

NWS Drought & Climate Services

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Spokane, WA



Outline

- US Drought Monitor Input
- Drought Statements
- Climate Data and Services

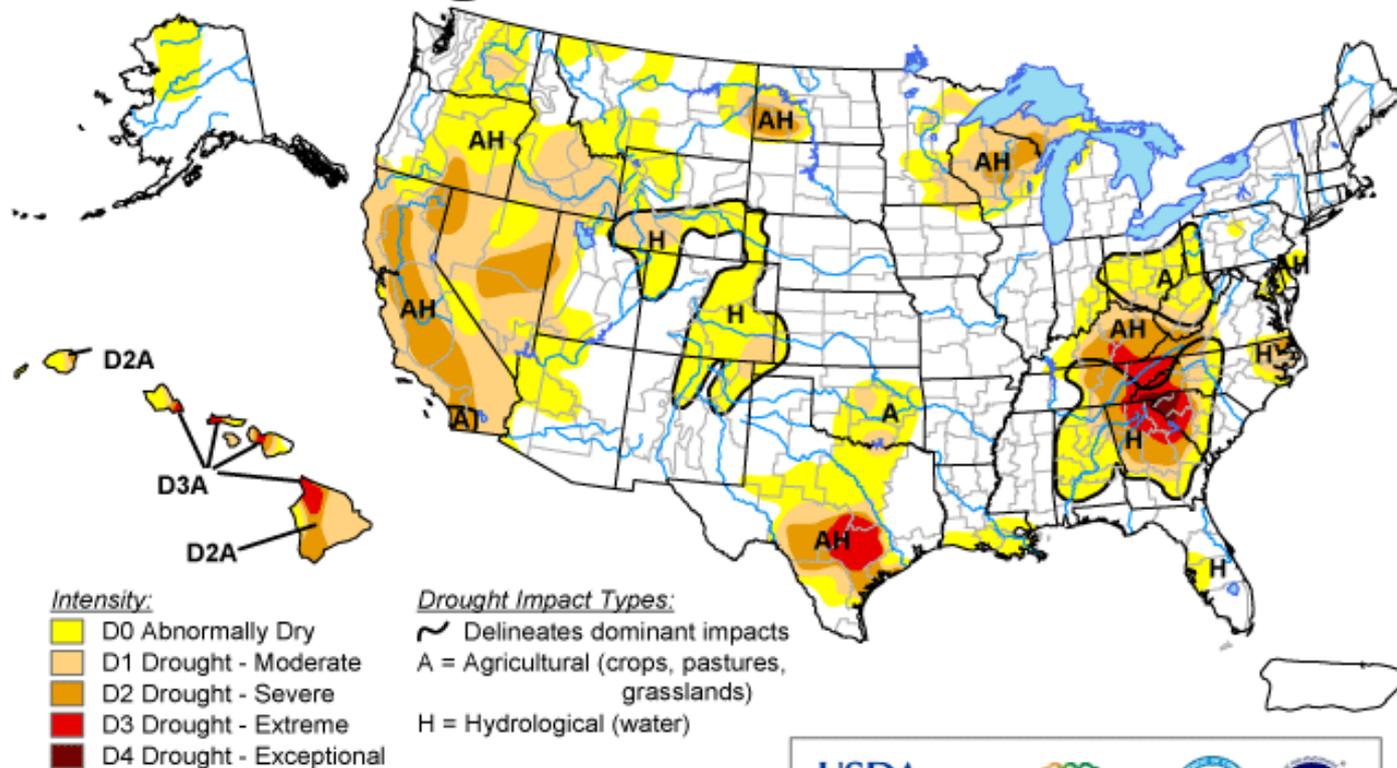


US Drought Monitor

U.S. Drought Monitor

November 4, 2008

Valid 8 a.m. EST



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, November 6, 2008

Author: Mark Svoboda, National Drought Mitigation Center



Regional Level

U.S. Drought Monitor West

November 4, 2008

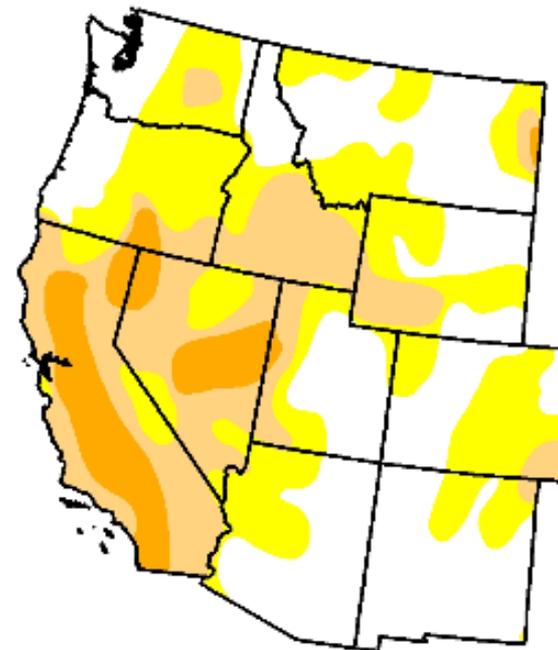
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	39.9	60.1	29.6	8.5	0.0	0.0
Last Week (10/28/2008 map)	39.9	60.1	30.0	10.4	0.0	0.0
3 Months Ago (08/12/2008 map)	32.7	67.3	31.2	10.0	0.7	0.0
Start of Calendar Year (01/01/2008 map)	26.3	73.7	54.7	33.1	2.7	0.0
Start of Water Year (10/07/2008 map)	41.3	58.7	28.6	10.4	0.1	0.0
One Year Ago (11/06/2007 map)	27.3	72.7	57.5	41.5	10.0	0.0

Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

<http://drought.unl.edu/dm>



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State Level

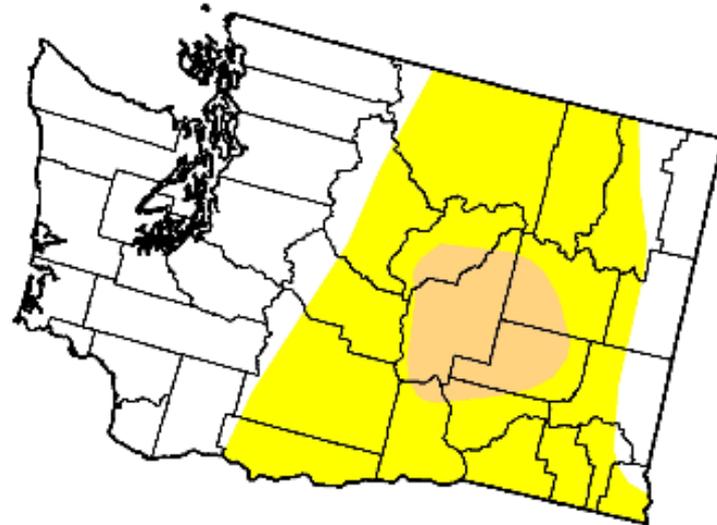
U.S. Drought Monitor Washington

November 4, 2008

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	49.2	50.8	8.5	0.0	0.0	0.0
Last Week (10/28/2008 map)	49.2	50.8	8.5	0.0	0.0	0.0
3 Months Ago (08/12/2008 map)	66.9	33.1	5.1	0.0	0.0	0.0
Start of Calendar Year (01/01/2008 map)	95.4	4.6	0.5	0.0	0.0	0.0
Start of Water Year (10/07/2008 map)	66.4	33.6	5.1	0.0	0.0	0.0
One Year Ago (11/06/2007 map)	59.2	40.8	7.0	2.2	0.0	0.0



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

<http://drought.unl.edu/dm>



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Local Input

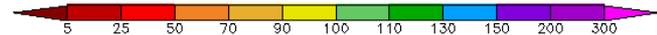
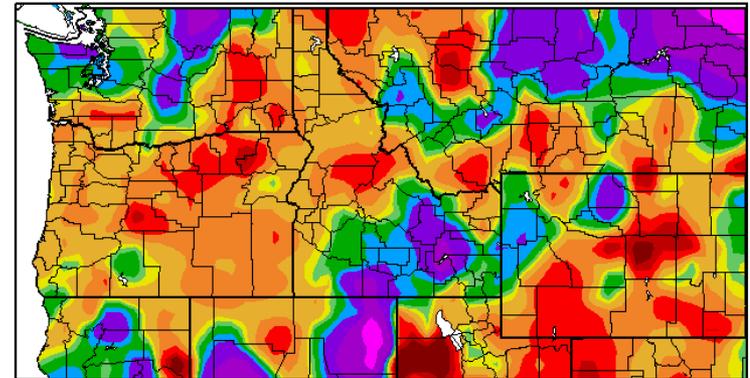
- NWS Forecast Offices act as local 'experts' into the USDM along with other experts (State Climatologists, USDA. Etc)
- Decisions on expanding or reducing drought status are often made based upon local input
- More local input needed! (FSA, County Agents, producers!)



Local Input

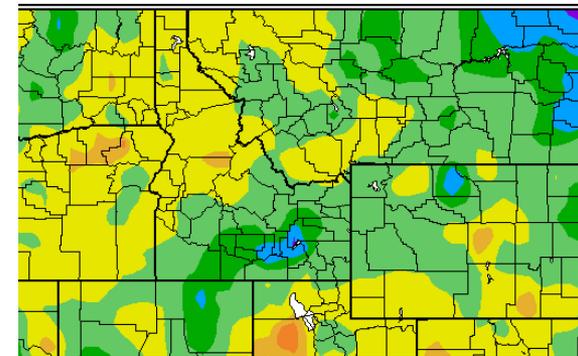
- Multiple data sources used (NWS weather data, PAWS, RAWs)
- USDA NASS reports
- Local media
- CoCoRAHS

Percent of Normal Precipitation (%)
10/12/2008 - 11/10/2008



Generated 11/11/2008 at HPRCC using provisional data. NOAA Regional Climate Centers

30 Day SPI
10/12/2008 - 11/10/2008



3 at HPRCC using provisional data. NOAA Regional Climate Centers



United States Department of Agriculture
National Agricultural Statistics Service
USDA NASS
Washington Field Office
P.O. Box 698, Olympia, WA 98507
(360) 953-1940 Fax: (360) 953-2061

Washington Crop Weather

Released: November 10, 2008
Week Ending: November 9, 2008
CWP: WA-CR4308

Much Needed Rain Gives Grain Growing Counties a Good Soaking

Field Crops
Days suitable for fieldwork were 3.7. Significant rain storms gave eastern Washington grain growing counties a much needed break. Walla Walla County reported winter wheat showed immediate improvement. Corn harvested for grain was winding down. Franklin County reported buckwheat harvest was almost finished. Christmas tree growers commenced with Noble fir bough harvest. Commercial dahlia growers had finished digging tubers.

Fruits and Vegetables
In the Yakima Valley, apple harvest was nearly finished. Whatcom County reported raspberry producers were busy tying and pruning. Cranberry growers completed post-harvest bog maintenance activities.

Livestock and Shellfish
Range and pasture conditions were 7 percent very poor, 26 percent poor, 26 percent fair and 41 percent good. On the eastern side, Ferry County reported cattlemen were weaning calves. Stevens County reported feedlots were heavy with mud from recent rains, and cattle were continuing to move to market. Lincoln County reported many ranchers had begun supplemental feeding. Hay prices appeared to be softening somewhat. Pacific County reported oyster harvest continued for the holiday market.

Days Suitable for Fieldwork		
Week	Days	
This Week	3.7	
Last Week	6.0	

Item	Percent			
	VS	SH	AD	S
Topsoil	11	17	36	36
Topsoil 5 Yr Avg	6	20	62	12
Subsoil	25	42	31	2
Subsoil 5 Yr Avg	11	32	53	4
Irrigation Water	1	3	95	1
Irrigation Water 5 Yr Avg	2	5	92	1
Hay & Roughage	8	14	72	6

VS=Very Short SH=Short AD=Adequate S=Surplus



Drought Services

- Drought Monitoring
- Drought Statements (DGT's)
- Local, regional, and national coordination
- The NWS does not declare the beginning or end of drought

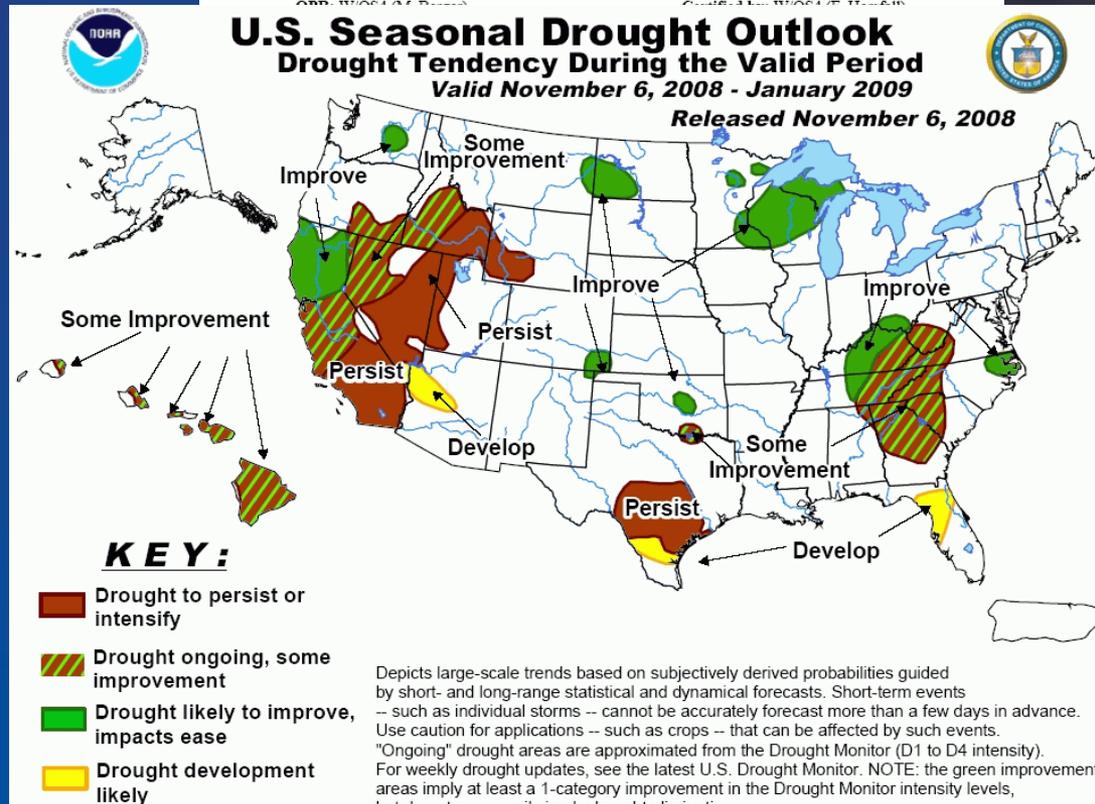
Department of Commerce & National Oceanic & Atmospheric Administration & National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-1201
JUNE 10, 2008

Operations and Services
Drought Services, NWSPD 10-12

WFO DROUGHT PRODUCTS SPECIFICATION

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>



Local Drought Statements

- Issued by the local NWS Forecast Office when 'D2' drought is depicted on the US Drought Monitor in the office's County Warning Area
- May also be issued at other stages of drought through local agreement
- Issued at least once per month while drought persists



Drought Statement

AXUS73 KARX 280921

DGTARX

IAC005-037-043-065-067-089-131-191-MNC039-045-055-099-109-157-169-WIC001-011-019-023-043-053-057-063-081-103-119-121-123-280900-

DROUGHT INFORMATION STATEMENT
NATIONAL WEATHER SERVICE LA CROSSE WI
421 AM CDT FRI OCT 28 2005

...DROUGHT STILL EXISTS IN PARTS OF THE AREA...

SYNOPSIS...

PRECIPITATION DEFICITS HAVE INCREASED ACROSS THE AREA. ACCORDING TO THE OCTOBER 25TH RELEASE OF THE U.S. DROUGHT MONITOR...MODERATE /D1/ DROUGHT STILL EXISTS ACROSS PARTS OF GRANT COUNTY IN SOUTHWEST WISCONSIN AND CLAYTON COUNTY IN NORTHEAST IOWA. ABNORMALLY DRY CONDITIONS /D0/ STILL EXISTS ACROSS NORTH CENTRAL...CENTRAL...AND SOUTHWEST WISCONSIN...AND NORTHEAST IOWA. ABNORMALLY DRY /D0/ CONDITIONS EXIST ACROSS CLARK AND TAYLOR COUNTIES IN NORTH CENTRAL WISCONSIN...ADAMS AND JUNEAU COUNTIES IN CENTRAL WISCONSIN...CRAWFORD...RICHLAND...AND VERNON COUNTIES IN SOUTHWEST WISCONSIN... AND ALLAMAKEE...CHICKASAW...FAYETTE...FLOYD...AND WINNESHIEK COUNTIES IN NORTHEAST IOWA.

SUMMARY OF IMPACTS...

STATE AND LOCAL ACTIONS.
NO KNOWN STATE OR LOCAL ACTIONS ARE CURRENTLY TAKING PLACE.

SOIL MOISTURE CONDITIONS.
AS OF OCTOBER 25TH...THE MIDWESTERN REGIONAL CLIMATE CENTER /MRCC/ INDICATED SOIL MOISTURE DEFICITS UP TO TWO AND HALF INCHES ACROSS PORTIONS OF THE SOUTHERN WISCONSIN...NORTHERN ILLINOIS...AND NORTHEAST AND SOUTHERN IOWA.

GROUNDWATER CONDITIONS.
THE CURRENT WELL WATER LEVEL IS 6.97 FEET BELOW GROUND LEVEL AS OF 7 AM ON OCTOBER 25TH JUST WEST OF TOMAH WISCONSIN IN MONROE COUNTY. THIS LEVEL IS SLIGHTLY LOWER THAN THE 6.72 FEET BELOW GROUND LEVEL AS OF 7 AM ON OCTOBER 11TH. NORMALLY THE WATER LEVEL SHOULD 4.95 FEET BELOW GROUND LEVEL. THE LOWEST LEVEL ON RECORD IN OCTOBER WAS 8.62 FEET BELOW THE GROUND LEVEL IN OCTOBER 1987. THE HIGHEST LEVEL ON RECORD WAS 1.94 FEET BELOW GROUND LEVEL IN OCTOBER 1972. THE PERIOD OF RECORD EXTENDS FROM OCTOBER 1949 THROUGH THE PRESENT.



NWS Climate Services



NWS Climate Services

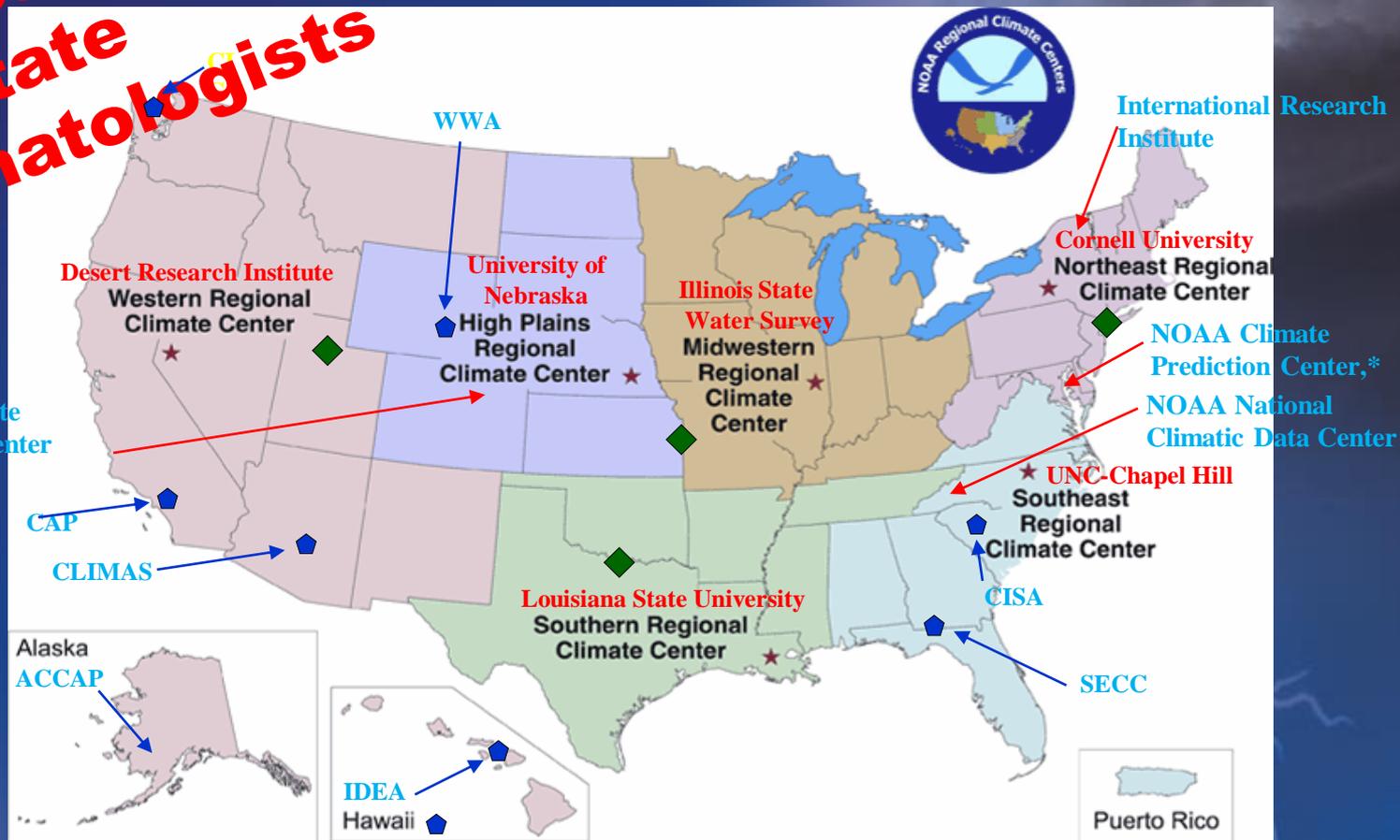
- ‘Weather, Water, and Climate’
- Climate Prediction Center
- Local, initial contact for climate data and services



NOAA Climate Services Partnerships

The Broad Community

Also:
122 WFOs
15 WSOs
13 RFCs
~50 State Climatologists



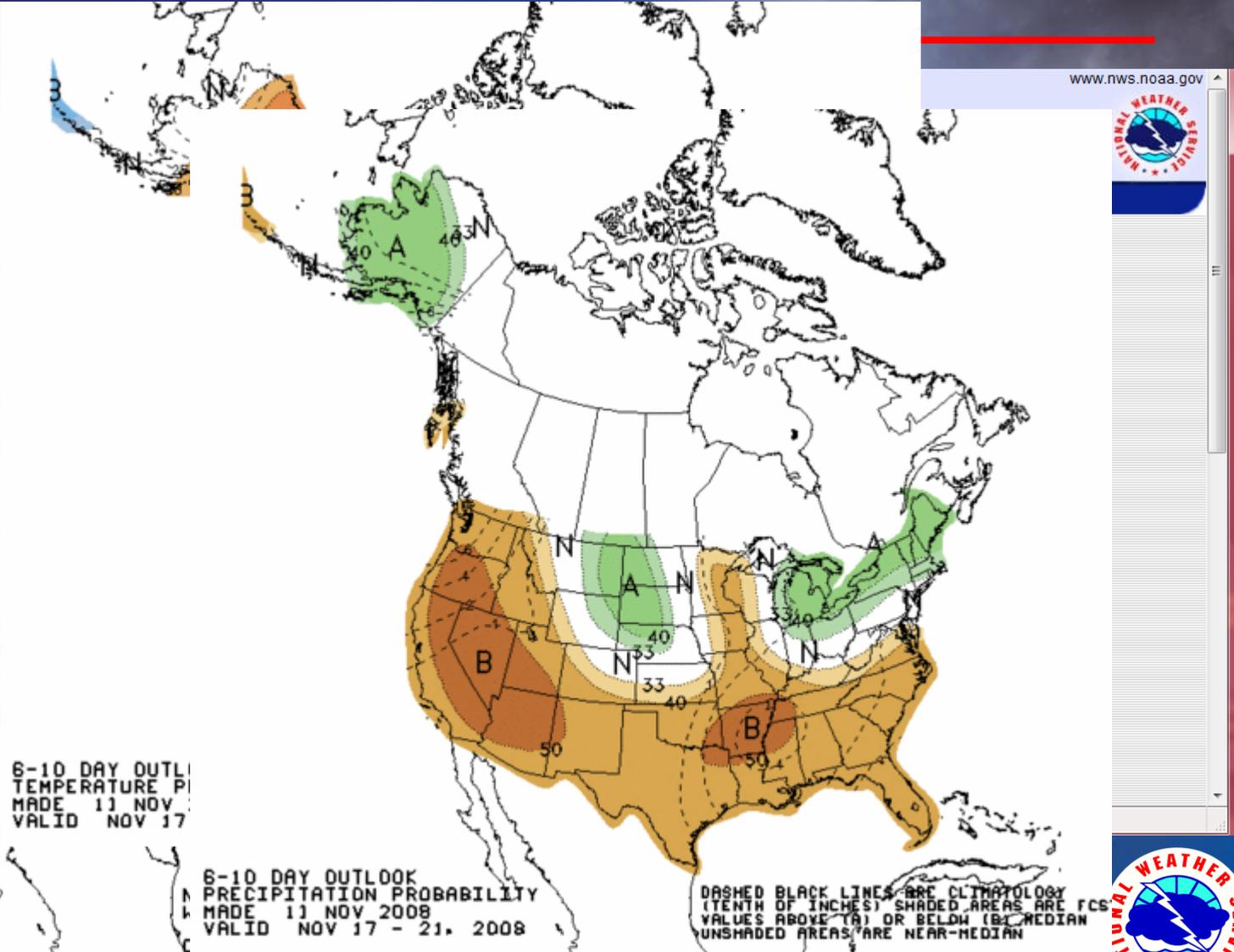
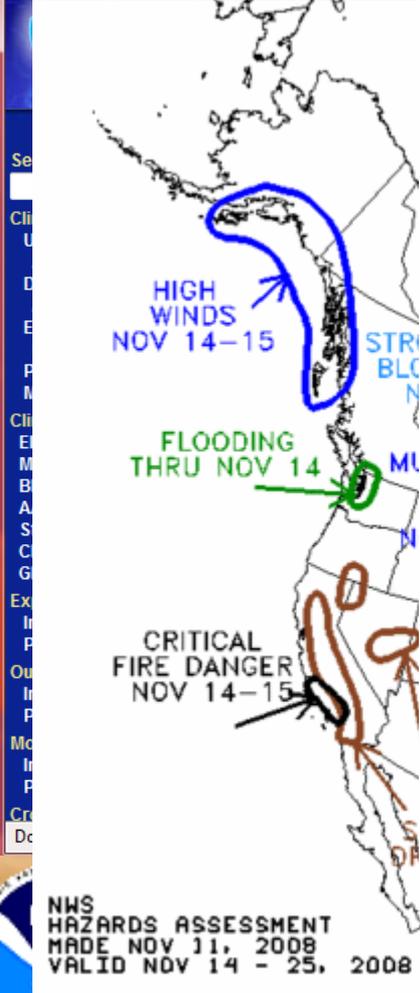
- ▮ RISA's
- ◆ NWS Regional HQ
- ★ Regional Climate Centers

* Climate Services Division,
 * Climate Program Office, and
 * NOAA HQ



Climate Prediction Center

National



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Local Climate Services

- Daily & Monthly Climate Summaries
- NOWdata
- Outreach & Resources



Spokane, WA



Time News Organization Search for: NWS All NOAA

Local forecast by "City, St"

City, St

As part of its ongoing efforts to improve service to the public, The National Weather Service has released a local 3-month temperature outlook. Access the product for your area [here](#). Please click [here](#) to complete the feedback survey.

- Observed Weather
- Climate Locations
- Climate Prediction
- Climate Resources
- Local Data/Records
- Astronomical
- NOWData

Observed Weather Reports

1. Product »

- Daily Climate Report (CLI)
- Preliminary Climatology Data (CF6)
- Record Event Report (RER)
- Monthly Weather Summary (CLM)
- Regional Summary (RTP)
- State Summary (Temp/Precip)

2. Location »

- Spokane
- Lewiston
- Wenatchee
- Spokane (NWS Office)
- Felts Field
- Omak
- Moses Lake

3. Timeframe »

- Most Recent
- Archived Data:

October 2008
September 2008
August 2008
July 2008
June 2008
May 2008

4. View »

[Storm Event Database \(SPC\)](#)
[Storm Data \(NCDC\)](#)

Product Description:

MONTHLY WEATHER SUMMARY - issued once per month:
Monthly weather statistics, including temperature, precipitation, degree days, pressure, wind and sky cover. Normal values and departures from normal are also included. *NOTE more in-depth record data may also be available under the tab "Local Data/Records." This product is available for up to 1 year.

[Additional CF6 Data](#)

- Climate
- Local
- National
- More...

- Weather Safety
- Inland NW Safety
- Weather Radio
- Storm Ready

Done



Daily & Monthly Climate Summaries

Daily Summary

000
CDUS46 KOTX 111727
CLIGEG

CLIMATE REPORT
NATIONAL WEATHER SERVICE SPOKANE, WA
927 AM PST TUE NOV 11 2008

.....
...THE SPOKANE WA INTL AIRPORT CLIMATE SUMMARY FOR NOVEMBER 11 2008...
VALID AS OF 0900 AM LOCAL TIME.

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1881 TO 2008

WEATHER ITEM	OBSERVED VALUE	TIME (LST)	RECORD VALUE	YEAR	NORMAL VALUE	DEPARTURE FROM NORMAL	LAST YEAR
.....							
TEMPERATURE (F)							
TODAY							
MAXIMUM	39	859 AM	62	1990	43	-4	46
MINIMUM	38	604 AM	-2	2000	30	8	28
PRECIPITATION (IN)							
TODAY							
MONTH TO DATE	1.02		0.89	1968	0.07	-0.01	0.00
SINCE SEP 1	1.32				0.72	0.30	0.45
SINCE OCT 1	1.32				1.78	-0.46	1.63
SINCE JAN 1	11.60				12.90	-1.30	9.17
SNOWFALL (IN)							
TODAY							
MONTH TO DATE	0.0		3.6	1992	0.2	-0.2	0.0
SINCE SEP 1	T				1.6	-1.6	0.0
SINCE JUL 1	T				2.1	-2.1	T
SINCE JAN 1	T				2.1	-2.1	T
SNOW DEPTH	0						

Monthly Summary

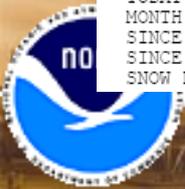
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CMUS56 KOTX 011038
CLMGEG

CLIMATE REPORT
NATIONAL WEATHER SERVICE SPOKANE, WA
338 AM PDT SAT NOV 1 2008

.....
...THE SPOKANE WA INTL AIRPORT CLIMATE SUMMARY FOR THE MONTH OF OCTOBER 2008...

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1881 TO 2008

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR'S VALUE	DATE(S)
.....						
TEMPERATURE (F)						
RECORD						
HIGH	87	10/04/1943				
LOW	7	10/31/2002				
HIGHEST	82	10/01	MM	MM	75	10/09
LOWEST	22	10/12	MM	MM	25	10/26
AVG. MAXIMUM	58.8		58.5	0.3	56.4	
AVG. MINIMUM	36.8		35.8	1.0	37.3	
MEAN	47.8		47.2	0.6	46.8	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		0.1	-0.1	0	
DAYS MIN <= 32	13		9.7	3.3	7	
DAYS MIN <= 0	0		0.0	0.0	0	
PRECIPITATION (INCHES)						
RECORD						
MAXIMUM	5.41	1947				
MINIMUM	T	1895				
TOTALS	0.30		1.06	-0.76	1.18	
DAILY AVG.	0.01		0.03	-0.02	0.04	
DAYS >= .01	7		7.0	0.0	11	



Spokane, WA



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Organization

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NWS

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[Local Data/Records](#)

[Astronomical](#)

[NOWData](#)

Local forecast by "City, St"

City, St

NOWData - NOAA Online Weather Data

1. Product »

- Daily data for a month
- Daily almanac
- Monthly avgs/totals
- Monthly occurrences
- Monthly extremes
- Daily extremes
- Daily/monthly normals
- Record extremes
- First/last dates

2. Location »

- Lewiston Area**
- Spokane Area
- Boundary Dam, WA
- Chelan, WA
- Chief Joseph Dam, WA
- Coulee Dam 1 Sw, WA
- Davenport, WA
- Ephrata Municipa, WA
- Lacrosse, WA
- Lind 3 Ne, WA

3. Variable »

- Max Temperature
- Min Temperature
- Avg Temperature
- Precipitation
- Snowfall
- Snow Depth
- Heating Degree Days
- Cooling Degree Days
- Growing Degree Days

4. Year »

- Current year
- Last year
- 1971-2000

5. View »

Product Description:

MONTHLY AVERAGES/TOTALS - calculates averages or totals, as appropriate, for the selected variable for each month of the year. This product is available for the current year, the previous year, or an average of the years 1971 through 2000. Additional stations and years of data are available from the Regional Climate Centers and the National Climatic Data Center.

- [NCDC Map Services](#) -
- [Common questions](#) -
- [Submit a question/comment](#) -



The Applied Climate Information System (ACIS) is a joint project of the Regional Climate Centers, the National Climatic Data Center and the National Weather Service. Official data and data for additional locations and years are available from the Regional Climate Centers and the National Climatic Data Center.

- Current Hazards
 - Inland Northwest
 - National Outlooks
- Current Conditions
 - Observations
 - Satellite Images
 - Radar Imagery
 - Rivers & Lakes
 - AHPS
- Forecasts
 - Activity Planner
 - Local Forecast Info
 - FCST Discussion
 - Graphical Forecasts
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 - Forecast Models
- Climate
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- Weather Safety
 - Inland NW Safety
 - Weather Radio
 - Storm Ready

Done



Daily Data - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://nowdata.rcc-acis.org/OTX/pubACIS_results

NOWData - NOAA Online Weather Data

Lewiston Area ([ThreadEx Station](#))
 Observed Daily Data
 Month: Nov 2008

Day	MaxT	MinT	AvgT	HDD	CDD	Pcpn	Snow	Snwg
1	51	43	47.0	18	0	T	0.0	0
2	56	47	51.5	13	0	0.09	0.0	0
3	56	39	47.5	17	0	T	0.0	0
4	48	39	43.5	21	0	0.09	0.0	0
5	51	33	42.0	23	0	0.00	0.0	0
6	52	36	44.0	21	0	0.02	0.0	0
7	56	48	52.0	13	0	0.02	M	M
8	54	44	49.0	16	0	0.07	0.0	0
9	49	41	45.0	20	0	0.12	0.0	0
10	54	40	47.0	18	0	T	0.0	0
11	M	M	M	M	M	M	M	M
12	M	M	M	M	M	M	M	M
13	M	M	M	M	M	M	M	M
14	M	M	M	M	M	M	M	M
15	M	M	M	M	M	M	M	M
16	M	M	M	M	M	M	M	M
17	M	M	M	M	M	M	M	M
18	M	M	M	M	M	M	M	M
19	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M
21	M	M	M	M	M	M	M	M
22	M	M	M	M	M	M	M	M
23	M	M	M	M	M	M	M	M
24	M	M	M	M	M	M	M	M
25	M	M	M	M	M	M	M	M
26	M	M	M	M	M	M	M	M
27	M	M	M	M	M	M	M	M
28	M	M	M	M	M	M	M	M

Done



Data Services

- Limited to short data requests of local data
- More extensive requests must be referred to State Climatologists, Regional Climate Centers, or National Climate Data Center
- NWS does not and cannot certify data (Only NCDC and some RCC's can)



Outreach & Resources

- NWS Staff are available for questions about:
 - *Climate Outlooks*
 - *Climate Data*
 - *Climate Change*
- Staff are also available for on-site presentations
- Referrals



Questions?

Royce Fontenot

royce.fontenot@noaa.gov

509-244-0110 x228

NWS Spokane Website

<http://www.weather.gov/spokane>

