



Utah Water Update (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors

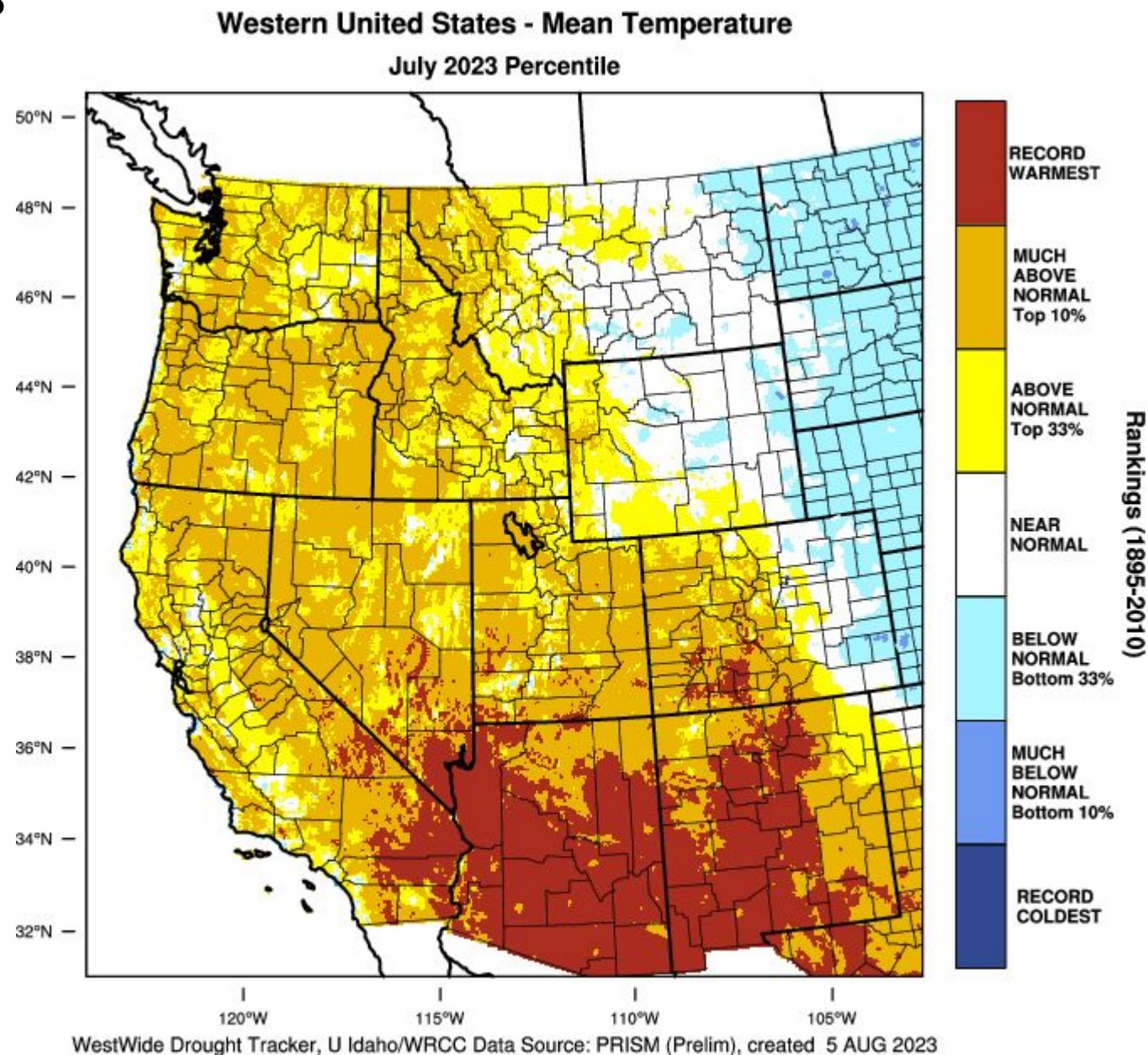




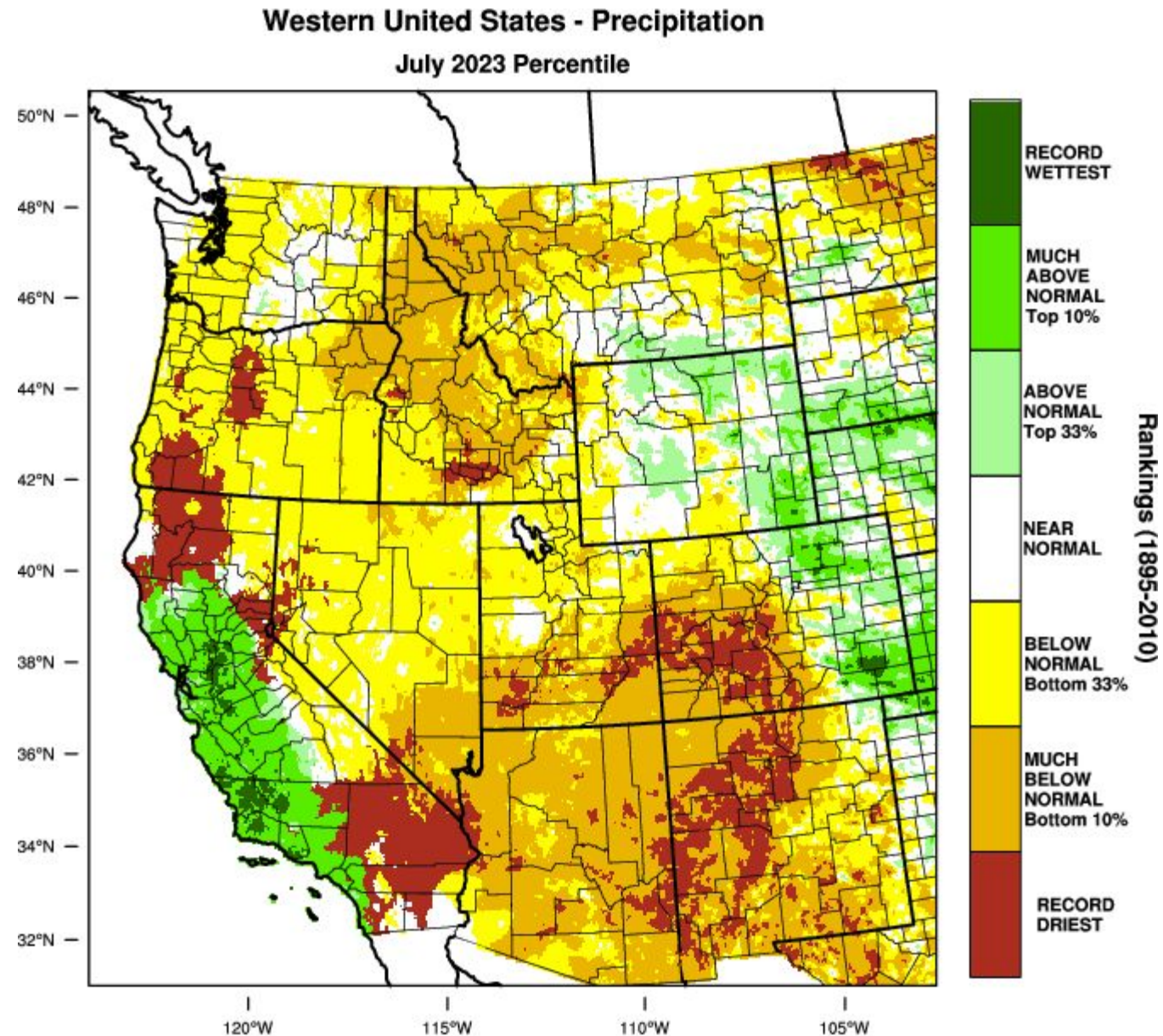
Utah Water Update

August 8, 2023

July Temperatures



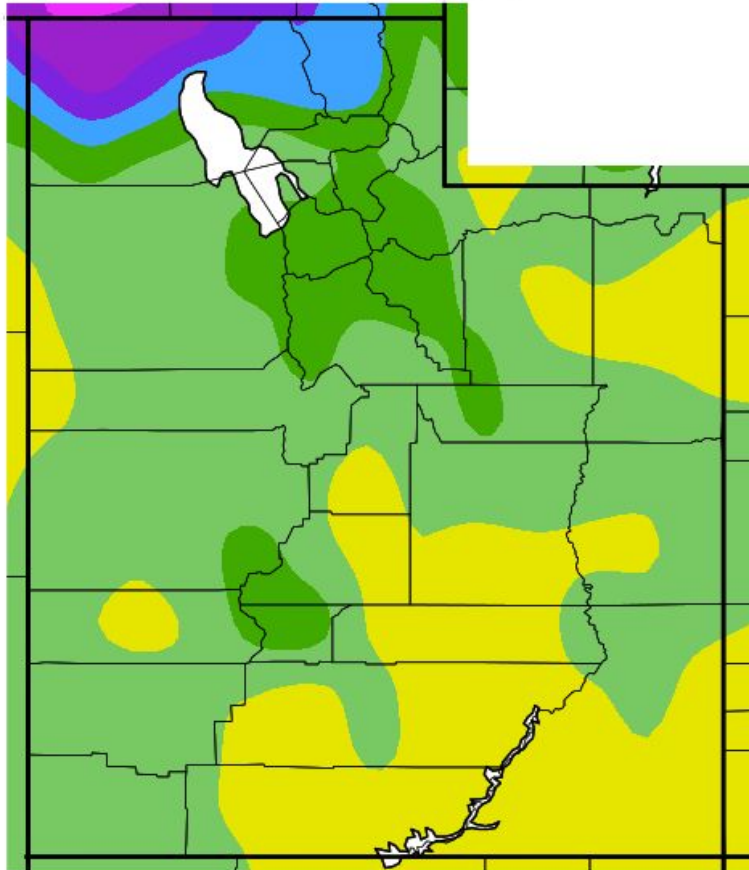
July Precipitation



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2023

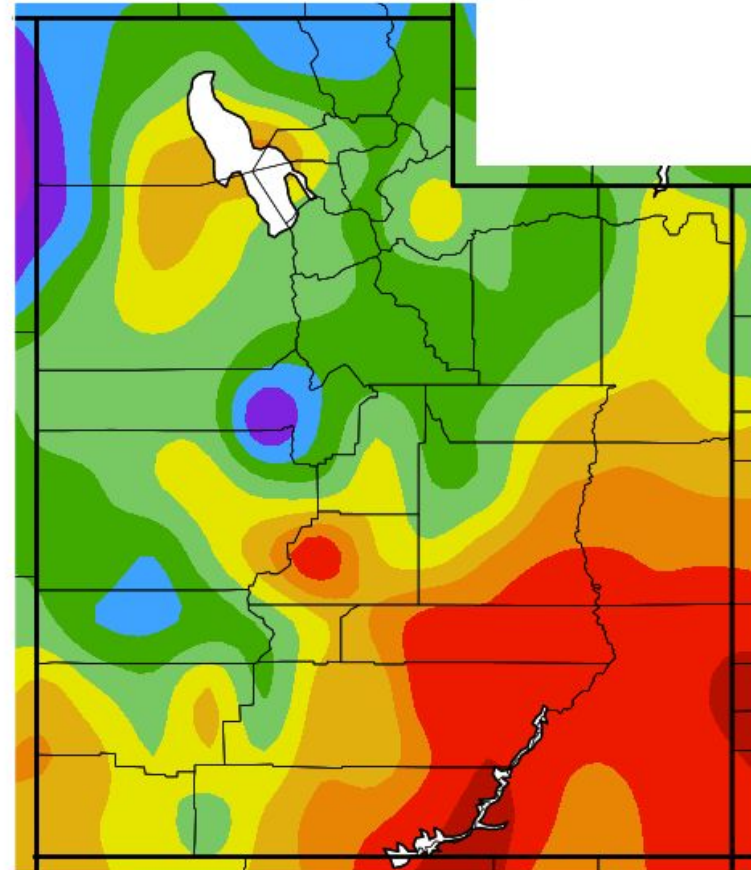
2-week Precipitation and Max Temperature

Precipitation Departure from Average (in.)
7/25/2023 – 8/7/2023



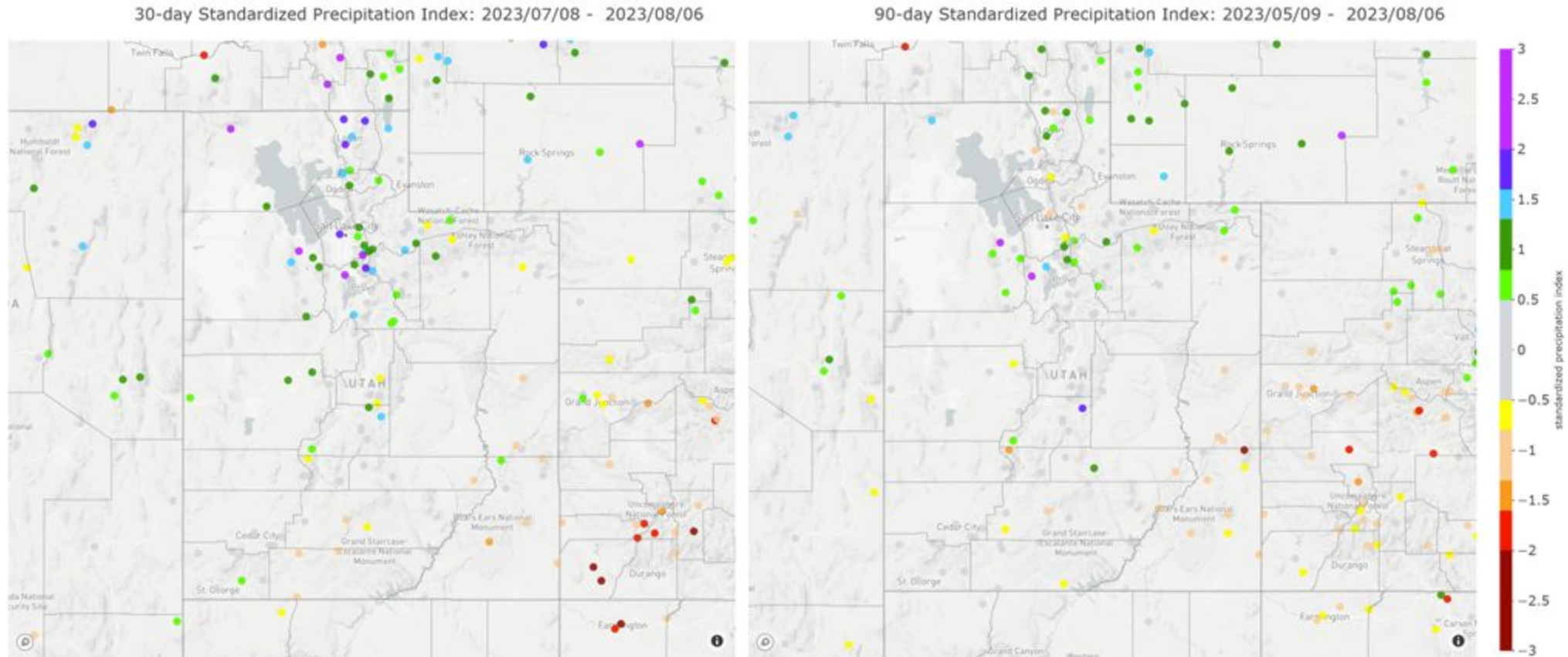
Generated 8/ 8/2023 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Max. Temperature dep from Ave (deg F)
7/25/2023 – 8/7/2023



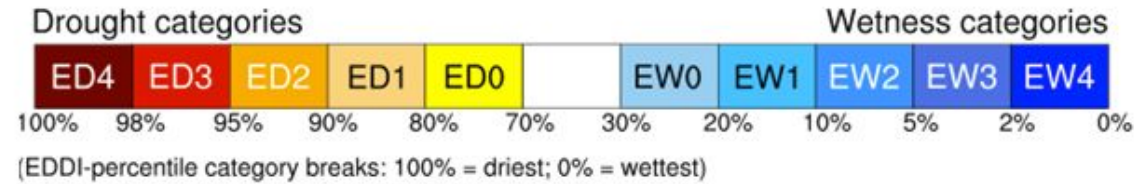
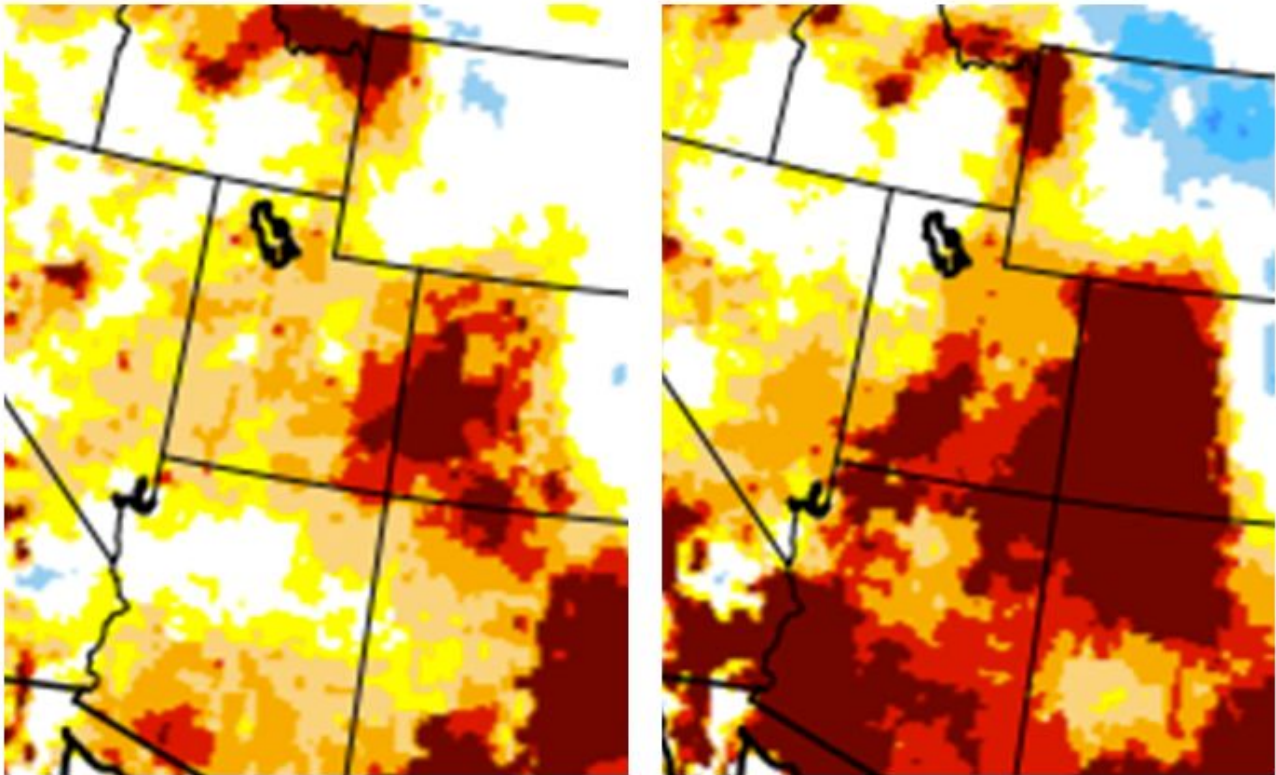
Generated 8/ 8/2023 at WRCC using provisional data.
NOAA Regional Climate Centers

30-day and 90-day Standardized Precipitation Index

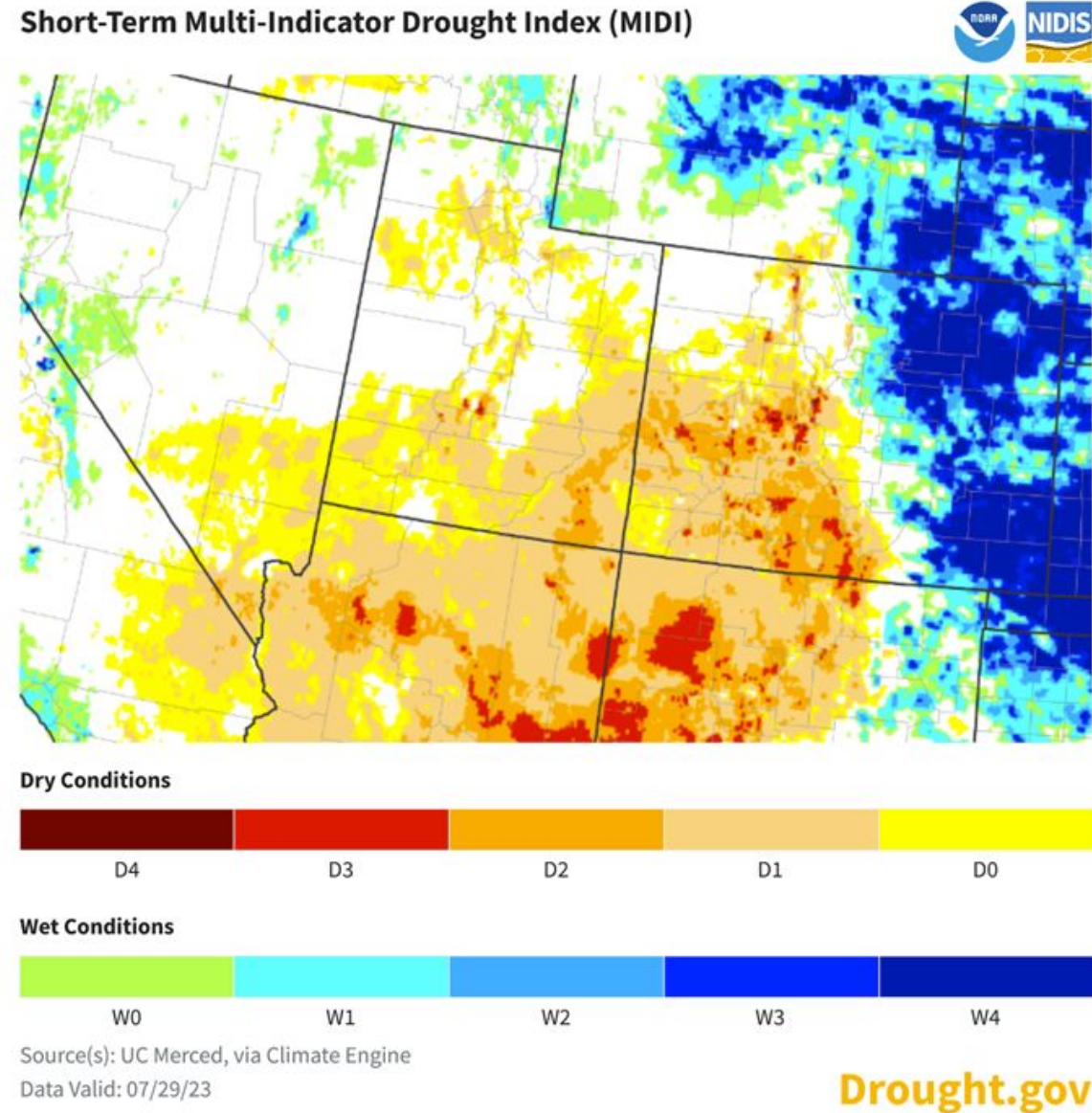


2-week and 1-month Evaporative Demand Drought Index

2-week EDDI categories for August 3, 2023 1-month EDDI categories for August 3, 2023

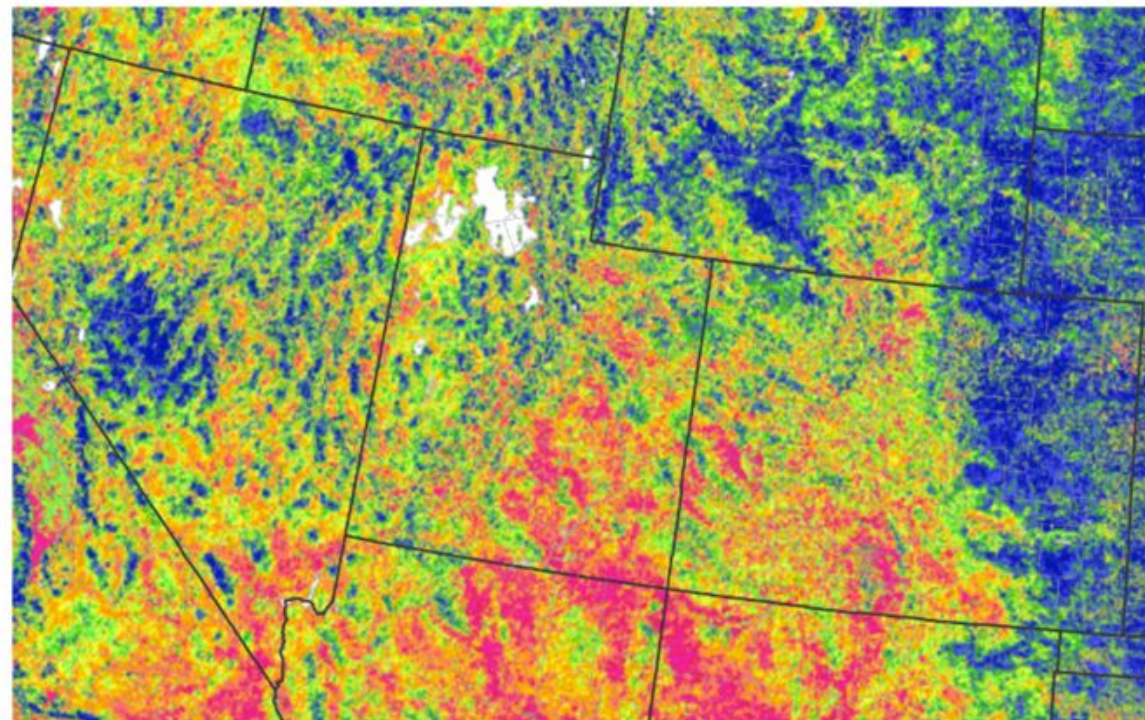


Short-Term Conditions



Vegetation Health Index

Vegetation Health Index



Unfavorable Conditions



Favorable Conditions

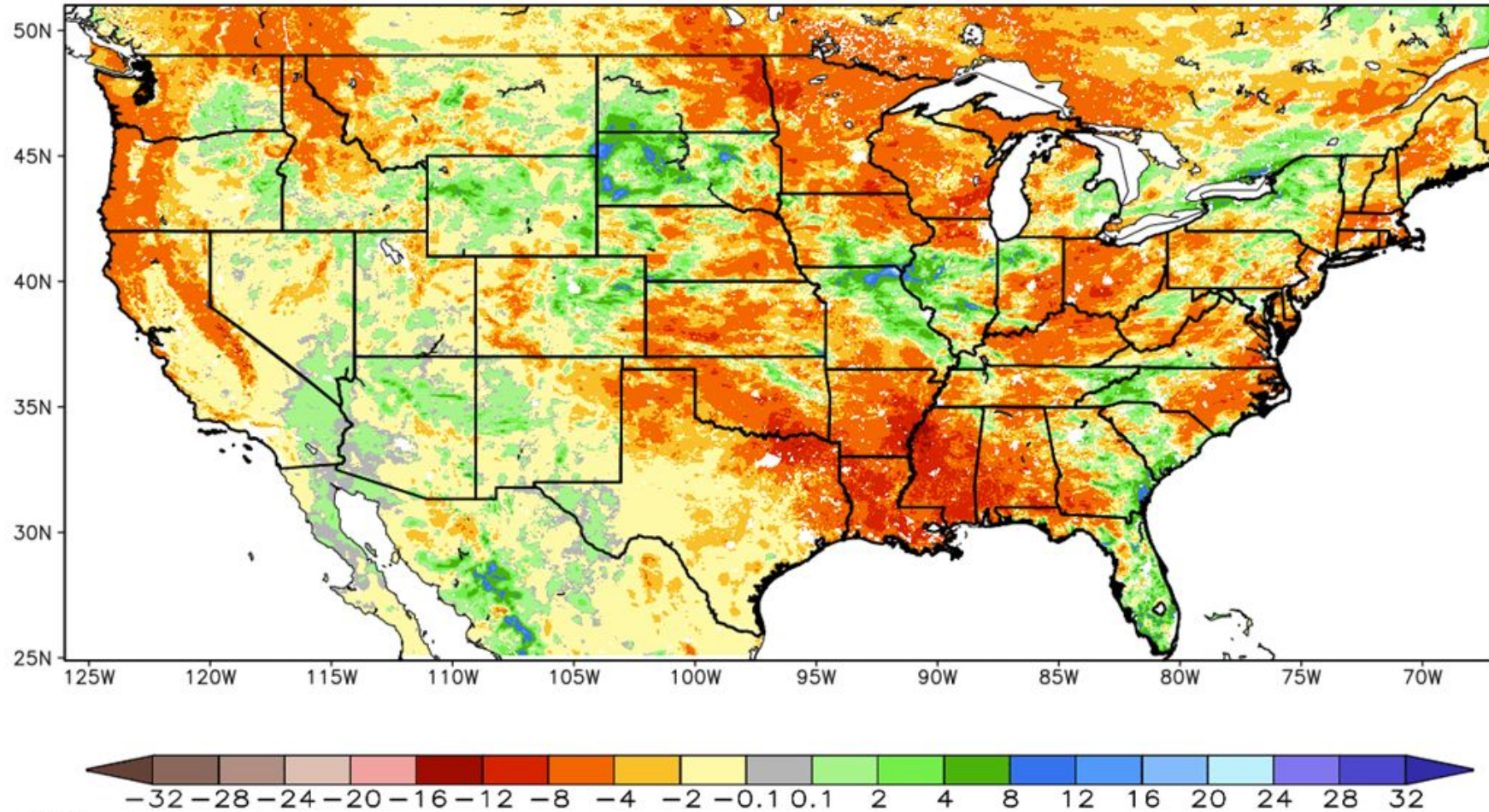


Source(s): NOAA STAR

Data Valid: 08/02/23

2-week Soil Moisture Changes

2-Week Difference in Column Relative Soil Moisture (%) valid 00z 08 Aug 2023

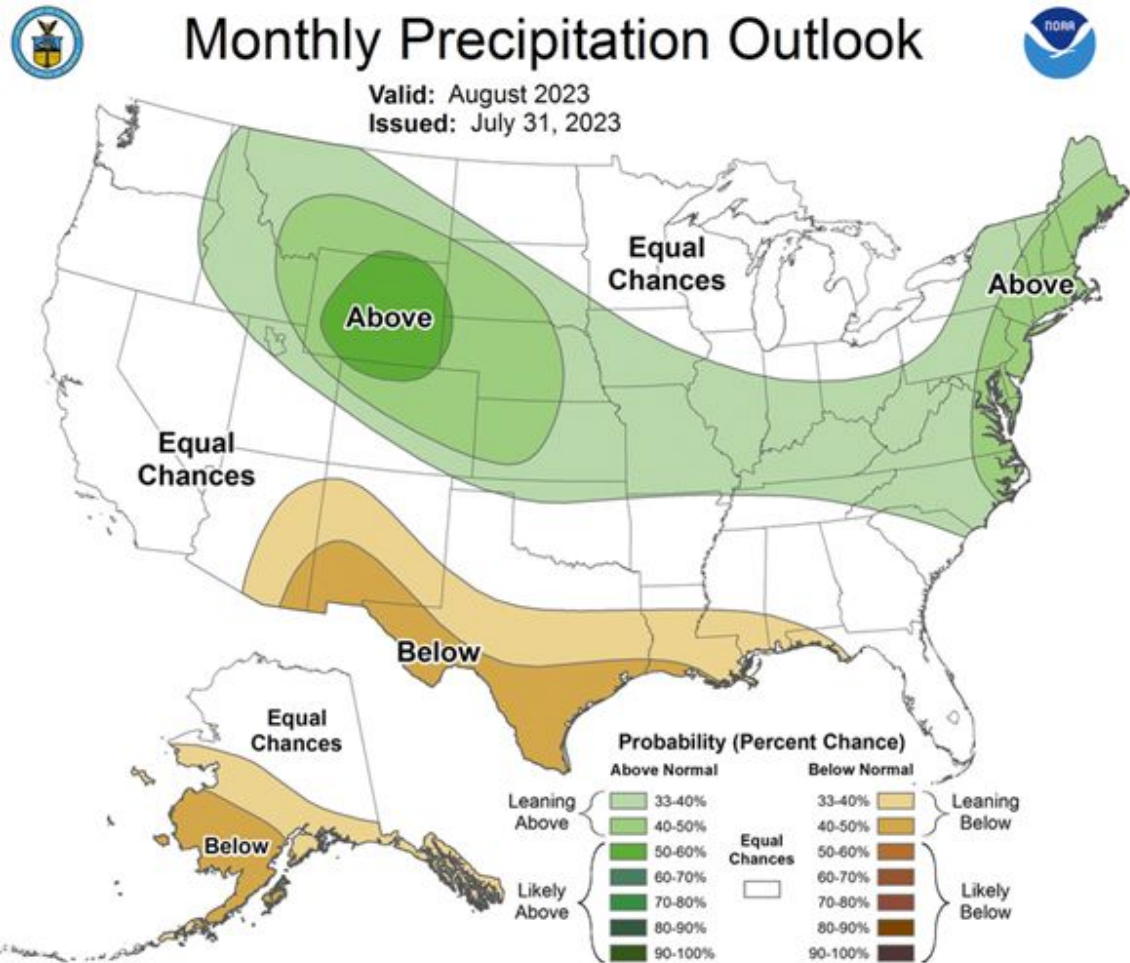
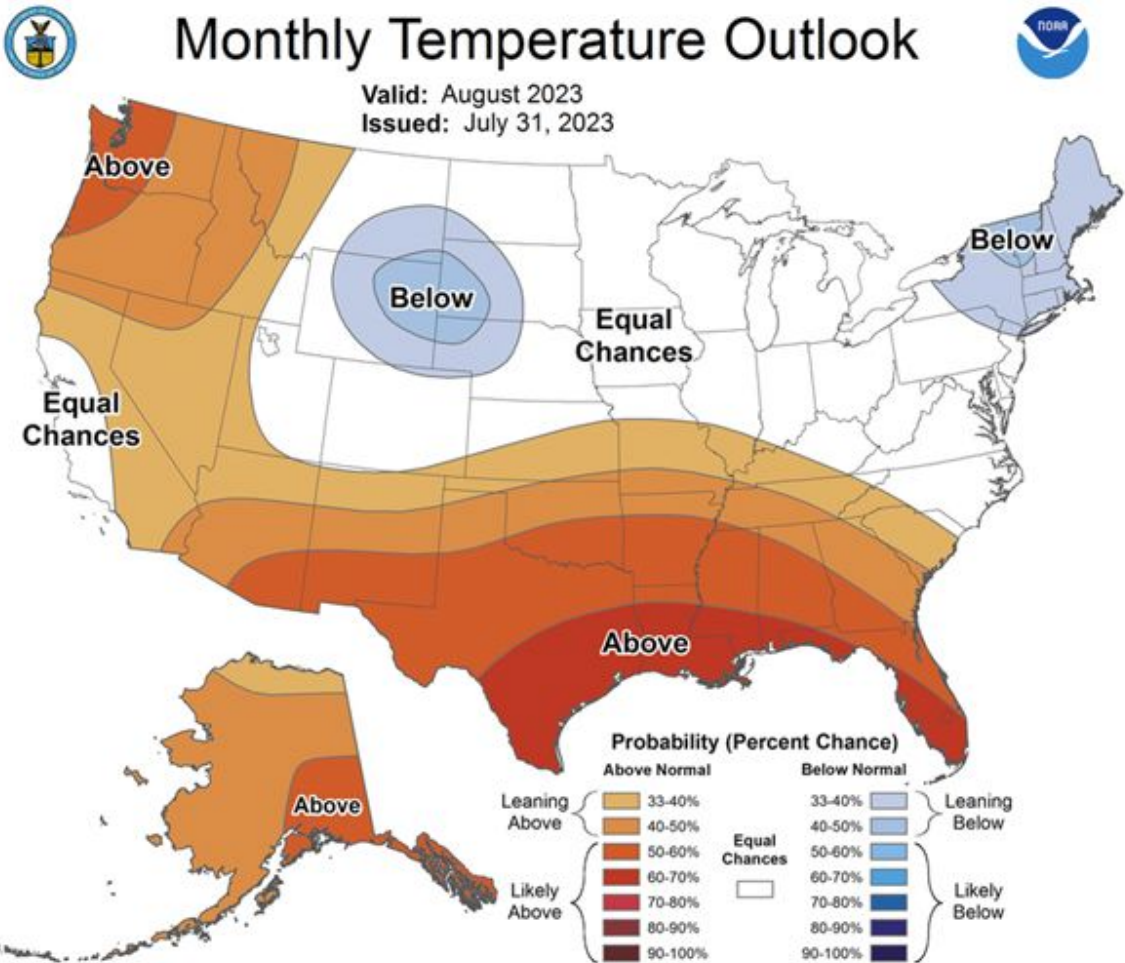


****NOTE****
****Experimental****

Agency - Utah Climate Center

Presenter - Jon Meyer

CPC August Outlook

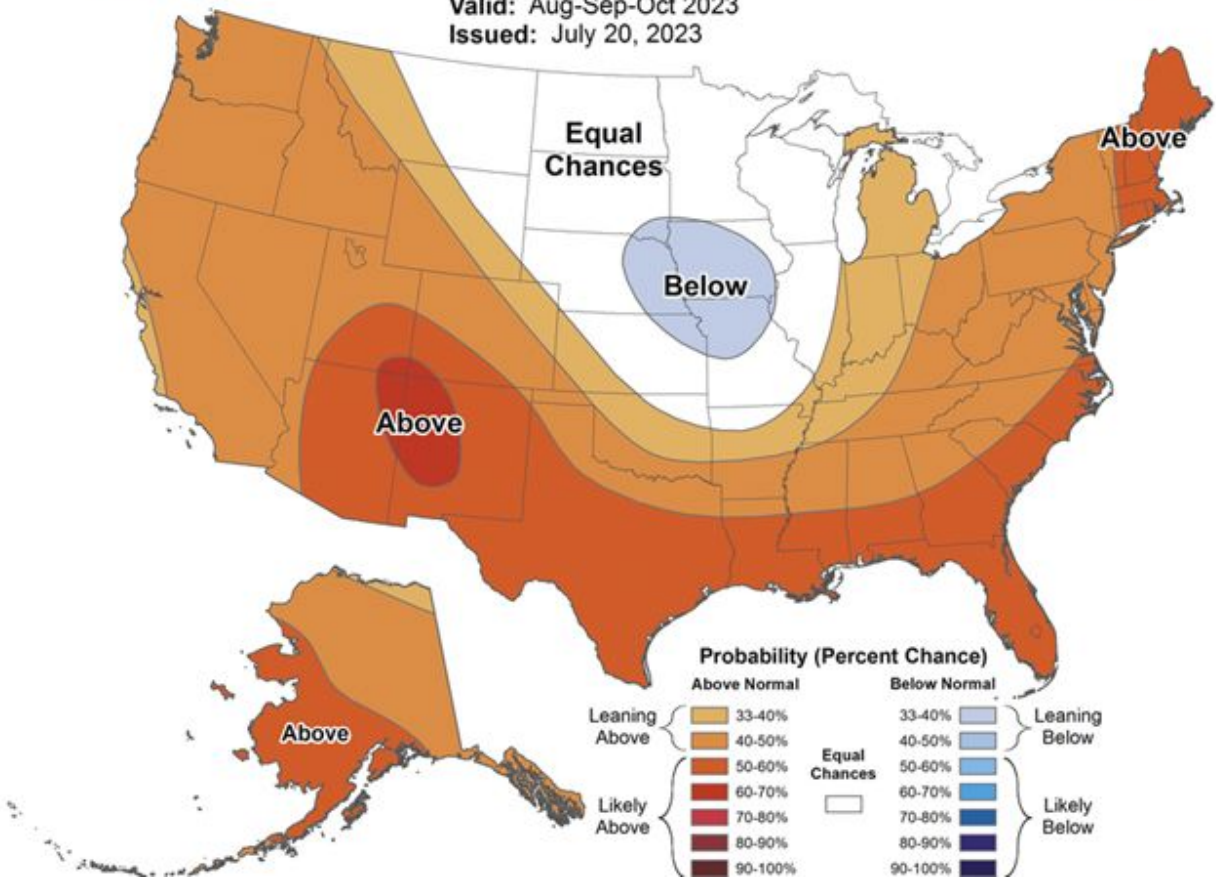


Agency -
Presenter -

CPC August-October Outlook

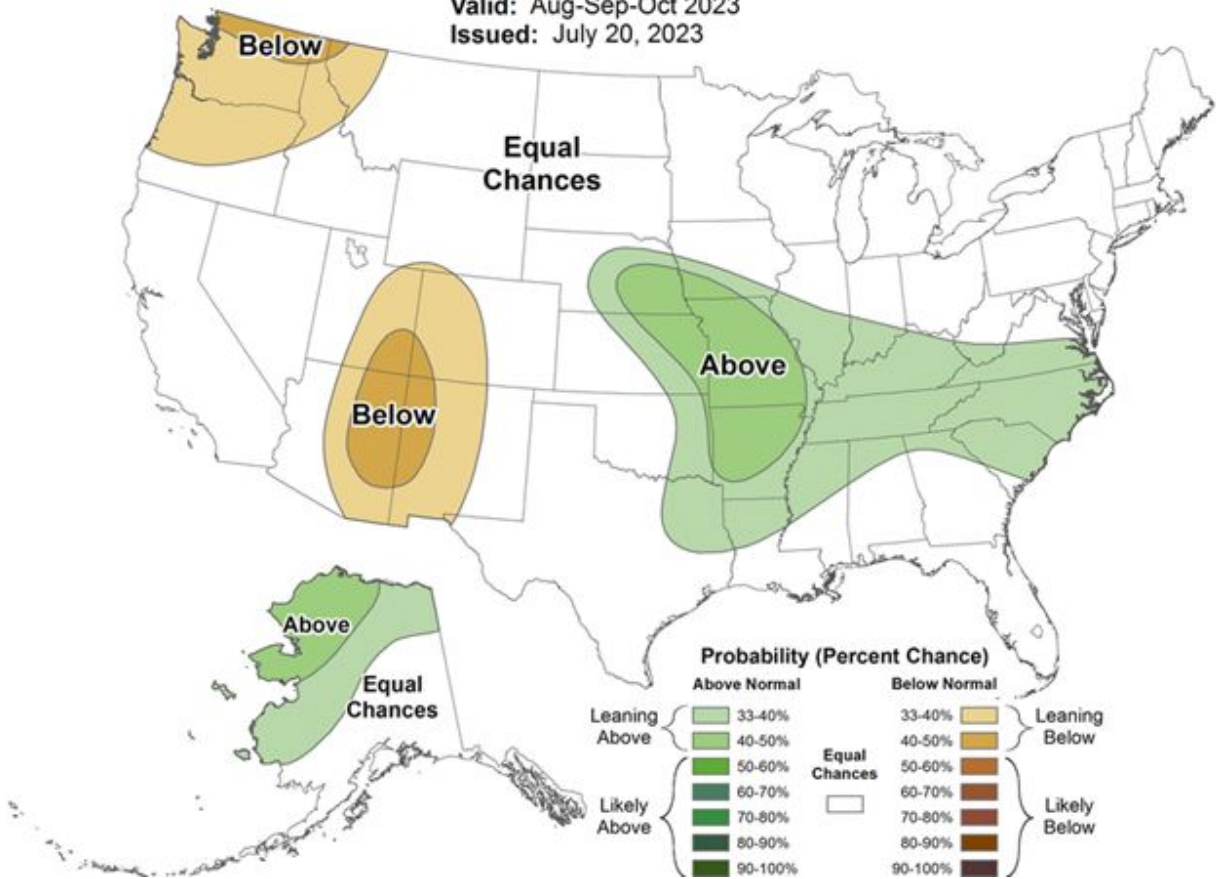
Seasonal Temperature Outlook

Valid: Aug-Sep-Oct 2023
Issued: July 20, 2023



Seasonal Precipitation Outlook

Valid: Aug-Sep-Oct 2023
Issued: July 20, 2023

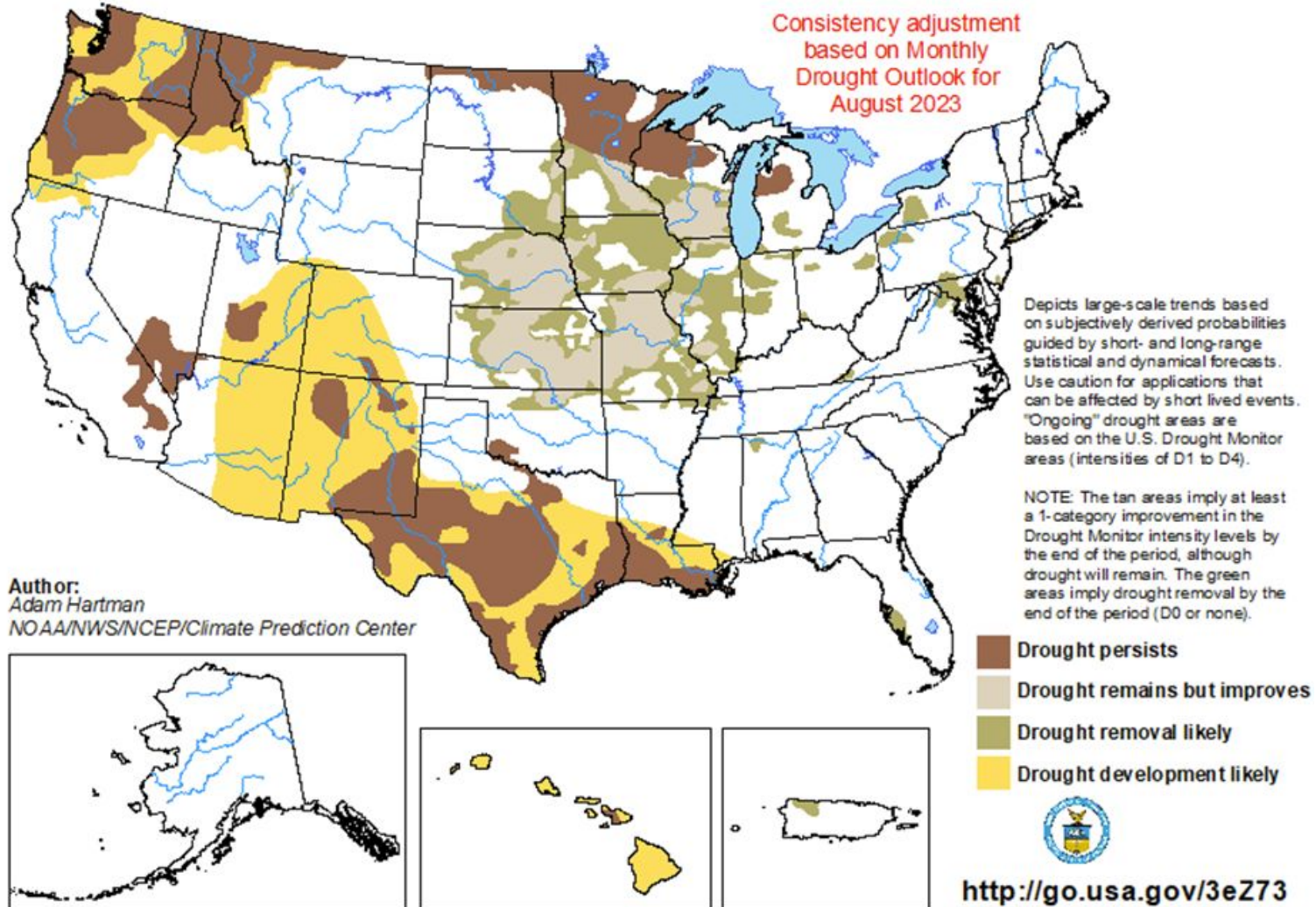


CPC August-October Drought Outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

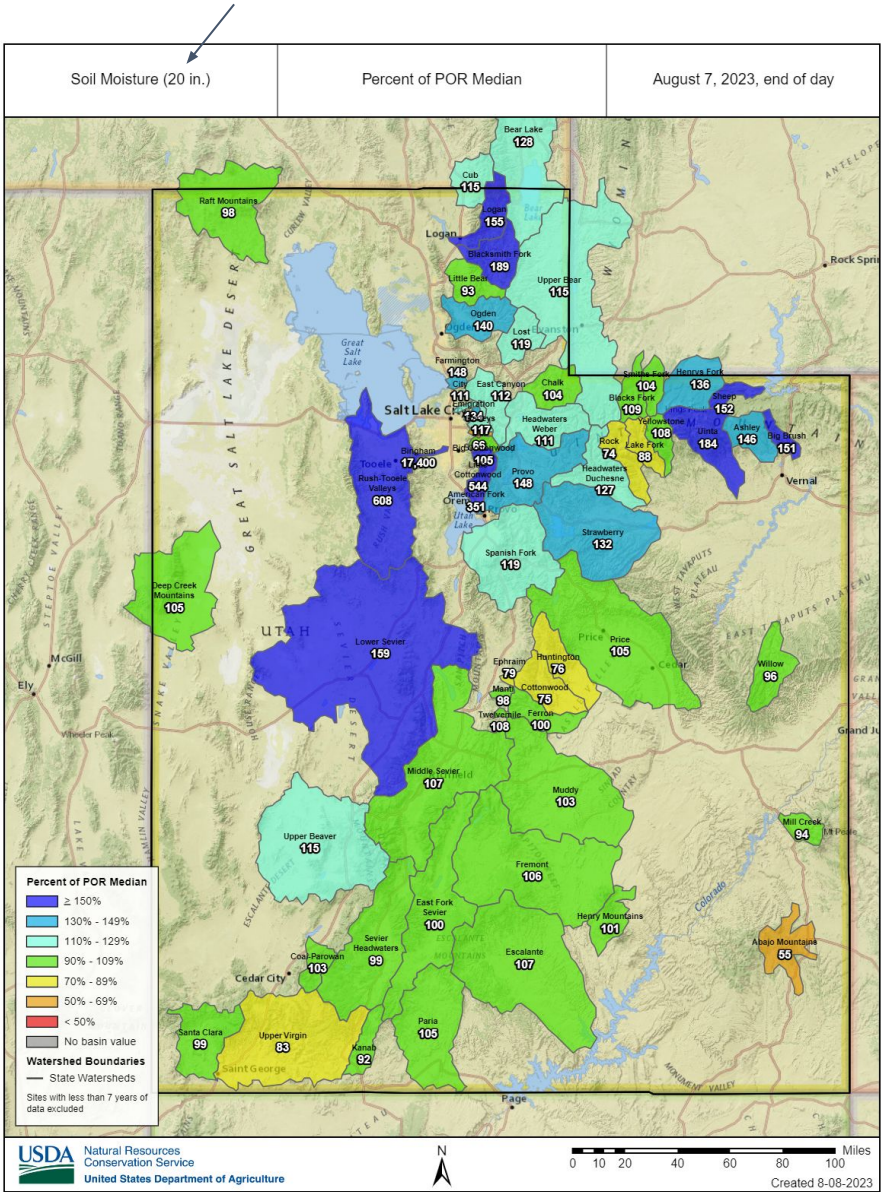
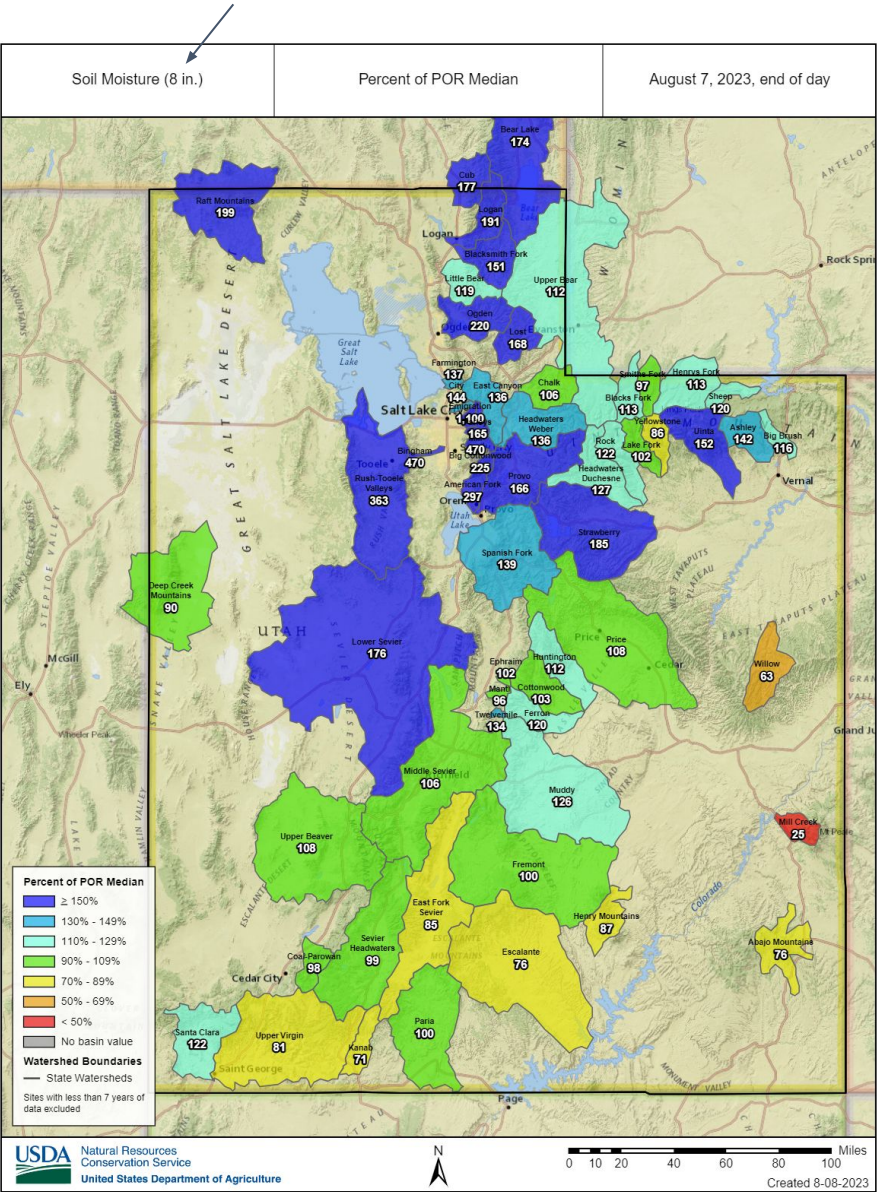
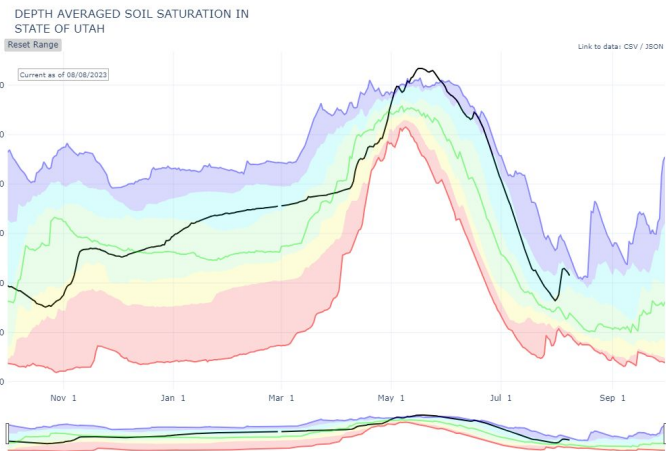
Valid for August 1 - October 31, 2023
Released July 31, 2023

Consistency adjustment
based on Monthly
Drought Outlook for
August 2023



Agency -
Presenter -

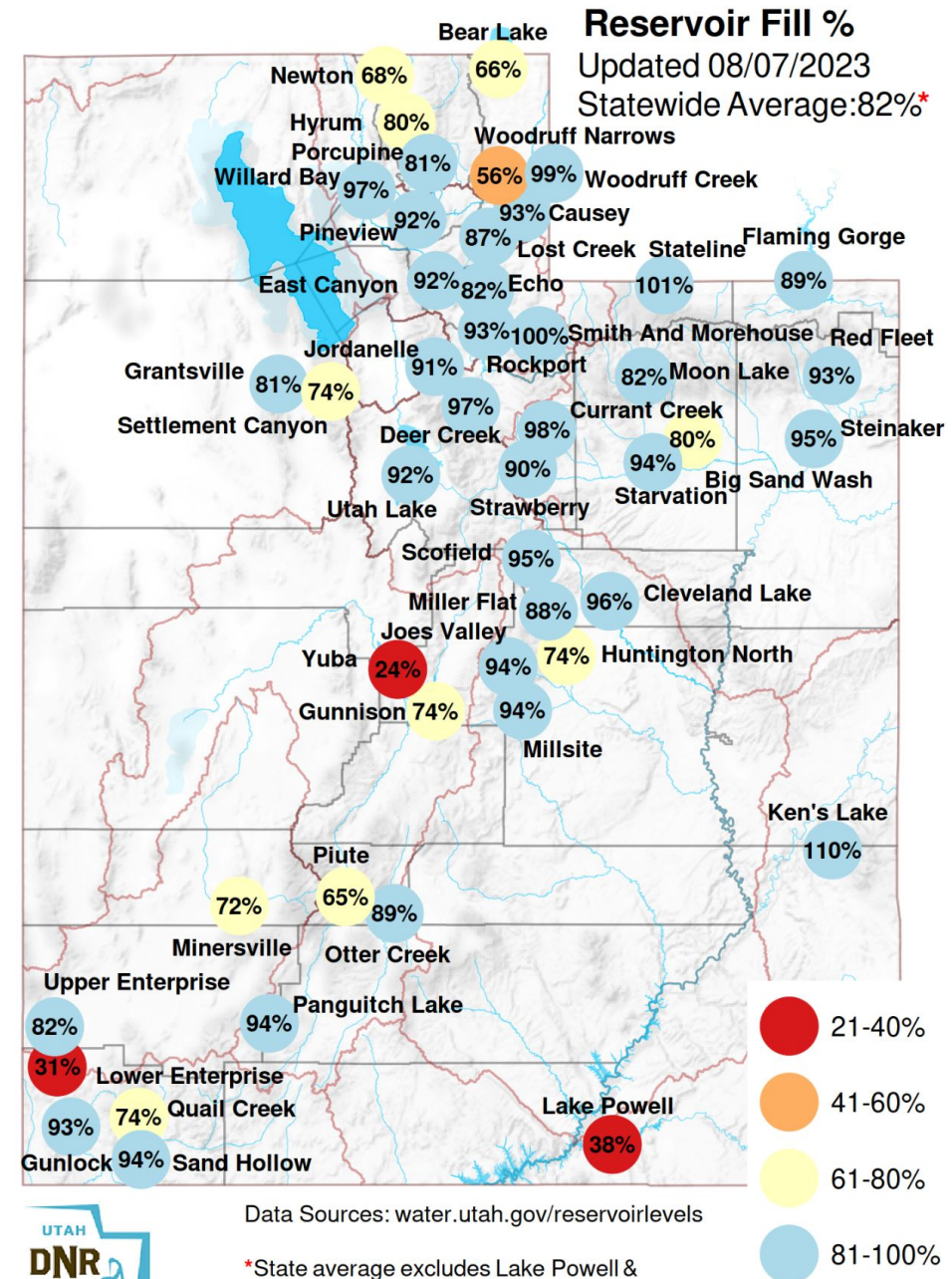
Soil Moisture



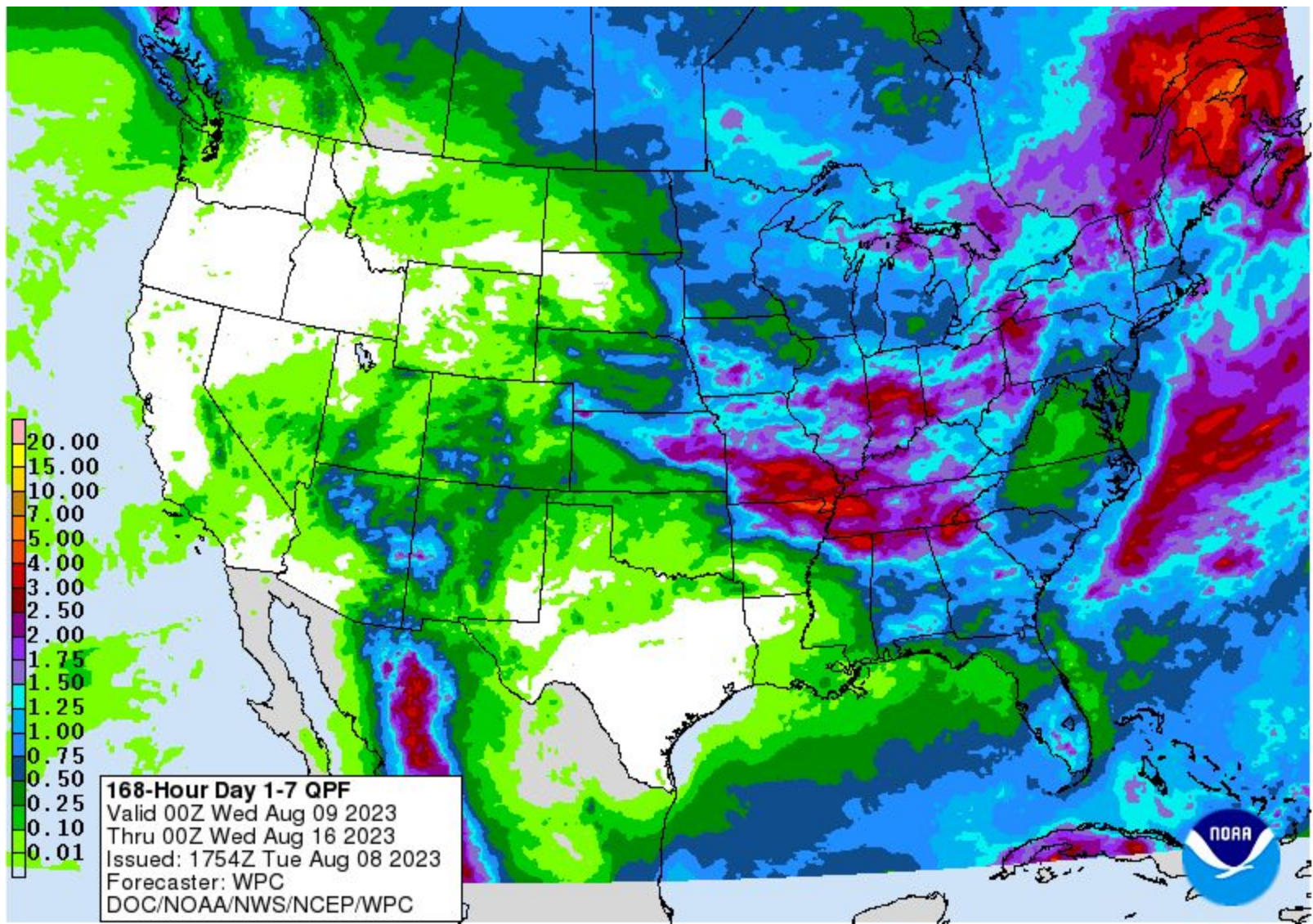
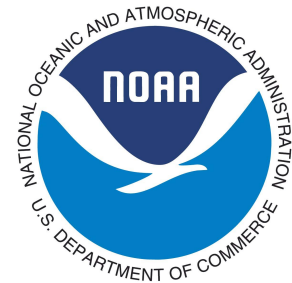
Yuba Lake had some work done on the spillway and needed to keep water levels low for that
Lower Enterprise is at a typical level for this time of year

Statewide reservoirs are 17% above median for this time of year

Statewide reservoirs are 31% higher than this time last year



Weather Forecast Office Utah Day 1-7 Outlook

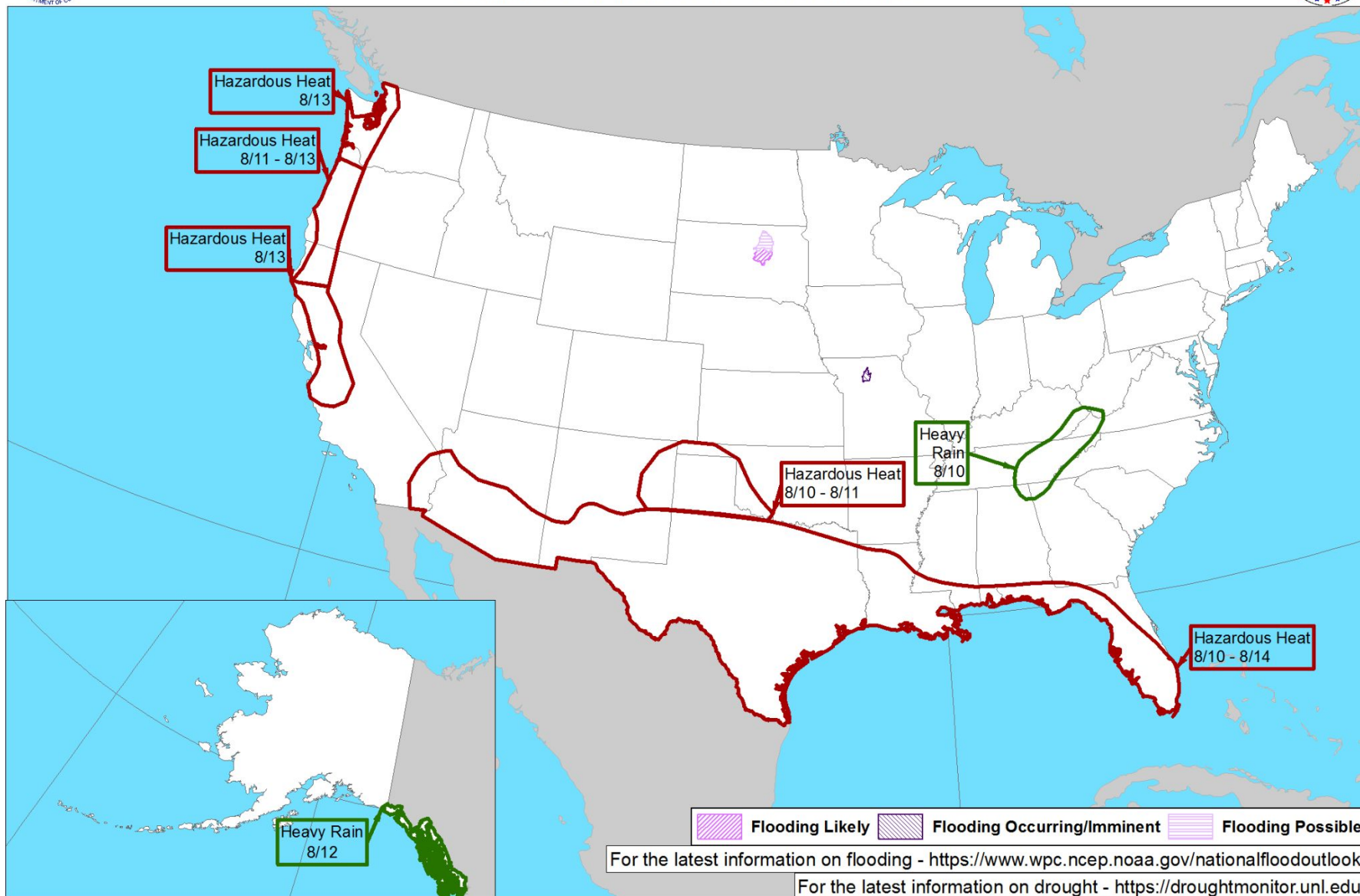
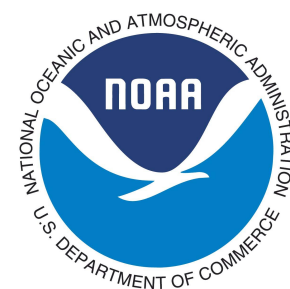


Agency - National Weather Service Weather Forecast Office
Presenter -



Day 3-7 U.S. Hazards Outlook

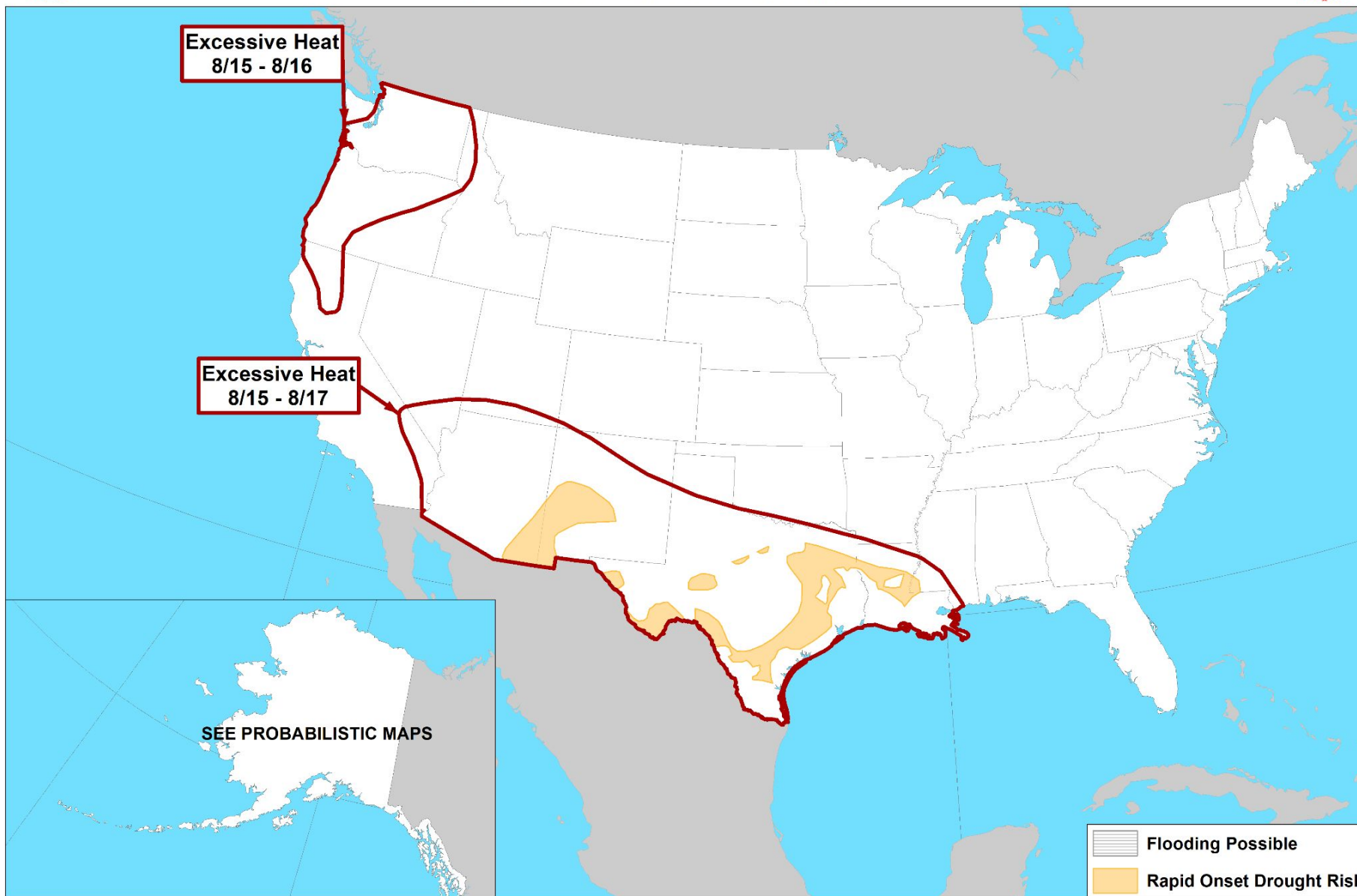
Valid: 08/10/2023-08/14/2023





Day 8-14 U.S. Hazards Outlook

Valid: 08/15/2023-08/21/2023

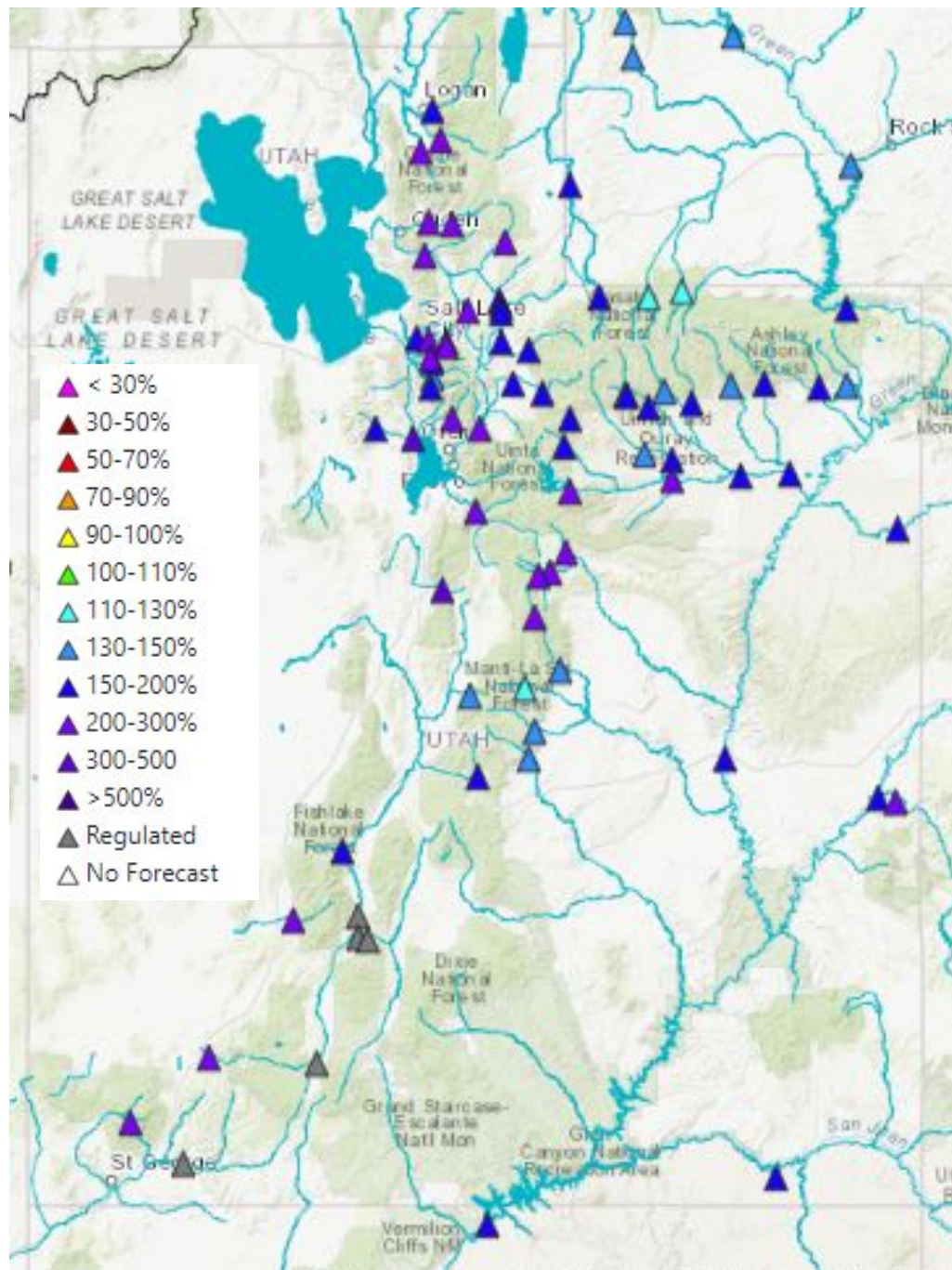


Climate Prediction Center

Made: 08/07/2023 3PM EDT

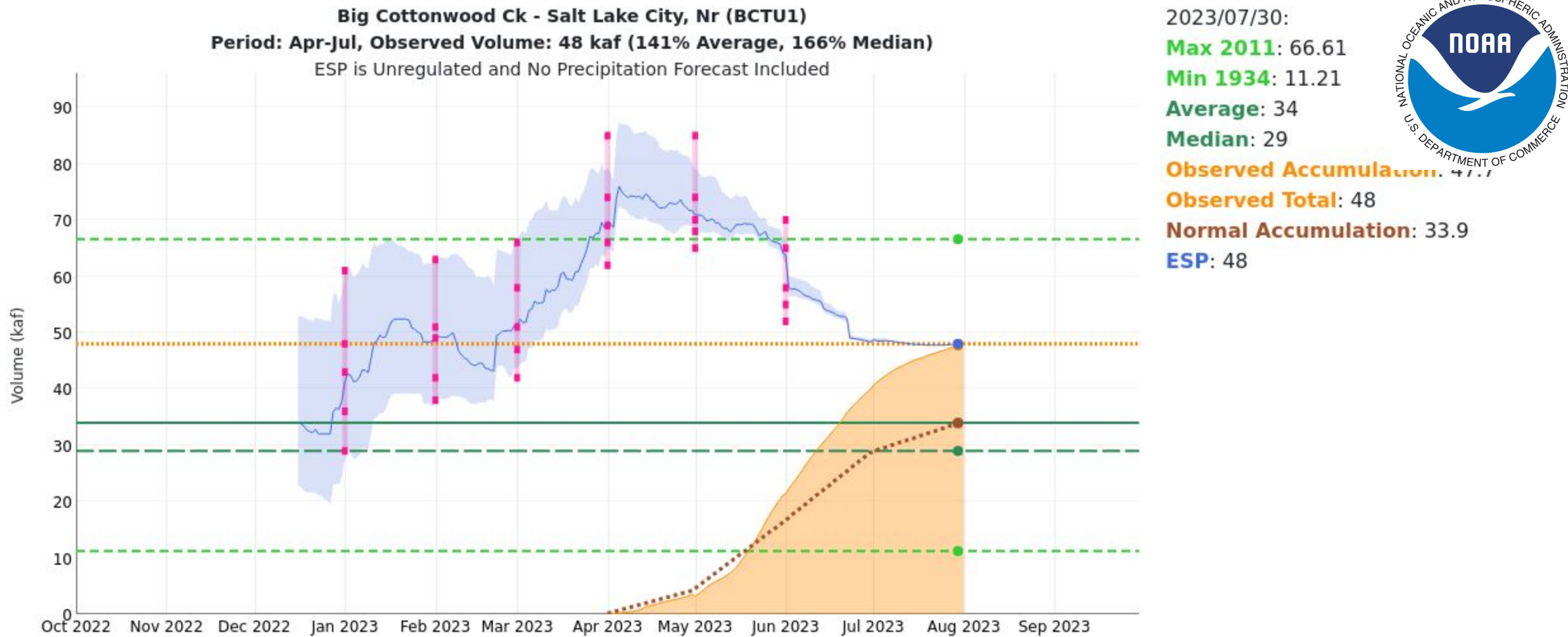
Follow us:  

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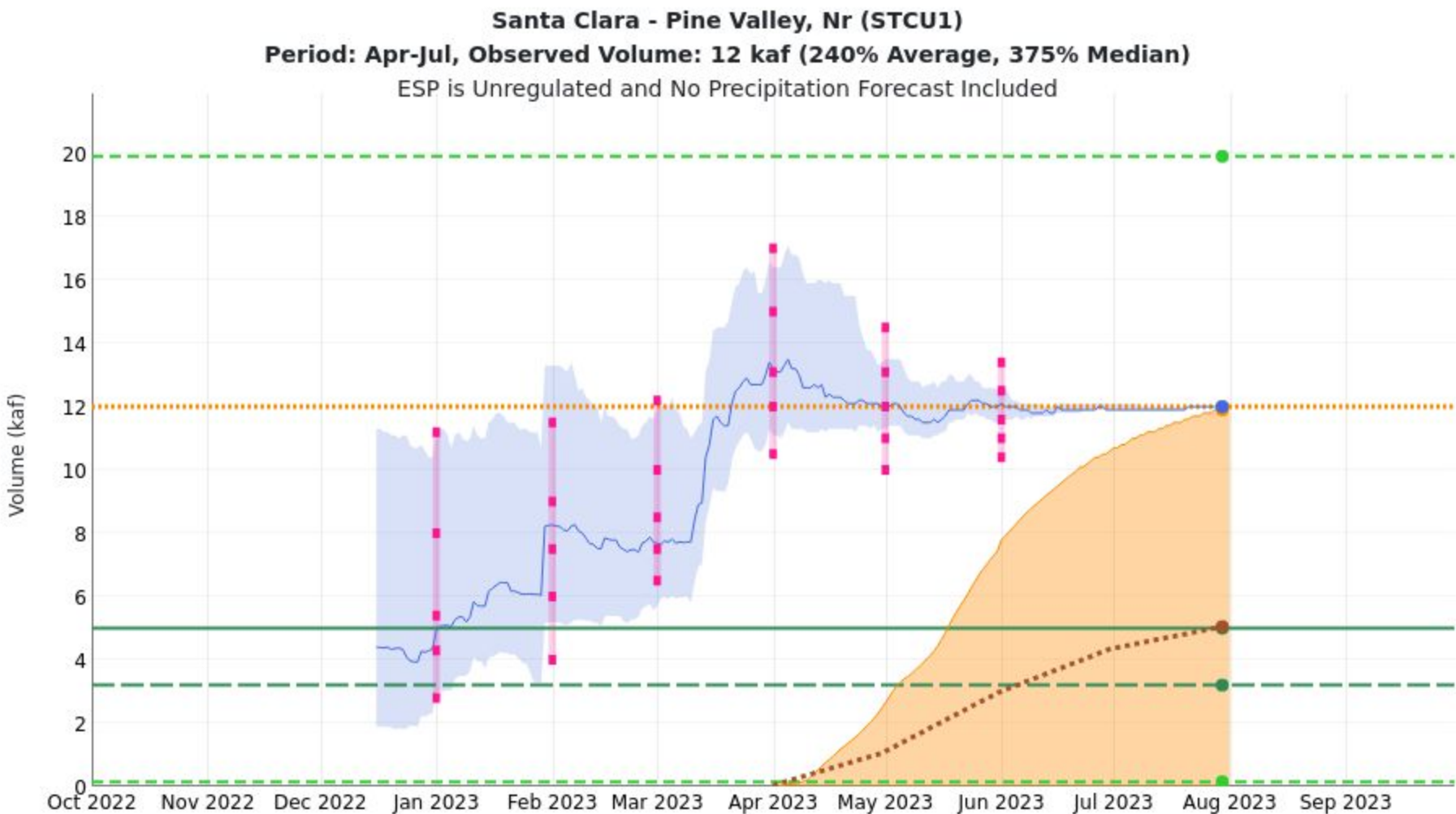


Provisional, observed water supply volumes are now available on our website. These values will become finalized as we collect finalized flow data from the USGS and other partners. Water supply volumes over Utah generally ranged from 110% to 230% of average conditions.

Overall, we did well forecasting this extreme years. In some areas, we struggled a bit more due to a slow, inefficient snowmelt, and lack of data from unmeasured depletions and some areas where high flows were not captured accurately.



We struggled a bit with our forecast at Big Cottonwood (and Little Cottonwood to a lesser extent). High flows were difficult to measure here since flows were above the rating curves. We had to make significant changes to our snow states in June as we realized the water was not coming.



2023/07/30:

Max 2005: 19.91

Min 2002: 0.15

Average: 5

Median: 3.2

Observed Accumulation: 11.7

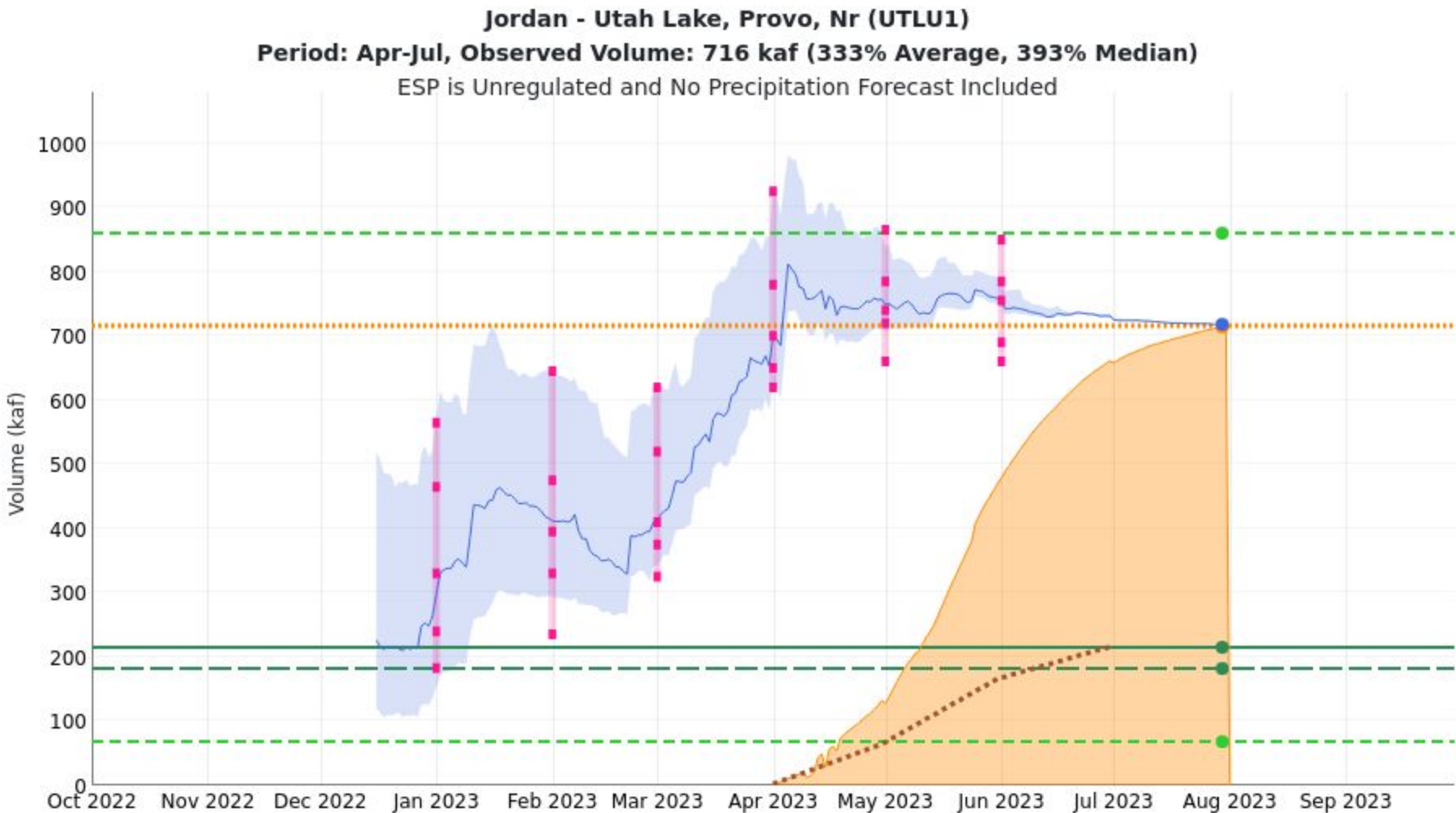
Observed Total: 12

Normal Accumulation: 5.05

ESP: 12



We did really well at Santa Clara. Initial thoughts are that warmer temperatures in the southern part of the state allowed for the snowmelt to come off efficiently.



2023/07/30:

Max 1984: 859.97

Min 1961: 68.03

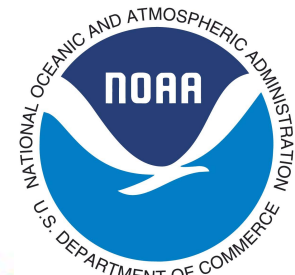
Average: 215

Median: 182

Observed Accumulation: 716

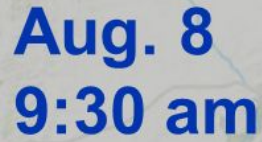
Observed Total: 716

ESP: 718




We also did well over the Provo River Basin. There are lots of diversions and uses going on here (some of which we don't have the data for), so this one can be tricky to get right, but we did well here.

Jul. 10 Aug. 8

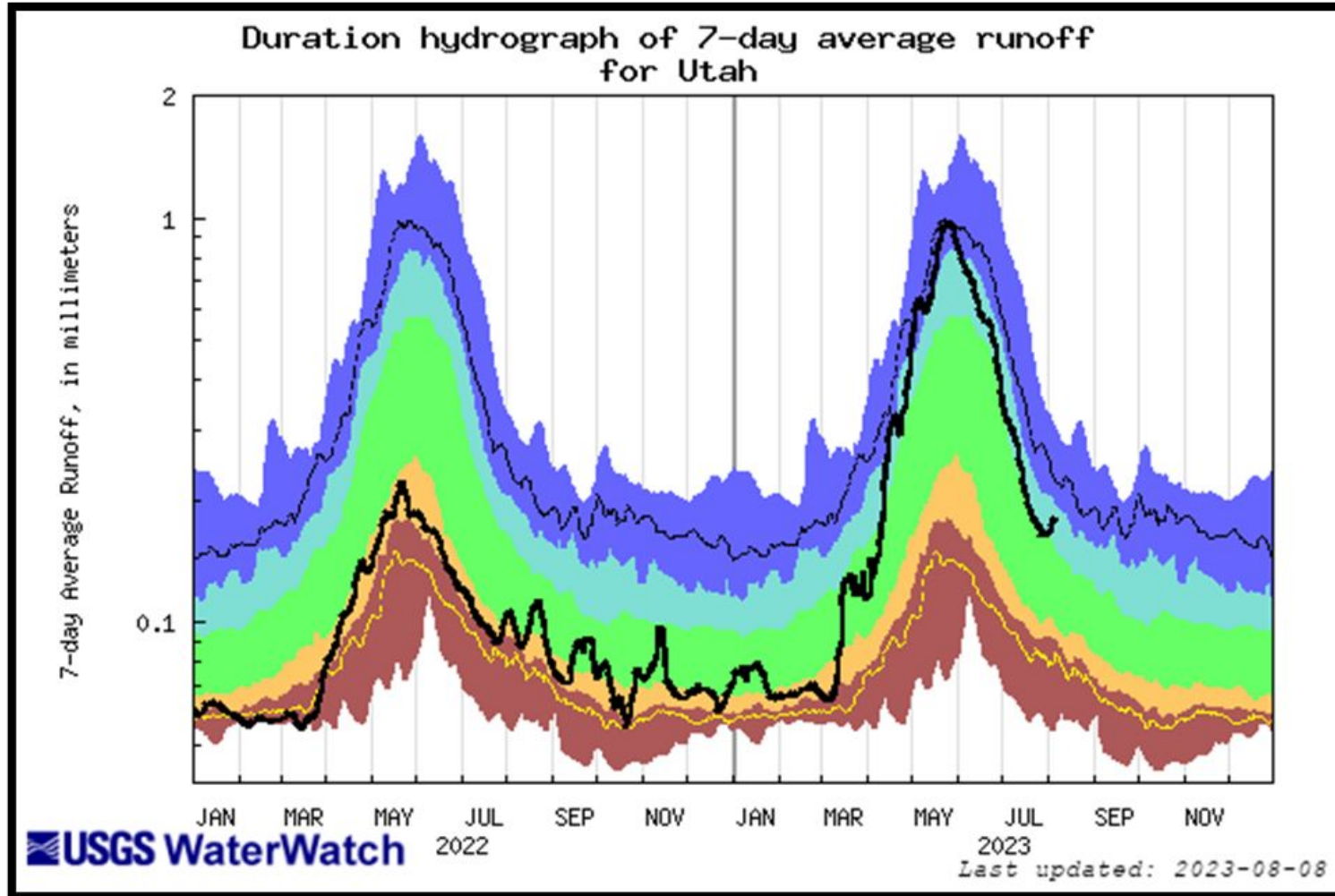
Provisional data, subject to revision

Streamflow: Status

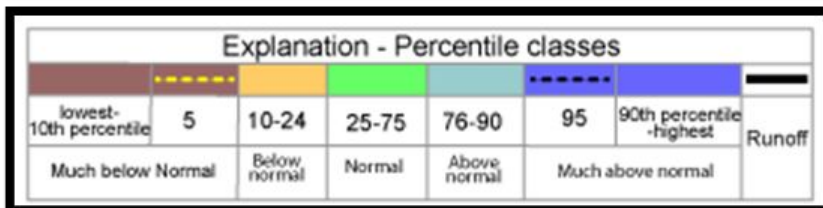
	Above flood stage	
	All-time high for this day	100 th percentile (maximum)
	Much above normal	>90 th percentile
	Above normal	76 th – 90 th percentile
	Normal	25 th – 75 th percentile
	Below normal	10 th – 24 th percentile
	Much below normal	<10 th percentile
	All-time low for this day	0 th percentile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



Utah Area-Based Runoff Duration Hydrograph



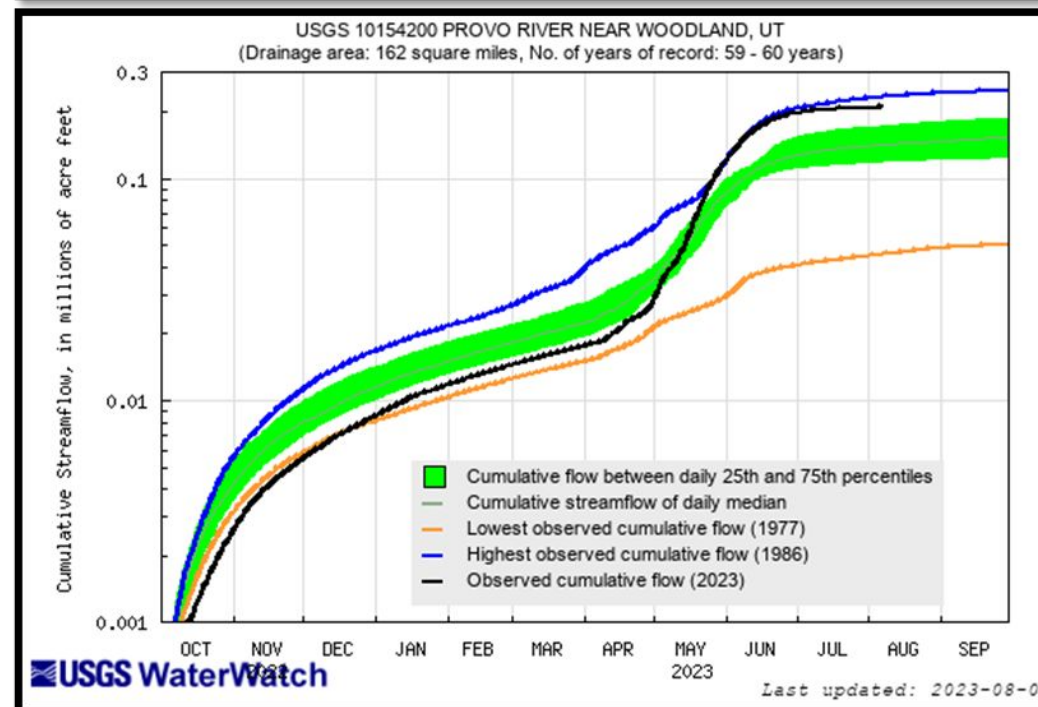
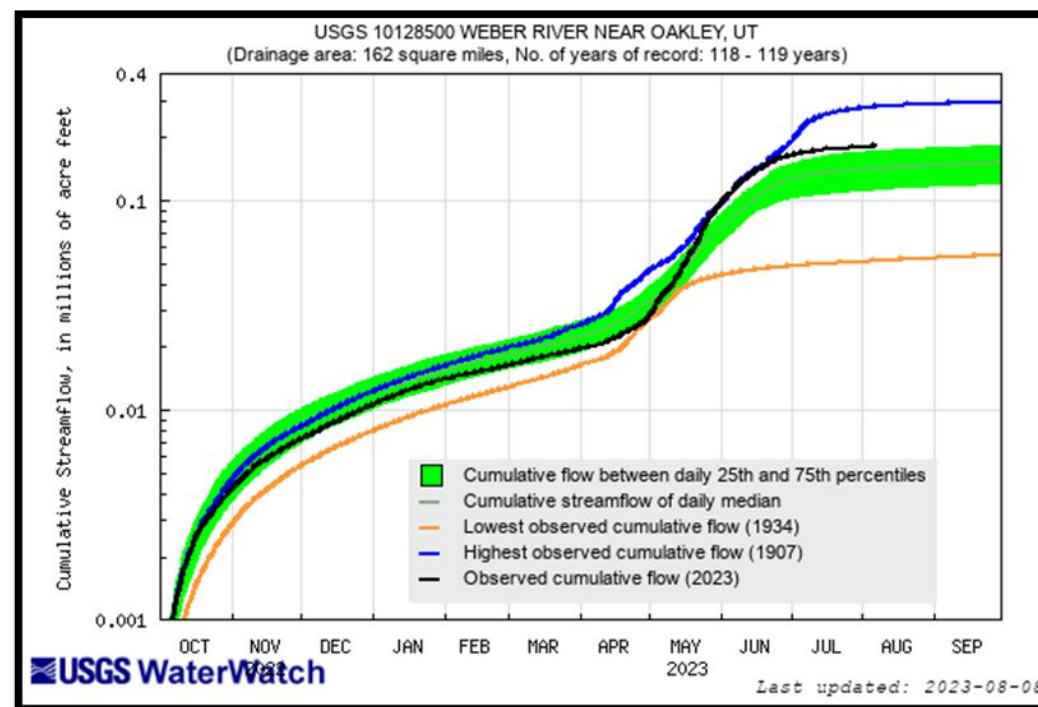
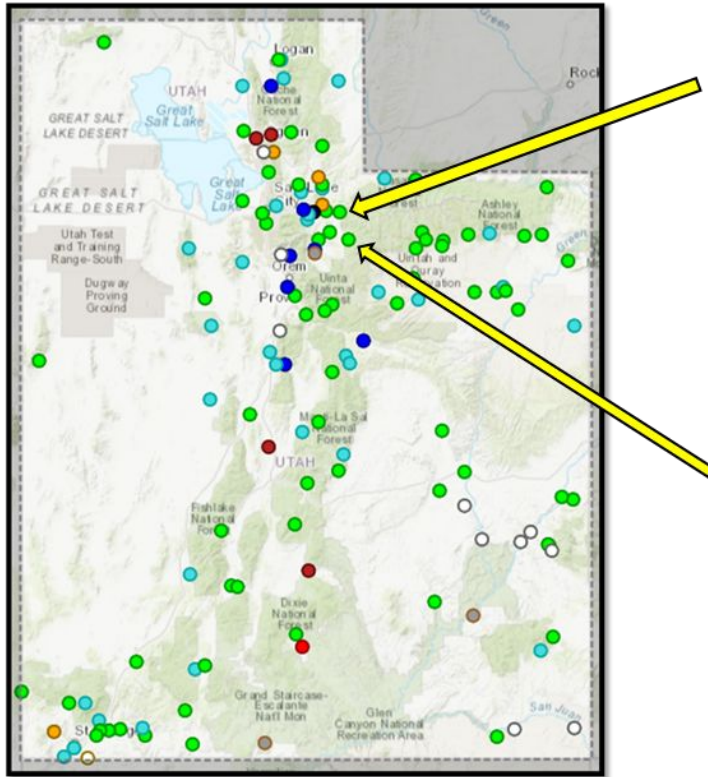
❑ The Runoff Duration Hydrograph is a graphical presentation of area-based runoff (the black line) calculated as a weighted average of HUC 8-runoff, plotted over the long-term statistics of runoff for each day or month of the year for each area.



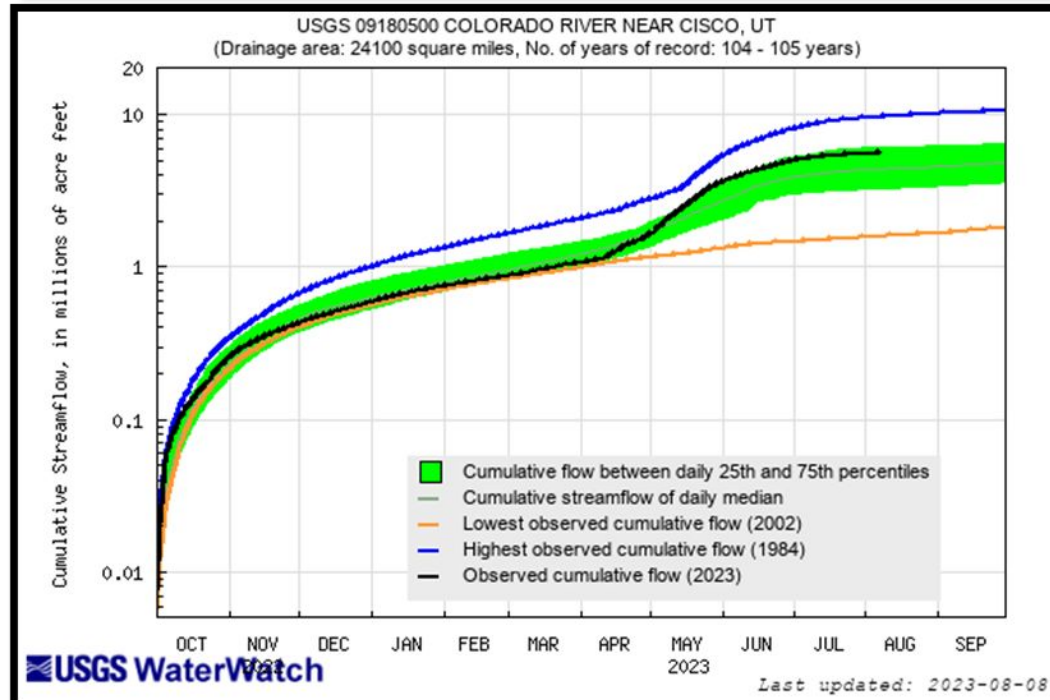
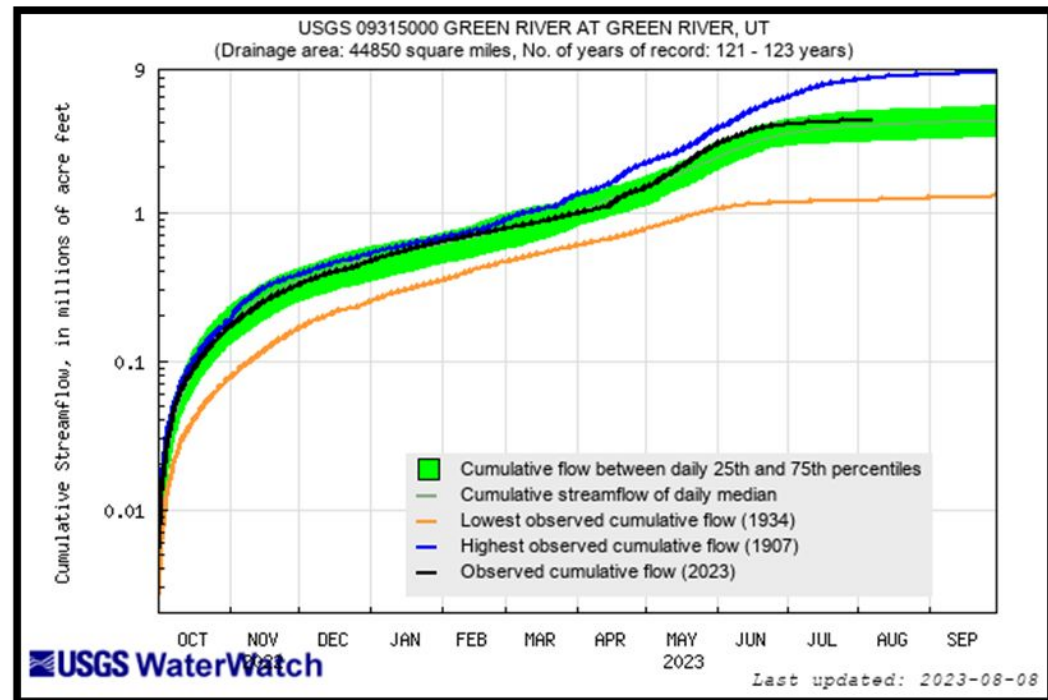
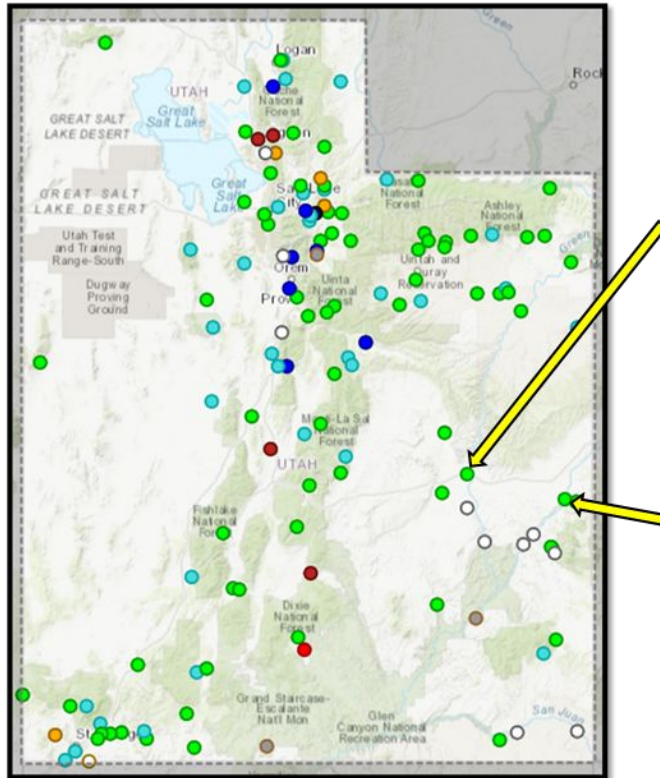
Provisional data, subject to revision

Agency - USGS Utah WSC
Presenter - Ryan Rowland

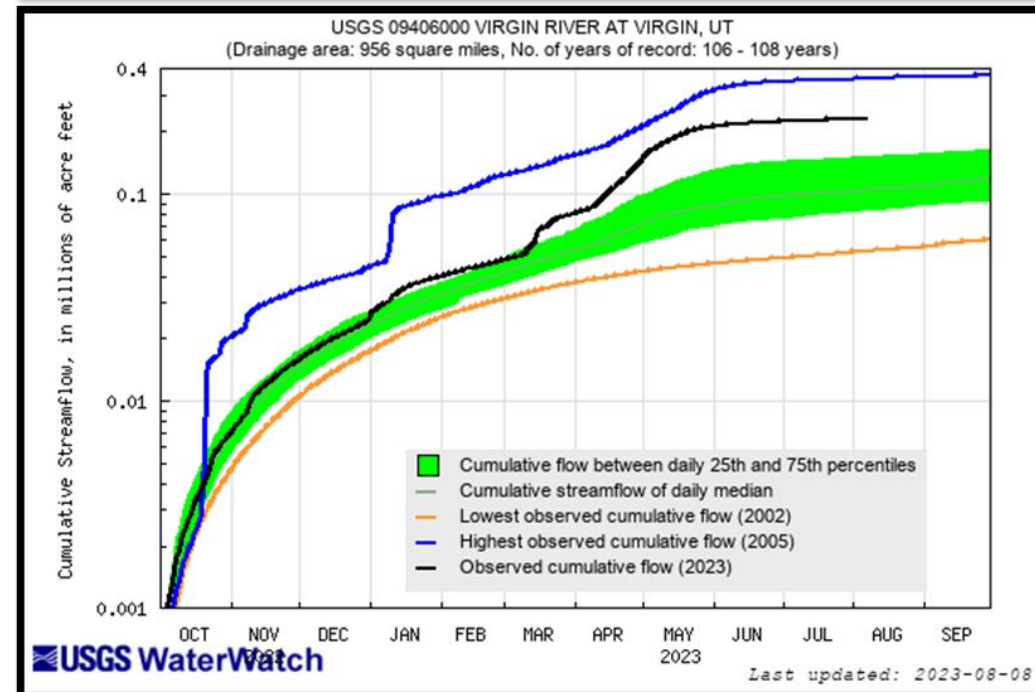
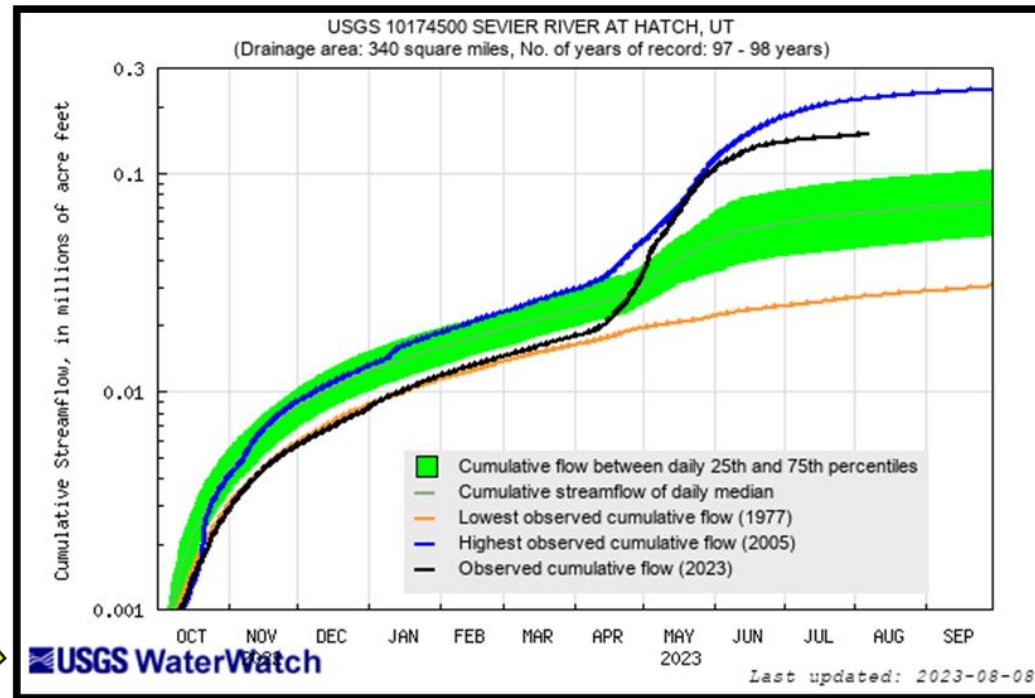
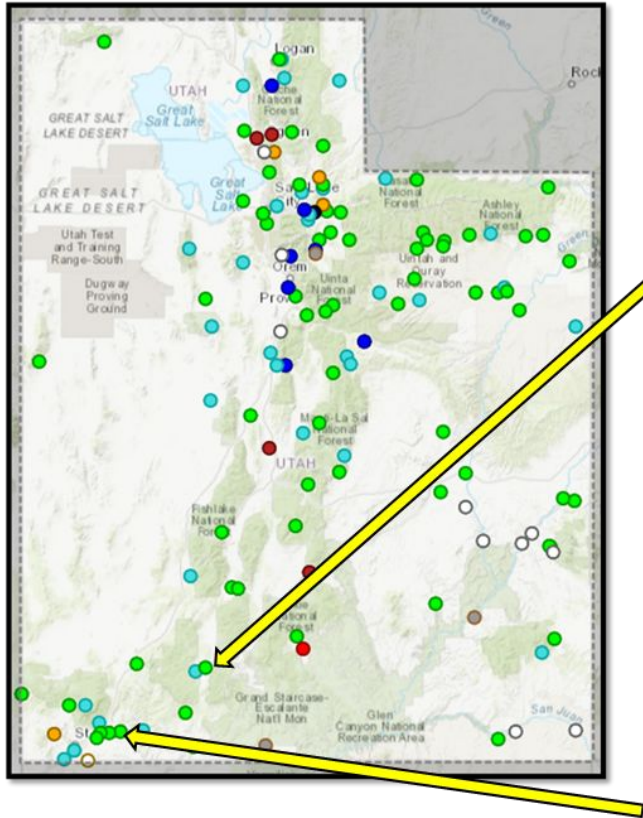
Cumulative Streamflow for Selected Gages



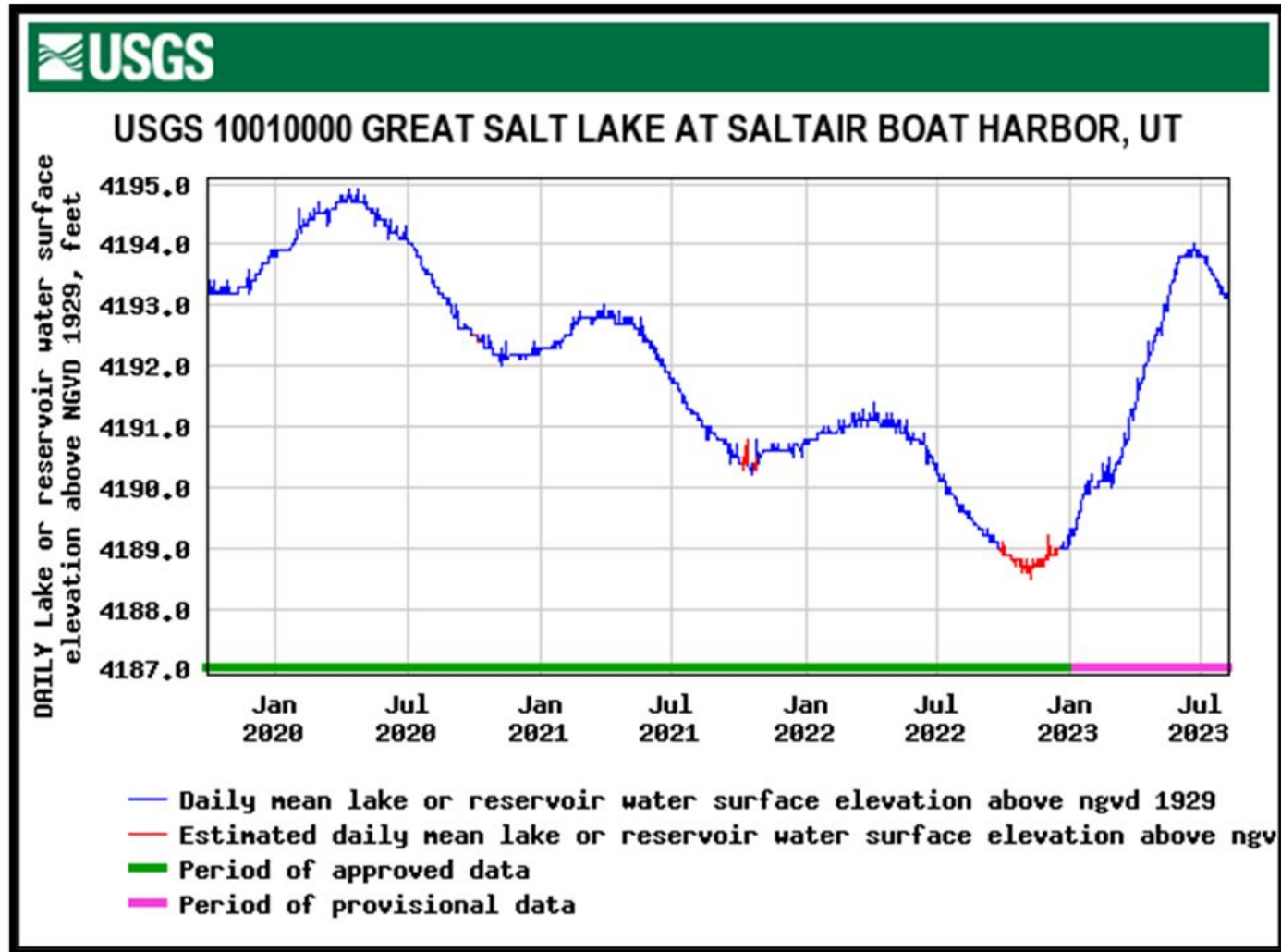
Cumulative Streamflow for Selected Gages



Cumulative Streamflow for Selected Gages

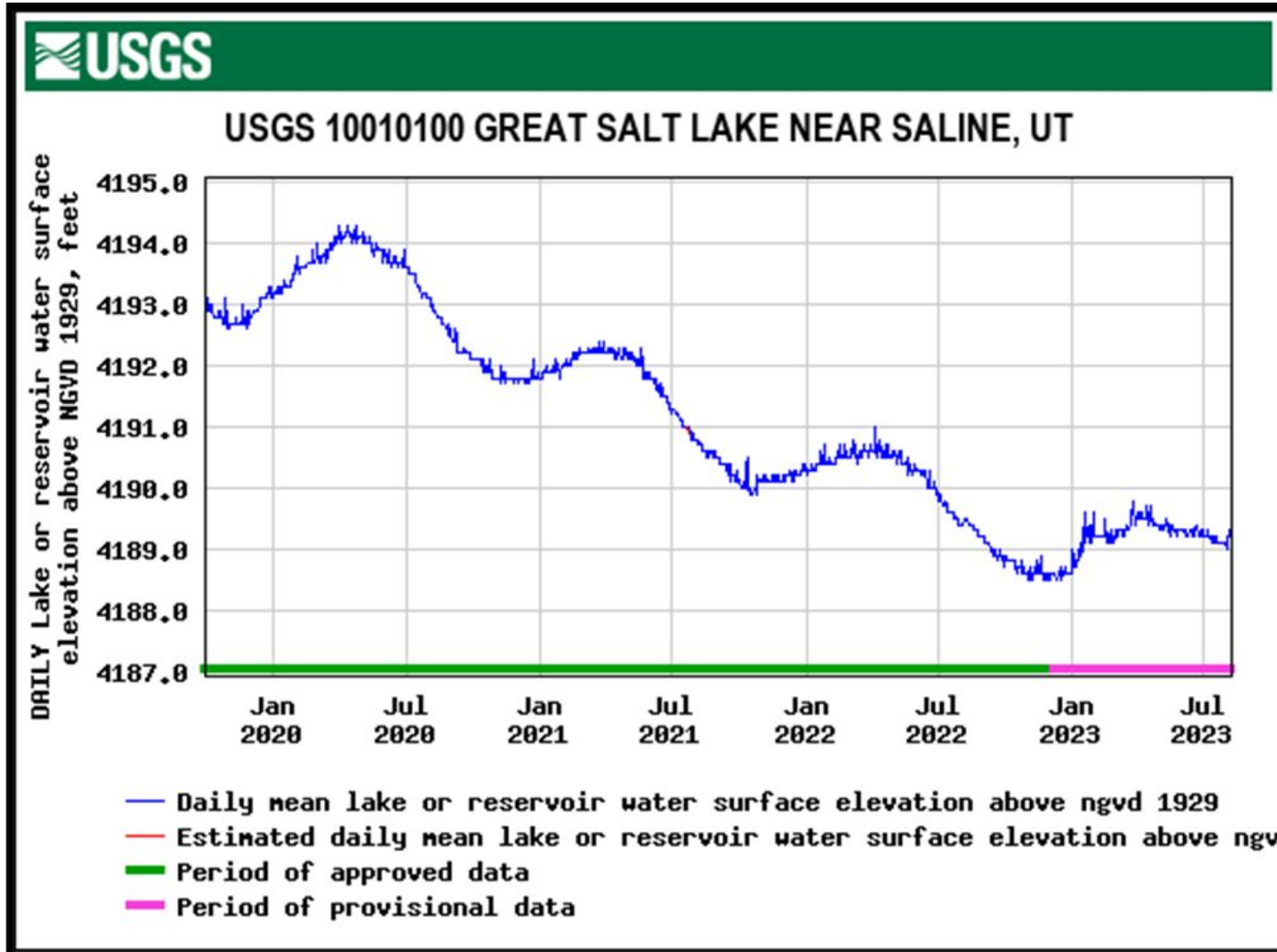


Great Salt Lake Water Surface Elevation – South Arm



- ❑ Daily value 8/7/2023 = 4,193.1'
- ❑ Daily value 7/10/2023 = 4,193.6'
- ❑ Peaked at 4,194.0' on 6/19 and 6/20/2023
- ❑ Berm at causeway breach raised to 4,192' 2/9/2023

Great Salt Lake Water Surface Elevation – North Arm



- ❑ Daily value 8/7/2023 = 4,189.2'
- ❑ Daily value 7/10/2023 = 4,189.1'
- ❑ Peaked at 4,189.8' on 3/24/2023

U.S. Drought Monitor

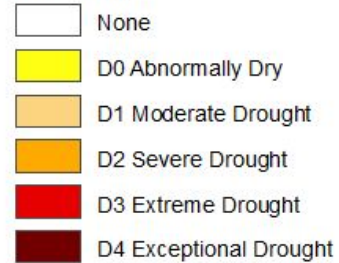
Utah

August 1, 2023

(Released Thursday, Aug. 3, 2023)

Valid 8 a.m. EDT

Intensity:



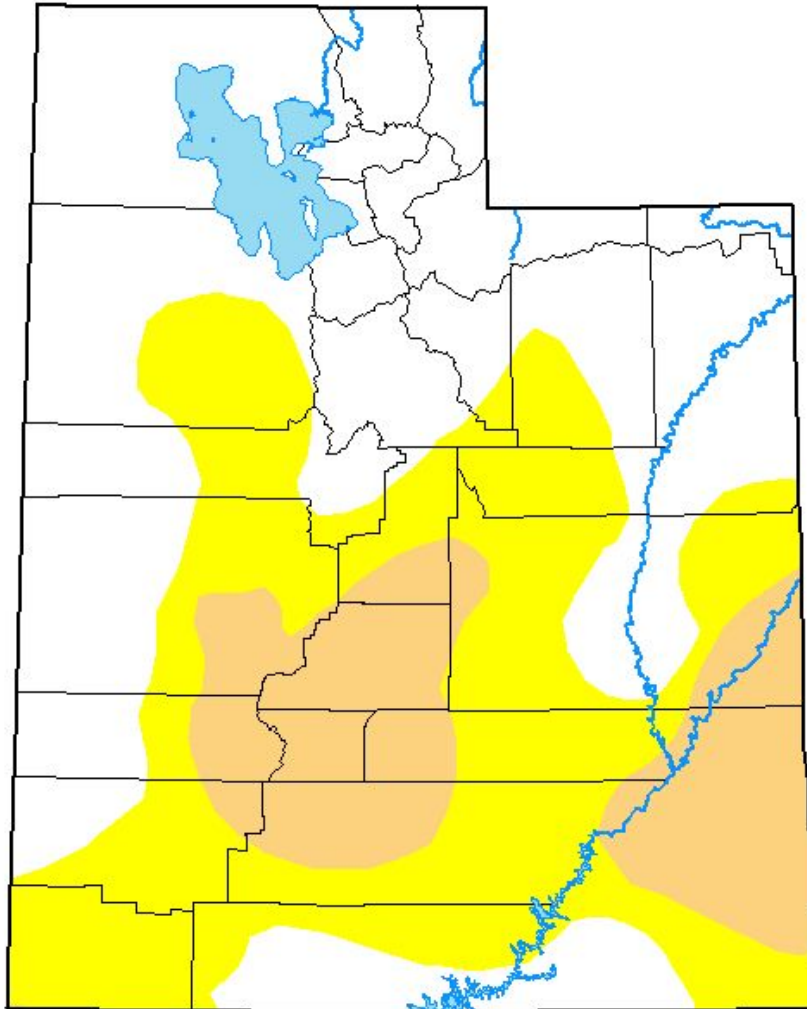
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu



To report on conditions between meetings:

Submit a report on CMOR drought website

Email Lhaskell@utah.gov

email drought@utah.gov