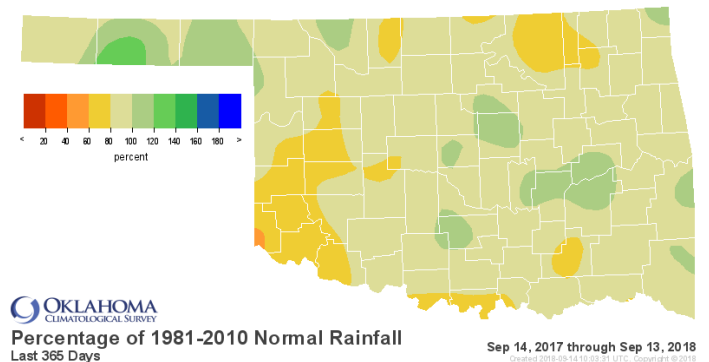
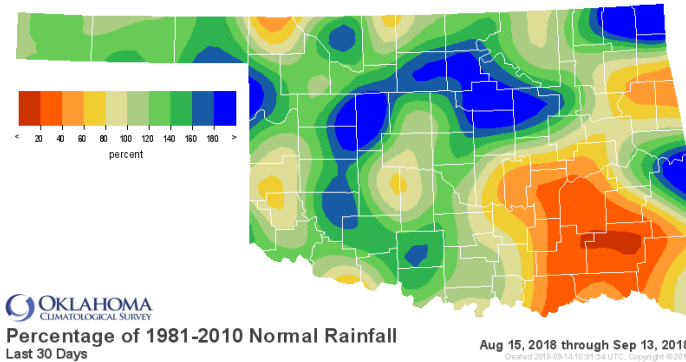


September 14, 2018

## PRECIPITATION

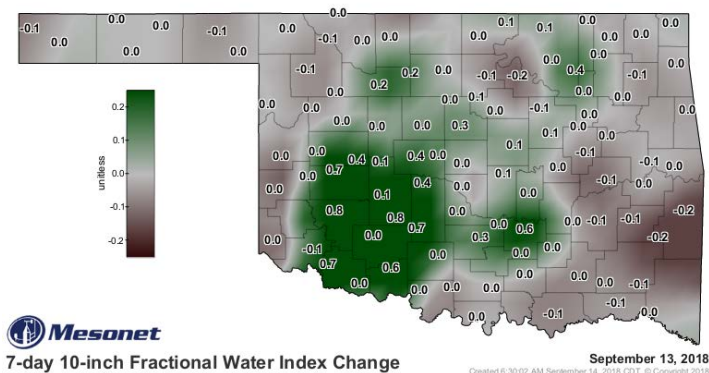
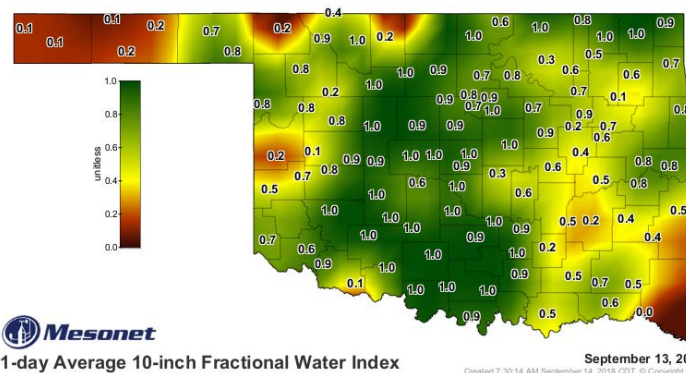
### Statewide Precipitation

| Climate Division | Last 30 Days<br>August 16 – September 13, 2018 |                                |                   |                 | Last 365 Days<br>September 14, 2017 – September 13, 2018 |                                |                   |                 |
|------------------|--|--------------------------------|-------------------|-----------------|--|--------------------------------|-------------------|-----------------|
|                  | 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        | 2.89"  | +0.61"                         | 127%              | 21st wettest    | 20.33"   | -0.25"                         | 99%               | 47th wettest    |
| NORTH CENTRAL    | 3.92"  | +0.99"                         | 134%              | 24th wettest    | 27.69"   | -3.73"                         | 88%               | 45th driest     |
| NORTHEAST        | 5.08"  | +1.45"                         | 140%              | 22nd wettest    | 36.65"   | -6.02"                         | 86%               | 36th driest     |
| WEST CENTRAL     | 4.35"  | +1.49"                         | 152%              | 19th wettest    | 23.73"   | -4.67"                         | 84%               | 35th driest     |
| CENTRAL          | 4.40"  | +1.06"                         | 132%              | 26th wettest    | 36.08"   | -1.55"                         | 96%               | 41st wettest    |
| EAST CENTRAL     | 2.89"  | -0.74"                         | 80%               | 44th driest     | 42.85"   | -3.29"                         | 93%               | 47th wettest    |
| SOUTHWEST        | 3.59"  | +0.64"                         | 122%              | 27th wettest    | 24.31"   | -5.96"                         | 80%               | 26th driest     |
| SOUTH CENTRAL    | 3.00"  | -0.30"                         | 91%               | 45th wettest    | 36.00"   | -4.71"                         | 88%               | 40th driest     |
| SOUTHEAST        | 1.68"  | -1.61"                         | 51%               | 16th driest     | 46.76"   | -3.83"                         | 92%               | 36th driest     |
| STATEWIDE        | 3.59"  | +0.45"                         | 114%              | 31st wettest    | 32.80"   | -3.67"                         | 90%               | 43rd driest     |



## SOIL MOISTURE

### Fractional Water Index September 13, 2018



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)<br>Through August 2018 |                |                  |
|--------------------------------------|---------------|-------|-------|-----------------|---|----------------|------------------|
| Climate Division                     | Status 9/8/18 | Value |       | Change in Value | 3-month   | 12-month       | 24-month         |
| NORTHWEST                            | Near Normal   | -0.57 | 1.46  | 2.03(+)         | Extremely Moist   | Near Normal    | Abnormally Moist |
| NORTH CENTRAL                        | Near Normal   | -1.24 | 1.3   | 2.54(+)         | Moderately Moist  | Near Normal    | Near Normal      |
| NORTHEAST                            | Near Normal   | -2.32 | -0.07 | 2.25(+)         | Near Normal   | Abnormally Dry | Near Normal      |
| WEST CENTRAL                         | Near Normal   | -3.51 | -1.44 | 2.07(+)         | Abnormally Moist  | Abnormally Dry | Near Normal      |
| CENTRAL                              | Near Normal   | -0.23 | 1.56  | 1.79(+)         | Moderately Moist  | Near Normal    | Abnormally Moist |
| EAST CENTRAL                         | Near Normal   | -1.66 | 0.08  | 1.74(+)         | Near Normal   | Near Normal    | Near Normal      |
| SOUTHWEST                            | Near Normal   | -3.61 | -1.36 | 2.25(+)         | Near Normal   | Abnormally Dry | Near Normal      |
| SOUTH CENTRAL                        | Near Normal   | -2.45 | 0.34  | 2.79(+)         | Near Normal   | Near Normal    | Near Normal      |
| SOUTHEAST                            | Near Normal   | -1.93 | 0.39  | 2.32(+)         | Near Normal   | Near Normal    | Near Normal      |

|                                      |                                 |                                  |                                  |                                     |                                  |                                    |                                    |                              |                                   |                                       |
|--------------------------------------|---------------------------------|----------------------------------|----------------------------------|-------------------------------------|----------------------------------|------------------------------------|------------------------------------|------------------------------|-----------------------------------|---------------------------------------|
| extreme drought<br>-4.0 or less      | severe drought<br>-3.0 to -3.9  | moderate drought<br>-2.0 to -2.9 | near normal<br>-1.9 to +1.9      | unusual moist spell<br>+2.0 to +2.9 | very moist spell<br>+3.0 to +3.9 | extremely moist<br>+4.0 and above  |                                    |                              |                                   |                                       |
| exceptionally dry<br>-2.00 and below | extremely dry<br>-1.99 to -1.80 | severely dry<br>-1.59 to -1.30   | moderately dry<br>-1.29 to -0.80 | abnormally dry<br>-0.79 to -0.51    | near normal<br>-0.50 to +0.50    | abnormally moist<br>+0.51 to +0.79 | moderately moist<br>+0.80 to +1.29 | very moist<br>+1.30 to +1.59 | extremely moist<br>+1.60 to +1.99 | exceptionally moist<br>+2.0 and above |

*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 September 8, all climate regions in the state were experiencing near normal conditions.*

*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 12-month period, all regions were near normal except Northeast, West Central, and Southwest, which were abnormally dry. For the 3-month and 24-month periods, all regions were near normal or wetter.*

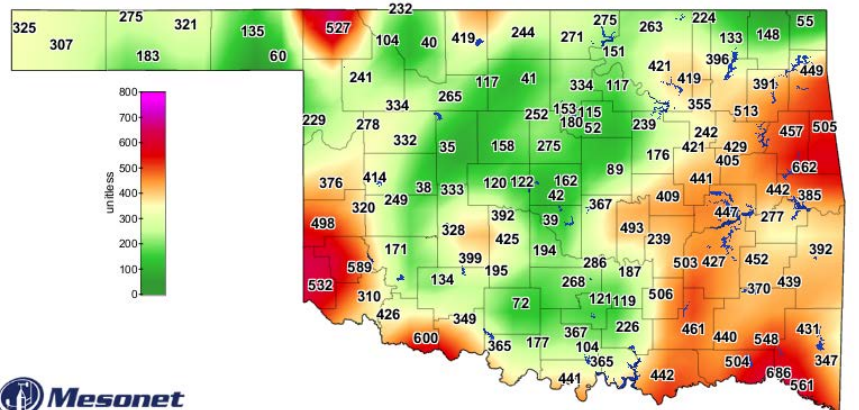
## Keetch-Byram Drought Fire Index

September 14, 10:00 a.m.--3 stations are above 600.

| STATION    | REGION       | KBDI |
|------------|--------------|------|
| Valliant   | Southeast    | 686  |
| Cookson    | East Central | 662  |
| Grandfield | Southwest    | 600  |

One station was above 600 on August 17, 2018.

*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.*



Keetch-Byram Drought Index

10:00 AM September 14, 2018 CDT  
Created 10:44:04 AM September 14, 2018 CDT. © Copyright 2016

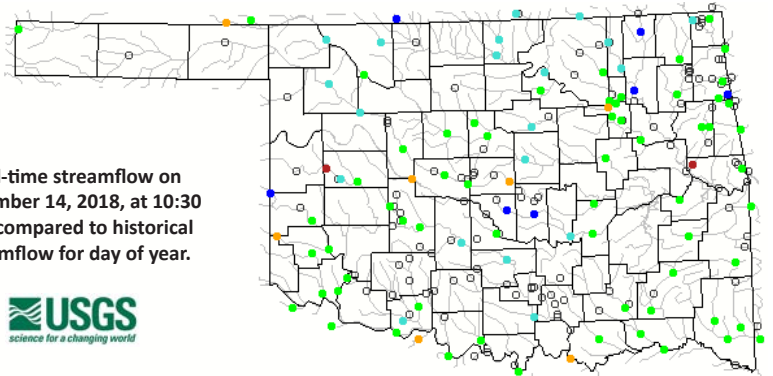
## STREAMFLOW CONDITIONS

September 14, 2018

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

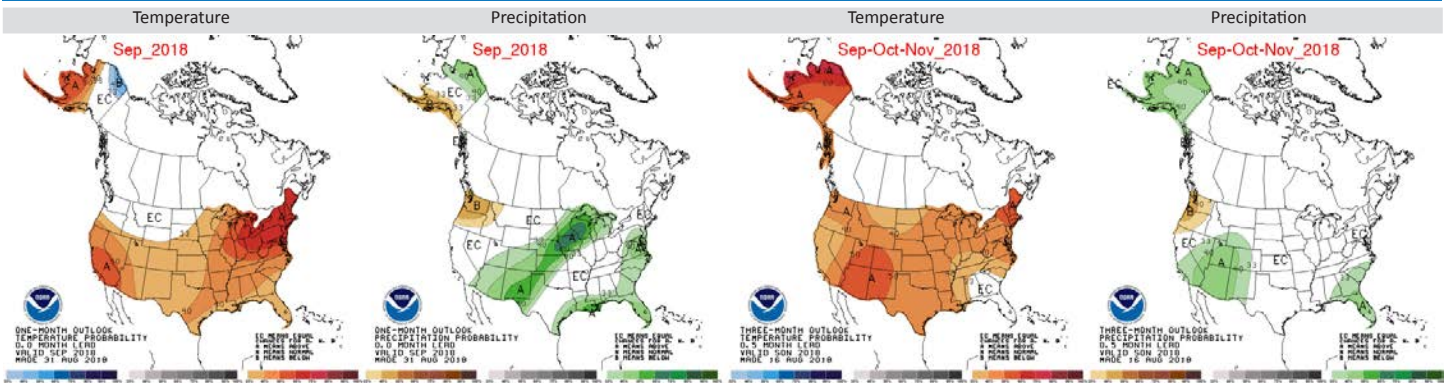
Visit [waterwatch.usgs.gov](http://waterwatch.usgs.gov) for real-time streamflow information.

Real-time streamflow on September 14, 2018, at 10:30 a.m. compared to historical streamflow for day of year.



# WEATHER/DROUGHT FORECAST

## Seasonal Outlook

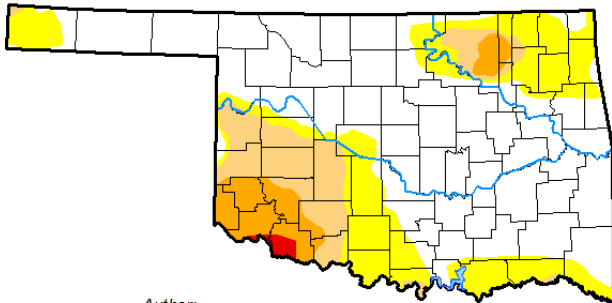


The contours on the maps show the total probability of three categories—above, indicated by the letter “A”; and below, indicated by the letter “B”. “EC” indicates “Equal Chances” for A or B.

## Drought Summary & Outlook

### U.S. Drought Monitor Oklahoma

**September 11, 2018**  
(Released Thursday, Sep. 13, 2018)  
Valid 8 a.m. EDT



Author:  
David Miskus  
NOAA/NWS/NCEP/CPC



<http://droughtmonitor.unl.edu/>

#### Drought Conditions (Percent Area)

|   | None  | D0-D4  | D1-D4 | D2-D4 | D3-D4 | D4   |
|---|-------|--------|-------|-------|-------|------|
| <b>Current</b>                              | 60.78 | 39.22  | 17.25 | 6.60  | 0.57  | 0.00 |
| <b>Last Week</b><br>09-04-2018              | 56.74 | 43.26  | 27.24 | 16.38 | 4.69  | 0.00 |
| <b>3 Months Ago</b><br>06-12-2018           | 19.29 | 80.71  | 50.75 | 35.76 | 23.91 | 2.12 |
| <b>Start of Calendar Year</b><br>01-02-2018 | 0.00  | 100.00 | 77.15 | 38.76 | 0.00  | 0.00 |
| <b>Start of Water Year</b><br>09-26-2017    | 64.46 | 35.54  | 0.77  | 0.00  | 0.00  | 0.00 |
| <b>One Year Ago</b><br>09-12-2017           | 80.10 | 19.90  | 2.04  | 0.00  | 0.00  | 0.00 |

#### Intensity

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

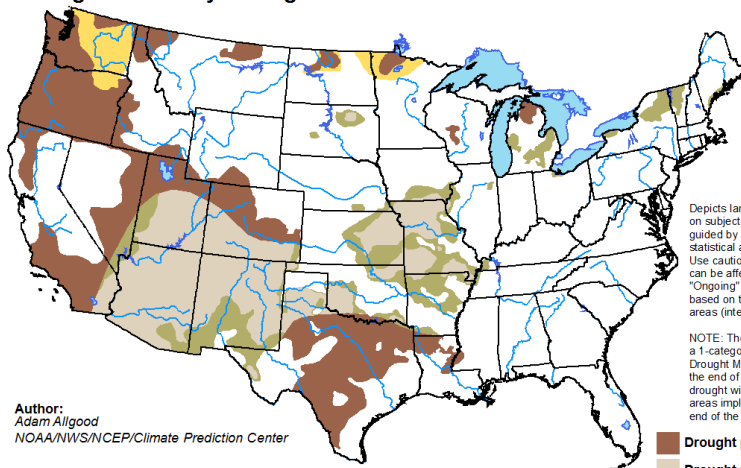
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

According to the latest U.S. Drought Monitor, as of September 11, the estimated Oklahoma population in drought areas was 425,853, which is down by almost a million from this time last month. Only 17.25% of the state (in area) is experiencing drought conditions, down from 47% a month ago. Only 0.57% of the state has received the Extreme Drought (D3) classification, while 6.6% remains in Severe Drought (D2) or worse and 17.25% is in Moderate Drought (D1) or worse.

According to the latest seasonal drought outlook for the period of August 16 through November 30, 2018, conditions in drought-stricken areas across Oklahoma are predicted to improve. Drought is predicted to persist in many areas in Texas, Colorado, Utah, Nevada, Idaho, and along the Pacific coastline.

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

Valid for August 16 - November 30, 2018  
Released August 16, 2018



Author:  
Adam Allgood  
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



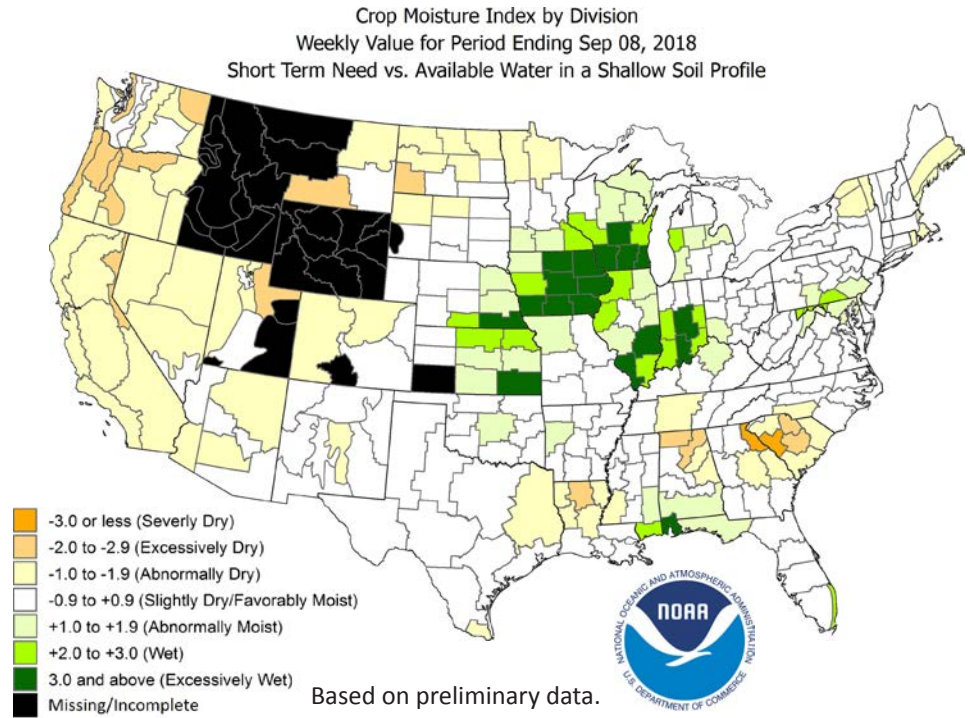
<http://go.usa.gov/3eZ73>



# CROP MOISTURE INDEX

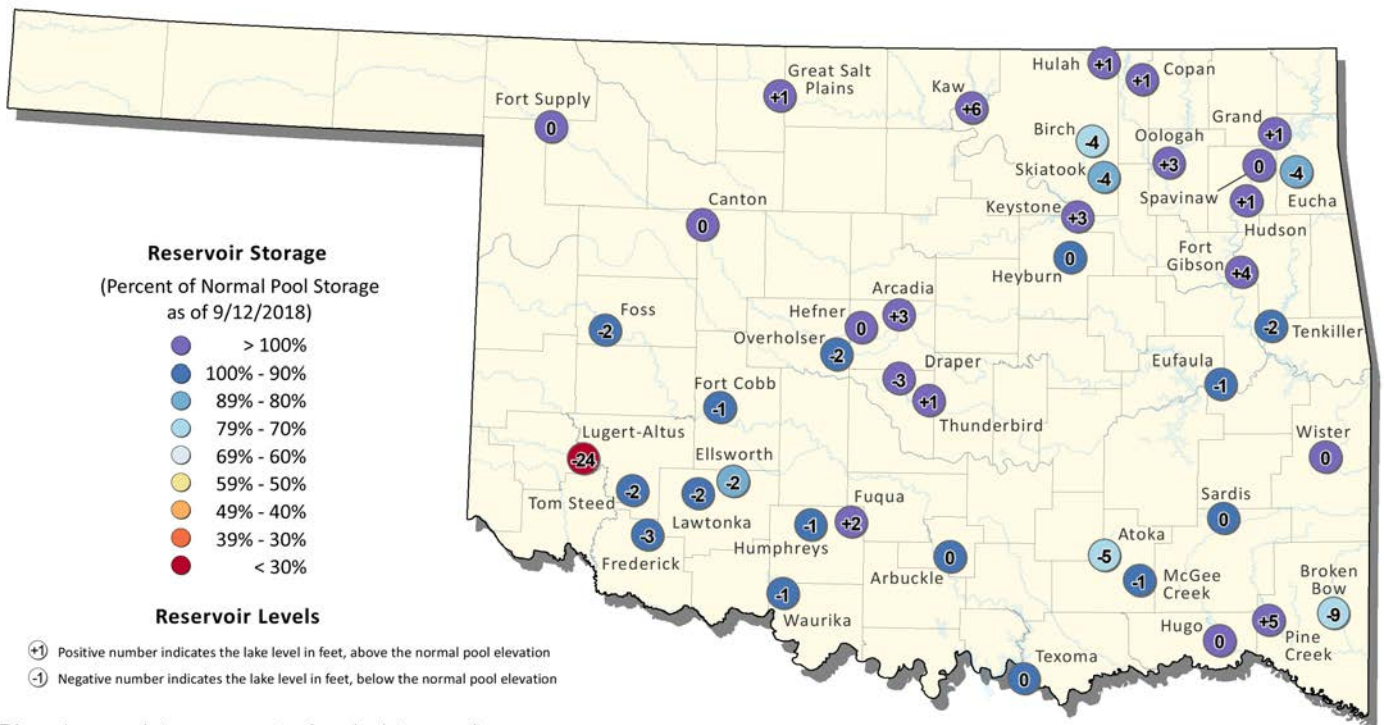
According to the NOAA Crop Moisture Index by Division, for the period ending September 8, 2018, the Central climate region was experiencing Abnormally Moist conditions (+1.0 to +1.9), while the rest of the state was experiencing Slightly Dry/Favorably Moist conditions (-0.9 to +0.9).

Derived from the Palmer Drought Severity Index (PDSI), the Crop Moisture Index reflects moisture supply in the short-term across major crop-producing regions. It identifies potential agricultural droughts. It is not intended to assess long-term droughts.



# RESERVOIR STORAGE

## Oklahoma Surface Water Resources Reservoir Levels and Storage as of 9/12/2018



This map shows reservoir storage as a percentage of normal pool storage capacity. The source information was collected from real-time lake gages monitored by the U.S. Army Corps of Engineers ([http://www.swt-wc.usace.army.mil/old\\_resv rept.htm](http://www.swt-wc.usace.army.mil/old_resv rept.htm)), and the U.S. Geological Survey ([http://waterdata.usgs.gov/ok/nwis/current/?type=lake&group\\_key=basin\\_cd](http://waterdata.usgs.gov/ok/nwis/current/?type=lake&group_key=basin_cd)). For more information please visit the OWRB's website at: (<http://www.owrb.ok.gov>)



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