	108.76	1,005.39
	Inventory	0.00	8.60	26.89	1.71	37.20
	<b>Subtotal</b>	<b>836.17</b>	<b>638.58</b>	<b>253.97</b>	<b>140.33</b>	<b>1,869.05</b>
<b><u>Business Interruption</u></b>						
	Income	0.03	1.95	0.02	0.20	2.21
	Relocation	0.41	0.37	0.02	0.07	0.87
	Rental Income	0.11	0.22	0.00	0.01	0.34
	Wage	0.10	1.91	0.02	1.79	3.82
	<b>Subtotal</b>	<b>0.65</b>	<b>4.45</b>	<b>0.06</b>	<b>2.08</b>	<b>7.24</b>
<b>ALL</b>	<b>Total</b>	<b>836.82</b>	<b>643.03</b>	<b>254.03</b>	<b>142.41</b>	<b>1,876.28</b>

## **Appendix A: County Listing for the Region**

Connecticut  
- Hartford

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Hartford	857,183	55,530,571	24,195,121	79,725,692
<b>Total</b>	<b>857,183</b>	<b>55,530,571</b>	<b>24,195,121</b>	<b>79,725,692</b>
<b>Total Study Region</b>	<b>857,183</b>	<b>55,530,571</b>	<b>24,195,121</b>	<b>79,725,692</b>

# Hazus-MH: Flood Event Report

**Region Name:** MidsexCT\_FLD\_v21

**Flood Scenario:** Yr100

**Print Date:** Saturday, May 18, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 369 square miles and contains 3,117 census blocks. The region contains over 61 thousand households and has a total population of 155,071 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 65,498 buildings in the region with a total building replacement value (excluding contents) of 16,015 million dollars (2006 dollars). Approximately 90.50% of the buildings (and 72.35% of the building value) are associated with residential housing.

## General Building Stock

Hazus estimates that there are 65,498 buildings in the region which have an aggregate total replacement value of 16,015 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	11,586,940	72.3%
Commercial	2,749,818	17.2%
Industrial	983,865	6.1%
Agricultural	73,896	0.5%
Religion	227,536	1.4%
Government	81,082	0.5%
Education	312,288	1.9%
<b>Total</b>	<b>16,015,425</b>	<b>100.00%</b>

**Table 2  
Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	6,950,657	71.6%
Commercial	1,838,382	18.9%
Industrial	544,025	5.6%
Agricultural	53,578	0.6%
Religion	126,333	1.3%
Government	40,932	0.4%
Education	155,834	1.6%
<b>Total</b>	<b>9,709,741</b>	<b>100.00%</b>

## Essential Facility Inventory

For essential facilities, there are 4 hospitals in the region with a total bed capacity of 747 beds. There are 72 schools, 15 fire stations, 12 police stations and 4 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	MidsexCT_FLD_v21
<b>Scenario Name:</b>	Yr100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

## General Building Stock Damage

Hazus estimates that about 3,171 buildings will be at least moderately damaged. This is over 67% of the total number of buildings in the scenario. There are an estimated 529 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	4	80.00	0	0.00	0	0.00	1	20.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	174	5.50	563	17.78	868	27.42	1,032	32.60	529	16.71
<b>Total</b>	<b>0</b>		<b>178</b>		<b>563</b>		<b>868</b>		<b>1,033</b>		<b>529</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	28	100.00
Masonry	0	0.00	1	1.25	12	15.00	24	30.00	33	41.25	10	12.50
Steel	0	0.00	3	75.00	0	0.00	0	0.00	1	25.00	0	0.00
Wood	0	0.00	173	5.66	551	18.04	843	27.60	996	32.61	491	16.08

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 747 hospital beds available for use. On the day of the scenario flood event, the model estimates that 645 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	15	2	0	2
Hospitals	4	1	0	1
Police Stations	12	0	0	0
Schools	72	3	0	3

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 193,412 tons of debris will be generated. Of the total amount, Finishes comprises 29% of the total, Structure comprises 44% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 7,736 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 5,243 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 11,399 people (out of a total population of 155,071) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 1,159.74 million dollars, which represents 11.94 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 1,155.50 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 54.33% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	387.82	110.91	28.92	11.47	539.11
	Content	241.43	250.16	64.95	44.40	600.94
	Inventory	0.00	5.13	9.78	0.54	15.45
	<b>Subtotal</b>	<b>629.25</b>	<b>366.20</b>	<b>103.64</b>	<b>56.42</b>	<b>1,155.50</b>
<b><u>Business Interruption</u></b>						
	Income	0.04	0.98	0.00	0.07	1.09
	Relocation	0.48	0.20	0.00	0.03	0.71
	Rental Income	0.16	0.11	0.00	0.00	0.27
	Wage	0.12	1.12	0.00	0.92	2.17
	<b>Subtotal</b>	<b>0.79</b>	<b>2.41</b>	<b>0.01</b>	<b>1.02</b>	<b>4.24</b>
<b>ALL</b>	<b>Total</b>	<b>630.04</b>	<b>368.61</b>	<b>103.65</b>	<b>57.44</b>	<b>1,159.74</b>

## **Appendix A: County Listing for the Region**

Connecticut

- Middlesex

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Middlesex	155,071	11,586,940	4,428,485	16,015,425
<b>Total</b>	<b>155,071</b>	<b>11,586,940</b>	<b>4,428,485</b>	<b>16,015,425</b>
<b>Total Study Region</b>	<b>155,071</b>	<b>11,586,940</b>	<b>4,428,485</b>	<b>16,015,425</b>

# Hazus-MH: Flood Event Report

**Region Name:** NewHavenCT\_FLD\_v21

**Flood Scenario:** Yr100

**Print Date:** Saturday, May 18, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

**Note:**

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 606 square miles and contains 10,820 census blocks. The region contains over 319 thousand households and has a total population of 824,008 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 280,515 buildings in the region with a total building replacement value (excluding contents) of 76,733 million dollars (2006 dollars). Approximately 90.25% of the buildings (and 68.45% of the building value) are associated with residential housing.

### General Building Stock

Hazus estimates that there are 280,515 buildings in the region which have an aggregate total replacement value of 76,733 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1**  
**Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	52,527,265	68.5%
Commercial	15,505,791	20.2%
Industrial	4,428,660	5.8%
Agricultural	226,467	0.3%
Religion	1,056,699	1.4%
Government	374,506	0.5%
Education	2,613,253	3.4%
<b>Total</b>	<b>76,732,641</b>	<b>100.00%</b>

**Table 2**  
**Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	19,851,025	68.3%
Commercial	5,729,321	19.7%
Industrial	2,513,643	8.6%
Agricultural	143,991	0.5%
Religion	309,292	1.1%
Government	113,613	0.4%
Education	423,160	1.5%
<b>Total</b>	<b>29,084,045</b>	<b>100.00%</b>

### Essential Facility Inventory

For essential facilities, there are 13 hospitals in the region with a total bed capacity of 2,769 beds. There are 358 schools, 43 fire stations, 55 police stations and 4 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	NewHavenCT_FLD_v21
<b>Scenario Name:</b>	Yr100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

## General Building Stock Damage

Hazus estimates that about 5,682 buildings will be at least moderately damaged. This is over 55% of the total number of buildings in the scenario. There are an estimated 775 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	5	12.82	29	74.36	4	10.26	1	2.56	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	5	62.50	2	25.00	0	0.00	0	0.00	1	12.50
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	377	6.69	1,318	23.37	1,396	24.76	1,774	31.46	774	13.73
<b>Total</b>	<b>5</b>		<b>412</b>		<b>1,324</b>		<b>1,397</b>		<b>1,774</b>		<b>775</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	24	100.00
Masonry	0	0.00	4	3.42	25	21.37	26	22.22	49	41.88	13	11.11
Steel	4	13.79	20	68.97	4	13.79	0	0.00	0	0.00	1	3.45
Wood	0	0.00	378	6.88	1,293	23.53	1,366	24.86	1,721	31.33	736	13.40

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 2,769 hospital beds available for use. On the day of the scenario flood event, the model estimates that 2,769 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	43	2	0	2
Hospitals	13	0	0	0
Police Stations	55	1	0	1
Schools	358	9	0	6

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 283,037 tons of debris will be generated. Of the total amount, Finishes comprises 36% of the total, Structure comprises 38% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 11,321 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 16,220 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 37,530 people (out of a total population of 824,008) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 2,641.09 million dollars, which represents 9.08 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 2,631.15 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 47.47% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	770.53	224.50	124.31	20.89	1,140.23
	Content	481.79	552.26	300.42	98.34	1,432.82
	Inventory	0.00	12.10	44.53	1.47	58.10
	<b>Subtotal</b>	<b>1,252.32</b>	<b>788.86</b>	<b>469.27</b>	<b>120.70</b>	<b>2,631.15</b>
<b><u>Business Interruption</u></b>						
	Income	0.04	2.77	0.06	0.19	3.06
	Relocation	0.87	0.55	0.05	0.06	1.52
	Rental Income	0.24	0.36	0.01	0.00	0.61
	Wage	0.12	2.69	0.05	1.89	4.76
	<b>Subtotal</b>	<b>1.27</b>	<b>6.37</b>	<b>0.16</b>	<b>2.14</b>	<b>9.95</b>
<b>ALL</b>	<b>Total</b>	<b>1,253.60</b>	<b>795.23</b>	<b>469.43</b>	<b>122.84</b>	<b>2,641.09</b>

## **Appendix A: County Listing for the Region**

Connecticut

- New Haven

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
New Haven	824,008	52,527,265	24,205,376	76,732,641
<b>Total</b>	<b>824,008</b>	<b>52,527,265</b>	<b>24,205,376</b>	<b>76,732,641</b>
<b>Total Study Region</b>	<b>824,008</b>	<b>52,527,265</b>	<b>24,205,376</b>	<b>76,732,641</b>

# Hazus-MH: Flood Event Report

**Region Name:** NewLondonCT\_FLD\_v21

**Flood Scenario:** Year100

**Print Date:** Monday, May 20, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 666 square miles and contains 5,208 census blocks. The region contains over 100 thousand households and has a total population of 259,088 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 105,392 buildings in the region with a total building replacement value (excluding contents) of 23,281 million dollars (2006 dollars). Approximately 91.50% of the buildings (and 75.10% of the building value) are associated with residential housing.

## General Building Stock

Hazus estimates that there are 105,392 buildings in the region which have an aggregate total replacement value of 23,281 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	17,484,870	75.1%
Commercial	3,577,005	15.4%
Industrial	890,062	3.8%
Agricultural	239,540	1.0%
Religion	329,686	1.4%
Government	241,936	1.0%
Education	518,176	2.2%
<b>Total</b>	<b>23,281,275</b>	<b>100.00%</b>

**Table 2  
Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	8,708,032	74.6%
Commercial	1,815,150	15.6%
Industrial	598,989	5.1%
Agricultural	130,838	1.1%
Religion	167,128	1.4%
Government	110,673	0.9%
Education	141,577	1.2%
<b>Total</b>	<b>11,672,387</b>	<b>100.00%</b>

## Essential Facility Inventory

For essential facilities, there are 2 hospitals in the region with a total bed capacity of 419 beds. There are 129 schools, 49 fire stations, 25 police stations and 9 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	NewLondonCT_FLD_v21
<b>Scenario Name:</b>	Year100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-Ifs

## General Building Stock Damage

Hazus estimates that about 2,586 buildings will be at least moderately damaged. This is over 64% of the total number of buildings in the scenario. There are an estimated 342 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	1	7.14	10	71.43	2	14.29	1	7.14	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	1	50.00	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	1	33.33	1	33.33	0	0.00	1	33.33	0	0.00
Religion	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	91	3.54	554	21.57	635	24.73	946	36.84	342	13.32
<b>Total</b>	<b>2</b>		<b>104</b>		<b>557</b>		<b>636</b>		<b>947</b>		<b>342</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)								
Concrete	0	0.00	0	0.00	0	0.00	0	0.00	3	100.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	13	100.00
Masonry	0	0.00	0	0.00	4	10.81	5	13.51	25	67.57	3	8.11
Steel	2	13.33	7	46.67	3	20.00	0	0.00	3	20.00	0	0.00
Wood	0	0.00	90	3.59	548	21.88	630	25.15	913	36.45	324	12.93

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 419 hospital beds available for use. On the day of the scenario flood event, the model estimates that 419 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	49	5	0	5
Hospitals	2	0	0	0
Police Stations	25	3	0	3
Schools	129	3	0	2

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 188,690 tons of debris will be generated. Of the total amount, Finishes comprises 29% of the total, Structure comprises 45% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 7,548 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 5,880 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 10,285 people (out of a total population of 259,088) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 1,199.47 million dollars, which represents 10.28 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 1,194.71 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 55.44% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	400.66	90.98	36.96	11.83	540.43
	Content	263.73	227.91	87.54	57.31	636.49
	Inventory	0.00	4.20	12.93	0.66	17.79
	<b>Subtotal</b>	<b>664.39</b>	<b>323.08</b>	<b>137.43</b>	<b>69.81</b>	<b>1,194.71</b>
<b><u>Business Interruption</u></b>						
	Income	0.04	1.00	0.02	0.06	1.12
	Relocation	0.31	0.15	0.02	0.03	0.52
	Rental Income	0.12	0.09	0.00	0.00	0.22
	Wage	0.14	0.94	0.02	1.81	2.91
	<b>Subtotal</b>	<b>0.62</b>	<b>2.18</b>	<b>0.07</b>	<b>1.89</b>	<b>4.76</b>
<b>ALL</b>	<b>Total</b>	<b>665.01</b>	<b>325.27</b>	<b>137.50</b>	<b>71.70</b>	<b>1,199.47</b>

## **Appendix A: County Listing for the Region**

Connecticut

- New London

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
New London	259,088	17,484,870	5,796,405	23,281,275
<b>Total</b>	<b>259,088</b>	<b>17,484,870</b>	<b>5,796,405</b>	<b>23,281,275</b>
<b>Total Study Region</b>	<b>259,088</b>	<b>17,484,870</b>	<b>5,796,405</b>	<b>23,281,275</b>

# Hazus-MH: Flood Event Report

**Region Name:** TollandCT\_FLD\_v21

**Flood Scenario:** Freq100Yr

**Print Date:** Saturday, May 18, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 410 square miles and contains 2,550 census blocks. The region contains over 49 thousand households and has a total population of 136,364 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 50,221 buildings in the region with a total building replacement value (excluding contents) of 11,381 million dollars (2006 dollars). Approximately 91.53% of the buildings (and 79.99% of the building value) are associated with residential housing.

## General Building Stock

Hazus estimates that there are 50,221 buildings in the region which have an aggregate total replacement value of 11,381 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	9,103,761	80.0%
Commercial	1,377,526	12.1%
Industrial	420,695	3.7%
Agricultural	67,262	0.6%
Religion	142,235	1.2%
Government	66,573	0.6%
Education	203,357	1.8%
<b>Total</b>	<b>11,381,409</b>	<b>100.00%</b>

**Table 2  
Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	4,074,169	77.7%
Commercial	728,889	13.9%
Industrial	252,400	4.8%
Agricultural	41,600	0.8%
Religion	56,964	1.1%
Government	37,127	0.7%
Education	50,834	1.0%
<b>Total</b>	<b>5,241,983</b>	<b>100.00%</b>

## Essential Facility Inventory

For essential facilities, there are 4 hospitals in the region with a total bed capacity of 224 beds. There are 66 schools, 22 fire stations, 10 police stations and 3 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	TollandCT_FLD_v21
<b>Scenario Name:</b>	Freq100Yr
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-Ifs

## General Building Stock Damage

Hazus estimates that about 228 buildings will be at least moderately damaged. This is over 28% of the total number of buildings in the scenario. There are an estimated 91 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	7	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	100.00
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	3	1.38	10	4.61	55	25.35	62	28.57	87	40.09
<b>Total</b>	<b>0</b>		<b>10</b>		<b>10</b>		<b>55</b>		<b>62</b>		<b>91</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	15	100.00
Masonry	0	0.00	2	25.00	1	12.50	2	25.00	1	12.50	2	25.00
Steel	0	0.00	4	66.67	0	0.00	0	0.00	0	0.00	2	33.33
Wood	0	0.00	4	2.02	9	4.55	53	26.77	61	30.81	71	35.86

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 224 hospital beds available for use. On the day of the scenario flood event, the model estimates that 224 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	22	1	0	1
Hospitals	4	0	0	0
Police Stations	10	1	0	1
Schools	66	3	0	2

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 29,358 tons of debris will be generated. Of the total amount, Finishes comprises 29% of the total, Structure comprises 41% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 1,174 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 1,989 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 2,655 people (out of a total population of 136,364) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 319.98 million dollars, which represents 6.10 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 318.78 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 36.16% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	74.04	26.49	23.55	2.43	126.51
	Content	41.52	74.74	52.09	12.86	181.20
	Inventory	0.00	1.21	9.61	0.25	11.07
	<b>Subtotal</b>	<b>115.56</b>	<b>102.43</b>	<b>85.25</b>	<b>15.54</b>	<b>318.78</b>
<b><u>Business Interruption</u></b>						
	Income	0.02	0.30	0.00	0.01	0.33
	Relocation	0.03	0.04	0.00	0.00	0.07
	Rental Income	0.04	0.02	0.00	0.00	0.06
	Wage	0.05	0.30	0.01	0.38	0.73
	<b>Subtotal</b>	<b>0.14</b>	<b>0.66</b>	<b>0.01</b>	<b>0.39</b>	<b>1.20</b>
<b>ALL</b>	<b>Total</b>	<b>115.70</b>	<b>103.09</b>	<b>85.26</b>	<b>15.93</b>	<b>319.98</b>

## **Appendix A: County Listing for the Region**

Connecticut  
- Tolland

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Tolland	136,364	9,103,761	2,277,648	11,381,409
<b>Total</b>	<b>136,364</b>	<b>9,103,761</b>	<b>2,277,648</b>	<b>11,381,409</b>
<b>Total Study Region</b>	<b>136,364</b>	<b>9,103,761</b>	<b>2,277,648</b>	<b>11,381,409</b>

# Hazus-MH: Flood Event Report

**Region Name:** WindhamCT\_FLD\_v21

**Flood Scenario:** Yr100

**Print Date:** Saturday, May 18, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

**Note:**

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 513 square miles and contains 2,744 census blocks. The region contains over 41 thousand households and has a total population of 109,091 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 43,813 buildings in the region with a total building replacement value (excluding contents) of 8,749 million dollars (2006 dollars). Approximately 90.48% of the buildings (and 72.58% of the building value) are associated with residential housing.

## General Building Stock

Hazus estimates that there are 43,813 buildings in the region which have an aggregate total replacement value of 8,749 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1**  
**Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	6,350,122	72.6%
Commercial	1,301,953	14.9%
Industrial	648,482	7.4%
Agricultural	90,063	1.0%
Religion	144,459	1.7%
Government	91,755	1.0%
Education	122,060	1.4%
<b>Total</b>	<b>8,748,894</b>	<b>100.00%</b>

**Table 2**  
**Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	3,045,035	67.9%
Commercial	763,997	17.0%
Industrial	478,096	10.7%
Agricultural	26,808	0.6%
Religion	65,256	1.5%
Government	37,775	0.8%
Education	68,880	1.5%
<b>Total</b>	<b>4,485,847</b>	<b>100.00%</b>

## Essential Facility Inventory

For essential facilities, there are 2 hospitals in the region with a total bed capacity of 148 beds. There are 56 schools, 27 fire stations, 10 police stations and no emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	WindhamCT_FLD_v21
<b>Scenario Name:</b>	Yr100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

## General Building Stock Damage

Hazus estimates that about 511 buildings will be at least moderately damaged. This is over 55% of the total number of buildings in the scenario. There are an estimated 262 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	0	0.00	3	37.50	0	0.00	2	25.00	3	37.50
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	1	0.20	13	2.59	85	16.97	143	28.54	259	51.70
<b>Total</b>	<b>0</b>		<b>3</b>		<b>16</b>		<b>85</b>		<b>145</b>		<b>262</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	14	100.00
Masonry	0	0.00	0	0.00	1	8.33	3	25.00	1	8.33	7	58.33
Steel	0	0.00	2	28.57	2	28.57	0	0.00	1	14.29	2	28.57
Wood	0	0.00	1	0.21	13	2.74	82	17.26	142	29.89	237	49.89

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 148 hospital beds available for use. On the day of the scenario flood event, the model estimates that 148 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	27	3	0	2
Hospitals	2	0	0	0
Police Stations	10	0	0	0
Schools	56	2	0	1

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 59,633 tons of debris will be generated. Of the total amount, Finishes comprises 25% of the total, Structure comprises 42% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 2,385 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 2,586 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 4,384 people (out of a total population of 109,091) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 511.23 million dollars, which represents 11.40 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 509.32 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 36.21% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	120.53	33.85	46.74	6.65	207.76
	Content	64.54	82.95	107.71	28.45	283.65
	Inventory	0.00	2.90	14.78	0.23	17.91
	<b>Subtotal</b>	<b>185.07</b>	<b>119.70</b>	<b>169.23</b>	<b>35.32</b>	<b>509.32</b>
<b><u>Business Interruption</u></b>						
	Income	0.00	0.20	0.02	0.03	0.26
	Relocation	0.05	0.04	0.02	0.02	0.14
	Rental Income	0.01	0.03	0.00	0.00	0.04
	Wage	0.01	0.29	0.02	1.15	1.47
	<b>Subtotal</b>	<b>0.07</b>	<b>0.56</b>	<b>0.06</b>	<b>1.21</b>	<b>1.91</b>
<b>ALL</b>	<b>Total</b>	<b>185.14</b>	<b>120.26</b>	<b>169.29</b>	<b>36.53</b>	<b>511.23</b>

## **Appendix A: County Listing for the Region**

Connecticut  
- Windham

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Windham	109,091	6,350,122	2,398,772	8,748,894
<b>Total</b>	<b>109,091</b>	<b>6,350,122</b>	<b>2,398,772</b>	<b>8,748,894</b>
<b>Total Study Region</b>	<b>109,091</b>	<b>6,350,122</b>	<b>2,398,772</b>	<b>8,748,894</b>

# Hazus-MH: Flood Event Report

**Region Name:** CT\_HurrSandy\_v21

**Flood Scenario:** CT\_SandyFinalDG

**Print Date:** Thursday, May 23, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 4 county(ies) from the following state(s):

- Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 2,267 square miles and contains 30,649 census blocks. The region contains over 804 thousand households and has a total population of 2,120,734 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 749,640 buildings in the region with a total building replacement value (excluding contents) of 211,921 million dollars (2006 dollars). Approximately 90.04% of the buildings (and 68.02% of the building value) are associated with residential housing.

## Building Inventory

### General Building Stock

Hazus estimates that there are 749,640 buildings in the region which have an aggregate total replacement value of 211,921 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1**  
**Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	144,152,932	68.0%
Commercial	40,046,152	18.9%
Industrial	10,755,493	5.1%
Agricultural	826,474	0.4%
Religion	2,973,666	1.4%
Government	1,502,201	0.7%
Education	11,664,293	5.5%
<b>Total</b>	<b>211,921,211</b>	<b>100.00%</b>

**Table 2**  
**Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	17,089,361	63.4%
Commercial	6,221,421	23.1%
Industrial	1,884,300	7.0%
Agricultural	76,950	0.3%
Religion	329,384	1.2%
Government	205,119	0.8%
Education	1,134,125	4.2%
<b>Total</b>	<b>26,940,660</b>	<b>100.00%</b>

### Essential Facility Inventory

For essential facilities, there are 24 hospitals in the region with a total bed capacity of no beds. There are 913 schools, 328 fire stations, 110 police stations and 91 emergency operation centers.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	CT_HurrSandy_v21
<b>Scenario Name:</b>	CT_SandyFinalDG
<b>Return Period Analyzed:</b>	Mix0
<b>Analysis Options Analyzed:</b>	No What-Ifs

## General Building Stock Damage

Hazus estimates that about 7,743 buildings will be at least moderately damaged. This is over 48% of the total number of buildings in the scenario. There are an estimated 283 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	17	19.32	69	78.41	2	2.27	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	6	54.55	4	36.36	1	9.09	0	0.00	0	0.00
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	1,165	15.21	2,990	39.04	1,874	24.47	1,347	17.59	283	3.69
<b>Total</b>	<b>17</b>		<b>1,242</b>		<b>2,996</b>		<b>1,875</b>		<b>1,347</b>		<b>283</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	6	100.00	0	0.00	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12	100.00
Masonry	2	1.20	25	14.97	68	40.72	36	21.56	35	20.96	1	0.60
Steel	10	16.95	44	74.58	4	6.78	1	1.69	0	0.00	0	0.00
Wood	1	0.01	1,162	15.52	2,911	38.89	1,835	24.52	1,306	17.45	270	3.61

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 0 hospital beds available for use. On the day of the scenario flood event, the model estimates that 0 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	328	6	0	6
Hospitals	24	0	0	0
Police Stations	110	2	0	2
Schools	913	5	0	4

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 246,133 tons of debris will be generated. Of the total amount, Finishes comprises 49% of the total, Structure comprises 31% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 9,845 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 21,319 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 52,155 people (out of a total population of 2,120,734) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 3,121.03 million dollars, which represents 11.58 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 3,101.86 million dollars. 1% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 45.52% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	855.31	290.17	110.28	30.33	1,286.08
	Content	563.54	743.63	271.16	180.14	1,758.46
	Inventory	0.00	15.57	40.07	1.68	57.32
	<b>Subtotal</b>	<b>1,418.85</b>	<b>1,049.36</b>	<b>421.50</b>	<b>212.15</b>	<b>3,101.86</b>
<b><u>Business Interruption</u></b>						
	Income	0.05	4.54	0.03	0.89	5.51
	Relocation	1.24	1.00	0.04	0.36	2.63
	Rental Income	0.31	0.66	0.00	0.01	0.98
	Wage	0.17	4.00	0.04	5.83	10.05
	<b>Subtotal</b>	<b>1.76</b>	<b>10.20</b>	<b>0.12</b>	<b>7.10</b>	<b>19.17</b>
<b>ALL</b>	<b>Total</b>	<b>1,420.60</b>	<b>1,059.56</b>	<b>421.62</b>	<b>219.25</b>	<b>3,121.03</b>

## **Appendix A: County Listing for the Region**

Connecticut

- Fairfield
- Middlesex
- New Haven
- New London

## Appendix B: Regional Population and Building Value Data

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Fairfield	882,567	62,553,857	29,462,157	92,016,014
Middlesex	155,071	11,586,940	4,850,971	16,437,911
New Haven	824,008	52,527,265	26,835,326	79,362,591
New London	259,088	17,484,870	6,619,825	24,104,695
<b>Total</b>	<b>2,120,734</b>	<b>144,152,932</b>	<b>67,768,279</b>	<b>211,921,211</b>
<b>Total Study Region</b>	<b>2,120,734</b>	<b>144,152,932</b>	<b>67,768,279</b>	<b>211,921,211</b>

# Hazus-MH: Flood Event Report

**Region Name:** LitchfieldCTa\_FLD\_v21

**Flood Scenario:** Yr100

**Print Date:** Monday, May 20, 2013

***Disclaimer:***

*Totals only reflect data for those census tracts/blocks included in the user's study region.*

*The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social*

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## General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Connecticut

Note:

Appendix A contains a complete listing of the counties contained in the region .

The geographical size of the region is 224 square miles and contains 1,654 census blocks. The region contains over 28 thousand households and has a total population of 71,744 people (2000 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B .

There are an estimated 31,105 buildings in the region with a total building replacement value (excluding contents) of 6,853 million dollars (2006 dollars). Approximately 89.58% of the buildings (and 71.24% of the building value) are associated with residential housing.

## General Building Stock

Hazus estimates that there are 31,105 buildings in the region which have an aggregate total replacement value of 6,853 million (2006 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

**Table 1  
Building Exposure by Occupancy Type for the Study Region**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	4,882,149	71.2%
Commercial	988,596	14.4%
Industrial	703,686	10.3%
Agricultural	38,240	0.6%
Religion	101,322	1.5%
Government	34,706	0.5%
Education	104,775	1.5%
<b>Total</b>	<b>6,853,474</b>	<b>100.00%</b>

**Table 2  
Building Exposure by Occupancy Type for the Scenario**

<b>Occupancy</b>	<b>Exposure (\$1000)</b>	<b>Percent of Total</b>
Residential	2,397,752	67.5%
Commercial	601,967	16.9%
Industrial	389,982	11.0%
Agricultural	24,495	0.7%
Religion	51,852	1.5%
Government	15,684	0.4%
Education	70,827	2.0%
<b>Total</b>	<b>3,552,559</b>	<b>100.00%</b>

## Essential Facility Inventory

For essential facilities, there are 1 hospitals in the region with a total bed capacity of 36 beds. There are 38 schools, 12 fire stations, 8 police stations and 1 emergency operation center.

## Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

<b>Study Region Name:</b>	LitchfieldCTa_FLD_v21
<b>Scenario Name:</b>	Yr100
<b>Return Period Analyzed:</b>	100
<b>Analysis Options Analyzed:</b>	No What-ifs

## General Building Stock Damage

Hazus estimates that about 240 buildings will be at least moderately damaged. This is over 46% of the total number of buildings in the scenario. There are an estimated 90 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5.3 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

**Table 3: Expected Building Damage by Occupancy**

Occupancy	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	4	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	3	18.75	4	25.00	5	31.25	1	6.25	3	18.75
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	0	0.00	2	0.91	6	2.74	63	28.77	61	27.85	87	39.73
<b>Total</b>	<b>0</b>		<b>10</b>		<b>10</b>		<b>68</b>		<b>62</b>		<b>90</b>	

**Table 4: Expected Building Damage by Building Type**

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
ManufHousing	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Masonry	0	0.00	2	28.57	1	14.29	2	28.57	1	14.29	1	14.29
Steel	0	0.00	4	28.57	2	14.29	4	28.57	1	7.14	3	21.43
Wood	0	0.00	2	0.93	6	2.79	62	28.84	60	27.91	85	39.53

## Essential Facility Damage

Before the flood analyzed in this scenario, the region had 36 hospital beds available for use. On the day of the scenario flood event, the model estimates that 36 hospital beds are available in the region.

**Table 5: Expected Damage to Essential Facilities**

Classification	Total	# Facilities		
		At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	12	1	0	1
Hospitals	1	0	0	0
Police Stations	8	0	0	0
Schools	38	2	0	2

If this report displays all zeros or is blank, two possibilities can explain this.

- (1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.
- (2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

## Induced Flood Damage

### **Debris Generation**

Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

The model estimates that a total of 39,208 tons of debris will be generated. Of the total amount, Finishes comprises 22% of the total, Structure comprises 44% of the total. If the debris tonnage is converted into an estimated number of truckloads, it will require 1,568 truckloads (@25 tons/truck) to remove the debris generated by the flood.

## Social Impact

### **Shelter Requirements**

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 1,305 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 2,093 people (out of a total population of 71,744) will seek temporary shelter in public shelters.

## Economic Loss

The total economic loss estimated for the flood is 428.59 million dollars, which represents 12.06 % of the total replacement value of the scenario buildings.

### **Building-Related Losses**

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 427.08 million dollars. 0% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 22.63% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

**Table 6: Building-Related Economic Loss Estimates**

(Millions of dollars)

<b>Category</b>	<b>Area</b>	<b>Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Others</b>	<b>Total</b>
<b><u>Building Loss</u></b>						
	Building	62.76	35.53	47.44	4.42	150.15
	Content	34.17	94.38	106.91	23.22	258.67
	Inventory	0.00	2.11	16.05	0.11	18.27
	<b>Subtotal</b>	<b>96.93</b>	<b>132.01</b>	<b>170.40</b>	<b>27.74</b>	<b>427.08</b>
<b><u>Business Interruption</u></b>						
	Income	0.00	0.27	0.01	0.04	0.31
	Relocation	0.03	0.07	0.02	0.02	0.13
	Rental Income	0.00	0.03	0.00	0.00	0.04
	Wage	0.01	0.41	0.01	0.60	1.03
	<b>Subtotal</b>	<b>0.04</b>	<b>0.77</b>	<b>0.03</b>	<b>0.66</b>	<b>1.51</b>
<b>ALL</b>	<b>Total</b>	<b>96.97</b>	<b>132.79</b>	<b>170.43</b>	<b>28.40</b>	<b>428.59</b>

## **Appendix A: County Listing for the Region**

Connecticut

- Litchfield

**Appendix B: Regional Population and Building Value Data**

	Building Value (thousands of dollars)			Total
	Population	Residential	Non-Residential	
<b>Connecticut</b>				
Litchfield	71,744	4,882,149	1,971,325	6,853,474
<b>Total</b>	<b>71,744</b>	<b>4,882,149</b>	<b>1,971,325</b>	<b>6,853,474</b>
<b>Total Study Region</b>	<b>71,744</b>	<b>4,882,149</b>	<b>1,971,325</b>	<b>6,853,474</b>

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## Quick Assessment Report

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May 23, 2013

**Study Region :** CT\_HurrSandy\_v21  
**Scenario :** CT\_SandyFinalDG  
**Return Period:** Mix0  
**Analysis Option:** 0

### Regional Statistics

<b>Area (Square Miles)</b>	2,267
<b>Number of Census Blocks</b>	30,649
<b>Number of Buildings</b>	
Residential	674,998
Total	749,640
<b>Number of People in the Region (x 1000)</b>	2,121
<b>Building Exposure (\$ Millions)</b>	
Residential	144,153
Total	211,921

### Scenario Results

#### Shelter Requirements

Displaced Population (# Households)	21,319
Short Term Shelter (# People)	52,155

#### Economic Loss

Residential Property (Capital Stock) Losses (\$ Millions)	1,419
Total Property (Capital Stock) Losses (\$ Millions)	3,102
Business Interruptions (Income) Losses (\$ Millions)	19

#### **Disclaimer:**

Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific flood. These results can be improved by using enhanced inventory data and flood hazard information.

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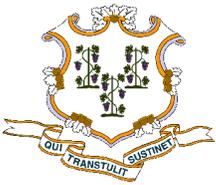
# Capability Assessment

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**Appendix 3-1. HMGP Admin Plan**



**STATE OF CONNECTICUT  
HAZARD MITIGATION GRANT PROGRAM  
ADMINISTRATIVE PLAN**

**December 2008**

**FOR**

**DISASTER DECLARATION  
FEMA-1700-DR-CT**

**APRIL, 2007 FLOODING EVENT**

**REVISED ON 12/31/08**

**Prepared by the  
State of Connecticut  
Department of Emergency Management and Homeland Security**

**25 Sigourney Street  
Hartford, Connecticut 06106**

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# **I. Introduction**

## **A. Purpose**

The purpose of the State of Connecticut Hazard Mitigation Grant Program Administrative Plan is to fulfill and implement the goals and strategies contained in the State Hazard Mitigation Plan. This Administrative plan also outlines the management procedures that the State will use to administer the Federal Hazard Mitigation Grant Program (HMGP) and the management of mitigation projects funded under the provisions of Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1989 (Stafford Act), Public Law 100-707, as implemented by 44 CFR, Part 206, Subpart N, subsection 206.407. Section 404 of the Stafford Act establishes an independent grant program to be used to fund State and local mitigation measures.

This Plan has been updated in response to the most recent Presidential Disaster Declaration on May 11, 2007 (FEMA-DR-1700-CT) for flooding that occurred in Connecticut from April 15 -17, 2007.

The HMGP is active only following a Presidentially Declared Disaster. The HMGP provides grants up to 75% of the total project cost for projects that mitigate damage from natural disasters. In response to a flash flood disaster declaration in June 1982 (FEMA-661-DP), the State of Connecticut drafted its first flood hazard mitigation plan under the provisions of Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288). When Connecticut was struck again by widespread flooding in June 1984 (FEMA-711-DR-CT) additional mitigation measures were added to Connecticut's mitigation plan.

In 1988, the Stafford Act was amended and Section 406 was renumbered as Section 409. Since the passage of the amended Stafford Act in 1988, Connecticut has suffered from five presidentially declared disasters:

- 1) The Western Connecticut tornado of July 10, 1989
- 2) Hurricane Bob on August 19, 1991
- 3) December Nor'easter (Winter Storm Beth) on December 10, 1992
- 4) Tropical Storm Floyd on September 16, 1999
- 5) Severe Flooding on October 14-15, 2005
- 6) Severe Flooding on April 15 – 17, 2007

Following any Presidential Disaster Declaration, the Federal Emergency Management Agency (FEMA) requires that the State HMGP Administrative Plan be updated in order to receive HMGP funds. The State will also amend the plan whenever necessary to reflect a material change in any State law, organizational, policy, or State agency operation.

Furthermore the State of Connecticut will comply with all applicable Federal Statutes and Regulations in effect with respect to the periods in which it receives grant funding under the HMGP.

#### B. Authorities and References

1. FEMA Regulations – 44 CFR, Part 206, Subparts M and N (Public Law 93-288 as amended by Public Law 100-707, The Robert T. Stafford Disaster Relief and Emergency Assistance Act) and the Disaster Mitigation Act of 2000, Section 322.
2. FEMA Law – Title V, The National Flood Insurance Program Reform Act of 1994, Subtitles D, E and F.
3. FEMA Regulations - 44 CFR, Part Section 60.3, the National Flood Insurance Program.
4. FEMA Regulations - 44 CFR, Part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
5. FEMA Regulations - 44 CFR, Part 14, Administration of Grants: Audits of State and Local Governments.
7. Executive Order 12612, Federalism.
8. Executive Order 11990, Protection of Wetlands.
9. Executive Order 11988, Floodplain Management.
10. Single Audit Act of 1984, as amended.
11. Connecticut General Statutes Title 28, Chapter 517, particularly Sections 28-9, 28-15(a), and 28-15(b), Civil Preparedness and Emergency Services, Federal Aid.
12. Connecticut General Statutes, Title 4, Chapter 24, Section 4-28a, Management of State Agencies, State Properties and Funds, Advisory Commission
13. Connecticut General Statutes, Section 25-68 et seq., Flood Control Projects.
14. Connecticut State Hazard Mitigation Plan – (Dated October, 2007)

### C. Definitions

1. "**Application**" means the initial requests for funding, submitted to FEMA by the State of Connecticut. Application also means the request for funding to be submitted to the State by the sub-applicant (e.g. municipality).
2. "**Applicant**" means the municipality, agency, federally recognized Native American tribe or other qualified entity that is applying for a grant.
3. "**Connecticut Interagency Hazard Mitigation Committee (CIHMC)**" means the committee formed to assist the State Hazard Mitigation Officer (SHMO) in review of mitigation project applications.
4. "**Department of Emergency Management and Homeland Security (DEMHS)**" means the agency designated by the Governor as the responsible agency for all matters related to the Hazard Mitigation Grant Program. The State Hazard Mitigation Officer (SHMO) works within DEMHS. The terms DEMHS and SHMO are used inter-changeably in this document.
5. "**Governor's Authorized Representative (GAR)**" means the individual designated by the governor to represent the State in activities related to the implementation of Public Law 93-288, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, and in ongoing State disaster, emergency preparedness, response and hazard mitigation activities. The Commissioner of the Department of Emergency Management and Homeland Security or his designated representative is the GAR.
6. "**Grant**" means an award of financial assistance by the State.
7. "**Grantee**" means a government entity to which a grant is awarded and which is accountable for use of the funds provided. The Grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. The State of Connecticut is the Grantee except as noted.
8. "**Hazard Mitigation Plan**" means a plan prepared by the State or a local or tribal government as a condition of receiving federal hazard mitigation funds under Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by Section 322 of the Disaster Mitigation Act of 2000.
9. "**Hazard Mitigation Survey Team (HMST)**" means the team that is established as the method of identifying mitigation issues in an immediate post-disaster setting. The HMST is also integral to early identification of measures to be funded under some hazard mitigation grant programs.

10. **“Measure”** means any mitigation project activity, or action proposed to reduce risk of future damage, hardship, loss of life, or suffering from disasters. The term “measure” is used interchangeably with the term “project” in the regulations.
11. **"Project"** means any mitigation measure, project, or action proposed to reduce risk of future damage, hardship, loss or suffering from disasters. The term "project" is used interchangeably with the term "measure" in regulations, and the term "measure" is used interchangeably with the term "project."
12. **"State Hazard Mitigation Officer (SHMO)"** means the individual designated by the Governor as the responsible individual for all matters related to the Hazard Mitigation Grant Program. The Department of Emergency Management and Homeland Security (DEMHS) is the agency designated by the Governor as the responsible agency for all matters related to the Hazard Mitigation Grant Program. The terms DEMHS and SHMO are used inter-changeably in this document.
13. **"Deputy State Hazard Mitigation Officer (SHMO)"** means the individual designated by the SHMO as the responsible deputy for all matters related to the Hazard Mitigation Grant Program. The Deputy SHMO carries out duties as delegated by the SHMO including processing reimbursement requests from sub-grantees, preparing any necessary Memoranda of Agreement or Contracts with municipalities, monitoring project through the performance period and preparing any necessary quarterly reports and preparing the necessary closeout reports at the end of the performance period.
14. **"Subgrant"** means an award of financial assistance under a grant to an eligible Subgrantee.
15. **"Subgrantee"** means the government or other legal entity to which a Subgrant is awarded and which is accountable to the Grantee for the use of the funds provided. Subgrantees may be a State agency, local government, private nonprofit organization, or Native American Nation.
16. Other definitions applicable to the hazard mitigation program found in Section 206.431 and 206, 433 44 CFR.

## II. Responsibilities

### A. State Government

1. The State of Connecticut Department of Emergency Management and Homeland Security (DEMHS), is designated to administer the HMGP program resulting from disaster declaration FEMA-1700-DR-CT, in conjunction with the Office of Policy and Management (OPM) and the Department of Environmental Protection (DEP). OPM and DEP provide

technical assistance in the ranking and prioritizing of projects proposed by towns and agencies for funding under the HMGP.

2. The State Hazard Mitigation Officer (SHMO), within DEMHS, is designated to coordinate activities of the Connecticut Interagency Hazard Mitigation Committee (CIHMC) and to serve as the responsible individual for project management. The terms DEMHS and SHMO are used inter-changeably in this document.
3. The CIHMC members are designated by the appropriate Directors or Commissioners of State Agencies having hazard mitigation expertise and responsibilities. State and federal agencies represented on the CIHMC are listed in Appendix B to this plan.

#### B. Local Government

The municipality's Chief Executive Officer of the municipality (e.g. First Selectman, Mayor, and Town Manager), the Chief Executive Officer of a qualified private non-profit organization, or the Chief Executive Officer of a federally recognized Native American Tribe will be required to designate an individual, in the application for a grant, who will serve as the point of contact on all matters related to the application.

### **III. Funding**

The federal share of any selected HMGP mitigation project will not exceed 75% of the total project cost. The total federal funds available will not exceed 15% of the Federal share of the FEMA estimate of all Damage Survey Reports under Section 406 (Public Assistance permanent restorative work), Individual Assistance, and administrative mission statements for each disaster. The Non-Federal share may exceed the Federal share and may be a combination of other State, local or private funding. The local share may be composed of local government generated revenue, private sector resources, and/or other grant money that law or regulation does not prohibit for this purpose. Any specific requirements for cost-share will be established in FEMA-State Agreements.

### **IV. Eligibility Requirements**

*The State of Connecticut's eligibility requirements conform to Federal standards. Federal definitions are used to determine eligibility.*

#### A. Eligible Grant Applicants are:

1. State and local units of government (with approved Hazard Mitigation Plans).
2. Private non-profit organizations or institutions that own or operate a private non-profit facility or other public holdings, or are defined as a separate taxing

district, as defined in 206.221 (e) 44 CFR of the Stafford Act, and Connecticut General Statutes Section 7-324 et seq.

3. Federally recognized Native American Tribes and tribal organizations (with approved Hazard Mitigation Plans).
4. Located in communities that meet all federal requirements to allow participation in the National Flood Insurance Program (NFIP), meet all applicable federal, State and local permit requirements. Only communities in good standing with the NFIP will be considered for HMGP mitigation grants in Connecticut.

B. Eligible Grant Projects must:

1. Seek to solve the problems they are intended to address;
2. Conform to the State's Natural Hazard Mitigation Plan;
3. Address a problem that has been repetitive, or a problem that poses a significant risk to health and safety if left unsolved;
4. Be cost effective and cost no more than the anticipated value of the reduction in damage to the project area if a future disaster were to occur (benefits must exceed cost of the project proposal);
5. Be the most practical, effective and environmentally sound alternative among a range of alternatives that have been considered;
6. Contribute, to the extent practicable, to a permanent or long-term rather than temporary or short-term solution to the problem it is intended to address and avoid unintended consequences;
7. Consider long-term changes to the areas and entities it protects, and has manageable future maintenance and modification requirements;
8. Contribute to a long-term solution that integrates hazard mitigation principles with existing programs and overall community planning; and
9. Meet all applicable codes, standards, and regulations applicable to the locale including, but not limited to, 44 CFR Part 9, Floodplain Management and Protection of Wetlands, and 44 CFR Part 10, Environmental Considerations.

## **V. Applicant Notification**

### **A. Public Assistance Briefings**

The State will coordinate the presentation of information, as needed, on the Hazard Mitigation Grant Program at Public Assistance Applicant's Briefings. The intent of Applicant Briefings is to create an early awareness of Mitigation Grant Programs.

### **B. Notice to Potential Applicants**

When sufficient funding is determined to be available for the Hazard Mitigation Grant Program (HMGP) to warrant the solicitation of new applications, an invitation to apply will be sent to the chief executive officer of each municipality, chief executive officer of each federally recognized Native American Tribe, and in the designated disaster area as well as other areas deemed by the SHMO to benefit from the announcement. When funding is limited, the State may also consider projects already on its list of priority projects developed and ranked by the CIHMC. (See Section VI, D.)

### **C. Special Briefings**

As necessary, detailed Hazard Mitigation Grant Program briefings for potential applicants will be scheduled. The briefings will describe eligible activities, funds and Subgrantee administrative requirements, application process and key deadlines.

## **VI. Project Identification**

### **A. Dissemination**

Information on the Hazard Mitigation Grant Program shall be widely disseminated through multiple sources to potential applicants.

### **B. Public Damage Assessment Teams**

Information acquired during Preliminary Damage Assessments (PDA) for presidentially-declared disasters is an excellent opportunity for the identification of mitigation issues and potential projects. PDA teams should be briefed as to the availability of funds and requirements of the Hazard Mitigation Grant Program so potential projects can be identified for follow-up by the CIHMC.

### **C. Public Assistance Briefings**

Applicants for Public Assistance may be aware of potential mitigation projects that will not be funded through the Public Assistance Program. They will be briefed on the availability of the Hazard Mitigation Grant Program during the Applicant Briefings that are held for Public Assistance. The Public Assistance inspection teams

consisting of Federal, State and local representatives will complete detailed inspections of damaged facilities and will be in a position to identify broad or comprehensive projects that may impact several sites.

#### D. List of Projects

An ongoing list of potential Hazard Mitigation projects shall be identified and maintained by the CIHMC for various types of mitigation grants.

## VII. Application Procedures

### A. Submission of Applications to the State

1. Application forms with instruction brochures will be provided for the applicant to provide information necessary to determine eligibility (Sec. IV) and ranking (Sec. VII B.2.)
2. Applications should be completed by the responsible governmental entity or private non-profit organization, signed by the Chief executive officer of the jurisdiction or organization, and submitted to the State Hazard Mitigation Officer.
3. Applications for projects must indicate that work can be completed within one year of the date of FEMA approval of the grant. An exception may be granted to this requirement if circumstances warrant.
4. Applicants must submit information on their proposed projects by the announced due date to the State Hazard Mitigation Officer to be considered for Section 404 funding.
5. The State must submit to FEMA all State-Approved HMGP projects after all state reviews and cost benefit analyses have been completed.
6. DEMHS staff will provide technical assistance to grant applicants during the application period. Technical assistance typically includes answering questions concerning eligibility of proposed projects and the approval procedure. All questions regarding permits, licenses and code compliance will be the responsibility of the applicant's jurisdiction.

### B. Review, Ranking and Selection of Projects

1. The function of the CIHMC is to review and recommend HMGP projects to the State Hazard Mitigation Officer (SHMO) for funding. The SHMO submits the approved funding recommendations to FEMA.

## 2. Ranking

The CIHMC will review applications for eligibility and completeness, and will rank and assign priorities for funding to all eligible projects. The CIHMC has developed a ranking form (see next page) which integrates the top 7 strategies and goals of the State Hazard Mitigation Plan and in accordance with the criteria in Section IV B and 44 CFR Section 206.434 (c).

## HAZARD MITIGATION GRANT PROGRAM

### Project Evaluation Criteria

I. Town/Project Name: \_\_\_\_\_ Reviewer Name: \_\_\_\_\_

<b>The extent to which the project ranks:</b>	<b>Low</b>					<b>High</b>	
	<b>0</b> 0%	<b>1</b> 20%	<b>2</b> 40%	<b>3</b> 60%	<b>4</b> 80%	<b>5</b> 100%	
Does the proposed measure prevent losses to a NFIP insurable building?							
Does the measure directly mitigate the effects of a frequent natural disaster such as flooding or high winds?							
Will the measure result in a long-term solution to a flooding problem & requires min. maintenance?							
Is the proposed measure multi-dimensional (Coupling Construction with Planning, Training or Improved Response Systems)?							
Does the proposed measure provide benefits to a large population of an area (e.g. Culvert upgrade, Bridge Replacement, Public Education...)?							
Does the project represent an innovative approach which can serve as a pilot project in another jurisdiction?							
Does the project have a Benefit to Cost Ratio greater than 1:1? (Projects which use a FEMA approved model to prove their benefits should be considered stronger than projects that only imply benefits without proof.)							
Will the measure eliminate future vulnerability to a common natural hazard (e.g. land acquisition, elevation of buildings, hurricane clips etc.)?							
Does the project protect a critical facility or community service such as a police station or school?							
Is the proposed measure located in a community that has recently or repeatedly suffered damages from natural disasters?							<b>Grand Total Score</b>
<b>Totals</b>							

The proposed mitigation measure

- a) should protect life, property and safety;
  - b) should protect essential services, critical facilities, or the economy of the community;
  - c) will have the greatest potential impact for reducing future disaster losses;
  - d) is well-designed, well-organized, and demonstrates the technical capacity to undertake and implement proposed measures successfully;
  - e) indicates a degree of commitment and support by participants (e.g. active participation, including financial, by local beneficiaries, public and private) and likelihood that the project, as proposed, will succeed in attaining its objectives;
  - f) fits within the local and State Hazard Mitigation Plan and an overall plan for development and/or hazard mitigation in the community, disaster area, or state;
  - g) encourages regional or multi-agency cooperation, and
  - h) will serve as a model for other communities and/or State agencies.
3. During the review and ranking process it is likely that the CIHMC will need additional information about the project. The State Hazard Mitigation Officer is responsible for obtaining the needed information from the Applicant's point of contact.

#### C. Notification of Applicants

Following selection of projects to be submitted to FEMA for HMGP funding, the SHMO will notify each applicant of the decision. regarding submission of Selected Projects to FEMA.

1. The State Hazard Mitigation Officer will ensure that minimum program requirements are met by ensuring that each applicant is a member in good standing of the NFIP and that each application is complete prior to being submitted to FEMA.
2. The State Hazard Mitigation Officer is also responsible for sending to FEMA a Standard Form (SF) 424 (Application for Federal Assistance) and an SF 424D (Assurance for Construction Programs) for each disaster. The package must contain any pertinent project management information not contained in the State Hazard Mitigation Administrative Plan and identify the specific mitigation measures for which funding is requested. The SF 424 must be signed by the Fiscal Administrative Manager of the Connecticut Department of Emergency Management and Homeland Security and forwarded to FEMA within 60 days of the disaster declaration. If this deadline cannot be met a request for extension shall be submitted to FEMA within 60 days.

## VIII. Project Management

### A. Administration

1. All HMGP mitigation funding approval for the Grantee and Subgrantee will be based on 75% - 25% cost sharing provisions outlined in the FEMA-State Agreements or other published guidance. The Non-Federal share may exceed the Federal share and may be a combination of other State, Local or private funding. Subgrantee applicants for HMGP funding must provide written description of its cost share agreement. Obligation of Federal funds will not take place until approval has been received for the project from FEMA.
2. Based on the approved application and work schedule of the project(s), a record keeping and financial system will be implemented for the duration of the project. The Subgrantee will submit quarterly progress reports to the State Hazard Mitigation Officer, beginning the first full quarter after receipt of the funding. These reports should indicate the status and projected completion date of the project, and any problems affecting the completion date, scope, or cost, which could result in non-compliance with approved grant conditions. The State Hazard Mitigation Officer will submit reports to FEMA as required. The final report will be a complete assessment of project accomplishments.
3. DEMHS staff will provide technical assistance to grant applicants during the performance of projects. Technical assistance typically includes answering questions concerning eligible expenses, processing of agreements and payments. All questions regarding permits, licenses and code compliance will be the responsibility of the applicant's jurisdiction.
4. Roles and responsibilities
  - a) Subgrantee (applicant):
    - (1) Implements monitoring procedures and submits quarterly progress reports to the State Hazard Mitigation Officer as directed at the time grant is awarded.
    - (2) Maintains financial records and receipts necessary to document all expenditures connected with the project including Subgrantee Administrative costs.
    - (3) Insures that any repair or construction is in accordance with applicable standards of safety, decency, and sanitation, and in conformity with applicable codes, specifications, and standards.

b) Grantee (Department of Emergency Management and Homeland Security):

- (1) Provides overall staff support necessary to manage the State Hazard Mitigation Grant Program and funded programs.
- (2) Receives quarterly progress reports from Subgrantee, and reviews and submits to FEMA as required.
- (3) Reviews certification of costs, cost overruns, audits and appeals, and forwards to GAR.
- (4) Monitors and evaluates project accomplishment, and adherence to work schedule.
- (5) Maintains necessary financial documentation and progress reports to support funds distributed to Subgrantee(s).
- (6) Coordinates project actions with the GAR and provides assistance as required in administering the mitigation program.
- (7) Provides technical assistance to Subgrantees as necessary.
- (8) Assures necessary interagency coordination on all aspects of the Program.

c) State Hazard Mitigation Officer (SHMO).

- (1) Is responsible for overall grant administration.
- (2) Notifies Subgrantees of actions taken in response to applications.
- (3) Certifies that all claims and costs are eligible and in compliance with provisions of the FEMA/State Agreement. Submits claims to the Regional Director for payment.
- (4) Coordinates all actions that pertain to the mitigation grant program with FEMA, as necessary, on matters pertaining to the Hazard Mitigation Grant Program.

d) Deputy SHMO

- (1) Will process reimbursement requests from sub-grantees
- (2) Prepare any necessary Memoranda of Agreement or Contracts with municipalities.

(3) Monitor projects through the performance period and prepare any necessary quarterly reports.

(4) Prepare the necessary closeout reports at the end of the performance period.

## B. Financial Administration

1. The Connecticut Department of Emergency Management and Homeland Security will serve as Grantee for project financial administration for disaster declaration #FEMA-1700-DR-CT in accordance with 44 CFR, Part 13. Subgrantee(s) (applicants) are accountable to the Grantee for funds that will be awarded.
2. Allowable costs associated with administering the program are authorized in accordance with Section 206-439, 44 CFR. Administrative costs must be shown as a separate line item and must be approved by the GAR or his designee.
3. Reimbursement

The Grantee will pay Subgrantees on a reimbursement basis upon receipt of a reimbursement request. Only up to 90% of the award will be available until after the project is completed; the final share will be paid after the SHMO and DEMHS accounting staff do a final project review and all relevant parties have signed off on the project completion certificate. DEMHS shall not be responsible for any cost overruns: any cost overruns shall be the sole responsibility of the sub-applicant.

### 4. Audit Requirements

#### a) State Audit

(1) The Grantee, and each Subgrantee, that receives \$25,000 or more in federal financial assistance, shall have audits made in accordance with 44 CFR Part 14.

(2) DEMHS shall assure that these audits are performed on a timely basis.

(3) DEMHS shall review audits completed for the Grantee and Subgrantees. If adverse findings are reported, the SHMO shall assure that appropriate action is taken and report that action to FEMA.

(4) DEMHS shall provide a copy of all audits performed on HMGP projects to the FEMA Inspector General.

(5) Additionally, the sub-grantees acknowledge and agree that the State Single Audit Act (§§4-230 through 236 inclusive and regulations promulgated thereunder) requires that all grants, federal or state must be itemized in the sub-grantee audit. As soon as available, a copy of the sub-grantee annual audit documenting Hazard Mitigation Grant Program expenditures must be provided to:

Mr. Joseph Duberek, Fiscal Administrative Manager  
Department Emergency Management Homeland Security Fiscal Unit  
25 Sigourney Street – 6<sup>th</sup> Floor  
Hartford, CT 06106-5042

b) Federal Single Audit Act

The sub-grantees acknowledge and agree that FEMA may elect to conduct a federal audit (Federal Single Audit Act of 1984, P.L. 98-502 and the amendments of 1996 P.L. 104-156) of the HMGP grant or on any of the subgrants.

5. Applicant Appeals

a) The applicant may elect to appeal a decision, made by the SHMO, on applications for mitigation grants.

b) The appeal will be submitted in writing and contain sufficient additional information, over that submitted with the original application, to warrant reconsideration by the SHMO.

c) Appeals must be submitted to the SHMO within 15 days from the date of the action being appealed.

6. SHMO Appeals

a) The SHMO may, on behalf of an applicant or the state, appeal any FEMA determination of federal assistance. Local appeals must be submitted in writing through the SHMO.

b) Applicants must provide sufficient information to allow the SHMO to determine the facts and validity of the request.

c) The SHMO appeal shall be in writing and submitted to FEMA within 60 days from the date of the action being appealed.

### C. Cost Overruns

1. The final cost of approved work may, in some instances, exceed approved cost estimates.
2. In cases of cost overrun, the applicant may request approval of additional costs providing justification (invoices, daily activity reports, progress reports, etc.) for evaluation by the SHMO.
3. The SHMO evaluates each cost overrun and, when justified, and funds are available, may approve an additional amount if it meets the cost/benefit criteria. The applicant should identify the overrun before the final inspection and in any applicable quarterly reports. Cost overruns will be approved only when funds are available in the grant program to support the amount required.
4. The SHMO will forward cost overruns exceeding 10% of project cost to the FEMA Regional Director for appropriate action.

### D. Project Closeout

1. When all payments of funds have been made, the SHMO determines eligible administrative allowance and requests reimbursement from FEMA.
2. Files at DEMHS will be documented to reflect that closeout has been accomplished and no further disbursements will be made.

## **IX. Plan Review**

This administrative plan will be reviewed and revised after each federally declared disaster to ensure compliance with law, implementing regulations and state policies. It will be updated as needed to reflect regulatory or policy changes or to improve program administration. The plan will be submitted to FEMA for approval by the FEMA Regional Administrator.

Upon the next update of Connecticut's Emergency Operations Plan, this Administrative plan will become a part of that plan and will be attached as an annex to the Emergency Operations Plan.

## APPENDIX A: HMGP APPLICATION PROCEDURES

Application for a Hazard Mitigation Program Grant should be come from the responsible governmental entity (city, town, borough, or Native American tribe), signed by the Chief executive officer or the designated representative of the jurisdiction and submitted to the State Hazard Mitigation Officer. The address for submitting applications pursuant to disaster declaration #FEMA-1700-DR-CT is:

Douglas Glowacki  
Emergency Preparedness Program Specialist  
State of Connecticut  
Department of Emergency Management and Homeland Security  
25 Sigourney Street  
Hartford, CT 06106

Each application must contain the following information:

- Identification number of disaster;
- Name of the applicant/organization;
- Point of contact for the proposed measure or project;
- Location of the proposed mitigation measure or project;
- Description of the proposed mitigation measure or project;
- Analysis of the project's cost effectiveness and substantive risk reduction;
- Project work schedule;
- Justification for selection of the project;
- Alternate considerations;
- Environmental information consistent with Federal and State Regulations;
- Cost breakdown of preferred alternative;
- List of damages indicating repetitive losses at sight.

Potential applicants must submit a copy of complete, signed applications by the announced deadline. Applications must be submitted as hard copies signed by applicant (.pdf copies of signed applications are also accepted via email). Applications postmarked later than the deadline will not be considered.

## **APPENDIX B: CT INTERAGENCY HAZARD MITIGATION COMMITTEE**

The following State Agencies will be considered and enlisted, when appropriate, to serve on the Connecticut Interagency Hazard Mitigation Committee (CIHMC) whenever necessary to accomplish the purposes of this Plan and the State's Hazard Mitigation Grant Program.

- Department of Emergency Management and Homeland Security
- Department of Environmental Protection
- Department of Public Safety - Office of the State Building Inspector
- Department of Transportation
- Office of Policy and Management
- Department of Education
- Department of Economic and Community Development

The following Federal Agencies will be considered and enlisted, when appropriate, to serve on the Connecticut Interagency Hazard Mitigation Committee (CIHMC) whenever necessary to accomplish the purposes of this Plan and the State's Hazard Mitigation Grant Program.

- Natural Resources Conservation Service (NRCS)
- National Weather Service (NWS)

## APPENDIX C: HMGP ENVIRONMENTAL CONSIDERATIONS

Projects funded under the Hazard Mitigation Grant Program must comply with certain environmental requirements. It is FEMA's responsibility to prepare the environmental document, although the State and/or local proponent of the project should provide much of the basic information. Coordination with all appropriate agencies and individuals is very important. The first step is to determine if the individual project is categorically excluded (CATEX) from the need to prepare an environmental document. The types of projects that do not need the environmental analysis are those that will not result in any physical change to the environment. Such projects include:

1. Training activities,
2. Public education programs,
3. Studies that involve no commitment of resources other than manpower and funding, and
4. Technical assistance activities.

If it is determined that a project meets the categorical exclusion criteria, the applicant shall provide a brief explanation, describing the project and why there will be no significant impact to the environment. All other projects should include an environmental analysis to aid in the compliance with environmental requirements. This analysis should describe the:

1. Need for the proposed action, i.e., the problem/issue that is being addressed,
2. Proposed action, including location (if applicable), all actions associated with implementing the mitigation project, and timing of project implementation,
3. Alternatives considered, including the no action alternative, and
4. Analysis of the environmental effects of the proposed project and alternatives. Answer the following questions with a yes (with explanation), no, or not applicable.

### Land Use and Socioeconomic Issues

- a) Is the proposed project inconsistent with land use in the area?
- b) Does the project conflict with local zoning ordinances?
- c) Will the project result in the relocation of any structures?
- d) Will the project have a significant effect on the economic activities of the area?
- e) Will the project have a significant effect on any parks or recreation areas?
- f) Does the proposed activity or project require a Coastal Zone Consistency Determination?

### Air Quality and Water Quality

- a) Will the project have significant effect on air quality?
- b) Will the project require any dredging and/or disposal of any material (including construction) in any wetlands or waterways? If so, the project may require a Corps of Engineers Section 404 permit.

- c) Will there be any modification of a streambed or banks of a waterway?

Natural Resources

- a) Will the project require the significant removal of any marine, aquatic, or terrestrial vegetation?  
b) Will the project involve construction in marshlands or wetland areas?  
c) Are there any known rare or endangered species within the project area?  
d) Is the project located inside or near a wildlife refuge or wildlife conservation area?

Archeological and Historic Resources

- a) Is the project site located in any area of archeological, cultural, or historical significance? Contact the State Historical Preservation Officer (SHPO) for determination.

Coordination

The application should also identify who was contacted in the development of the project and in the preparation of this environmental analysis. Appropriate agencies for coordination might include:

- Connecticut Department of Environmental Protection
- Connecticut State Historic Preservation Office
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- Natural Resources Conservation Service

References

References may be required, if appropriate.

The information provided in the environmental document will be analyzed at the FEMA Regional Office to determine if there will be significant environmental impacts as a result of the proposed project. If not, then a Finding of No Significant Impact (FONSI) will be prepared, attached to the environmental analysis, now an Environmental Assessment, and approved by the FEMA Regional Office. If significant impacts are anticipated, then the project will be reviewed and revised or an Environmental Impact Statement (EIS) will be prepared.

## Appendix 3-2. USDA Forest Service Grant Programs

On an annual basis, the DEEP Division of Forestry administers the following US Forest Service funded grant programs, with funding distributed to applicants through a competitive process:

### Urban Forestry

America the Beautiful urban forestry grant program

### Fire

Dry Fire Hydrant grant program

Volunteer Fire Assistance grant program

### Legacy

Forest Legacy grant program

In addition, the Division of Forestry is currently administering the following individual grants, presented to various recipients and awarded under the US Forest Service's Competitive Allocation (CARP) program:

- Asian Longhorned Beetle Detection Surveys (completed)
- Biomass from Connecticut's Urban Forest (initiated FY 209)
- Understanding Connecticut Landowner's Attitudes and Objectives (initiated FY 2010)
- A Coordinated Multistate Effort to Detect, Suppress and Prepare for Emerald Ash Borer in the Northern United States (initiated FY 2011)
- Quiet Corner Woodland Partnership (initiated FY 2012)
- Developing a Comprehensive Model for Urban Forestry in the 21st Century (initiated FY 2012)
- Engaging Family Forest Landowners to Promote Forest Health and BioDiversity (initiated FY 2012)
- Legacy Tree Ecosystem Services Planning (initiated FY 2012)
- Reintroduction of Blight Resistant Chestnut Trees to Connecticut's Forests (initiated FY 2012)
- Locally Grown Forest Products (initiated FY 2012)
- Asian Longhorned Beetle Follow-up Zip Code Survey and Second Home Based Survey (initiated FY 2012)
- Assessing the Roles of Climate and Biological Control on Hemlock Stands (initiated FY 2012)

### Contact Information:

Chris Donnelly  
Urban Forestry Coordinator  
DEEP Forestry  
79 Elm Street  
Hartford, CT 06106  
(860) 424-3178

## **Appendix 3-3. Connecticut Natural Disaster Plan 2009**

**STATE OF CONNECTICUT  
NATURAL DISASTER  
PLAN  
2009**



**Prepared By The  
DEPARTMENT OF  
EMERGENCY MANAGEMENT AND HOMELAND SECURITY**

**STATE OF CONNECTICUT**

**NATURAL  
DISASTER  
PLAN**

**2009**

Prepared By The  
**DEPARTMENT OF  
EMERGENCY MANAGEMENT AND HOMELAND SECURITY**

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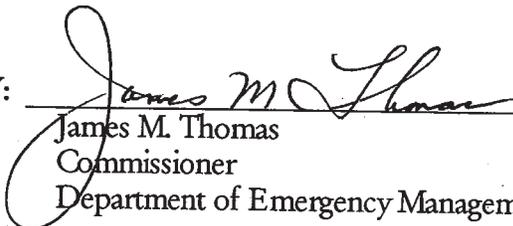
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AUTHENTICATION

In accordance with Section 28-5(b), C.G.S., I hereby present the State of Connecticut Natural Disaster Plan 2009. All government agencies, state or local, and all civil preparedness forces in the State shall carry out the duties and functions assigned by the plan, as approved by the Governor. This plan supersedes the Natural Disaster Response Plan promulgated on January 27, 2006.

PRESENTED BY:

  
James M. Thomas  
Commissioner  
Department of Emergency Management and Homeland Security

APPROVED BY:

  
M. JODI RELL  
Governor

DATE:

February 9, 2009

**EXECUTIVE SUMMARY**

This Plan establishes the mission assignments of state agencies in responding to natural disasters of a severity and magnitude typical for Connecticut. The Plan also describes the interaction of state government with local governments, private response organizations (e.g., utilities, the American Red Cross) and the federal government in natural disaster situations.

In any type of disaster or emergency, state agencies must first fulfill departmental mandates established by state statutes, regulations or executive orders and then provide support to local authorities as requested, available and appropriate. Exceptions to these priorities are made only in cases of imminent peril to life and health.

The State of Connecticut Natural Disaster Plan is implemented by order of the Governor. Whenever the Governor orders implementation of the Natural Disaster Plan, the State Emergency Management and Homeland Security Commissioner shall activate the State Emergency Operations Center (EOC) and request representation in the State EOC by appropriate state, federal and private response agencies.

The State EOC will monitor disaster response activities statewide and will coordinate the provision of assistance to state and local authorities as necessary and appropriate. The State EOC will maintain communications with the Federal Emergency Management Agency Regional Response Coordination Center (RRCC) in Maynard, Massachusetts. Communications with local authorities will be maintained through the five Emergency Management and Homeland Security Regional Offices located in Bridgeport, Middletown, Colchester, Rocky Hill and Litchfield.

If necessary, the Governor may declare a state of emergency under Section 28-9, C.G.S. and invoke extensive emergency powers which allow the Governor to take any action reasonably necessary in light of the emergency. The Governor's emergency powers include (but are not limited to) taking operational control of all civil preparedness forces and functions in the state, modifying or suspending statutes and regulations, ordering evacuations, removing debris from public and private land or waters, and seizing property.

In 2008, FEMA approved the *State of Connecticut's Disaster Debris Management Plan, September 2008* (*Annex to the State's Natural Disaster Plan, 2006*). As part of the approval process, certain criteria had to be met, including the State's establishing pre-event contracts for debris removal operations and for the monitoring of these operations. The Plan identifies the framework for proper management of debris generated by a natural disaster, with the goal of facilitating prompt and efficient recovery that is cost effective, eligible for FEMA reimbursement, and protective of the environment. See Section O – Debris Management for more information. The Disaster Debris Management Plan and the debris management and monitoring contracts are available through the Department of Environmental Protection's website.

**This State of Connecticut Natural Disaster Plan 2009 incorporates the policies and procedures presented in the National Response Framework (NRF) and in the National Incident Management System (NIMS). DEMHS Plans and Guides are continually being reviewed and revised to reflect the latest, best practices in emergency management and homeland security, and are in compliance with the NRF and the NIMS.**

*STATE OF CONNECTICUT NATURAL DISASTER PLAN*  
*Executive Summary*

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*STATE OF CONNECTICUT NATURAL DISASTER PLAN*  
*Authority, Mission, Hazard Analysis, and Organization*

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**AUTHORITY, MISSION, HAZARD ANALYSIS, AND ORGANIZATION**

**1. AUTHORITY:**

Title 28, Chapter 517 of the Connecticut General Statutes provides the authority for the State of Connecticut and its political subdivisions to prepare for and respond to natural disasters and other emergencies.

The Robert T. Stafford Emergency Relief and Disaster Assistance Act (PL 93-288, as amended, a.k.a. “The Stafford Act”) is the federal legislation that creates a national program for disaster preparedness, response, recovery, and mitigation. Connecticut’s emergency management program, developed under the authority of Title 28, complies with the federal program established by the Stafford Act.

There are many federal and state statutes and regulations that have a bearing on emergency management; however, Title 28 and the Stafford Act are the two laws most central to emergency management in Connecticut.

**2. MISSION:**

The mission of Connecticut's emergency management community (state and local governments and private response and recovery organizations) in times of natural disaster is to:

- 1) maximize the preservation of life and property;
- 2) correct or alleviate, as expeditiously as possible, serious disaster or emergency-related conditions which present continued threats to the health or welfare of the residents of the state, and
- 3) facilitate a return to normalcy by all practical means.

**3. HAZARD ANALYSIS**

The natural hazards that pose the most likely threats to the State of Connecticut include floods, severe thunderstorms, hurricanes, tornadoes, ice storms, winter storms, blizzards, and coastal storms. Droughts and earthquakes are also possible.

The State Department of Emergency Management and Homeland Security (DEMHS) considers a strong Category 3 hurricane as the most probable, worst-case disaster scenario facing the state.

Historically, the worst disasters to affect the State of Connecticut have been the 1938 hurricane and the 1955 floods. The 1955 floods were caused by the heavy rainfall associated with the remnants of two hurricanes.

**4. ORGANIZATION**

DEMHS has primary responsibility for development and implementation of the state’s emergency management program.

Connecticut is divided into five emergency management Regions. DEMHS Regional Offices are responsible for providing administrative support and planning assistance to local governments in their

***STATE OF CONNECTICUT NATURAL DISASTER PLAN***  
***Authority, Mission, Hazard Analysis, and Organization***

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jurisdictions. During emergencies, the Regional Offices serve as mutual aid coordinators and communications links between towns and the State Emergency Operations Center (EOC). The staff of the Regional Offices can be augmented during emergencies.

DEMHS Headquarters includes the State EOC, which is the Governor's direction and control center. During emergencies, the State EOC is staffed with representatives of key state and private agencies. The State EOC maintains communications with state departmental EOCs, federal agencies and facilities, private agency EOCs, and the towns and cities of the state through the DEMHS Regional Offices. The Media Center in the State EOC is used as a Joint Information Center (JIC) by federal, state, and private agencies involved in responding to a natural disaster.

Each of the State's 169 political subdivisions has an emergency management director appointed by the local chief executive of the town. Only a few local emergency management directors are full-time, paid directors. The majority of local emergency management directors are part-time directors with no staff support. Most of these part-time directors are volunteers.

All towns and cities have a facility designated as a local EOC (usually located in the town hall, the police station, or a fire station) which serves as the local chief executive's direction and control center. During emergencies local officials maintain communications with the DEMHS Regional Office serving their region.

**GENERAL EMERGENCY OPERATIONS CONCEPTS**

**1. RELATIONSHIP OF GENERAL EMERGENCY OPERATIONS CONCEPTS (GEOCs) TO OTHER PROVISIONS OF THE STATE NATURAL DISASTER PLAN**

The following are generally accepted concepts of emergency response operations in the State of Connecticut. These concepts are generally valid in any type of disaster or emergency, except where specific policies or operational procedures set forth in this plan or another emergency operations plan state otherwise.

**2. GENERAL EMERGENCY OPERATIONS CONCEPTS (GEOCs)**

**GEOC-1. Mobilization of forces by the State DEMHS Commissioner.** The State Department of Emergency Management and Homeland Security (DEMHS) Commissioner may, under Section 28-5(c) C.G.S., cause the full or partial mobilization of civil preparedness forces in advance of an actual disaster as may be necessary for the prompt and effective operation of any state emergency management (emergency response/emergency operations) plan.

**GEOC-2. Governor's Authority to Take Control of Any and All Forces of the State.** In the event the Governor declares a state of civil preparedness emergency, pursuant to Section 28-9 C.G.S., he may personally take direct operational control of any or all parts of the civil preparedness forces and functions in the State. The Governor may also take such actions as are reasonably necessary to protect the health, safety and welfare of the people of the state, to prevent or minimize loss or destruction of property, and to minimize the effects of hostile action.

**GEOC-3. Distinction between Operational Control and Direction of Emergency Forces.** When a local jurisdiction's forces are operationally engaged within its own boundaries, both operational control and direction of emergency forces are retained. When either State or local civil preparedness forces are sent elsewhere, operational control is exercised by the authority at the scene of the operation, but direction is retained by the parent jurisdiction. Conversely, forces sent to the aid of a locality from other State or local jurisdictions, civil or military, come under local operational control, but remain under direction of the parent agency. A distinction is made between (1) "operational control" and (2) "direction" of emergency forces. Operational control consists of the functions of assignments of tasks, designation of objectives and priorities, and such other control necessary to accomplish the mission. Direction of civil preparedness forces is retained at all times by the appropriate civil or military authority and includes the authority to commit to, or withdraw from, emergency operations.

**GEOC-4. Mutual Aid as First Means of Assistance.** Mutual aid agreements between local governments in effect at the time of the emergency are the first means of obtaining assistance when a city or town's resources are exhausted or nearly exhausted.

**GEOC-5. Order of Mobilization for Emergency Forces Supporting Local Officials.** City and town governments shall be responsible for all peoples and properties within their boundaries and jurisdictions to the limits of their resources. Emergency operations will be carried out principally by local forces supported by mutual aid, then state forces, and, as available and needed, by military and/or federal forces.

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**GEOC-6. Local Requests for State Assistance.** Requests by local governments for State assistance shall be made through the appropriate DEMHS Regional Office or the DEMHS Headquarters in Hartford if the Regional Office cannot be reached.

**GEOC-7. Activation and Use of the Connecticut National Guard.** The Connecticut National Guard, State Military Department, if available, may be activated by the Governor to support local and/or state civil preparedness forces. In such event, however, it would complement and not substitute for other state or local forces in emergency operations. Military forces will remain at all times under military command but will support and assist other emergency forces through mission-type assignments to include objectives, priorities, and other information necessary to the accomplishment of the mission.

**GEOC-8. Local Government Situation Reports.** Local governments are responsible for providing periodic situation reports to the appropriate DEMHS Regional Offices whenever local civil preparedness forces are engaged in emergency operations or are preparing for emergency operations (increased readiness) in anticipation of an actual disaster or emergency.

**GEOC-9. State Government Line of Succession.** The Constitution of the State of Connecticut, in Article Four (4) and Article One (1), provides the following line of succession of State Government:

The Governor of the State  
The Lieutenant Governor of the State  
The President Pro Tempore of the Senate

It further provides "in order to ensure continuity in operation of State and local governments in a period of emergency resulting from disaster caused by enemy attack, the general assembly shall provide by law for the prompt and temporary succession to the powers and duties of all public offices, the incumbents of which may become unavailable for carrying on their powers and duties."

**GEOC-10. Common Tasks of State Agencies in Emergency Response.** All agencies and departments have common tasks as follows:

- a) accounting for disaster-related expenditures for equipment, supplies, material and labor utilized by the agency;
- b) thorough documentation of agency emergency operations including maintenance of logs at the State Emergency Operations Center (EOC) and departmental EOCs;
- c) implementation of plans and procedures to protect inmates, institutionalized persons, and department personnel; and
- d) rendering reports to the State EOC as required.

**GEOC-11. Responsibility of State Agencies to Perform Missions Not Specifically Assigned.** All State agencies and departments not specifically assigned missions in an emergency operations plan will be expected to respond to emergencies, within their respective capabilities, as requested by the Governor or the DEMHS Commissioner or when in their judgment the welfare or safety of the State is threatened.

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**GEOC-12. Authority of State Agency Heads to Commence Emergency Operations.** Department and agency heads, or anyone legally administering their offices, shall activate their departmental standard operating procedures for emergencies by direct order of the Governor, by request of the DEMHS Commissioner, or when in their judgment the welfare or safety of the state is threatened.

**GEOC-13. State Agency Heads or Designees To Staff State Emergency Operations Center.** Maximum interface of state civil preparedness forces will be achieved through the presence of certain commissioners, department heads or their designees at the State EOC, located in the DEMHS Headquarters.

**GEOC-14. Responsibility of Governor in Requesting Federal Assistance.** The Governor is responsible for requesting federal emergency relief and disaster assistance on behalf of local governments, businesses, and residents of the state.

**GEOC-15. Responsibility of DEMHS Commissioner and Agency Heads to Advise Governor Regarding Emergency Response Actions, Orders and Directives.** The DEMHS Commissioner and other department heads are responsible for advising the Governor of emergency response actions and orders appropriate to the emergency situation. The Governor is responsible for issuing orders and giving directives to state agencies and other non-state officials as the situation warrants.

**GEOC-16. State To Advise Local Officials of Appropriate Protective Actions.** Whenever appropriate, and time and circumstances permit, the State EOC will provide local officials with recommended protective actions for the general public as well as with other recommended actions appropriate to the emergency situation.

**STATE AGENCY MISSION ASSIGNMENTS**

**1. ALL AGENCIES:**

In addition to fulfilling the mission assignments listed below, all agencies shall support emergency operations as directed by the Governor's Office or as requested by the Department of Emergency Management and Homeland Security (DEMHS).

**2. The DEPARTMENT OF ADMINISTRATIVE SERVICES (DAS) has responsibility for:**

- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS;
- b) Facilitating the acquisition of medical and food supplies;
- c) Providing vehicles and fuel to state employees with disaster or emergency assignments; and
- d) Issuing state contracts for relief supplies, equipment, debris management, and other services as needed.

**3. The DEPARTMENT OF AGRICULTURE (DoAG) has responsibility for:**

- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS;
- b) Assessing the agricultural impact of any disaster or emergency and providing DEMHS with such written reports as it may require for use in developing requests for Presidential disaster or emergency declarations;
- c) Developing for the Governor formal requests for agricultural assistance from the United States Department of Agriculture (USDA);
- d) Implementing appropriate controls on shell fisheries affected by a disaster or emergency;
- e) Monitoring dairy products for bacteriological contamination and implementing appropriate controls;
- f) Coordinating the rescue and care of animals; and
- g) Consulting with the DEP, DPH, and appropriate federal agencies with regard to the appropriate disposal methods of animal carcasses in the event of catastrophic animal mortalities.

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**4. The DEPARTMENT OF BANKING has responsibility for:**

- a) Ordering closure of state chartered banks and credit unions in emergencies declared by the Governor.

**5. The OFFICE OF THE CHIEF MEDICAL EXAMINER (OCME) has responsibility for:**

- a) Provide information and reports on fatalities caused by the disaster to DEMHS and/or the State EOC as requested; and
- b) Coordinate victim identification and mortuary services, as needed.

**6. The DEPARTMENT OF CHILDREN AND FAMILIES (DCF) has responsibility for:**

- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS;
- b) Documenting agency emergency operations activities and expenses, including those at departmentally-operated emergency staging sites (Hotline, etc.);
- c) Assisting the Department of Mental Health and Addiction Services (DMHAS) with crisis counseling;
- d) Activating department buildings and facilities as shelters in accordance with pre-existing agreements with local officials;
- e) Providing protective and behavioral health services to children and families displaced or otherwise affected by the disaster; and
- f) Providing medical support (physicians, pediatricians, psychiatrists and nurses on DCF staff or on contract to DCF) to the Department of Public Health, as requested.

**7. The COMPTROLLER has responsibility for:**

- a) Designing an accounting system for disaster funds to meet federal regulations; and
- b) Issuing checks to applicants receiving disaster assistance.

**8. The DEPARTMENT OF CONSUMER PROTECTION (DCP) has responsibility for:**

- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS;
- b) Inspecting food establishments, warehouses, supply houses, slaughterhouses and processors affected by a disaster and issuing appropriate regulatory orders to ensure consumer safety;

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- c) Staffing Disaster Recovery Centers (DRCs), Joint Field Offices (JFOs) and Joint Information Centers (JICs) as requested by DEMHS to provide consumer assistance during recovery;
- d) Providing such written reports as may be required by DEMHS for use in preparing requests for Presidential disaster or emergency declarations;
- e) Assisting the Governor's Office with public information, especially during the recovery phase, to advise disaster victims about dealings with others, including retailers, and contractors and good consumer practices;
- f) Providing assistance in obtaining food, bottled water, medical supplies, and pharmaceutical supplies;
- g) Assisting in the National Strategic Stockpile;
- h) Assisting in the Chempack program;
- i) Implementing systems and strategies to protect the maintenance and integrity of the drug supply;
- j) Implementing and maintaining the statewide database that assists the "Cities Readiness Initiative" from the Center for Disease Control (CDC) that enables the critical infrastructures and closed Points of Dispensing (PODs) to establish the pre-event inventory requirements of antibiotics; and
- k) With regard to the State's contracts for disaster debris management services, ensuring that the portable scales used at temporary debris storage and reduction (TDSR) sites by the State's debris removal contractors have been pre-registered and NTEP- approved.

**9. The DEPARTMENT OF CORRECTION (DOC) has responsibility for:**

- a) Providing transportation assistance, food assistance, laundry assistance, secure staging areas/parking areas, as requested;
- b) Activating the food services Memorandum of Understanding with the American Red Cross to support Red Cross feeding activities; and
- c) Staffing the State EOC on a 24-hour basis as requested by DEMHS.

**10. The COMMISSION ON THE DEAF AND HEARING IMPAIRED has responsibility for:**

- a) Providing interpreters as requested by the Governor's Office or DEMHS to assist with public information for the deaf and to assist deaf disaster victims in applying for disaster assistance.

**11. The DEPARTMENT OF DEVELOPMENTAL SERVICES (DDS) has responsibility for:**

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- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS; and
- b) Coordinating the use of DDS facilities during a disaster or emergency, as directed by the Governor.

**12. The DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT (DECD) has responsibility for:**

- a) Assessing the impact of a disaster or emergency upon businesses, industries and the general economy of the State or affected area and providing DEMHS with such written reports as it may require;
- b) Providing qualified personnel to serve on joint Federal/State Preliminary Damage Assessment (PDA) Teams as requested by DEMHS;
- c) Staffing Disaster Recovery Centers and the Joint Field Office as requested by DEMHS to provide information and technical assistance to affected businesses and receive applications for financial assistance if available;
- d) Implementing the Temporary Housing Plan following Presidentially declared disasters if the State elects to administer this program;
- e) Maintaining up-to-date lists of local housing providers (Local Housing Authorities (LHAs), Nonprofits, etc.) and local rental assistance providers for use in locating available housing; and
- f) Supporting emergency operations as requested by DEMHS.

**13. The DEPARTMENT OF EDUCATION (SDE) has responsibility for:**

- a) Supporting local government and/or state agency emergency operations in accordance with agreements in effect at the time; and
- b) Assisting DMHAS with crisis counseling.

**14. The DEPARTMENT OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY (DEMHS) has responsibility for:**

- a) Ensuring dissemination of warnings to local governments by the State Warning Point (SWP) as per the State Warning Plan;
- b) Activating the State EOC and Media Center following consultation with the Governor's Office;
- c) Coordinating the establishment and maintenance of communications with affected and/or threatened areas;

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- d) Monitoring and documenting potential disaster or emergency situations;
- e) Coordinating the delivery of assistance to local governments and state agencies as requested and available;
- f) Advising the Governor as to necessary actions, including implementation of the Natural Disaster Plan;
- g) Assisting the Governor's Office with emergency and non-emergency public information releases;
- h) Receiving and evaluating situation reports from local governments, state agencies, utility companies, and private relief organizations;
- i) Determining the need for, requesting, and coordinating a Preliminary Damage Assessment (PDA) of the disaster-affected areas in conjunction with the Federal Emergency Management Agency (FEMA);
- j) Providing a Public Assistance Officer (PAO) to coordinate and perform state-level administrative functions of the FEMA Public Assistance Program.
- k) Drafting, for the Governor's signature, formal requests for Presidential disaster and emergency declarations under the Stafford Act and U.S. Small Business Administration disaster declarations;
- l) Determining number and location of Disaster Recovery Centers (DRCs) in conjunction with FEMA;
- m) Coordinating the federal/state meeting subsequent to a Presidential declaration;
- n) Coordinating state agency staffing of DRCs, Joint Field Offices (JFOs) and Joint Information Centers (JICs);
- o) Disseminating emergency data and information to local governments, state, and federal agencies;
- p) Documenting DEMHS emergency response activities;
- q) Convening meetings, as necessary, of the Connecticut Helps Oversight Council (CHOC) to coordinate state services for disaster victims with the services of private relief organizations and the federal government; and
- r) Expediting establishment of special accounts for disaster assistance funds and taking other actions necessary to expedite the availability of disaster assistance funds to local governments and individual disaster victims;
- s) Requesting interstate mutual aid assistance under the Emergency Management Assistance Compact (EMAC);
- t) Coordinating the activation and deployment of state and federal Urban Search and Rescue Teams;

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- u) Requesting, through the Department of Motor Vehicles, waivers on the restrictions to hours of operations for commercial drivers, as appropriate; and
- v) Administering the state contract for debris management and removal services.

**15. The DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) has responsibility for:**

- a) Activating the DEP EOC and Communications Center as appropriate;
- b) Staffing the State EOC on a 24-hour basis as requested by DEMHS;
- c) Investigating and advising on the condition of private and municipal dams upon request from the State EOC, and/or the State Police, DEMHS, or local authorities;
- d) Disseminating public information, in coordination with the Governor's Office, relative to environmental health hazards and NOAA and National Weather Service flood alert advisories;
- e) Monitoring the condition of state-owned dams and advising the State EOC as appropriate;
- f) Assessing and coordinating with local officials regarding the clean-up of fuel oil spills in basements
- g) Evacuating and securing all DEP-owned land as necessary;
- h) Conducting search and rescue operations on DEP-owned land;
- i) Assisting with search and rescue operations through the provision of rescue boats and crews;
- j) Inspecting municipal water pollution control facilities and advising on protective actions and repairs;
- k) Providing technical assistance to local officials regarding the operation and management of dikes, dams, and other water control structures;
- l) Providing qualified personnel as requested by DEMHS to serve on joint Federal/State Preliminary Damage Assessment Teams to assess municipal property damage and damage to DEP lands and facilities;
- m) Providing technical assistance on the natural resource and environmental conditions for the feasibility of land use for temporary housing sites and mass burials;
- n) Providing technical assistance on timber salvage, emergency debris disposal, and open burning; as well as issuance of emergency and temporary authorizations and general permits for the creation and operation of Temporary Debris Storage and Reduction (TDSR) Sites for the management of disaster debris;

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- o) Providing flood insurance map-readers to staff Disaster Recovery Centers (DRCs), if necessary, following a Presidential declaration of a disaster or emergency;
- p) Providing technical assistance to bulk oil terminal operators;
- q) Assisting DEMHS and FEMA with the development of 15- and 90-day Hazard Mitigation Reports following a Presidential declaration of disaster or emergency;
- r) Assisting DEMHS, FEMA, and the Interagency Hazard Mitigation Team (IHMT) in the development of a 180-day IHMT Report on mitigation strategies following Presidentially declared disasters; channel restoration, clearing, or other emergency work;
- s) Requesting emergency funding from appropriate federal agencies (to be determined at the time of the event and from funding sources separate from FEMA, i.e. NRCS) for stream channel restoration, clearing, or other emergency work;
- t) Documenting agency emergency response activities, flood warning operations, and recovery actions;
- u) Coordinating with the U.S. Army Corps of Engineers (USACE) regarding operation of Corps flood control projects in an emergency, ice jams, and other situations with flooding implications that may require involvement by the Corps;
- v) Coordinating with the U.S. Coast Guard (USCG), as appropriate, regarding the USCG's National Strike Team which may be called upon to react to major incidents of oil pollution or hazardous release;
- x) Operating the State Automated Flood Warning System;
- y) Requesting federal wildfire suppression assistance;
- z) Providing technical assistance to state agencies and local authorities regarding the management of disaster debris including the provision of a municipal guidance document for the management of disaster debris and providing public information announcements;
- aa) Administering the state contract for Disaster Debris Monitoring Services;
- bb) Providing staff technical assistance, as may be necessary, in support of the State's Disaster Debris Removal Contractors;
- cc) If requested by DEMHS, assigning a representative (staff from the DEP's Inland Water Resources Division) to the Joint Field Office, when established, to serve as the State Hazard Mitigation Officer; and
- dd) Maintaining the capability to respond to an event at the Millstone Power Station to assist Millstone to remain operational and producing power.

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**16. The COMMISSION ON FIRE PREVENTION AND CONTROL (CFPC) has responsibility for:**

- a) Staffing the State EOC on a 24-hour basis as requested by DEMHS; and
- b) Implementing the Statewide Fire Service Deployment Plan during emergency situations.

**17. The GOVERNOR has responsibility for:**

- a) Directing activation and implementation of the State emergency plan; (NOTE: This is a prerequisite to receiving federal assistance under the Robert T. Stafford Emergency Relief and Disaster Assistance Act, PL 93-288, as amended.)
- b) Directing and controlling emergency and non-emergency public information by assigning appropriate personnel to the Media Center in the State EOC and holding press briefings as necessary; (NOTE: *Assignment of public information personnel to the Joint Field Office (JFO) and the Joint Information Center (JIC) will also be necessary if the state receives assistance under the Stafford Act.*)
- c) Ordering activation of National Guard units;
- d) Declaring civil preparedness emergencies and invoking emergency powers as appropriate under Section 28-9, C.G.S., including but not limited to:
  - 1) ordering the evacuation of stricken or threatened areas and taking such steps as are necessary for the receipt and care of evacuees;
  - 2) ordering into action local civil preparedness mobile support units or other civil preparedness forces;
  - 3) ordering state agencies or instrumentalities to clear wreckage and debris from publicly or privately owned lands and waters;
  - 4) modifying or suspending statutes, regulations or requirements which conflict with the expeditious and efficient execution of civil preparedness functions; and
  - 5) seizing and using real or personal property as the public exigency requires;
- e) Declaring driving bans under Section 3-6, C.G.S. or ordering other appropriate actions necessary under Section 3-1, C.G.S.;
- f) Evaluating the need for federal disaster assistance and directing DEMHS to develop requests for Presidential disaster or emergency declarations or U.S. Small Business Administration disaster declarations as appropriate; executing all such formal requests;
- g) Directing the Department of Agriculture to develop formal requests for USDA assistance as appropriate; executing all such formal requests;

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- h) Inviting FEMA officials into the state during the pre-declaration phase of a disaster to observe disaster-related conditions in the state and to review the situation with state officials;
- i) Requesting or authorizing requests by the Adjutant General (TAG) or by the State Coordinating Officer (SCO) for specialized military assistance;
- j) Executing the Federal-State Agreement in the event of a Presidential disaster or emergency declaration;
- k) Providing public information and, in coordination with DEMHS, American Red Cross (ARC), FEMA, making public appeals for goods and services necessary to effective response and recovery;
- l) If appropriate, activating the State of Connecticut/ARC Disaster Relief Cabinet to solicit donations from member companies; and
- m) Activating the State contracts for disaster debris management services – for both debris removal and debris monitoring, as a result of an emergency declaration by the Governor.

**18. The DEPARTMENT OF HIGHER EDUCATION (DOHE) has responsibility for:**

- a) Providing shelter, mass feeding, non-surgical medical care, and temporary housing at state colleges, regional community colleges, and the University of Connecticut, depending upon student populations; and
- b) Assisting the Department of Agriculture, as requested, with agricultural impact assessments through the University of Connecticut.

**19. The DEPARTMENT OF INFORMATION TECHNOLOGY (DOIT) has responsibility for:**

- a) Staffing the State EOC, JFOs, JICs, and other facilities as requested by DEMHS;
- b) Arranging for the prompt installation of telecommunications support in DRCs for the Center Managers, at the State EOC, and at other locations as needed;
- c) Arranging for information technology equipment, installation, repair, programming, and troubleshooting, at the State EOC and at other locations as needed and requested;
- d) Facilitating the acquisition of communications and information technology equipment and services;
- e) Requesting and coordinating activities through the National Communication Service for emergency telecommunications service priority (TSP) and wireless priority services (WPS);
- f) Activating the DOIT EOC and Communications Center;

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- g) Monitoring and reporting on the condition of the state telecommunications infrastructure;
- h) Coordinating agency business continuity and information technology disaster recovery plans in conjunction with agencies' staff;
- i) Originating public information, in coordination with the Governor's Office, relative to communications, information technology, and the National Communications System; and
- j) Providing coordination and support for statewide geospatial information resources through the State Geospatial Council, as needed.

**20. The INSURANCE DEPARTMENT has responsibility for:**

- a) Staffing DRCs, JFOs and JICs as requested by DEMHS to provide advice on insurance matters to disaster victims;
- b) Assisting in the determination of insurance coverage and damage assessment as requested by DEMHS through adjusters affiliated with Connecticut insurance companies;
- c) Providing written reports as may be required by DEMHS for use in preparing a request for a Presidential disaster or emergency declaration, etc.; and
- d) Assisting the Governor's office with public information, especially during the recovery phase, to advise disaster victims about dealings with their insurance companies and the option for mediation of disputed claims (if activated by Insurance Commissioner).

**21. The JUDICIAL DEPARTMENT has responsibility for:**

- a) Providing interpreters as requested by DEMHS to assist with public information and to assist disaster victims in applying for disaster assistance; and
- b) Disposing of civil and criminal actions arising out of emergency or disaster situations.

**22. The DEPARTMENT OF LABOR (DOL) has responsibility for:**

- a) Assessing damages to commercial and industrial structures, limited to safety assessment;
- b) Evaluating impact of a disaster or emergency on employment and developing and submitting to DEMHS such written reports concerning disaster-caused unemployment as DEMHS may require;
- c) Staffing DRCs, JFOs and JICs as requested by DEMHS;
- d) Providing administration and operation of unemployment assistance;

- e) Soliciting additional manpower to assist in recovery operations as needed; and
- f) With regard to the state's contracts for disaster debris management and removal services, approving the Contractors' safety component (Accident Prevention Program) in their Management Plan/Operations Plan prior to the commencement of any field work.

**23. The DEPARTMENT OF MENTAL HEALTH AND ADDICTION SERVICES (DMHAS) has responsibility for:**

- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS;
- b) Implementing departmental disaster behavioral health protocols, including deployment of Behavioral Health Crisis Response Teams if appropriate; and
- c) Determining the need for and preparing applications for federal assistance under the Stafford Act.

**24. The MILITARY DEPARTMENT has responsibility for:**

- a) Activating appropriate National Guard units upon direction of the Governor;
- b) Staffing the State EOC on a 24-hour basis as requested by DEMHS;
- c) Providing the following support services as directed by the Governor or requested by DEMHS:
  - 1) evacuation assistance;
  - 2) search and rescue operations;
  - 3) anti-looting, access and traffic control, and curfew enforcement (declared emergencies only);
  - 4) transportation of state and federal officials;
  - 5) road and bridge repairs;
  - 6) clearance of debris;
  - 7) emergency communications support;
  - 8) sandbagging operations (providing personnel and equipment);
  - 9) aerial damage assessment during or immediately following the emergency;
  - 10) fire suppression;
  - 11) stream channel clearance;
  - 12) provision of emergency resource equipment (water trailers, generators, etc.) to appropriate state agencies for use and/or distribution as prioritized by the cognizant (i.e., receiving) state agency;
  - 13) provision of shelter support at National Guard Armories;
  - 14) Supporting the transportation of Red Cross equipment (cots);
  - 15) logistical management operations; and
  - 16) deployment of Civil Support Team

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- d) If possible, pre-positioning personnel, equipment and supplies in anticipation of a disaster's impact;
- e) Documenting agency emergency response activities; and
- f) Providing written reports on disaster- or emergency-related expenditures and National Guard activities as requested by DEMHS.

**25. The DEPARTMENT OF MOTOR VEHICLES (DMV) has responsibility for:**

- a) Staffing the State EOC upon request of the DEMHS Commissioner or Governor's Office;
- b) Assisting other state agencies with the evacuation of institutionalized persons through the limited provision of vehicles and personnel, as requested;
- c) Assisting the State Police through the provision of uniformed inspectors to provide traffic control as well as to search for dangerous cargos and/or suspicious drivers of heavy vehicles, as requested; and
- d) Providing communications support, including immediately providing digital images for requesting law enforcement agencies and by the dispatching of mobile data terminals for use by any law enforcement agency that loses communications.

**26. The OFFICE OF POLICY AND MANAGEMENT (OPM) has responsibility for:**

- a) Staffing the State EOC upon request of the DEMHS Commissioner or Governor's Office;
- b) If necessary, assisting the Governor's Office with emergency and non-emergency public information as directed;
- c) Providing information (census data, budget information, etc.) as requested by DEMHS for use in the development of requests for Presidential disaster or emergency declarations;
- d) If necessary, assisting FEMA officials in locating an appropriate facility for use as a Joint Field Office (JFO) and Joint Information Center (JIC) and staffing the JFO/JIC;
- e) Expediting establishment of special accounts for disaster assistance funds and taking other actions necessary to expedite the availability of disaster assistance funds to local governments and individual disaster victims; and
- f) Locating supplies of fuel for emergency vehicles and making recommendations for fuel allocations.

**27. The DEPARTMENT OF PUBLIC HEALTH (DPH) has responsibility for:**

- a) Staffing the State EOC on a 24-hour basis as requested by DEMHS;

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- b) Providing DEMHS with such written reports as it may require regarding the impact or potential impact of a disaster or emergency upon public health and the healthcare system;
- c) Assisting public health and sanitation efforts through the use of state laboratories for micro-bacteriological and chemical analysis;
- d) Organizing, operating, and supervising teams for immunization of the general public or selected population groups;
- e) Staffing DRCs, JFOs and JICs as requested by DEMHS to answer health-related questions from the public;
- f) Assisting the Governor's Office with public information on public health matters including:
  - 1) provision of information on safety of food at nursing homes and at commercial locations such as restaurants and retail markets; and
  - 2) provision of information on cleanup and decontamination.
- g) Documenting agency emergency response activities;
- h) Activating components of DPH as necessary; including participation in Preliminary Disaster Assessment Teams, as requested;
- i) Assisting DEP and local health departments in assessing biological, chemical and radiation risks;
- j) Exercising its authority under the Public Health Emergency Response Authority Act in implementing the State of CT Public Health Emergency Response Plan, as appropriate;
- k) Administering the Strategic National Stockpile Program;
- l) Deploying mobile field hospital as deemed appropriate;
- m) Deploying the CT-1 Disaster Medical Assistance Team as appropriate;
- n) Monitoring the status of CT's general hospitals and long term care facilities ability to deliver medical care to the public; and
- o) Assessing public and private drinking water systems.

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**28. The DEPARTMENT OF PUBLIC SAFETY (DPS) has responsibility for:**

- a) Receiving and relaying warnings to local governments as per the State Warning Plan;
- b) Staffing the State EOC on a 24-hour basis as requested by DEMHS;
- c) Assisting the Governor's Office with emergency and non-emergency public information releases;
- d) Controlling access to dangerous or impassable sections of state-maintained and/or state- patrolled roads;
- e) Monitoring dams, particularly state dams, as requested by DEP for high water levels and visible signs of loss of structural integrity; notifying appropriate state and local officials;
- f) Relaying warnings received from CONVEX (Connecticut Valley Electric Exchange) regarding hydroelectric dam releases and/or possible dam failures to appropriate state and local officials in accordance with specific warning plans for individual dams;
- g) Providing aerial assessments;
- h) Providing assistance, as requested, to local civil preparedness forces primarily for the purposes of search and rescue, route alerting, anti-looting, traffic control, curfew enforcement, and limiting access to a disaster area;
- i) Providing emergency transportation for state and federal officials;
- j) Providing emergency communications links through mobile units and the State Police Communications Van;
- k) Assisting with victim identification through fingerprint and dental studies;
- l) Providing written reports on disaster- or emergency-related expenditures and State Police activities as requested by DEMHS;
- m) Activating the State Police EOC as appropriate;
- n) Advising the Governor as to necessary actions, particularly regarding the issuance of curfews and the need for National Guard support;
- o) Documenting agency emergency response activities; and
- p) Coordinating the response of state police forces with local police authorities.

**29. The DEPARTMENT OF PUBLIC UTILITY CONTROL (DPUC) has responsibility for:**

- a) Staffing the State EOC as requested by DEMHS;

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***State Agency Mission Assignments***

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- b) Coordinating, monitoring and reporting to DEMHS on the restoration, maintenance and operation of utility services;
- c) Providing DEMHS with periodic updates on utility company operations and service interruptions throughout the emergency phase;
- d) Developing and submitting to DEMHS such written reports as it may require regarding the impact of a natural disaster upon utility operations; and
- e) Ensuring that utilities have the resources to mobilize maintenance and repair forces.

**30. The DEPARTMENT OF PUBLIC WORKS (DPW) has responsibility for:**

- a) Assessing the impact of a disaster upon state buildings and developing and submitting to DEMHS such written impact assessment reports as it may require; providing damage assessors as requested by DEMHS to serve on joint federal/state damage assessment teams to assess municipal property damage in selected communities;
- b) Approving the leasing of all state property and maintaining an inventory of same;
- c) Assisting OPM and/or DEMHS in locating facilities appropriate for use as JFOs and JICs;
- d) Activating the DPW Emergency Operations and Communications Center;
- e) Staffing the State EOC upon request of the DEMHS Commissioner or the Governor's Office;
- f) Implementing building evacuation/shelter-in-place orders at DPW owned and managed facilities as necessary when ordered to do so by the DEMHS Commissioner or the Governor's Office;
- g) Providing additional security to DPW owned and managed facilities as necessary;
- h) Initiating emergency shut-down/re-start of all DPW owned and managed facilities as necessary;
- i) Assisting other State agencies with facilities/security issues as necessary, being certain to document all such emergency response action;
- j) At the request of DEMHS Commissioner, providing qualified personnel to participate on one or more Federal/State PDA teams as necessary;
- k) If requested by DEMHS, assisting in the selection of a facility for use as a JCO/JIC; and
- l) If requested by DEMHS, assisting in the selection of suitable sites to serve as Disaster Recovery Centers.

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**31. The DEPARTMENT OF SOCIAL SERVICES (DSS) has responsibility for:**

- a) Staffing the State Emergency Operations Center (EOC) as requested by DEMHS;
- b) Assisting FEMA in the implementation of the Individuals and Households Program (IHP) following Presidentially declared disasters or emergencies for which IHP assistance is authorized by FEMA;
- c) Implementing plans for the receipt and care of evacuees, as directed by the Governor;
- d) Assisting elderly disaster victims in obtaining ongoing agency services including:
  - 1) chore and handyman services;
  - 2) transportation;
  - 3) nutrition assistance;
  - 4) legal aid;
  - 5) ombudsman services;
  - 6) Connecticut Community Care, Inc. assessment services for those at risk of inappropriate institutionalization;
  - 7) Areas Agencies on Aging; and
  - 8) Protective Services for Elders.
- e) Assisting elderly disaster victims in applying for state and federal assistance.

**32. The DEPARTMENT OF TRANSPORTATION (DOT) has responsibility for:**

- a) Activating the DOT EOC;
- b) Staffing the State EOC on a 24-hour basis as requested by DEMHS;
- c) Signing and barricading unsafe or impassable state highways;
- d) Closing appropriate rail and airport facilities as a result of damage or other unsafe conditions;
- e) Releasing sandbags, other material, and equipment as appropriate from DOT garages as requested by DEMHS and/or the State EOC;
- f) Providing CT Transit buses and drivers to assist with the evacuation of persons needing transportation, as requested by the State EOC and/or DEMHS;
- g) Providing public information, via the State EOC and in coordination with the Governor's Office, relative to road conditions and closures, flight service, train schedules, and ferry operations;
- h) Clearing debris from state-maintained roads;
- i) Removing snow and ice from state-maintained roads;

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- j) Advising the Governor, via the State EOC, on such matters as:
  - 1) the need to declare driving bans;
  - 2) the need for National Guard/Military Department personnel and equipment relative to the repair or protection of transportation facilities; and
  - 3) the need for federal military assistance in snow removal support;
  
- k) Providing support to the U.S. Coast Guard Sector of Long Island Sound and DEP in relation to the closing and subsequent reopening of ports and waterways during or after the occurrence of major natural disasters;
  
- l) Assessing the impact of a disaster or emergency upon state transportation facilities and providing DEMHS and/or the State EOC with such written reports as it may require; providing damage assessors as requested by DEMHS to serve on joint federal/state damage assessment teams to assess municipal property damages in selected towns and cities;
  
- m) Providing assistance to municipalities for the purposes of debris clearance, inspection, repair and/or condemnation of transportation facilities, once departmental priorities have been met; providing support for search and rescue operations;
  
- n) Notifying the State EOC of disruptions or impending disruptions to the transportation system (e.g., road closures, bridge outages, damage to railways, etc.) and rectification of such disruptions;
  
- o) Preparing formal requests for financial assistance from the Federal Highway Administration;
  
- p) Documenting agency emergency response activities; and
  
- q) Providing traffic management assistance through the DOT's two Operation Center resources such as Highway Advisory Radio, Changeable Permanent and Portable Variable Message signs and field personnel, as requested by the State EOC and/or DEMHS.

## **WARNING**

### **1. GENERAL**

The State Department of Emergency Management and Homeland Security (DEMHS) maintains a detailed State Warning Plan which delineates a procedure for warning all towns and cities of the state of any impending emergency situation. The major features of the State Warning Plan which relate to natural disasters are discussed below; however, the entire State Warning Plan has not been included herein.

### **2. STATE WARNING POINTS**

There are two State Warning Points. The Primary State Warning Point is located in the Communications Center of the Connecticut State Police (CSP), Department of Public Safety, in Middletown. It is manned continuously by full-time civilian radio dispatchers. The Alternate State Warning Point is located at the DEMHS Headquarters in Hartford. It is manned during normal working days from 8:00 AM to 4:30 PM and whenever the State Emergency Operations Center (EOC) located in DEMHS is activated and operational.

State Warning Points receive weather watches, alerts, advisories and warnings from the National Weather Service via the National Warning System (a dedicated phone system also known by the acronym "NAWAS") and/or the National Weather Service Weather Wire. Weather information is also received at the State Warning Points via the National Oceanographic and Atmospheric Administration (NOAA) VHF radio.

The Primary State Warning Point is responsible for acknowledging receipt of weather watches and warnings received from the National Weather Service and for disseminating such watches and warnings over the National Warning System and the COLLECT (Connecticut On-Line Law Enforcement Communications Teleprocessing) System, a teletype system which reaches approximately 90 local police departments statewide. Dissemination of watches and warnings over NAWAS can be assumed by the State DEMHS, but dissemination of watches and warnings over the COLLECT System can only be done by the CSP Communications Center.

### **3. LOCAL WARNING POINTS**

Dissemination of a weather warning over the NAWAS System (by either the State Warning Point or the Alternate State Warning Point) and over the COLLECT System (by the State Warning Point) triggers a fan-out and relay system which ultimately reaches at least one local official within each town. Several different communications and warning systems are utilized to complete this fan-out including the State Fire Radio System, county fire radio systems and telephone. Many towns and dispatch centers are responsible for relaying warnings to other towns. Specific warning assignments are found in the State Warning Plan.

Local authorities have the responsibility for seeing that weather warnings are adequately disseminated to all emergency services.

#### **4. WARNING OF THE GENERAL PUBLIC**

In terms of weather warnings, the warning fan-out described above is only intended to officially notify State and local authorities and/or emergency services of hazardous or potentially hazardous weather conditions. The fan-out does not, in and of itself, ensure that warnings will reach the public.

Warning the public of hazardous or potentially hazardous weather conditions is accomplished in several ways. A common means is for the National Weather Service (NWS) to transmit travelers' advisories, watches, warnings or alerts over the National Weather Service Weather Wire to the wire services (AP, UPI). The wire services then disseminate this information to their subscribers including radio and television stations and newspapers. Information is then made available to the public. Many media organizations subscribe to weather services other than the National Weather Service.

Another method of warning the public is for the National Weather Service or one of the two State Warning Points to transmit a warning message over the State's Emergency Alert System. Most of the State's major radio and television stations are part of this system and broadcast EAS announcements made by the National Weather Service or one of the State's Warning Points in accordance with standing agreements.

In addition, federal guidelines allow the use of civil defense sirens to warn the public of severe weather conditions. Local governments should determine the feasibility of using siren signals in their communities. Local emergency plans should be clear on the use of siren signals in severe weather situations, and any plans to employ these signals should be made known to the residents of the community. Only the steady, non-wavering, 3-minute tone should be used for weather warnings.

Local authorities are also encouraged to develop route alerting procedures utilizing emergency vehicles equipped with public address systems for high hazard areas in their communities (e.g., downstream of dams, along rivers susceptible to flash flooding, coastal flood zones, etc.). Route alerting procedures are especially valuable in communities without fixed sirens.

Finally, weather warnings may reach the general public (and some local officials) directly via NOAA VHF-FM radio. Special weather information is available continuously on stations operated by the National Weather Service Offices located in Albany – 162.550 MHz, Taunton (Boston) – 162.475 MHz, and Brookhaven (NYC, NY) – 162.400 MHz. Severe weather warnings, watches, alerts and advisories are broadcast on these stations. NOAA weather receivers have been purchased by many local governments, schools, businesses, congregate care facilities and individual citizens.

## **COMMUNICATIONS**

### **1. GENERAL**

Telephones shall be the primary means of communication between the various levels of government and between the various state agency headquarters and the State Emergency Operations Center (EOC). Although in many instances alternate means of communication are available and may be used if needed, maximum possible utilization should be made of the telephone system.

Local governments are requested to direct their communications with the State, including requests for assistance, through the appropriate Department of Emergency Management and Homeland Security (DEMHS) Regional Office which will relay the information to the State EOC.

State agencies are requested to channel their communications from district or sector offices to the agency headquarters and from the agency headquarters to the agency representatives in the State EOC. Several state agencies (CSP, DOT, DMV, and DPH) maintain radio base stations in the State EOC. Normal communications channels should be circumvented only in unusual circumstances.

DMV can support law enforcement communications by providing digital images and by dispatching mobile data terminals for use by any law enforcement agency that has lost communications.

DEMHS, the Connecticut State Police (CSP), the Department of Environmental Protection (DEP), and/or the Department of Public Health (DPH) may dispatch their communications vans to the scene of a disaster to allow for rapid and well-coordinated communications between the State EOC and a disaster scene.

### **2. TELEPHONE OUTAGES**

Should the telephone system fail or become overloaded, the DEMHS Regional High Band Radio shall serve as the primary means of back-up communication between the towns and the state. Amateur radio should be used as the secondary back-up.

The DEMHS Regional Office shall be the network control station for towns using High Band or amateur radio to communicate with the state or neighboring communities. Towns are responsible for developing and maintaining the capability to communicate with the DEMHS Regional Office via High Band or amateur radio.

MDV Mobile Satellite Ventures Satphones are available at DPH, all general hospitals, C-MEDs, certain local health districts, DEMHS offices/vehicles, and at the State EOC.

### **3. COMMUNICATIONS WITH THE FEDERAL GOVERNMENT**

DEMHS shall establish and maintain communications with the Federal Emergency Management Agency (FEMA) Regional Response Coordination Center (RRCC) in Maynard, MA and the FEMA

Regional Office in Boston, MA. The primary means of communication shall be commercial telephone, as well as satellite phone, supported by the Federal National Radio System (FNARS).

#### **4. COMMUNICATIONS WITH ELECTRIC UTILITIES**

Electric utilities can maintain essential communications with the State EOC during telephone outages through a radio network known as the Utility Emergency Radio Network/Connecticut Valley Electric Exchange (UERN/CONVEX).

#### **5. INTEROPERABILITY COMMUNICATIONS**

In the event that a natural disaster results in situations requiring State and local first-responders with incompatible radio systems to communicate in the field, the 800 MHz I-TAC channels should be utilized if necessary. All local first-responder agencies, and the Connecticut State Police, have the ability to communicate on the I-TAC channels. I-TAC channels should be activated and utilized at the command and control level, as outlined in the I-CALL/I-TAC operations and training documents of the Department of Public Safety.

CT DEMHS has received an FCC license for the State Tactical On-Scene Channel System (STOCS). This Interoperable Radio System allows responders to communicate while working at the scene of an incident, using portable radios with a maximum output power of 3 watts. The STOCS system consists of three VHF frequencies, three UHF frequencies and five 800 MHz frequencies.

## PUBLIC INFORMATION

### **1. GENERAL**

Direction and control of media liaison activities and public information shall be the responsibility of the Governor's Press Secretary or his designee.

To the greatest extent possible, all state agencies will coordinate disaster public information activities with the Governor's Press Secretary to avoid contradictory, confusing, incomplete or erroneous information being given to the public.

### **2. MEDIA INQUIRIES**

Upon activation of the State Emergency Operations (EOC), the Governor's Press Secretary or his designee shall designate a phone line(s) (preferably within the EOC) for the purpose of media inquiries. All EOC personnel receiving media inquiries shall refer such inquiries to the Governor's Press Secretary or his designee at the designated extension.

### **3. MEDIA BRIEFINGS**

The Governor's Press Secretary shall schedule media briefings in the State EOC Media Center. Agency heads, EOC desk officers, or other appropriate agency representatives including those of private agencies such as the American Red Cross (ARC), Northeast Utilities (NU), United Illuminating (UI), and SBC Communications (SBC) may be requested to participate in media briefings.

CT-N (Connecticut Network) may be used for live on-air briefings by the Governor during a statewide disaster or emergency. CT-N is available on cable television and on the web. Briefings are taped and re-broadcasted.

### **4. PRESIDENTIALLY DECLARED DISASTERS AND EMERGENCIES**

In the event of a Presidentially declared disaster or emergency the Governor's Press Secretary or his designee shall have the title of State Public Information Officer (PIO) and shall coordinate closely with the FEMA Public Information Officer. When/if FEMA establishes a Joint Information Center (JIC), the State PIO and his staff should operate from the JIC. The JIC is usually co-located with the FEMA-established Joint Field Office (JFO), but could be established at a separate location. Public information in the post-declaration period will focus on disaster assistance programs and procedures for making application to these programs.

### **5. EMERGENCY PUBLIC INFORMATION**

Emergency public information is defined as official instructions given to the general public regarding immediate actions necessary to protect life or health. Emergency public information announcements concerning weather-related events will be made primarily by the National Weather Service (NWS) utilizing the Emergency Alert System (EAS). The EAS utilizes Connecticut-based radio and television

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***Public Information***

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stations working together in voluntary cooperation with government agencies to broadcast emergency public information.

Use of EAS is indicated in the following situations:

- 1) tornado warnings,
- 2) severe thunderstorm warnings,
- 3) dam failures, and
- 4) just prior to the arrival of gale force or tropical storm force winds associated with a hurricane.

In unusual circumstances, emergency public information announcements may be broadcast over the EAS from the State Warning Point (SWP) (Department of Public Safety (DPS) Midpoint facility in Middletown) or the Alternate State Warning Point (ASWP) (State Emergency Operations Center (EOC) in Hartford). This will occur if:

- 1) the NWS specifically requests the SWP or ASWP to do so,
- 2) the SWP or ASWP believes that important additional information needs to be conveyed to the public, or
- 3) some other unusual circumstance exists that warrants activation of the EAS by the SWP or ASWP.

If the EAS is activated by the SWP or the ASWP, the Governor's Office will be notified prior to activation if practical, or immediately thereafter if not practical, through the established channels.

## **6. LOCAL EAS ANNOUNCEMENTS**

Local officials are strongly encouraged to develop agreements with EAS stations serving their towns so that in time of emergency these stations may be readily accessed and important emergency instructions provided to the public.

Local officials are requested to notify DEMHS of local EAS announcements by contacting the appropriate DEMHS Regional Office or State DEMHS Headquarters. (Notification should be made prior to EAS activation if practical, or immediately after EAS activation if not practical.)

**STATE EMERGENCY OPERATIONS CENTER PROCEDURES**

**1. ACTIVATION**

The State Emergency Operations Center (EOC) is located in the State Armory in Hartford. For natural disaster purposes the State EOC will be activated by the Department of Emergency Management and Homeland Security (DEMHS) Commissioner when deemed appropriate after notification and approval of the Governor's Office.

**2. STAFFING**

The agencies listed below should be prepared to staff the State EOC on a 24-hour basis as requested by the Department of Emergency Management and Homeland Security:

American Red Cross	Northeast Utilities
Civil Air Patrol	Public Health
Coast Guard	Public Utilities Control
Emergency Management & Homeland Security	AT&T
Environmental Protection	State Police
FEMA	Transportation
Governor's Office	United Illuminating
Military	

Other agencies may also be requested to provide EOC staff on a 24-hour basis.

State agencies shall staff the State EOC with at least one "Desk Officer", and such other personnel as are necessary, to operate pre-positioned agency radios and to handle telephonic communications. Desk officers are direct representatives of their corresponding agencies and must have the authority to make decisions on behalf of their agency and to direct and commit agency resources. Ideally, Commissioners, Deputy Commissioners, or other senior agency officials should serve as Desk Officers. If this is not possible, a representative with direct, immediate and constant access to appropriate agency authorities is acceptable.

Desk Officers are requested to remain at their stations during their shifts. If it becomes necessary to leave the desk for a period of time, desk coverage should be arranged for.

**3. STATE EOC AND MEDIA CENTER OPERATIONS**

A. General

Desk Officers are expected to keep abreast of their respective agency's emergency response activities and to provide updated information on agency operations to the Operations Desk. Desk Officers should utilize appropriate forms provided by DEMHS or make appropriate entries to the EOC computer log.

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In addition, a verbal notification to the Operations Desk should be made in matters of critical importance.

Agency departmental operations centers and agency field personnel are required to keep their State EOC personnel fully informed of agency field operations and matters of concern or potential concern to the agency. It is essential that State EOC personnel be kept aware of the nature and location of all disaster-related operations and problems, including potential problems, so that resources may be applied in the most efficient manner. Conversely, it is the duty of the agency Desk Officer in the State EOC to inform appropriate personnel of his agency in the field or at district offices or EOCs of important matters which are learned of first by State EOC personnel.

**B. Local Requests For Assistance**

Local governments requesting state assistance with emergency-related problems shall normally do so through DEMHS Regional Offices. Requests will be forwarded through DEMHS channels to the Operations Desk for disposition by the Operations Desk Officer. The Operations Desk Officer shall classify the nature of the request and determine the appropriate resource agencies for the mission. The Operations Desk Officer shall confer with the Desk Officers of the resource agencies to determine if the request can be met, and if so, determine the most appropriate course of action. If a request cannot be met, the requesting official shall be so notified through DEMHS channels. If assistance can be provided, the Operations Desk Officer shall instruct an appropriate agency Desk Officer to notify the requesting official and begin coordinating the delivery of assistance.

State agencies will provide assistance as necessary and available, provided local resources have first been committed to the maximum extent possible and state departmental priorities have been met.

In the event that a local government requests and receives assistance directly from a state agency without going through normal DEMHS channels, the State agency providing the assistance shall so inform its Desk Officer in the State EOC. However, local governments are requested to direct requests for assistance to the appropriate DEMHS Regional Office whenever possible.

**C. Governor's Briefings**

The Operations Desk Officer shall announce the time of agency briefings for the Governor's Office. Agency Desk Officers shall be prepared to provide verbal reports on agency activities to the Governor or his designee.

**D. EOC Security**

The DEMHS Administrative Officer shall arrange for security on the main entrance to the State EOC. Only personnel assigned to duty in the EOC shall be permitted entrance to the State EOC. Any person who has not been assigned to EOC duty shall be permitted entrance to the State EOC only if expressly authorized by the DEMHS Administrative Officer.

All media personnel shall be directed to the Media Center entrance door.

**F. Media Center**

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Media Center operations shall be supervised by the Governor's Press Secretary or his designee.

The Governor's Press Secretary shall schedule all media briefings in the Media Center and shall arrange for participation by the appropriate state and private agencies. The Governor's Press Secretary shall also coordinate the production and distribution in the Media Center of printed materials relevant to the emergency, and arrange for "background" speakers as appropriate between press briefings.

CT-N (Connecticut Network) may be used for live on-air briefings by the Governor during a statewide disaster or emergency. CT-N is available on cable television and on the web. Briefings are taped and re-broadcasted.

Media representatives in the Media Center shall not be permitted into the operations room except as periodically authorized by the Governor's Press Secretary who shall first consult with the DEMHS Commissioner.

**G. Governor's Emergency Communications Team**

The Governor's Emergency Communications Team consists of all state agency communications directors and public information officers (PIOs) as well as the Governor's personal Communications Office staff. The Governor's Director of Communications serves as the head of the Communications Team and may designate operational coordination to a member of his/her staff. Additionally, a DEMHS staff person is assigned by the DEMHS Commissioner to serve as the administrative manager and coordinator of the Communications Team, maintaining all contact information, drafting schedules, coordinating team training and assisting the Governor's Office as required.

The purpose of the Governor's Emergency Communications Team is to develop and distribute comprehensive, centralized public information and precautionary instructions to the public on a 24 hour basis during times of crisis. Because of limited individual agency staffing, state PIO assets must be "pooled" to adequately staff and sustain a Joint Information Center.

The authority to activate the Governor's Emergency Communications Team – and to open the Media Center or Joint Information Center – rests with the Office of the Governor, specifically the Governor's Chief of Staff and/or Director of Communications. This authority may be delegated for specific incidents or emergencies to the DEMHS Commissioner.

Normally, the DEMHS Commissioner will make a recommendation to the Governor and/or Chief of Staff as to the need for opening the Media Center or a Joint Information Center (JIC) based on the nature of the disaster or emergency.

Once a decision is made by the Governor's Office to open the Media Center or to establish a JIC and to activate the Communications Team, the Governor's full-time communications staff will initiate calls to active team members using the membership roster to establish initial staffing. Activation of specific team members may be based on their parent agency or particular area of expertise. DEMHS staff will assist the Governor's communications staff in making calls, as necessary.

## COASTAL EVACUATIONS

### 1. BACKGROUND

Between 1987 and 1994, the US Army Corps of Engineers (USACE) conducted a comprehensive hurricane evacuation study for the State of Connecticut. The purpose of the study was to provide state and local emergency managers with realistic data quantifying the major factors involved in hurricane decision-making. The study included state-of-the-art computer modeling of storm surges associated with 533 hypothetical hurricanes of varying intensity, direction and forward speed. The major outputs of the Corps of Engineers study were extensive mapping of inundation and evacuation zones, and a two-volume Technical Data Report which included a shelter analysis and evacuation clearance time estimates. These products were provided to state officials and officials of Connecticut's coastal communities.

The coastal evacuation policies and procedures set forth below were developed based on information provided in the Corps of Engineers hurricane evacuation study.

### 2. STORM INTENSITY

The National Hurricane Center (NHC) in Coral Gables, Florida has adopted use of the Saffir/Simpson scale to classify hurricanes based on their intensity. The Saffir/Simpson scale divides hurricanes into 5 categories with a category 5 hurricane being the most intense.

During the course of their study, the Corps of Engineers noted that category 1 and 2 hurricanes produced very similar effects upon the Connecticut coast in terms of flooding. The Corps also noted that category 3 and 4 hurricanes produced very similar storm surge flooding conditions. Therefore, for the purposes of simplicity, the Corps of Engineers' study considers only two basic hurricane scenarios for Connecticut, a "weak storm" (category 1 or 2 hurricane) and a "strong storm" (category 3 or 4 hurricane). Category 5 hurricanes are considered a theoretical impossibility as far north as Connecticut.

In addition to hurricanes, other extra-tropical storm systems such as nor'easters can create dangerous conditions along the Connecticut coast which may warrant evacuation of coastal areas. Unlike hurricanes, there is no evacuation guidance developed specifically for extra-tropical storms. However, a strong extra-tropical storm system could produce coastal flooding comparable to a category 1 or 2 hurricane.

### 3. HURRICANE EVACUATION STUDY FINDINGS

The Corps of Engineers study found that as a general rule in Connecticut it takes 7 hours to complete a coastal evacuation from the time residents receive official notification to evacuate. This 7 hours, referred to as "clearance time," does not represent driving time, but the total amount of time necessary for all residents in the threatened area to leave school or work, assemble at home, secure their residences, pack some basic necessities, determine their evacuation destination and arrive at their destination, whether it be a public shelter, an inland hotel or the home of another family member or friend.

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***Coastal Evacuations***

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To the 7-hour clearance time must be added an additional 2 hours for dissemination time. Dissemination time represents the amount of time required to notify the public to evacuate, measured from the time of an official decision to recommend (or order) a coastal evacuation. Public notification measures include live press conferences and other notification to the electronic media, as well as door-to-door notification by local emergency services personnel.

Therefore, the total evacuation time required for a coastal evacuation is around 9 hours (7 hours clearance time plus 2 hours dissemination time), measured from the time of the decision to recommend (order) an evacuation to the time that evacuees arrive at their evacuation destinations.

Coastal evacuations should be completed before the arrival of dangerous "pre-landfall hazards" such as gale force winds and flooding of low-lying evacuation routes. This means that evacuation decisions should be made before the leading edge of the storm system (measured as the radius of gale force winds from the eye of the hurricane) is within 9 hours of landfall on the Connecticut coastline. Situations in which gale force winds are predicted to arrive during hours of darkness pose particularly difficult evacuation decision-making problems. In such situations, it may be necessary to make evacuation decisions when the leading edge of the storm system is 12 or more hours away. This will allow the greater part of the evacuation to occur during daylight hours.

#### **4. COASTAL EVACUATION PROCEDURES**

1. The State Department of Emergency Management and Homeland Security (DEMHS) will maintain close telephone coordination with the National Hurricane Center (NHC) and with local National Weather Service (NWS) Offices.
2. Based upon strike probability information provided by the NHC, DEMHS (following consultation with the Governor's Office) will notify local officials in coastal communities of the possibility of the state issuing an evacuation recommendation. Information regarding the timing and scope of the state recommendation will be communicated to local officials. No public announcements regarding evacuation of specific localities will be made by the state at this time. Local officials are advised to begin readying public shelters at this time.
3. Based upon additional information provided by the NHC and local NWS Offices, and following consultation with the Governor's Office, DEMHS may issue a general public evacuation recommendation for coastal communities. All evacuation recommendations will be geared to the evacuation zones mapped by the Army Corps of Engineers in the *Connecticut Evacuation Zone Atlas*. An evacuation recommendation may be made by the Governor or by the DEMHS Commissioner and does not require declaration of a state of civil preparedness emergency by the Governor, although such a declaration by the Governor would be highly probable.

If practical, notification of the media will be done by means of a press briefing at the Media Center in the State Emergency Operations Center (EOC) in Hartford.

DEMHS will provide local officials in coastal communities with advance warning of the state recommendation before notification is made to the state media. Public shelters should be activated at this time and be prepared to receive evacuees.

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***Coastal Evacuations***

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4. In the case of a particularly intense hurricane, the Governor may declare a state of civil preparedness emergency and issue an evacuation order in lieu of a recommendation, pursuant to his emergency powers under Section 28-9, C.G.S.
5. DEMHS will notify appropriate federal, state and private agencies of the state's evacuation recommendation.
6. No evacuation recommendations will be made unless the NHC has issued a hurricane warning which includes the Connecticut coastline.
7. Following an evacuation recommendation or order issued by state authorities, local authorities are requested to immediately begin conducting evacuation operations as recommended (ordered) by the state and in accordance with the evacuation zones delineated in the Corps of Engineers *Evacuation Zone Atlas*.
8. The State of Connecticut will not issue area-specific coastal evacuation recommendations for extra-tropical storm systems. Evacuation decisions for these events will be made by local officials, based on information provided by the NWS.

## **SITUATION REPORTING**

### **1. LOCAL GOVERNMENTS**

Local governments shall submit periodic situation reports to the appropriate Department of Emergency Management and Homeland Security (DEMHS) Regional Office whenever:

- 1) requested to do so by DEMHS, or
- 2) emergency operations are undertaken.

Situation reports should be submitted at least once every eight hours until emergency conditions have been brought under control and all of the following conditions are met:

- 1) local emergency declarations or other emergency orders are lifted;
- 2) all shelters have been closed;
- 3) power and phone service is nearing total restoration;
- 4) roads have been reopened to the extent possible without reconstruction;
- 5) search and rescue operations have ceased; and
- 6) the local Emergency Operations center (EOC) has been deactivated.

Situation reports may be telephoned, faxed, e-mailed, or radioed to the appropriate DEMHS Regional Office. Local officials are requested to utilize DEMHS Form 233 (Rev. 5/05), "State of Connecticut Local Government Situation Report." (See copy at end of this section.) If the Regional Office cannot be reached, reports should be submitted directly to the State EOC.

This Situation Report Form has been developed to keep the Governor and the State Emergency Operations Center up to date on the disaster situation in each municipality. It is also the format for initial requests for State assistance. The senior official in charge of the municipal Emergency Operations Center is responsible for ensuring the report is submitted to the appropriate DEMHS Regional Office.

The first Situation Report(s) sent to the DEMHS Regional Offices may be incomplete since a full situation assessment takes time. Whatever information is available should be sent as soon as possible and updates should be sent as emergency conditions change or more information is known. If the Town has not experienced any significant effects in a regional disaster, this fact should also be reported in order to help the State define the geographical area involved.

### **2. STATE AGENCIES**

a) The DEMHS Regional Offices will transmit local government situation reports to the DEMHS Operations Section of the State EOC. The DEMHS Operations Section will provide appropriate situation reports to the FEMA personnel at the State EOC or the Federal Regional Response Coordination Center (RRCC) in Maynard, MA.

b) The Department of Public Health (DPH) will provide the State EOC with information from public and private water companies regarding service interruptions and projected restoration times.

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Situation Reporting***

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- c) The Department of Environmental Protection (DEP) will provide the State EOC with information regarding impacts to municipal water pollution control facilities.
- d) The Department of Transportation (DOT) will provide the State EOC with an assessment of disaster impacts upon state transportation facilities, including impacts upon ground, rail and air facilities, ports and harbors, and ferry service.
- e) All state agency desk officers staffing the State EOC will solicit information from departmental personnel regarding agency operations and impacts of the disaster or emergency upon departmental facilities.

**3. PRIVATE AGENCIES**

- a) Northeast Utilities (NU) will submit periodic reports on power outages, by town, and projected restoration times to the State EOC. NU reports shall also include the number of tree and line crews (both NU and mutual aid) deployed, standing by, or en route. Such reports will normally be submitted to the NU Desk Officer and passed to the Department of Public Utility Control (DPUC) Desk Officer, or the DEMHS Operations Officer if there is no DPUC Desk Officer at the State EOC.
- b) United Illuminating (UI) will submit periodic reports on power outages, by town, and projected restoration times to the State EOC. UI reports shall also include the number of tree and line crews (both UI and mutual aid) deployed, standing by, or en route. Such reports will normally be submitted to the UI Desk Officer and passed to the DPUC Desk Officer, or the DEMHS Operations Officer if there is no DPUC Desk Officer at the State EOC.
- c) SBC Communications, Inc. (SBC) will submit periodic reports on telephone outages and projected restoration times to the State EOC. Such reports will normally be submitted to the SBC Desk Officer and passed to the DPUC Desk Officer, or the DEMHS Operations Officer if there is no DPUC Desk Officer at the State EOC.
- d) The American Red Cross (ARC) will submit periodic reports regarding the ARC relief operation. Such reports shall include the number of shelters being operated by the ARC, number of shelterees, location and scope of feeding operations, location of service centers and types and amounts of ARC assistance provided at these centers, and other pertinent information concerning ARC operations. Such reports will normally be submitted to the ARC Desk Officer in the State EOC.
- e) CTWARN provides status reports to the drinking water section within DPH on the transfer of mutual aid resources in the drinking water industry sector and to the State EOC for wastewater mutual aid activities.

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Situation Reporting*

<b>STATE OF CONNECTICUT LOCAL GOVERNMENT SITUATION REPORT</b>				
Department of Emergency Management and Homeland Security DEMHS Form 233 Revised 123108				
TOWN _____	DEMHS REGION _____	REPORT # _____	DATE _____	
REPORTED BY _____		TELEPHONE _____	TIME _____	
1. OVERALL EMERGENCY CONDITION N/A _____ Minor _____ Significant _____ Major _____				
2. CASUALTIES (provide latest cumulative figures) Fatalities _____ Injuries _____ Missing _____				
3. EOC ACTIVATION Closed _____ Partial _____ Full _____				
4. EMERGENCY ORDERS (Emergency Declared, Evacuation Ordered, Driving Ban, Curfew, etc.) _____				
5. MUTUAL AID RECEIVED FROM Police _____ Fire _____ Public Works _____ Medical _____ Other _____ (describe)				
6. SHELTER STATUS				
	Name/Location	# People	Managed By (Red Cross or Local)	Open/Closed
_____				
7. DAMS/RIVERS STATUS _____				
8. ROADS/BRIDGES STATUS (Blocked/Washed Out/Flooded/Closed - Give Location) _____				
9. DAMAGE REPORT				
	Minor*	Significant*	Major*	10. REMARKS
Residential				
Business				
Municipal Bldgs.				
Water Supply				
Sewer Plant				
Debris				
Power Outages				
Telephone Outages				
*Check One - Give numbers under remarks if available				
11. ASSISTANCE REQUESTED _____				
Name/Title of Contact: _____			Telephone: _____	

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Situation Reporting***

**INSTRUCTIONS FOR LOCAL GOVERNMENT SITUATION REPORT FORM**

1. Overall Emergency Condition: Check one designation (N/A-not applicable, Minor, Significant, Major as described below:
 

<b>N/A</b>	<b>No significant emergency operations underway or necessary.</b>
<b>Minor</b>	<b>Only partial EOC activation, if at all; local emergency response forces are involved in emergency operations but the situation is clearly manageable; no mutual aid necessary; no declarations of emergency; physical damage generally minor; only small-scale shelter operations, if any; power/telephone outages expected to be of short duration.</b>
<b>Significant</b>	<b>A significant event which fully or almost fully involves local emergency response forces (chief executive, police, fire, public works). A full scale or partial EOC activation is generally associated with this event level. The need for mutual aid or state aid, if there is such a need, is not obvious, although some form of assistance might eventually be needed. A state of emergency is not usually declared. The local emergency response system is strained but not overwhelmed. Some moderate physical damage and power/telephone outages are usually associated with this event level, as are shelter operations.</b>
<b>Major</b>	<b>Mutual aid needed; direct state and/or federal support needed to some degree; may be casualties; possibly some search and rescue operations; damage to many homes, businesses and other facilities, with possible destruction of some; restricted areas established; shelter operations ongoing, state of emergency declared, EOC fully activated, widespread power and telephone outages, some areas inaccessible by vehicles.</b>
  
2. Casualties: Provide the best estimate of disaster related casualties. Provide latest cumulative figures, not an update from the previous Situation Report.
  
3. EOC Activation: Indicate if the local EOC is closed, partially activated, or fully activated. Partially Activated means that only a few key agencies are represented in the EOC. Fully activated means that all key agencies are represented in the EOC on a 24-hour a day basis.
  
4. Emergency Orders: Indicate any emergency orders issued by the Chief Elected Official (State of emergency declared, Evacuation orders, Driving Ban or Curfews in effect, etc.)
  
5. Mutual Aid Received From: Indicate any mutual aid being received from other towns or cities (not the state).
  
6. Shelter Status: Indicate all public shelters that are currently open or give time when shelters will open or close; name and location of shelter, the number of people in the shelter, and who is managing the shelter (Red Cross, local Fire Department, etc.).
  
7. Dams/Rivers Status: List the name of any rivers approaching flood stage or currently flooding. List the name of any dams that are threatened or breached.
  
8. Roads/Bridges Status: Describe the impact of floodwaters on the local road system or bridges (both state and locally maintained) and the extent to which roads and bridges have been made impassable by downed trees, wires, or other debris.
  
9. Damage Report: Check one designation. Give numbers under #10 (remarks) if available.

	<b>Minor</b>	<b>Significant</b>	<b>Major</b>
Residential	No significant structural damage. Damages limited to broken glass, shingle loss, basement flooding.	Few if any units severely damaged. Structural damage generally limited to non-living space areas.	Severe structural damage or destruction of many residential units.
Business	No significant structural damage. Damages limited to broken glass, shingles, and/or signs, flooding.	Few (if any) businesses severely damaged or requiring long-term closures.	Severe structural damage or destruction of many businesses.
Municipal Bldgs.	No significant structural damage. Damages limited to broken glass, shingles, and/or signs, flooding.	Damage to one key or several non-critical public buildings. Building use restricted or closed.	Severe structural damage or destruction resulting in loss of building for an extended period of time.
Water Supply	Loss of private wells due to minor power outages.	Temporary loss of a major public water supply due to contamination/ damage to distribution system.	Extensive damage to a public water supply, rendering it unusable for several days or longer.
Sewer Plant	Loss of grinder pumps due to minor power outages	Loss of pump stations due to power outages or damage to system	Extensive damage to a sewer plant or distribution system; total loss of system.
Debris	Debris due to fallen trees or branches, utility poles, (or other debris); manageable by local forces.	Debris significant but manageable by local forces. Some roads temporarily closed.	Numerous roads closed due to significant debris; local forces need assistance.
Power Outages	Individual streets or homes without power.	Up to 50% of the town without electrical power.	Nearly all of the town without electrical power.
Telephone Outages	Individual streets or homes without phones.	Up to 50% of the town without phones.	Nearly all of the town without phones.

10. Remarks: Provide any pertinent information that you feel State Officials should be aware of regarding the situation in the community. Provide figures in #9 (Damage Report), if available.
11. Assistance Requested: Indicate what type of assistance the community requires, if any, and a local point of contact (name/title and telephone) for coordination purposes.

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Declarations and Orders by Federal, State and Local Authorities***

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**DECLARATIONS AND ORDERS BY FEDERAL, STATE & LOCAL AUTHORITIES**

**1. LOCAL DECLARATIONS OF EMERGENCY**

Local authorities shall promptly notify the State Department of Emergency Management and Homeland Security (DEMHS) (via Regional Offices if possible) of the declaration of a local civil preparedness emergency or disaster emergency by the local chief executive officer. Such notification shall include:

- 1) the date and time of the declaration;
- 2) reason for the declaration; and
- 3) any special powers invoked or to be invoked by the local chief executive;

The DEMHS Commissioner or the DEMHS Operations Officer shall inform the Governor's Office or the Governor's representative in the Emergency Operations Center (EOC) of any emergency declarations by local officials.

Local authorities shall also notify DEMHS when the state of emergency is lifted. The Governor's Office, or the Governor's representative in the State EOC, shall be notified by the DEMHS Commissioner, or Operations Officer, of the lifting of local declarations of emergency.

State agencies shall take local declarations of emergency into consideration when allocating state agency resources.

In addition, local authorities shall notify DEMHS (via the appropriate Regional Office) of any other emergency orders or decrees issued in response to the emergency, including, but not limited to:

- 1) driving bans,
- 2) evacuations,
- 3) curfews, and
- 4) school closings.

**2. DECLARATION OF EMERGENCY BY THE GOVERNOR**

The Governor shall declare a state of emergency pursuant to Section 28-9, C.G.S. based upon his evaluation of the situation and the recommendations of the DEMHS Commissioner.

DEMHS shall disseminate word of an emergency declaration to local officials via Regional Offices.

The Governor's Press Secretary shall ensure that the appropriate media organizations are notified of an emergency declaration.

The Governor's emergency powers in a declared emergency are enumerated in Sections 28-6, 28-6a, 28-7f, 28-9, 28-9a, 28-9b, 28-9c, 28-9d, 28-9f, 28-9g, and 28-11, C.G.S. With regard to natural disasters, some of the Governor's most significant powers are:

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Declarations and Orders by Federal, State and Local Authorities***

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- (1) the power to modify or suspend any statute, regulation or requirement which is in conflict with the efficient and expeditious execution of civil preparedness functions (Section 28-9a);
- (2) the power to take direct operational control of any or all parts of the civil preparedness forces and functions in the State (Sections 28-6a and 28-7f);
- (3) the power to order into action any or all parts of the civil preparedness forces (State or local) of the State (Section 28-9b);
- (4) the power to order the evacuation of all or part of the population of stricken or threatened areas and to take such steps as are necessary for the receipt and care of such evacuees (Section 28-9f);
- (5) the power to take any other steps as are reasonably necessary to protect the health, safety, and welfare of the people of the State, or to prevent or minimize loss or destruction of property (Section 28-9g);
- (6) the power to acquire temporary housing units and to assist any political subdivision in acquiring and preparing sites for temporary housing units (Section 28-9a);
- (7) the power to designate such vehicles and persons as shall be permitted to move and the routes which they shall follow (Section 28-9d).

With regard to item (1) above, all state agencies are requested to notify DEMHS whenever a need arises to have certain statutes, regulations or requirements modified or suspended in order to efficiently and expeditiously execute the agency's civil preparedness mission. Such notification shall be an indication of the need for an emergency declaration by the Governor.

### **3. AUTHORITY OF GOVERNOR TO DECLARE DRIVING BAN**

#### **A. Statutory Reference:**

The Governor may issue an order pursuant to Sections 3-1 and 3-6a, C.G.S. declaring a driving ban for some or all of the highways and streets in the State without declaring a civil preparedness emergency pursuant to Section 28-9, C.G.S.

Section 3-6a, C.G.S. reads as follows:

"Section 3-6a. Power of Governor to restrict use of streets and highways during extreme weather conditions.

- (a) Whenever an emergency situation exists because of extreme weather conditions or other acts of nature, other than as is provided in Section 28-9, requiring the restriction of movement of persons and vehicles upon the streets and highways of the state, the Governor may issue an order pursuant to Section 3-1 designating the persons and vehicles which shall be permitted to move and the routes which they shall follow.

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Declarations and Orders by Federal, State and Local Authorities***

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(b) Violation of an order issued pursuant to subsection (a) of this section shall be an infraction.”

Section 3-1, C.G.S. reads as follows:

"Section 3-1. General powers and duties. The supreme executive power of the state shall be vested in the Governor. He may, personally or through any authorized agent, investigate into, and take any proper action concerning, any matter involving the enforcement of the laws of the state and the protection of its citizens. He may appoint any officer of the state whose office is provided for by law but for whose appointment no other provision is made by the constitution or the statutes. He may demand in writing from any officer, department, board, commission, council or other agency of the state a report on any matter relating to the official duties of such agencies."

**B. Procedures**

The Commissioner of the State Department of Transportation (DOT), in consultation with the Commissioner of Public Safety, shall be responsible for advising and recommending such driving bans to the Governor. The DOT Commissioner shall inform the DEMHS Commissioner of his recommendation to the Governor.

DEMHS shall notify local officials of the Governor's decision to implement a driving ban via the DEMHS Regional Offices.

The Governor's Press Secretary or his designee shall ensure dissemination of driving ban orders to the appropriate media organizations.

**4. U.S. COAST GUARD**

The U.S. Coast Guard Sector of Long Island Sound has the authority to close and reopen ports and waterways before, during, and/or after the occurrence of major natural disasters. In the event a waterway or port should become unsafe for normal transit, the Coast Guard may deem it necessary to secure or restrict movement of any or all vessels in or on that waterway or port.

## SHELTERS

### 1. GENERAL

The identification, activation and operation of public shelters in response to a disaster or emergency is primarily the responsibility of local officials working in conjunction with their local American Red Cross (ARC) Chapters.

In natural disaster situations involving evacuations from a threatened area (e.g., coastal flood zone or riverine flood zone) prior to disaster impact, only a small percentage of those evacuated will require sheltering; the majority will find accommodations with family or friends. It has been the experience of the ARC that not more than 25% of evacuees require public shelter, and in most cases the percentage is much smaller.

The *Connecticut Hurricane Evacuation Study* estimates that a Category 1 or 2 hurricane would require sheltering of approximately 30,000 people in coastal communities and that a Category 3 or 4 hurricane would require sheltering of approximately 50,000 shoreline residents.

### 2. IDENTIFICATION OF SHELTERS

Identification of suitable shelter facilities is the responsibility of local officials working in conjunction with the ARC. Shelter facilities should be selected based on criteria established in ARC's 'Disaster Program Guidance, Sheltering Handbook', ARC 4496, 'Criteria for Selection of Hurricane Evacuation Shelter' and ARC 6564, 'Shelter Facility Survey.'" Shelter facilities should be surveyed by a structural engineer and certified as capable of withstanding wind loads according to ASCE 7-88 (American Society of Civil Engineers) or ANSI A58 (American National Standards Institute) (1982) structural design criteria.

Shelters should be located outside riverine and coastal inundation areas shown on Flood Insurance Rate Maps (FIRM) and coastal storm surge areas depicted in the *Connecticut Hurricane Evacuation Study, Inundation Map Atlas*. Whenever possible, shelters should also be located outside the evacuation areas mapped in the *Hurricane Evacuation Study, Evacuation Map Atlas*.

In order to meet shelter demands, officials in coastal communities may need to utilize facilities which do not meet all ARC criteria in terms of sleeping space, eating facilities, emergency power generation, cooking facilities, handicapped access, etc. These shelter facilities, if needed, will not be operated by ARC personnel. Such facilities are intended as short-term "storm shelters," used solely for the purpose of providing a short-term safe-haven for evacuees from threatened areas. These facilities should not be utilized for long-term shelter operations. Such "storm shelters" should meet the wind load criteria of ASCE 7-88 or ANSI A58 (1982) structural design criteria and should be located outside areas vulnerable to flooding as mapped on the FIRMs and the *Connecticut Hurricane Evacuation Study Inundation Atlas and Evacuation Zone Atlas*.

**3. SHELTER OPERATIONS**

Local officials may request that state facilities within their jurisdiction be activated for use as public shelters in accordance with pre-existing agreements between local officials and the appropriate state agency.

Local officials are requested to inform the State Emergency Operations Center (EOC) through the appropriate DEMHS Regional Office, of the names of all facilities activated for use as shelters, the number of persons sheltered, and the times at which individual shelters cease operations.

**PUBLIC HEALTH/MEDICAL**

**1. GENERAL**

Most natural disasters will not cause casualties in numbers sufficient to exceed the capacity of normal emergency medical service operations. Nevertheless, tornadoes and earthquakes both have mass casualty potential, possibly requiring augmented emergency medical operations.

Natural disasters can pose serious public health problems as a result of such things as floodwater contamination, lack of refrigeration, lack of sanitation and potable water, disruption of pharmaceutical operations, and vector (disease producing organism) proliferation.

**2. MASS CASUALTY INCIDENTS (MCI)**

A. Local Emergency Medical Services (EMS) Operations

Local emergency medical services shall respond to the scene of a mass casualty incident in accordance with established protocols of the local EMS organization for mass casualty response. Mass casualty operations should be conducted in accordance with the CT DPH EMS Mobilization Plan.

B. American Red Cross

The Red Cross may engage in a number of activities to assist victims, survivors, families of victims or survivors, emergency workers or others. These services include but are not limited to: shelter, food, basic first aid, and mental health services.

During Aviation Disasters: Under the provisions of the Aviation Disaster Family Assistance Act of 1996 (P.L. 104-264), airlines, the National Transportation Safety Board (NTSB), and a “designated independent nonprofit organization” were given specific responsibilities with regard to coordinating the emotional care and support of the families of passengers involved in aviation disasters. The NTSB, as part of its Federal Family Assistance Plan for Aviation Disasters, has designated the Red Cross as the organization responsible for Family Care and Mental Health. The Red Cross has accepted this role and has specially trained staff on call on its “Critical Response Team” (CRT) who initiate support within hours of a request from the NTSB for services.

**3. PUBLIC HEALTH ISSUES**

The State DPH will provide technical advice and assistance to local health officials regarding public health threats and issues, and assist in the coordination of healthcare.

DPH will also provide information for the general public regarding measures and precautions to minimize threats to health. Public information should be coordinated through the Governor's Press Secretary, or his designee, who shall be called the State Public Information Officer (PIO).

DPH may exercise its authorities under the Public Health Emergency Response Authority Act and as detailed in the State of CT Public Health Emergency Response Plan.

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*Public Health/Medical*

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The Department of Children and Families (DCF) may provide medical support staff to DPH, as requested.

## **SEARCH AND RESCUE**

### **1. BASIC AREAS OF RESPONSIBILITY**

Search and rescue operations are primarily the responsibility of local emergency services personnel.

State agencies including the Department of Emergency Management and Homeland Security, Connecticut State Police, National Guard, Environmental Protection, and Transportation have personnel and equipment capable of supporting local search and rescue operations if necessary.

In addition, the U.S. Coast Guard is well suited to perform search and rescue operations. Coast Guard resources are especially capable of performing rescue operations in areas subject to coastal flooding.

The Civil Air Patrol (CAP) may be utilized to coordinate air and ground search operations. CAP assistance is contingent upon a mission authorization number being granted to the Connecticut Wing of the CAP by the U.S. Air Force at the request of the CAP or the State Department of Emergency Management and Homeland Security (DEMHS) Commissioner.

### **2. PREPOSITIONING OF SEARCH AND RESCUE ASSETS**

In situations involving impending hurricanes or other coastal storms, the State Emergency Operations Center (EOC) may consider pre-positioning resources and allocating resources based upon availability, predicted point of landfall, predicted surge elevations at various points along the coast, availability of local resources, and degree of compliance with local evacuation orders.

### **3. OPERATIONS**

If search and rescue assistance is needed, local emergency services shall first invoke any mutual aid agreements in effect with emergency service agencies of neighboring communities. If mutual aid is insufficient, unavailable, or inappropriate given the particular circumstances at hand, local authorities may request assistance from other appropriate sources including the U.S. Coast Guard or the State EOC.

The State EOC can also be reached via the State Fire Radio Network (46.16 MHz) or amateur radio (145.11 MHz, voice; 145.03 MHz, packet radio).

Towns which have DEMHS High Band radio may also contact the DEMHS Regional Offices on the appropriate frequency listed below:

- Region 1 - 153.755 MHz
- Region 2 - 153.800 MHz
- Region 3 - 153.935 MHz
- Region 4 - 153.965 MHz
- Region 5 - 153.740 MHz

#### **4. U.S. COAST GUARD OPERATIONS**

The U.S. Coast Guard operates two Small Boat Stations in Connecticut, in New London and New Haven. These stations conduct search and rescue missions on Long Island Sound and any adjacent navigable waters.

In cases of imminent peril to life, where Coast Guard resources are required, local authorities should contact the Duty Officer at Group Long Island Sound in New Haven at one of the following numbers:

- 1) 203-468-4401
- 2) 203-468-4404
- 3) 203-468-4498
- 4) 800-774-8724

If telephone service has been interrupted, the Coast Guard continuously monitors VHF radio signals on Channel 16.

#### **5. CT Urban Search and Rescue (USAR)**

Connecticut Task Force 1 (CT-TF-1) has been established within the Department of Emergency Management and Homeland Security, as the state's Urban Search & Rescue Team. CT-TF-1 is made up of appointed volunteer members whose mission is to provide a coordinated effort of personnel and resources to locate, extricate, and provide immediate medical treatment to victims trapped within collapsed structures. The USAR Team is based out of Brainerd Airport.

## MASS CARE

### 1. GENERAL

Mass care is defined as those resources and measures necessary to provide disaster victims with sleeping accommodations, prepared food, and emergency first aid. Mass care facilities provide some or all of these services. A shelter facility is a mass care facility, but a mass care facility is not necessarily a shelter.

It is the responsibility of local officials working in conjunction with their American Red Cross (ARC) Chapters and other appropriate local organizations such as church groups to develop a system for providing mass care services.

### 2. MASS CARE OPERATIONS

Local officials are requested to notify the State Emergency Operations Center (EOC), through the appropriate Department of Emergency Management and Homeland Security (DEMHS) Regional Office, of mass care facilities activated in response to a disaster or emergency and the types of services being offered at each facility.

If additional resources to support mass care operations are required at the local level, and the Area ARC Chapter advises local officials that additional ARC resources are not readily available through the state level or national level ARC organizations, or through existing ARC agreements with the State Department of Administrative Services, Food Distribution Program, then a request for mass care assistance should be made by local officials to the State EOC, through the appropriate DEMHS Regional Office.

Local Red Cross Chapters may also request additional resources via the State Coordinating Chapter of the Red Cross, which may relay these needs to the State via the ARC liaison at the State EOC.

The Connecticut National Guard may be requested by DEMHS to provide mass care assistance in support of local government/ARC mass care operations.

Every community should consider working with other towns and the Red Cross for a more efficient response to sheltering needs. The possibility of designating regional shelters should be explored.

Additionally, DEMHS has recently executed a Memorandum of Understanding with the Connecticut University System for Temporary Shelter Facilities at Central CT, Eastern CT, Southern CT, and Western CT State University campuses.

## **DEBRIS MANAGEMENT**

### **1. GENERAL**

Debris management operations necessitated by a natural disaster can be very expensive and last for several months. In a catastrophic disaster, debris management operations could conceivably last for more than a year. The State has identified a Category 3 hurricane as the most probable, worst case scenario facing the State. The State has projected that the amount of debris that could be generated by such an event could range from 5.5 million tons to 20 million tons. To put this amount in perspective, in Connecticut, the quantity of solid waste (municipal solid waste and construction and demolition debris) normally processed and disposed annually is 5 million tons.

In 2008, FEMA approved the *State of Connecticut's Disaster Debris Management Plan, September 2008 (Annex to the State's Natural Disaster Plan, 2006)*. As part of the approval process, certain criteria had to be met, including the State's establishing pre-event contracts for debris removal operations and for the monitoring of these operations. The Plan identifies the framework for proper management of debris generated by a natural disaster, with the goal of facilitating prompt and efficient recovery that is cost effective, eligible for FEMA reimbursement, and protective of the environment. These State contracts were executed in June and August 2008 respectively. These are pre-need and pre-event contracts that can assist the State in disaster debris recovery operations in response to a catastrophic event. These contracts also assure the immediate availability of coordinated debris removal support following a debris-producing incident. These contracts will be used on an as needed basis. These contracts will be activated only by the Governor as the result of an emergency declaration under Title 28 of the Connecticut General Statutes and a Presidential major disaster or emergency declaration under the Stafford Act. The contracts will be administered at the sole discretion of the State. Municipalities may request, through DEMHS, that the State take the lead in debris clean-up operations within their town boundaries. If the State does assume the lead, then the state will direct its contractors and the state will seek reimbursement of FEMA Public Assistance Funding. (The Disaster Debris Management Plan and the debris management and monitoring contracts may be viewed on the Department of Environmental Protection's website.)

Local officials are urged to closely monitor statements of federal and state officials regarding eligibility for reimbursement for debris management operations, and to adopt debris management policies and strategies that will maximize eligibility for federal or state assistance.

However, in no case should essential debris removal operations to open roads, or otherwise protect public safety, be delayed pending clarification of eligibility for state or federal assistance.

### **2. BASIC AREAS OF RESPONSIBILITY**

A. Local governments are responsible for the removal of debris from municipally owned lands and waters. Local governments are encouraged to develop debris management plans including identification of Temporary Debris Storage and Reduction (TDSR) sites and potential open-burning sites within their respective communities. Each municipality should identify labor and heavy equipment resources

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***Debris Management***

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available for debris removal, and designate a command structure for debris removal operations. To assure rapid response, it is prudent for municipalities to have in-place short-term Time and Materials Contracts limited to 70 hours of actual work (in compliance with FEMA guidance). After that point, longer term contracts must be competitively bid on a unit price basis. Should the municipality exhaust its resources or become overwhelmed in its capacity to respond to a catastrophic event, the municipality may request the State to assume the responsibility to remove the debris from within its boundaries. The State will respond to municipal requests to the extent State resources are available.

B. State government is responsible for rapid and efficient response to a disaster, including recovery activities. There are a number of key state agencies that are responsible for some aspect of disaster debris management. These include:

1) DEMHS is responsible for coordinating emergency response during major natural disasters including the management and direction of State resources. This agency is responsible for the oversight of the State's debris removal contracts, when activated by the Governor.

2) DOT is responsible for clearing and/or removing wreckage and debris from state owned or maintained transportation facilities. The State DOT may also provide support of local debris management operations as directed by the Governor.

3) DEP is responsible for removing debris from all DEP-owned lands and providing technical assistance to state and local officials on the proper disposal of debris; making determinations regarding open-burning waivers; issuing Emergency Authorizations and Temporary Authorizations for solid waste management resulting from a natural disaster event; and is responsible for the oversight of the State's debris monitoring contract. The DEP will work with DOT and DEMHS in providing technical assistance and guidance (in accordance with the State Debris Management Plan) on the removal and disposal of debris from state-owned roads and highways.

4) Connecticut National Guard (CTNG) may serve as a support agency for debris management and assist other state or local debris management forces as directed by the Governor. Enlistment of National Guard forces to assist with debris management operations will be coordinated through DEMHS.

5) DAS, DPW, DPS and DOL will all play a role in the implementation of the State's debris removal and debris monitoring contracts.

### **3. LOCAL DEBRIS MANAGEMENT POLICIES REGARDING DEBRIS ON PRIVATE PROPERTY**

As soon as possible following a disaster, or even preceding a disaster if there is sufficient warning time, local officials should communicate local debris management policy to all residents of the community. It is highly advisable that the debris management policy as it pertains to private property and local residents be put in writing, as this may become important with regard to eligibility for federal and state reimbursements at a later date. In addition, debris management policies must be applied uniformly to all residents of the community for the municipality to be eligible for any subsequent federal or state reimbursements.

Local debris management policy must be clear on such matters as types of debris (if any) that may be brought to the public right-of-way for pickup by local forces or contractors working for local government, whether local forces will remove debris from private lands and waters, access to temporary debris staging areas by residents, and other pertinent aspects of debris removal. Local policies can be amended as the situation warrants.

If a local government elects to clear and remove debris and wreckage from privately owned lands and waters, appropriate written authorizations from landowners should first be obtained. (See Sample Authorization included in this section.) In most cases, neither the federal government nor the state will reimburse local governments for the cost of debris removal from private property. Private landowners are generally held responsible for bringing debris to the public right-of-way for pickup by local government forces or debris haulers under contract to the local government. However, in some cases, the Federal Emergency Management Agency (FEMA) may offer funding to state and local governments willing to perform debris removal on private property. In such cases, the state and FEMA will require written authorizations from landowners.

In developing local policies for removal of debris associated with private property, local officials are advised that insurance carriers are required to pay for the removal of certain types of debris from private property such as trees on insured structures and material from damaged structures. Towns removing disaster-generated debris from private property (as opposed to curbside pickup from the public right-of-way) must attempt to recover any insurance proceeds received by private property owners and must forward all recovered proceeds to FEMA.

Also, building contractors performing repairs or reconstruction of buildings and structures should be held responsible for disposing of scrap building materials and should not be allowed to place such materials on the public right-of-way for pickup by local, state or federal government agencies or their agents.

#### **4. RESPONSIBILITY OF LOCAL OFFICIALS TO MONITOR DEBRIS MANAGEMENT OPERATIONS**

To maximize potential federal reimbursements for debris management costs, it is essential that local officials monitor and document the movement of debris by local forces and contractors in terms of the load sizes, types, and quantities and equipment and personnel involved. The town should appoint a local official to monitor debris removal contractors. After the emergency phase of the debris management operations (generally one to two weeks after the incident), the town should sign a competitively bid written contract with all debris removal contractors.

Local officials may be required by FEMA or the State to explain local procedures for validating contractor invoices and other costs associated with the removal of disaster-deposited debris. Inadequate monitoring of debris removal operations, particularly by contractors, could result in loss of, or reduction of, federal and state disaster assistance funds in cases where, for example, FEMA or the State Public Assistance Coordinator (PAC) determine that contractor invoices are excessively high and that local monitoring of contractors was inadequate to guard against inappropriate billings by contractors.

## **5. FEDERAL/STATE SUPPORT OF LOCAL DEBRIS MANAGEMENT OPERATIONS**

If assistance with the removal of debris from municipal lands and waters is needed, local governments shall first invoke any mutual aid agreements in effect with neighboring communities.

If mutual aid is insufficient to meet the need, local chief executives may request support via the DEMHS Regional Office. Requests should be made as part of a Local Government Situation Report (See form in Section I, pages I-3 and I-4.) and should indicate numbers and types of equipment needed as well as requirements for manpower (skilled and unskilled labor). Local requests for debris removal assistance will be relayed by the DEMHS Regional Office to the State Emergency Operations Center (EOC) Operations Desk. If possible, a properly authenticated, unconditional authorization for removal of debris should be immediately faxed to the State EOC. (See Sample Authorizations on pages O-5 and O-6.) Otherwise, such authorization must be presented before state forces or agents of the state will assist with emergency debris removal.

If possible and appropriate, the state will provide emergency debris management assistance in one of the following ways:

- a) The State DOT, National Guard, DEP or state contract forces (that is, the State's stand-by contract for both debris removal and debris monitoring services), will, to the extent available, support local operations in a catastrophic natural disaster should the municipality find itself not able to effectively manage debris removal or is overwhelmed. State forces so employed will be under the operational control of the State. The state will be named Public Assistance Applicant for Federal assistance in all cases unless otherwise directed by the Governor in a State declared emergency. However, direction of state forces (i.e., authority to commit or withdraw from operations) shall at all times be retained by the appropriate state agency authority, civil or military.
- b) The DEMHS Commissioner or the Governor may order civil preparedness forces of another town to assist with emergency debris removal as authorized by Sections 28-7(f), 28-8(a) and 28-9, C.G.S. The State shall reimburse towns rendering aid under these Sections.
- c) The DEMHS Commissioner or the Governor may request direct federal assistance through FEMA from the Department of Defense in a Presidentially declared disaster or emergency or in an event which is likely to result in a Presidential declaration of a disaster or emergency. Local units of government requesting federal debris removal support will be required to sign an unconditional authorization for debris removal.
- d) Private agency resources may be solicited as described in Section 6, below.

## **6. OTHER DEBRIS MANAGEMENT SUPPORT**

A. The Mennonite Disaster Service can provide unskilled labor to assist in the removal of debris, but usually in Presidentially declared disasters only. The Red Cross will solicit Mennonite assistance at the request of the Governor, the DEMHS Commissioner, or local authorities. Mennonite services are primarily intended to assist the elderly, the infirm, and the handicapped.

B. The Connecticut Construction Industries Association, Inc. (CCIA) may provide personnel and equipment through various construction companies. A maximum effort will come on the call of the Governor when the Governor has declared a civil preparedness emergency or disaster emergency. In undeclared situations either the Governor or the State DEMHS Commissioner may request CCIA assistance. CCIA will respond with equipment and manpower as available.

**7. STATUTORY REFERENCE - SECTION 28-9(c) C.G.S.**

“Sec. 28-9c. Removal of debris or wreckage. Governor's powers illuminated.

(a) Whenever the Governor has declared a disaster emergency to exist under the laws of this State, or the President, at the request of the Governor, has declared a major disaster or emergency to exist in this state, the Governor is authorized: (1) Notwithstanding any other provision of law, through the use of state departments or agencies, or the use of any of the state's instrumentalities, to clear or remove from publicly or privately owned land or water, debris and wreckage which may threaten public health or safety, or public or private property; (2) to accept funds from the federal government and utilize such funds to make grants to any political subdivision for the purpose of removing debris or wreckage from publicly or privately owned land or water.

(b) (1) Authority under this section shall not be exercised unless the affected political subdivision, corporation, organization or individual owning such property shall first present an unconditional authorization for removal of such debris or wreckage from public and private property and, in the case of removal of debris or wreckage from private property, shall first agree to indemnify the state against any claim arising from such removal; (2) whenever the Governor provides for clearance of debris or wreckage pursuant to subsection (a), employees of the designated state agencies or individuals appointed by the state are authorized to enter upon private land or water and perform any tasks necessary to the removal or clearance operation.”



**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Debris Management***

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SAMPLE AUTHORIZATION (TOWN)

Pursuant to Section 28-9c of the Connecticut General Statutes and 42 U.S.C., Section 5173, the Town/City of \_\_\_\_\_, a political subdivision of the State of Connecticut, acting herein by its duly authorized representative(s) does hereby grant and give freely, and without any coercion whatsoever, the right of access, entry and use of its public lands to the State of Connecticut and the United States Government, their departments, agencies, instrumentalities, contractors and subcontractors for the purpose of clearing and removing from its public lands or waters any disaster-related debris and wreckage that the State of Connecticut or the United States Government determines may threaten public health and safety and/or public and private property.

IT IS FULLY UNDERSTOOD THAT THIS AUTHORIZATION DOES NOT OBLIGATE THE STATE OF CONNECTICUT OR THE UNITED STATES GOVERNMENT TO PERFORM ANY OF THE ABOVE-DESCRIBED WORK.

The Town/City of \_\_\_\_\_ hereby agrees to report to the Department of Emergency Management and Homeland Security of the State of Connecticut and the Federal Emergency Management Agency of the United States Government, any insurance settlements or other funds obtained from any other source for the removal of debris and wreckage from its lands or waters that has been performed at the expense of the State of Connecticut or the United States Government.

Town/City of \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_  
(Name, Title)  
Duly Authorized Official

Approved: \_\_\_\_\_  
(Town/City Attorney)

Date: \_\_\_\_\_

## MILITARY ASSISTANCE

### 1. GENERAL

Military assistance may include such things as communications support, debris clearance, evacuation of casualties and disaster victims, search and rescue, feeding, health, medical and sanitation support, housing and shelter, police support, emergency street, road and bridge repair, fire suppression assistance, emergency demolition, emergency power supply, and restoration of utilities.

### 2. CONNECTICUT NATIONAL GUARD

The Connecticut National Guard (CTNG) is the primary source of military assistance to state and local civil authorities.

The Guard may be called to state active duty by the Governor. The Adjutant General (TAG), in consultation with the Department of Emergency Management and Homeland Security (DEMHS) Commissioner, shall make recommendations to the Governor regarding activation of Guard units.

In some cases, National Guard units on federal drill status may be utilized for disaster response operations.

In Presidentially declared disasters, the cost of mobilizing and employing the National Guard for performance of eligible work under the Stafford Act is reimbursable. The federal assistance share shall not be less than 75% of eligible costs. In a Presidentially declared emergency, certain Guard costs, such as costs associated with debris removal, may also be eligible for 75% (or higher) federal reimbursement. However, federal assistance under a Presidential emergency declaration is more limited than under a major disaster declaration.

In cases where National Guard resources are insufficient to meet the requirements of a disaster or emergency, assistance from active duty military components may be requested as outlined below.

### 3. POSSE COMITATUS ACT

Generally speaking, National Guard units on state active duty are the only military forces which may be utilized to assist with the enforcement of civilian laws. Federal military forces, including National Guard units on federal active duty, are precluded from law enforcement activities by the Posse Comitatus Act. There are certain Constitutional provisions under which federal military forces may be used for law enforcement, such as in riotous situations beyond the control of state and local authorities, but only following an executive order by the President for insurgents to disperse and retire peaceably within a limited time.

### 4. U.S. ARMY CORPS OF ENGINEERS - FLOOD FIGHTING ASSISTANCE

The U.S. Army Corps of Engineers (USACE) has authority to supplement state and local flood fighting and rescue operations (PL 84-99 and AR 500-60). Corps assistance may include such things as technical

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Military Assistance***

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advice, sandbags, high velocity pumps, emergency contracting and boats for rescue operations. State authorities should contact the Commander, New England District, U.S. Army Corps of Engineers in Concord, Massachusetts to request assistance. The Department of Emergency Management and Homeland Security (DEMHS) and the Department of Environmental Protection (DEP) will evaluate the need for Corps assistance. DEMHS will make requests for Corps assistance.

**5. DEPARTMENT OF DEFENSE AUTHORITY UNDER THE STAFFORD ACT**

Section 403(c) of the Robert T. Stafford Emergency Relief and Disaster Assistance Act, (PL 93-288, as amended) reads as follows:

"During the immediate aftermath of an incident which may ultimately qualify for (disaster relief or emergency assistance under the Stafford Act), the Governor of the State in which the incident occurred may request the President to direct the Secretary of Defense to utilize resources of the Department of Defense for the purpose of performing on public and private lands any emergency work which is made necessary by such incident and which is essential for the preservation of life and property. If the President determines that such work is essential for the preservation of life and property, the President shall grant such request to the extent the President determines practical. Such emergency work may only be carried out for a period not to exceed 10 days."

The federal share of assistance under this authority shall be not less than 75% of actual costs.

**6. OTHER MILITARY ASSISTANCE TO CIVIL AUTHORITIES**

Commanders of U.S. military installations may provide support to civil authorities in cases of "imminent seriousness," where prompt and vigorous action is necessary to save lives, prevent immediate human suffering or mitigate great destruction or damage to public or private property. The U.S. Army installation at Fort Drum, New York is primarily responsible for providing any military assistance to civil authorities in the New England States. Requests for assistance should be directed to the Headquarters, First U. S. Army, Fort Gillem, Georgia.

Prior to a Presidential disaster or emergency declaration the State Adjutant General should be the single coordinator for U.S. military (other than USACE) support to civil authorities. If State and local resources are insufficient to deal with an emergency situation, the State Adjutant General shall request necessary assistance from active component military units, following consultation with the Governor's Office and the DEMHS Commissioner.

Following a Presidential declaration, federal active duty military units will receive mission assignments from the Federal Coordinating Officer (FCO) appointed by the President. Mission assignments will be based on needs and priorities identified by the State and transmitted to the FCO by the State Coordinating Officer (usually the DEMHS Commissioner) appointed by the Governor.

**PRELIMINARY DAMAGE ASSESSMENT**

**1. GENERAL**

Preliminary Damage Assessments (PDAs) are organized, systematic field surveys of the disaster area by joint federal/state PDA teams, assisted and guided by local officials. PDAs must be conducted in accordance with, and as required by, federal regulations (44 CFR, Part 206, Section 206.35) prior to a gubernatorial request for a Presidential disaster or emergency declaration under the Stafford Act.

Information regarding disaster impacts gathered by PDA teams is used by the state to:

- a) make an initial determination of the impact of a disaster upon the state;
- b) determine the need for federal disaster assistance; and
- c) develop documentation to support a request for federal disaster assistance;

PDA information is used by the federal government to evaluate requests for federal disaster assistance.

Information and estimates developed during the joint federal/state PDA do not serve as the basis for subsequent federal disaster assistance funding. Such information is developed by a variety of federal agencies following a federal disaster declaration and only upon formal application for federal assistance by a disaster-affected resident, local unit of government, state agency or eligible private non-profit organization.

The initial phase of a PDA (i.e., that part of the PDA which takes place in the most heavily impacted county, or counties, prior to submission of a gubernatorial request for federal assistance) can take from one to five days or longer depending upon the magnitude of the disaster. Small scale disasters will generally require a longer initial PDA to identify enough eligible damage to qualify for federal assistance.

After the initial Presidential declaration, PDAs may resume in less seriously impacted counties to determine if additional areas of the state should be declared eligible for federal assistance.

**2. INITIATION AND COORDINATION OF PDA**

The Department of Emergency Management and Homeland Security (DEMHS) Commissioner will notify the Federal Emergency Management Agency (FEMA) Regional Director of the need for a PDA following consultation with the Governor's Office.

DEMHS and FEMA are responsible for coordinating the PDA effort and will form a PDA coordination team which will:

- a) notify appropriate state and federal agencies of the need to perform a PDA and request agencies to provide a specified number of qualified personnel to participate on the PDA teams;

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***Preliminary Damage Assessment***

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- b) request the participation of the State Coordinating Chapter of the American Red Cross on PDA teams, in particular the Individual Assistance (IA) PDA teams;
- c) designate federal and state representatives to each PDA team, brief PDA team members prior to the commencement of the PDA, provide appropriate forms, itineraries and local points of contact;
- d) notify local officials of the estimated day and time of arrival of a PDA team in their community and of the information to have ready for the PDA team (See Section 5, "Local Officials.");
- e) debrief each PDA team daily and/or at the conclusion of the PDA;
- f) compile the results of the PDA and provide these results to the DEMHS Commissioner and other appropriate state and federal officials; and
- g) provide copies of PDA team reports to the DEMHS Commissioner, the State Department of Transportation (DOT) and other state agencies as requested and appropriate.

The PDA coordination team will work from the State Emergency Operation Center (EOC). Briefings for PDA team members will normally be conducted in the Media Center in the State EOC.

### **3. RESPONSIBILITIES OF STATE AGENCIES**

The State agencies listed below may be requested by DEMHS to provide personnel to serve on joint Federal/State PDA teams.

- Economic and Community Development
- Environmental Protection
- Public Health
- Public Safety (Office of State Building Inspector)
- Public Works
- Transportation

Federal members of the PDA teams are primarily responsible for developing actual damage estimates. State personnel serving on PDA teams are primarily responsible for such things as providing information on unit costs, labor and equipment rates, existing state codes and standards, and ensuring that all significant damage sites are surveyed by the PDA team. State PDA team members may also assist federal team members in developing damage estimates.

Other state agencies including Agriculture, Insurance, Public Health, and Consumer Protection may be requested by DEMHS to provide a written report on the disaster's impact with regard to their respective areas of expertise and concern. The National Guard, Department of Transportation, and Department of Public Safety/State Police may be requested by DEMHS to provide estimates of disaster-related costs of their agencies.

### **4. PDA TEAM OPERATIONS**

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***Preliminary Damage Assessment***

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A typical PDA team will consist of at least one Federal representative and one State representative. Team composition may increase depending upon the mission assigned to the team by the PDA coordination team.

There are two types of PDA teams, known as Individual Assistance (IA) teams and Public Assistance (PA) teams. An IA team assesses impacts upon private property including homes and businesses. PA teams assess damages to public facilities and estimate other public expenditures for such things as debris removal, overtime costs, etc.

Each PDA team will be given a list of towns in which to conduct a preliminary damage assessment by the PDA coordination team. Each PDA team will also be given a name(s) and phone number(s) of a local point of contact in each town. PDA teams will be provided with state road maps and PDA forms. Team members with access to cellular phones are encouraged to utilize them and to provide the PDA coordination team with their cellular phone numbers.

PDA teams are requested to call the local point of contact before proceeding to the town to arrange a rendezvous point with local officials. PDA teams are also requested to periodically call the PDA coordination team at the State Emergency Operations Center (EOC) (phone number to be provided to each PDA team when dispatched from EOC).

PDA teams should complete their surveys as quickly as possible. Reasonably accurate figures pertaining to costs and damages are the objective, not hard figures.

## **5. LOCAL OFFICIALS**

Towns may be surveyed by either one or two PDA teams (an IA team and/or a PA team) depending upon the nature of damages sustained. IA and PA teams will usually arrive independently of one another.

Chief executives of disaster-impacted communities will be contacted by the PDA coordination team or by a DEMHS Regional Coordinator and notified of the day on which their town is scheduled for a survey by an IA or PA team. Chief executives should provide the PDA coordination team and/or Regional Coordinator with the name and phone number of a local point of contact that PDA teams should call prior to the team's departure for the town.

Local officials should have the following information and personnel available for the Public Assistance (PA) PDA team at the time the PA team reaches the agreed upon rendezvous point:

1) a breakdown of the local budget (minus education figures) showing amounts appropriated for the current fiscal year for:

- a) the Highway/Public Works Department
- b) road maintenance; and
- c) total local budget (minus education);

2) the current balances of the:

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***Preliminary Damage Assessment***

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- a) total local budget (minus education);
  - b) Highway/Public Works Department budget; and
  - c) road maintenance account;
- 3) local road maps for use by the PDA team;
- 4) estimates of additional payable hours or overtime worked by local government employees in response to the emergency;
- 5) other costs to local government of responding to the emergency including the costs of purchases, rentals and contracts;
- 6) information regarding insurance coverage on municipal facilities; and
- 7) public works director, town engineer, local emergency management director or other local officials desiring to participate in the PDA (building official, assessor, etc.).

Local officials should guide both IA and PA teams to all areas of significant damage in the community. To ensure that acceptably accurate replacement cost estimates of public facilities are developed, the local public works director or a qualified designee should participate in the PDA. Such a local official is essential to adequately describe a destroyed public facility as it existed prior to the disaster.

**PRESIDENTIAL DISASTER/EMERGENCY DECLARATION PROCESS**

**1. GENERAL**

The process by which a State requests a Presidential emergency or disaster declaration is found in Sections 401 and 501(a) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, the Stafford Act, as amended) and in regulations of the Federal Emergency Management Agency (44 CFR 206.35 and 206.36) and in 42 U.S.C. 5121-5206. Adherence to the process contained in the applicable laws and regulations mentioned above will ensure rapid processing of State requests by the Federal Emergency Management Agency (FEMA).

The Department of Emergency Management and Homeland Security (DEMHS) will assess the severity and magnitude of a disaster's impact based upon situation reports provided by local governments, state agencies and private response organizations and upon Preliminary Damage Assessments (PDAs) conducted in conjunction with FEMA. (See Section Q.) DEMHS officials will consult with other state agency officials, and the DEMHS Commissioner will advise the Governor as to whether:

- a) effective response is within the capabilities of the State and affected local governments;
- b) appropriate federal assistance can be provided by individual federal agencies acting under their own statutory authorities; and
- c) Federal disaster or emergency assistance under Public Law 93-288 is needed.

Upon a determination by the Governor that Federal assistance under Public Law 93-288 is needed, DEMHS will prepare the formal, written request in accordance with the applicable federal laws and regulations.

**2. RESPONSIBILITIES OF OTHER STATE AGENCIES**

The Department of Labor and the Office of Policy and Management will provide DEMHS with such statistical information as it may require in preparation of the declaration request including, but not limited to:

- a) pre-disaster unemployment rates;
- b) median income levels;
- c) housing vacancy percentages;
- d) other socio-economic conditions;
- e) status of the State budget and projected deficits or surpluses; and
- f) status of funds available from State accounts to assist with recovery efforts.

**3. REQUESTS FOR MAJOR DISASTER DECLARATIONS**

The Governor must submit his request for a major disaster declaration to the President through the FEMA Regional Director in Boston, Massachusetts. The request must be submitted within 30 days of the occurrence of the incident. The 30-day period may be extended by the Associate Director of

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
***Presidential Declaration Process***

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FEMA, provided that a written request for an extension is submitted by the Governor during the 30-day period. The extension request will stipulate reasons for the delay.

All written requests for a Presidential declaration of a major disaster must include the following information that is required by federal law or regulation:

- a) a finding by the Governor that:
  - 1) the situation is of such severity and magnitude that effective response is beyond the capabilities of the State and affected local governments; and
  - 2) Federal assistance under the Stafford Act is necessary to supplement the efforts and available resources of the State, local governments, disaster relief organizations, and compensation by insurance for disaster-related losses;
- b) confirmation that the Governor has taken appropriate action under state law and has directed execution of the State emergency plan;
- c) an estimate of the amount and severity of damages and losses stating the impact of the disaster on the public and private sectors;
- d) preliminary estimates of the types and amount of supplementary Federal disaster assistance needed under the Act {Programs: Individual Assistance, including the Individuals and Households Program (IHP), Disaster Unemployment Assistance, Crisis Counseling, Public Assistance, Hazard Mitigation, Small Business Administration Disaster loans, Direct Federal Assistance such as Debris Removal};
- e) information describing the extent and nature of State and local resources which have been or will be used to alleviate conditions of the disaster, stating specifically those activities for which no Federal funding will be requested; and
- f) certification by the Governor that State and local government obligations and expenditures for the disaster comply with all applicable cost-sharing; i.e. the State and local governments will assume all applicable non-Federal share of costs required under the Stafford Act.

When Direct Federal Assistance (DFA) is requested, the following information and certifications should be provided: (If DFA is not requested in the Governor's initial request, the Governor's Authorized Representative (GAR) can request DFA at a later date, if needed.)

- a) request for direct Federal assistance for work and services to save lives and property;
- b) list of reasons State and local government can not perform or contract for performance of the work assistance being requested; and
- c) identification of specific types of assistance being requested.

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***Presidential Declaration Process***

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In accordance with Direct Federal Assistance, 44 CFR 206.208, the State of Connecticut agrees that it shall:

- 1) Provide, without cost to the United States, all lands, easements and rights-of-way necessary to accomplish the approved work;
- 2) Hold and save the United States free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work;
- 3) Provide reimbursement to FEMA for the non-Federal share of the costs of such work in accordance with the provisions of the FEMA-State Agreement;
- 4) Assist the performing Federal agency in all support and local jurisdictional matters;
- 5) In requests for debris removal where the debris poses an immediate threat to lives, public health and safety, the Governor's request shall state "Pursuant to Sections 403 and 407 of the Stafford Act, 42 U.S.C. 5170b and 5173, the State agrees to indemnify and hold harmless the United States of America for any claims arising from the removal of debris or wreckage for this disaster. The State agrees that debris removal from public and private property will not occur until the landowner signs an unconditional authorization for the removal of debris."

**4. REQUESTS FOR EMERGENCY DECLARATIONS**

When an incident occurs or threatens to occur in the State, which would not qualify under the definition of a major disaster as defined in PL 93-288, as amended, the Governor may request that the President declare an emergency. The request must be submitted within 5 days after the need for assistance becomes apparent, but no longer than 30 days after the occurrence of the incident. The period may be extended by the Associate Director of FEMA, provided that a written request for such extension is made by the Governor during the 30-day period immediately following the incident. The basis for the Governor's request must be that the situation:

- a) is of such severity and magnitude that effective response is beyond the capabilities of the State and affected local governments; and
- b) requires supplementary federal emergency assistance to save lives and to protect property, public health and safety, or to lessen or avert the threat of a disaster.

In addition to the above findings, the complete request shall include:

- a) confirmation that the Governor has taken appropriate action under state law and has directed execution of the state emergency plan;
- b) information describing the state and local efforts and resources which have been or will be used to alleviate the emergency,
- c) information describing other federal agency efforts and resources which have been or will be used in responding to this incident; and

- d) identification of the type and extent of additional federal aid required.

## **5. PROCESSING OF REQUESTS FOR PRESIDENTIAL DECLARATIONS**

The Governor's request shall be sent to the FEMA Region I Director who is required by regulation to acknowledge receipt of the request in writing. The FEMA Regional Office will perform an analysis of the Governor's request and forward it to the Director of FEMA in Washington along with a recommendation to grant or deny the request. The FEMA Director will review the FEMA Regional analysis and make a final recommendation to the President to grant or deny the request.

Based on the Governor's request and the FEMA Director's report and recommendation, the President may:

- a) grant the Governor's request;
- b) deny the Governor's request; or
- c) grant an emergency declaration if a major disaster declaration has been requested.

The Governor will be promptly notified of the President's determination by the Director of FEMA or his designee.

## **6. DESIGNATION OF AREAS ELIGIBLE FOR FEDERAL DISASTER ASSISTANCE**

Upon a determination by the President that a major disaster or emergency exists, the Associate Director of FEMA will designate which areas of the State are disaster-affected and the types of federal aid to be made available. Designation of disaster-affected areas and types of federal aid is usually by county; however, it may be by town or other area. The Regional Director of FEMA will notify the Governor of the Associate Director's designations.

## **7. APPEALS**

If a request for a major disaster or emergency declaration is denied, the Governor may appeal the decision within 30 days after the date of the letter denying the request. This request for reconsideration, along with appropriate additional information shall be submitted to the President through the FEMA Regional Director. The processing of this request shall be similar to the processing of the initial request.

DEMHS will be responsible for preparing all letters on behalf of the Governor's Office appealing federal decisions regarding declaration requests or designation of disaster-affected areas and types of assistance.

**FEMA-STATE AGREEMENT FOR ASSISTANCE UNDER THE STAFFORD ACT**

**1. GENERAL**

Upon the declaration of a major disaster or emergency by the President, the Governor, acting for the State, and the Federal Emergency Management Agency (FEMA) Regional Director, or his/her designee, acting for the Federal Government, shall execute a FEMA-State Agreement. The Governor's Authorized Representative (GAR) and the Regional Director (or his/her designee) may execute amendments to the agreement.

The FEMA-State Agreement states the understandings, commitments, and conditions for assistance under which FEMA disaster assistance shall be provided. This Agreement imposes binding obligations on FEMA, the State and its local governments in the form of conditions for assistance which are legally enforceable. However, such conditions may be modified by a properly executed amendment to the FEMA-State Agreement. No FEMA funds may be disbursed until such time as this Agreement for the Presidential declaration has been signed.

Much of the language contained in the FEMA-State Agreement is required by Federal regulations. The FEMA Regional Office is responsible for preparing the Agreement document and presenting it to the Governor for his review and signature.

For major disasters the Agreement describes the incident period for which assistance will be made available, the type and extent of the Federal assistance to be made available, and contains the commitment of the State and local government(s) with respect to funds to be expended in alleviating damage and suffering caused by the major disaster. The Agreement also contains other terms and conditions consistent with the declaration and the provisions of applicable laws, Executive Orders, and regulations.

For emergencies the Agreement specifies the beginning and the end of the incident period, identifies the type and extent of Federal assistance, and includes any details unique to the current emergency.

**2. ESTABLISHMENT OF FEDERAL-STATE-LOCAL COST SHARE RATIOS**

ONE OF THE MOST IMPORTANT ASPECTS OF THE FEMA-STATE AGREEMENT IS THE COST SHARE RATIO ESTABLISHED FOR FEDERAL ASSISTANCE TO STATE AND LOCAL UNITS OF GOVERNMENT AND ELIGIBLE PRIVATE NON-PROFIT ORGANIZATIONS. The federal share is not less than 75% of eligible costs and damages. In a particularly severe disaster, the Governor may negotiate an increase in the federal share.

The Governor will determine what percentage of local government and private non-profit organization expenditures and obligations, if any, will be absorbed by the State. Consultation with State legislative leaders may be necessary if legislative action to pay the State share of local obligations will be required.

Since the cost share ratios established in the FEMA-State Agreement are important to all applicants for public assistance (i.e., local governments) the terms of the FEMA-State Agreement should be communicated to all concerned parties as soon as possible.

**3. DESIGNATION OF STATE OFFICIALS TO ADMINISTER DISASTER ASSISTANCE**

In executing the FEMA-State Agreement, the Governor must designate a Governor's Authorized Representative (GAR) to act on his/her behalf in subsequent matters related to securing federal disaster assistance. Considering the nature of the responsibilities of the Governor's Authorized Representative, it is advisable that the Commissioner of the Department of Emergency Management and Homeland Security (DEMHS) be appointed to this position, and that the DEMHS Deputy Commissioner be appointed as the Alternate Governor's Authorized Representative (AGAR).

**JOINT FIELD OFFICE/JOINT INFORMATION CENTER**

**1. GENERAL**

The Joint Field Office (JFO) is a facility established by the Federal Coordinating Officer (FCO) from which disaster assistance operations are coordinated. The JFO is a management center for the disaster assistance programs where the State and Federal staff partners work together to carry out the mission of disseminating time-critical assistance to state/local government and individuals. The JFO should be functional (furnished, staffed and all necessary computers and telephone hookups operational within 48 to 72 hours of the State's declaration) and be located within the designated counties.

The JFO will be staffed by the FCO, the State Coordinating Officer (SCO) and their respective staffs. The major disaster assistance functions coordinated from the JFO are:

- a) Disaster Recovery Center (DRC) operations;
- b) Individuals and Households Program (IHP);
- c) Inspection, by Federal Emergency Management Agency (FEMA) contractors, of damaged private properties whose owners have applied for federal disaster assistance;
- d) State Crisis Counseling;
- e) Small Business Administration loan program;
- f) Hazard Mitigation program;
- g) Community Relations;
- h) Public Assistance program; and
- i) Congressional Relations.

The Joint Information Center (JIC) is a facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media. The Federal Public Information Officer (PIO), the State PIO, and the PIOs from all participating agencies and jurisdictions collocate at the JIC. Normally, the JIC occupies the same facility as the JFO.

**2. SELECTION OF FACILITY FOR USE AS JFO/JIC**

Normally, the FCO will locate and secure a facility adequate for use as a JFO/JIC through the US General Services Administration. If state assistance in locating an appropriate facility is needed, the Department of Emergency Management and Homeland Security (DEMHS) will contact the Department of Public Works (DPW) Emergency Operations Center who will then be responsible for alerting appropriate personnel of the DPW Real Estate Division.

The FCO will provide specific guidance on the necessary features of the JFO/JIC (including floor space, number of private offices, conference and meeting rooms, training space for disaster relief workers, and other resources for the Disaster Field Training Officer (DFTO)).

All JFO/JIC operating expenses are the responsibility of the federal government. This includes arrangements and costs for renting/leasing, furnishing, phone installation and billings, utilities, parking, security, janitorial services, etc.

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**Joint Field Office/Joint Information Center**

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**3. STATE AGENCY STAFFING REQUIREMENTS**

The following State personnel will staff the JFO:

- a) the SCO (designated by the Governor; normally the Department of Emergency Management and Homeland Security (DEMHS) Commissioner) or,
- b) the Alternate SCO (designated by the Governor, normally the DEMHS Deputy Commissioner);
- c) the Governor's Authorized Representative (GAR) (designated by the Governor; normally the DEMHS Commissioner) or,
- d) the Alternate GAR (AGAR) (designated by the Governor; normally the DEMHS Deputy Commissioner);
- e) the State Public Assistance Officer (appointed by the Governor; normally the AGAR);
- f) the State Hazard Mitigation Officer (SHMO) (appointed by the Governor; normally from the Inland Water Resources Division of the DEP); and
- g) the Individuals and Households Program Coordinator (from the Department of Social Services (DSS).

The following State personnel will staff the JIC:

- a) the State Public Information Officer (i.e., the Governor's Press Secretary or his designee);
- b) DEMHS Director of Communications; and
- c) PIOs of other State agencies as determined necessary by the State PIO.

These officials are the State partners of their Federal counterparts. All officials listed above shall be responsible for arranging for any necessary staff and/or clerical support, computers, printers, etc.

The SCO may request other State agency personnel to staff the JFO/JIC as necessary.

The SCO may also request that the American Red Cross provide personnel to staff the JFO/JIC as necessary.

All State personnel assigned to the JFO/JIC are considered part of the SCO's staff and shall participate in such meetings and submit such written reports and information as may be requested by the SCO.

**4. GOVERNOR'S EMERGENCY COMMUNICATIONS TEAM**

The Governor's Emergency Communications Team consists of all state agency communications directors and public information officers (PIOs) as well as the Governor's personal Communications Office staff. The Governor's Director of Communications serves as the head of the Communications Team and may designate operational coordination to a member of his/her staff. Additionally, a DEMHS staff person is assigned by the DEMHS Commissioner to serve as the administrative manager and coordinator of the Communications Team, maintaining all contact information, drafting schedules, coordinating team training and assisting the Governor's Office as required.

The purpose of the Governor's Emergency Communications Team is to develop and distribute comprehensive, centralized public information and precautionary instructions to the public on a 24

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***Joint Field Office/Joint Information Center***

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hour basis during times of crisis. Because of limited individual agency staffing, state PIO assets must be “pooled” to adequately staff and sustain a Joint Information Center.

The authority to activate the Governor’s Emergency Communications Team – and to open the Joint Information Center – rests with the Office of the Governor, specifically the Governor’s Chief of Staff and/or Director of Communications. This authority may be delegated for specific incidents or emergencies to the DEMHS Commissioner.

Normally, the DEMHS Commissioner will make a recommendation to the Governor and/or Chief of Staff as to the need for a Joint Information Center (JIC) based on the nature of the disaster or emergency.

**TELEREGISTRATION AND DISASTER RECOVERY CENTER**

**1. TELEREGISTRATION**

The Federal Emergency Management Agency (FEMA) utilizes a 1-800 telephone number as the primary means of establishing contact with disaster victims. A call to a FEMA National Teleregistration Center number begins the disaster assistance application process. FEMA will widely publish a specific 1-800 telephone number at the time the disaster is declared by the President. Inspectors under contract to FEMA may visit the homes and businesses of victims who call and register for assistance through a National Teleregistration Center. These inspections will be the basis for eligibility determinations and referral to other appropriate disaster assistance programs.

**2. DISASTER RECOVERY CENTERS (DRCs)**

Disaster Recovery Centers (DRCs) may be requested by the State as a component to any disaster recovery strategy. They are the principal provider of community level applicant assistance and represent the only intergovernmental presence available to the general public. DRCs supplement the delivery of Federal and State programs while simultaneously providing an environment conducive to interactive workshops and emotional support. A Disaster Recovery Center is a readily accessible facility in the disaster area where individuals, family members, and business owners may visit for:

- a) Guidance on Disaster Recovery (various Federal, State, and local agencies);
- b) Assistance to help clarify any written correspondence received;
- c) Housing assistance and rental resource information from the Individuals and Households Program (IHP) program;
- d) Answers to questions, problem resolution, and appropriate referrals;
- e) Status of applications being processed by FEMA and the Small Business Administration (SBA);
- f) Workshops (SBA, Mitigation, etc.); and
- g) Applicant Registration via telephone (National Teleregistration Center).

a. Selection of Disaster Recovery Centers

Upon submission of a request for a Presidential disaster declaration, the State Coordinating Officer (SCO) (usually the Commissioner of the Department of Emergency Management and Homeland Security [DEMHS]) and the Federal Coordinating Officer (FCO) shall jointly begin determining the number of DRCs that should be opened and the general areas in which they should be located. The DEMHS Commissioner will advise the Governor's Office concerning the number and location of DRCs.

The DEMHS Regional Coordinators will contact the local chief executives of towns specified by the DEMHS Commissioner to secure adequate local facilities for use as DRCs. If there are suitable State facilities in a town where a DRC is to be located, Regional Coordinators should contact State officials of those facilities, following consultation with the chief executive of the town in which the State facility is located.

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All DRCs should have, as a minimum, the following features:

- 1) an open floor space, such as a basketball court;
- 2) adequate restroom facilities;
- 3) office space for the DRC manager;
- 4) a private area(s) for crisis intervention work;
- 5) easy building access, with handicapped ramps; and
- 6) telephones (including a TDD/TT for the hearing impaired) and computer hookup capability.

Under present federal regulations, the operating costs of the DRC are not reimbursable (e.g., heat, lights, janitorial, etc.).

In the pre-declaration phase it is imperative that no public announcements be made by State or local officials concerning DRCs. Regardless of any preliminary arrangements between State and local officials, FEMA makes the final decisions regarding the number of DRCs that will be staffed by federal relief workers. The SCO and the FCO shall determine the hours and days of DRC operation. All local officials contacted during the pre-declaration phase shall be notified of the Federal/State decision regarding the final numbers and locations of DRCs. Premature statements about DRCs can be a source of confusion to disaster victims and public officials alike.

b. Staffing Disaster Recovery Centers

Sufficient numbers of employees should be committed to the DRCs to service disaster victims in a timely manner. DRCs are particularly busy in the late afternoon and evening after normal working hours, on weekends, and on the first and last days of operation.

In addition to Federal agencies, the State and private agencies listed below will staff all DRCs during all hours of operation if so requested by the SCO:

- 1) the Department of Economic and Community Development will provide information on relocation sites for businesses and state aid available to affected businesses;
- 2) the Department of Mental Health and Addiction Services will arrange for crisis intervention workers at DRCs to assist emotionally distressed disaster victims and to observe and assist emergency workers as well;
- 3) the Department of Labor will provide representatives to handle questions about disaster-caused unemployment benefits, and to take applications for the Disaster Unemployment Assistance program;
- 4) the Department of Environmental Protection will provide flood insurance map-readers, if necessary;
- 5) the Department of Social Services will provide staff for the IHP program administered by FEMA, as needed;
- 6) the Department of Revenue Services will provide tax related assistance; and
- 7) the American Red Cross will provide information on ARC relief programs and make appropriate referrals.

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***Teleregistration and Disaster Recovery Centers***

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In addition, DEMHS will ensure that the DRC Manager is provided with phone numbers for obtaining other state services that may be needed by disaster victims including phone numbers for interpreting services, insurance questions, consumer fraud issues, deaf and hearing impaired services, services for the elderly, services for the blind, and services for Tribal Nations.

c. Mobile Disaster Recovery Centers

The FCO and the SCO will jointly determine that one or more mobile DRCs are necessary to provide adequate service to disaster victims in outlying areas. Individual State agencies listed above may be requested by the SCO to staff such mobile DRCs.

**FEMA PUBLIC ASSISTANCE PROGRAM**

**1. GENERAL**

In Presidentially declared disasters or emergencies State and local government agencies and certain private non-profit organizations may be eligible for grant assistance under the Federal Emergency Management Agency's (FEMA) Public Assistance Program, authorized by PL93-288. The program provides assistance for removal of debris, the implementation of emergency protective measures, and the permanent restoration of the public infrastructure. The program also encourages protection from future damage by providing assistance for mitigation measures during the recovery process. In most circumstances FEMA will pay 75 percent of the cost of eligible work. In the case of local governments, the State may pay an additional share of the eligible work. The exact amount of the State share will be determined at the time of the disaster and will be set forth in the FEMA-State Agreement.

**2. RECORD KEEPING**

When a disaster strikes, there is a tendency to "do whatever needs to be done" with a minimum of red tape. Normal documentation and record keeping are often overlooked or waived for the sake of expediency. While this tendency is understandable, it may well prove to be extremely costly.

All potential applicants for FEMA disaster assistance including State agencies, local governments, and private non-profit organizations are requested to begin documenting and recording expenditures and damages as soon as emergency response activities are undertaken. **Federal reimbursements will not be provided if it cannot be demonstrated that: 1) money has been actually expended, or 2) that damages have been incurred as a direct result of the declared disaster and/or emergency.**

The following suggestions are offered to assist potential applicants with record keeping:

a) **Take Pictures.** Before and after photographs of damaged facilities may provide the most irrefutable evidence on damages. Often it is necessary for State and local forces to perform emergency work without delay, before there is a Presidential disaster declaration and before federal inspectors have arrived to view the disaster area. Good pictures of such things as disaster deposited debris, buildings or bridges in need of immediate demolition, sandbag dikes, etc. may help to demonstrate that emergency work was:

- 1) necessary,
- 2) performed, and
- 3) eligible for reimbursement.

If at all possible, **wait for federal damage survey teams** to survey the area before beginning permanent restorative work or debris removal operations. Bear in mind, however, that it may be several days before these teams arrive and that public health and safety should not be compromised if a clear and present danger requires immediate address.

b) For all disaster-related work which is contracted out keep:

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- 1) copies of requests for bids,
- 2) the bid documents,
- 3) the contracts which are let,
- 4) invoices submitted by the contractor,
- 5) warrants authorizing check issuance, and
- 6) copies of checks issued in payment.

c) For work performed by force account, i.e., the applicant's own forces, keep:

- 1) appropriate extracts from payrolls with any cross-references needed to locate original documents,
- 2) a schedule of equipment used on the job, and
- 3) invoices, warrants and checks issued and paid for materials and supplies used on the job.

All records and documents which may be used in claiming reimbursement should be kept in a central location. The applicant is responsible for ensuring compliance with state and local procurement regulations. Record keeping and documentation should continue throughout the response and recovery phases of a disaster or emergency. **Remember, the most common reason for failure to obtain federal assistance is a lack of adequate documentation.**

Should a Governor's request for a Presidential disaster declaration be denied, it is possible that the State, through a special act of the legislature, might appropriate funds for its own disaster assistance program. In all likelihood, documentation and records similar to those described above would also be necessary in order to be eligible for assistance under a State disaster assistance program.

### **3. DESIGNATION OF AREAS ELIGIBLE FOR PUBLIC ASSISTANCE**

Following the declaration of a disaster or emergency by the President, the FEMA National Office in Washington, D.C. will determine which areas of the State will be eligible for Public Assistance. The Governor will be notified of FEMA's determination through the FEMA Regional Director.

Emergency work and permanent restorative work on damaged/destroyed public facilities within the designated area may be eligible for assistance in accordance with the specific disaster declaration criteria. The Preliminary Damage Assessment (PDA) data forms the foundation for immediate funding for emergency; work in the communities hardest hit by the disaster. This Immediate Needs Funding, up to 50% of the Federal share of the PDA estimates for emergency work, provides funds for applicants to continue recovery activities without the burden of extensive documentation and review during the peak of crisis operations.

### **4. DESIGNATION OF STATE PUBLIC ASSISTANCE OFFICER (PAO)**

If the disaster declaration authorizes the implementation of the FEMA Public Assistance Program, the Governor must appoint the State Public Assistance Officer (PAO), usually a DEMHS staff member. The State PAO will locate at the Joint Field Office (JFO) and will work closely with the FEMA PAO to schedule Applicants' Briefings to assist State agencies and local governments in developing project applications for federal assistance.

## **5. INITIAL NOTIFICATION OF ELIGIBLE APPLICANTS**

The State Public Information Officer (i.e., Governor's Press Secretary or his designee) and the FEMA Public Information Officer shall be responsible for developing and issuing joint press releases describing areas of the State eligible for public assistance.

## **6. APPLICANTS' BRIEFINGS**

Applicants' Briefings are conducted by the FEMA and the State PAOs. The Briefings are attended by appropriate local officials and representatives of State agencies. The purposes of the Briefings are to explain the FEMA Public Assistance Program including application eligibility and appeal procedures as well as to answer questions. Applicants will be furnished informative materials including handbooks and fact sheets.

The State PAO shall confer with the FEMA PAO and shall determine the number of Applicants' Briefings that will be necessary, and the most suitable location(s) for such Briefings.

The State PAO shall make arrangements for the use of appropriate facilities in which to conduct Briefings and shall notify the local chief executives of all eligible communities of the time, date and place of the Applicants' Briefing for their community. It is recommended that the following officials from each eligible community attend the Applicants' Briefing.

- a) Chief Executive Officer,
- b) Finance or Fiscal Officer, and
- c) Town Engineer or Public Works Director.

At the Applicants' Briefing, or subsequent to it, local officials should provide the State PAO with the names of eligible private non-profit facilities in their towns which have sustained disaster-related damages. Eligible private non-profit facilities include educational, utility, emergency, medical, custodial care, or other private non-profit facilities providing essential governmental type services to the general public, as well as such facilities on Indian reservations. The State PAO will review all Requests for Public Assistance (RPAs) for private non-profit organizations to determine if they are eligible entities prior to submitting the RPAs to FEMA.

A separate Applicants' Briefing will normally be held for state agencies. The State PAO will notify appropriate state agency officials of the location, date and time of Applicants' Briefings for state agencies. It is important that officials attending Applicants' Briefings are aware of the types of public facilities which have sustained damage and the types of emergency work already performed or to be performed.

Applicants will be encouraged to complete and hand in a Request for Public Assistance (RPA) form and a Receipt of the List of Assurances form (LOA) at the Applicants' Briefings, but may submit their RPA and LOA forms up to 30 days after the designation of a county as eligible for public assistance. If the RPA and LOA forms are not submitted before the deadline, the Applicant will be ineligible for the program. (See the RPA and the LOA forms at the end of section V.)

## **7. INSPECTOR BRIEFINGS**

The FEMA and State PAOs shall schedule briefings for state and federal inspectors who may assist state and local governments in developing Project Worksheets (PWs). Normally these briefings will be held at the Joint Field Office (JFO). Inspector briefings will be conducted by FEMA Public Assistance personnel and are intended to familiarize state and federal inspectors with the use of appropriate forms and procedures and to provide disaster-specific information.

The Departments of Transportation, Environmental Protection, and Public Works shall provide personnel with engineering and/or construction expertise as requested by the State PAO to attend inspector briefings and to assist federal inspectors. The State PAO will request personnel from State agencies based upon a review of the RPAs and guidance of the FEMA PAO.

## **8. KICK-OFF MEETINGS AND PROJECT WORKSHEETS (PWs)**

The FEMA PAO will assign a Project Officer to each applicant (i.e., state agency and community). The Project Officer will conduct a “Kick-Off Meeting” held in the community to explain procedures for preparing Project Worksheets (PWs) for Large and Small Projects. Local officials will be encouraged to prepare PWs for all Small Projects under \$55,500 (amount adjusted periodically). The Project Officer will provide training and guidance to local officials regarding preparation of PWs for Small Projects. FEMA will be responsible for preparing PWs for all Large Projects (i.e., projects over \$55,500, adjusted periodically). FEMA will use a predetermined Cost Estimating Formula (CEF) for determining the amount of federal assistance for each eligible Large Project. The FEMA CEF is a cost estimating methodology which uses standard construction industry practices and includes: labor, materials, equipment, project design and management, contractor overhead and profit, escalation due to inflation, and other factors that can increase project costs significantly over long construction periods.

## **9. PROJECT APPLICATIONS**

Upon review and approval of PWs by FEMA, the State PAO prepares a Project Application (PApp) on behalf of the applicant (local government, state agency or private non-profit).

The PApp represents the total amount of financial assistance requested by an applicant from FEMA and the State for each category of assistance (i.e., debris clearance, emergency protective measures, roads systems, water control facilities, public buildings and equipment, public utilities, other damages such as parks and recreational facilities). The amounts represented on the PApp are based on the PWs. If additional damages are discovered, or if estimates on the original PWs prove too low, supplemental PWs and PApps may be developed by the State PAO. If it appears that the cost of restoring a damaged public facility will exceed the amount on the original PW, the State PAO should be contacted immediately and appropriate FEMA officials consulted. Failure to do so could result in the applicant bearing the additional costs.

## **10. SPECIAL CONSIDERATIONS**

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
**FEMA Public Assistance Program**

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It is absolutely imperative that applicants for public assistance provide the State PAO with all pertinent information regarding: 1) insurance coverage on applicant-owned facilities and properties, 2) historical structures, and 3) environmental considerations. All project worksheets involving facilities and equipment for which there are special considerations must be reviewed by FEMA. The applicant has a critical role in identifying special considerations. Insurance proceeds will be deducted from assistance received from FEMA.

**11. COORDINATION WITH STATE PUBLIC ASSISTANCE OFFICER (PAO)**

Applicants are assigned to a federal program expert called a Public Assistance Coordinator (PAC), who will serve as their customer service representative on PA Program matters and who will manage the processing of all of the applicant's recovery projects. It is frequently a year or more from the time of the disaster before all federal funds are received by eligible local governments, private non-profit entities and state agencies. Throughout the recovery period it is absolutely essential that local officials keep in close touch with the State PAO. If there is any question whatsoever as to how to proceed, local officials should first consult with the State PAO. This will minimize confusion and delays and will ensure that all eligible costs are fully reimbursed by the federal government.

**12. RESPONSIBILITY OF LOCAL OFFICIALS TO MONITOR WORK**

Local officials are responsible for oversight of disaster-related work performed by private contractors working for the municipality. This can be especially important in disasters involving extensive debris removal operations. Local officials may be required by FEMA or the State PAO to explain local procedures for validating contractor invoices for work done. Inadequate monitoring of contractors by local officials could result in loss or reduction of federal and state disaster assistance funds in cases where FEMA or the State PAO determines that contractor invoices are excessively high and that local monitoring of contractors was inadequate to guard against inappropriate billings.

**13. APPEALS**

The appeal process is an opportunity for the applicant to request FEMA to review its decision regarding eligibility. Usually an appeal can be resolved informally. If, however, the applicant is not satisfied with the decision, there is a two-level appeal process: first to the Regional Director; second to the Associate Director at FEMA headquarters. The State PAO can assist the applicant through the appeals process.

**14. AUDITS**

Audits of eligible applicants will be conducted in accordance with FEMA guidelines and the Single Audit Act, P.L. 98-502. For purposes of the FEMA Public Assistance Program, the State of Connecticut is considered the grantee; local units of government and private non-profits are subgrantees.

**15. PUBLIC ASSISTANCE FLOWCHARTS**

The Public Assistance (PA) Program is based on a partnership of FEMA, State and local officials. FEMA is committed to enhancing this partnership through improved communication, training and information exchange. PROCESS Flowcharts, available on the FEMA website, show the PA Program from disaster planning to project approval stages.

**STATE OF CONNECTICUT NATURAL DISASTER PLAN  
FEMA Public Assistance Program**

<b>FEDERAL EMERGENCY MANAGEMENT AGENCY REQUEST FOR PUBLIC ASSISTANCE</b>			O.M.B. No. 3067-0151 Expires September, 30, 2006
<b>Applicant (Political subdivision or eligible applicant):</b>		<b>Date Submitted:</b>	
		-CT	
<b>County (Location of Damages. If located in multiple counties, please indicate)</b>			
<b>APPLICANT PHYSICAL LOCATIONS</b>			
<b>Street Address</b>			
<b>City</b>	<b>County</b>	<b>State</b>	<b>Zip Code</b>
<b>MAILING ADDRESS (If different from Physical Location)</b>			
<b>Street Address</b>			
<b>Post Office Box</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
<b>Primary Contact /Applicant's Authorized Agent</b>		<b>Alternate Contact</b>	
<b>Name</b>		<b>Name</b>	
<b>Title</b>		<b>Title</b>	
<b>Business Phone</b>		<b>Business Phone</b>	
<b>FAX No</b>		<b>FAX No</b>	
<b>Home Phone (Optional)</b>		<b>Home Phone (Optional)</b>	
<b>Cell Phone</b>		<b>Cell Phone</b>	
<b>E-Mail Address</b>		<b>E-Mail Address</b>	
<b>Pager &amp; Pin Number</b>		<b>Pager &amp; Pin Number</b>	
<b>Did you participate in the Federal/State Preliminary Damage Assessment (PDA)?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO			
Private Non-Profit Organization? <input type="checkbox"/> YES <input type="checkbox"/> NO			
If yes, which of the facilities identified below best describe your organization?			
<p>_____</p> <p>Title 44 CFR part 206.221(e) defines an eligible private non-profit facility as: "...any private non-profit educational, utility, emergency, medical or custodial care facility, including a facility for the aged or disabled, and other facility providing essential governmental type services to the general public, and such facilities on Indian reservations" "Other essential governmental services facility means museums, zoos, community centers, libraries, homeless shelters, senior citizen centers, rehabilitation facilities, shelter workshops and facilities which provide health and safety services of a governmental nature. All such facilities must be open to the general public."</p> <p><b>Private Non-Profit Organizations must attach copies of their Tax Exemption Certificate and Organization Charter or By-Laws. If your organization is a school or educational facility, please attach information on accreditation or certification.</b></p>			

*STATE OF CONNECTICUT NATURAL DISASTER PLAN  
FEMA Public Assistance Program*

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RECEIPT  
OF  
LIST OF ASSURANCES

*Submit to: State Public Assistance Officer, c/o DEMHS, 360 Broad Street, Hartford, CT 06105*

I, \_\_\_\_\_, (Print your name & title) of the  
\_\_\_\_\_ (town, city, borough, non-profit, agency)

have received/reviewed the List of Assurances and will submit a copy to the Administrative  
Head and the Finance Office of my Agency.

I am also aware that I have to keep records for three years from the starting date as specified in  
§13.42 (I)(c).

\_\_\_\_\_  
(Signature & Title)

\_\_\_\_\_  
(date)

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
**FEMA Public Assistance Program**

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APPLICANT ASSURANCES (revised 5/07)

The applicant hereby assures and certifies that he will comply with the FEMA regulations, policies, guidelines and requirements including OMB's Circulars A-102 for local governments and A-110 for institutions of higher education, hospitals and Private Non-Profits (PNPs), as they relate to the application, acceptance and use of Federal funds for this Federally-assisted project. Also, the Applicant gives assurance and certifies with respect to and as a condition for the grant that:

1. It possesses legal authority to apply for the grant, and to finance and construct the proposed facilities; that its charter and/or ordinances direct and authorize the person identified as the official dealing with the state to act in connection with the application and to provide such additional information as may be required.
2. It will comply with the provisions of: Executive Order 11988, relating to Floodplain Management, and Executive Order 11990, relating to Protection of Wetlands.
3. It will have sufficient funds available to meet the non-Federal share of the cost for construction projects. Sufficient funds will be available when construction is completed to assure effective operation and maintenance of the facility for the purpose constructed.
4. It will not enter into a construction contract(s) for the project or undertake other activities until the conditions of the grant program(s) have been met.
5. It will provide and maintain competent and adequate architectural engineering supervision and inspection at the construction site to insure that the completed work conforms with the approved plans and specifications; that it will furnish progress reports and such other information as the Federal grantor agency may need.
6. It will operate and maintain the facility in accordance with the minimum standards as may be required or prescribed by the applicable Federal, State and local agencies for the maintenance and operation of such facilities.
7. It will give the grantor agency and the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the grant.
8. It will require the facility to be designed to comply with the "American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by the Physically Handicapped," Number A117.1-1961, as modified (41 CFR 101-17-7031). The applicant will be responsible for conducting inspections to insure compliance with these specifications by the contractor.
9. It will cause work on the project to be commenced within a reasonable time after receipt of notification from the approving Federal agency that funds have been approved and will see that work on the project will be prosecuted to completion with reasonable diligence.
10. It will not dispose of or encumber its title or other interests in the site and facilities during the period of Federal interest or while the Government holds bonds, whichever is the longer.
11. It agrees to comply with Section 311, P.L. 93-288 and with Title VI of the Civil Rights Act of 1964 (P.L. 83-352) and in accordance with Title VI of the Act, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement. If any real property or structure is provided or improved with the aid of Federal financial assistance extended to the Applicant, this assurance shall obligate the Applicant, or in the case of any transfer of such property, any transferee, for

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
**FEMA Public Assistance Program**

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the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits.

12. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.

13. It will comply with the requirements of Title II and Title III of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced as a result of Federal and Federally assisted programs.

14. It will comply with all requirements imposed by the Federal grantor agency concerning special requirements of law, program requirements and other administrative requirements approved in accordance with OMB Circular A-102, P.L. 93-288 as amended, and applicable Federal Regulations.

15. It will comply with the provisions of the Hatch Act which limit the political activity of employees.

16. It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act, as they apply to hospital and educational institution employees of State and local governments.

17. To the best of his knowledge and belief the disaster relief work described on each Federal Emergency Management Agency (FEMA) Project Application for which Federal Financial assistance is requested is eligible in accordance with the criteria contained in 44 Code of Federal Regulations, Part 206, and applicable FEMA Handbooks.

18. The emergency or disaster relief work therein described for which Federal Assistance is requested hereunder does not or will not duplicate benefits received for the same loss from another source.

19. It will (1) provide without cost to the United States all lands, easements and rights-of-way necessary for accomplishments of the approved work; (2) hold and save the United States free from damages due to the approved work or Federal funding.

20. This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, reimbursements, advances, contracts, property, discounts of other Federal financial assistance extended after the date hereof to the Applicant by FEMA, that such Federal Financial assistance will be extended in reliance on the representations and agreements made in this assurance and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the applicant, its successors, transferees, and assignees, and the authorized to sign assurances on behalf of the applicant.

21. It will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973, Public Law 93-234, 87 Stat. 975, approved December 31, 1973. Section 102(a) requires, on and after March 2, 1975, the purchase of flood insurance in communities where such insurance is available as a condition for the receipt of any Federal financial assistance for construction or acquisition purposes for use in any area that has been identified by the Director, Federal Emergency Management Agency as an area having special flood hazards. The phrase "Federal financial assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any other form of direct or indirect Federal assistance.

22. It will comply with the insurance requirements of Section 314, P.L. 93-288, to obtain and maintain any other insurance as may be reasonable, adequate, and necessary to protect against further loss to any property which was replaced, restored, repaired, or constructed with this assistance.

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23. It will defer funding of any projects involving flexible funding until FEMA makes a favorable environmental clearance, if this is required.

24. It will assist the Federal grantor agency in its compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, (16 U.S.C. 470), Executive Order 11593, and the Archeological and Historic Preservation Act of 1966 (16 U.S.C. 469a-1 et seq.) by (a) consulting with the State Historic Preservation Officer on the conduct of investigations, as necessary, to identify properties listed in or eligible for inclusion in the National Register of Historic places that are subject to adverse effects (see 36 CFR Part 800.8) by the activity, and notifying the Federal grantor agency of the existence of any such properties, and by (b) complying with all requirements established by the Federal grantor agency to avoid or mitigate adverse effects upon such properties.

25. It will, for any repairs or construction financed herewith, comply with applicable standards of safety, decency and sanitation and in conformity with applicable codes, specifications and standards; and will evaluate the natural hazards in areas in which the proceeds of the grant or loan are to be used and take appropriate action to mitigate such hazards, including safe land use and construction practices.

26. Applicant agrees to conform to revisions to these assurances that may from time to time be posted on the DEMHS website: [www.ct.gov/demhs](http://www.ct.gov/demhs). Then click on Emergency Management and then click on Public Assistance.

#### STATE ASSURANCES

The State agrees to take any necessary action within State capabilities to require compliance with these assurances and agreements by the applicant or to assume responsibility to the Federal government for any deficiencies not resolved to the satisfaction of the Regional Administrator.

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**ACRONYMS, ABBREVIATIONS, AND GLOSSARY**

<b>AGAR</b>	<b>Alternate Governor’s Authorized Representative.</b> Individual designated by the Governor in the FEMA-State Agreement to exercise the same powers as the Governor’s Authorized Representative (GAR) in the administration of federal disaster assistance on behalf of the State and local governments and other grant and loan recipients.
<b>ANSI</b>	<b>American National Standards Institute</b>
<b>ARC</b>	<b>American Red Cross</b>
<b>ASCE</b>	<b>American Society of Civil Engineers</b>
<b>ASWP</b>	<b>Alternate State Warning Point.</b> The State Department of Emergency Management and Homeland Security office located at 360 Broad Street, Hartford, CT 06105 is Connecticut’s ASWP. The ASWP is responsible for disseminating weather watches and warnings issued by the National Weather Service when the State Warning Point is not covering this responsibility.
<b>AT&amp;T</b>	<b>American Telephone and Telegraph</b>
<b>CAP</b>	<b>Civil Air Patrol</b>
<b>CCIA</b>	<b>Connecticut Construction Industries Association, Inc</b>
<b>CDC</b>	<b>Center for Disease Control and Prevention (US DHHS).</b> The CDC works to protect public health and safety by providing information to enhance health decisions; and it promotes health through partnerships with state health departments and other organizations.
<b>CEF</b>	<b>Cost Estimating Formula.</b> Estimating methodology using standard construction industry practices.
<b>CEO</b>	<b>Chief Executive Officer.</b> The official of the community who is charged with the authority to implement and administer laws, ordinances and regulations; a mayor, first selectman, town/city manager.
<b>CFR</b>	<b>Code of Federal Regulations</b>
<b>CFPC</b>	<b>Commission on Fire Prevention and Control (State of Connecticut)</b>
<b>CGS</b>	<b>Connecticut General Statutes</b>
<b>CHOC</b>	<b>Connecticut Helps Oversight Council.</b> A group of state agencies and nonprofit organizations convened by DEMHS and/or DCF and/or DMHAS on behalf of the Governor to coordinate resources and services for disaster victims. Includes OPM, DCF, DMHAS, DOI, DOL, DPH, DSS, Office of Victim Advocate, Office of Victim Services, American Red Cross, United Way, Salvation Army, Catholic Charities, Governor’s Prevention Partnership, Center for Trauma and Response, Family and Children’s Agency and CT Volunteer Organizations Active in Disaster (VOAD).
<b>C-MED/RCC</b>	<b>Centralized Medical Emergency Dispatch/Regional Coordination Center.</b> Coordinates and communicates between hospitals and pre-hospital emergency medical service providers. Also coordinates movement of medical resources to a mass casualty incident scene and the distribution of patients. There are 13 communications centers that perform the C-MED function. They are located in Bridgeport, Colchester, Groton, Litchfield, New Haven, Norwich, Prospect, Thompson, Tolland, Waterford, Westbrook and West Hartford.
<b>COLLECT</b>	<b>Connecticut On-Line Law Enforcement Communications Teleprocessing.</b> On-line system for disseminating text data among federal, state and local law enforcement agencies.
<b>CONVEX</b>	<b>Connecticut Valley Electric Exchange.</b> CONVEX is located in Newington, CT and is responsible for monitoring, planning and coordinating the electrical transmission system for Connecticut and Western Massachusetts under both normal and emergency conditions.
<b>CRT</b>	<b>Critical Response Team (American Red Cross)</b>
<b>CSP</b>	<b>Connecticut State Police</b>
<b>CT</b>	<b>Connecticut</b>
<b>CT-N</b>	<b>Connecticut Network</b>
<b>CTNG</b>	<b>Connecticut National Guard</b>
<b>DAS</b>	<b>Department of Administrative Services (State of Connecticut)</b>
<b>DECD</b>	<b>Department of Economic and Community Development (State of Connecticut)</b>
<b>DCF</b>	<b>Department of Children and Families (State of Connecticut)_</b>

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<b>DCP</b>	<b>Department of Consumer Protection (State of Connecticut)</b>
<b>DDS</b>	<b>Department of Developmental Services (State of Connecticut)</b> formerly called the Department of Mental Retardation.
<b>DEMHS</b>	<b>Department of Emergency Management and Homeland Security (State of Connecticut)</b> formerly called Office of Emergency Management – OEM.
<b>DEP</b>	<b>Department of Environmental Protection (State of Connecticut)</b>
<b>DFA</b>	<b>Direct Federal Assistance</b>
<b>DHS</b>	<b>Department of Homeland Security (U.S.)</b>
<b>DMHAS</b>	<b>Department of Mental Health and Addiction Services (State of Connecticut)</b>
<b>DMV</b>	<b>Department of Motor Vehicles (State of Connecticut)</b>
<b>DOAG</b>	<b>Department of Agriculture (State of Connecticut)</b>
<b>DOC</b>	<b>Department of Corrections (State of Connecticut)</b>
<b>DOHE</b>	<b>Department of Higher Education (State of Connecticut)</b>
<b>DOIT</b>	<b>Department of Information Technology (State of Connecticut)</b>
<b>DOL</b>	<b>Department of Labor (State of Connecticut)</b>
<b>DOT</b>	<b>Department of Transportation (State of Connecticut)</b>
<b>DPH</b>	<b>Department of Public Health (State of Connecticut)</b>
<b>DPS</b>	<b>Department of Public Safety (State of Connecticut)</b>
<b>DPUC</b>	<b>Department of Public Utility Control (State of Connecticut)</b>
<b>DPW</b>	<b>Department of Public Works (State of Connecticut)</b>
<b>DRC</b>	<b>Disaster Recovery Center.</b> Facility located in or near a Presidentially-declared disaster area which individual disaster victims and business owners may visit for guidance and information on a variety of federal and non-federal disaster assistance programs, telephonic registration for disaster assistance, status reports concerning previously submitted applications for disaster assistance, interactive recovery workshops, emotional support, clarification of written correspondence from disaster relief agencies and other forms of assistance.
<b>DSS</b>	<b>Department of Social Services (State of Connecticut)</b>
<b>EAS</b>	<b>Emergency Alert System.</b> A statewide association of broadcast and cable media stations which assist federal, state and local officials by disseminating emergency public information related to weather and other emergencies.
<b>EM</b>	<b>Emergency Management</b>
<b>EMAC</b>	<b>Emergency Management Assistance Compact.</b> A Congressionally-sanctioned, interstate mutual aid compact to which most states, including Connecticut, belong.
<b>EMS</b>	<b>Emergency Medical Services</b>
<b>EOC</b>	<b>Emergency Operations Center</b>
<b>ERT</b>	<b>Emergency Response Team.</b> The ERT consists of federal disaster relief officials from the Federal Emergency Management Agency and other federal agencies. The ERT deploys to the Joint Field Office following a Presidential declaration of disaster or emergency and works under the direction of the Federal Coordinating Officer. The ERT provides operational, administrative and logistical support to federal response activities in the field. The ERT also provides support for the dissemination of information to the general public, the media and Congress.
<b>ESF</b>	<b>Emergency Support Function.</b> A category of disaster response or recovery operations identified in the National Response Framework (NRF) and assigned to ESF Coordinator, Primary and Support Federal Agencies. The Federal ESF agencies support State and local response and recovery operations and other Federal ESF agencies.
<b>ESF # 1</b>	<b>Emergency Support Function # 1 -Transportation</b>
<b>ESF # 2</b>	<b>Emergency Support Function # 2 - Communications</b>
<b>ESF # 3</b>	<b>Emergency Support Function # 3 - Public Works and Engineering</b>
<b>ESF # 4</b>	<b>Emergency Support Function # 4 - Firefighting</b>
<b>ESF # 5</b>	<b>Emergency Support Function # 5 - Emergency Management</b>
<b>ESF # 6</b>	<b>Emergency Support Function # 6 - Mass Care, Emergency Assistance, Housing, and Human Services</b>
<b>ESF # 7</b>	<b>Emergency Support Function # 7 – Logistics Management and Resource Support</b>

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<b>ESF # 8</b>	<b>Emergency Support Function # 8 - Public Health and Medical Services</b>
<b>ESF # 9</b>	<b>Emergency Support Function # 9 - Search and Rescue</b>
<b>ESF # 10</b>	<b>Emergency Support Function # 10 - Oil and Hazardous Materials Response</b>
<b>ESF # 11</b>	<b>Emergency Support Function # 11 - Agriculture and Natural Resources</b>
<b>ESF # 12</b>	<b>Emergency Support Function # 12 - Energy</b>
<b>ESF # 13</b>	<b>Emergency Support Function # 13 - Public Safety and Security</b>
<b>ESF # 14</b>	<b>Emergency Support Function # 14 - Long-Term Community Recovery</b>
<b>ESF # 15</b>	<b>Emergency Support Function # 15 - External Affairs</b>
<b>FCO</b>	<b>Federal Coordinating Officer.</b> A FEMA official appointed by the President. The FCO is responsible for the overall integration of Federal emergency management resource allocations and activities in support of, and in coordination with State, tribal, and local requirements. The FCO ensures that federal disaster assistance is provided in a timely and coordinated fashion and in accordance with all applicable laws, regulations and agreements between FEMA and the State.
<b>FEMA</b>	<b>Federal Emergency Management Agency</b> is now a part of the U.S. Department of Homeland Security (DHS/FEMA).
<b>FIRM</b>	<b>Flood Insurance Rate Map</b>
<b>FNARS</b>	<b>Federal National Radio System</b>
<b>GAR</b>	<b>Governor's Authorized Representative.</b> Individual designated by the Governor in the FEMA/State Agreement to administer federal disaster assistance programs on behalf of the State and local governments and other grant and loan recipients.
<b>GEOC</b>	<b>General Emergency Operations Concepts.</b> Principles of emergency operations that generally hold true in natural and technological disasters and emergencies of all types and magnitudes,
<b>HHS</b>	<b>Department of Health and Human Services (US)</b>
<b>IA</b>	<b>Individual Assistance.</b> Disaster assistance provided to an individual victim or business owner.
<b>IC</b>	<b>Incident Commander.</b> Individual responsible for the management of all incident operations at the incident site.
<b>ICP</b>	<b>Incident Command Post</b>
<b>ICS</b>	<b>Incident Command System.</b> A standardized organizational structure used to command, control, and coordinate the use of resources and personnel responding to the scene of an emergency. ICS concepts and principles include common terminology, modular organization, integrated communication, unified command structure, consolidated action plan, manageable span of control, designated incident facilities, and comprehensive resource management.
<b>IHP</b>	<b>Individuals and Households Program.</b> Federal grant program for individuals and households for housing and other disaster-related needs.
<b>IMT</b>	<b>Incident Management Team</b>
<b>IRRs</b>	<b>Initial Response Resources.</b> Resources commonly needed in a disaster area which are stockpiled by FEMA or available through emergency contracts with private vendors that can be quickly deployed to a disaster site.
<b>JFO</b>	<b>Joint Field Office.</b> The primary field location for the coordination of response and recovery operations in a Presidentially-declared disaster or emergency. The JFO houses the Federal Coordinating Officer (FCO) and staff comprising the federal Emergency Response Team (ERT). The JFO operates with a schedule (up to 24 hours per day) sufficient to sustain federal response operations. The State Coordinating Officer (SCO) usually maintains a staff at the JFO as well.
<b>JIC</b>	<b>Joint Information Center.</b> An intergovernmental public information center established to ensure the coordinated release of information by federal, State and local officials to the media and the public regarding disaster-related activities and recovery programs.
<b>MCI</b>	<b>Mass Casualty Incident.</b> Any incident that causes emergency medical service providers to alter their normal pre-hospital patient care protocols in order to provide the most effective possible pre-hospital patient care. An MCI can also be defined as any single incident with a threshold number of casualties established in the local mass casualty plan.
<b>MERS</b>	<b>Mobile Emergency Response Support.</b> A FEMA detachment that deploys to a disaster area to support the initial federal responders with communications, data processing, food,

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	water, shelter, etc. Designed to be self-supporting for at least 72 hours.
<b>MMRS</b>	<b>Metropolitan Medical Response System.</b> A federally funded initiative to enhance a local jurisdiction's capability to respond to a mass casualty incident resulting from any cause including weapons of mass destruction.
<b>NAWAS</b>	<b>National Warning System.</b> A dedicated national telephone circuit connecting federal, state and local warning points. NAWAS is frequently used for the dissemination of weather warning information.
<b>NDMS</b>	<b>National Disaster Medical System.</b>
<b>NGO</b>	<b>Non-Governmental Organization.</b> A nonprofit entity serving a public purpose, not a private benefit.
<b>NHC</b>	<b>National Hurricane Center.</b>
<b>NIMCAST</b>	<b>NIMS Capability Assessment Support Tool.</b> A web-based self-assessment tool for states and local governments to use to evaluate their incident response and management capabilities.
<b>NIMS</b>	<b>National Incident Management System.</b> As directed by the President and administered by the US DHS, this is a system that includes a standardized approach to incident management and response, training, credentialing, communications, equipment, and technologies. The NIMS system provides a consistent, nationwide approach for Federal, State, local, and tribal governments; the private sector; and non-governmental organizations (NGOs) to work together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. The NIMS includes a core set of concepts, principles, and terminology – the Incident Command System (ICS). The NIMS includes, and is in the process of developing, multi-agency coordination systems; training; identification and management of resources; qualification and certification of personnel; and the collection, tracking, and reporting of incident information and resources.
<b>NOAA</b>	<b>National Oceanographic and Atmospheric Administration</b>
<b>NRF</b>	<b>National Response Framework.</b> Promulgated by U.S. DHS in January 2008, The NRF is a guide to how the nation conducts an all-hazards response. The NRF describes how federal agencies will coordinate with each other to provide support and assistance to state, local, and tribal governments; non-governmental organizations; and the private sector.
<b>NRP</b>	<b>National Response Plan.</b> (Developed by the U.S. DHS) replaced the Federal Response Plan prepared by FEMA. The NRP was superseded in January 2008 by the National Response Framework (NRF).
<b>NU</b>	<b>Northeast Utilities</b>
<b>NWS</b>	<b>National Weather Service</b>
<b>OEM</b>	<b>Office of Emergency Management (State of Connecticut)</b> is now called DEMHS – Department of Emergency Management and Homeland Security
<b>OEMS</b>	<b>Office of Emergency Medical Services (State of Connecticut)</b> part of DPH
<b>OPM</b>	<b>Office of Policy and Management (State of Connecticut)</b>
<b>PA</b>	<b>Public Assistance.</b> FEMA disaster assistance program which provides relief to a public entity such as a state agency or local unit of government. In some circumstances, private non-profit entities may be eligible.
<b>PAC</b>	<b>Public Assistance Coordinator.</b> FEMA official who conducts the Kick-Off meetings and provides assistance in developing project worksheets under the FEMA Public Assistance program. Connecticut also designates a Public Assistance Coordinator or Official.
<b>PAO</b>	<b>Public Assistance Official.</b> State official designated by the Governor and FEMA official designated by the FEMA Regional Director to administer the FEMA Public Assistance program authorized under Section 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended.
<b>PApp</b>	<b>Project Application.</b> The Project Application represents the total amount of financial assistance requested by an applicant for each category of assistance.
<b>PDA</b>	<b>Preliminary Damage Assessment.</b> A survey of damages in a disaster-affected area by a joint federal-State-local team. Federal regulations require PDAs prior to a governor's request for a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended.

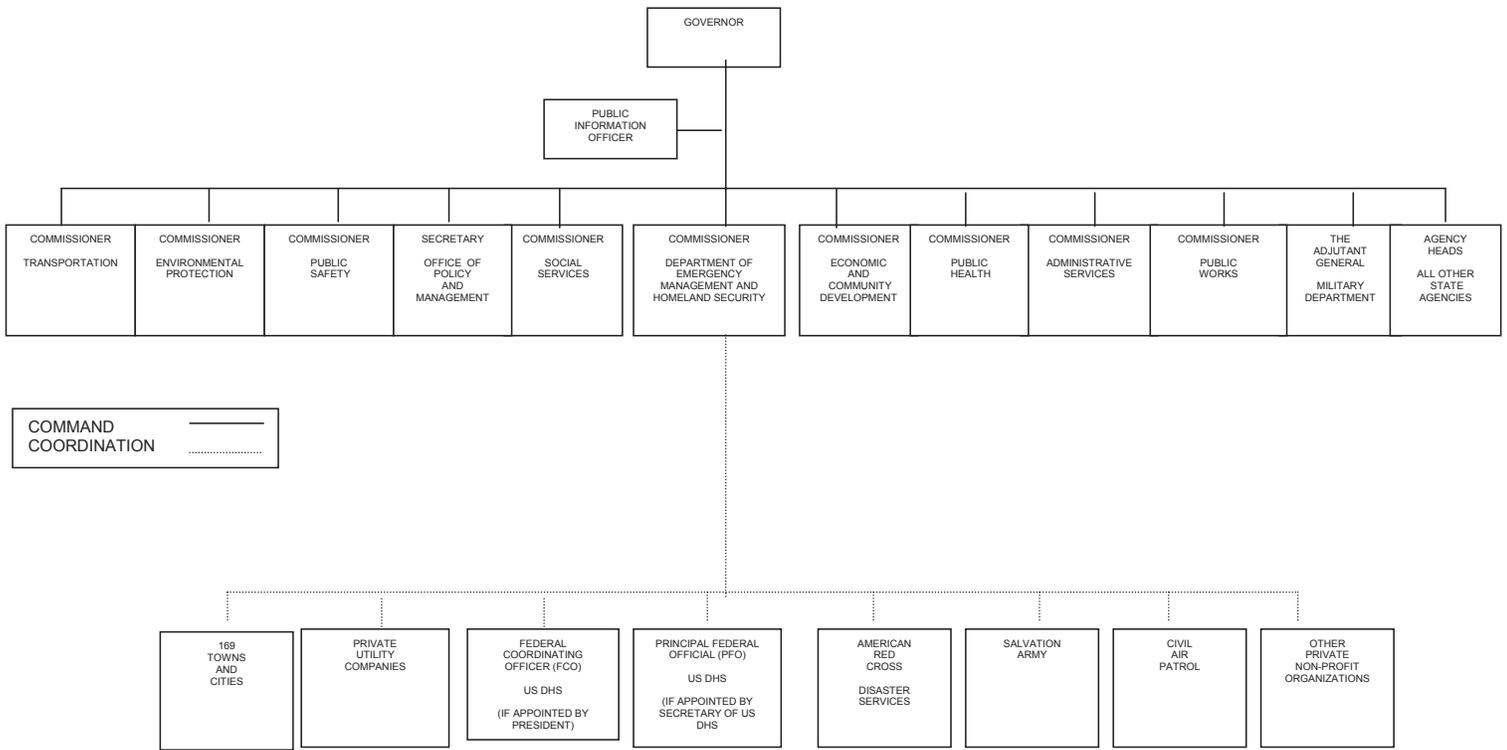
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<b>PFO</b>	<b>Principal Federal Official.</b> Federal official who may be designated by the Secretary of Homeland Security to coordinate the activities of other Federal officials, acting under their own authorities, to ensure consistency of Federal support as well as the overall effectiveness of Federal incident management.
<b>PIO</b>	<b>Public Information Officer.</b> Designated spokesperson who deals with the media.
<b>PL</b>	<b>Public Law (of the United States).</b>
<b>POD</b>	<b>Point of Dispensing.</b> Location for distribution of supplies and vaccines from the Strategic National Stockpile.
<b>PW</b>	<b>Project Worksheet.</b> Form used for estimates for public assistance application.
<b>ROC</b>	<b>Regional Operations Center</b> is now called the Regional Response Coordination Center – RRCC.
<b>RPA</b>	<b>Request For Public Assistance.</b> A form used by a state, local or tribal government or a public or private non-profit organization to apply for disaster assistance from the Federal Emergency Management Agency.
<b>RRCC</b>	<b>Regional Response Coordination Center.</b> Located in Maynard, Massachusetts the RRCC is a federal interagency operations center for coordination of federal support to states in disasters and emergencies. The RRCC houses the federal Emergency Response Team (ERT) prior to the establishment of the Joint Field Office (JFO) in the disaster-affected state.
<b>SAO</b>	<b>State Approving Official</b>
<b>SCO</b>	<b>State Coordinating Officer.</b> State official designated by the Governor in the FEMA-State Agreement following a Presidentially-declared disaster or emergency to coordinate state and local response and recovery activities with those of the federal government. The SCO is usually the State Emergency Management and Homeland Security Commissioner.
<b>SDE</b>	<b>Department of Education (State of Connecticut)</b>
<b>SHMO</b>	<b>State Hazard Mitigation Officer.</b> State official designated by the Governor in the FEMA-State Agreement to ensure compliance with federal hazard mitigation requirements under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended.
<b>STOCS</b>	<b>State Tactical On Scene Channel System</b>
<b>SWP</b>	<b>State Warning Point.</b> The State Department of Public Safety located at 1111 Country Club Road in Middletown, CT 06457 is the SWP for Connecticut.
<b>TAG</b>	<b>The Adjutant General.</b> The Commissioner of the State Military Department.
<b>TDD/TT</b>	<b>Telecommunications Devices for the Deaf/Text Telephones</b>
<b>TDSRS</b>	<b>Temporary Debris Storage and Reduction Site</b>
<b>UC</b>	<b>Unified Command</b>
<b>UCS</b>	<b>Unified Command System.</b> Multi-agency, multi-jurisdictional command system in which responding organizations jointly determine the operational goals and response strategies.
<b>UERN</b>	<b>Utility Emergency Radio Network.</b> Radio network operated by Northeast Utilities
<b>UI</b>	<b>United Illuminating</b>
<b>USACE</b>	<b>U.S. Army Corps of Engineers</b>
<b>USC</b>	<b>United States Code</b>
<b>USCG</b>	<b>United States Coast Guard</b>
<b>USDA</b>	<b>United States Department of Agriculture</b>
<b>WI System</b>	<b>Welfare Information System.</b> Established by the American Red Cross after a large disaster to help family members locate living relatives in or near the disaster area. ARC collects names of survivors located in hospitals and shelters and provides information to relatives who may inquire as to their whereabouts.

**STATE OF CONNECTICUT NATURAL DISASTER PLAN**  
**Chart of Agencies Involved in Disaster Response in Connecticut**

**CHART OF AGENCIES INVOLVED IN DISASTER RESPONSE IN CONNECTICUT**



## Appendix 3-4. Fire Danger Monitoring

CT DEEP's Division of Forestry continually monitors the danger of forest fire to help protect Connecticut's 1.8 million acres of forestland. Beginning in early spring, the Division starts monitoring weather and soil moisture conditions as it relates to fire danger. During the Spring Fire Season, and at other times of the year when the fire danger is high or above, the Division broadcasts daily predictions for fire danger. Advisories on forest fire danger levels are sent to CT DEEP state park forest field staff, municipalities, fire departments, and the media. Forest fire danger levels are classified as low, moderate, high, very high, or extreme according to the National Fire Danger Rating System (NFRDS).

In addition, the Division posts Red Flag Warnings, which are issued by the National Weather Service (NWS). A Red Flag warning is a warning to the fire fighting community that if there is a fire, the weather conditions can be expected to cause erratic fire behavior. Red Flag warnings are not a fire danger rating and they are not synonymous with High, Very High, or Extreme fire danger. Red Flag warnings are issued when winds will be sustained or there will be frequent gusts above a certain threshold (normally 25 mph). In addition, relative humidity needs to be below 30 percent and precipitation for the previous five days has to have been less than 1/4-inch.

Moderating any threat of wildland fires in Connecticut is CT DEEP's fire fighting capability. Personnel from the state parks and the Forestry Division form the backbone of the state's fire fighting staff. The Division of Forestry also maintains a fire-fighting crew for possible assignment to assist the USDA Forest Service in the suppression of large forest fires anywhere in the nation. This Connecticut Interstate Fire Crew is utilized within the state and is available for mutual aid to states in the Northeast. In 1949, the State of Connecticut signed a compact with six other states to form the Northeastern Forest Fire Protection Commission (NFFPC). The mandate of the NFFPC is to "provide the means to its member states and provinces to cope with fires that might be beyond the capabilities of a single member through information, technology, and resource sharing (mutual aid) activities."<sup>1</sup> Today the NFFPC consists of the following members:

Seven states – Maine, New Hampshire, Vermont, Connecticut, Massachusetts, Rhode Island, and New York;

Four Canadian provinces – Quebec, New Brunswick, Newfoundland/Labrador, and Nova Scotia; and

New England National Forests – White Mountain, Green Mountain, and Finger Lakes National Forests.

The initial attempt to suppress wildland fires in Connecticut communities is performed by local fire departments, with the Division of Forestry assisting upon request. Local fire departments focus their fire response and suppression efforts during wildland fires on residential and commercial structure protection. This is due to the fact that local fire departments are responsible for fire management and suppression activities associated with these structures in particular. The fire fighting tactics utilized for structure fires and wildland fires are very different, requiring that local fire departments coordinate with and receive support from state and Federal fire fighting capabilities for managing and fighting wildland fires.

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<sup>1</sup> Source: Northeastern Forest Fire Protection Compact (NFFPC) website.

# Local Plan Coordination

## Appendix 4

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Appendix 4-1. Status of Natural Hazard Mitigation Planning (April 2013)..... 2  
Appendix 4-2. Local Plan Upload and Tracker..... 9

## Appendix 4-1. Status of Natural Hazard Mitigation Planning (April 2013)

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Andover	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Ansonia	New Haven	VCOG	MJ	2/14/2013	2/14/2018	✓		
Ashford	Windham	NECOG	MJ	2/16/2007	2/16/2012		✓	✓
Avon	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Barkhamsted	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Beacon Falls	New Haven	COGCNV	S	4/10/2009	4/10/2014	✓		✓
Berlin	Hartford	CCRPA	MJ	6/15/2011	6/15/2016	✓		
Bethany	New Haven	SCRCOG	MJ	-	-			✓
Bethel	Fairfield	HVCEO	-	-	-			
Bethlehem	Litchfield	COGCNV	S	4/10/2009	4/10/2014	✓		✓
Bloomfield	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Bolton	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Bozrah	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Branford	New Haven	SCRCOG	MJ	-	-			✓
Bridgeport	Fairfield	GBRC	MJ	1/29/2007	1/29/2012		✓	✓
Bridgewater	Litchfield	HVCEO	-	-	-			
Bristol	Hartford	CCRPA	MJ	6/15/2011	6/15/2016	✓		
Brookfield	Fairfield	HVCEO	-	-	-			
Brooklyn	Windham	NECOG	MJ	-	-			✓
Burlington	Hartford	CCRPA	MJ	6/15/2011	6/15/2016	✓		
Canaan	Litchfield	NWCOG	MJ	-	-			✓
Canterbury	Windham	NECOG	MJ	-	-			✓
Canton	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Chaplin	Windham	WinCOG	MJ	2/16/2007	2/16/2012		✓	✓
Cheshire	New Haven	COGCNV	S	5/23/2008	5/23/2013	✓		✓
Chester	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓
Clinton	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Colchester	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Colebrook	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Columbia	Tolland	CRCOG	MJ	2/16/2007	2/16/2012		✓	✓
Cornwall	Litchfield	NWCOG	MJ	-	-			✓
Coventry	Tolland	CRCOG	MJ	2/16/2007	2/16/2012		✓	✓
Cromwell	Middlesex	RiverCOG	MJ	-	-			✓
Danbury	Fairfield	HVCEO	S	4/3/2012	4/3/2017	✓		
Darien	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
Deep River	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓
Derby	New Haven	VCOG	MJ	2/14/2013	2/14/2018	✓		
Durham	Middlesex	RiverCOG	MJ	-	-			✓
East Granby	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
East Haddam	Middlesex	RiverCOG	MJ	-	-			✓
East Hampton	Middlesex	RiverCOG	MJ	-	-			✓
East Hartford	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
East Haven	New Haven	SCRCOG	S	6/4/2012	6/4/2017	✓		
East Lyme	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
East Windsor	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Eastford	Windham	NECOG	MJ	-	-			✓
Easton	Fairfield	GBRC	MJ	1/29/2007	1/29/2012		✓	✓
Ellington	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Enfield	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Essex	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓
Fairfield	Fairfield	GBRC	MJ	1/29/2007	1/29/2012		✓	✓
Farmington	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Franklin	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Glastonbury	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Goshen	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Granby	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Greenwich	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
Griswold	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Groton (City)	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Groton (Town)	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Guilford	New Haven	SCRCOG	S	7/17/2012	7/19/2017	✓		
Haddam	Middlesex	RiverCOG	MJ	-	-			✓
Hamden	New Haven	SCRCOG	MJ	-	-			✓
Hampton	Windham	WinCOG	MJ	2/16/2007	2/16/2012		✓	✓
Hartford	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Hartland	Hartford	LHCEO	MJ	2/27/2007	2/27/2012		✓	✓
Harwinton	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Hebron	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Kent	Litchfield	NWCOG	MJ	-	-			✓
Killingly	Windham	NECOG	MJ	-	-			✓
Killingworth	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓
Lebanon	New London	WinCOG	MJ	2/16/2007	2/16/2012		✓	✓
Ledyard	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Lisbon	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Litchfield	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Lyme	New London	RiverCOG	MJ	1/18/2007	1/18/2012		✓	✓
Madison	New Haven	SCRCOG	MJ	-	-			✓
Manchester	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Mansfield	Tolland	CRCOG	MJ	2/16/2007	2/16/2012		✓	✓
Marlborough	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Mashantucket Pequot Tribal Nation	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Meriden	New Haven	SCRCOG	S	-	-			✓
Middlebury	New Haven	COGCNV	S	5/29/2009	5/29/2014	✓		✓
Middlefield	Middlesex	RiverCOG	MJ	-	-			✓
Middletown	Middlesex	RiverCOG	MJ	-	-			✓
Milford	New Haven	SCRCOG	S	8/13/2007	8/13/2012		✓	✓
Mohegan Tribe	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Monroe	Fairfield	GBRC	MJ	1/29/2007	1/29/2012		✓	✓
Montville	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Morris	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Naugatuck	New Haven	COGCNV	S	9/9/2009	9/9/2014	✓		✓
New Britain	Hartford	CCRPA	MJ	6/15/2011	6/15/2016	✓		
New Canaan	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
New Fairfield	Fairfield	HVCEO	S	8/23/2011	8/23/2016	✓		
New Hartford	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
New Haven	New Haven	SCRCOG	S	8/2/2011	8/2/2016	✓		
New London	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
New Milford	Litchfield	HVCEO	-	-	-			
Newington	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Newtown	Fairfield	HVCEO	-	-	-			
Norfolk	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
North Branford	New Haven	SCRCOG	MJ	-	-			✓
North Canaan	Litchfield	NWCOG	MJ	-	-			✓
North Haven	New Haven	SCRCOG	MJ	-	-			✓
North Stonington	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Norwalk	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Norwich	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Old Lyme	New London	RiverCOG	MJ	1/18/2007	1/18/2012		✓	✓
Old Saybrook	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓
Orange	New Haven	SCRCOG	MJ	-	-			✓
Oxford	New Haven	COGCNV	S	4/6/2007	4/6/2012		✓	✓
Plainfield	Windham	NECOG	MJ	-	-			✓
Plainville	Hartford	CCRPA	MJ	6/15/2011	6/15/2016	✓		
Plymouth	Litchfield	CCRPA	MJ	6/15/2011	6/15/2016	✓		
Pomfret	Windham	NECOG	MJ	-	-			✓
Portland	Middlesex	RiverCOG	MJ	-	-			✓
Preston	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Prospect	New Haven	COGCNV	S	8/6/2008	8/6/2014	✓		✓
Putnam	Windham	NECOG	MJ	-	-			✓
Redding	Fairfield	HVCEO	-	-	-			
Ridgefield	Fairfield	HVCEO	-	-	-			
Rocky Hill	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Roxbury	Litchfield	NWCOG	MJ	-	-			✓
Salem	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Salisbury	Litchfield	NWCOG	MJ	-	-			✓
Scotland	Windham	WinCOG	MJ	2/16/2007	2/16/2012		✓	✓
Seymour	New Haven	VCOG	MJ	2/14/2013	2/14/2018	✓		
Sharon	Litchfield	NWCOG	MJ	-	-			✓
Shelton	Fairfield	VCOG	MJ	2/14/2013	2/14/2018	✓		
Sherman	Fairfield	HVCEO	S	7/18/2011	7/18/2016	✓		
Simsbury	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Somers	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
South Windsor	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Southbury	New Haven	COGCNV	S	4/10/2009	4/10/2014	✓		✓
Southington	Hartford	CCRPA	MJ	6/15/2011	6/15/2016	✓		
Sprague	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Stafford	Tolland	CRCOG	MJ	-	-			✓
Stamford	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
Sterling	Windham	NECOG	MJ	-	-			✓
Stonington (Borough)	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Stonington (Town)	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Stratford	Fairfield	GBRC	MJ	1/29/2007	1/29/2012		✓	✓
Suffield	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Thomaston	Litchfield	COGCNV	S	4/10/2009	4/10/2014	✓		✓
Thompson	Windham	NECOG	MJ	-	-			✓
Tolland	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Torrington	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Trumbull	Fairfield	GBRC	MJ	1/29/2007	1/29/2012		✓	✓
Union	Tolland	NECOG	MJ	-	-			✓
Vernon	Tolland	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Voluntown	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Wallingford	New Haven	SCRCOG	MJ	-	-			✓
Warren	Litchfield	NWCOG	MJ	-	-			✓
Washington	Litchfield	NWCOG	MJ	-	-			✓
Waterbury	New Haven	COGCNV	S	12/10/2007	12/10/2012		✓	✓
Waterford	New London	SCCOG	MJ	10/24/2012	10/24/2017	✓		
Watertown	Litchfield	COGCNV	S	4/6/2007	4/6/2012		✓	✓
West Hartford	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
West Haven	New Haven	SCRCOG	MJ	-	-			✓
Westbrook	Middlesex	RiverCOG	MJ	1/18/2007	1/18/2012	✓		✓

Community	County	RPO	Plan Type	FEMA Approval Date	Plan Expiration Date	Plan Status		
						Current	Expired	Planning in Progress
Weston	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
Westport	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
Wethersfield	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Willington	Tolland	CRCOG	MJ	2/16/2007	2/16/2012		✓	✓
Wilton	Fairfield	SWRPA	MJ	6/9/2011	6/9/2016	✓		
Winchester	Litchfield	LHCEO	MJ	2/27/2007	2/27/2012	✓		✓
Windham	Windham	WinCOG	MJ	2/16/2007	2/16/2012		✓	✓
Windsor	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Windsor Locks	Hartford	CRCOG	MJ	9/24/2008	9/24/2013	✓		✓
Wolcott	New Haven	COGCV	S	9/30/2008	9/30/2013	✓		✓
Woodbridge	New Haven	SCRCOG	MJ	-	-			✓
Woodbury	Litchfield	COGCV	S	4/6/2007	4/6/2012		✓	✓
Woodstock	Windham	NECOG	MJ	-	-			✓

S = Single Jurisdiction Plan; MJ = Multi-Jurisdiction Plan

**Appendix 4-2. Local Plan Upload and Tracker**

Plan Data as of April 2013

County	RPO	Community or Tribe	New Plan since 2010?	Plan Type	FEMA Approval	Expiration Date	Status	Review Complete	
Fairfield	GBRC	Bridgeport	No	MJ	1/29/2007	1/29/2012	Expired, Update in progress by in-house staff	Done!	
		Easton	No	MJ	1/29/2007	1/29/2012	Expired, Update in progress by in-house staff	Done!	
		Fairfield	No	MJ	1/29/2007	1/29/2012	Expired, Update in progress by in-house staff	Done!	
		Monroe	No	MJ	1/29/2007	1/29/2012	Expired, Update in progress by in-house staff	Done!	
		Stratford	No	MJ	1/29/2007	1/29/2012	Expired, Update in progress by in-house staff	Done!	
		Trumbull	No	MJ	1/29/2007	1/29/2012	Expired, Update in progress by in-house staff	Done!	
	HVCEO	Bethel	No	-	-	-	-	No Plan, HVCEO applying for grant	N/A
		Brookfield	No	-	-	-	-	No Plan, HVCEO applying for grant	N/A
		Danbury	Yes	S	4/3/2012	4/3/2017	Current	Done!	
		New Fairfield	Yes	S	8/23/2011	8/23/2016	Current	Done!	
		Newtown	No	-	-	-	-	No Plan, HVCEO applying for grant	N/A
		Redding	No	-	-	-	-	No Plan, HVCEO applying for grant	N/A
		Ridgefield	No	-	-	-	-	No Plan, HVCEO applying for grant	N/A
		Sherman	Yes	S	7/18/2011	7/18/2016	Current	Done!	
	SWRPA	Darien	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		Greenwich	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		New Canaan	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		Norwalk	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		Stamford	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		Weston	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		Westport	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
		Wilton	Yes	MJ	6/9/2011	6/9/2016	Current	Done!	
	VCOG	Shelton	Yes	MJ	2/14/2013	2/14/2018	Current	Done!	
Hartford	CCRPA	Berlin	Yes	MJ	6/15/2011	6/15/2016	Current	Done!	
		Bristol	Yes	MJ	6/15/2011	6/15/2016	Current	Done!	
		Burlington	Yes	MJ	6/15/2011	6/15/2016	Current	Done!	
		New Britain	Yes	MJ	6/15/2011	6/15/2016	Current	Done!	
		Plainville	Yes	MJ	6/15/2011	6/15/2016	Current	Done!	
		Southington	Yes	MJ	6/15/2011	6/15/2016	Current	Done!	
	CRCOG	Avon	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Bloomfield	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Canton	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		East Granby	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		East Hartford	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		East Windsor	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Enfield	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Farmington	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Glastonbury	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Granby	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Hartford	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Manchester	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Marlborough	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Newington	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Rocky Hill	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Simsbury	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		South Windsor	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Suffield	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		West Hartford	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Wethersfield	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Windsor	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		Windsor Locks	No	MJ	9/24/2008	9/24/2013	Current, Update in progress by in-house staff	Done!	
		LHCEO	Hartland	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!
		CCRPA	Plymouth	Yes	MJ	6/15/2011	6/15/2016	Current	Done!
		COGCNV	Bethlehem	No	S	4/10/2009	4/10/2014	Current, Update in progress	Done!
			Thomaston	No	S	4/10/2009	4/10/2014	Current, Update in progress	Done!
			Watertown	No	S	4/6/2007	4/6/2012	Expired, Update in progress	Done!
			Woodbury	No	S	4/6/2007	4/6/2012	Expired, Update in progress	Done!

Litchfield	HVCEO	Bridgewater	No	-	-	-	No Plan, HVCEO applying for grant	N/A		
		New Milford	No	-	-	-	No Plan, HVCEO applying for grant	N/A		
	LHCEO	Barkhamsted	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Colebrook	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Goshen	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Harwinton	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Litchfield	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Morris	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		New Hartford	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Norfolk	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Torrington	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
		Winchester	No	MJ	2/27/2007	2/27/2012	Expired, Update in progress	Done!		
	NWCOG	Canaan	No	-	-	-	Initial MJ in progress	N/A		
		Cornwall	No	-	-	-	Initial MJ in progress	N/A		
		Kent	No	-	-	-	Initial MJ in progress	N/A		
		North Canaan	No	-	-	-	Initial MJ in progress	N/A		
		Roxbury	No	-	-	-	Initial MJ in progress	N/A		
		Salisbury	No	-	-	-	Initial MJ in progress	N/A		
		Sharon	No	-	-	-	Initial MJ in progress	N/A		
		Warren	No	-	-	-	Initial MJ in progress	N/A		
Washington		No	-	-	-	Initial MJ in progress	N/A			
Middlesex	LCRVCOG	Chester	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!		
		Clinton	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!		
		Cromwell	No	-	-	-	Initial MJ in progress	Done!		
		Deep River	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!		
		Durham	No	-	-	-	Initial MJ in progress	Done!		
		East Haddam	No	-	-	-	Initial MJ in progress	Done!		
		East Hampton	No	-	-	-	Initial MJ in progress	Done!		
		Essex	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!		
		Haddam	No	-	-	-	Initial MJ in progress	Done!		
		Killingworth	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!		
		Middlefield	No	-	-	-	Initial MJ in progress	Done!		
		Middletown	No	-	-	-	Initial MJ in progress	Done!		
		Old Saybrook	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Reviewed draft update	Done!		
		Portland	No	-	-	-	Initial MJ in progress	Done!		
		Westbrook	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!		
		New Haven	COGCNV	Beacon Falls	No	S	4/10/2009	4/10/2014	Current, Update in progress	Done!
				Cheshire	No	S	5/23/2008	5/23/2013	Current, Update in progress	Done!
Middlebury	No			S	5/29/2009	5/29/2014	Current, Update in progress	Done!		
Naugatuck	No			S	9/9/2009	9/9/2014	Current, Update in progress	Done!		
Oxford	No			S	4/6/2007	4/6/2012	Expired, Update in progress	Done!		
Prospect	No			S	8/6/2008	8/6/2014	Current, Update in progress	Done!		
Southbury	No			S	4/10/2009	4/10/2014	Current, Update in progress	Done!		
Waterbury	No			S	12/10/2007	12/10/2012	Expired, Update in progress	Done!		
Wolcott	No			S	9/30/2008	9/30/2013	Current, Update in progress	Done!		
SCRCOG	Bethany			Yes	MJ	-	-	Initial MJ in progress	N/A	
	Branford		Yes	MJ	-	-	Initial MJ in progress	N/A		
	East Haven		Yes	S	6/4/2012	6/4/2017	Current	Done!		
	Guilford		Yes	S	7/17/2012	7/19/2017	Current	Done!		
	Hamden		Yes	MJ	-	-	Initial MJ in progress	N/A		
	Madison		Yes	MJ	-	-	Initial MJ in progress	N/A		
	Meriden		Yes	S	-	-	APA & locally adopted, awaiting FEMA approval	Done!		
	Milford		No	S	8/13/2007	8/13/2012	Expired, Update in progress	Done!		
	New Haven		Yes	S	8/2/2011	8/2/2016	Current	Done!		
	North Branford		Yes	MJ	-	-	Initial MJ in progress	N/A		
North Haven	Yes		MJ	-	-	Initial MJ in progress	N/A			
Orange	Yes	MJ	-	-	Initial MJ in progress	N/A				
Wallingford	Yes	MJ	-	-	Initial MJ in progress	N/A				
West Haven	Yes	MJ	-	-	Initial MJ in progress	N/A				
Woodbridge	Yes	MJ	-	-	Initial MJ in progress	N/A				
Ansonia	Yes	MJ	2/14/2013	2/14/2018	Current	Done!				

	VCOG	Derby	Yes	MJ	2/14/2013	2/14/2018	Current		
		Seymour	Yes	MJ	2/14/2013	2/14/2018	Current		
New London	LCRVCOG	Lyme	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!	
		Old Lyme	No	MJ	1/18/2007	1/18/2012	Former CRERPA plan, Update in progress	Done!	
	SCCOG	Bozrah	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Colchester	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		East Lyme	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Franklin	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Griswold	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Groton (City)	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Groton (Town)	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Ledyard	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Lisbon	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Montville	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		New London	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		North Stonington	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Norwich	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Preston	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Salem	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Sprague	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Stonington (Borough)	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
		Stonington (Town)	Yes	MJ	10/24/2012	10/24/2017	Current	Done!	
Voluntown	Yes	MJ	10/24/2012	10/24/2017	Current	Done!			
Waterford	Yes	MJ	10/24/2012	10/24/2017	Current	Done!			
	WRCOG	Lebanon	No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!	
	CRCOG	Andover	No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!	
Bolton		No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!		
Ellington		No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!		
Hebron		No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!		
Somers		No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!		
Stafford		No	-	-	-	No Plan, Will be included in MJ update	N/A		
Tolland		No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!		
Vernon		No	MJ	9/24/2008	9/24/2013	Current, Update in progress	Done!		
NECCOG	Union	No	-	-	-	Initial MJ in progress	Done!		
	WRCOG	Columbia	No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!	
Coventry		No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!		
Mansfield		No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!		
Willington		No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!		
Windham	NECCOG	Ashford	No	MJ	-	2/16/2012	Expired (WinCOG), update part of NECCOG Initial MJ	Done!	
		Brooklyn	No	-	-	-	Initial MJ in progress	Done!	
		Canterbury	No	-	-	-	Initial MJ in progress	Done!	
		Eastford	No	-	-	-	Initial MJ in progress	Done!	
		Killingly	No	-	-	-	Initial MJ in progress	Done!	
		Plainfield	No	-	-	-	Initial MJ in progress	Done!	
		Pomfret	No	-	-	-	Initial MJ in progress	Done!	
		Putnam	No	-	-	-	Initial MJ in progress	Done!	
		Sterling	No	-	-	-	Initial MJ in progress	Done!	
		Thompson	No	-	-	-	Initial MJ in progress	Done!	
	Woodstock	No	-	-	-	Initial MJ in progress	Done!		
	WRCOG	Chaplin	No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!	
		Hampton	No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!	
		Scotland	No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!	
		Windham	No	MJ	2/16/2007	2/16/2012	Expired, Update in progress	Done!	
	Unaffiliated	SCCOG	Mashantucket Pequot Tribal Nation	Yes	MJ	10/24/2012	10/24/2017	Current	Done!
			Mohegan Tribe	Yes	MJ	10/24/2012	10/24/2017	Current	Done!

Scott	62
Jenabay	41
Jessica	43
<b>146</b>	

**Total:** 126 Approved  
20 Drafts  
**146**

**146 Reviewed**  
**100.0% Complete!**

AECOM

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**156 TOTAL PLANS**

**Add hazards as needed. Will delete hazards that are not addressed in any plan.**

County	RPO	Community	Dam or Levee Failure	Drought	Earthquake	Erosion	Extreme Cold	Extreme Heat	Flood, Coastal & Storm Surge	Flood, Flash	
Fairfield	GBRC	Bridgeport	H		M-H				M	M	
		Easton	M		M				L	L	
		Fairfield	M-H		M-H				M	M	
		Monroe	M		M				L	M	
		Stratford	L-M		M				M-H	M	
		Trumbull	M-H		M				L	L	
	HVCEO	Bethel									
		Brookfield									
		Danbury	M-H		M-H						
		New Fairfield	M		M-H						
		Newtown									
		Redding									
		Ridgefield									
	Sherman	M		M-H							
	SWRPA	Darien	L-M	M	L-M					M-H	
		Greenwich	L-M	M-H	M					M-H	
		New Canaan	M	M-H	L-M					M	
		Norwalk	M	M	L-M					M-H	
		Stamford	L-M	M-H	M					M-H	
		Weston	M	M-H	L-M					M	
		Westport	M	M	L-M					M-H	
		Wilton	M	M-H	L-M					M	
	VCOG	Shelton	L		M-H						
CCRPA	Berlin	H	M	L-M							
	Bristol	M-H	M	L-M							
	Burlington	H	M	L-M							
	New Britain	H	M	M							
	Plainville	L	M	L-M							
	Southington	H	M	L-M							

Hartford	CRCOG	Avon	M	M	M				
		Bloomfield	M-H	M	M				
		Canton	H	M	M				
		East Granby	M	M	M				
		East Hartford	M	M	M				
		East Windsor	M	M	M				
		Enfield	M-H	M	M				
		Farmington	M-H	M	M				
		Glastonbury	M	M	M				
		Granby	M	M	M				
		Hartford	M	M	M				
		Manchester	M-H	M	M				
		Marlborough	M	M	M				
		Newington	M	M	M				
		Rocky Hill	M	M	M				
		Simsbury	M	M	M				
		South Windsor	M	M	M				
		Suffield	M	M	M				
		West Hartford	M-H	M	M				
		Wethersfield	M	M	M				
		Windsor	M-H	M	M				
Windsor Locks	M	M	M						
LHCEO	Hartland	M	M	L					
	CCRPA	Plymouth	H	M	L-M				
	COGCNV	Bethlehem	H		M-H				
		Thomaston	H		M-H				
		Watertown	M	L	M				
		Woodbury	M	L	M				
	HVCEO	Bridgewater							
		New Milford							
		Barkhamsted	M	M	L				
		Colebrook	M	M	L				
		Goshen	M	M	L				
Harwinton		M-H	M	L					

Litchfield	LHCEO	Litchfield	M	M	L					
		Morris	M-H	M	L					
		New Hartford	M-H	M	L					
		Norfolk	M-H	M	L					
		Torrington	H	M	L					
		Winchester	H	M	L					
	NWCOG	Canaan								
		Cornwall								
		Kent								
		North Canaan								
		Roxbury								
		Salisbury								
		Sharon								
		Warren								
Washington										
Middlesex	LCRVCOG	Chester	H		M			M-H	H	
		Clinton	H		M			H	H	
		Cromwell	M	L	L	L	M	M		H
		Deep River	H		M			H	H	
		Durham	M-H	L	L	L	M	M		H
		East Haddam	H	L	L-M	L	M	M		H
		East Hampton	M-H	L	L	L	M	M		H
		Essex	H		M				H	H
		Haddam	H	L	L	L	M	M		H
		Killingworth	H		M				L	H
		Middlefield	M-H	L	L	L	M	M		H
		Middletown	H	L	L	L-M	M	M		H
		Old Saybrook	H	L-M	M			M	H	H
		Portland	H	L	L	L	M	M		H
Westbrook	H		M				H	H		
		Beacon Falls	H		M-H					
		Cheshire	M-H		M-H					
		Middlebury	M		M-H					
		Naugatuck	H		M-H					

New Haven	COGCNV	Oxford	H	L	M			L	
		Prospect	M-H		M				
		Southbury	M-H		M-H				
		Waterbury	M-H		M				
		Wolcott	M-H		M-H				
	SCRCOG	Bethany	L	L	L	M	M	M	L
		Branford	L	L	L	M	M	M	H
		East Haven	L-M		M	M			H
		Guilford	L		M	H			H
		Hamden	L	L	L	M	M	M	M
		Madison	L	L	L	M	M	M	H
		Meriden	M		M				
		Milford	M-H	M	M	H			H
		New Haven			M-H	M-H			H
		North Branford	L	L	L	M	M	M	L
		North Haven	L	L	L	M	M	M	M
		Orange	L	L	L	M	M	M	L
		Wallingford	L	L	L	M	M	M	L
		West Haven	L	L	L	M	M	M	H
		Woodbridge	L	L	L	M	M	M	L
VCOG	Ansonia	L		M-H					
	Derby	L		M-H					
	Seymour	L		M-H					
LCRVCOG	Lyme	M-H		M-H				M-H	H
	Old Lyme	M-H		M				H	H
	Bozrah	L-M		M					
	Colchester	L		M					
	East Lyme	L		M				H	
	Franklin	L		M					
	Griswold	H		M					
	Groton (City)	L		M				M	
	Groton (Town)	L		M				H	
	Ledyard	L		M				L-M	
Lisbon	L		M						

New London	SCCOG	Montville	M		M				L	
		New London	L		M				H	
		North Stonington	L		M					
		Norwich	L-M		M				L	
		Preston	L		M				L-M	
		Salem	L		M					
		Sprague	M		M					
		Stonington (Borough)	L		M				H	
		Stonington (Town)	M		M				H	
		Voluntown	L		M					
		Waterford	L-M		M				H	
	WRCOG	Lebanon	M-H	M	M					
Tolland	CRCOG	Andover	M	M	M					
		Bolton	M	M	M					
		Ellington	M	M	M					
		Hebron	M	M	M					
		Somers	M	M	M					
		Stafford								
		Tolland	M	M	M					
		Vernon	M-H	M	M					
	NECOG	Union		M	L					H
	WRCOG	Columbia	M-H	M	M					
		Coventry	M-H	M	M					
Mansfield		H	M	M						
Willington		M-H	M	M						
Windham	NECOG	Ashford		M	L					H
		Brooklyn		M	L					H
		Canterbury		M	L					H
		Eastford		M	L					H
		Killingly		M	L					H
		Plainfield		M	L					H
		Pomfret		M	L					H
		Putnam		M	L					H
		Sterling		M	L					H

		Thompson		M	L				H	
		Woodstock		M	L				H	
	WRCOG	Chaplin	M	M	M					
		Hampton	M-H	M	M					
		Scotland	L	M	M					
		Windham	H	M	M					
Unaffiliated	SCCOG	Mashantucket Pequot Tribal Nation	L		M				H	
		Mohegan Tribe	L		M				L	
		<b>Total # Plans that Ranked Hazard</b>	<b>143</b>	<b>99</b>	<b>156</b>	<b>22</b>	<b>18</b>	<b>20</b>	<b>50</b>	<b>35</b>
		Low Ranking	32	21	40	7	0	1	12	2
		Low to Moderate Ranking	8	1	13	1	0	0	2	0
		Moderate Ranking	44	72	84	11	18	19	8	4
		Moderate to High Ranking	31	5	19	1	0	0	8	0
		High Ranking	28	0	0	2	0	0	20	29
		<b>Average Hazard Ranking</b>	<b>3.10</b>	<b>2.62</b>	<b>2.53</b>	<b>2.55</b>	<b>3.00</b>	<b>2.90</b>	<b>3.44</b>	<b>4.54</b>
		<b>Average Hazard Description</b>	<b>M</b>	<b>H</b>						

Hazard Ranking Scheme:

		Not Assessed
1	L	Low
2	L-M	Low to Moderate
3	M	Moderate
4	M-H	Moderate to High
5	H	High

Community	Flood, Poor Drainage	Flood, Riverine	Geomagnetic Storms	Hail	Hurricane	Ice	Ice Jam & Associated Flooding	Landslide & Mudflow	Land Subsidence & Sinkholes	Lightning
Bridgeport		M-H		M	H					M-H
Easton		M		M	M-H					M
Fairfield		M-H		M	H					M
Monroe		M-H		M	M-H					M
Stratford	H	M-H		M	H					M-H
Trumbull		M-H		M	M-H					M
Bethel										
Brookfield										
Danbury	M	M-H		M	H	H	L			M
New Fairfield	L-M	M		M	H	H	L			M
Newtown										
Redding										
Ridgefield										
Sherman	L-M	M		M	H	H	L			M
Darien		H			H					
Greenwich		H			H					
New Canaan		H			M-H					
Norwalk		H			H					
Stamford		H			H					
Weston		H			M-H					
Westport		H			H					
Wilton		H			M-H					
Shelton	M-H	M-H		M	H	M-H		M		M
Berlin		H			H					
Bristol		H			H					
Burlington		H			H					
New Britain		H			H					
Plainville		H			H					
Southington		H			H					

Avon		M-H			M					
Bloomfield		M-H			M					
Canton		H			M					
East Granby		M			M					
East Hartford		M-H			M					
East Windsor		M-H			M					
Enfield		H			M					
Farmington		M-H			M					
Glastonbury		M-H			M					
Granby		M-H			M					
Hartford		M-H			M					
Manchester		M-H			M					
Marlborough		M-H			M					
Newington		M-H			M					
Rocky Hill		M-H			M					
Simsbury		M-H			M					
South Windsor		M-H			M					
Suffield		M-H			M					
West Hartford		L-M			M					
Wethersfield		M-H			M					
Windsor		M-H			M					
Windsor Locks		M-H			M					
Hartland		M-H			H	H				
Plymouth		H			H					
Bethlehem	M	M		L-M	H	H	L			M
Thomaston	M	M		L-M	H	H	L			M
Watertown	M	H		L	M			L		
Woodbury	M	H		L	M-H			L		
Bridgewater										
New Milford										
Barkhamsted		H				H				
Colebrook		M-H				H				
Goshen	M-H	M-H				H				
Harwinton		H				H				

Litchfield		H				H				
Morris		H				H				
New Hartford		H				M-H				
Norfolk		M-H				H				
Torrington		H				H				
Winchester	M-H	H				H				
Canaan										
Cornwall										
Kent										
North Canaan										
Roxbury										
Salisbury										
Sharon										
Warren										
Washington										
Chester		H			M-H					
Clinton		H			H					
Cromwell		H	L		H		M			
Deep River		H			M-H					
Durham		M-H	L		H		M			
East Haddam		H	L		H		M-H			
East Hampton		M-H	L		H		M			
Essex		H			M-H					
Haddam		M-H	L		H		M			
Killingworth		M-H			M-H					
Middlefield		M-H	L		H		M			
Middletown		H	L		H		M			
Old Saybrook		H			H					
Portland		H	L		H		M			
Westbrook		H			H					
Beacon Falls	M	M		L-M	H	H	L			M
Cheshire	M	M		L-M	H	H			L-M	M
Middlebury	M	M		L-M	H	H				M
Naugatuck	M	M		L-M	H	H	L			M

Oxford	M	H		L	H	H		L		
Prospect	M	L-M		L-M	H	H				M
Southbury	M	M		L-M	H	H	M-H			M
Waterbury	H	M-H		L-M	H	M-H		M-H		M
Wolcott	M	M-H		L-M	H	H				M
Bethany	M	H		M	H	H				M
Branford	M	H		M	H	H				M
East Haven	M-H	H		L-M	H	M				M
Guilford	M	M-H		L-M	H	M-H				M
Hamden	M	H		M	H	H				M
Madison	M	H		M	H	H				M
Meriden	M-H	H		L-M	H	H				M
Milford	H	H			H	M-H		L		
New Haven	M	M-H		M	M-H	H		L-M	L-M	H
North Branford	M	H		M	H	H				M
North Haven	M	H		M	H	H				M
Orange	M	H		M	H	H				M
Wallingford	M	H		M	H	H				M
West Haven	M	H		M	H	H				M
Woodbridge	M	H		M	H	H				M
Ansonia	M-H	M-H		L-M	H	M-H		M		M
Derby	M-H	M-H		L-M	H	M-H		M		M
Seymour	M-H	M-H		L-M	H	M-H		M		M
Lyme		H			M-H					
Old Lyme		H			H					
Bozrah	M	M-H		M	H	M-H				M
Colchester	M	M-H		M	H	M-H				M
East Lyme	M	H		M	H	M-H				M
Franklin	M	L-M		M	H	M-H				M
Griswold	M-H	H		M	H	M-H				M
Groton (City)	L-M	L		M	H	M-H				M
Groton (Town)	M	H		M	H	M-H				M
Ledyard	M-H	M-H		M	H	M-H				M
Lisbon	M	L		M	H	M-H				M

Montville	M	L-M		M	H	M-H				M
New London	M-H	L		M	H	M-H				M
North Stonington	M	M-H		M	H	M-H				M
Norwich	M	H		M	H	M-H	L			M
Preston	M	H		M	H	M-H				M
Salem	M-H	L-M		M	H	M-H				M
Sprague	M-H	M-H		M	H	M-H	L-M			M
Stonington (Borough)	M	L		M	H	M-H				M
Stonington (Town)	M-H	H		M	H	M-H				M
Voluntown	M	L-M		M	H	M-H				M
Waterford	M-H	M-H		M	H	M-H				M
Lebanon		M-H			M-H		L			
Andover		L-M			M					
Bolton		L-M			M					
Ellington		M-H			M					
Hebron		M-H			M					
Somers		M-H			M					
Stafford										
Tolland		M-H			M					
Vernon		M-H			M					
Union		H		M	H					H
Columbia		H			M-H		L-M			
Coventry		H			M-H		L-M			
Mansfield		H			M-H		L-M			
Willington		M-H			M-H		L			
Ashford		H		M	H					H
Brooklyn		H		M	H					H
Canterbury		H		M	H					H
Eastford		H		M	H					H
Killingly		H		M	H					H
Plainfield		H		M	H					H
Pomfret		H		M	H					H
Putnam		H		M	H					H
Sterling		H		M	H					H

Thompson		H		M	H					H
Woodstock		H		M	H					H
Chaplin		M-H			M-H		L			
Hampton		M			M-H		L			
Scotland		M			M-H		L			
Windham		M-H			M-H		L-M			
Mashantucket Pequot Tribal Nation	L	L		M	H	M-H				M
Mohegan Tribe	L	L		M	H	M-H				M
<b>Total # Plans that Ranked Hazard</b>	<b>60</b>	<b>156</b>	<b>8</b>	<b>74</b>	<b>146</b>	<b>66</b>	<b>27</b>	<b>10</b>	<b>2</b>	<b>71</b>
Low Ranking	2	6	8	3	0	0	13	4	0	0
Low to Moderate Ranking	3	8	0	16	0	0	5	1	2	0
Moderate Ranking	37	13	0	55	30	1	7	4	0	56
Moderate to High Ranking	15	56	0	0	22	30	2	1	0	2
High Ranking	3	73	0	0	94	35	0	0	0	13
<b>Average Hazard Ranking</b>	<b>3.23</b>	<b>4.17</b>	<b>1.00</b>	<b>2.70</b>	<b>4.44</b>	<b>4.52</b>	<b>1.93</b>	<b>2.20</b>	<b>2.00</b>	<b>3.39</b>
<b>Average Hazard Description</b>	<b>M</b>	<b>M-H</b>	<b>L</b>	<b>M</b>	<b>M-H</b>	<b>H</b>	<b>L-M</b>	<b>L-M</b>	<b>L-M</b>	<b>M</b>

Hazard Ranking Scheme:

Community	Sea Level Rise	Thunderstorms (Summer Storms)	Tornado	Tsunami	Wildfire	Wind	Winter Storm / Snow / Blizzard
Bridgeport		H	L-M			L-M	H
Easton		H	L-M			L-M	H
Fairfield		H	L-M			L-M	H
Monroe		H	L-M			L-M	H
Stratford		H	L-M			H	H
Trumbull		H	L-M			L-M	H
Bethel							
Brookfield							
Danbury		M-H	H		L-M	H	H
New Fairfield		H	H		L-M	H	H
Newtown							
Redding							
Ridgefield							
Sherman		H	M		L-M	H	H
Darien	H	H	M				H
Greenwich	H	H	M				H
New Canaan	H	H	M				H
Norwalk	H	H	M				H
Stamford	H	H	M				H
Weston	H	H	M				H
Westport	H	H	M				H
Wilton	H	H	M				H
Shelton		H	H		M	H	H
Berlin			M		L		H
Bristol			M		L		H
Burlington			M		L - M		H
New Britain			M		L		H
Plainville			M		L		H
Southington			M		L		H

Avon			M-H		L		M-H
Bloomfield			M-H		L		M-H
Canton			M-H		L		M-H
East Granby			M-H		L		M-H
East Hartford			M-H		L		M-H
East Windsor			M-H		L		M-H
Enfield			M-H		L		M-H
Farmington			M-H		L		M-H
Glastonbury			M-H		L		M-H
Granby			M-H		M		H
Hartford			M-H		L		M-H
Manchester			M-H		L		M-H
Marlborough			M-H		L		M-H
Newington			M-H		L		M-H
Rocky Hill			M-H		L		M-H
Simsbury			M-H		L		M-H
South Windsor			M-H		L		M-H
Suffield			M-H		L		M-H
West Hartford			M-H		L		M-H
Wethersfield			M-H		L		M-H
Windsor			M-H		L		M-H
Windsor Locks			M-H		L		M-H
Hartland		H	H		M	H	H
Plymouth			M		L		H
Bethlehem		H	M-H		L-M	H	H
Thomaston		H	M-H		L-M	H	H
Watertown		H	M		L	M	H
Woodbury		M-H	M		L	M-H	M-H
Bridgewater							
New Milford							
Barkhamsted		M-H			M	H	H
Colebrook		M-H			M	H	H
Goshen		H			M	H	H
Harwinton		M-H			M-H	H	H

Litchfield		M-H			M-H	H	H
Morris		M-H			M-H	H	H
New Hartford		M-H			M-H	H	H
Norfolk		M-H			M-H	H	H
Torrington		M-H			M-H	H	H
Winchester		M-H			M-H	H	H
Canaan							
Cornwall							
Kent							
North Canaan							
Roxbury							
Salisbury							
Sharon							
Warren							
Washington							
Chester	H		L-M	M	M	M-H	H
Clinton	H		M	M	M	M-H	H
Cromwell			L-M		L	M-H	M-H
Deep River	H		L-M	M	M	M-H	H
Durham			L-M		L-M	M-H	M-H
East Haddam			L-M		L	M-H	M-H
East Hampton			L-M		L-M	M-H	M-H
Essex	H		L-M	M	L-M	M-H	H
Haddam			L-M		L-M	M-H	M-H
Killingworth	L		M	L	L-M	M	H
Middlefield			L-M		L	M-H	M-H
Middletown			L-M		L-M	M-H	M-H
Old Saybrook	H	M-H	M	M	L	M	H
Portland			L-M		L-M	M-H	M-H
Westbrook	H		L-M	M	M	M-H	H
Beacon Falls		H	M		L-M	H	H
Cheshire		H	M		L-M	H	H
Middlebury		H	M		L-M	H	H
Naugatuck		H	M		L-M	H	H

Oxford		H	L		L	H	M
Prospect		H	M		L-M	H	H
Southbury		H	M		L-M	H	H
Waterbury		H	M		L	H	H
Wolcott		H	M		L-M	H	H
Bethany	L	M	M		L	M	H
Branford	M	M	M		L	M	H
East Haven	H	H	H		L-M	H	H
Guilford	H	H	H		L-M	H	H
Hamden	M	M	M		L	M	H
Madison	M	M	M		L	M	H
Meriden		H	H		L-M	H	H
Milford		M-H	L-M	L	L	H	M-H
New Haven	H	H	L-M			H	H
North Branford	L	M	M		L	M	H
North Haven	M	M	M		L	M	H
Orange	L	M	M		L	M	H
Wallingford	L	M	M		L	M	H
West Haven	M	M	M		L	M	H
Woodbridge	L	M	M		L	M	H
Ansonia		H	H		M	H	H
Derby		H	H		M	H	H
Seymour		H	H		M	H	H
Lyme	H		L-M	M	L-M	M-H	H
Old Lyme	H		L-M	M	M	M-H	H
Bozrah		M	M		L	M	H
Colchester		M	M		M	M	H
East Lyme	H	M	M		L-M	M	H
Franklin		M	M		L-M	M	H
Griswold		M	M		M	M	H
Groton (City)	H	M	M		L	M	H
Groton (Town)	H	M	M		L	M	H
Ledyard	M-H	M	M		L	M	H
Lisbon		M	M		L-M	M	H

Montville	M-H	M	M		M	M	H
New London	H	M	M		L-M	M	H
North Stonington		M	M		L-M	M-H	H
Norwich	M	M	M		L	M	H
Preston	M	M	M		L-M	M	H
Salem		M	M		L	M	H
Sprague		M	M		L-M	M	H
Stonington (Borough)	H	M	M		L	M	H
Stonington (Town)	H	M	M		L-M	M	H
Voluntown		M	M		M	M	H
Waterford	H	M	M		M	M	H
Lebanon		M	M		L-M		H
Andover			M-H		L-M		M-H
Bolton			M-H		L		M-H
Ellington			M-H		L		M-H
Hebron			M-H		L		M-H
Somers			M-H		L		M-H
Stafford							
Tolland			M-H		L		M-H
Vernon			M-H		L		M-H
Union		H	M			H	H
Columbia		M	M		L-M		H
Coventry		M	M		L-M		H
Mansfield		M	M		L-M		H
Willington		M	M		L-M		H
Ashford		H	M			H	H
Brooklyn		H	M			H	H
Canterbury		H	M			H	H
Eastford		H	M			H	H
Killingly		H	M			H	H
Plainfield		H	M			H	H
Pomfret		H	M			H	H
Putnam		H	M			H	H
Sterling		H	M			H	H

Thompson		H	M			H	H
Woodstock		H	M			H	H
Chaplin		M	M		L-M		H
Hampton		M	M		L-M		H
Scotland		M	M		L-M		H
Windham		M	M		L-M		H
Mashantucket Pequot Tribal Nation	H	M	M		L-M	M	H
Mohegan Tribe	H	M	M		L	M	H
<b>Total # Plans that Ranked Hazard</b>	<b>43</b>	<b>104</b>	<b>146</b>	<b>10</b>	<b>129</b>	<b>103</b>	<b>156</b>
Low Ranking	6	0	1	2	60	0	0
Low to Moderate Ranking	0	0	22	0	42	5	0
Moderate Ranking	7	41	82	8	19	34	1
Moderate to High Ranking	2	13	31	0	7	17	38
High Ranking	28	50	10	0	0	47	117
<b>Average Hazard Ranking</b>	<b>4.07</b>	<b>4.09</b>	<b>3.18</b>	<b>2.60</b>	<b>1.78</b>	<b>4.03</b>	<b>4.74</b>
<b>Average Hazard Description</b>	<b>M-H</b>	<b>M-H</b>	<b>M</b>	<b>M</b>	<b>L-M</b>	<b>M-H</b>	<b>H</b>

Hazard Ranking Scheme:













Indicate the types of critical facilities included in their loss estimates.

County	RPO	Community or Tribe	Loss Estimates provided by hazard. If so, use additional columns to document loss/risk and methodology used.	Unit of Column B (Buildings/S)	Source(s)	Types of Critical Facilities included in Analysis														Methodology for how calculated...HAZUS... Census Blk intersection w FP...	
						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other			
GBRC				N/A	Appendix C: Critical Facilities	1	46 Schools	2 Major Hospitals; 7 Nursing Homes	1	3 Courts; 14 State Agencies			4 Utilities				6			3 Education Centers; 7 Home Care Agencies; 60 Day Care Facilities; 32 Out-Patient Clinics; 25 Mental Health Facilities; 14 Substance Abuse Facilities; 9 other Health Care Resources; 8 Federal Agencies; 4 Recreational Facilities	town list of critical facilities, text
		Bridgeport	Yes																		
		Easton	Yes	N/A	Appendix C: Critical Facilities	1	3 Educational Facilities			1	1 Public Works; 1 Town Hall									4 Child Care Facilities	town list of critical facilities, text
		Fairfield	Yes	N/A	Appendix C: Critical Facilities	5	15 Educational Facilities	7 Nursing Homes	1	1 Public Works; 1 Town Garage; 1 Water Pollution Control; 1 Senior Citizen's Center; 1 Town Hall; 1 U.S. Army Reserve			Pump Stations; 3 Utilities								town list of critical facilities, text
		Monroe	Yes	N/A	Appendix C: Critical Facilities		12 Educational / Child Care Facilities				1 Public Works										town list of critical facilities, text
		Stratford	Yes	N/A	Appendix C: Critical Facilities															Institutional and recreational uses such as schools, beaches, parks, and other public properties are located within the flood plain. Two of the town's emergency shelters are within the 100-YR floodplain	text
		Trumbull	Yes	N/A	Appendix C: Critical Facilities	1	13 Educational Facilities; 1 University			1	1 Public Works; 1 Town Hall									6 Child Care Facilities	town list of critical facilities, text
Fairfield		Bethel																			
		Brookfield																			
		Danbury	Yes	Buildings	HAZUS-MH	16 total, 100 year flood event: 2 at least moderate damage; 100 year hurricane event: 16 expected loss of use <1 day, 500 year hurricane event: 16 expected loss of use >1 day	32 total, 100 year flood event: 3 at least moderate damage; 3 loss of use, 100 year hurricane event: 32 expected loss of use <1 day, 500 year hurricane event: 32 expected loss of use >1 day	1 (Danbury Hospital) 100 year flood event: minor damage; 100 year hurricane event: 1 expected loss of use <1 day, 500 year hurricane event: 1 expected loss of use >1 day; nine additional facilities	3 total, 100 year flood event: minor damage; 100 year hurricane event: 3 expected loss of use <1 day, 500 year hurricane event: 3 expected loss of use >1 day	City Hall, Public Works	14 facilities including airport, I-84, Route 7, etc., Regional Transit hub	Electrical Substations, Water and Sewer Service	One primary and several other Shelters	33 Hazardous Materials Reporting Facilities, Danbury Fair Mall	Yes	Yes	Yes	Yes	41 places of worship	HAZUS for critical facilities losses, other facilities listed in text	
			Yes	Buildings	HAZUS-MH	1 total, 100 year flood event: minor damage, 100 year hurricane event: 1 expected loss of use <1 day, 500 year hurricane event: 1 expected loss of use >1 day	5 total, 100 year flood event: minor damage, 100 year hurricane event: 5 expected loss of use <1 day, 500 year hurricane event: 5 expected loss of use >1 day	None in HAZUS	1 total, 100 year flood event: minor damage, 100 year hurricane event: 1 expected loss of use <1 day, 500 year hurricane event: 1 expected loss of use >1 day	Town Hall			Two Shelters							HAZUS for critical facilities losses, other facilities listed in text	
		New Fairfield																			
		Newtown																			
		Redding																			
	Ridgefield																				
	Sherman	Yes	Buildings	HAZUS-MH	1 total, 100 year hurricane event: 1 expected loss of use <1 day, 500 year hurricane event: 1 expected loss of use >1 day	1 total, 100 year hurricane event: 1 expected loss of use <1 day, 500 year hurricane event: 1 expected loss of use >1 day	None in HAZUS	1 total, 100 year hurricane event: 1 expected loss of use <1 day, 500 year hurricane event: 1 expected loss of use >1 day	Highway Department Garage, Town Hall			Emergency Services Facility, Two shelters								HAZUS for critical facilities losses, other facilities listed in text	
SWRPA		Darien																			
		Greenwich																			
		New Canaan																			
		Norwalk	Yes	N/A	HAZUS-MH Database, no complete table provided	15	135	4 Hospitals; Numerous Public and Private Medical Facilities	9		19 Rail Stations; I-95; Northeast Rail Corridor		7 Waste Water Treatment Facilities; 3 Electric Power Facilities; Communication Towers		4 Emergency Operations Centers					Entire region: a total of fourteen critical facilities were found within a flood hazard area, of which two were in Greenwich, six in Norwalk, and six in Stamford.	HAZUS, local input
		Stamford																			
		Weston																			
		Westport																			
	Wilton																				

Indicate the types of critical facilities included in their loss estimates.

County	RPO	Community or Tribe	Loss Estimates provided by hazard. If so, use additional columns to document loss/risk and methodology used.	Unit of Column B (Buildings/5)	Source(s)	Types of Critical Facilities included in Analysis														Methodology for how calculated...HAZUS... Census Blk intersection w FP...
						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other		
	VCOG	Shelton	Yes	Buildings	Table 2-5 Critical Facilities, HAZUS	4 Fire Stations; (Fairfield County: Fire Station Functionality 100% after 100-YR event, 0% after 500-YR event)	1 School; (Fairfield County: School Functionality 100% after 100-YR event, 0% after 500-YR event)	9 Elderly Housing, Assisted Living, and Convalescent Homes	1 Police Station; (Fairfield County: Police Station Functionality 100% after 100-YR event, 0% after 500-YR event)	1 Community Center; 1 Animal Shelter; 1 City Hall; 1 Public Works; 1 Water Pollution Control Facility			(Fairfield County: Emergency Response Center Facility Functionality 100% after 100-YR event, 0% after 500-YR event)					9 daycare facilities; 3 mobile home parks; (Entire Region: Minimal earthquake damage in all HAZUS scenarios. Minimal hurricane damage to essential facilities for wind speeds less than 78 mph; hospital has moderate damage with an increasing length of loss of use from the 100-year return period to the 500-year return period; minor damage to the remaining essential facilities is likely to occur for all greater wind events.)	HAZUS, town list of critical facilities, text	
	CCRPA	Berlin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Physical Services building in floodplain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Bristol	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Burlington	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		New Britain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Plainville	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Wastewater Treatment Facility in 500-year floodplain	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Southington	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Avon	N/A	N/A	N/A	4	N/A	Yes	1	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 6 Page 45	
		Bloomfield	N/A	N/A	N/A	6	N/A	N/A	1	Yes	Interstate 91, Interstate 291	MDC	N/A	N/A	N/A	Yes	N/A	N/A	Map 8 Page 49	
		Canton	N/A	N/A	N/A	3	N/A	N/A	1	Sewage Plant is a "flooding challenge"; Town garage is four feet below BFE of Farmington River	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Map 12 Page 57	
		East Granby	N/A	N/A	N/A	Yes	N/A	N/A	N/A	Yes	Bradley International Airport (runway)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Listed in Goals and Objectives	
		East Hartford	N/A	N/A	N/A	N/A	N/A	N/A	2	CT River Levee System	Interstate 84, Interstate 384	Connecticut Natural Gas, State Dept. of IT	N/A	N/A	N/A	N/A	N/A	N/A	Listed in Description: Map 16 Page 67	
		East Windsor	N/A	N/A	N/A	3	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 18 Page 72	
		Enfield	N/A	N/A	N/A	6	N/A	N/A	N/A	Town Hall, Public Works	Interstate 91	Municipal Sewer System, 3 Water Companies	Emergency Management	N/A	N/A	N/A	N/A	N/A	FHMP, Map 22 Page 81	
		Farmington	N/A	N/A	N/A	3	N/A	UHC	N/A	Town Hall, Public Works	Interstate 84	Municipal Sewer, MDC	N/A	N/A	N/A	N/A	N/A	N/A	Map 24 Page 85	
		Glastenbury	N/A	N/A	N/A	4	N/A	N/A	1	N/A	Route 2, Route 3	MDC	N/A	N/A	N/A	N/A	N/A	N/A	Map 26 Page 89	
		Granby	N/A	N/A	N/A	N/A	N/A	N/A	1	Public Works	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 28 Page 95	
		Hartford	N/A	N/A	N/A	1	Trinity College, UHart	Hartford, Saint Francis	4	N/A	Interstate 84, Interstate 91, Braimard Airport	MDC	N/A	Convention Center, Expo Center	N/A	N/A	N/A	Bushnell Theater	N/A	Map 30 Page 101
		Manchester	N/A	N/A	N/A	1	N/A	1	2	Town Hall, Public Works	Interstate 84, Interstate 384, Interstate 291	Municipal Water and Sewer System	Shelters	N/A	N/A	N/A	Various historic districts	Senior Center	Map 34 Page 110; Text	
		Marlborough	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Public Works	Route 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 36 Page 114; Text	
		Newington	N/A	N/A	N/A	N/A	N/A	Veterans Administration's CT Health Primary Care Facility	1	CT DOT Headquarters; Highway Department	Route 9	MDC	N/A	N/A	N/A	N/A	N/A	N/A	Map 38 Page 119; Text	
		Rocky Hill	N/A	N/A	N/A	2	N/A	State Veterans Home and Hospital	N/A	Town Hall, Public Works	Interstate 91	MDC	Shelters	N/A	N/A	N/A	N/A	N/A	Map 40 Page 123; Text	
		Simsbury	N/A	N/A	N/A	1	N/A	N/A	1	Town Hall, Public Works	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 42 Page 128; Text	
		South Windsor	N/A	N/A	N/A	1	N/A	N/A	N/A	Town Hall, Public Works	Interstate 291	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 46 Page 137; Text	
		Suffield	N/A	N/A	N/A	1	N/A	N/A	2	Public Works	Bradley International Airport	N/A	N/A	N/A	N/A	N/A	N/A	North Central Connecticut Correctional Facility	Map 48 Page 140; Text	
		West Hartford	N/A	N/A	N/A	1	N/A	N/A	1	Town Hall, Public Works	Interstate 84	MDC	N/A	N/A	N/A	N/A	N/A	N/A	Map 54 Page 154; Text	
		Wethersfield	N/A	N/A	N/A	1	N/A	N/A	N/A	Town Hall, Public Works; Town Garage susceptible to flooding	Interstate 91, Route 3	MDC	N/A	N/A	N/A	N/A	N/A	N/A	Map 56 Page 159; Text	
		Windsor	N/A	N/A	N/A	4	N/A	N/A	1	Town Hall, Public Works	Interstate 91, Interstate 291, Route 20, Railroad	MDC	N/A	N/A	N/A	N/A	N/A	N/A	Map 58 Page 164; Text	
		Windsor Locks	N/A	N/A	N/A	2	Middle school has drainage issue (Kettle Brook)	N/A	N/A	Town Hall, Public Works	Interstate 91, Route 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 60 Page 168; Text	
	LHCEO	Hartland	N/A	N/A	Critical Facilities Map and text	2	1			1 Town Hall; 1 Town Garage										
	CCRPA	Plymouth	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		Bethlehem	N/A	N/A		1	2	0	1	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
	CCRCOV	Thomaston	N/A	N/A		1	3	N/A	1	2	N/A	4	2	N/A	N/A	N/A	N/A	N/A	Mentioned in text	

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						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other				
Litchfield	COVCO	Watertown	N/A	N/A	N/A	1	N/A	multiple	1	multiple	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Mentioned in text			
		Woodbury	N/A	N/A	N/A	2	multiple	multiple	1	multiple	N/A	N/A	N/A	N/A	N/A	1	N/A	N/A	Mentioned in text			
	HVCEO	Bridgewater																				
		New Milford																				
	LHCEO	Barkhamsted	N/A	N/A	Critical Facilities Map for each town and text	3	2			1 Town Hall; 1 Public Works Department		1 MDC Supply Headquarters								GIS mapping		
		Colebrook	N/A	N/A		2	1			1 Town Hall; 1 Town Garage											GIS mapping	
		Goshen	N/A	N/A		1	1			1 Town Hall; 1 Town Garage		Fuel Storage Tanks for Goshen Oil							1 Goshen Store		GIS mapping	
		Harwinton	N/A	N/A		2	1			1 Town Hall; 1 Town Garage; 1 Harwinton Senior Center											GIS mapping	
		Litchfield	N/A	N/A		4	4			1 Litchfield Town Hall; 1 Town Hall Annex in Bantam; 1 Bantam Borough Hall; 1 Town Public Works Department		1 Sewage Treatment Plant									GIS mapping	
		Morris	N/A	N/A		1	1			1 Morris Town Hall; 1 Town Public Works Department											GIS mapping	
		New Hartford	N/A	N/A		4	3			1 Town Hall; 1 Public Works Department; 1 Wastewater Treatment Plant										Several facilities appear to be located within the 100-YR floodplain of the Farmington River, including the Town Hall, Public Works Department, Wastewater Treatment Plant, and New Hartford Elementary School		GIS mapping
		Norfolk	N/A	N/A		1	1			1 Town Hall; 1 Town Garage		1 Sewer Treatment Plant; 1 Water Tank								1 Gas Station; 1 Phone Company Building		GIS mapping
		Torrington	N/A	N/A		1	3	1		1 City Hall; 1 Public Works Garage; 1 Senior Center		High Pressure Tennessee Gas Line								1 Torrington Armory; Torrington Water Company Reservoirs		GIS mapping
		Winchester	N/A	N/A		3	3	1	3 Schools; 1 Community College	1 Nursing Home; Elderly Housing Complexes	1 Town Hall; 1 Municipal Public Works Garage		1 Winsted Water Treatment Plant; 1 Winsted Sewer Treatment Plant							Rugg Brook and Crystal Lake Reservoirs; 1 Child Center		GIS mapping
	NWCOG	Canaan																				
		Cornwall																				
		Kent																				
		North Canaan																				
		Roxbury																				
Salisbury																						
Sharon																						
Warren																						
Washington																						
		N/A	N/A	N/A		1	N/A	1	N/A	Small airport, Railroad, Route 9, Chester-Hadlyme Ferry	Municipal sewer in downtown area	Yes	N/A	Yes	N/A	Many historic structures in downtown floodplain areas	N/A					
	Chester	N/A	N/A	N/A	2	4	N/A	1	N/A	Interstate 95, railroad	CWC water service	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text				
	Clinton	N/A	N/A	N/A	2	5	None	1	Emergency Operations Center	Interstate 91, Route 9, Railroad	Mattabasset Wastewater Regional Treatment Facility; protected by levee; susceptible to ice jam at Wilcox Island/Arrigoni Bridge downstream causing flooding; majority of town has water service	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text				
	Cromwell	N/A	N/A	N/A	Yes, Equipment damaged in 1982 flood	4	N/A	1	N/A	Route 9	Municipal sewer in downtown area	Yes, can become isolated during severe floods	N/A	N/A	N/A	N/A	N/A	Mentioned in text				
	Deep River	N/A	N/A	N/A	1	5	None	None, RST	Emergency Operations Center	Yes	Small community water systems, Buckeye pipeline	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text				
	Durham	N/A	N/A	N/A	2	3	None	N/A	Town Garage susceptible to flooding; Emergency Operations Center	Goodspeed Airport susceptible to flooding; Route 151 over Salmon River susceptible to Ice Jams (Art Christian said this was mitigated at 4/2 meeting)	Yes	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text				
	East Haddam	N/A	N/A	N/A																		

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						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other		
Middlesex	LCRVCOG	East Hampton	N/A	N/A	N/A	3	4	None	2	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
		Essex	N/A	N/A	N/A	1	1	N/A	1	Town Hall	Route 9; railroad (perhaps no longer critical)	Yes, municipal sewer system	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
		Haddam	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Town Garage in Higganum Center is susceptible to flooding. Could be essential facility identified by HAZUS	East Haddam Bridge	Yes (no public water or sewer)	Yes	Marina adjacent to East Haddam Bridge subject to freshet flooding	N/A	N/A	N/A	N/A	Mentioned in text	
		Killingworth	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
		Middlefield	N/A	N/A	N/A	1	3	None	1	Emergency Operations Center	Yes	Buckeye pipeline, three sewer service areas	Yes	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
		Middletown	N/A	N/A	N/A	South District Fire Station in floodplain	Yes	Connecticut Valley Hospital (mental health), Middlesex Hospital	Yes	City Hall at risk of flooding (flood stage of 19+ feet)	Highways, freight rail.	Middletown Water & Sewer; Middletown WTP to be closed has a high-risk of flooding (and past unreported flood damages); large generating plant and another (Kleen) under construction; petroleum pipelines	Yes	Harbor Park on CT River frequently floods	N/A	Russell Library	N/A	N/A	Mentioned in text	
		Old Saybrook	N/A	N/A	N/A	2	4	2 nursing homes (not in 1% floodplain); Apple Rehab is within 0.2% floodplain	1	Town Hall, Dept. of Public Works	Interstate 95, Railroad, most critical facilities located along Route 1; State DOT garage	Telecommunications, electric, natural gas, gasoline and oil, water supply	Emergency response (in 1% floodplain), EOC, shelters (Old Saybrook High School primary); All critical facility buildings in 0.2% floodplain	Facilities that store and use hazardous materials (mostly on Route 1 outside of 1% floodplain)	N/A	N/A	N/A	Dams	Mentioned in text	
		Portland	N/A	N/A	N/A	N/A	Water backs up into basement of Brownstone Intermediate School during severe storms; only high school has emergency generator	Yes	Water backs up into basement during severe storms	Public Works; transfer station (no emergency generator)	Railroad bridge from Middletown	WWTP, Petroleum storage tanks, and Hazardous Waste Transfer Facility in CT River floodplain; No emergency power for water well or water pumping station; Water storage tanks and chlorinator building near State Forest (wildfire risk)	Yes	Marinas on CT River and Industrial area near bridge at risk of flooding from major freshets	N/A	No emergency generator	N/A	Senior Center (no emergency generator)	Mentioned in text	
		Westbrook	N/A	N/A	N/A	2	3	N/A	2	EOC is located in Town Hall at relatively low elevation and can be isolated by flooding on Route 1, potential to move it to a nearby school	Interstate 95	CWC provides water service	Westbrook High School is large and has a generator, but is not the primary shelter because it can be cut off by flooding. Daisy Ingraham School is primary shelter.	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
		COGCNV		Beacon Falls	N/A	N/A	N/A	1 total, located in 500 year floodplain	2 total, 1 located in 500 year floodplain	1 total, 1 located in 500 year floodplain	1 total, 1 located in 500 year floodplain	2 total,	Route 8	4 total, 2 located in 100 year floodplain (some)	1 total, 1 located in 500 year floodplain					
Cheshire	N/A			N/A	N/A	3 total,	11 total,	4 total,	1 total,	2 total,	I-691	Public Water & sewer	1 total,			1 total,		waste water treatment plant located in floodplain, mobile home park	Mentioned in text	
Middlebury	N/A			N/A	N/A	1 total, 1 adjacent to floodplain	5 total,	N/A	1 total,	2 total,	I-84	11 total, 3 in floodplain, 3 adjacent to floodplain	Yes	2 total,		1 total,		6 total (childcare, assisted living),	Mentioned in text	
Naugatuck	N/A			N/A	N/A	2 total, 1 located in 500 year floodplain	11 total, 1 located in 500 year floodplain	N/A	1 total,	2 total, 1 located in 500 year floodplain	Route 8	5 total, 3 located in floodplain (some), 2 located in 500 year floodplain	1 total,					2 total (senior center and food bank), 1 located in 500 year floodplain	Mentioned in text	
Oxford	N/A			N/A	N/A	multiple		1 total,	1 total,	multiple			Yes						Mentioned in text	
Prospect	N/A			N/A	N/A	1 total,	3 total,	1 total,	1 total,	2 total,				Yes			1 total,		1 total (mobile home park)	Mentioned in text
Southbury	N/A			N/A	N/A	1 total,	1 total,	N/A	1 total,	1 total,	I-84	5 total, 1 sewer located in floodplain, 1 water located in 100 year floodplain	Yes					8 total, 1 (national defense and communications) located in 500 year floodplain	Mentioned in text	
Waterbury	N/A			N/A	N/A	10 total,	31 total,	2 total,	2 total,	7 total,	I-84, Route 8, railroad	Public Water & sewer	1 total,			1 total,		3 total (assisted living)	Mentioned in text	
Wolcott	N/A			N/A	N/A	4 total,	5 total,	N/A	1 total,	2 total,			Yes					1 total (convalescent home)	Mentioned in text	
				Bethany	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	2	2	0	2	1	N/A	N/A	N/A	131 commercial, 45 industrial	N/A	N/A		1 EOC, 2 public works, 3 shelters
		Branford	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	5	5	4	1	1	I-95 and rail	N/A	N/A	741 commercial, 269 industrial	N/A	N/A	25+	1 EOC, 1 public works, 1 rail station	Simple exposure analysis using GIS intersects	

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						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other		
New Haven	SCRCOG	East Haven	N/A	N/A	HAZUS - 6.4 earthquake in East Haddam; 100-year inland and coastal flood; 100-year and 500-year hurricane wind	4 total, minor earthquake damage; 100-year + 500-year wind; minor damage with loss of use of more than one day;	12 total; earthquake - minor damage - 2 schools with less than 50% functionality; 100-year wind: none or minor damage, loss of use greater than one day at five schools; 500-year wind: minor damage; than one day at each; 100-year coastal flood: one school with moderate damage and loss of use;	3 total, 1 in cat. 3 surge zone; earthquake - minor damage, 48% of beds out of service initially, 27% out after one week, 8% out of service after one month; 100-year & 500-year wind: minor damage, loss of use greater than one day;	1 total, 1 in floodplain or coastal flood hazard area; earthquake - none or minor damage; 100-year & 500-year wind: minor damage, loss of use greater than one day;	2 total, 1 in floodplain or coastal flood hazard area	3 total (underpass).	1 total.	Yes					7 total, senior center in cat.4 surge zone, airport in cat.1 surge zone and floodplain or coastal flood hazard area, sewer pumping station in floodplain or coastal flood hazard area and various surge zones.	Mentioned in text, HAZUS-MH	
		Guilford	N/A	N/A	HAZUS - 6.4 earthquake in East Haddam; 100-year inland and coastal flood (will not affect any essential facilities); 100-year and 500-year hurricane wind	5 total, 1 cat.4 surge zone, 1 cat.3 surge zone and in floodplain or coastal flood hazard area; 500-year wind will cause minor damage and loss of use > 1 day to each; earthquake - minor damage and less than 50% functionality after one day	8 total, 100-year wind; minor damage and loss of use > 1 day at 7 schools; 500-year wind: minor damage and loss of use > 1 day at each; earthquake - minor damage and less than 50% functionality after one day	1 total (nursing home)	1 total, 500-year wind: minor damage and loss of use > 1 day; earthquake - minor damage, less than 50% functionality after one day	2 total, town hall cat.4 surge zone, dpw cat.1 surge zone and in floodplain or coastal flood hazard area	4 total (boat yards), 4 in cat.1 surge zone and in floodplain or coastal flood hazard area	Yes	Emergency Operations Center; earthquake - minor damage, less than 50% functionality after one day; 500-year wind: minor damage, loss of use > 1 day				7 total, community center cat.4 surge zone, multiple assisted living in floodplain and cat.1-4 surge zone	Mentioned in text, HAZUS-MH		
		Hamden	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	7	17	0	1	1	Rail	N/A	N/A	695 commercial, 76 industrial	N/A	N/A		3 public works, 3 shelters	Simple exposure analysis using GIS intersects	
		Madison	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	2	11	3	1	1	1-95 and rail	N/A	N/A	467 commercial, 156 industrial	N/A	N/A		1 public works, 1 rail station, 1 shelter	Simple exposure analysis using GIS intersects	
		Meriden	N/A	N/A	HAZUS - 5.7 earthquake in Portland; 100-year inland flood (will not affect any essential facilities); 100-year (none or minor damage only) and 500-year hurricane wind	5 total, 100 year hurricane minor damage, 500 year hurricane minor damage, 500 year hurricane moderate damage; one fire station would suffer at least moderate damage under 100-year flood event	21 total, 100 year hurricane minor damage, 500 year hurricane 1 has at least moderate damage, 500 year earthquake moderate damage to 10	1 total, 100 year hurricane at least moderate damage, no beds in service after one week, totally operational after 30 days; Portland 5.7 earthquake minor damage, 26% beds in service after earthquake, 48% in service after 1 week, 77% in service after 30 days	1 total, 100 year hurricane minor damage, 500 year hurricane moderate damage	1 total,		7 total,	1 total,					24 total,		
		Milford	N/A	N/A	N/A	multiple	1 total,	multiple	1 total,	4 total,										
		New Haven	N/A	N/A	N/A	8 total, 1 located in flood zone	5 total, 1 located in flood zone	2 total,	1 total,	5 total,	2 total, 2 located in flood zone			1 total,			1 total,		1 total (fire training academy), 1 located in flood zone	
		North Branford	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	4	5	2	1	1	N/A	N/A	N/A	297 commercial, 136 industrial	N/A	N/A		1 EOC, 1 public works, 1 shelter	Simple exposure analysis using GIS intersects	
		North Haven	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	4	8	0	1	1	1-91 and rail	N/A	N/A	627 commercial, 240 industrial	N/A	N/A		1 EOC, 1 public works, 1 shelter	Simple exposure analysis using GIS intersects	
		Orange	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	1	8	0	1	1	1-95 and rail	N/A	N/A	471 commercial, 127 industrial	N/A	N/A		6 public works	Simple exposure analysis using GIS intersects	
Wallingford	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	7	18	2	2	1	1-91 and rail	N/A	N/A	976 commercial, 372 industrial	N/A	N/A		1 EOC, 1 public works, 1 rail station, 4 shelters	Simple exposure analysis using GIS intersects			
West Haven	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	9	17	5	1	1	1-95 and rail	N/A	N/A	946 commercial, 299 industrial	N/A	N/A		1 public works, 1 rail station, 1 shelter	Simple exposure analysis using GIS intersects			
Woodbridge	Exposure yes, loss estimates no		Local data, SCRCOG and Hazus-MH	1	5	0	1	1	N/A	N/A	N/A	254 commercial, 74 industrial	N/A	N/A		1 EOC, 1 public works	Simple exposure analysis using GIS intersects			

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						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other			
VCOG	Ansonia	Yes	Buildings	Table 2-5 Critical Facilities, HAZUS	6 Fire Stations; (New Haven County Fire Facility Functionality 100% after 100-YR flood, 0% after 500-YR flood)	4 Schools; (New Haven County: School Functionality 100% after 100-YR flood, 0% after 500-YR flood)	1 nursing & rehab; 5 elderly housing; (New Haven County: Hospital has 0% of beds at day one of 100-YR flood, 100% of beds 3 days after 100-YR flood, 0% of beds at day one of 500-YR flood, 100% of beds 30 days after 500-YR flood)	1 Police Station; (New Haven County: Police Station Facility Functionality 100% after 100-YR flood, 0% after 500-YR flood)	1 Public Works; 1 Armory			1 United Illuminating Substation	1 Ansonia Rescue Medical Services						4 day care; 1 multi-lingual / limited transportation; (Entire Region: Minimal earthquake damage in all HAZUS scenarios. Minimal hurricane damage to essential facilities for wind speeds less than 78 mph; hospital has moderate damage with an increasing length of loss of use from the 100-year return period to the 500-year return period; minor damage to the remaining essential facilities is likely to occur for all greater wind events.)	HAZUS, town list of critical facilities, text	
				Table 2-5 Critical Facilities, HAZUS			7 assisted living and elderly housing; 2 hospital and cancer center		1 City Hall; 1 public works; 6 stormwater pump stations			1 wastewater treatment plant; 8 sewer pump stations						1 dam; (Entire Region: Minimal earthquake damage in all HAZUS scenarios. Minimal hurricane damage to essential facilities for wind speeds less than 78 mph; hospital has moderate damage with an increasing length of loss of use from the 100-year return period to the 500-year return period; minor damage to the remaining essential facilities is likely to occur for all greater wind events.)	HAZUS, town list of critical facilities, text		
	Derby	Yes	Buildings	Table 2-5 Critical Facilities, HAZUS		4															
	Seymour	Yes	Buildings	Table 2-5 Critical Facilities, HAZUS		2	4 assisted living and elderly housing		1 public works; 1 water pollution control facility					1						1 Regional Water Authority Wellfield; (Entire Region: Minimal earthquake damage in all HAZUS scenarios. Minimal hurricane damage to essential facilities for wind speeds less than 78 mph; hospital has moderate damage with an increasing length of loss of use from the 100-year return period to the 500-year return period; minor damage to the remaining essential facilities is likely to occur for all greater wind events.)	HAZUS, town list of critical facilities, text
LCRVCOG	Lyme	N/A	N/A	N/A	1	1	N/A	N/A	N/A	N/A	N/A	No public water or sewer, vulnerable to power outages	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Mentioned in text	
	Old Lyme	N/A	N/A	N/A	2	5	N/A	1	N/A	Interstate 95; Railroad		Small public water systems, no sewer (although sewer is now connected to POW in SE corner of town)	Yes	N/A	N/A	N/A	N/A	N/A	N/A	Mentioned in text	

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						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other					
New London	SCCOG	Bozrah																					
		Colchester																					
		East Lyme																					
		Franklin																					
		Griswold																					
		Groton (City)																					
		Groton (Town)					100 year flood event 2 at least moderate damage and subsequent loss of use																
		Ledyard																					
		Lisbon																					
		Montville																					
		New London																					
		North Stonington																					
		Norwich																					
		Preston																					
	Salem																						
	Sprague																						
	Stonington (Borough)																						
	Stonington (Town)						100 year flood event 2 at least moderate damage and subsequent loss of use																
	Voluntown																						
	Waterford																						
	WRCOG			N/A	N/A	1, volunteer	3: elementary, middle, and high	Elderly housing facility	1	Public Works, Town Hall			Two transformer stations and several telephone towers		Small industrial park off Route 207		Johnathan Trumbull Library	Historic district downtown with important structures from Revolutionary War period	Girl scout camp		Mentioned in text		
		Lebanon	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	1 gas pipeline	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 4 page 40		
		Andover	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	Municipal Sewer System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 10 page 53		
		Bolton	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	CWC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 20 Page 76		
		Ellington	N/A	N/A	N/A	1	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 32 Page 105		
		Hebron	N/A	N/A	N/A	N/A	N/A	1	Yes	Public Works	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
		Somers	N/A	N/A	N/A	Yes	N/A	N/A	N/A	Town Hall, Public Works	N/A	N/A	Public Water in some areas	N/A	N/A	N/A	N/A	N/A	N/A	Osborn and Northern Correctional Facilities	Map 44 Page 132; Text		
		Stafford																					
		Tolland	N/A	N/A	N/A	1	N/A	N/A	State Police Troop	Town Hall, Public Works	Interstate 84	Interstate 84	Two Water Utilities, Public Sewer downtown	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 50 Page 146; Text		
		Vernon	N/A	N/A	N/A	2	N/A	1	1	Town Hall, Public Works	Interstate 84	Interstate 84	CWC, Public Sewer	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Map 52 Page 151; Text		
	NECCOG	Union	Yes	Buildings	HAZUS-MH	1 Fire Station; (100-YR flood event; none to minor damage)	1 School; (100-YR flood event; none to minor damage)																

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						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other				
Tolland	WRCOG	Columbia	N/A	N/A	N/A	1	4: pre-school, private elementary, pre-school through 8, and high school	3 elderly facilities	1. RST	Public Works	N/A	telephone relay station on Route 66	Yes	Defense sub-contractor facility	N/A	N/A	Original Dartmouth College building	N/A	Mentioned in text			
		Coventry	N/A	N/A	N/A	4	4: 2 elementary, middle, high	Equine hospital; Elderly housing community	1	Public Works	N/A	telephone relay station, WWTP, pump station, wells	Yes	N/A	N/A	N/A	2 historic homes	N/A	Mentioned in text			
		Mansfield	N/A	N/A	N/A	3 (2 volunteer, 1 full-time at UConn)	University of Connecticut and 8 more: two Montessori schools, three elementary schools, one middle school, one (regional) high school, and one school associated with Natchaug Hospital	Psychiatric and substance abuse hospital; elderly concentrations at Jumper Hill and Jensen's Mobile Home Park	1 RST and full-time department at UConn	Public Works, Town Hall	Railroad on western town line	1 telephone facility; 2 Wellfields owned by UConn with storage and distribution systems; WWTP owned by UConn; WTP owned by Windham Water Works;	Yes	N/A	Yes	Yes	Several historic districts associated with village centers; historic buildings throughout town	4 mobile home parks	Mentioned in text			
		Willington	N/A	N/A	N/A	3 volunteer stations	5 schools (two public and three private nursery schools)	Animal clinic; Senior housing area;	None (patrolled by RST)	Transfer station; Historic Town Hall; Town Office Building; Town Garage	1-84; Route 44 and Route 74 are major trucking routes to Rhode Island	Town-owned water supply to senior housing complex		Hazardous Materials storage site		Public Library		No mobile home parks; 3 churches; 2 campgrounds				
		Ashford	Yes	Buildings	Hazus-MH	1 Fire Station; (100-YR flood event: at least moderate damage) (100-YR hurricane: expected loss of use <1 day)	1 School; (100-YR flood event: none to minor damage) (100-YR hurricane: expected loss of use <1 day)													Hazus-MH		
NECCOG	NECCOG	Brooklyn	Yes	Buildings	Hazus-MH	2 Fire Stations; (100-YR flood event: none to minor damage) (100-YR hurricane: 4 buildings with expected loss of use <1 day)	4 Schools; (100-YR flood event: none to minor damage) (100-YR hurricane: 4 buildings with expected loss of use <1 day)		1 Police Station; (100-YR flood event: none to minor damage) (100-YR hurricane: 1 building with expected loss of use <1 day)											Hazus-MH		
		Canterbury	Yes	Buildings	Hazus-MH	1 Fire Station; (100-YR flood event: none to minor damage)	2 Schools; (100-YR flood event: none to minor damage)														Hazus-MH	
		Eastford	Yes	Buildings	Hazus-MH	1 Fire Station; (100-YR flood event: at least moderate damage; loss of use)	1 School; (100-YR flood event: none to minor damage)														Hazus-MH	
		Killingly	Yes	Buildings	Hazus-MH	5 Fire Stations; (100-YR flood event: 3 buildings with at least moderate damage, 2 buildings with loss of use)	7 Schools; (100-YR flood event: 3 buildings with at least moderate damage, 2 buildings with loss of use)		2 Police Stations; (100-YR flood event: none to minor damage)													Hazus-MH
		Plainfield	Yes	Buildings	Hazus-MH	1 Fire Station; (100-YR flood event: none to minor damage)	7 Schools; (100-YR flood event: none to minor damage)		1 Police Station; (100-YR flood event: none to minor damage)													Hazus-MH
		Pomfret	Yes	Buildings	Hazus-MH	1 Fire Station; (100-YR flood event: none to minor damage) (100-YR hurricane: expected loss of use <1 day)	2 Schools; (100-YR flood event: none to minor damage) (100-YR hurricane event: 2 buildings with expected loss of use <1 day)															Hazus-MH
		Putnam	Yes	Buildings	Hazus-MH	1 Fire Station; (100-YR flood event: at least moderate damage, loss of use) (100-YR hurricane: 1 building with expected loss of use <1 day)	6 Schools; (100-YR flood event: 3 buildings with at least moderate damage, 3 buildings with loss of use) (100-YR hurricane: 6 buildings with expected loss of use <1 day)	1 Hospital; (100-YR flood event: none to minor damage)	1 Police Station; (100-YR flood event: at least moderate damage, loss of use) (100-YR hurricane: expected loss of use <1 day)													Hazus-MH
Windham	NECCOG	Sterling	Yes	Buildings	Hazus-MH	2 Fire Stations; (100-YR flood event: 1 building with at least moderate damage, 1 building with loss of use) (100-YR hurricane: 3 buildings with expected loss of use <1 day)	1 School; (100-YR flood event: none to minor damage) (100-YR hurricane: none to minor damage)		1 Police Station; (100-YR flood event: none to minor damage)												Hazus-MH	

Indicate the types of critical facilities included in their loss estimates.

County	RPO	Community or Tribe	Loss Estimates provided by hazard. If so, use additional columns to document loss/risk and methodology used.	Unit of Column B (Buildings\$)	Source(s)	Types of Critical Facilities included in Analysis														Methodology for how calculated...HAZUS... Census Blk intersection w FP...		
						Fire Stations	Schools	Hospitals/ Nursing homes	Police	Government Facilities	Transportation Infrastructure	Utilities	Emergency Services	Commercial and Industrial	Post Office	Library	Historic	Other				
		Thompson	Yes	Buildings	Hazus-MH	3 Fire Stations; (100-YR flood event: 1 building with at least moderate damage, 1 building with loss of use) (100-YR hurricane: 3 buildings with expected loss of use <1 day)	5 Schools; (100-YR flood event: 1 building with at least moderate damage, 1 building with loss of use) (100-YR hurricane: 5 buildings with expected loss of use <1 day)		1 Police Station; (100-YR flood event: at least moderate damage, loss of use) (100-YR hurricane: expected loss of use <1 day)												Hazus-MH	
		Woodstock	Yes	Buildings	Hazus-MH	4 Fire Stations; (100-YR flood event: 1 building with at least moderate damage, 1 building with loss of use) (100-YR hurricane: 4 buildings with expected loss <1 day)	4 Schools; (100-YR flood event: none to minor damage) (100-YR hurricane: 4 buildings with expected loss of use <1 day)															Hazus-MH
	WRCOG	Chaplin	N/A	N/A	N/A	1, volunteer	2, elementary and high	N/A	1, RST	Public Works	two old bridges on important thoroughfares, one subject to ice jams	2 telephone relay stations; small water systems	Yes	N/A	N/A	Yes	historic district dating to 1700's	30 mobile homes throughout town		Mentioned in text		
		Hampton	N/A	N/A	N/A	1, volunteer	1, elementary	N/A	N/A	Public Works	One old bridge on Route 97 in need of repair	SBC telephone central office on Route 6; primary underground telephone cable from Hartford to Boston	Yes	Potential HazMat site with 60,000 gal propane off Route 6	N/A	N/A	Concentration of historic homes on Main Street (1700's and throughout town	2 churches which draw a large percentage of town's population to services; Some mobile homes scattered throughout town		Mentioned in text		
		Scotland	N/A	N/A	N/A	1, volunteer	1, elementary	N/A	N/A	Town Hall/Library	N/A	N/A	Yes	1 large sawmill operation	N/A	Public Library / Town Hall (historic)	4 historic sites	manufactured homes on Littlefield Road and in campground off Toleration Road; 3 churches draw large concentrations of people to services		Mentioned in text		
		Windham	N/A	N/A	N/A	4: 3 volunteer and one full-time	12 primary and secondary schools; ECSU; Quinebaug Valley Community College branch	Hospital; 3 convalescent homes; 5 elderly and special needs housing areas;	2: one municipal and one from ECSU	N/A	Windham Airport; Railroad; Route 6	Telephone (SBC) switch station facility; Electrical substation; municipal water and sewer	Regional dispatch center for Windham, Franklin, and Lebanon	Six hazardous materials sites	N/A	N/A	Several notable historic structures	2 mobile home parks and additional mobile homes scattered through town		Mentioned in text		
Unaffiliated	SCCOG	Mashantucket Pasquot Tribal Nation				See above	See above	See above	See above													
		Mohegan Tribe				See above	See above	See above	See above													

County	RPO	Community or Tribe	Types of Land Use/Development Data Included in Plan (SOURCE)	Areas of (r/z) Growth	Other Relevant Information for Land Use & Development	
		Bridgport	Bridgport encompasses 17.5 square miles and is characterized by a compact Central Business District surrounded by medium- to high-density multi-family residential districts with mixed-use commercial corridors. Outside this first ring is low- to medium-density development. Further beyond, land changes to predominantly low-density single family dwellings.	The population peaked in the 1950s, and has steadily declined until the present as a result of suburban growth and the decline of industry in the area. By 2010, the CT Office of Policy and Management projects that the population of Bridgport will grow to over 142,000 residents. Much of this growth will come in the 0-19 and 20-64 age groups, with the 20-64 age projected to increase by 7.4% from 1990 to 2010. The 1996 Bridgport Master Plan of Development focuses on infilling former manufacturing lots now left vacant. The Lower East End Municipal Development Plan calls for redevelopment of the central corridor of Stratford Avenue, removal of blight from the highly residential neighborhoods, rezoning of blocks to create larger lot sizes and opportunities for home ownership.	Bridgport has an extensive highway network, rail facilities, intra-regional bus service, regional airport, port facilities, and ferry service to Long Island. The city contains 1,200 acres of parks.	
			Eaton	Eaton is a highly residential area with large residential lots. A large portion of the town, 73%, is owned by the Aquaponic Water Company and is public watershed supply land. As such, the town is predominantly rural, with a general lack of a centralized commercial sector.	The Town of Eaton covers 28.8 square miles of land and is home to 1,308 residents as of 2004, a 17.5% increase since 1990. The primary cause of Eaton's current population increase is the migration of residents of nearby urban areas to suburban areas such as Eaton. The preservation of open spaces and some small scale agriculture has helped Eaton to maintain a sense of community despite the overall decline of agriculture in the area and the expansion of residential uses. The Eaton Plan of Conservation and Development projects that approximately 400 to 500 additional dwellings will be added before the town reaches "saturation", based both on developable land area as well as the policies that are chosen to control future development. The estimated future population is 6,000 persons. This is an almost 20% increase in total population, with an anticipated increase in population density from 265 to 228 persons per square mile.	
		Fairfield	Fairfield is a predominantly residential community, with significant commercial and industrial corridors. The housing in the western half of Fairfield is predominantly low-density, although there is significant medium density housing in the Southport Village. The housing in the eastern half of Fairfield is predominantly medium-density. High density housing is located along Fairfield Beach Road on Long Island Sound and along the Route 95 corridor. Eaton - Chapple, and Stratford Road. Commercial uses are concentrated along the Route 95 and Route 1 corridors as well as along Black Back Triangle. Industrial uses are concentrated between Route 95 and Route 1 as well as in the Commerce Drive area.	Fairfield has experienced a 9% increase in population since 1990. The service sector is increasing and manufacturing is on the decline. The town's population grew by almost 4,000 in the 1990s, and has grown twofold since the turn of the century. The Commerce Drive area represents the greatest opportunity for development in Fairfield. Residential areas will continue to be built-out to existing zoning standards, with corresponding increases in population. The Town will limit development on the Pine Creek side of Fairfield Beach Road as this area is vulnerable to coastal natural hazards.		
			Moore	Moore has experienced a 25% population increase in the 1970s, a 20.6% increase in the 1980s and a 14% increase in the 1990s. Most current economic growth in the area is occurring along two commercial corridors that correspond with Routes 25 and 111. In the coming decade, residents aged 55 and over are expected to comprise a larger share of the total population than in the past. The Residential Density Plan calls for approximately one-acre residential lots in the east and southeast sections of the city, approximately two-acre lots in the north and west sections, three-acre lots in the northeast, south central, and central sections of the city. Various areas of the city are proposed to contain higher density housing. The Future Land Use Plan calls for the development of a significant industrial sector in the southwest section of the City, north of Garden Road and along Pepper Street. The Town would like to require areas for open space, including tracts of land in the northeast sections of Moore.	Twenty five percent of the town's land area is still undeveloped.	
		Fairfield	Stratford is mostly built out. Much of the development over the next ten to twenty years is expected to be in the form of in-fill residential development at varying density levels and redevelopment of existing industrial and commercial areas. The town is encouraging revitalization of its waterfront along the Beaman's River. There is a sizable area (100 acres or more) of land for industrial and business development purposes off of Larchley Boulevard and another 75 acres of land for mixed-use development on the site of the former Stratford Army Engine Plant (Main Street and Suffolk Lane). Both of these areas are located within the coastal flood hazard area. In the north end of Stratford, there is a 75-acre parcel that is zoned for industrial use and may get developed for an office park (Barnington Woods property).			
			Tranbull	Tranbull is primarily residential, occupying approximately 60% of the total land area. Streets and highways comprise approximately 10% of the land area. Commercial and industrial uses are very minor in Tranbull, as are governmental and institutional land uses. Public open space accounts for approximately 8% of the total land area. Aquaponic Water Company uses approximately 6.5% of the land area. Water and private open space both make up just over 1% of the land area.	The town of Tranbull covers 23.5 square miles and is home to over 95,400 residents, constituting an increase of 10% since 1990. Recently, the town has added more compact, cluster development and condominiums, a change from the single family residences that were most common in the town. Because of the large amount of industry and commerce in the Tranbull-Bridgport area, and the fact that Tranbull still contains a significant amount of developable land, it is reasonable to expect Tranbull to continue to experience additional growth and development. Tranbull is considered to be in a fairly built-out condition. Any development that occurs in Tranbull will likely be in the form of minor residential development. Development of higher density housing and support of regional housing efforts may raise the population of Tranbull to what may be considered their permanent limits.	Thirteen percent of the town's land area is dedicated to recreation, including a trail to trail project that will eventually connect with the ferry dock in Bridgport. Industrial and commercial areas have been filled out to what may be considered their permanent limits.
		HVCDO	Danbury	The city's population saturation point is considered to be 90,000 people, so future expansion along the West Side will likely be the last major residential expansion in the city. City development is primarily redevelopment.	The Land Trust of Danbury currently protects 217 acres primarily in the southern part of the city, and an additional 1,381 acres of land has been designated by the City for parks and other recreational uses. Other lands are protected by the city as part of water supply watersheds.	
			New Fairfield	500 persons per square mile; 1,077 housing units were added between 2000 and 2009	The Connecticut State Data Center projects continued population growth and estimates that the 2020 population will be 16,249. Decadal growth areas throughout town on two-acre lots.	After the arrival of Connecticut's 1073 wetlands protection law, development potential in New Fairfield was significantly reduced to the approximately 8% of municipal land area defined as wetland was largely excluded from development. Significant amount of private communities.
		SHERMAN	Shelton	189 persons per square mile; 104 housing units were added to the community's housing stock between 2000 and 2009	The Connecticut State Data Center projects continued population growth in Shelton over the next 20 years and estimates that the 2020 population will be 4,823. Recent development on north end of Town and on I-95 throughout town	Significant amount of private communities
			Darien		Recent residential and commercial development near Metro-North train stations	
		SWBPA	Greenwich	420 CDP, potential residential and commercial development near Metro-North train stations		
			New Canaan	region consists of 225 square miles with a population of 345,000. majority of open space located in northern part of South Western CT, higher concentrations of commercial land along coast.	low but continued population growth; developable land in the region is scarce; possible "strip" development along Routes 1 and 7	
		VCOG	Shelton	High-density industrial centers in downtown area; higher density residential and nonresidential land uses situated near the Naugatuck and Beaman's Rivers and the Route 8 corridor; western portion of Shelton is predominantly forested, some agricultural land east in northern and southeastern Shelton	A few residential and industrial/commercial projects are located north of Route 8 in the downtown area, in the southern part of the city, and along the Route 8 corridor in south-central Shelton.	Almost all developable parcels surrounding the Route 8 corridor within the VCOG region have been developed to date.
			Beth	From 2000 census, 675 persons per square mile; developed areas increased 21% from 1985-2006, with development primarily occurring on previously undeveloped land	Projected population gain of 15.1% through 2030; population 60 or older expected to increase 72% by 2030; significant population increase from 2000 to 2005	Town has more than 1,700 acres of Net Developable Land (land available for development that is not hampered by build-out constraints such as wetlands, floodplains, etc.). Mainly decentralized development
		CRCPA	Branford	1,241 persons per square mile; developed areas increased 17% from 1985-2006, with development primarily occurring on previously undeveloped land	Projected population loss of 1.4% through 2030; population 60 or older expected to increase 30% by 2030	City has more than 1,700 acres of Net Developable Land
			Burlington	Density of 269 persons per square mile; developed areas increased 8% from 1985-2006, with development primarily occurring on previously undeveloped land	Projected (preliminary) population gain of 3.1% through 2030; population 60 or older expected to increase 14% by 2030; significant population increase from 2000 to 2005	Town has more than 3,300 acres of Net Developable Land
		New Britain	Density of 5,330 persons per square mile; developed areas increased 9% from 1985-2006, while agricultural and forested areas became increasingly fragmented.	Projected population gain of 9.7% through 2030; population 60 or older expected to increase 20% by 2030	City has less than 300 acres of Net Developable Land; Has 1,200 acres of parks and open space	
			Plainville	1,768 persons per square mile; developed areas increased 16% from 1985-2006, with development primarily occurring on previously undeveloped land and a significant reduction in agricultural land	Projected population loss of 6.1% through 2030; population 60 or older expected to increase 29% by 2030	Town has less than 1,000 acres of Net Developable Land; Town is extremely flat
		Avon	106 persons per square mile; developed areas increased 23% from 1985-2006, with development primarily occurring on previously undeveloped land	Projected population gain of 4.0% through 2030; population 60 or older expected to increase 49% by 2030; significant population increase from 2000 to 2005	Town has over 5,000 acres of Net Developable Land	
				73 persons per square mile; housing units increased 7.3% from 2000 to 2009	N/A	Suburban town; principal industries include insurance, printing, concrete products, poultry processing, reflective tapes, fiber optics, and medical facilities.

County	RPO	Community or Tribe	Types of Land Use/Development Data Included in Plan (SOURCE)	Areas of (r/j) Growth	Other Relevant Information for Land Use & Development
Hartford	CRDCG	Bloomfield	793 persons per square mile; housing units increased 8.3% from 2000 to 2006	N/A	Three MDX reservoirs and two state parks (Pleasant and Falcon Mountain). Industries include insurance, aerospace products, specialized tools, electronics, gold and diamond products, diversified industries, and agriculture.
		Canton	483 persons per square mile; housing units increased 15.5% from 2000 to 2006	N/A	Rural town. Major retail developments. Industries include plants, injection molding, small businesses and large commercial retail, restaurants, small farming, and antique shops.
		East Granby	298 persons per square mile; housing units increased 6.5% from 2000 to 2006	N/A	Rural town. Farming, manufacturing, and quarrying principal industries; Connecticut Air National Guard has a base in town and Bradley International Airport has runway space in town.
		East Hartford	2,714 persons per square mile; housing units decreased 0.3% from 2000 to 2006	Continued development of the former Rensselaer Airfield to bring additional corporate, state, municipal, and retail opportunities	Suburban town; many regionally significant transportation routes. Industries include aerospace manufacturing and contractors, warehousing and distribution centers, high industrial, and retail businesses. CT&I and the State Dept. of Information Technology maintain critical infrastructure in town. Home to UConn Huskies football, Goodwin College, Cabot's retail store.
		East Windsor	288 persons per square mile; housing units increased 7.3% from 2000 to 2006	N/A	Principal industries include agriculture, support systems facilities, and manufacture of small tools, paper boxes, electronics, aluminum by-products, farm implements, and fertilizers.
		Enfield	1,371 persons per square mile; housing units increased 1.0% from 2000 to 2006	N/A	Several parks. Industries include insurance, manufacture of toys, water filtration systems, specialized machinery, aluminum and magnesium castings, wooden reeds for wire and cables, silk screening, games, greeting cards, tools and gauges, envelopes, laser beam welding, warehouse distribution of toys, clothing and pharmaceuticals, manufacture of electronic assemblies, processing of food and dairy products, ice cream, vegetable and tobacco farming.
		Farmington	893 persons per square mile; housing units increased 6.8% from 2000 to 2006	N/A	UConn Health Center / Medical and Dental schools. Industries include national and international corporate facilities, banking, insurance, retail (West Farm Mall), homebased services and product development, aerospace engineering and products, laser research and production, precision and specialty manufacturing, manufacture of ball bearing spindles, springs, dies and level switches, dies, screws, and plastics.
		Glastonbury	645 persons per square mile; housing units increased 4.6% from 2000 to 2006	N/A	Industries include insurance and financial services, technology and banking, computer services, agriculture, and retail.
		Granby	271 persons per square mile; housing units increased 5.9% from 2000 to 2006	N/A	Rural community. Significant lands owned by State and Melcom State Refuge and Granby Land Trust.
		Hartford	7,324 persons per square mile; housing units decreased 5.5% from 2000 to 2006	N/A	State capital; many state-owned facilities; Branford Airport; many insurance companies, two major hospitals, Trinity College and Uhart, Convention Center, Expo Center, Bushnell Theater.
		Manchester	2,088 persons per square mile; housing units increased 8.7% from 2000 to 2006	N/A	Suburban Town. Largest regional retail concentration in New England at Backland Hills. Industries include engineered fibers, steel metal fabrication, plastics, machine tool companies, printing, warehouse/distribution facilities, electronic equipment, aircraft and missile components.
		Marlborough	172 persons per square mile; housing units increased 5.0% from 2000 to 2006	N/A	Rural town. Local businesses are the dominant industry.
		Newington	2,283 persons per square mile; housing units increased 2.0% from 2000 to 2006	Hartford-New Britain Busway, New Haven-Springfield commuter rail, and Central CT State University campus likely to spur development	Suburban town; industries include printing and manufacturing of airplane parts, dies, gauges, tools and plumbing supplies. Significant retail development along Route Temple, Home Depot, Verizon Administration's CT Primary Care Facility, CT DOT, and CT International Skating Center.
		Rocky Hill	1,445 persons per square mile; housing units increased 6.6% from 2000 to 2006	N/A	State Veterans Home and Hospital and Dinosaur State Park. Industries include agriculture, engines, bearings, aircraft, and electronics.
		Simsbury	696 persons per square mile; housing units increased 2.5% from 2000 to 2006	N/A	Suburban community. Industries include agriculture, insurance offices, non-electric blast initiation systems, polycarbonate fiber manufacturing, and safety and detonating fuse making.
		South Windsor	823 persons per square mile; housing units increased 6.9% from 2000 to 2006	N/A	Suburban community. Major retail developments near Backland Hills. Industries include commercial and institutional food distributors, fuel cell power plants, machine and equipment design and manufacture.
		Suffield	100 persons per square mile; housing units increased 5.9% from 2000 to 2006	N/A	Rural community. Industries include agriculture, manufacture of ice cream, gas, small tools, and warehousing. Part of Bradley International Airport and the North Central Connecticut Correctional facility are also located in Suffield.
		West Hartford	2,781 persons per square mile; housing units increased 1.5% from 2000 to 2006	Major land development is approximately 90% completed	Suburban community. Largely residential. Home to UConn, St. Joseph's University of Connecticut branch (now moved to Hartford). Several reservoirs (and reservoir lands) that supply MDX.
		Westfield	2,185 persons per square mile; housing units increased 2.5% from 2000 to 2006	N/A	Industries include professional offices, restaurants, marine dock, Koff-Strom, printing, the Hartford Hospital Wellness Center, and several State Offices including the Department of Correction, Labor Department, and Motor Vehicles.
		Windsor	899 persons per square mile; housing units increased 4.6% from 2000 to 2006	Rapidly developing CT on Dix Hill Road	Suburban community. Industries include power generation, aerospace, insurance, computer aided design and manufacturing, software development, medical technology, financial services, manufacturing of computer components, electronics, machine tools, adhesives, measuring devices, automotive parts, air movement equipment, and shade grown tobacco.
Windsor Locks	1,379 persons per square mile; housing units increased 5.2% from 2000 to 2006	N/A	Suburban community. Bradley International Airport. Industries include food serving and distribution, manufacture of aerospace products, paper products, electronics, and machines. Significant number of hotels and related travel services.		
LKFCO	Hartford	Pop. Density in 2000: 60/93 people/sq. mi. Total Population in 2000: 2,042	Projected 2025 Total Population: 2,990. Average Annual Change: 2000-2025: 36	See LKFCO regional description below.	
CCRPA	Phonoth	522 persons per square mile; developed areas increased 16% from 1985-2006, with development primarily occurring on previously undeveloped land and a significant increase in barren land.	Projected population gain of 3,095 through 2020; population 60 or more expected to increase 60% by 2020; significant population increase from 2000 to 2005	Town has nearly 4,000 acres of Not Developable Land. Seven distinct villages act as population centers.	
COGCVN	Bethlehem	185 people per square mile; population growth in Town from 2000-2006 was only 5%	According to Bethlehem's Plan of Conservation and Development, population growth in Town is forecast to be only about 1% per year from 2005 to 2020	Bethlehem has almost no development currently ongoing due to the lack of public water & sewer	
	Thomaston	699 people per square mile; population growth in Town from 2000-2006 was only 5%	Based on analysis by the Council of Governments of the Central Connecticut Valley, population growth in the region outside of Waterbury is estimated to be about 10% from 2005 to 2025	Thomaston has 25% protected open space	
	Watertown	2000 population 30,890 people			
	Waterbury	2000 population 9,466 people	Expanding as a regional suburb		
Lackford	HYCDO	New Milford	Pop. Density in 2000: 96.49 people/sq. mi. Total Population in 2000: 2,064	Projected 2025 Total Population: 4,310. Average Annual Change: 2000-2025: 33	
		Barkhamsted	Pop. Density in 2000: 46.71 people/sq. mi. Total Population in 2000: 1,471	Projected 2025 Total Population: 1,790. Average Annual Change: 2000-2025: 11	
		Colebrook	Pop. Density in 2000: 61.79 people/sq. mi. Total Population in 2000: 1,697	Projected 2025 Total Population: 1,990. Average Annual Change: 2000-2025: 12	
		Easton	Pop. Density in 2000: 111.36 people/sq. mi. Total Population in 2000: 5,281	Projected 2025 Total Population: 6,060. Average Annual Change: 2000-2025: 30	Torington is an urban center and the Town of Winchester serves as a sub-regional urban center for more suburban communities. Slightly over 10% of the region consists of State forest and parkland. 30% of the region consists of privately owned open space reserves. Approx. 4% of the region consists of water bodies. Roughly 60% of the region's landscape is undeveloped; much of this land consists of wetlands and steep slopes.
		Meriden	Pop. Density in 2000: 148.59 people/sq. mi. Total Population in 2000: 8,316	Projected 2025 Total Population: 9,300. Average Annual Change: 2000-2025: 39	
		Millfield	Pop. Density in 2000: 133.38 people/sq. mi. Total Population in 2000: 3,301	Projected 2025 Total Population: 3,600. Average Annual Change: 2000-2025: 12	
		Avon	Pop. Density in 2000: 164.43 people/sq. mi. Total Population in 2000: 4,088	Projected 2025 Total Population: 4,750. Average Annual Change: 2000-2025: 34	
		New Hartford	Pop. Density in 2000: 36.64 people/sq. mi. Total Population in 2000: 1,640	Projected 2025 Total Population: 1,900. Average Annual Change: 2000-2025: 10	
		Northford	Pop. Density in 2000: 84.92 people/sq. mi. Total Population in 2000: 2,200	Projected 2025 Total Population: 41,630. Average Annual Change: 2000-2025: 209	
		Torrington	Pop. Density in 2000: 330.46 people/sq. mi. Total Population in 2000: 10,664	Projected 2025 Total Population: 11,440. Average Annual Change: 2000-2025: 31	
		Windsor			
NWDCG		Canaan			
		Canaan			
		Canterbury			
		North Canaan			
		Rocky Hill			
		Sudbury			
		Warren			
		Washington			
		Cherry	2000 population: 3,743, 247 people per square mile of land area. Development in town is located primarily east of Route 9 along Putnam Brook and in the area surrounding the commercial center. Low-density development exists along most town roads.		Water power for industry led to early population growth and development as industrial villages. Committed open space is 45% of the land area and is a major limitation on future development.
		Clinton	2000 population: 13,094, 791 people per square mile of land area. Most populated Clinton town; significant portion of the population lives within coastal floodplain particularly during summer. CI development concentrated along the I-95 and Route 1 corridors, mainly commercial corridor extends northward on Route 95.	Attraction of shore and limited undeveloped usable land has created pressure for conversion of seasonal dwellings to year-round homes. Larger subdivisions north of I-95 with several remaining viable areas for development.	Adopted two-acre zoning north of I-95 but is under appeal. High density in beach areas. Most available land south of I-95 is developed. 10% committed open space reserves.
		Cromwell	2000 population: 12,871, 5,365 housing units, 1,078 people per square mile of land area, 432 housing units per square mile.	Population expected to increase 30.0% through 2020 (Connecticut State Data Center)	Route 372 intensively developed. Open space primarily along the Mattitohock and CT Rivers, inconsistency between local and State PUD.
		Deer River	2000 population: 4,603, 346 people per square mile of land area. Low density development along most town roads. Limited commercial development in the village area and along Route 154.		Water power for industry led to early population growth and development as industrial villages. Committed open space is 33% of the land area.

County	RPO	Community or Tribe	Types of Land Use/Development Data Included in Plan (SOURCE)	Areas of (+/-) Growth	Other Relevant Information for Land Use & Development	
Middlesex	LCRVCGO	Dunham	2000 population: 6,627, 2,349 housing units; 281 people per square mile of land area; 100 housing units per square mile	Population expected to increase 40.4% through 2030 (Connecticut State Data Center). Minimal CT growth potential. Re-use or mixed use possible. Significant drinking water issue on Main Street (to be mitigated by expansion of water service from Middlefield)	Open space (primarily State-owned) dominates town. Some inconsistencies between local and State P&CD.	
		East Hadham	2000 population: 8,333, 4,015 housing units; 153 people per square mile of land area; 73 housing units per square mile	Population expected to increase 25.3% through 2030 (Connecticut State Data Center)	N/A	
		East Hampton	2000 population: 13,522, 2,412 housing units; 379 people per square mile of land area; 124 housing units per square mile	Population increase data not provided	Significant amount of open space	
		Essex	2000 population: 8,576, 688 people per square mile of land area; Village Centers of Essex, Village (densest development), Eastbrook, and Ixonia.	Residential subdivisions have been developed west of Route 9; and new commercial and industrial development has been located in Eastbrook.	Water power for industry led to early population growth and development as industrial villages.	
		Hadham	2000 population: 7,157, 2,830 housing units; 163 people per square mile of land area; 64 housing units per square mile	Population expected to increase 9.4% through 2030 (Connecticut State Data Center). Lack of vacant land promotes re-use. Higgam Village District and Tyngville Center-Bridge Street areas are zoned for CT uses	Lots of open space. Only Town on CT River that is divided by the River. You have to drive through another town to get from one part to the other. Inconsistency between State and local P&CD	
		Killingworth	2000 population: 6,018, 170 people per square mile of land area. Primarily rural, only town in region without a coastal area. Single family homes are primarily located as strip development on large lots along existing roads, especially Route 80 and Route 148.	Continuing economic development in the basin of Food Meadow Browns and Lane Districts is expected with pressures leading to intensified flood plain use	Experienced highest growth in region from 1990 to 2000. More than half of land area is contained open space, including State Forest and water company land	
		Middlefield	2000 population: 4,203, 1,740 housing units; 331 people per square mile of land area; 137 housing units per square mile	Population expected to decrease 0.2% through 2030 (Connecticut State Data Center). Growth area located along Route 66 (State P&CD) and central portion of town (local P&CD). Bulk development occurring around Lake Besek. Industrial Zones more common than commercial zones excepting Route 66 corridor.	Numerous open space acreage around Lake Besek, Haby Reservoir, Wadsworth Park, State Park, etc. Some inconsistencies between the local and State P&CD	
		Middletown	2000 population: 43,167, 19,697 housing units; 1,055 people per square mile of land area; 482 housing units per square mile	Population expected to increase 14.0% through 2030 (Connecticut State Data Center)	Middlesex County is the 4th fastest growing county in the State. More than 6000 building permits issued from 2003-2008. Middletown is the hub of the county with easy access to major highways, airports, railroads, and other modes of transportation.	
		Old Saybrook	2010 population: 10,242, 20% of population over age 65, mostly south of Interstate 95 and susceptible to flooding. Most land south of I-95 completely developed. Open space comprises 20% of the land area. Approximately 50 structures are center-occupied. Nearly half of the residential structure value is in town in hurricane surge area	Pressure for conversion of seasonal dwellings to year-round homes. Lack of water and sewer has limited conversion but this work is typically in coastal flood zones. Few and relatively small subdivisions proposed in recent years for development. development of commercial and residential properties has diminished	In 2011, the Town made it easier for seasonal properties to convert to year-round use provided water, sewer, and septic system requirements are met and no other changes to structure code. Primary industries include services, trade, and government. Governmentally located near shopping malls, Universities, airports, restaurants, beaches, skiing, sports areas, Theaters, and the State Capitol. Zone A floodplains are included in local Floodplain Zone which has restrictive regulations including prohibiting new residential development.	
		Portland	2000 population: 8,732, 3,528 housing units; 373 people per square mile of land area; 190 housing units per square mile	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Intensification of shore and limited undeveloped usable land has created pressure for conversion of seasonal dwellings to year-round homes. Lack of water and sewer has limited conversion but this work is typically in coastal flood zones.	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.
		Westbrook	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		Beacon Falls	2010 population: 10,242, 20% of population over age 65, mostly south of Interstate 95 and susceptible to flooding. Most land south of I-95 completely developed. Open space comprises 20% of the land area. Approximately 50 structures are center-occupied. Nearly half of the residential structure value is in town in hurricane surge area	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		Cheshire	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		COGCVN		Waterbury	2010 population: 10,242, 20% of population over age 65, mostly south of Interstate 95 and susceptible to flooding. Most land south of I-95 completely developed. Open space comprises 20% of the land area. Approximately 50 structures are center-occupied. Nearly half of the residential structure value is in town in hurricane surge area	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)
Wolcott	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Naugatuck	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Oxford	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Prospect	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Southbury	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Waterbury	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Wolcott	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Bethany	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Bradford	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
East Haven	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Eastford	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Hamden	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
Malden	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1			Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
New Haven	SCRCDG	Meriden	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		Milford	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		New Haven	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		North Branford	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		South Haven	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	
		Waterbury	2000 population: 6,292, 399 people per square mile of land area. Densest development and significant amount of population lives in coastal floodplain areas. Tremendous density of seasonal beach cottages. CT development primarily along I-95 and Route 1	Population expected to increase 19.3% through 2030 (Connecticut State Data Center)	Second only to City of Norwalk for total number of boats in municipal waters. Approximately 15% open space.	

County	RPO	Community or Tribe	Types of Land Use/Development Data Included in Plan SOURCE	Areas of (r-) Growth	Other Relevant information for Land Use & Development	
Orange			Demographics (2010 census), geography (multiple sources), transportation network (multiple sources)	NA	In the South Central Region there is a strong connection between transportation and development patterns. Regional growth centers are broadly determined in the State's Plan of Conservation and Development. These growth centers typically involve the utilization of existing developed sites or underutilized sites. South Central Region Council of Governments (SCRCOG) municipalities are continually working to balance development, increased population densities and transportation needs in a way that promotes the Region's broader long-term goals.	
			Wallingford	Demographics (2010 census), geography (multiple sources), transportation network (multiple sources)	NA	In the South Central Region there is a strong connection between transportation and development patterns. Regional growth centers are broadly determined in the State's Plan of Conservation and Development. These growth centers typically involve the utilization of existing developed sites or underutilized sites. South Central Region Council of Governments (SCRCOG) municipalities are continually working to balance development, increased population densities and transportation needs in a way that promotes the Region's broader long-term goals.
			West Haven	Demographics (2010 census), geography (multiple sources), transportation network (multiple sources)	NA	In the South Central Region there is a strong connection between transportation and development patterns. Regional growth centers are broadly determined in the State's Plan of Conservation and Development. These growth centers typically involve the utilization of existing developed sites or underutilized sites. South Central Region Council of Governments (SCRCOG) municipalities are continually working to balance development, increased population densities and transportation needs in a way that promotes the Region's broader long-term goals.
			Woodbridge	Demographics (2010 census), geography (multiple sources), transportation network (multiple sources)	NA	In the South Central Region there is a strong connection between transportation and development patterns. Regional growth centers are broadly determined in the State's Plan of Conservation and Development. These growth centers typically involve the utilization of existing developed sites or underutilized sites. South Central Region Council of Governments (SCRCOG) municipalities are continually working to balance development, increased population densities and transportation needs in a way that promotes the Region's broader long-term goals.
			VCOG	High-density industrial centers in downtown area, higher density residential and nonresidential land uses situated near the Naugatuck and Housatonic Rivers and the Route 8 corridor; forested areas in northeastern Ansonia minimal agricultural land use	A few residential and commercial/industrial projects are located in the southeastern portion of Ansonia near the Derby and Woodbridge borders, at the Ansonia-Seymour municipal line, and in the northern portion of Ansonia. The demolition and rebuild of apartments has been proposed to Ansonia officials at a location within the 500-year flood zone (Zone X) on the west bank of the Naugatuck River.	almost all developable parcels surrounding the Route 8 corridor within the VCOG region have been developed to date
Derby			High-density industrial centers in downtown area, higher density residential and nonresidential land uses situated near the Naugatuck and Housatonic Rivers and the Route 8 corridor; sparsely distributed agricultural land; some rural and farmland cover in southwest Derby	Derby is generally built out and lacking space. However, four potential areas of development that are notable aside from local landfill are: Main Street redevelopment (vacant land exists on the south side of Main Street), a proposed commerce park between Route 8 and the Naugatuck River, a possible four-lot residential subdivision off Redfern Drive, a potential industrial/commercial zoned industrial park off Blue Terrace. The Main Street Redevelopment project and the proposed commerce park both are in central Derby along the Route 8 corridor, located in areas protected by levees and thus in flood zones. The possible subdivision and the potential industrial park are both in centers	almost all developable parcels surrounding the Route 8 corridor within the VCOG region have been developed to date	
			High-density industrial centers in downtown area, higher density residential and nonresidential land uses situated near the Naugatuck and Housatonic Rivers and the Route 8 corridor; some rural and farmland cover in southwest Seymour; forested areas in southeast and north, sparsely distributed agricultural land	A few residential and commercial/industrial developments are located in the northeast corner of Seymour, along the Housatonic river in the southwestern portion of town, in the northern part of the downtown section of Seymour west of the Naugatuck River and Route 8, along Route 17 east of downtown, and in the northeastern section of Seymour near the Bethany and Woodbridge town lines.	almost all developable parcels surrounding the Route 8 corridor within the VCOG region have been developed to date	
			High-density industrial centers in downtown area, higher density residential and nonresidential land uses situated near the Naugatuck and Housatonic Rivers and the Route 8 corridor; some rural and farmland cover in southwest Seymour; forested areas in southeast and north, sparsely distributed agricultural land	A few residential and commercial/industrial developments are located in the northeast corner of Seymour, along the Housatonic river in the southwestern portion of town, in the northern part of the downtown section of Seymour west of the Naugatuck River and Route 8, along Route 17 east of downtown, and in the northeastern section of Seymour near the Bethany and Woodbridge town lines.	almost all developable parcels surrounding the Route 8 corridor within the VCOG region have been developed to date	
LCR/VCOG			1200 population; 2,000 to 60 people per square mile of land area; Rural community. Historic village concentration area exist in Haddam and Haddam. Subdivisions often involve clusters of rural lots with long, private access driveways. Densest area of residential housing located in Rodgers Lake, including large proportion of seasonal residents.	Continuation of shored and limited undeveloped usable land has created pressure for conversion of seasonal dwelling to year-around homes. Lack of water and sewer has limited conversion but this work is typically in coastal flood zones. Recent development has included primarily single family homes in subdivisions in previous rural areas.	85% of the town's land area is undeveloped, with 21% committed to open space. Substantial acreage in the Nehalem State Forest, Selden Neck State Park, and the Nature Conservancy. New lots are minimum of 2 or 3 acres. Most of town is zoned for low-density residential.	
			Old Lyme	2000 population; 7,400, 304 people per square mile of land area; Haddam Village Center near old ferry crossing on CT River; population typically doubles in the summer months. Primary industrial areas near I-95 Exit 71. Primary commercial area near Exit 70.	The Stockhouse Road/Rocky Drive Commerce Park is the most significant area of commercial/industrial development. The Route 82 corridor in the southern part of town is another area of potential development.	total designated open space = 2,293 acres or 18.1%
New London			Brantham	120 people per square mile;	Colchester attempts to steer most new development in or adjacent to the Town Center. It is likely that Colchester will continue to undergo development in the future and maintain its suburban nature, with a considerable amount of industrial and commercial development.	total designated open space = 6,130 acres or 20.6%
			Colchester	324 people per square mile;	The northern section of the community is rural with increasing development density towards the coastline. Businesses are concentrated in the village centers of Flanders and Naatic, and extend east from Naatic along Route 154, with some marinas located on the Naatic River.	total designated open space = 3,971 acres or 17.8%
			East Lyme	500 people per square mile;	The Franklin Hill and Poppans Hills project collectively includes a golf course and golf course clubhouse (200 acres), 250-unit hotel, health spa, luxury salon, 120 condominium units, and an active adult community of 800 residential units, a community center, a 3,000 square foot bank, a 3,000 square foot pharmacy, and a 2,000 square foot convenience store. Build-out of the project is expected over the next five years.	total designated open space = 3,888 acres or 18.1%
			Franklin	98 people per square mile;	Re focus in most of the town is either maintaining or improving the existing pattern of development, proposed to a population in 2030 is 13,413 (LCCSPC).	total designated open space = 6,390 acres or 28.5%
			Grainfield	323 people per square mile;	Remaining vacant developable land was equal to 3% of the overall land area.	total designated open space = 4,644 acres or 24.5%
			Groton (City)	3,257 people per square mile;	Developable land is present in Groton, and a number of new developments have been proposed within the last few years including apartments, commercial expansions.	total designated open space = 4,644 acres or 24.5%
			Groton (Town)	1,019 people per square mile;	Multi-unit subdivisions are commonly proposed or pending in town and 20 to 40 lots per year are created, opportunities for commercial/industrial development outside the town center may be focused at the Baldwin Hill Industrial Park.	total designated open space = 4,000 acres or 15.9%
			Ledyard	300 people per square mile;	Approximately five to eight new subdivisions have been constructed over the past five years, with four additional subdivisions in the planning stages. A few single family homes have also been built.	total designated open space = 837 acres or 7.8%
			Libra	441 people per square mile;	It is likely that Mountville will continue to be a suburban community in the future, with the majority of its commercial and industrial development focused along I-95 and Route 32 in the eastern half of town.	total designated open space = 4,220 acres or 15.9%
			Mountville	4,441 people per square mile;	The City of New London is nearly fully-developed with the exception of a few areas of dedicated open space. Most development entails the redevelopment of existing properties.	total designated open space = 424 acres or 1.1%
SCCOG			New London	96 people per square mile;	The lack of sewer service limits the size of potential new developments. As the Town wishes to expand commercial development in the vicinity of Interstate 95, a formal agreement with the Town of Stonington may occur in the future. Some private facilities in the southern part of town are already connected to the Stonington sewer system through private agreements.	total designated open space = 11,905 acres or 33.8%
			North Stonington	1,380 people per square mile;	Approximately 528 new housing units were constructed since 2005.	total designated open space = 2,373 acres or 13.2%
			Sorwich	149 people per square mile;	Approximately 180 new housing units were constructed in Preston between 2005 and 2010, but 40% of those were constructed in 2005. No new industry has been developed over the last five years, and new commercial development is limited to a new four-story hotel that is being built on Route 2 near Fowwoods Resort Casino.	total designated open space = 3,099 acres or 15.7%
			Preston	140 people per square mile;	Salem will continue to be a rural-dominant community in the future, with limited industrial and commercial development. The housing stock in Salem consists primarily of single family homes. No housing developments are currently in front of the town. Among others, the NCTCI Update lists the encouragement of affordable housing development in town and the encouragement of cluster/conservation design subdivisions in town.	total designated open space = 6,429 acres or 34.1%
			Salem	216 people per square mile;	Town officials state that a 20 unit subdivision is currently being built on Noah's Way with 17 units currently completed. Additionally, four properties in town were purchased and could soon be developed with homes, while an Active Adult development is proposed off Riverside Drive in the village of Vernalis. The Bulbs Mills property has also undergone redevelopment and may be subject to additional work. Lastly, a former packaging mill which is currently vacant may be purchased and redeveloped. Aside from these potential development projects, very little development is underway in Straggs.	total designated open space = 1,576 acres or 18.7%
Straggs						

County	RPO	Community or Tribe	Types of Land Use/Development Data Included in Plan (SOURCE)	Area of (b) Growth	Other Relevant Information for Land Use & Development
		Stoughton (Borough)	2,132 people per square mile;	Many homes have undergone recent renovation and many have installed flood and wind mitigation measures such as shutters and floodwalls. People: The overall population of the community decreasing slightly between 2000 and 2010; the number of housing units in the community grew by 244 between 2005 and 2010. Several new developments have been constructed or approved since the last RDP including reactor supply stores, hotel, houses, senior housing, or day-care.	total designated open space = 4,367 acres or 19.0%
		Stoughton (Town)	454 people per square mile;	Voluntown will continue to be a rural community in the future, with commercial areas being limited to the Village District along Route 165 near the Town of Griswold. Voluntown has a wide range of small businesses that offer services such as chicken farming, carpentry, construction, antiques, dairy and tree farming, stamp grinding, and pigging. No industry is located in Voluntown.	total designated open space = 4,367 acres or 19.0%
		Voluntown	65 people per square mile;	Development within the town is ongoing and consists of a combination of residential and commercial projects.	total designated open space = 16,537 acres or 65.0%
		Waterford	170 people per square mile;		total designated open space = 3,024 acres or 14.1%
WRCOG		Lebanon	2000 population: 6,007; 128 persons per square mile; Denser residential communities border Lake Williams, Assonet Lake, and Red Cedar Lake. Mainly agricultural and rural. Largely forested.		
CRCOG		Andover	214 persons per square mile; housing units increased 8.3% from 2000 to 2006.	N/A	Rural town; Nathan Hale State Forest; Andover Lake (155 acres) with private recreation area, Davis Chamberlain Nature Preserve. Principal industries include agriculture and small wood and machine shops.
		Bethon	75 persons per square mile; housing units increased 7.2% from 2000 to 2006.	N/A	Rural town. Industries include agriculture, poultry, cream, feeding solvents, candy, and small machine shops.
		Blington	412 persons per square mile; housing units increased 13.8% from 2000 to 2006.	N/A	Growing community. One of the largest agricultural production towns in CT with over 3,000 acres in cultivation.
		Hebron	107 persons per square mile; housing units increased 9.4% from 2000 to 2006.	N/A	Rural community.
		Somers	188 persons per square mile; housing units increased 5.3% from 2000 to 2006.	N/A	Rural town; State of CT Osborn and Northern Correctional Facilities; Industries are agriculture and diversified industries.
		Stafford	164 persons per square mile; housing units increased 8.3% from 2000 to 2006.	N/A	Rural community. Industries include manufacturing and professional services.
		Tolland	1,638 persons per square mile; housing units increased 7.6% from 2000 to 2006.	N/A	Suburban community. Industries include auto/dining, metal surface treatments, biotechnology media production, communications equipment, fire retardant paints, dyeing and finishing of fabrics, plastics, beds and beds, and woodworking.
		Verden	2006: 0% Developed, 1.2% Turf & Grass, 0.5% Other Grasses, 2.6% Agricultural Field, 23.9% Deciduous Forest, 59% Coniferous Forest, 4.9% Water, 0.4% Non-forested Wetland, 2.4% Forested Wetland, 0.3% Barren	% Change from 1985 to 2006: 8.7% Developed, 54.9% Turf & Grass, 10.2% Other Grasses, 3.2% Agricultural Field, 2% Deciduous Forest, 1.2% Coniferous Forest, 0.7% Water, 1.8% Non-forested Wetland, 8.1% Forested Wetland, 10.9% Barren	See regional description in Windham County
NCCCOG		Union	2000 population: 4,971; 232 persons per square mile; Denser residential communities border lakes such as Columbia Lake and Moss Pond. Commercial area along Route 6 and strip malls on Route 66. Largely forested.		
		Columbia	2000 population: 11,500; 85 persons per square mile; Denser residential communities border lakes; Mainly rural with some agriculture; Shopping plaza on Route 44 and Route 31		Summer camp populations significant near Columbia Lake
WRCOG		Croftville	2000 population: 20,250; 89 persons per square mile; Urban concentration in Storrs (CCO) and southeastern corner near Williamsic. Mainly rural with some agriculture and extensive forest now. Commercial areas include East Road Mall. Four Centers Shopping area, and three strip malls		
		Manchester	2000 population: 5,959; 171 persons per square mile; Predominantly rural agricultural and residential. Two commercial areas. Significant forests including Nutmeg and New Haven State Forest		Two seasonal campgrounds which host summer population
Tolland		Ashford	In 2006: 7.4% Developed, 2.6% Turf & Grass, 1.2% Other Grasses, 7% Agricultural Field, 64.6% Deciduous Forest, 10.1% Coniferous Forest, 2.2% Water, 0.4% Non-forested Wetland, 3.9% Forested Wetland, 0.1% Barren	% Change from 1985 to 2006: 11.4% Developed, 49.1% Turf & Grass, 70.1% Other Grasses, 3.9% Agricultural Field, 2.3% Deciduous Forest, 1.4% Coniferous Forest, 11.2% Water, 15.9% Non-forested Wetland, 2.7% Forested Wetland, 54.6% Barren	
		Brooklyn	In 2006: 9.9% Developed, 4.9% Turf & Grass, 2.2% Other Grasses, 12.4% Agricultural Field, 51.3% Deciduous Forest, 6.9% Coniferous Forest, 1.8% Water, 0.5% Non-forested Wetland, 6.6% Forested Wetland, 1.1% Barren, 0.9% Utility (forest)	% Change from 1985 to 2006: 22.4% Developed, 55.2% Turf & Grass, 80.8% Other Grasses, 9.7% Agricultural Field, 5.8% Deciduous Forest, 11.7% Coniferous Forest, 15.8% Water, 4.4% Non-forested Wetland, 1.7% Forested Wetland, 26.6% Barren, 5.6% Utility (forest)	
		Caterbury	In 2006: 6.7% Developed, 3.7% Turf & Grass, 1.8% Other Grasses, 11.3% Agricultural Field, 63.3% Deciduous Forest, 3.3% Coniferous Forest, 1.9% Water, 0.6% Non-forested Wetland, 6.1% Forested Wetland, 1.2% Barren, 0.1% Utility (forest)	% Change from 1985 to 2006: 10.6% Developed, 45.2% Turf & Grass, 82.2% Other Grasses, 2.7% Agricultural Field, 4.6% Deciduous Forest, 7.9% Coniferous Forest, 39.3% Water, 2.1% Non-forested Wetland, 0.7% Forested Wetland, 49.6% Barren, 6.5% Utility (forest)	
		Stafford	In 2006: 6.6% Developed, 2.1% Turf & Grass, 1.4% Other Grasses, 7% Agricultural Field, 52.1% Deciduous Forest, 21.8% Coniferous Forest, 2.3% Water, 0.7% Non-forested Wetland, 3.4% Forested Wetland, 0.4% Barren, 0.2% Utility (forest)	% Change from 1985 to 2006: 18.6% Developed, 51.2% Turf & Grass, 64.2% Other Grasses, 5.7% Agricultural Field, 2.2% Deciduous Forest, 1.1% Coniferous Forest, 15.9% Water, 0% Non-forested Wetland, 1.3% Forested Wetland, 44.9% Barren, 0% Utility (forest)	
		Killingly	In 2006: 15.6% Developed, 4.9% Turf & Grass, 1.8% Other Grasses, 4.3% Agricultural Field, 50.9% Deciduous Forest, 11.3% Coniferous Forest, 4.5% Water, 0.4% Non-forested Wetland, 3.9% Forested Wetland, 1.4% Barren, 0.2% Utility (forest)	% Change from 1985 to 2006: 25.8% Developed, 36.1% Turf & Grass, 34.8% Other Grasses, 16.4% Agricultural Field, 7.2% Deciduous Forest, 6.1% Coniferous Forest, 8.5% Water, 6.2% Non-forested Wetland, 7.1% Forested Wetland, 63.1% Barren, 12.4% Utility (forest)	The Region is characterized by an abundance of streams, rivers, ponds and a few lakes set amongst a heavily forested landscape. Much of the open lands formerly associated with agriculture are entering to a forested state.
		Plainfield	In 2006: 14.7% Developed, 6.2% Turf & Grass, 2.6% Other Grasses, 11.8% Agricultural Field, 47.2% Deciduous Forest, 5.8% Coniferous Forest, 1.5% Water, 1.1% Non-forested Wetland, 6.3% Forested Wetland, 2.4% Barren, 0.3% Utility (forest)	% Change from 1985 to 2006: 33.5% Developed, 42.8% Turf & Grass, 93.5% Other Grasses, 9.1% Agricultural Field, 11.1% Deciduous Forest, 9.4% Coniferous Forest, 17.8% Water, 4.2% Non-forested Wetland, 7% Forested Wetland, 25.1% Barren, 13.7% Utility (forest)	Residential development during the past twenty-five years has been quite dispersed. Until the late growth and population density was focused on the traditional mill villages and town centers. Overall, population density is amongst the lowest in the state, despite having pockets with relatively high density.
		Putnam	In 2006: 7.2% Developed, 3.6% Turf & Grass, 1.4% Other Grasses, 17% Agricultural Field, 57.2% Deciduous Forest, 5.7% Coniferous Forest, 1.5% Water, 1.1% Non-forested Wetland, 4.5% Forested Wetland, 0.2% Barren, 0.4% Utility (forest)	% Change from 1985 to 2006: 13.1% Developed, 56.8% Turf & Grass, 93.6% Other Grasses, 5.5% Agricultural Field, 2.4% Deciduous Forest, 1.9% Coniferous Forest, 16.9% Water, 4.3% Non-forested Wetland, 1.1% Forested Wetland, 3.5% Barren, 1.7% Utility (forest)	
		Putnam	In 2006: 18.3% Developed, 5.6% Turf & Grass, 2.8% Other Grasses, 11.9% Agricultural Field, 41% Deciduous Forest, 11.7% Coniferous Forest, 1.7% Water, 1.7% Non-forested Wetland, 5.7% Forested Wetland, 0% Total Wetland, 3.5% Barren, 0.9% Utility (forest)	% Change from 1985 to 2006: 26.7% Developed, 58.8% Turf & Grass, 23.9% Other Grasses, 5.6% Agricultural Field, 12.6% Deciduous Forest, 12.8% Coniferous Forest, 15.9% Water, 0% Non-forested Wetland, 5% Forested Wetland, 0% Total Wetland, 18.1% Barren, 7.4% Utility (forest)	
		Sterling	In 2006: 7.5% Developed, 3.2% Turf & Grass, 1.9% Other Grasses, 17.8% Agricultural Field, 61.7% Deciduous Forest, 9.3% Coniferous Forest, 0.9% Water, 0.4% Non-forested Wetland, 3.9% Forested Wetland, 1.7% Barren, 0.1% Utility (forest)	% Change from 1985 to 2006: 23.9% Developed, 111.7% Turf & Grass, 117.7% Other Grasses, 1.4% Agricultural Field, 7.3% Deciduous Forest, 3.4% Coniferous Forest, 14.8% Water, 3% Non-forested Wetland, 6.9% Forested Wetland, 100.9% Barren, 0% Utility (forest)	
		Thompson	In 2006: 11% Developed, 3% Turf & Grass, 1.4% Other Grasses, 14.9% Agricultural Field, 47.9% Deciduous Forest, 13.5% Coniferous Forest, 4.3% Water, 1.6% Non-forested Wetland, 6.7% Forested Wetland, 1.2% Barren, 0.3% Utility (forest)	% Change from 1985 to 2006: 19.6% Developed, 34.5% Turf & Grass, 78.9% Other Grasses, 2.5% Agricultural Field, 5.9% Deciduous Forest, 6.7% Coniferous Forest, 4.9% Water, 1.3% Non-forested Wetland, 4.6% Forested Wetland, 96.7% Barren, 4% Utility (forest)	
		Woodstock	In 2006: 8.1% Developed, 3.4% Turf & Grass, 1.7% Other Grasses, 15.9% Agricultural Field, 54.9% Deciduous Forest, 25.9% Coniferous Forest, 2.7% Water, 0.9% Non-forested Wetland, 6% Forested Wetland, 0.3% Barren	% Change from 1985 to 2006: 13% Developed, 39.8% Turf & Grass, 51.1% Other Grasses, 3.7% Agricultural Field, 3.5% Deciduous Forest, 2.3% Coniferous Forest, 14.2% Water, 25.8% Non-forested Wetland, 4.6% Forested Wetland, 49.1% Barren	3,000-acre Natchaug State Forest is potential brush fire site
	WRCOG		Chaplin	2000 population: 2,550; 116 persons per square mile; Predominantly rural and rural, no population centers	
		Hampton	2000 population: 1,758; 76.3 persons per square mile; Small commercial area off Route 6 near Chaplin. No real population concentrations although Main Street is more densely settled		
		Scotland	2000 population: 1,556; 84 persons per square mile; Extremely rural with some agriculture		
	Wadsworth	2000 population: 22,851; 825 persons per square mile; Mainly rural with some agriculture and an urban concentration in Williamsic. Several shopping centers with concentrations in North Wadsworth and Williamsic.		ESU	
Unaffiliated	SCCOG	Machanicus Pequot Tribal Nation	65 people per square mile;	Development primarily occurring on fee lands off of the reservation	
		Molegag Tribe	56 people per square mile;	No industry is located on the reservation. The Machanicus Tribe has several areas that they deem sacred. The majority of these areas are located on the lands outside of the reservation. On the Reservation, Fort Shanno is a place of distinction for the Tribe and is being reserved from development as it is the site of the Tribe's first village in the area, a fortress, a celebration site, and a burial ground. The site is listed on the National Register of Historic Places and is a National Historic Landmark.	

















Some plans provide details on their capability to implement mitigation strategies. If the plan has a capability assessment section please indicate what types of capabilities they have, and indicate the general category with an (X).

County	RPO	Community or Tribe	Capability Assessment						National Flood Insurance Program	NFIP Community Rating System	Notes
			Grant Match	Local Funding	Technical Assistance	Education/ Outreach	Citizen Corp				
Fairfield	GBRC	Bridgeport	X	X	X	X		X	Recommended		
		Easton	X	X	X	X		X	Recommended		
		Fairfield	X	X	X	X		X	Recommended		
		Monroe	X	X	X	X		X	Recommended		
		Stratford	X	X	X	X		X	Recommended		
		Trumbull	X	X	X	X		X	Recommended		
	HVCEO	Bethel									
		Brookfield									
		Danbury	X	X	X	X		X	Joining CRS Recommended		
		New Fairfield	X	X	X	X		X			
		Newtown									
		Redding									
		Ridgefield									
		Sherman	X		X	X		X			
		Darien	X	X	X	X		X			
		Greenwich	X	X	X	X		X			
	SWRPA	New Canaan	X	X	X	X	X - Advisory Committee to prepare the plan. Weston has a local Emergency Planning Committee	X			
		Norwalk	X	X	X	X		X	X		
		Stamford	X	X	X	X		X	X		
		Weston	X	X	X	X		X	X		
		Westport	X	X	X	X		X	X	X	
		Wilton	X	X	X	X		X	X		
		Shelton	X	X	X	X		X	X	Recommended	
	VCOG										
	Hartford	CCRPA	Berlin	X	X	X	X		X		No formal capability assessment section
			Bristol	X	X	X	X		X		No formal capability assessment section
			Burlington	X	X	X	X		X		No formal capability assessment section
New Britain			X	X	X	X		X		No formal capability assessment section	
Plainville			X	X	X	X		X		No formal capability assessment section	
Southington			X	X	X	X		X		No formal capability assessment section	
CRCOG		Avon	X	X	X	X		X		No formal capability assessment section	
		Bloomfield	X	X	X	X		X		No formal capability assessment section	
		Canton	X	X	X	X		X		No formal capability assessment section	
		East Granby	X	X	X	X		X		No formal capability assessment section	
		East Hartford	X	X	X	X		X		No formal capability assessment section	
		East Windsor	X	X	X	X		X		No formal capability assessment section	
		Enfield	X	X	X	X		X		No formal capability assessment section; Town has completed numerous mitigation projects since adoption of the FHMP in 2000.	
		Farmington	X	X	X	X		X		No formal capability assessment section	
		Glastonbury	X	X	X	X		X		No formal capability assessment section	
		Granby	X	X	X	X		X		No formal capability assessment section	
		Hartford	X	X	X	X		X	Recommended	No formal capability assessment section	
		Manchester	X	X	X	X		X		No formal capability assessment section	
		Marlborough	X	X	X	X		X		No formal capability assessment section	
		Newington	X	X	X	X	X	X		No formal capability assessment section	
		Rocky Hill	X	X	X	X		X		No formal capability assessment section	
		Simsbury	X	X	X	X		X		No formal capability assessment section	
		South Windsor	X	X	X	X		X	Recommended	No formal capability assessment section	
		Suffield	X	X	X	X		X		No formal capability assessment section	
West Hartford		X	X	X	X		X	Current, Class 8 (10% discount)	No formal capability assessment section; Town provides outreach to RLPs regarding retrofits and holds regular meetings to provide technical advice to residents on flood protection and preparedness.		
Wethersfield		X	X	X	X		X	Recommended	No formal capability assessment section		
Windsor		X	X	X	X		X	Recommended	No formal capability assessment section		
Windsor Locks		X	X	X	X		X		No formal capability assessment section		
LHCEO		Hartland	X	X	X	X		X			
CCRPA		Plymouth	X	X	X	X		X		No formal capability assessment section	
	COGCVN	Bethlehem				X		X	Joining CRS Recommended		
		Thomaston	X	X	X	X		X	Joining CRS Recommended		
		Watertown	X	X	X	X		X		No formal capability assessment section	
		Woodbury	X	X	X	X		X		No formal capability assessment section	
Litchfield	HVCEO	Bridgewater									
		New Milford									
	LHCEO	Barkhamsted	X	X	X	X		X			
		Colebrook	X	X	X	X		X			
		Goshen	X	X	X	X		X			
		Harwinton	X	X	X	X		X			
		Litchfield	X	X	X	X		X			
		Morris	X	X	X	X		X			
		New Hartford	X	X	X	X		X			
		Norfolk	X	X	X	X		X			
		Torrington	X	X	X	X		X			
		Winchester	X	X	X	X		X			
	NWCOG	Canaan									
		Cornwall									
		Kent									
		North Canaan									
		Roxbury									
		Salisbury									
Sharon											
Warren											
Washington											
Middlesex	LCRVCOG	Chester	X	X	X	X		X		Stricter 10-year limitation for substantial improvements	
		Clinton	X	X	X	X	X	X		Stricter 5-year limitation for substantial improvements	
		Cromwell	X	X	X	X		X			
		Deep River	X	X	X	X		X			
		Durham	X	X	X	X		X			
		East Haddam	X	X	X	X		X			
		East Hampton	X	X	X	X		X			
		Essex	X	X	X	X		X			
		Haddam	X	X	X	X		X			

Some plans provide details on their capability to implement mitigation strategies. If the plan has a capability assessment section please indicate what types of capabilities they have, and indicate the general category with an (X).

County	RPO	Community or Tribe	Capability Assessment						Notes
			Grant Match	Local Funding	Technical Assistance	Education/ Outreach	Citizen Corp	National Flood Insurance Program	
		Killingworth	X	X	X	X		X	
		Middlefield	X	X	X	X		X	
		Middletown	X	X	X	X		X	
		Old Saybrook	X	X	X	X		X	Stricter 5-year limitation for substantial improvements
		Portland	X	X	X	X		X	
		Westbrook	X	X	X	X		X	Current Status is "Recinded" - Class 10 as of 2011 Stricter 5-year limitation for substantial improvements
New Haven	COGNV	Beacon Falls	X	X	X	X		X	Joining CRS Recommended New construction and improvements must be 2 feet above BFE
		Cheshire	X	X	X	X		X	Current Status is "Recinded" - class 10
		Middlebury	X	X	X	X	X	X	Joining CRS Recommended
		Naugatuck	X	X	X	X		X	Joining CRS Recommended New construction and improvements must be 2 feet above BFE
		Oxford	X	X	X	X		X	Joining CRS Recommended
		Prospect	X	X	X	X		X	Joining CRS Recommended
		Southbury	X	X	X	X	X	X	Joining CRS Recommended
		Waterbury	X	X	X	X		X	Joining CRS Recommended
	SCRCOG	Wolcott	X	X	X	X	X	X	Joining CRS Recommended
		Bethany	X	X	X	X		X	
		Branford	X	X	X	X		X	
		East Haven	X	X	X	X	X	X	x (entered but not in use currently)
		Guilford	X	X	X	X	X	X	Joining CRS Recommended
		Hamden	X	X	X	X		X	
		Madison	X	X	X	X		X	
		Meriden	X	X	X	X		X	Joining CRS Recommended
		Milford	X	X	X	X		X	Current, Class 9 (5% discount)
		New Haven	X	X	X	X		X	
		North Branford	X	X	X	X		X	
		North Haven	X	X	X	X		X	
		Orange	X	X	X	X		X	
		Wallingford	X	X	X	X		X	
		West Haven	X	X	X	X		X	
		Woodbridge	X	X	X	X		X	
VCOG	Ansonia	X	X	X	X		X	Recommended	
	Derby	X	X	X	X		X	Recommended	
	Seymour	X	X	X	X		X	Recommended	
New London	LCRVCOG	Lyme	X	X	X	X		X	
		Old Lyme	X	X	X	X		X	
		Bozrah	X	X	X	X		X	
		Colchester	X	X	X	X		X	
	SCCOG	East Lyme	X	X	X	X		X	Current, Class 9 (5% discount)
		Franklin	X	X	X	X		X	
		Griswold	X	X	X	X		X	
		Groton (City)	X	X	X	X		X	
		Groton (Town)	X	X	X	X		X	
		Lesbury	X	X	X	X		X	
		Lisbon	X	X	X	X		X	
		Montville	X	X	X	X		X	
		New London	X	X	X	X		X	
		North Stonington	X	X	X	X		X	
		Norwich	X	X	X	X		X	
		Preston	X	X	X	X		X	
		Salem	X	X	X	X		X	
		Sprague	X	X	X	X		X	
		Stonington (Borough)	X	X	X	X		X	Current, Class 9 (5% discount)
		Stonington (Town)	X	X	X	X		X	Current, Class 9 (5% discount)
	Volantown				X		X		
	WRCOG	Waterford	X	X	X	X		X	Joining CRS Recommended
		Lebanon	X	X	X	X		X	
	Tolland	CRCOG	Andover	X	X	X	X		X
Bolton					X	X		X	No formal capability assessment section; Page 51 notes that financing studies and implementing mitigation measures is a major concern.
Ellington			X	X	X	X		X	No formal capability assessment section
Hebron			X	X	X	X		X	No formal capability assessment section
Somers			X	X	X	X		X	Recommended No formal capability assessment section
Stafford									
NECCOG		Tolland	X	X	X	X		X	Recommended No formal capability assessment section
		Vernon	X	X	X	X		X	Recommended No formal capability assessment section
		Union	X	X	X	X		X	
		Columbia	X	X	X	X		X	
		Coventry	X	X	X	X		X	
		Mansfield	X	X	X	X		X	
		Willington	X	X	X	X		X	
		Ashford	X	X	X	X		X	
WRCOG	Brooklyn	X	X	X	X		X		
	Canterbury	X	X	X	X		X		
	Eastford	X	X	X	X		X		
	Killingly	X	X	X	X		X		
	Plainfield	X	X	X	X		X		
	Pomfret	X	X	X	X		X		
	Putnam	X	X	X	X		X		
	Sterling	X	X	X	X		X		
WRCOG	Thompson	X	X	X	X		X		
	Woodstock	X	X	X	X		X		
	Chaplin	X	X	X	X		X		
	Hampton	X	X	X	X		X		
	Scotland	X	X	X	X		X		
	Windham	X	X	X	X		X		
Unaffiliated	SCCOG	Mashantucket Pequot Tribal Nation	X	X	X	X		X	
		Mohegan Tribe	X	X	X	X		X	

Does the plan have projects that fall into any of these general categories? If so, please indicate what sub-type it is within the general category. Multiple projects within the same category do not have to be denoted, unless they are different sub-types. If you do and paste it in a separate column. We'll be writing about those types of projects separately.

County	RPO	Community or Tribe	Project Type								
			Prevention Measures (Indicate: P-Plan, AS-Alert Systems, S-Structural Prevention, O-Other)	Property Protection Measures (Indicate: A-Acquired, L-Relocated, E-Elevated, R-Regulations, V-Vulnerability Analysis, O-Other)	Emergency Services Measures (Indicate: T-Training, E-Equipment, M-Mapping, D-Data collection, P-Planning, O-Other)	Structural Projects Measures (Indicate: M-Maintenance, N-New Structure, O-Other)	Natural Resource Protection Measures (Indicate: X-Yes)	Public Education and Awareness Measures (Indicate: T-Training, M-Public Meetings, P-Publications, O-Other)	NFIP (Indicate: X-NFIP Projects listed)	Community Rating System (CRS) (Indicate: X-CRS Projects Listed)	
Fairfield	GBRC	Bridgeport	S, AS	E, R	D, M	N, M	X	P	X		
		Easton	AS	E	D	M, N			X		
		Fairfield	S	E, L, R		M	X		X		
		Monroe	S	E		M, N			X		
		Stratford	P, AS, S	R, E	M, D	M, N	X	M	X		
		Trumbull	AS	E	D	M			X		
	HVCEO	Bethel									
		Brookfield									
		Danbury	AS, P, S, O (increase tree inspections)	R, A, E, L, V	E, M, P, D	M, N	X	P, T, M,	X	Joining CRS Recommended	
		New Fairfield	AS, P, S, O (increase tree inspections)	R, A, L,	E, M, P	M, N	X	P, T, M,			
		Newtown									
		Redding									
		Ridgefield									
		Sherman	AS, P, S, O (increase tree inspections)	R, A, L,	E, M, P, D	M, N	X	P, T, M,			
		Darien	P	V, R, E, A	M, P	M, N	X	P, T, M	X		
		SWRPA	Greenwich	AS	R	D, E, M, T	M, N	X	P, M	X	
	New Canaan		AS	A, R	E				X		
	Norwalk		P	V	E, D, M	M	X	P, O, M	X	X	
	Stamford		P, AS	V, A	M, T, E, D		X		X	X	
			AS, P	A, V, E	D, M, E	M	X	p	X		
	Weston										
	Westport		P	A, E, R	P	M	X	P	X	X	
	Wilton	AS, S, P	R	D, T, P	M	X	T, M, P	X			
	VCEO	Shelton	S, P, AS	E, A	M, E, D	M	X	P, O	X	Recommended	
Hartford	CCRPA	Berlin	P, S, O: Page 41-42	A, L, R	P, E, T		X	P, T	X		
		Bristol	S: Page 46-47	R	E	N, O		P, T, O	X		
		Burlington	S, AS: Page 50-52	R	T, E	M		P, T	X		
		New Britain	P: Page 55-56	R	P			P (trilingual), T	X		
		Plainville	P, S: Page 59-60	R	E, T, D			P, T			
		Southington	AS: Page 68-69	R	D, E, P			P, T			
		Avon			P, T, E, D, M				X		
		Bloomfield	P	A	D, M, E, P, T		X	P, O (outreach to property owners to clear debris from streams)			
		Canton	AS	L, A, R, V	D, P	M	X	P	X		
		East Granby	P, S	R, V, L	P, D	M, N	X	T, P	X		
	CRCOG	East Hartford	P, S, AS	V	P, T, D	M, N (including MDC Clean Water Project)		M, T, P	X		
		East Windsor	O (increase public works staff), P	V, O (remove beaver dams); A	D, P, T, E	M, N	X	P	X		
		Enfield		A, R	P, D, E			T	X		
		Farmington	P	V	P, D, E	O (feasibility of roadway elevation and installation of bi-directional culverts).		P	X		
		Glastonbury		R	D, T, P	O (feasibility of bridge elevation)		P	X		
		Granby	P, O (increase tree-trimming budget)	R, L (utilities underground, fire roads and dry hydrant installation)	E, P, O (increase public works funding and contracts to enhance availability)	N (priority bridge projects)		P			
		Hartford	P, AS	V	T, D, P, E	N (including MDC Clean Water Project), M	X	P, M	X	Joining CRS Recommended	
		Manchester	AS, P	V	E, P, D, M	O (New EOC, electrical upgrades to primary shelter); N (upgrade/elevate roads)		P, T	X		
		Marlborough	O (fund staff and labor for snow removal; monitor utility ROW tree maintenance), P		E	M		P, T			
		Newington	O (monitor drainage system maintenance by railroad), P		T	N, M			X		
		Rocky Hill			E, P	N (including storage area for emergency sheltering resources)		P, T	X		
		Simsbury	P, AS	R, A	P, D, E	N	X	T	X	Joining CRS Recommended	
		South Windsor	AS, P	V, R	P, D	M	X	P	X	Joining CRS Recommended	
		Suffield	P, S		P, T, E	M, N		P, T	X		
West Hartford	P		P	M		P, M, T		X			
Wethersfield	O (tree maintenance budget), P	V, L (power lines), R	D, P	N, O (dredging projects), M		T, M, P	X	Joining CRS Recommended			
Windsor	P	V, L (power lines)	P, E, T	N, M		T, M, P	X	Joining CRS Recommended			
Windsor Locks	S	R		N, M			X				
LHCEO	Hartland	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			

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County	RPO	Community or Tribe	Prevention Measures (Indicate: P-Plan, AS-Alert Systems, S-Structural Prevention, O-Other)	Property Protection Measures (Indicate: A-Acquired, L-Relocated, E-Elevated, R-Regulations, V-Vulnerability Analysis, O-Other)	Emergency Services Measures (Indicate: T-Training, E-Equipment, M-Mapping, D-Data collection, P-Planning, O-Other)	Structural Projects Measures (Indicate: M-Maintenance, N-New Structure, O-Other)	Project Type				Community Rating System (CRS) (Indicate: X-CRS Projects Listed)	
							Natural Resource Protection Measures (Indicate: X-Yes)	Public Education and Awareness Measures (Indicate: T-Training, M-Public Meetings, P-Publications, O-Other)	NFIIP (Indicate: X-NFIIP Projects listed)			
Litchfield	CCRPA	Plymouth	P, S, AS, Page 64-66	R, V	P, E, T, D	M, N						
		Bethlehem	O (increase tree inspections), AS, P	R, L (utilities underground, elevate roads, drv hydrants), E, A	O, D, P	N, M	X	P, T, M, O	X	Joining CRS Recommended		
	COGCNV	Thomaston	AS, P, S, O (increase tree inspections)	A, L, R, O	T, P, M	N, M	X	P, T, M, O	X	Joining CRS Recommended		
		Watertown	AS, P, S, O (tree inspections)	A, V	T, P	N, M	X	P	X			
		Woodbury	P	V	T, P	N, M	X	P	X			
	HVCEO	Bridgewater										
		New Milford										
	LHCEO	Barkhamsted	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
		Colebrook	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
		Goshen	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
		Harwinton	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
		Litchfield	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
		Morris	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
		New Hartford	AS, P, S	R, A, V, E, L	P, T, E, M	M, N	X	T, P, M	X			
		Norfolk	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Torrington		AS, P, S	R, A, V, E	P, T, E, M, D	M, N	X	T, P, M	X				
Winchester		AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X				
NWCOG	Canaan											
	Corwall											
	Kent											
	North Canaan											
	Roxbury											
	Salisbury											
	Sharon											
	Warren											
Middlesex	LCRVCOG	Chester	P, S, AS	E (roadway), V, A/O (open space acquisition), R	P, D, M, T	M	X	T, P	X			
		Clinton	S, P, AS	R, E, A (V zones), V	P, D, M, T	N, M	X	P, T, M	X			
		Cromwell	AS, P, O (budget for deadfall removal)	E (River Road, Riversedge Drive), R, O (support residents seeking funding to elevate homes), V	E	N (Levee, River Road), M	X	P, T, M	X			
		Deep River	S, P, AS	A, R, V, E (encourage)	D, M, P, T	M, N	X	P, T	X			
		Durham	AS, P, O (budget for deadfall removal)	V, E (roadways), L (relocate EOC)	E, D, P	N, M	X	P, T, M	X			
		East Haddam	P, O (budget for deadfall removal)	V, A (study 7 properties to acquire for CT River open space)	E	M	X	P, M	X			
		East Hampton	AS, P, O (budget for deadfall removal)		E, D, M, P	N	X	P, M	X			
		Essex	S, P, AS	R, A (when possible), V, E	D, M, P, T	M	X	P, T	X			
		Haddam	P, O (budget for deadfall removal), S	V, E (roadways), L (Town Garage)	D, E, M, P	N	X	P, M				
		Killingworth	P, AS, S	R, V	D, M, P, T	M	X	P	X			
		Middlefield	AS, P, O (budget for deadfall removal)	V (drainage study of Lake Road); E (elevate Lake Road)	E, P	N			X			
		Middletown	P, O (budget for deadfall removal), S	L (Fire Station, bus station, etc.), E (RLPs), A, V	D, E, P	O (Roth Wellfield upgrades, relocate WWTP), M, N	X	P, M	X			
		Old Saybrook	P, S	E (encourage elevation of RLPs, elevate infrastructure), R, V, L (utilities), O (develop plan on how to handle RL properties that want a buyout)	P, D, M, T, E	N, M	X	T, P, M	X			
		Portland	P, O (budget for deadfall removal), AS		E, D, M, T, P	V	X	P, M				
		Westbrook	S, P, AS	R, V, A, E	D, M, P, T	M	X	P, T, M	X	X, but status recinded		
COGCNV	Beacon Falls	O (increase tree inspections), AS, P	A, L, R, O	D, M, P, E, T	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Cheshire	P, AS, O	A, L, R, O	M, D, P, E, T	N, M	X	P	X	X, but status recinded			
	Middlebury	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Naugatuck	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Oxford	AS	A, L, E, V	T, M, E	N, M	X	M, P	X	Joining CRS Recommended			
	Prospect	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Southbury	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Waterbury	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Wolcott	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended			
	Bethany											
Branford												
East Haven	P, AS, O	R, L	T, P, E, M, D	N, M	X	P, M, T, O	X	X, but status recinded				

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County	RPO	Community or Tribe	Project Type								
			Prevention Measures <i>(Indicate: P-Plan, AS-Alert Systems, S-Structural Prevention, O-Other)</i>	Property Protection Measures <i>(Indicate: A-Acquired, L-Relocated, E-Elevated, R-Regulations, V-Vulnerability Analysis, O-Other)</i>	Emergency Services Measures <i>(Indicate: T-Training, E-Equipment, M-Mapping, D-Data collection, P-Planning, O-Other)</i>	Structural Projects Measures <i>(Indicate: M-Maintenance, N-New Structure, O-Other)</i>	Natural Resource Protection Measures <i>(Indicate: X-Yes)</i>	Public Education and Awareness Measures <i>(Indicate: T-Training, M-Public Meetings, P-Publications, O-Other)</i>	NFIP <i>(Indicate: X-NFIP Projects listed)</i>	Community Rating System (CRS) <i>(Indicate: X-CRS Projects Listed)</i>	
New Haven	SCRCOG		P, AS, O	A, L, E, R	T, E, M, D, P	N, M	X	T, M, P, O	X	Joining CRS Recommended	
		Guilford									
		Hamden									
		Madison									
		Meriden	P, AS, O	A, R, V,	T, E, M, D,	N, M	X	P, M, T, O	X	Joining CRS Recommended	
		Milford	P, AS	V	D, M, P, T	N, M	X	P	X	X	
		New Haven	P, AS, S, O	R, V, L, A, E	T, E, D, M,	N, M	X	P,	X		
		North Branford									
		North Haven									
		Orange									
		Wallingford									
		West Haven									
		Woodbridge									
		VCOG	Ansonia	S, P, AS	E, A	M, D	M	X	P, O	X	Recommended
Derby	S, P, AS		R, E, A	M	M	X	P, O	X	Recommended		
Seymour	S, P, AS		E, A	M, D	M	X	P, O	X	Recommended		
New London	SCRCOG	Lyme	P, S, AS	V, R, A	D, M, P, T, E	M	X	P, T	X		
		Old Lyme	P, S, AS	R, V, A, E	D, M, P, T	M	X	P, M	X		
		Bozrah	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		Colchester	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		East Lyme	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X	
		Franklin	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		Griswold	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		Groton (City)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		
		Groton (Town)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		
		Ledyard	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		Lisbon	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		Montville	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
		New London	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		
		North Stonington	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
WRCOG	Norwich	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X			
	Preston	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X			
	Salem	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X			
	Sprague	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X			
	Stonington (Borough)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X		
	Stonington (Town)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X		
	Voluntown	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X			
	Waterford	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X, Joining CRS Recommended		
	Lebanon	S, P, O (increase money for tree maintenance), AS	E, A, R, V	E, D, M	M, N	X	P, O (public access cable channel broadcasts),	X			
	Andover	AS, P		D, M, T, E, P		X					
	Bolton	AS	V, L (power lines)	P, E	N, M		T, M, P				
	Ellington		V, R	E, P		X	M, P				
	Hebron	P	O (encourage dry hydrants), R	P, D	N, M	X	P	X			
	Somers	P	O (encourage new developments to include generators), R (dry hydrants and cisterns)	P (increase sheltering capacity)	O (implement recommendations of Somers Floodplain Management Study), M	X	P	X	Joining CRS Recommended		
Stafford											
Tolland		O (increase funding for tree maintenance), P	V, R, A	E, P, D	N, M	X	T, P, M	X	Joining CRS Recommended		
Vernon		P, AS	V	E	N		T, P, M	X	Joining CRS Recommended		

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							Natural Resource Protection Measures <i>(Indicate: X-Yes)</i>	Public Education and Awareness Measures <i>(Indicate: T-Training, M-Public Meetings, P-Publications, O-Other)</i>	NFIP <i>(Indicate: X-NFIP Projects listed)</i>	Community Rating System (CRS) <i>(Indicate: X-CRS Projects Listed)</i>
	NECCOG	Union	P	R, V	P, M, D, T	M	X	T	X	
		Columbia	S, P, AS	E, A, R, V	E, D, M	M, N	X	P	X	
	WRCOG	Coventry	S, P, AS	E, A, R, V	E, D, M	M, N	X	P, O (public access cable channel broadcasts), T	X	
		Mansfield	S, P, (increase money for tree maintenance), AS	E, A, R, V	E, D, M, P, T	M, N	X	P, O (public access cable channel broadcasts), T	X	
Windham	NECCOG	Willington	S, P	E, A, R, V	E, D, M	M, N	X	P	X	
		Ashford	P	R, V	P, M, D, T, E	M	X	T	X	
		Brooklyn	P	R, V	P, M, D, T, E	M	X	T	X	
		Canterbury	P	R, V	P, M, D, T	M	X	T	X	
		Eastford	P	R, V	P, M, D, T	M, N	X	T	X	
		Killingly	P	R, V	P, M, D, T	M	X	T	X	
		Plainfield	P	R, V	P, M, D, T	M	X	T	X	
		Pomfret	P	R, V	P, M, D, T, E	M	X	T	X	
		Putnam	P	R, V	P, M, D, T, E	M	X	T	X	
		Sterling	P	R, V	P, M, D, T, E	M, N	X	T	X	
	Thompson	P	R, V	P, M, D, T	M, N	X	T	X		
	Woodstock	P	R, V	P, M, D, T	M, N	X	T	X		
	WRCOG	Chaplin	S, P, O (increase funding for tree maintenance), AS	E, A, R, V	E, D, M	M, N	X	P, O (public access cable channel broadcasts), T	X	
		Hampton	S, P, AS	E, A, R, V	E	M, N	X	P	X	
		Scotland	S, P	E, A, R, V	E	M, N	X	P		
Windham		S, P	E, A, R, V	E	M, N		P			
Unaffiliated	SCCOG	Mashantucket Pequot Tribal Nation	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X	
		Mohegan Tribe	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X	

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Community or Tribe	Project Type								Projects that Rock!
	Prevention Measures (Indicate: P-Plan, AS-Alert Systems, S-Structural Prevention, O-Other)	Property Protection Measures (Indicate: A-Acquired, L-Relocated, E-Elevated, R-Regulations, V-Vulnerability Analysis, O-Other)	Emergency Services Measures (Indicate: T-Training, E-Equipment, M-Mapping, D-Data collection, P-Planning, O-Other)	Structural Projects Measures (Indicate: M-Maintenance, N-New Structure, O-Other)	Natural Resource Protection Measures (Indicate: X-Yes)	Public Education and Awareness Measures (Indicate: T-Training, M-Public Meetings, P-Publications, O-Other)	NFIP (Indicate: X-NFIP Projects listed)	Community Rating System (CRS) (Indicate: X-CRS Projects Listed)	
Bridgeport	S, AS	E, R	D, M	N, M	X	P	X		Ox Brook Flood Control project: create a stormwater detention area at the north end of the project in Roger's Park, acquire additional land as needed for creation of the detention area
Easton	AS	E	D	M, N			X		
Fairfield	S	E, L, R		M	X		X		
Monroe	S	E		M, N			X		
Stratford	P, AS, S	R, E	M, D	M, N	X	M	X		Encourage or consider requiring the use of storm shutters along the coastline.
Trumbull	AS	E	D	M			X		
Bethel									
Brookfield									
Danbury	AS, P, S, O (increase tree inspections)	R, A, E, L, V	E, M, P, D	M, N	X	P, T, M,	X	Joining CRS Recommended	Construct the proposed Blind Brook channel improvements scheduled for 2012-2015 as well as acquire homes out of the Blind Brook floodplain and convert to City park space
New Fairfield	AS, P, S, O (increase tree inspections)	R, A, L,	E, M, P	M, N	X	P, T, M,			
Newtown									
Redding									
Ridgefield									
Sherman	AS, P, S, O (increase tree inspections)	R, A, L,	E, M, P, D	M, N	X	P, T, M,			Create new road leading north from Town Center to create 2nd mode of egress
Darien	P	V, R, E, A	M, P	M, N	X	P, T, M	X		
Greenwich	AS	R	D, E, M, T	M, N	X	P, M	X		
New Canaan	AS	A, R	E				X		
Norwalk	P	V	E, D, M	M	X	P, O, M	X	X	
Stamford	P, AS	V, A	M, T, E, D		X		X	X	
Weston	AS, P	A, V, E	D, M, E	M	X	p	X		Conservation Commission should explore LID methodology and, together with the Planning and Zoning Commission, promulgate regulations including strengthening regulations controlling changes in rates and direction of runoff from roadways and lots; encouraging retention of existing forests, outcrops, ridges and stone walls; urging selective rather than clear cutting of trees; and updating the Weston Environmental Resources Manual
Westport	P	A, E, R	P	M	X	P	X	X	
Wilton	AS, S, P	R	D, T, P	M	X	T, M, P	X		
Shelton	S, P, AS	E, A	M, E, D	M	X	P, O	X	Recommended	Pursue acquisition / demolition or elevation of residential structures that suffer flood damage; prioritize RLPs.
Berlin	P, S, O; Page 41-42	A, L, R	P, E, T		X	P, T	X		Acquired one RLP and converted to open space
Bristol	S; Page 46-47	R	E	N, O		P, T, O	X		
Burlington	S, AS; Page 50-52	R	T, E	M		P, T	X		
New Britain	P; Page 55-56	R	P			P (triflingual), T	X		Guidelines governing release of water from dams to avoid dam breakage
Plainville	P, S; Page 59-60	R	E, T, D			P, T			Acquired one RLP and converted to open space
Southington	AS; Page 68-69	R	D, E, P			P, T			
Avon		R	P, T, E, D, M			P	X		
Bloomfield	P	A	D, M, E, P, T		X	P, O (outreach to property owners to clear debris from streams)			
Canton	AS	L, A, R, V	D, P	M	X	P	X		
East Granby	P, S	R, V, L	P, D	M, N	X	T, P	X		
East Hartford	P, S, AS	V	P, T, D	M, N (including MDC Clean Water Project)		M, T, P	X		\$7 million capital improvement program to repair and upgrade CT River levee system; MDC Clean Water Project separating storm and sanitary sewers
East Windsor	O (increase public works staff), P	V, O (remove beaver dams); A	D, P, T, E	M, N	X	P	X		
Enfield		A, R	P, D, E	N, M		T	X		
Farmington	P	V	P, D, E	O (feasibility of roadway elevation and installation of bi-directional culverts).		P	X		
Glastonbury		R	D, T, P	O (feasibility of bridge elevation)		P	X		
Granby	P, O (increase tree-trimming budget)	R, L (utilities underground, fire roads and dry hydrant installation)	E, P, O (increase public works funding and contracts to enhance availability)	N (priority bridge projects)		P			Promote timber management planning with other major landowners to mitigate wildfire risk
Hartford	P, AS	V	T, D, P, E	N (including MDC Clean Water Project), M	X	P, M	X	Joining CRS Recommended	\$10 million capital improvement program to repair and upgrade CT River levee system; MDC Clean Water Project separating storm and sanitary sewers
Manchester	AS, P	V	E, P, D, M	O (New EOC, electrical upgrades to primary shelter); N (upgrade/elevate roads)		P, T	X		
Marlborough	O (fund staff and labor for snow removal; monitor utility ROW tree maintenance), P		E	M		P, T			
Newington	O (monitor drainage system maintenance by railroad), P		T	N, M			X		Implementing the recommendations of 2004 NRCS study to remove/upgrade culverts and floodproof buildings in Stamm Road area
Rocky Hill			E, P	N (including storage area for emergency sheltering resources)		P, T	X		
Simsbury	P, AS	R, A	P, D, E	N	X	T	X	Joining CRS Recommended	
South Windsor	AS, P	V, R	P, D	M	X	P	X	Joining CRS Recommended	
Suffield	P, S		P, T, E	M, N		P, T	X		
West Hartford	P		P	M		P, M, T			Annual "Flood Hazard Information Week"
Wethersfield	O (tree maintenance budget), P	V, L (power lines), R	D, P	N, O (dredging projects), M		T, M, P	X	Joining CRS Recommended	
Windsor	P	V, L (power lines)	P, E, T	N, M		T, M, P	X	Joining CRS Recommended	
Windsor Locks	S	R		N, M			X		
Hartland	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X		

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Community or Tribe	Project Type									Projects that Rock!
	Prevention Measures (Indicate: P-Plan, AS-Alert Systems, S-Structural Prevention, O-Other)	Property Protection Measures (Indicate: A-Acquired, L-Relocated, E-Elevated, R-Regulations, V-Vulnerability Analysis, O-Other)	Emergency Services Measures (Indicate: T-Training, E-Equipment, M-Mapping, D-Data collection, P-Planning, O-Other)	Structural Projects Measures (Indicate: M-Maintenance, N-New Structure, O-Other)	Natural Resource Protection Measures (Indicate: X-Yes)	Public Education and Awareness Measures (Indicate: T-Training, M-Public Meetings, P-Publications, O-Other)	NFIP (Indicate: X-NFIP Projects listed)	Community Rating System (CRS) (Indicate: X-CRS Projects Listed)		
Plymouth	P, S, AS, Page 64-66	R, V	P, E, T, D	M, N		P, T, O	X			
Bethlehem	O (increase tree inspections), AS, P	R, L (utilities underground, elevate roads, drv hydrants), E, A	O, D, P	N, M	X	P, T, M, O	X	Joining CRS Recommended		Upgrade town-owned Class B dam to pass 100-year flood event
Thomaston	AS, P, S, O (increase tree inspections)	A, L, R, O	T, P, M	N, M	X	P, T, M, O	X	Joining CRS Recommended		Create or assign a new shelter facility outside of dam failure inundation areas of Class C dams
Watertown	AS, P, S, O (tree inspections)	A, V	T, P	N, M	X	P	X			
Woodbury	P	V	T, P	N, M	X	P	X			Stream bank stabilization project; raise roadway;
Bridgewater										
New Milford										
Barkhamsted	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Colebrook	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Goshen	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Harwinton	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Litchfield	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Morris	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
New Hartford	AS, P, S	R, A, V, E, L	P, T, E, M	M, N	X	T, P, M	X			
Norfolk	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Torrington	AS, P, S	R, A, V, E	P, T, E, M, D	M, N	X	T, P, M	X			Install gauges along the Naugatuck River to better monitor river levels during flooding events
Winchester	AS, P, S	R, A, V, E	P, T, E, M	M, N	X	T, P, M	X			
Canaan										
Cornwall										
Kent										
North Canaan										
Roxbury										
Salisbury										
Sharon										
Warren										
Washington										
Chester	P, S, AS	E (roadway), V, AO (open space acquisition), R	P, D, M, T	M	X	T, P	X			
Clinton	S, P, AS	R, E, A (V zones), V	P, D, M, T	N, M	X	P, T, M	X			
Cromwell	AS, P, O (budget for deadfall removal)	E (River Road, Riverside Drive), R, O (support residents seeking funding to elevate homes), V	E	N (Levee, River Road), M	X	P, T, M	X			Raise road or build levee in River Road area to reduce residential flooding
Deep River	S, P, AS	A, R, V, E (encourage)	D, M, P, T	M, N	X	P, T	X			
Durham	AS, P, O (budget for deadfall removal)	V, E (roadways), L (relocate EOC)	E, D, P	N, M	X	P, T, M	X			
East Haddam	P, O (budget for deadfall removal)	V, A (study 7 properties to acquire for CT River open space)	E	M	X	P, M	X			Study acquisition of seven floodprone properties along CT River to convert to open space
East Hampton	AS, P, O (budget for deadfall removal)		E, D, M, P	N	X	P, M	X			
Essex	S, P, AS	R, A (when possible), V, E	D, M, P, T	M	X	P, T	X			
Haddam	P, O (budget for deadfall removal), S	V, E (roadways), L (Town Garage)	D, E, M, P	N	X	P, M	X			
Killingworth	P, AS, S	R, V	D, M, P, T	M	X	P	X			
Middlefield	AS, P, O (budget for deadfall removal)	V (drainage study of Lake Road), E (elevate Lake Road)	E, P	N			X			Installation of larger culverts or elevate Lake Road, the only access to hundreds of homes in Lake Besek area
Middletown	P, O (budget for deadfall removal), S	L (Fire Station, bus station, etc.), E (RLPs), A, V	D, E, P	O (Roth Wellfield upgrades, relocate WWTP), M, N	X	P, M	X			City to buyout five properties on Nejako Drive with conversion to open space
Old Saybrook	P, S	E (encourage elevation of RLPs, elevate infrastructure), R, V, L (utilities), O (develop plan on how to handle RL properties that want a basement)	P, D, M, T, E	N, M	X	T, P, M	X			Construct public pool to enhance swimming ability of emergency responders and residents!
Portland	P, O (budget for deadfall removal), AS		E, D, M, T, P	V	X	P, M				
Westbrook	S, P, AS	R, V, A, E	D, M, P, T	M	X	P, T, M	X	X, but status recinded		
Beacon Falls	O (increase tree inspections), AS, P	A, L, R, O	D, M, P, E, T	N, M	X	P, T, M, O	X	Joining CRS Recommended		Upgrade utilities and place underground on Main Street between the Police Station and Exit 23 off Route 8 to prevent future damage from flooding;
Cheshire	P, AS, O	A, L, R, O	M, D, P, E, T	N, M	X	P	X	X, but status recinded		Excavate East Sindall stream to a depth of 30 inches to restore original capacity reduced by debris deposition from upstream erosion, work downstream of Allen Ave along the property at 815 Allen Ave
Middlebury	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended		
Naugatuck	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended		
Oxford	AS	A, L, E, V	T, M, E	N, M	X	M, P	X	Joining CRS Recommended		
Prospect	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended		
Southbury	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended		Acquisitions throughout town
Waterbury	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended		City-wide stormwater upgrades (vast areas of the city do not have storm drainage systems)
Wolcott	P, AS, O	A, L, R, O	M, P, T, E, D	N, M	X	P, T, M, O	X	Joining CRS Recommended		
Bethany										
Branford										
East Haven	P, AS, O	R, L	T, P, E, M, D	N, M	X	P, M, T, O	X	X, but status recinded		Develop EOP's for various dams; acquisitions and elevations along the shoreline and along the Farm River

Does the plan have projects that fall into any of these general categories? If so, please indicate what sub-type it is within the general category. Multiple projects within the same category do not have to be denoted, unless they are different sub-types. If you come across a specific project that really rocks and is totally awesome and unique, please call it out and paste it in a separate column. We'll be writing about those types of projects separately.

Community or Tribe	Project Type								Projects that Rock!
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Guilford	P, AS, O	A, L, E, R	T, E, M, D, P	N, M	X	T, M, P, O	X	Joining CRS Recommended	Make the community center more resilient as the shelter or make the new high school a shelter; Relocate the Public Works Facility outside a flood zone and hurricane surge zone; Stabilize slopes and lake edge along Route 77 to prevent further erosion of the road; elevate numerous floodprone roads; continue with coastal resilience planning.
Hamden									
Madison									
Meriden	P, AS, O	A, R, V	T, E, M, D	N, M	X	P, M, T, O	X	Joining CRS Recommended	Implement the Harbor Brook Flood Mitigation Improvements
Milford	P, AS	V	D, M, P, T	N, M	X	P	X	X	Dredging project at Wepawaug River/Eisenhower Park
New Haven	P, AS, S, O	R, V, L, A, E	T, E, D, M	N, M	X	P	X		Install a spillway to the west of the Pond Lily dam to prevent flooding problems at this location, which are also impacting the Town of Woodbridge; raise elevation of Quinnipiac Ave when it crosses Hemingway Creek
North Branford									
North Haven									
Orange									
Wallingford									
West Haven									
Woodbridge									
Ansonia	S, P, AS	E, A	M, D	M	X	P, O	X	Recommended	Pursue acquisition / demolition or elevation of residential structures that suffer flood damage; prioritize RLPs.
Derby	S, P, AS	R, E, A	M	M	X	P, O	X	Recommended	Pursue acquisition / demolition or elevation of residential structures that suffer flood damage; prioritize RLPs. Implement drainage improvements to the Gilbert Street area to reduce flooding; acquire properties as needed to facilitate
Seymour	S, P, AS	E, A	M, D	M	X	P, O	X	Recommended	Pursue acquisition / demolition or elevation of residential structures that suffer flood damage; prioritize RLPs.
Lyme	P, S, AS	V, R, A	D, M, P, T, E	M	X	P, T	X		
Old Lyme	P, S, AS	R, V, A, E	D, M, P, T	M	X	P, M	X		
Bozrah	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Colchester	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		Work with the homeowners at the end of Caverly Mill Road to formally abandon the road and convert it into a private driveway. The town will continue to warn the two homeowners prior to significant storms of the likelihood of flooding. This recommendation remains from the 2005 Hazard Mitigation Plan Annex, but was mistakenly referred to as the "Savin's Pond" bridge
East Lyme	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X	Consider removing a small dam located between Route 1 and Interstate 95 on Latimer Brook if lowering the water surface elevation will help reduce flooding along Route 1
Franklin	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Griswold	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Groton (City)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		Pursue HMGP funding to construct a flood wall around the WWTP to resolve inundation issues; In order to protect areas with marina uses (and preclude heavier marine commercial or industrial uses), consider establishing a new recreational boating zoning classification that would prevent replacing water-dependent uses with residential uses.
Groton (Town)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		Work with the City of Groton to create an open space corridor along Birch Plain Creek (called the "Greenbreak") and add land to the existing Birch Plain Creek Park; Install appropriately designed flood/tide gates at locations such as Groton Long Point and Mumford Cove, with considerations for sea level rise built into the design.
Ledyard	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Lisbon	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Montville	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
New London	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		Relocate the Fire Department headquarters from the flood zone; Pursue improvements to the Shaw's Cove pumping system to allow greater flood control through stormwater pumping
North Stonington	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Norwich	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		Pursue grant funding for the acquisition of Nutmeg Company, Inc. along the Yantic River and other commercial properties adjacent to the Yantic River and convert the properties to open space; Remove the Upper Falls dam on the Yantic River to eliminate backwater at Sherman Street during flood conditions;
Preston	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X		
Salem	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		Pursue funding to install floodproofing measures, including elevations, acquisitions, and/or flood walls, to resolve the inundation problem affecting the area behind the "Salem Town Center" strip mall at the southwest corner of Routes 82 and 85 is in the SFHA of Harris Brook.
Sprague	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		Pursue funding sources for the addition of a generator for the village of Hanover Sewer Pumping Station; Consider options available to elevate wells in the Sprague Water and Sewer Authority wellfield above the Shetucket River SFHA elevation; Look to acquire an additional approximate 230 acres to add to its approximate 630 acres of open space.
Stonington (Borough)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X	
Stonington (Town)	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X	Consider investigating the scale and cost of a large-scale diking project to protect Mystic from inland and coastal flooding
Voluntown	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Waterford	P, AS, S	R, V, A, E	T, E, D, M, P	N, M	X	P, T	X	X, Joining CRS Recommended	Replace culverts and/or elevate sections of Gardiners Wood Road, Route 156, Route 213, Braman Road, Oil Mill Road, Niles Hill Road, and Boston Post Road.
Lebanon	S, P, O (increase money for tree maintenance), AS	E, A, R, V	E, D, M	M, N	X	P, O (public access cable channel broadcasts)	X		
Andover	AS, P		D, M, T, E, P		X	T, M, P			
Bolton	AS	V, L (power lines)	P, E	N, M		T, M, P			
Ellington		V, R	E, P		X	M, P			
Hebron	P	O (encourage dry hydrants), R	P, D	N, M	X	P	X		
Somers	P	O (encourage new developments to include generators), R (dry hydrants and cisterns)	P (increase sheltering capacity)	O (implement recommendations of Somers Floodplain Management Study), M	X	P	X	Joining CRS Recommended	
Stafford									
Tolland	O (increase funding for tree maintenance), P	V, R, A	E, P, D	N, M	X	T, P, M	X	Joining CRS Recommended	
Vernon	P, AS	V	E	N		T, P, M	X	Joining CRS Recommended	

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Union	P	R, V	P, M, D, T	M	X	T	X		
Columbia	S, P, AS	E, A, R, V	E, D, M	M, N	X	P	X		
Coventry	S, P, AS	E, A, R, V	E, D, M	M, N	X	P, O (public access cable channel broadcasts), T	X		
Mansfield	S, P, (increase money for tree maintenance), AS	E, A, R, V	E, D, M, P, T	M, N	X	P, O (public access cable channel broadcasts), T	X		
Wilmington	S, P	E, A, R, V	E, D, M	M, N	X	P			
Ashford	P	R, V	P, M, D, T, E	M	X	T	X		
Brooklyn	P	R, V	P, M, D, T, E	M	X	T	X		
Canterbury	P	R, V	P, M, D, T	M	X	T	X		
Eastford	P	R, V	P, M, D, T	M, N	X	T	X		
Killingly	P	R, V	P, M, D, T	M	X	T	X		
Plainfield	P	R, V	P, M, D, T	M	X	T	X		
Pomfret	P	R, V	P, M, D, T, E	M	X	T	X		
Putnam	P	R, V	P, M, D, T, E	M	X	T	X		
Sterling	P	R, V	P, M, D, T, E	M, N	X	T	X		
Thompson	P	R, V	P, M, D, T	M, N	X	T	X		
Woodstock	P	R, V	P, M, D, T	M, N	X	T	X		
Chaplin	S, P, O (increase funding for tree maintenance), AS	E, A, R, V	E, D, M	M, N	X	P, O (public access cable channel broadcasts), T	X		
Hampton	S, P, AS	E, A, R, V	E	M, N	X	P	X		
Scotland	S, P	E, A, R, V	E	M, N	X	P			
Windham	S, P	E, A, R, V	E	M, N		P			
Mashantucket Pequot Tribal Nation	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		
Mohegan Tribe	P, AS, S	R, V	T, E, D, M, P	N, M	X	P, T	X		

Region wide: An inventory and threat calculation of beaver created dams within the Region is needed to understand their number and potential hazard threat. Based on results - a list of priorities for the management of these dams should be developed. Putnam: Simonzi Park Streambank Stabilization - approximately 1,000 feet on the Quinebaug River fronting Simonzi Park. River is causing significant erosion that, if not corrected, will endanger Simonzi Park, the Putnam River Trail, Kennedy Drive, and water and sewer lines. Engineering design and plans have been completed.

# Mitigation Strategy

## Appendix 5

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<b>APPENDIX 5-1. MITIGATION PRIORITIZATION CRITERIA</b>	<b>2</b>
<b>APPENDIX 5-2. MITIGATION ACTIVITIES TRACKER FOR 2013 - 2016</b>	<b>4</b>
<b>APPENDIX 5-3. MITIGATION FUNDING</b>	<b>5</b>
<b>APPENDIX 5-4. REPORT ON PAST CT NHMP ACTIVITIES</b>	<b>6</b>

## Appendix 5-1. Mitigation Prioritization Criteria

<b>S</b> Social	<ul style="list-style-type: none"> <li>• Is the proposed action socially acceptable to the community(s)?</li> <li>• Are there equity issues involved that would mean that one segment of a community is treated unfairly?</li> <li>• Will the action cause social disruption?</li> </ul>
<b>T</b> Technical	<ul style="list-style-type: none"> <li>• Will the proposed action work?</li> <li>• Will it create more problems than it solves?</li> <li>• Does it solve a problem or only a symptom?</li> <li>• Is it the most useful action in light of other community(s) goals?</li> </ul>
<b>A</b> Administrative	<ul style="list-style-type: none"> <li>• Can the community(s) implement the action?</li> <li>• Is there someone to coordinate and lead the effort?</li> <li>• Is there sufficient funding, staff, and technical support available?</li> <li>• Are there ongoing administrative requirements that need to be met?</li> </ul>
<b>P</b> Political	<ul style="list-style-type: none"> <li>• Is the action politically acceptable?</li> <li>• Is there public support both to implement and to maintain the project?</li> </ul>
<b>L</b> Legal	<ul style="list-style-type: none"> <li>• Is the community(s) authorized to implement the proposed action? Is there a clear legal basis or precedent for this activity?</li> <li>• Are there legal side effects? Could the activity be construed as a taking?</li> <li>• Is the proposed action allowed by a comprehensive plan, or must a comprehensive plan be amended to allow the proposed action?</li> <li>• Will the community(s) be liable for action or lack of action?</li> <li>• Will the activity be challenged?</li> </ul>
<b>E</b> Environmental	<ul style="list-style-type: none"> <li>• How will the action affect the environment?</li> <li>• Will the action need environmental regulatory approvals?</li> <li>• Will it meet local and state regulatory requirements?</li> <li>• Are endangered or threatened species likely to be affected?</li> </ul>
<b>E</b> Economic	<ul style="list-style-type: none"> <li>• What are the costs and benefits of this action?</li> <li>• Do the benefits exceed the costs?</li> <li>• Are initial, maintenance, and administrative costs taken into account?</li> <li>• Has funding been secured for the proposed action? If not, what are the potential funding sources (public, non-profit, and private)?</li> <li>• How will this action affect the fiscal capability of the community(s)?</li> <li>• What burden will this action place on the tax base or local economy?</li> <li>• What are the budget and revenue effects of this activity?</li> <li>• Does the action contribute to other community goals, such as capital improvements or economic development?</li> <li>• What benefits will the action provide?</li> </ul>

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring, negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the "expert" or source to consult to help you evaluate the criterion.

Goal: \_\_\_\_\_

Objective: \_\_\_\_\_

STAPLEE Criteria	S (Social)		T (Technical)			A (Administrative)		P (Political)			L (Legal)		E (Economic)			E (Environmental)							
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/Waste Sites	Consistent with Community Environmental Goals	Consistent with Federal Laws
Considerations →  for Alternative Actions ↓																							

Source: Federal Emergency Management Agency. 2003. *State and Local Mitigation Planning How-To Guide: Developing the Mitigation Plan – Identifying Mitigation Actions and Implementation Strategies*. FEMA. [http://www.fema.gov/fima/planning\\_howto3.shtm](http://www.fema.gov/fima/planning_howto3.shtm)

## **Appendix 5-2. Mitigation Activities Tracker for 2013 - 2016**

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
1	1.1	Provide model ordinances and sample higher standards language that communities can adopt into existing floodplain ordinances.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	Continuous, updated as required				
2	1.1	Conduct technical transfer and training associated with current extreme rainfall data.	USDA / Natural Resources Conservation Service	DEEP / Inland Water Resources	Staff time	Agency Operating Budgets	1-2 years				
3	1.1	Conduct technical transfer and training associated with available LiDAR data.	USDA / Natural Resources Conservation Service	DEEP / Inland Water Resources	Staff time	Agency Operating Budgets	1-2 years				
4	1.1	Encourage municipalities to adopt local water use restriction ordinances to ensure that proper water conservation measures are implemented during periods of severe to extreme drought and other water emergencies, in line with the Connecticut Drought Preparedness and Response Plan.	DPH / Drinking Water Section	Water Planning Council	Staff time; minimal expense for outreach materials	Agency Operating Budgets	Continuous, but particularly during drought conditions or other water emergencies				
5	1.1	Launch an outreach campaign to promote FEMA's Community Rating System (CRS) as a means for local communities to soften the likely increase in many flood insurance policy rates resulting from new reforms to the National Flood Insurance Program (NFIP) enacted by the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12).	DEEP / Inland Water Resources / Flood Management Section		Staff time; minimal expense for outreach materials	Agency Operating Budgets	1 Year				
6	1.1	Encourage local hazard mitigation plans to consider continuity of agricultural operations during and following hazard events.	DESPP / Emergency Management and Homeland Security		Staff time; minimal expense for outreach materials	Agency Operating Budgets	Continuous, especially as local plans are submitted for State review				X
7	1.2	Communicate the importance of natural hazard mitigation to agricultural producers through the Department of Agriculture's weekly newsletter. This would consist of articles with links to useful websites such as DEEP and "ReadyAg" (available from PSU website).	DAG / Bureau of Agricultural Development & Resource Preservation		Staff time; minimal expense for outreach materials	Agency Operating Budgets	6 months, then annually thereafter	X	X	X	X
8	1.2	Develop a body of canned presentations and short workshop educational materials that could be utilized on a scheduled basis. While these could be developed for multiple hazards, the emphasis of this activity is on flood mitigation and climate change adaptation.	DEEP / Inland Water Resources/ Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time; minimal expense for outreach materials	Agency Operating Budgets	Dependent on available resources and funding				
9	1.2	Investigate the possibility of holding the CFM exam on an annual basis for interested persons.	DEEP / Inland Water Resources/ Flood Management Section		Staff time	Agency Operating Budgets	1 year				
10	1.2	Investigate the possibility of holding an annual short CFM refresher course for interested persons who desire to take the CFM exam.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	1 year, in combination with above activity				
11	1.2	Develop educational materials on successful hazards mitigation projects, and integrate these with other readily available online resources such as StormSmart Coasts, etc.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources and Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	Dependent on available resources and funding	X	X	X	X
12	1.2	Investigate the development of a series of training media products that introduce, explain, and train interested persons on natural hazards, mitigation, NFIP program, reading flood maps, federal-state grant programs and other related issues	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management and Homeland Security; DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1 year	X	X	X	X

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
13	1.2, 1.3, 3.2	Develop educational tools to inform decision makers on the value of acquiring, maintaining, and increasing climatological data collection, including hydrologic (e.g. stream gage) data, and the continuation of OLISP's sentinel monitoring program to help provide early warning of climate change impacts. This activity is linked to Activity #28.	CHMC and Water Planning Council	DEEP / Inland Water Resources and Office of Long Island Sound Programs	Staff time; minimal expense for outreach materials	Agency Operating Budgets	1-2 years	X	X	X	X
14	1.3	Develop regulations and implementation guidance, and public outreach materials, for new legislation requiring inundation maps and Emergency Action Plans (EAPs) for high and significant hazard dams.	DEEP / Inland Water Resources / Dam Safety Section		Staff time; minimal expense for outreach materials	Agency Operating Budgets	Dependent on available resources and funding				
15	1.3	Develop a Statewide Repetitive Loss Strategy to mitigate and reduce the number of repetitive loss properties.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources / Flood Management Section	\$20-40k	FEMA (FMA, PDM, or HMGP); in-kind staff resources	1-2 years				
16	1.3	Based on future forecast modeling for increased precipitation, storminess, and sea level rise, develop and propose policies to reduce risks for new development, including consideration towards relocating structures or reducing existing hazards within inundation areas with increasing risk. Policies should also address appropriate use of federal and state mitigation monies.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	1-2 years				
17	1.4	Identify partners to help complete acquisition of LiDAR (processed to 1' contours or better) for 100% state coverage.	OPM	DEEP / Inland Water Resources	Staff time	Agency Operating Budgets	1 Year				
18	1.4	Support the State-level Cultural and Natural Resources Recovery Function to increase resiliency of cultural and natural resources from disasters.	LTR Committee	DESPP / Emergency Management & Homeland Security; DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	Continuous	X	X	X	X
19	1.4	Implement and institutionalize a coordination program similar to the USACE's "Silver Jackets" between all federal and state agencies, including: NRCS, FEMA, USACE, Long Term Recovery Committee, Natural and Cultural Resources task force, etc.	DOI	DECD, USGS	Staff time	Agency Operating Budgets	2 years	X	X	X	X
20	1.4	Support and implement State-level Hurricane Sandy Supplemental Funding "Implementation Strategy" to facilitate interagency coordination between state and federal agencies.	LTR Committee	DESPP / Emergency Management & Homeland Security	TBD	Hurricane Sandy Supplemental Funding	6 months	X			
21	2.1	Develop implementation strategy for Public Act 13-15, which requires consideration of the ways in which a water pollution control project mitigates the effects of sea level rise. The Act also requires that the list of priority water quality projects include the necessity and feasibility of implementing measures designed to mitigate the impact of a rise in sea level over the projected life span of such project.	DEEP / Planning and Standards Division / Municipal Water Pollution Control Section	DEEP / Office of Long Island Sound Programs	Estimated at \$100 million.	CT Clean Water Fund	Ongoing as Water Pollution Control Facilities are upgraded. Generally on a thirty year cycle. Actual call for projects will occur during SFY- 14.	X			
22	2.1	Develop project category priorities for hazard mitigation funding administered by the State regardless of funding source, and then design consistent evaluation criteria to be used during application reviews for various programs as required (i.e., HMGP Administrative Plan), recognizing there will be differences in program eligibility, etc.	DESPP / Emergency Management & Homeland Security	DAS / Division of Construction Services	Staff time	Agency Operating Budgets	Continuous, updated as required	X	X	X	X

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
23	2.1	Through communications with other state agencies and communities with FEMA-approved Natural Hazard Mitigation Plans, develop a list of potential mitigation projects that can be maintained and assessed for further development upon availability of funding sources. This will also help assist in future NHMP planning by identifying when areas and facilities of concern exist.	DESPP / Emergency Management & Homeland Security	DAS / Division of Construction Services	Staff time	Agency Operating Budgets	Continuous, updated as required	X	X	X	X
24	2.1	Investigate the opportunity for FEMA to re-calculate the Cost/Benefit Analysis used in grant applications such that relocation of homes outside of floodplains is more frequently feasible in the context of hazard mitigation projects.	DEEP / Inland Water Resources	DESPP / Emergency Management & Homeland Security, in coordination with FEMA	Staff time	Agency Operating Budgets	1-2 years	X	X	X	X
25	2.2	Acquire and install emergency backup generators at state-owned critical facilities.	DAS / Division of Construction Services	DESPP / Emergency Management & Homeland Security; in coordination with FEMA	<\$75k/ generator	FEMA (HMGP)	5 years	X	X	X	X
26	2.2	Conduct phragmites control/invasive plant control (herbicide and mowing) on state-owned land tidal and freshwater marshes to reduce fuel load and wildfire risk in tidal areas. Phragmites for three year period to control this invasive species. Reduce phragmites by 50% in year one; 40% in year two; 10% in year three with 100% reduction after three years.	DEEP / Bureau of Natural Resources	DAS / Division of Construction Services	\$600/acre  Total estimated cost is \$2.7 million over three years	TBD	3 years				
27	2.3	Continue to provide communities with tools to support improved local vulnerability and risk assessments to support hazard mitigation planning and the development of fundable hazard mitigation projects. Build on successful delivery of online Adaptation Resource Toolkit (ART) and related training workshops.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources / Flood Management Section and Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	Continuous	X	X	X	X
28	2.3	Convene a forum of state agencies to coordinate assess and evaluate gaps in climatological data, to establish priorities, and to identify strategies to secure funding for necessary enhancements. This activity is linked to Activities #13 and #39.	DPH	DEEP / Inland Water Resources, Water Planning Council	Staff time	Agency Operating Budgets	1 year	X	X	X	X
29	2.3	Promote the capture and use of hydrologic monitoring data for improved Benefit-Cost Analysis (BCA) model population at the state and local level (e.g. high water marks, gage data, historical damages from all events, recurrence intervals, etc). Also, expand efforts to include similar data for other hazards, and include the quantification of environmental benefits (according to FEMA Mitigation Policy #FP-108-024-01) to increase Benefit to Cost Ratios for eligible projects.	DESPP / Emergency Management & Homeland Security		N/A	N/A	Continuous, as data becomes available and in conjunction with BCA reviews				
30	2.3	Encourage owners/operators of critical facilities, such as municipal wastewater treatment plants, to pursue grant funds to elevate, relocate, floodproof, or otherwise protect electrical and mechanical systems to minimize or eliminate service disruption during and after potential hazard events.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	Conduct outreach on an annual basis, and incorporate into all notifications of funding availability	X			X
31	2.4	Create a central repository and web-based portal dedicated to identifying and procuring funding from all available sources. This activity is linked to Activity #33.	Governor's Office	LTR Committee	Staff time	Agency Operating Budgets	1 year	X	X	X	X
32	2.4	Upon completion of DOT's systems-level vulnerability assessment in support of the Climate Change and Extreme Weather pilot project, allocate funds for increasing capacities of selected culverts in state roads. This activity is linked to Activity #44.	DOT		TBD	Agency Operating Budgets, FHWA	5 years			X	

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
33	2.4	Through working with the State NHMP Planning Team, develop a list of potential funding sources available on a state and federal level for natural hazards mitigation planning activities and projects. This activity is linked to Activity #31.	DESPP / Emergency Management & Homeland Security	DEEP / Inland Water Resources / Flood Management Section and Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1 year	X	X	X	X
34	2.4	Encourage communities and state agencies to pursue funding opportunities to develop advanced research and plans in the area of natural hazards mitigation. Planning activities included under this section would be: stand alone plans which can assist in enhancing existing Natural Hazards Mitigation Plans (e.g., debris management plans, evacuation and sheltering plans, hazards studies and evaluations (including recommendations) which are not part of existing approved plans).	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	Continuous	X	X	X	X
35	2.4	Develop a State Climate Change Science plan to measure the rate of climate change including sea level rise, evapotranspiration increase, etc. as being tracked through OLISP's sentinel monitoring program, to support climate change adaptation planning and transportation Natural Hazards Mitigation Planning activities and research. Specific tasks include (1) consolidating climatological and ecological data which could be done by OLISP/WPC/USGS/UCONN; and 2) secure and leverage funding for enhanced Sentinel Monitoring for Climate Change program and development of a State Climate Science Plan which should be DEEP and UCONN. This activity is linked with Activity #45.	DEEP / Office of Long Island Sound Programs	Water Planning Council; USGS; University of Connecticut; DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	3 years	X	X	X	X
36	2.4	Encourage communities to pursue funding opportunities to develop FEMA approved Natural Hazards Mitigation Plans which promote the integration of climate adaptation strategies with conventional hazard mitigation techniques.	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management & Homeland Security; DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	Continuous	X	X	X	X
37	2.5	Maintain a tracking system of submitted FEMA grant project/planning applications, to help analyze the types of projects and the mitigation needs that continue to exist within the State.	DESPP / Emergency Management & Homeland Security		\$60-80k	FEMA (HMGP)	1-2 years	X	X	X	X
38	2.5	Develop an evaluation process and implement said process to measure the results from the implementation of various activities as listed in the State NHMP.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	1 year	X	X	X	X
39	3.1	Pursue Federal funding to establish additional stream gauges for flood and drought planning purposes. This activity is linked to Activity #28.	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management & Homeland Security	Staff time	Agency Operating Budgets	1 year				
40	3.1	Continue planning and development of a database to assist with the storage and maintenance of risk and hazard information from local and multi-jurisdictional hazard mitigation plans.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	Dependent on available resources	X	X	X	X
41	3.1	Encourage municipalities to conduct watershed-based hydrologic and hydraulic studies to evaluate potential flood mitigation alternatives along river and stream corridors.	DEEP / Inland Water Resources / Flood Management Section		Staff time	N/A – although funding for implementation will have to be sought	Continuous				

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
42	3.1	Investigate actions of other states with regards to the develop of an interactive webpage or other medium for collecting flood information from the general public or other entities which would include photos and other types of information which would be a valuable asset in documenting impacts from natural hazards. This information can be utilized to support reporting damages to FEMA in a more efficient time frame, in combination with other available sources including but not limited to the StormSmart CHAMP and Connecticut StormReporter websites.	DEEP / Inland Water Resources / Flood Management Section	DESPP / Emergency Management & Homeland Security; DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	1 year	X	X	X	X
43	3.1	Develop Connecticut StormReporter Stakeholder Network to facilitate the rapid capture, delivery, and documentation of post-storm impacts to coastal areas by local teams and citizens in the field.	DEEP / Office of Long Island Sound Programs	DEEP / Inland Water Resources / Flood Management Section; DESPP / Emergency Management & Homeland Security	Staff time	Agency Operating Budgets	2 years	X			X
44	3.1	Upon completion of DOT's systems-level vulnerability assessment in support of the Climate Change and Extreme Weather pilot project in Litchfield County, repeat the process in the remainder of the state. This activity is linked to Activity #32.	DOT		TBD	FHWA	5 years			X	
45	3.1	Increase hydrologic monitoring in the state relative to precipitation, surface groundwater, and tidal gauges to enhance the statewide data collection effort and improve long term trend analysis for climate change assessments, predictive modeling and hazard mitigation. This activity is linked with Activity #35.	DEEP / Inland Water Resources and Office of Long Island Sound Programs		TBD	TBD	5 years				
46	3.1	Develop updated/improved storm surge hazard modeling to supplement sea level rise inundation scenarios.	USACE	DESPP / Emergency Management & Homeland Security; DEEP / Inland Water Resources / Flood Management Section and Office of Long Island Sound Programs; University of Connecticut	Staff time	Agency Operating Budgets	3 years	X			X
47	3.1	Use shoreline transect data to map coastal erosion zones and develop applicable outreach products.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	3 years				
48	3.1	Continue to identify head-of-tide habitat within Connecticut and monitor the change in this habitat due to climate change through sentinel monitoring in order to determine those communities that may endure increased risk from coastal storms and associated flooding. OLISP is currently funding multiple monitoring and data synthesis projects in support of this activity.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	1-2 years				
49	3.1	Identify and map the locations of headwater, main stem and coastal dams, culverts, bridges, and other structures or land modifications that contribute to flood damage and act as barriers to habitat connectivity, and assess the feasibility of removal or modification of these structures. This activity is linked to Activity #55.	DEEP / Office of Long Island Sound Programs	DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	3 years				
50	3.1	Evaluate the hazard potential in Connecticut of land subsidence or slope failures.	DEEP / Geological Survey		Staff time	Agency Operating Budgets	1-2 years				
51	3.1	Create a database of survey elevation points in coastal areas.	DOT		TBD	Agency Operating Budgets	3 years	X			

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
52	3.2	Create a literature review of various FEMA publications to be placed on CT DEEP's flood management webpage. Include a short description of the publication and a direct link for convenient downloading of the document, or a note to contact CT DEEP's Flood Management Section to obtain a copy.	DEEP / Inland Water Resources / Flood Management Section		Staff time	Agency Operating Budgets	Dependent on available resources and funding				
53	3.2	Encourage dissemination and outreach of updated regional IPCC model scenarios, coupled with Northeast Regional Climate Center data and best emerging science, to communities and educators, and to inform all planning processes and statewide education.	DEEP / Office of Long Island Sound Programs	CT Climate Education/Communication Committee	Staff time	Agency Operating Budgets	Dependent on available resources and funding				
54	3.2	Finalize StormSmart Coasts CT site and perform outreach to encourage use by local communities and others to reduce risk.	DEEP / Office of Long Island Sound Programs		Staff time	Agency Operating Budgets	2 years	X			X
55	3.3	Perform a feasibility analysis of the development and expansion of an inventory of infrastructure (including, but not limited to, key transportation, energy, water supply, wastewater and storm water conveyance and treatment structures, dams and levees) at risk from the effects of climate change and prioritize them based on a formalized list of criteria (TBD). In addition, investigate the feasibility of mapping the exact location and elevation of all coastal sewer outflows and coastal flood control structures and including this information in the inventory. Useful data that may be collected for this inventory project includes the exact location of the structure; elevation; structure condition and year built; and value of infrastructure vulnerable to coastal and riverine flooding hazards exacerbated by climate change. This effort should be coordinated with ongoing efforts by CT DOT and the EPA's Climate Ready Water Utilities (CRWU) programs being implemented by the water infrastructure sector. This activity is linked to Activity #49.	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs; DAS / Division of Construction Services	Staff time	Agency Operating Budgets	Dependent on available resources and funding				
56	3.3	Perform an assessment of increased natural hazard vulnerability and risk from climate change (e.g., effects from increased flooding, sea level rise, and severe weather (e.g., wind, temperature, drought)). Assessment should be based on local risk and vulnerability assessments already prepared by local communities in coordination with DEEP.	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	Dependent on available resources and funding			X	X
57	3.3	In coordination with local communities, recommend categorical (e.g., wastewater, energy) and site-specific options for adaptation from the projected impacts of climate change and occurrence of natural hazards for public infrastructure (including flood protection structures). Adaptation and hazard mitigation alternatives should include the estimated costs associated with the options evaluated to be the most viable for implementation purposes.	DEEP / Office of Long Island Sound Programs	DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	Dependent on available resources and funding				
58	3.3	Research and identify the legal authorities applicable to regulation and planning for climate change adaptation activities, especially at the local level. Identify opportunities to build on the success of Public Act 12-101, which combined a number of initiatives to address sea level rise and to revise the regulatory procedures applicable to shoreline protection (more fully described in Section 3.2.1.3).	DEEP / Inland Water Resources / Flood Management Section	DEEP / Office of Long Island Sound Programs	Staff time	Agency Operating Budgets	Dependent on available resources and funding				

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
59	3.3	Encourage education and community participation in adaptation, low impact development, and flood management through existing networks and partnerships including the CT Climate Education Communication Committee. This includes coordinating OLISP's coastal community adaptation and risk mitigation work with educational place based student experiences through CT Green Leaf in K-12 to increase participation and maximize local solutions.	DEEP / Office of Long Island Sound Programs	CT Green LEAF	Staff time	Agency Operating Budgets	Dependent on available resources and funding	X			X
60	3.4	Develop and deliver Micro-grid Pilot Program Trainings.	DEEP / Bureau of Energy and Technology		\$25,000	Microgrid Grant and Loan Pilot Program; participating electric utilities	2 years	X	X	X	X
61	3.4	Coordinate with water utilities to more actively promote water conservation measures with their customers, especially now that new legislation allows them to recover revenue while encouraging conservation.	DPH / Drinking Water Section	Water Planning Council	Staff time	Agency Operating Budgets	Continuous, but particularly during drought conditions or other water emergencies				
62	1.1, 1.4, 2.1, 2.2, 2.3, 3.3	<b>Local School Construction Grant Program and School Safety Infrastructure Council:</b> <ul style="list-style-type: none"> <li>Identify and assess existing public school facilities that could be impacted by natural hazards (including climate change). Correlate identified schools with the School Building Project Priority Lists; identify mitigation strategies for these projects early on in the grant process.</li> <li>For new grants involving siting a new school, provide and encourage the use of an interactive web based mapping portal for local school districts to use during site selection.</li> </ul> Encourage early coordination with DAS Environmental Planning and GIS Services Unit. <ul style="list-style-type: none"> <li>Should facilities be located within natural hazard areas, request an assessment of "no feasible or prudent alternative;" encourage higher design standards above minimum criteria for new schools or "renovated as new."</li> <li>Identify long-term climate change adaptation strategies for each structure/facility.</li> </ul>	DAS / Office of School Facilities	DESPP / Emergency Management & Homeland Security; DEEP / Inland Water Resources / Flood Management Section	Staff time	Agency Operating Budgets	Dependent on available resources and funding		X		X
63	1.1, 1.4, 2.1, 2.2, 2.3, 3.3	<b>Sustainable State Facilities Initiative:</b> <ul style="list-style-type: none"> <li>Identify, develop, and prioritize a plan for state facilities' potentially impacted by natural hazards (including climate change)</li> <li>Assess the risks in relation to the physical structures, the agency's long-term capital planning plans, building life span, etc.</li> <li>Develop specific mitigation strategies for each structure/facility as part of the plan utilizing existing hazard data, identify timeframe for implementing the strategies, and include estimated mitigation costs.</li> <li>Identify long-term climate change adaptation strategies for each structure/facility.</li> </ul>	DAS / Environmental Planning & GIS Services Unit		Staff time	Agency Operating Budgets	Dependent on available resources and funding		X		X

Activity #	Goal / Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost	Potential Funding Sources	Timeframe for Completion	Hazard(s)			
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm
64	1.1, 1.2, 1.3, 1.4, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4	Establish a Connecticut "Center for Coasts" that will conduct research, analysis, design, outreach and education projects to guide the development and implementation of technologies, methods and policies that increase the protection of ecosystems, coastal properties and other lands and attributes of the state that are subject to the effects of rising sea levels and natural hazards. More information on the specific activities proposed for the Center to undertake is provided in Chapter 3.	DEEP / Office of Planning and Program Development and Office of Long Island Sound Programs	University of Connecticut	TBD	DEEP and UConn will be looking to collaborate with NOAA and will continue to look for other sources.	Deliver a workplan to the General Assembly by early 2014	X	X	X	X
65	1.1, 1.3, 1.4, 2.2, 2.3, 3.1, 3.3, 3.4	Adopt a seismic station currently being installed in CT as part of EarthScope, a nationally funded research program, in order to continue seismic monitoring operations in the Moodus area of East Haddam, beyond the initial two year period. This will enable continuous seismic monitoring with special emphasis on these frequent events. Once adopted, the station will become part of the New England Seismic Network, under a maintenance and technical assistance agreement with Weston Observatory of Boston College.	DEEP / Geological Survey	Weston Observatory, Boston College, Office of Emergency Management; State Academic Institutions; New England State Geologists	\$30K/station estimated purchase price; \$5K/yr annual maintenance	Coalition of State Agencies	Seismic monitoring beginning 2013 for 2 years. Adoption of the Instrumentation available in 2015. Multi-year maintenance agreement recommended				
66	1.1, 1.3, 1.4, 2.2, 2.3, 3.1, 3.3	Conduct geophysical research to investigate, classify, and map soil stability and susceptibility to liquefaction during seismic events to assist with future hazard mitigation planning efforts.	DEEP / Geological Survey	USGS	\$~50K/yr for 3 years	FEMA (NEHRP)	3 years from support received, with annual progress reporting				
67	1.3, 1.4, 2.2, 2.3, 3.1, 3.2, 3.3	Improve identification of escarpments susceptible to landslide and fluvial erosion risk, utilizing geologic, soils, and elevation data. This activity will provide improved landslide and mass wasting risk estimates, to produce a more comprehensive view of landscape stability during extreme weather events and subsequent impacts.	DEEP	USDA / Natural Resources Conservation Service	\$40-50K Estimated cost dependent on project scope and involvement of cooperative partners	USDA, FEMA	2 years from support received, with annual progress reporting				
68	1.1, 1.3, 1.4, 2.2, 2.3, 3.1, 3.3	Identify and map extent of historic underground mining operations in the State; assess reclamation and current land use relative to risk of land subsidence and mine collapse for the estimated 23 historic underground mining operations in Connecticut. Project deliverables will include georeferenced site maps and assessment reports, as well as a summary of current conditions and potential ground collapse hazards in these areas.	DEEP / Geological Survey	Office of the State Archeologist; State Historic Preservation	\$40k	Agency Operating Budgets	12-18 months, contingent on funding and resource availability				

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X					X	2	3	3	2	3	2	3	18	High	
X	X				X	2	2	1	2	3	2	2	14	Medium	
X						2	2	1	2	3	2	2	14	Medium	
			X			2	3	3	1	3	2	3	17	High	
X						2 or 3	2	1 or 2	2	2	3	2	14 to 16	Medium	
			X		X	2	3	1	1 or 2	3	2	2	14 to 15	Medium	
X	X	X	X	X	X	3	2	3	2	3	2	2	17	High	
X					X	3	3	2	2	2 or 3	2	3	17 to 18	High	
X						2	3	3	3	3	2	2	18	High	
X						2	2 or 3	1 or 2	2 or 3	3	2	2	14 to 17	Medium to High	
X	X	X	X	X	X	3	3	1	2	3	2	2 or 3	16 to 17	Medium to High	
X	X	X	X	X	X	3	3	1	2	3	2	3	17	High	

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X			X		X	3	3	1	3	3	1 or 2	3	17 to 18	High	
X	X					3	3	2	3	2	2	3	18	High	
X						3	3	2	3	3	3	3	20	High	
X					X	1	2	1 or 2	1	1 or 2	2	3	11 to 13	Medium	
X						1	3	1	1 or 2	3	1 or 2	3	13 to 15	Medium	
X	X	X	X	X	X	3	3	2	2	3	2	3	18	High	
X	X	X	X	X	X	3	3	1	1	2	1	2	13	Medium	
X						3	3	2	3	2	3	2	18	High	
X					X	2	3	2	3	3	1 or 2	3	17 to 18	High	
X	X	X	X	X	X	3	3	2	2	3	3	2	18	High	

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X	X	X	X	X	X	3	2 or 3	1	2	2	2	2 or 3	14 to 16	Medium	
X	X	X	X	X	X	2	2	2	2	2	3	3	16	Medium	
X	X	X	X	X	X	3	3	2	2	3	3	3	19	High	
		X				3	3	1 or 2	3	3	2	3	18-19	High	
X	X	X	X	X	X	3	3	1	2	3	2	3	17	High	
X	X	X	X		X	2	3	2	1	3	3	3	17	High	
X						3	2	1	2	3	3	3	17	High	
X					X	2	3	1	2	3	1 or 2	3	15-16	Medium	
X	X	X	X	X	X	3	3	2	3	2	3	2	18	High	
X					X	3	3	1 or 2	2	2	1 or 2	2 or 3	14 to 17	Medium to High	

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X	X	X	X	X	X	2	3	2	2	2	3	2	16	Medium	
X	X	X	X	X	X	3	2	1 or 2	2 or 3	3	2	2 or 3	15 to 18	Medium to High	
X	X	X	X		X	2	3	3	2	3	2	3	18	High	
X	X	X	X	X	X	3	3	2	3	3	3	3	20	High	
X	X	X	X	X	X	2	3	1	2	2 or 3	2	2	14 to 15	Medium	
X	X	X	X	X	X	2	2 or 3	1	2	2 or 3	2	3	14 to 16	Medium	
X			X			2	3	1	2	2 or 3	2 or 3	2 or 3	14 to 17	Medium to High	
X	X	X	X	X	X	2	2	1	2 or 3	3	2	2	14 to 15	Medium	
X						2	1	2	1	2 or 3	2	2	12 to 13	Medium	

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X	X	X	X	X	X	3	3	2	2	2	2	2 or 3	16 to 17	Medium to High	
X					X	3	2	2	2	2	2	2	15	Medium	
X					X	2	3	2	2	2	2 or 3	3	16 to 17	Medium to High	
X			X		X	1 to 2	3	1	1	3	1	3	13 to 14	Medium	
						2	3	1	1 to 2	3	1	1 to 2	12 to 14	Medium	
X					X	2	2	1	2 or 3	2	1	3	13 to 14	Medium	
X					X	2	2	1	2	2 or 3	2	2 or 3	13 to 15	Medium	
X						2	3	1	2	2	2	3	15	Medium	
						2	2	1	2	2	2	2	13	Medium	
X					X	2	3	1	2 or 3	3	2	2 or 3	15 to 17	Medium to High	

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)								
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change	SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X					X	3	3	1	2	2 or 3	2	2 or 3	15 to 17	Medium to High
					X	3	3	3	2	2	2	3	18	High
X					X	3	3	3	2	2	2	2	17	High
X					X	2 or 3	2	1	3	2 or 3	2	3	15 to 17	Medium to High
X	X	X	X		X	2 or 3	2	1	2	2	2	3	14 to 15	Medium
X			X		X	2	1	1	2	2	2	2	12	Medium
X			X		X	2	2 or 3	2	2	2	2	3	15 to 16	Medium

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)
X					X	3	3	2	2	2	2	2	16	Medium	
						3	3	2	3	3	3	2	19	High	
			X			1	2	1 or 2	1	2	3	3	13 to 14	Medium	
X	X				X	3	3	2	2	3	2	2	17	High	
X	X				X	3	3	2	2	3	2	2	17	High	

) to be Addressed						STAPLEE CRITERIA (3=GOOD, 2= AVERAGE, 1 = POOR)									
Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change	SOCIAL	TECHNICAL	ADMINISTRATIVE	POLITICAL	LEGAL	ECONOMIC	ENVIRONMENTAL	TOTAL STAPLEE SCORE	OVERALL RANKING (7-10 = LOW, 11-16 = MEDIUM, 17-21 = HIGH)	
X	X				X	3	3	3	3	3	1	3	19	High	
				X		3	3	1	3	3	2	3	18	High	
X			X	X		3	3	2	3	3	2	3	19	High	
X			X	X	X	3	3	1 to 2	2	3	1 to 2	3	16-18	Medium	
X			X	X	X	3	3	1 to 2	2	3	1 to 2	3	16-18	Medium	

## **Appendix 5-3. Mitigation Funding**



# Mitigation Funding

A Resource for Funding Mitigation Projects

April 2013



**FEMA**

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# MITIGATION FUNDING

The purpose of this document is to assist communities with identifying funding mechanisms for mitigation actions that reduce the impact of natural hazards and disasters. This document is a supplement to the Federal Emergency Management Agency (FEMA) document titled *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards*, which identifies and evaluates a range of potential mitigation actions.<sup>1</sup>

This document focuses on the following:

- Funding opportunities beyond traditional mitigation-specific sources;
- Resources to assist communities in the grant research process;
- An initial list of national funding opportunities; and
- Local departments and organizations that could provide direct funding or information on funding opportunities.

This document categorizes funding opportunities based on the four mitigation actions mentioned in the *Mitigation Ideas* document: (1) Local Planning and Regulations, (2) Structure and Infrastructure Projects, (3) Natural Systems Protection, and (4) Education and Awareness Programs.

The funding list provided is intended to be a starting point for identifying funding opportunities and is not comprehensive. Community leaders should use this resource to begin their research, while continuously seeking innovative ways to maximize funding options through collaboration. As stated in the *Patchwork Quilt Approach*, “Communities need to know where to start and how to proceed. Assessing needs, accessing help, and identifying funding sources requires [*sic*] creativity, vision, leadership, and time.”<sup>2</sup>

*This document was developed separately by BakerAECOM, LLC and is intended to build upon the FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards publication. The appearance of an organization does not constitute the endorsement of the organization, its views, or any affiliated information by FEMA.*

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<sup>1</sup> FEMA. (2013). *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards*. Retrieved from <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=6938>.

<sup>2</sup> Thomas, E.A., Jerolleman, A., Turner, T.L., Punchard, D., Bowen, S.K. (2011). *Planning and Building Livable, Safe & Sustainable Communities: The Patchwork Quilt Approach*, 9. Retrieved from [http://www.floods.org/ace-files/documentlibrary/Best\\_Practices/Patchwork\\_Quilt\\_USACE-HUD-FEMA-NHMA-7-11.pdf](http://www.floods.org/ace-files/documentlibrary/Best_Practices/Patchwork_Quilt_USACE-HUD-FEMA-NHMA-7-11.pdf).

# FUNDING RESOURCES

All mitigation projects require funding resources to ensure successful implementation. Communities can obtain support through grants and non-monetary assistance such as loans, technical assistance, and tax credits.

This section provides community leaders with some of the available resources for general guidance about grants, grant training opportunities, and grant databases. Community leaders will want to research these options to find funding opportunities and general grant assistance to help meet their mitigation project needs.

## **Guidance**

- Corporation for National and Community Service  
<http://www.nationalserviceresources.org/>
- Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance Grant Applicant Resources  
<http://www.fema.gov/grant-applicant-resources>
- Virtual Private Library Grant Resources  
<http://www.grantresources.info/>
- Human Frontier Science (Art of Grantsmanship Program)  
<http://www.hfsp.org/funding/art-grantsmanship>
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service  
<http://www.nmfs.noaa.gov/trade/howtodogrants.htm>
- Partnership for Sustainable Communities (Federal Resources for Sustainable Rural Communities)  
[http://www.sustainablecommunities.gov/pdf/federal\\_resources\\_rural.pdf](http://www.sustainablecommunities.gov/pdf/federal_resources_rural.pdf)
- United Nations  
<http://www.un.org/depts/dhl/sflib/libmgnt/grantproposals.htm>
- University of Washington  
<http://www.washington.edu/research/guide/grantwriting.html>
- University of Wisconsin-Madison  
<http://researchguides.library.wisc.edu/content.php?pid=16143&sid=108666>
- University of Pittsburgh  
<http://www.pitt.edu/~offres/proposal.html>
- University of Florida  
<http://www.humanities.ufl.edu/grant-writing.html>
- Boston College  
<http://www.bc.edu/content/bc/research/osp/granttools.html>
- University of California - Los Angeles  
<http://www.ovcr.ucla.edu/grant-writing-tips.html>

## ***Grant Training***

- American Grant Writer's Association  
<http://www.agwa.us/agwa.us/training>
- Corporation for National and Community Service  
<http://www.nationalserviceresources.org/>
- FEMA Emergency Management Institute (EMI)
  - Grants Writing Practicum for Emergency Services and Emergency Managers [PowerPoint]  
<http://search.usa.gov/search?affiliate=netc&m=false&query=grants>
  - Introduction to Unified Hazard Mitigation Assistance (Independent Study Course No. IS-212)  
<http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-212>
  - Mitigation eGrants for the Grant Applicant Training (Independent Study Course No. IS-31A)  
<http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=IS-31.a>
  - Mitigation eGrants System  
<http://www.fema.gov/mitigation-egrants-system>
- Foundation Center  
<http://foundationcenter.org/getstarted/training/online/>
- The Grantsmanship Center  
<http://www.tgci.com/>

## ***Grant Databases***

- Alliance for Community Trees  
<http://actrees.org/what-we-do/grants-and-awards/funding/>
- Catalog of Federal Domestic Assistance (CFDA)  
<https://www.cfda.gov/>
- U.S. Environmental Protection Agency Grants and Funding  
[http://water.epa.gov/grants\\_funding/](http://water.epa.gov/grants_funding/)  
<https://ofmpub.epa.gov/apex/watershedfunding/f?p=fedfund:1>
- FEMA Grants  
<http://www.fema.gov/grants>
- Ford Foundation  
<http://www.fordfoundation.org/grants/search>
- Grants.gov  
[http://grants.gov/applicants/app\\_help\\_reso.jsp](http://grants.gov/applicants/app_help_reso.jsp)
- Grant Watch  
<http://www.grantwatch.com/>
- StormSmartCoasts  
<http://fl.stormsmart.org/funding/>
- USASpending.gov  
<http://www.usaspending.gov/data>
- The William and Flora Hewlett Foundation  
[http://www.hewlett.org/grants/search?order=field\\_date\\_of\\_award\\_value&sort=desc](http://www.hewlett.org/grants/search?order=field_date_of_award_value&sort=desc)

## NATIONAL FUNDING

There are 26 Federal agencies that offer over 1,000 grant programs annually in various categories, and thousands of opportunities for funding are offered through corporations and non-profit organizations. Community leaders can also seek out other non-monetary funding opportunities.

Some examples of non-monetary funding include:

- **Technical Support**
  - The Conservation Fund offers the [Green Infrastructure Services](#) program, which provides technical support for communities looking to implement green infrastructure designs.
  - The U.S. Environmental Protection Agency offers the [Smart Growth Implementation Assistance](#) program, which provides technical support for communities using smart growth techniques.
- **Tax Credit**
  - The Internal Revenue Service (IRS) offers the [Conservation Easement Tax Credit](#), which provides a tax credit for landowners relinquishing the development rights for portions of their land. The IRS also offers the [Disaster Assistance and Emergency Relief for Individuals and Businesses](#) program, which provides tax credit for individuals who have sustained damage, destruction, or property loss due to an unexpected event.
- **Insurance**
  - The U.S. Department of Agriculture, Risk Management Agency offers the [Federal Multi-Peril Crop Insurance](#) program, which provides comprehensive insurance for crops against weather-related causes of loss and certain other unavoidable perils.

Tables A-D *National Funding Opportunities* (page 8) and the *Grants Databases* list (page 3) are valuable resources for finding national funding opportunities.

## LOCAL, STATE, REGIONAL, AND NON-PROFIT FUNDING

Many funding opportunities are available at the State, regional, and local level. It is also important to consider sources of funding other than mitigation-specific organizations. Forming partnerships with diverse local organizations can be a great tool for local communities looking to increase funding and project opportunities.

The sections below are sample lists of potential funding sources from local and State departments, as well as regional, professional, and philanthropic and non-profit organizations. Some of the organizations below provide direct funding, while others partner with grantors to provide technical support. Because each State and local government varies in available resources and departments, the sections below provide initial suggested locations that community leaders are encouraged to research further for specific funding opportunities.

## ***Local and State Agency Funding Sources***

<b>Local/State Department:</b>	<b>Potential grant(s) for:</b>
<b>Agriculture</b>	<ul style="list-style-type: none"> <li>▪ Conservation easements</li> <li>▪ Land rehabilitation</li> <li>▪ Best management practices for runoff</li> <li>▪ Tree planting for erosion control</li> <li>▪ Irrigation system upgrades</li> </ul>
<b>Community and Public Service</b>	<ul style="list-style-type: none"> <li>▪ Public awareness</li> <li>▪ AmeriCorps-funded projects</li> </ul>
<b>Economic Development and Commerce/International Trade</b>	<ul style="list-style-type: none"> <li>▪ Workforce training</li> <li>▪ Building compliance assistance for businesses</li> <li>▪ Green roofs</li> <li>▪ Ecotourism</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>▪ Education and awareness of environmental hazards</li> <li>▪ School gardens</li> <li>▪ Rain barrels</li> <li>▪ Science projects and fairs related to mitigation practices</li> </ul>
<b>Emergency Management, First Responders, and Homeland Security</b>	<ul style="list-style-type: none"> <li>▪ Training emergency personnel</li> <li>▪ Multi-hazard mitigation projects</li> <li>▪ State Hazard Mitigation Officer (SHMO)</li> <li>▪ FEMA Hazard Mitigation Grants</li> </ul>
<b>Environment and Natural Resources</b>	<ul style="list-style-type: none"> <li>▪ Watershed protection</li> <li>▪ Conservation easements</li> <li>▪ Green roofs</li> <li>▪ Floodplain management</li> <li>▪ National Flood Insurance Program (NFIP)</li> <li>▪ Compliance with environmental regulations</li> </ul>
<b>Geographic Information Systems and Mapping</b>	<ul style="list-style-type: none"> <li>▪ Equipment</li> <li>▪ Technical assistance for mapping at-risk areas</li> </ul>
<b>Health and Environment</b>	<ul style="list-style-type: none"> <li>▪ Education and awareness of health benefits of natural areas</li> </ul>
<b>Historic Preservation</b>	<ul style="list-style-type: none"> <li>▪ Retrofitting historic structures</li> </ul>
<b>Housing and Community Development</b>	<ul style="list-style-type: none"> <li>▪ Affordable and safe housing projects</li> <li>▪ Building codes and code enforcement</li> </ul>
<b>Planning and Construction</b>	<ul style="list-style-type: none"> <li>▪ Technical assistance for building regulations and codes</li> <li>▪ Implementation of statewide building codes</li> <li>▪ Smart growth projects</li> </ul>
<b>Public Works</b>	<ul style="list-style-type: none"> <li>▪ Developing, upgrading, and maintaining stormwater systems</li> <li>▪ Permeable surfaces</li> <li>▪ Technical assistance</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>▪ Restoration of urban-wildlife interface areas</li> <li>▪ Permeable highways</li> <li>▪ Tree planting</li> </ul>
<b>Tribal Affairs</b>	<ul style="list-style-type: none"> <li>▪ Projects relating to mitigation practices that are specific to Tribal governments</li> </ul>

## ***Regional Organizations***

- Community Development Commission
- Regional Planning Commission
- Seismic Safety Commission
- Watershed Management Organization

## ***Professional Organizations***

- American Institute of Architects (AIA)
- American Planning Association (APA)
- American Public Works Association (APWA)
- Association of State Floodplain Managers (ASFPM)
- Association of State Wetland Managers (ASWM)
- Coastal States Organization (CSO)
- Mortgage Bankers Association (MBA)
- National Association of Counties (NACO)
- National Association of Development Organizations (NADO)
- National Association of Flood and Stormwater Management Agencies (NAFSMA)
- National Association of Home Builders (NAHB)
- National Association of Realtors (NAR)
- National Emergency Management Association (NEMA)
- National Governors Association (NGA)
- National League of Cities (NLC)

## ***Philanthropic or Non-Profit Organizations***

- Community Trust  
*Examples: Mount Dora Community Trust, The New York Community Trust, Irvine Community Trust*
- Riverkeepers  
*Examples: Anacostia Riverkeepers, Hackensack Riverkeepers, Rogue Riverkeepers*
- Volunteer Emergency Responders
- Local Natural Resource and Wildlife Protection Groups  
*Examples: Audubon Society, Sierra Club, Wildlife Conservation Society*
- Local Weatherization Groups  
*Examples: Casa Verde Weatherization Program*
- Civic and Public Service Organizations  
*Examples: Lions Club, Citizen Corps, Big Brother Big Sisters*
- Firewise
- Private Charitable Foundations  
*Examples: Rockefeller Foundation, Thousand Oak Police Charitable Foundation, Tulsa Community Foundation*



# TABLES FOR NATIONAL FUNDING OPPORTUNITIES

This section categorizes funding opportunities based on the four mitigation actions mentioned in the *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* document: (1) Local Planning and Regulations, (2) Structure and Infrastructure Projects, (3) Natural Systems Protection, and (4) Education and Awareness Programs. The grant opportunities are listed alphabetically by grantor.

**TABLE A: NATIONAL FUNDING OPPORTUNITIES FOR LOCAL PLANNING AND REGULATIONS**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
U.S. Department of Energy	Energy Efficiency and Conservation Block Grant Program	\$5 million	Provides funding for weatherization of structures and development of building codes/ordinances to ensure energy efficiency and restoration of older homes	<a href="http://www1.eere.energy.gov/wip/eecbg.html">http://www1.eere.energy.gov/wip/eecbg.html</a>
U.S. Department of Housing and Urban Development	Sustainable Communities Regional Planning Grants	\$5 million	Provides funding for projects that reduce environmental impacts, promote public awareness, land use, etc.	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/sustainable_communities_regional_planning_grants">http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/sustainable_communities_regional_planning_grants</a>
	Community Challenge Grants	\$3 million *	Provides funding to help communities update their building codes and ordinances for land acquisition, repurposing old building, and providing affordable and sustainable housing	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/HUD-DOT_Community_Challenge_Grants">http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/HUD-DOT_Community_Challenge_Grants</a>
	Community Development Block Grant (CDBG) Program	\$60,000,000 *	Provides funding for communities to obtain resources for a wide range of unique community development needs	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs</a>
	CDBG Disaster Recovery Assistance	\$3 billion *	Provides funding for flexible grants to help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/drsi">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/drsi</a>
Economic Development Administration	Public Works and Economic Development Facilities Program	1:1 matching	Provides funding for communities to re-establish through rebuilding infrastructure and commerce-related structures	<a href="http://www.eda.gov/ffo.htm">http://www.eda.gov/ffo.htm</a>
Enterprise Community Partners, Inc.	Sustainability Training Grants	\$5,000	Provides funding and training on how to implement sustainable and hazard resistant construction techniques	<a href="http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/sustainability-training-grants">http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resources/sustainability-training-grants</a>
U.S. Environmental Protection Agency	Community Action for a Renewed Environment (CARE)	\$275,000	Provides funding for technical and regulatory support for programs that reduce toxic waste and better the environment against hazards	<a href="http://www.epa.gov/care/">http://www.epa.gov/care/</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

**TABLE A: NATIONAL FUNDING OPPORTUNITIES FOR LOCAL PLANNING AND REGULATIONS (CONT.)**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
Federal Emergency Management Agency	Emergency Management Performance Grants Program	1:1 matching	Provides funding for emergency preparedness systems	<a href="http://www.fema.gov/fy-2012-emergency-management-performance-grants-program">http://www.fema.gov/fy-2012-emergency-management-performance-grants-program</a>
	Pre-Disaster Mitigation Grant Program	Planning: \$1,000,000 Programs: \$3,000,000*	Provides funding for planning and structural construction in local communities, States, territories, and tribes	<a href="http://www.fema.gov/pre-disaster-mitigation-grant-program">http://www.fema.gov/pre-disaster-mitigation-grant-program</a>
	Flood Mitigation Assistance Program	Varies *	Provides funding for planning, structural practices, and regulation assistance pertaining to flooding risk	<a href="http://www.fema.gov/flood-mitigation-assistance-program">http://www.fema.gov/flood-mitigation-assistance-program</a>
	Community Disaster Loan Program	\$5 million	Provides funds to any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue	<a href="http://www.fema.gov/community-disaster-loan-program">http://www.fema.gov/community-disaster-loan-program</a>
U.S. Green Building Council	Affordable Green Neighborhoods Grant Program	\$25,000	Provides funding for the construction of affordable, environmentally conscious, and hazard-sustainable structures	<a href="http://www.usgbc.org/DisplayPage.aspx?CMSPageID=2184">http://www.usgbc.org/DisplayPage.aspx?CMSPageID=2184</a>
National Science Foundation	George E. Brown, Jr. Network for Earthquake Engineering Simulation Research (NEESR), Planning Grants (NEESR Planning)	\$5 million	Provides funding for research that enhances current earthquake modeling technology	<a href="http://www.nsf.gov/funding/pgm_summ.jsp?pi_ms_id=6192">http://www.nsf.gov/funding/pgm_summ.jsp?pi_ms_id=6192</a>
Ocean and Coastal Resource Management	Administrative Grants	1:1 matching	Provides funding to States for administering coastal management programs	<a href="http://coastalmanagement.noaa.gov/funding/welcome.html">http://coastalmanagement.noaa.gov/funding/welcome.html</a>
Western Forestry Leadership Coalition	Western Wildland Urban Interface Grant Program	\$300,000	Provides funding for projects that reduce fuel prone debris and adapt communities to be fire safe	<a href="http://www.wflccenter.org/sapf/index.php">http://www.wflccenter.org/sapf/index.php</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

**TABLE B: NATIONAL FUNDING OPPORTUNITIES FOR STRUCTURE AND INFRASTRUCTURE PROJECTS**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
U.S. Army Corp of Engineers	Snagging and Clearing for Flood Control (CAP Section 208)	\$500,000	Provides for local protection from flooding by channel clearing and excavation, with limited embankment construction by use of materials from the clearing operation only	<a href="https://ofmpub.epa.gov/apex/watershedfunding/f?p=116:2:0::NO::P2_X_PROG_NUM,P2_X_YEAR:105,2013">https://ofmpub.epa.gov/apex/watershedfunding/f?p=116:2:0::NO::P2_X_PROG_NUM,P2_X_YEAR:105,2013</a>
Bank of America	Community Development Grant	Varies*	Provides funding for revitalization of local communities	<a href="http://about.bankofamerica.com/en-us/global-impact/charitable-foundation-funding.html#fbid=y-SVpURtQIN">http://about.bankofamerica.com/en-us/global-impact/charitable-foundation-funding.html#fbid=y-SVpURtQIN</a>
U.S. Bureau of Reclamation	Cooperative Watershed Management Program	\$50,000	Provides funding for creating and maintaining watershed groups and management projects	<a href="http://www.usbr.gov/WaterSMART/cwmp/index.html">http://www.usbr.gov/WaterSMART/cwmp/index.html</a>
	WaterSMART Water and Energy Efficiency Grant Funding	1:1 matching	Provides funding for projects that conserve and efficiently use water, increase the use of renewable energy, and protect endangered species	<a href="http://www.usbr.gov/WaterSMART/weeg/index.html">http://www.usbr.gov/WaterSMART/weeg/index.html</a>
Coastal Services Center	Cooperative Agreements	\$3.5 million	Provides funding for conservation and management of coastal resources through a variety of mechanisms	<a href="http://www.csc.noaa.gov/funding/index.html">http://www.csc.noaa.gov/funding/index.html</a>
U.S. Department of Energy	Energy Efficiency and Conservation Block Grant Program	\$5 million	Provides funding for weatherization of structures and development of building codes/ordinances to ensure energy efficiency and restoration of older homes	<a href="http://www1.eere.energy.gov/wip/eeebg.html">http://www1.eere.energy.gov/wip/eeebg.html</a>
U.S. Department of Housing and Urban Development	Emergency Solutions Grants Program	\$14 million	Provides funding for sheltering, outreach, and data research for emergency preparedness projects focused on unsheltered people	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/homeless/programs/esg">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/homeless/programs/esg</a>
	Community Development Block Grant (CDBG) Program	\$60,000,000*	Provides funding for communities to obtain resources for a wide range of unique community development needs	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs</a>
	CDBG Disaster Recovery Assistance	\$3 billion	Provides funding for flexible grants to help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/drsi">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/drsi</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

**TABLE B: NATIONAL FUNDING OPPORTUNITIES FOR STRUCTURE AND INFRASTRUCTURE PROJECTS (CONT.)**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
U.S. Department of Transportation	TIGER Discretionary Grants	\$21 million	Provides funding for projects that strengthen the economy, creates jobs, reduces gridlock, and provides safe, affordable, and environmentally sustainable transportation choices	<a href="http://www.dot.gov/tiger">http://www.dot.gov/tiger</a>
Economic Development Administration	Public Works and Economic Development Facilities Program	1:1 matching	Provides funding for communities to re-establish through rebuilding infrastructure and commerce-related structures	<a href="http://www.eda.gov/ffo.htm">http://www.eda.gov/ffo.htm</a>
U.S. Environmental Protection Agency	Community Action for a Renewed Environment (CARE)	\$275,000	Provides funding for technical and regulatory support for programs that reduce toxic waste and better the environment against hazards	<a href="http://www.epa.gov/care/">http://www.epa.gov/care/</a>
	Brownfields Assessment and Cleanup Cooperative Agreements	\$1 million	Provides funding for brownfields assessment, cleanup, revolving loans, and environmental job training	<a href="http://www.epa.gov/brownfields/">http://www.epa.gov/brownfields/</a>
Federal Emergency Management Agency	Hazard Mitigation Grant Program	75% Federal matching	Provides funding for mitigation activities such as acquisition, elevation, and retrofitting of structures	<a href="http://www.fema.gov/hazard-mitigation-grant-program">http://www.fema.gov/hazard-mitigation-grant-program</a>
	Pre-Disaster Mitigation Grant Program	Planning: \$1,000,000 Programs: \$3,000,000*	Provides funding for planning and structural construction in local communities, States, territories, and tribes	<a href="http://www.fema.gov/pre-disaster-mitigation-grant-program">http://www.fema.gov/pre-disaster-mitigation-grant-program</a>
	Flood Mitigation Assistance Program	Varies*	Provides funding for planning, structural practices, and regulation assistance pertaining to flooding risk	<a href="http://www.fema.gov/flood-mitigation-assistance-program">http://www.fema.gov/flood-mitigation-assistance-program</a>
	Community Disaster Loan Program	\$5 million	Provides funds to any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue	<a href="http://www.fema.gov/community-disaster-loan-program">http://www.fema.gov/community-disaster-loan-program</a>
	Public Assistance (Section 406 Hazard Mitigation Funding)	75% Federal matching	Provides funding for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations	<a href="http://www.fema.gov/public-assistance-local-state-tribal-and-non-profit">http://www.fema.gov/public-assistance-local-state-tribal-and-non-profit</a>
	Repetitive Flood Claims Program	75% Federal matching	Provides funds for mitigation activities to reduce flood damages to insured properties that have had one or more claims to the NFIP	<a href="http://www.fema.gov/repetitive-flood-claims-program">http://www.fema.gov/repetitive-flood-claims-program</a>

**TABLE B: NATIONAL FUNDING OPPORTUNITIES FOR STRUCTURE AND INFRASTRUCTURE PROJECTS (CONT.)**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
Federal Emergency Management Agency (cont.)	Severe Repetitive Loss Grant Program	\$150,000	Provides funds to reduce or eliminate the long-term risk of flood damage to severe repetitive loss (SRL) structures insured under the NFIP	<a href="http://www.fema.gov/repetitive-flood-claims-program">http://www.fema.gov/repetitive-flood-claims-program</a>
	Individual and Households Program	\$1.5 million	Provides money and services to people in a Presidentially declared disaster area whose property has been damaged or destroyed and whose losses are not covered by insurance	<a href="http://www.fema.gov/individual-assistance-program-tools">http://www.fema.gov/individual-assistance-program-tools</a>
Federal Highway Administration	Emergency Relief Program	\$100 million	Provides funding for the repair or reconstruction of federal highways and roads on federal lands that have suffered serious damage as a result of natural disasters	<a href="http://www.fhwa.dot.gov/programadmin/erelief.cfm">http://www.fhwa.dot.gov/programadmin/erelief.cfm</a>
National Fish & Wildlife Foundation	Five Star and Urban Waters Restoration Grant Program	\$50,000	Provides funding for projects including protection and restoration of riparian areas and beaches, watershed clean up, education programs, and research of watershed viability	<a href="http://www.nfwf.org/Pages/fivestar/home.aspx#.UVMiyxzqk6s">http://www.nfwf.org/Pages/fivestar/home.aspx#.UVMiyxzqk6s</a>
National Institute for Water Resources and U.S. Geological Survey	Water Resources Research National Competitive Grants Program	\$250,000	Provides funding for research on the topic of improving and enhancing the nation's water supply	<a href="https://niwr.net/public/Migration/current-and-recent-requests-proposals">https://niwr.net/public/Migration/current-and-recent-requests-proposals</a>
Natural Resources Conservation Service	Watershed Rehabilitation Program	65% Federal matching	Provides funding for the rehabilitation of aging dams that were installed primarily over the past 55 years	<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wr/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wr/</a>
Rural Development	Rural Housing Repair and Rehabilitation Loans	\$7,500	Provides loans and grants to very low-income homeowners to repair, improve, or modernize their dwellings, or to remove health and safety hazards	<a href="http://www.rurdev.usda.gov/rhs/sfh/brief_repairloan.htm">http://www.rurdev.usda.gov/rhs/sfh/brief_repairloan.htm</a>
	Community Facilities Loans and Grants	75% Federal matching	Provides funding for critical facilities in rural communities	<a href="http://www.rurdev.usda.gov/HAD-CF_Grants.html">http://www.rurdev.usda.gov/HAD-CF_Grants.html</a>
Surdna Foundation	Sustainable Urban Environments Program's Urban Water Management	\$450,000	Provides grants for projects that promote sustainable and environmentally conscious urban water management strategies	<a href="http://www.surdna.org/what-we-fund/sustainable-environments/4-what-we-fund-/what-we-fund-/482-urban-water-management.html">http://www.surdna.org/what-we-fund/sustainable-environments/4-what-we-fund-/what-we-fund-/482-urban-water-management.html</a>

**TABLE C: NATIONAL FUNDING OPPORTUNITIES FOR NATURAL SYSTEMS PROTECTION**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
Coastal Services Center	Cooperative Agreements	\$3.5 million	Provides funding for conservation and management of coastal resources through a variety of mechanisms	<a href="http://www.csc.noaa.gov/funding/index.html">http://www.csc.noaa.gov/funding/index.html</a>
Farm Service Agency	Conservation Reserve Enhancement Program	1:1 Federal matching of land rental	Provides funding for farm land to be kept out of commission to help protect environmentally challenged areas	<a href="http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=cep">http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=cep</a>
	Farmable Wetlands Program	Varies*	Provides funding for farms that voluntary choose to not farm on parts of wetlands that can be used for erosion and flood control	<a href="http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=fwp">http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=fwp</a>
	Tree Assistance Program	70% Federal matching*	Provides financial assistance to qualifying orchardists to replace eligible trees, bushes, and vines damaged by natural disasters	<a href="http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=diap&amp;topic=tap">http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=diap&amp;topic=tap</a>
The National Trust for Historic Preservation	Henry A. Jordan, M.D. Preservation Excellence Fund	\$5,000	Provides funding for projects that integrate land conservation, urban/business development, and historic preservation with sustainable environmental practices	<a href="http://www.preservationnation.org/resources/find-funding/special-funds/henry-a-jordan.html#.UTV3eMpWKXc">http://www.preservationnation.org/resources/find-funding/special-funds/henry-a-jordan.html#.UTV3eMpWKXc</a>
Natural Resources Conservation Service	Conservation Innovation Grants	\$800,000	Provides funding for programs to non-governmental organizations that create innovative conservation and technological strategies to environmental problems, such as flooding and drought	<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/</a>
	Emergency Watershed Protection Program	Varies*	Provides direct funding and technical assistance to be used on any watershed whenever fire, flood, or other natural occurrence is causing (or has caused) a sudden impairment of the watershed	<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/ewp/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/ewp/</a>
Ocean and Coastal Resource Management	Administrative Grants	1:1 matching	Provides funding to States for administering coastal management programs	<a href="http://coastalmanagement.noaa.gov/funding/welcome.html">http://coastalmanagement.noaa.gov/funding/welcome.html</a>
Surdna Foundation	Sustainable Urban Environments Program's Urban Water Management	\$450,000	Provides grants for projects that promote sustainable and environmentally conscious urban water management strategies	<a href="http://www.surdna.org/what-we-fund/sustainable-environments/4-what-we-fund-/what-we-fund-/482-urban-water-management.html">http://www.surdna.org/what-we-fund/sustainable-environments/4-what-we-fund-/what-we-fund-/482-urban-water-management.html</a>
Trout Unlimited	Embrace-A-Stream Grant	\$5,000	Provides funding for stream restoration that helps preserve trout habitats	<a href="http://www.tu.org/conservation/watershed-restoration-home-rivers-initiative/embrace-a-stream">http://www.tu.org/conservation/watershed-restoration-home-rivers-initiative/embrace-a-stream</a>
United Water	United Water Grants	Varies*	Provides funding for projects that support outreach and environmental services in local communities	<a href="http://www.unitedwater.com/CommunityEvents.aspx?id=8570&amp;terms=grants">http://www.unitedwater.com/CommunityEvents.aspx?id=8570&amp;terms=grants</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

**TABLE D: NATIONAL FUNDING OPPORTUNITIES FOR EDUCATIONAL AWARENESS PROGRAMS**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
American Water	Environmental Grant Program	Varies*	Provides funding for programs that restore and protect water resource outlets (watershed, ground water, etc.)	<a href="http://www.amwater.com/corporate-responsibility/environmental-sustainability/environmental-stewardship-and-innovation/environmental-grant-program.html">http://www.amwater.com/corporate-responsibility/environmental-sustainability/environmental-stewardship-and-innovation/environmental-grant-program.html</a>
Arbor Day Foundation	TD Green Streets	\$20,000	Provides funding for support of local forestry projects in low- to moderate-income (LMI) neighborhoods	<a href="http://actrees.org/what-we-do/grants-and-awards/funding/td-green-streets-grant/#more-9354">http://actrees.org/what-we-do/grants-and-awards/funding/td-green-streets-grant/#more-9354</a>
U.S. Bureau of Reclamation	Cooperative Watershed Management Program	\$50,000	Provides funding for creating and maintaining watershed groups and management projects	<a href="http://www.usbr.gov/WaterSMART/cwmp/index.html">http://www.usbr.gov/WaterSMART/cwmp/index.html</a>
	WaterSMART Water and Energy Efficiency Grant Funding	1:1 matching	Provides funding for projects that conserve and efficiently use water, increase the use of renewable energy, and protect endangered species	<a href="http://www.usbr.gov/WaterSMART/weeg/index.html">http://www.usbr.gov/WaterSMART/weeg/index.html</a>
Climate and Land Use Alliance	Alliance Grants	\$2 million	Provides funding for protecting land through land use and climate change strategies	<a href="http://www.climateandlandusealliance.org/en/initiatives-en/funding-en/grant-inquiry-form-en/">http://www.climateandlandusealliance.org/en/initiatives-en/funding-en/grant-inquiry-form-en/</a>
Coastal Services Center	Cooperative Agreement Grant	\$3.5 million	Provides funding for conservation and management of coastal resources through a variety of mechanisms	<a href="http://www.csc.noaa.gov/funding/index.html">http://www.csc.noaa.gov/funding/index.html</a>
U.S. Department of Energy	Energy Efficiency and Conservation Block Grant Program	\$5 million	Provides funding for weatherization of structures and development of building codes/ordinances to ensure energy efficiency and restoration of older homes	<a href="http://www1.eere.energy.gov/wip/eeecbg.html">http://www1.eere.energy.gov/wip/eeecbg.html</a>
U.S. Department of Housing and Urban Development	Sustainable Communities Regional Planning Grants	\$5 million	Provides funding for projects that reduce environmental impacts, promote public awareness, land use, etc.	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/sustainable_communities_regional_planning_grants">http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/sustainable_communities_regional_planning_grants</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

**TABLE D: NATIONAL FUNDING OPPORTUNITIES FOR EDUCATIONAL AWARENESS PROGRAMS (CONT.)**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
U.S. Department of Housing and Urban Development (cont.)	Emergency Solutions Grants Program	\$14 million	Provides funding for sheltering, outreach, and data research for emergency preparedness projects focused on unsheltered people	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/homeless/programs/esg">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/homeless/programs/esg</a>
	Community Challenge Grants	\$3 million	Provides funding to help communities update their building codes and ordinances for land acquisition, repurposing old building, and providing affordable and sustainable housing	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/HUD-DOT_Community_Challenge_Grants">http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/HUD-DOT_Community_Challenge_Grants</a>
	Community Development Block Grant (CDBG) Program	\$60,000,000*	Provides funding for communities to obtain resources for a wide range of unique community development needs	<a href="http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs">http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs</a>
Enterprise Community Partners, Inc.	Sustainability Training Grants	\$5,000	Provides funding and training on how to implement sustainable and hazard resistant construction techniques	<a href="http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resenmources/sustainability-training-grants">http://www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/resenmources/sustainability-training-grants</a>
U.S. Environmental Protection Agency	Community Action for a Renewed Environment (CARE)	\$275,000	Provides funding for technical and regulatory support for programs that reduce toxic waste and betters the environment against hazards	<a href="http://www.epa.gov/care/">http://www.epa.gov/care/</a>
	Environmental Education Grants	\$250,000	Provides funding for environmental education programs that promote environmental stewardship and awareness	<a href="http://www2.epa.gov/education/environmental-education-ee-grants">http://www2.epa.gov/education/environmental-education-ee-grants</a>
	Nonpoint Source Pollution Funding (319 Program)	60% Federal matching	Provides funding for implementation of nonpoint source projects and programs in accordance with section 319 of the Clean Water Act	<a href="http://water.epa.gov/polwaste/nps/cwact.cfm">http://water.epa.gov/polwaste/nps/cwact.cfm</a>
	Brownfields Assessment and Cleanup Cooperative Agreements	\$1 million	Provides funding for brownfields assessment, cleanup, revolving loans, and environmental job training	<a href="http://www.epa.gov/brownfields/">http://www.epa.gov/brownfields/</a>
Federal Emergency Management Agency	Assistance to Firefighters Grant Program	\$1 million	Provides funding for training firefighters and emergency responders in assisting with fire-related hazards	<a href="http://www.fema.gov/assistance-firefighters-grant">http://www.fema.gov/assistance-firefighters-grant</a>
	Staffing for Adequate Fire and Emergency Response Grants	\$4 million	Provides funding for communities to hire adequate emergency response staff	<a href="http://www.fema.gov/staffing-adequate-fire-emergency-response-grants">http://www.fema.gov/staffing-adequate-fire-emergency-response-grants</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

**TABLE D: NATIONAL FUNDING OPPORTUNITIES FOR EDUCATIONAL AWARENESS PROGRAMS (CONT.)**

Grantor	Grant Name	Amount (maximum)	Brief Description	Website
Federal Emergency Management Agency (cont.)	Emergency Management Performance Grants Program	1:1 matching	Provides funding for emergency preparedness systems	<a href="http://www.fema.gov/fy-2012-emergency-management-performance-grants-program">http://www.fema.gov/fy-2012-emergency-management-performance-grants-program</a>
	Community Disaster Loan Program	\$5 million	Provides funds to any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue	<a href="http://www.fema.gov/community-disaster-loan-program">http://www.fema.gov/community-disaster-loan-program</a>
National Fish & Wildlife Foundation	Five Star and Urban Waters Restoration Grant Program	\$50,000	Provides funding for projects including protection and restoration of riparian areas and beaches, watershed clean up, education programs, and research of watershed viability	<a href="http://www.nfwf.org/Pages/fivestar/home.aspx#.UVMiyxzk6s">http://www.nfwf.org/Pages/fivestar/home.aspx#.UVMiyxzk6s</a>
National Park Service	Land and Water Conservation Fund	\$4 million	Provides funding for projects that will acquire and/or develop land for outdoor recreation purposes	<a href="http://www.nps.gov/lwcf/">http://www.nps.gov/lwcf/</a>
Ocean and Coastal Resource Management	Administrative Grants	1:1 matching	Provides funding to States for administering coastal management programs	<a href="http://coastalmanagement.noaa.gov/funding/welcome.html">http://coastalmanagement.noaa.gov/funding/welcome.html</a>
Target	Field Trip Grants	\$700	Provides funding for local school systems to help students learn outside of the classroom	<a href="https://corporate.target.com/corporate-responsibility/grants/field-trip-grants">https://corporate.target.com/corporate-responsibility/grants/field-trip-grants</a>
United Water	United Water Grants	Varies*	Provides funding for projects that support outreach and environmental services in local communities	<a href="http://www.unitedwater.com/CommunityEvents.aspx?id=8570&amp;terms=grants">http://www.unitedwater.com/CommunityEvents.aspx?id=8570&amp;terms=grants</a>
Western Forestry Leadership Coalition	Western Wildland Urban Interface Grant Program	\$300,000	Provides funding for projects that reduce fuel prone debris and adapt communities to be fire safe	<a href="http://www.wflccenter.org/sapf/index.php">http://www.wflccenter.org/sapf/index.php</a>

\* Amounts are dependent on available funding, need of grantees, number of applicants, and the specific details of projects

## **Appendix 5-4. Report on past CT NHMP Activities**

<i>FEDERAL FISCAL YEAR</i>	<i>DESCRIPTION</i>	<i>FUNDING</i>	
<i>PROGRAM</i>		<i>FEDERAL</i>	<i>LOCAL</i>
<b>FFY 00</b>			
<i>FMA</i>	Drafting of a regional Hazard Mitigation Plan by CREPA	\$19,900	\$4,975
	<b>Totals for FFY 00</b>	<b>\$19,900</b>	<b>\$4,975</b>
<b>FFY 01</b>			
<i>FMA</i>	Preparation of the third phase of the Regional Hazard Mitigation Plan by CREPA.	\$19,400	\$4,850
<i>HMGP</i>	Draft a mitigation plan in cooperation with CT River Estuary RPA	\$20,000	\$9,000
	<b>Totals for FFY 01</b>	<b>\$39,400</b>	<b>\$13,850</b>
<b>FFY 02</b>			
<i>FMA</i>	Prepare a Regional Hazard Mitigation Plan	\$19,600	\$6,533
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by SECCOG	\$76,133	\$25,378
	Prepare a Regional Hazard Mitigation Plan by SWRPA	\$37,462	\$12,487
	Prepare a Regional Hazard Mitigation Plan by NECCOG	\$17,791	\$5,930
	<b>Totals for FFY 02</b>	<b>\$150,986</b>	<b>\$50,329</b>
<b>FFY 03</b>			
<i>FMA</i>	Prepare a Regional Hazard Mitigation Plan	\$20,000	\$6,668
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by the CCRPA	\$50,878	\$17,007
	Prepare a Regional Hazard Mitigation Plan by the COGCNV	\$51,677	\$17,226
	Prepare a Regional Hazard Mitigation Plan by the GBRPA	\$70,845	\$23,615
	Prepare a Regional Hazard Mitigation Plan by the WRCOG	\$70,000	\$23,333
	Prepare a Regional Hazard Mitigation Plan by CRERPA	\$33,636	\$10,471
	<b>Totals for FFY 03</b>	<b>\$297,036</b>	<b>\$98,319</b>
<b>FFY 04</b>			
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	\$101,050	\$33,690
	Prepare a Regional Hazard Mitigation Plan by the NWCCOG	\$40,857	\$13,619
	Prepare a Regional Hazard Mitigation Plan by the CRCOG	\$322,500	\$107,500
	Prepare a Regional Hazard Mitigation Plan by the City of New Haven	\$7,505	\$2,502
	<b>Totals for FFY 04</b>	<b>\$471,912</b>	<b>\$157,311</b>
<b>FFY 05</b>			

<b>FEDERAL FISCAL YEAR</b>		<b>DESCRIPTION</b>	<b>FUNDING</b>	
<b>PROGRAM</b>			<b>FEDERAL</b>	<b>LOCAL</b>
<b>FMA</b>	Update existing Hazard Mitigation Plan, City of Milford		\$8,247	\$2,749
	Prepare a Hazard Mitigation Plan, Town of Hamden		\$0	\$0
	<b>Totals for FFY 05</b>		<b>\$8,247</b>	<b>\$2,749</b>
<b>FFY06</b>				
<b>PDM</b>	Prepare a Regional Hazard Mitigation Plan by the COGCNV		\$95,000	\$31,667
	<b>Totals for FFY 06</b>		<b>\$95,000</b>	<b>\$31,667</b>
<b>FFY07</b>				
<b>PDM</b>	Prepare a Regional Hazard Mitigation Plan by Midstate RPO		\$137,564.60	\$45,856
	<b>Totals for FFY 07</b>		<b>\$137,564.60</b>	<b>\$45,856</b>
	<b>Grand Totals FFY 1997-2007</b>		<b>\$1,220,045</b>	<b>\$405,056</b>

<b>FEDERAL FISCAL YEAR</b>	<b>DESCRIPTION (Project/Planning Activity)</b>	<b>FUNDING</b>	
<b>PROGRAM</b>		<b>FEDERAL</b>	<b>LOCAL</b>
<b>FFY 97</b>			
<b>FMA</b>	Elevation of structure located at 60 Harbor Road, Westport, CT	\$29,062.00	\$9,687.00
	Elevation of structure located at 120 Harbor Road, Westport, CT	\$51,551.00	\$17,184.00
	Elevation of structure located at 8 Spriteview Road, Westport, CT	\$18,750.00	\$6,250.00
	Elevation of structure located at 30 Marine Ave., Westport, CT	\$82,500.00	\$27,500.00
	<b>Totals for FFY 97</b>	<b>\$181,863.00</b>	<b>\$60,621.00</b>
<b>FFY 98</b>			
<b>FMA</b>	Elevation of structure located at 23 Danbury Ave., Westport, CT	\$54,180.00	\$18,060.00
	Elevation of structure located at 20 Ostend Ave., Westport, CT	\$0.00	\$0.00
	Elevation of structure located at 26 Ostend Ave., Westport, CT	\$0.00	\$0.00
	Elevation of structure located at 42 Danbury Ave., Westport, CT	\$54,476.00	\$18,159.00
	Elevation of structure located at 201 Hillspoint Ave., Westport, CT	\$31,350.00	\$10,550.00
<b>MAP</b>	Dry Hydrants in Glastonbury, CT	\$30,000.00	\$10,000.00
<b>PI</b>	Town of Westport: Downtown flood control study, tide gauge, hurricane makeover pilot project, 120 flood audits of businesses, 40 residential flood audits, shelter supplies, hurricane awareness week	\$500,000.00	\$166,665.00
	<b>Totals for FFY 98</b>	<b>\$670,006.00</b>	<b>\$223,434.00</b>
<b>FFY 99</b>			
<b>FMA</b>	Elevation of structure located at 16 Ostend Ave., Westport, CT	\$53,250.00	\$17,750.00
	Elevation of structure located at 4 Marine Ave., Westport, CT	\$64,875.00	\$21,625.00
	Elevation of structure located at 89 Shoreline Drive, Stratford, CT	\$0.00	\$0.00
	Elevation of structure located at 22 Spriteview Ave., Westport, CT	\$0.00	\$0.00
<b>PI</b>	City of Milford Elevation of Six Coastal Structures	\$300,000.00	\$100,000.00
	<b>Totals for FFY 99</b>	<b>\$418,125.00</b>	<b>\$139,375.00</b>
<b>FFY 00</b>			
<b>FMA</b>	Elevation of structure located at 8 Roland Place, Westport, CT	\$112,686.00	\$37,563.00
	Acquisition of structure located at 34 Lynch Terrace, Enfield, CT	\$0.00	\$0.00

<b>FEDERAL FISCAL YEAR</b>	<b>DESCRIPTION (Project/Planning Activity)</b>	<b>FUNDING</b>	
<b>PROGRAM</b>		<b>FEDERAL</b>	<b>LOCAL</b>
	Elevation of structure located at 8 Danbury Ave., Westport, CT	\$52,500.00	\$17,500.00
	Elevation of 3 Brookside Terrace in Essex, Connecticut	\$108,646.00	\$36,250.00
	Drafting of a regional Hazard Mitigation Plan by CREPA	\$19,900.00	\$4,975.00
<b>PI 1.</b>	City of East Haven: Upgrade to engineering computer network, coastal public address system, hurricane shutters, sample home elevation project, public information materials	\$300,000.00	\$100,000.00
	<b>Totals for FFY 00</b>	<b>\$593,732.00</b>	<b>\$196,288.00</b>
<b>FFY 01</b>			
<b>FMA</b>	Acquisition of structure located at 13 Hellstrom Road, East Haven, CT	\$0.00	\$0.00
	Acquisition of structure located at 12 Raymond Court, East Haven CT	\$0.00	\$0.00
	Upgrade of Connecticut Alert System – Statewide	\$33,750.00	\$11,250.00
	Preparation of the third phase of the Regional Hazard Mitigation Plan by CREPA.	\$19,400.00	\$4,850.00
<b>HMGP</b>	Elevation of structure located at 33 Soundview Drive, Westport, CT	\$0.00	\$0.00
	Elevation of structure located at 146 Kings Highway, Westport, CT	\$0.00	\$0.00
	Elevation of structure Located at 8 Harbor Road, Westport, CT	\$48,250.00	\$13,750.00
	Elevation of structure located at 31 Morehouse Lane, Milford, CT	\$0.00	\$0.00
	Upgrade of culverts in Somers, CT to prevent flooding.	\$18,360.00	\$18,360.00
	Draft a mitigation plan in cooperation with CT River Estuary RPA	\$20,000.00	\$9,000.00
<b>PI</b>	City of Norwich Project Impact Tasks	\$300,000.00	\$100,000.00
	<b>Totals for FFY 01</b>	<b>\$439,760.00</b>	<b>\$157,210.00</b>
<b>FFY 02</b>			
<b>FMA</b>	Elevation of structure located at 146 Kings Highway, Westport, CT	\$0.00	\$0.00
	Elevation of structure located at 24 Morehouse Blvd., Westport, CT	\$39,000.00	\$13,000.00
	Elevation of structure located at 6 Ostend Ave., Westport, CT	\$109,912.00	\$36,638.00
	Prepare a Regional Hazard Mitigation Plan	\$19,600.00	\$6,533.33

<b>FEDERAL FISCAL YEAR</b>	<b>DESCRIPTION (Project/Planning Activity)</b>	<b>FUNDING</b>	
<b>PROGRAM</b>		<b>FEDERAL</b>	<b>LOCAL</b>
<b>PDM Planning</b>	Prepare the Connecticut Standard Section 322 Plan	\$165,562.00	\$41,390.00
	Prepare a Regional Hazard Mitigation Plan by SECCOG	\$76,133.37	\$25,377.89
	Prepare a Regional Hazard Mitigation Plan by SWRPA	\$37,461.79	\$12,487.26
	Prepare a Regional Hazard Mitigation Plan by NECCOG	\$17,790.94	\$5,930.31
	<b>Totals for FFY 02</b>	<b>\$465,460.10</b>	<b>\$141,356.79</b>
<b>FFY 03</b>			
<b>FMA</b>	Elevation of structure located at 35 Ostend Ave., Westport, CT	\$111,525.00	\$37,175.00
	Elevation of structure located at 30 Sunset Road, Greenwich, CT	\$0.00	\$0.00
	Acquisition of structure located at 191 Hillspoint Road, Westport, CT	\$0.00	\$0.00
	Elevation of structure located at 38 Camden Street, Fairfield, CT	\$41,250.00	\$13,750.00
	Elevation of structure located at 40 Point Beach Drive, Milford, CT	\$45,000.00	\$15,000.00
	Elevation of structure located at 28 Ostend Ave., Westport, CT	\$0.00	\$0.00
	Elevation of structure located at 5 Naussau Road, Westport, CT	\$0.00	\$0.00
	Acquisition of properties located at 41 & 45 Morse Ave., West Haven, CT	\$0.00	\$0.00
	Prepare a Regional Hazard Mitigation Plan	\$20,000.00	\$6,667.69
<b>PDM Planning</b>	Prepare a Regional Hazard Mitigation Plan by the CCRPA	\$50,878.20	\$17,007.00
	Prepare a Regional Hazard Mitigation Plan by the COGCNV	\$51,676.66	\$17,225.55
	Prepare a Regional Hazard Mitigation Plan by the GBRPA	\$70,845.00	\$23,615.00
	Prepare a Regional Hazard Mitigation Plan by the WRCOG	\$70,000.00	\$23,333.00
	Prepare a Regional Hazard Mitigation Plan by CRERPA	\$33,635.74	\$10,471.03
	<b>Totals for FFY 03</b>	<b>\$494,810.60</b>	<b>\$164,244.27</b>
<b>FFY 04</b>			
<b>FMA</b>	Home Elevation, 41 Hillside Avenue, Milford	\$61,200.00	\$20,400.00
	Home Elevation, 105 Hillside Avenue, Milford	\$71,850.00	\$23,950.00
<b>PDM Planning</b>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	\$101,050.00	\$33,690.00

<i>FEDERAL</i>	<b>DESCRIPTION</b>	<b>FUNDING</b>	
<i>FISCAL YEAR</i>	<b>(Project/Planning Activity)</b>		
<i>PROGRAM</i>		<b>FEDERAL</b>	<b>LOCAL</b>
	Prepare a Regional Hazard Mitigation Plan by the NWCCOG	\$40,856.63	\$13,618.87
	Prepare a Regional Hazard Mitigation Plan by the CRCOG	\$322,500.00	\$107,500.00
	Prepare a Regional Hazard Mitigation Plan by the City of New Haven	\$7,505.46	\$2,501.82
	<b>Totals for FFY 04</b>	<b>\$604,962.09</b>	<b>\$201,660.69</b>
<b>FFY 05</b>			
<i>FMA</i>	Update existing Hazard Mitigation Plan, City of Milford	\$8,247.00	\$2,749.00
	Prepare a Hazard Mitigation Plan, Town of Hamden	\$0.00	\$0.00
<i>PDM</i>	Home elevation, 80 Shoreline Drive, Town of Stratford	\$56,700.00	\$18,000.00
	Home elevation, 691 Broadway, Town of Milford	\$0.00	\$0.00
	Home elevation, 390 Cosey Beach, Town of East Haven	\$112,612.50	\$37,537.50
	Home elevation, 192 Cosey Beach, Town of East Haven	\$69,693.75	\$23,231.25
	Home elevation, 274A Cosey Beach, Town of East Haven	\$63,393.75	\$21,131.25
	Home elevation, 278 Cosey Beach, Town of East Haven	\$65,756.25	\$21,918.75
	Home elevation, 376 Cosey Beach, Town of East Haven	\$73,631.25	\$24,543.75
	Home elevation, 384 Cosey Beach, Town of East Haven	\$72,056.25	\$24,018.75
	Home elevation, 312 Cosey Beach, Town of East Haven	\$75,206.25	\$25,068.75
	Home elevation, 380 Cosey Beach, Town of East Haven	\$72,056.25	\$24,018.75
	Home elevation, 388 Cosey Beach, Town of East Haven	\$111,825.00	\$37,275.00
	<b>Totals for FFY 05</b>	<b>\$781,178.25</b>	<b>\$259,492.75</b>
<b>FFY06</b>			
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	\$95,000.00	\$31,667.00
	<b>Totals for FFY 06</b>	<b>\$95,000.00</b>	<b>\$31,667.00</b>
<b>FFY07</b>			
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by Midstate RPO	\$137,564.60	\$45,856.20
	<b>Totals for FFY 07</b>	<b>\$137,564.60</b>	<b>\$45,856.20</b>
<b>FFY08</b>			
<i>FMA</i>	City of Milford Home elevation	\$64,125.00	\$21,375.00
	City of Milford Home Elevation	\$75,000.00	\$30,000.00

<i>FEDERAL FISCAL YEAR</i>	<i>DESCRIPTION (Project/Planning Activity)</i>	<i>FUNDING</i>	
<i>PROGRAM</i>		<i>FEDERAL</i>	<i>LOCAL</i>
<i>PDM</i>	Housatonic Valley Council of Elected Officials - Town of Sherman hazard mitigation plan	\$37,500.00	\$12,500.00
	Town of Trumbull - home acquisition	\$411,000.00	\$137,000.00
	<b>Totals for FFY 08</b>	<b>\$587,625.00</b>	<b>\$200,875.00</b>
<b>FFY09</b>			
<i>PDM</i>	City of Norwalk - home elevation	\$150,000.00	\$95,787.00
	Town of Guilford - hazard mitigation plan	\$30,040.00	\$10,531.00
	City of Danbury - hazard mitigation plan	\$37,499.06	\$12,499.69
	South Western Regional Planning Agency - multi-jurisdictional hazard mitigation plan	\$26,237.45	\$8,750.00
	<b>Totals for FFY 09</b>	<b>\$243,776.51</b>	<b>\$127,568.00</b>
<b>FFY10</b>			
<i>L-PDM</i>	Town of Westport - fire department generator project	\$264,750.00	\$88,250.00
<i>PDM</i>	Town of Newtown - hazard mitigation plan	\$37,740.00	\$12,580.00
	Valley Council of Governments - multi-jurisdictional hazard mitigation plan	\$63,000.00	\$21,000.00
	Connecticut River Estuary Regional Planning Agency - multi-jurisdictional hazard mitigation plan	\$65,159.00	\$21,844.00
	City of Meriden - hazard mitigation plan	\$30,000.00	\$10,000.00
	<b>Totals for FFY 10</b>	<b>\$395,490.00</b>	<b>\$153,674.00</b>
<b>FFY11</b>			
<i>RFC</i>	Town of North Branford - home acquisition	\$329,500.00	\$0.00
<i>PDM</i>	Capitol Region Council of Governments - multi-jurisdictional hazard mitigation plan	\$300,000.00	\$100,000.00
	Windham Regional Council of Governments - multi-jurisdictional hazard mitigation plan	\$45,000.00	\$15,000.00
	Southeastern Connecticut Council of Governments - multi-jurisdictional hazard mitigation plan	\$93,749.86	\$31,250.36
	South Central Regional Council of Governments - multi-jurisdictional hazard mitigation plan	\$225,562.50	\$75,187.50
	<b>Totals for FFY 11</b>	<b>\$993,812.36</b>	<b>\$221,437.86</b>
<b>FFY12</b>			
<i>PDM</i>	Town of Bethel - hazard mitigation plan	\$30,750.00	\$10,250.00
	State of Connecticut - update of state NHMP	\$132,992.96	\$44,347.04

<i>FEDERAL FISCAL YEAR</i>	<b>DESCRIPTION (Project/Planning Activity)</b>	<b>FUNDING</b>	
<i>PROGRAM</i>		<b>FEDERAL</b>	<b>LOCAL</b>
	Litchfield Hills Council of Elected Officials - multi-jurisdictional hazard mitigation plan	\$30,075.00	\$10,025.00
	Greater Bridgeport Regional Council - multi-jurisdictional hazard mitigation plan	\$90,000.00	\$30,000.00
	Town of Watertown - local hazard mitigation plans for Watertown, Oxford, and Woodbury	\$18,000.00	\$6,000.00
	<b>Totals for FFY 12</b>	<b>\$301,817.96</b>	<b>\$56,712.04</b>
	<b>Grand Totals FFY 1997-2007</b>	<b>\$7,404,983.47</b>	<b>\$2,381,472.60</b>

## Projects Completed with FEMA, State and Local Funds Prior to 2002

Project Description	Comments
Install hurricane evacuation signs along the coast of Long Island Sound.	Fourteen towns from Westport to Stonington installed the signs in 1994 -1995
Install seventy-five (75) Advanced Technology NOAA weather radios.	Seventy-five (75) Advanced Technology NOAA Weather radios were purchased and installed in 1994.
Expand the Automated Flood Warning System to North Branford and East Haven.	East Haven installed the Automated Flood Warning System in the spring of 2001. North Branford elected not to participate in the system at this time.
Consider the acquisition of flood-prone land and buildings for open space recreation in Norwich.	Thirteen homes in Norwich were acquired and demolished in 1994 - 1996 to provide open space along the Yantic River.
Add Automated Flood Warning Systems along the larger rivers in Connecticut	Twelve gauges were added to 7 large river basins in Connecticut in 1997.
Install a Coastal Flood Warning System to monitor waves and tides in Long Island Sound.	Two separate systems were installed; one by the USGS in 1997 in eastern Long Island Sound, and the other by the towns of Milford and Westport in 2001.
Install an Automated Flood Warning System in the Norwalk River basin.	This system was installed in 2000 using \$66,000 in State funding and \$34,000 in municipal funding.
Install an Automated Flood Warning System in the City of Danbury.	This system was installed in Summer 2002 using \$35,000 in State funding and \$17,000 in municipal funding.
Install an Automated Flood Warning System in the Town of Wallingford.	This system was installed in 1996 using \$66,000 in State funding and \$34,000 in municipal funding.
Draft debris clearance plans within each town's EOP for sorting of debris.	Some towns have developed clearance plans on their own.
Prepare a computer inventory of all high hazard dams and their locations within Connecticut. The Dam Safety Section of the DEP is the lead agency.	Over 4,300 dams were cataloged in a Graphical Information System (GIS) database in 1995-95. A second, more detailed phase of the project was completed in 2003 and involved 237 High Hazard Dams.
Develop a plan and inventory by the City of Stamford to increase its readiness for natural disasters.	The City completed a four-part plan and inventory of flood prone structures in the City in 1994.

Develop a memorandum of understanding regarding Statewide Severe weather warning procedures between the State police, OEM and the NWS.	A plan has been completed with the assistance of the Connecticut Broadcasters Association in response to the installation of the new Emergency Alerting System (EAS) that replaced EBS in 1997.
Upgrade the existing flood warning system with satellite and radar capability.	WSI Inc., was hired by the DEP to provide satellite and radar data to the State in 1993. The OEM also contracted with DTN and Baron Services in 1996 and 2001, respectively.
Conduct a 1 day workshop to train emergency management personnel in new emergency communications technology. OEM is the lead agency.	OEM in cooperation with the DEP conducts workshops on a regular basis to train users in the new EAS warning system, and run statewide weather emergency response drills.
Create a database to prepare preliminary damage assessments. OEM is the lead agency.	OEM instituted a PDA database in 1997 as part of an upgrade to their EOC in Hartford.
Create a fax and email weather warning network to warn towns of approaching severe weather.	Connecticut instituted a fax network in 1994 and expanded it to email in 1998. Connecticut has spent over \$100,000 on the fax network since 1994.
Install a National Oceanic and Atmospheric Administration (NOAA) Weather Warning Transmitter to provide weather warnings to Litchfield County.	A NOAA Weather Warning Transmitter was installed in the town of Cornwall in Spring 2001, and was funded completely (\$75,000) by the State.
Expand the Flood Audit Program in conjunction with the installation of new flood warning systems in Connecticut.	A total of 325 flood audits have been completed since 1994 at a cost of \$97,500 in conjunction with the installation of new flood warning systems.
Develop a course on wind strengthening to be conducted by the HBA and DPS for builders, architects and enforcement personnel.	In 1997, the Connecticut DEP in cooperation with the Connecticut Association of architects hosted a series of workshops on flood and wind resistant construction practices.
Produce a short storm warning video to increase public Awareness of Natural Disasters. The National Weather Service is the lead agency.	The NWS completed a video on storm preparedness in 1997. A copy of the video is available from the NWS.

<p>Develop a video on earthquake preparedness. The Connecticut OEM is the lead agency in cooperation with the New England States Earthquake Consortium (NESEC).</p>	<p>In 1996 NESEC produced a video entitled "The Next Earthquake in New England". A copy of the video is available by contacting NESEC.</p>
<p>Expand the floodplain management program to integrate natural flood protection with FEMA flood protection standards.</p>	<p>Connecticut has used the Flood Mitigation Assistance (FMA) program to mitigate dozens of floodprone structures. Connecticut also drafted a Floodplain Management Manual in 2004 to assist communities in administering their floodplain management programs.</p>
<p>Integrate FEMA's new Community Rating System (CRS) into the state floodplain management program.</p>	<p>Connecticut's NFIP coordinator is working with several municipalities that have joined the CRS since 1994 and earned reductions in their insurance premiums as a result.</p>
<p>Complete the Stream Channel Encroachment Line (SCEL) regulations.</p>	<p>The older regulations were not revised, however, the SCEL lines were completely inspected in 1999.</p>
<p>Survey bridge and culvert design standards to determine a minimum standard for all bridge and culvert designs for projects that involve state funds.</p>	<p>Bridge construction involving state funds is required to meet or exceed the 100-Year flood standard. Culvert design is typically required to meet or exceed the 25-Year flood standard unless there are extenuating circumstances.</p>
<p>Develop a coordination agreement with the NWS to provide forecast coverage.</p>	<p>A memorandum of understanding was signed in 1996 between the DEP and the NWS.</p>
<p>Prepare a report detailing which types of structures may be vulnerable to seismic activity, and create guidelines for construction. The Office of the State Building Inspector is the lead agency</p>	<p>The new BOCA codes already include guidelines for seismic construction.</p>

<i>FEDERAL FISCAL YEAR</i>	<i>DESCRIPTION</i>	<i>STATUS</i>	<i>FUNDING</i>	
<i>PROGRAM</i>			<i>FEDERAL</i>	<i>LOCAL</i>
<b>FFY 00</b>				
<i>FMA</i>	Drafting of a regional Hazard Mitigation Plan by CREPA	Completed	\$19,900	\$4,975
	<b>Totals for FFY 00</b>		<b>\$19,900</b>	<b>\$4,975</b>
<b>FFY 01</b>				
<i>FMA</i>	Preparation of the third phase of the Regional Hazard Mitigation Plan by CREPA.	Completed	\$19,400	\$4,850
<i>HMGP</i>	Draft a mitigation plan in cooperation with CT River Estuary RPA	Completed	\$20,000	\$9,000
	<b>Totals for FFY 01</b>		<b>\$39,400</b>	<b>\$13,850</b>
<b>FFY 02</b>				
<i>FMA</i>	Prepare a Regional Hazard Mitigation Plan	Completed	\$19,600	\$6,533
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by SECCOG	Completed	\$76,133	\$25,378
	Prepare a Regional Hazard Mitigation Plan by SWRPA	Completed	\$37,462	\$12,487
	Prepare a Regional Hazard Mitigation Plan by NECCOG	Completed	\$17,791	\$5,930
	<b>Totals for FFY 02</b>		<b>\$150,986</b>	<b>\$50,329</b>
<b>FFY 03</b>				
<i>FMA</i>	Prepare a Regional Hazard Mitigation Plan	Completed	\$20,000	\$6,668
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by the CCRPA	Completed	\$50,878	\$17,007
	Prepare a Regional Hazard Mitigation Plan by the COGCNV	Completed	\$51,677	\$17,226
	Prepare a Regional Hazard Mitigation Plan by the GBRPA	Completed	\$70,845	\$23,615
	Prepare a Regional Hazard Mitigation Plan by the WRCOG	Completed	\$70,000	\$23,333
	Prepare a Regional Hazard Mitigation Plan by CRERPA	Completed	\$33,636	\$10,471
	<b>Totals for FFY 03</b>		<b>\$297,036</b>	<b>\$98,319</b>
<b>FFY 04</b>				
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	Ongoing	\$101,050	\$33,690
	Prepare a Regional Hazard Mitigation Plan by the NWCCOG	Ongoing	\$40,857	\$13,619
	Prepare a Regional Hazard Mitigation Plan by the CRCOG	Completed	\$322,500	\$107,500
	Prepare a Regional Hazard Mitigation Plan by the City of New Haven	Completed	\$7,505	\$2,502
	<b>Totals for FFY 04</b>		<b>\$471,912</b>	<b>\$157,311</b>
<b>FFY 05</b>				

<i>FEDERAL FISCAL YEAR</i>	<i>DESCRIPTION</i>	<i>STATUS</i>	<i>FUNDING</i>	
<i>PROGRAM</i>			<i>FEDERAL</i>	<i>LOCAL</i>
<i>FMA</i>	Update existing Hazard Mitigation Plan, City of Milford	Completed	\$8,247	\$2,749
	Prepare a Hazard Mitigation Plan, Town of Hamden	Declined	\$0	\$0
	<b>Totals for FFY 05</b>		<b>\$8,247</b>	<b>\$2,749</b>
<i>FFY06</i>				
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	Completed	\$95,000	\$31,667
	<b>Totals for FFY 06</b>		<b>\$95,000</b>	<b>\$31,667</b>
<i>FFY07</i>				
<i>PDM</i>	Prepare a Regional Hazard Mitigation Plan by Midstate RPO	Ongoing	\$137,564.60	\$45,856
	<b>Totals for FFY 07</b>		<b>\$137,564.60</b>	<b>\$45,856</b>
	<b>Grand Totals FFY 1997-2007</b>		<b>\$1,220,045</b>	<b>\$405,056</b>

<i>FEDERAL FISCAL YEAR PROGRAM</i>	DESCRIPTION	STATUS	FUNDING	
			FEDERAL	LOCAL
<b>FFY 97</b>				
<i>FMA</i>	Elevation of structure located at 60 Harbor Road, Westport, CT	Complete	\$29,062	\$9,687
	Elevation of structure located at 120 Harbor Road, Westport, CT	Complete	\$51,551	\$17,184
	Elevation of structure located at 8 Spriteview Road, Westport, CT	Complete	\$18,750	\$6,250
	Elevation of structure located at 30 Marine Ave., Westport, CT	Complete	\$82,500	\$27,500
	<b>Totals for FFY 97</b>		<b>\$181,863</b>	<b>\$60,621</b>
<b>FFY 98</b>				
<i>FMA</i>	Elevation of structure located at 23 Danbury Ave., Westport, CT	Complete	\$54,180	\$18,060
	Elevation of structure located at 20 Ostend Ave., Westport, CT	Declined	\$0	\$0
	Elevation of structure located at 26 Ostend Ave., Westport, CT	Declined	\$0	\$0
	Elevation of structure located at 42 Danbury Ave., Westport, CT	Complete	\$54,476	\$18,159
	Elevation of structure located at 201 Hillspoint Ave., Westport, CT	Complete	\$31,350	\$10,550
<i>MAP</i>	Dry Hydrants in Glastonbury, CT	Complete	\$30,000	\$10,000
<i>PI</i>	Town of Westport: Downtown flood control study, tide gauge, hurricane makeover pilot project, 120 flood audits of businesses, 40 residential flood audits, shelter supplies, hurricane awareness week	Complete	\$500,000	\$166,665
	<b>Totals for FFY 98</b>		<b>\$670,006</b>	<b>\$223,434</b>
<b>FFY 99</b>				
<i>FMA</i>	Elevation of structure located at 16 Ostend Ave., Westport, CT	Complete	\$53,250	\$17,750
	Elevation of structure located at 4 Marine Ave., Westport, CT	Complete	\$64,875	\$21,625
	Elevation of structure located at 89 Shoreline Drive, Stratford, CT	Declined	\$0	\$0
	Elevation of structure located at 22 Spriteview Ave., Westport, CT	Declined	\$0	\$0
<i>PI</i>	City of Milford Elevation of Six Coastal Structures	Complete	\$300,000	\$100,000
	<b>Totals for FFY 99</b>		<b>\$418,125</b>	<b>\$139,375</b>
<b>FFY 00</b>				
<i>FMA</i>	Elevation of structure located at 8 Roland Place, Westport, CT	Completed	\$112,686	\$37,563
	Acquisition of structure located at 34 Lynch Terrace, Enfield, CT	Declined	\$0	\$0

<b>FEDERAL FISCAL YEAR</b>	<b>DESCRIPTION</b>	<b>STATUS</b>	<b>FUNDING</b>	
<b>PROGRAM</b>			<b>FEDERAL</b>	<b>LOCAL</b>
	Elevation of structure located at 8 Danbury Ave., Westport, CT	Completed	\$52,500	\$17,500
	Elevation of 3 Brookside Terrace in Essex, Connecticut	Completed	\$108,646	\$36,250
	Drafting of a regional Hazard Mitigation Plan by CREPA	Completed	\$19,900	\$4,975
<b>PI 1.</b>	City of East Haven: Upgrade to engineering computer network, coastal public address system, hurricane shutters, sample home elevation project, public information materials	Completed	\$300,000	\$100,000
	<b>Totals for FFY 00</b>		<b>\$593,732</b>	<b>\$196,288</b>
<b>FFY 01</b>				
<b>FMA</b>	Acquisition of structure located at 13 Hellstrom Road, East Haven, CT	Declined	\$0	\$0
	Acquisition of structure located at 12 Raymond Court, East Haven CT	Declined	\$0	\$0
	Upgrade of Connecticut Alert System – Statewide	Completed	\$33,750	\$11,250
	Preparation of the third phase of the Regional Hazard Mitigation Plan by CREPA.	Completed	\$19,400	\$4,850
<b>HMGP</b>	Elevation of structure located at 33 Soundview Drive, Westport, CT	Declined	\$0	\$0
	Elevation of structure located at 146 Kings Highway, Westport, CT	Declined	\$0	\$0
	Elevation of structure Located at 8 Harbor Road, Westport, CT	Completed	\$48,250	\$13,750
	Elevation of structure located at 31 Morehouse Lane, Milford, CT	Declined	\$0	\$0
	Upgrade of culverts in Somers, CT to prevent flooding.	Completed	\$18,360	\$18,360
	Draft a mitigation plan in cooperation with CT River Estuary RPA	Completed	\$20,000	\$9,000
<b>PI</b>	City of Norwich Project Impact Tasks	Completed	\$300,000	\$100,000
	<b>Totals for FFY 01</b>		<b>\$439,760</b>	<b>\$157,210</b>
<b>FFY 02</b>				
<b>FMA</b>	Elevation of structure located at 146 Kings Highway, Westport, CT	Declined	\$0	\$0
	Elevation of structure located at 24 Morehouse Blvd., Westport, CT	Completed	\$39,000	\$13,000
	Elevation of structure located at 6 Ostend Ave., Westport, CT	Completed	\$109,912	\$36,638
	Prepare a Regional Hazard Mitigation Plan	Completed	\$19,600	\$6,533

<b>FEDERAL FISCAL YEAR</b>	<b>DESCRIPTION</b>	<b>STATUS</b>	<b>FUNDING</b>	
<b>PROGRAM</b>			<b>FEDERAL</b>	<b>LOCAL</b>
<b>PDM Planning</b>	Prepare the Connecticut Standard Section 322 Plan	Completed	\$165,562	\$41,390
	Prepare a Regional Hazard Mitigation Plan by SECCOG	Completed	\$76,133	\$25,378
	Prepare a Regional Hazard Mitigation Plan by SWRPA	Completed	\$37,462	\$12,487
	Prepare a Regional Hazard Mitigation Plan by NECCOG	Completed	\$17,791	\$5,930
	<b>Totals for FFY 02</b>		<b>\$465,460</b>	<b>\$141,357</b>
<b>FFY 03</b>				
<b>FMA</b>	Elevation of structure located at 35 Ostend Ave., Westport, CT	Completed	\$111,525	\$37,175
	Elevation of structure located at 30 Sunset Road, Greenwich, CT	Declined	\$0	\$0
	Acquisition of structure located at 191 Hillspoint Road, Westport, CT	Declined	\$0	\$0
	Elevation of structure located at 38 Camden Street, Fairfield, CT	Completed	\$41,250	\$13,750
	Elevation of structure located at 40 Point Beach Drive, Milford, CT	Completed	\$45,000	\$15,000
	Elevation of structure located at 28 Ostend Ave., Westport, CT	Declined	\$0	\$0
	Elevation of structure located at 5 Naussau Road, Westport, CT	Declined	\$0	\$0
	Acquisition of properties located at 41 & 45 Morse Ave., West Haven, CT	Declined	\$0	\$0
	Prepare a Regional Hazard Mitigation Plan	Completed	\$20,000	\$6,668
<b>PDM Planning</b>	Prepare a Regional Hazard Mitigation Plan by the CCRPA	Completed	\$50,878	\$17,007
	Prepare a Regional Hazard Mitigation Plan by the COGCNV	Completed	\$51,677	\$17,226
	Prepare a Regional Hazard Mitigation Plan by the GBRPA	Completed	\$70,845	\$23,615
	Prepare a Regional Hazard Mitigation Plan by the WRCOG	Completed	\$70,000	\$23,333
	Prepare a Regional Hazard Mitigation Plan by CRERPA	Completed	\$33,636	\$10,471
	<b>Totals for FFY 03</b>		<b>\$494,811</b>	<b>\$164,244</b>
<b>FFY 04</b>				
<b>FMA</b>	Home Elevation, 41 Hillside Avenue, Milford	Ongoing	\$61,200	\$20,400
	Home Elevation, 105 Hillside Avenue, Milford	Ongoing	\$71,850	\$23,950
<b>PDM Planning</b>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	Ongoing	\$101,050	\$33,690

<b>FEDERAL FISCAL YEAR</b>	<b>DESCRIPTION</b>	<b>STATUS</b>	<b>FUNDING</b>	
<b>PROGRAM</b>			<b>FEDERAL</b>	<b>LOCAL</b>
	Prepare a Regional Hazard Mitigation Plan by the NWCCOG	Ongoing	\$40,857	\$13,619
	Prepare a Regional Hazard Mitigation Plan by the CRCOG	Ongoing	\$322,500	\$107,500
	Prepare a Regional Hazard Mitigation Plan by the City of New Haven	Completed	\$7,505	\$2,502
	<b>Totals for FFY 04</b>		<b>\$604,962</b>	<b>\$201,661</b>
<b>FFY 05</b>				
<b>FMA</b>	Update existing Hazard Mitigation Plan, City of Milford	Ongoing	\$8,247	\$2,749
	Prepare a Hazard Mitigation Plan, Town of Hamden	Declined	\$0	\$0
<b>PDM</b>	Home elevation, 80 Shoreline Drive, Town of Stratford	Ongoing	\$56,700	\$18,000
	Home elevation, 691 Broadway, Town of Milford	Declined	\$0	\$0
	Home elevation, 390 Cosey Beach, Town of East Haven	Ongoing	\$112,613	\$37,538
	Home elevation, 192 Cosey Beach, Town of East Haven	Ongoing	\$69,694	\$23,231
	Home elevation, 274A Cosey Beach, Town of East Haven	Ongoing	\$63,394	\$21,131
	Home elevation, 278 Cosey Beach, Town of East Haven	Ongoing	\$65,756	\$21,919
	Home elevation, 376 Cosey Beach, Town of East Haven	Ongoing	\$73,631	\$24,544
	Home elevation, 384 Cosey Beach, Town of East Haven	Ongoing	\$72,056	\$24,019
	Home elevation, 312 Cosey Beach, Town of East Haven	Ongoing	\$75,206	\$25,069
	Home elevation, 380 Cosey Beach, Town of East Haven	Ongoing	\$72,056	\$24,019
	Home elevation, 388 Cosey Beach, Town of East Haven	Ongoing	\$111,825	\$37,275
	<b>Totals for FFY 05</b>		<b>\$781,178</b>	<b>\$259,493</b>
<b>FFY06</b>				
<b>PDM Planning</b>	Prepare a Regional Hazard Mitigation Plan by the COGCNV	Ongoing	\$95,000	\$31,667
	<b>Totals for FFY 06</b>		<b>\$95,000</b>	<b>\$31,667</b>
<b>FFY07</b>				
<b>PDM Planning</b>	Prepare a Regional Hazard Mitigation Plan by Midstate RPO	Ongoing	\$137,564.60	\$45,856
	<b>Totals for FFY 07</b>		<b>\$137,564.60</b>	<b>\$45,856</b>
	<b>Grand Totals FFY 1997-2007</b>		<b>\$4,882,462</b>	<b>\$1,621,206</b>