



Utah Water Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors



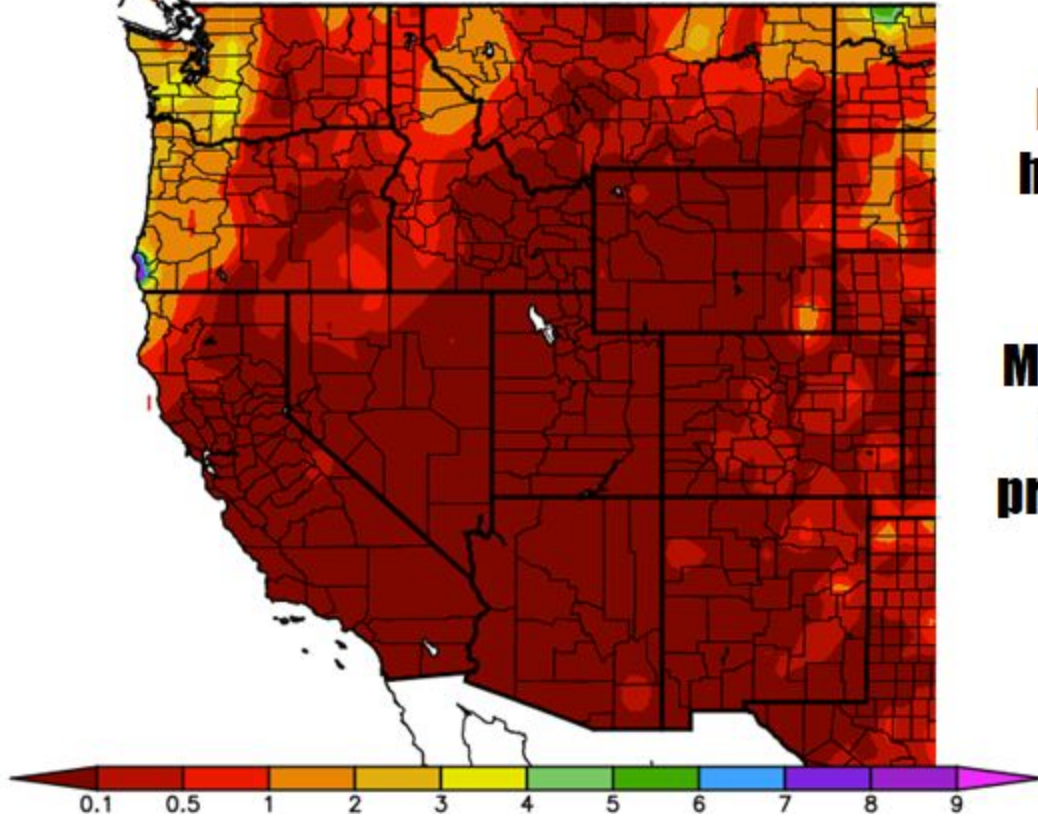


Utah Drought Monitor Webinar

June 22, 2021

2-Week Total Precipitation

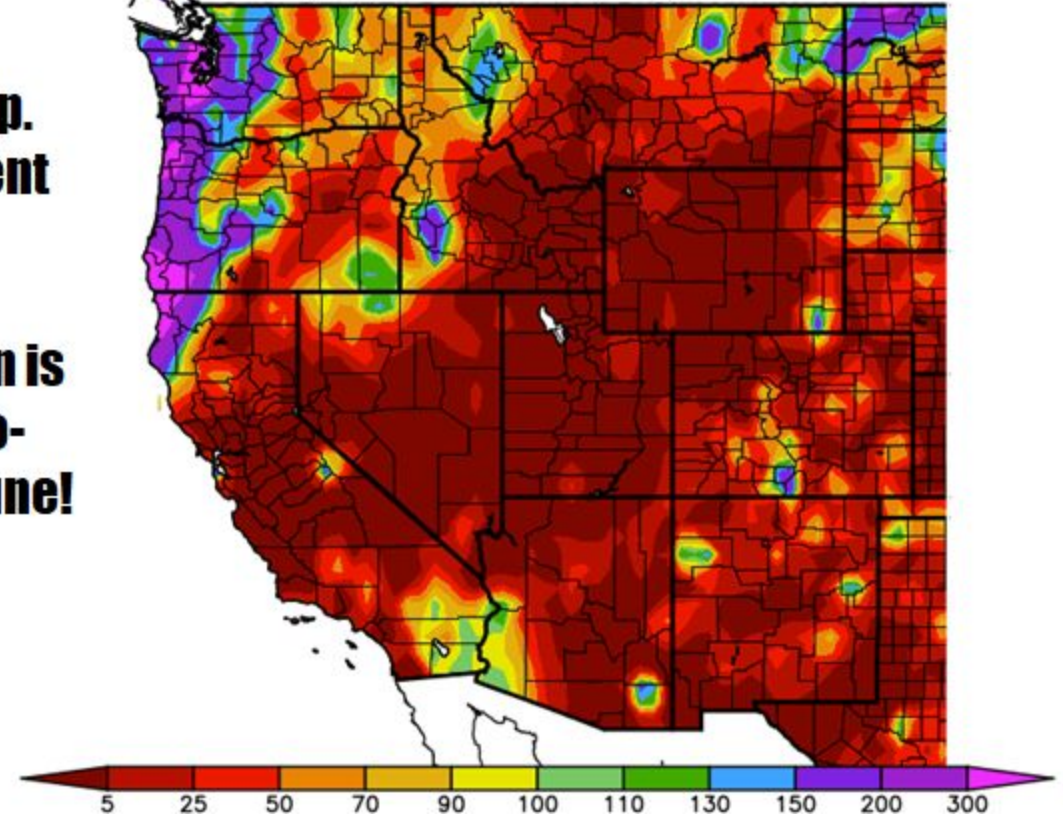
Total Precipitation (in.)
6/5/2021 – 6/18/2021



**Little to no precip.
has fallen in recent
weeks!**

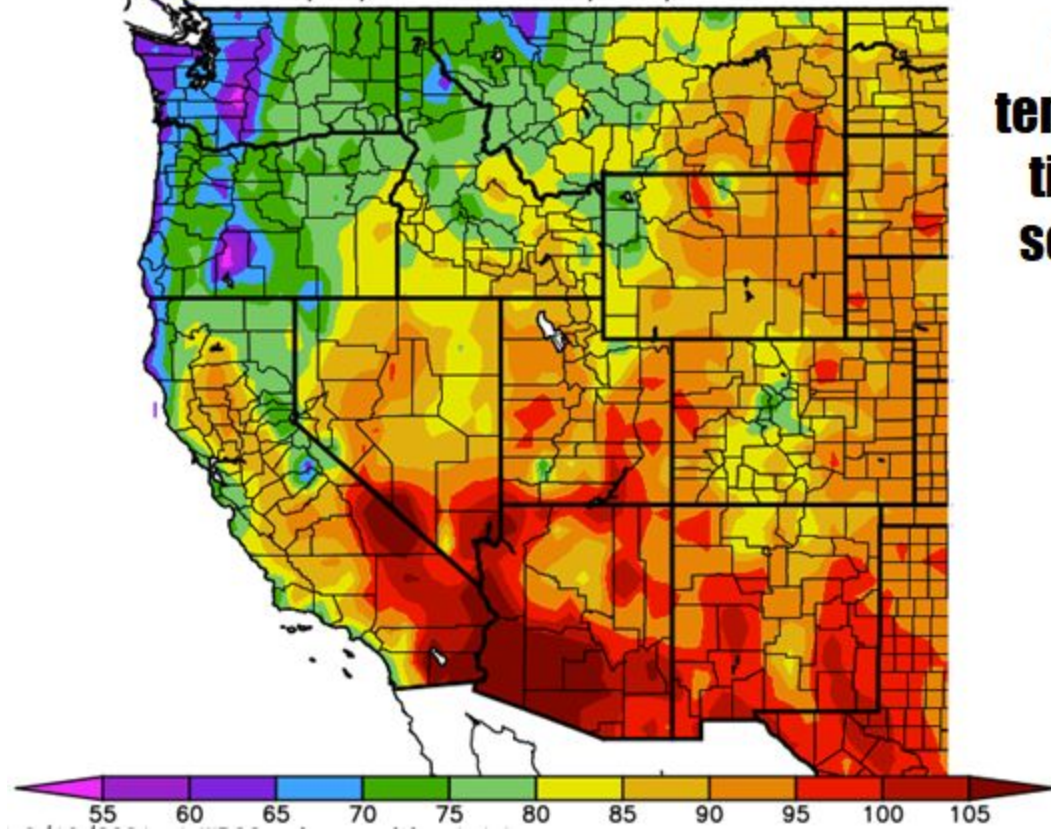
**Much of the region is
looking at a zero-
precip month of June!**

Percent of Average Precipitation (%)
6/5/2021 – 6/18/2021



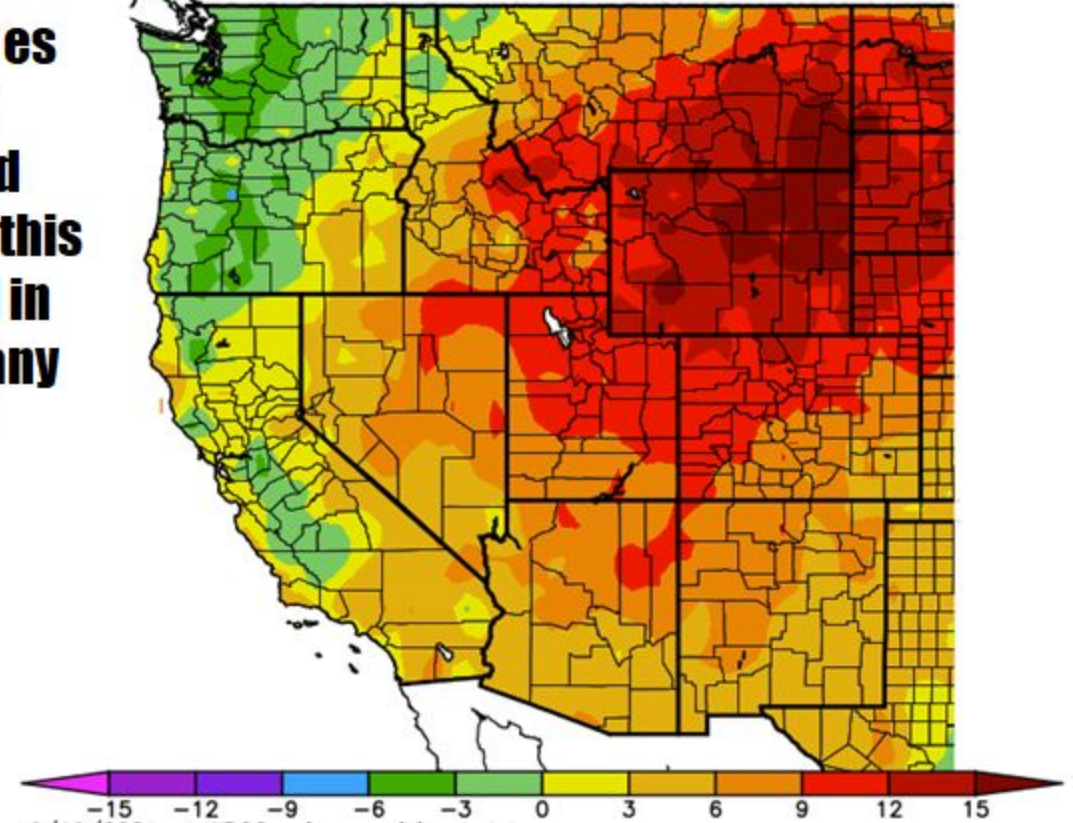
2-Week Temperatures

Av. Max. Temperature (deg. F)
6/5/2021 – 6/18/2021



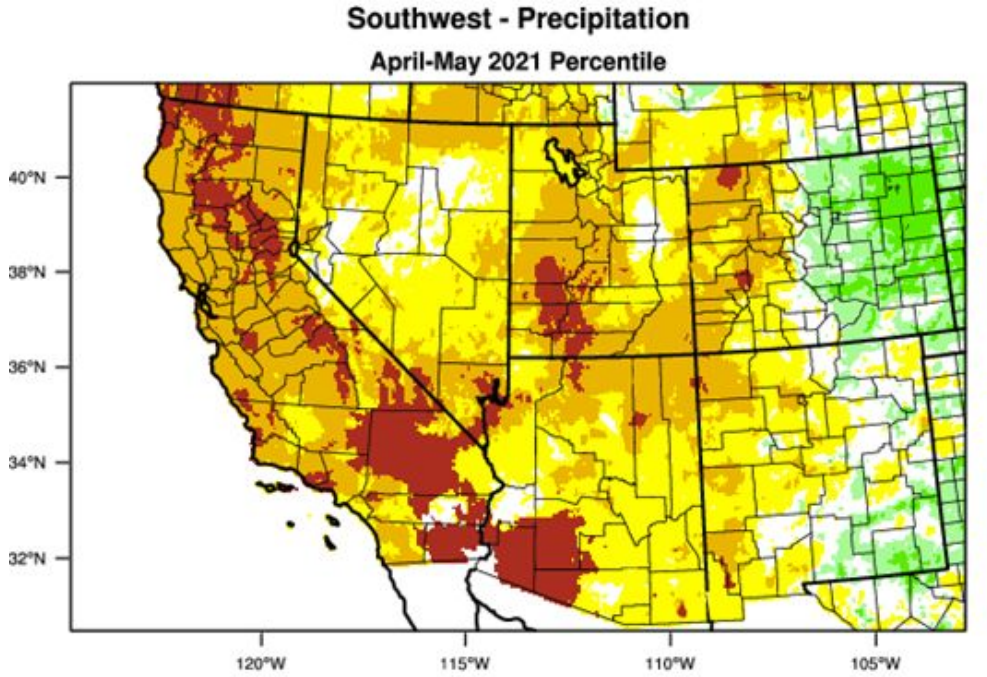
**Record heat waves
have brought
unprecedented
temperatures for this
time of year and in
some cases for any
time of year!**

Av. Max. Temperature dep from Ave (deg F)
6/5/2021 – 6/18/2021

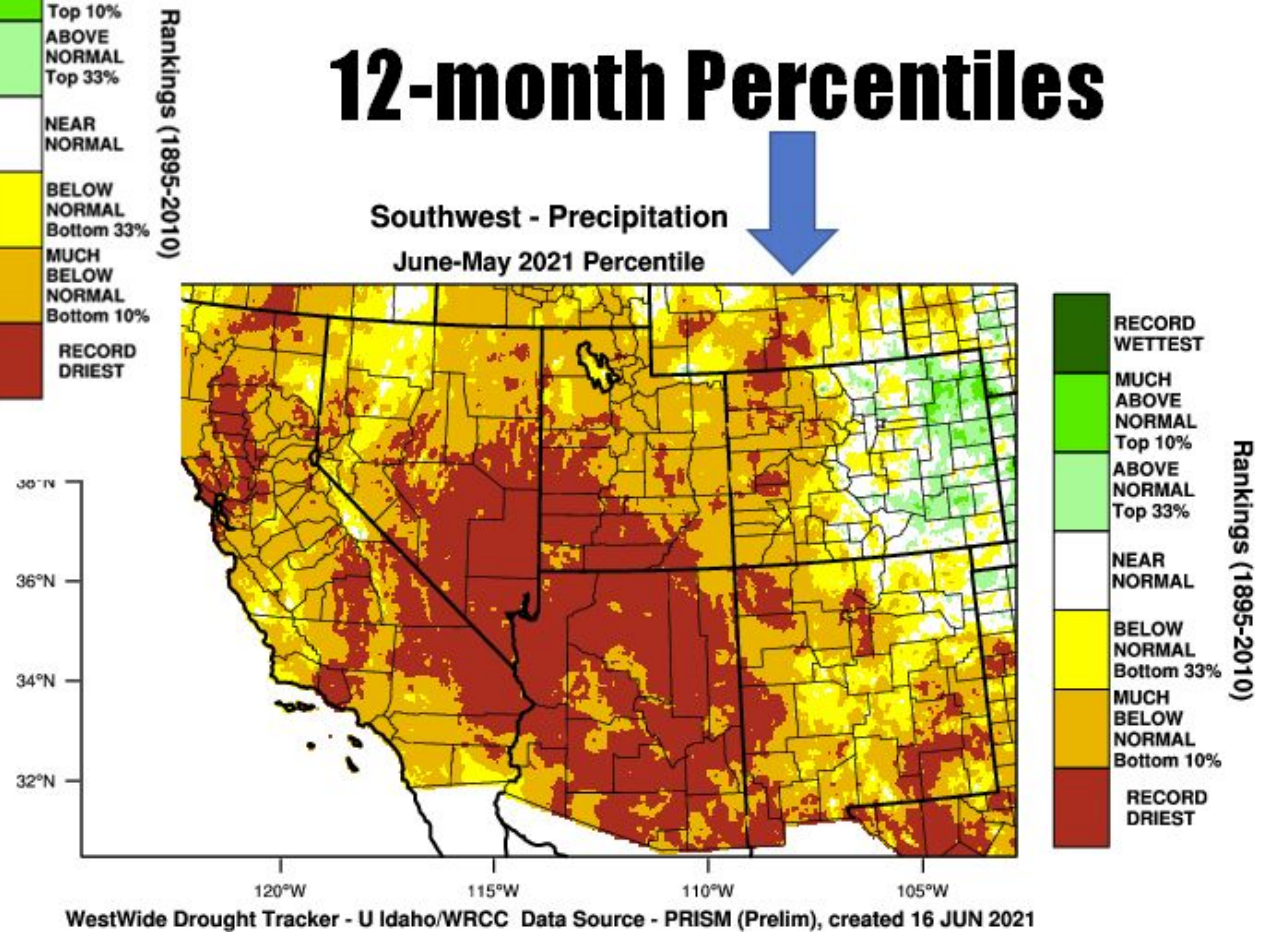


Precipitation Percentiles

12-month Percentiles



2-month Percentiles

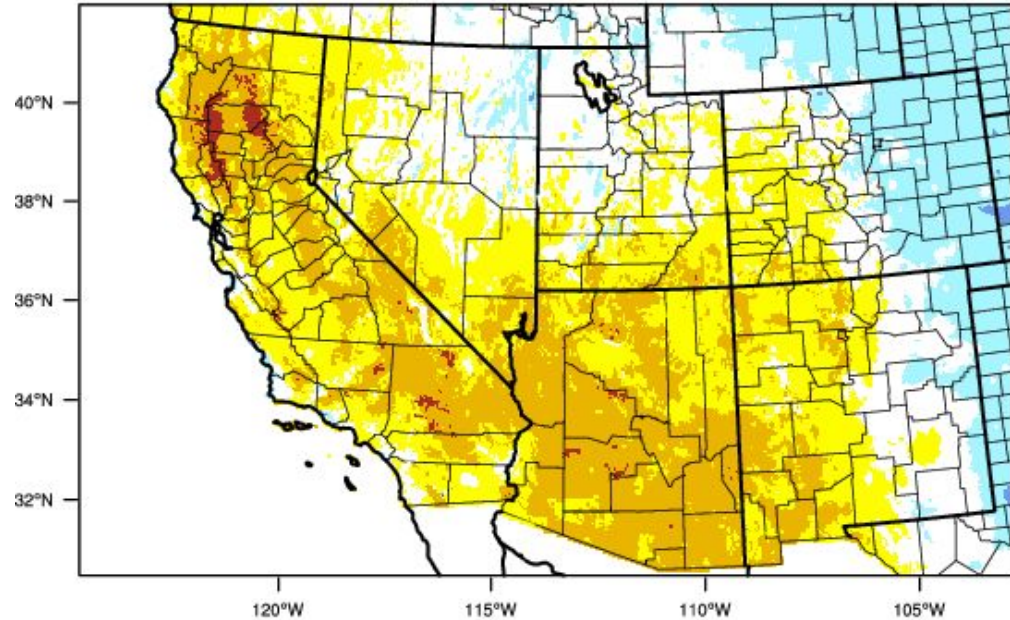


Agency -
Presenter -

Temperature Percentiles

Southwest - Mean Temperature

April-May 2021 Percentile



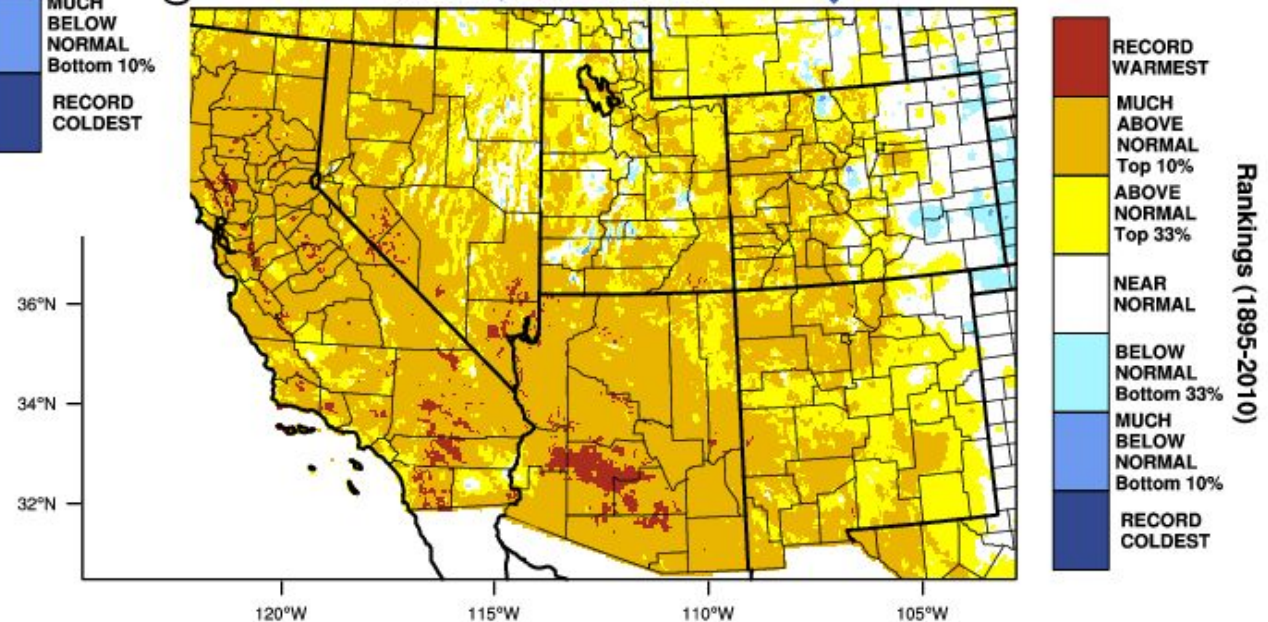
WestWide Drought Tracker - U Idaho/WRCC Data Source - PRISM (Prelim), created 16 JUN 2021

2-month Percentiles

12-month Percentiles

Southwest - Mean Temperature

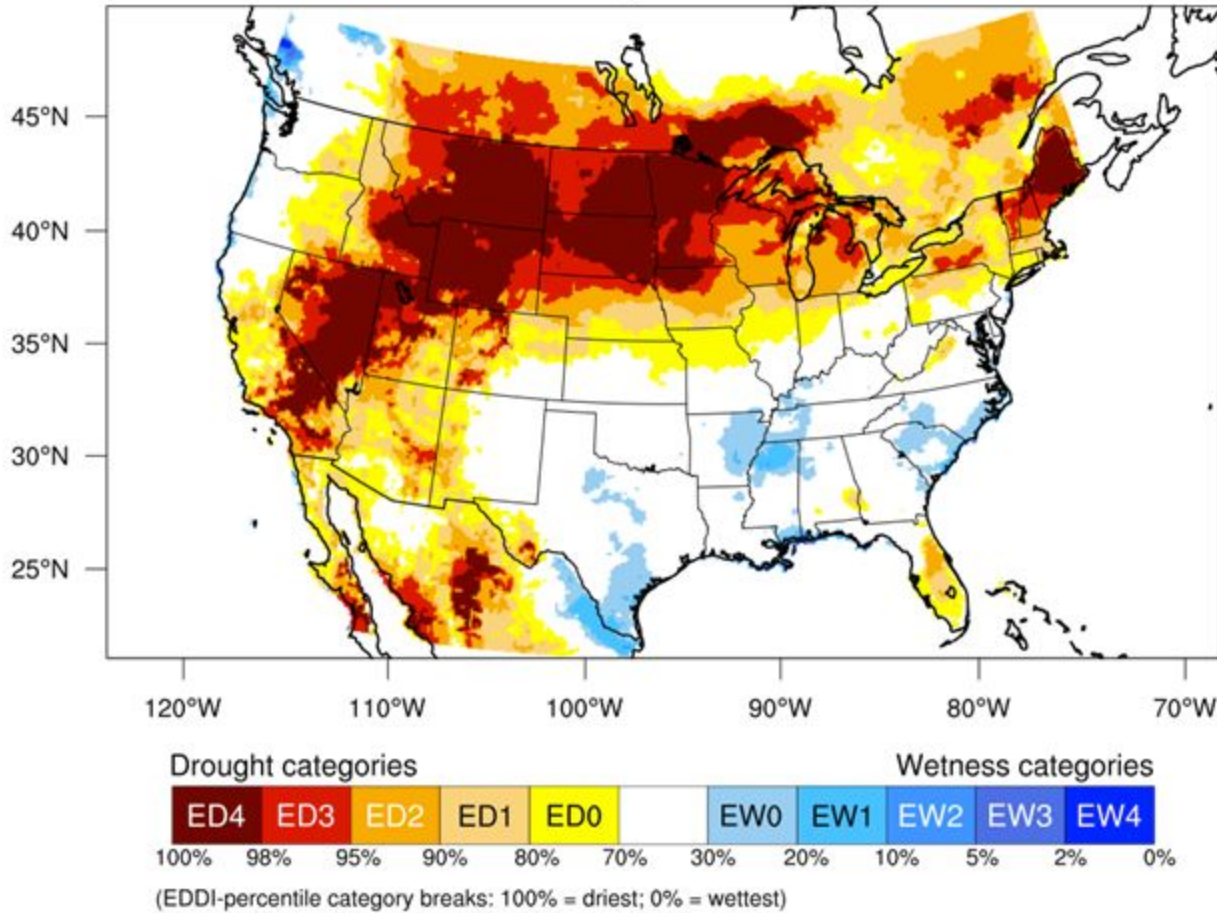
June-May 2021 Percentile



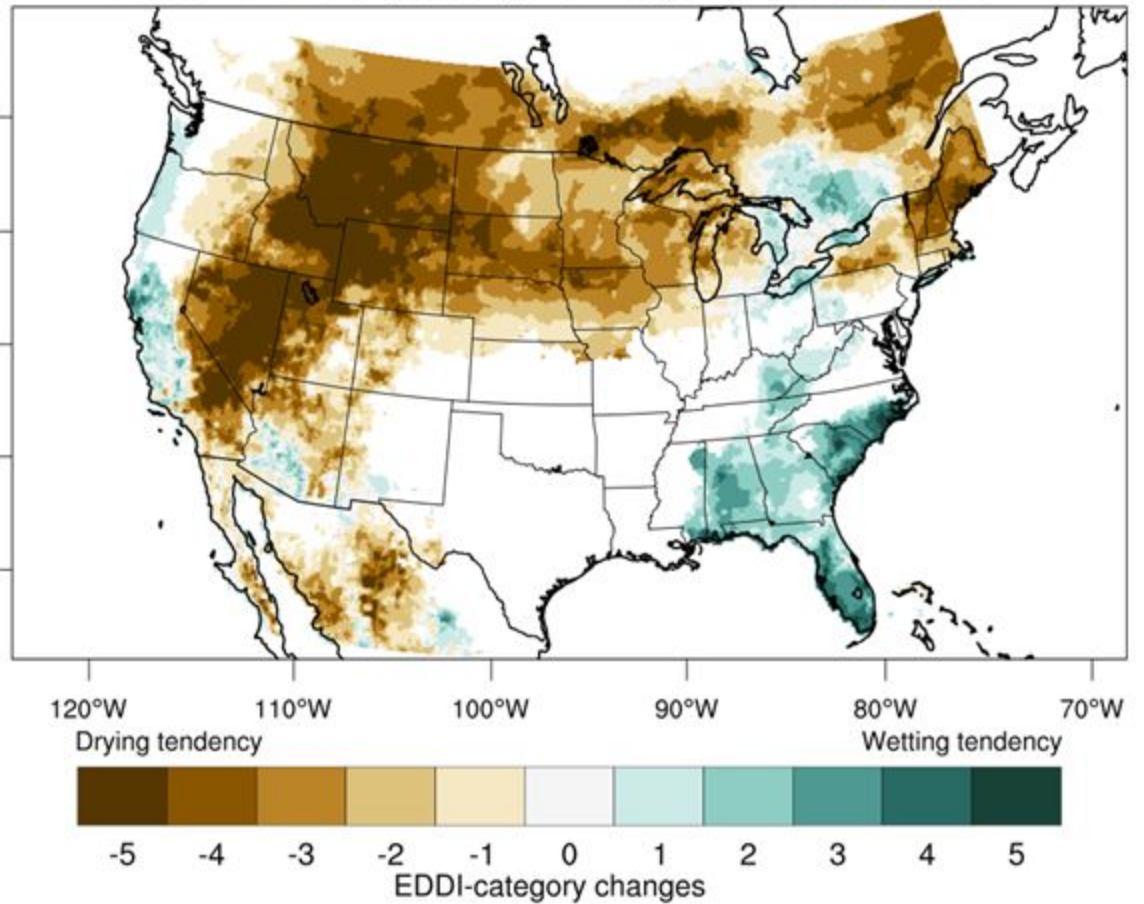
WestWide Drought Tracker - U Idaho/WRCC Data Source - PRISM (Prelim), created 16 JUN 2021

2-Week Evaporative Demand Drought Index

2-week EDDI categories for June 16, 2021

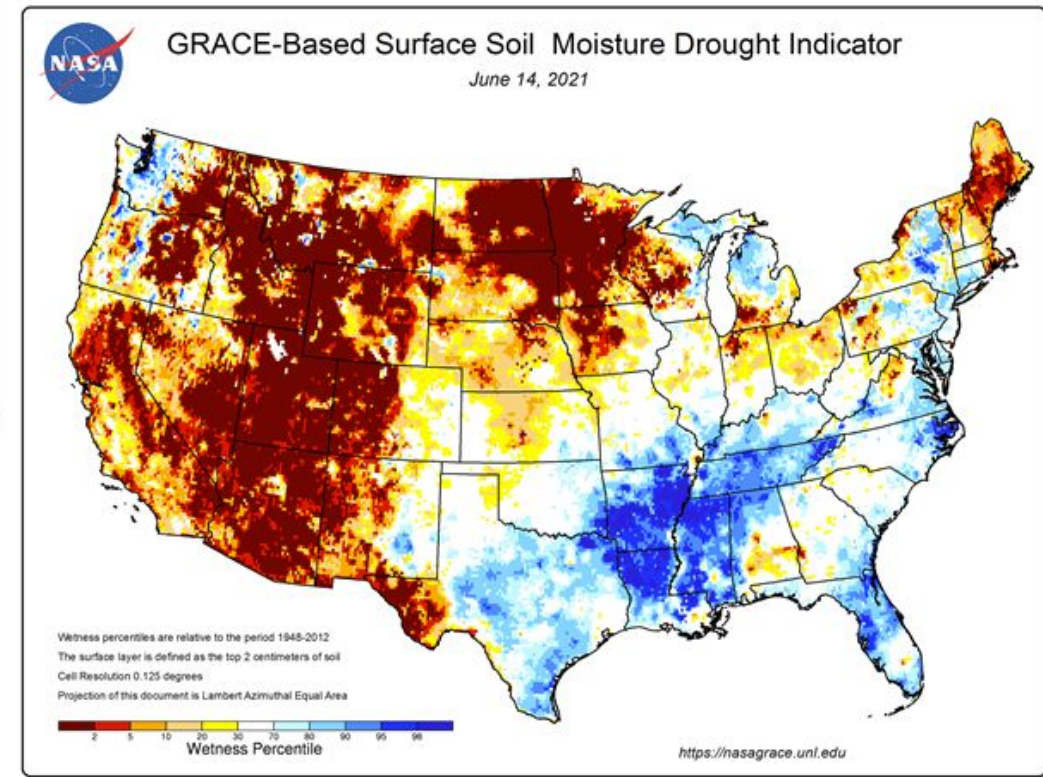
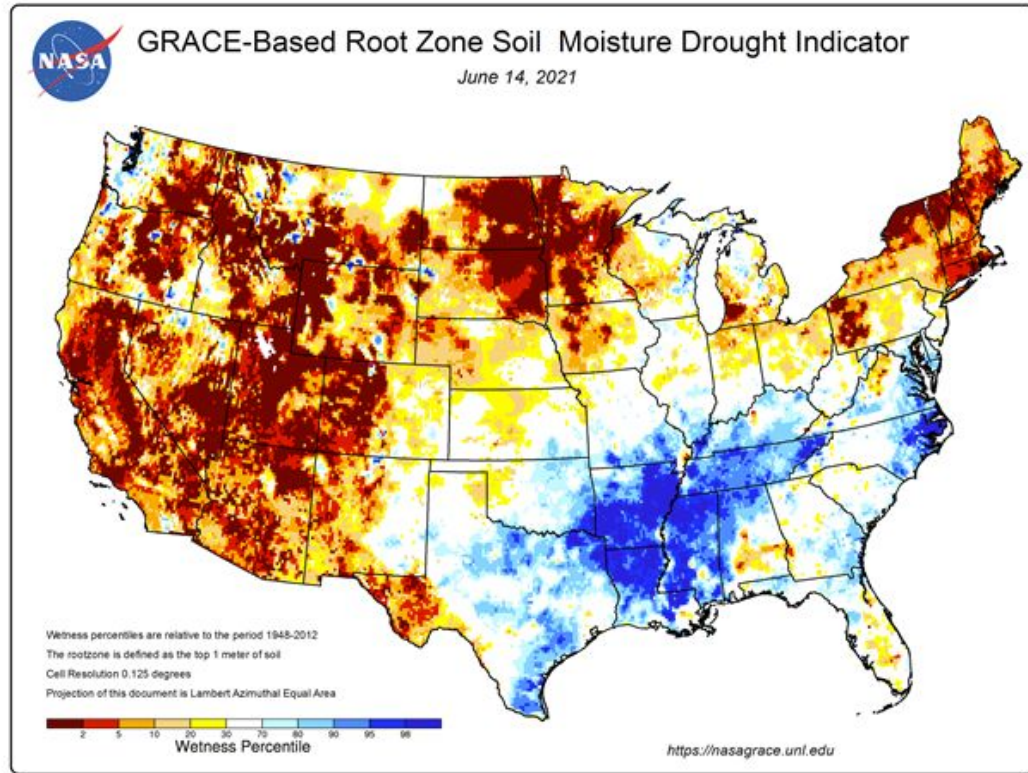


2-week EDDI: Changes during the 14 days ending on June 15, 2021



Satellite observations of Soil Moisture

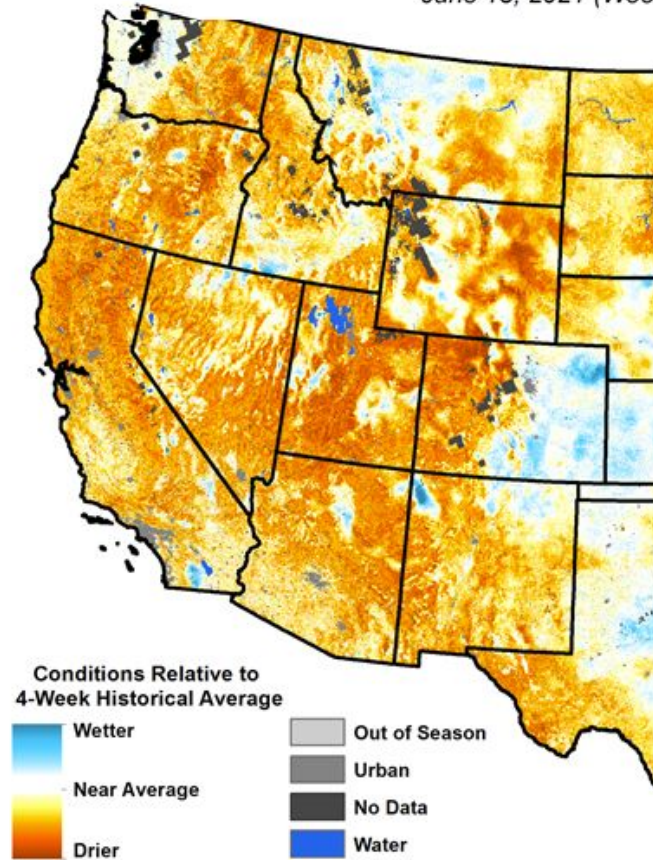
Dry soil moisture conditions remain at unprecedented levels at both surface and root-zone levels.



Drought Indices

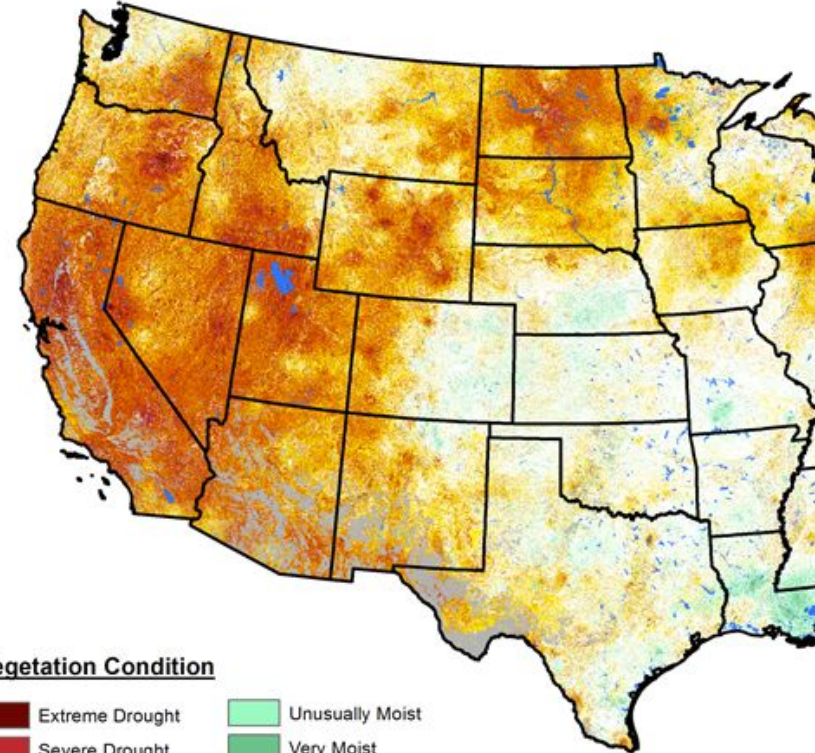
Quick Drought Response Index (QuickDRI)

June 13, 2021 (Week 24)



Vegetation Drought Response Index

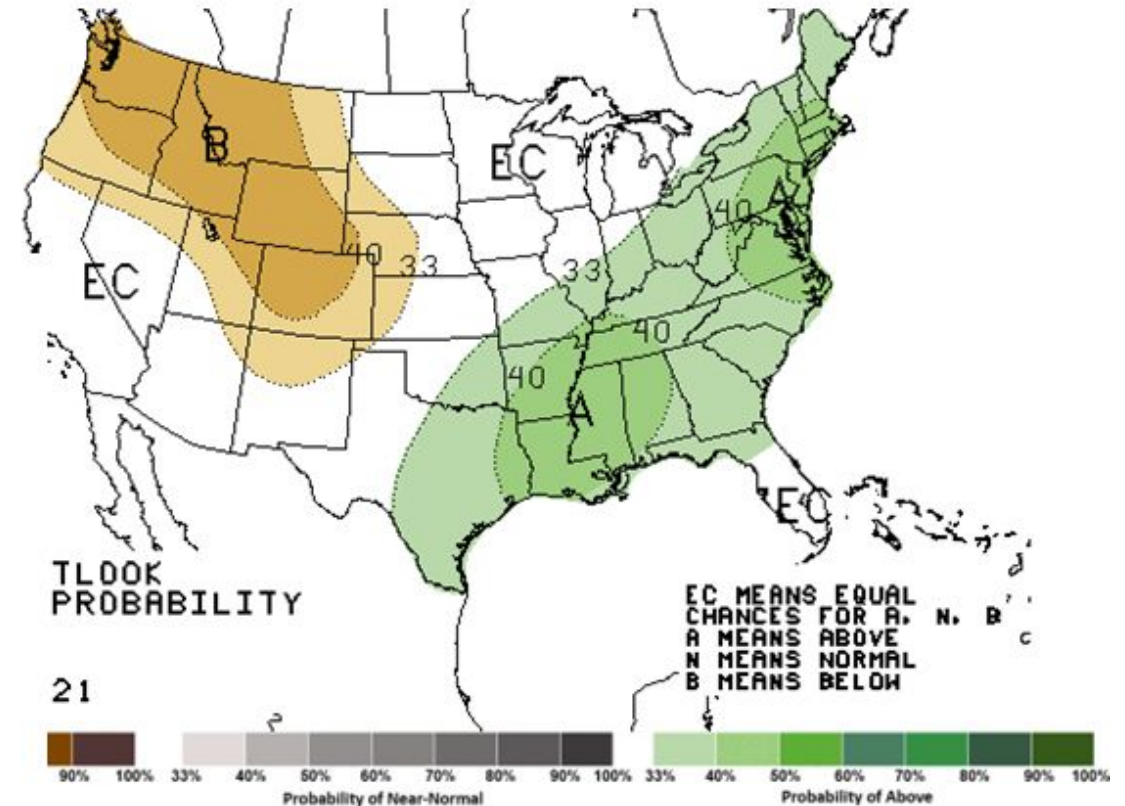
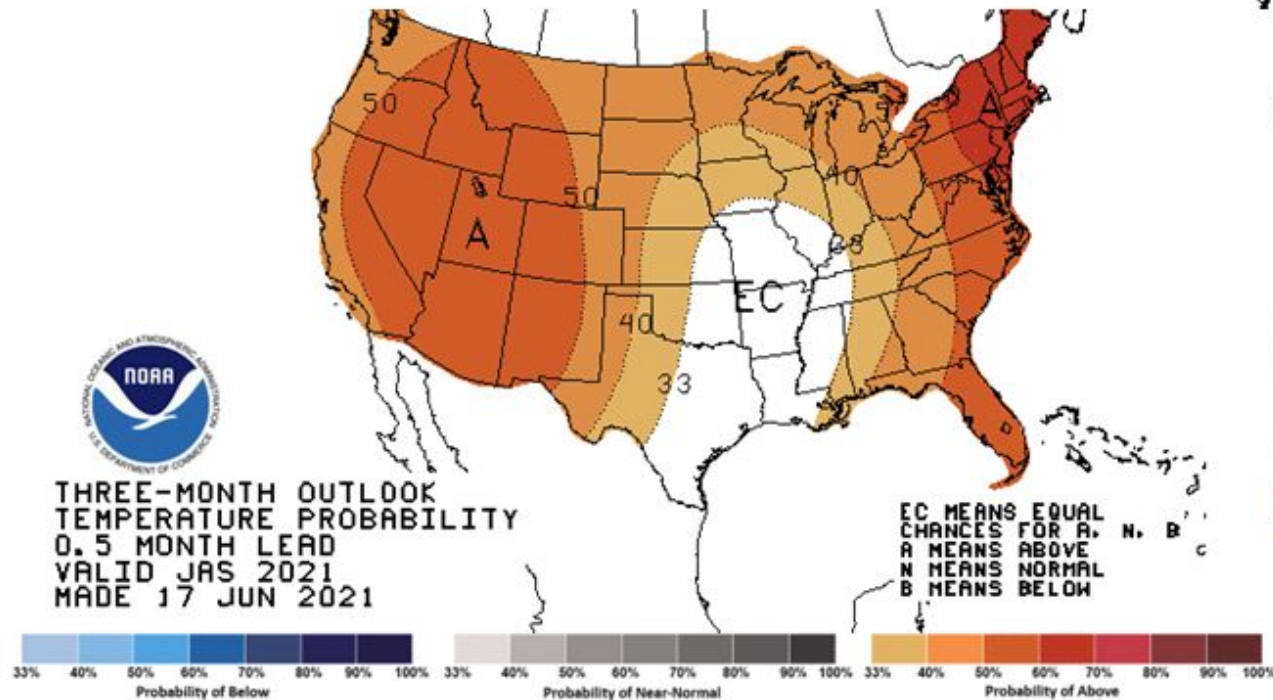
Complete



CPC 3-month (July - Sep) Outlook

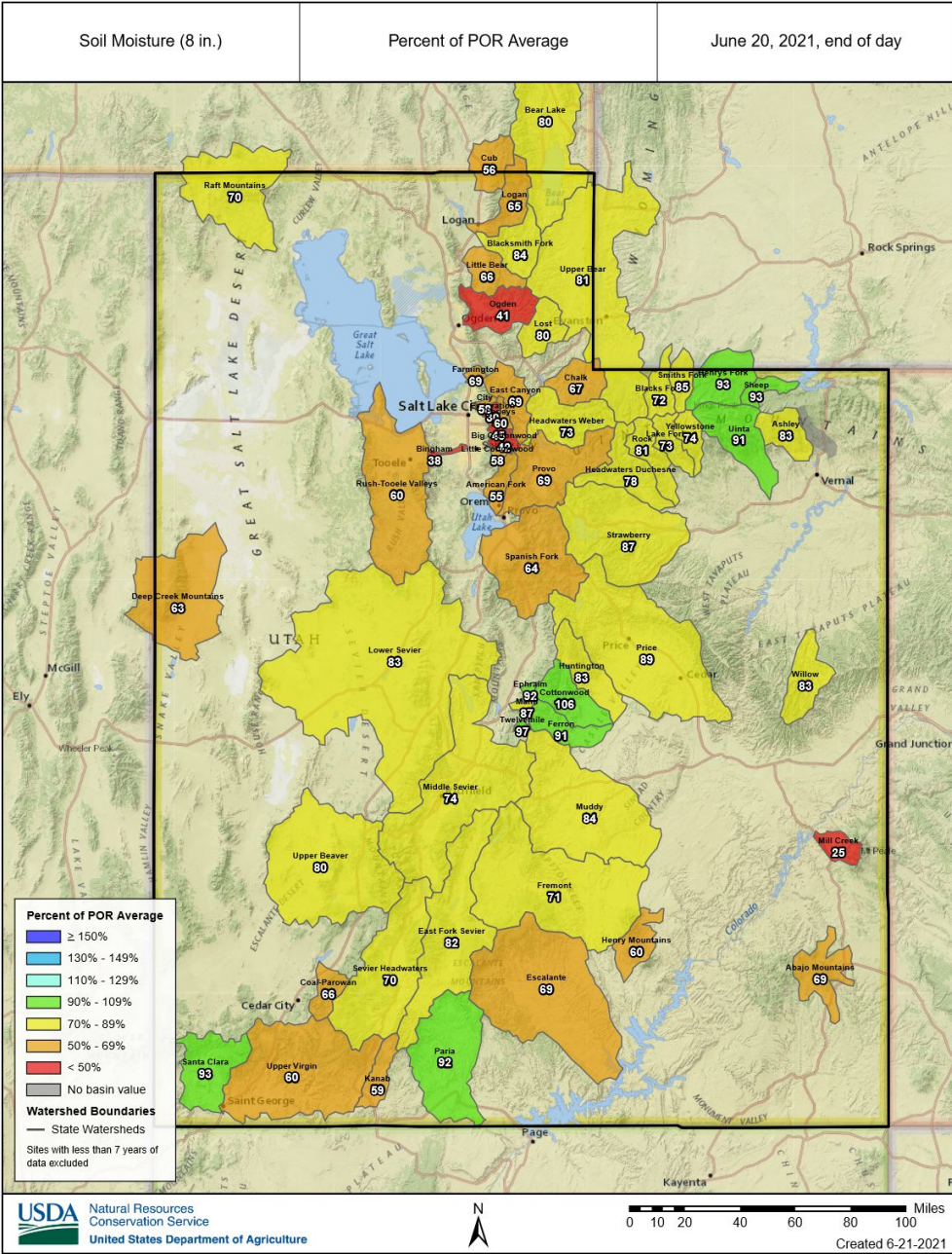
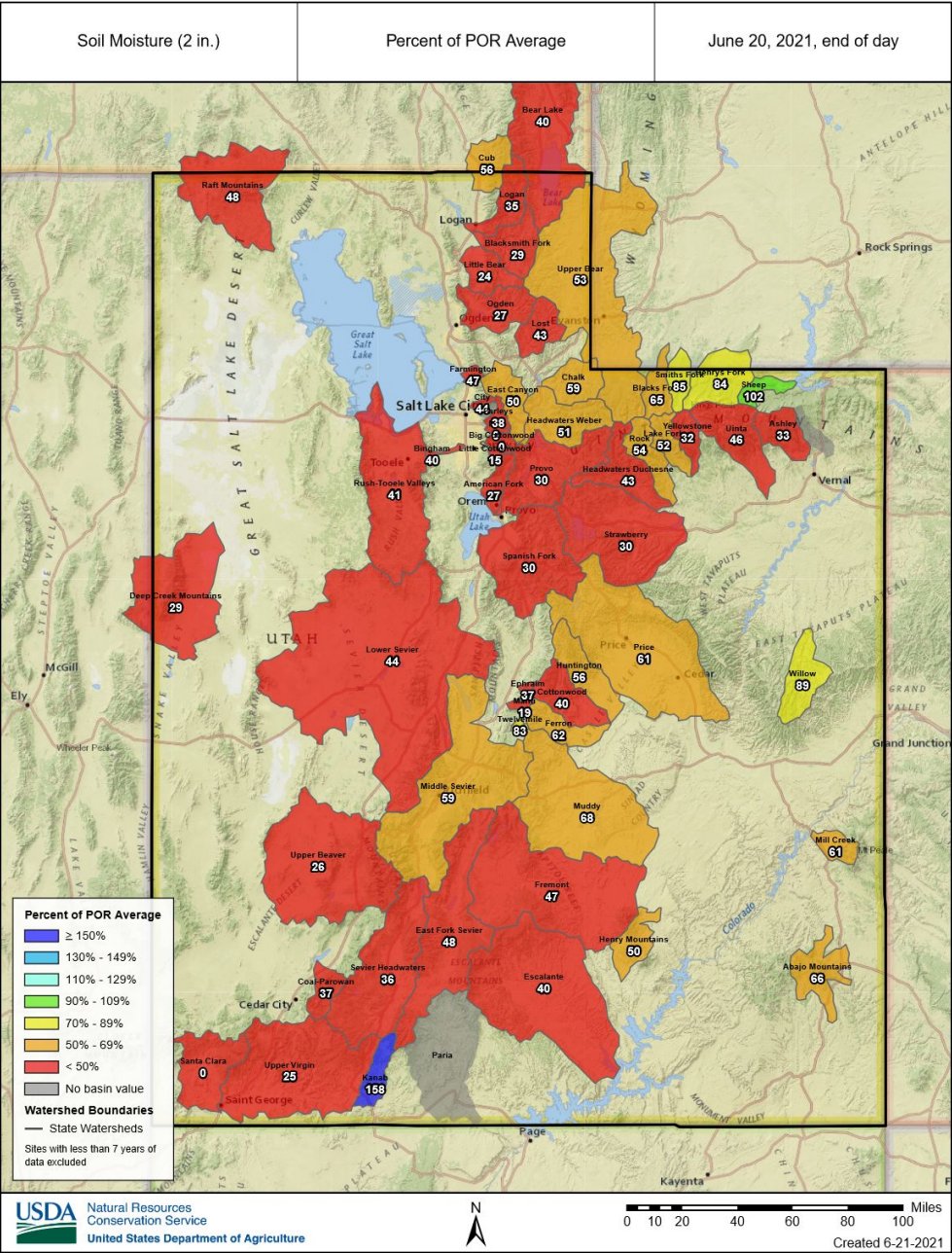
Above-normal summer temperatures remains highly likely, with the northern periphery of the Monsoon region likely seeing lower-than normal precipitation.

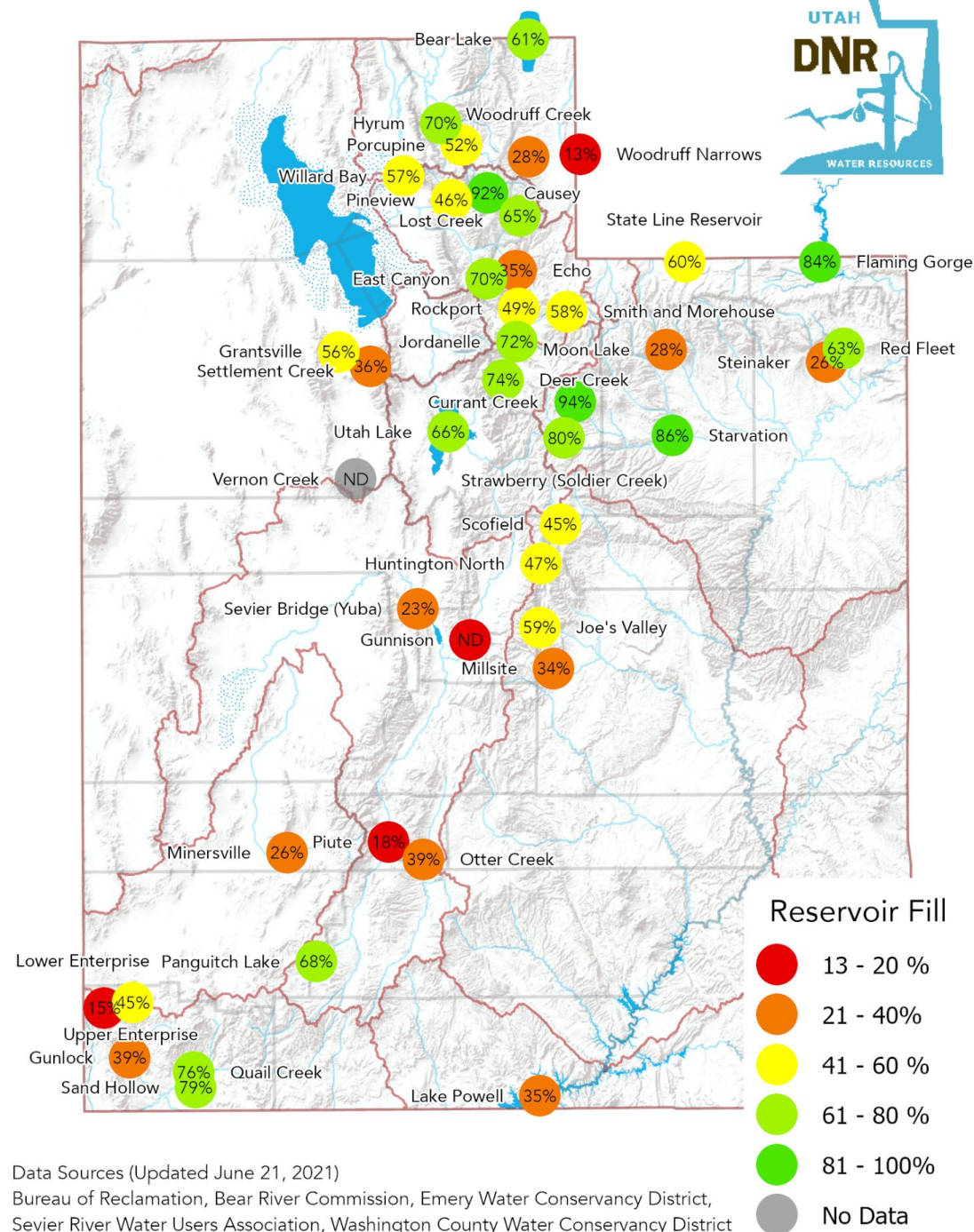
***Where will the high pressure draw up monsoonal moisture into the desert southwest?**



Soil Moisture

2" sensor vs 8" sensor
SNOTEL & SCAN

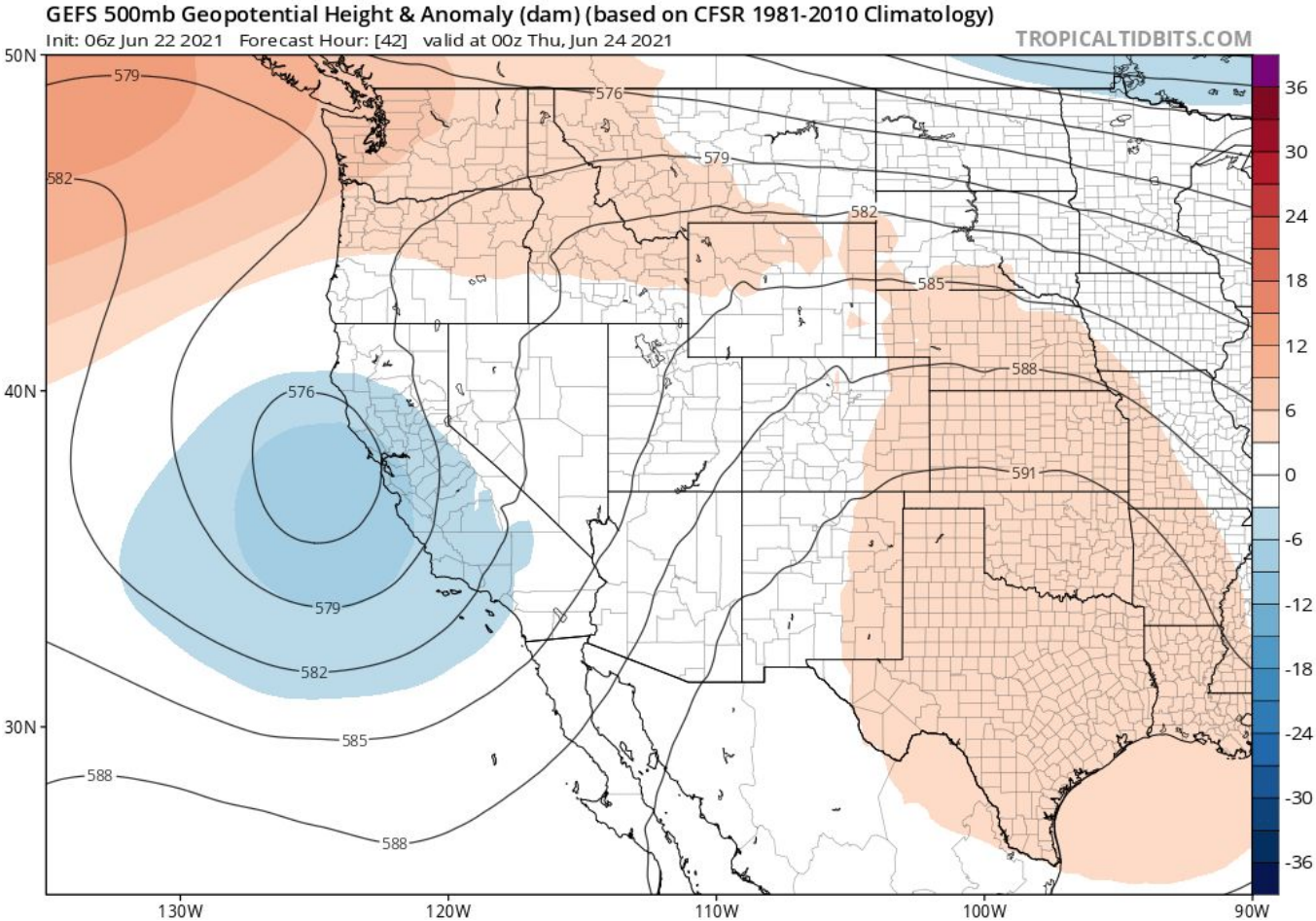
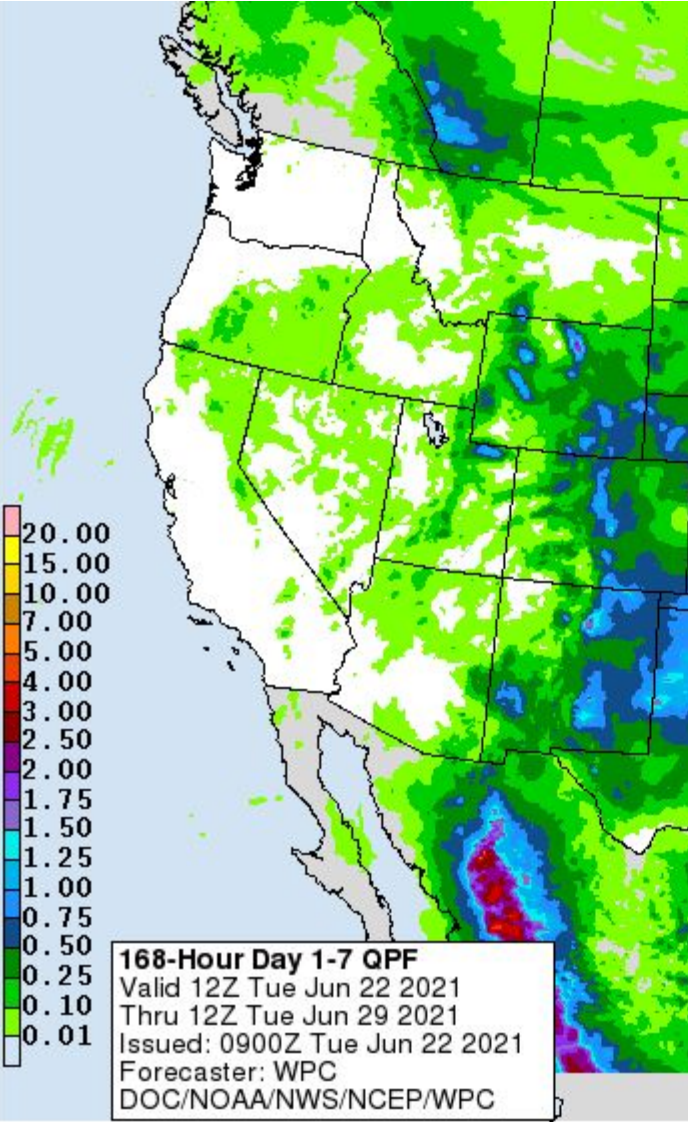
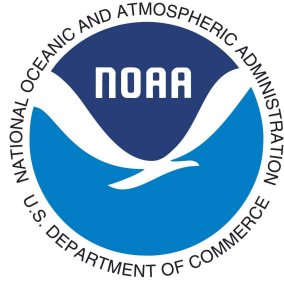




Agency - Division of Water Resources
w/ NRCS data
Presenter - Laura Haskell

Data Sources (Updated June 21, 2021)
Bureau of Reclamation, Bear River Commission, Emery Water Conservancy District,
Sevier River Water Users Association, Washington County Water Conservancy District

Weather Forecast Office Utah Day 1-7 Outlook



Weather Prediction Center U.S. Day 3-7 Hazards Outlook



U.S. Day 3-7 Hazards Outlook

About the Hazards Outlook

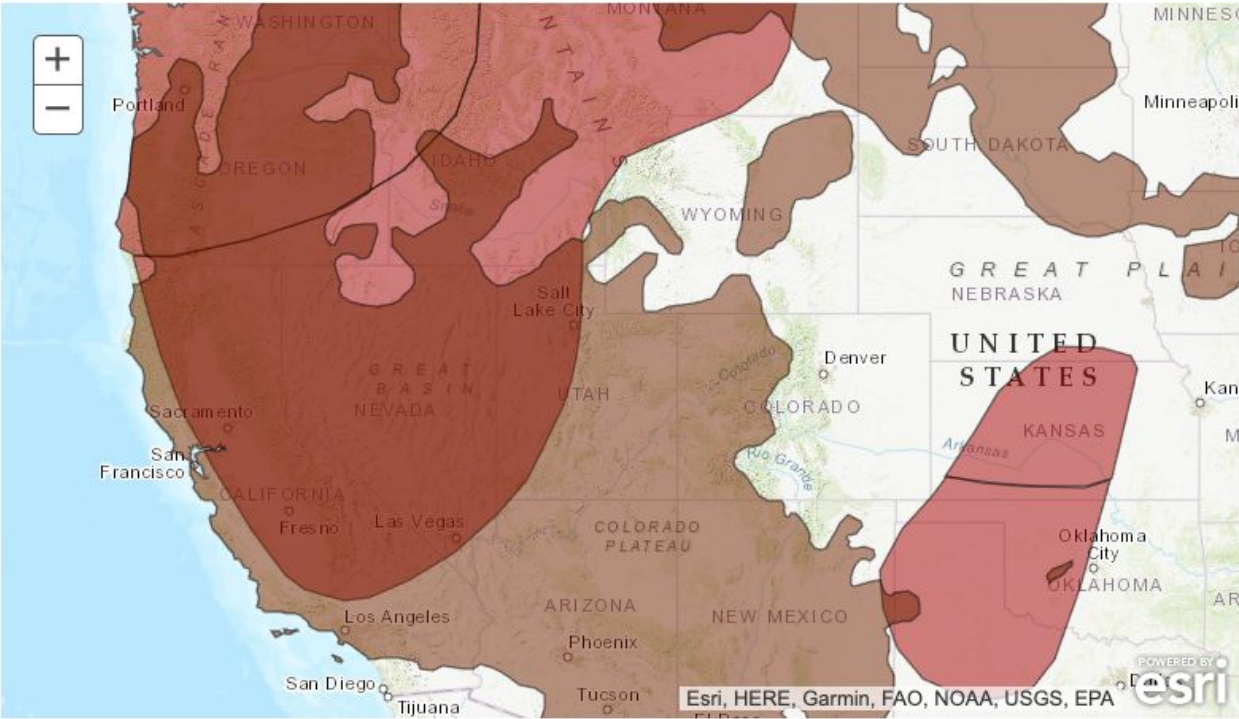
Created June 21, 2021

NOTE: These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

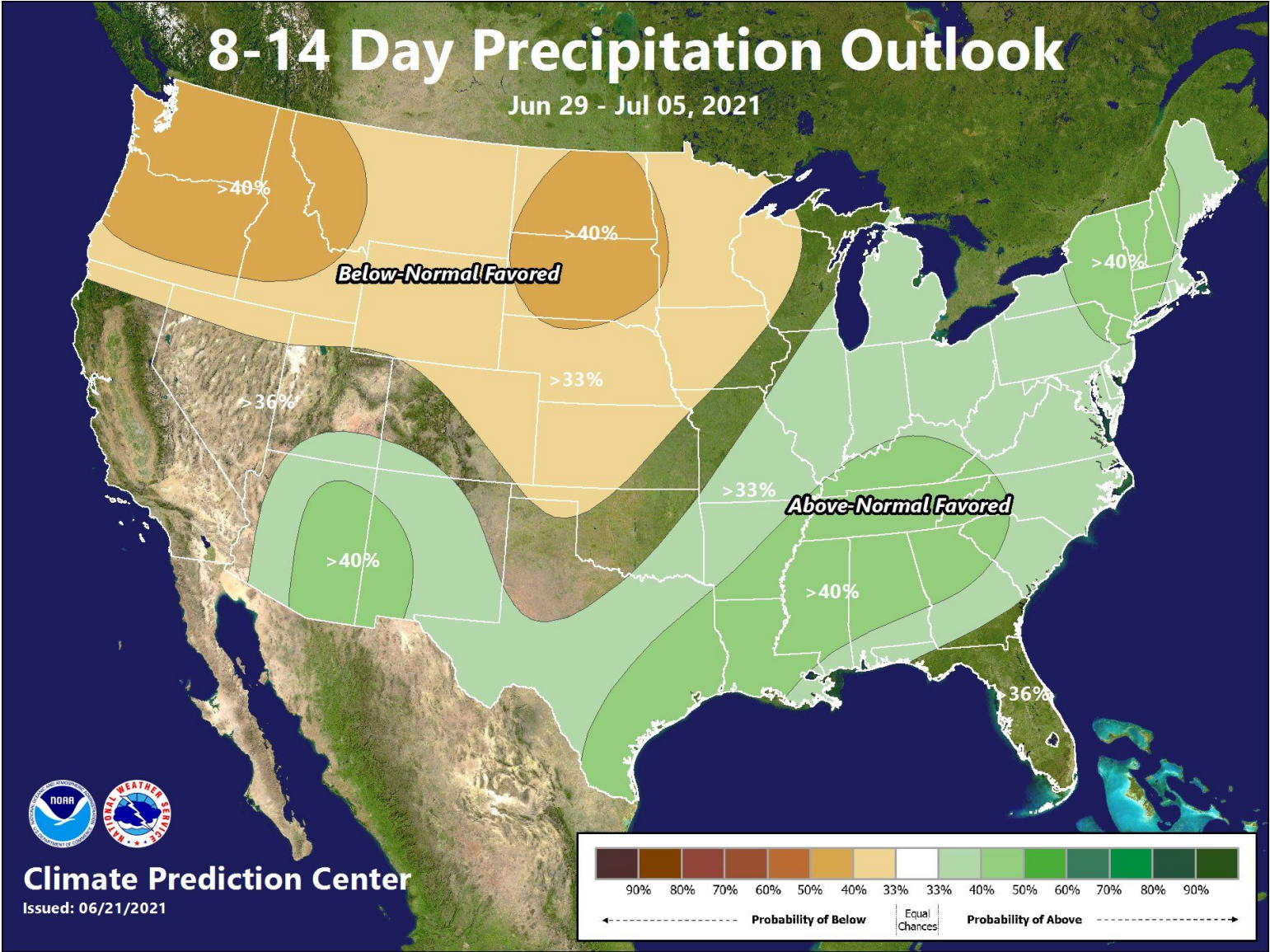
| | |
|---------------|-------------------------------------|
| Precipitation | <input type="checkbox"/> |
| Temperature | <input checked="" type="checkbox"/> |
| Soils | <input checked="" type="checkbox"/> |

| Legend | |
|--------------------------------|--------------------------------|
| Flooding Likely | Excessive Heat |
| Flooding Occurring or Imminent | High Winds |
| Flooding Possible | Much Above Normal Temperatures |
| Freezing Rain | Much Below Normal Temperatures |
| Heavy Ice | Significant Waves |
| Heavy Precipitation | Enhanced Wildfire Risk |
| Heavy Rain | Severe Drought |
| Heavy Snow | |
| Severe Weather | |

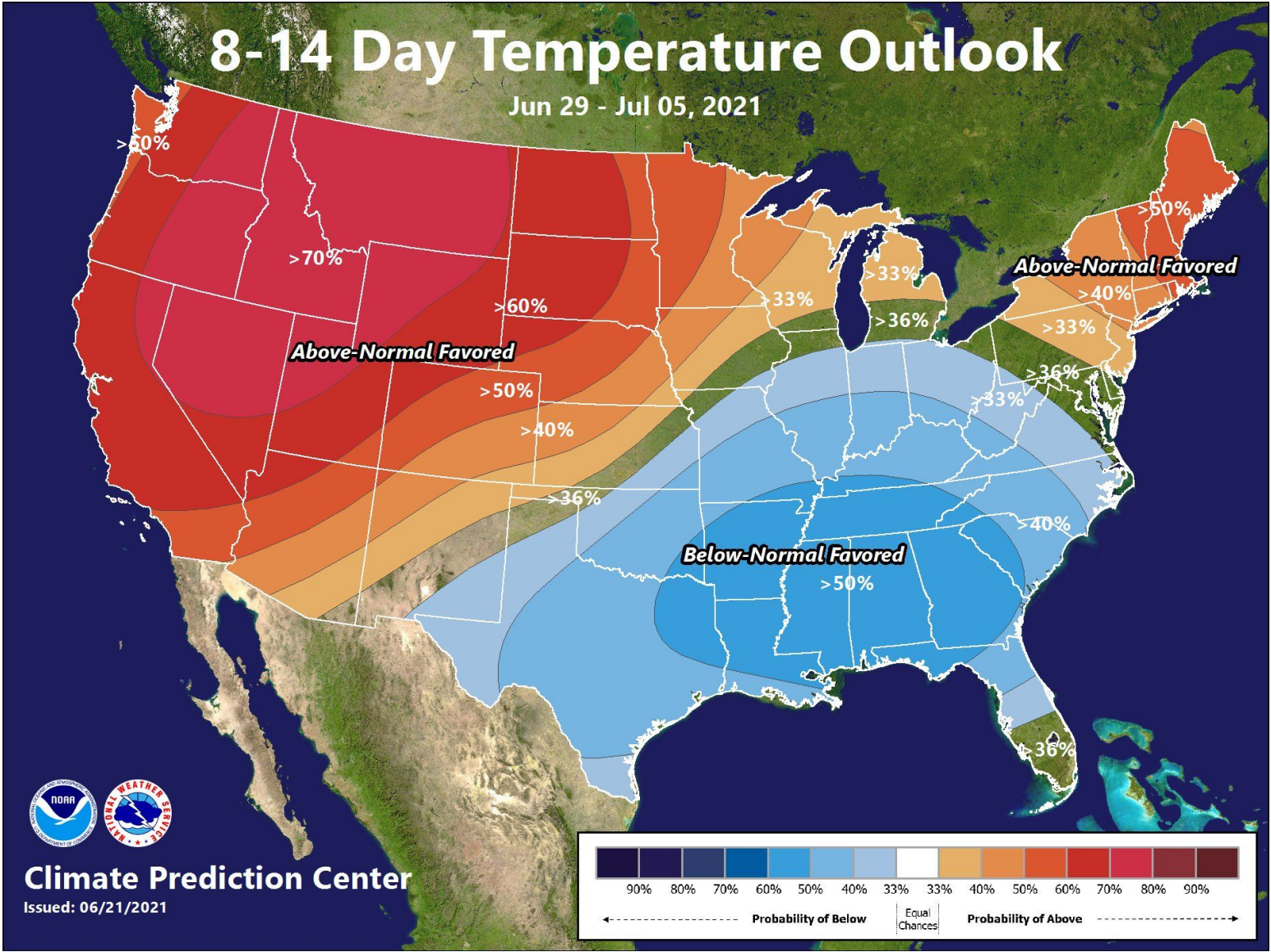
Valid June 24, 2021 - June 28, 2021



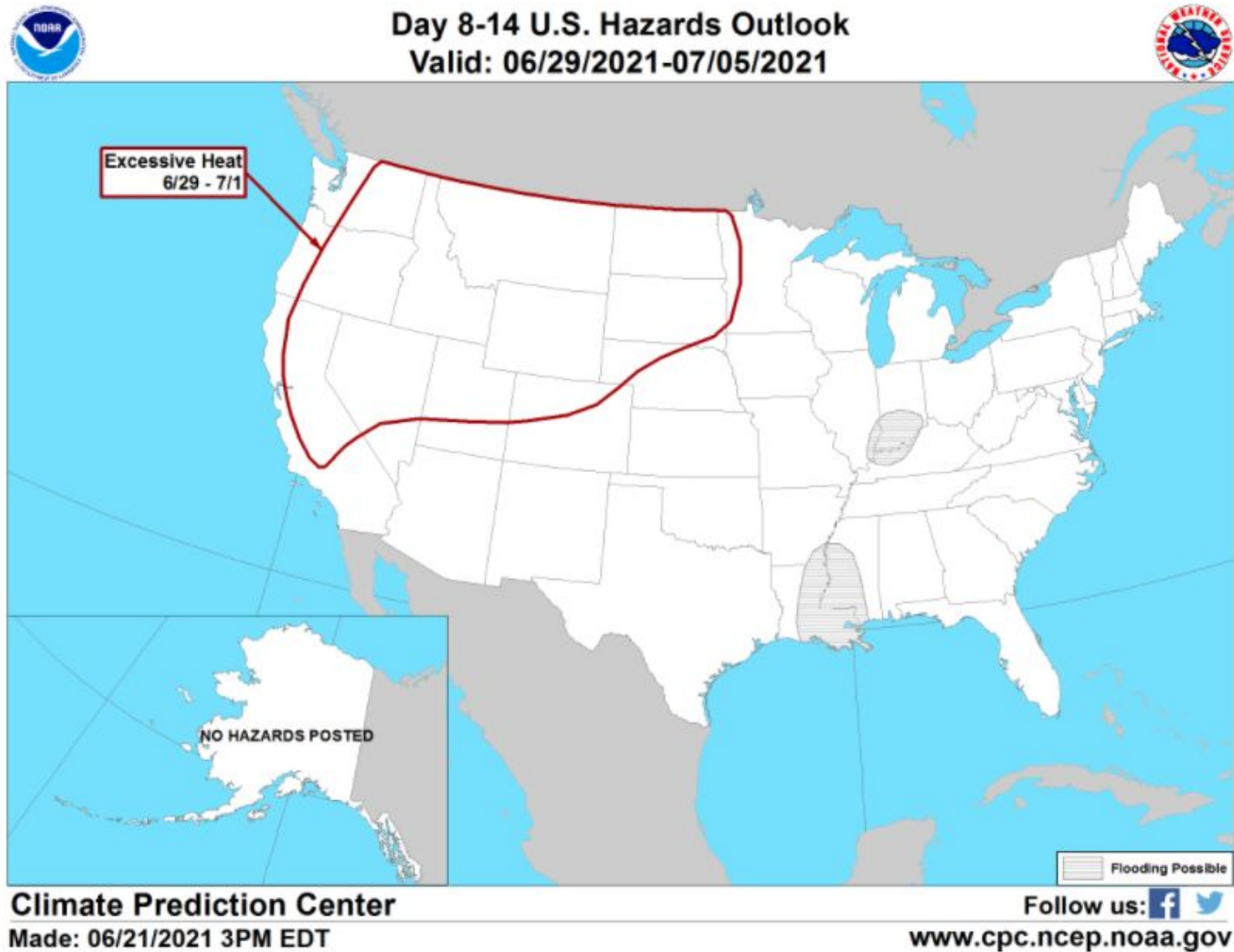
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



Climate Prediction Center U.S. Week-2 Hazards Outlook

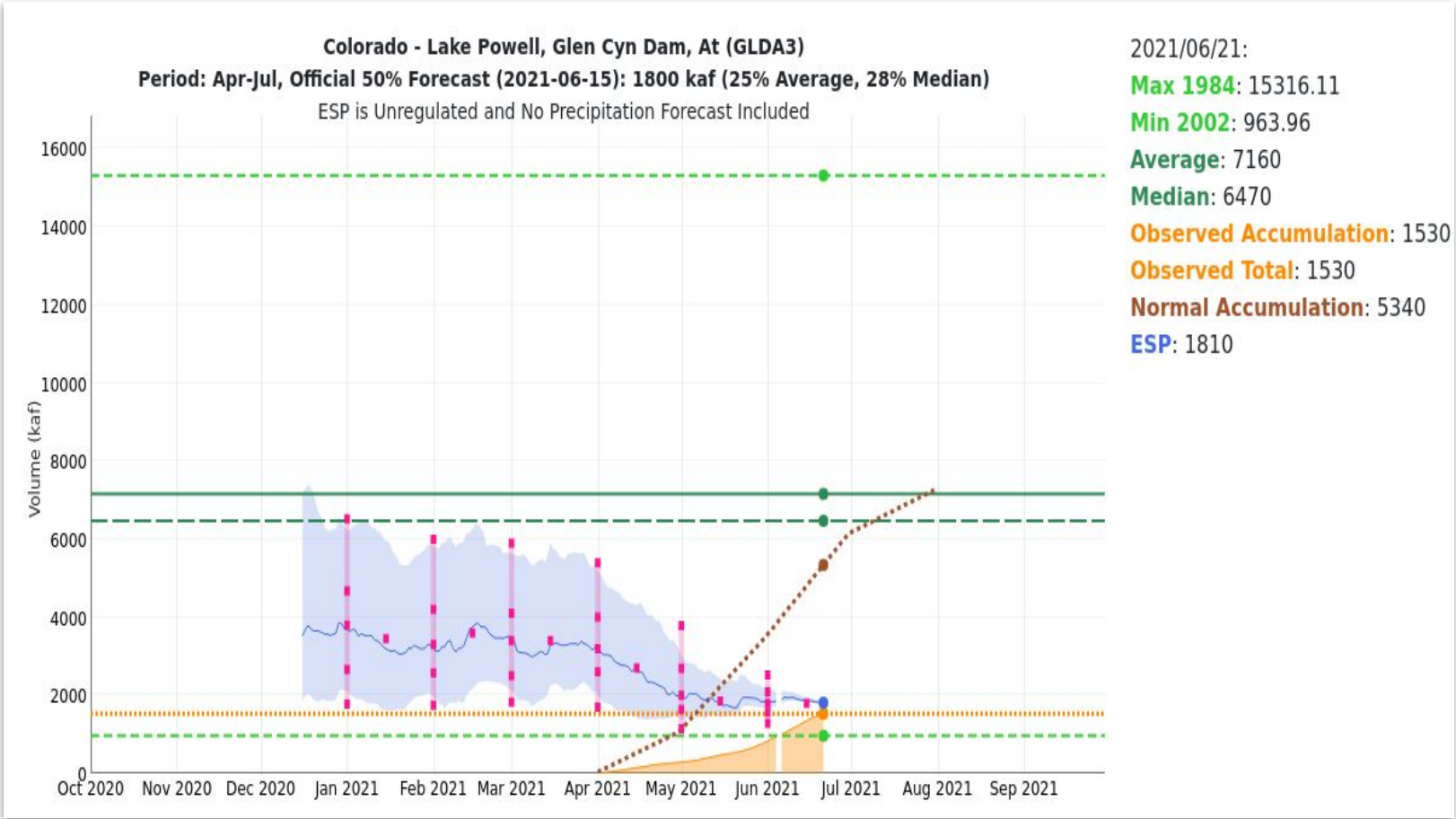


Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

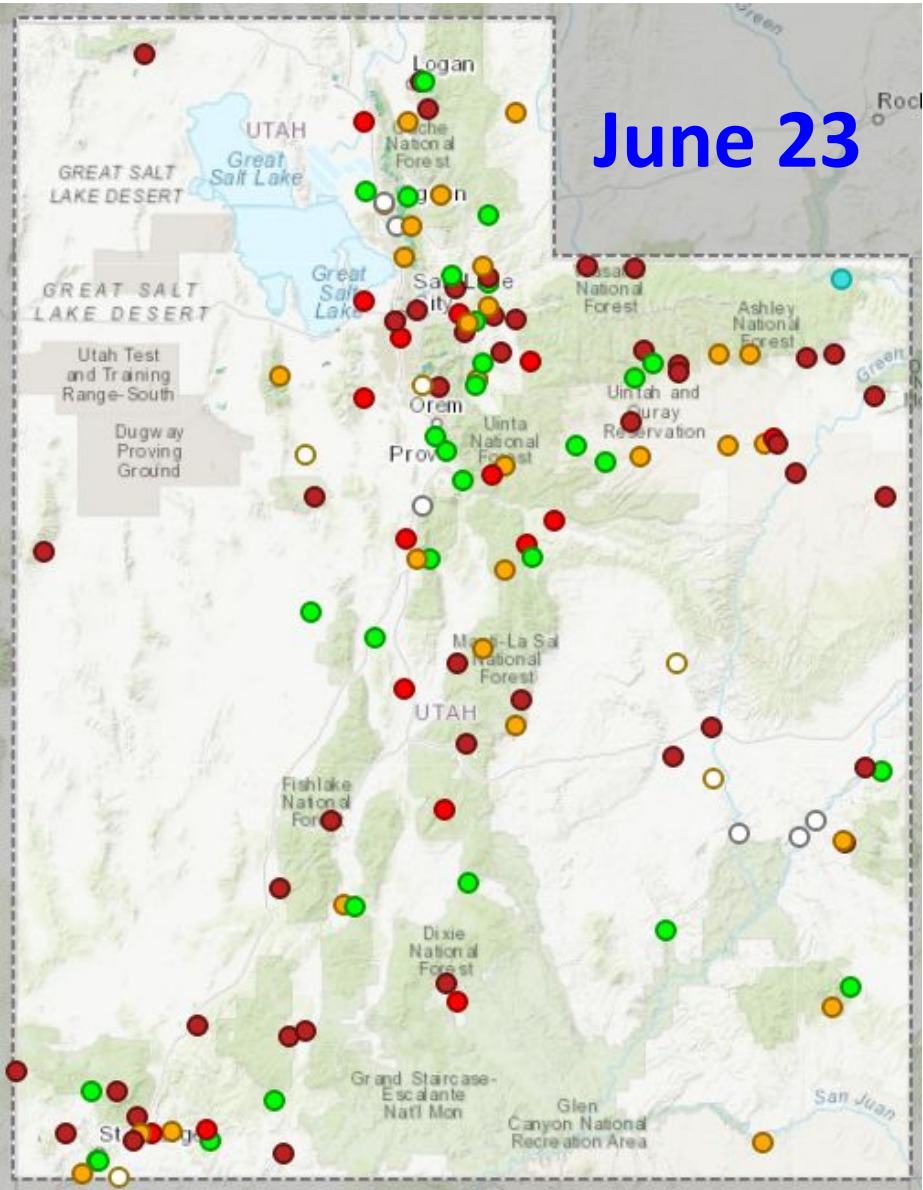
Water Supply Forecasts / Runoff (Percent of Average)

Map of seasonal water supply forecasts April-July Runoff:
Summary of conditions at:

| | |
|-------------|-----|
| Weber | 39% |
| Bear | 49% |
| Six Creeks | 50% |
| Utah Lake | 23% |
| Sevier | 25% |
| Green River | 36% |
| San Juan | 44% |
| Lake Powell | 25% |



Current Streamflow Conditions



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

0th percentile (minimum)

<10th percentile

10th – 24th percentile

25th – 75th percentile

76th – 90th percentile

>90th percentile

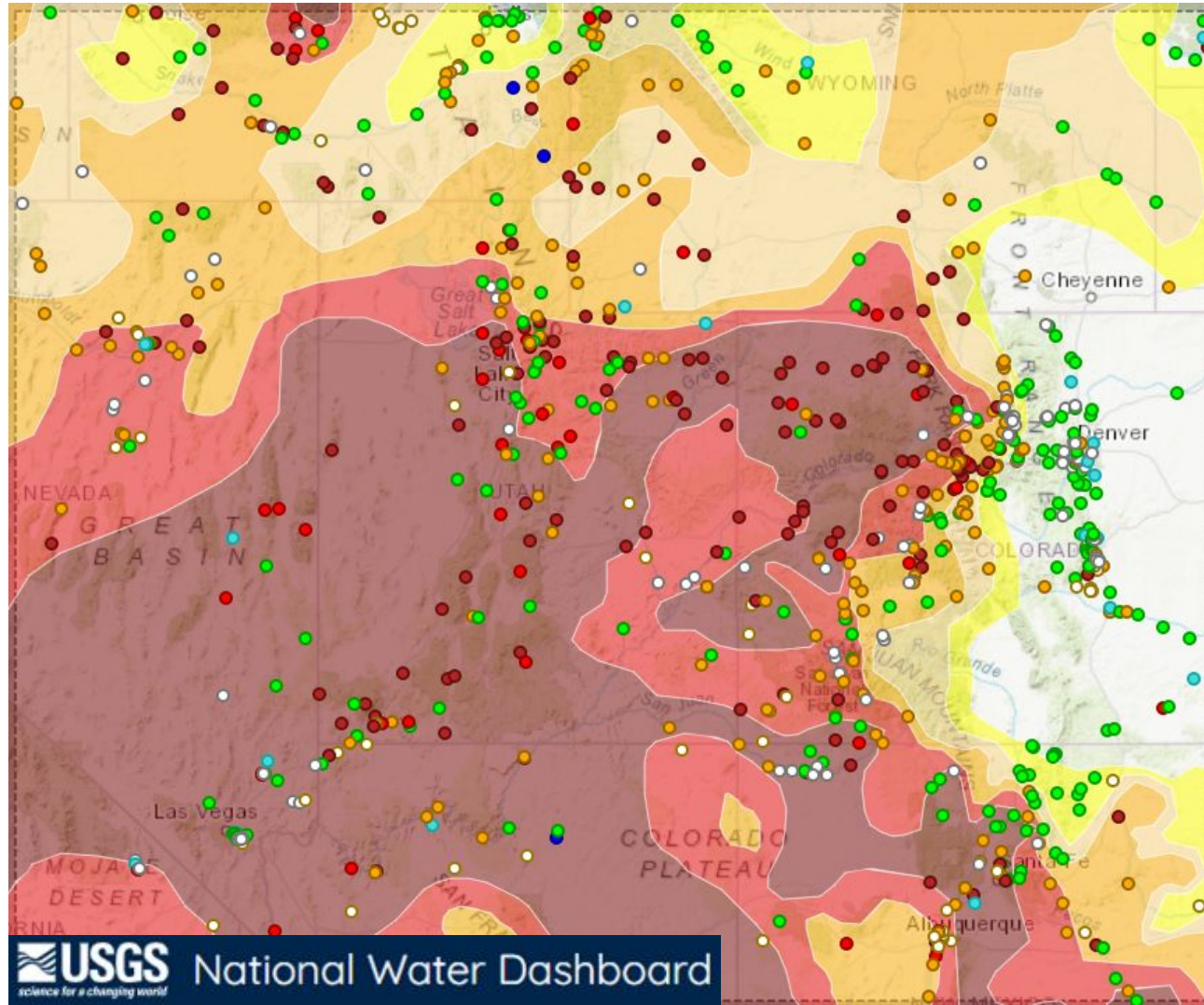
100th percentile (maximum)

0 cubic feet per second

See Comments


| Streamflow Summary | | | |
|--|----|-------|--|
| STATION COUNTS BY FLOW STATUS | | | |
| All-time low for this day-of-year | 16 | 12.0% | |
| Much below normal for this day-of-year | 45 | 33.8% | |
| Below normal for this day-of-year | 29 | 21.8% | |
| Normal for this day-of-year | 31 | 23.3% | |
| Above normal for this day-of-year | 1 | 0.8% | |
| Much above normal for this day-of-year | 0 | 0.0% | |
| All-time high for this day-of-year | 0 | 0.0% | |
| Not ranked - insufficient record | 11 | 8.3% | |

Current Streamflow Conditions



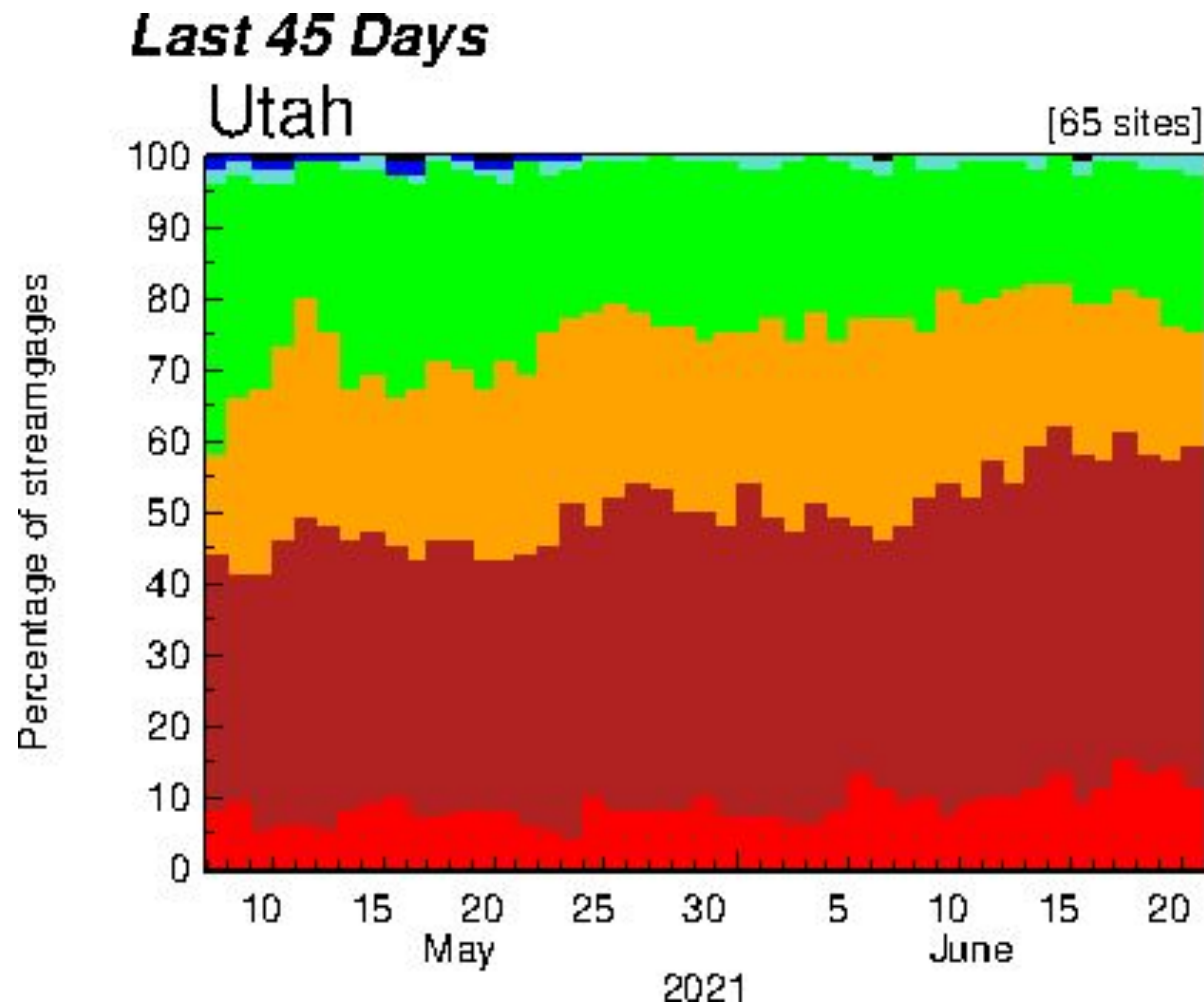
Welcome to the
National Water Dashboard

TOP NAVIGATION EXPLANATION

| | |
|--|-----------------------------|
|  Layers | Add and remove map layers |
|  Legend | Explanation of layers shown |
|  Tools | Additional map tools |

Agency - USGS Utah Water Science Center
Presenter - Ryan Rowland

Current Streamflow Conditions



| Explanation - Percentile classes | | | | | | | |
|----------------------------------|-------------------|--------------|--------|--------------|-------------------|------|---------|
| | | | | | | | |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | No Data |
| | Much below normal | Below normal | Normal | Above normal | Much above normal | | |



USGS Science in Utah ✓
@USGS_UT

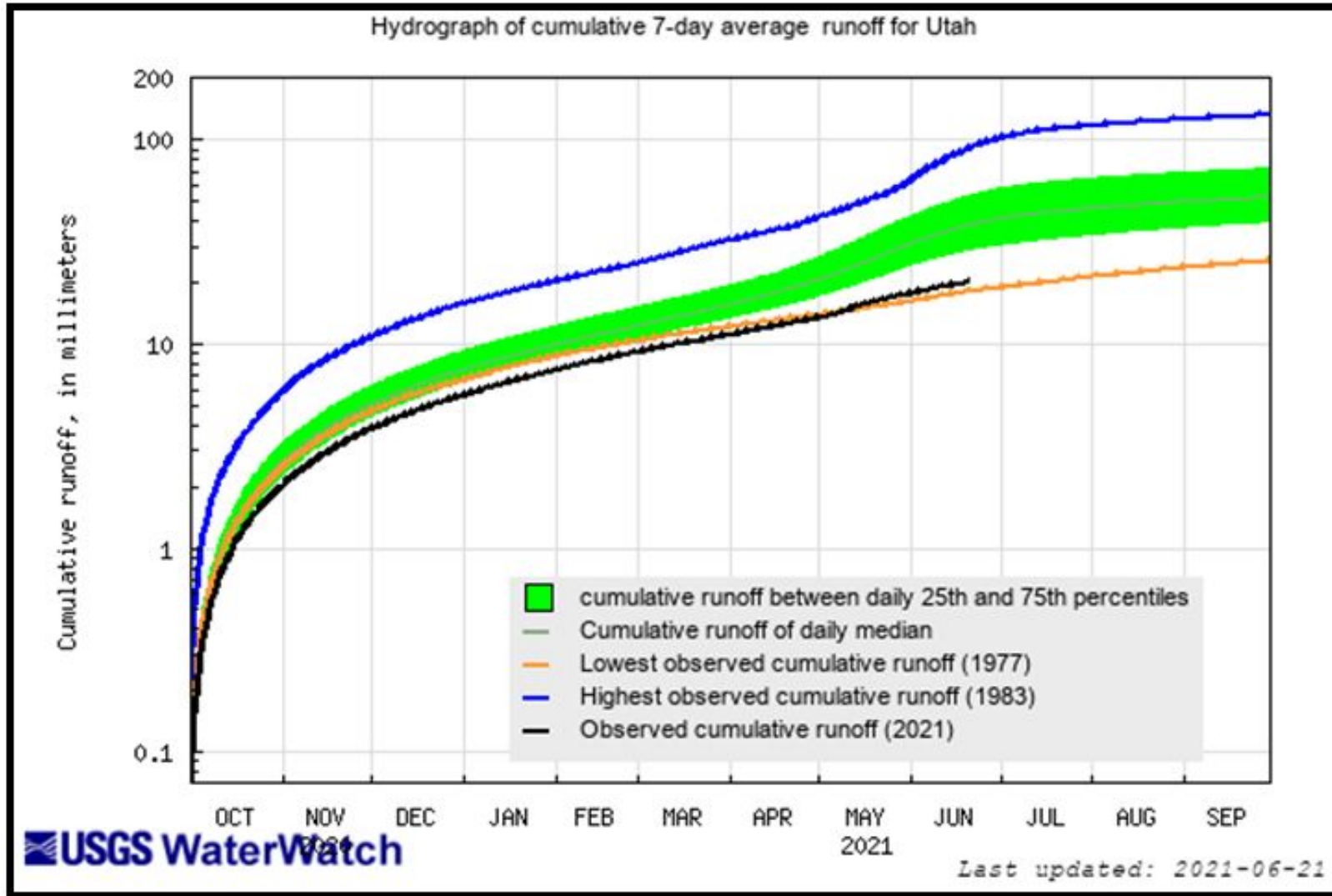
Utah is seeing low flows across the state. A [#USGS](#) [#hydrotech](#) recently measured 12.7 cfs on the Little Bear @ Paradise, Utah ow.ly/bvLV50F7MNG. The mean daily average for that day is 165 cfs. Get real time data for many Utah streams and rivers at ow.ly/TSli50F7MNF



Agency - USGS Utah Water Science Center

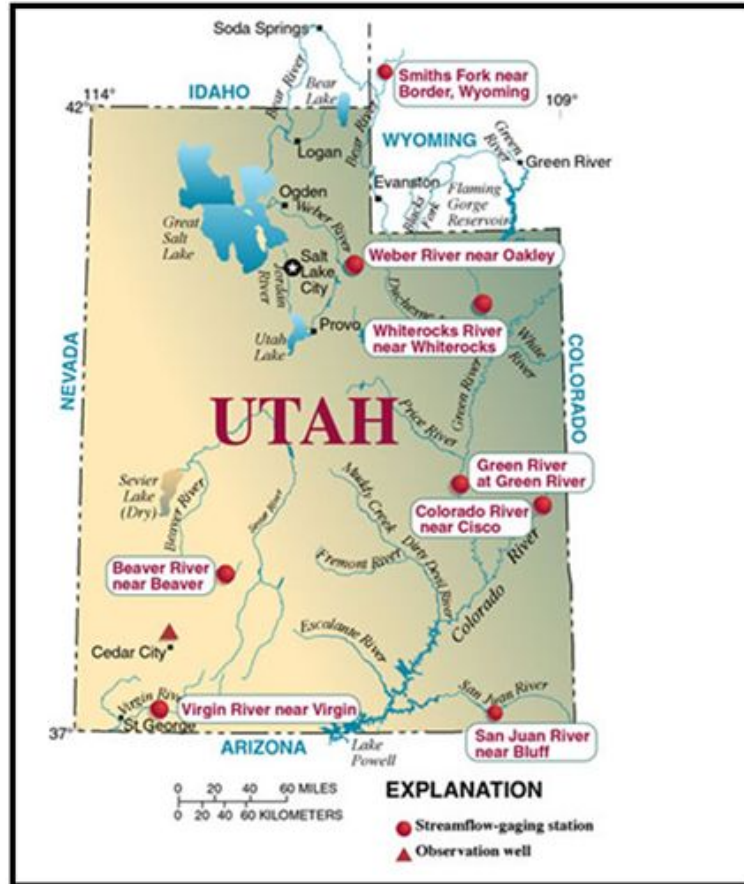
Presenter - Ryan Rowland

Cumulative Streamflow



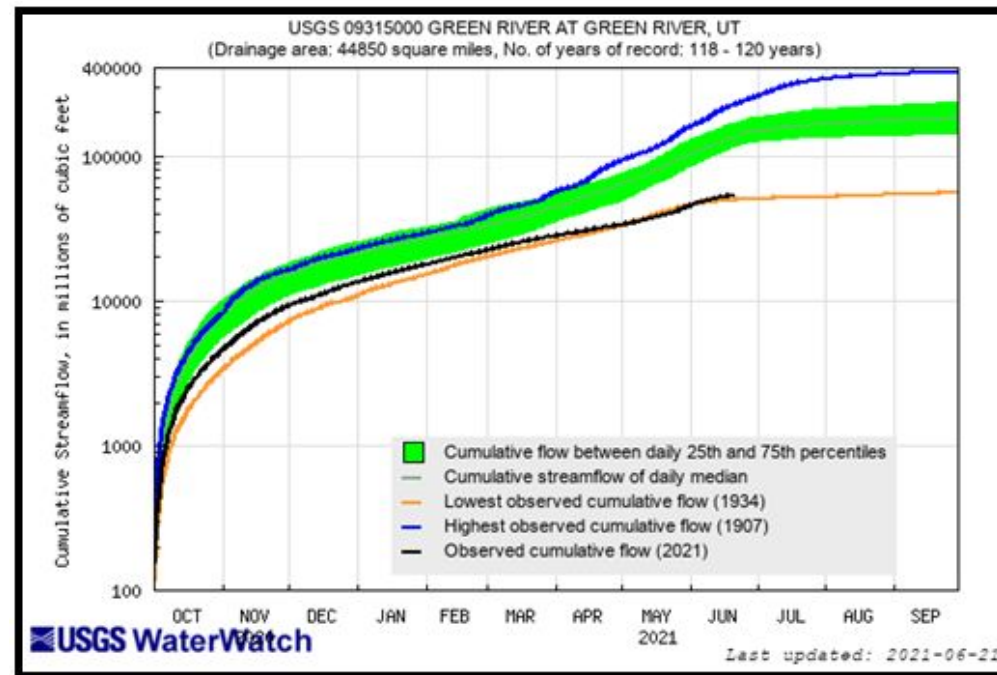
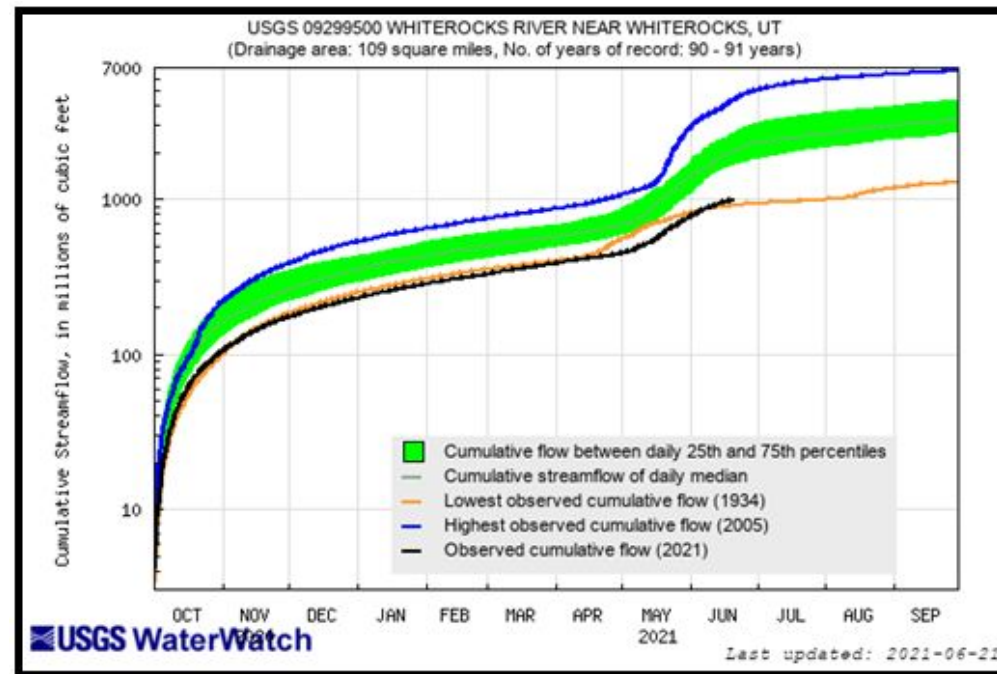
**Statewide
Cumulative
7-day average
runoff for
water year
2021 is near the
lowest on
record**

Cumulative Streamflow at Long Term Sites

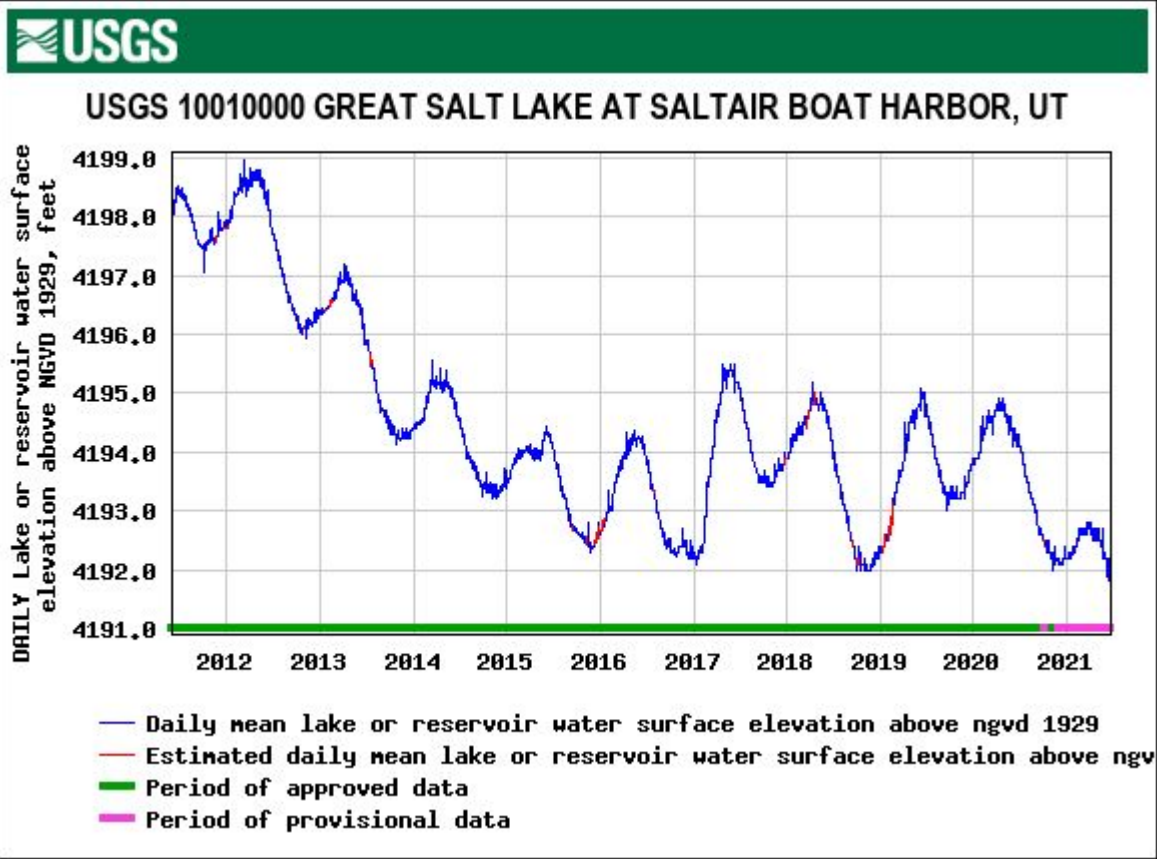


Map from Wilkowske and others, 2003, Drought Conditions in Utah During 1999-2002: A Historical Perspective, USGS Fact Sheet 037-03

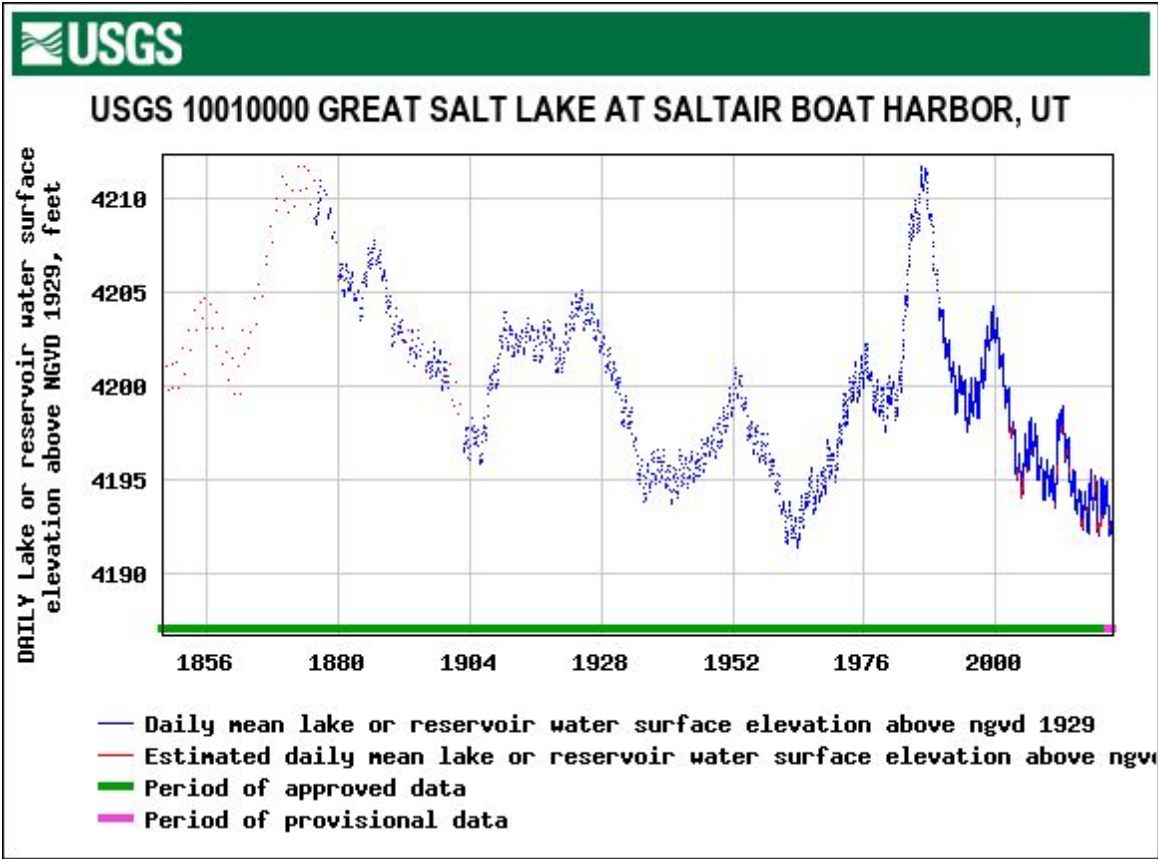
Agency - USGS Utah Water Science Center
Presenter - Ryan Rowland



Great Salt Lake Water Surface Elevation



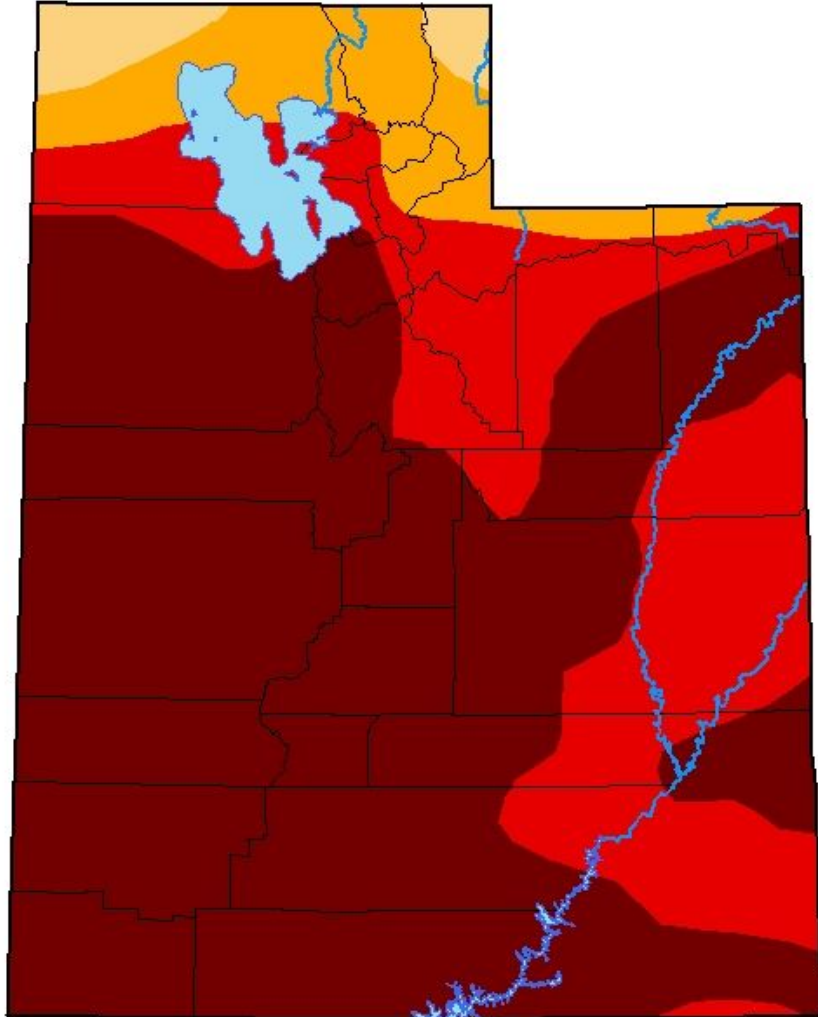
**Current elevation:
4,191.8 ft**



**Period of Record low elevation:
4,191.35 ft (1963)**

U.S. Drought Monitor

Utah



June 15, 2021
 (Released Thursday, Jun. 17, 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:

Curtis Riganti
 National Drought Mitigation Center



droughtmonitor.unl.edu

