



Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors





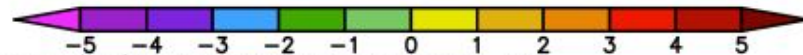
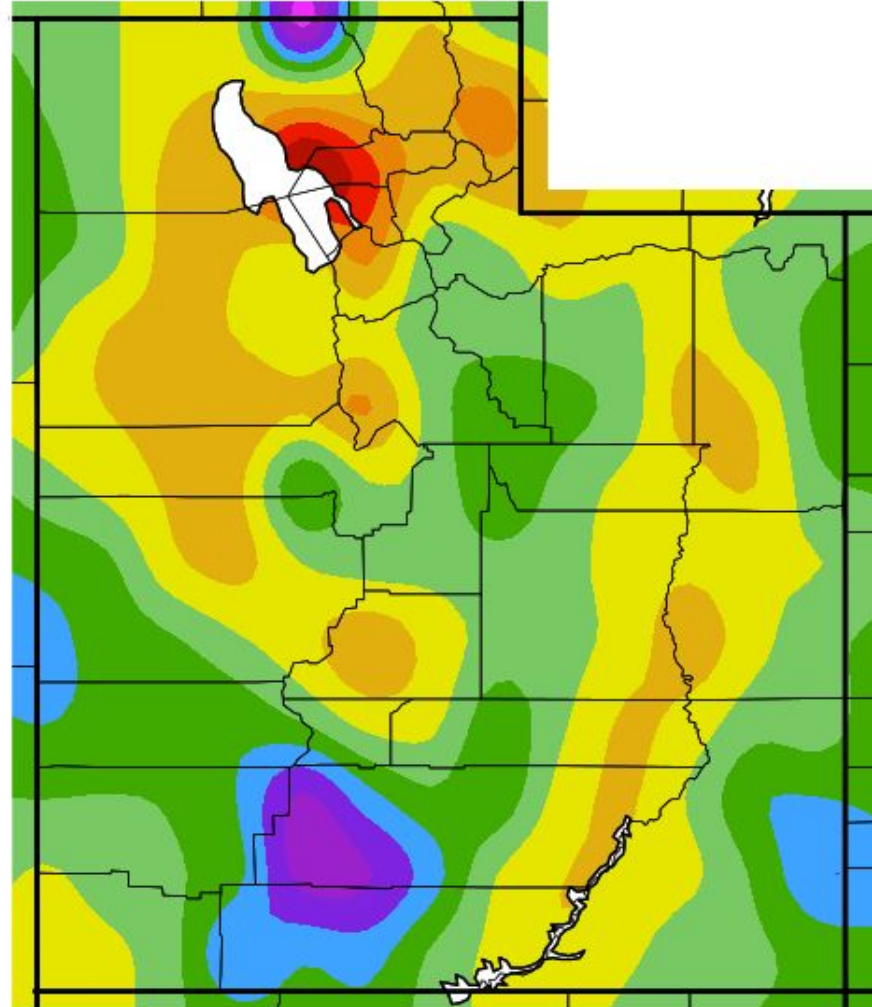
Utah Water Assessment & Conditions Monitoring Webinar

June 6, 2023



Max Temperature 14 day (Related to Average)

Av. Max. Temperature dep from Ave (deg F)
5/23/2023 – 6/5/2023

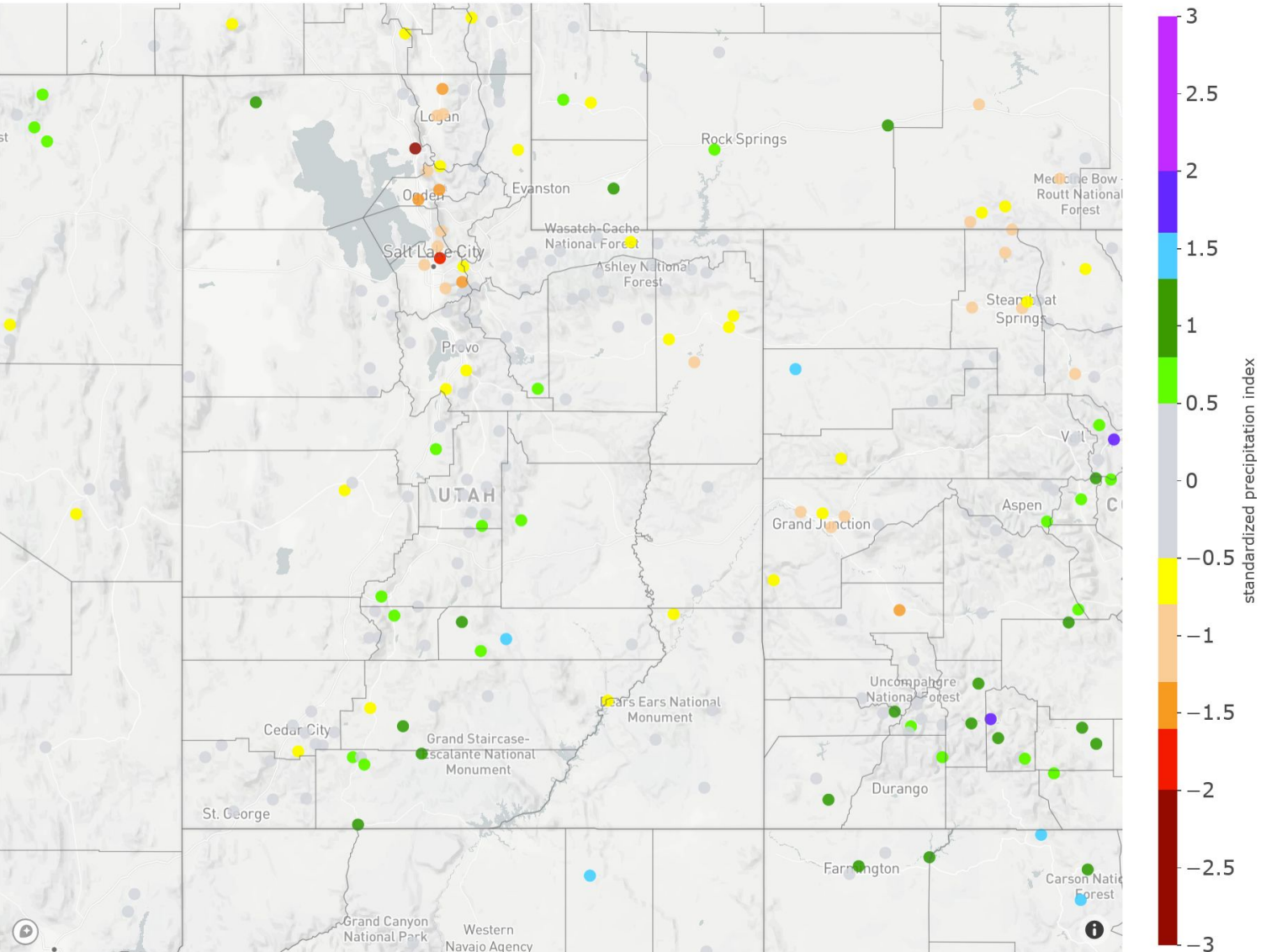


Generated 6/ 6/2023 at WRCC using provisional data.
NOAA Regional Climate Centers

Agency - Utah Climate Center
Presenter - Jon Meyer

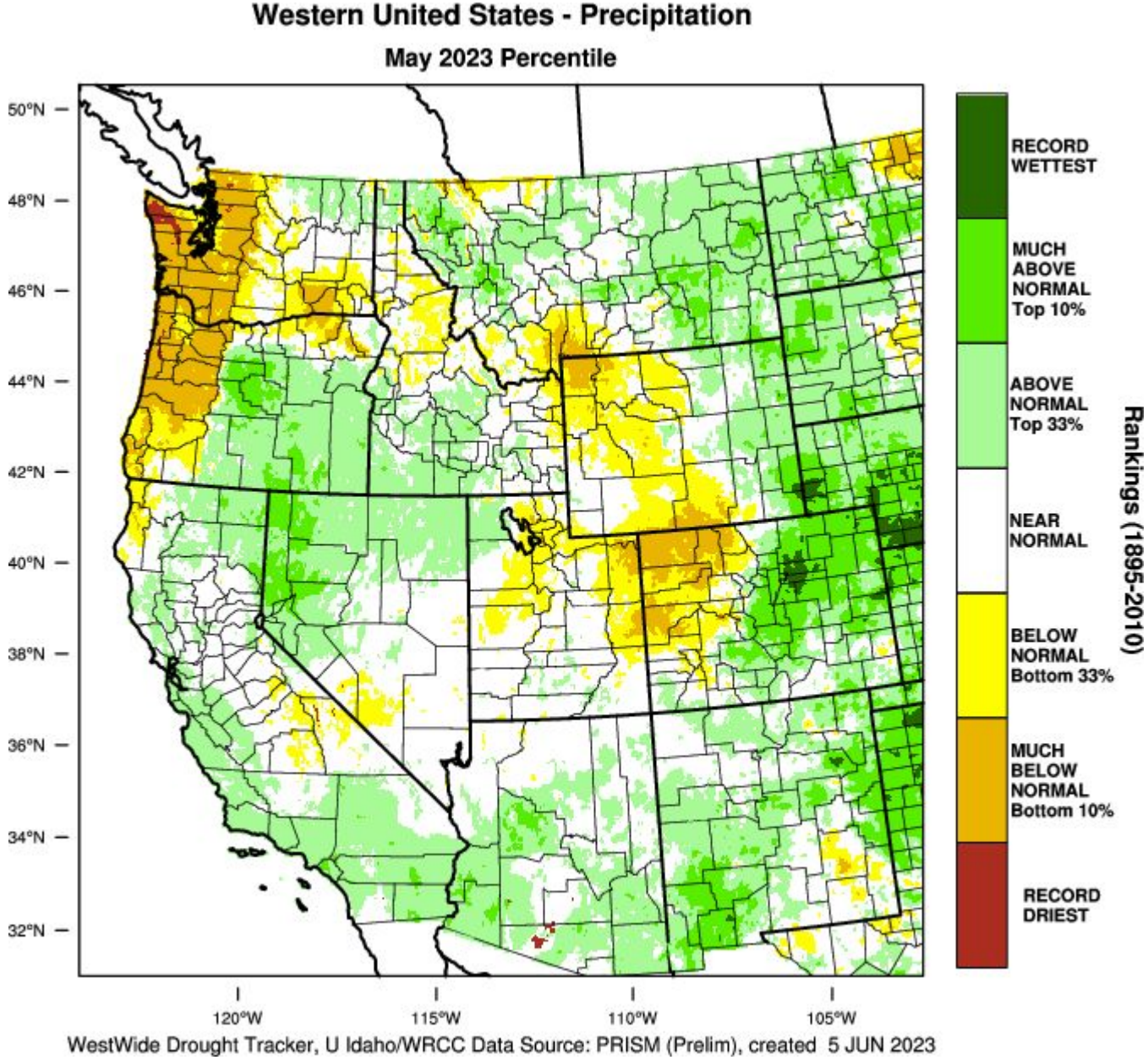
Precipitation 30-day SPI

30-day Standardized Precipitation Index: 2023/05/07 - 2023/06/05



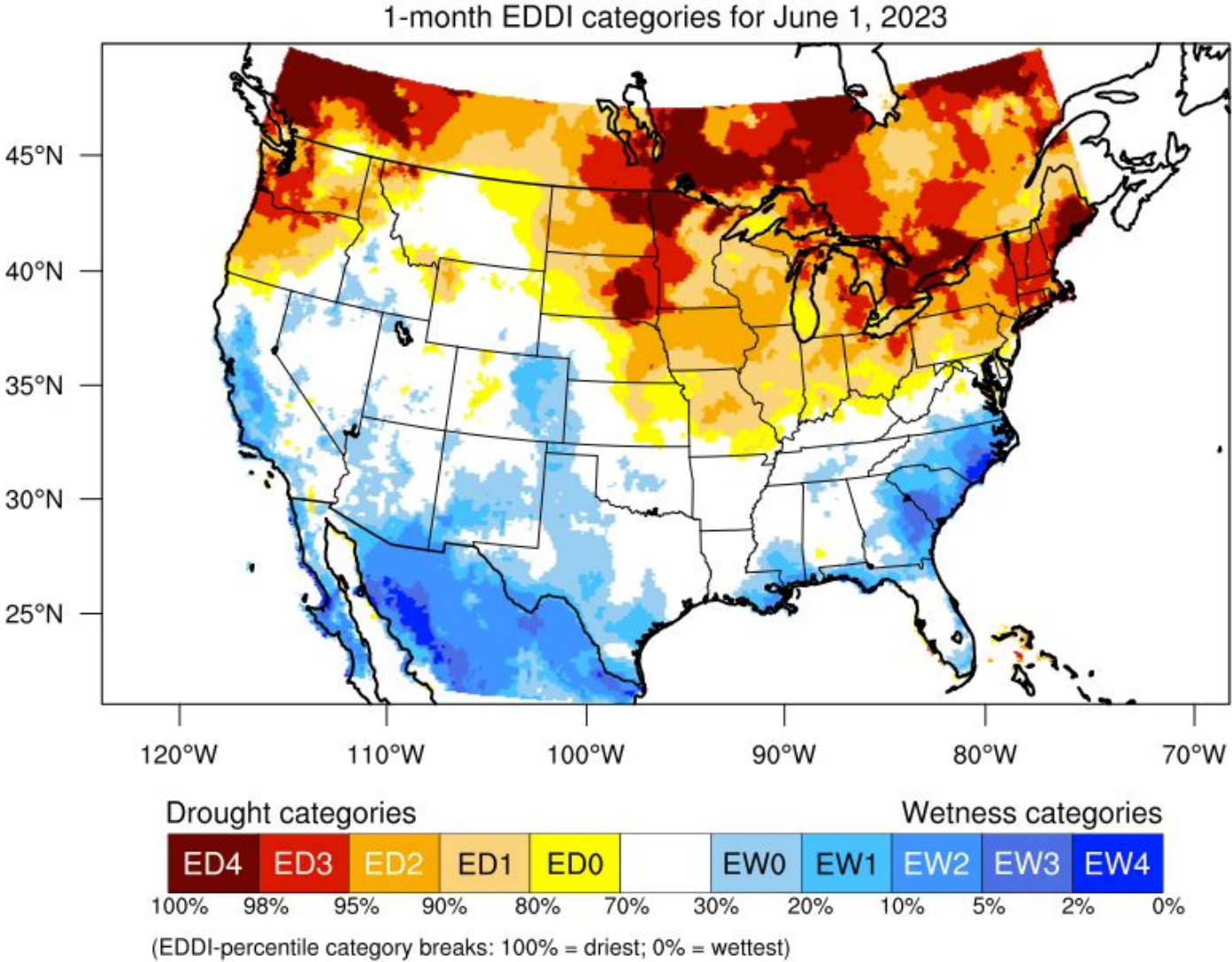
Agency - Utah Climate Center
Presenter - Jon Meyer

Precipitation May history (Percent of Average)



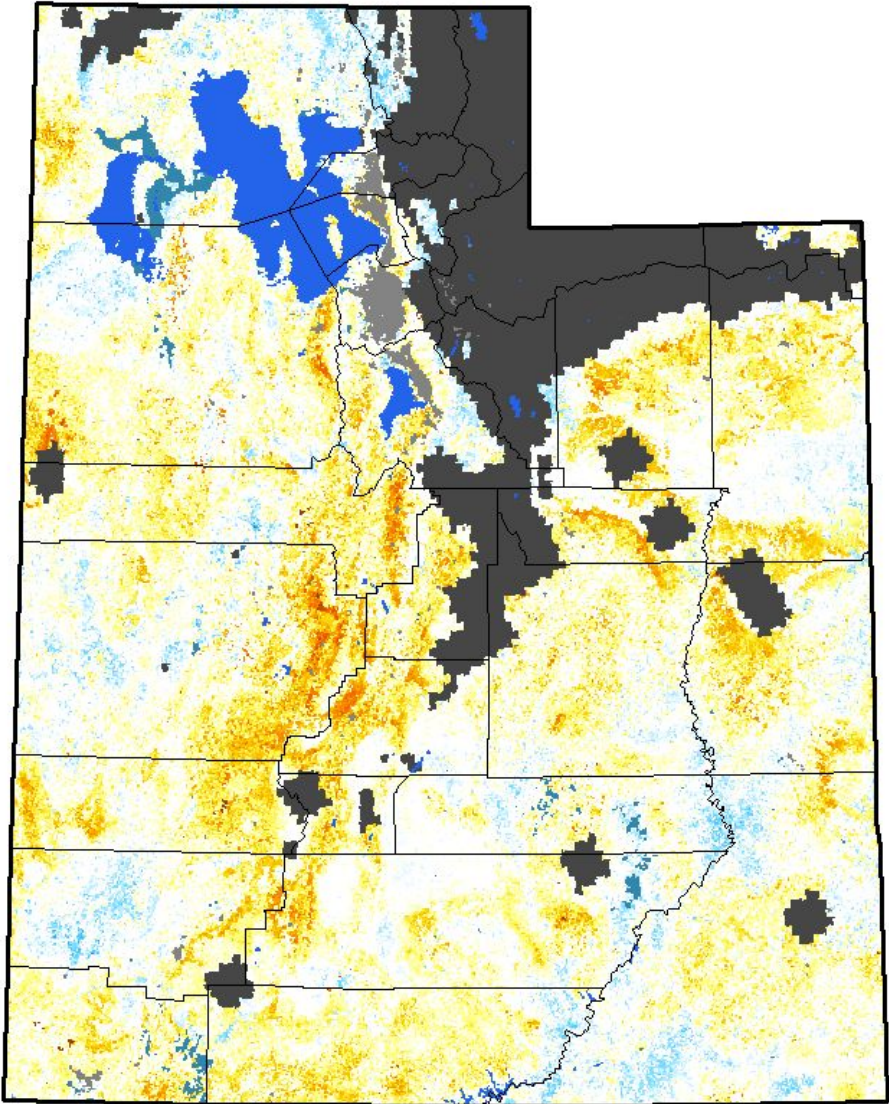
Agency - Utah Climate Center
Presenter - Jon Meyer

Temperature 30 day (Related to Average)



Generated by NOAA/ESRL/Physical Sciences Laboratory

Quick-DRI Drought Metric



Conditions Relative to
4-Week Historical Normals

- Wetter
- Near Average
- Drier
- Out of Season
- Urban
- No Data
- Water

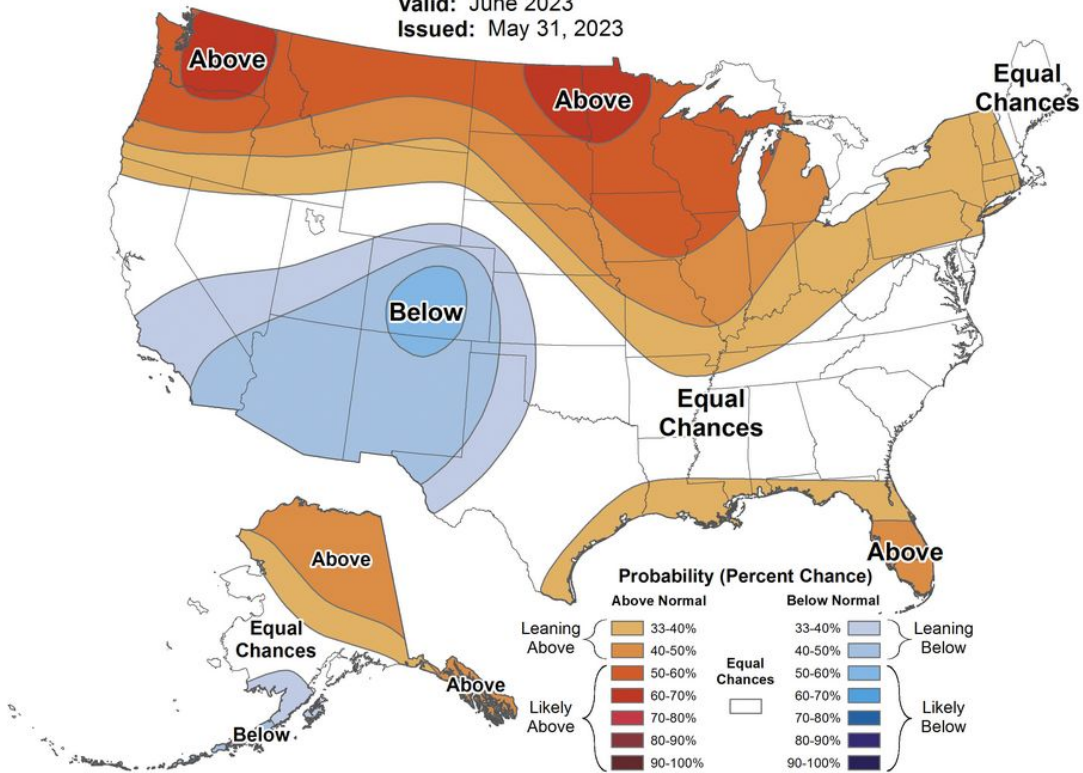
CPC Outlooks



Monthly Temperature Outlook



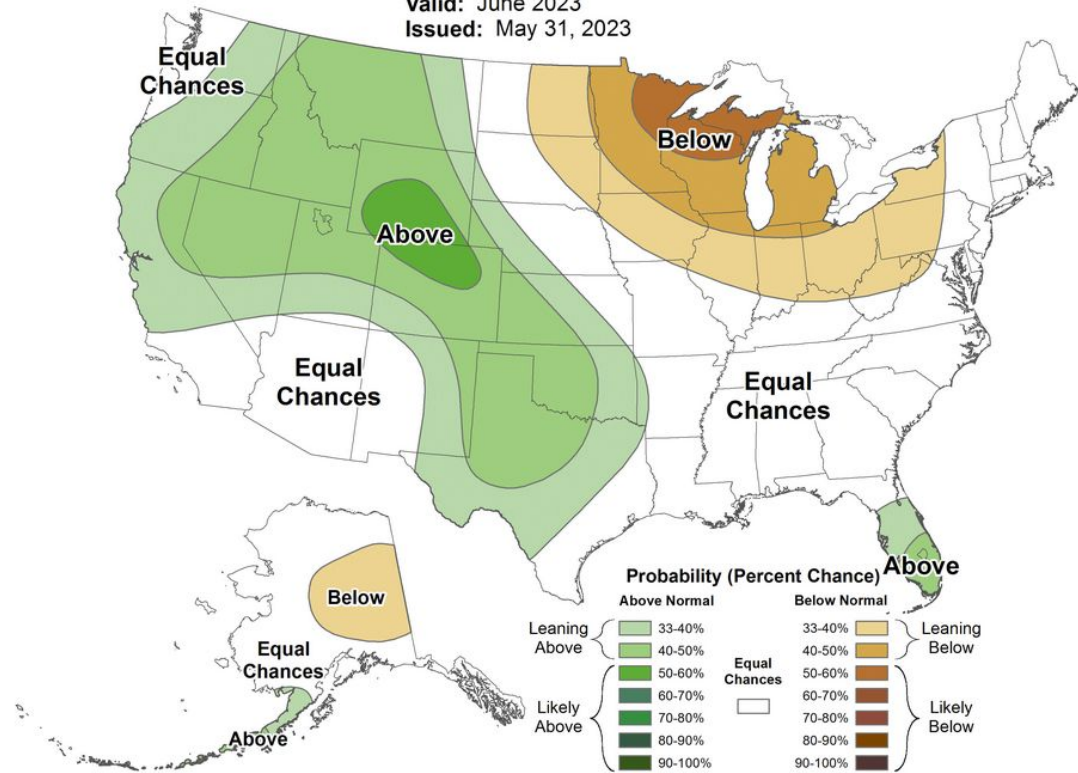
Valid: June 2023
Issued: May 31, 2023



Monthly Precipitation Outlook



Valid: June 2023
Issued: May 31, 2023



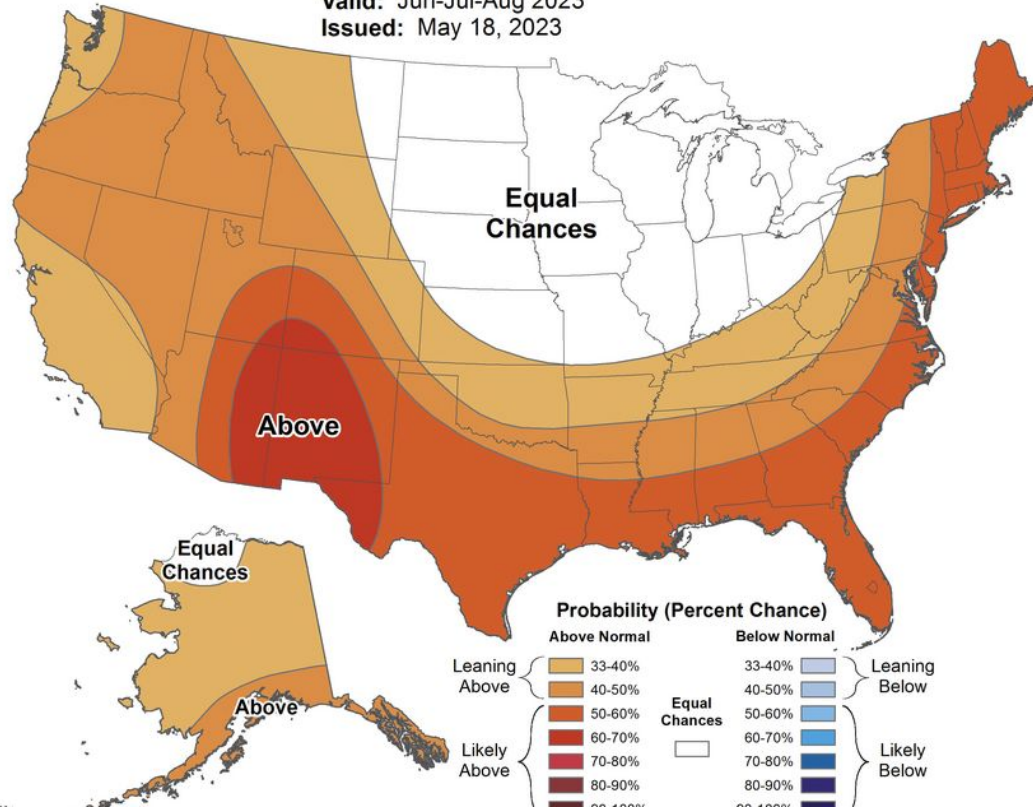
CPC Outlooks



Seasonal Temperature Outlook



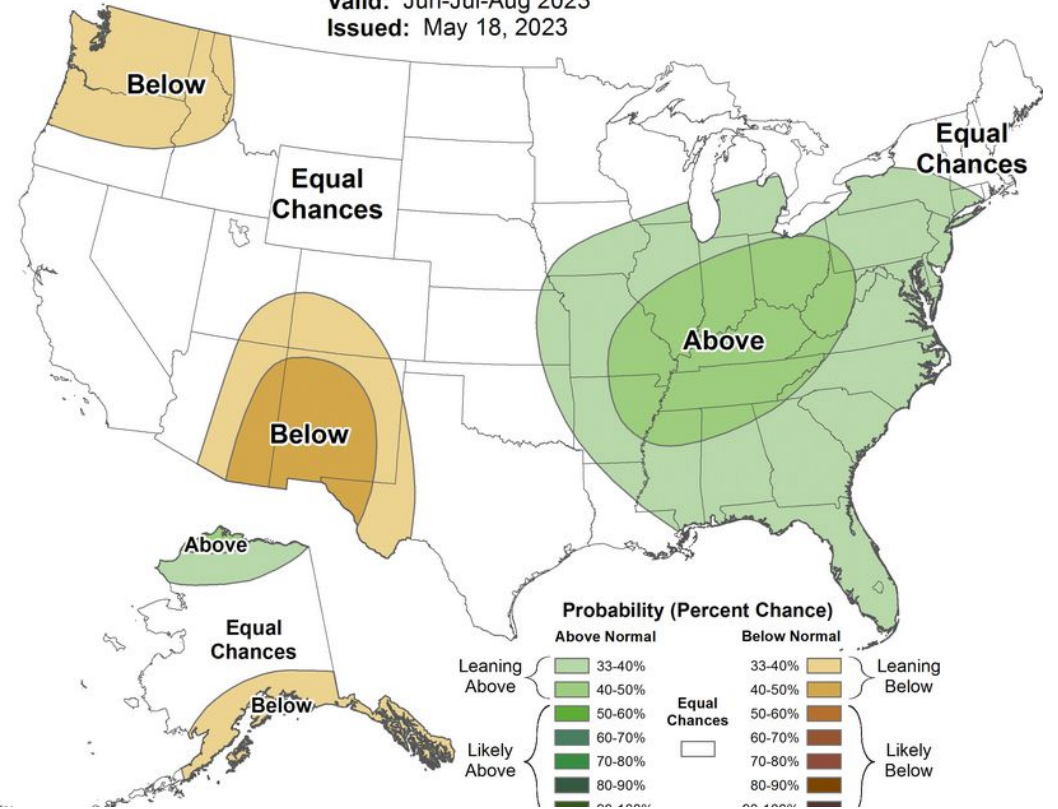
Valid: Jun-Jul-Aug 2023
 Issued: May 18, 2023



Seasonal Precipitation Outlook



Valid: Jun-Jul-Aug 2023
 Issued: May 18, 2023



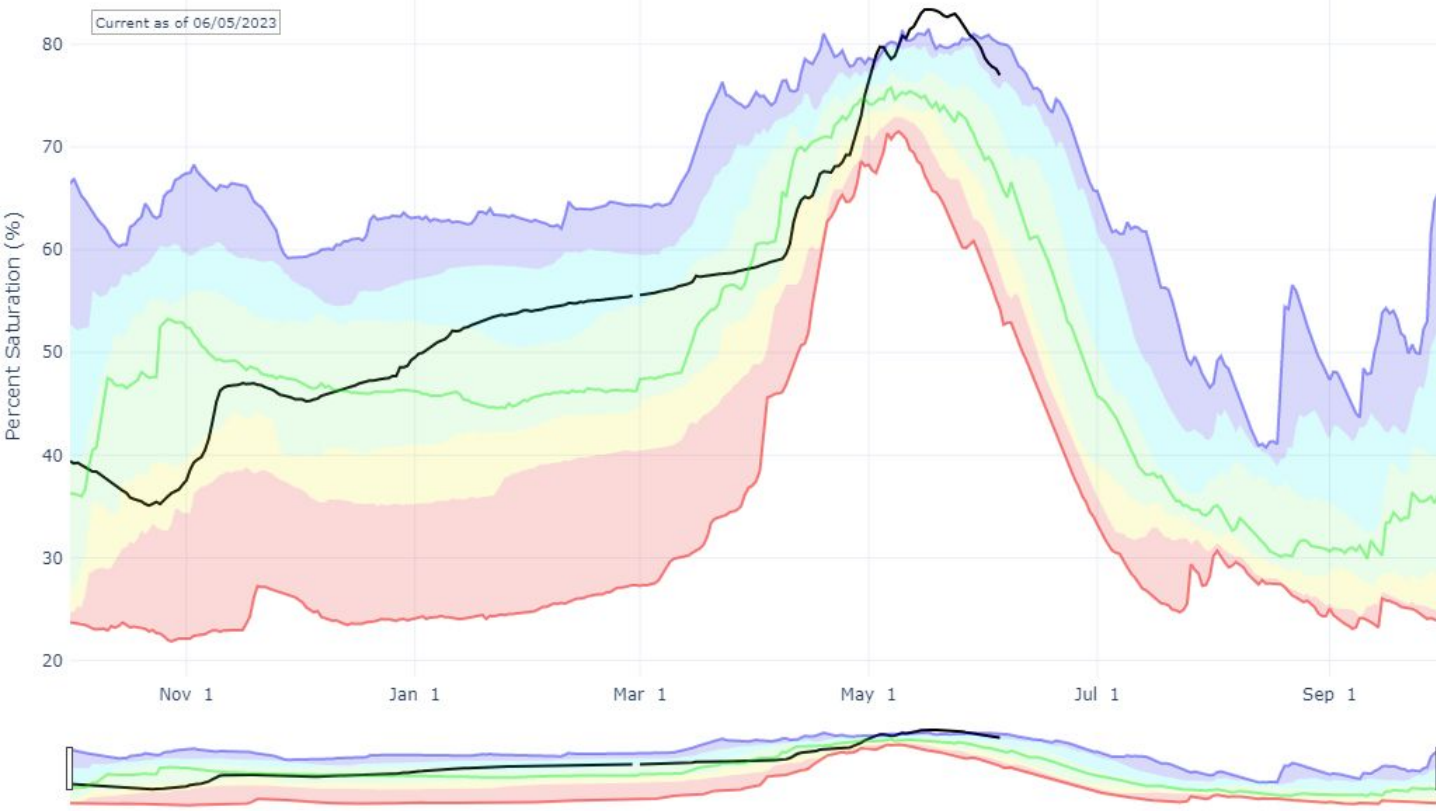
Soil Moisture

DEPTH AVERAGED SOIL SATURATION IN STATE OF UTAH

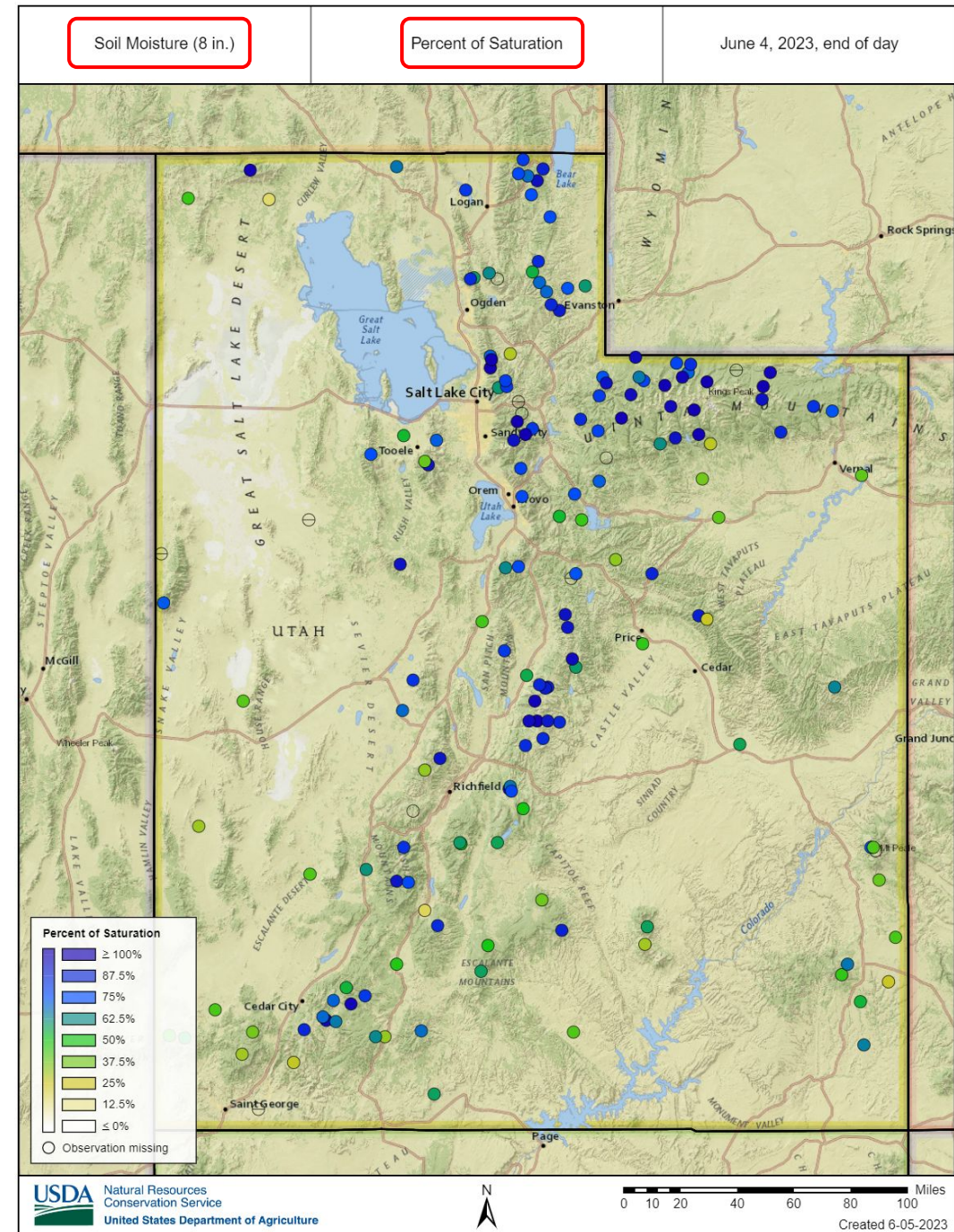
Reset Range

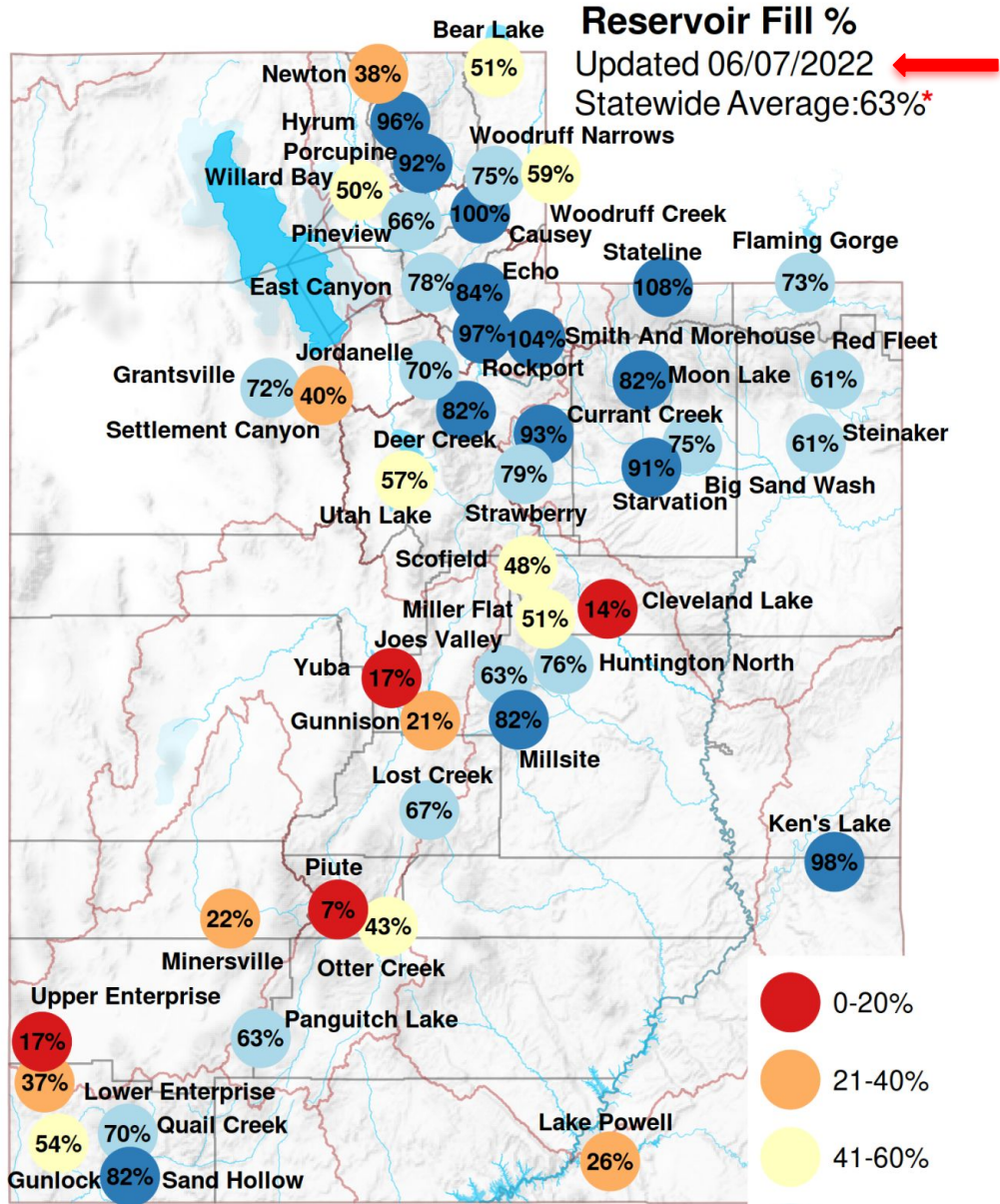
[Link to data: CSV / JSON](#)

Current as of 06/05/2023



Agency - NRCS Snow Survey
Slide prepared by J Clayton

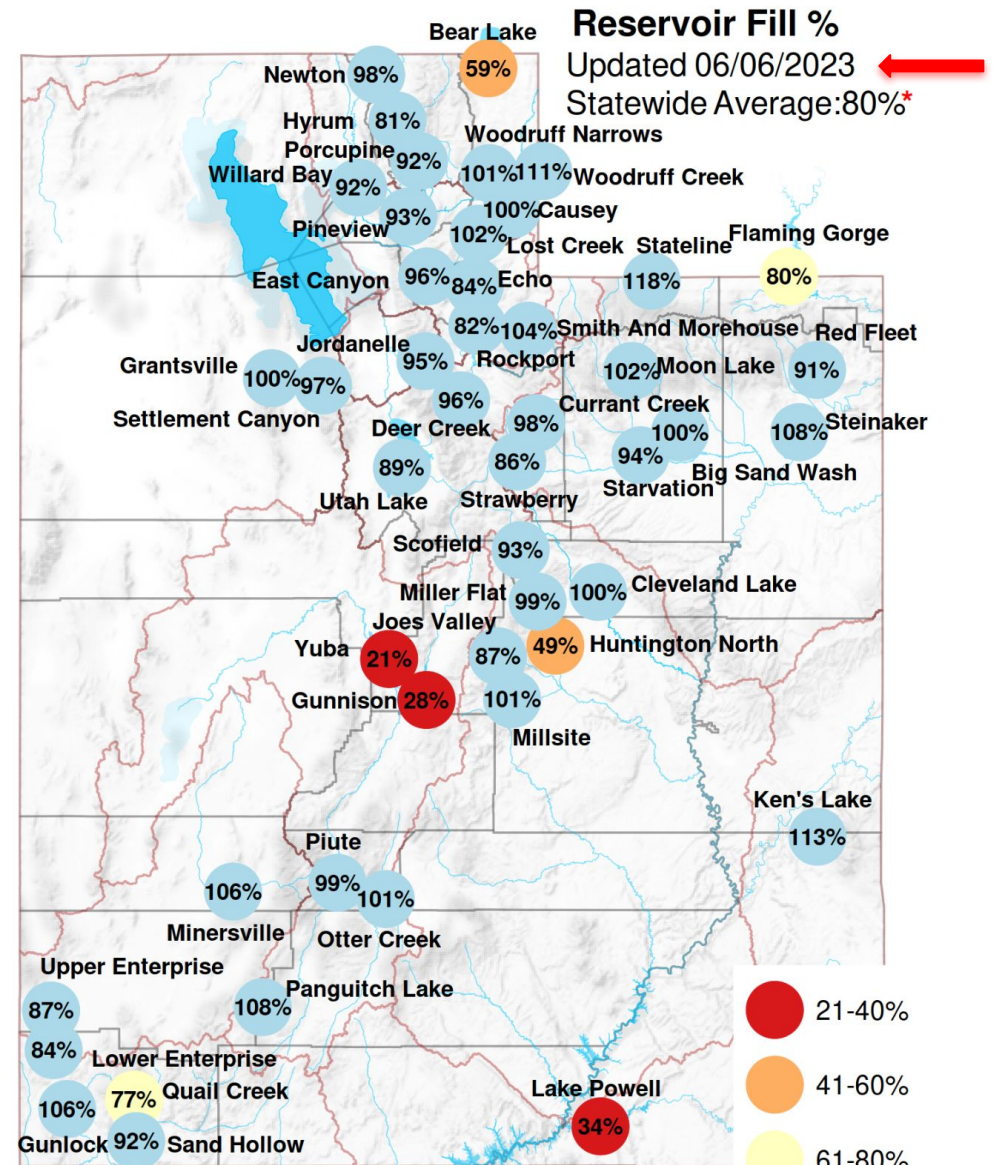
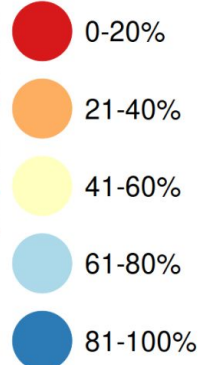




Data Sources: water.utah.gov/reservoirlevels

*State average excludes Lake Powell & Flaming Gorge to better represent the state's water supply.

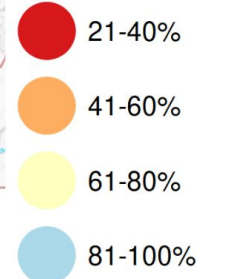
Total capacity including these is 47%



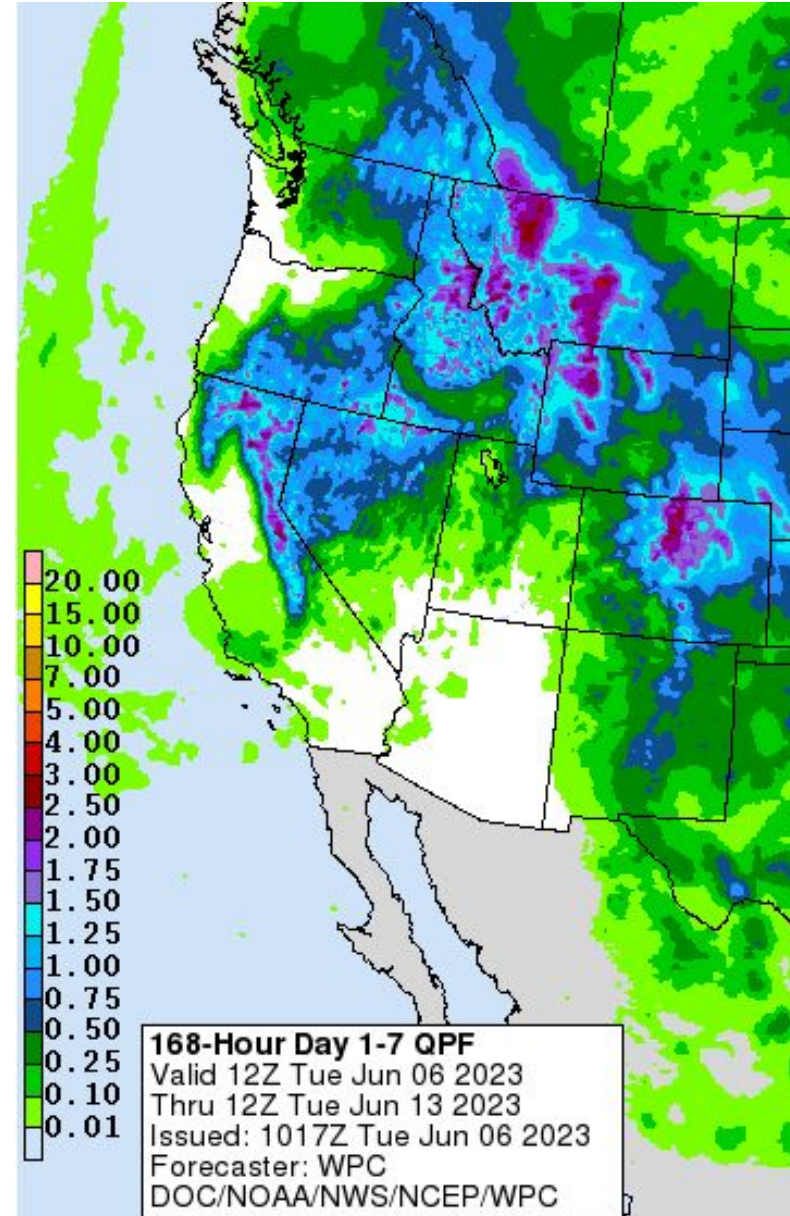
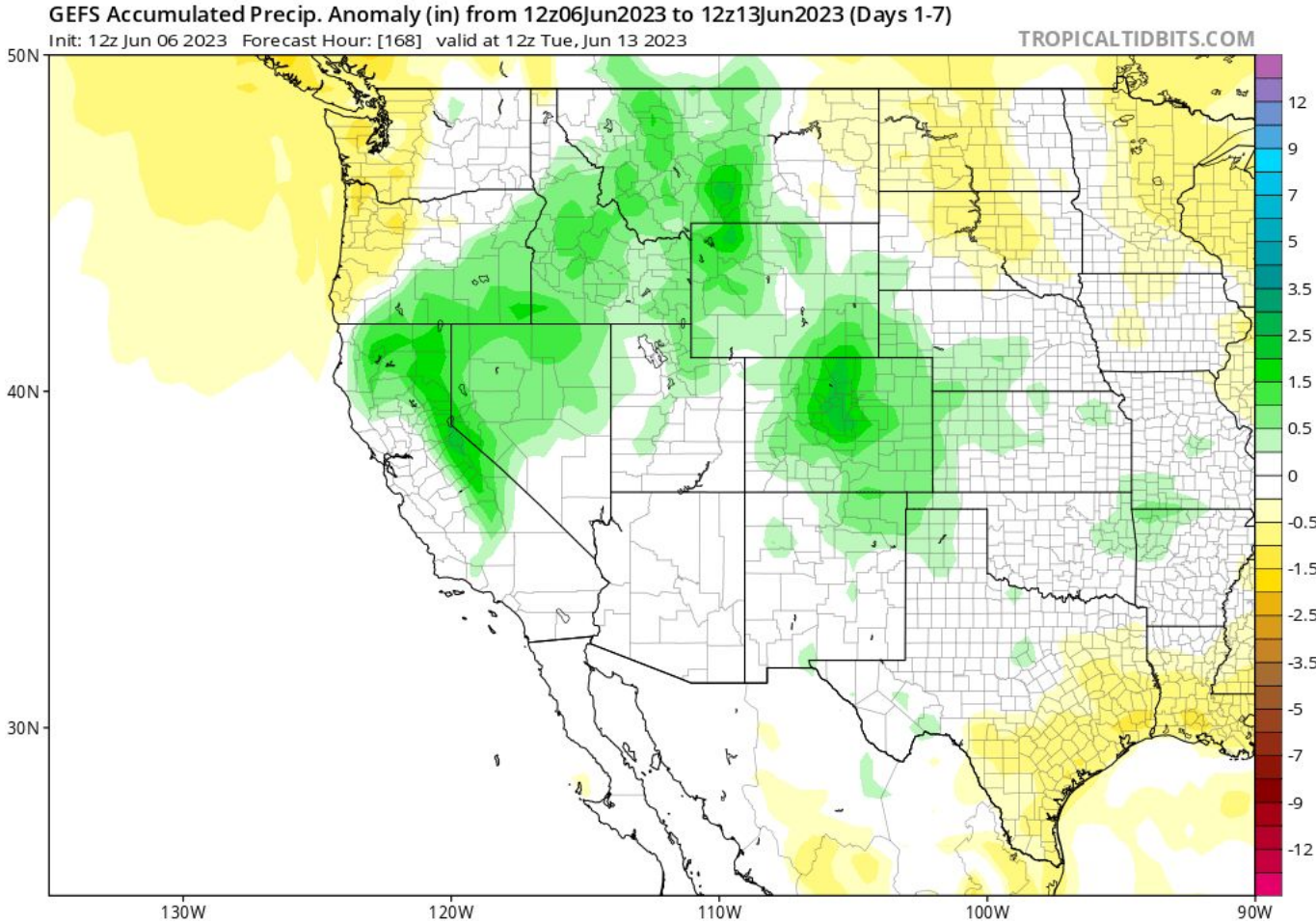
Data Sources: water.utah.gov/reservoirlevels

*State average excludes Lake Powell & Flaming Gorge to better represent the state's water supply.

Total capacity including these is 47%



Weather Forecast Office Utah Day 1-7 Outlook

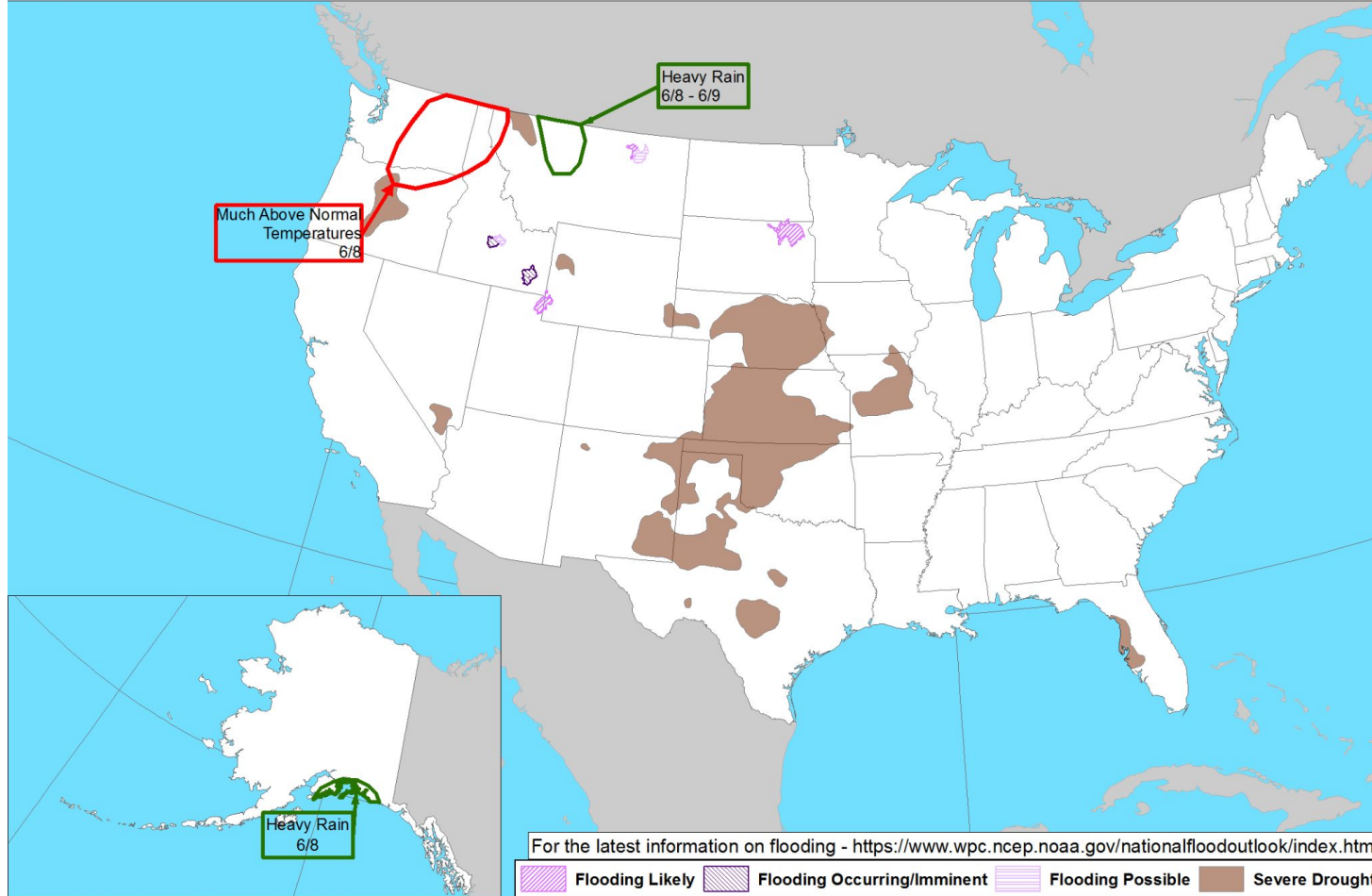


Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

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



Day 3-7 U.S. Hazards Outlook
Valid: 06/08/2023-06/12/2023



Weather Prediction Center

Made: 06/05/2023 3PM EDT

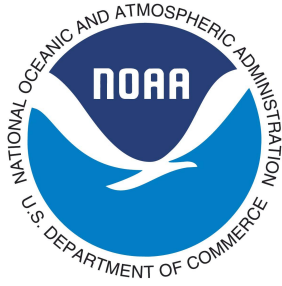
Follow us:

www.wpc.ncep.noaa.gov

Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

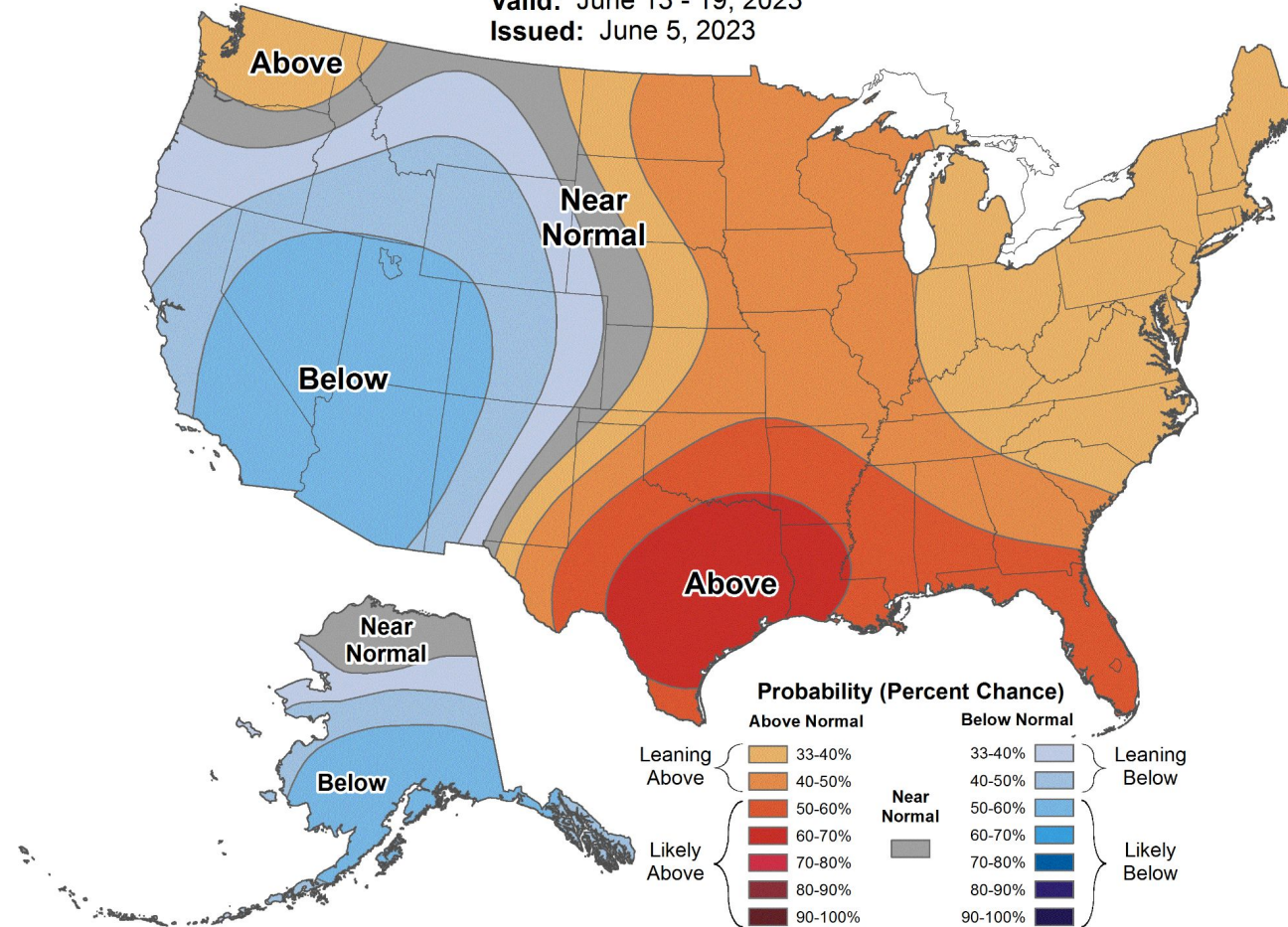
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



8-14 Day Temperature Outlook



Valid: June 13 - 19, 2023
Issued: June 5, 2023



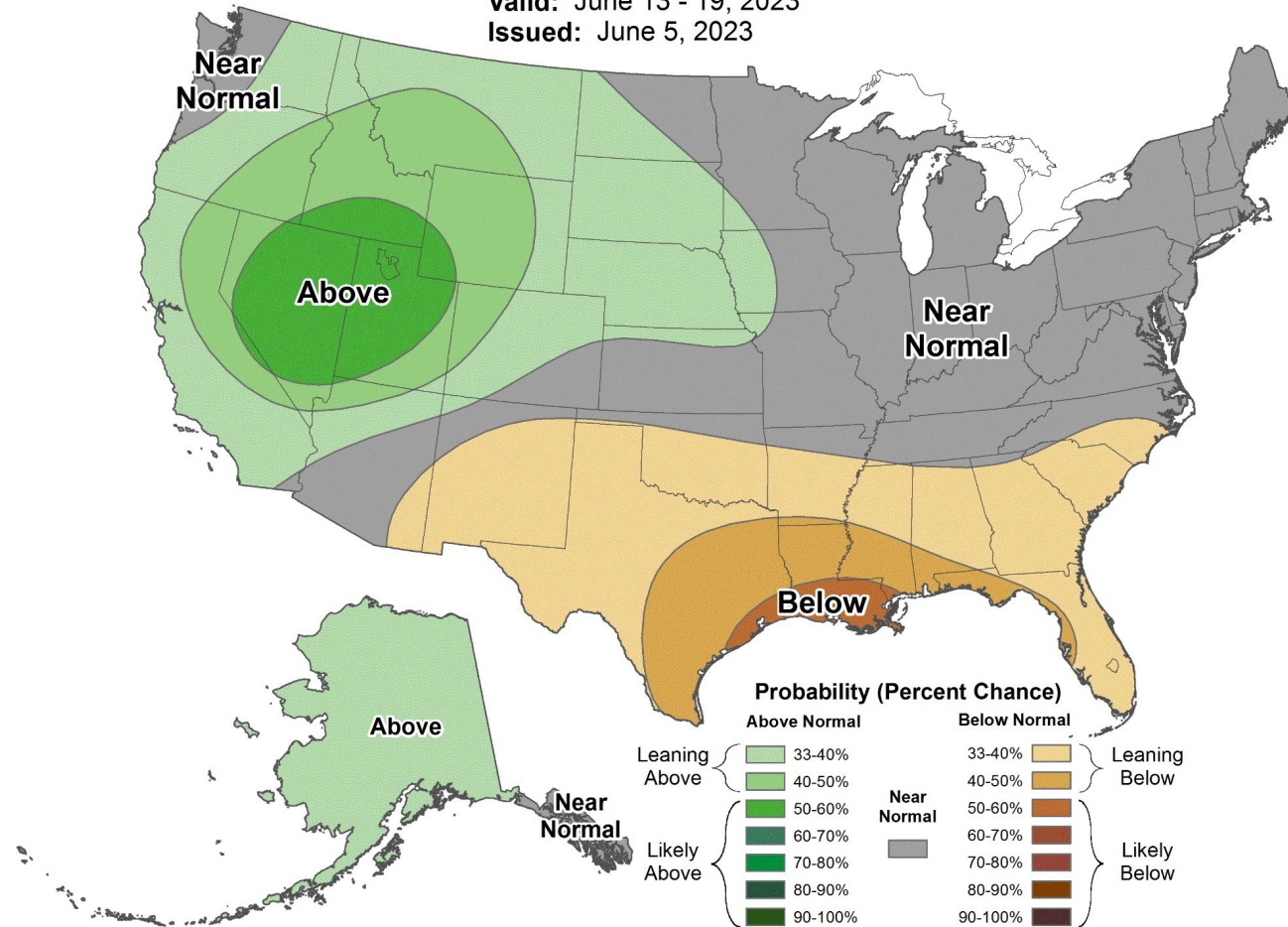
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



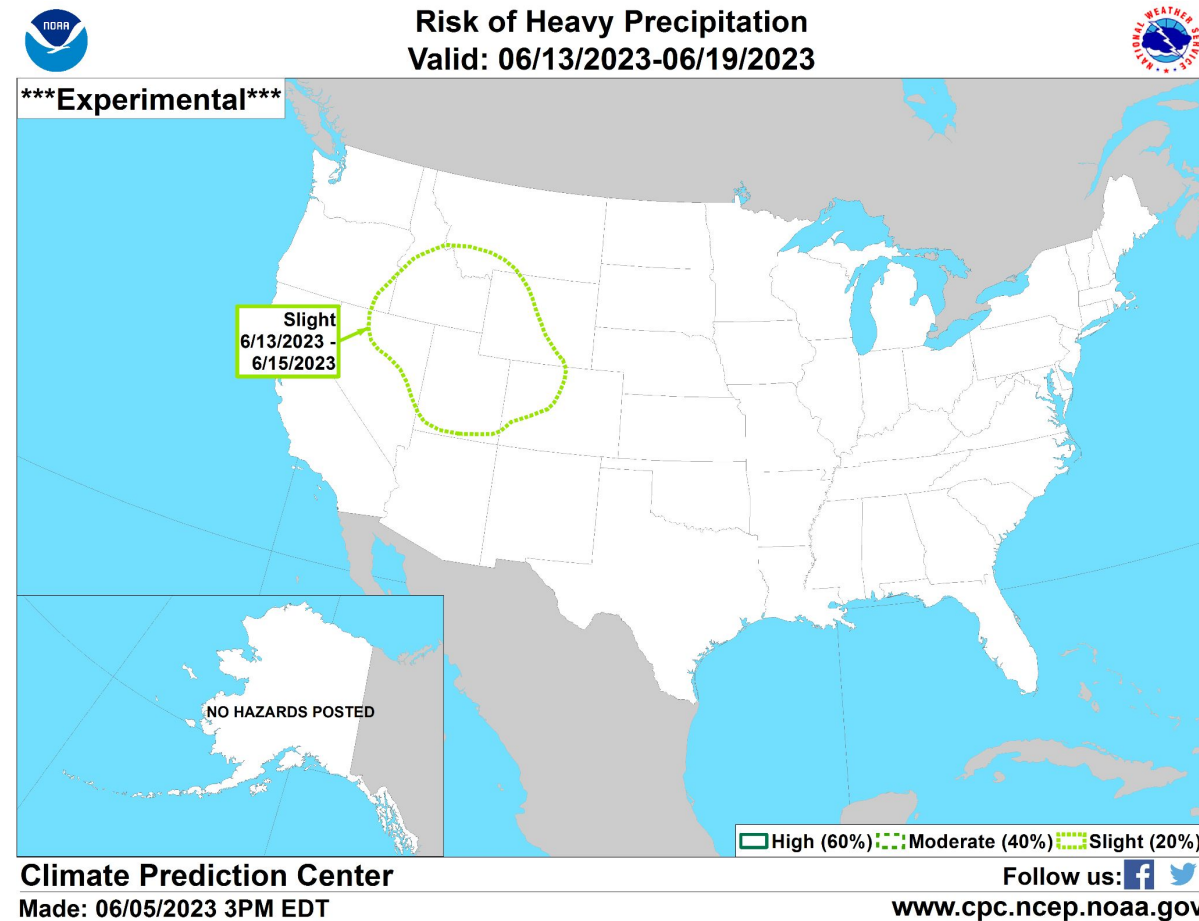
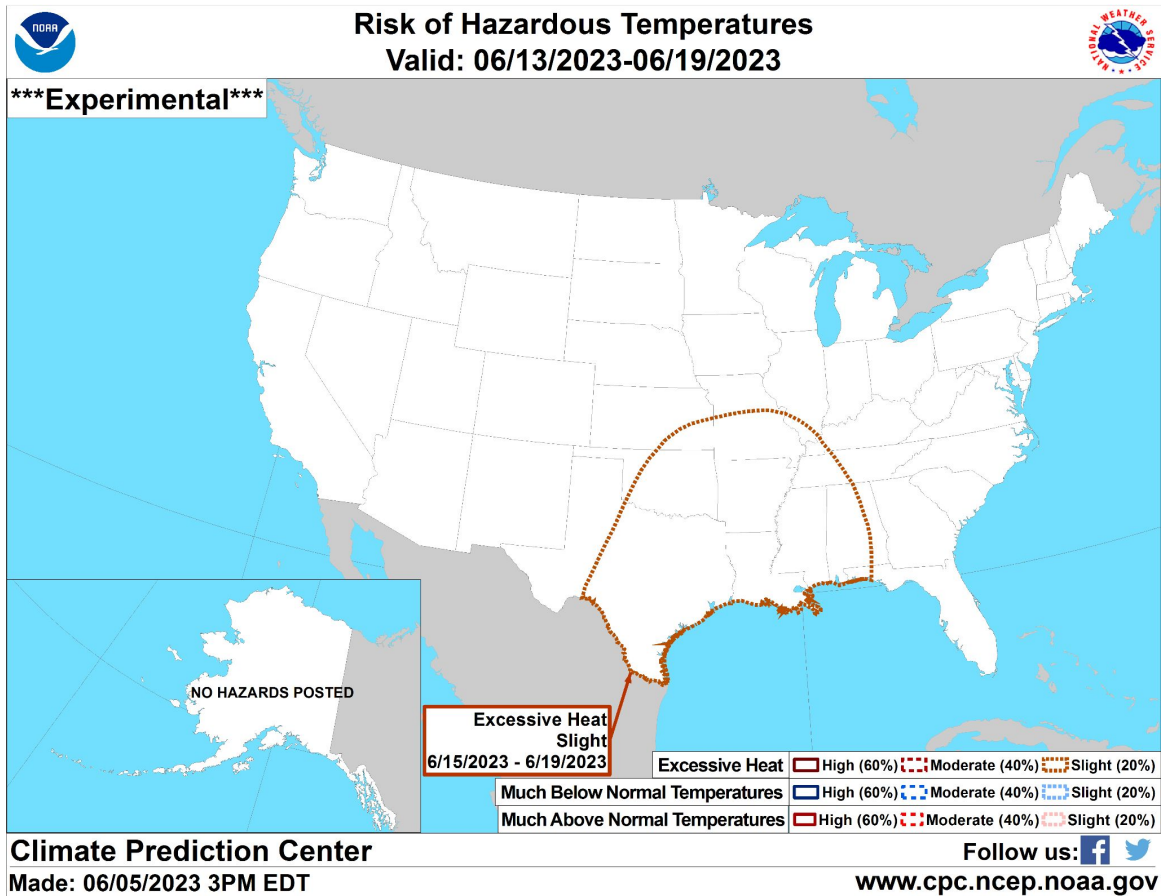
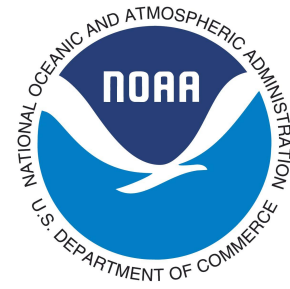
8-14 Day Precipitation Outlook



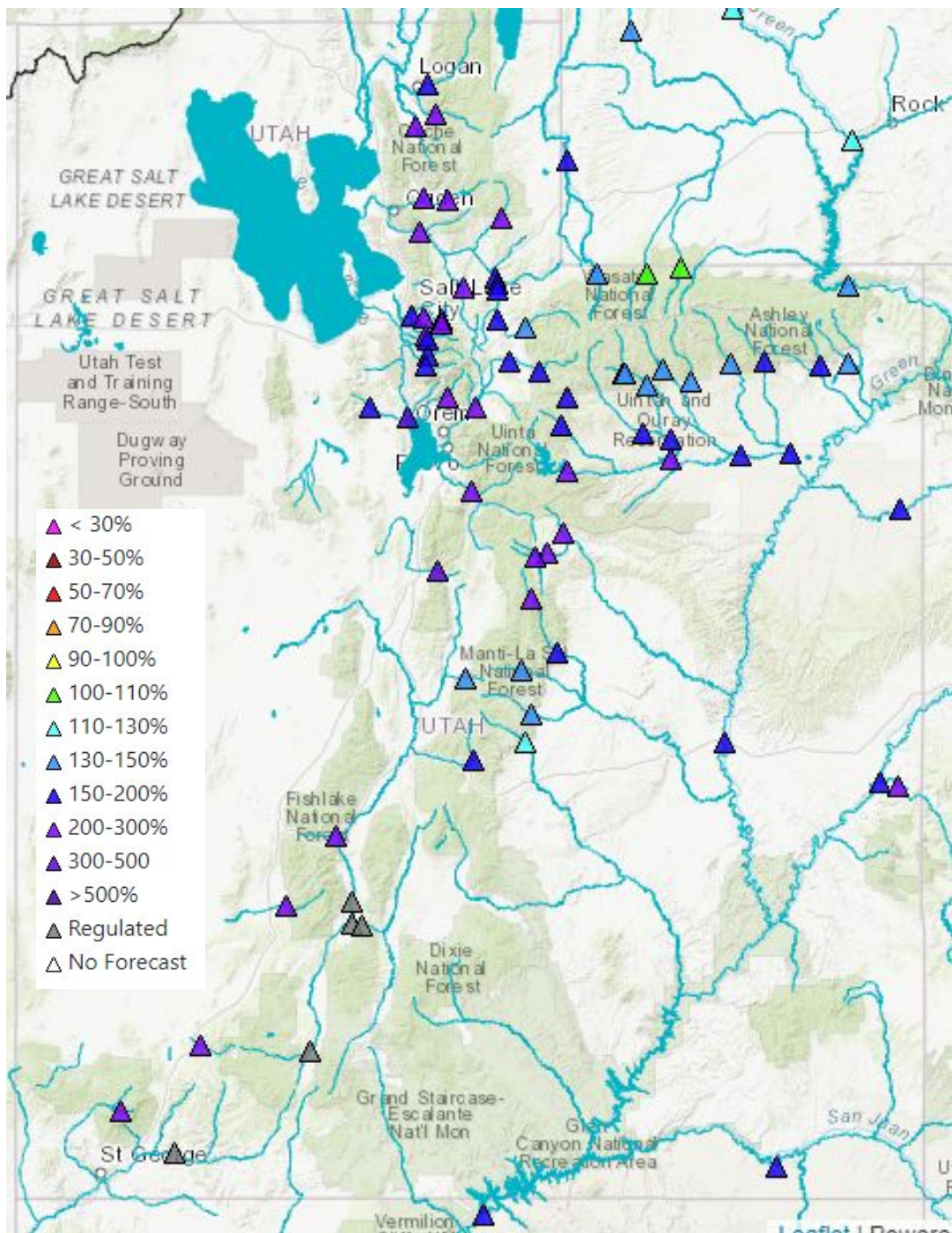
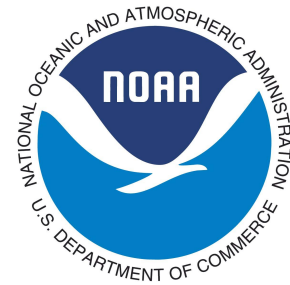
Valid: June 13 - 19, 2023
Issued: June 5, 2023



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



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



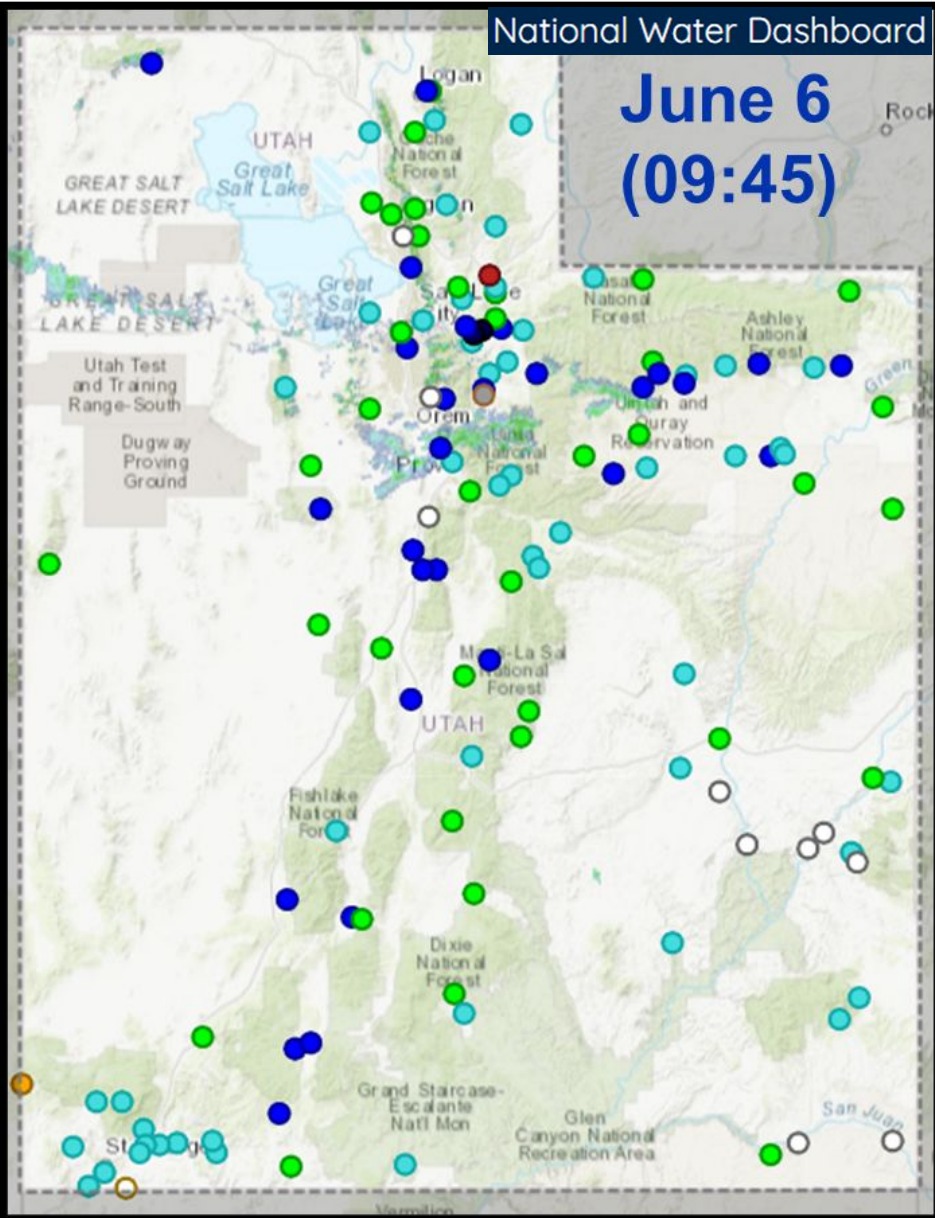
A relatively dry May led to slightly reduced seasonal water supply forecasts, but forecasted (and observed) water supply volumes are still much above normal throughout Utah.

Flooding is still being observed over parts of the Bear River Basin, and high elevation snowpack is still impacting runoff in Northern Utah. For the most part, snowmelt-driven seasonal peak flows have passed, and hydrographs are in recession.

June is our last update of our “official” water supply forecasts. Forecast information will still be available daily through July.

Current Streamflow Conditions

May 9 Jun. 6



*Sites must have at least 10 years of streamflow record to be ranked on this graphic

Day-of-Year Status	% Gages	% Gages
All-time high for this day-of-year	7.3% ■	1.5%
Much above normal for this day-of-year	19.0% ■	21.2% ■
Above normal for this day-of-year	30.7% ■	39.4% ■
Normal for this day-of-year	29.2% ■	27.7% ■
Below normal for this day-of-year	1.5%	0.7%
Much below normal for this day-of-year	1.5%	0.7%
All-time low for this day-of-year	0.7%	0.0%
Not ranked - insufficient record	7.3% ■	7.3% ■
Not ranked - stream not flowing	0.7%	0.7%
Not ranked - no measurement	0.7%	0.7%

Streamflow: Status

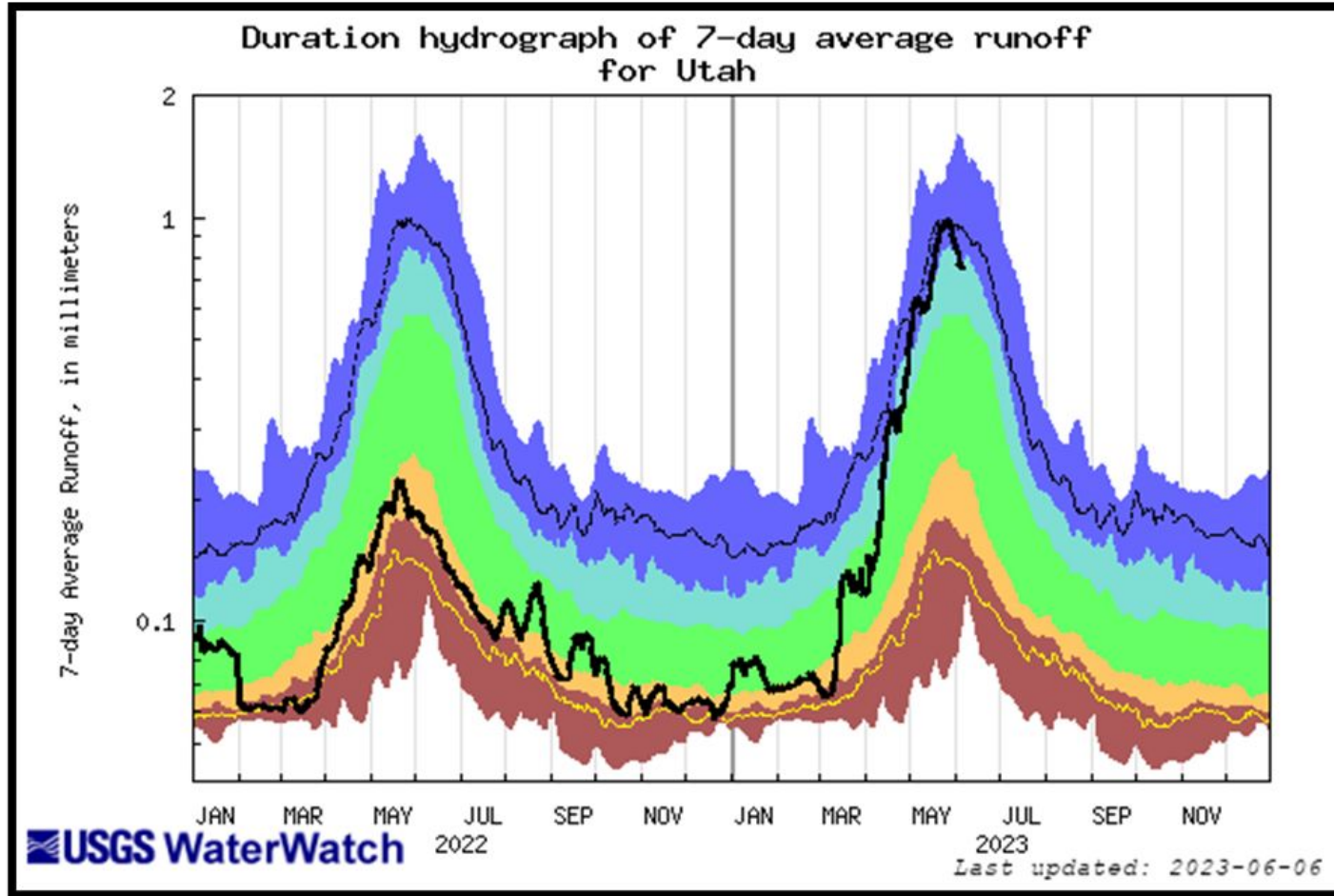
- Above flood stage
- All-time high for this day (100th percentile (maximum))
- Much above normal (>90th percentile)
- Above normal (76th – 90th percentile)
- Normal (25th – 75th percentile)
- Below normal (10th – 24th percentile)
- Much below normal (<10th percentile)
- All-time low for this day (0th percentile (minimum))
- Not flowing
- Not ranked
- Measurement flag
- Recent measurement unavailable

Provisional data, subject to revision

Agency - USGS Utah WSC
 Presenter - Ryan Rowland



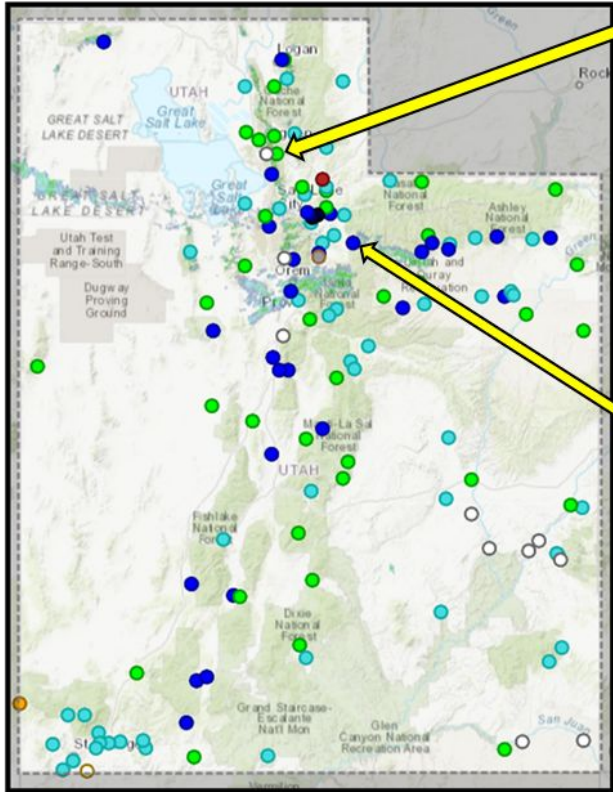
Utah Area-Based Runoff Duration Hydrograph



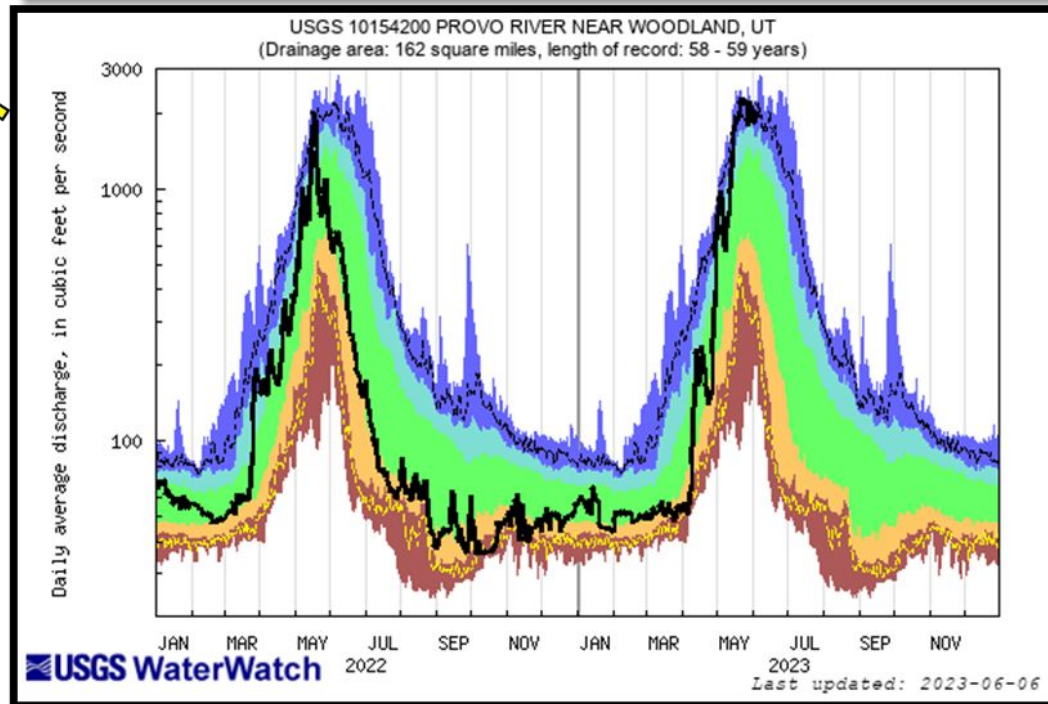
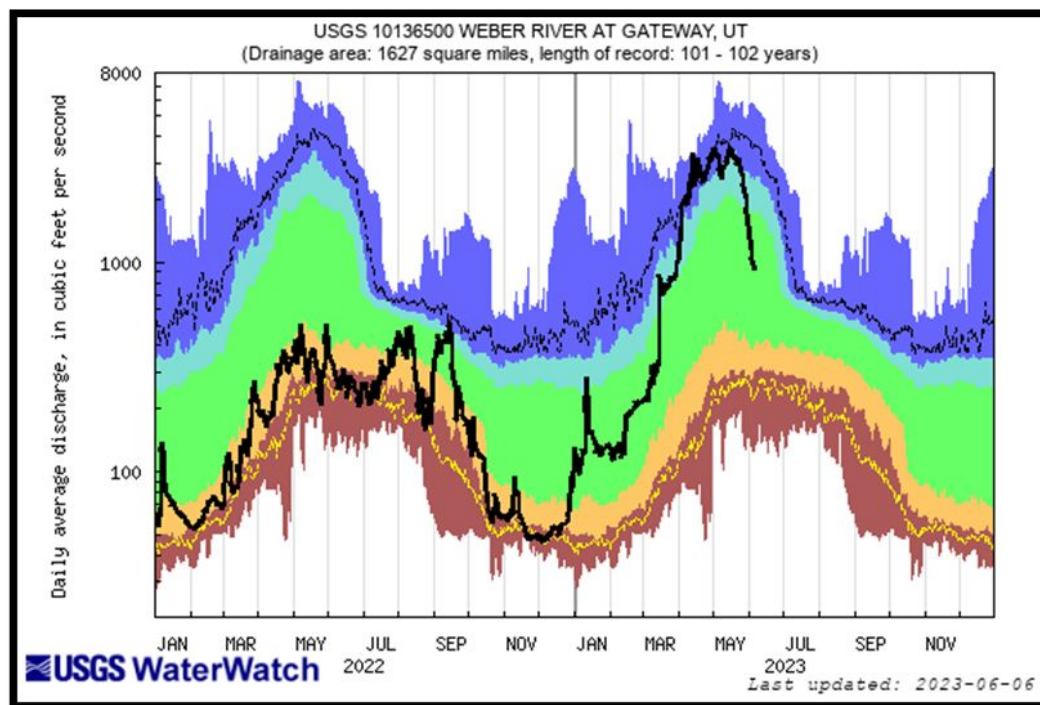
- The Runoff Duration Hydrograph is a graphical presentation of area-based runoff (the black line) calculated as a weighted average of HUC 8-runoff, plotted over the long-term statistics of runoff for each day or month of the year for each area.

Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Runoff

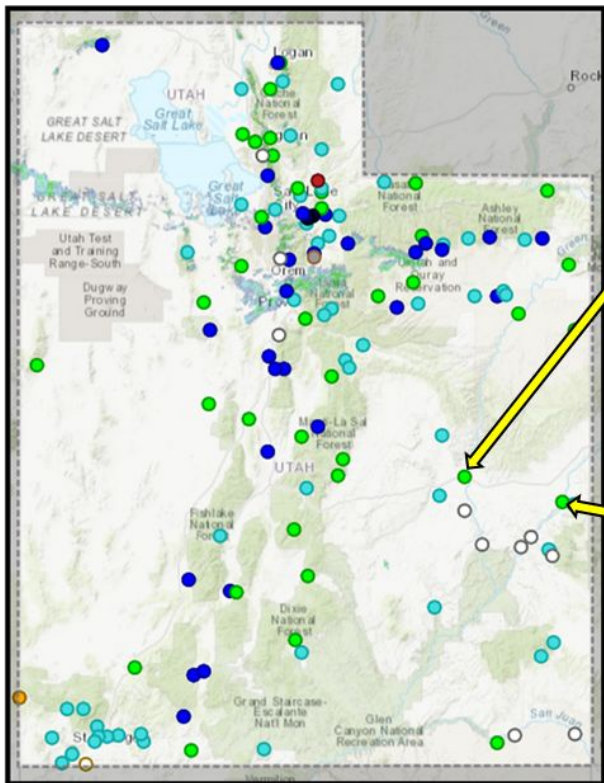
Duration Hydrographs for Selected Gages



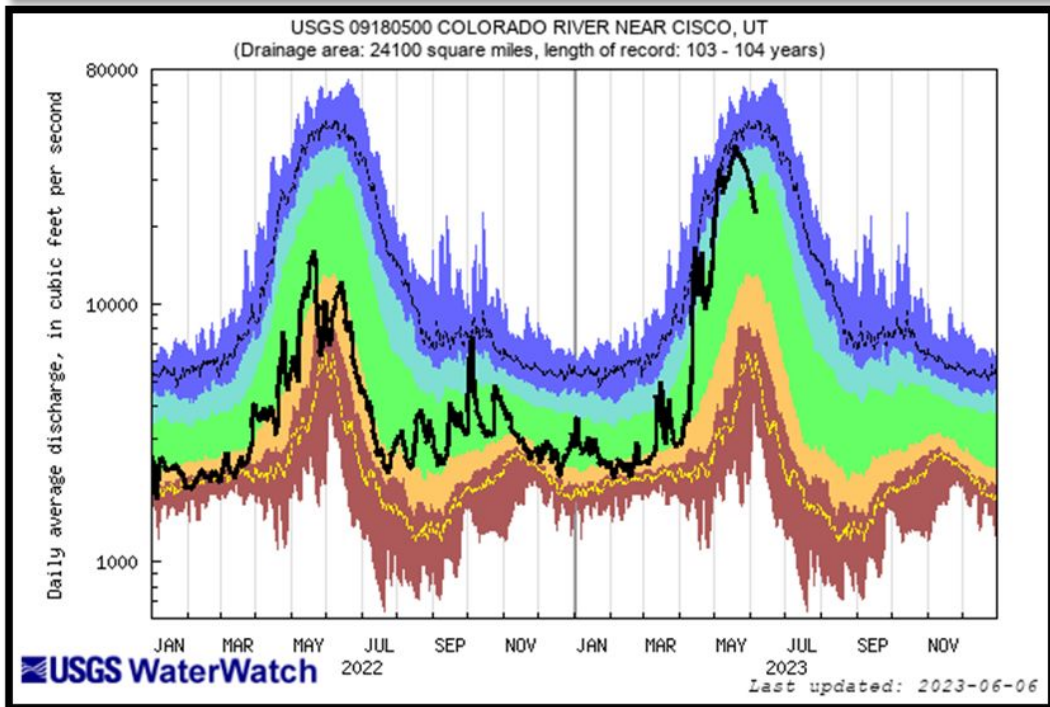
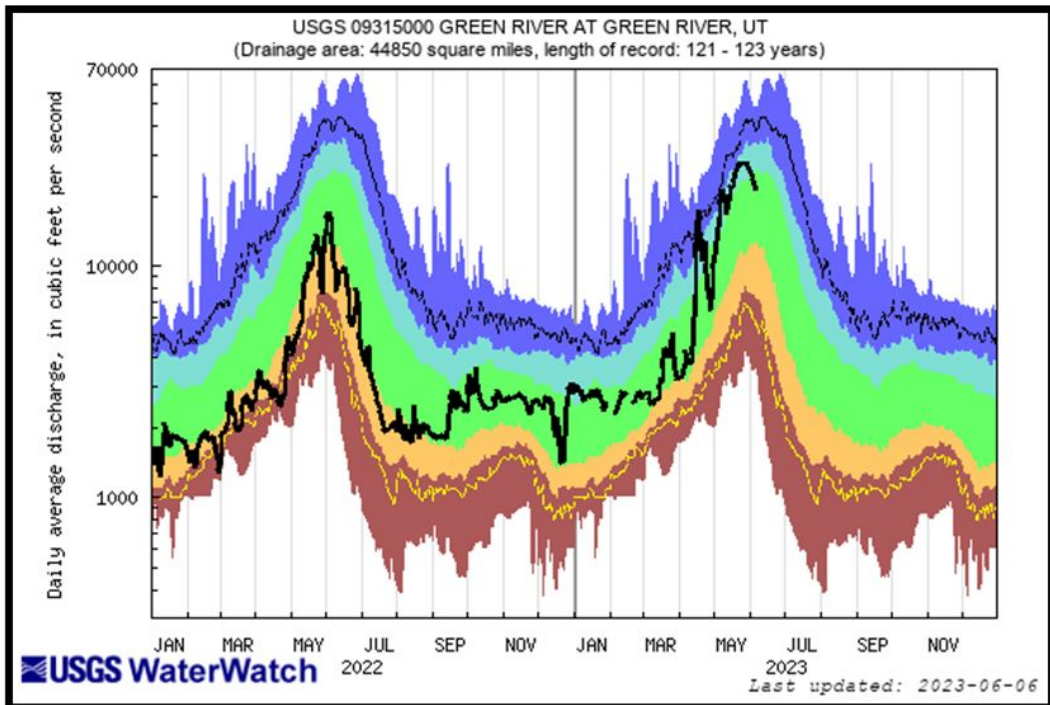
Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Runoff
Much below Normal		Below normal	Normal	Above normal		Much above normal	



Duration Hydrographs for Selected Gages

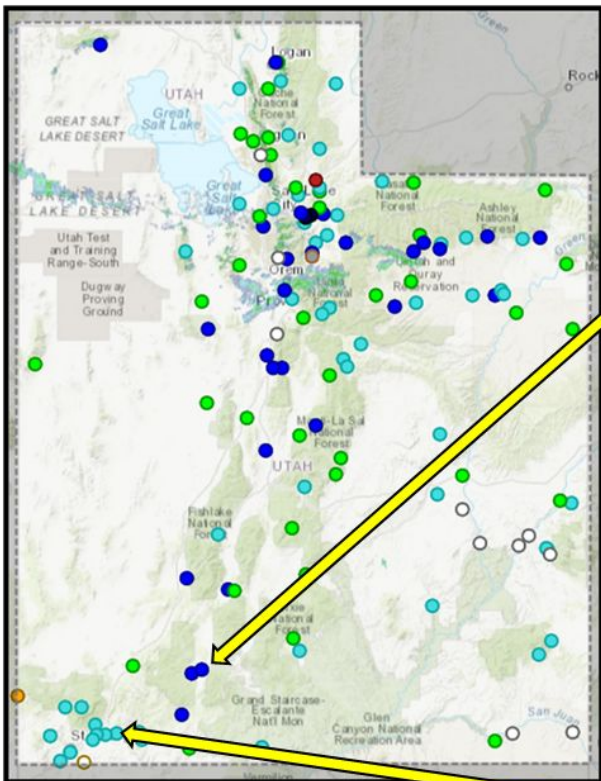


Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Runoff
Much below Normal	Below normal	Normal	Above normal	Much above normal			



Provisional data, subject to revision

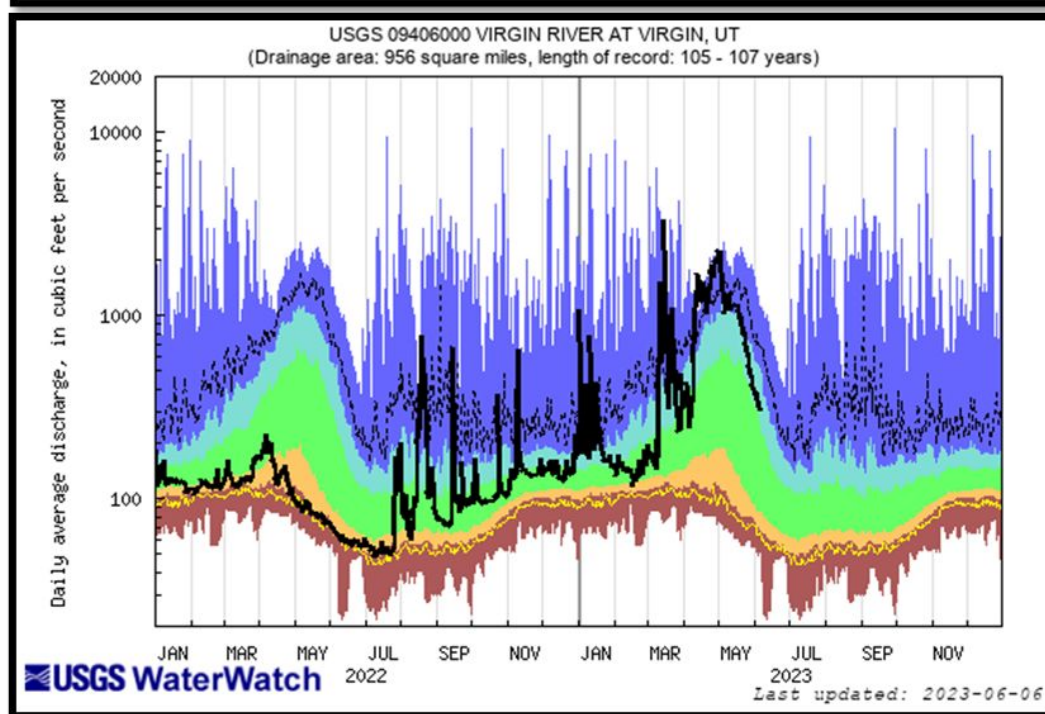
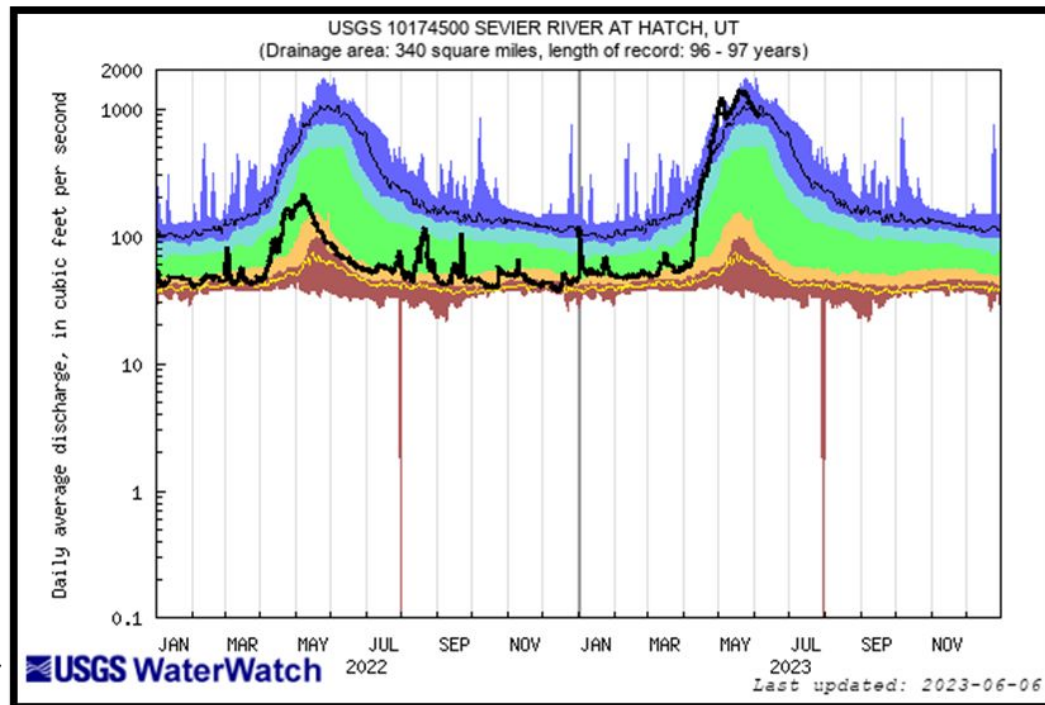
Duration Hydrographs for Selected Gages



Explanation - Percentile classes

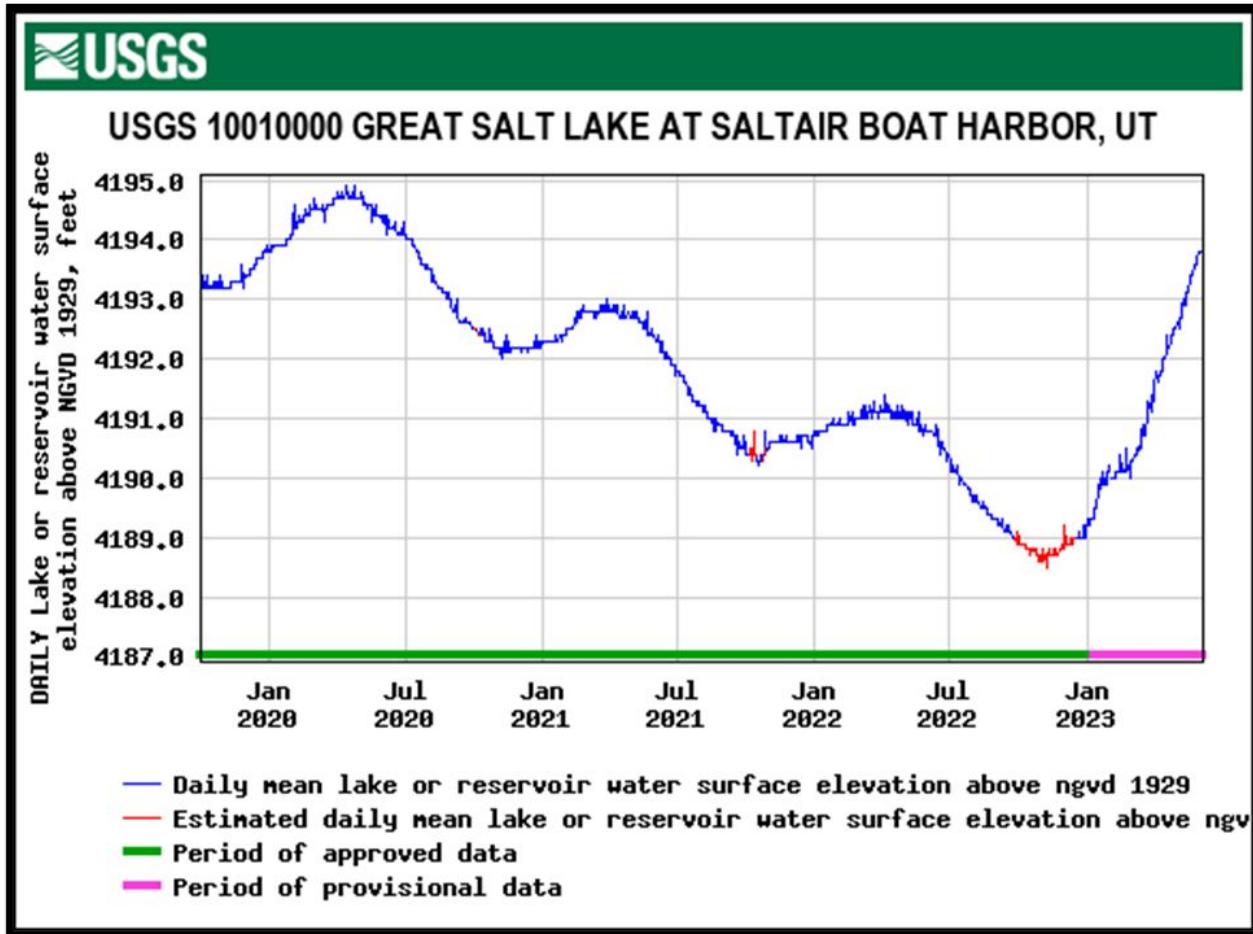
Percentile Class	Color
lowest-10th percentile	Dark Red
5	Orange
10-24	Light Green
25-75	Medium Green
76-90	Light Blue
95	Dark Blue
90th percentile - highest	Very Dark Blue
Runoff	Black

Much below Normal | Below normal | Normal | Above normal | Much above normal



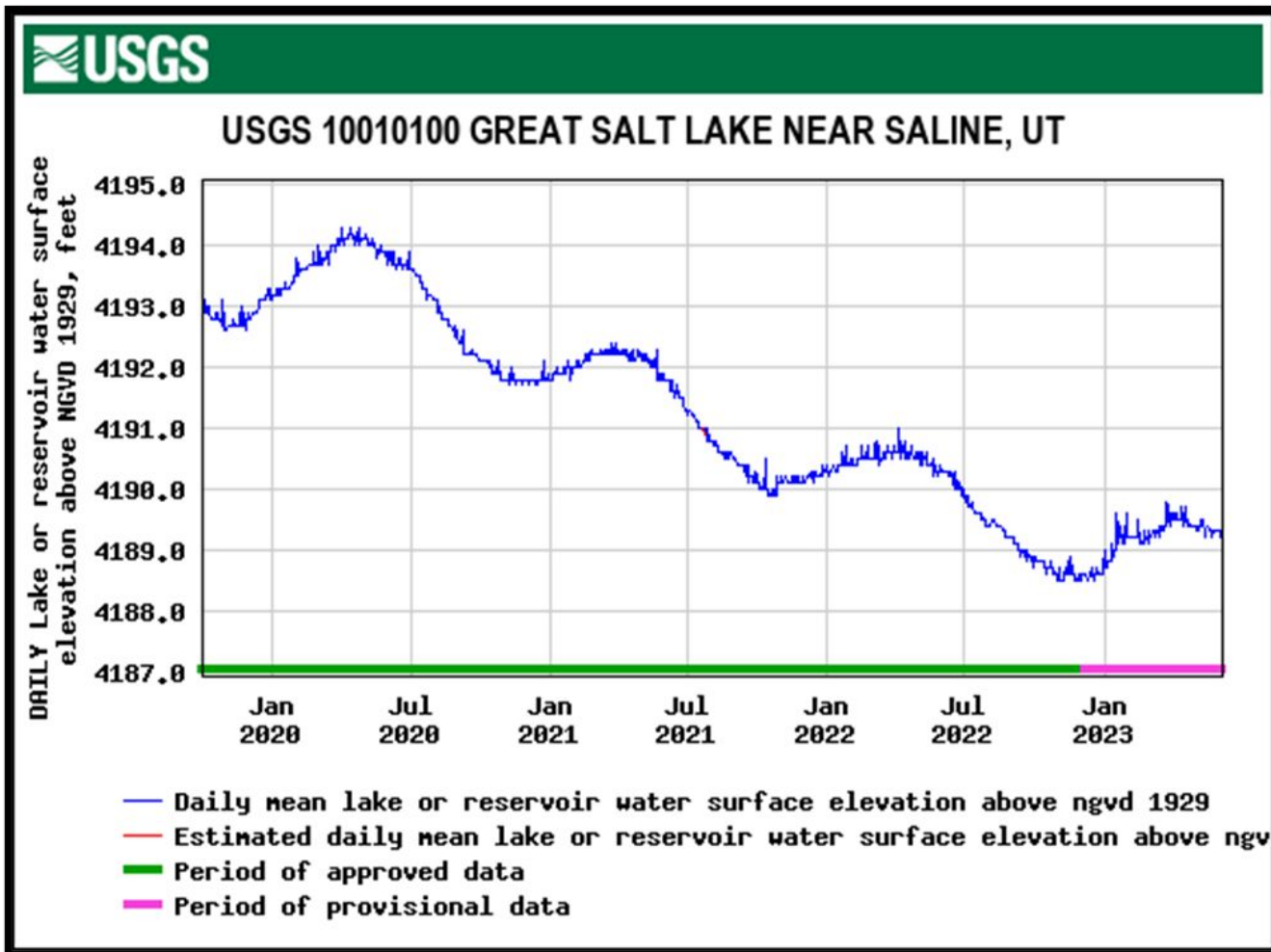
Provisional data, subject to revision

Great Salt Lake Water Surface Elevation – South Arm



- ❑ Daily value 6/5/2023 = 4,193.8'
- ❑ Daily value 5/8/2023 = 4,192.8'
- ❑ Up 5.3' since November
- ❑ Berm at causeway breach raised to 4,192' 2/9/2023

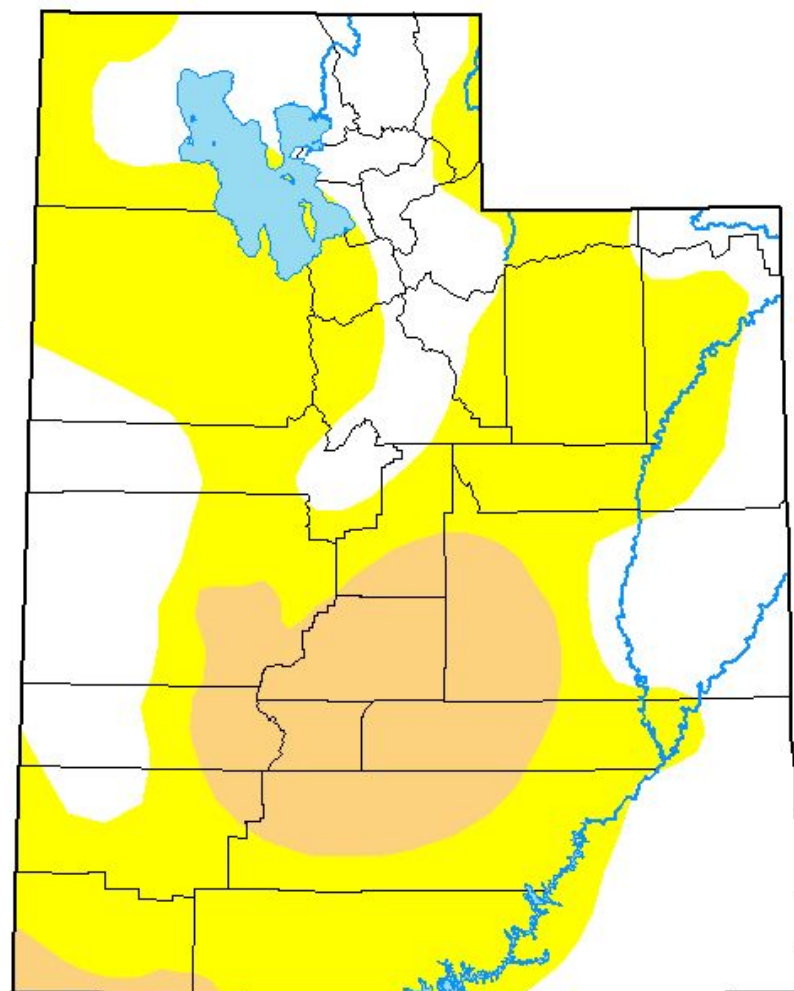
Great Salt Lake Water Surface Elevation – North Arm









- ❑ Daily value 6/5/2023 = 4,189.3
- ❑ Daily value 5/8/2023 = 4,189.4'
- ❑ Up 0.8' since November
- ❑ Berm at causeway breach raised to 4,192' 2/9/2023

U.S. Drought Monitor Utah

May 30, 2023
(Released Thursday, Jun. 1, 2023)
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>

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NCEI/NOAA



droughtmonitor.unl.edu