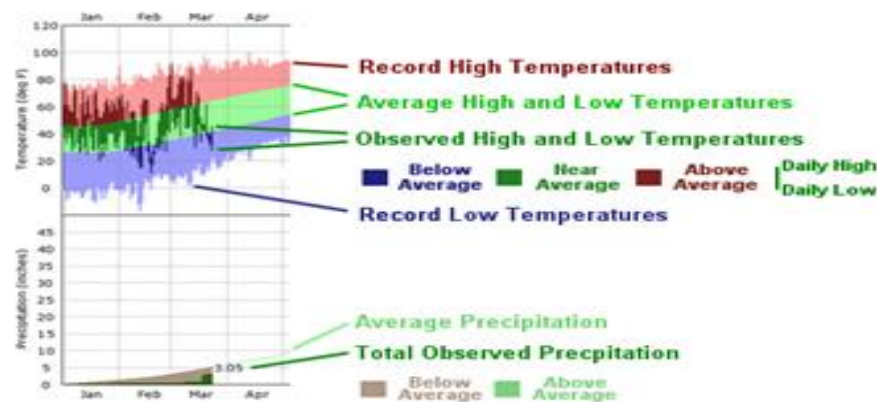
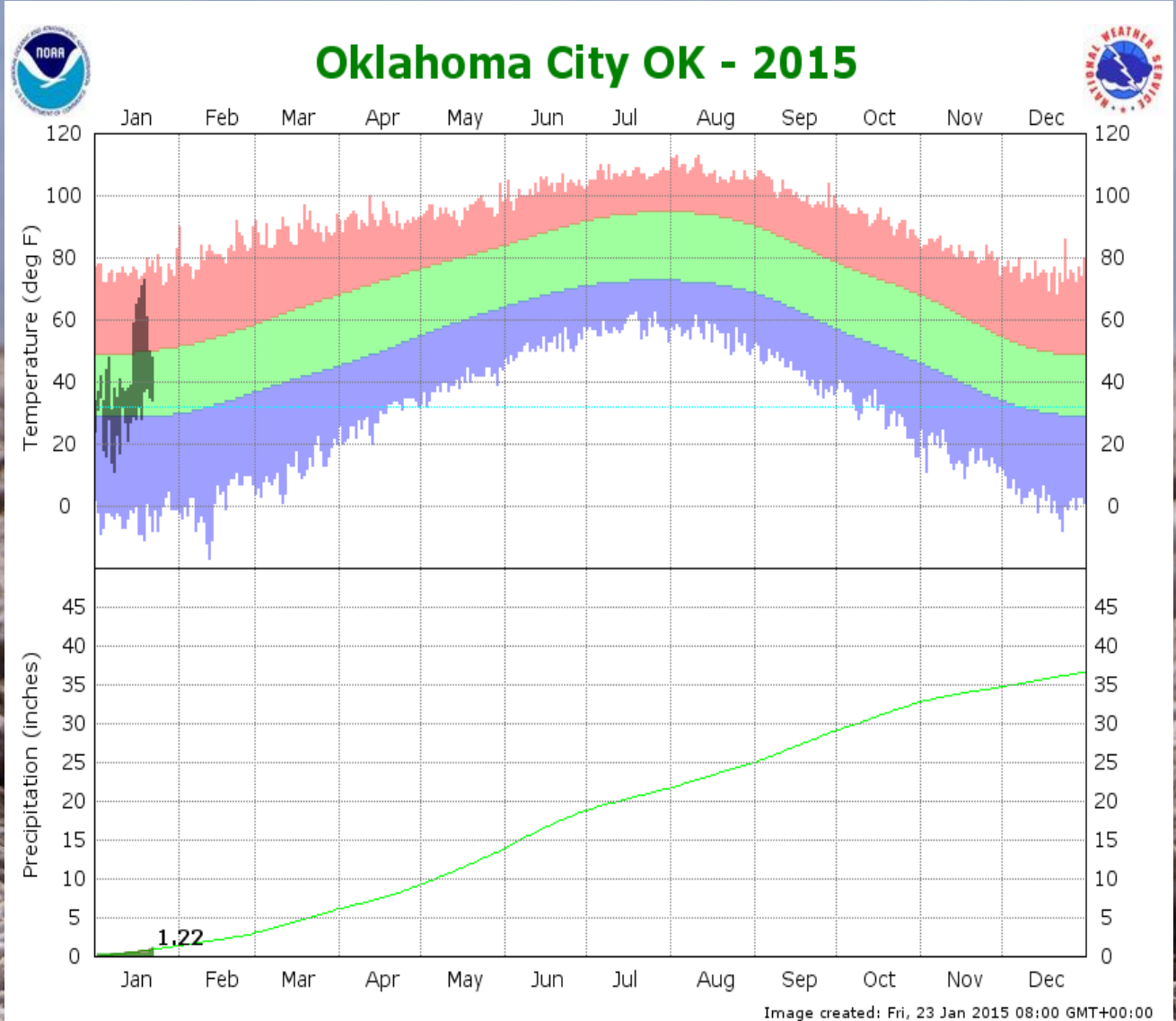


Drought Conditions in Central Oklahoma



**Water Resources Division
Association of Central Oklahoma Governments
January 23, 2015**

Temperature and Precipitation Plot for Oklahoma City, Oklahoma for 2015



<http://www.srh.noaa.gov/oun/climate/graphdisplay.php?city=okc&year=2015>

Rainfall Summaries by Oklahoma Climate Division

Calendar Year 01-Jan-2015 through

22-Jan-2015

Climate Division	Total Rainfall	Departure from Normal	Pct of Normal	Rank since 1921 (88 periods)	Driest on Record	Wettest on Record
W. Central	0.58"	-0.06"	91%	42nd wettest	0.00" (1986)	2.47" (1949)
Central	0.81"	-0.16"	84%	43rd wettest	0.00" (1967)	4.78" (1932)
S. Central	1.66"	+0.24"	117%	26th wettest	0.00" (1967)	6.47" (1932)
Statewide	0.98"	-0.11"	90%	42nd wettest	0.01" (1967)	4.47" (1932)

Water Year: 01-Oct-2014 through

22-Jan-2015

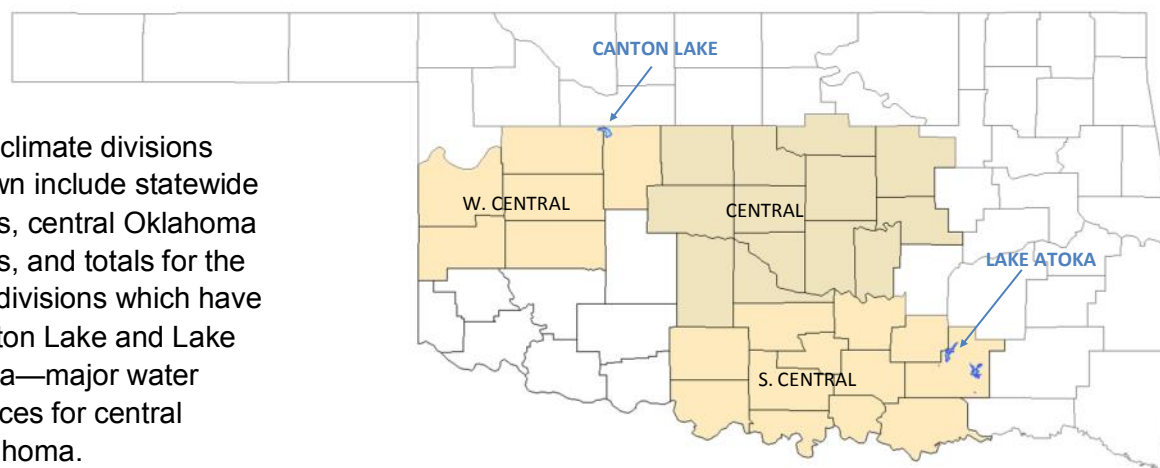
Climate Division	Total Rainfall	Departure from Normal	Pct of Normal	Rank since 1921 (88 periods)	Driest on Record	Wettest on Record
W. Central	5.11"	-1.07"	83%	45th wettest	1.09" (1966-67)	13.40" (1986-87)
Central	7.46"	-1.62"	82%	47th driest	1.98" (1966-67)	16.50" (1984-85)
S. Central	10.53"	-0.58"	95%	39th wettest	2.10" (1950-51)	19.76" (1981-82)
Statewide	7.93"	-1.24"	87%	45th wettest	2.43" (1950-51)	15.00" (2004-05)

Winter 2014 01-Dec-2014 through

22-Jan-2015

Climate Division	Total Rainfall	Departure from Normal	Pct of Normal	Rank since 1921 (88 periods)	Driest on Record	Wettest on Record
W. Central	1.07"	-0.79"	57%	35th driest	0.15" (1955-56)	4.89" (1959-60)
Central	1.74"	-1.22"	59%	30th driest	0.35" (2005-06)	8.43" (1984-85)
S. Central	3.48"	-0.53"	87%	44th wettest	0.51" (2005-06)	10.32" (1997-98)
Statewide	2.38"	-0.78"	75%	40th driest	0.61" (2005-06)	7.10" (1997-98)

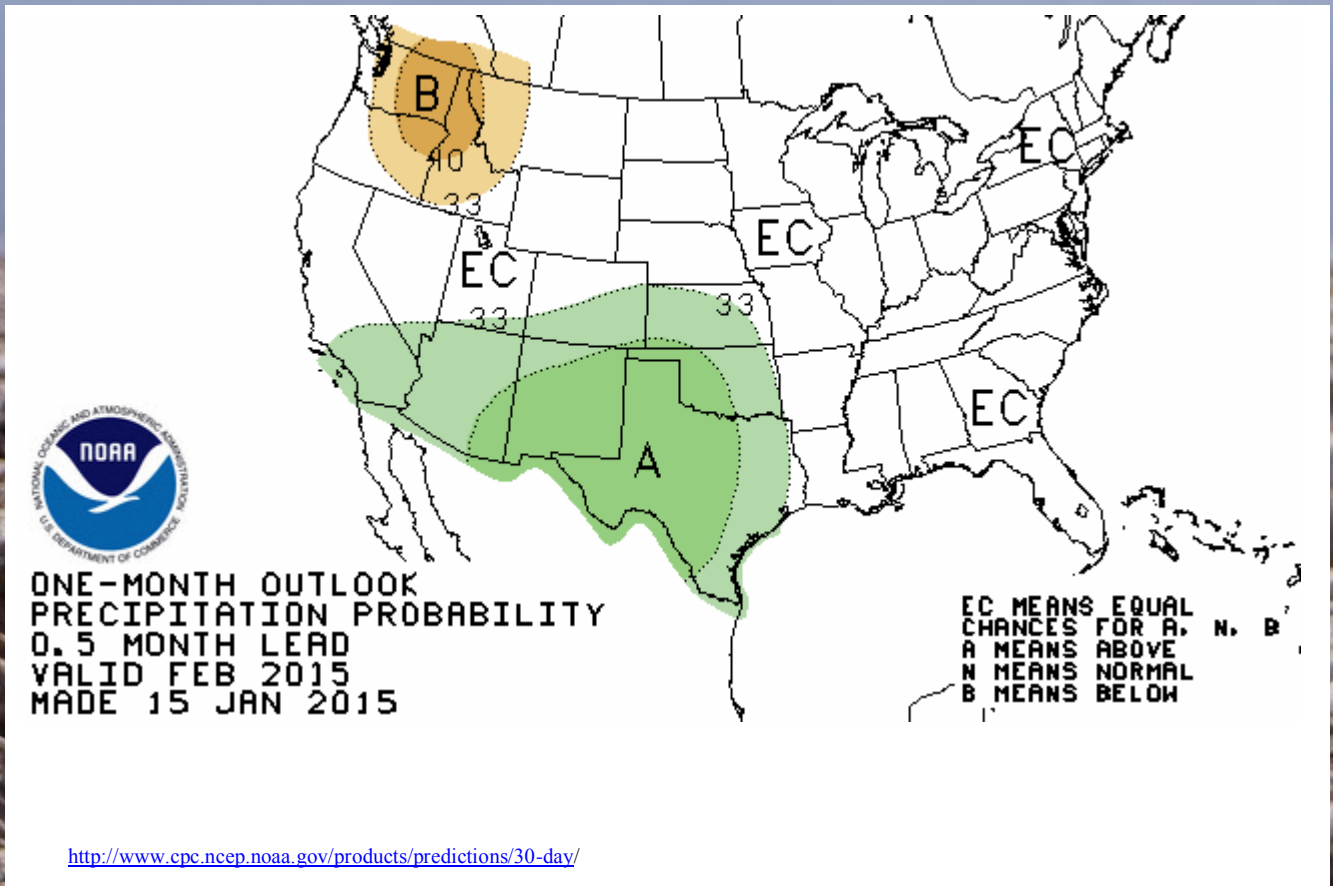
The climate divisions shown include statewide totals, central Oklahoma totals, and totals for the two divisions which have Canton Lake and Lake Atoka—major water sources for central Oklahoma.



http://climate.ok.gov/index.php/drought/last_30_days/

OKLAHOMA
CLIMATOLOGICAL SURVEY

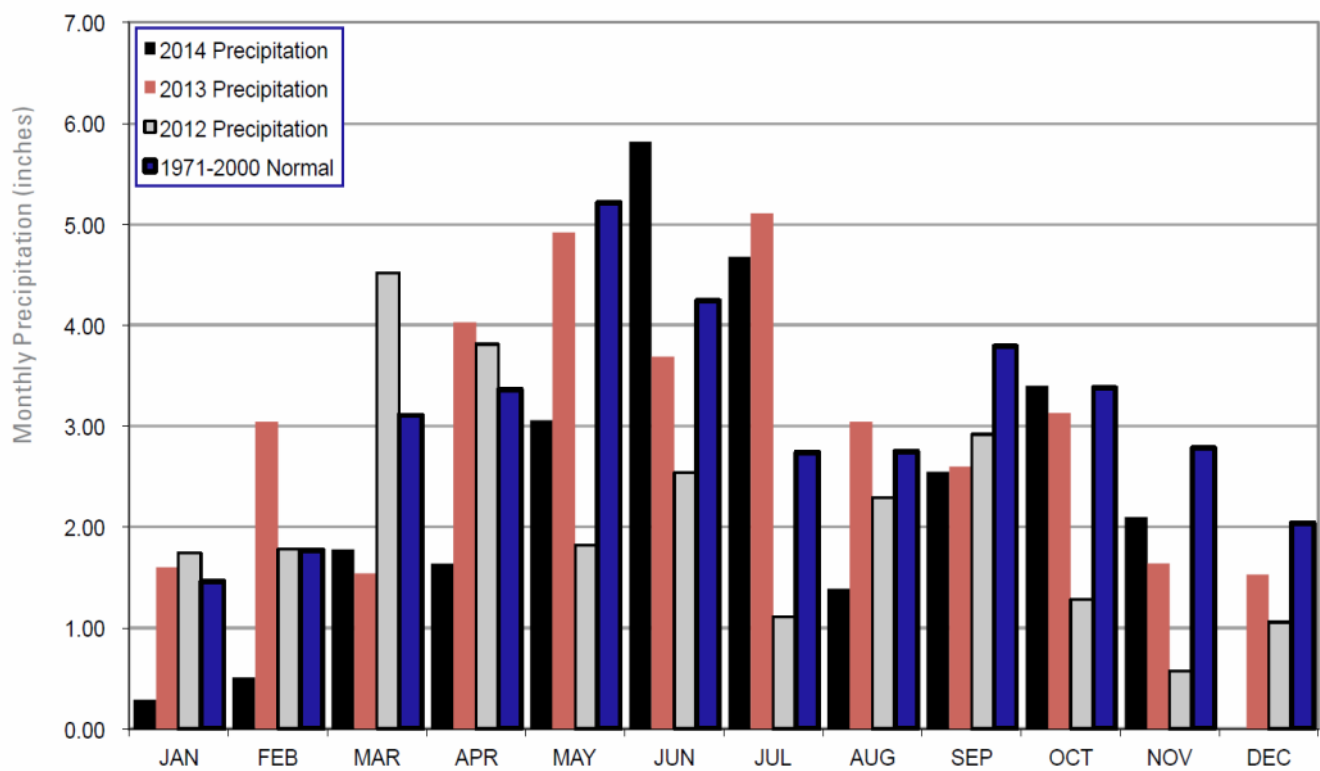
NOAA One-Month Outlook



White areas are shown as EC (Equal Chance) on these maps represent areas where there are no strong climate signals from the climate tools to have skill in preferring one category over another. That doesn't mean that there are equal chances of each of the categories occurring – it means that currently there is no skill in identifying the most likely category. In these areas, it is best to be prepared for all possibilities.

Statewide Precipitation Monthly Totals vs. Normal

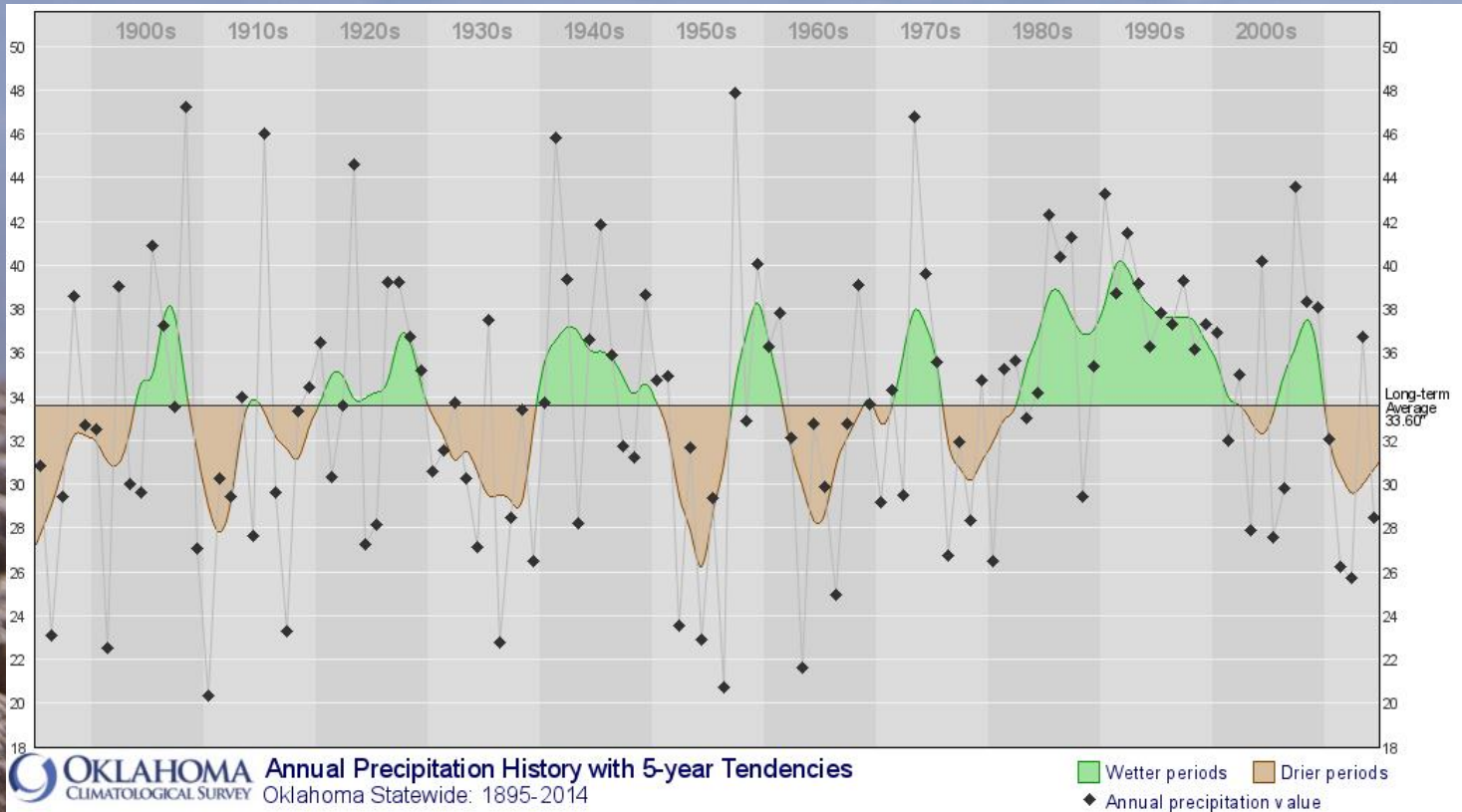
2012, 2013 AND 2014 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



http://climate.ok.gov/index.php/climate/summary/reports_summaries

OKLAHOMA
CLIMATOLOGICAL SURVEY

Annual Precipitation History with 5-Year Tendencies



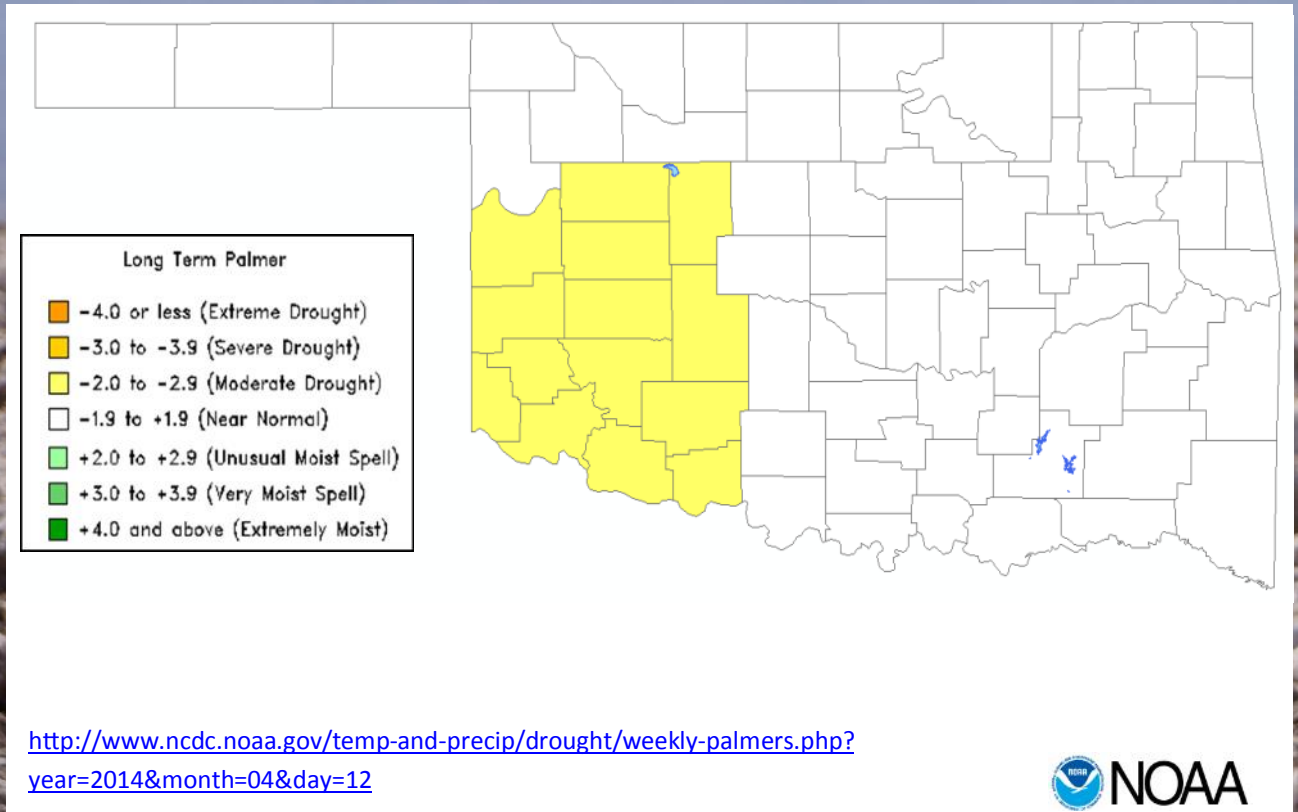
http://climate.ok.gov/index.php/climate/climate_trends/precipitation_history_annual_statewide/CD00/prcp/Annual/oklahoma_south-central_u.s

This graph shows the cyclical nature of wet and drought periods in Oklahoma. The black dots represent the annual precipitation for that particular year. The line represents the annual precipitation data smoothed over five years. This smoothed line shows well the wet periods (shaded green) and the drought periods (shaded brown). The drought cycles appear to average about five to eight years in length.

We are currently in Year 5 of a eight to ten year drought cycle.

Drought Severity Index by Climate Division

Palmer Weekly Value for Period JAN 03 2015



The Palmer Drought Index (PDI) maps show long-term (cumulative) meteorological drought and wet conditions. The maps show how the geographical pattern of the long-term (meteorological) moisture conditions has changed over the last 12 months. On these maps, the red shading denotes drought conditions while the green shading indicates wet conditions.

For an animated gif of the long term PDI see <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html>.

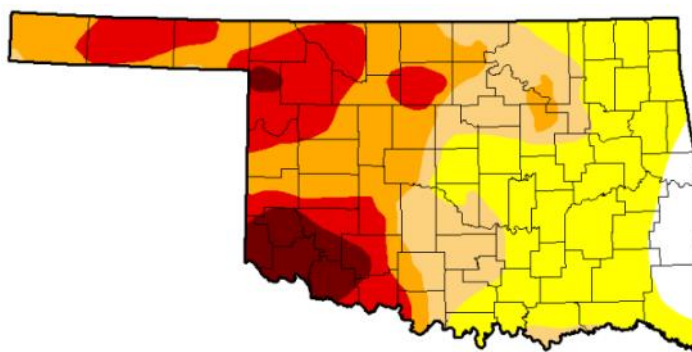
U.S. Drought Monitor

Regional Map Week of 02 DEC 2014

Drought Condition (Percent Area):

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2015-01-20	5.03	94.97	60.60	43.87	22.58	5.69
Last Week	2015-01-13	29.59	70.41	59.12	42.59	22.58	5.69
3 Months Ago	2014-10-21	22.15	77.85	64.49	55.44	20.87	4.84
Start of Calendar Year	2014-12-30	25.63	74.37	62.03	40.84	21.74	5.70
Start of Water Year	2014-09-30	8.55	91.45	73.31	58.13	20.92	4.64
One Year Ago	2014-01-21	35.17	64.83	38.04	18.99	4.84	2.40

U.S. Drought Monitor Oklahoma



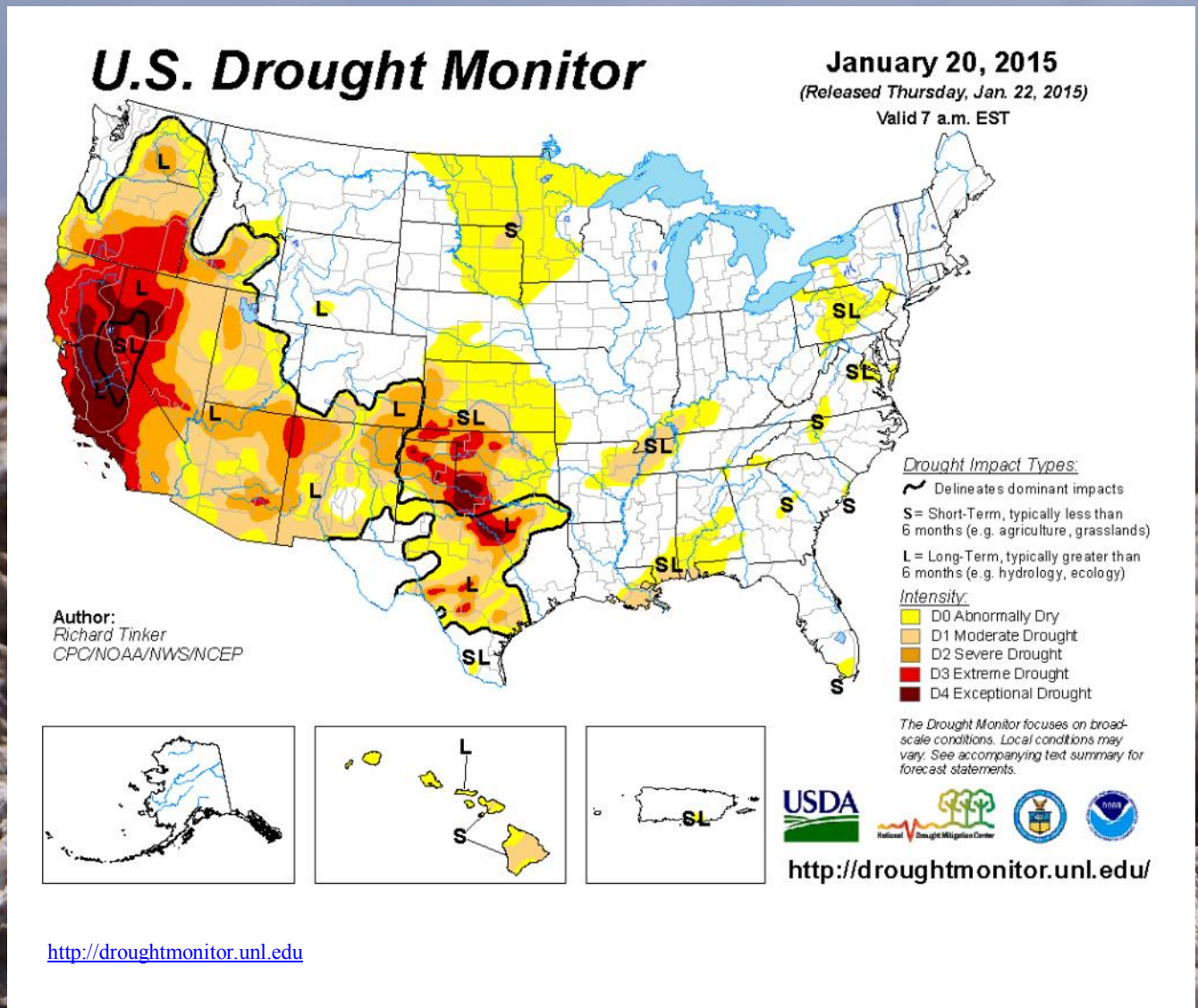
Intensity:

■ D0 - Abnormally Dry
■ D1 - Moderate Drought
■ D2 - Severe Drought

■ D3 - Extreme Drought
■ D4 - Exceptional Drought

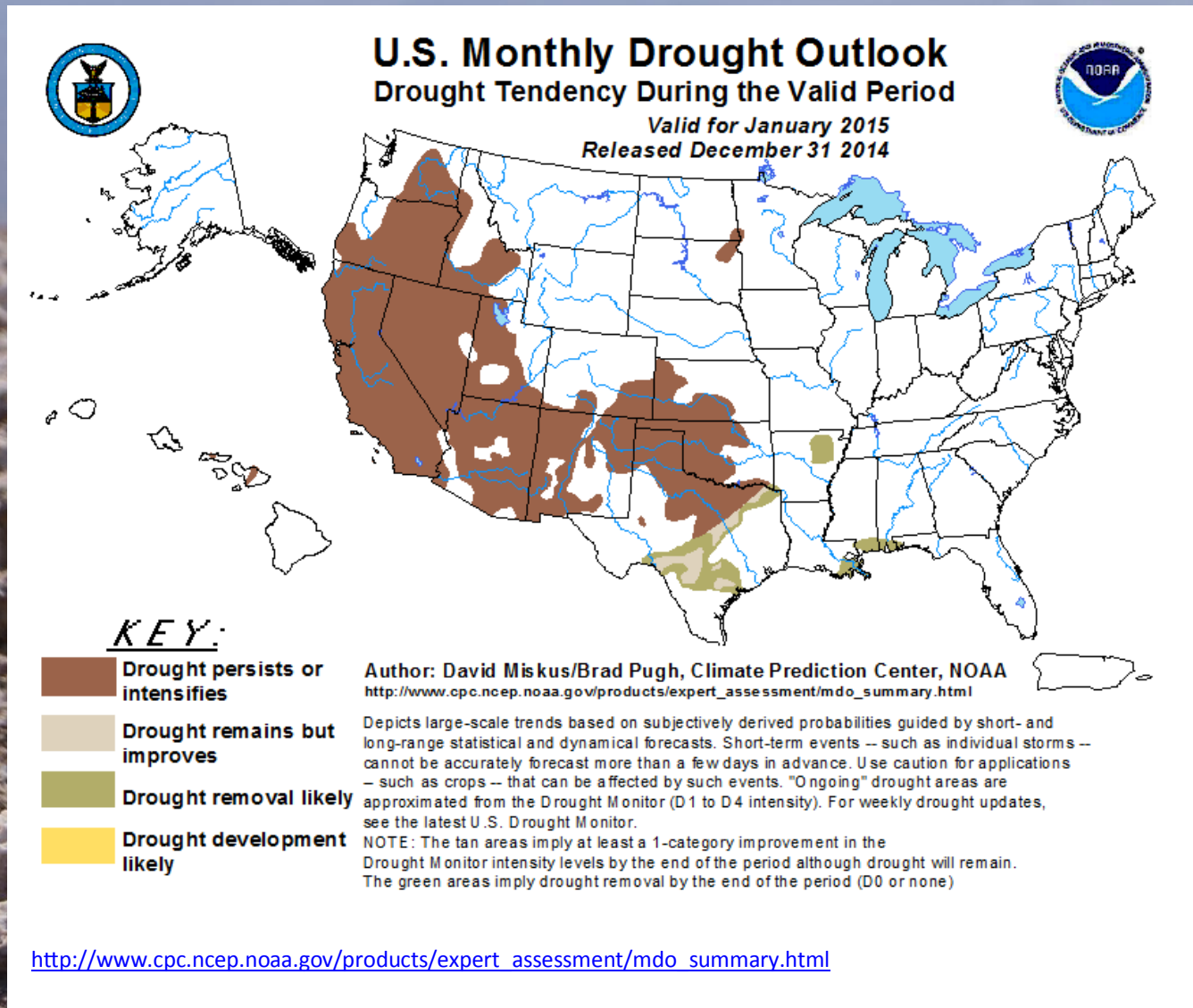
<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?OK>

U.S. Drought Monitor Nationwide Map



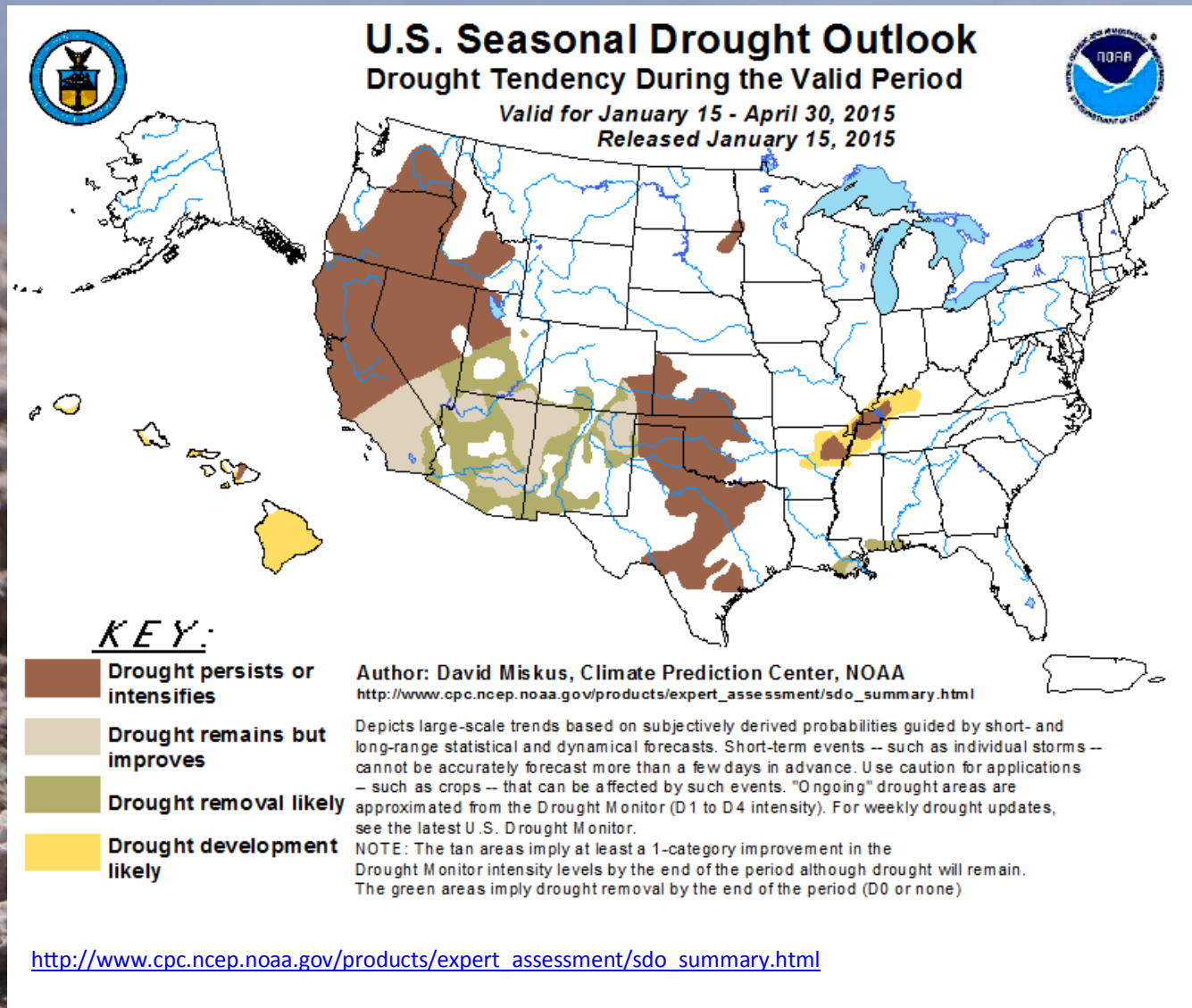
U.S. Drought Monitor

Monthly Drought Outlook Map



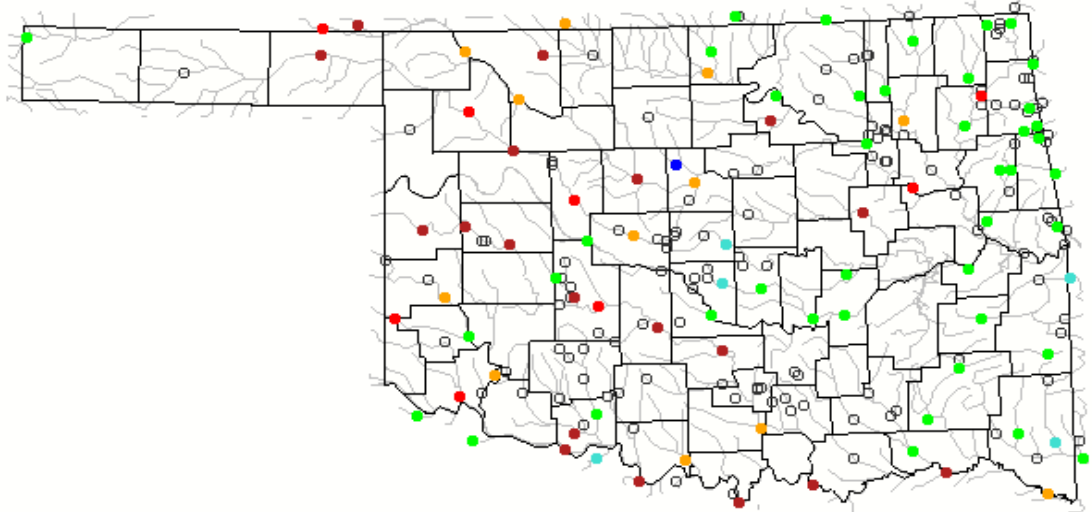
U.S. Drought Monitor

Seasonal Drought Outlook Map



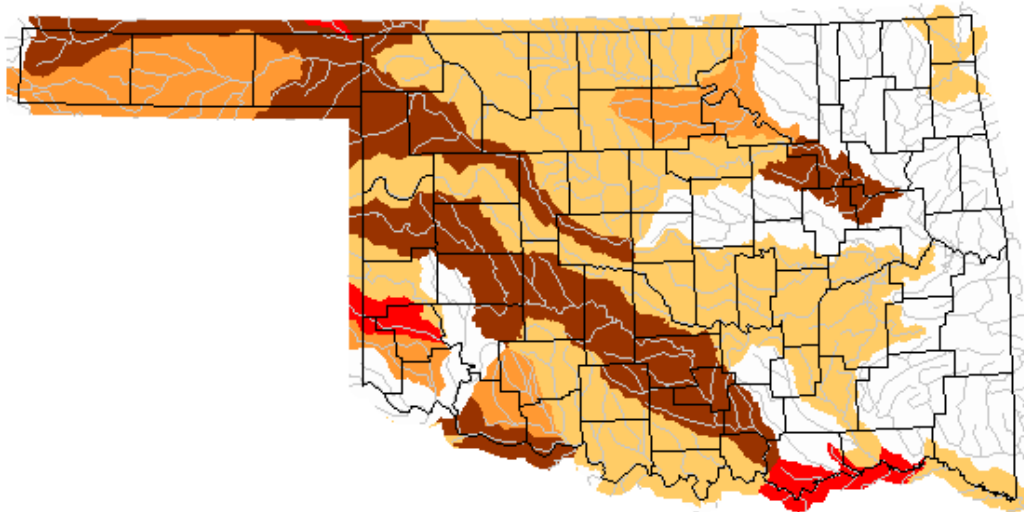
USGS Streamflow Data

Friday, January 23, 2015 12:00ET



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

Thursday, January 22, 2015

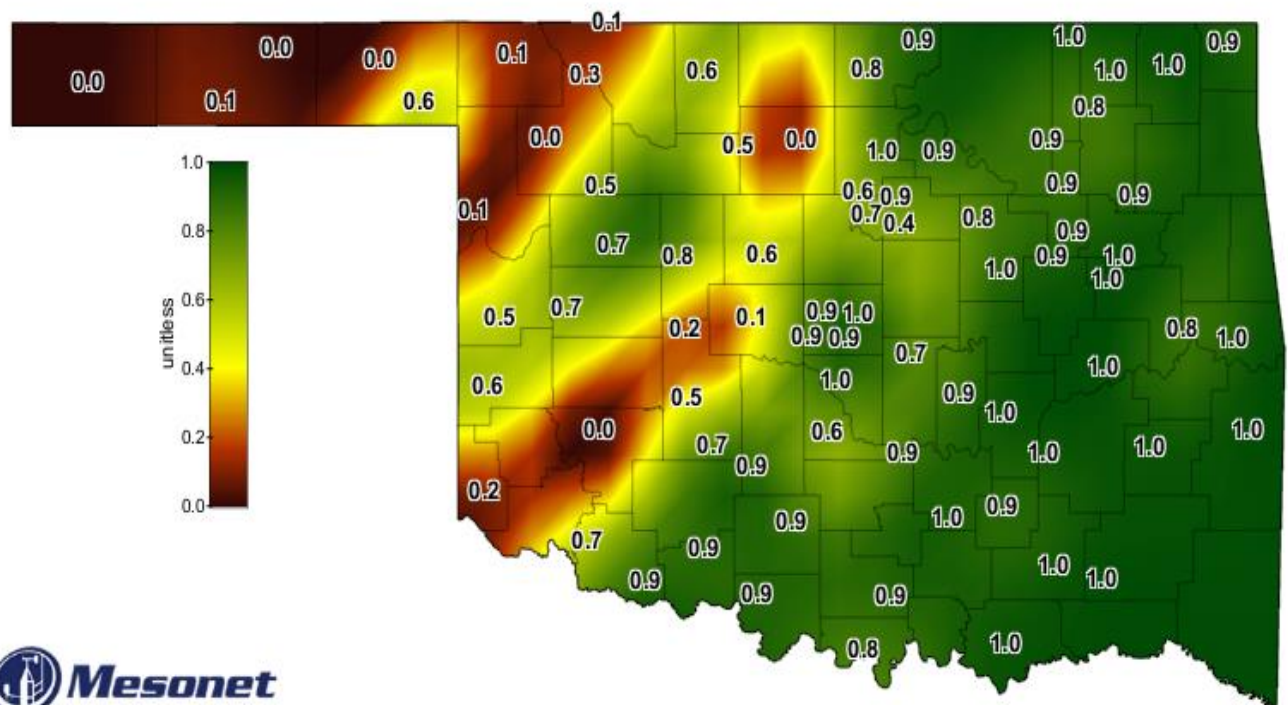


Explanation - Percentile classes				
Low	≤5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

<http://waterwatch.usgs.gov/new/?m=real&r=ok&w=map>

<http://waterwatch.usgs.gov/new/index.php?m=dryw&r=ok>

SOIL MOISTURE MAP



Daily Averaged Fractional Water Index at 24 inches

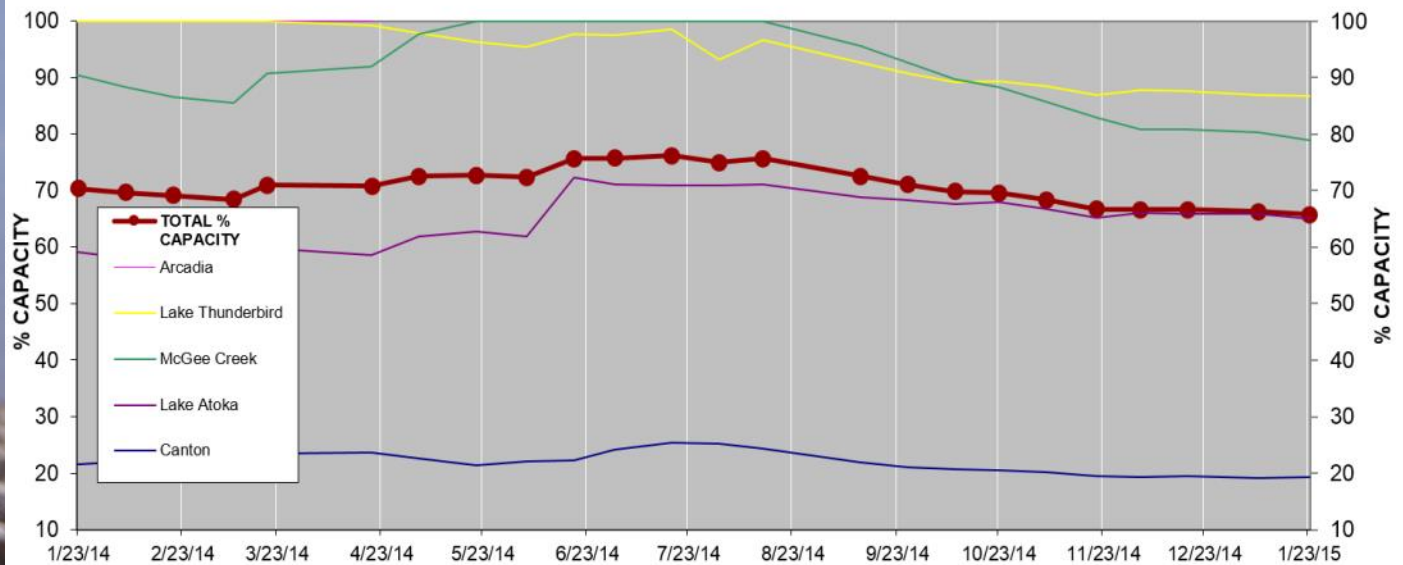
January 22, 2015

Created 6:30:14 AM January 23, 2015 CST. © Copyright 2015



http://www.mesonet.org/index.php/weather/map/24-inch_fractional_water_index/soil_moisture

Percent of Surface Water Conservation Storage Central OK Reservoirs



Lake Hefner and Lake Overholser are terminal storage for Canton Lake. Lake Draper is terminal storage for McGee Creek and Atoka Lakes.

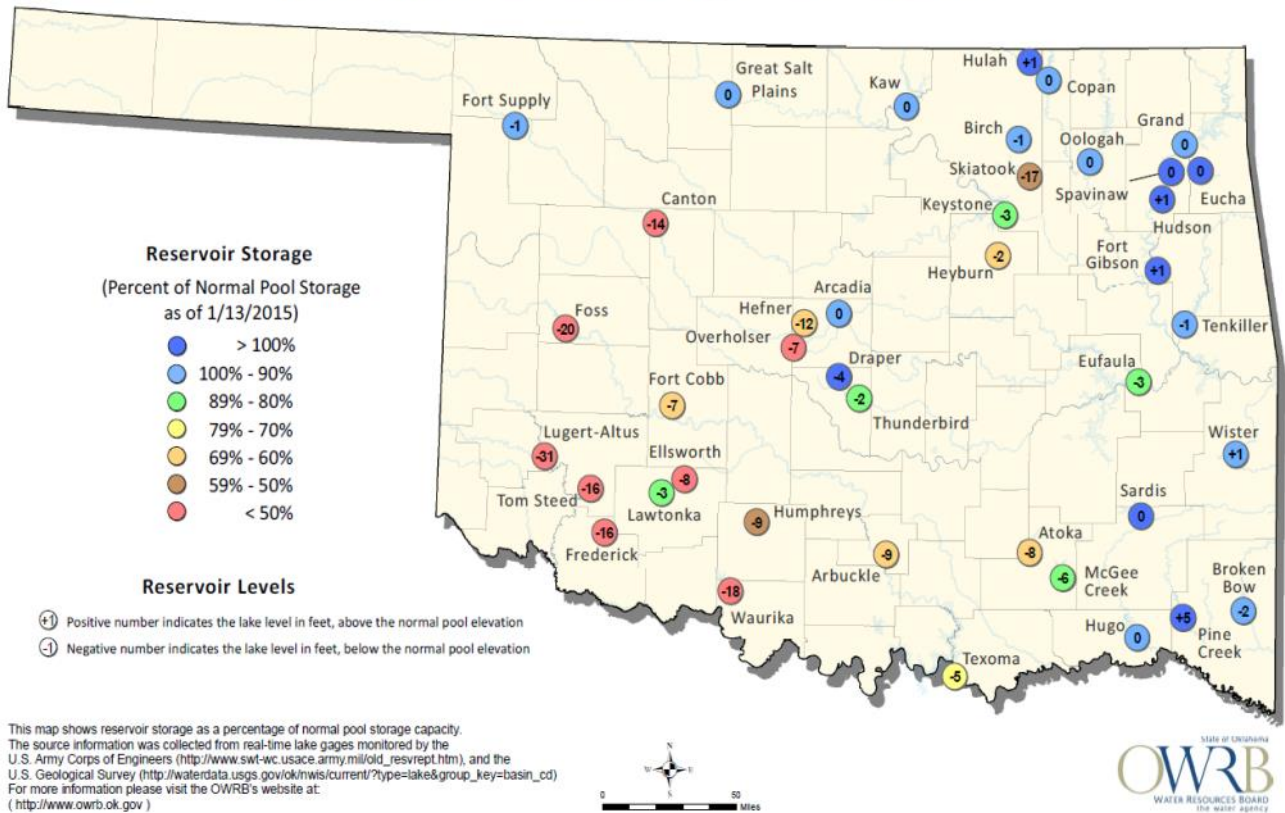
LAKE	% CAPACITY	% CHANGE FROM 1/8/2015
Canton	19.4	0.2
Arcadia	100.0	0.0
Lake Thunderbird	86.7	-0.2
McGee Creek	79.0	-1.4
Lake Atoka	65.1	-0.8
TOTAL % CAPACITY	65.7	-0.5

http://www.swf-wc.usace.army.mil/old_resv rept.htm http://waterdata.usgs.gov/ok/nwis/dv/?site_no=07333010&agency_cd=USGS&referred_module=sw

The graph is the amount of water stored in five major lakes that supply water to central Oklahoma as a percent of capacity over the past year.

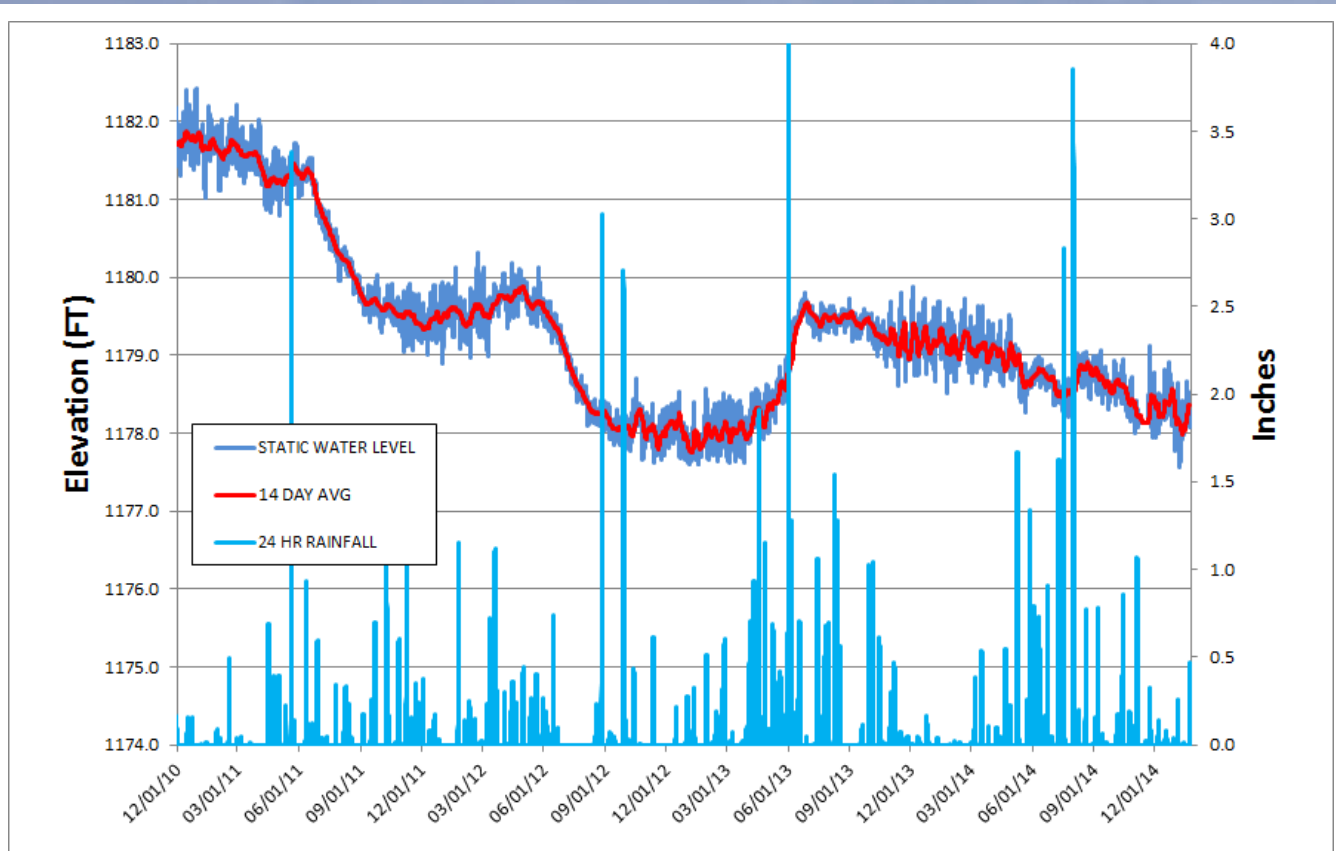
Oklahoma Surface Water Resources

Reservoir Levels and Storage as of 1/13/2015



http://www.owrb.ok.gov/maps/pdf_map/Monthly%20Reservoir%20Storage.pdf

Groundwater Levels Spencer Mesonet Station

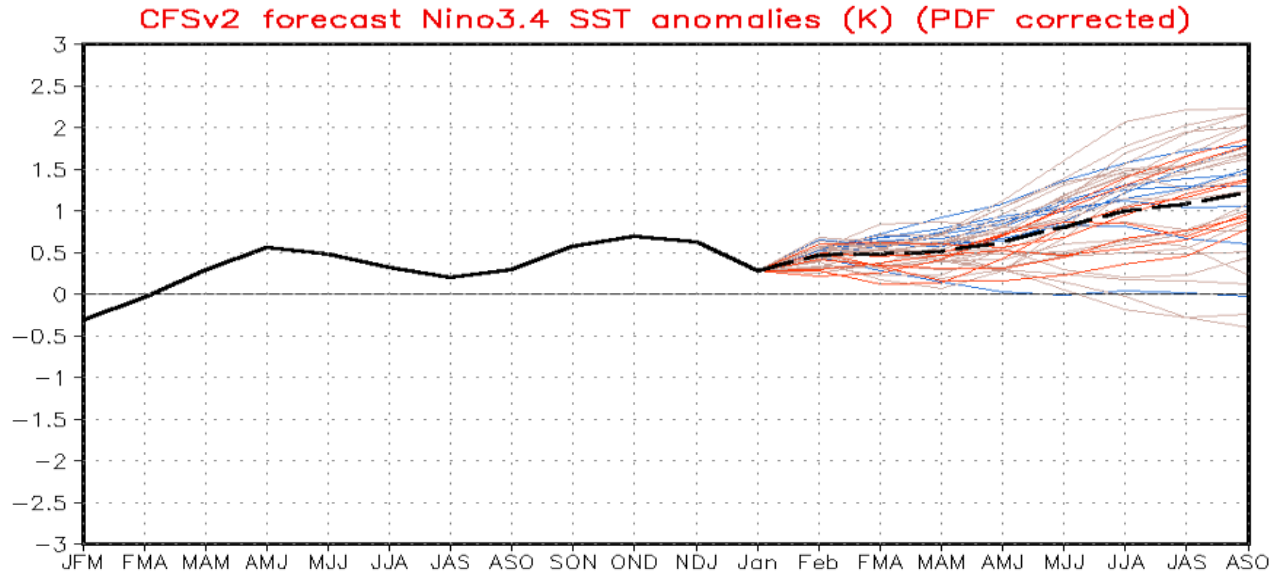


<http://www.mesonet.org/index.php/weather/groundwater>

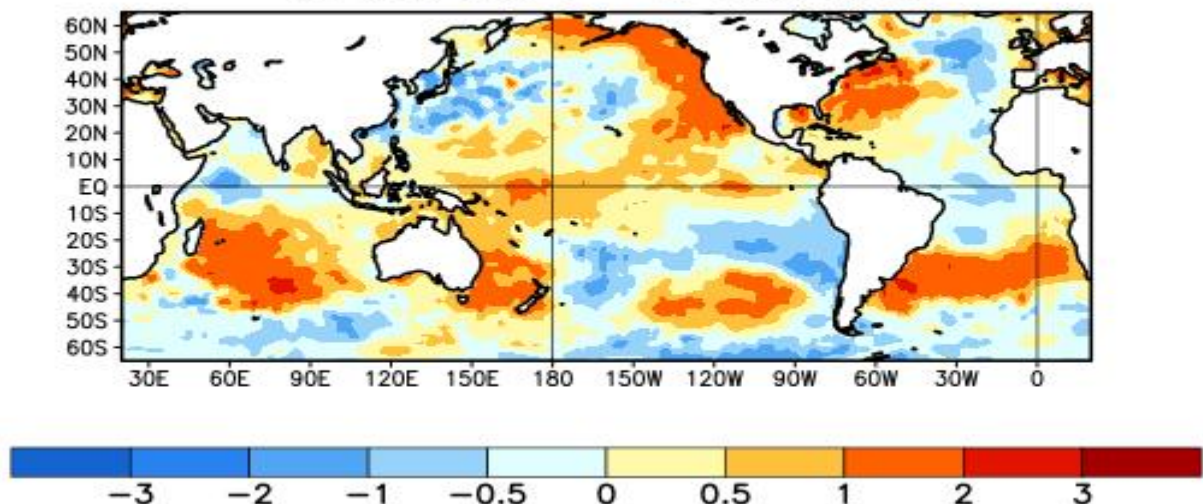


ENSO Cycle

Recent Evolution, Current Status and Predictions



Average SST Anomalies
21 DEC 2014 – 17 JAN 2015



Summary

ENSO Alert System Status: El Niño Watch

- ENSO-neutral conditions continue.
- Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean.
- There is an approximately 50-60% chance of El Niño conditions during the next two months, with ENSO-neutral favored thereafter .