



ILLINOIS STATE
WATER SURVEY
PRAIRIE RESEARCH INSTITUTE

Central United States 2012 Drought Assessment

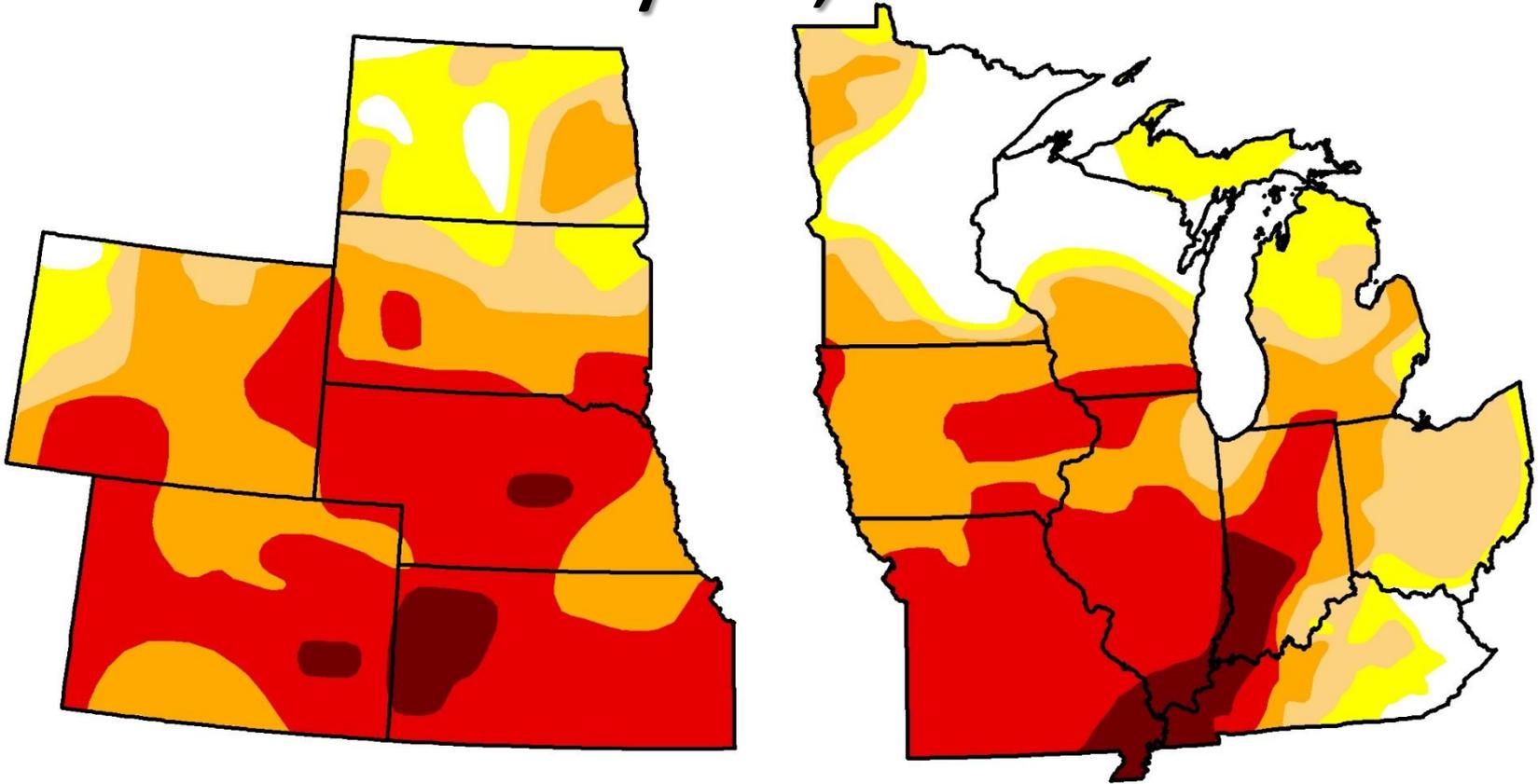
Jim Angel

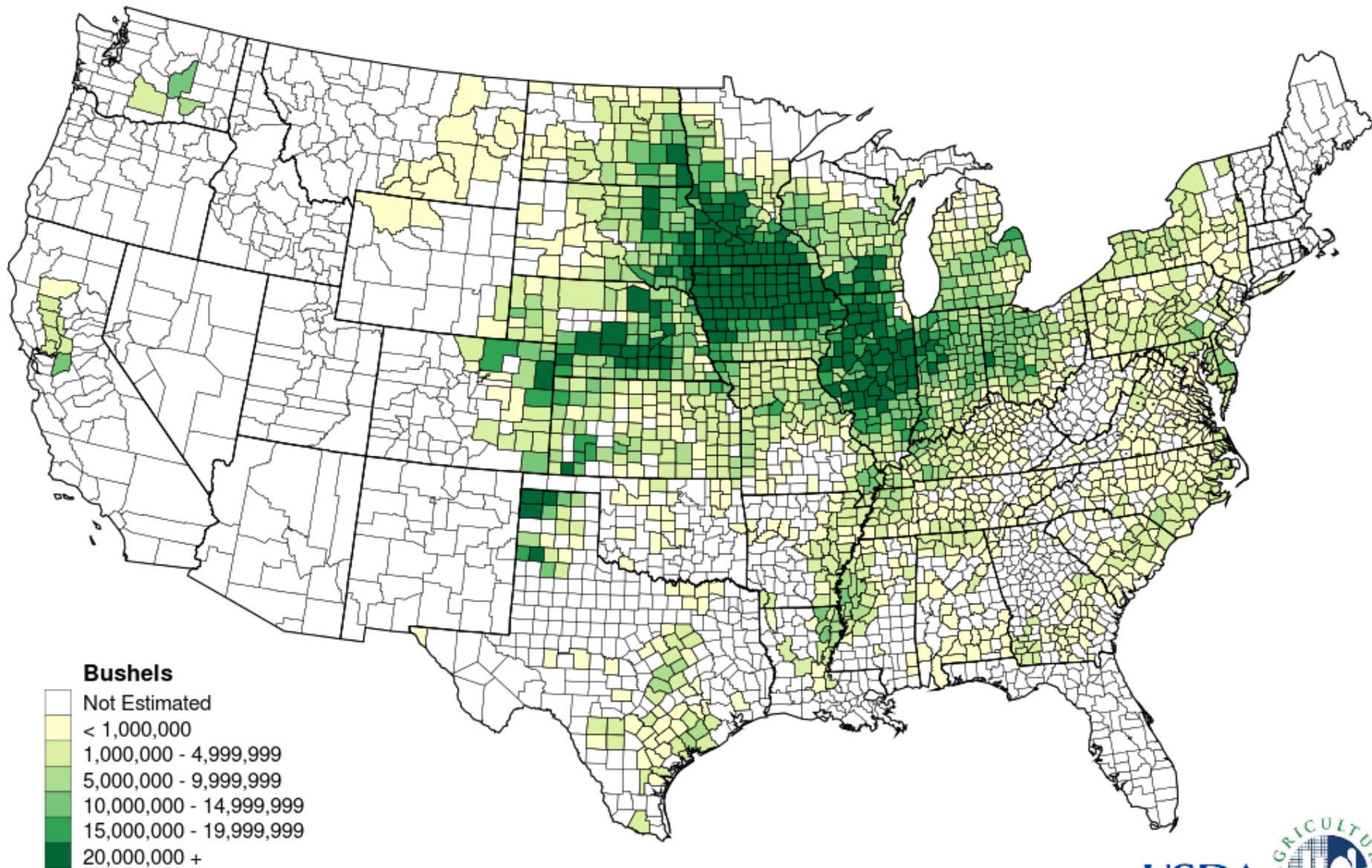
State Climatologist for Illinois



University of Illinois at Urbana-Champaign

July 31, 2012





U.S. Department of Agriculture, National Agricultural Statistics Service



1. Preamble (NIDIS)
 - a. Characterize drought climatologically and via impacts
 - b. Highlight the collaborative nature of the report
2. Climatological overview of the drought
 - a. Observations
 - i. MRCC/HPRCC/NCDC – climate variables
 - ii. NDMC – DM statistics/summary
 - iii. NRCS – soil moisture
 - b. Forecasts
 - i. CPC – seasonal T/P/drought outlooks
 - ii. CIRES – experimental outlooks
 - iii. NWS/USFS – wildfire outlooks (????)
 - iv. NWS/RFC – 90-day stream flow forecasts
 - v. NRCS – stream flow forecasts
 - vi. USACE – water supply forecasts
 - c. Attribution
 - i. ERSL
 - ii. SCs

3. Regional Environmental and Economic Impacts
 - a. Great Plains Agriculture
 - i. Wheat
 - ii. Corn
 - iii. Soybeans
 - iv. Horticulture and Specialty Crops
 - v. Livestock
 - vi. Rangeland
 - b. Midwest Agriculture (irrigation)
 - i. Wheat
 - ii. Corn
 - iii. Soybeans
 - iv. Horticulture and Specialty Crops
 - v. Livestock
 - vi. New irrigation/tiling implications?
 - c. Water:
 - i. River and Great Lakes Transportation
 - ii. Energy
 1. Production
 2. Demand
 - iii. Municipal Water Supplies

- a. Wildfires (plains, mountains, forests)
 - b. Ecosystems
 - c. Recreation and Tourism?
 - d. Tribal
4. Risk Management
- a. Agriculture
 - i. Crop insurance (RMA, FSA)
 - ii. On-farm grain storage
 - iii. Irrigation
 - iv. Policy?
 - v. Genetics?
 - b. Transportation
 - c. Energy
5. Regional climate services provided in response to the drought (NCDC, USDA???, SCs)
- a. NOAA (NCDC, NWS)
 - b. SCs
 - c. RCCs
 - d. USDA
 - e. DOI (USFWS, BOR, USGS)
6. Lessons learned, best practices, and next steps
- a. Information Delivery
 - b. Types of Information Delivered
 - c. Expressed Needs

The 2012 Drought - Illinois

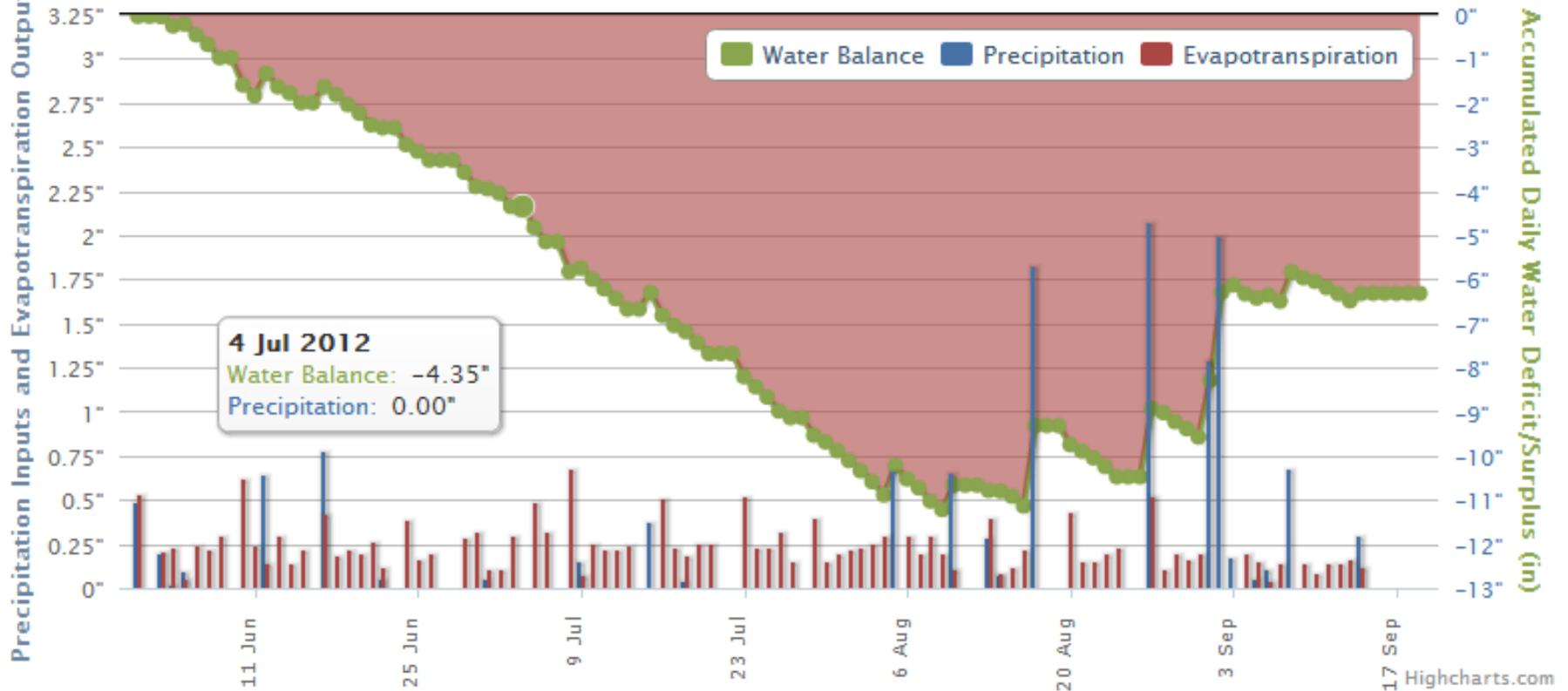
- Worst drought since 1988 and rivaled the 1930s and 1950s drought
- Corn yield, 101 bu/acre (64% of last year)
- Soybean yield, 43 bu/acre (89% of last year)
- Estimated costs in Illinois alone, \$6 billion and rising

ET Gauge (CoCoRaHS)

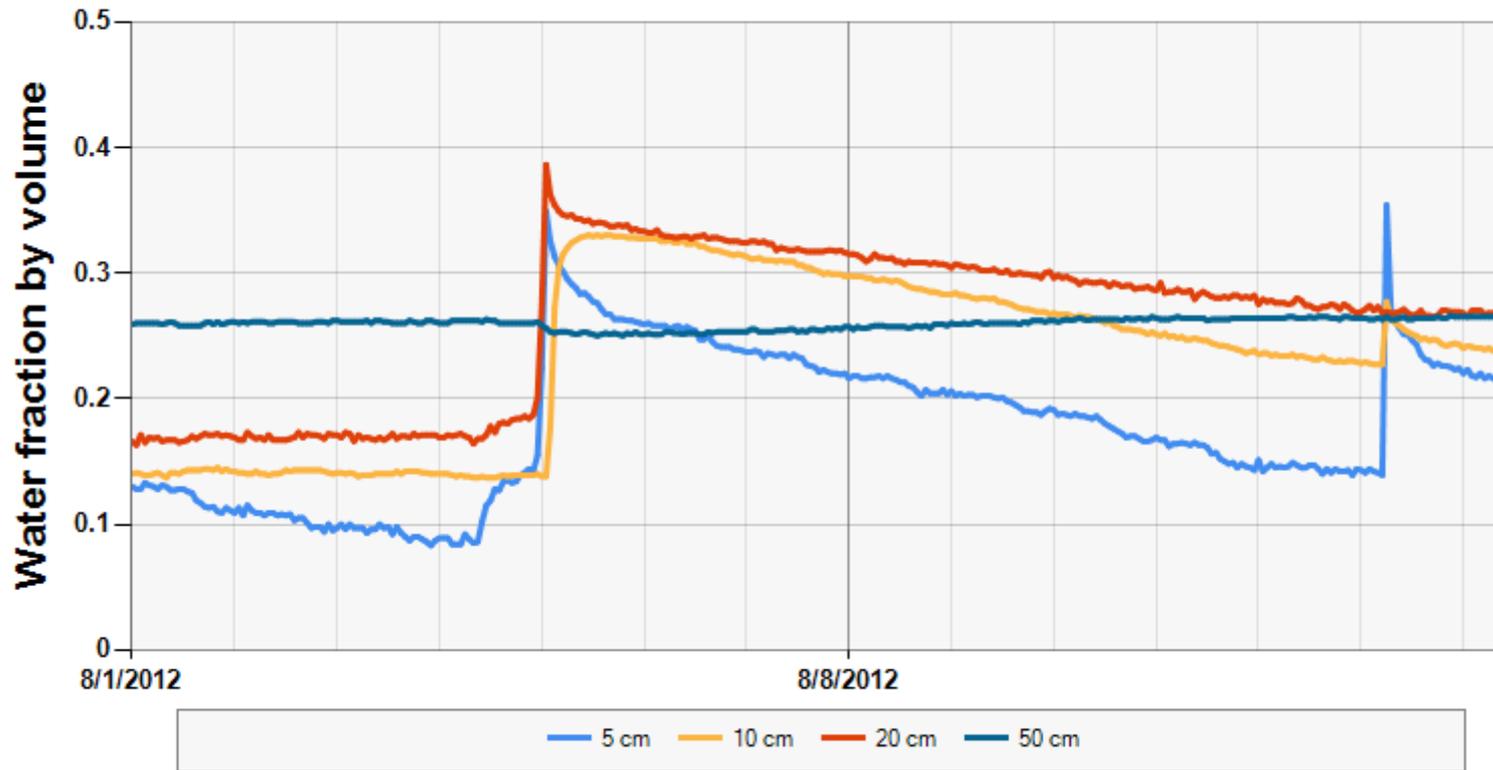


June 1, 2012 – September 19, 2012 Water Balance for Station IL-CP-64 (Champaign 2.4 SSE)

Source: CoCoRaHS Station Water Balance Summary Report



Carbondale



Case Studies/Success Stories

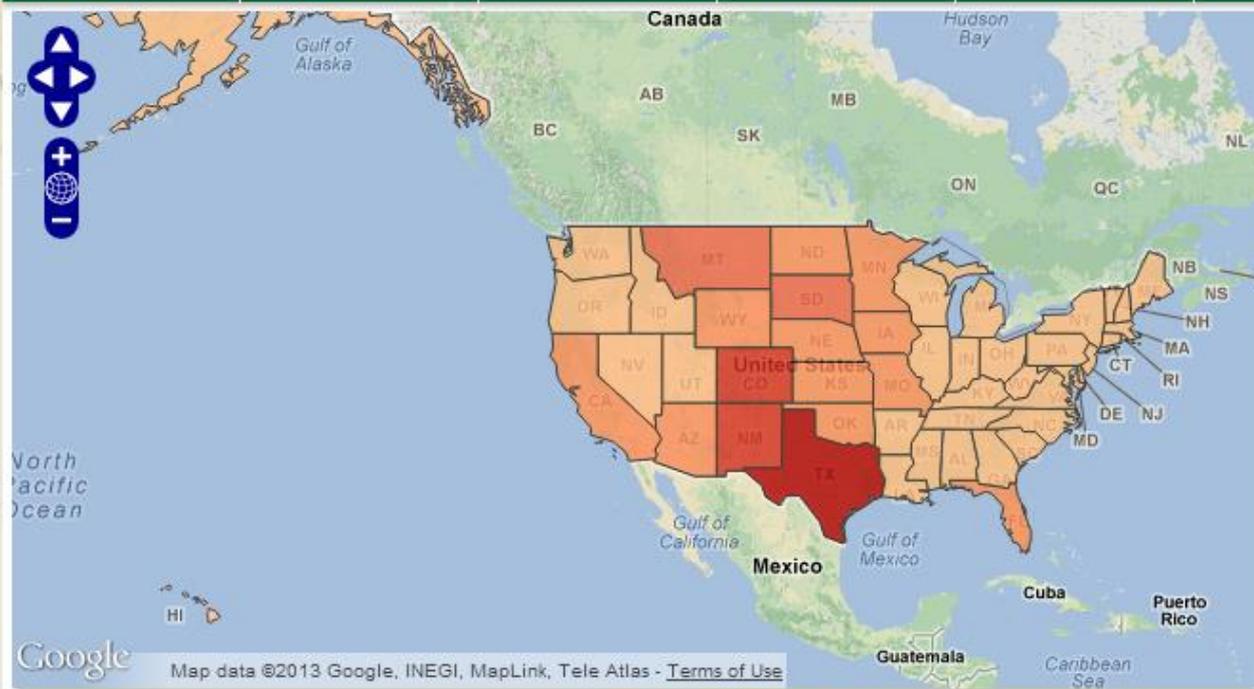
- City of Decatur Illinois
- Drought-Ready Community
- Planning
- Mitigation





Issues Related to the Drought

- Cover crops
- Tillage practices (no-till)
- Nitrogen management
- Mix of crops next year
- Soil moisture recovery
- Seasonal forecast
- Irrigation options
- Assessing long-term risk of drought
- Mississippi River navigation



[Refresh](#)

Impacts & Reports Overlays

Impacts

Opacity 80%

Impacts

- 0
- 2 - 5
- 6 - 9
- 10 - 13
- 14 - 16
- 17 - 19

Reports

Time Period

Location

Categories

Report Types

All States | 03-15-2013 - 04-15-2013 |

Impact Counts Impacts List | Page 1/10 Report Counts Reports List | Page 1/43

Total Impacts All States		97	
Category			
Agriculture	57	Business & Industry	7
Fire	9	Plants & Wildlife	15
Relief, Response & Restrictions	58	Society & Public Health	9
Tourism & Recreation	4	Water Supply & Quality	33
Report Source			
Media	58	User	4

Timeline

- SC reports by April 30
- First Draft of Report by the July 9 AASC meeting
- Final report by the Fall?

Other Details

- Scope: 2012 Calendar Year
- Living Document
- Set up Dropbox for reports by agency/state

Questions?

