

Oklahoma Water Resources Bulletin & Summary of Current Conditions

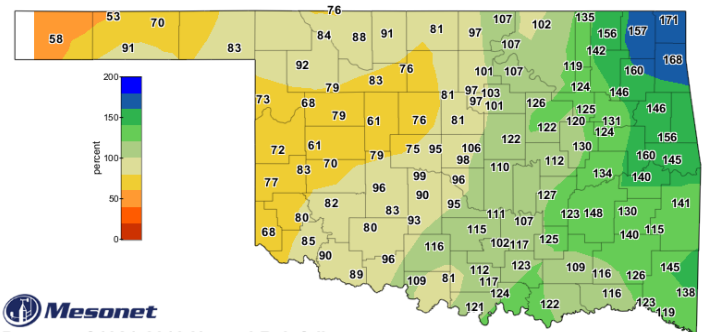
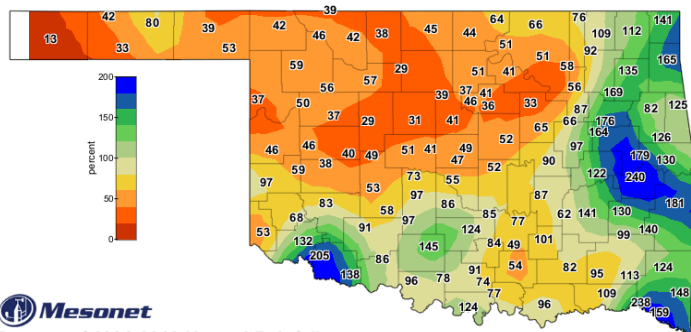


June 12, 2020

PRECIPITATION

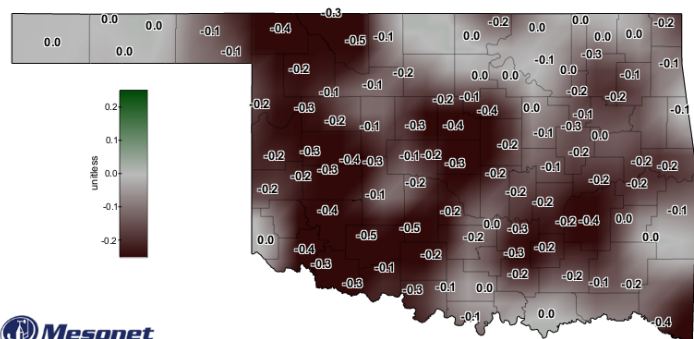
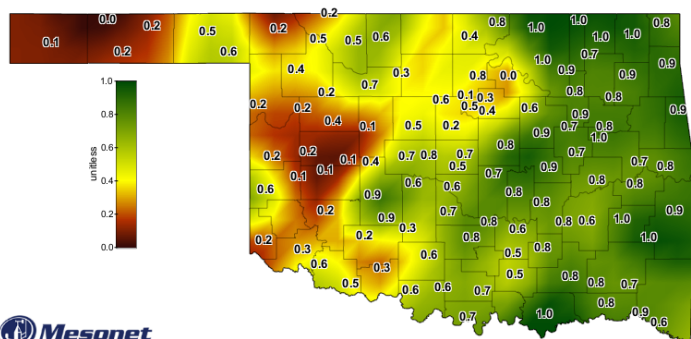
Statewide Precipitation

Climate Division	Last 30 Days May 13, 2020 – June 11, 2020				Last 365 Days June 13, 2019 – June 11, 2020			
	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	Rank Since 1921	Total Rainfall (inches)	Departure From Normal (inches)	Percent of Normal	RANK SINCE 1921
PANHANDLE	1.14"	-1.84"	38%	9th driest	15.00"	-5.47"	73%	18th driest
NORTH CENTRAL	2.07"	-2.49"	45%	14th driest	27.86"	-3.41"	89%	41st driest
NORTHEAST	5.31"	-0.37"	94%	43rd wettest	57.36"	+14.86"	135%	2nd wettest
WEST CENTRAL	2.03"	-2.46"	45%	13th driest	21.52"	-6.73"	76%	21st driest
CENTRAL	2.78"	-2.37"	54%	16th driest	37.61"	+0.15"	100%	32nd wettest
EAST CENTRAL	6.61"	+0.94"	117%	29th wettest	63.09"	+17.12"	137%	2nd wettest
SOUTHWEST	3.82"	-0.58"	87%	47th driest	26.06"	-4.07"	87%	37th driest
SOUTH CENTRAL	4.49"	-0.89"	83%	45th driest	45.93"	+5.38"	113%	19th wettest
SOUTHEAST	7.76"	+2.06"	136%	20th wettest	65.07"	+14.63"	129%	5th wettest
STATEWIDE	3.91"	-0.99"	80%	35th driest	39.87"	+3.55"	110%	21st wettest



SOIL MOISTURE

Fractional Water Index June 11, 2020



The Fractional Water Index ranges from very dry soil having a value of 0 to soil at field capacity illustrated by a value of 1.
[1.0-0.8 = Enhanced Growth; 0.8-0.5 = Limited Growth; 0.5-0.3 = Plants Wilting; 0.3-0.1 = Plants Dying; <0.1 = Barren Soil.]

DROUGHT INDICES

Palmer Drought Severity Index (PDSI)					Standardized Precipitation Index (SPI) Through May 2020		
Climate Division	Status 06/06/20	Value 05/09	Value 06/06	Change in Value	3-month	12-month	24-month
NORTHWEST	Moderate Drought	-0.04	-2.14	2.1(-)	Moderately Dry	Near Normal	Extremely Moist
NORTH CENTRAL	Near Normal	2.73	1.02	1.71(-)	Near Normal	Near Normal	Exceptionally Moist
NORTHEAST	Extremely Moist	4.94	4.22	0.72(-)	Moderately Moist	Exceptionally Moist	Exceptionally Moist
WEST CENTRAL	Near Normal	0.50	-1.08	1.58(-)	Near Normal	Near Normal	Extremely Moist
CENTRAL	Unusual Moist Spell	3.97	2.48	1.49(-)	Near Normal	Moderately Moist	Exceptionally Moist
EAST CENTRAL	Extremely Moist	4.54	4.3	0.24(-)	Very Moist	Exceptionally Moist	Exceptionally Moist
SOUTHWEST	Near Normal	0.64	0.41	0.23(-)	Near Normal	Near Normal	Very Moist
SOUTH CENTRAL	Very Moist Spell	3.65	3.08	0.57(-)	Moderately Moist	Moderately Moist	Exceptionally Moist
SOUTHEAST	Extremely Moist	4.41	4.14	0.27(-)	Very Moist	Extremely Moist	Exceptionally Moist

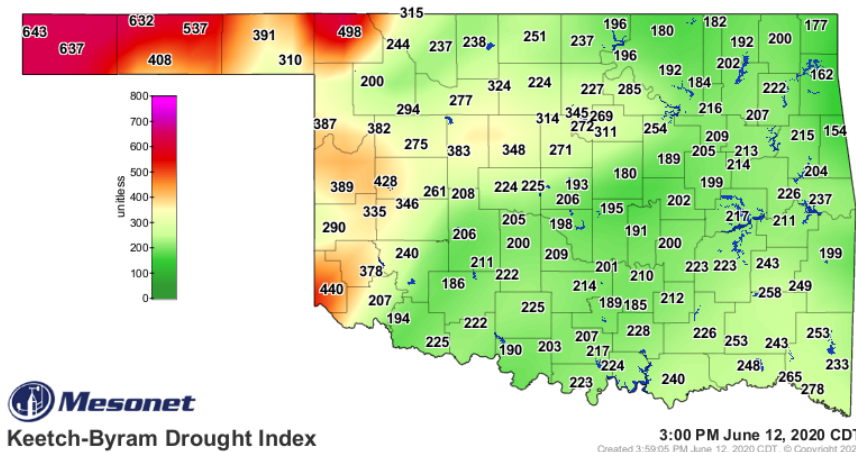
extreme drought -4.0 or less	severe drought -3.0 to -3.9	moderate drought -2.0 to -2.9	near normal -1.9 to +1.9	unusual moist spell +2.0 to +2.9	very moist spell +3.0 to +3.9	extremely moist +4.0 and above
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exceptionally dry -2.00 and below	extremely dry -1.99 to -1.60	severely dry -1.59 to -1.30	moderately dry -1.29 to -0.80	abnormally dry -0.79 to -0.51	near normal -0.50 to +0.50	abnormally moist +0.51 to +0.79	moderately moist +0.80 to +1.29	very moist +1.30 to +1.59	extremely moist +1.60 to +1.99	exceptionally moist +2.0 and above
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The PDSI is based upon precipitation, temperature, and soil moisture, and is considered most effective for unirrigated cropland, spanning from -10 (dry) to +10 (wet). According to the latest PDSI, as of June 6, The Northwest region is experiencing Moderate Drought conditions. The rest of the state is Near Normal or wetter.

The SPI provides a comparison of precipitation over several specified periods with totals from the same periods for all years included in the historical record. For the three-month period, the Northwest region was Moderately Dry, but the rest of the state was Near Normal or wetter. For the two other time periods shown, all regions were Near Normal or wetter.

Keetch-Byram Drought Fire Index



The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires.

KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

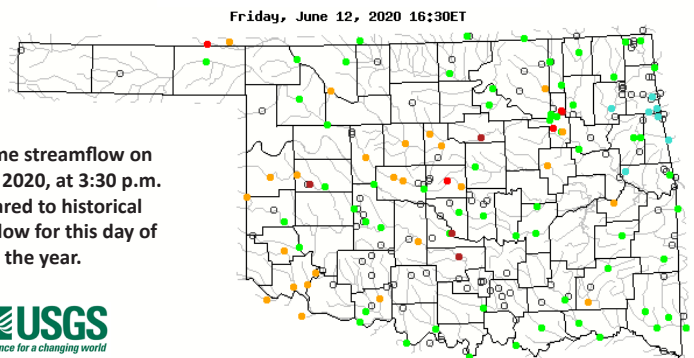
STREAMFLOW CONDITIONS

June 12, 2020

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

Visit waterwatch.usgs.gov for additional real-time streamflow information.

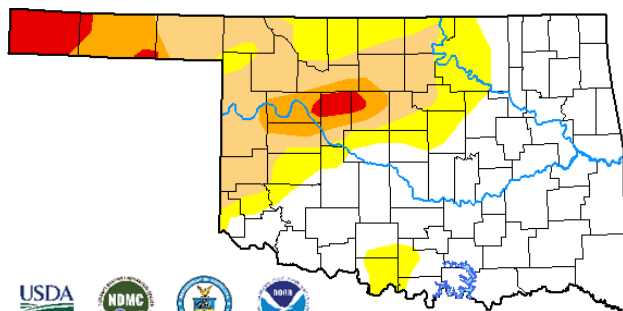
Real-time streamflow on June 12, 2020, at 3:30 p.m. compared to historical streamflow for this day of the year.



WEATHER/DROUGHT FORECAST

Drought Summary for Oklahoma

U.S. Drought Monitor Oklahoma

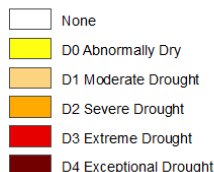


June 9, 2020

(Released Thursday, June 11, 2020)

Valid 7 a.m. EDT

Intensity:



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

Author: Brad Pugh
NOAA/CPC

Drought Conditions (percent area)

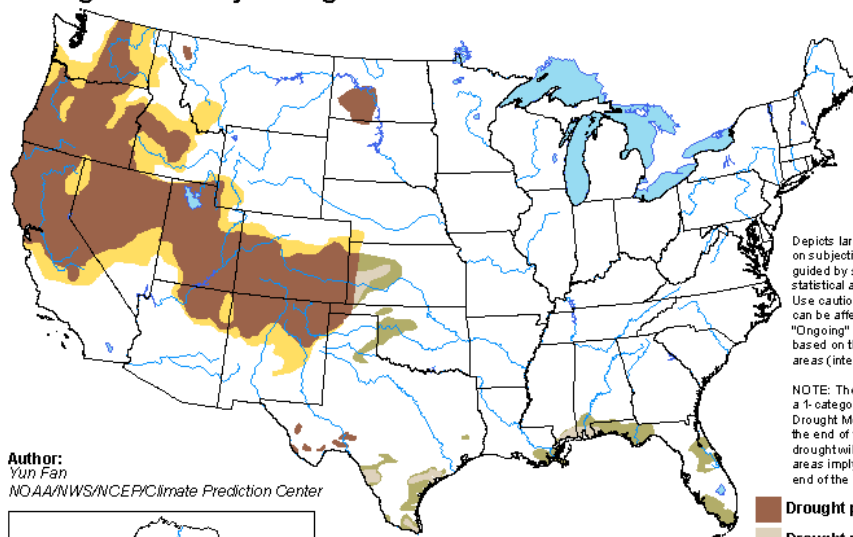
Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2020-06-09	56.16	43.84	28.02	10.14	3.92	0.00	86
Last Week	2020-06-02	70.07	29.93	15.16	5.08	1.72	0.00	52
3 Months Ago	2020-03-10	85.63	14.37	4.66	0.84	0.00	0.00	20
Start of Calendar Year	2019-12-31	76.45	23.55	10.47	3.64	0.00	0.00	38
Start of Water Year	2019-10-01	71.94	28.06	11.08	1.01	0.00	0.00	40
One Year Ago	2019-06-11	100.00	0.00	0.00	0.00	0.00	0.00	0

According to the latest U.S. Drought Monitor, as of June 9, 2020, the estimated Oklahoma population living in areas experiencing drought was 300,997 with 3.92% of the state in area experiencing Extreme Drought (D3-4) conditions, 10.14% experiencing Severe Drought (D2) conditions or worse, and 28.02% experiencing Moderate Drought (D1) or worse. A total of 43.84% of the state has Abnormally Dry (D0) conditions or worse.

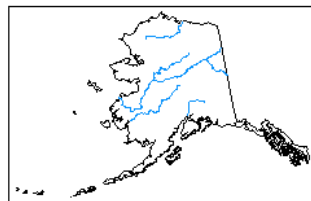
Drought Probability

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for May 21 - August 31, 2020
Released May 21



Author:
Yun Fan
NOAA/NWS/NCEP/Climate Prediction Center



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

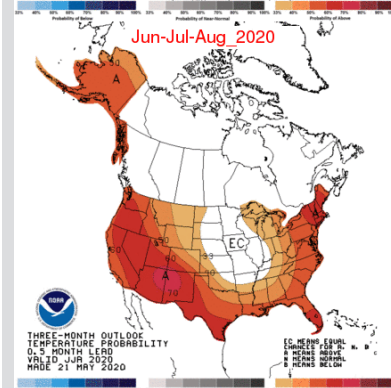
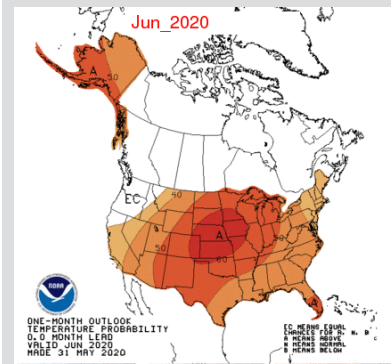
- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



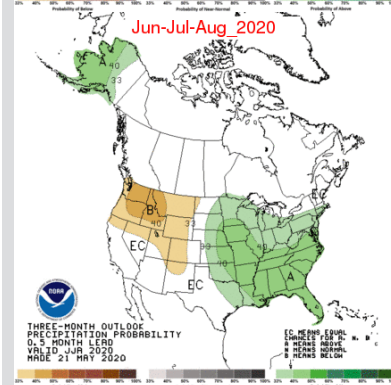
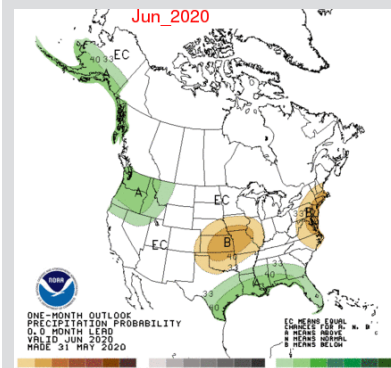
<http://go.usa.gov/3eZ73>

Seasonal Outlook

Temperature Probability



Precipitation Probability



The contours on the maps above show the total probability of three categories. "Above" is indicated by the letter "A"; "Below" is indicated by the letter "B"; "EC" indicates "Equal Chances" for A or B.

RESERVOIR STORAGE

Oklahoma Surface Water Resources Reservoir Levels and Storage as of 6/8/2020

