Utah Water Conditions Monitoring (Drought Webinar)

The meeting will begin shortly

Thank you to our contributors
Utah Drought Monitor Webinar

July 20, 2021
Temperature 14 day history

Av. Max. Temperature dep from Ave (deg F)
7/5/2021 - 7/18/2021

Av. Max. Temperature dep from Ave (deg F)
6/19/2021 - 7/18/2021

Agency - Utah Climate Center
Presenter - Jon Meyer
Precipitation 14 day

Agency - Utah Climate Center
Presenter - Jon Meyer
Precipitation 30 day history (Percent of Average)

Agency - Utah Climate Center
Presenter - Jon Meyer
30-day Standardized Precipitation Index (SPI)
Evaporative Stress

The Evaporative Stress Index (ESI) describes temporal anomalies in evapotranspiration (ET), highlighting areas with anomalously high or low rates of water use across the land surface. The ESI also demonstrates capability for capturing early signals of “flash drought,” brought on by extended periods of hot, dry, and windy conditions leading to rapid soil moisture depletion.

Source(s): NASA SERVIR

*Currently, data are only available for the contiguous U.S.
La Niña potentially emerging during the September-November season and lasting through the 2021-22 winter (66% chance during November-January).*
<table>
<thead>
<tr>
<th>Station Name</th>
<th>Location</th>
<th>Last Updated</th>
<th>ETo inches</th>
<th>ETc inches</th>
<th>Precipitation inches</th>
<th>Irrigation Requirement inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logan, UT</td>
<td>Logan</td>
<td>07/20/2021 11:00 am</td>
<td>0.21&quot;</td>
<td>1.72&quot;</td>
<td>0.00&quot;</td>
<td>0.00&quot;</td>
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<tr>
<td>Brigham City, UT VWS</td>
<td>Brigham City</td>
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<td>0.23&quot;</td>
<td>1.97&quot;</td>
<td>0.21&quot;</td>
<td>1.69&quot;</td>
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<tr>
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<td>1.90&quot;</td>
<td>0.19&quot;</td>
<td>1.52&quot;</td>
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<tr>
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<td>Layton</td>
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<td>0.20&quot;</td>
<td>1.61&quot;</td>
<td>0.18&quot;</td>
<td>1.44&quot;</td>
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<tr>
<td>Morgan, UT VWS</td>
<td>Morgan</td>
<td>07/20/2021 12:00 pm</td>
<td>0.20&quot;</td>
<td>1.87&quot;</td>
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<td>1.88&quot;</td>
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<tr>
<td>North Salt Lake, UT VWS</td>
<td>North Salt Lake</td>
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<td>2.08&quot;</td>
<td>0.23&quot;</td>
<td>1.87&quot;</td>
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<td>07/20/2021 12:00 pm</td>
<td>0.19&quot;</td>
<td>1.55&quot;</td>
<td>0.17&quot;</td>
<td>1.50&quot;</td>
</tr>
<tr>
<td>Solanoce</td>
<td>Tooele</td>
<td>07/20/2021 12:00 pm</td>
<td>0.20&quot;</td>
<td>1.99&quot;</td>
<td>0.18&quot;</td>
<td>1.70&quot;</td>
</tr>
<tr>
<td>Jordan Valley WCD</td>
<td>West Jordan</td>
<td>07/20/2021 09:00 am</td>
<td>0.23&quot;</td>
<td>2.06&quot;</td>
<td>0.21&quot;</td>
<td>1.95&quot;</td>
</tr>
<tr>
<td>Davidsen, UT VWS</td>
<td>South Jordan</td>
<td>07/20/2021 12:00 pm</td>
<td>0.22&quot;</td>
<td>2.00&quot;</td>
<td>0.20&quot;</td>
<td>1.90&quot;</td>
</tr>
<tr>
<td>Provo, UT VWS</td>
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<td>1.84&quot;</td>
<td>0.20&quot;</td>
<td>1.66&quot;</td>
</tr>
<tr>
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<td>1.71&quot;</td>
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<td>1.55&quot;</td>
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<tr>
<td>Vernal, UT VWS</td>
<td>Vernal</td>
<td>07/20/2021 12:00 pm</td>
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<td>1.78&quot;</td>
<td>0.24&quot;</td>
<td>1.60&quot;</td>
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<td>Manila</td>
<td>07/20/2021 12:00 pm</td>
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<td>0.19&quot;</td>
<td>1.48&quot;</td>
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<tr>
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<td>Nephi</td>
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<td>1.71&quot;</td>
<td>0.16&quot;</td>
<td>1.53&quot;</td>
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<tr>
<td>Delta, UT VWS</td>
<td>Delta</td>
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<td>0.19&quot;</td>
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<td>1.41&quot;</td>
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<td>1.45&quot;</td>
<td>0.14&quot;</td>
<td>1.31&quot;</td>
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<td>1.93&quot;</td>
<td>0.23&quot;</td>
<td>1.65&quot;</td>
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<tr>
<td>Castle Dale, UT VWS</td>
<td>Castle Dale</td>
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<td>0.24&quot;</td>
<td>1.70&quot;</td>
<td>0.22&quot;</td>
<td>1.53&quot;</td>
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<td>0.16&quot;</td>
<td>1.40&quot;</td>
<td>0.14&quot;</td>
<td>1.26&quot;</td>
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<td>1.64&quot;</td>
<td>0.21&quot;</td>
<td>1.48&quot;</td>
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<td>1.91&quot;</td>
<td>0.23&quot;</td>
<td>1.72&quot;</td>
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<tr>
<td>Blanding, UT VWS</td>
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<td>0.28&quot;</td>
<td>1.79&quot;</td>
<td>0.22&quot;</td>
<td>1.51&quot;</td>
</tr>
<tr>
<td>Beaver, UT VWS</td>
<td>Beaver</td>
<td>07/20/2021 12:00 pm</td>
<td>0.18&quot;</td>
<td>1.58&quot;</td>
<td>0.16&quot;</td>
<td>1.42&quot;</td>
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<tr>
<td>Cedar City, UT VWS</td>
<td>Cedar City</td>
<td>07/20/2021 12:00 pm</td>
<td>0.17&quot;</td>
<td>1.50&quot;</td>
<td>0.15&quot;</td>
<td>1.44&quot;</td>
</tr>
<tr>
<td>St. George, UT VWS</td>
<td>St. George</td>
<td>07/20/2021 12:00 pm</td>
<td>0.22&quot;</td>
<td>1.99&quot;</td>
<td>0.20&quot;</td>
<td>1.76&quot;</td>
</tr>
<tr>
<td>Kanab, UT VWS</td>
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<td>07/20/2021 12:00 pm</td>
<td>0.19&quot;</td>
<td>1.61&quot;</td>
<td>0.17&quot;</td>
<td>1.45&quot;</td>
</tr>
</tbody>
</table>
Soil Moisture

Agency - NRCS Snow Survey
Presenter - Jordan Clayton
Soil Moisture

Depth Averaged Soil Saturation in Weber-Ogden

Reset Range

Current as of 09/19/2021

Max
Average (POR)
Min
Stats. Shading
2021 (24 sites)
2020 (24 sites)
2019 (23 sites)
2018 (23 sites)
2017 (23 sites)
2016 (23 sites)
2015 (24 sites)
2014 (23 sites)
2013 (23 sites)
2012 (22 sites)
2011 (22 sites)
2010 (20 sites)
2009 (19 sites)
2008 (19 sites)
2007 (18 sites)
2006 (18 sites)
2005 (16 sites)

Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th Percentiles. For more information visit USGS: 20-year normals calculation description.
Soil Moisture

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Presenter - Jordan Clayton
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Presenter - Jordan Clayton
Soil Moisture

Agency - NRCS Snow Survey
Presenter - Jordan Clayton
Weather Forecast Office Utah Day 1-7 Outlook

Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill
Weather Prediction Center U.S. Day 3-7 Hazards Outlook

Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill
8-14 Day Precipitation Outlook
Jul 27 - Aug 02, 2021

Above-Normal Favored
>33%
>40%
>50%

Below-Normal Favored
>36%
>33%
Climate Prediction Center U.S. Week-2 Hazards Outlook

Day 8-14 U.S. Hazards Outlook
Valid: 07/27/2021-08/02/2021

Excessive Heat
7/27 - 7/28

NO HAZARDS POSTED

Climate Prediction Center
Made: 07/19/2021 3PM EDT

Follow us: www.cpc.ncep.noaa.gov

Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill
2021 Seasonal Water Supply Volume Forecasts
April - July Runoff, as Percent of Average (KAF)


Summary of conditions at:
Weber Gateway 18%
Bear UT/WY 49%
Six Creeks LCC 51%
Utah Lake 27%
Sevier Piute 33%
Green River UT 29%
San Juan Bluff 42%
Lake Powell 25%

Agency - CBRFC
Presenter - Brent Bernard
Current Streamflow Conditions

July 20

Streamflow Summary

<table>
<thead>
<tr>
<th>Flow Status</th>
<th>Station Counts</th>
<th>Flow Status Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-time low for this day-of-year</td>
<td>16</td>
<td>11.9%</td>
</tr>
<tr>
<td>Much below normal for this day-of-year</td>
<td>34</td>
<td>25.4%</td>
</tr>
<tr>
<td>Below normal for this day-of-year</td>
<td>40</td>
<td>29.9%</td>
</tr>
<tr>
<td>Normal for this day-of-year</td>
<td>26</td>
<td>19.4%</td>
</tr>
<tr>
<td>Above normal for this day-of-year</td>
<td>4</td>
<td>3.0%</td>
</tr>
<tr>
<td>Much above normal for this day-of-year</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>All-time high for this day-of-year</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Not ranked - insufficient record</td>
<td>13</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Streams: Flow status

- All-Time Low for this Day
- Much Below Normal
- Below Normal
- Normal
- Above Normal
- Much Above Normal
- All-Time High for this Day
- Not Flowing
- Above NWS Flood Stage
- Not Ranked

Agency - USGS Utah Water Science Center
Presenter - Ryan Rowland
Cumulative Streamflow

- **Cumulative 7-day average runoff for water year 2021** is near the lowest on record.
Great Salt Lake Water Surface Elevation

- 4,191.4’ today
- Historic low measurement 4,191.35’ (1963)
U.S. Drought Monitor
Utah

July 13, 2021
(Released Thursday, Jul. 15, 2021)
Valid 8 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. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:
Adam Hartman
NOAA/NWS/NCDC/CDM/CPC

droughtmonitor.unl.edu