Summary
The drier trend that started in June has continued into August for many locations. July and August to date have seen very dry conditions along with very warm temperatures. This has allowed drought conditions to get worse in some areas and develop in other locations that were not previously in drought. Abnormally Dry (D0) to Extreme Drought (D3) conditions were being reported across South Central Texas. Locations across the west and southwest portion of the region were experiencing the driest conditions. Abnormally dry conditions have spread across the central and eastern portions of the region. Water restrictions are starting to become the normal. Lakes and reservoirs remain in fairly good shape but continue to fall due to lack of rain and high evaporation rates. The Edwards Aquifer has fallen into Stage one water restrictions and will soon enter Stage two restrictions without rain.

Figure 3, the U.S. Drought Monitor valid August 11th and issued on August 13th by the National Drought Mitigation Center, showed Abnormally Dry (D0) to Extreme (D3) drought conditions across the region. These drought conditions will continue and get worse in many locations unless we begin to see rainfall. Currently 77 percent of South-Central Texas has Abnormally Dry (D0) to Extreme (D3) drought conditions.

The U.S. Drought Monitor is a comprehensive drought monitoring effort between government and academic partners. It is issued each Thursday morning and incorporates hydrometeorological data through 7 AM Tuesday.
Hydrologic Impacts

According to the USGS Current Water Data the Blanco, San Antonio, Medina, and Guadalupe river basins reported normal seven day flows. The Pecos, Devils, Frio, Nueces, Brazos, and Colorado river basins reported below normal seven-day flows. Data for the Rio Grande river basin was not unavailable.

Reservoir conditions as of August 13, 2020 are presented in the following table.

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Pool Elevation (ft)</th>
<th>Current Elevation (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amistad</td>
<td>1117.00</td>
<td>1069.9</td>
</tr>
<tr>
<td>Medina Lake</td>
<td>1064.2</td>
<td>1043.2</td>
</tr>
<tr>
<td>Canyon Lake</td>
<td>909.00</td>
<td>906.4</td>
</tr>
<tr>
<td>Granger Lake</td>
<td>504.00</td>
<td>503.2</td>
</tr>
<tr>
<td>Georgetown Lake</td>
<td>791.00</td>
<td>778.9</td>
</tr>
<tr>
<td>Lake Buchanan</td>
<td>1020.00</td>
<td>1015.9</td>
</tr>
<tr>
<td>Lake LBJ</td>
<td>825.00</td>
<td>824.7</td>
</tr>
<tr>
<td>Lake Marble Falls</td>
<td>738.00</td>
<td>736.3</td>
</tr>
<tr>
<td>Lake Travis</td>
<td>681.00</td>
<td>665.0</td>
</tr>
<tr>
<td>Lake Austin</td>
<td>492.91</td>
<td>491.9</td>
</tr>
</tbody>
</table>

According to Texas Commission on Environmental Quality (TCEQ), there are 1085 public water supply systems with voluntary or mandatory water use restrictions across the entire state. Figure 4 shows the locations of affected systems across Texas. This assessment is normally updated weekly.

Fire Danger Impacts

As of August 13th, there were 30 counties with county-wide burn bans in effect. These burn bans are established by county officials.

The Texas Forest Service uses the Keetch-Byram Drought Index (KBDI) as a system for relating current and recent weather conditions to potential or expected fire behavior. It is a numerical index calculated daily for each county. Each number is an estimate of the amount of rain, in hundredths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil and 800 a completely dry soil. As shown below, the August 17th issuance of the KBDI showed values of 500 to 800 across the region.

![Figure 4 – Water Systems with Water Use Restrictions July 31, 2020](image1)

![Figure 5 – Burn Bans Currently in Effect](image2)

![Figure 6 – KBDI Map](image3)
Each week, the Climate Prediction Center (CPC) analyzes the percent of available soil moisture as compared to normal. The August 12th available soil moisture ranges from 5 to 70 percent of normal across South Central Texas.

The Crop Moisture Index monitors short term need compared to available water across major crop producing regions. This index is not used to monitor long term drought conditions. The latest Crop Moisture Index issued by the CPC on August 8th indicated short term moisture conditions were severely dry to moderately dry across South Central Texas.

The CPC Outlooks for September 2020 through November 2020 indicated stronger trends for above average temperatures (figure 8) and greater chances for below average rainfall (figure 9) across South Central Texas. The next three-month outlooks are scheduled to be available on August 20, 2020.

U.S. Seasonal Drought Outlook indicates drought conditions will develop or persist across the region through October 31, 2020.
Contact Information:
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2090 Airport Road
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830.606.3617 Press 2
Website: http://www.weather.gov/austin/
Email: sr-ewx.webmaster@noaa.gov

Drought Related Links:

Precipitation Data:
http://water.weather.gov/precip/

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

USGS Stream Flow Conditions
https://waterdata.usgs.gov/nwis/rt

TCEQ Map of Water Systems under Water Use Restriction
https://www.tceq.texas.gov/drinkingwater/trot/location.html

The Texas Counties Burn Ban Map:
http://tfsfrp.tamu.edu/wildfires/DecBan.png

The KDBI County Average Map:
http://twc.tamu.edu/tfs/kbdi_daily/kbdicounty.png

CPC Soil Moisture:

Texas AgNews:
http://agnews.tamu.edu/

CPC Outlook Maps:
http://www.cpc.ncep.noaa.gov/

CPC U.S. Seasonal Drought Outlook:
http://www.cpc.ncep.noaa.gov/products/Drought/