Temperature and Precipitation Plot for Oklahoma City, Oklahoma for 2021

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.

http://climate.ok.gov/index.php/drought/last_30_days/
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.
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.
Abnormal dryness or drought are currently affecting approximately 185,122 people in Oklahoma.

U.S. Drought Monitor Nationwide Map

Map released: May 27, 2021
Data valid: May 25, 2021

United States and Puerto Rico Author(s):
Adam Hartman, NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):
Ahira Sanchez-Lugo, NOAA/NCEI

http://droughtmonitor.unl.edu
U.S. Drought Monitor

Monthly Drought Outlook Map

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

Valid for June 2021
Released May 31, 2021

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 level by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D3 or none).


Author:
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NOAA/NWS/NCEP/Climate Prediction Center

http://go.usa.gov/3eZGd
USGS Streamflow Data

Tuesday, June 01, 2021 10:30ET

Monday, May 31, 2021

Below normal 28-day average streamflow

https://waterdata.usgs.gov/ok/nwis/rt

https://waterwatch.usgs.gov/index.php?id=pa28d_dry&sid=w_map&m_pa28d_dwc&r=ok
SOIL MOISTURE MAP

1-day Average 24-inch Fractional Water Index

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

http://www.mesonet.org/index.php/weather/map/24-inch_fractional_water_index/soil_moisture
CONSECUTIVE DAYS WITHOUT RAINFALL MAP

http://www.mesonet.org/index.php/weather/map/consecutive_days_with_less_than_0.25_inches_Rainfall/rainfall
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.

<table>
<thead>
<tr>
<th>LAKE</th>
<th>% CAPACITY</th>
<th>% CHANGE FROM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canton</td>
<td>100.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Arcadia</td>
<td>100.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Lake Thunderbird</td>
<td>100.0</td>
<td>0.0</td>
</tr>
<tr>
<td>McGee Creek</td>
<td>100.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Lake Atoka</td>
<td>86.4</td>
<td>9.1</td>
</tr>
<tr>
<td>TOTAL % CAPACITY</td>
<td>100.0</td>
<td>3.8</td>
</tr>
</tbody>
</table>

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.

http://waterdata.usgs.gov/ok/nwis/dv/?site_no=07333010&agency_cd=USGS&referred_module=sw
Oklahoma Surface Water Resources
Reservoir Levels and Storage as of 5/24/2021

Reservoir Storage
(Percent of Normal Pool Storage as of 5/24/2021)

- > 100%
- 100% - 90%
- 89% - 80%
- 79% - 70%
- 69% - 60%
- 59% - 50%
- 49% - 40%
- 39% - 30%
- < 30%

Reservoir Levels
1) Positive number indicates the lake level in feet, above the normal pool elevation.
2) Negative number indicates the lake level in feet, below the normal pool elevation.

This map shows reservoir storage as a percentage of normal pool storage capacity. The source information was collected from real-time lake gauges maintained by the U.S. Army Corps of Engineers (http://www.swl.usace.army.mil/Daily_Reporting_Reservoir_Report.pdf) and the U.S. Geological Survey (http://waterdata.usgs.gov/ok/nwis/monITOR/?hostname=group_key=oeamockup). For more information, please visit the OWRB’s website at (http://www.owrb.ok.gov)

https://www.owrb.ok.gov/supply/drought/reservoirstorage.php
Groundwater Levels
Spencer Mesonet Station

http://www.mesonet.org/index.php/weather/groundwater
AQUIFER RECHARGE MAY 2021

Central Oklahoma Aquifer System

Recharge in Inches:
- 0.0 - 0.1
- 0.1 - 0.2
- 0.2 - 0.3
- 0.3 - 0.4
- 0.4 - 0.5
- 0.5 - 0.6
- 0.6 - 0.7
- 0.7 - 0.8
- 0.8 - 0.9
- 0.9 - 1.0
Recharge Charts
Central Oklahoma Aquifer System

ACCUMULATED RECHARGE 2021

MONTHLY AQUIFER RECHARGE

ACOG
ENSO Cycle
Recent Evolution, Current Status and Predictions

- ENSO-neutral conditions are present.
- Equatorial sea surface temperatures (SSTs) are near-to-below average over the east-central and eastern Pacific Ocean.
- ENSO-neutral likely to continue through the Northern Hemisphere summer (67% chance in June-August 2021).

https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt