



Utah Water Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors

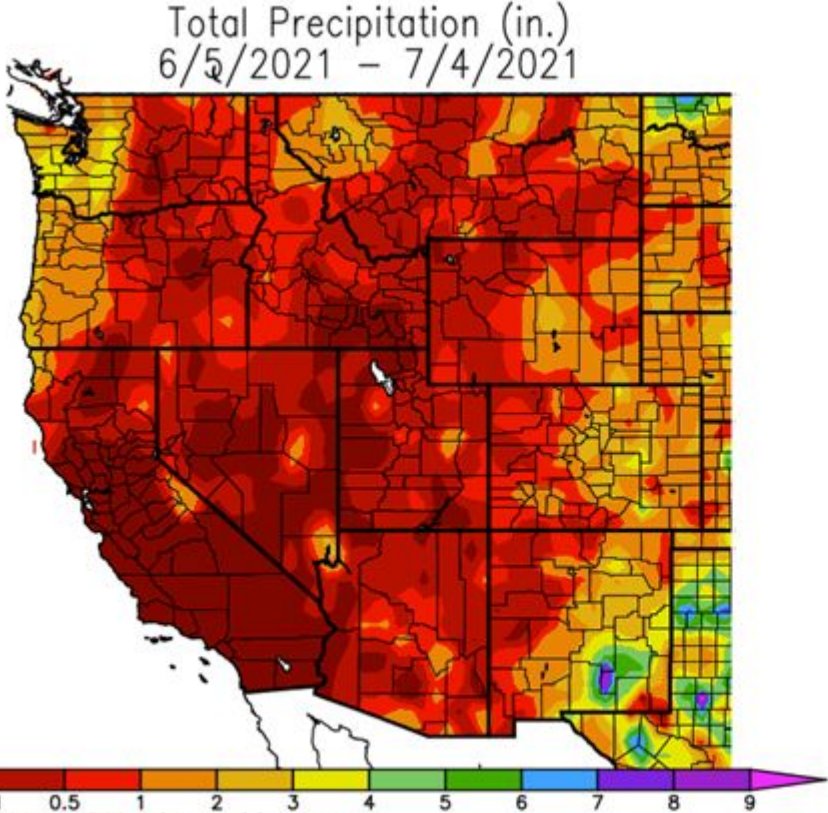




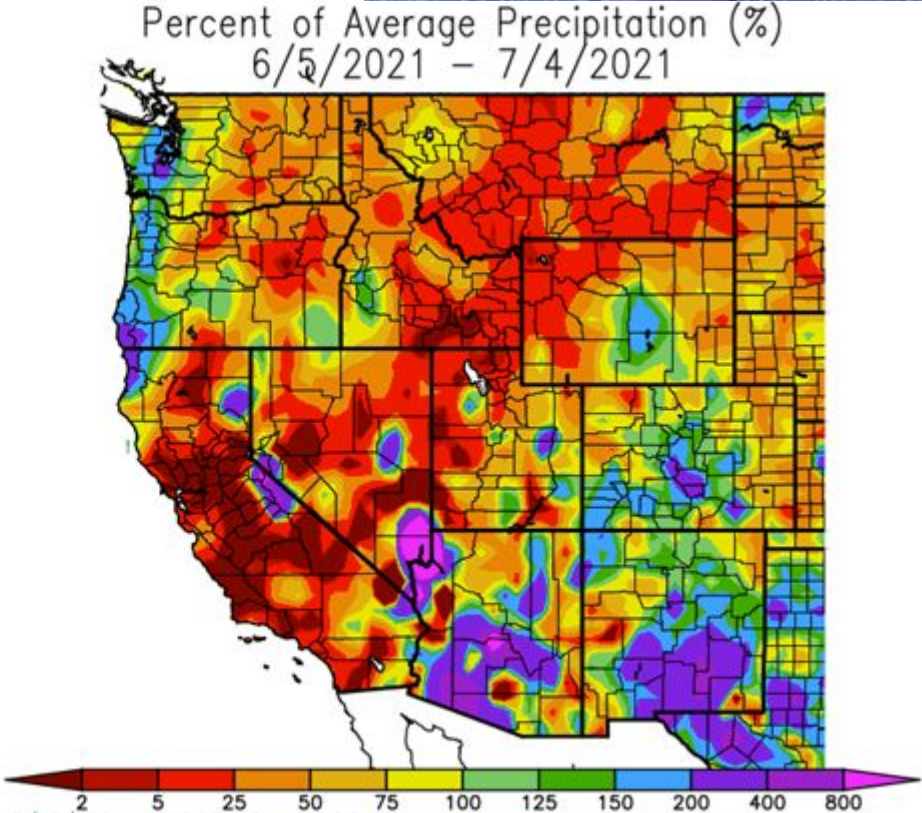
Utah Drought Monitor Webinar

July 7, 2021

Precipitation 30-day history



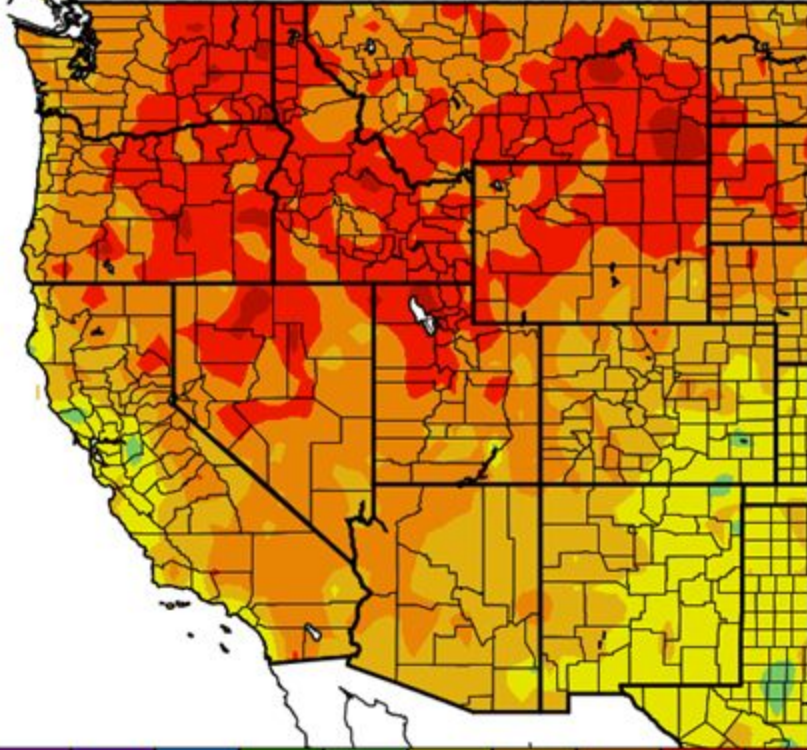
Generated 7/ 5/2021 at WRCC using provisional data.
NOAA Regional Climate Centers



Generated 7/ 5/2021 at WRCC using provisional data.
NOAA Regional Climate Centers

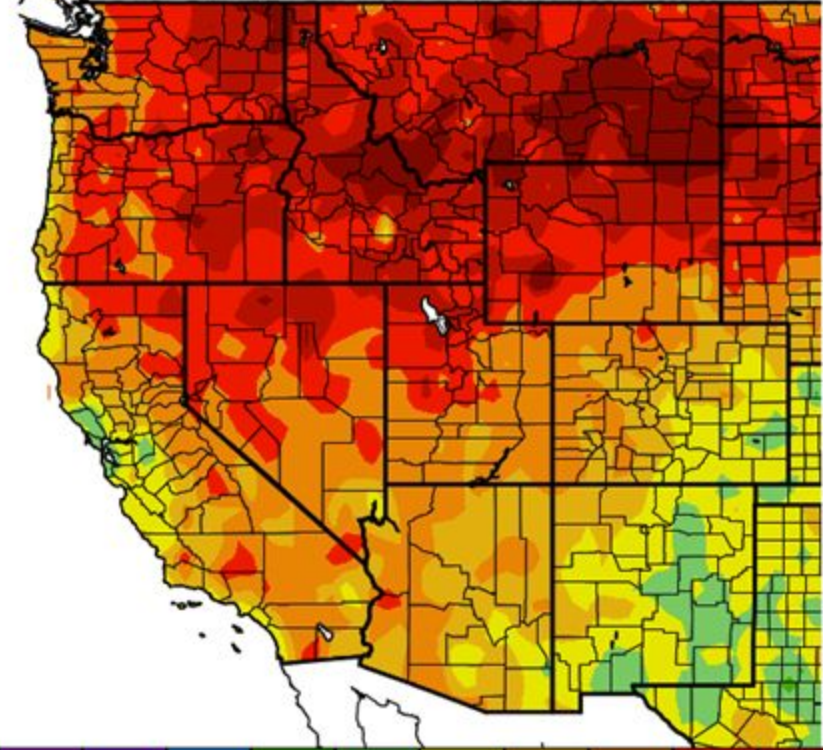
Temperature 30-day

Ave. Temperature dep from Ave (deg F)
6/5/2021 – 7/4/2021



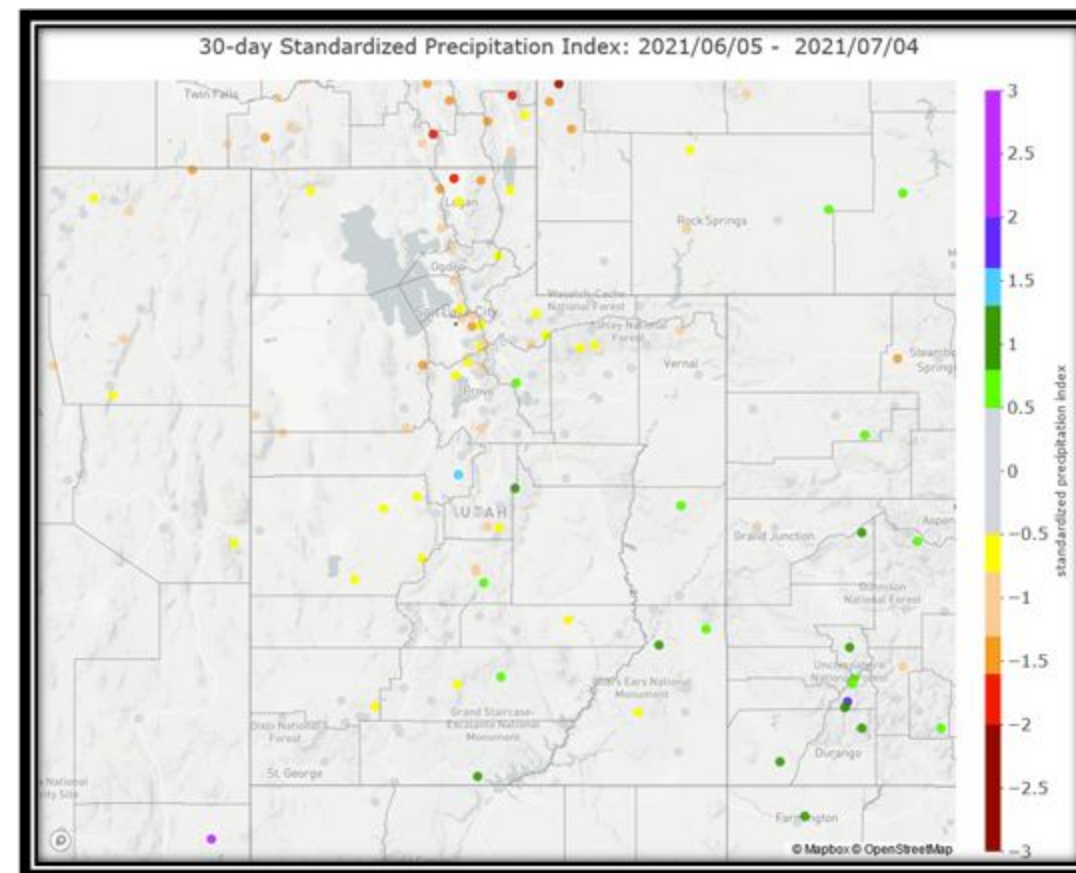
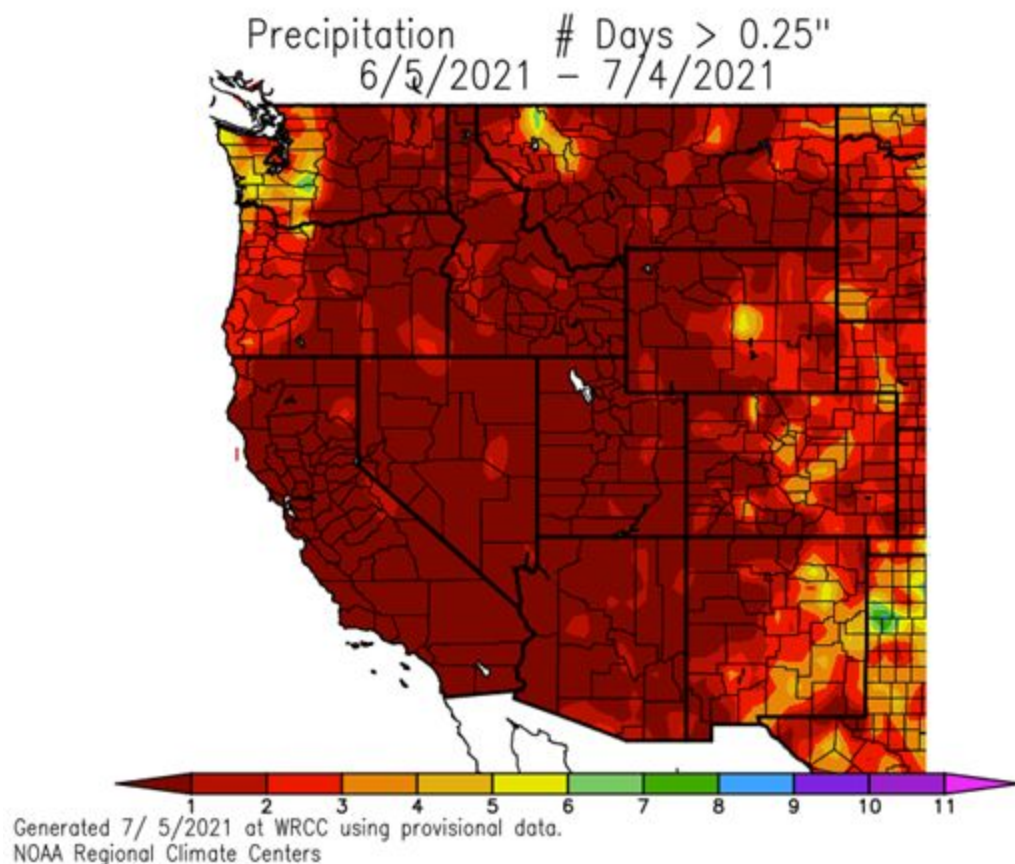
Generated 7/ 5/2021 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Max. Temperature dep from Ave (deg F)
6/5/2021 – 7/4/2021

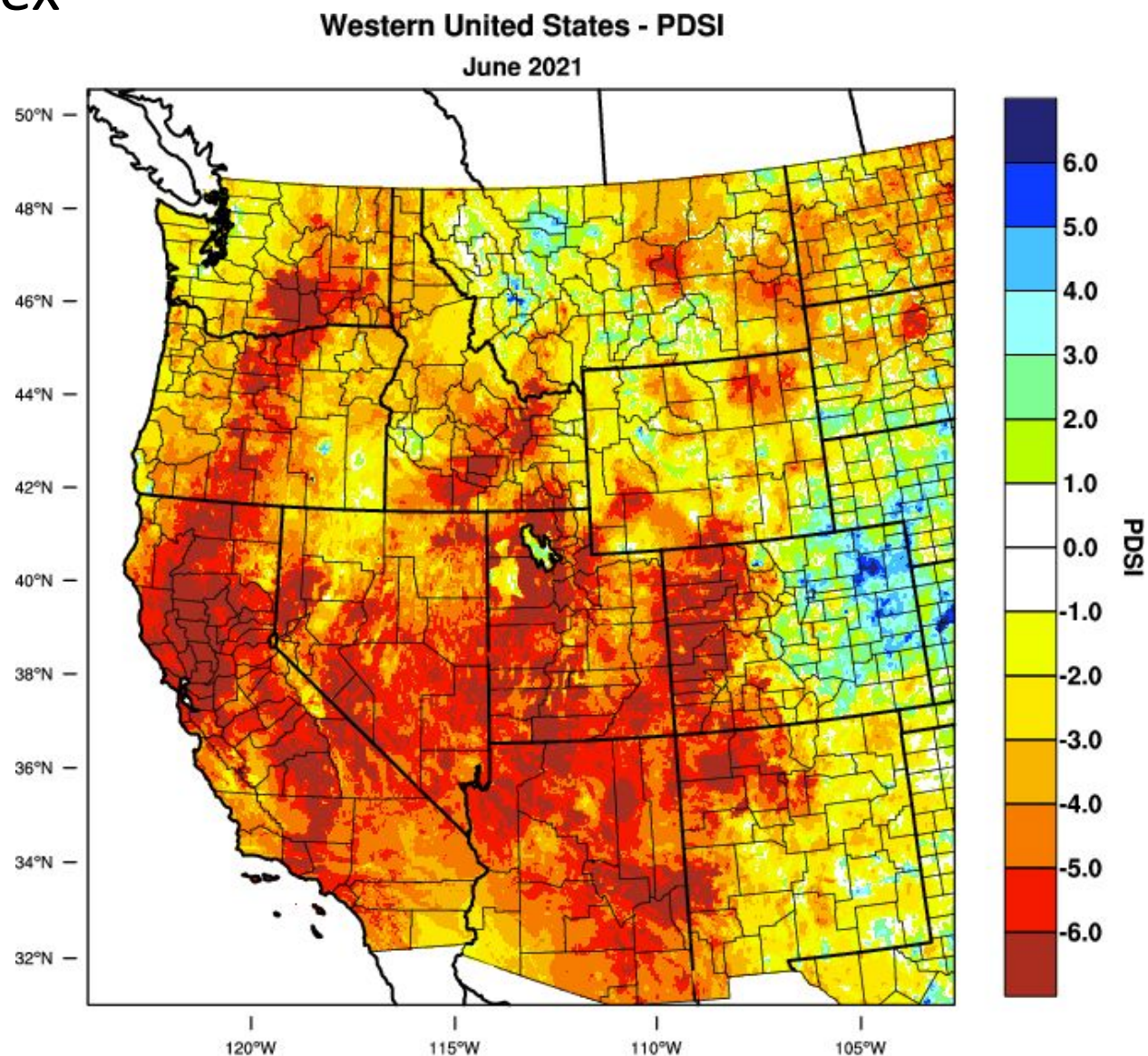


Generated 7/ 5/2021 at WRCC using provisional data.
NOAA Regional Climate Centers

June's Precipitation Summary



June's Palmer Drought Severity Index



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 JUL 2021

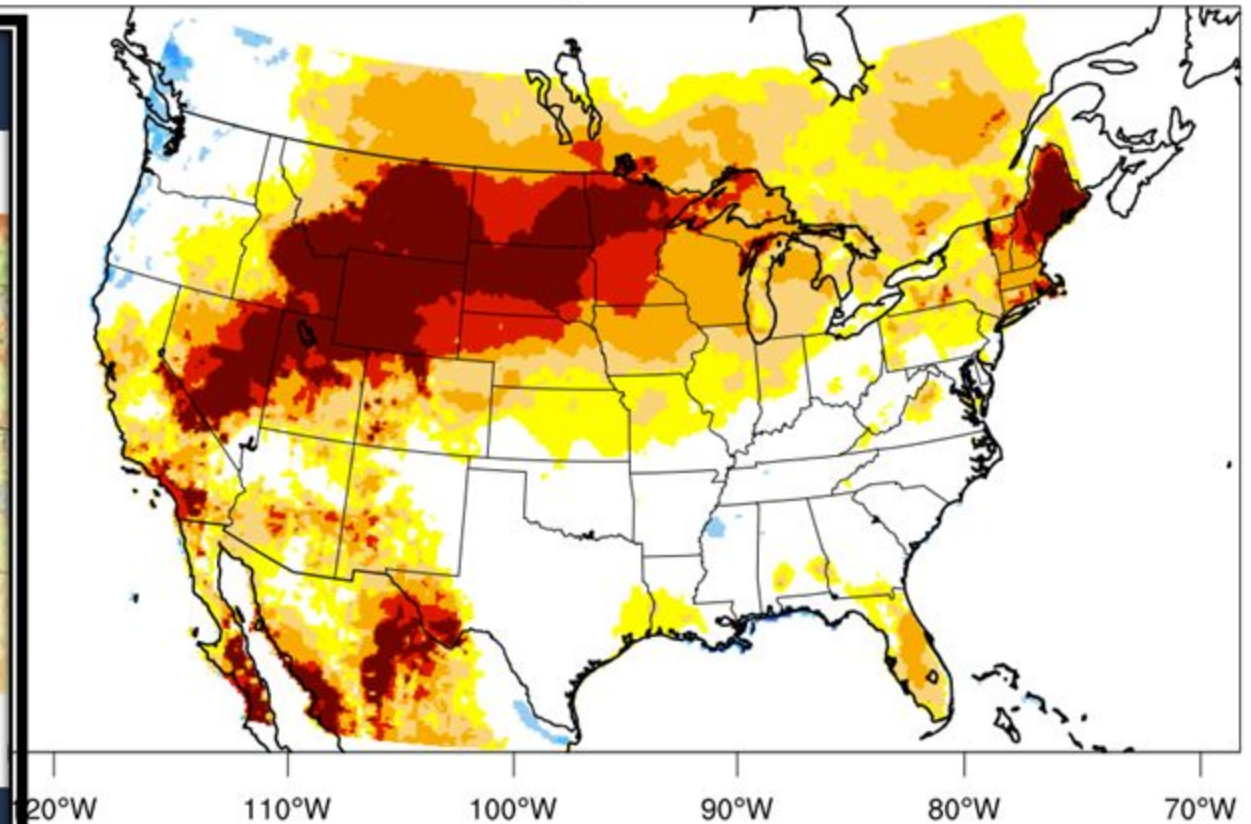
Agency - Utah Climate Center

Presenter - Jon Meyer



EDDI Evaporative Demand Drought Index

2-week EDDI categories for June 19, 2021

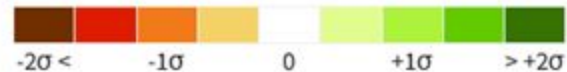


U.S. Vegetation and Drought

[Evaporative Stress Index](#) [VegDRI](#) [Vegetation Health Index](#)

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. [Learn more.](#)

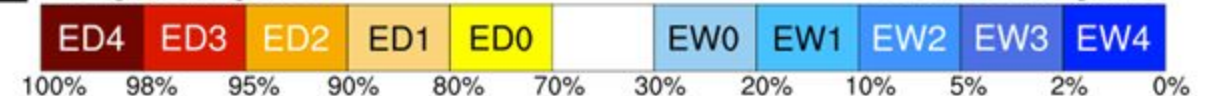
Standardized ET/PET Anomalies



*Currently, data are only available for the contiguous U.S.

Source(s): [NASA SERVIR](#)

Drought categories

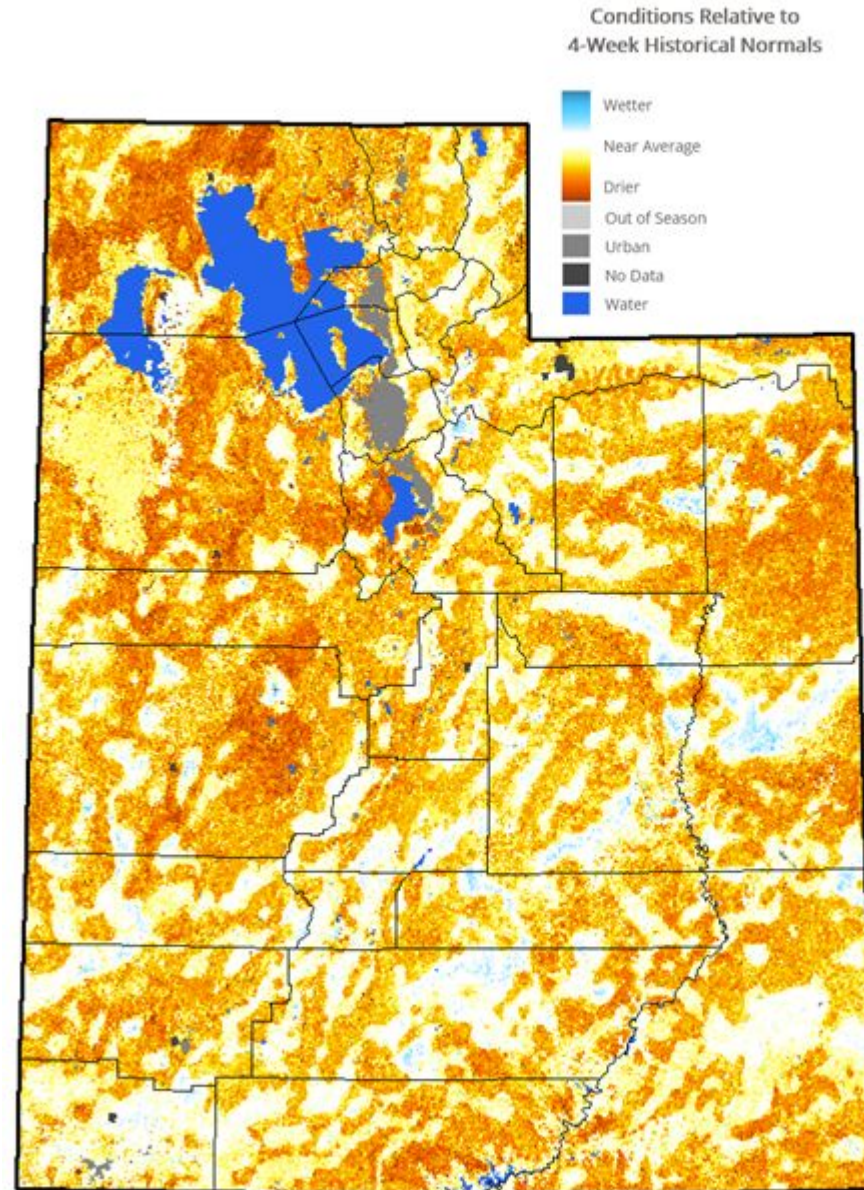


(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

Agency - Utah Climate Center

Presenter - Jon Meyer

Quick Drought Response Index (QuickDRI)



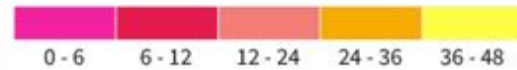
Agency - Utah Climate Center
Presenter - Jon Meyer

U.S. Vegetation and Drought

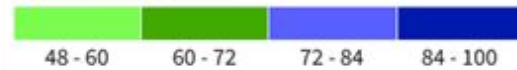
[Evaporative Stress Index](#) [VegDRI](#) [Vegetation Health Index](#)

NOAA's Center for Satellite Applications and Research produces satellite-based global vegetation health products, including the vegetation health index (VHI). VHI is a proxy characterizing vegetation health or a combined estimation of moisture and thermal conditions. Vegetation health is often used to estimate crop condition and anticipated yield. If the indices are below 40, indicating different levels of vegetation stress, losses of crop and pasture production might be expected; if the indices above 60 (favorable conditions), plentiful production might be expected. [Learn more.](#)

Unfavorable Conditions

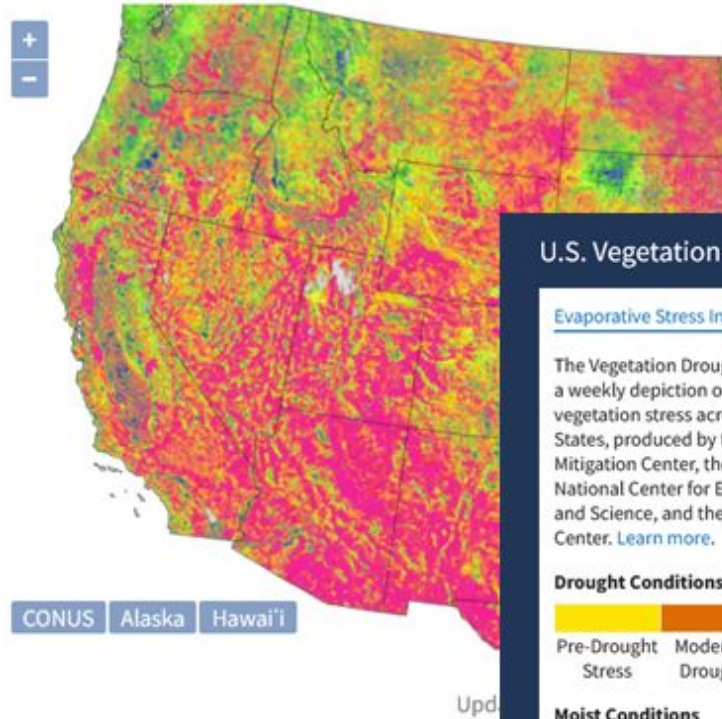


Favorable Conditions



*Currently, data are only available for the 50 U.S. states.

Source(s): [NOAA STAR](#)



U.S. Vegetation and Drought

[Evaporative Stress Index](#) [VegDRI](#) [Vegetation Health Index](#)

The Vegetation Drought Response Index (VegDRI) is a weekly depiction of drought's effects on vegetation stress across the contiguous United States, produced by the National Drought Mitigation Center, the U.S. Geological Survey's National Center for Earth Resources Observation and Science, and the High Plains Regional Climate Center. [Learn more.](#)

Drought Conditions



Moist Conditions

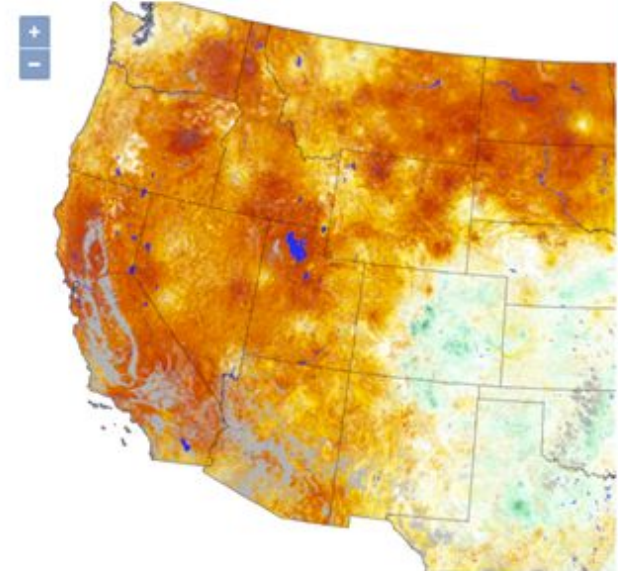


Other Conditions



*Currently, data are only available for the contiguous U.S.

Source(s): [NDMC](#), [USGS](#), [HPRCC](#)



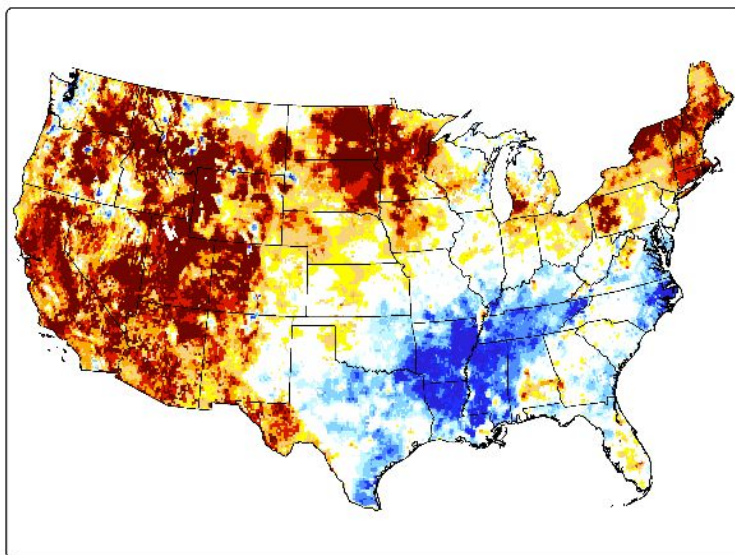
Updates Weekly - 07/06/21



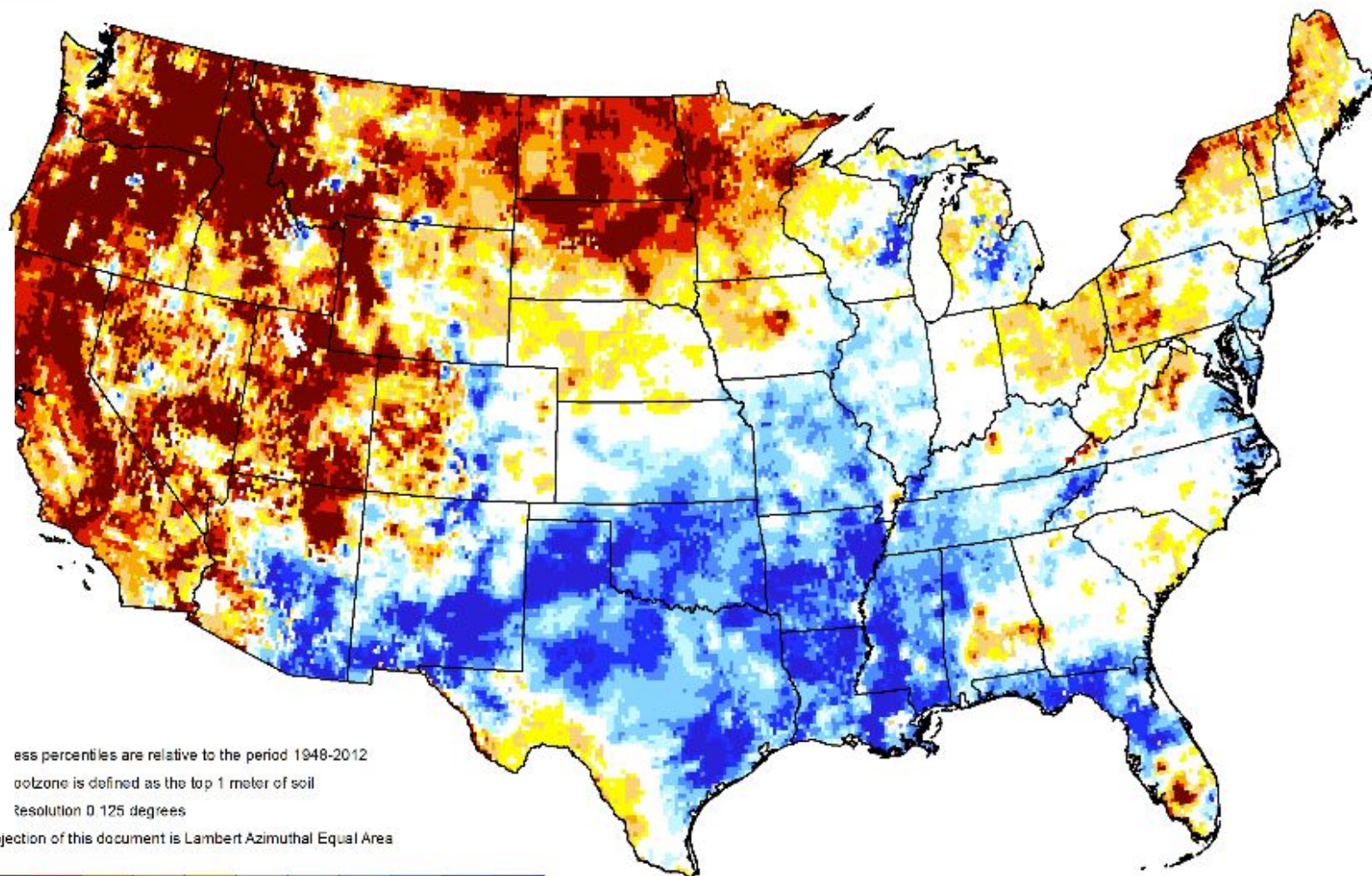
GRACE-Based Root Zone Soil Moisture Drought Indicator

July 05, 2021

Root Zone Soil Moisture Percentile



Download:



Percentiles are relative to the period 1948-2012
Rootzone is defined as the top 1 meter of soil
Resolution 0.125 degrees

Projection of this document is Lambert Azimuthal Equal Area



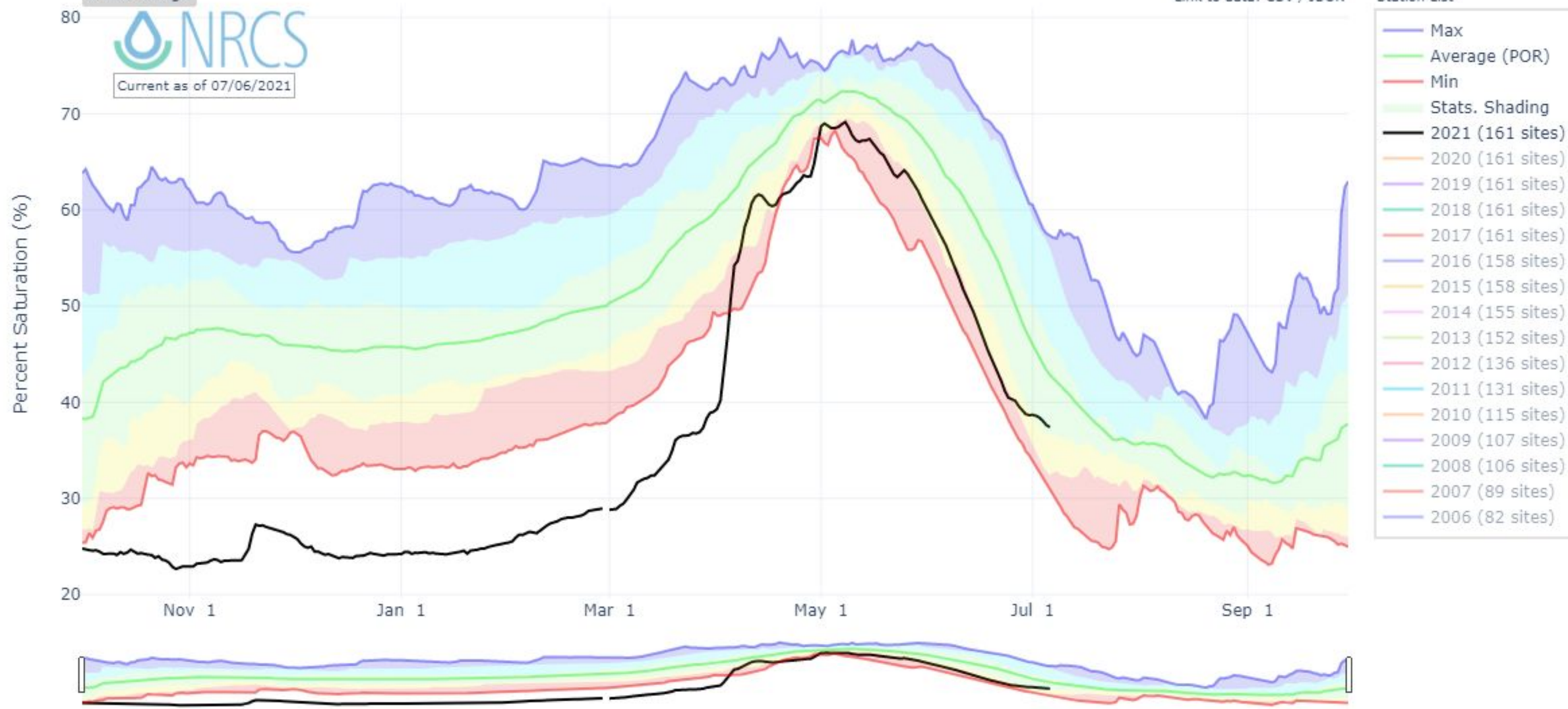
<https://nasagrace.unl.edu>

DEPTH AVERAGED SOIL SATURATION IN STATE OF UTAH

Reset Range

[Link to data: CSV / JSON](#)

Station List



PRECIPITATION IN STATE OF UTAH

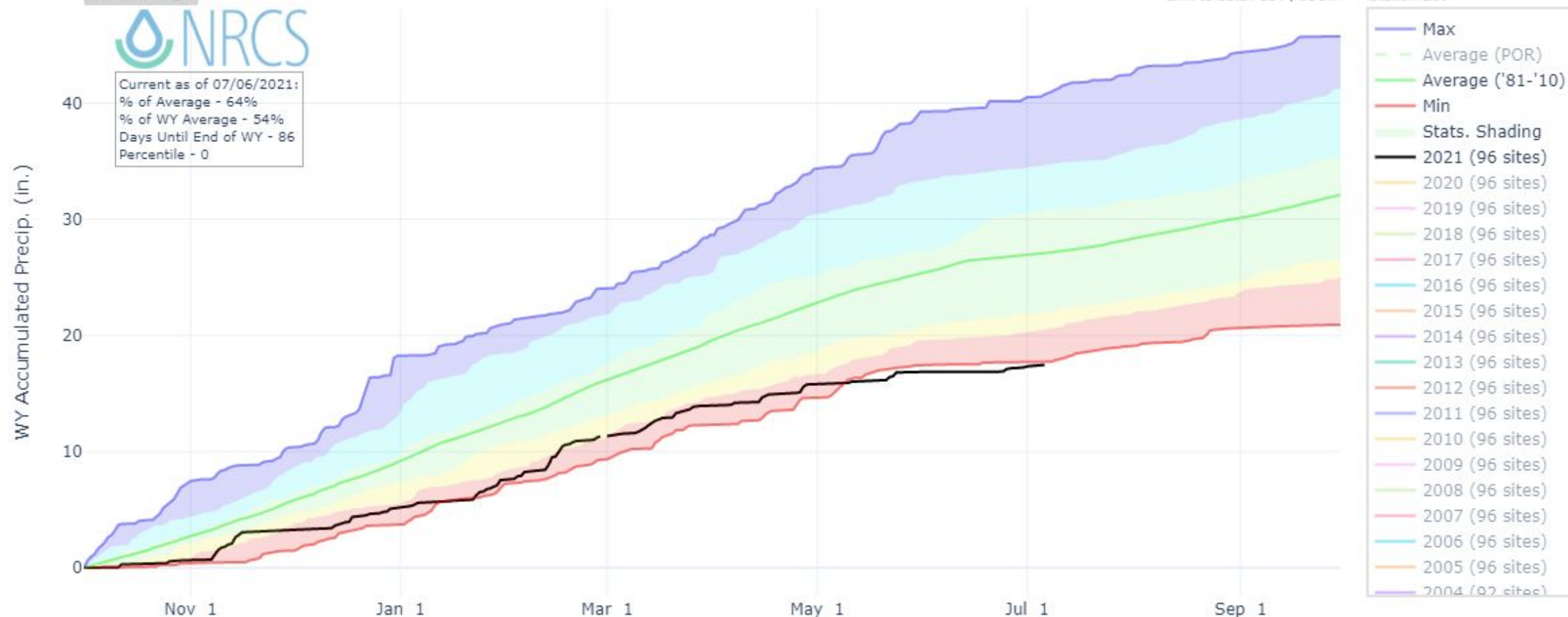
Reset Range



Current as of 07/06/2021:
% of Average - 64%
% of WY Average - 54%
Days Until End of WY - 86
Percentile - 0

[Link to data: CSV / JSON](#)

Station List

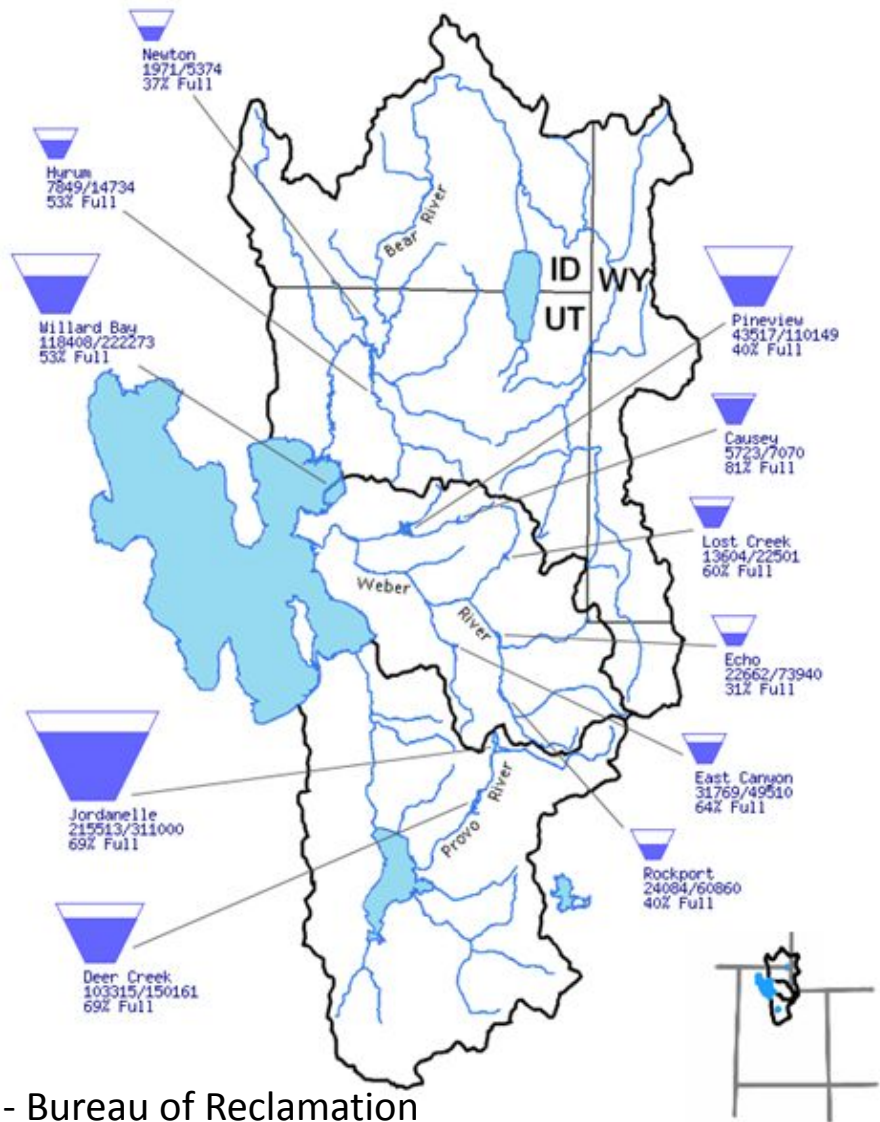


Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th Percentiles.
For more information visit: [30 year normals calculation description](#).

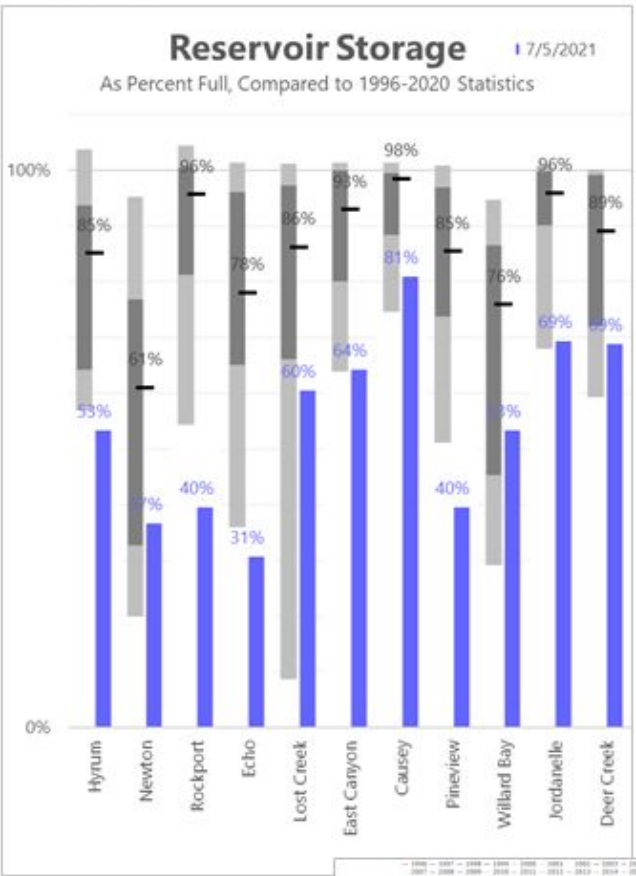
Reservoir Levels

Data Current as of:
07/05/2021

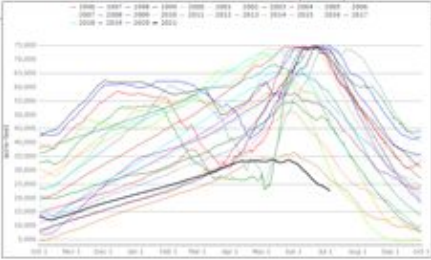
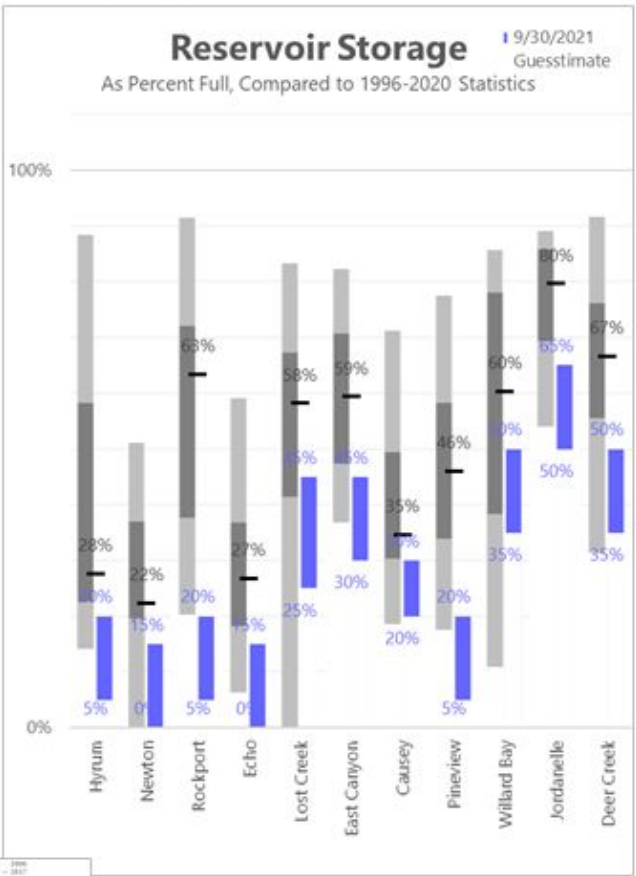
Bear, Weber, and Provo River Basins



Current

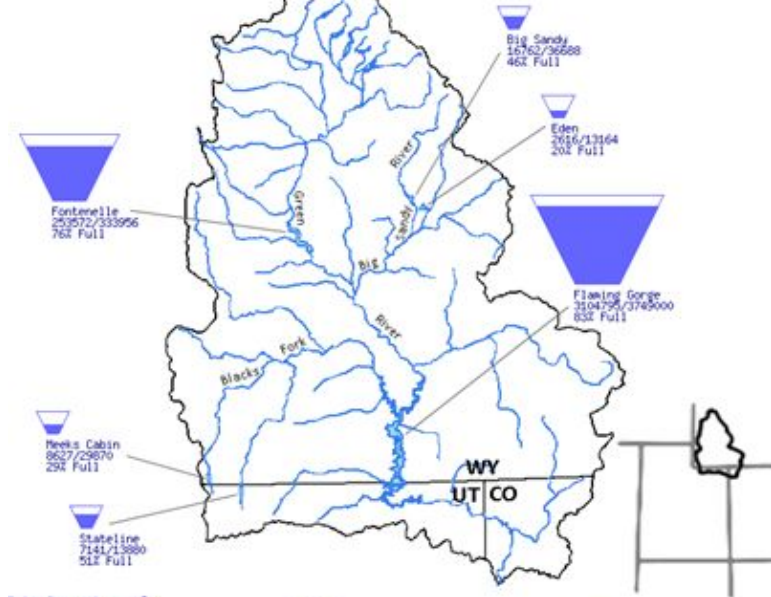


Forecast



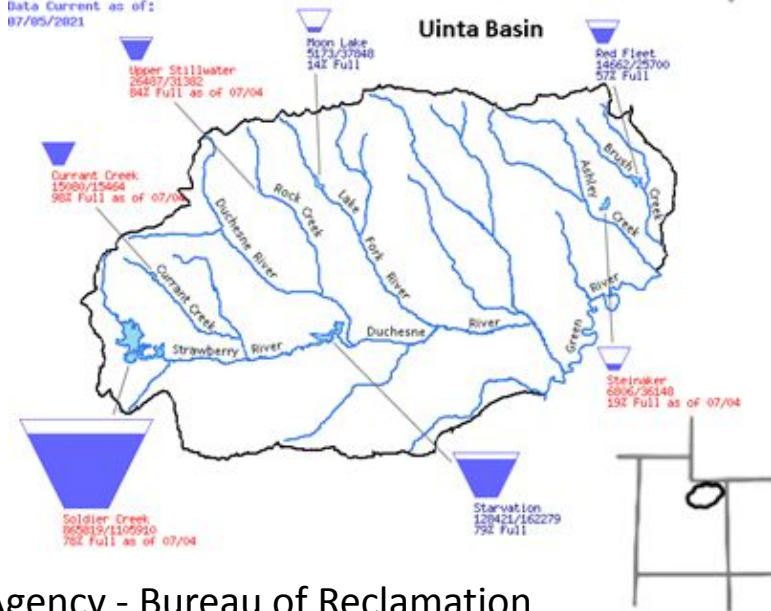
Upper Green River Basin

Reservoir Levels



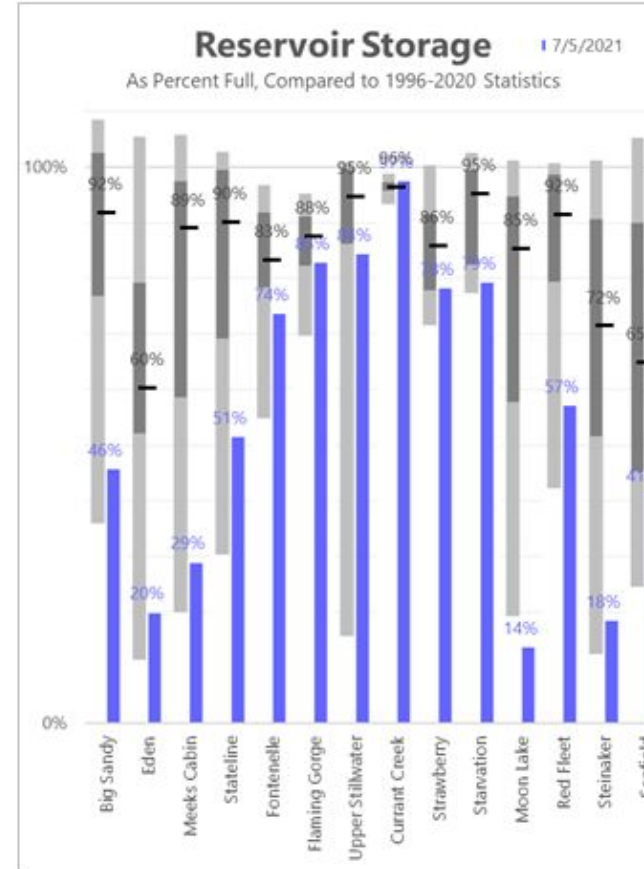
Data Current as of: 07/05/2021

Uinta Basin

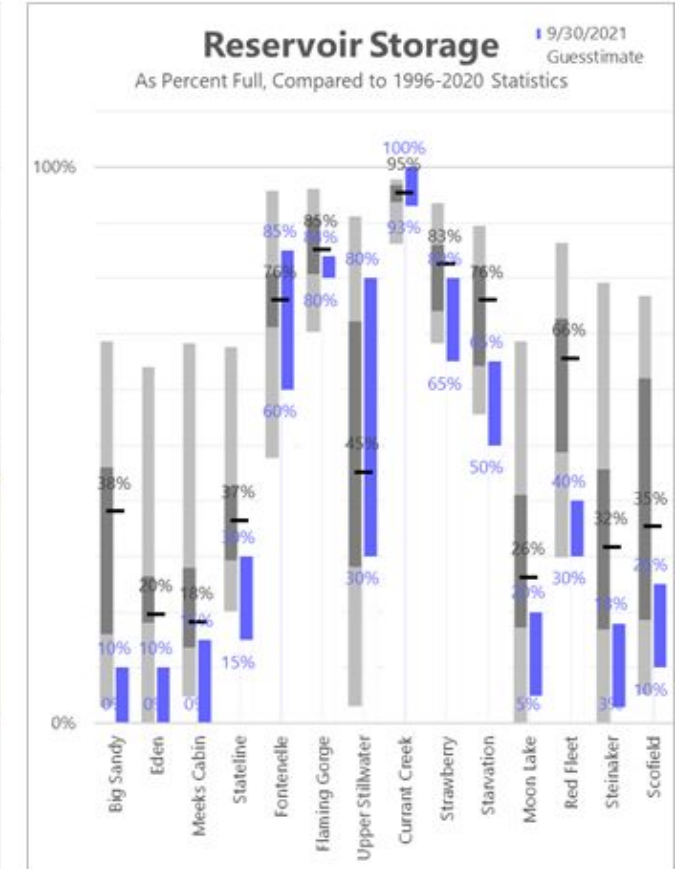


Data Current as of: 07/05/2021

Current



Forecast



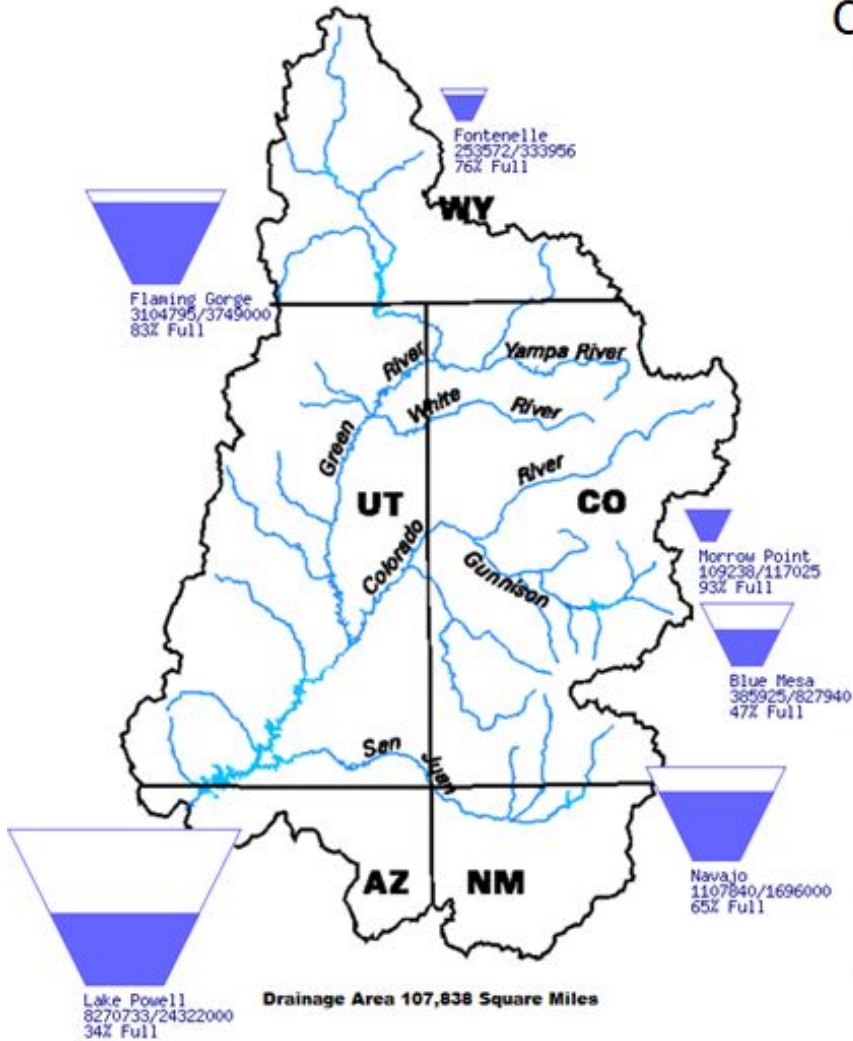
Price and San Rafael River Basins



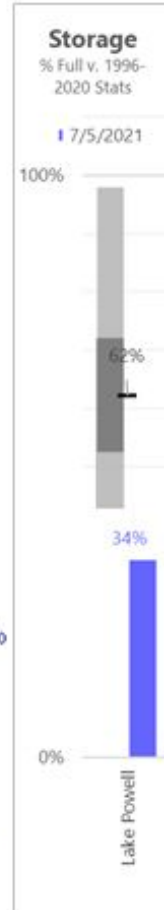
Reservoir Levels

Data Current as of:
07/05/2021

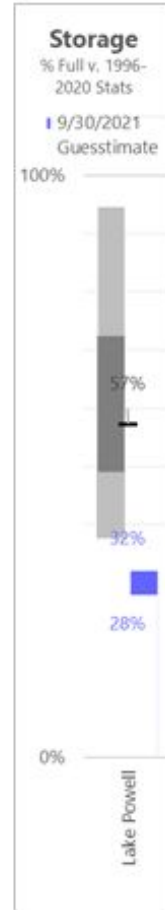
Upper Colorado River Drainage Basin



Current

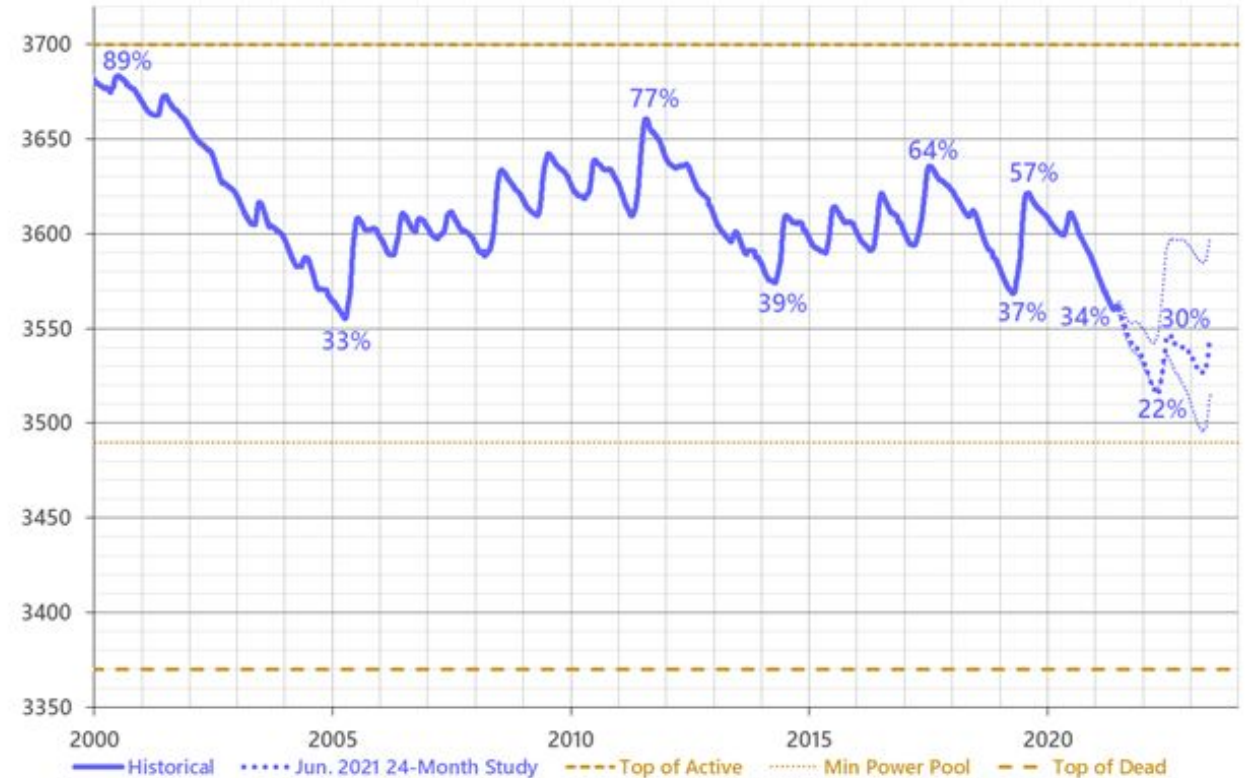


Forecast



Lake Powell

Elevation in feet



Agency - Bureau of Reclamation
Presenter - Gary Henrie



Weather Forecast Office Utah Day 1-7 Outlook



HEAT WAVE ON THE WAY

95-105 DEGREE DAYS • WARM NIGHTS PROVIDE LIMITED RELIEF

HYDRATE

Drink plenty of water, avoid alcohol and caffeine which speed up dehydration

PLAN

Avoid or reschedule outdoor activities/work

PROTECT

Wear light-colored clothing, a hat, and sunscreen

DON'T FORGET

Never leave kids or pets in a vehicle - no matter how brief

DON'T IGNORE

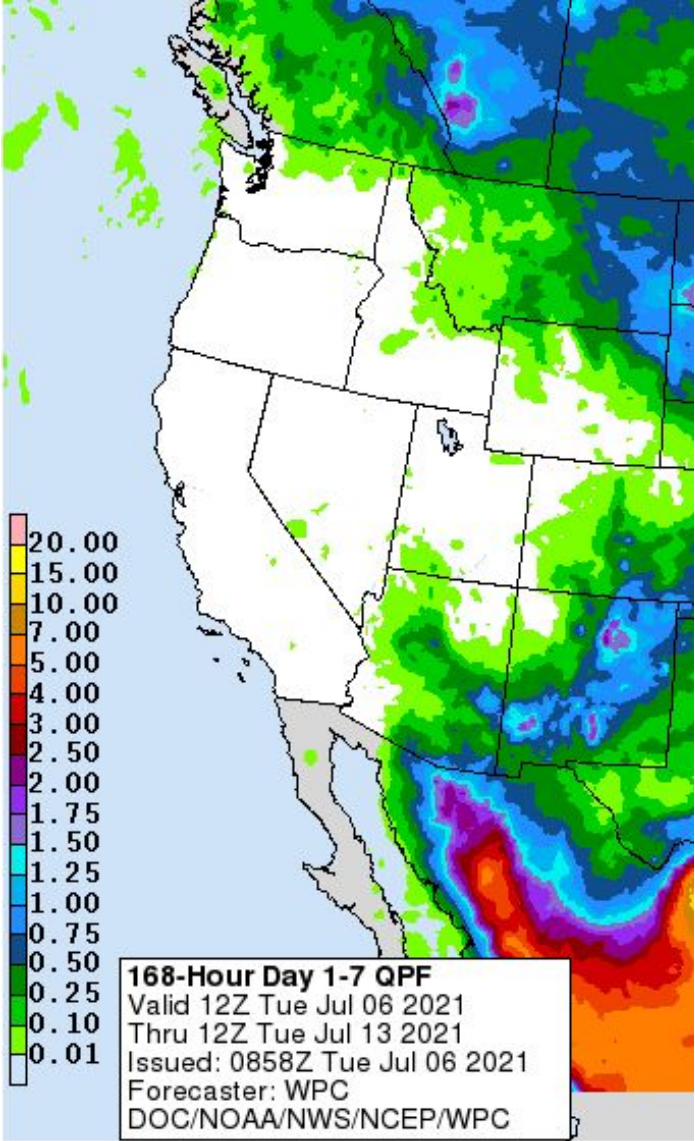
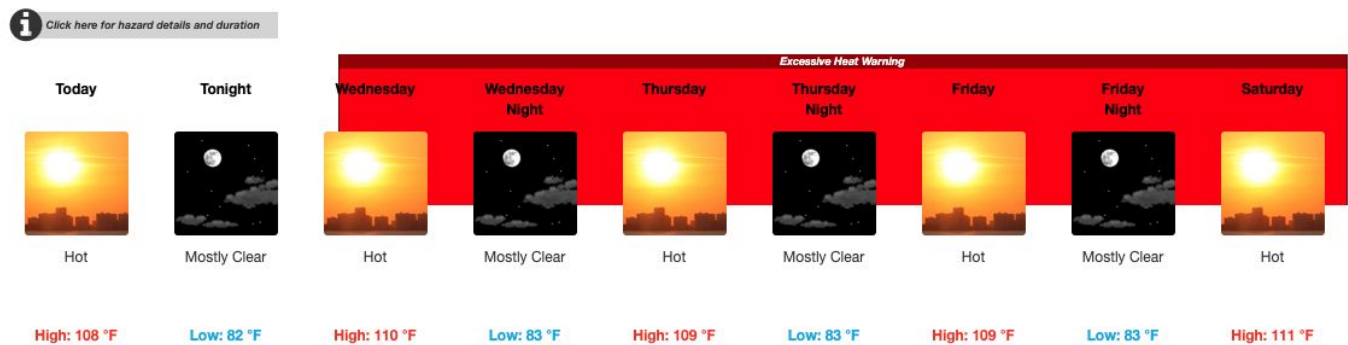
Signs of heat-related illness: dizziness, heavy sweating, cramps, cool and clammy skin

STAY SAFE DURING THE HEAT

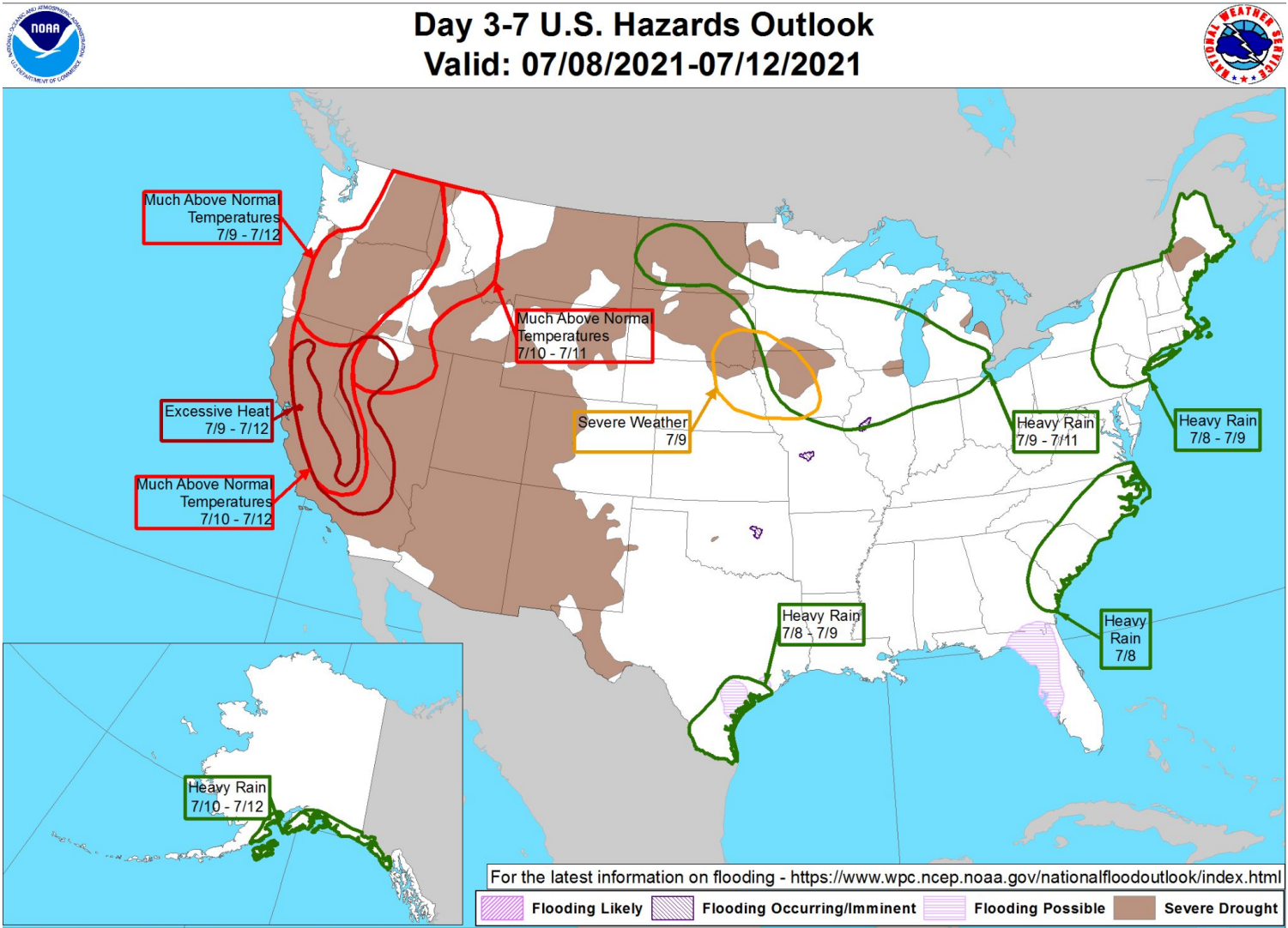
Salt Lake City, UT
WWW.WEATHER.GOV/HEAT

July 4, 2021

Saint George UT



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

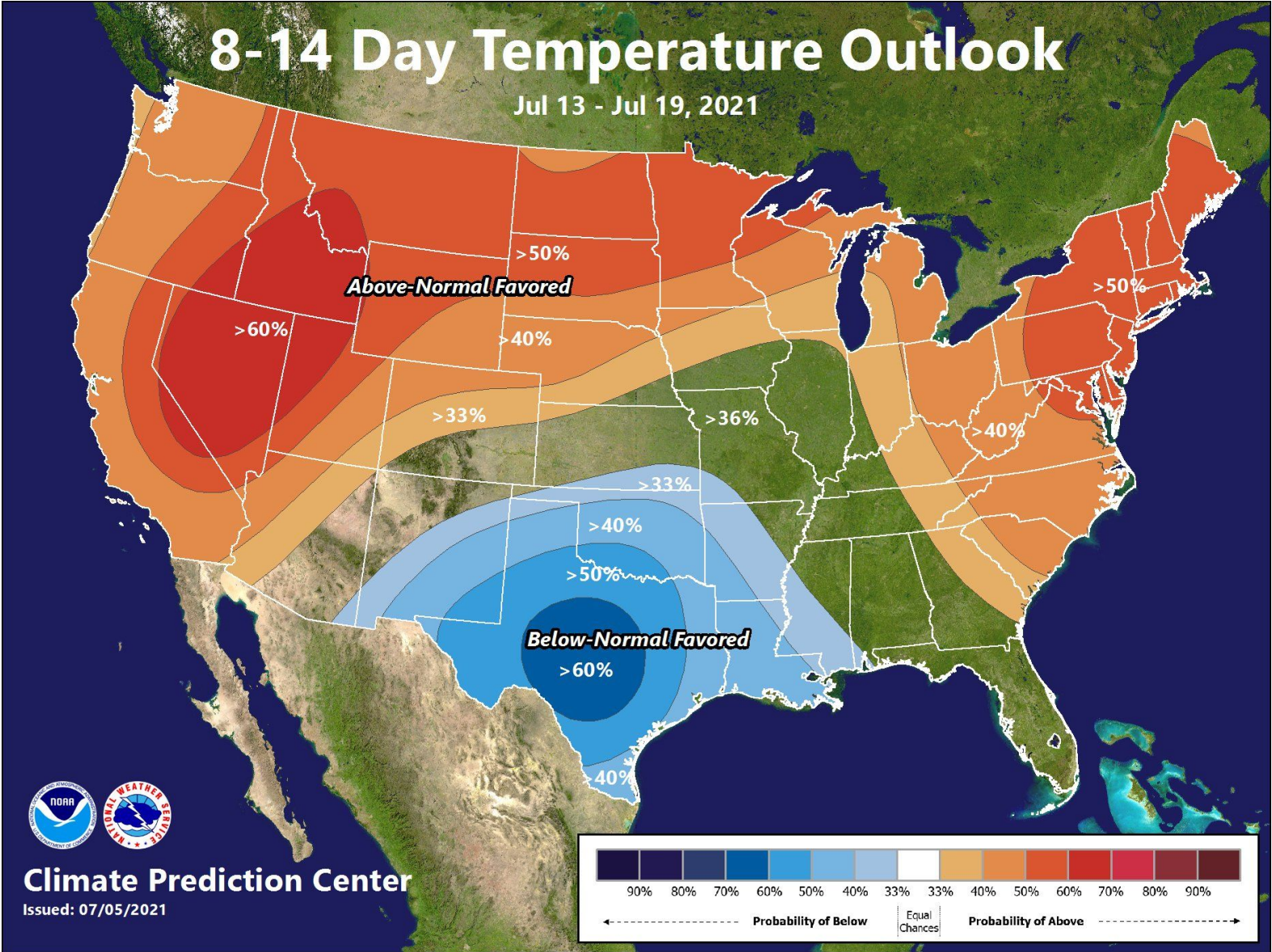


Weather Prediction Center

Made: 07/05/2021 3PM EDT

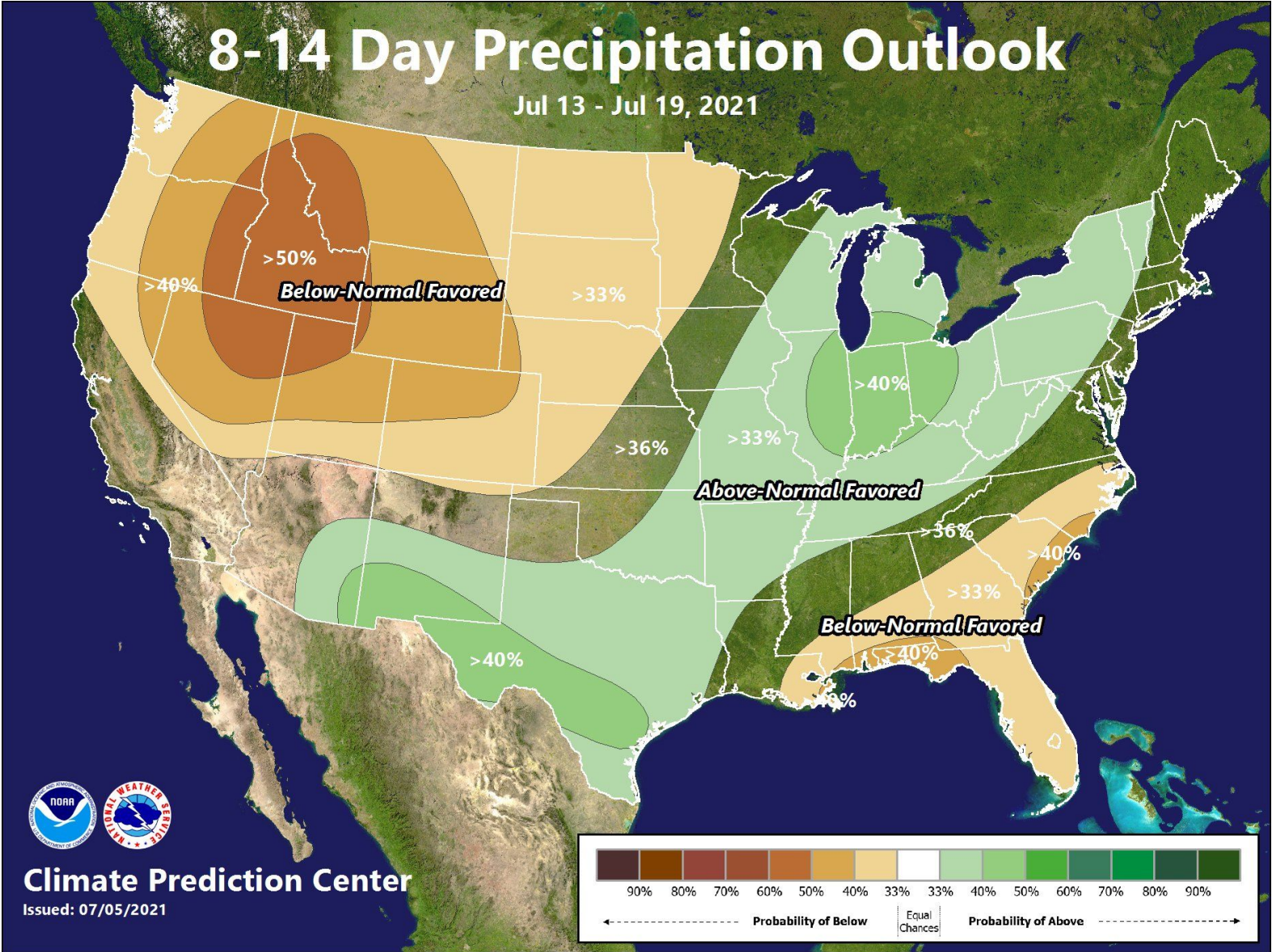
Follow us:  www.wpc.ncep.noaa.gov

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



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

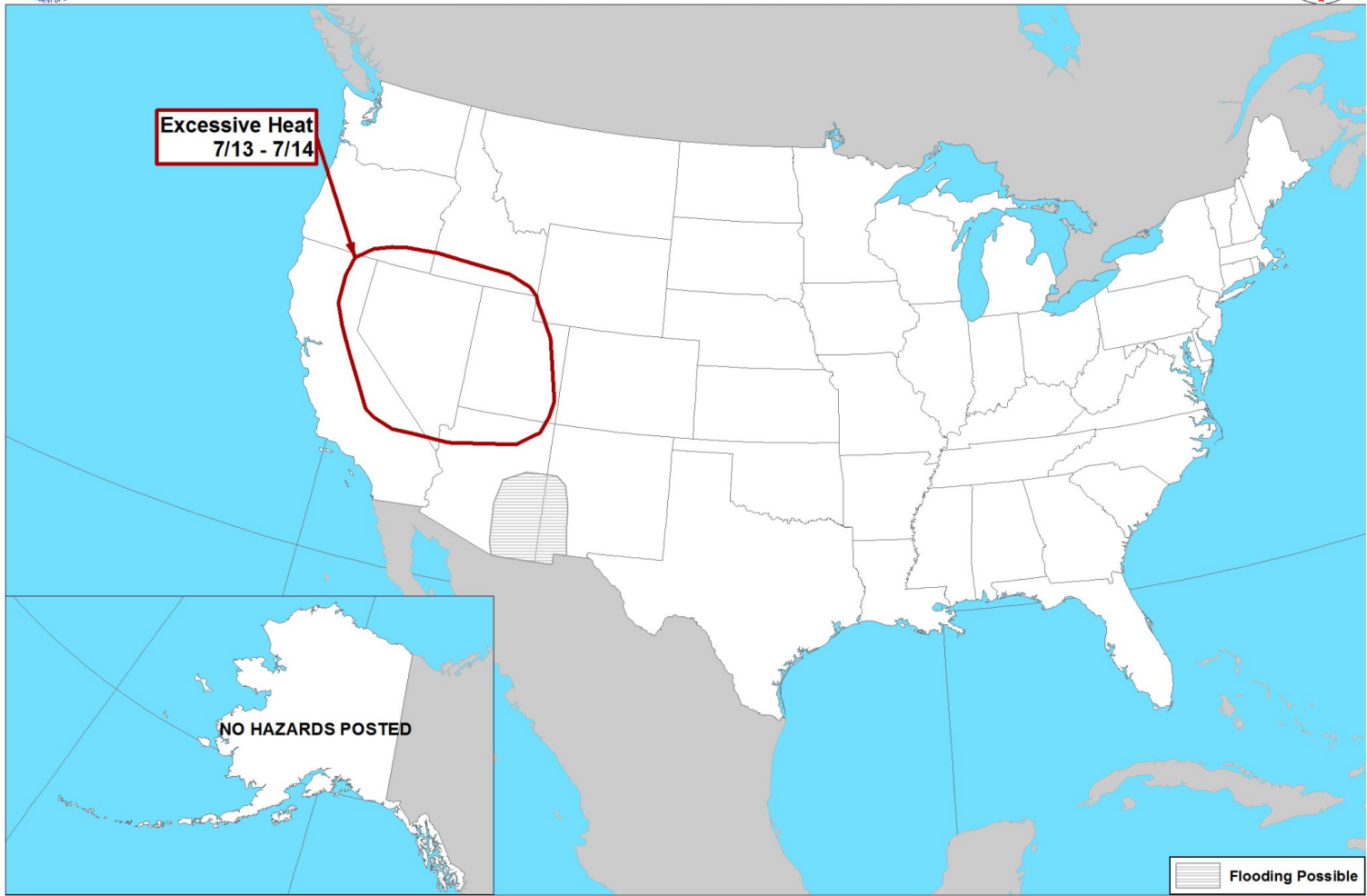
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



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



Day 8-14 U.S. Hazards Outlook
Valid: 07/13/2021-07/19/2021

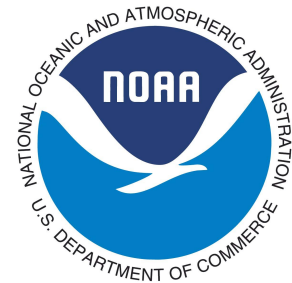


Climate Prediction Center
Made: 07/05/2021 3PM EDT

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www.cpc.ncep.noaa.gov



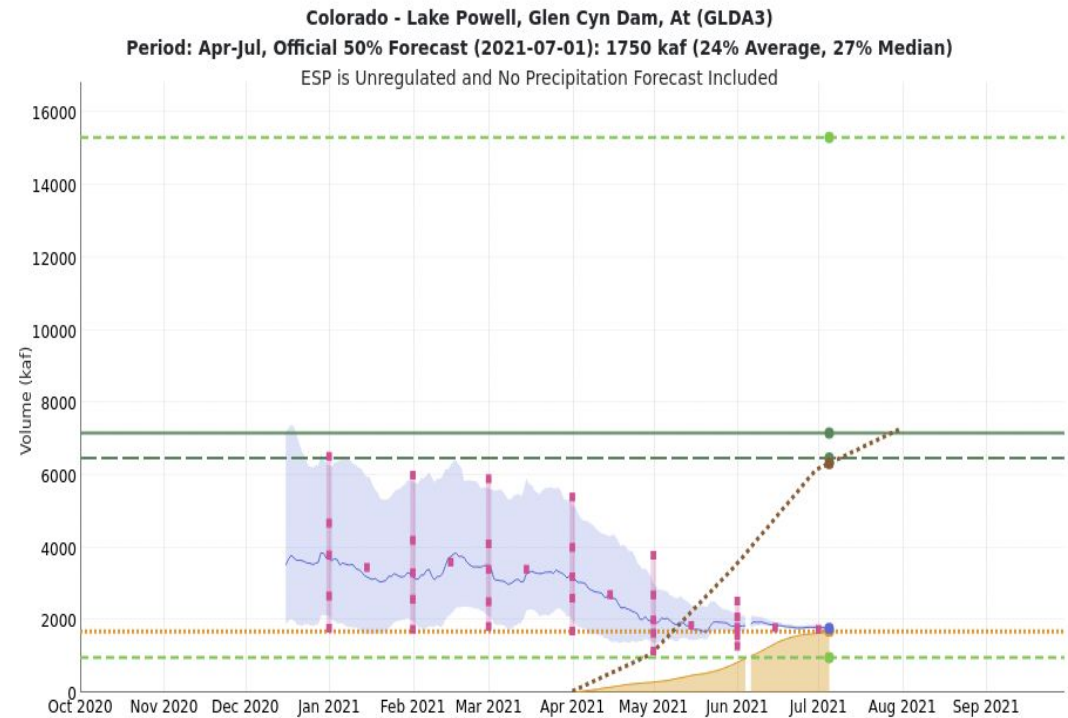
CBRFC/NOAA - 2021 Water Supply Forecasts / Runoff



A-J WS Vol Fcsts plus June Flows, as % of Average

Summary of conditions at:

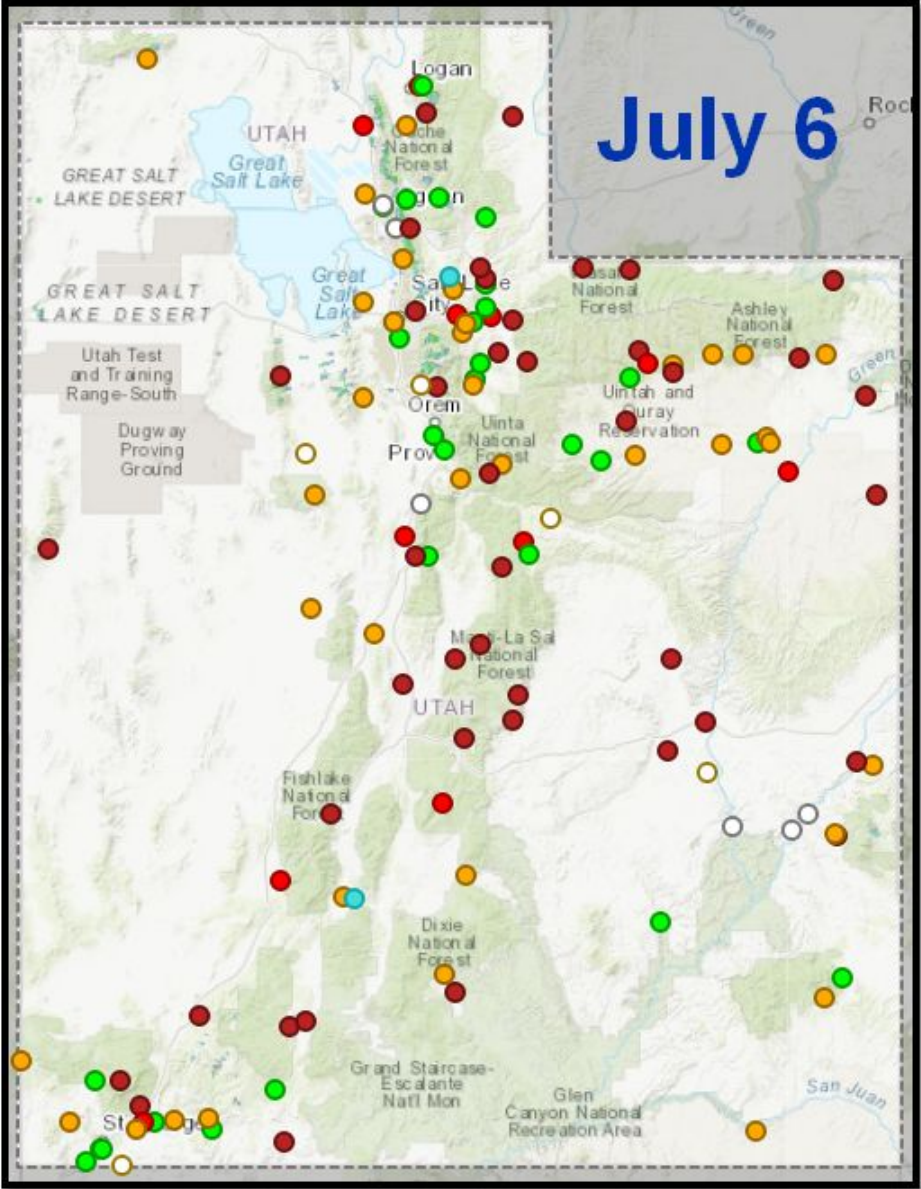
Weber Headwater	40%, 25%
Bear Headwater	50%, 30%
Six Creeks LD Resv	40%, 20%
Utah Lake	25%, 30%
Sevier - Hatch	30%, 25%
Green River FG	36%, 38%
San Juan Bluff	43%, 38%
Lake Powell	25%, 30%



2021/07/05:
Max 1984: 15316.11
Min 2002: 963.96
Average: 7160
Median: 6470
Observed Accumulation: 1690
Observed Total: 1690
Normal Accumulation: 6320
ESP: 1770

Near to or just above record low volumes for April - July Period across the whole of Utah, especially in lower elevation drainages.

Current Streamflows



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

0th percentile (minimum)

<10th percentile

10th – 24th percentile

25th – 75th percentile

76th – 90th percentile

>90th percentile

100th percentile (maximum)

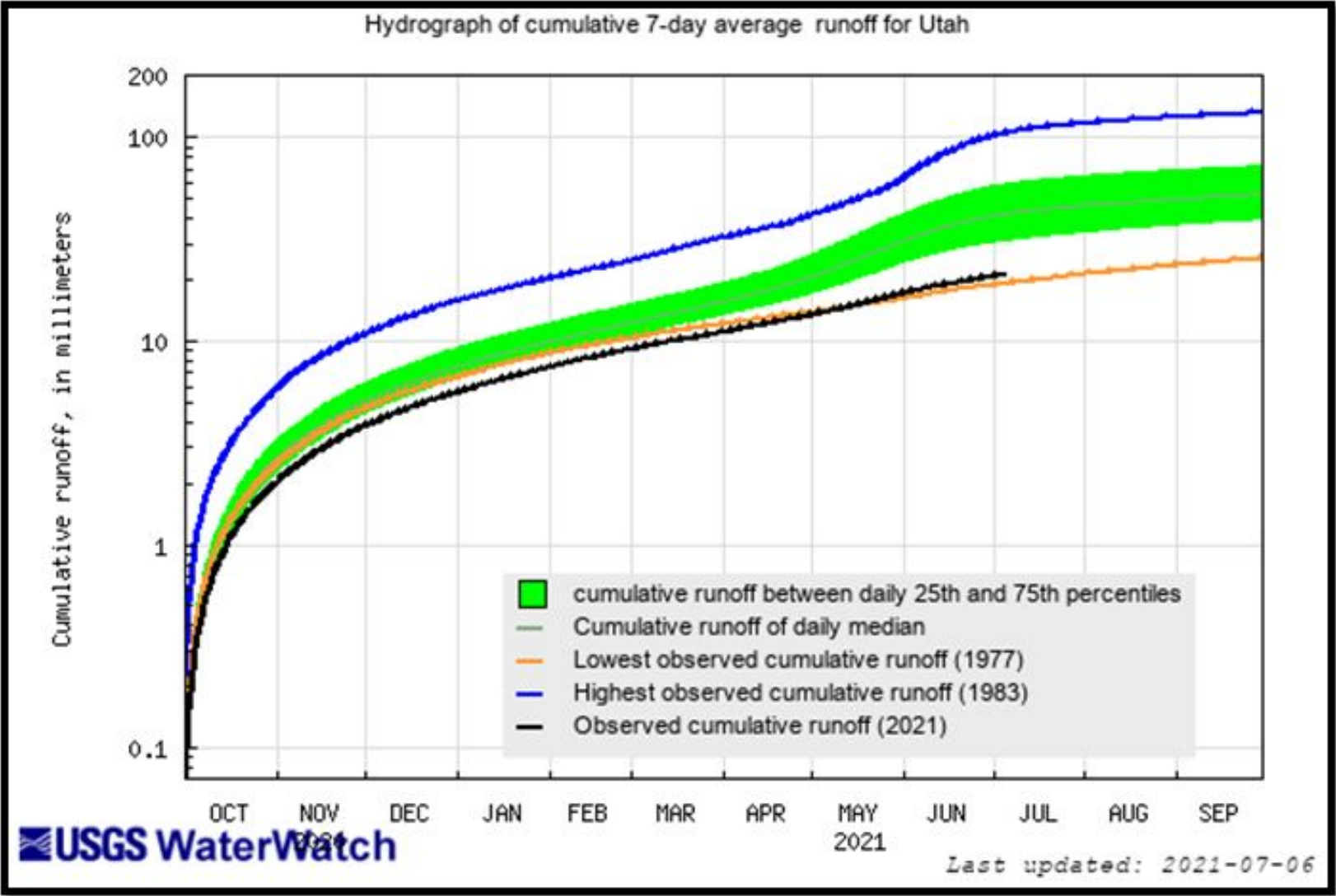
0 cubic feet per second

See Comments

See Comments

Streamflow Summary			
STATION COUNTS BY FLOW STATUS			
All-time low for this day-of-year	11	8.3%	
Much below normal for this day-of-year	43	32.3%	
Below normal for this day-of-year	36	27.1%	
Normal for this day-of-year	30	22.6%	
Above normal for this day-of-year	2	1.5%	
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%	

Statewide Cumulative Streamflow

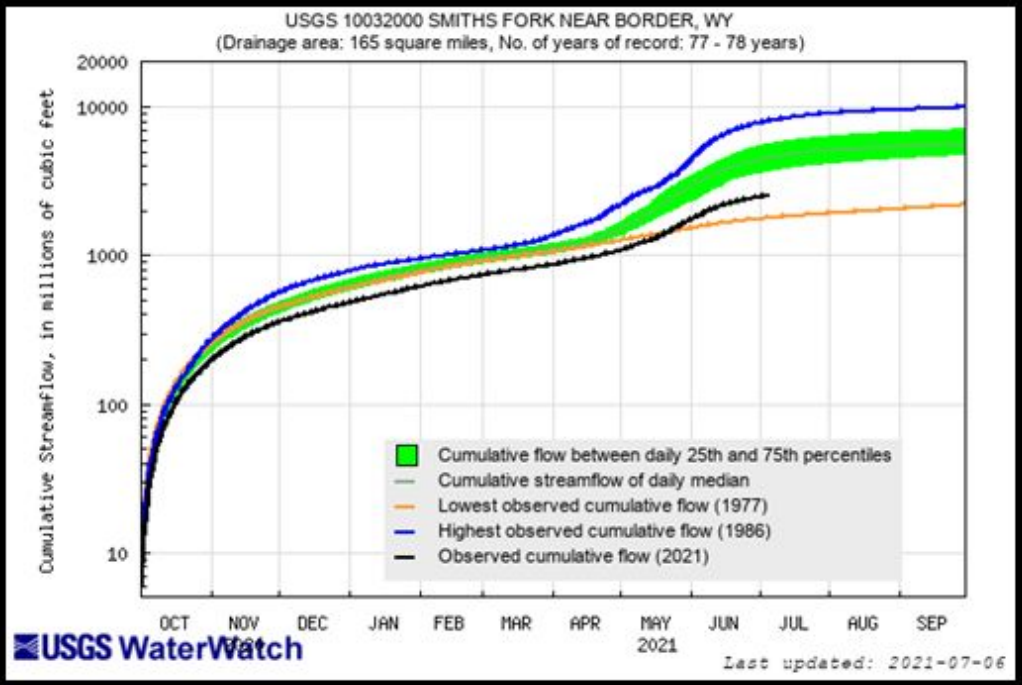


☐ Cumulative 7-day average runoff for water year 2021 is near the lowest on record

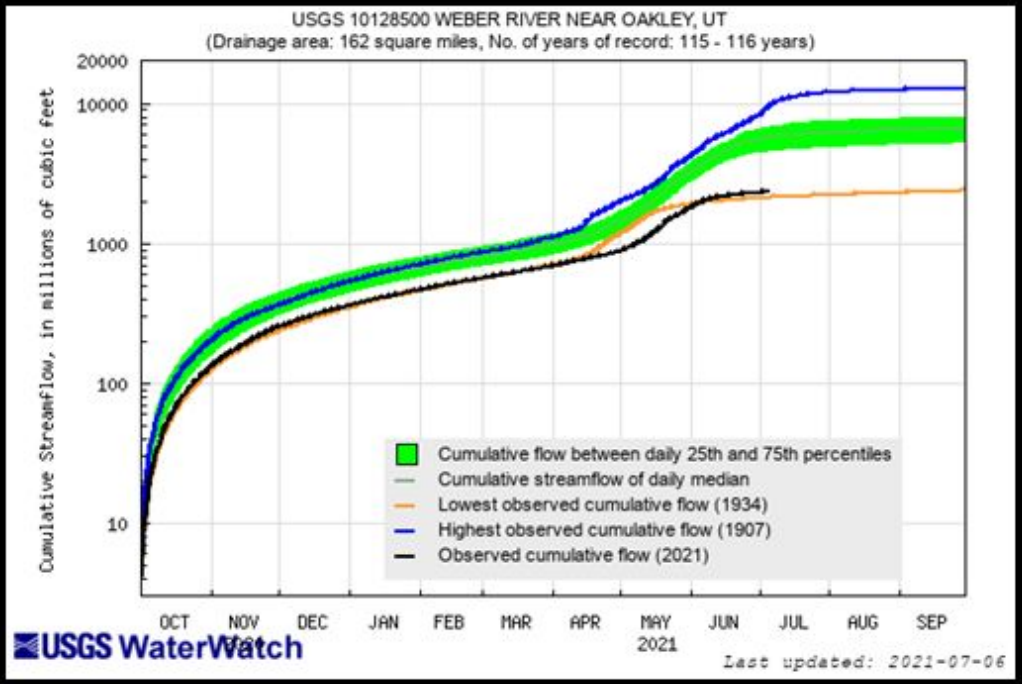
Cumulative Streamflow at Long Term Sites



Agency - U.S. Geological Survey
Presenter - Ryan Rowland



Today: 172 cfs
Mean daily: 368 cfs



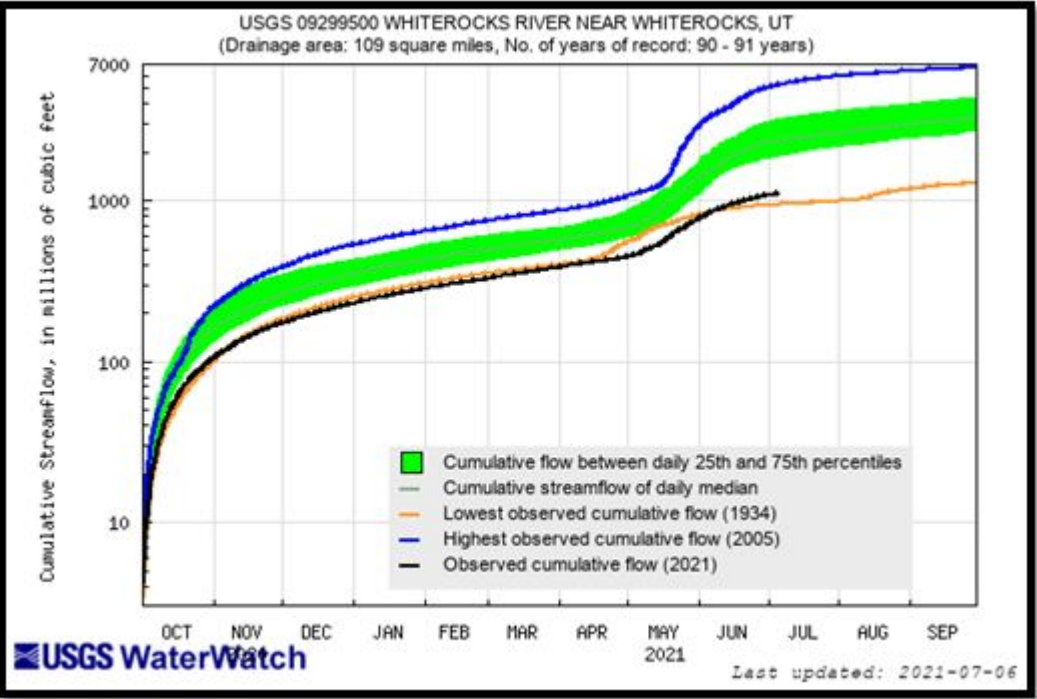
Today: 73.9 cfs
Mean daily: 383 cfs



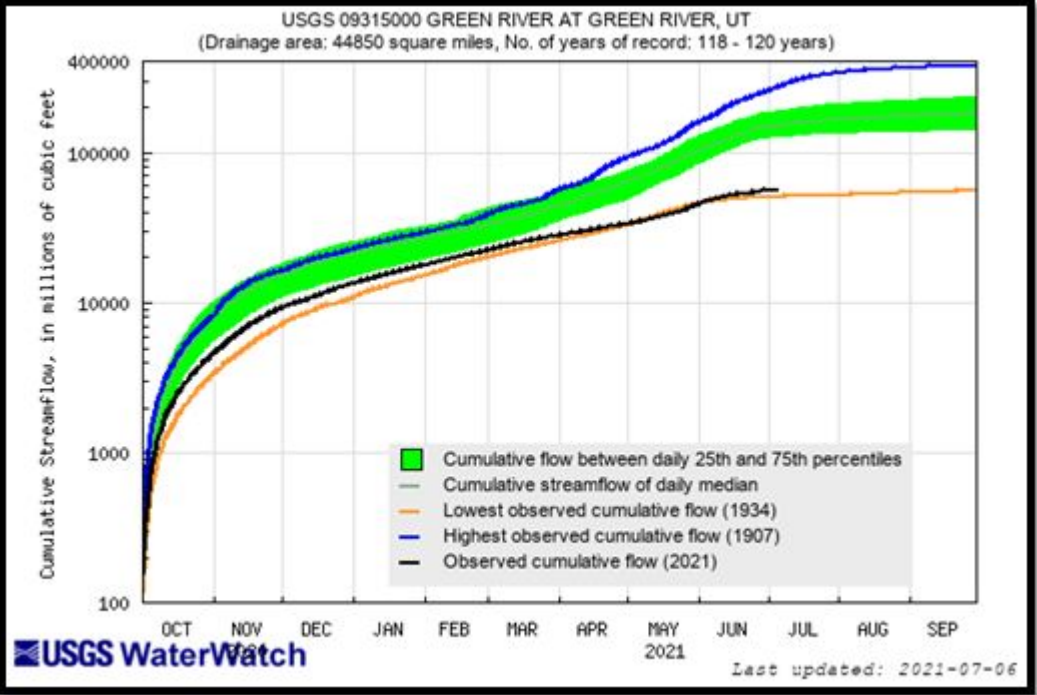
Cumulative Streamflow at Long Term Sites



Agency - U.S. Geological Survey
Presenter - Ryan Rowland



Today: 92.6 cfs
Mean daily: 216 cfs



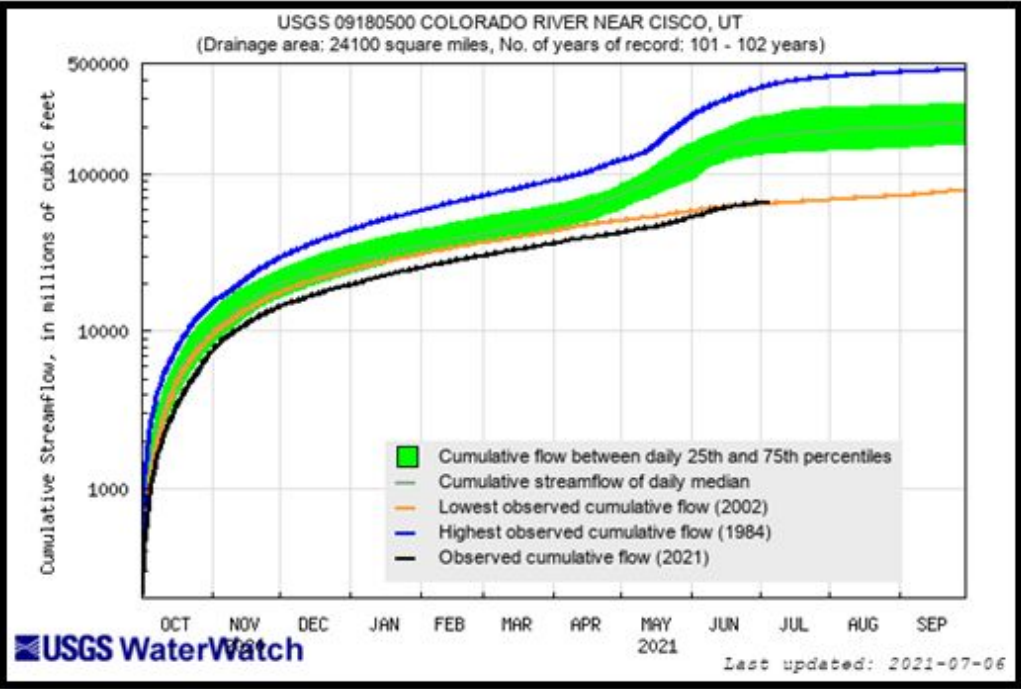
Today: 1,910 cfs
Mean daily: 10,400 cfs



Cumulative Streamflow at Long Term Sites

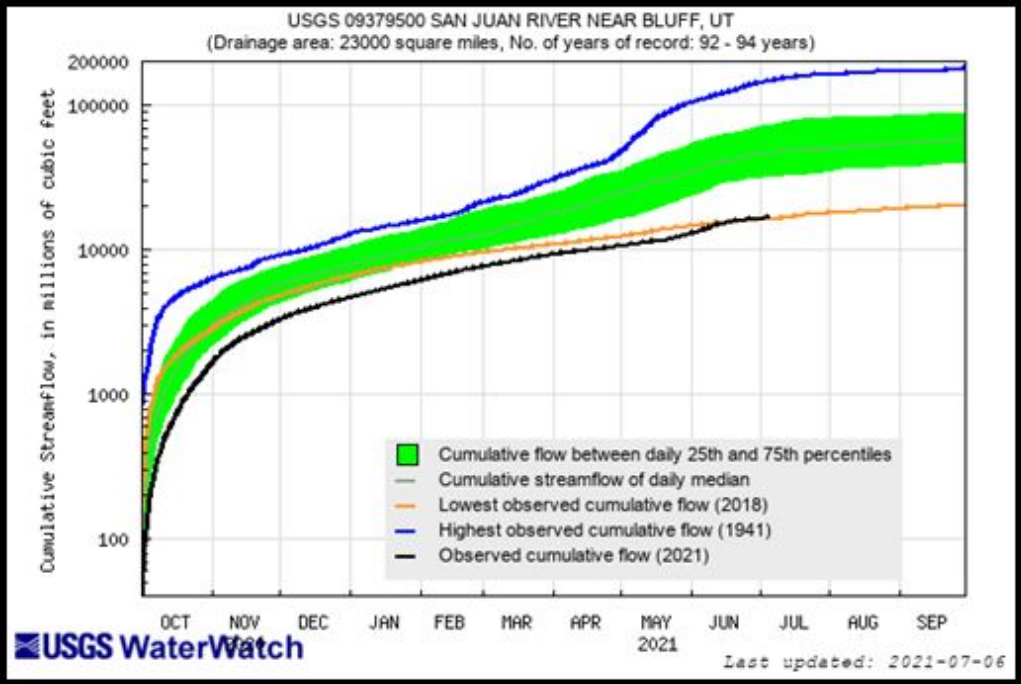


Agency - U.S. Geological Survey
Presenter - Ryan Rowland



Today: 2,760 cfs

Mean daily:
11,600 cfs

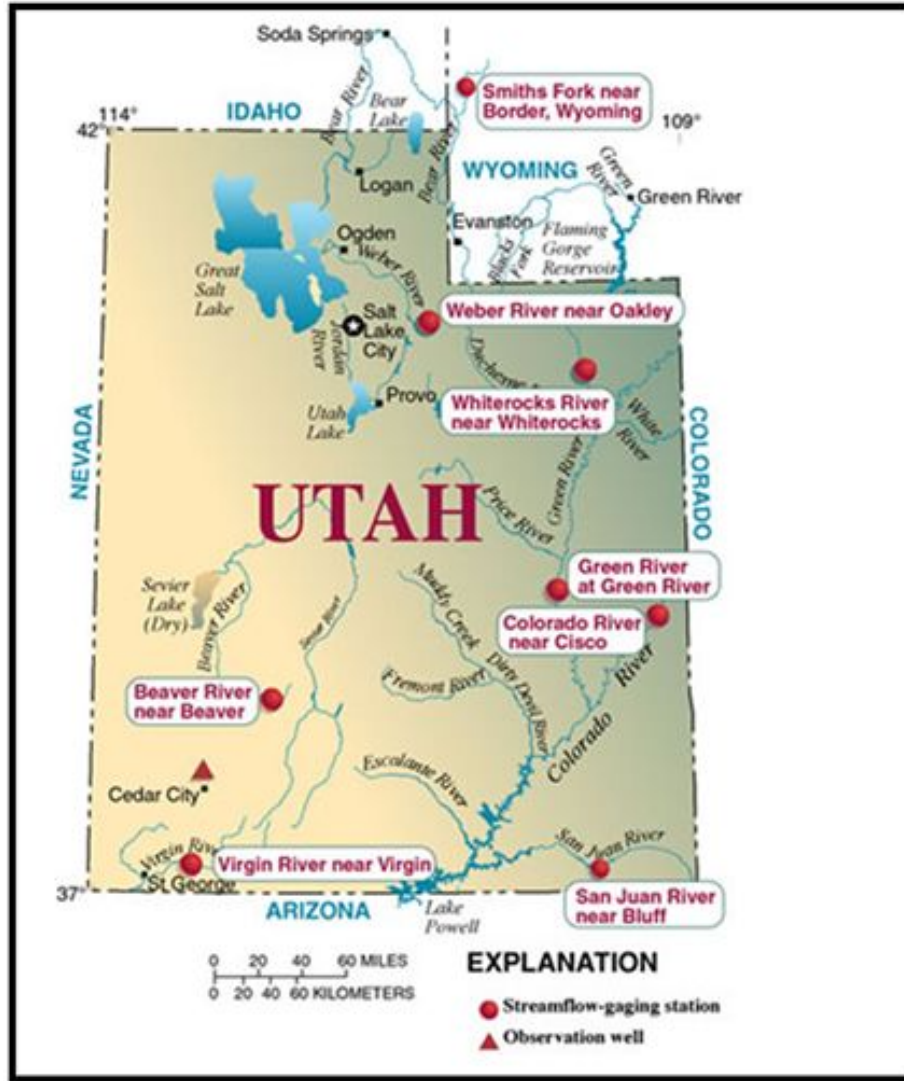


Today: 713 cfs

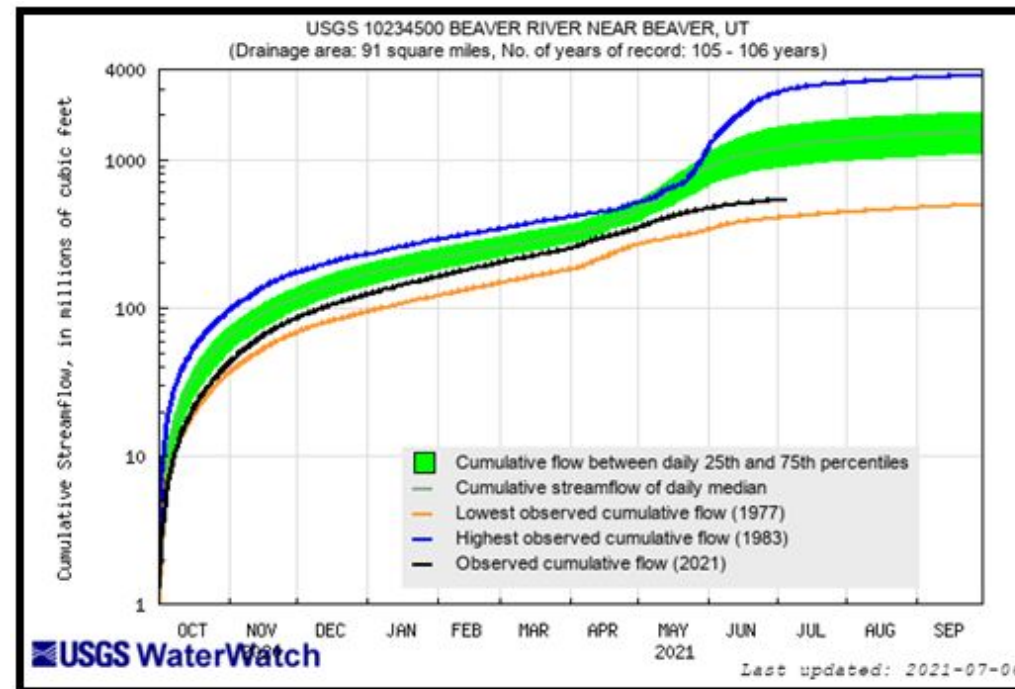
Mean daily:
2,819 cfs



Cumulative Streamflow at Long Term Sites

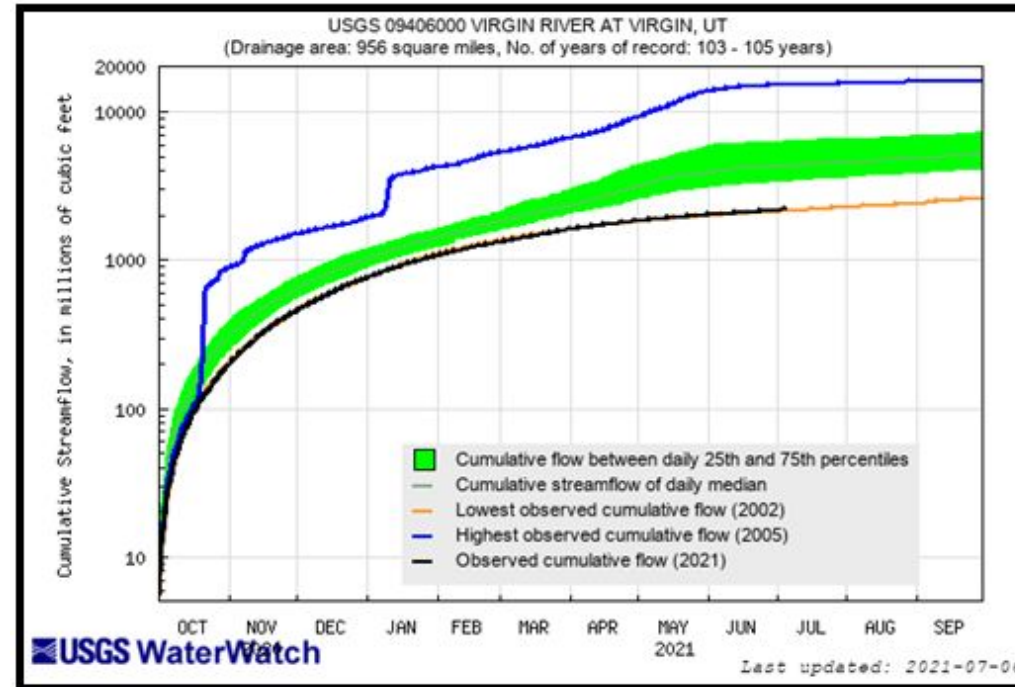


Agency - U.S. Geological Survey
Presenter - Ryan Rowland



Today: 9.2 cfs

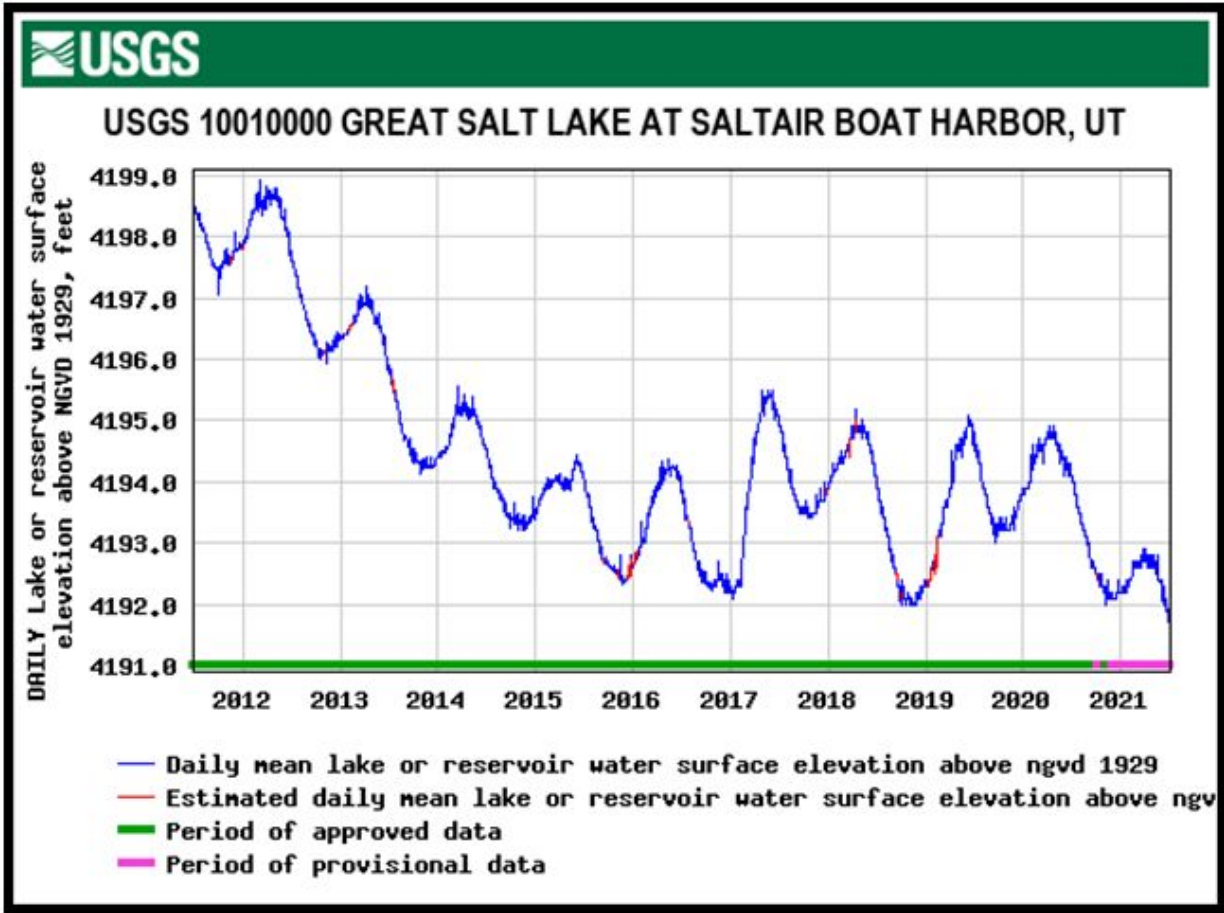
Mean daily:
75 cfs



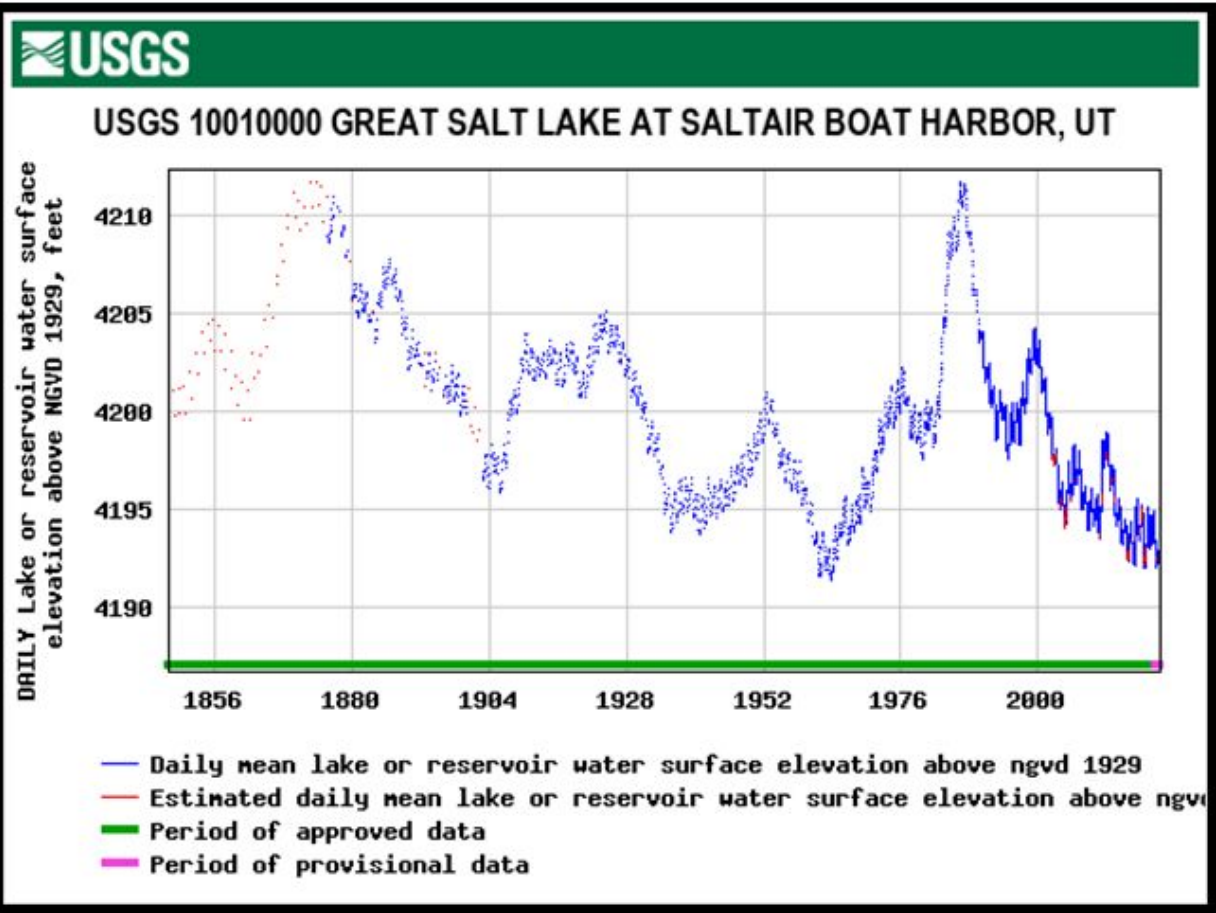
Today: 57.9 cfs

Mean daily:
90 cfs

Great Salt Lake Water Surface Elevation at Saltair



Today 4,191.7'

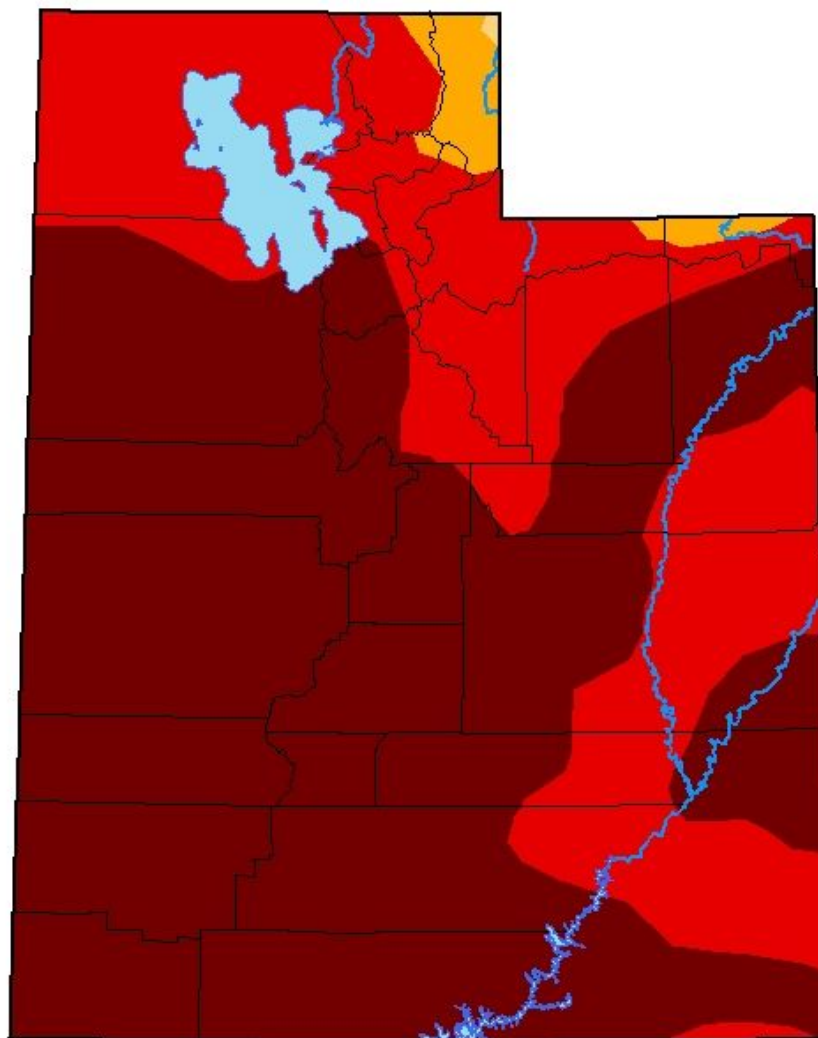


Historic low 4,191.35' (1963)

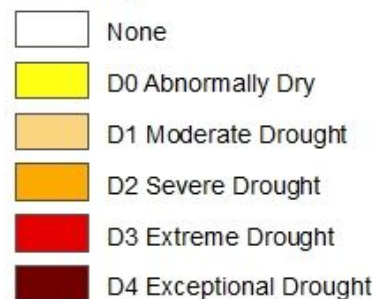
U.S. Drought Monitor

Utah

June 29, 2021
(Released Thursday, Jul. 1, 2021)
Valid 8 a.m. EDT



Intensity:



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:

Deborah Bathke
National Drought Mitigation Center



droughtmonitor.unl.edu