



Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors

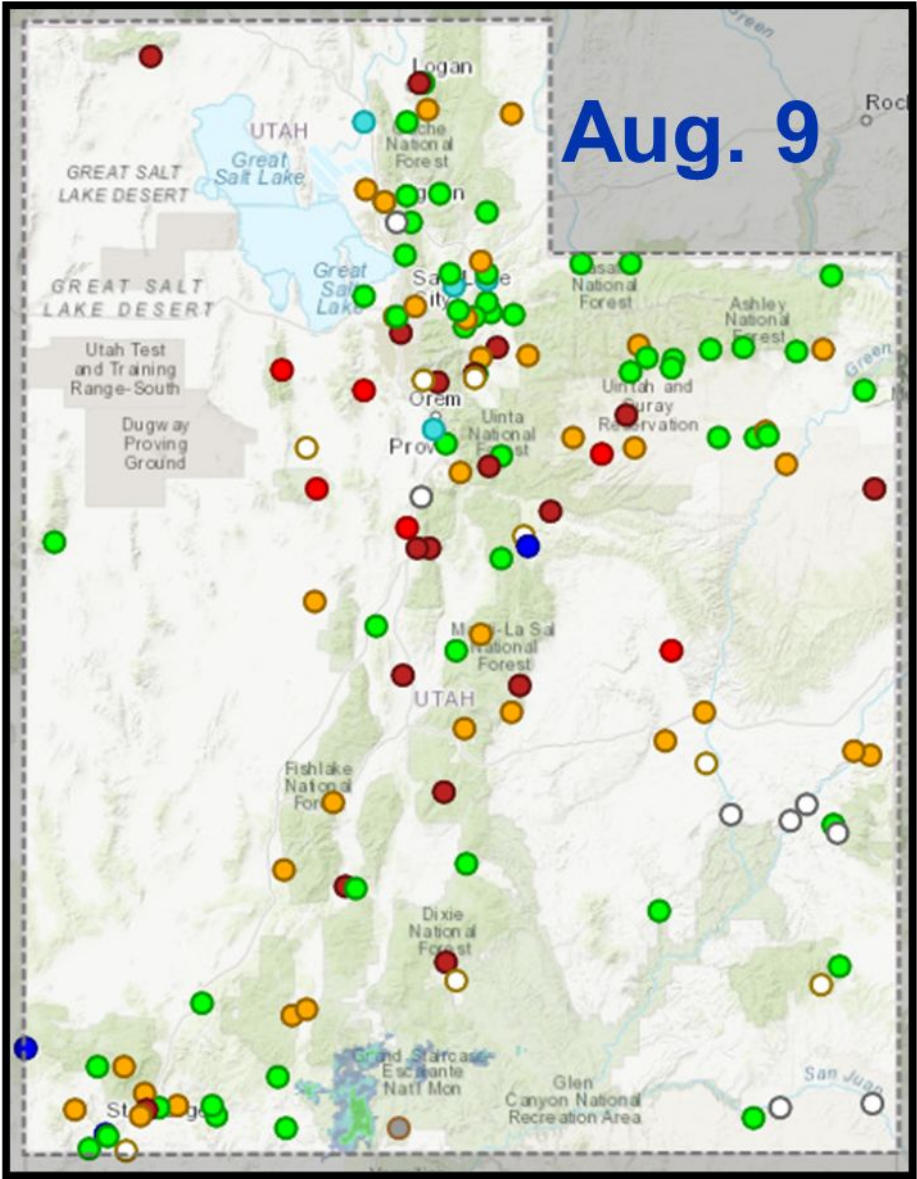




Utah Water Assessment & Conditions Monitoring Webinar

August 9, 2022

Current Streamflows



*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	0.0%	0.0%
Much above normal for this day-of-year	0.7%	2.2%
Above normal for this day-of-year	4.4%	2.9%
Normal for this day-of-year	38.0%	40.1%
Below normal for this day-of-year	29.9%	24.8%
Much below normal for this day-of-year	10.2%	13.1%
All-time low for this day-of-year	5.8%	4.4%
Not ranked - insufficient record	7.3%	7.3%
Not ranked - stream not flowing	3.6%	4.4%

Streamflow: Status

Above flood stage

All-time high for this day

Much above normal

Above normal

Normal

Below normal

Much below normal

All-time low for this day

Not flowing

Not ranked

Measurement flag

Recent measurement unavailable

100th percentile (maximum)

>90th percentile

76th – 90th percentile

25th – 75th percentile

10th – 24th percentile

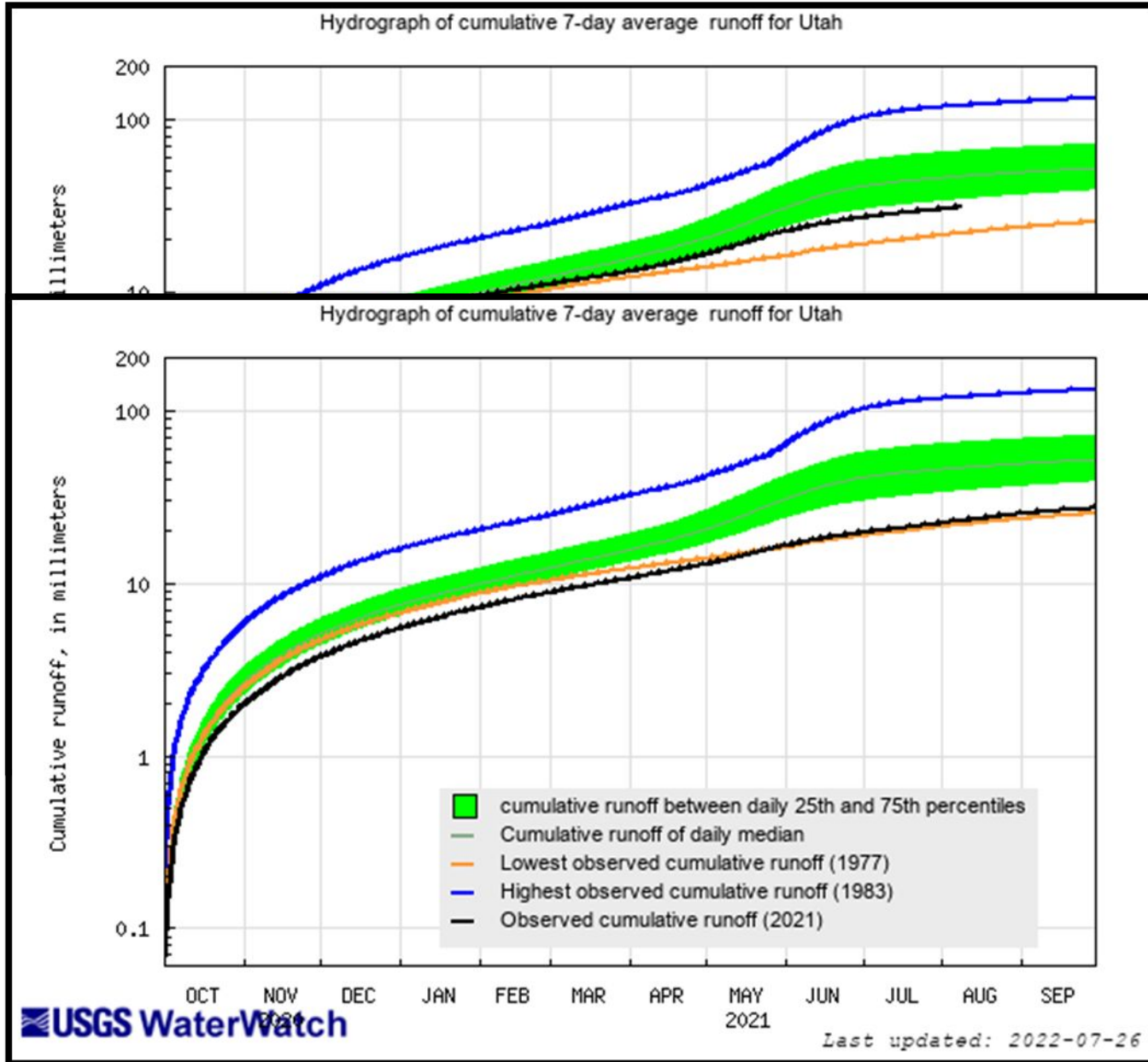
<10th percentile

0th percentile (minimum)

Agency - USGS UTWSC
Presenter - Ryan Rowland



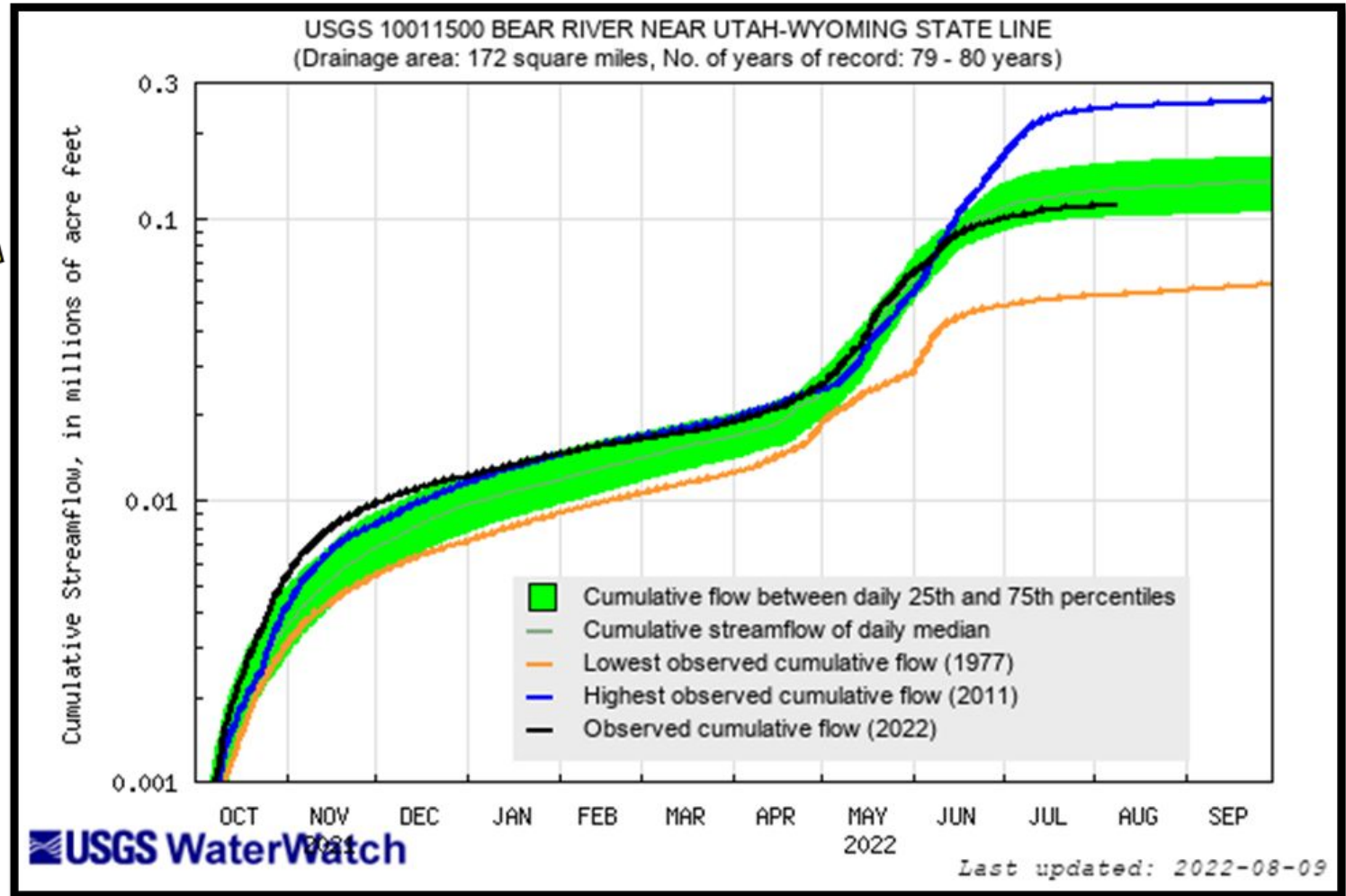
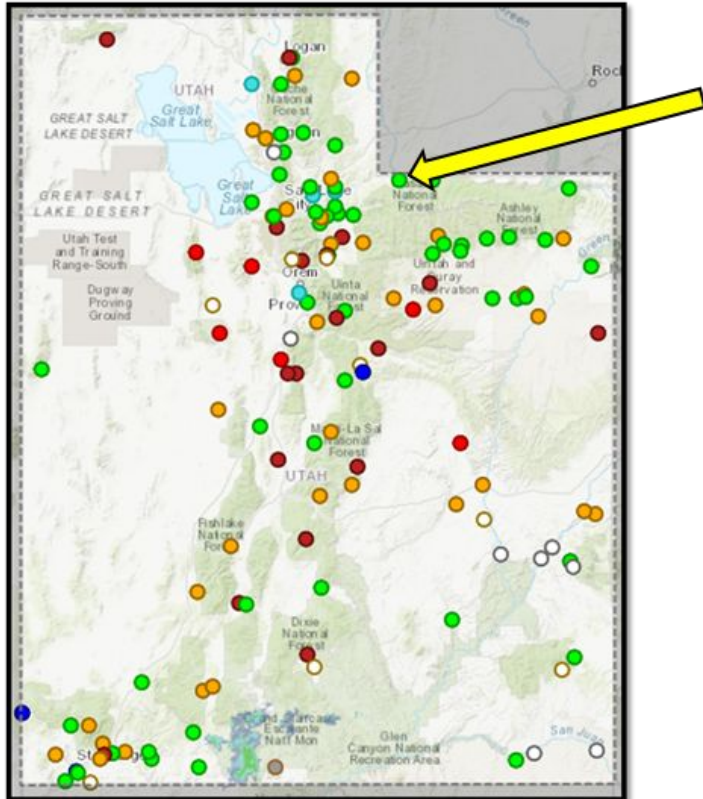
Area Based Cumulative Runoff for Utah



Area based runoff computed from mixed regulated and unregulated streamflows

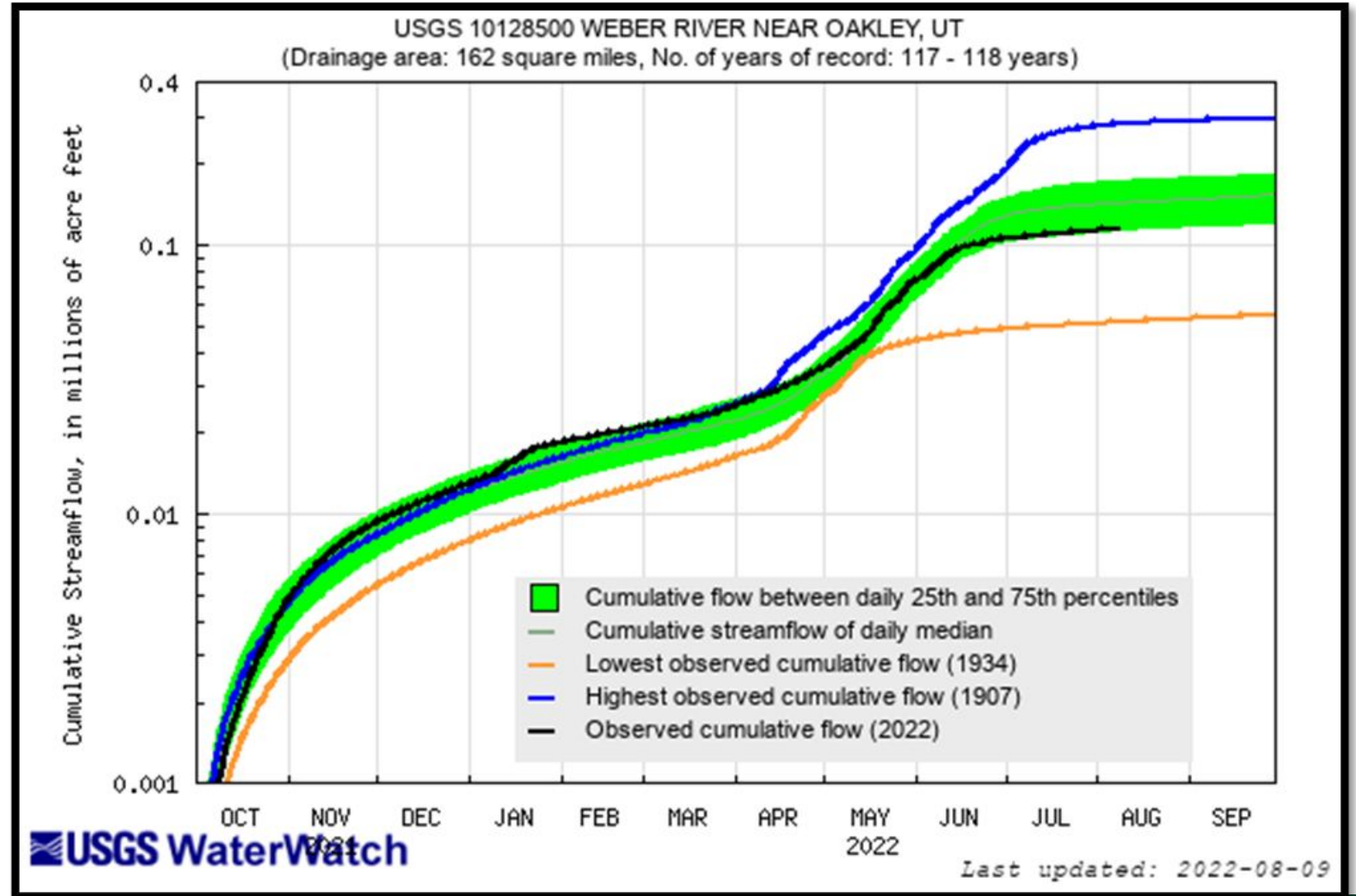
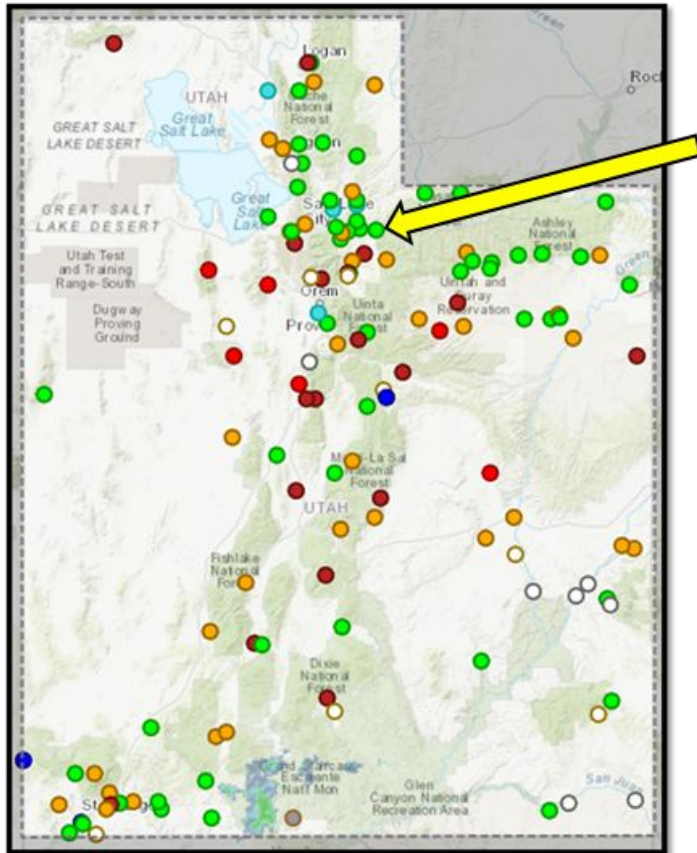
WY2022 higher than WY2021, still below normal

Cumulative Streamflow at Selected Gages



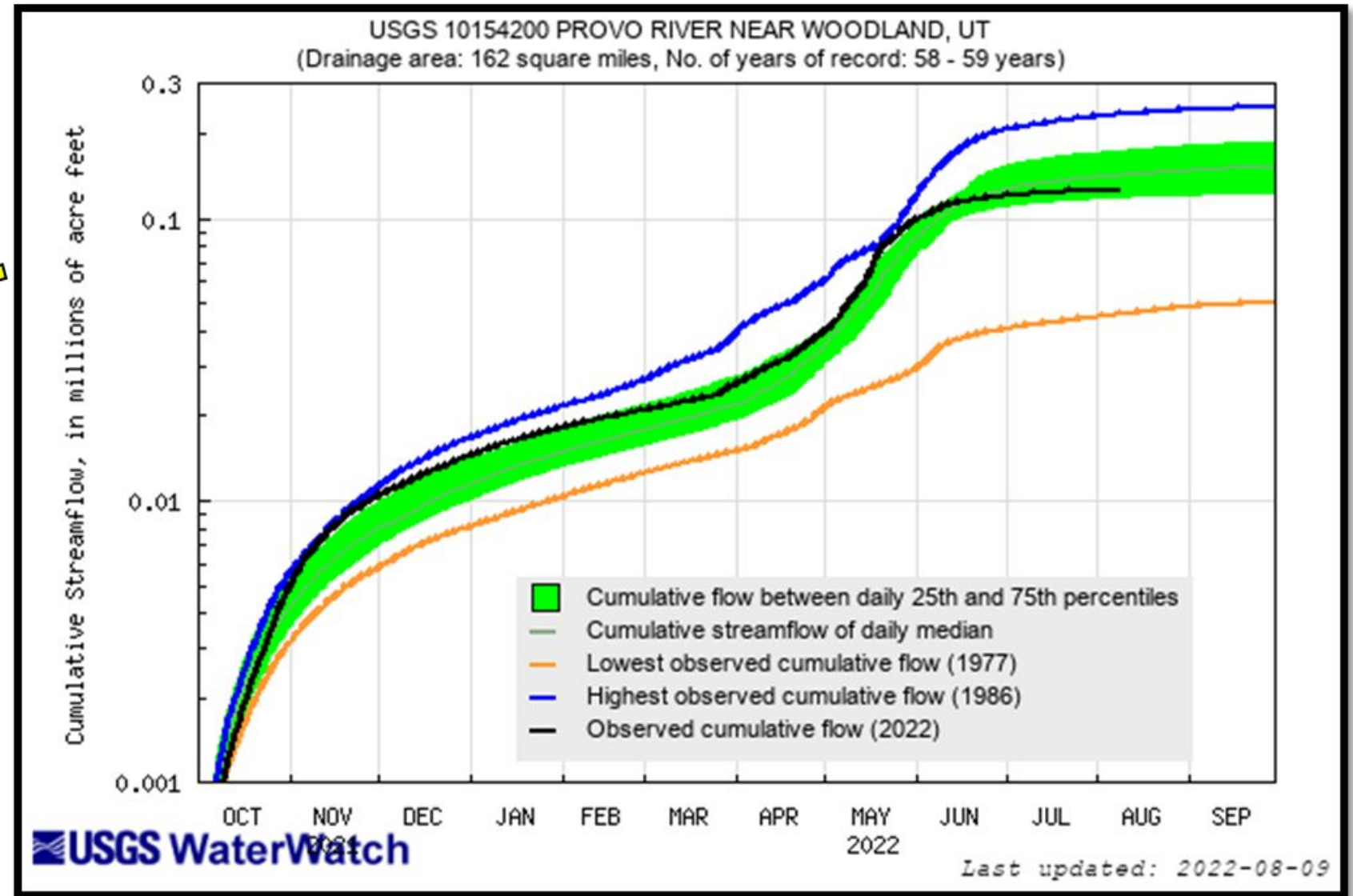
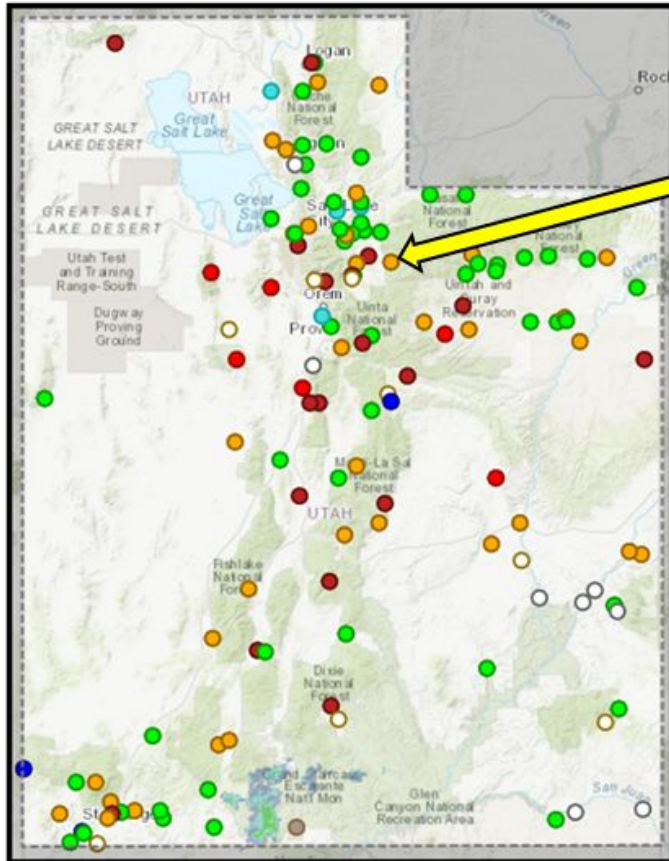
Agency - USGS UTWSC
Presenter - Ryan Rowland

Cumulative Streamflow at Selected Gages



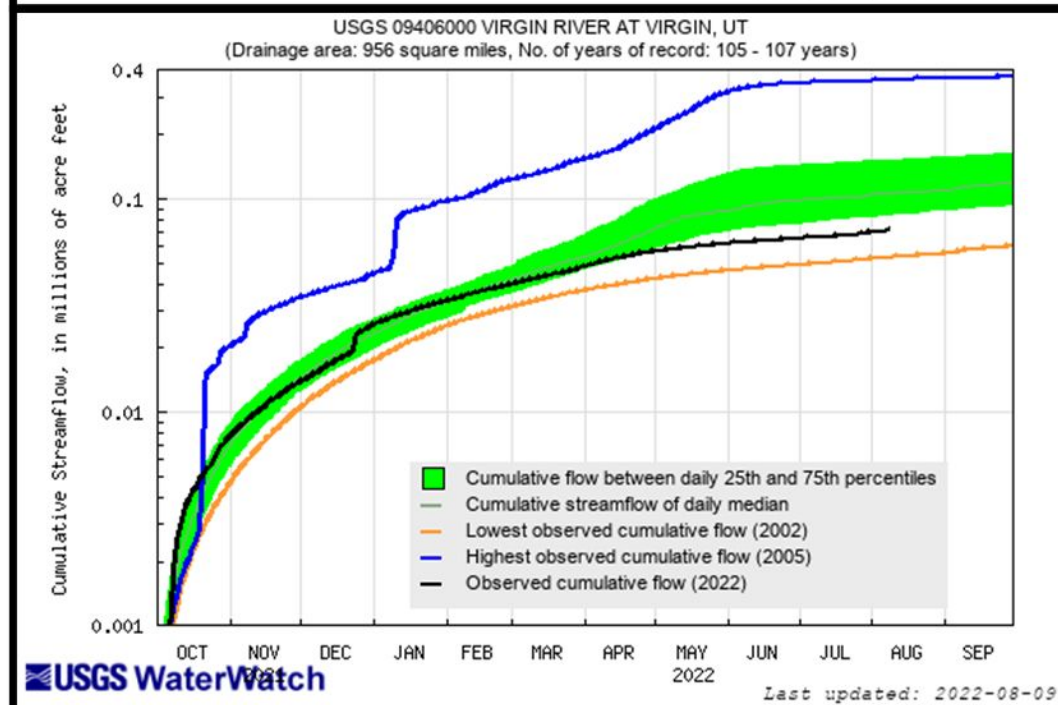
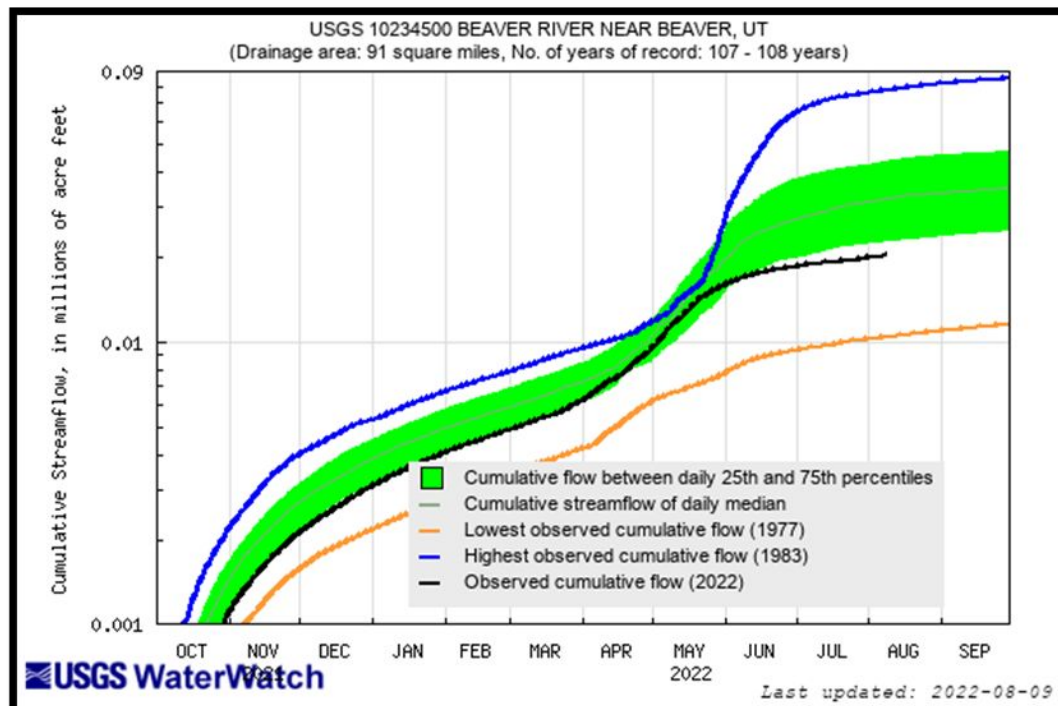
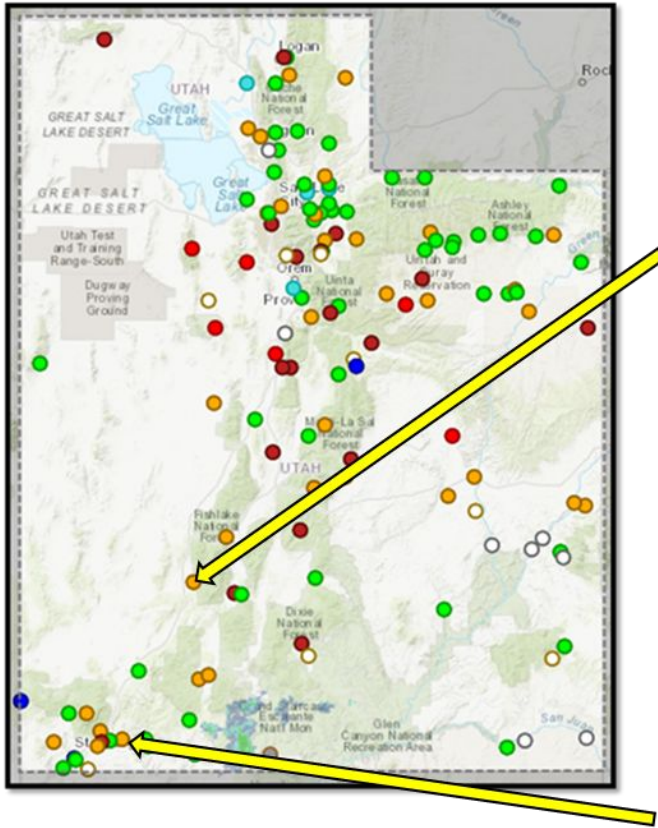
Agency - USGS UTWSC
Presenter - Ryan Rowland

Cumulative Streamflow at Selected Gages

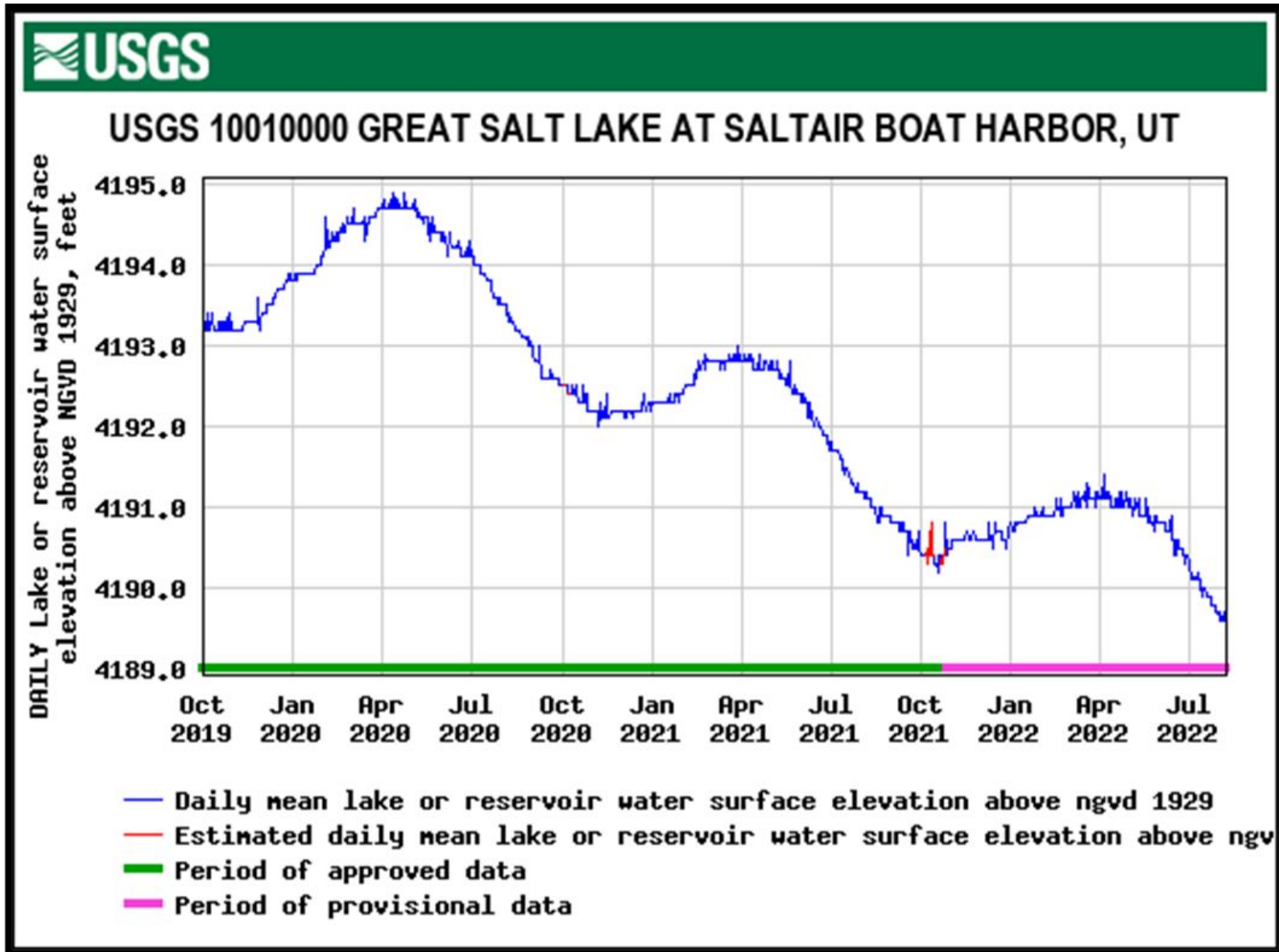


Agency - USGS UTWSC
Presenter - Ryan Rowland

Cumulative Streamflow at Selected Gages



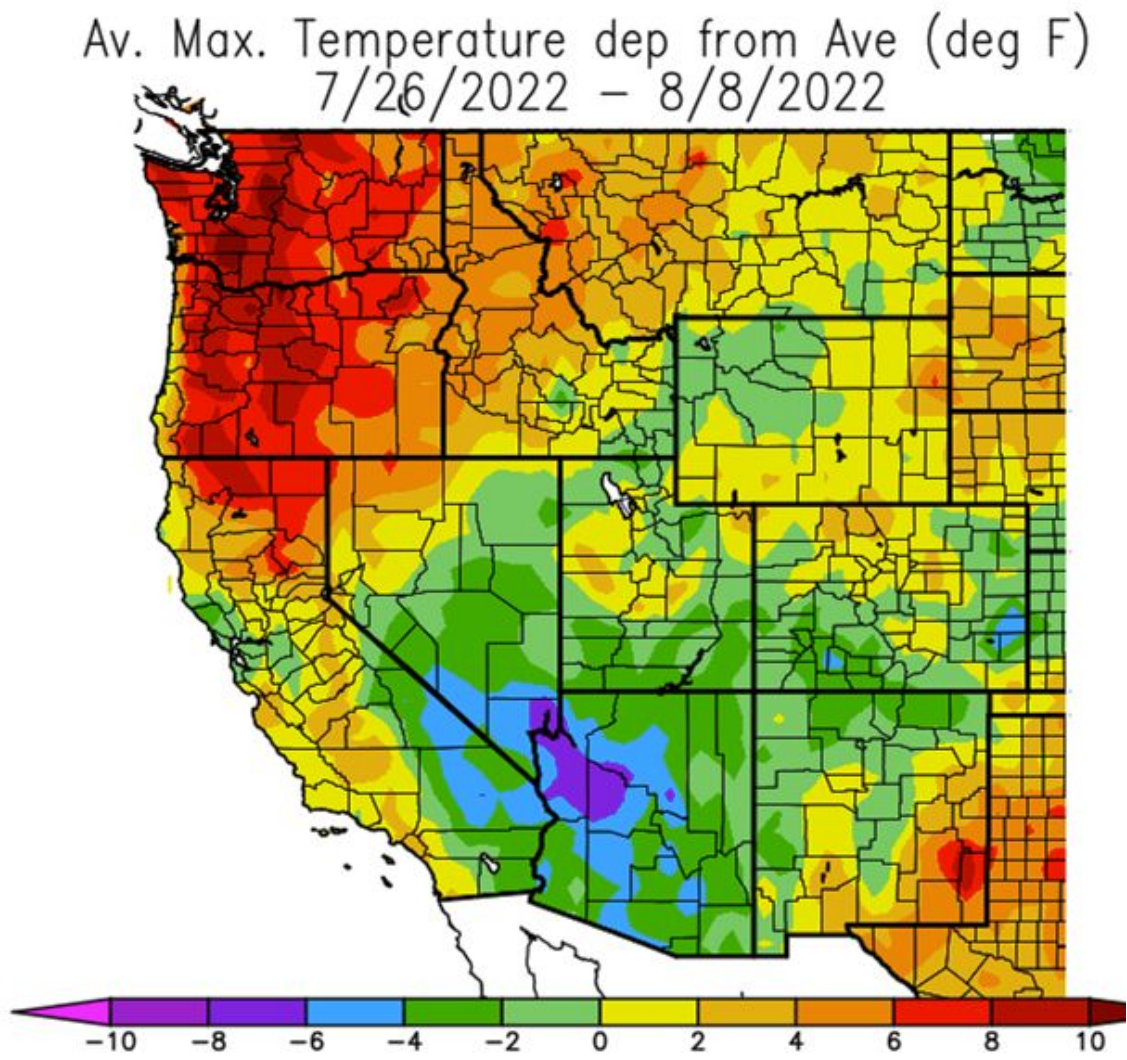
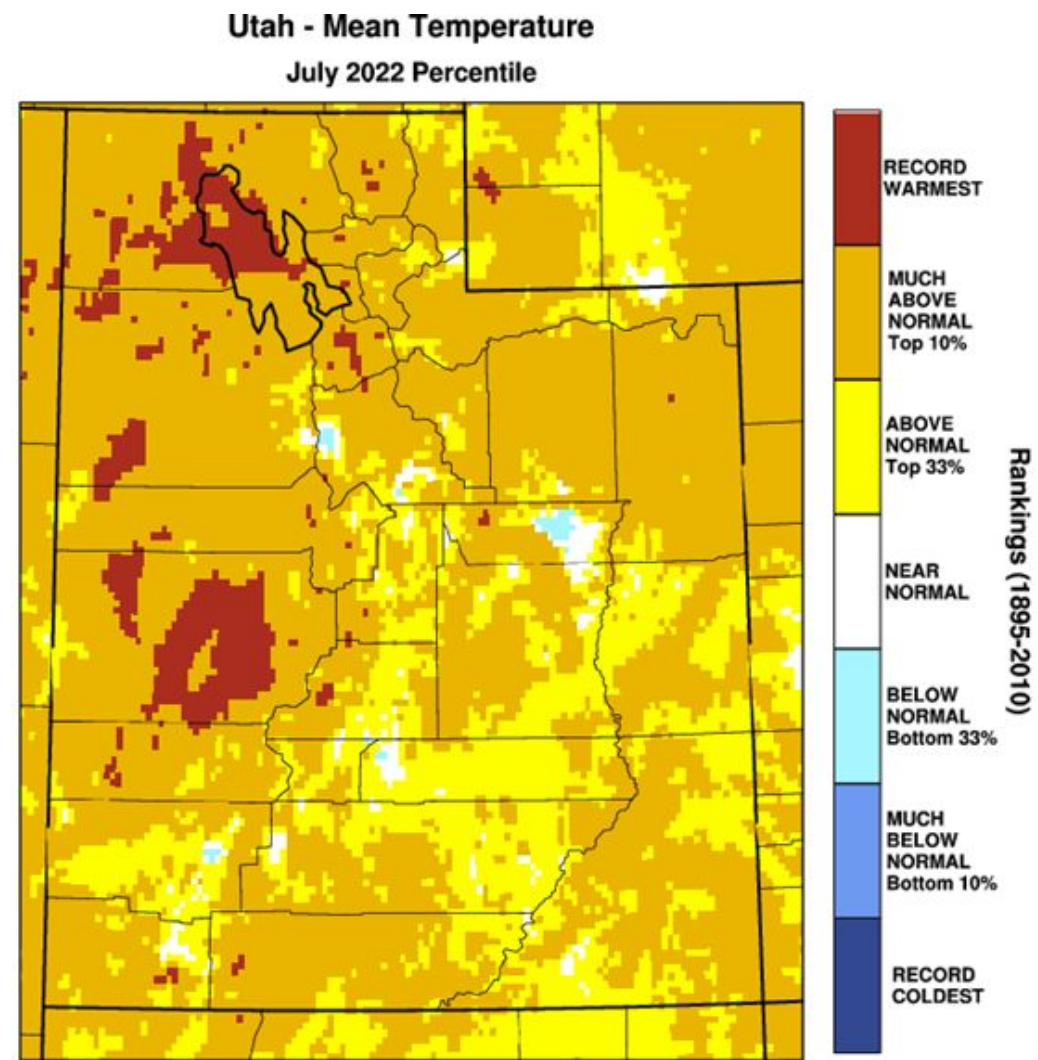
Great Salt Lake Water Surface Elevation



□ Mean daily value 8/8/2022 = 4,189.6' (record lows continue)

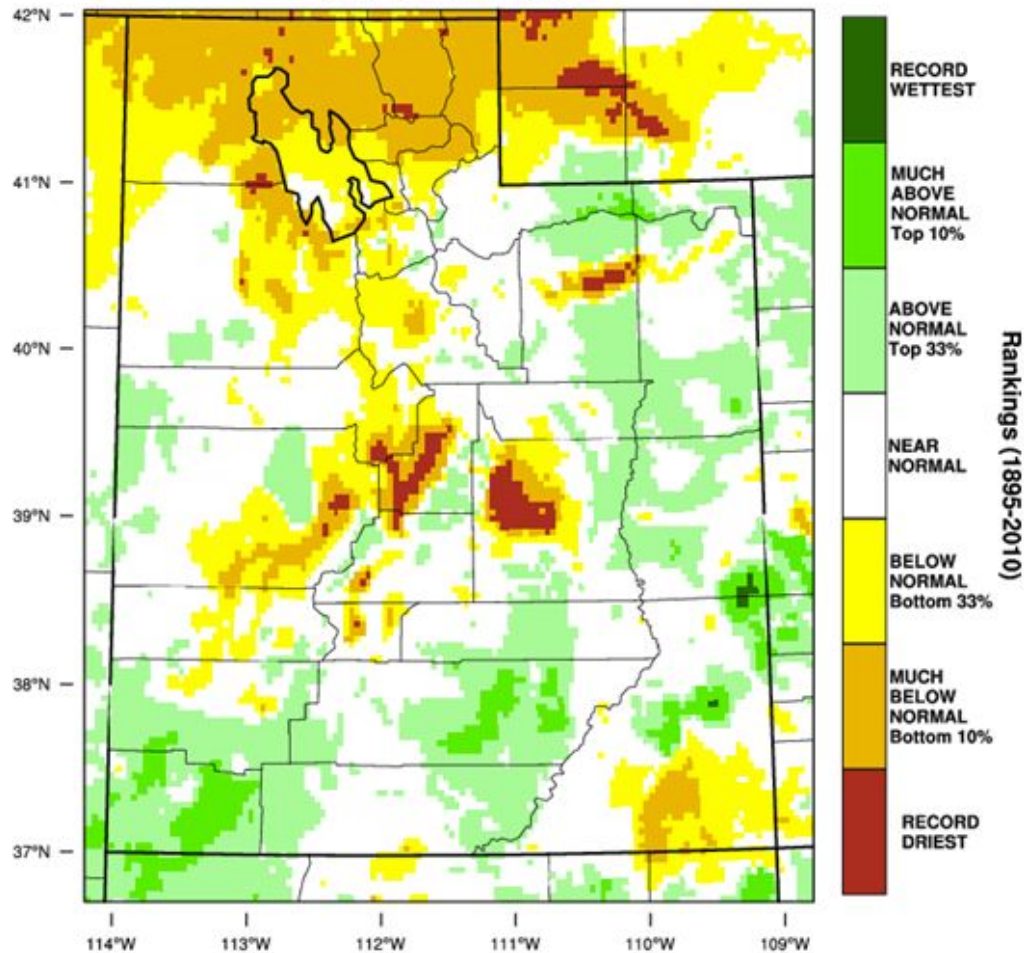
□ Mean daily value 7/25/2022 = 4,189.8'

Temperatures (July Mean Percentile; Max. Temp. Anomaly)



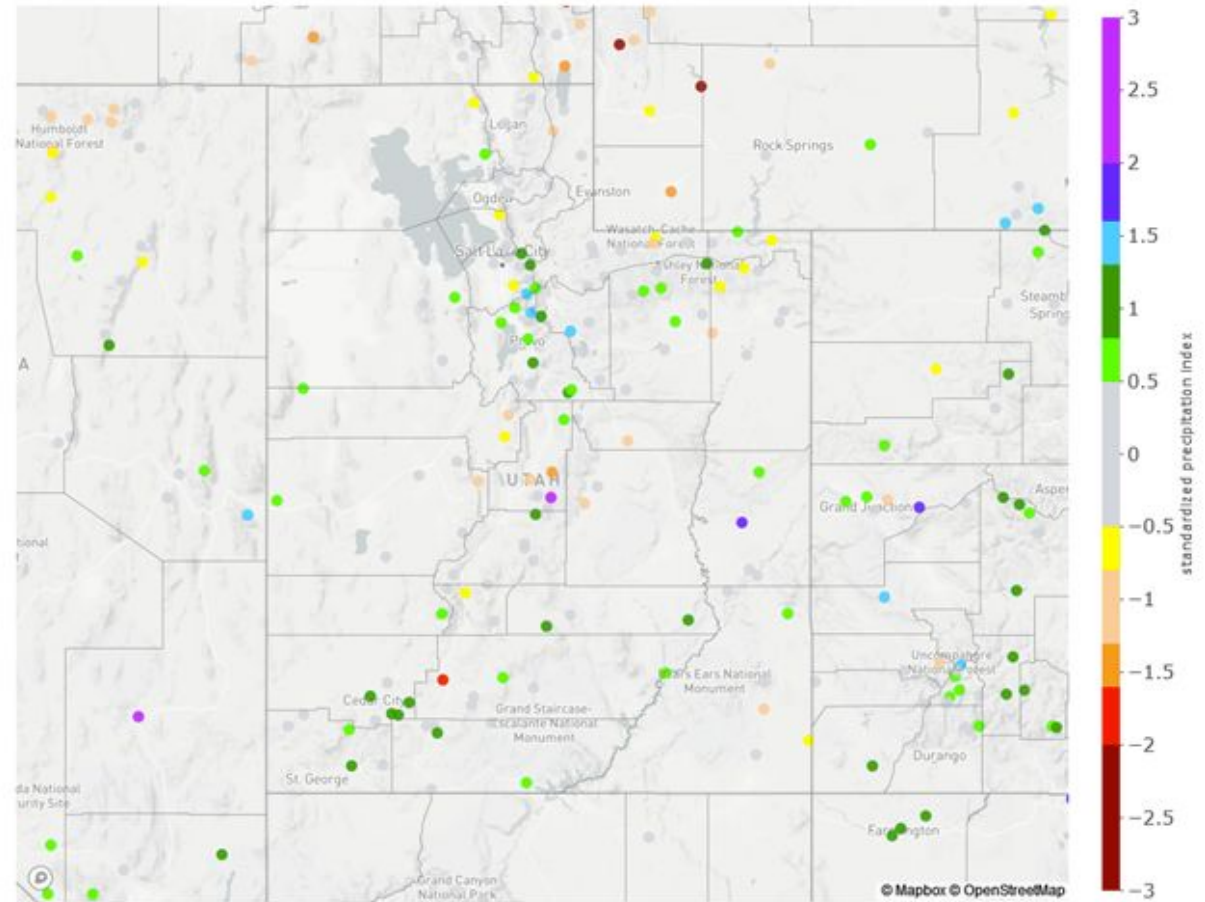
Precipitation (July Percentile; 30-day SPI)

Utah - Precipitation
July 2022 Percentile

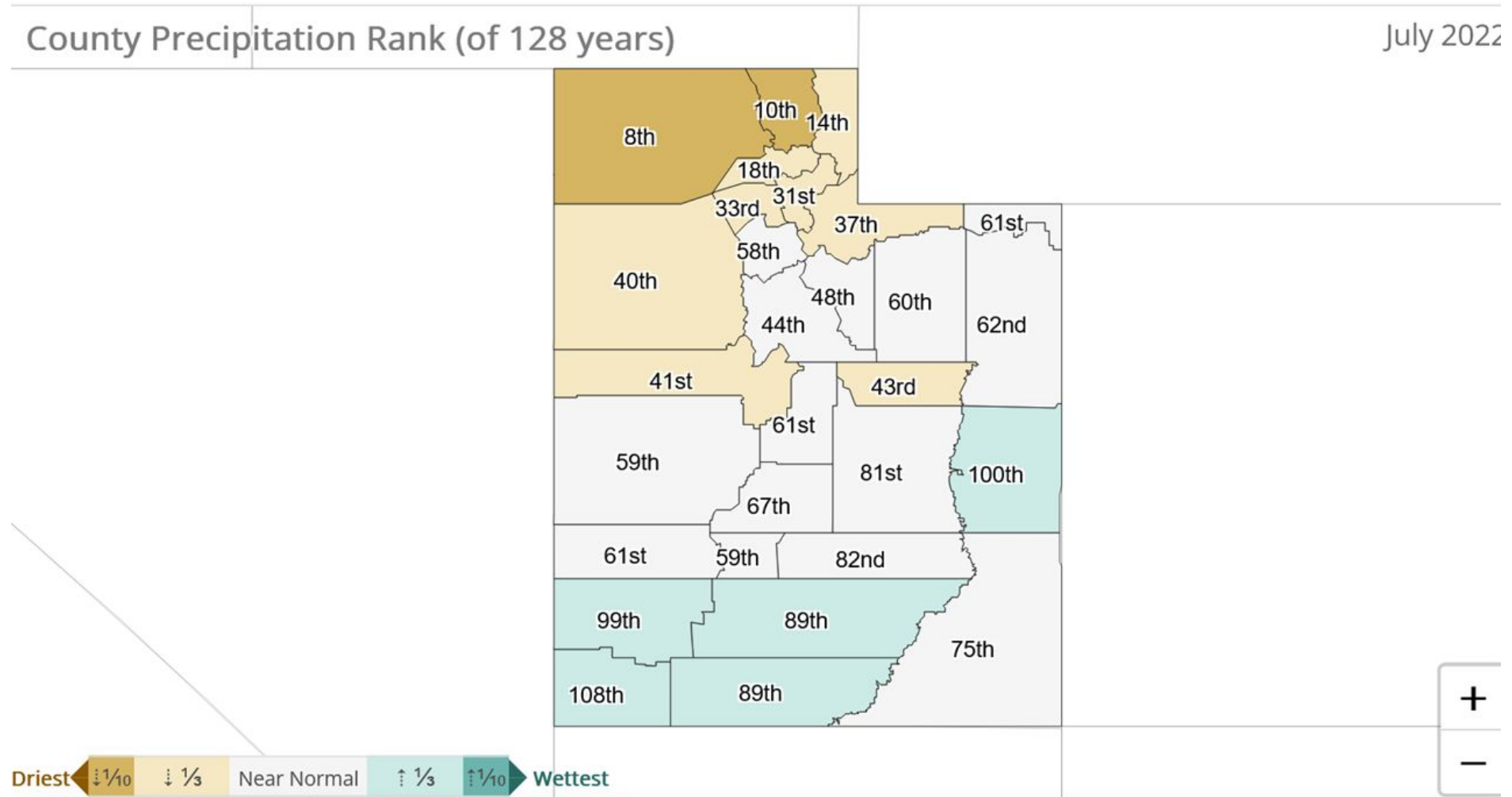


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2022

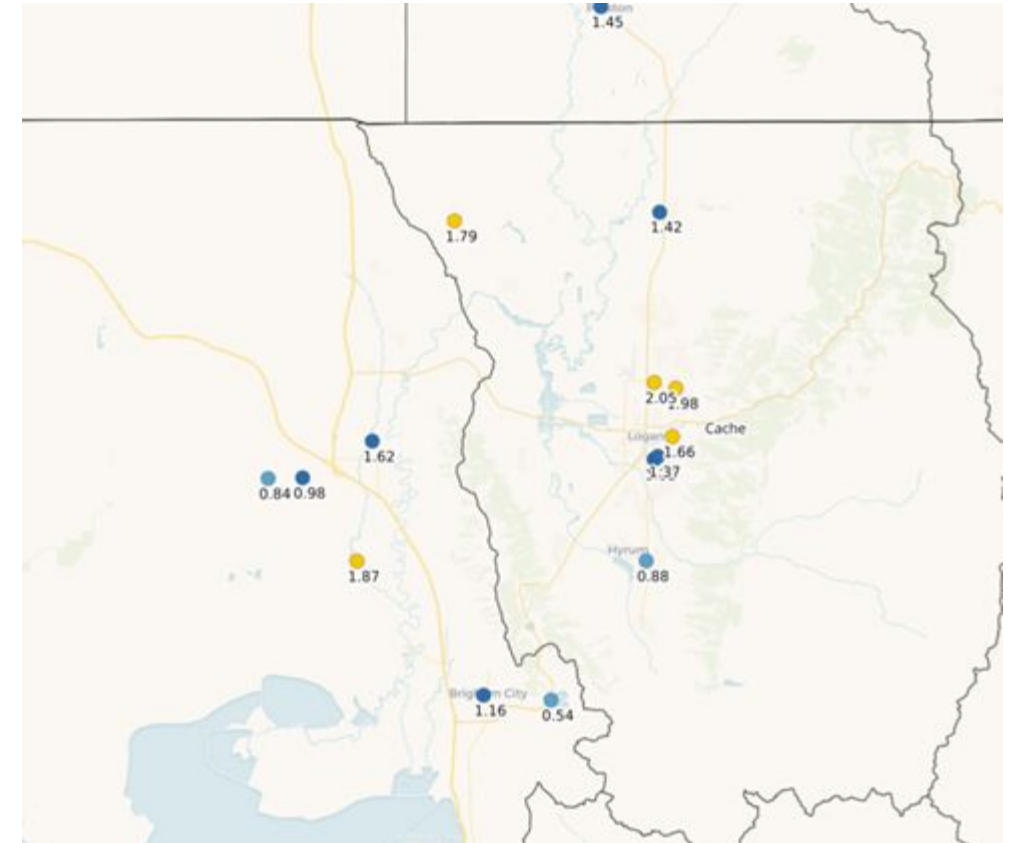
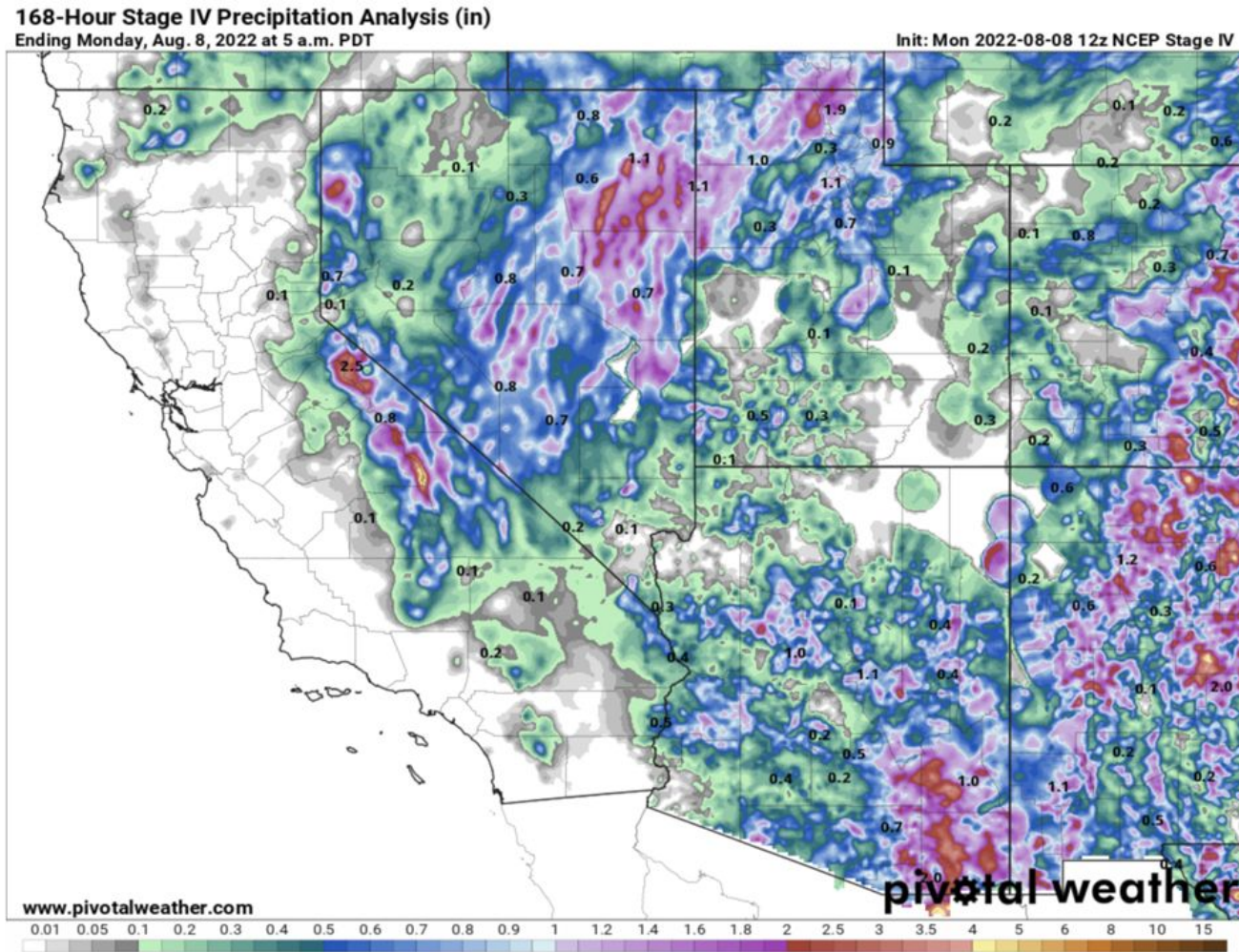
30-day Standardized Precipitation Index: 2022/07/07 - 2022/08/05



Precipitation (NCEI rank by country)

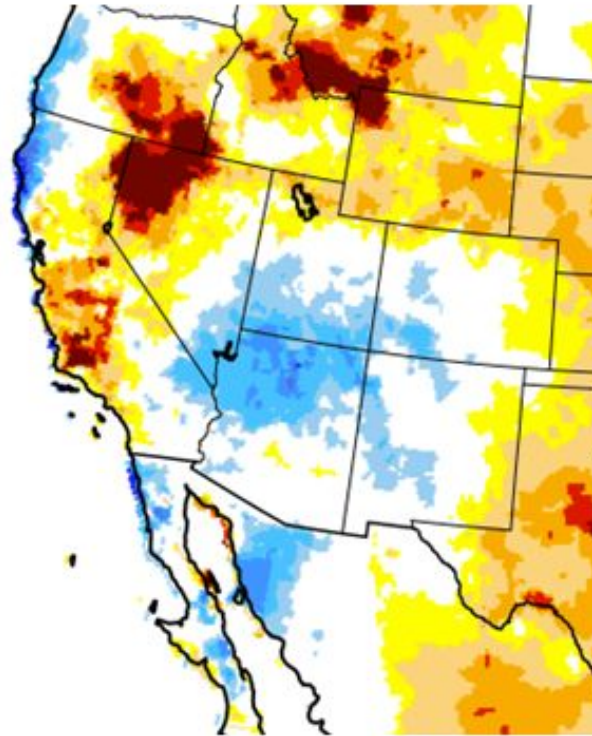


Precipitation (Recent Northern Utah Event)

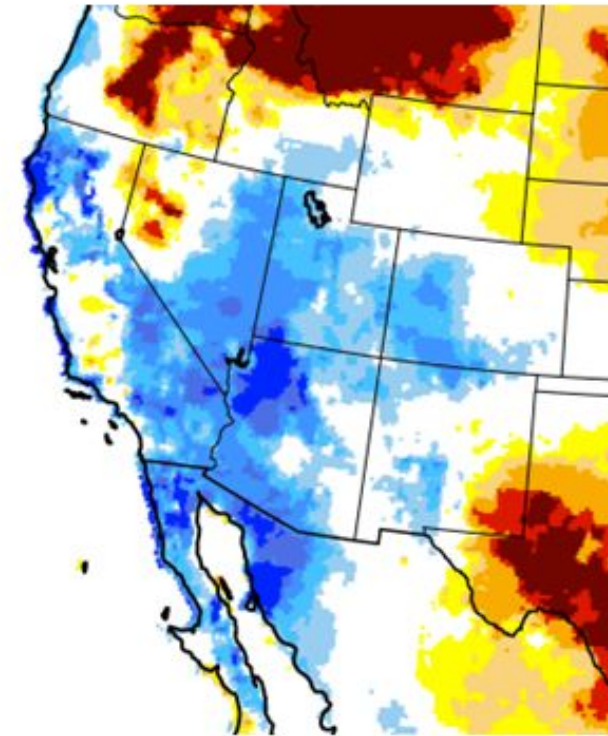


Evaporative Demand Drought Index (EDDI)

1-Month (to Aug 4)



1-Week (to Aug 4)



Drought categories



100% 98% 95% 90% 80% 70%

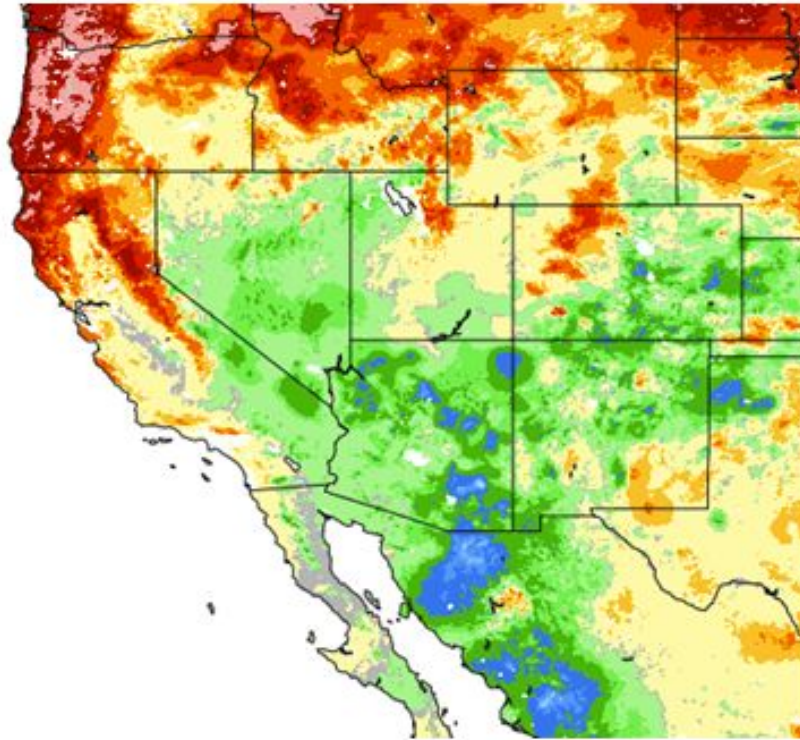
Wetness categories



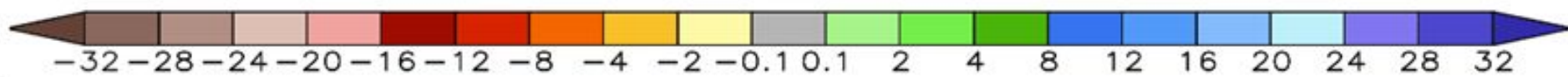
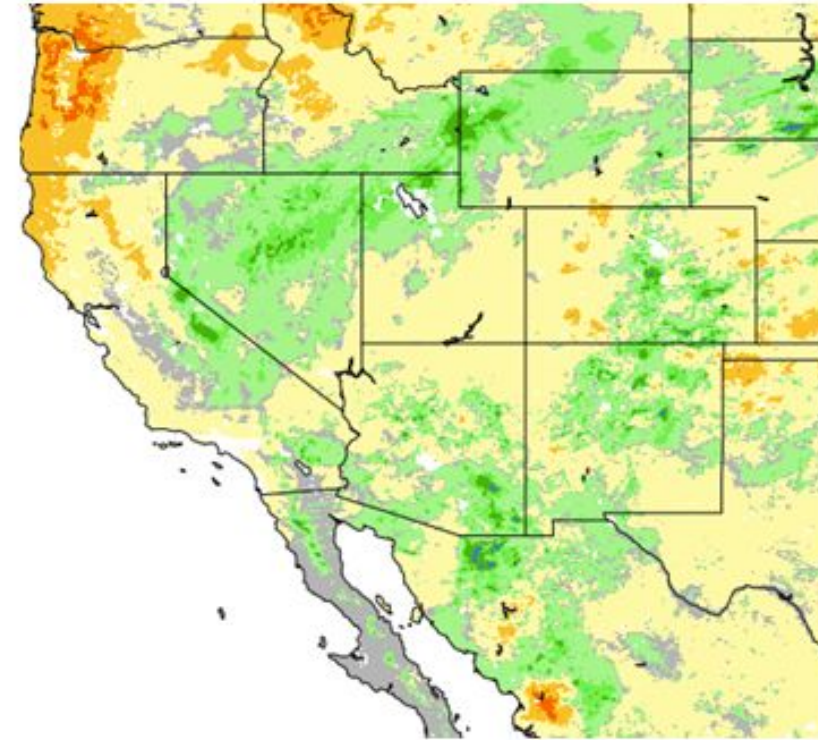
30% 20% 10% 5% 2% 0%

NASA SPORT Modeled Soil Moisture Change

1-Month (to Aug 9)



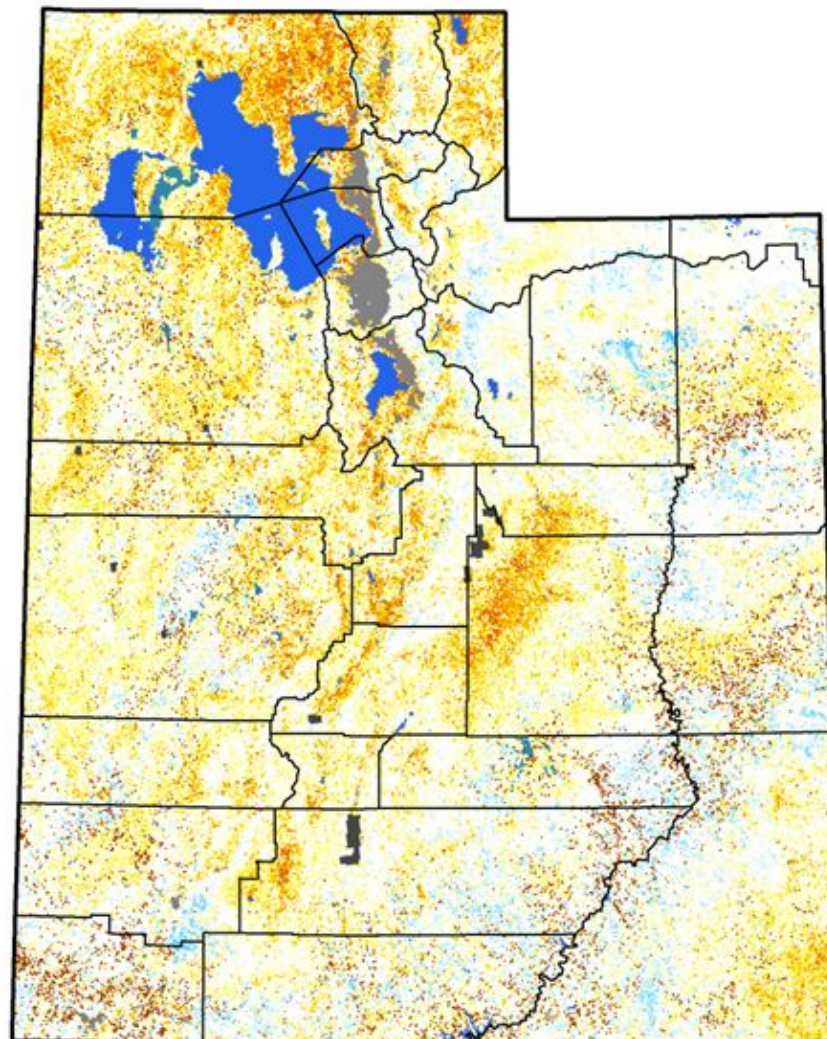
1-Week (to Aug 9)



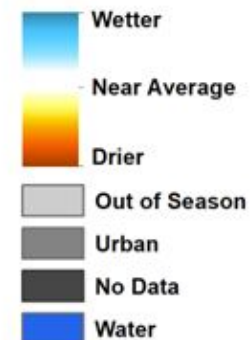
Quick Drought Response Index

Utah

July 31, 2022
(Week 31)



Conditions Relative to
4-Week Historical Average



CALMIT
University of Nebraska - Lincoln
Center for Advanced Land Management Information Technologies



Agency - Utah Climate Center
Presenter - Jon Meyer

Vegetation Drought Response Index (VegDRI; Aug 7)

[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.](#)

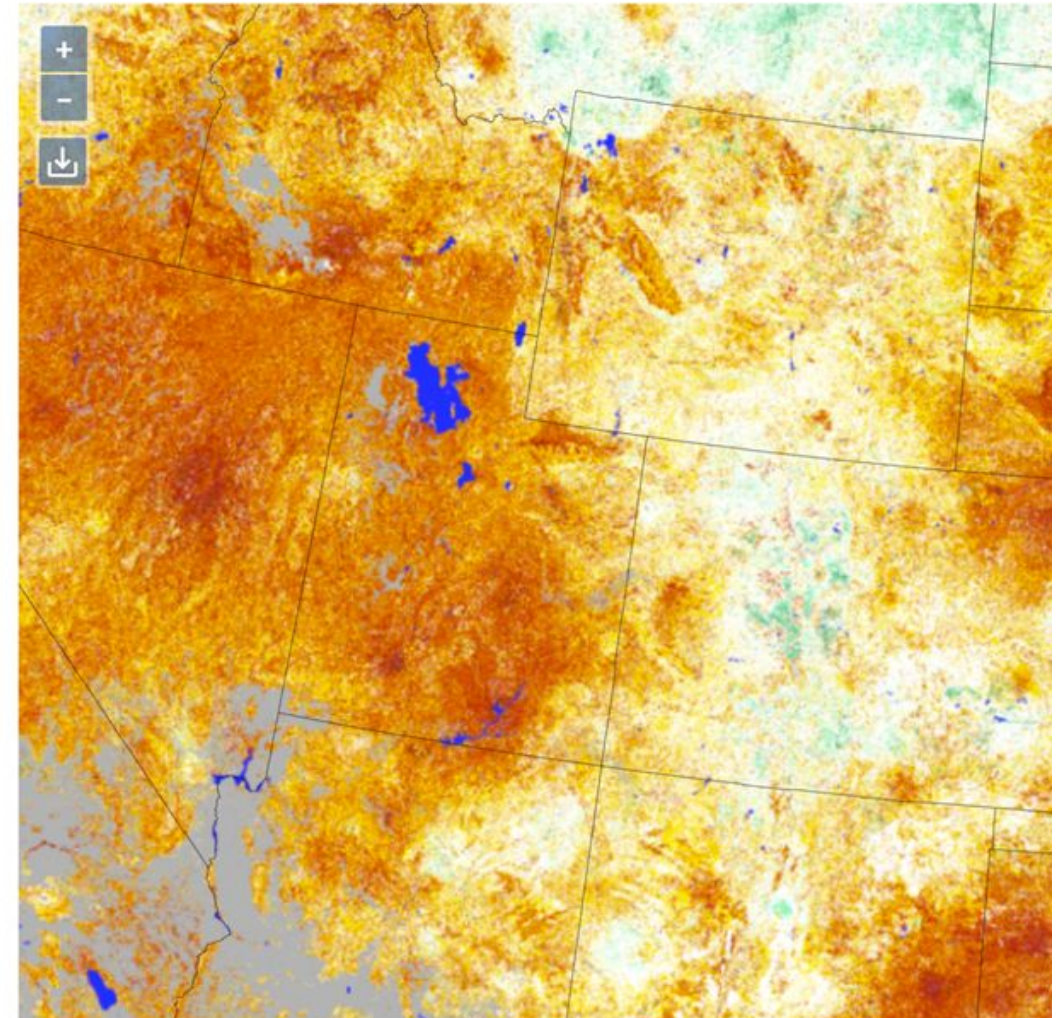
Drought Conditions



Moist Conditions



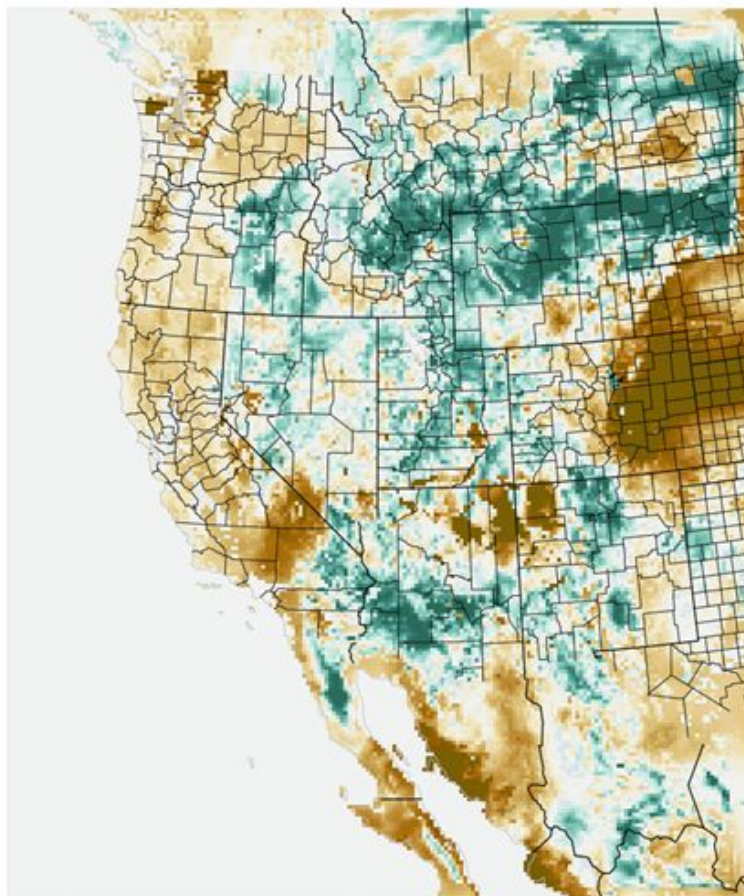
Other Conditions



Utah Climate Center Hi-Res Soil Moisture Forecast

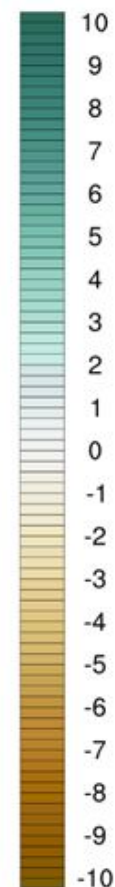
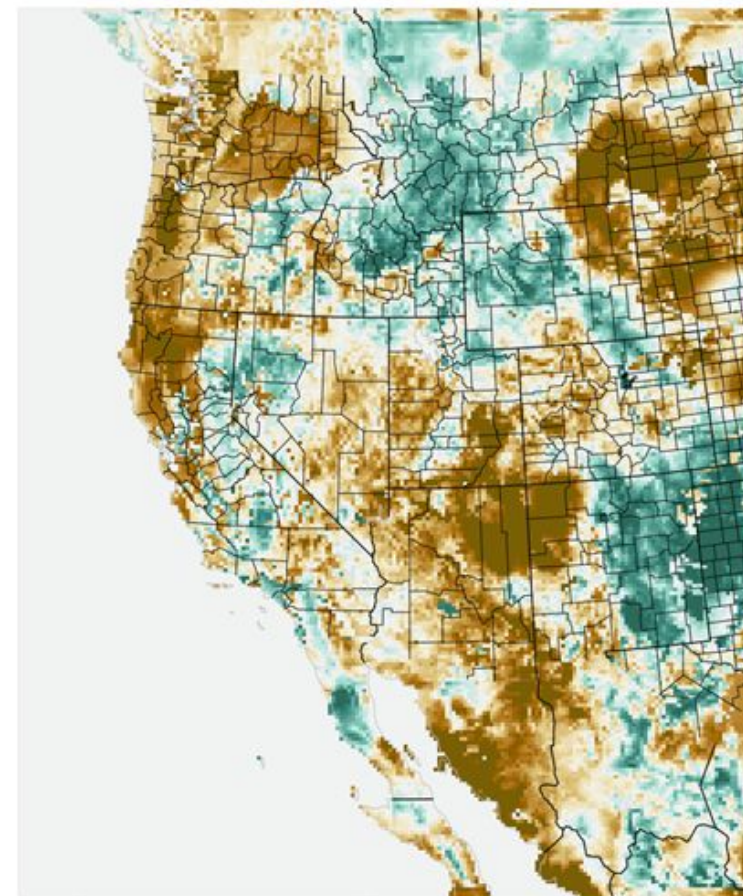
1-Week (to Aug 16)

Change in Soil Moisture Since Initialization (%)
F192 Valid Tue 2022-08-16 12z Init: Mon 2022-08-08 12z



1-Month (to Sept 7)

Change in Soil Moisture Since Initialization (%)
F720 Valid Wed 2022-09-07 12z Init: Mon 2022-08-08 12z

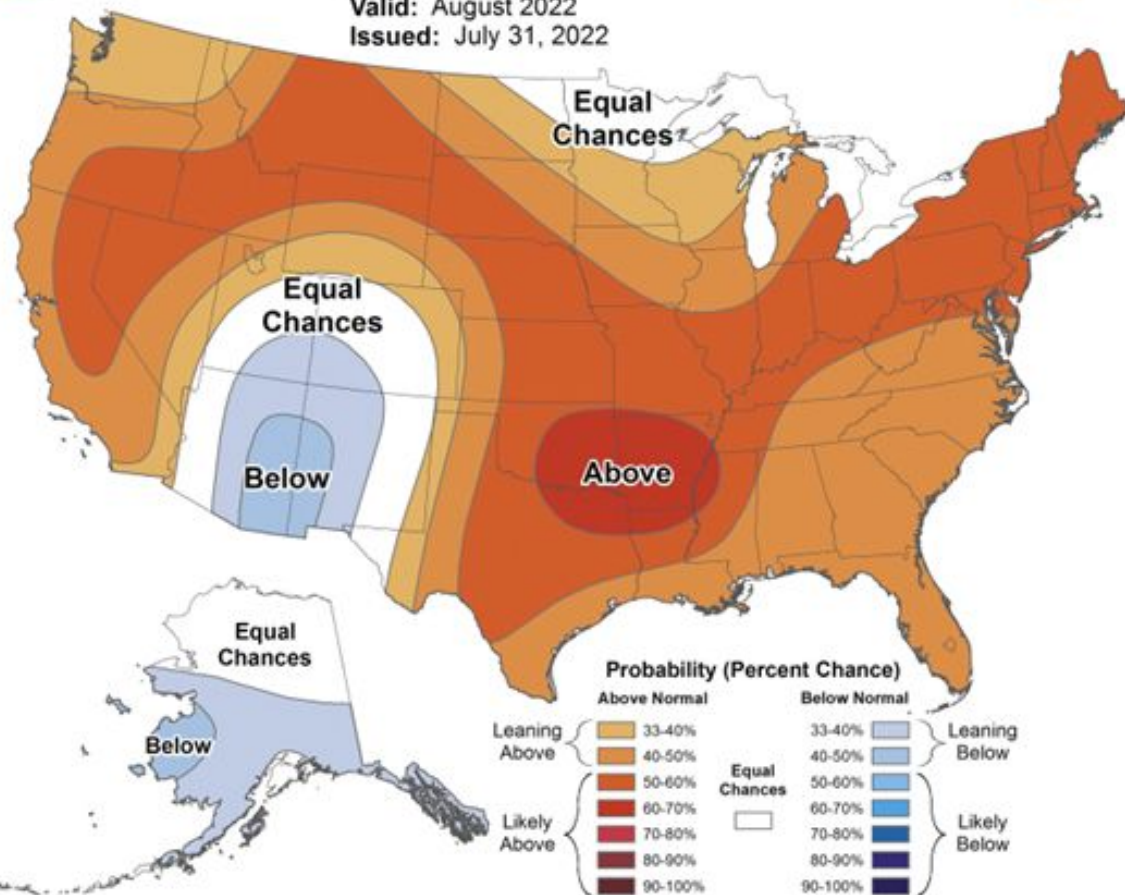


Climate Prediction Center One-Month Outlook



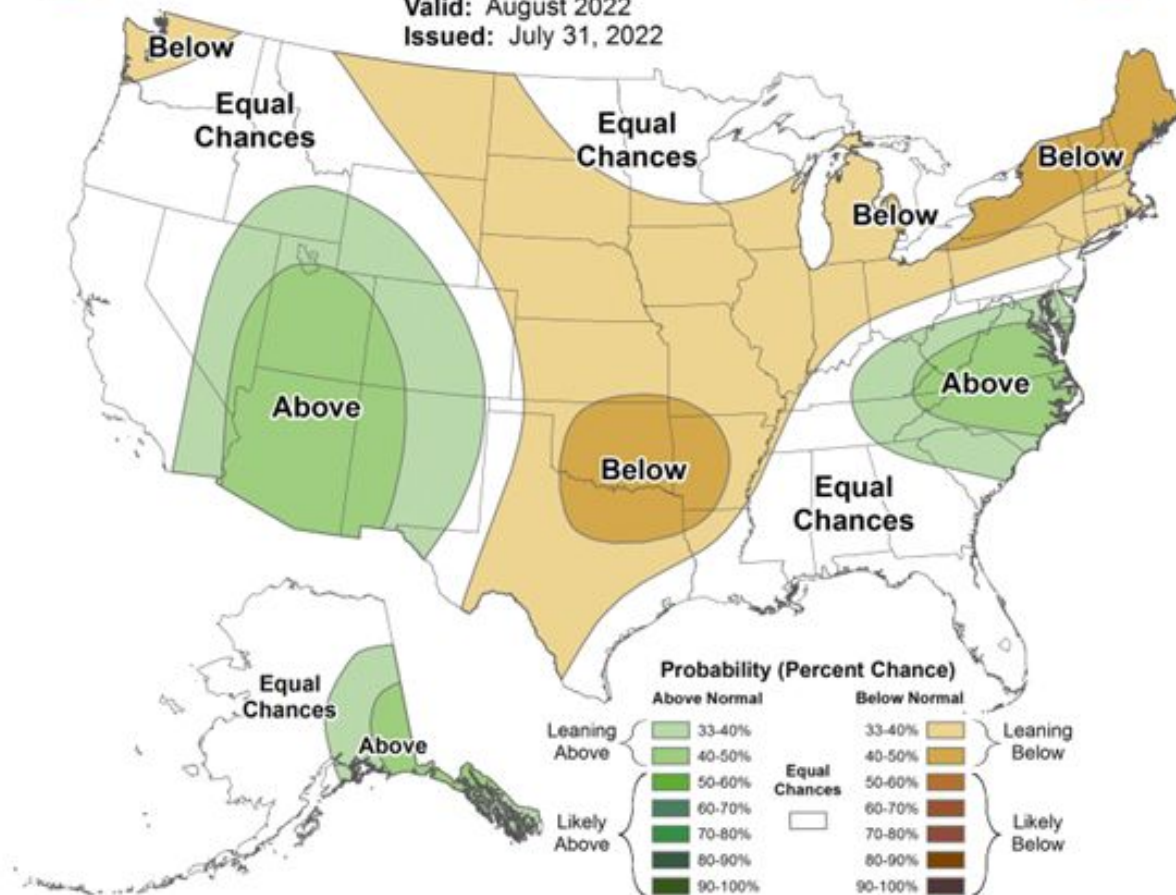
Monthly Temperature Outlook

Valid: August 2022
Issued: July 31, 2022



Monthly Precipitation Outlook

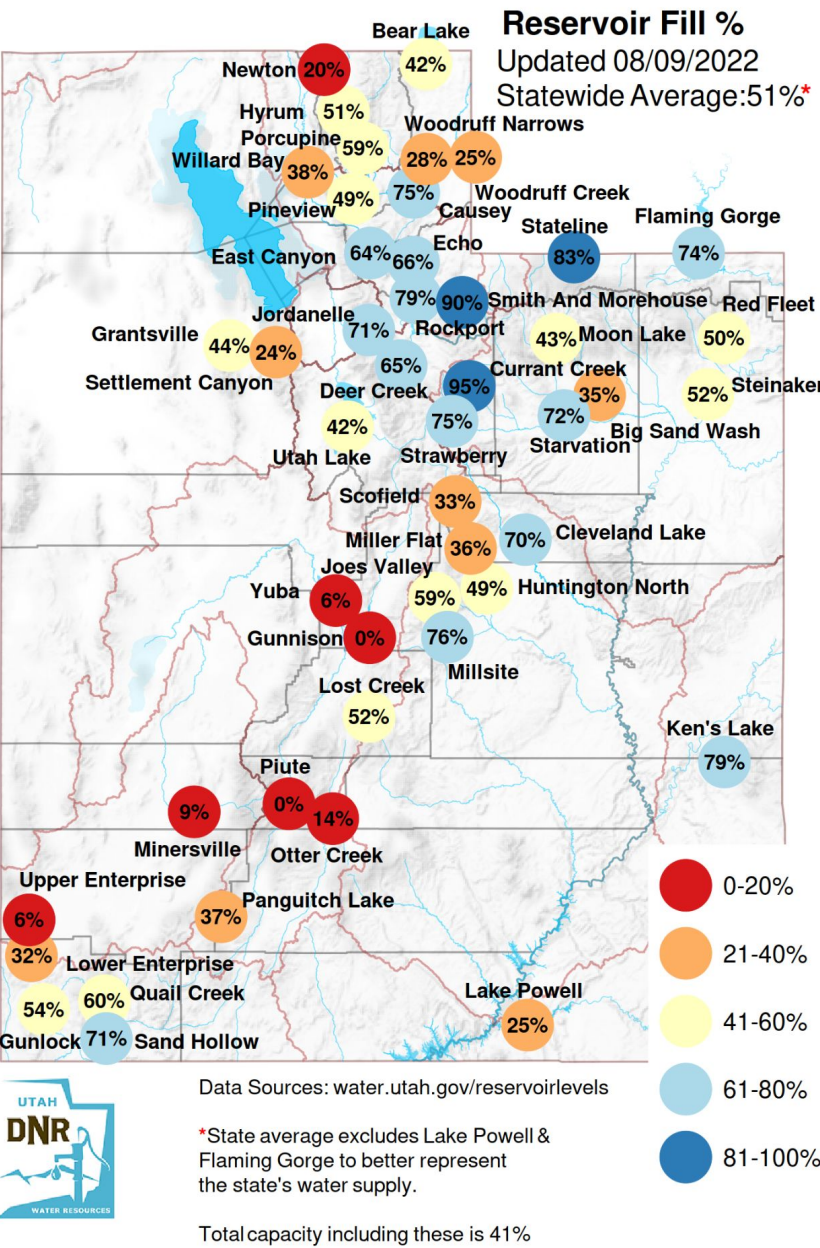
Valid: August 2022
Issued: July 31, 2022



28 reservoirs below 55%

Reservoirs 20% full or less

- Gunnison
- Piute
- Upper Enterprise
- Sevier Bridge (Yuba)
- Minersville
- Otter Creek
- Newton Dam
- Settlement Canyon

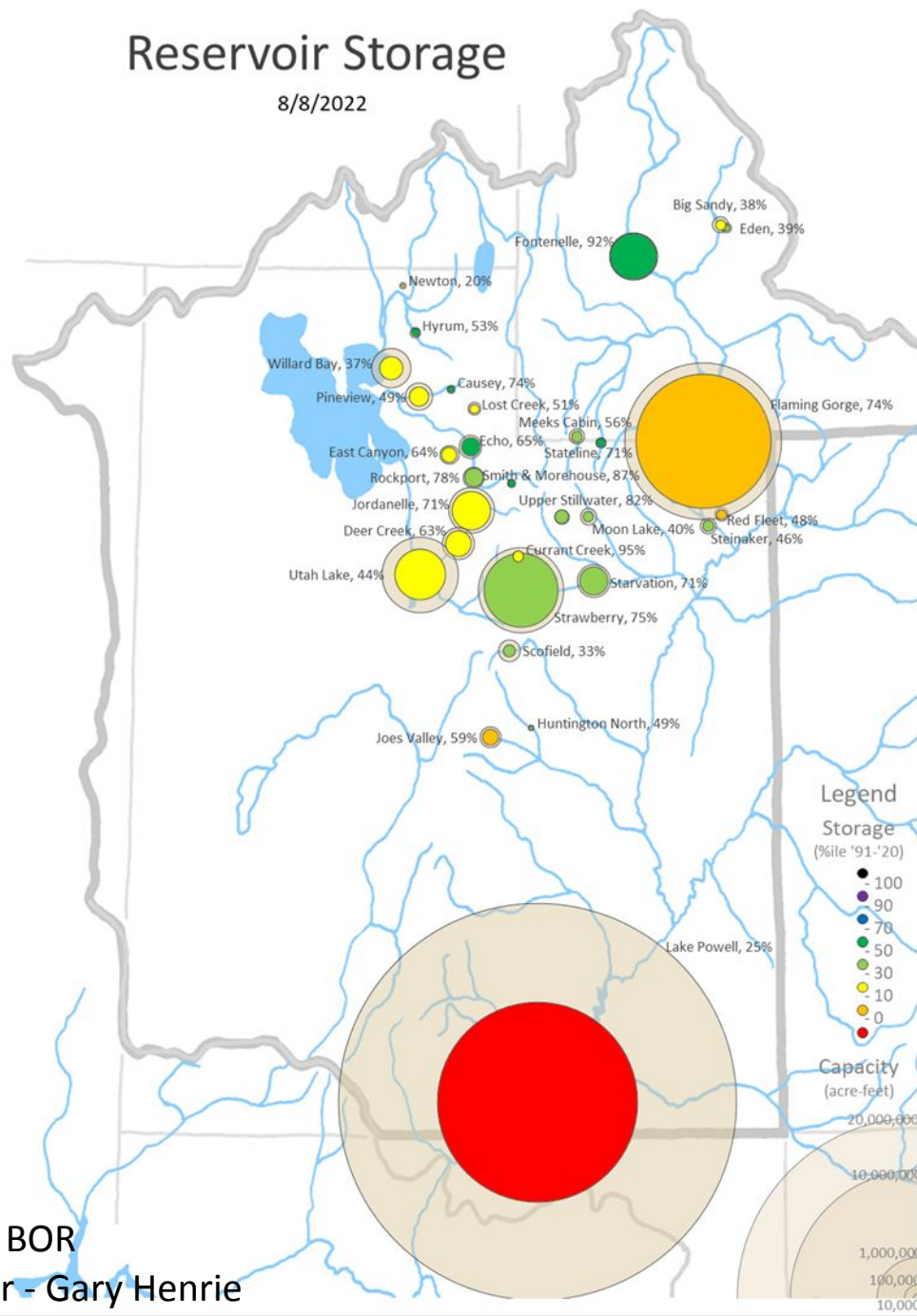




BUREAU OF
RECLAMATION

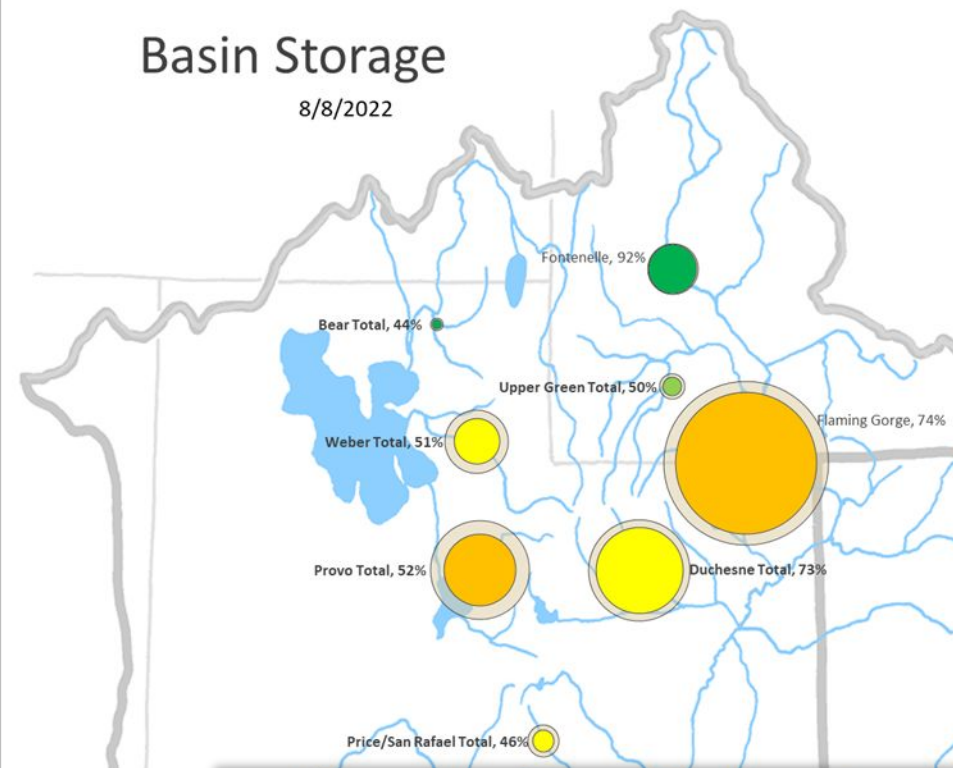
Reservoir Storage

8/8/2022



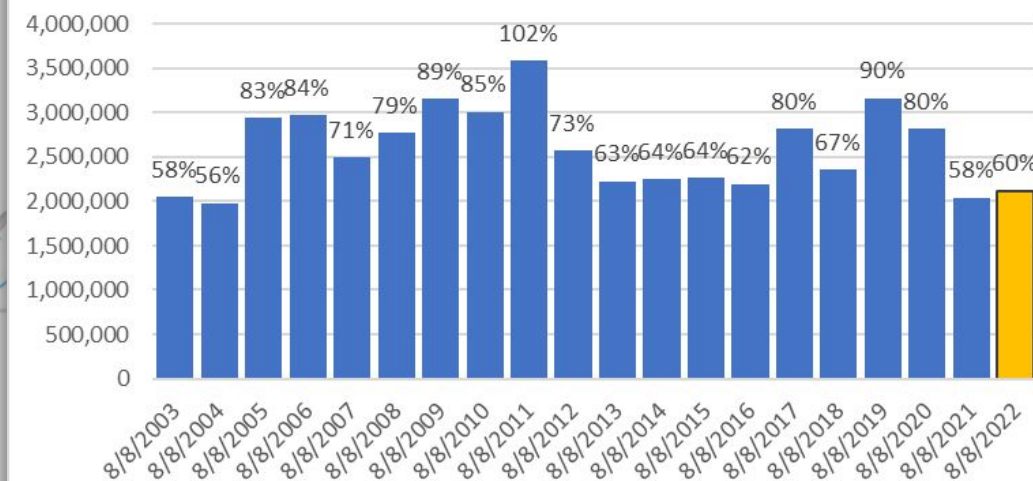
Basin Storage

8/8/2022

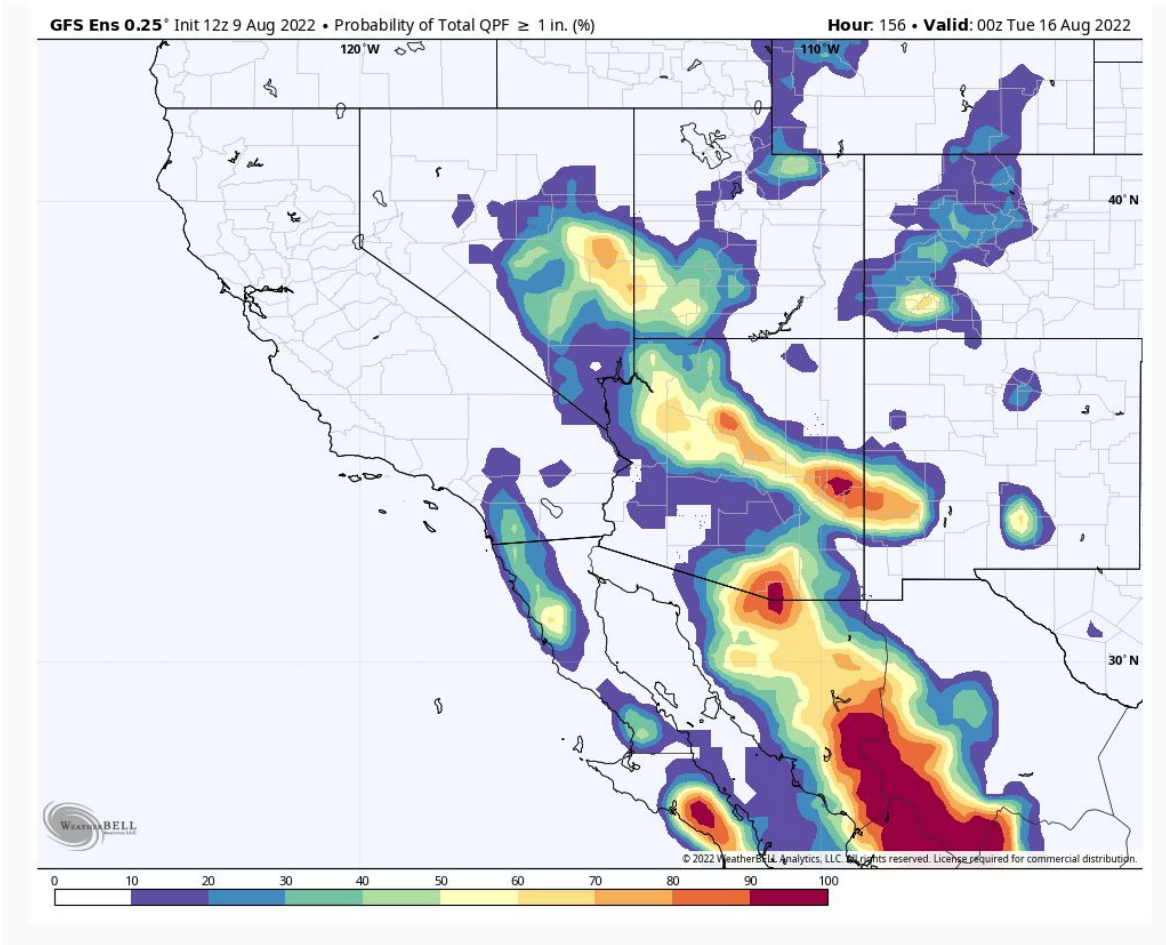
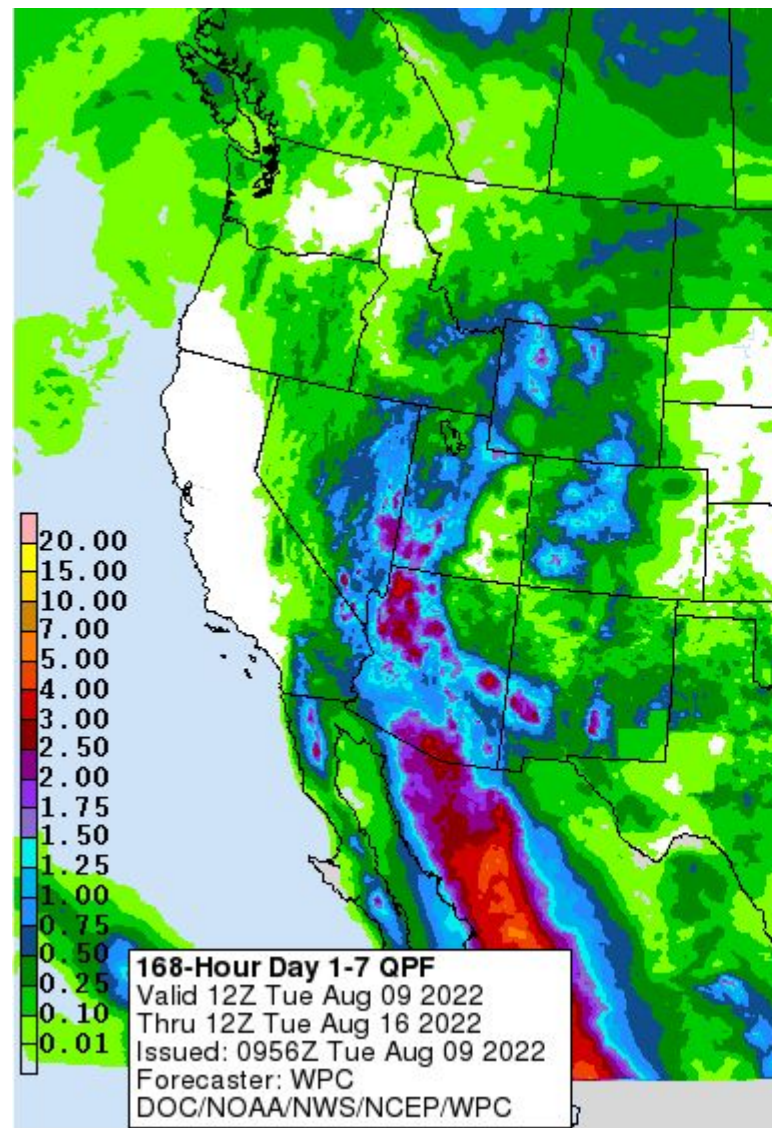
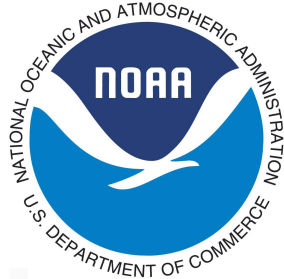


System Storage (acre-feet)

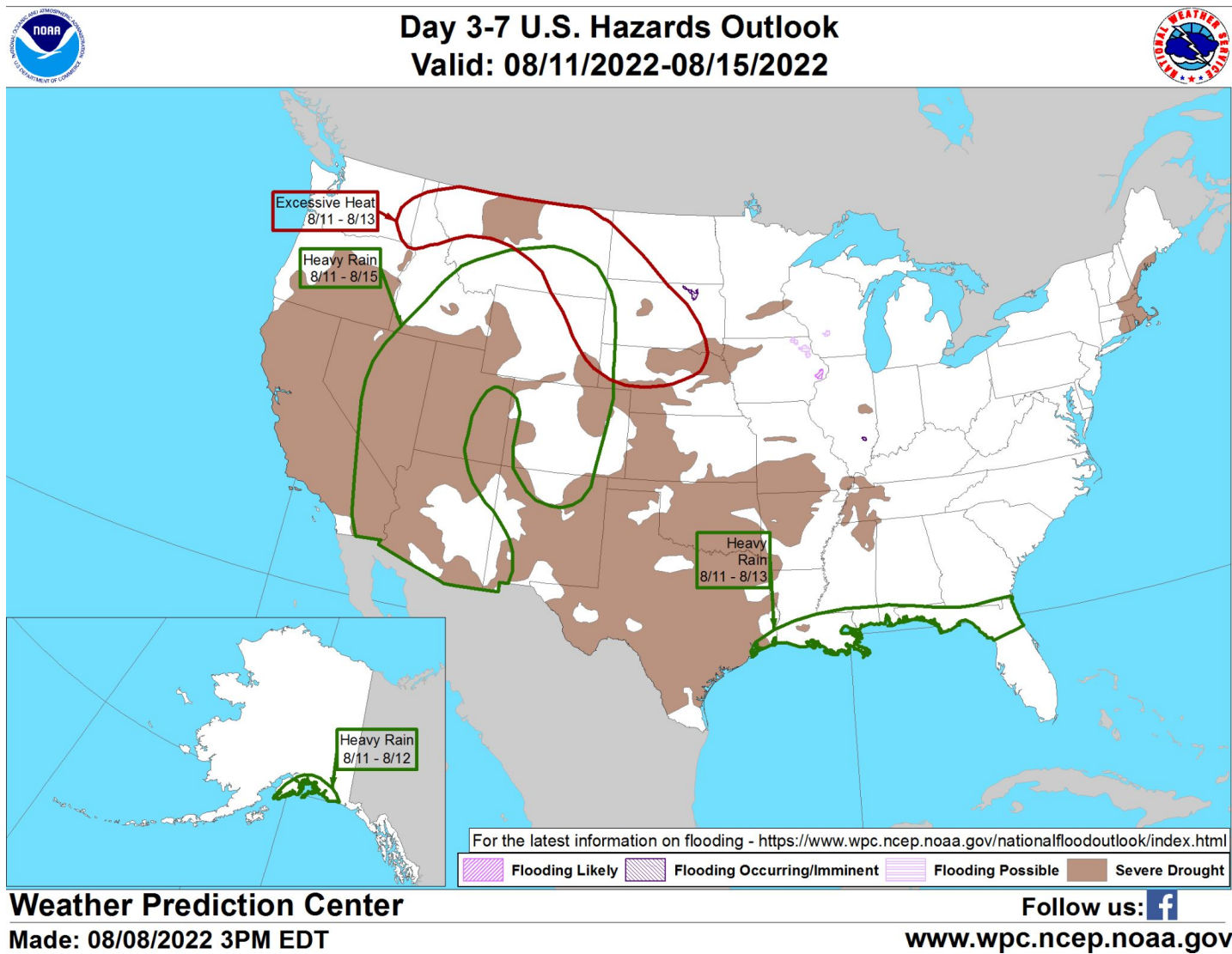
Excluding Fontenelle, Flaming Gorge, and Lake Powell



Weather Forecast Office Utah Day 1-7 Outlook



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

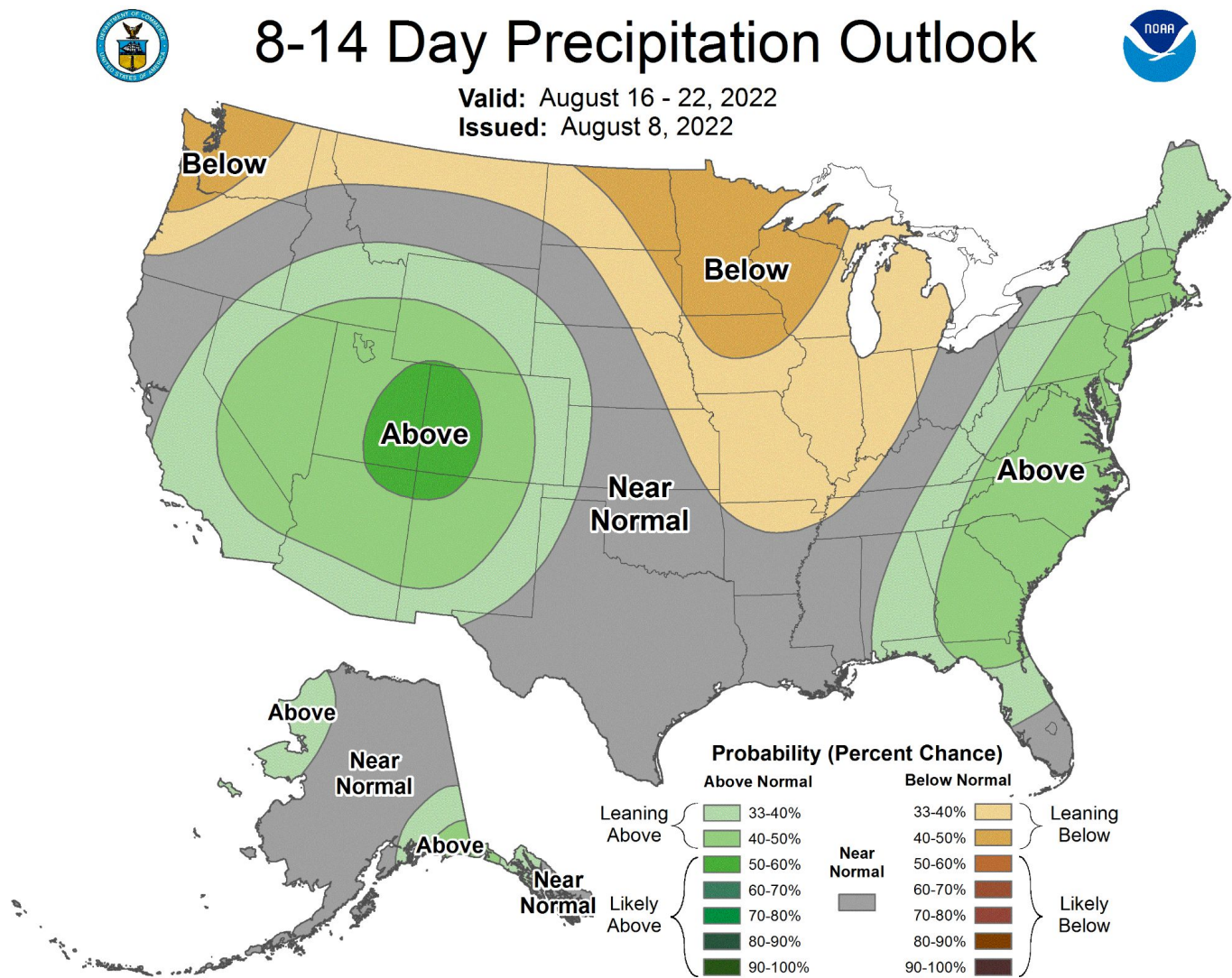




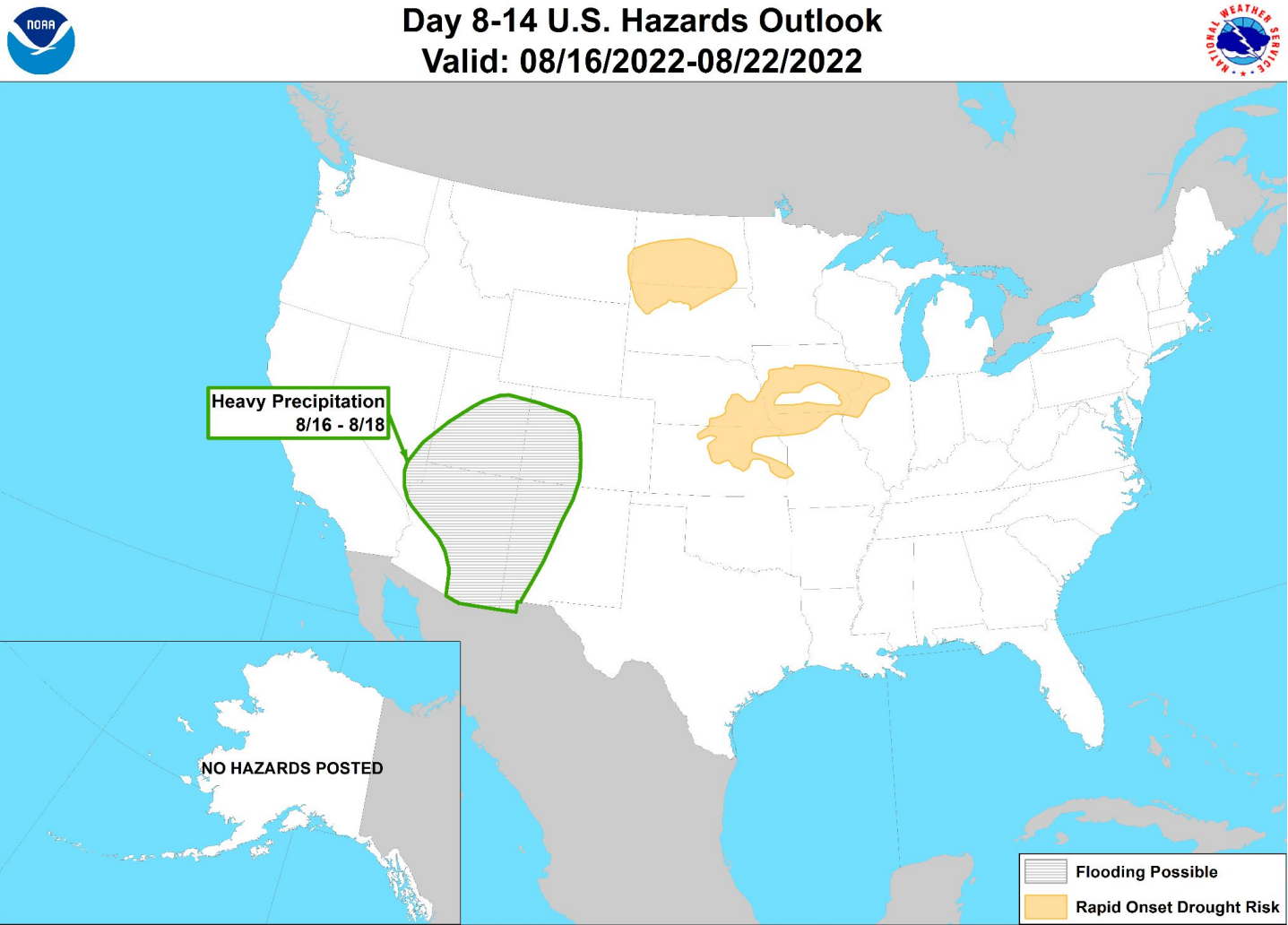
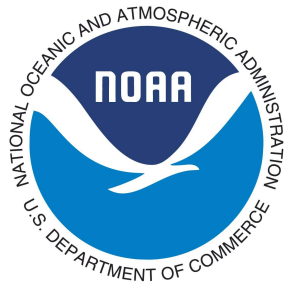
Valid: August 16 - 22, 2022
Issued: August 8, 2022



Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



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



Climate Prediction Center
Made: 08/08/2022 3PM EDT

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www.cpc.ncep.noaa.gov

April through July Observed Runoff (Percent of Average)

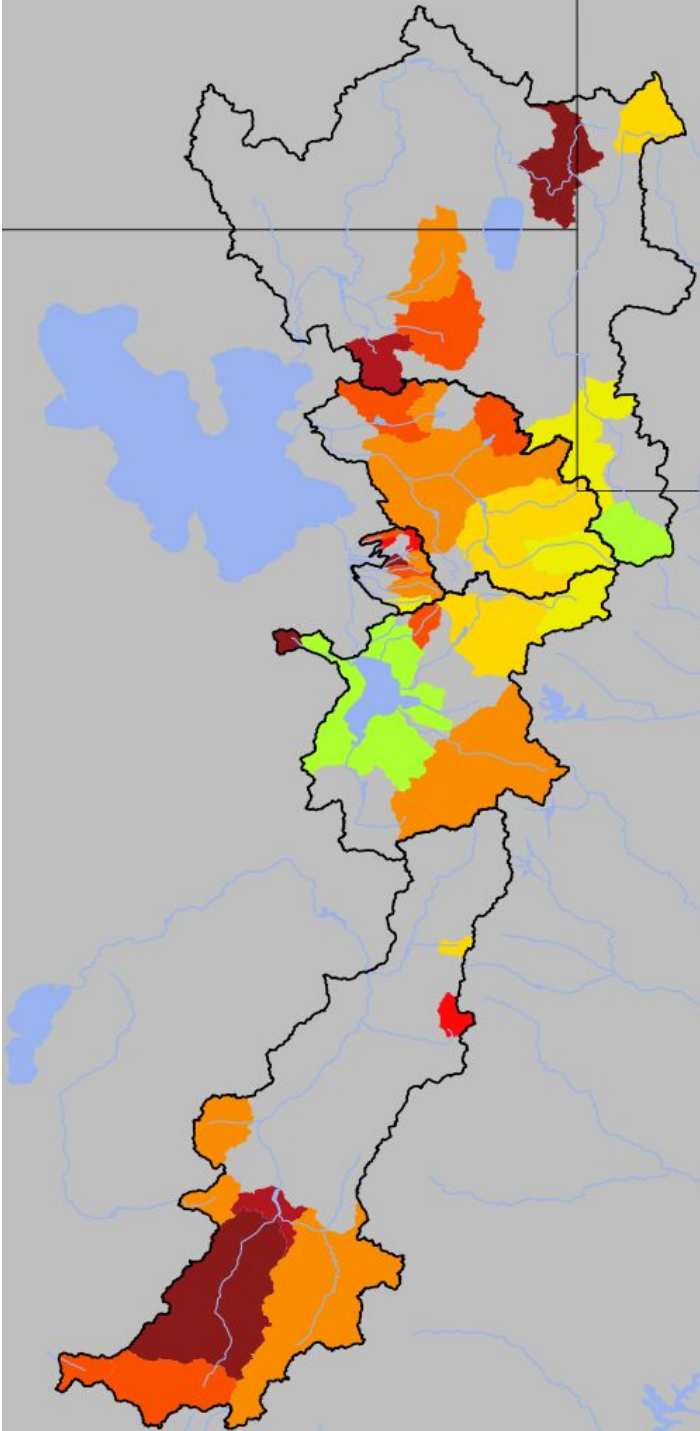
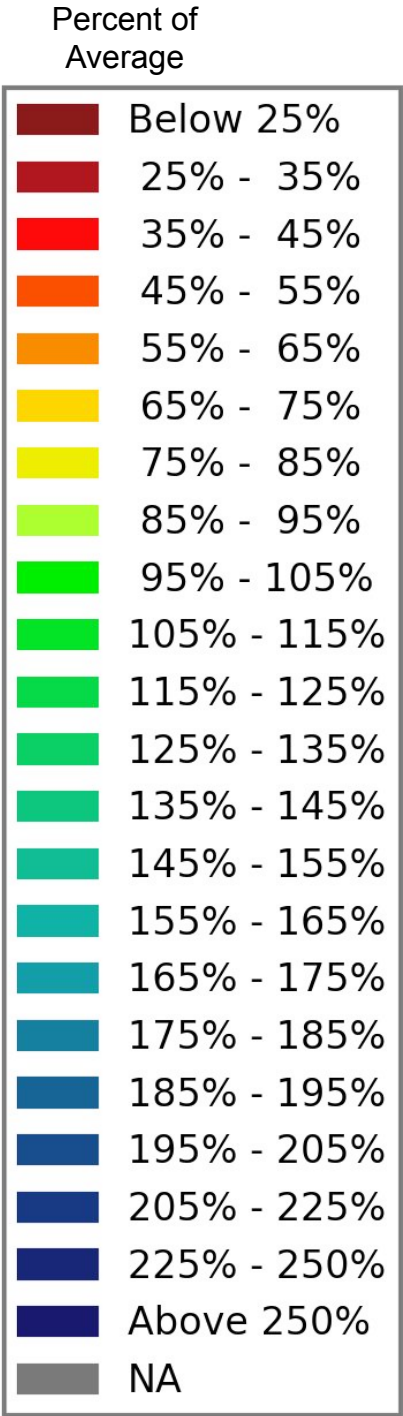
Weber: 48% - 84% median: 63%

Bear: 35% - 86% median: 58%

Six Creeks: 15% - 83% median: 53%

Utah Lake: 48% - 86% median: 63%

Sevier: 10% - 72% median: 46%

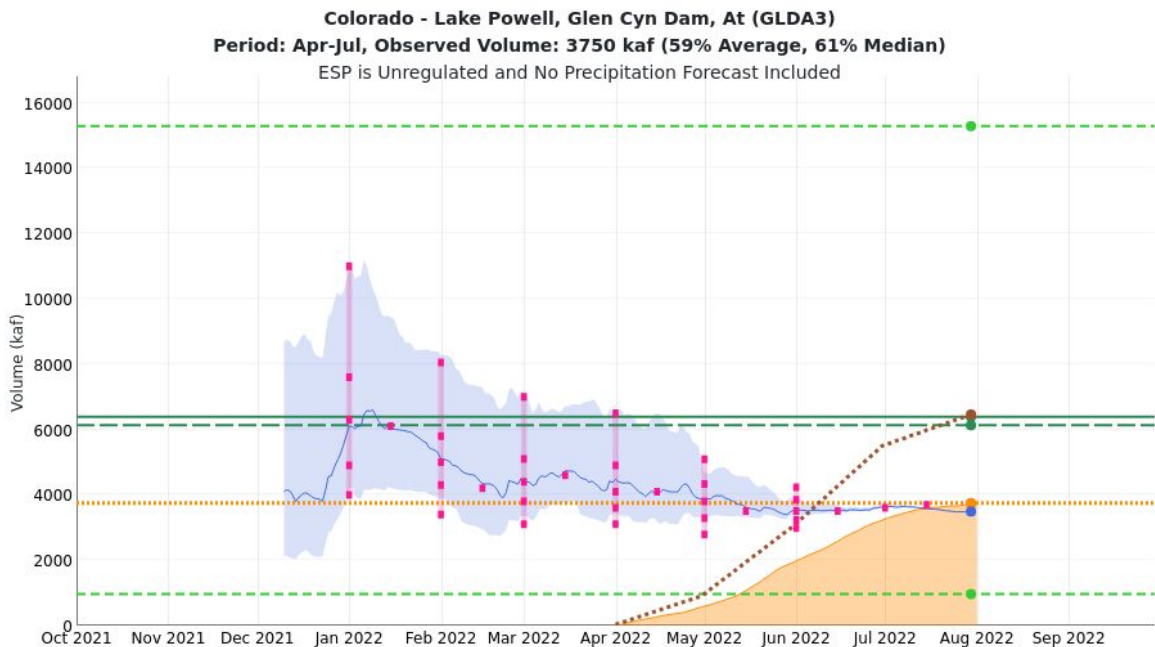


April through July Observed Runoff (Percent of Average)

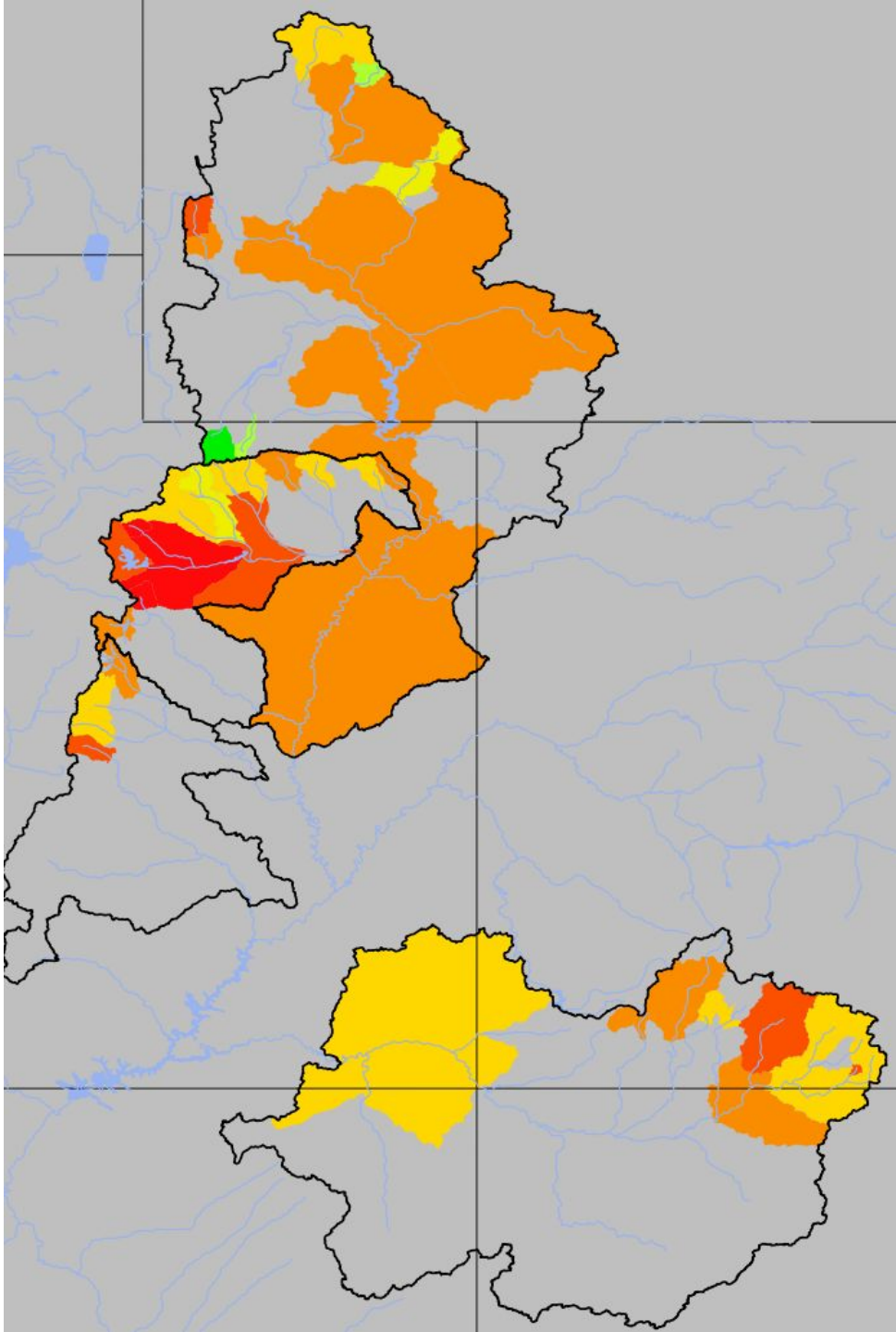
Green River: 37% - 96% median: 64%

San Juan: 50% - 72% median: 66%

Powell: 3.75 MAF, 59% of average

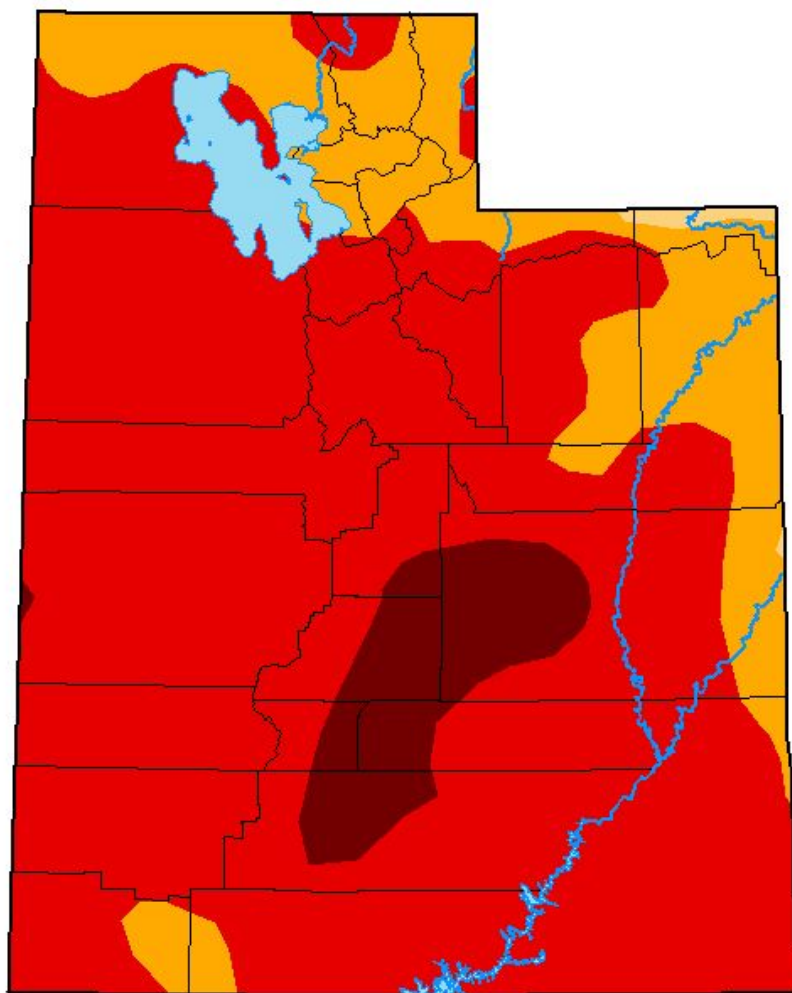


2022/07/30:
Max 1984: 15285.64
Min 2002: 963.96
Average: 6390
Median: 6130
Observed Accumulation: 3720
Observed Total: 3750
Normal Accumulation: 6460
ESP: 3490

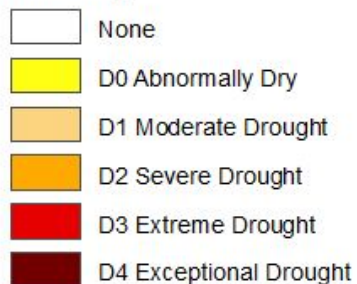


U.S. Drought Monitor Utah

August 2, 2022
(Released Thursday, Aug. 4, 2022)
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>

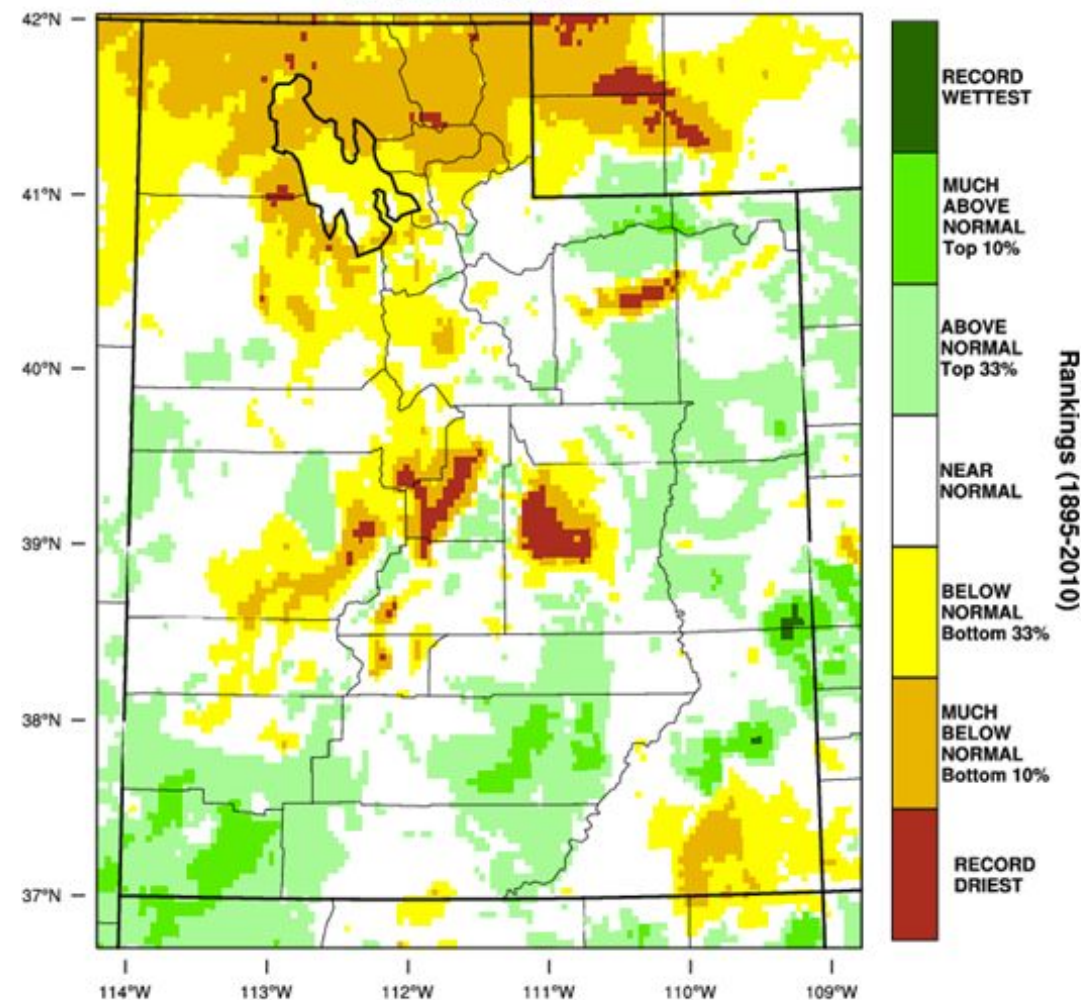
Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

Utah - Precipitation July 2022 Percentile



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2022