

# Oklahoma Water Resources Bulletin & Summary of Current Conditions

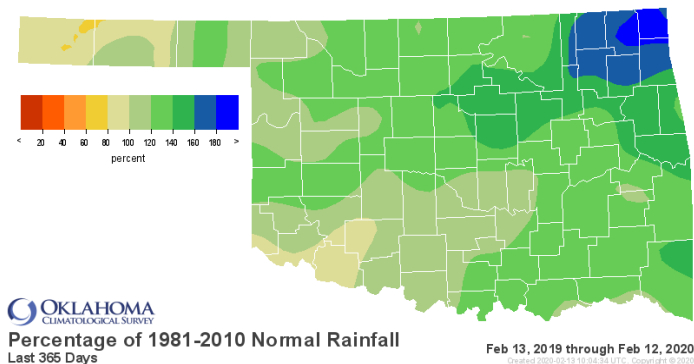
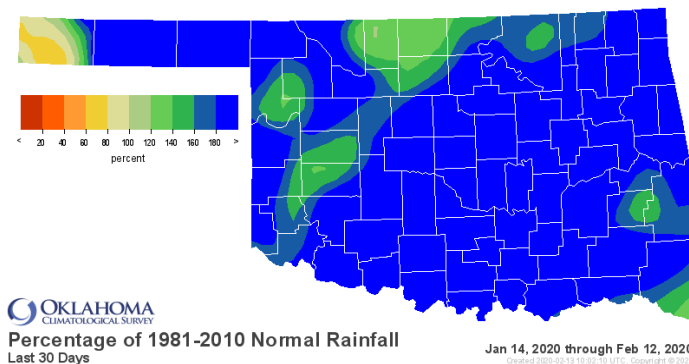


February 13, 2020

## PRECIPITATION

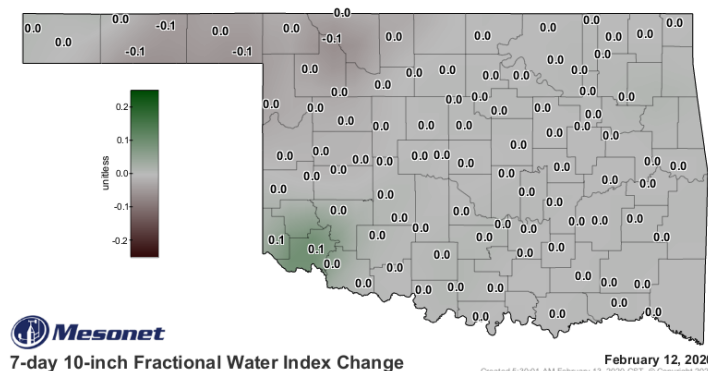
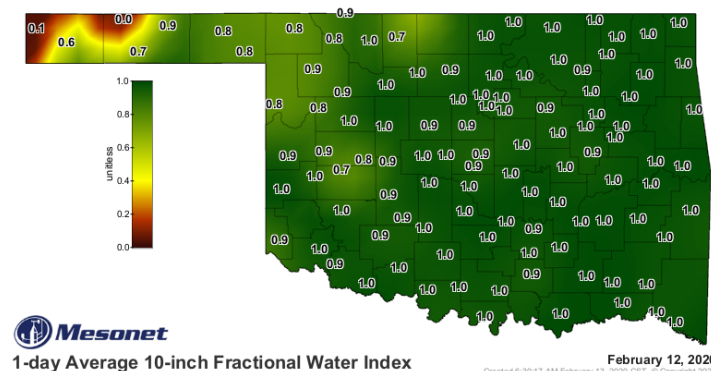
### Statewide Precipitation

Climate Division	Last 30 Days January 14, 2020 – February 12, 2020				Last 365 Days February 13, 2019 – February 12, 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	1.19"	+0.55"	187%	13th wettest	21.25"	+0.67"	103%	35th wettest
NORTH CENTRAL	1.82"	+0.76"	172%	16th wettest	40.59"	+9.17"	129%	5th wettest
NORTHEAST	3.66"	+1.86"	204%	3rd wettest	66.02"	+23.35"	155%	1st wettest
WEST CENTRAL	1.77"	+0.75"	173%	15th wettest	35.71"	+7.31"	126%	9th wettest
CENTRAL	4.10"	+2.50"	256%	2nd wettest	49.58"	+11.95"	132%	3rd wettest
EAST CENTRAL	5.56"	+3.16"	232%	4th wettest	62.91"	+16.77"	136%	4th wettest
SOUTHWEST	2.96"	+1.70"	235%	3rd wettest	32.69"	+2.42"	108%	21st wettest
SOUTH CENTRAL	5.97"	+3.88"	286%	2nd wettest	48.98"	+8.27"	120%	9th wettest
SOUTHEAST	5.95"	+2.78"	188%	8th wettest	65.60"	+15.01"	130%	7th wettest
<b>STATEWIDE</b>	<b>3.68"</b>	<b>+2.03"</b>	<b>223%</b>	<b>3rd wettest</b>	<b>47.16"</b>	<b>+10.69"</b>	<b>129%</b>	<b>3rd wettest</b>



## SOIL MOISTURE

### Fractional Water Index February 12, 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 January 2020		
Climate Division	Status 02/08/20	Value		Change in Value	3-month	12-month	24-month
NORTHWEST	Unusual Moist Spell	2.39	2.75	0.36(+)	Abnormally Moist	Moderately Moist	Very Moist
NORTH CENTRAL	Very Moist Spell	3.73	3.85	0.12(+)	Near Normal	Exceptionally Moist	Exceptionally Moist
NORTHEAST	Extremely Moist	5.05	5.09	0.04(+)	Moderately Moist	Exceptionally Moist	Exceptionally Moist
WEST CENTRAL	Near Normal	0.96	1.59	0.63(+)	Abnormally Moist	Very Moist	Very Moist
CENTRAL	Extremely Moist	3.76	4.47	0.71(+)	Moderately Moist	Extremely Moist	Exceptionally Moist
EAST CENTRAL	Extremely Moist	4.52	4.88	0.36(+)	Moderately Moist	Extremely Moist	Exceptionally Moist
SOUTHWEST	Near Normal	-0.62	0.42	1.04(+)	Near Normal	Abnormally Moist	Moderately Moist
SOUTH CENTRAL	Extremely Moist	3.28	4.00	0.72(+)	Abnormally Moist	Moderately Moist	Extremely Moist
SOUTHEAST	Extremely Moist	4.45	4.39	0.06(-)	Near Normal	Very Moist	Extremely 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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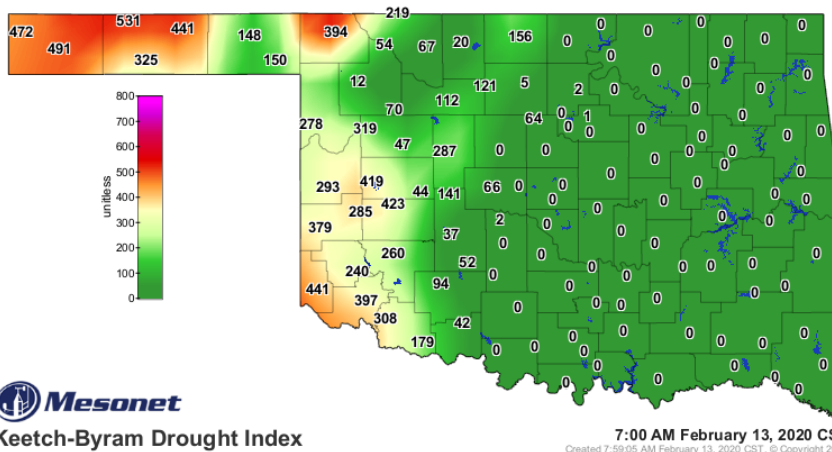
  

exceptionally dry -2.00 and below	extremely dry -1.99 to -1.80	severely dry -1.59 to -1.30	moderately dry -1.29 to -0.80	abnormally dry -0.79 to -0.51	near normal -0.50 to +0.50	abnormally moist +0.51 to +0.79	moderately moist +0.80 to +1.29	very moist +1.30 to +1.59	extremely moist +1.60 to +1.99	exceptionally 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 February 8, the West Central and Southwest regions were near normal but the rest of the state's climate regions were above normal.

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 all three time periods shown, all climate 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.

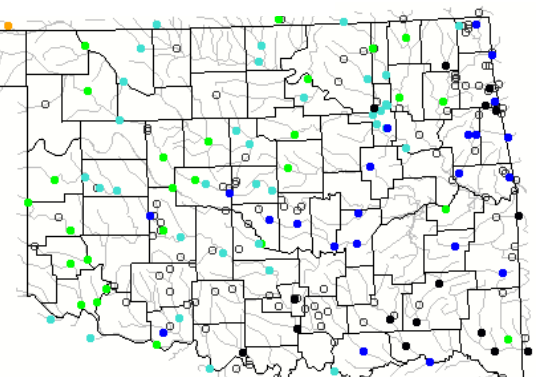
## STREAMFLOW CONDITIONS

February 13, 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](http://waterwatch.usgs.gov) for additional real-time streamflow information.

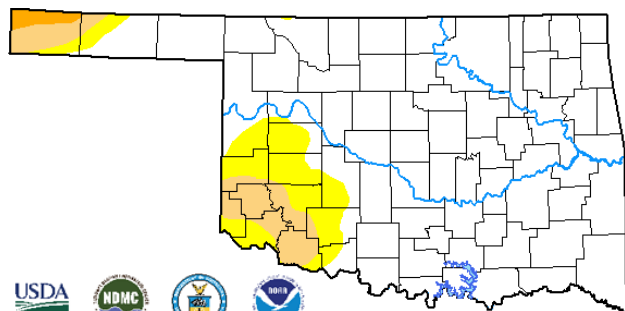
Real-time streamflow on February 13, 2020, at 7:30 a.m. compared to historical streamflow for this day of the year.



# WEATHER/DROUGHT FORECAST

## Drought Summary for Oklahoma

### U.S. Drought Monitor Oklahoma



**February 11, 2020**  
(Released Thursday, Feb. 13, 2020)  
Valid 7 a.m. EDT

#### Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

Author: Richard Tinker  
NOAA/NWS/NCEP/CPC

#### Drought Conditions (percent area)

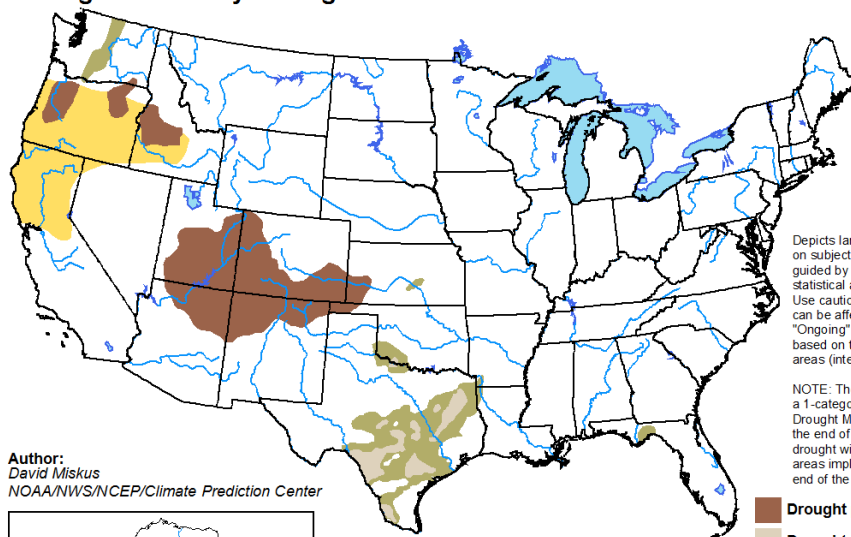
Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
Current	2020-02-11	84.31	15.69	6.77	0.85	0.00	0.00	23
Last Week	2020-02-04	83.33	16.67	7.51	0.85	0.00	0.00	25
3 Months Ago	2019-11-12	81.20	18.80	10.04	0.78	0.00	0.00	30
Start of Calendar Year	2019-12-31	76.45	23.55	10.47	3.64	0.00	0.00	38
Start of Water Year	2019-10-01	71.94	28.06	11.08	1.01	0.00	0.00	40
One Year Ago	2019-02-12	92.41	7.59	0.00	0.00	0.00	0.00	8

According to the latest U.S. Drought Monitor, as of February 13, 2020, the estimated Oklahoma population living in areas experiencing drought was 55,314. Less than 1% of the state in area is experiencing Severe Drought (D2) and about 6.8% remains in Moderate Drought (D1) or worse. Several areas (15.7%) in western parts of the state have Abnormally Dry (D0) conditions or worse.

## Drought Probability

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

Valid for January 16 - April 30, 2020  
Released January 16



Author:  
David Miskus  
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).

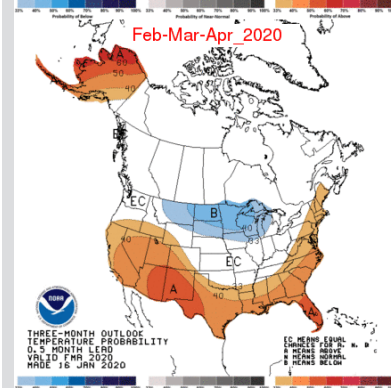
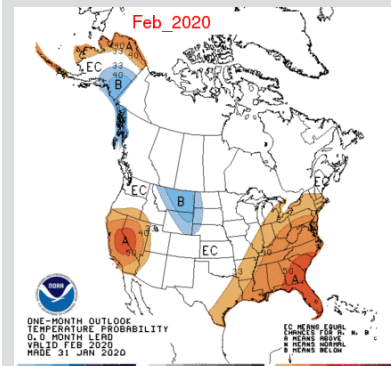
- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



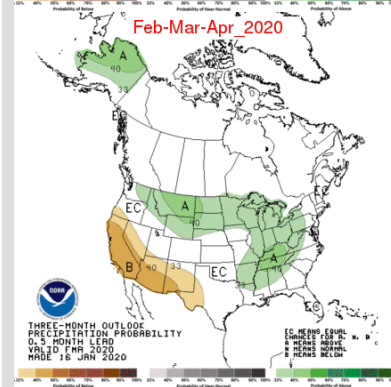
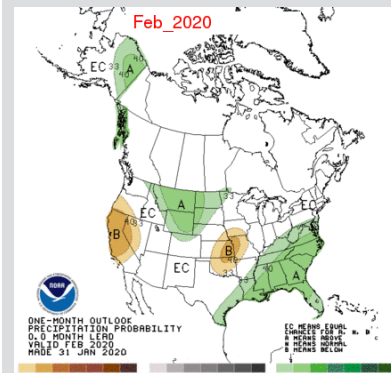
<http://go.usa.gov/3eZ73>

## 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 2/10/2020

