



Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors





Utah Water Assessment & Conditions Monitoring Webinar

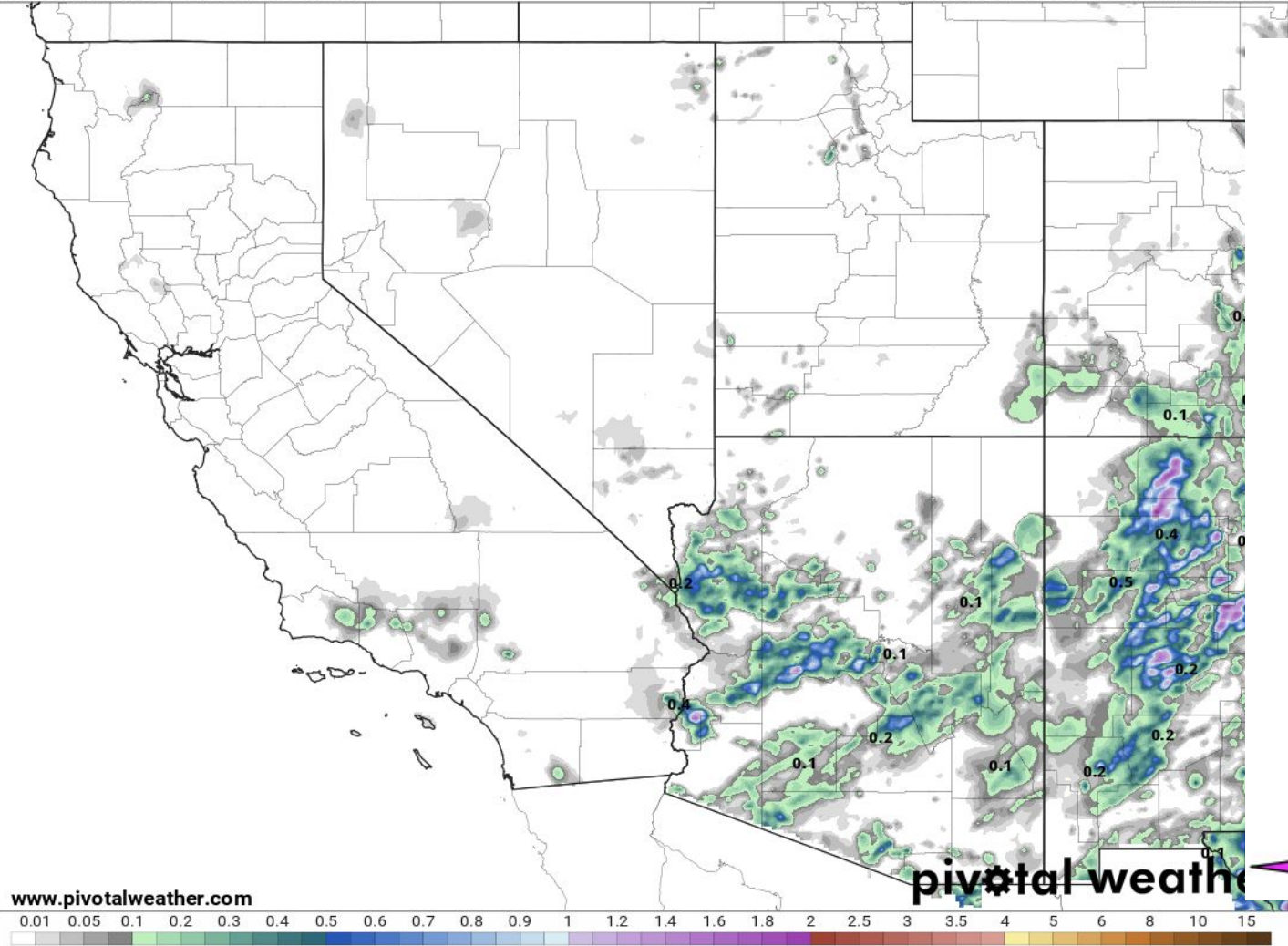
September 6, 2022

7-day Precipitation (Stage IV Data) & 7-day Max. Temp. Anomaly

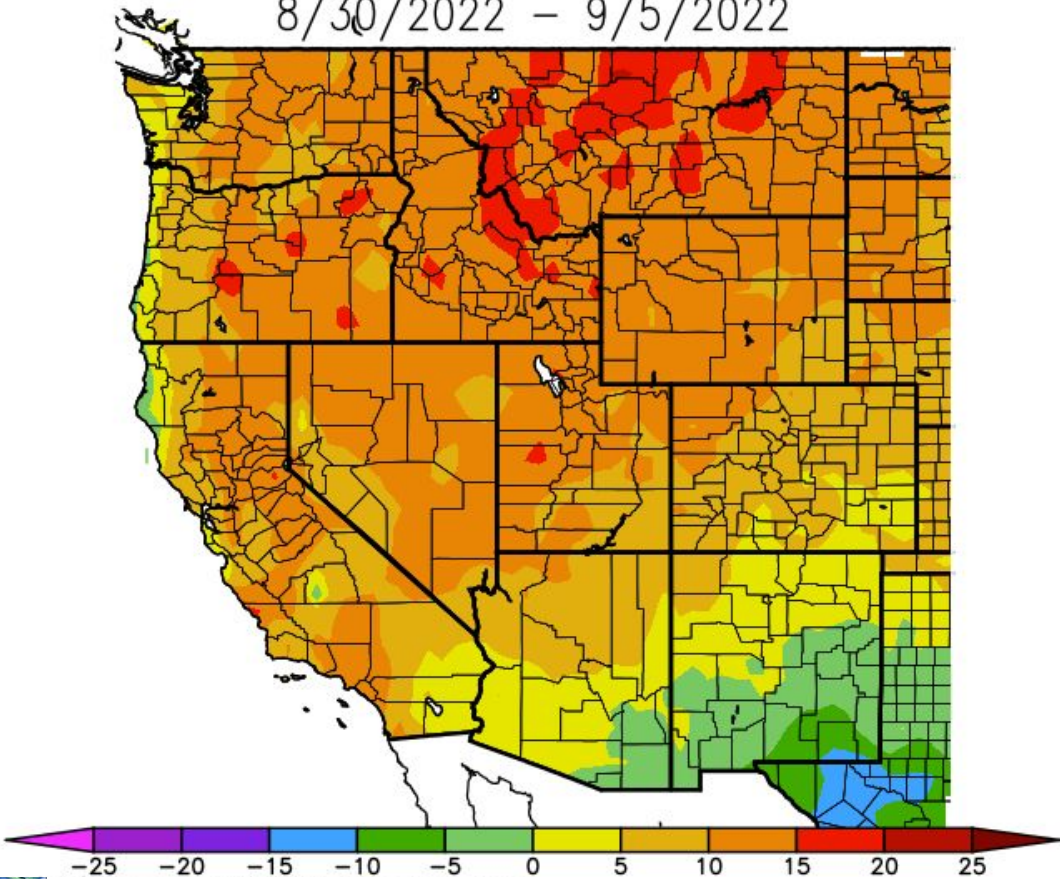
168-Hour Stage IV Precipitation Analysis (in)

Ending Monday, Sep. 5, 2022 at 5 a.m. PDT

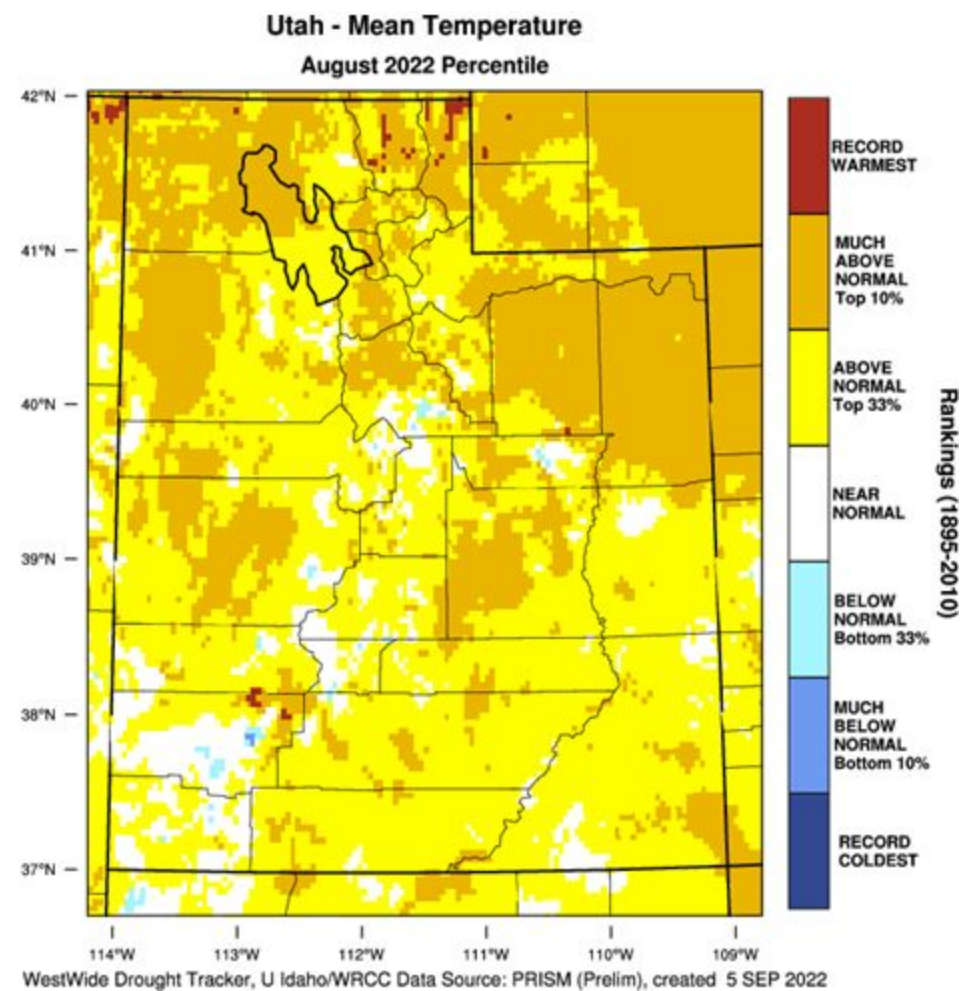
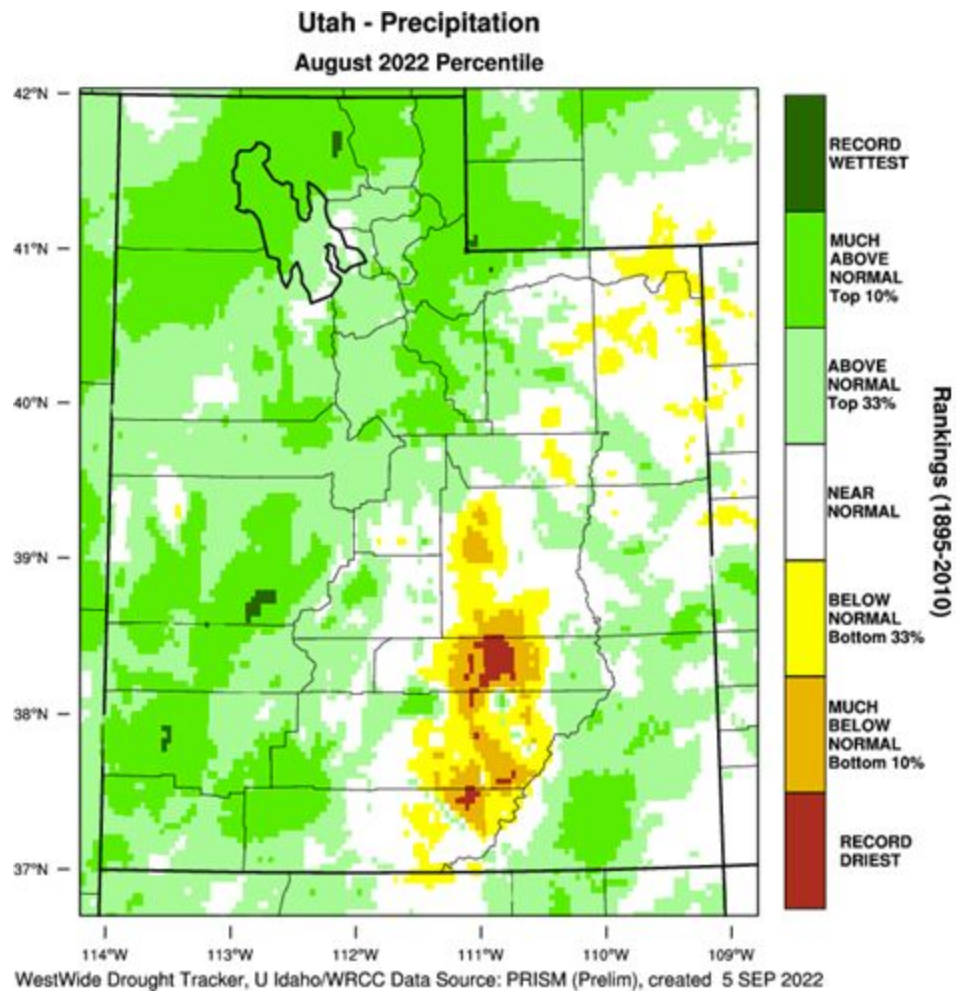
Init: Mon 2022-09-05 12z NCEP Stage IV



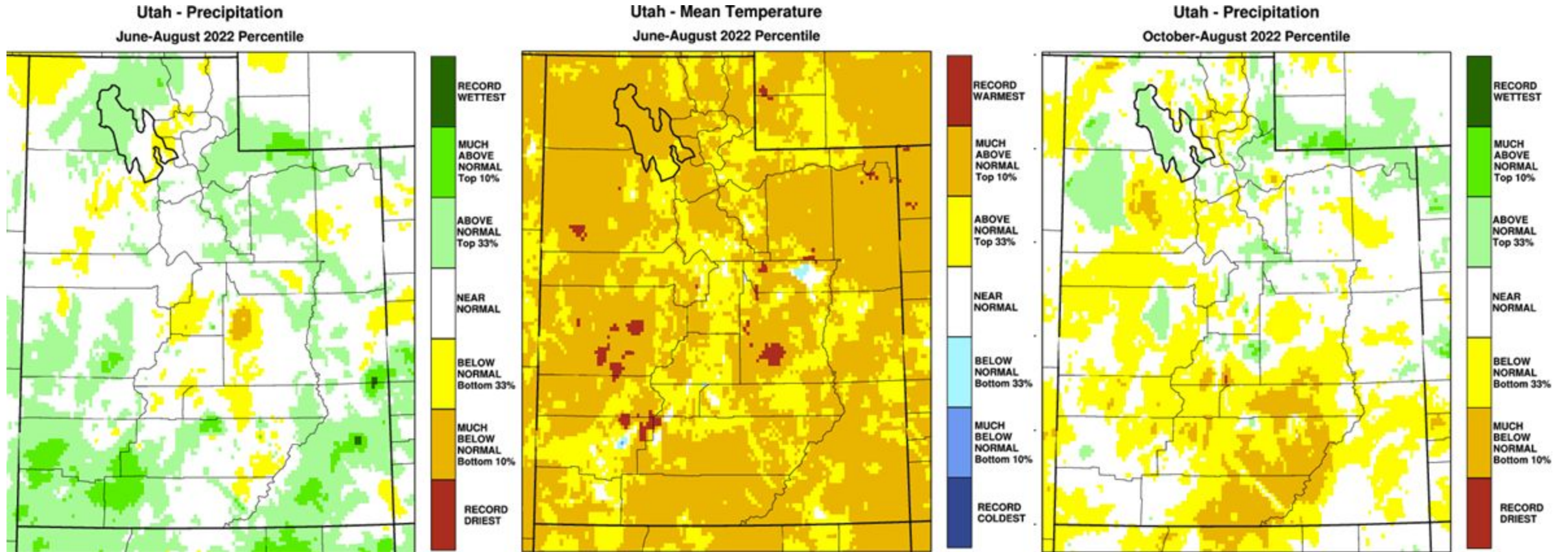
Av. Max. Temperature dep from Ave (deg F)
8/30/2022 – 9/5/2022



August Precipitation and Temperature

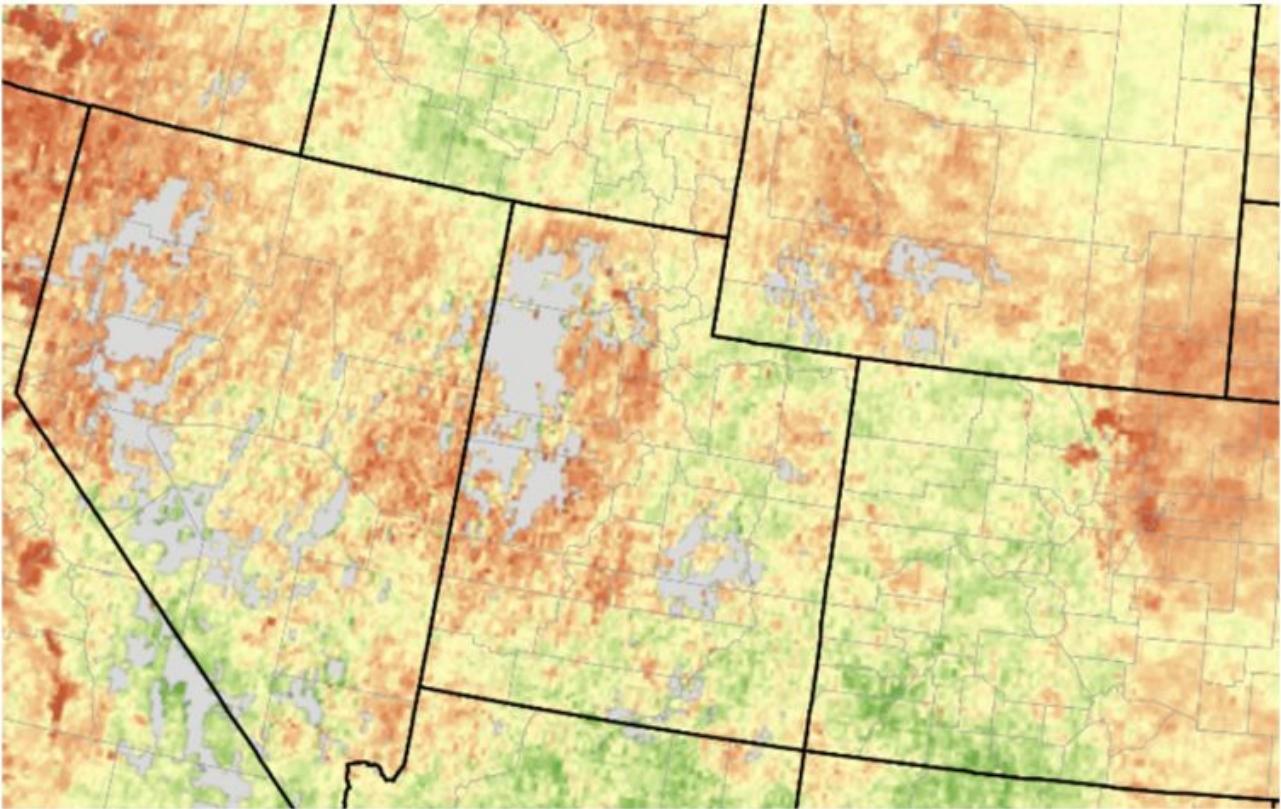


June-August Summer Precipitation and Temperature + Water Year Precipitation

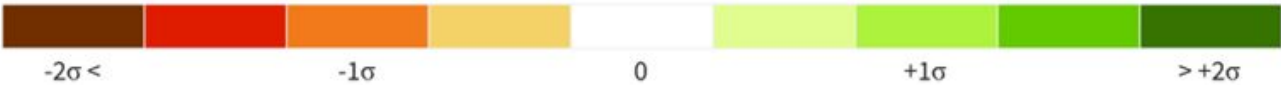


Evaporative Stress Index

U.S. Vegetation and Drought: Evaporative Stress Index



Standardized ET/PET Anomalies

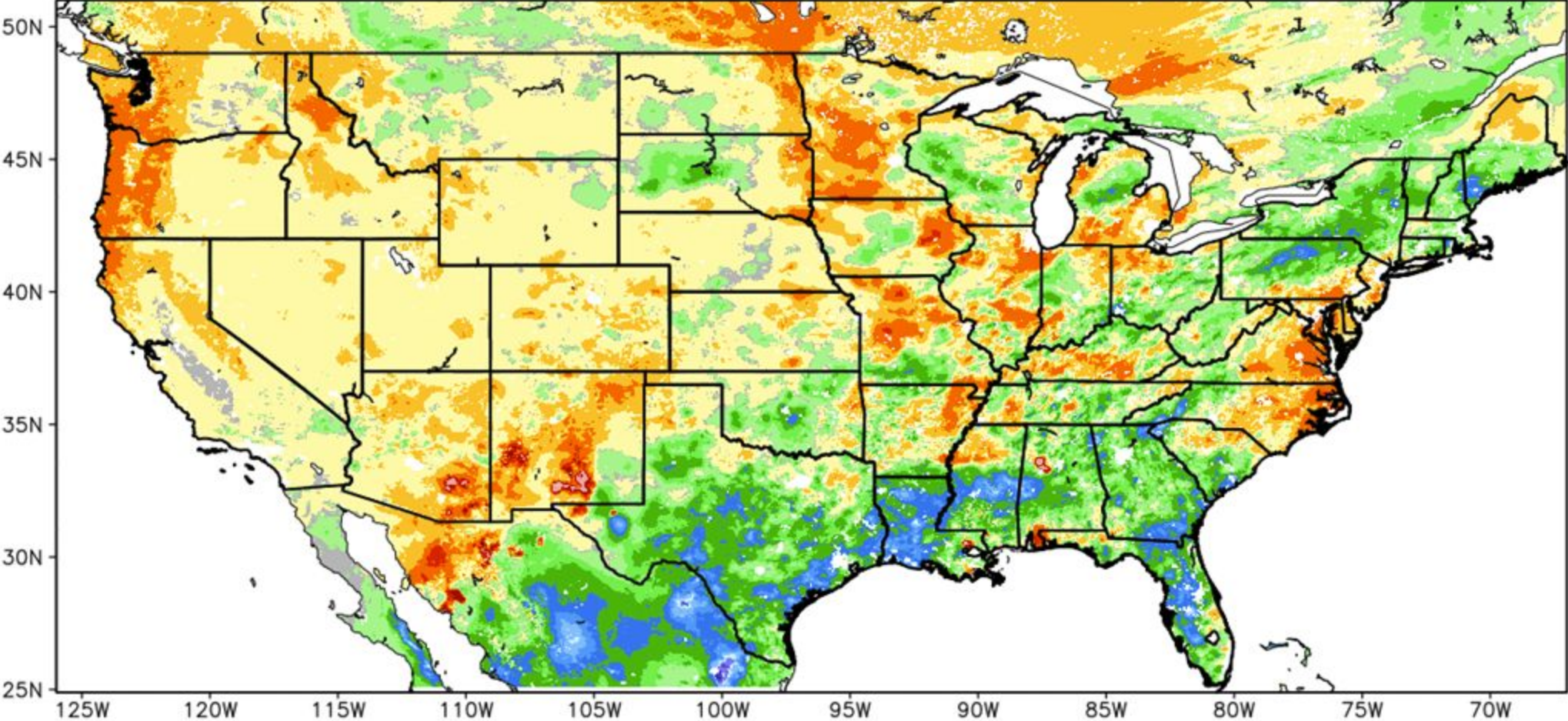


Source(s): NASA SERVIR
Last Updated - 09/06/22

[Drought.gov](https://drought.gov)

Soil Moisture Change

2-Week Difference in Column Relative Soil Moisture (%) valid 00z 06 Sep 2022



Agency - Utah Climate Center
Presenter - Jon Meyer

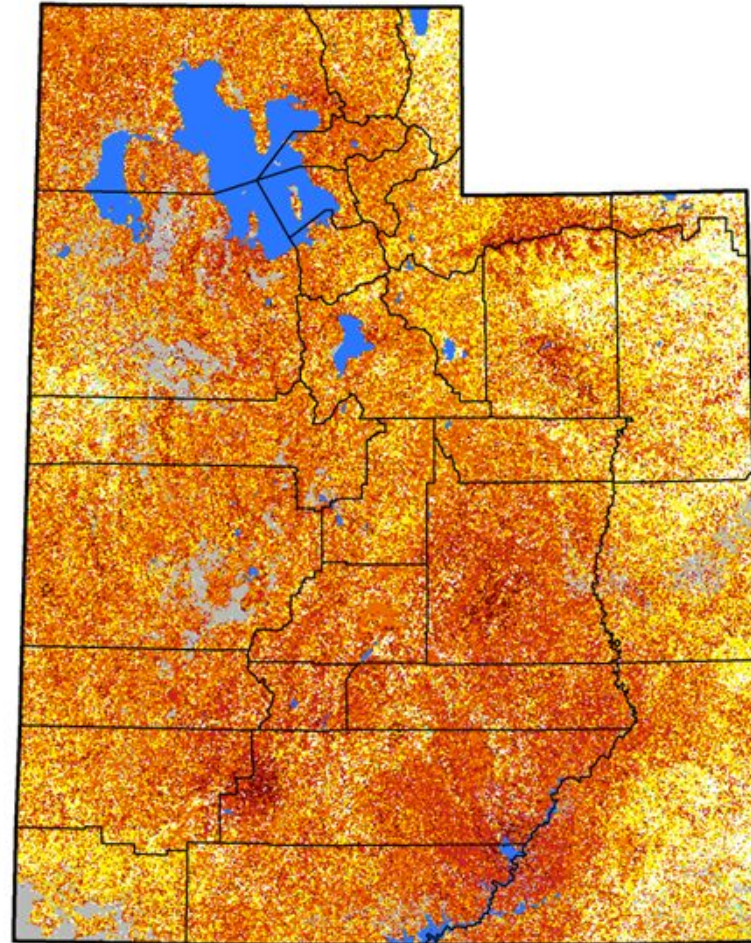
****NOTE****
****Experimental****



Vegetation Drought Response Index

Complete: Utah

July 31, 2022

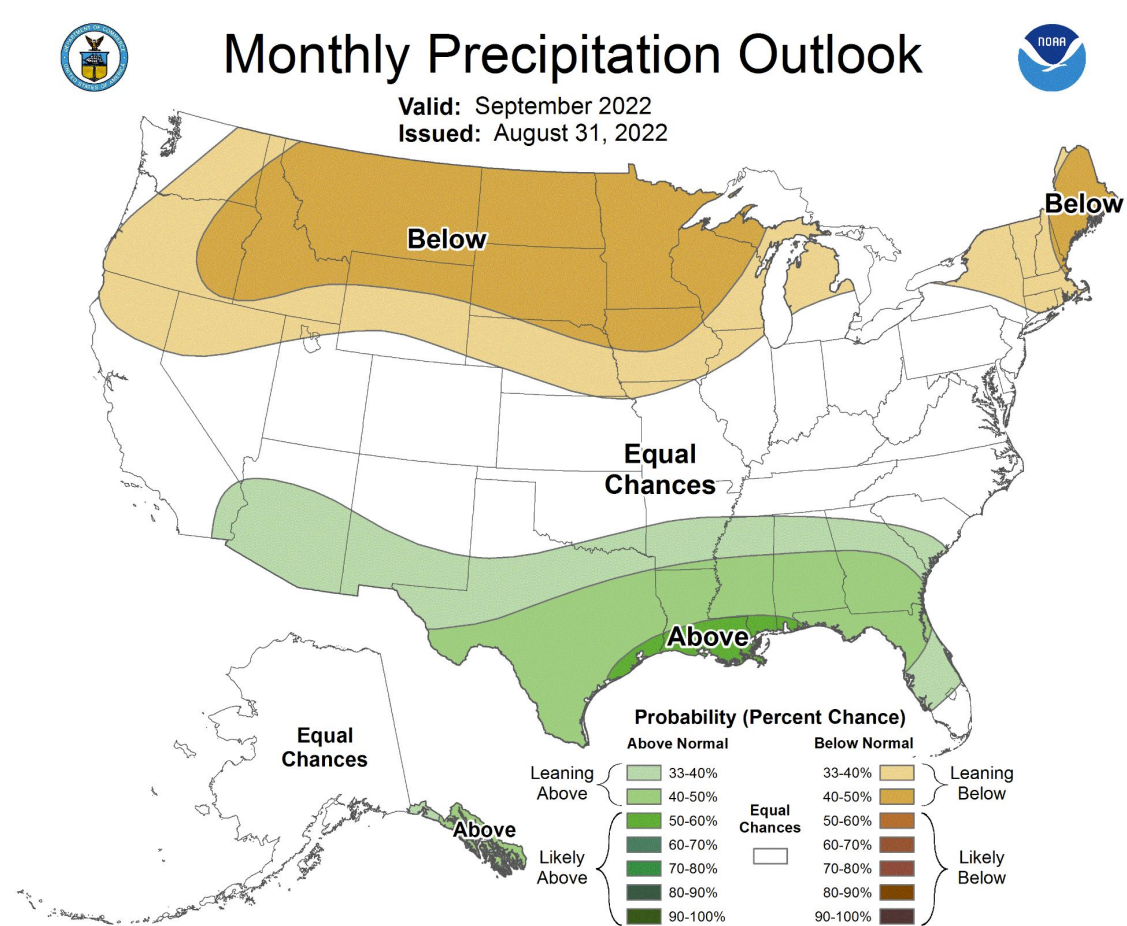
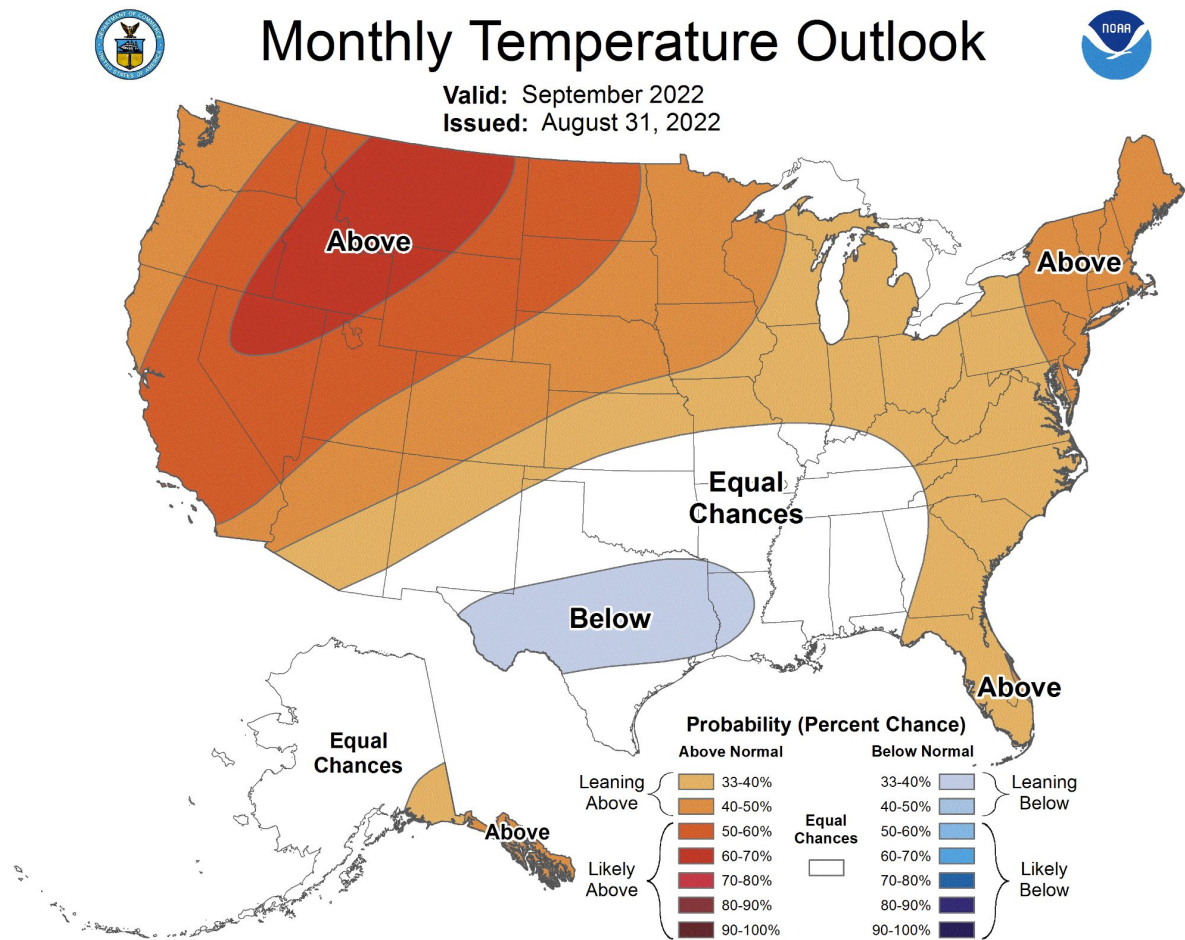


Vegetation Condition

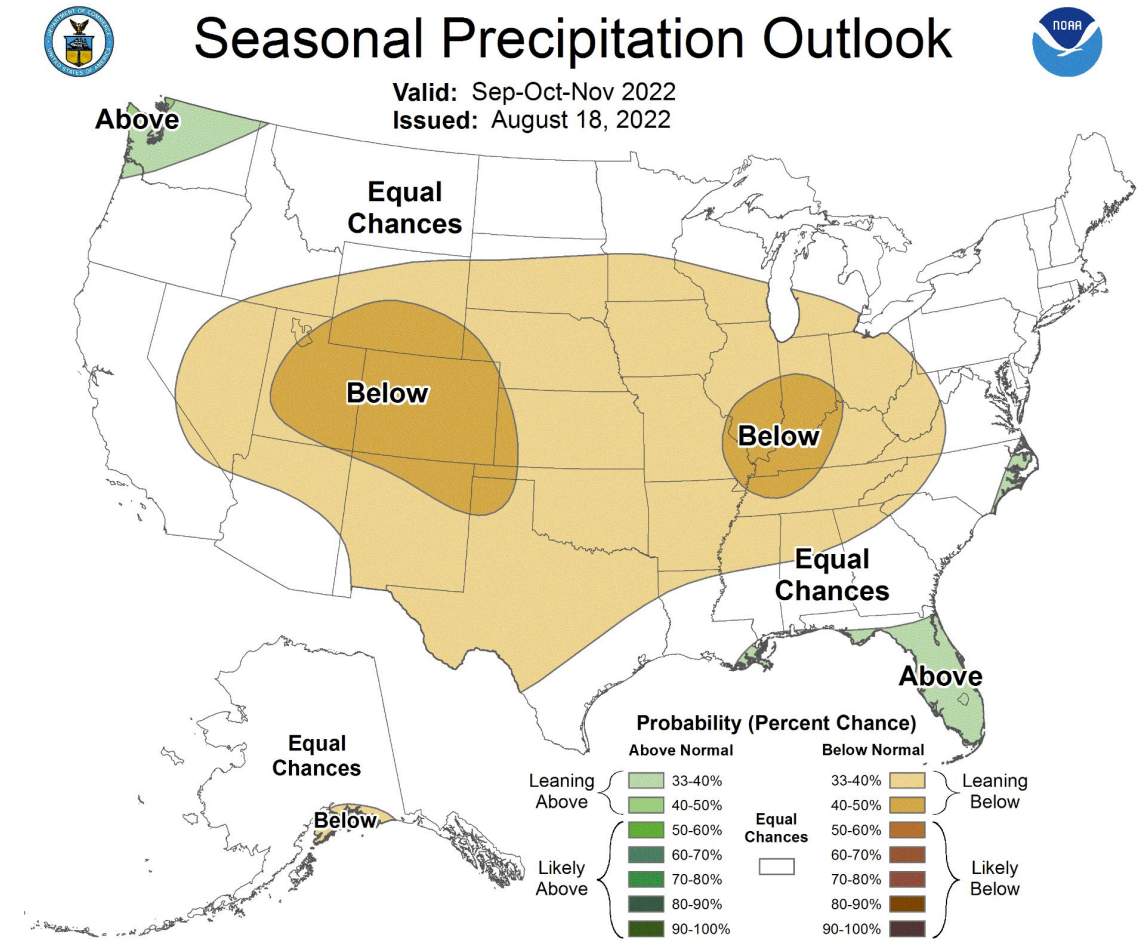
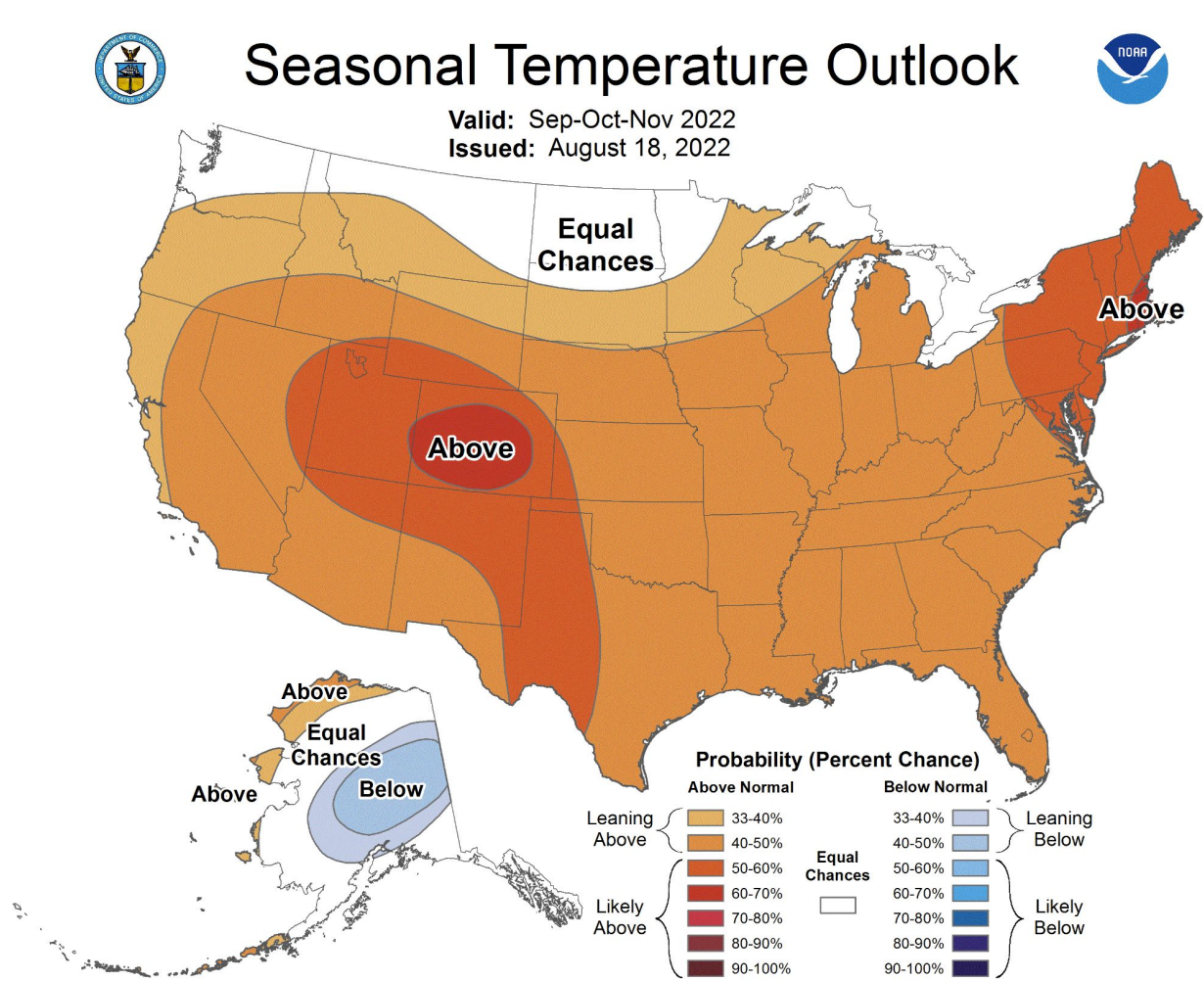
- Extreme Drought
- Severe Drought
- Moderate Drought
- Pre-drought stress
- Near Normal
- Unusually Moist
- Very Moist
- Extreme Moist
- Out of Season
- Water



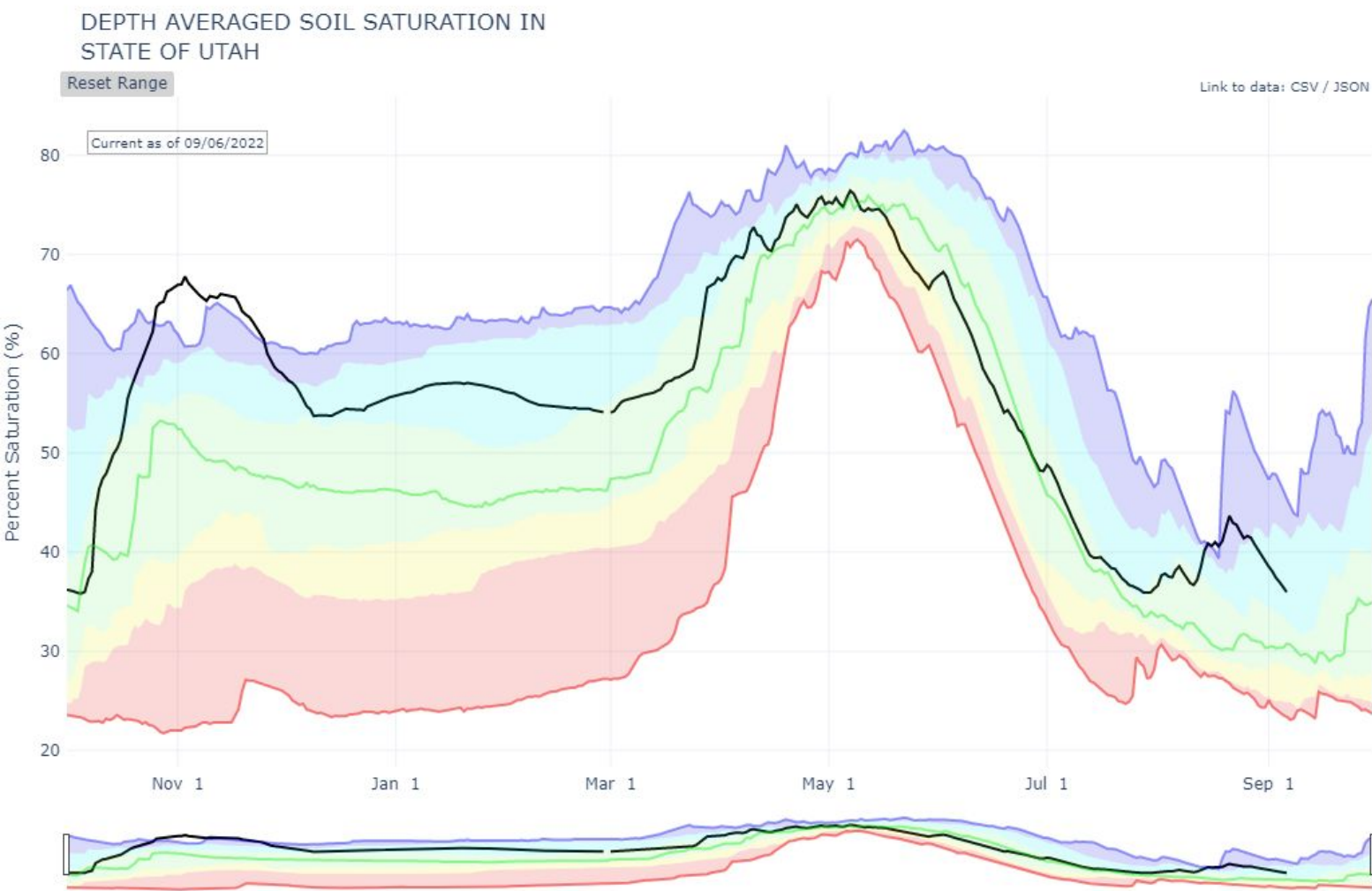
CPC September Outlook



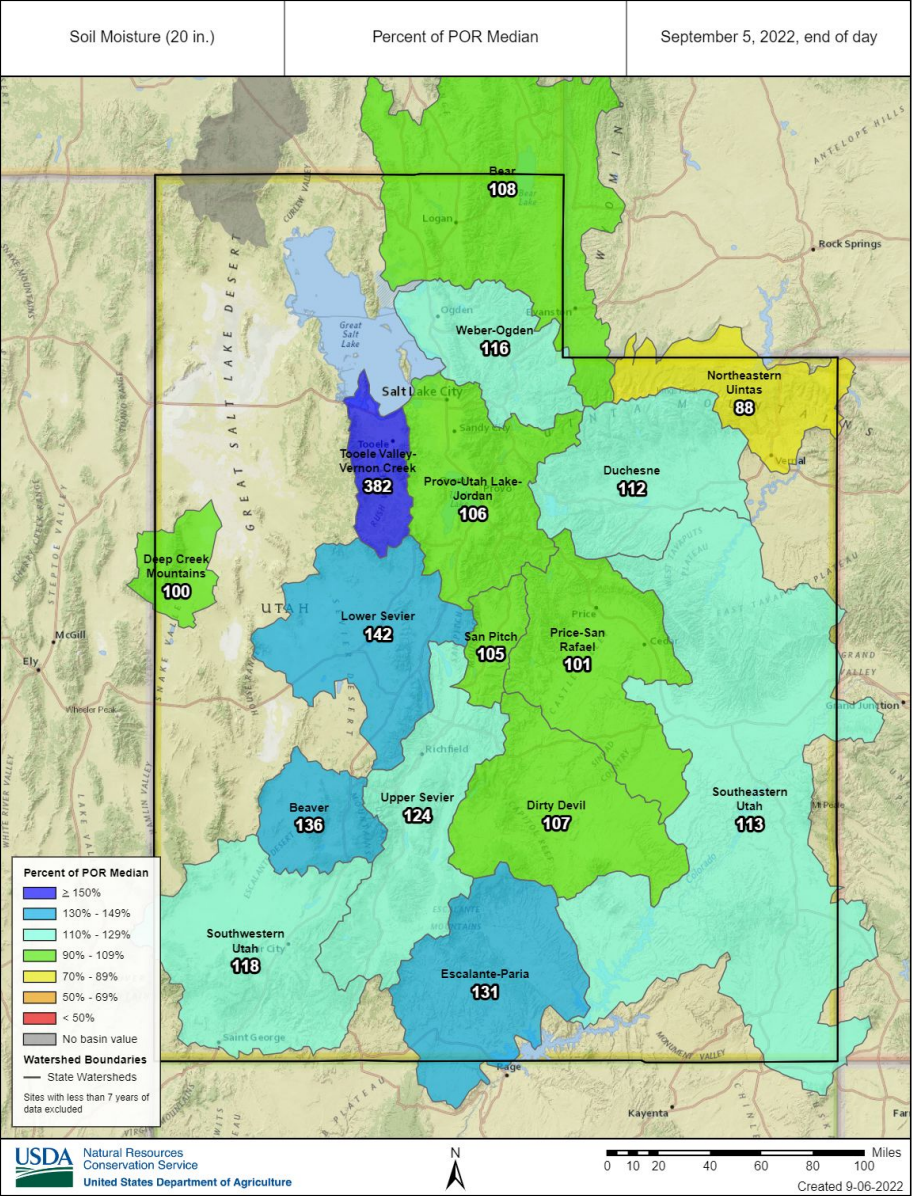
CPC Sept-Nov. Outlook



Soil Moisture



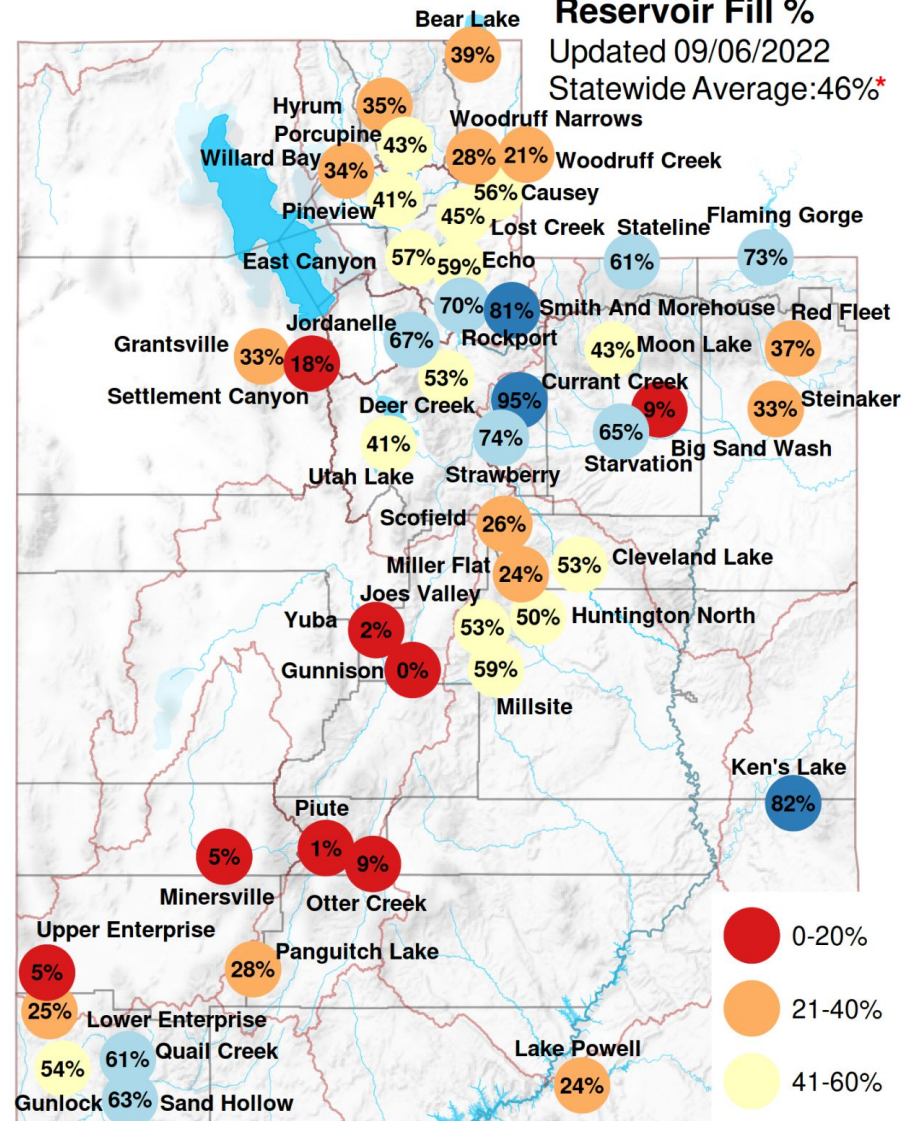
Agency - NRCS Snow Survey
Slide from Jordan Clayton



Reservoir Fill %

Updated 09/06/2022

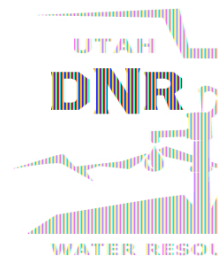
Statewide Average: 46%*



Data Sources: water.utah.gov/reservoirlevels

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

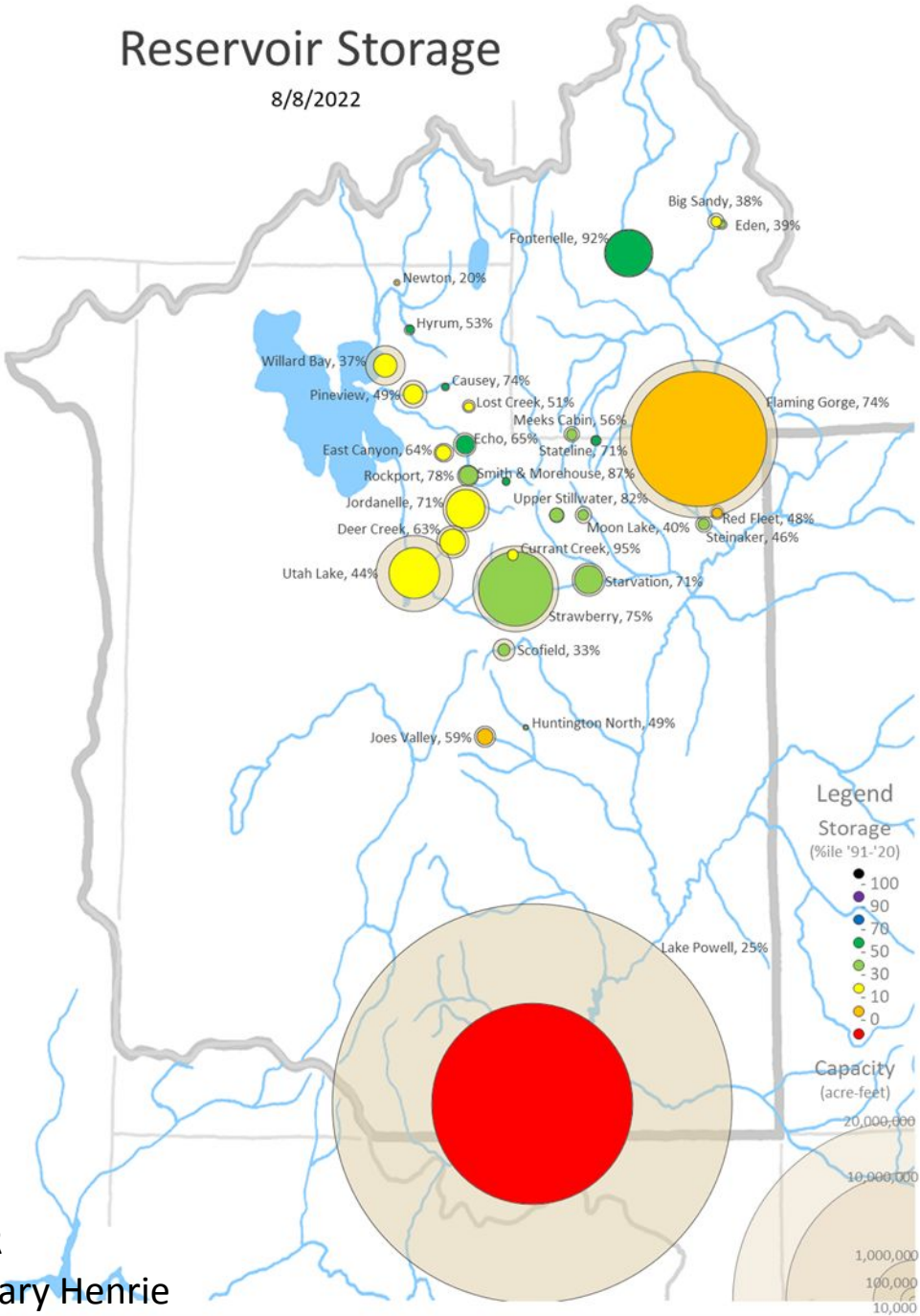
Total capacity including these is 38%



Reservoir

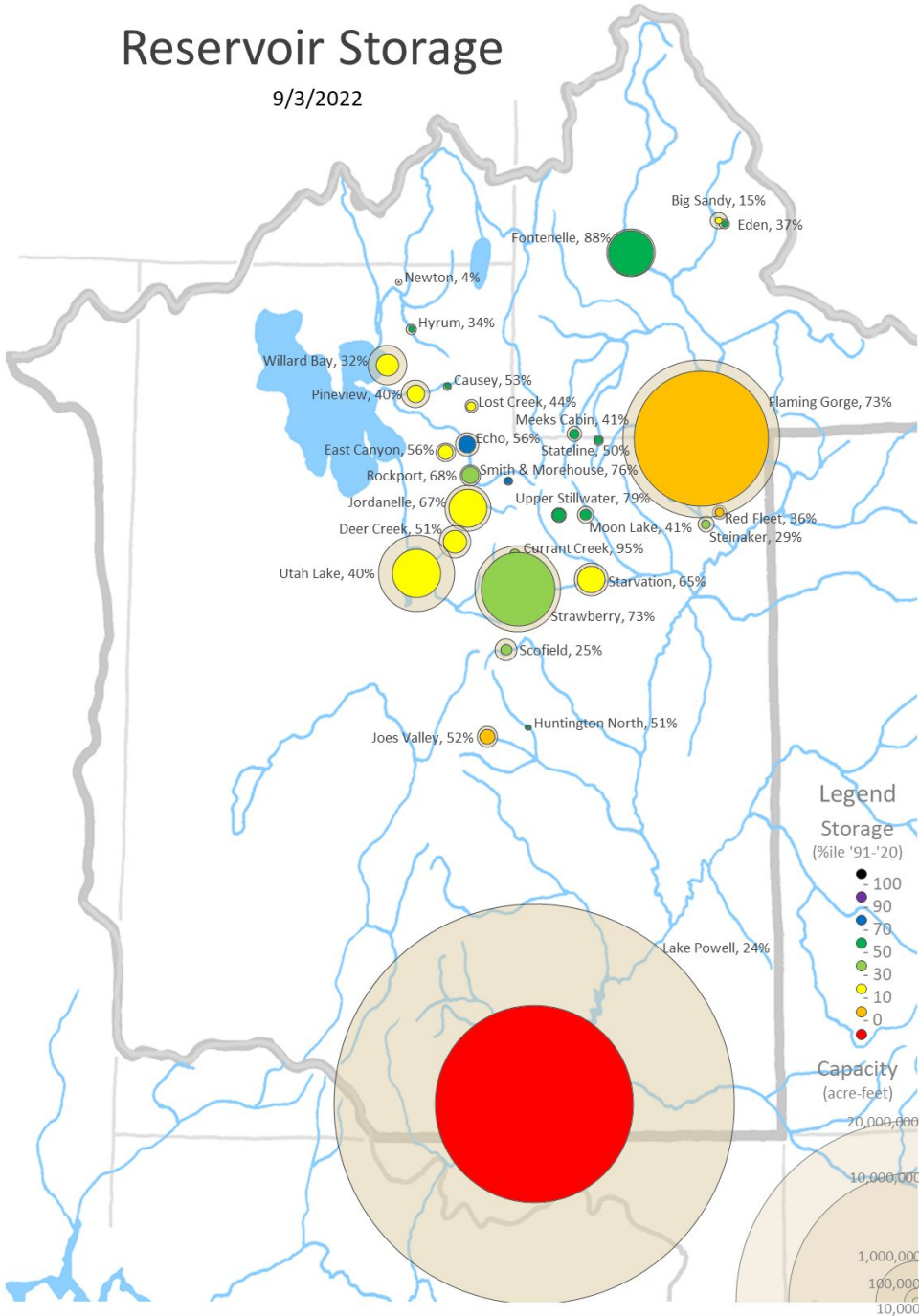
Reservoir Storage

8/8/2022

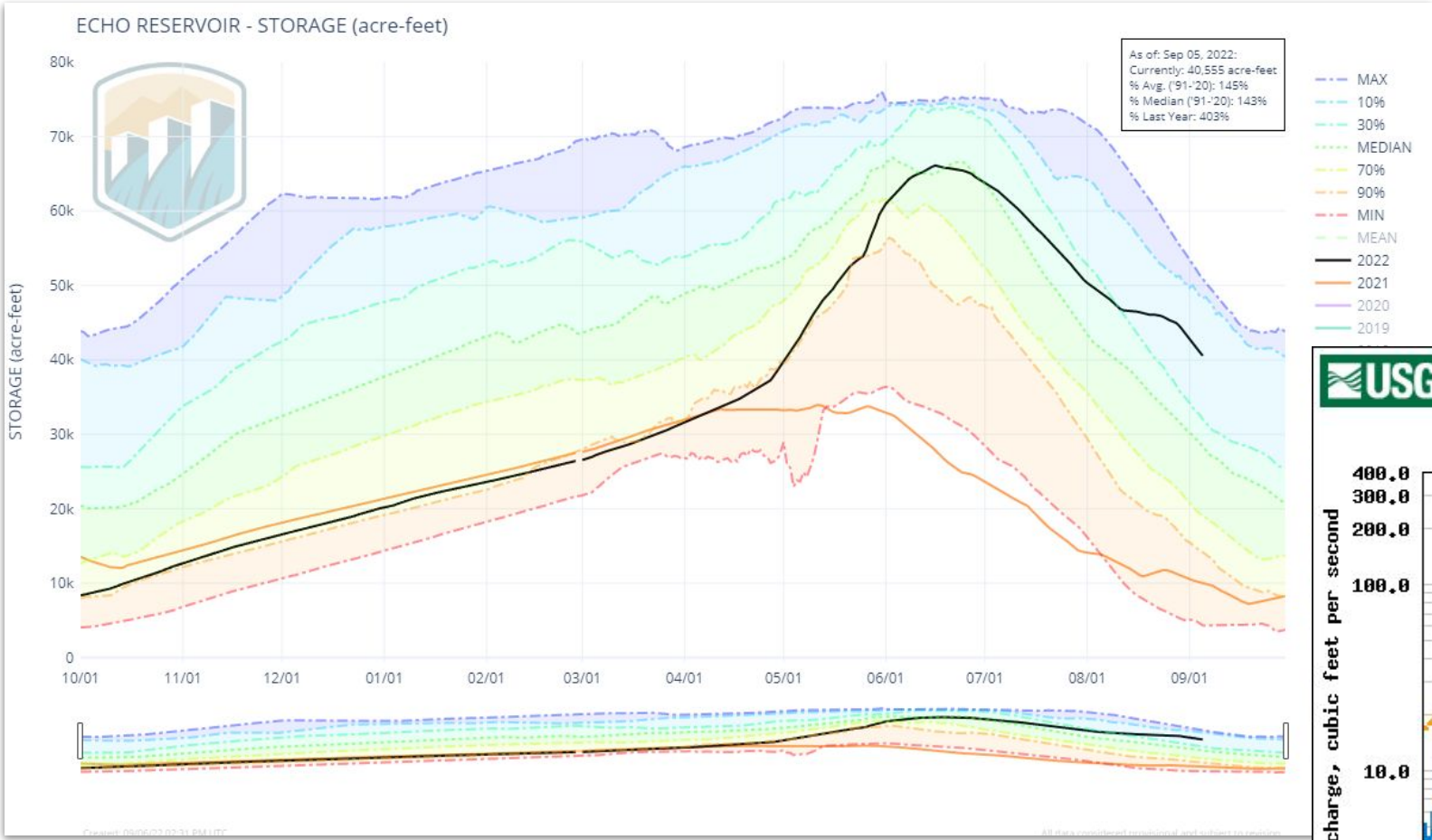


Reservoir Storage

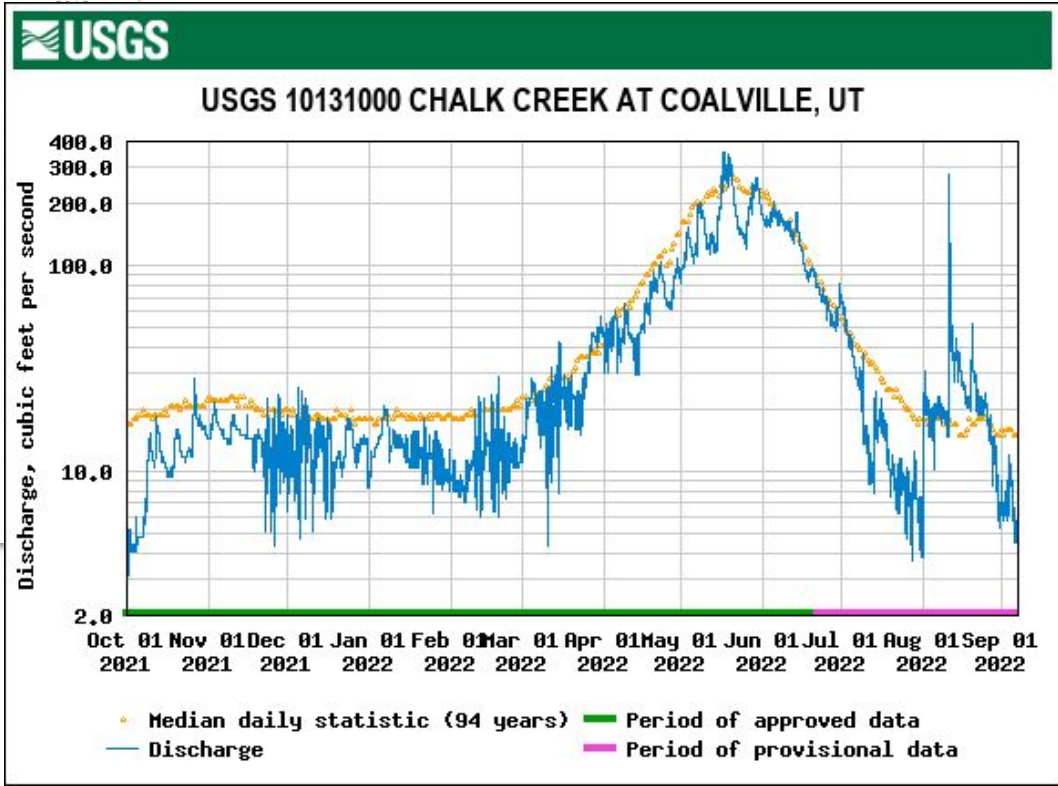
9/3/2022



Reservoir Levels

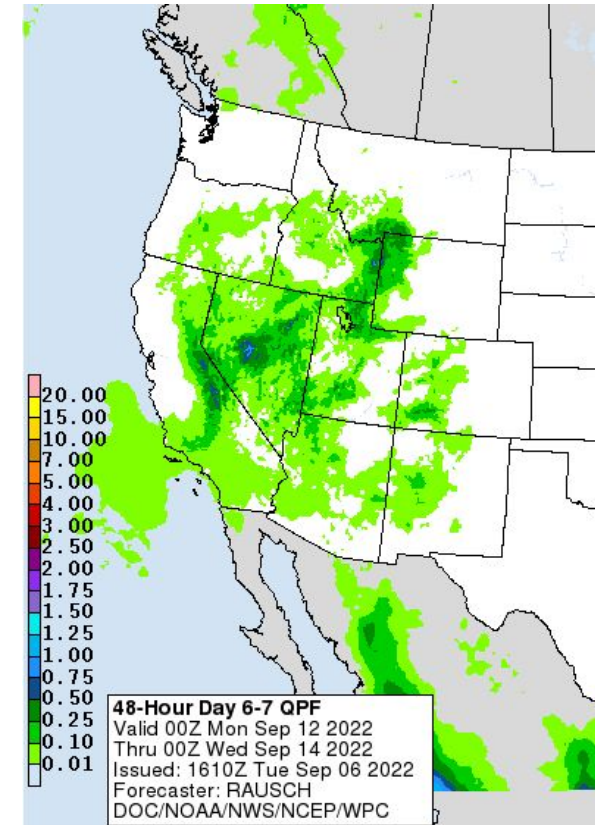
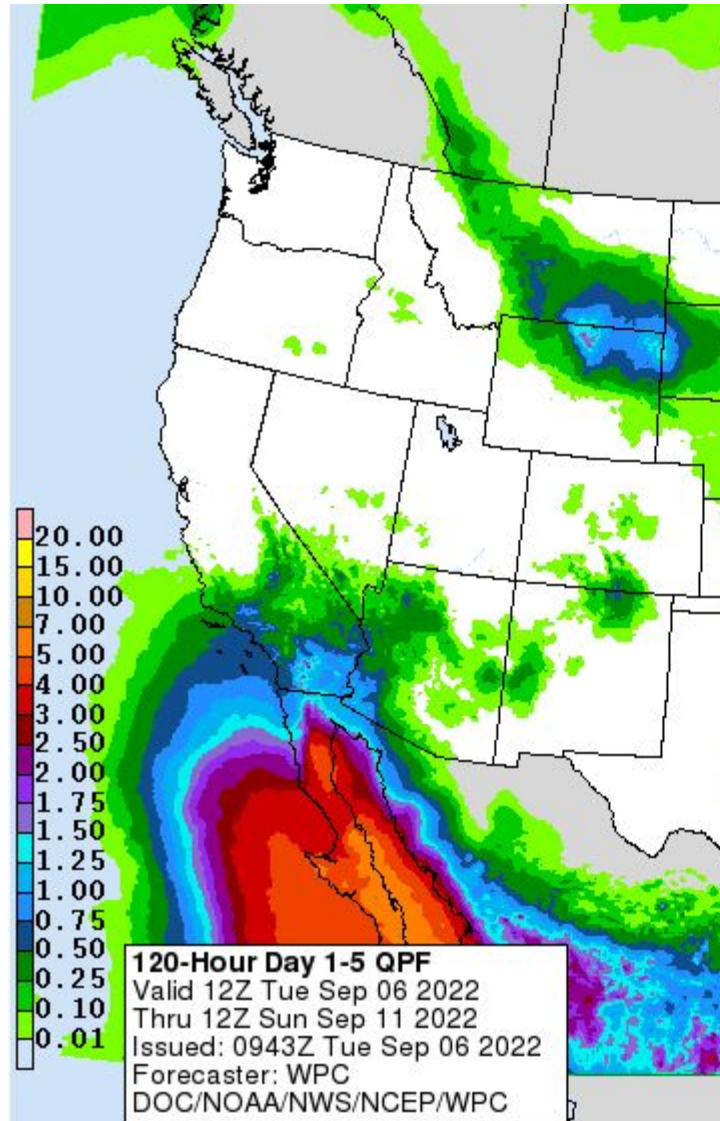
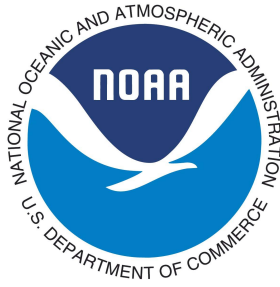


https://www.usbr.gov/uc/water/hydrodata/reservoir_data/site_map.html



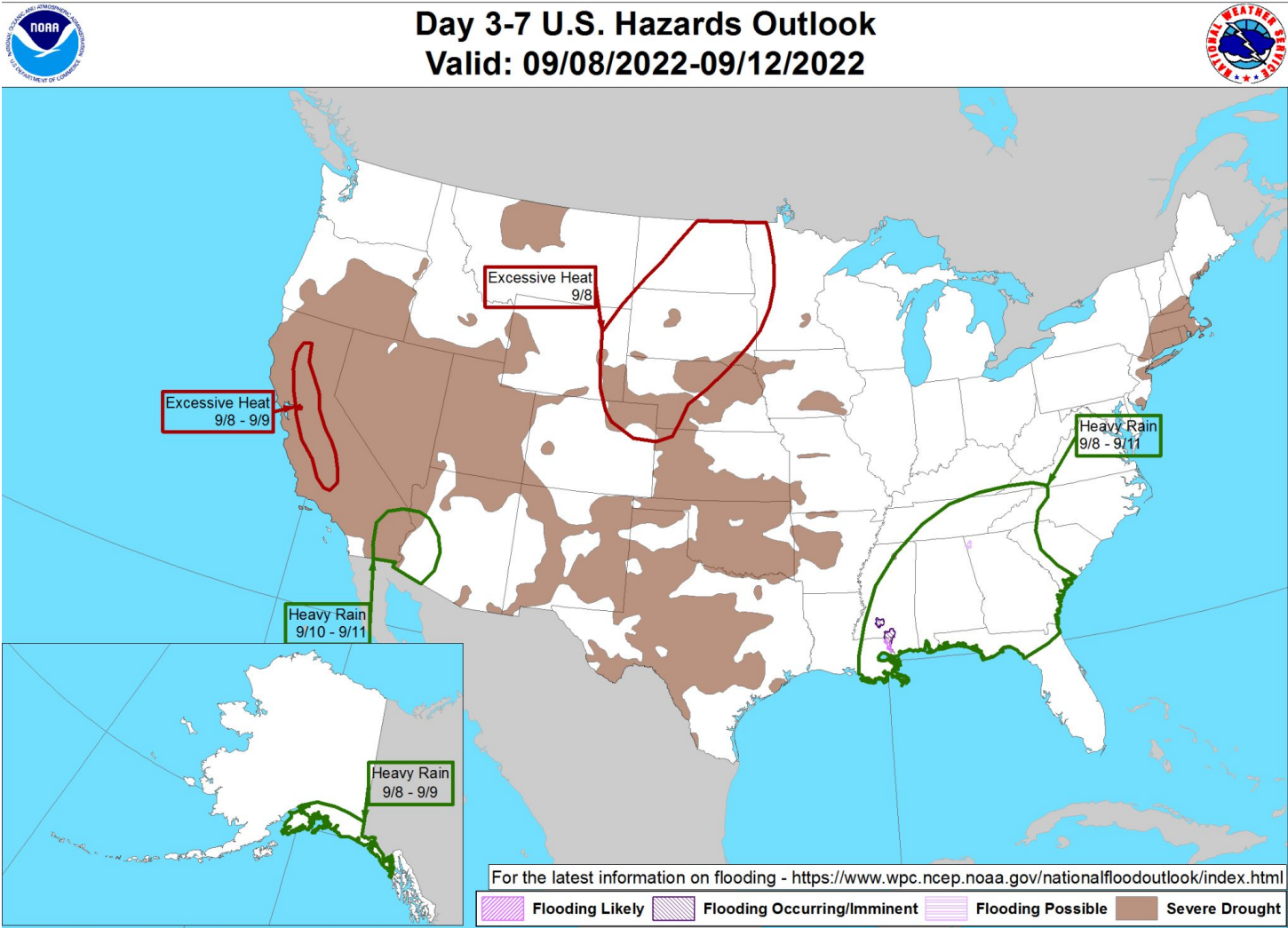
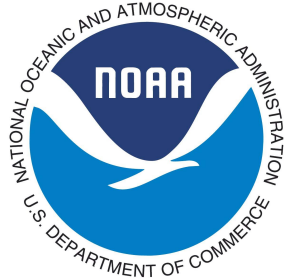
Agency - BOR
Presenter - Gary Henrie

Weather Forecast Office Utah Day 1-7 Outlook



- Dangerously hot temperatures for early September will be in place through Wednesday for most locations and perhaps Thursday for Lower Washington County, Zion National Park and Glen Canyon National Recreation Area
- Record-breaking heat both in terms of magnitude and duration for early September will continue across most valley areas of Utah, especially through Wednesday and possibly into Thursday.
- Some moisture is expected to return to southern Utah by Sunday and much of the state by Monday, but the details remain uncertain at this time

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



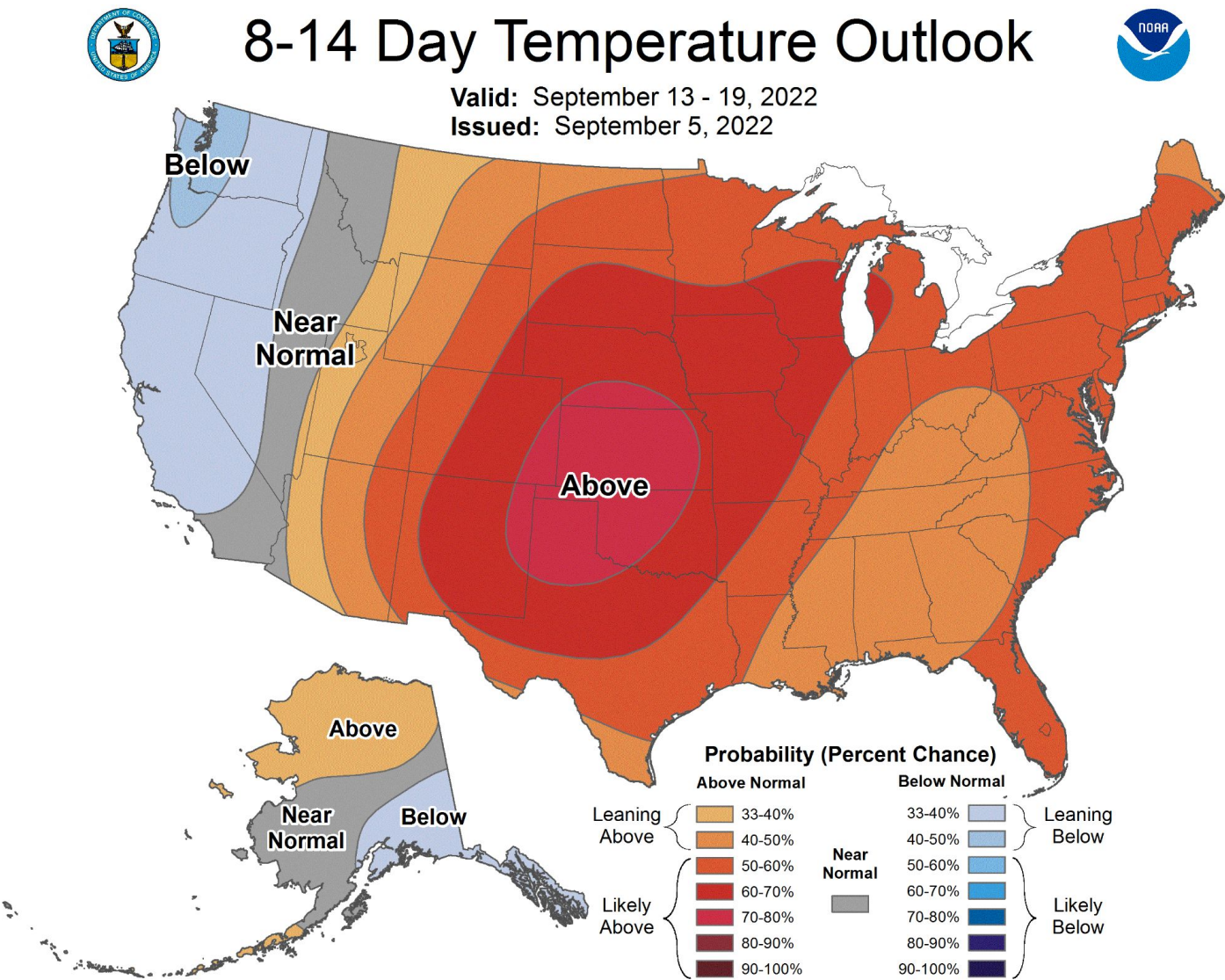
Weather Prediction Center

Made: 09/05/2022 3PM EDT

Follow us: 

www.wpc.ncep.noaa.gov

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



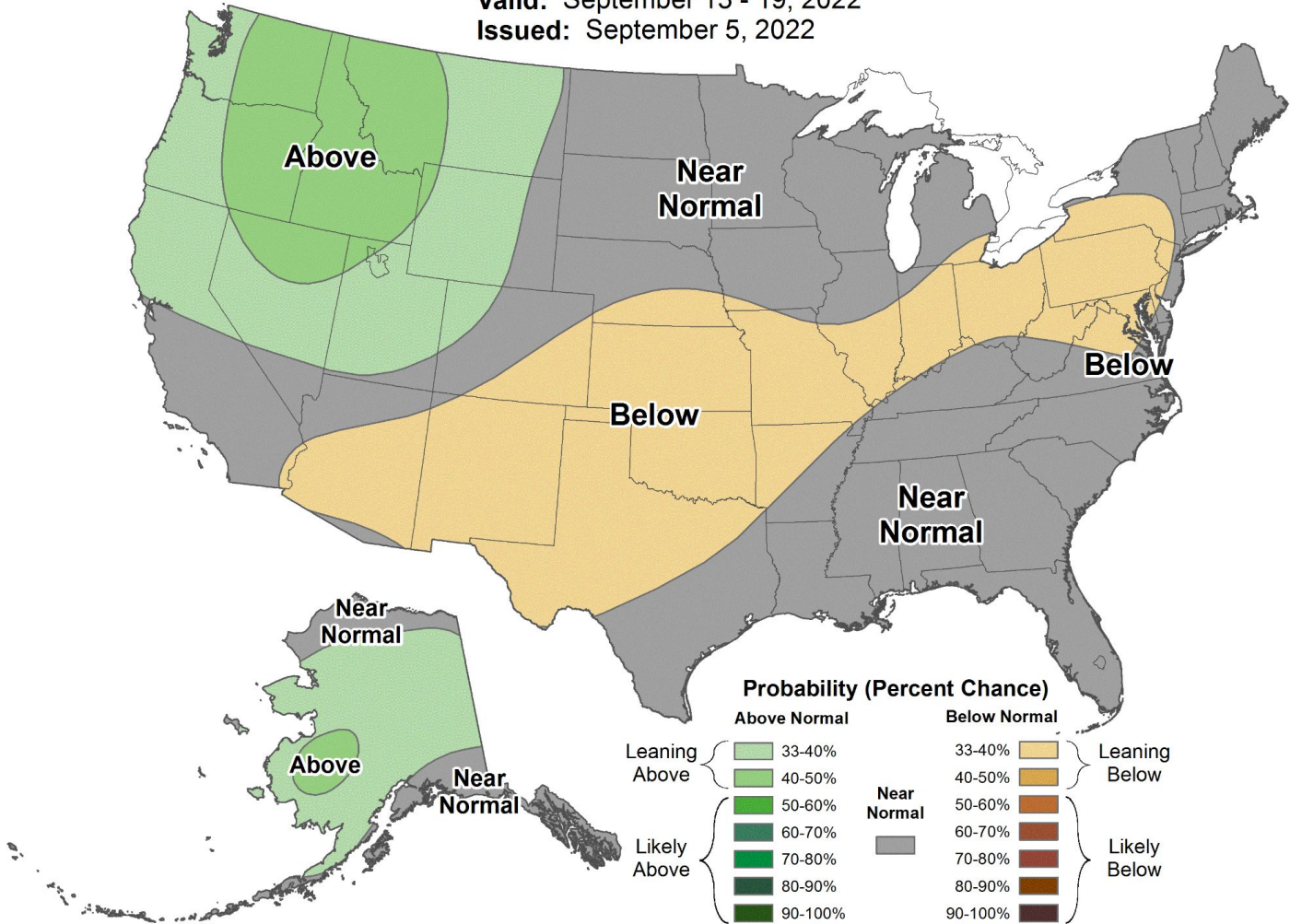
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



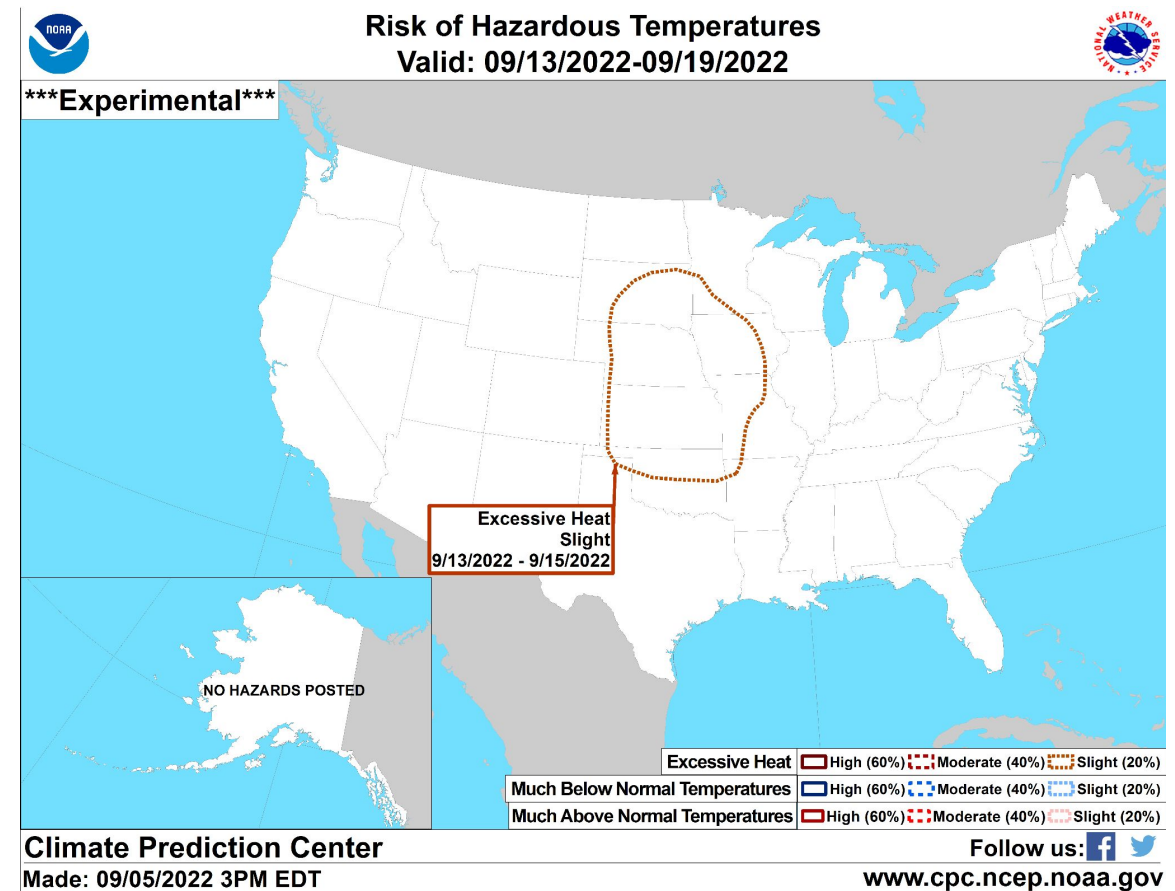
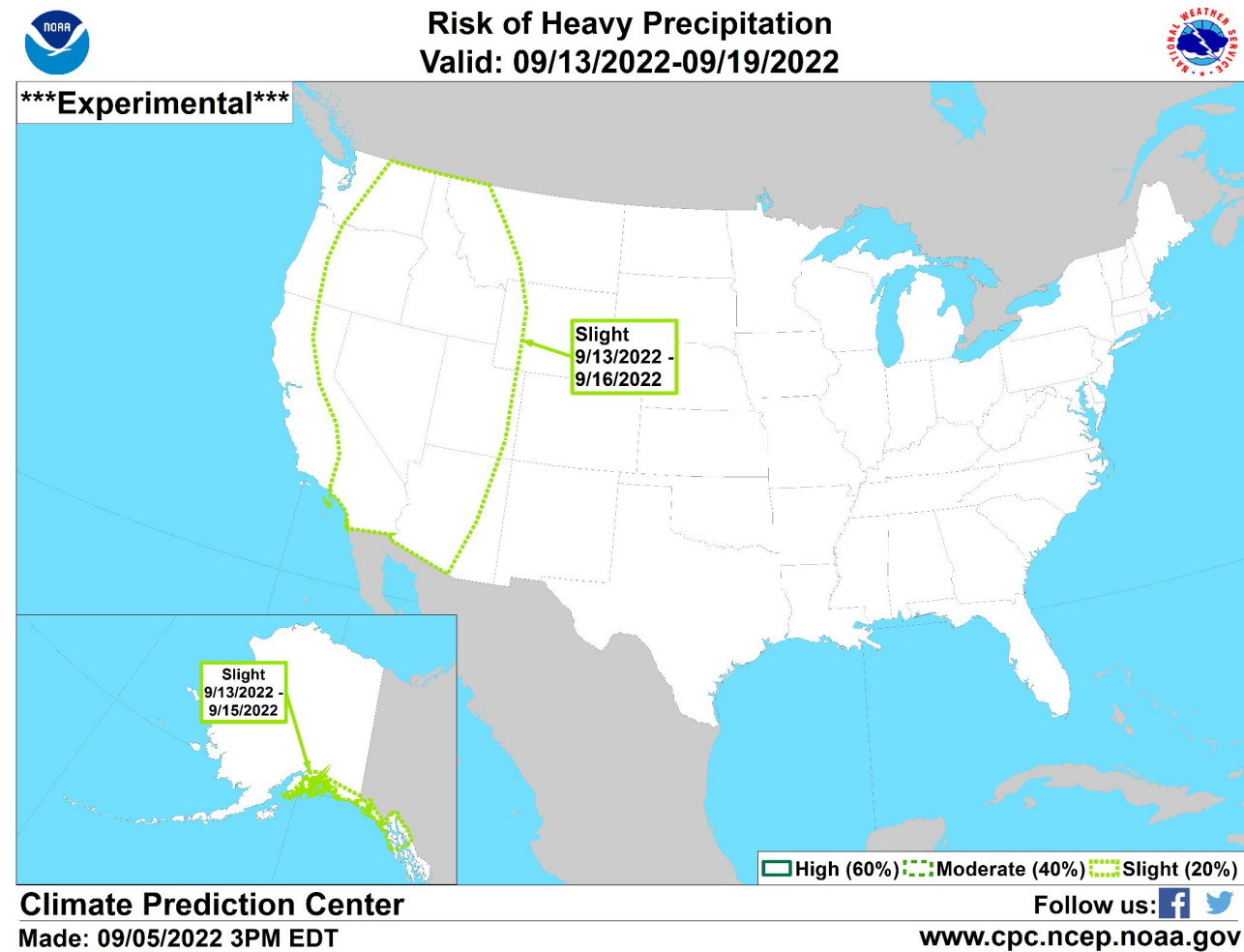
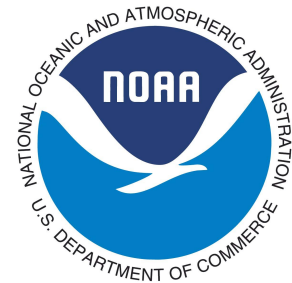
8-14 Day Precipitation Outlook



Valid: September 13 - 19, 2022
Issued: September 5, 2022

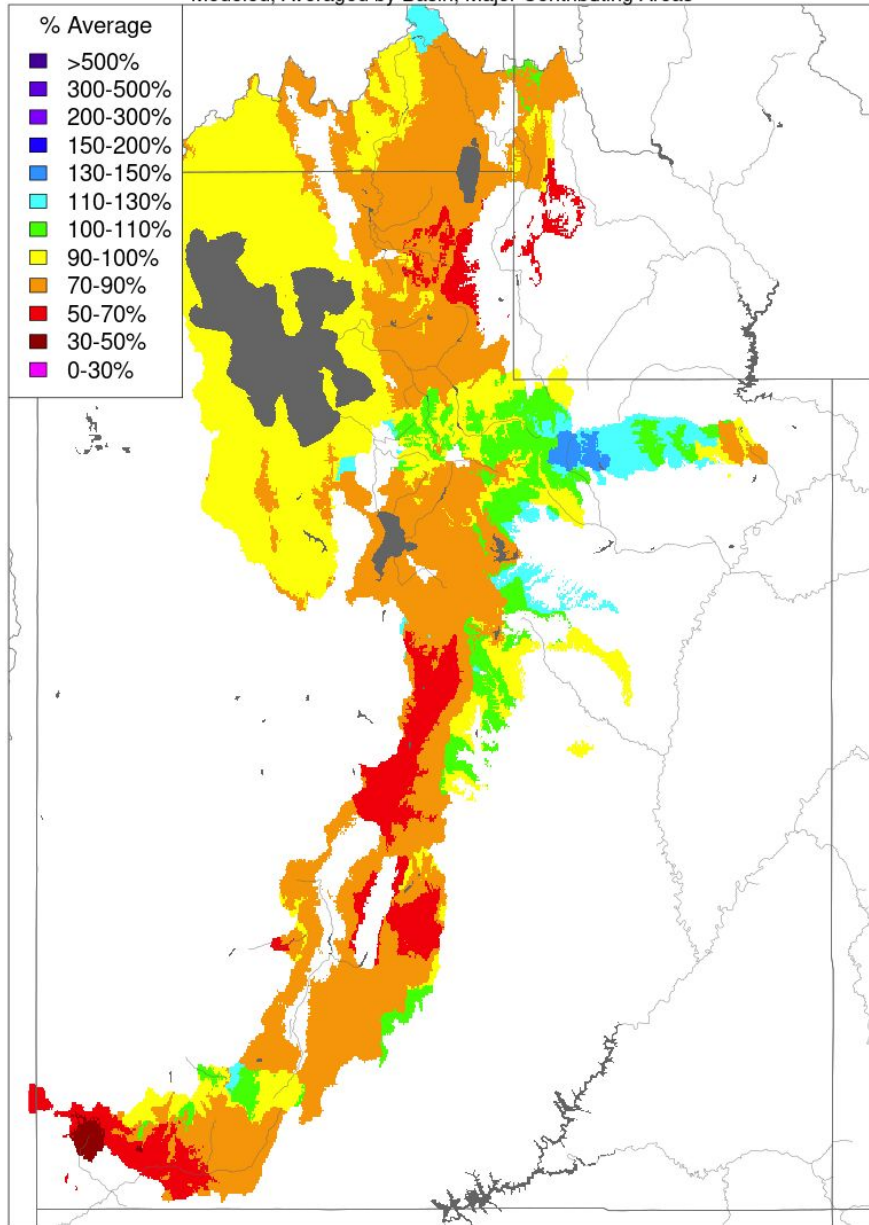


Climate Prediction Center U.S. Week-2 Hazards Outlook



Soil Moisture - Fall - 2021 (November 15)

Modeled, Averaged by Basin, Major Contributing Areas

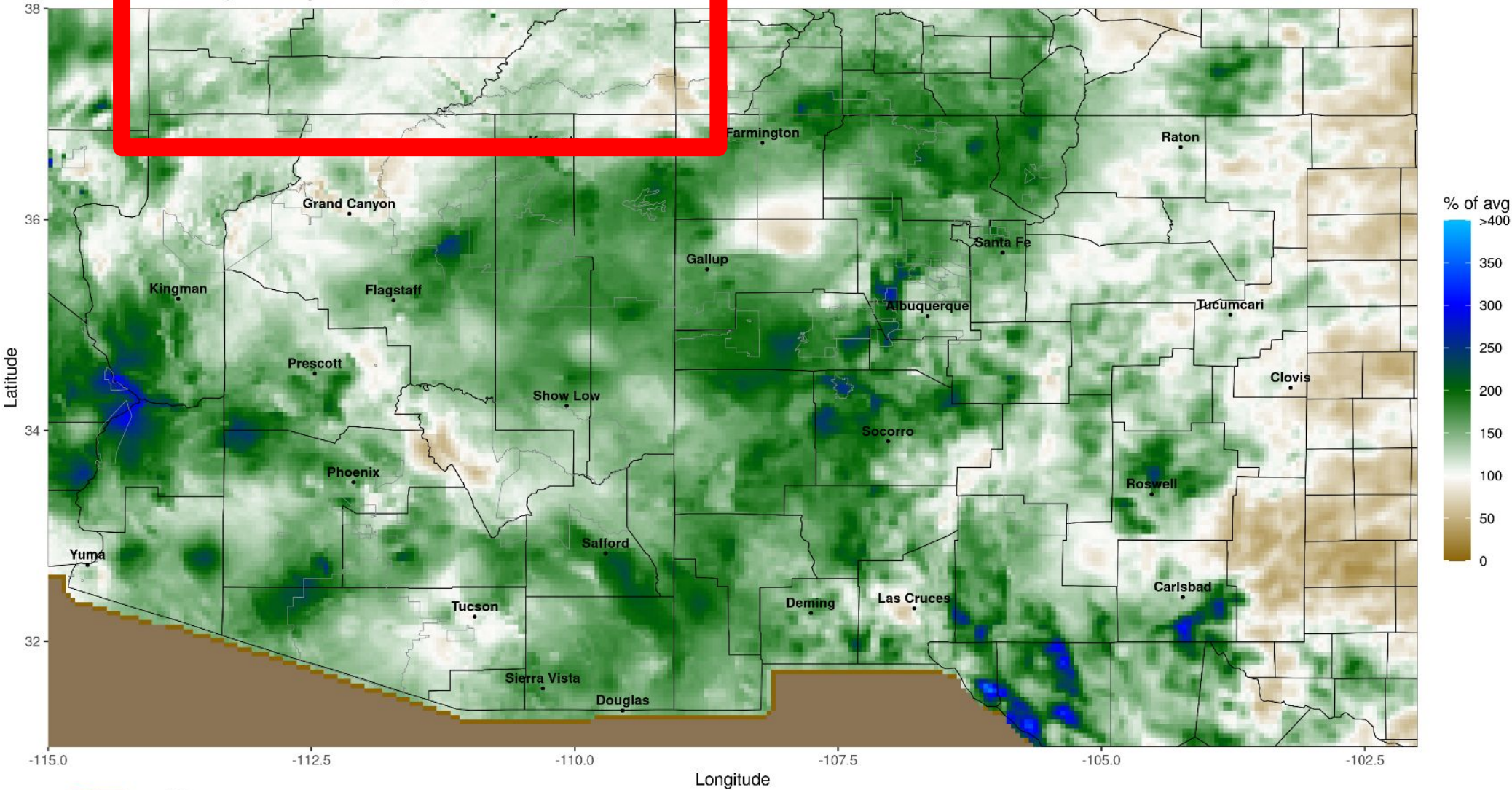


Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

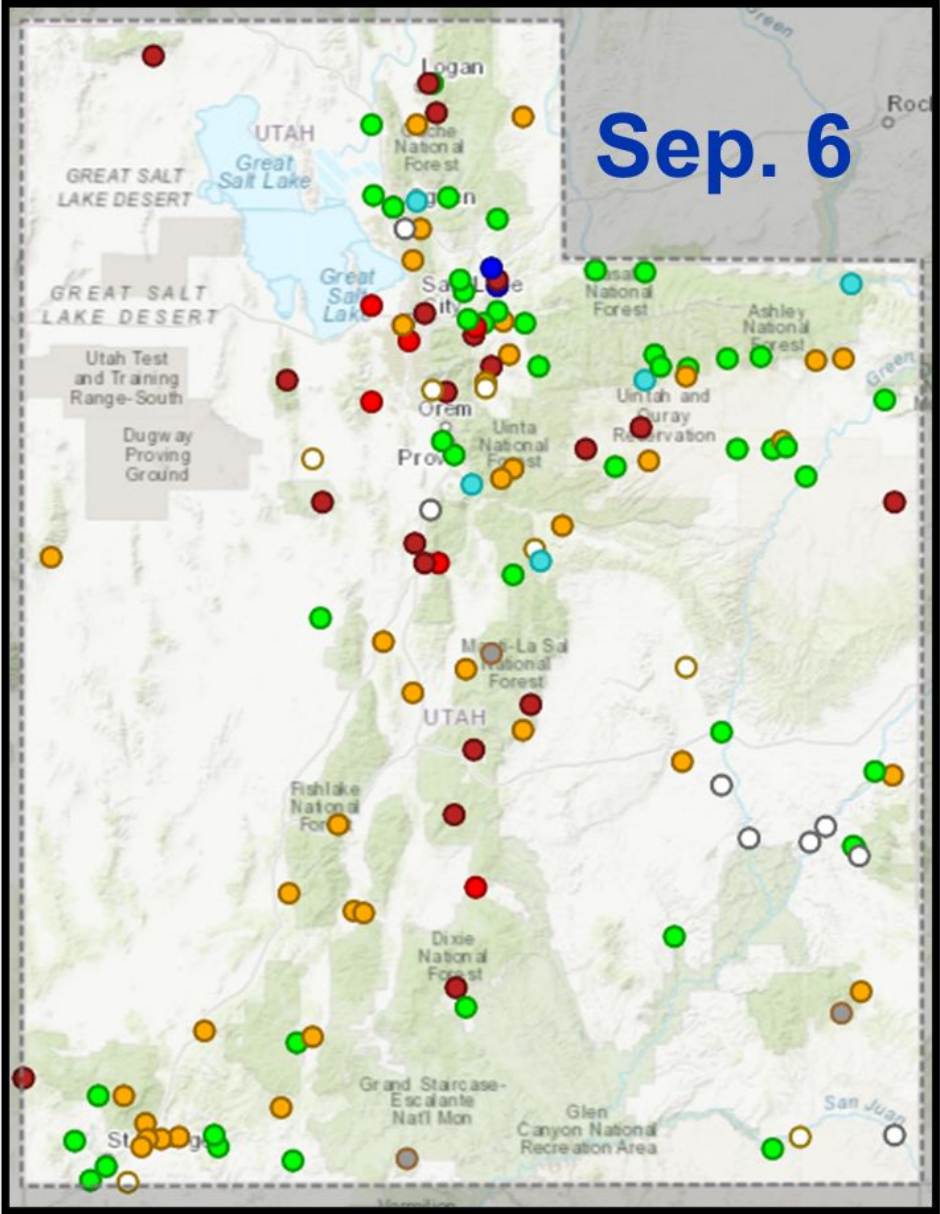


During this time of the year, the CBRFC is focused on providing continuous support for reservoir operators who are continuing to meet demands for irrigation and other uses. Soon, we'll begin to take a hard look at baseflow conditions as irrigation demands decline and stop, but before gages freeze. This will give us a good idea regarding the state of deep soil moisture conditions, and how those conditions may impact next year's snowmelt runoff.

Percent of Average Precipitation (%): 2022-06-15 to 2022-09-05



Current Streamflow Conditions



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

Aug. 22 Sep. 6

Day-of-Year Status	% Gages	% Gages
All-time high for this day-of-year	0.7%	0.7%
Much above normal for this day-of-year	3.6%	1.5%
Above normal for this day-of-year	15.3%	4.4%
Normal for this day-of-year	37.2%	32.8%
Below normal for this day-of-year	19.0%	27.7%
Much below normal for this day-of-year	9.5%	15.3%
All-time low for this day-of-year	2.9%	4.4%
Not ranked - insufficient record	7.3%	7.3%
Not ranked - stream not flowing	2.2%	3.6%

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

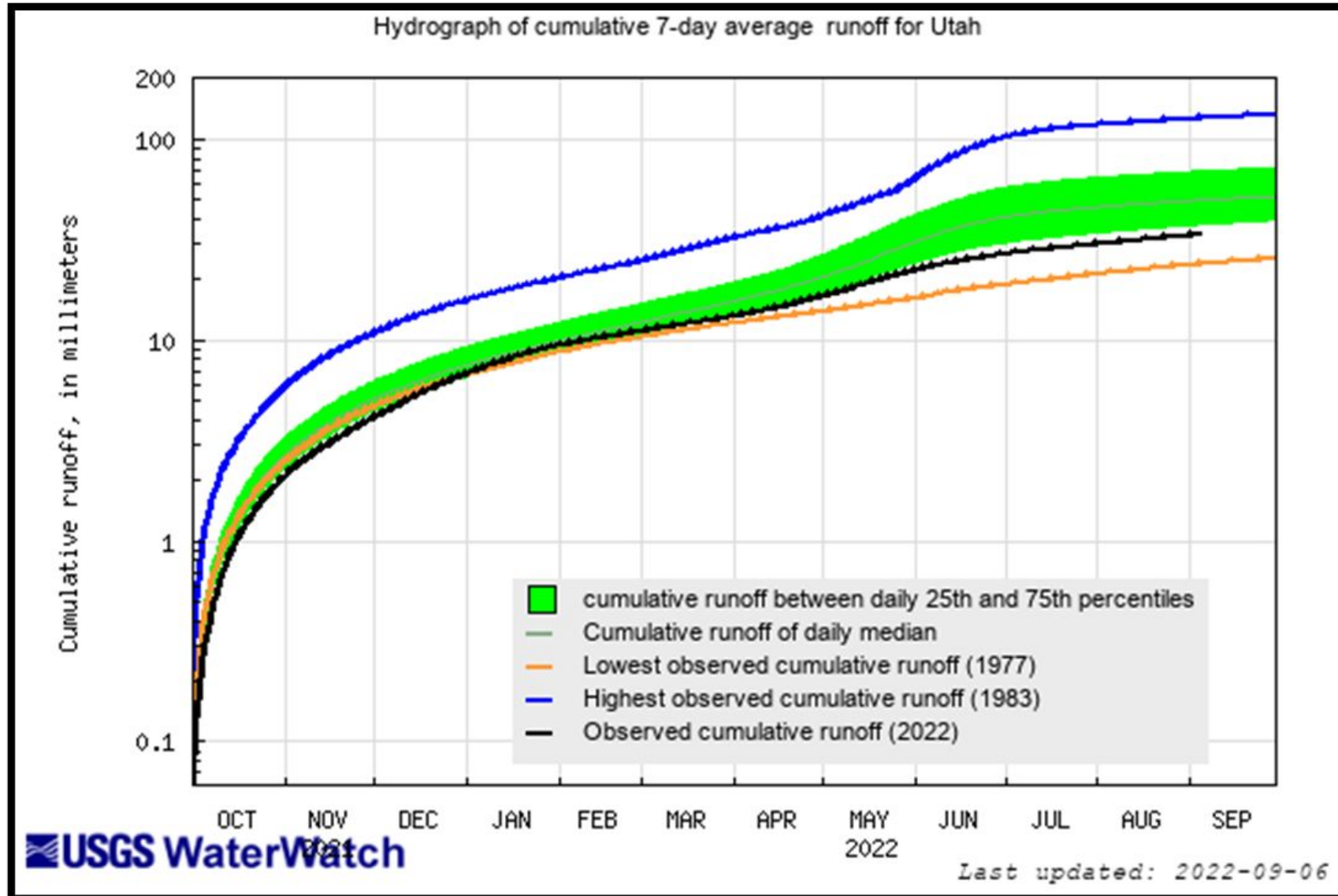
<10th percentile

0th percentile (minimum)

Agency - USGS UT WSC
Presenter - Ryan Rowland

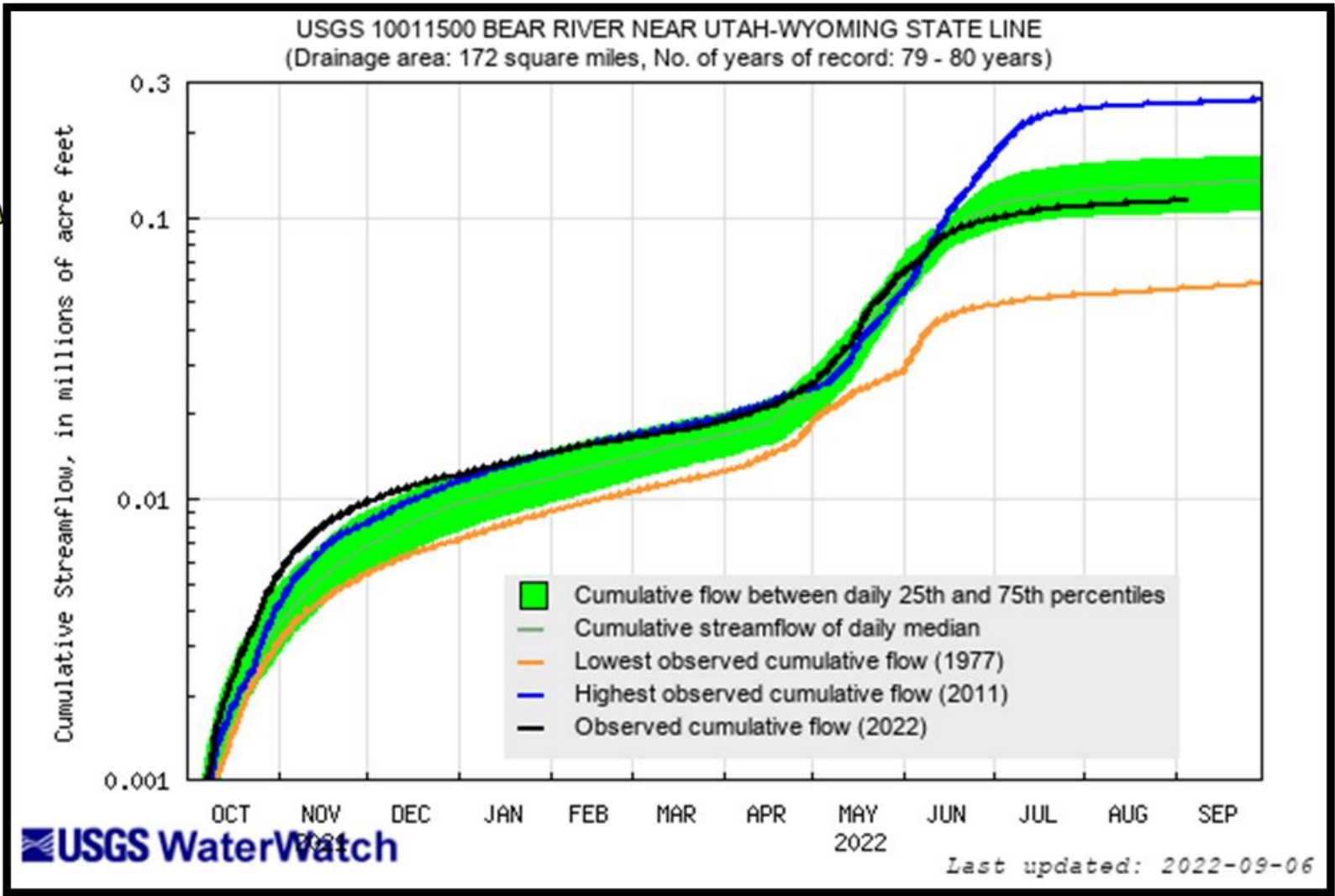
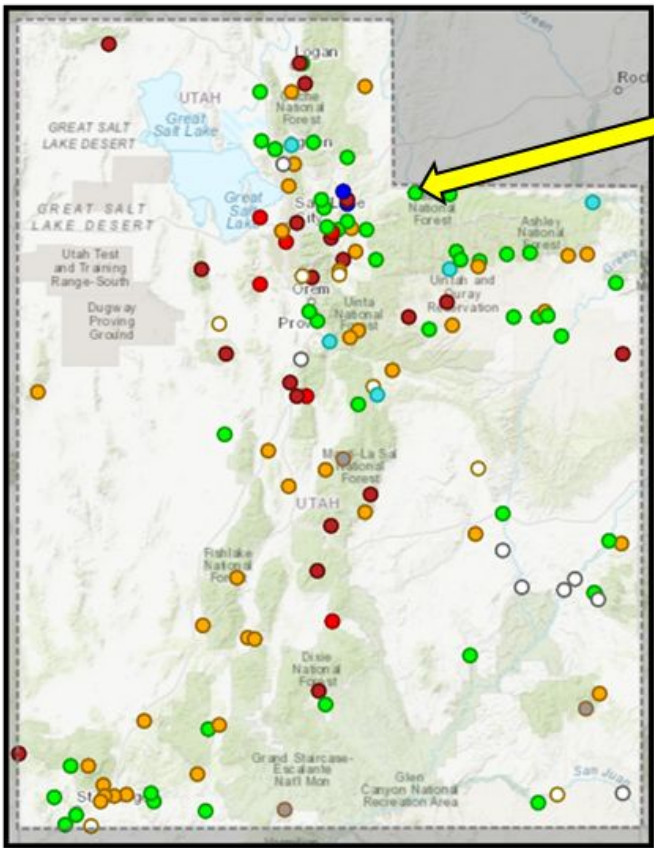


Area Based Cumulative Runoff for Utah

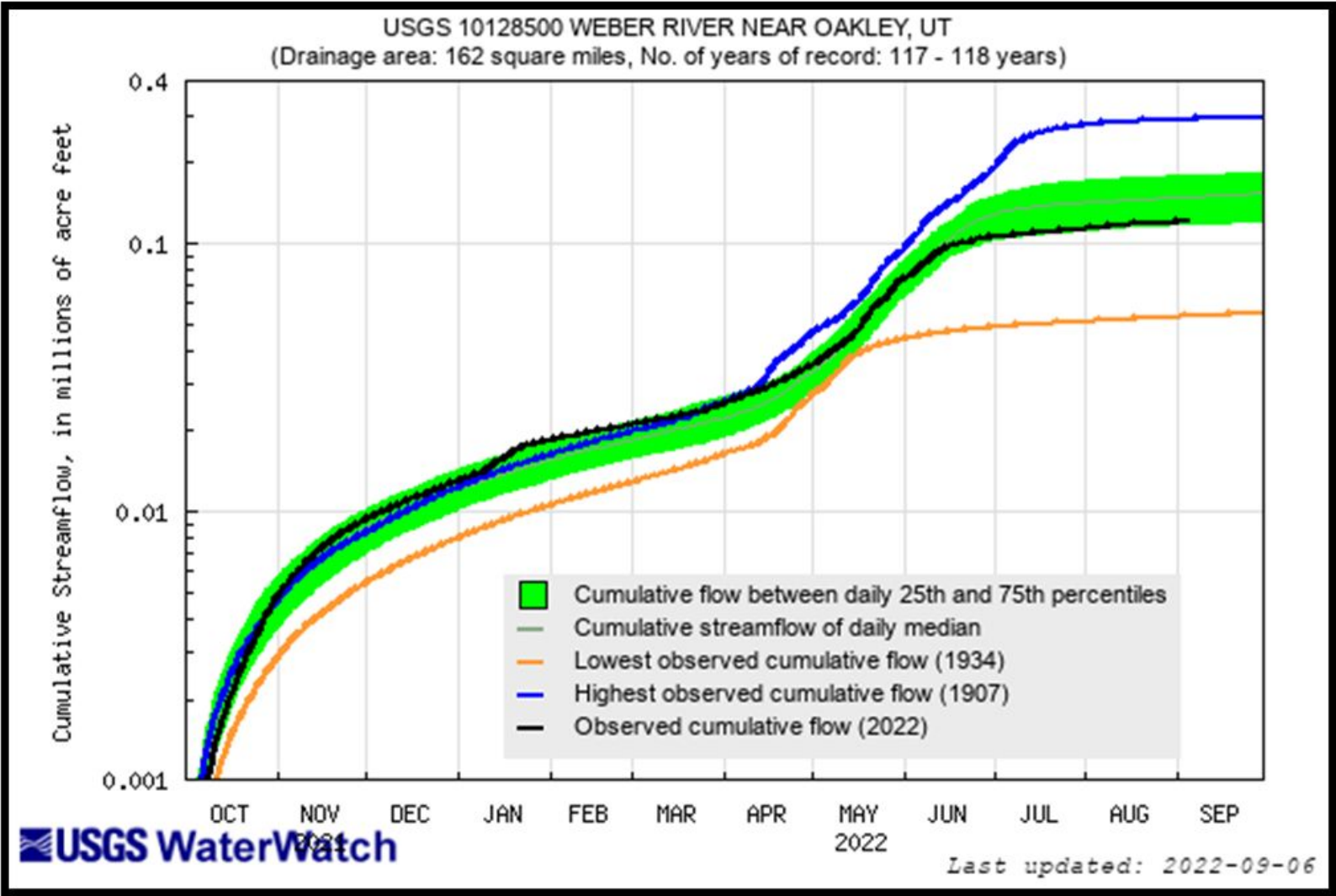
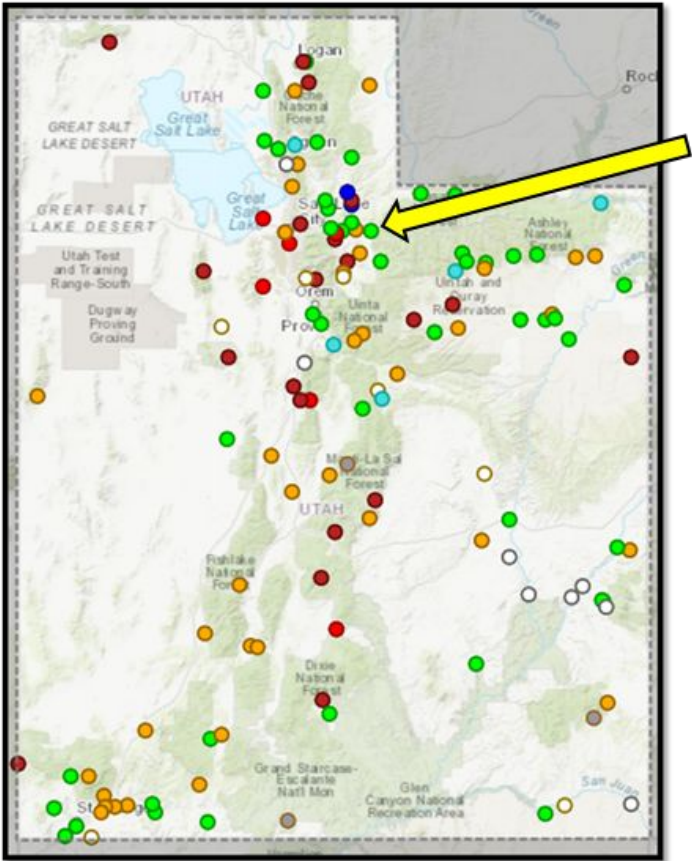


□ Area based runoff computed from mixed regulated and unregulated streamflows

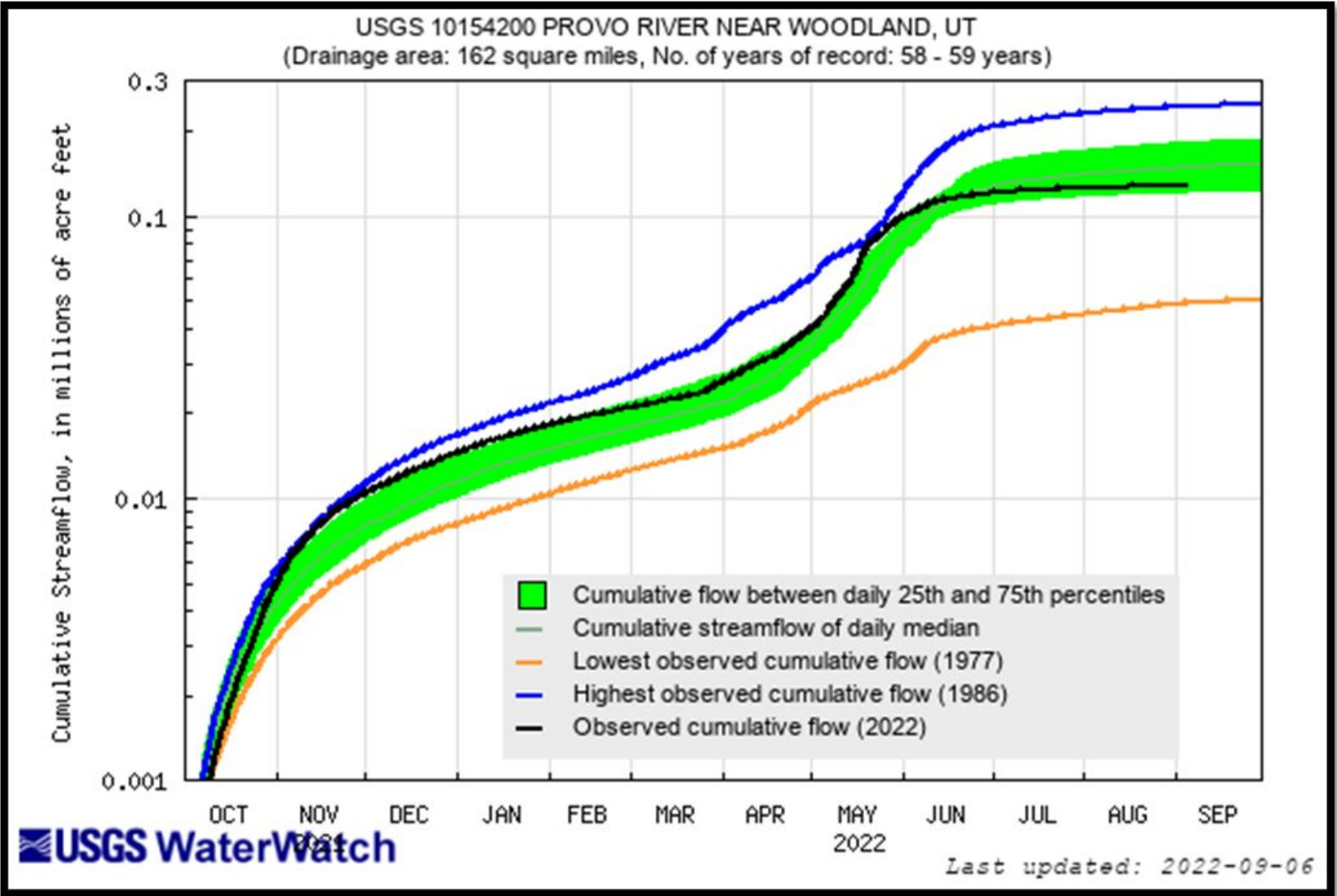
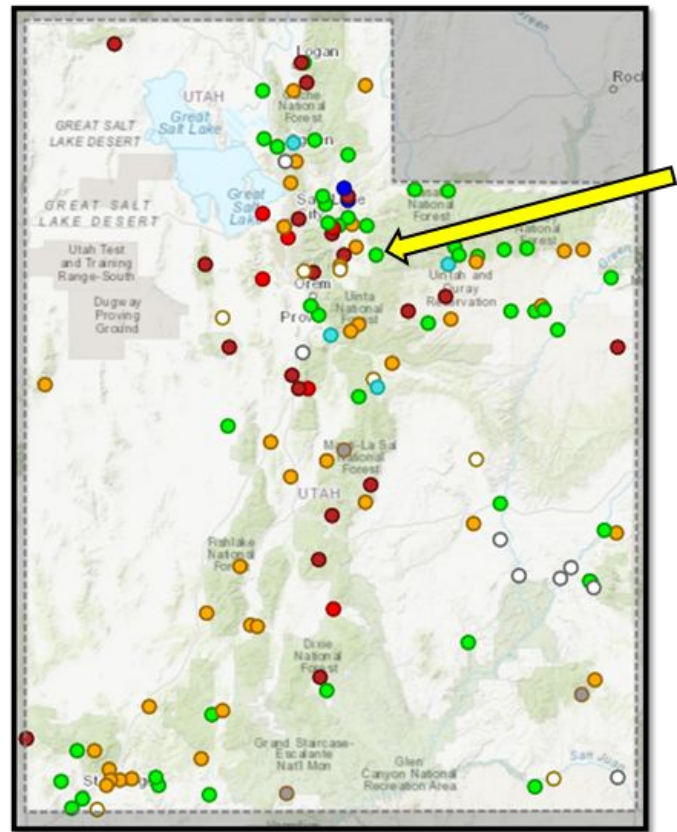
Cumulative Streamflow for Selected Gages



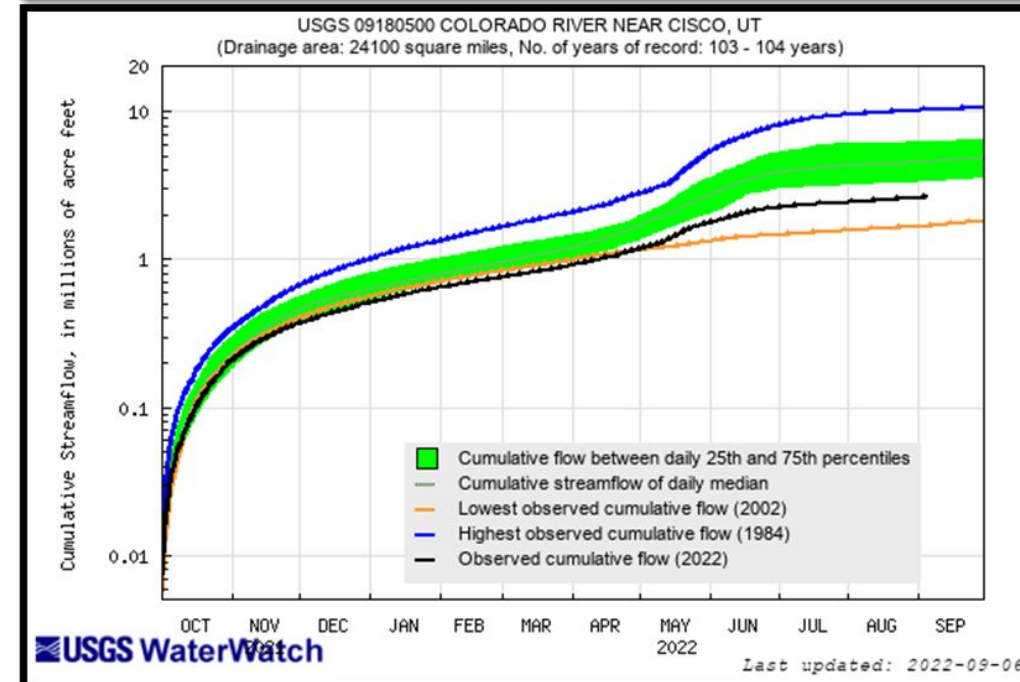
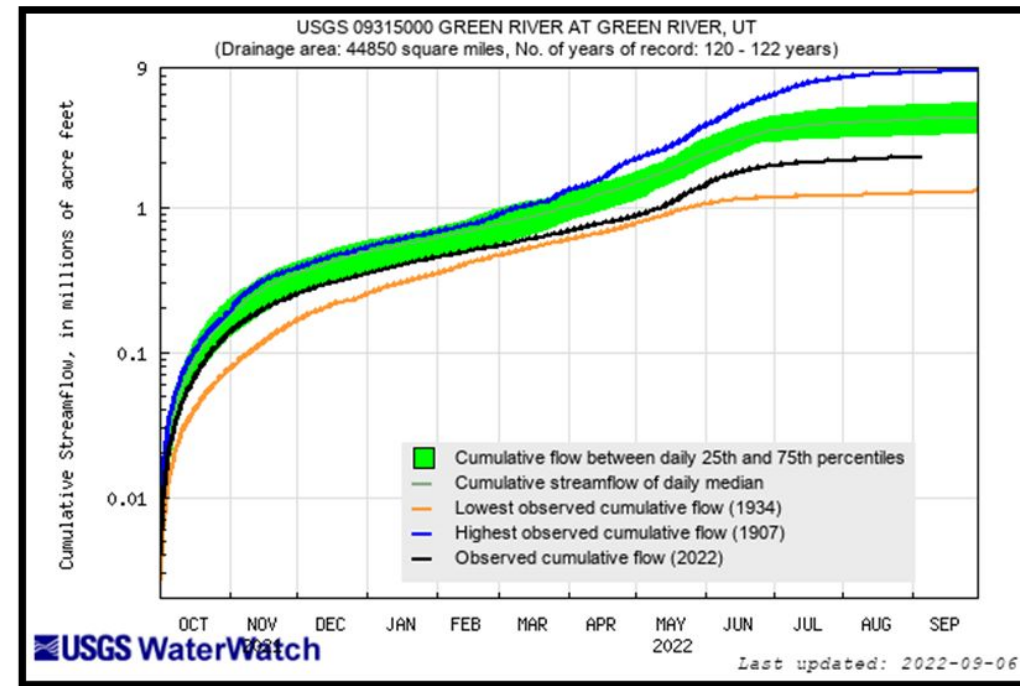
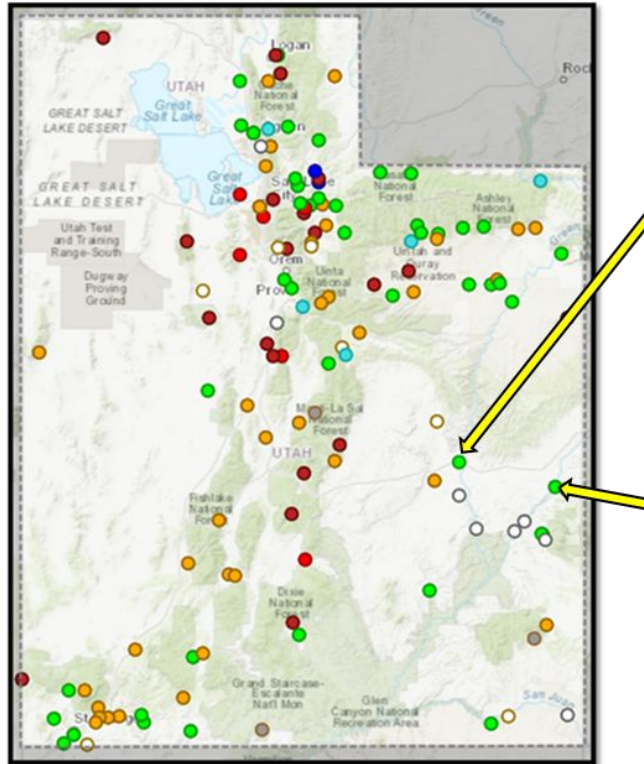
Cumulative Streamflow for Selected Gages



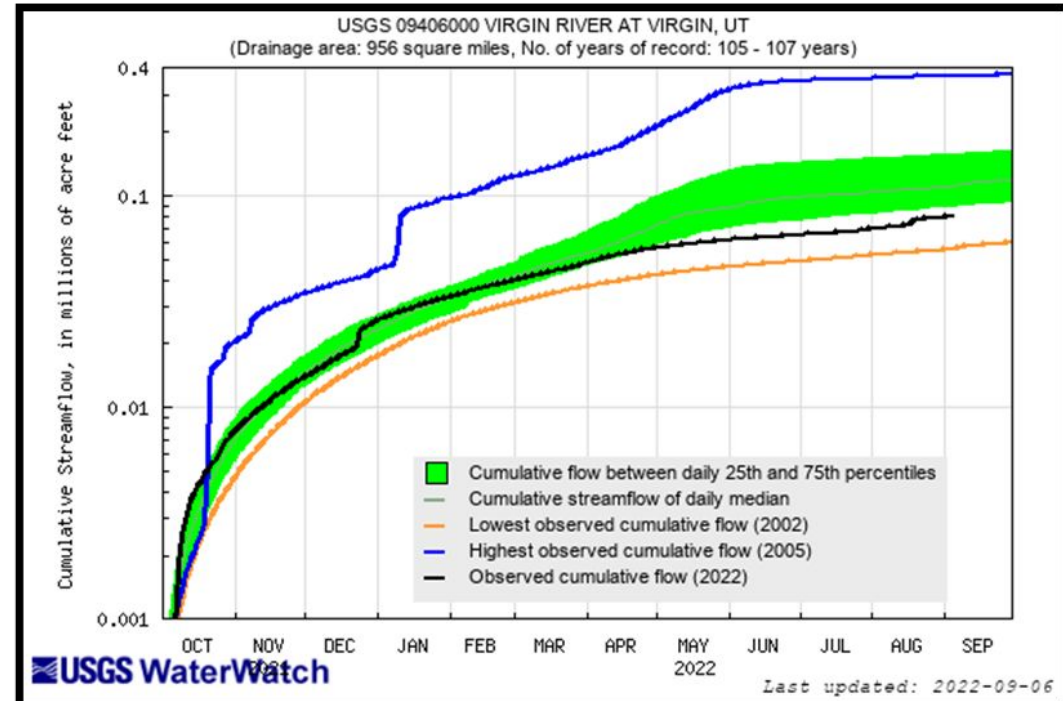
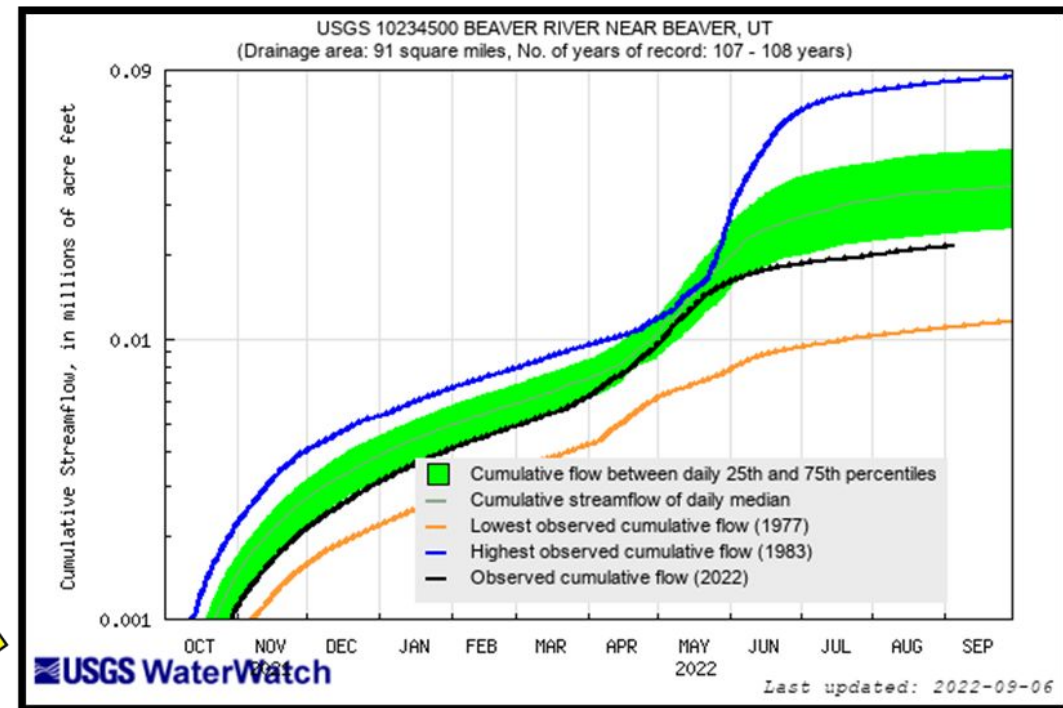
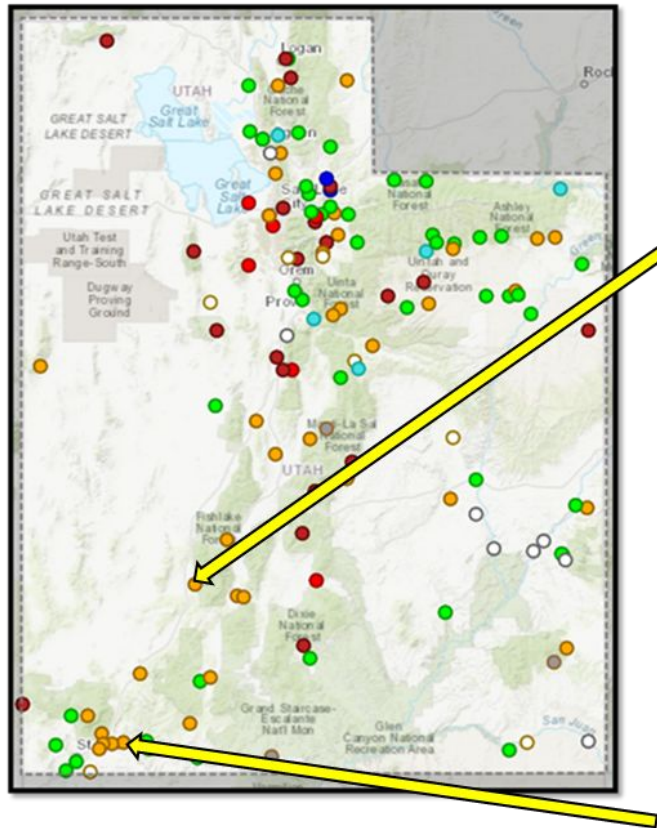
Cumulative Streamflow for Selected Gages



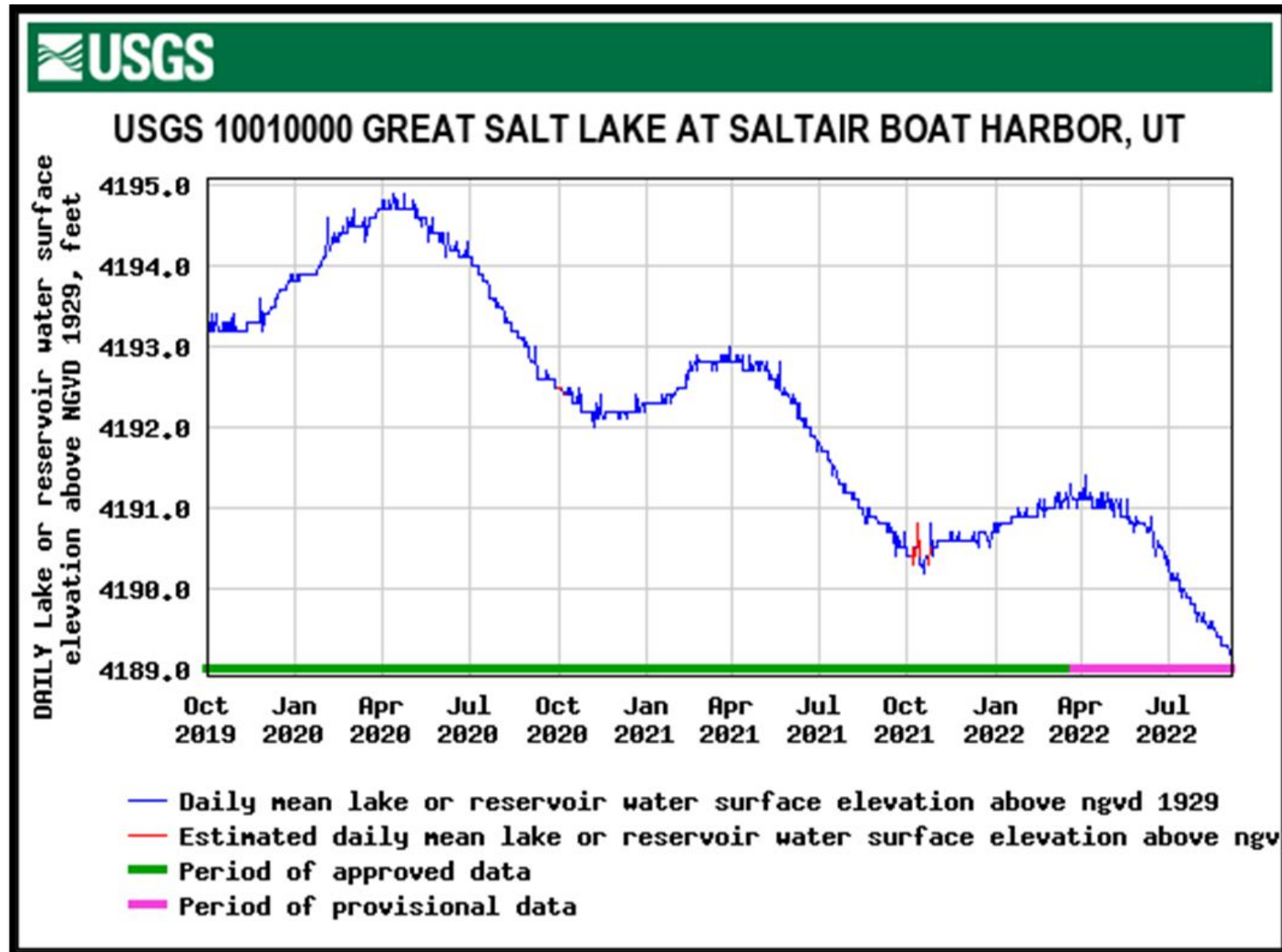
Cumulative Streamflow for Selected Gages



Cumulative Streamflow for Selected Gages



Great Salt Lake Water Surface Elevation

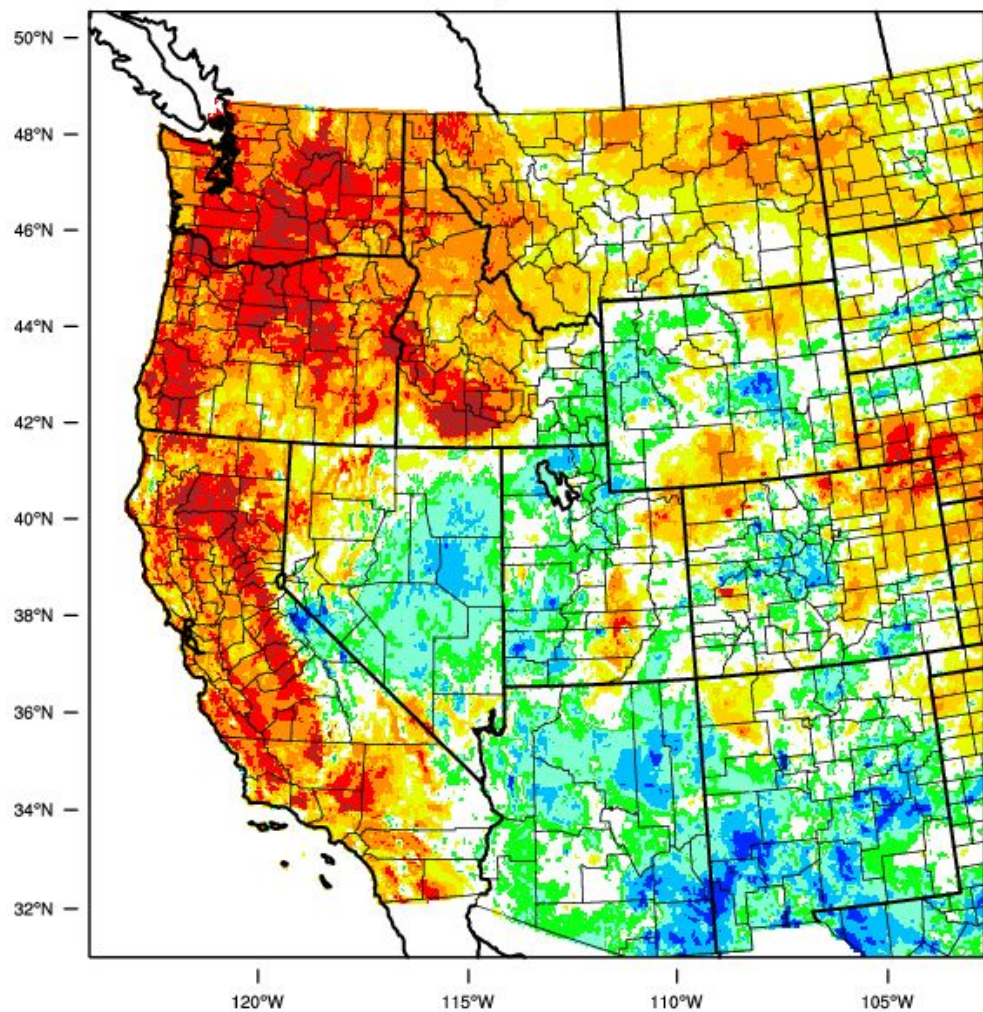


□ Mean daily value
9/5/2022 =
4,189.2' (record
lows continue)

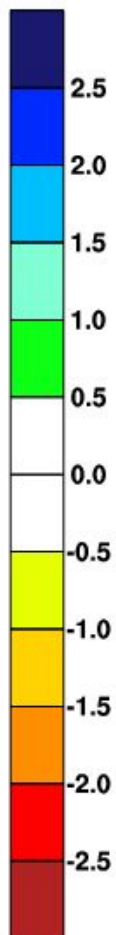
□ Mean daily value
8/21/2022 =
4,189.4'

Western United States - 1 month SPEI

August 2022



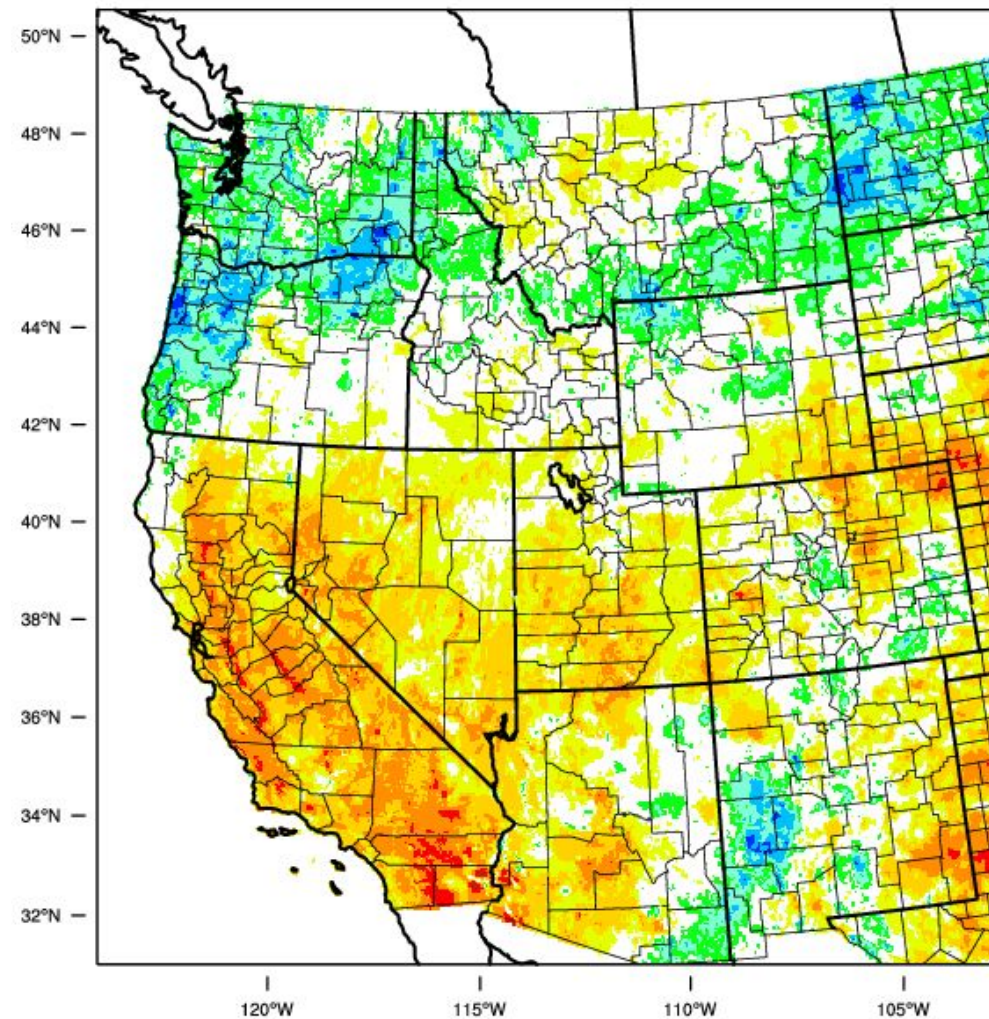
SPEI1



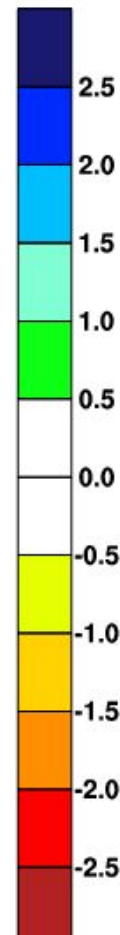
WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 SEP 2022

Western United States - 6 month SPEI

August 2022



SPEI6

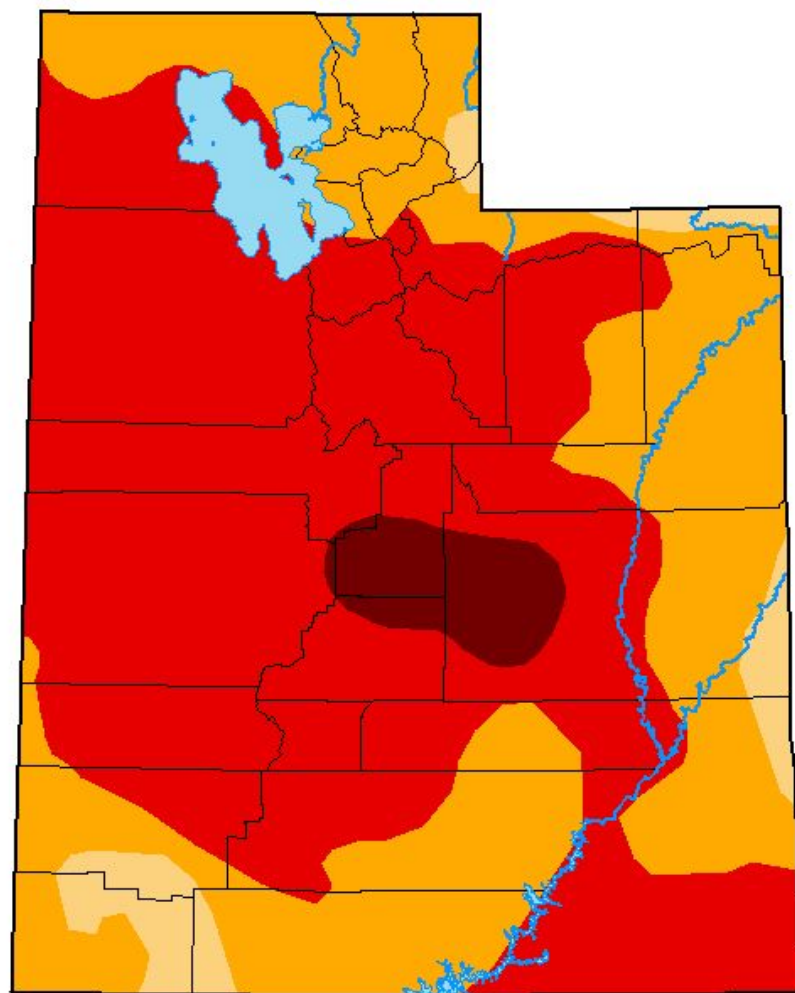


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 SEP 2022

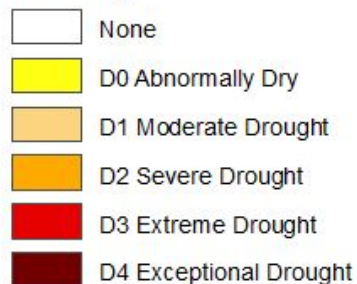
U.S. Drought Monitor

Utah

August 30, 2022
(Released Thursday, Sep. 1, 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>

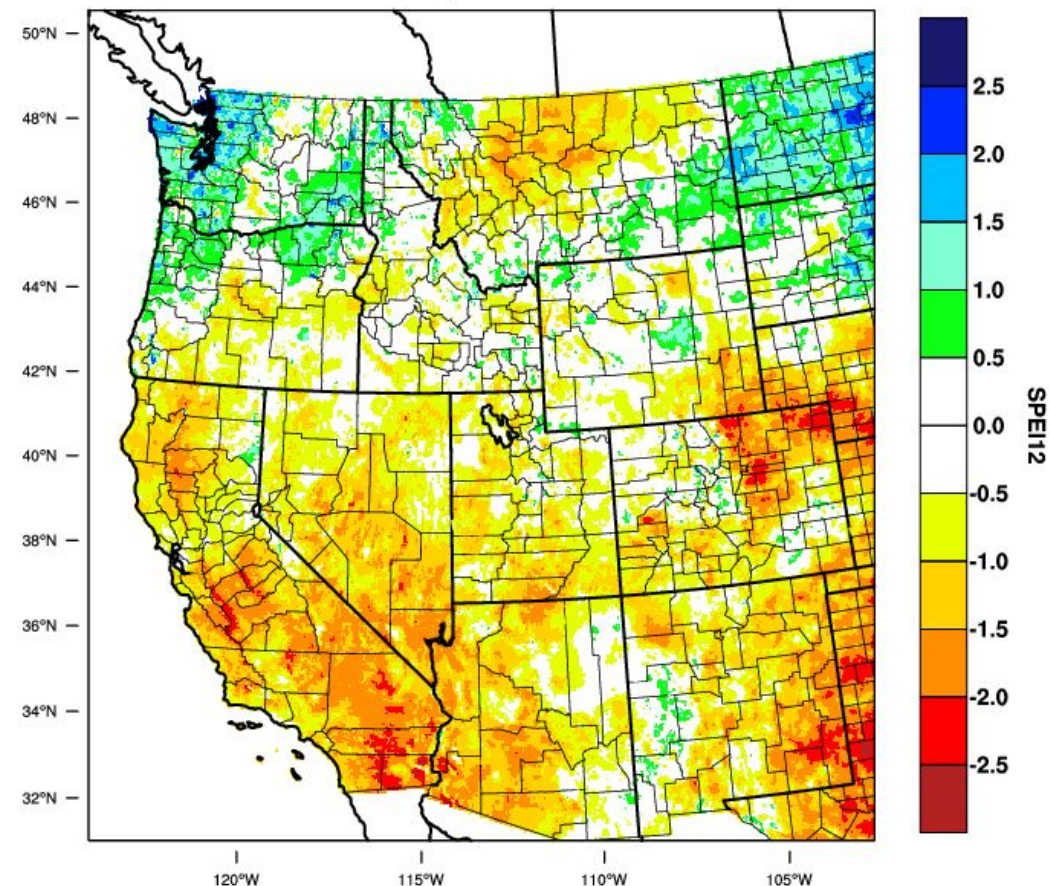
Author:

Deborah Bathke
National Drought Mitigation Center



droughtmonitor.unl.edu

Western United States - 12 month SPEI
August 2022



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