

NE Drought Conditions CARC Update: April 2008

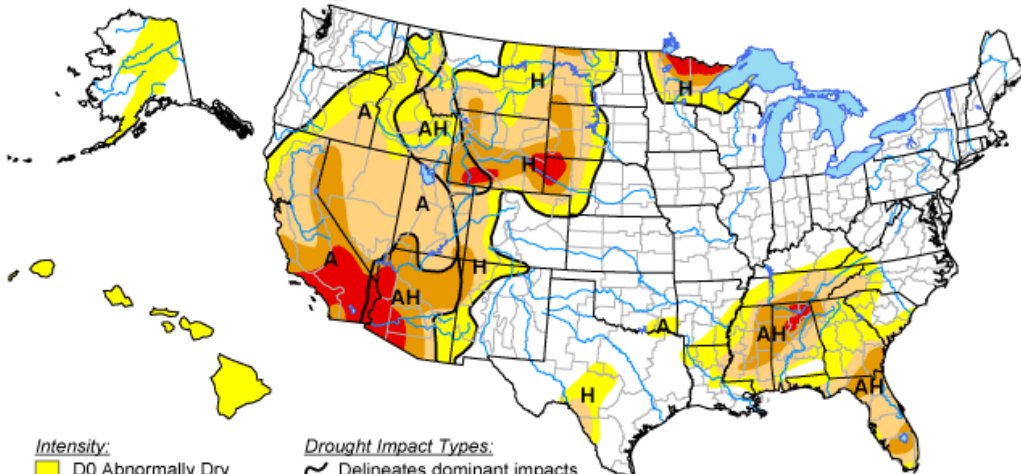
Mark Svoboda and Brian Fuchs
National Drought Mitigation Center
University of Nebraska-Lincoln

Al Dutcher, State Climatologist
School of Natural Resources
University of Nebraska-Lincoln

Current Conditions around Nebraska and the region...

U.S. Drought Monitor

April 17, 2007
Valid 8 a.m. EDT



Intensity:

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

Drought Impact Types:

- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

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

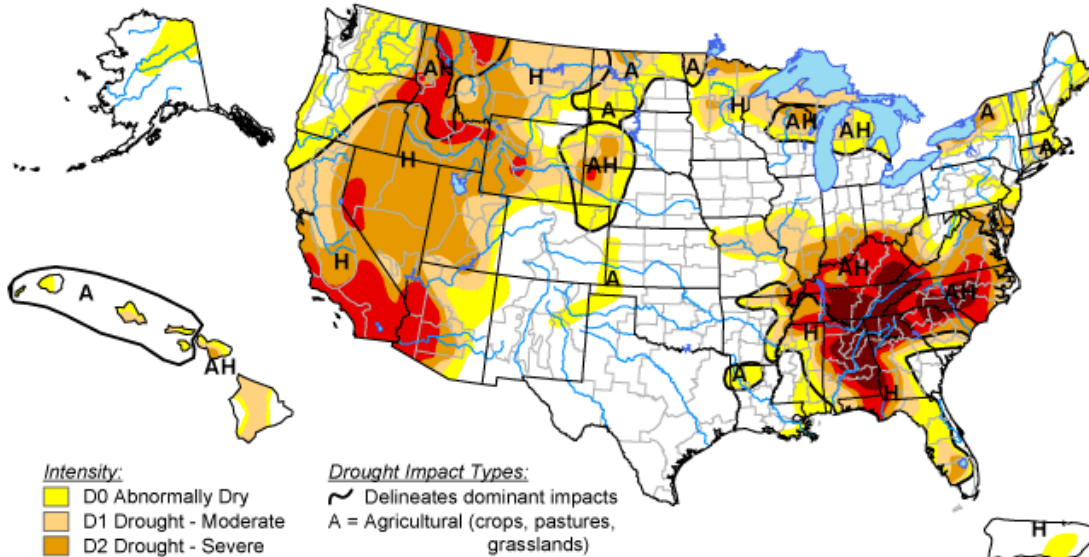
<http://drought.unl.edu/dm>



Released Thu
Author: David M

U.S. Drought Monitor

October 2, 2007
Valid 8 a.m. EDT



Intensity:

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



Released Thursday, October 4, 2007

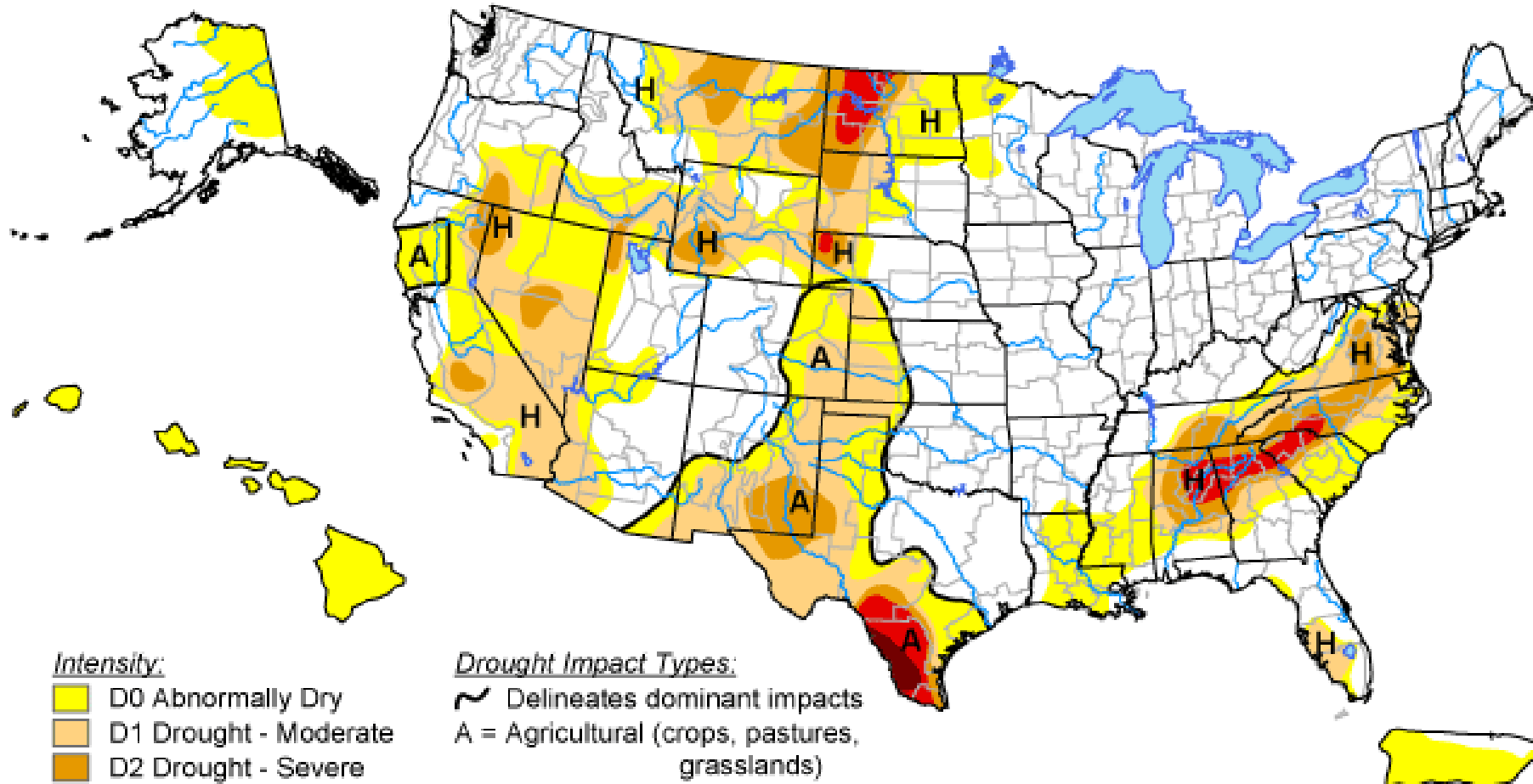
Author: Jay Lawrimore/Liz Love-Brotak, NOAA/NESDIS/NCDC

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Lincoln

U.S. Drought Monitor

April 15, 2008

Valid 8 a.m. EDT



Intensity:

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- D1 Drought - Moderate
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Released Thursday, April 17, 2008

Authors: Jay Lawrimore/Liz Love-Brotak, NOAA/NESDIS/NCDC

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

U.S. Drought Monitor

High Plains

April 15, 2008

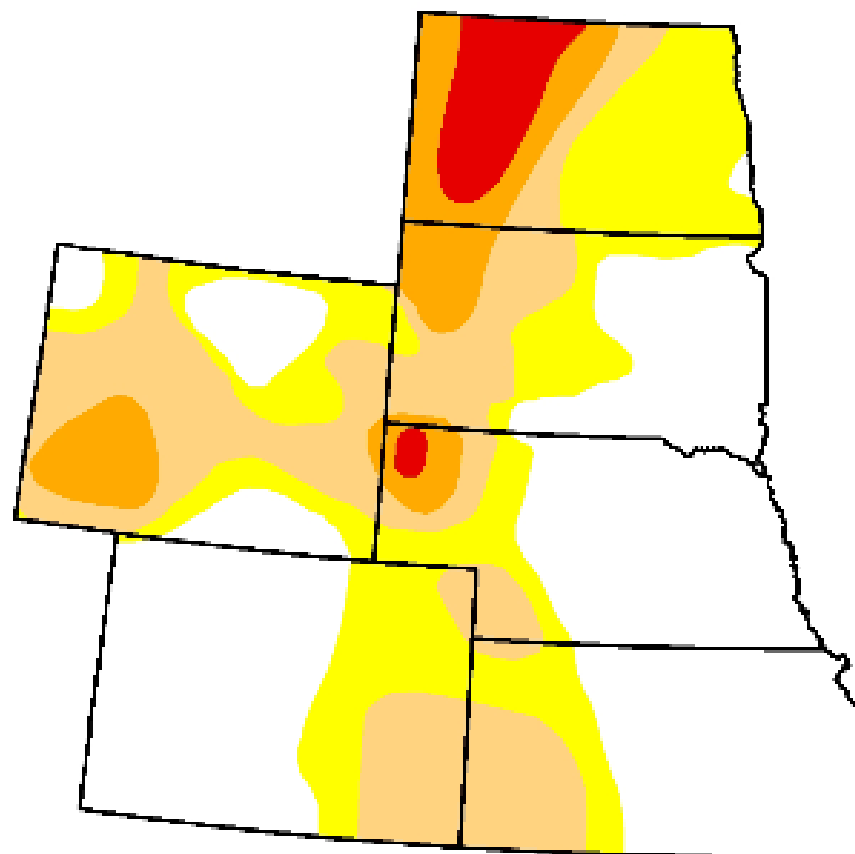
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	44.1	55.9	33.1	11.4	3.4	0.0
Last Week (04/08/2008 map)	43.6	56.4	34.1	11.3	3.4	0.0
3 Months Ago (01/22/2008 map)	46.0	54.0	29.4	14.7	0.3	0.0
Start of Calendar Year (01/01/2008 map)	46.8	53.2	29.4	11.8	0.3	0.0
Start of Water Year (10/02/2007 map)	55.8	44.2	23.3	10.8	1.0	0.0
One Year Ago (04/17/2007 map)	49.4	50.6	38.3	17.9	3.6	0.0

Intensity:

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



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Author: J. Lawrimore/L. Love-Brotak, NOAA/NESDIS/NCDC

U.S. Drought Monitor

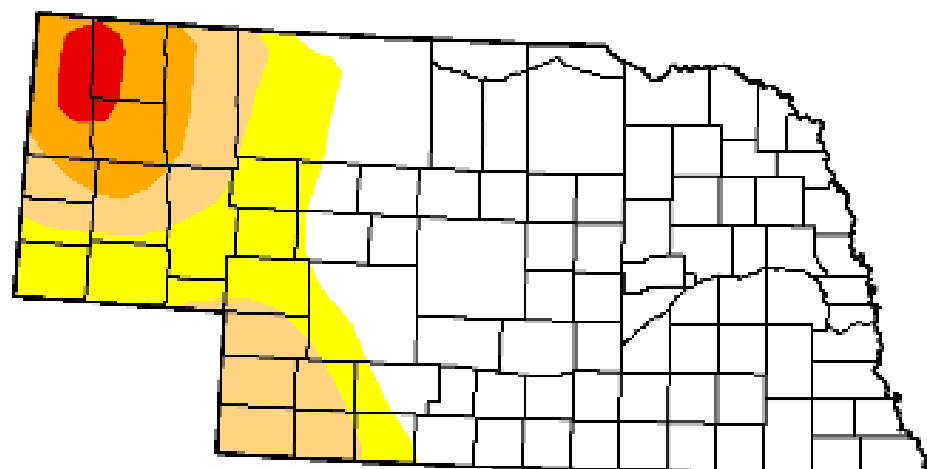
Nebraska

April 15, 2008

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	66.7	33.3	19.1	7.8	1.7	0.0
Last Week (04/08/2008 map)	66.7	33.3	23.8	7.8	1.7	0.0
3 Months Ago (01/22/2008 map)	66.7	33.3	15.7	7.8	1.7	0.0
Start of Calendar Year (01/01/2008 map)	66.7	33.3	15.9	7.8	1.7	0.0
Start of Water Year (10/02/2007 map)	70.9	29.1	13.6	7.0	1.7	0.0
One Year Ago (04/17/2007 map)	61.0	39.0	25.4	16.7	8.7	0.0



Intensity:

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

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

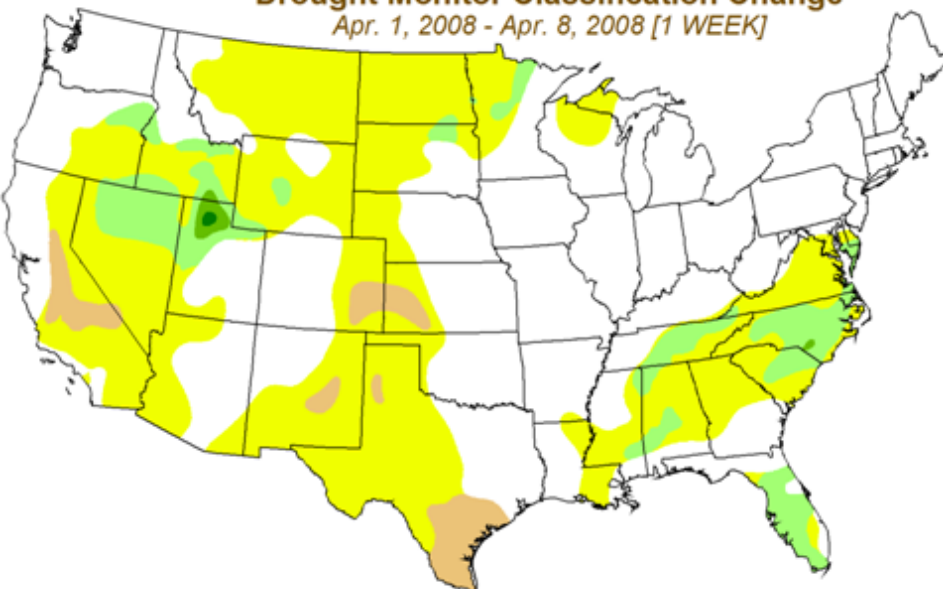


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Author: J. Lawrimore/L. Love-Brotak, NOAA/NESDIS/NCDC

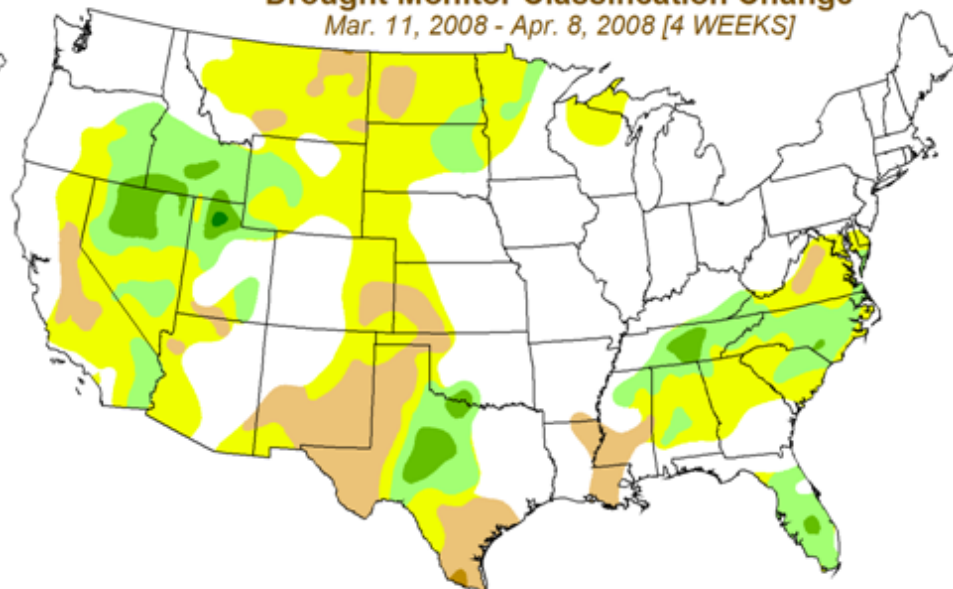
Drought Monitor Classification Change

Apr. 1, 2008 - Apr. 8, 2008 [1 WEEK]



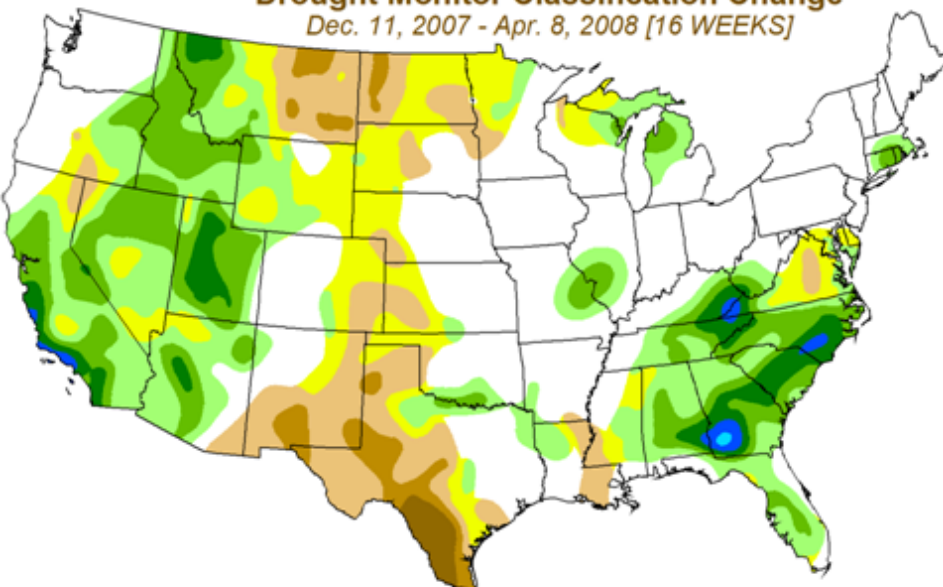
Drought Monitor Classification Change

Mar. 11, 2008 - Apr. 8, 2008 [4 WEEKS]



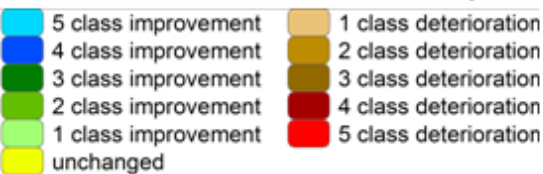
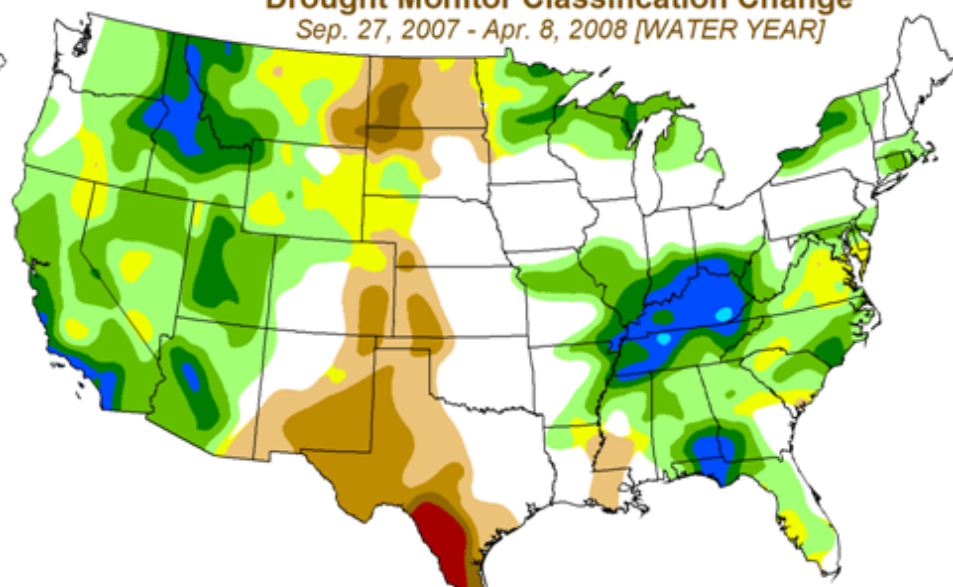
Drought Monitor Classification Change

Dec. 11, 2007 - Apr. 8, 2008 [16 WEEKS]



Drought Monitor Classification Change

Sep. 27, 2007 - Apr. 8, 2008 [WATER YEAR]

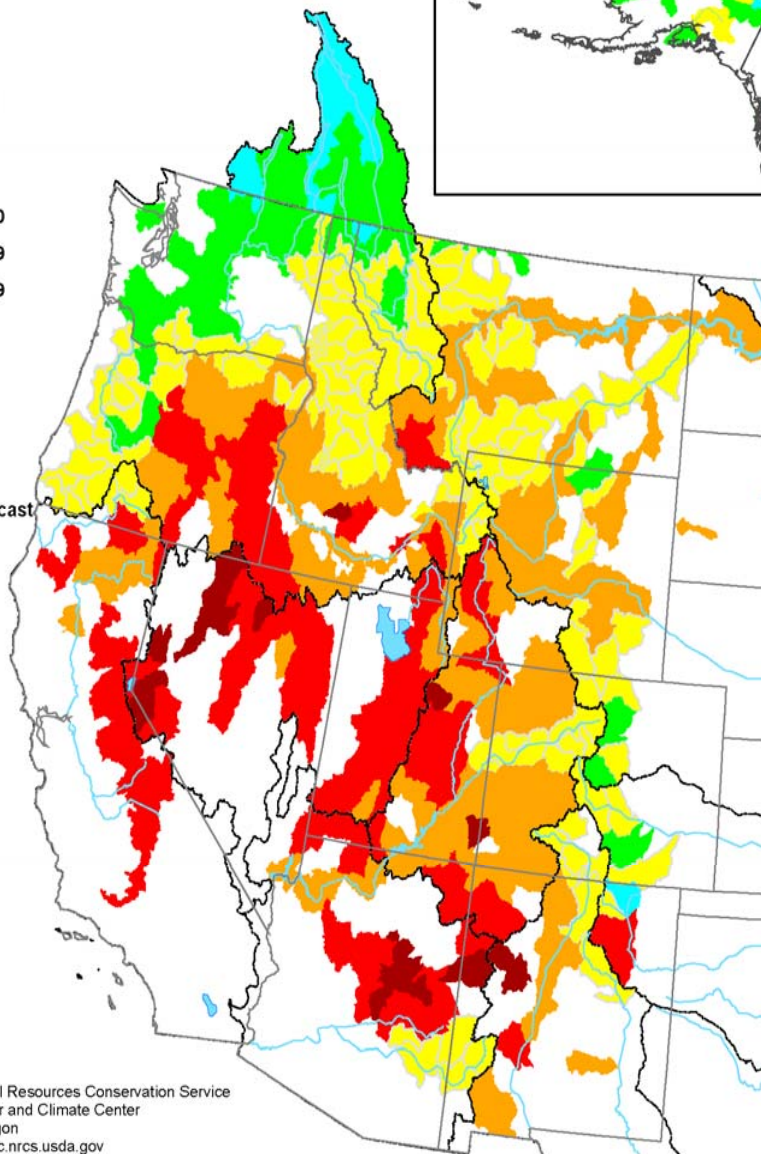


These maps depict approximate changes in drought intensity from selected initial times to the current week, with no consideration given to intervening weeks. The difference calculations are based on interpolated 4 km grids of Drought Monitor classifications, and as a result, will be smoother than would similar products based directly on the published versions of the Drought Monitor.

Spring and Summer Streamflow Forecasts as of April 1, 2007

Legend

percent

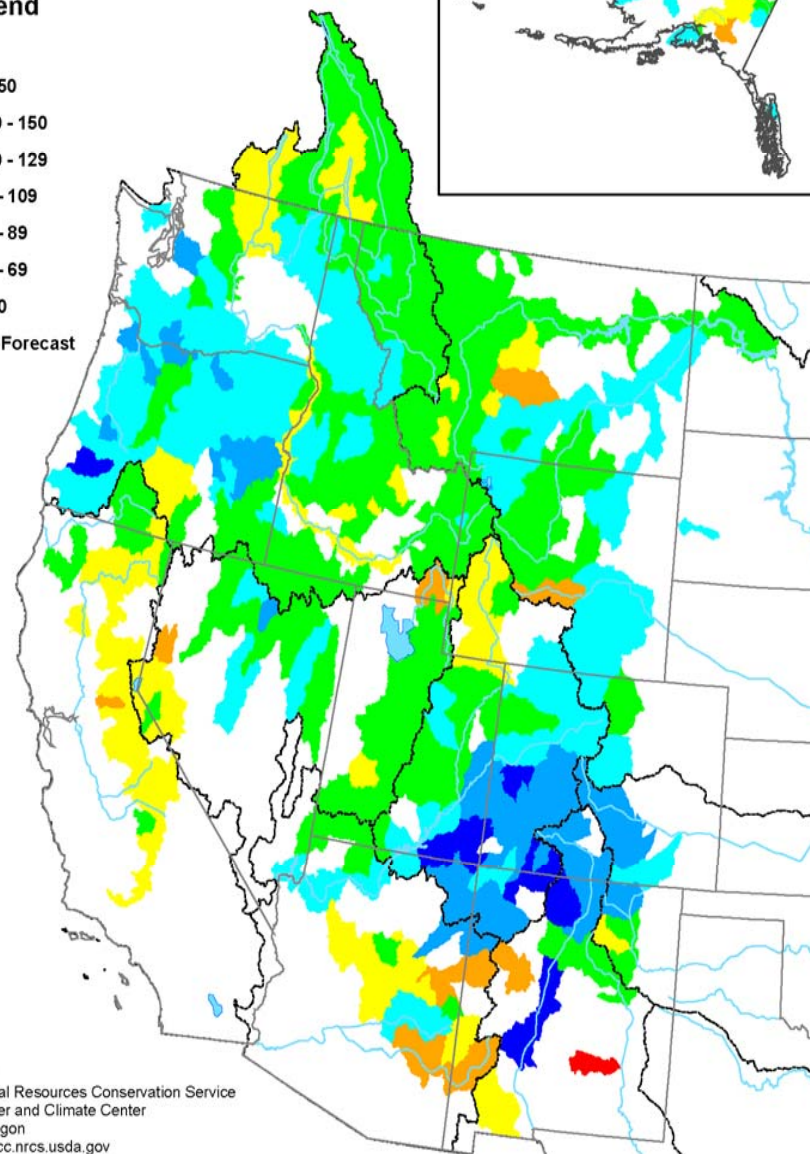


Prepared by
USDA, Natural Resources Conservation Service
National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Spring and Summer Streamflow Forecasts as of April 1, 2008

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percent



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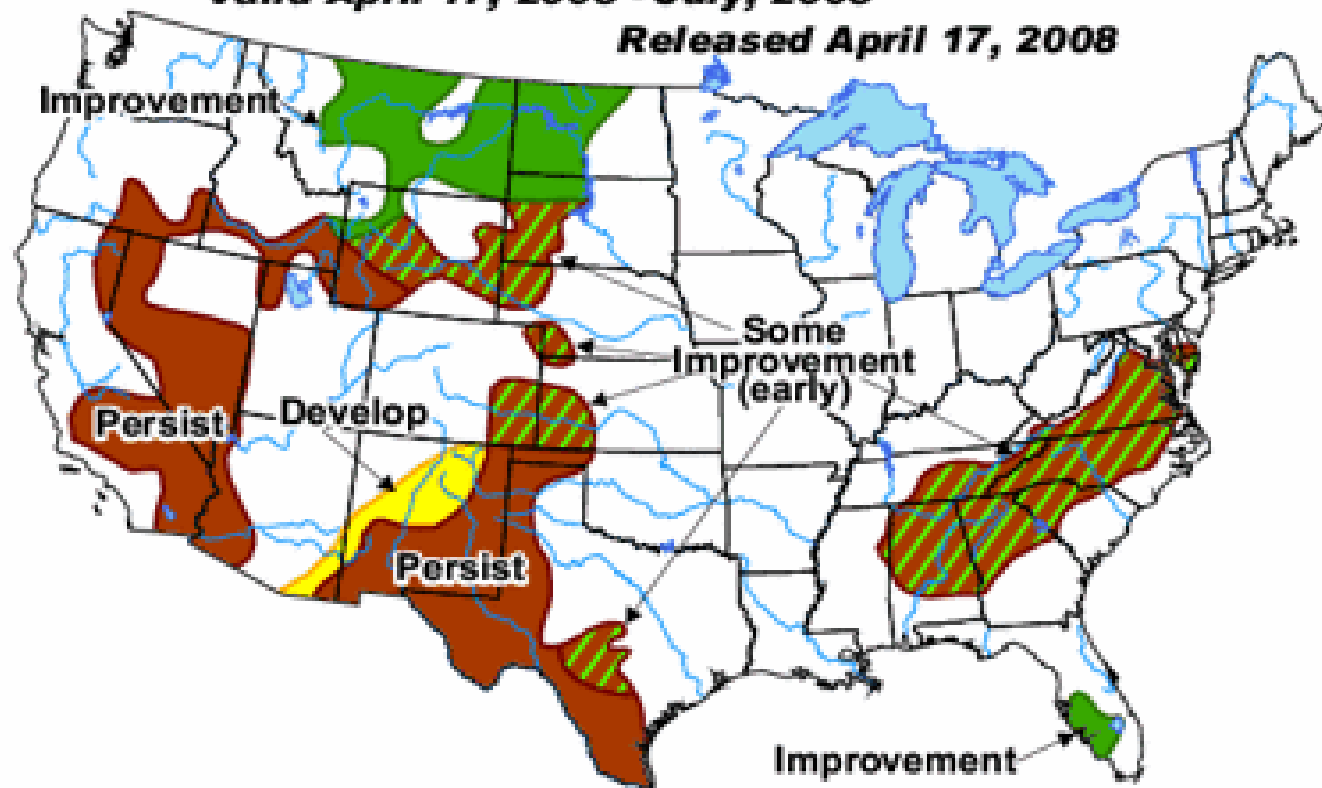


U.S. Seasonal Drought Outlook




Drought Tendency During the Valid Period

Valid April 17, 2008 - July, 2008

Released April 17, 2008



KEY:

-  Drought to persist or intensify
-  Drought ongoing, some improvement
-  Drought likely to improve, impacts ease
-  Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events — such as individual storms — cannot be accurately forecast more than a few days in advance. Use caution for applications — such as crops — that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

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- Research

Area Information

Select By State

Select By Region

Maps & Tools

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- Map Viewer
- Search Metadata Portal

Welcome to drought.gov!

Where are Drought Conditions Now? How is the Drought Affecting Me? Will the Drought Continue?

U.S. Drought Monitor February 19, 2008

Legend:

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

Drought Conditions

% Area for U.S., including AK, HI & PR (As of 2.19.2008)

Info Source: National Drought Mitigation Center

Legend:

- 1.72%
- 1.64%
- 9.43%
- 12.03%
- 26.7%
- 48.48%

What's New

- Southeast Drought Workshop
- Status of Drought Early Warning Workshop - June 2008

Drought News

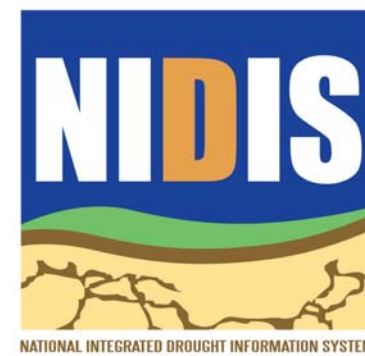
- Drought Could Force Nuke-Plant Shutdowns
- NOAA - National Oceanic and Atmospheric Administration - 2007 was Tenth Warmest for U.S., Fifth Warmest Worldwide
- South Florida Records Two Driest Back-to-Back Years
- Georgia's Water Crisis: We Have A Plan: Legislators handily approve system to deal with this, and future, droughts
- NPR: Harvesting Rainwater by Not Letting It Go to Waste

NIDIS Feature

Some Descriptive Text For Featured Story...

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Republican River Basin Water and Drought Portal - Windows Internet Explorer provided by School of Natural Resources

http://129.93.160.14/Republican/index.html

File Edit View Favorites Tools Help

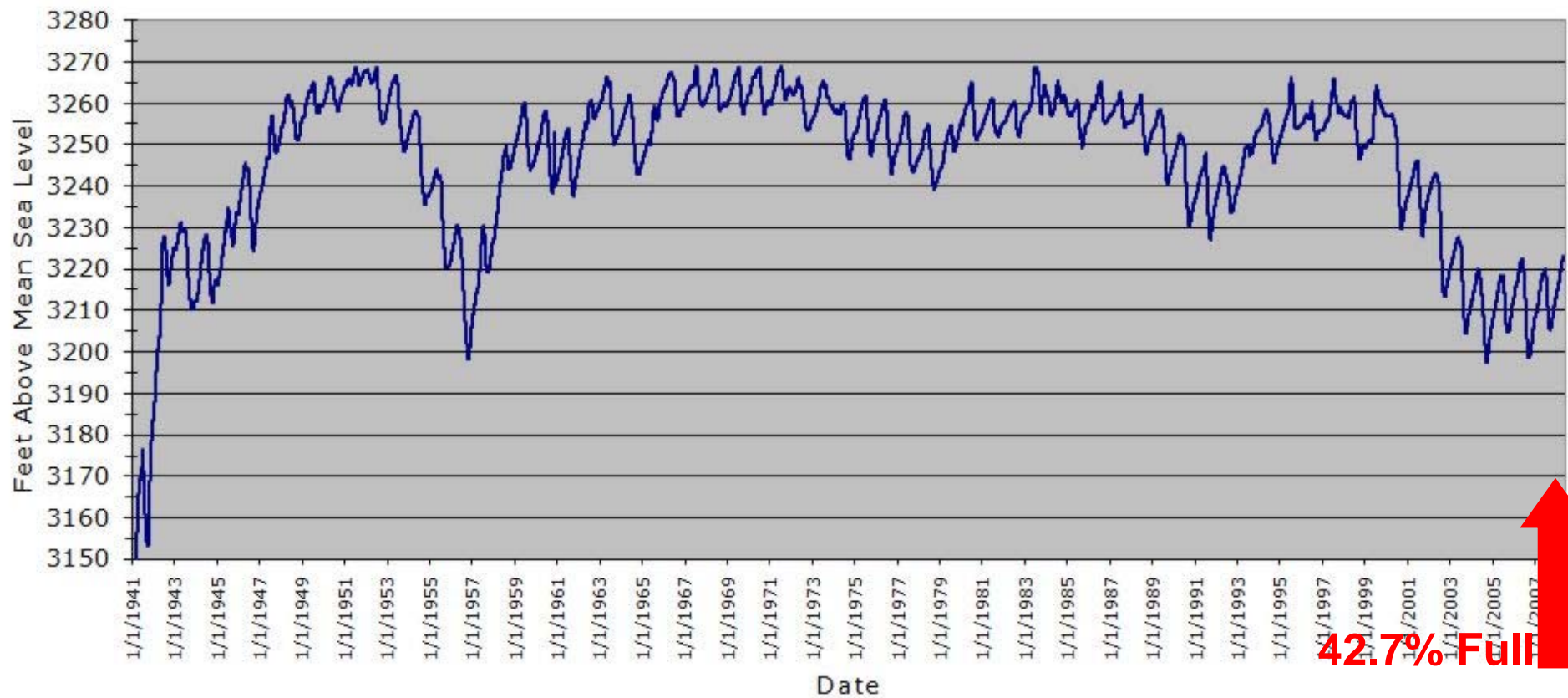
Google Go

Summary

- **Steady as she goes...conditions slowly improving state-wide**
 - 33% of NE Abnormally Dry (D0)
 - 19% of NE classified in Moderate Drought (D1)
- **Better snows in the Rockies (especially Colorado)**
- **Better flows and lake levels in general**
- **Hydro has a ways to go though.....**

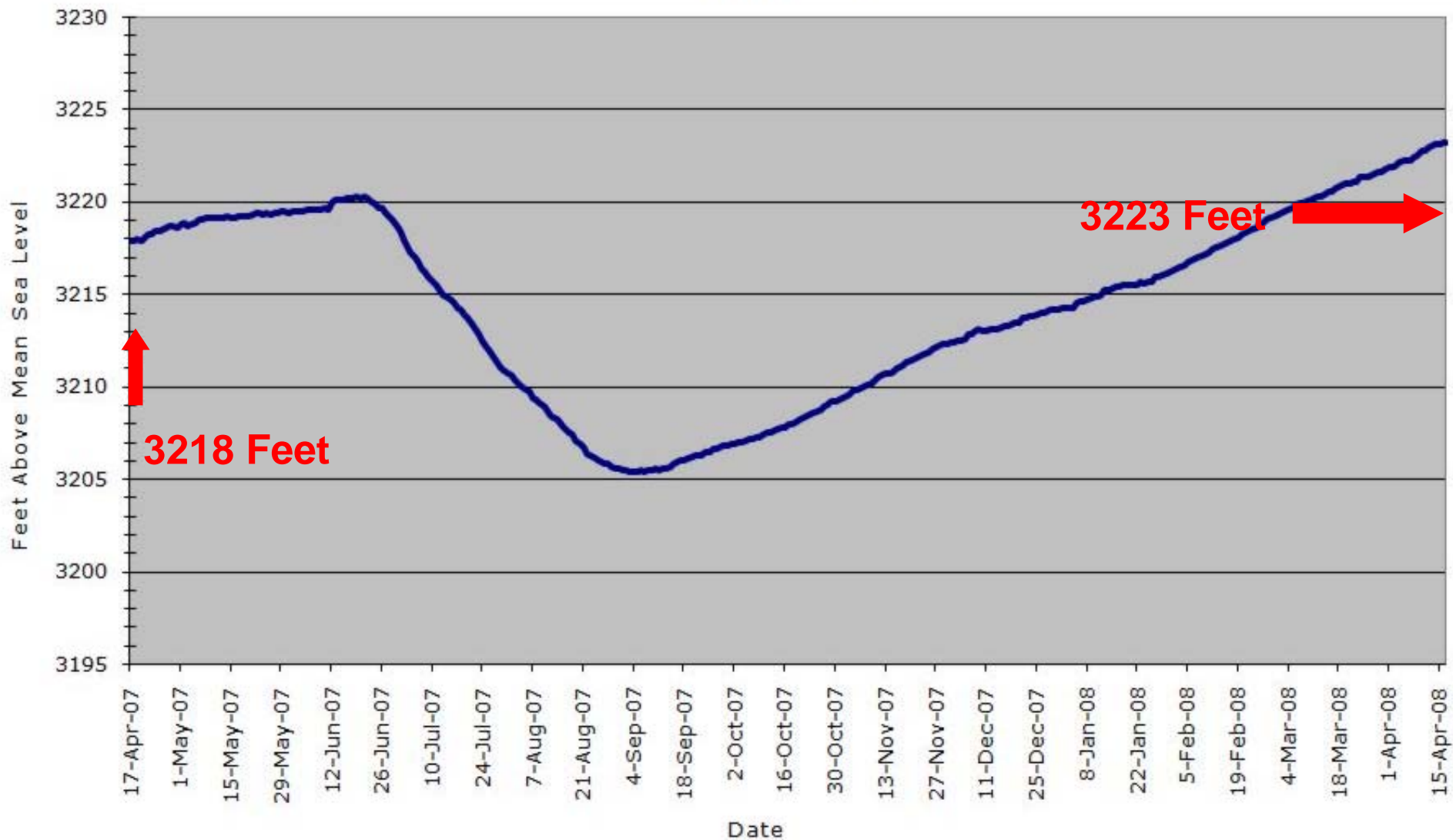
Nebraska Water Supply Update...

Lake McConaughy Elevation 1941 to Present



SOURCE: CNPPID www.cnppid.com

Lake McConaughy Elevation Since Apr. 17, 2007



Lake McConaughy

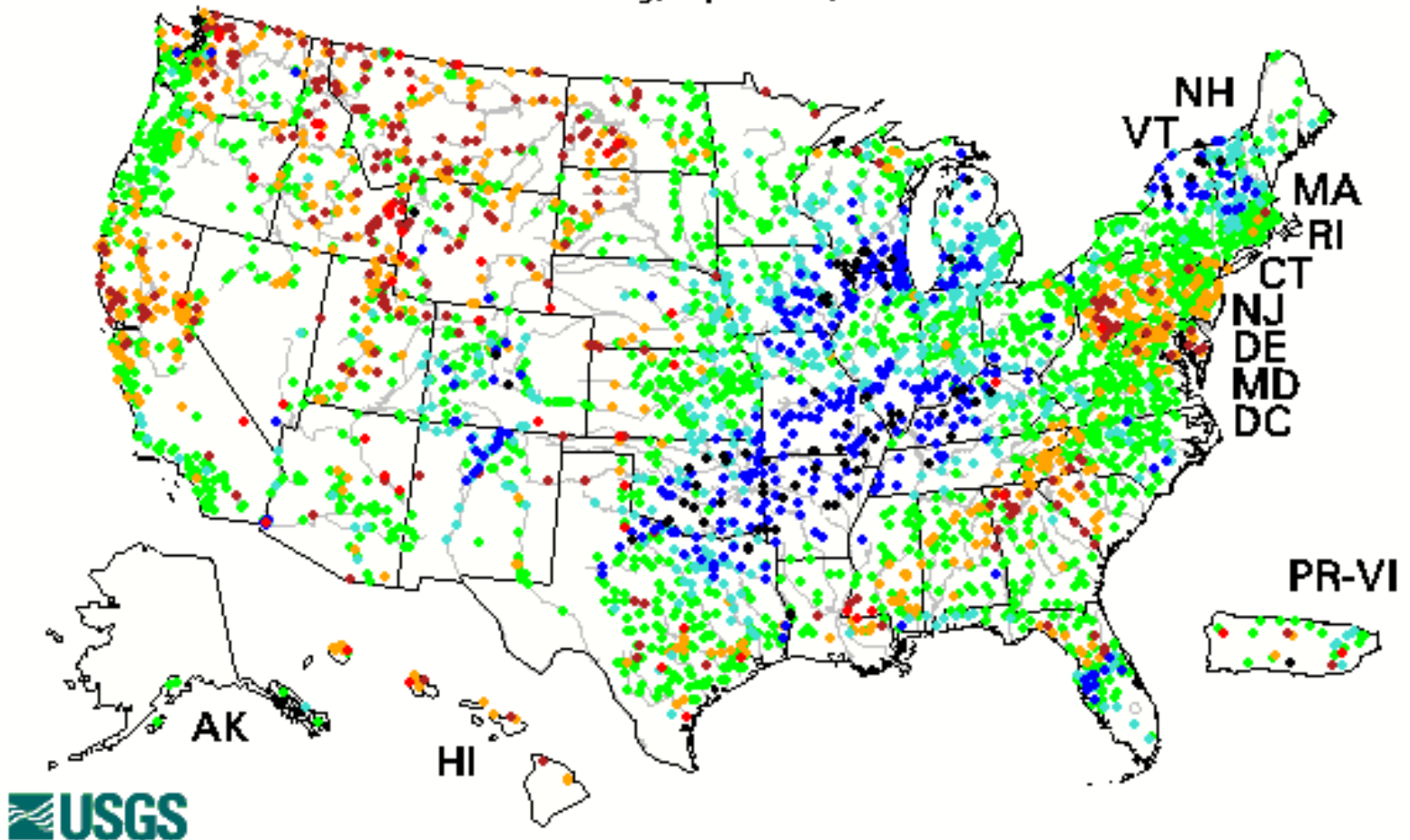
“Civil Engineer Cory Steinke reported that the snow water equivalent in the snowpack above Seminoe Reservoir on the North Platte River in Wyoming is currently 111% of the 30-year average. The U.S. Bureau of Reclamation's April snowmelt runoff forecast in the North Platte Basin predicted runoff of 900,000 acre-feet or 101% of the 30-year average.

If that forecast proves correct, Steinke said, it would be the first time in nine years that runoff exceeded the 30-year average. "That's not nearly enough to fill Wyoming's North Platte River reservoirs, which are currently about one-third full," Steinke said, "but it will be helpful for irrigation canals in the Panhandle. We need to see those canals receive a full supply of irrigation water. That could help next year's return flows to the North Platte River and inflows to Lake McConaughy."

SOURCE: CNPPID News Release, April 7, 2008

Map of 14-day average streamflow compared To historical streamflow for the day of year

Wednesday, April 16, 2008



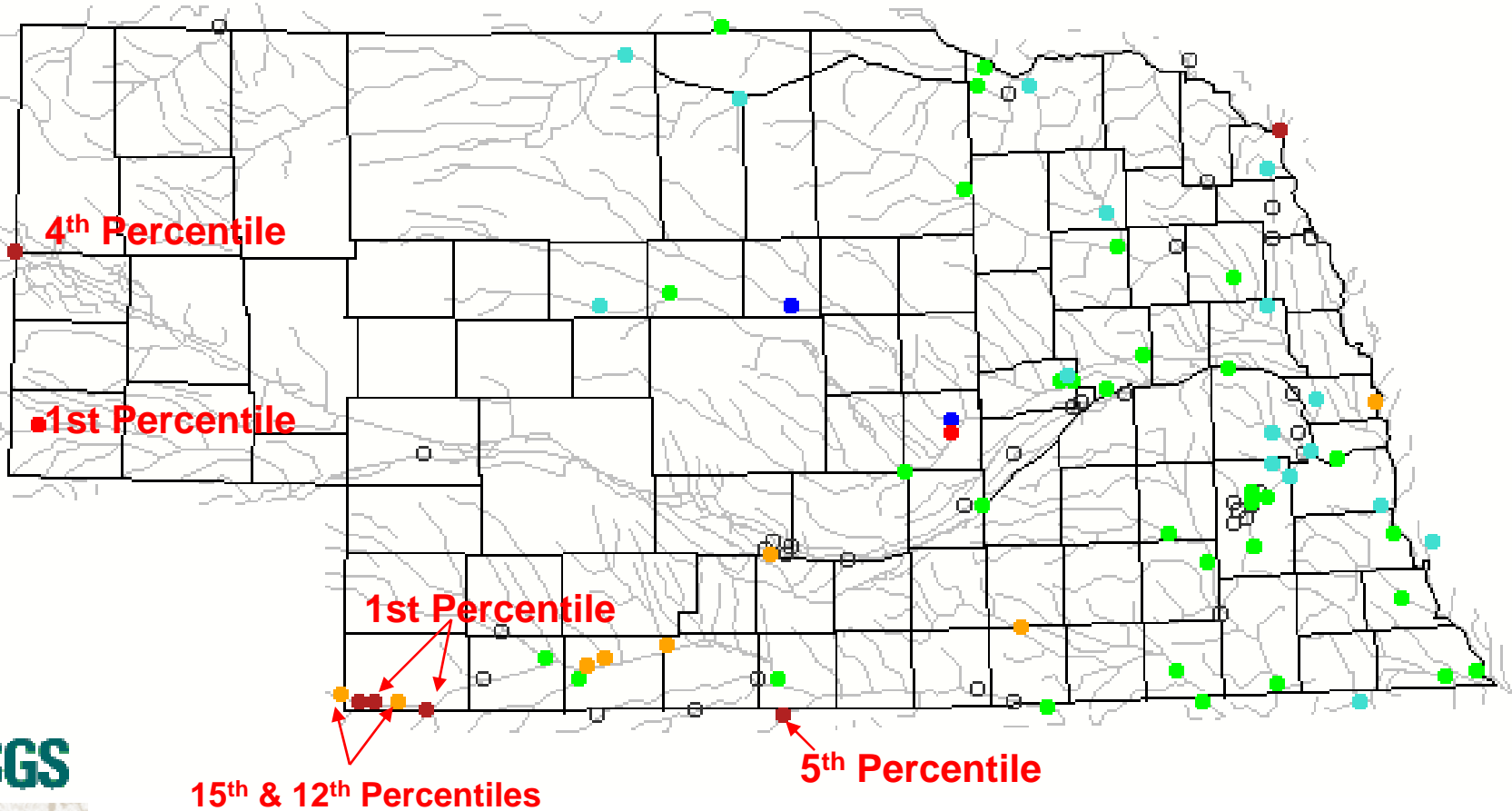
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Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked



Map of 14-day average streamflow compared To historical streamflow for the day of year

Wednesday, April 16, 2008

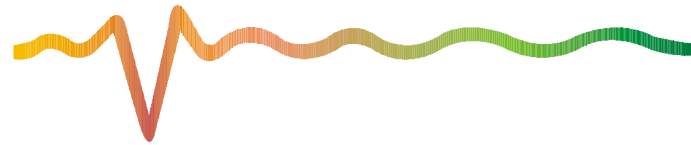


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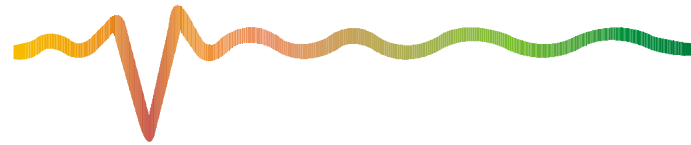
Republican River Basin



- Hugh Butler: 72% of conservation pool
- Enders: 40% increase in volume compared to last year at this time
- Harry Strunk: 95% of conservation pool
- Swanson: 46.8% of conservation pool and 2 feet higher than a year ago

Source: BOR http://www.usbr.gov/gp/lakes_reservoirs/

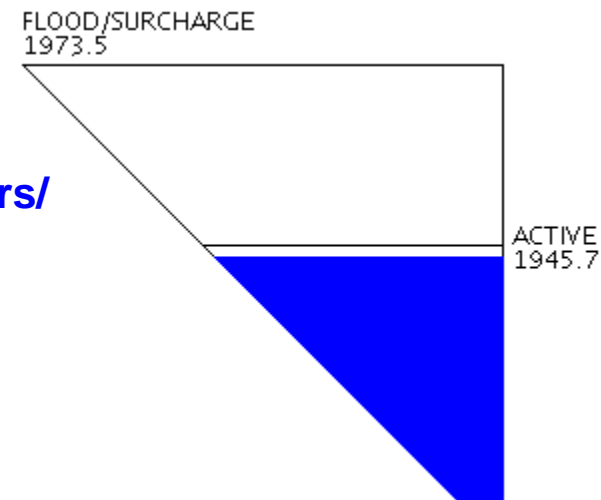
Republican River Basin



Harlan County Current Conditions

- Conservation Pool is 91.3% Full
- 123,244 Acre Feet more than a year ago
- 38,000 Acre Feet above the historical average

Source: BOR http://www.usbr.gov/gp/lakes_reservoirs/



Questions?