Drought Conditions in Central Oklahoma

Water Resources Division
Association of Central Oklahoma Governments
June 1, 2017
Temperature and Precipitation Plot for Oklahoma City, Oklahoma for 2017

http://xmacis.rcc-acis.org/
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.
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

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.
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.
### U.S. Drought Monitor

**Regional Map Week of 30 MAY 2017**

<table>
<thead>
<tr>
<th>Week</th>
<th>None</th>
<th>D0-D4</th>
<th>D1-D4</th>
<th>D2-D4</th>
<th>D3-D4</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current 2017-05-30</td>
<td>97.17</td>
<td>2.83</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Last Week 2017-05-23</td>
<td>97.17</td>
<td>2.83</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>3 Months Ago 2017-02-28</td>
<td>12.64</td>
<td>87.36</td>
<td>73.14</td>
<td>28.77</td>
<td>0.18</td>
<td>0.00</td>
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<tr>
<td>Start of Calendar Year 2016-12-27</td>
<td>5.63</td>
<td>94.37</td>
<td>72.32</td>
<td>45.73</td>
<td>3.14</td>
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<tr>
<td>Start of Water Year 2016-09-27</td>
<td>57.82</td>
<td>42.18</td>
<td>19.04</td>
<td>3.05</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>One Year Ago 2016-05-31</td>
<td>97.18</td>
<td>2.82</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**U.S. Drought Monitor**

**Oklahoma**

Estimated Population in Drought Areas: 0

U.S. Drought Monitor

Monthly Drought Outlook Map

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

Valid for June 2017
Released May 31, 2017

USGS Streamflow Data

https://waterdata.usgs.gov/ok/nwis/rt
http://ok.water.usgs.gov/drought/
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.
Groundwater Levels
Spencer Mesonet Station

http://www.mesonet.org/index.php/weather/groundwater
ENSO Cycle
Recent Evolution, Current Status and Predictions

ENSO Alert System Status: Not Active

- ENSO-neutral conditions are present.
- Equatorial sea surface temperatures (SSTs) are near-to-above average across most of the Pacific Ocean.
- ENSO-neutral and El Niño are nearly equally favored during the Northern Hemisphere summer and fall 2017.

Summary