

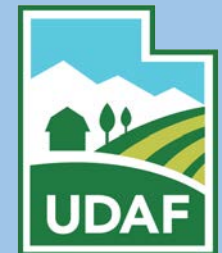


Utah Water Conditions Update (drought webinar)

The meeting will begin shortly



Thank you to our contributors

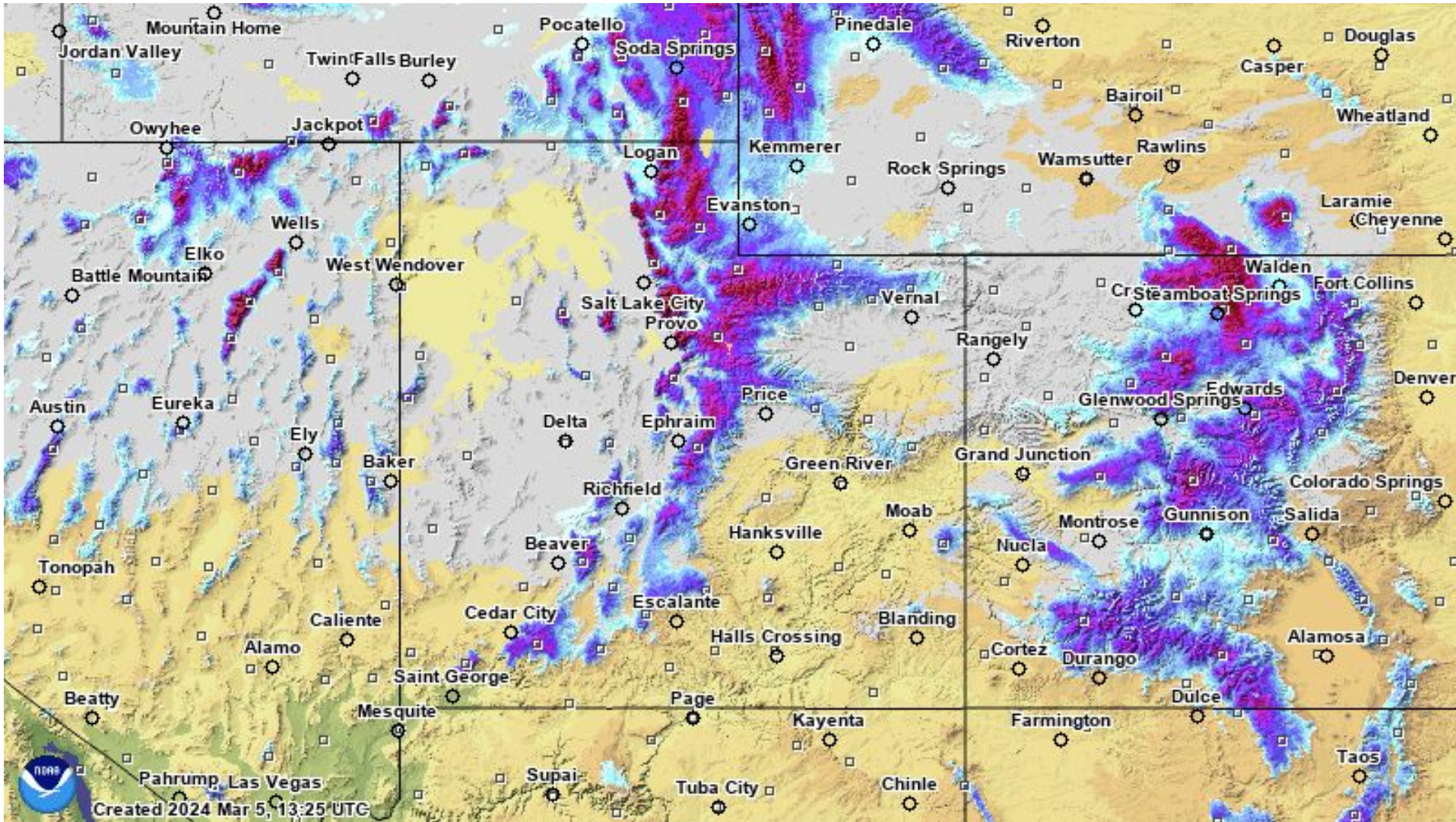




Utah Water Assessment & Conditions Monitoring Webinar

March 5, 2024

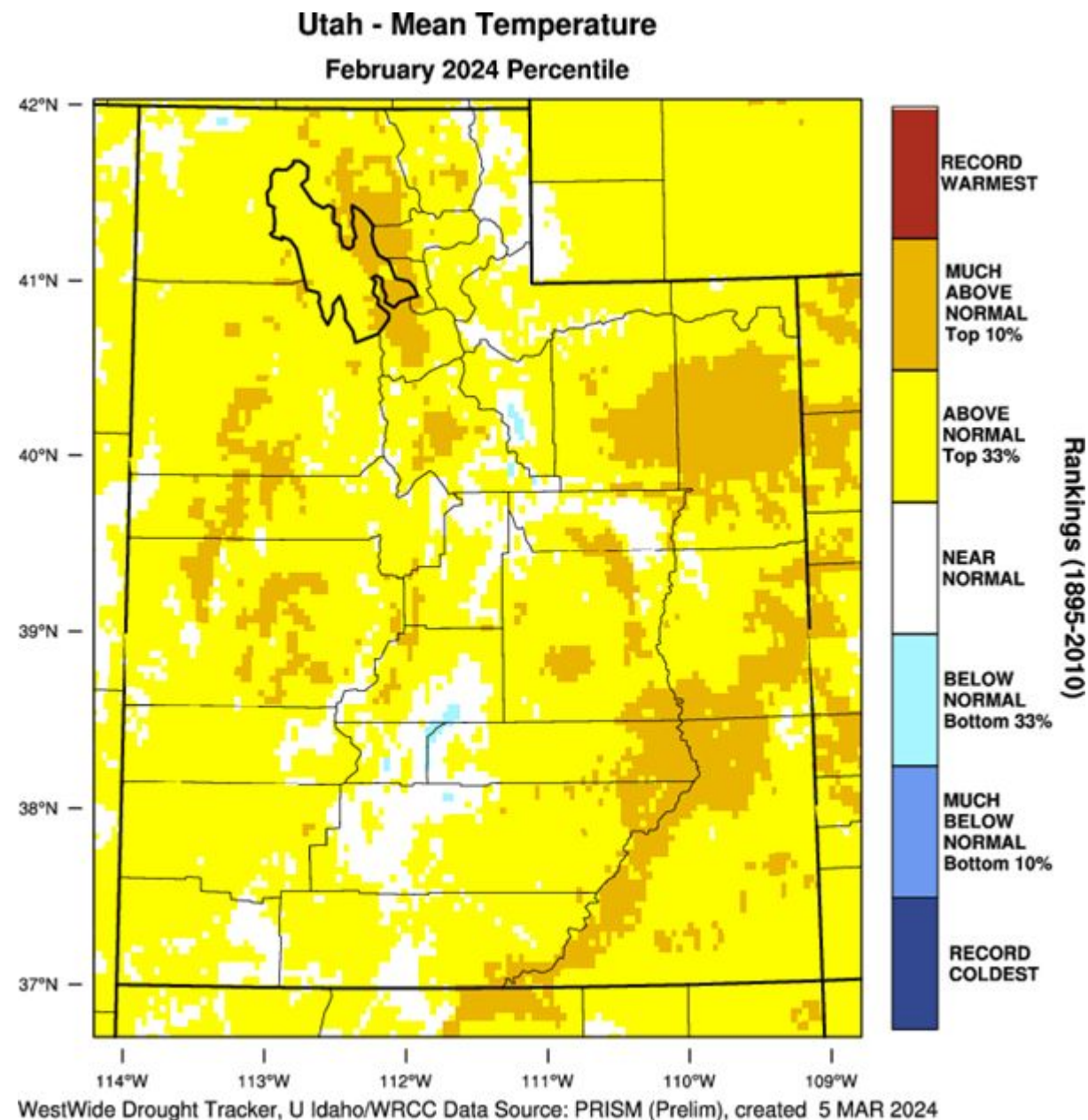
Current Snow Cover



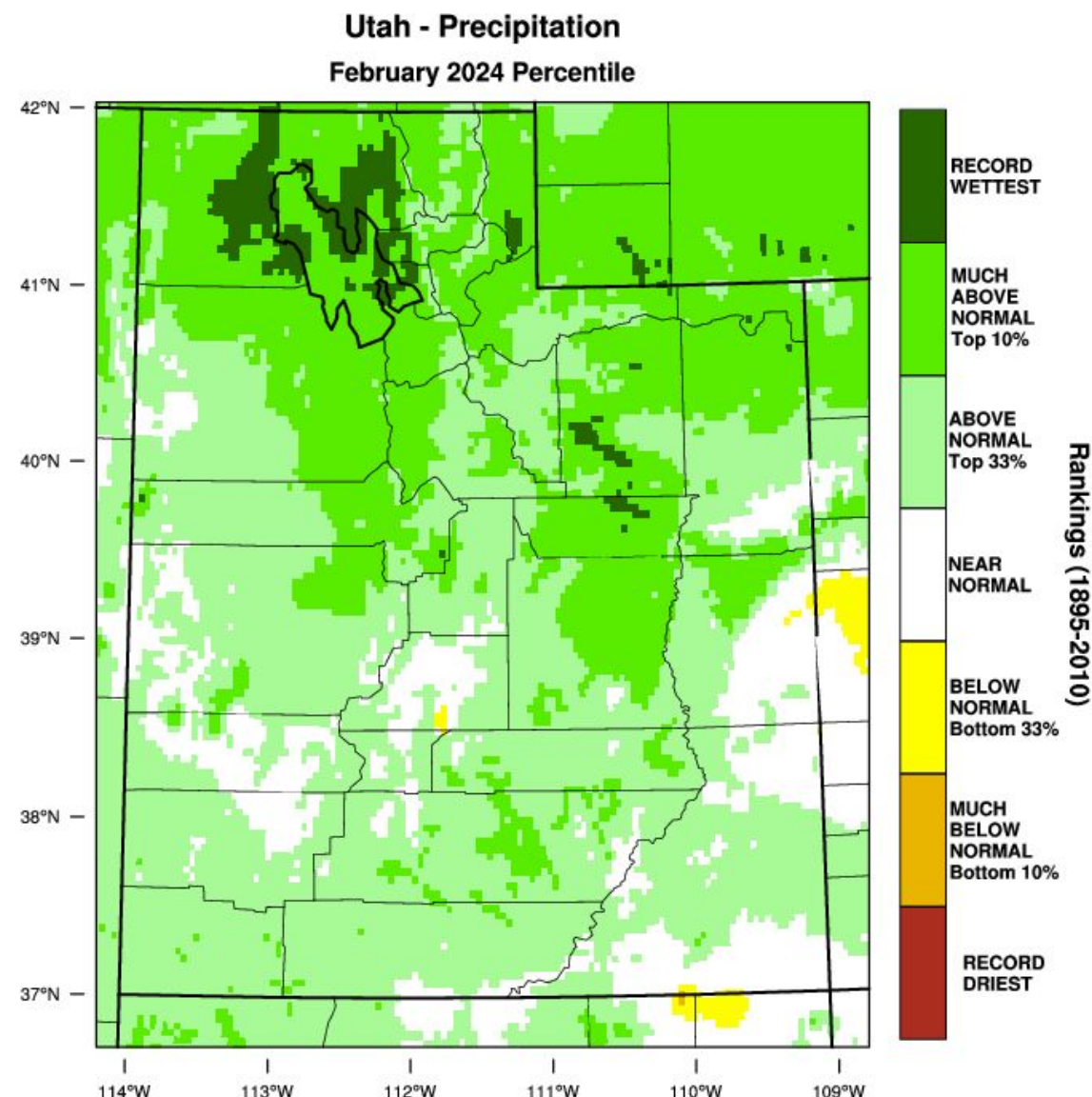
Agency - Utah Climate Center

Presenter - Jon Meyer

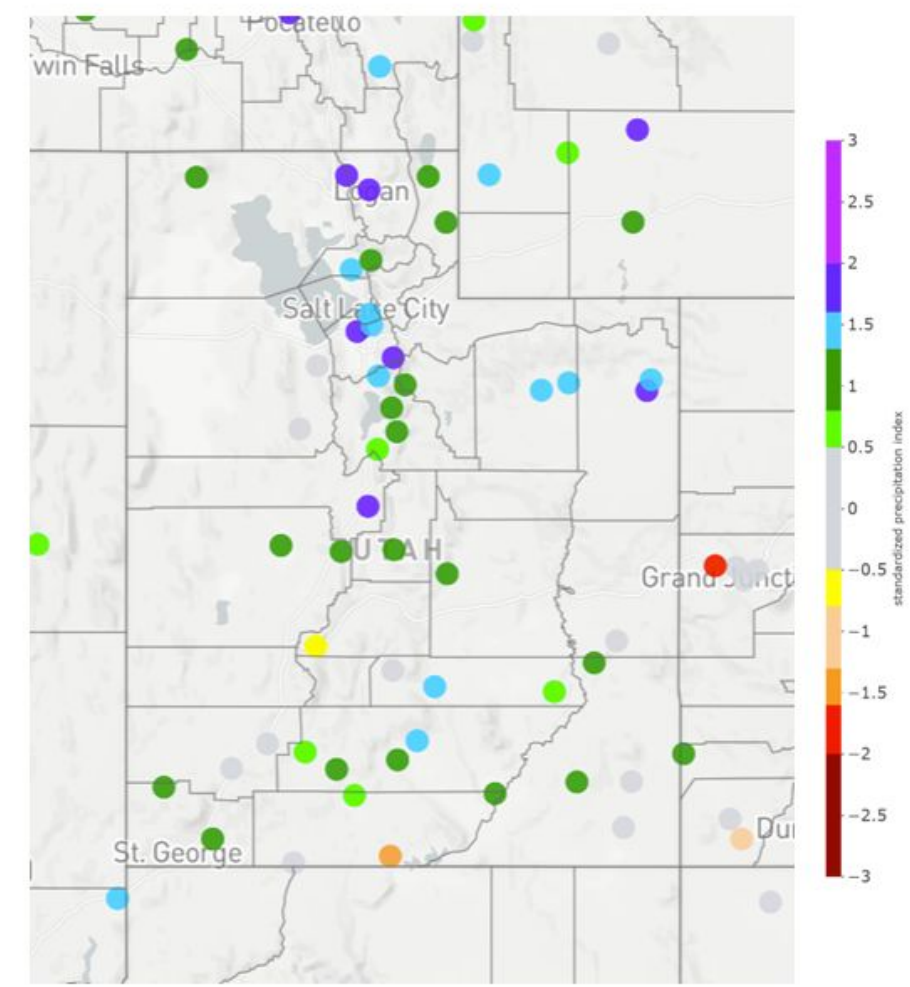
Temperature (30-day anomaly)



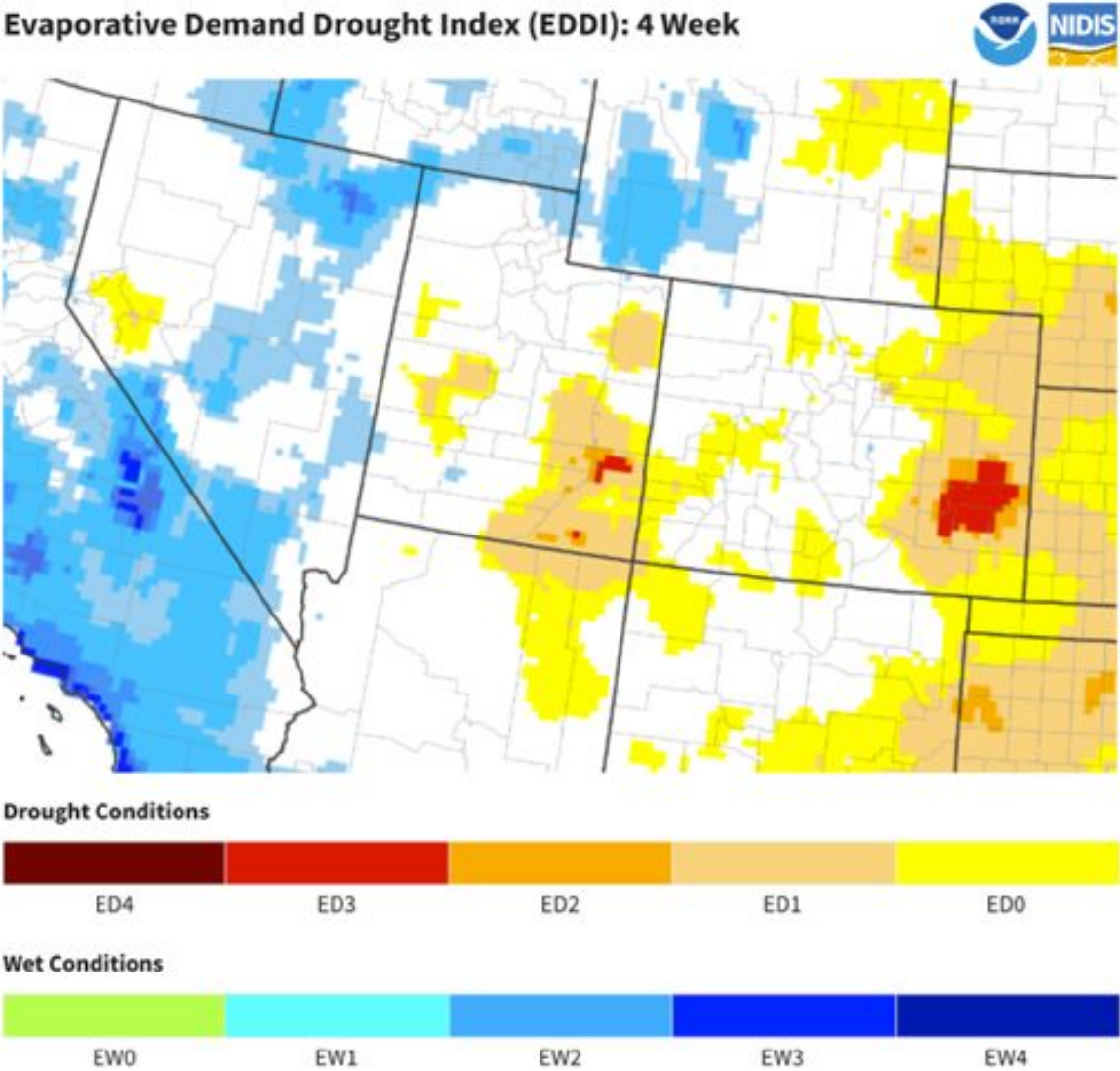
Precipitation (30-day)



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 MAR 2024



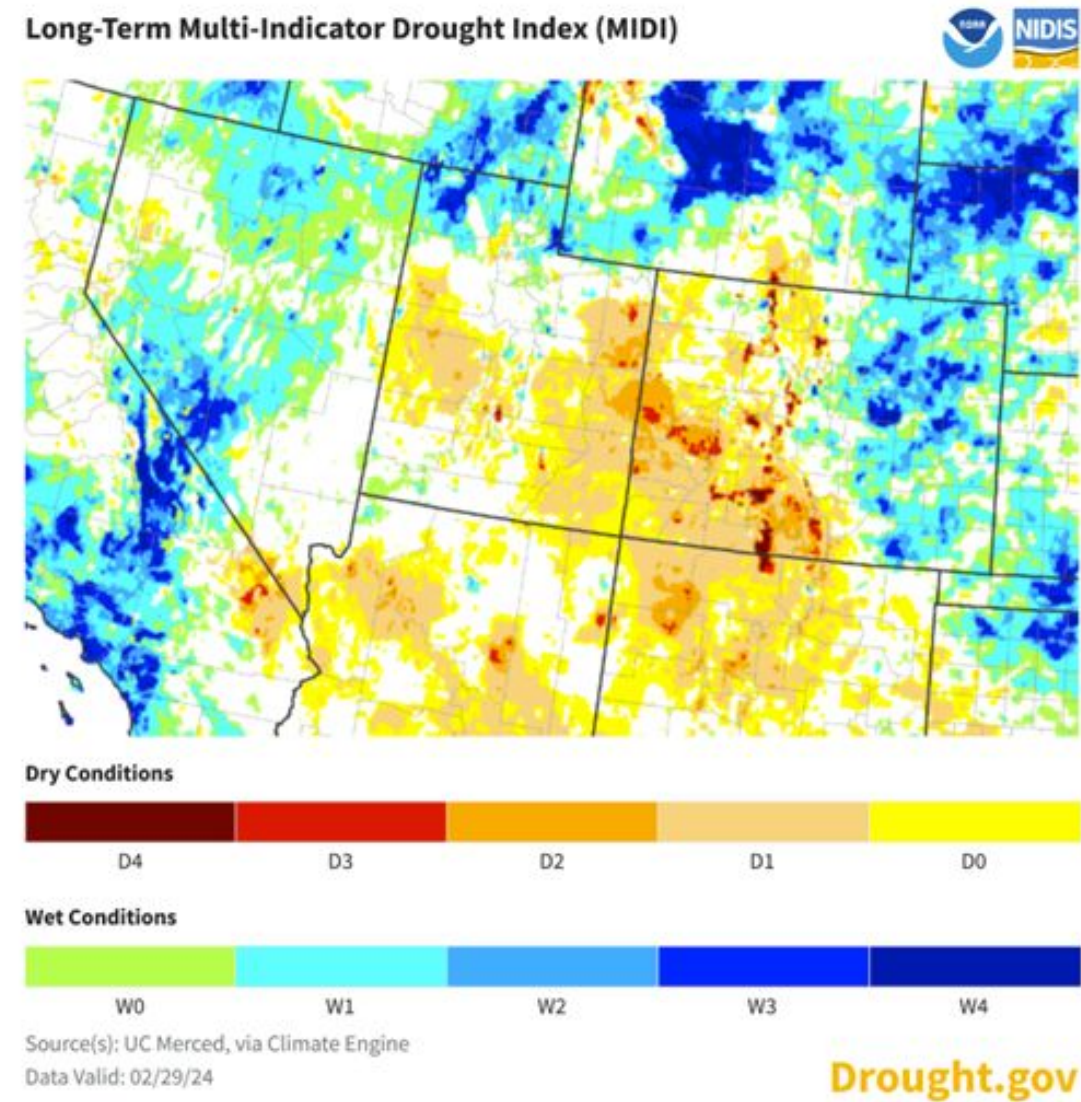
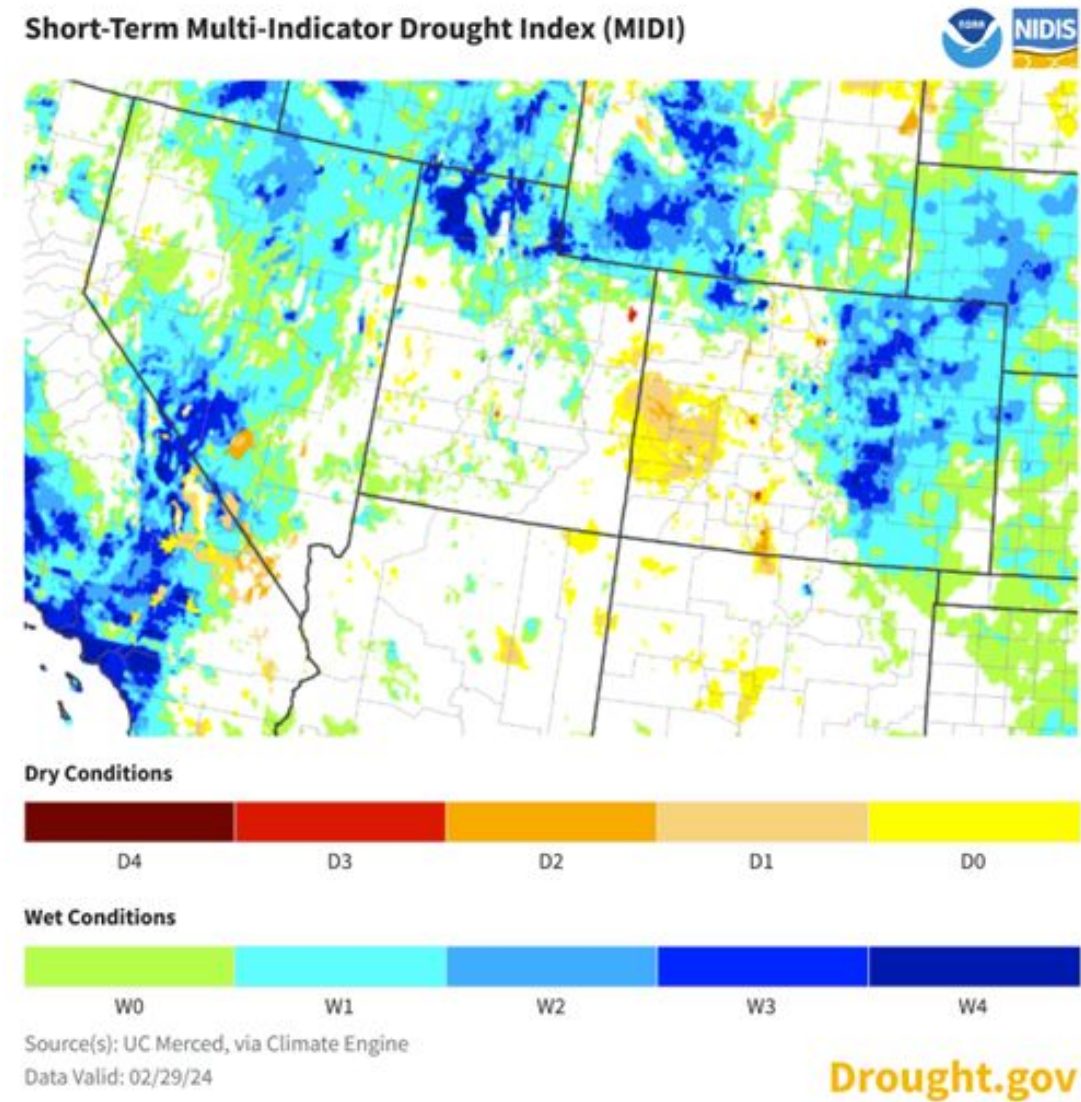
4-week Evaporative Demand



Source(s): NOAA Physical Sciences Laboratory
Data Valid: 02/27/24

Drought.gov

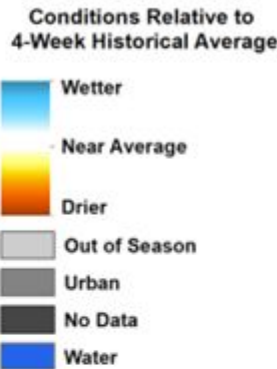
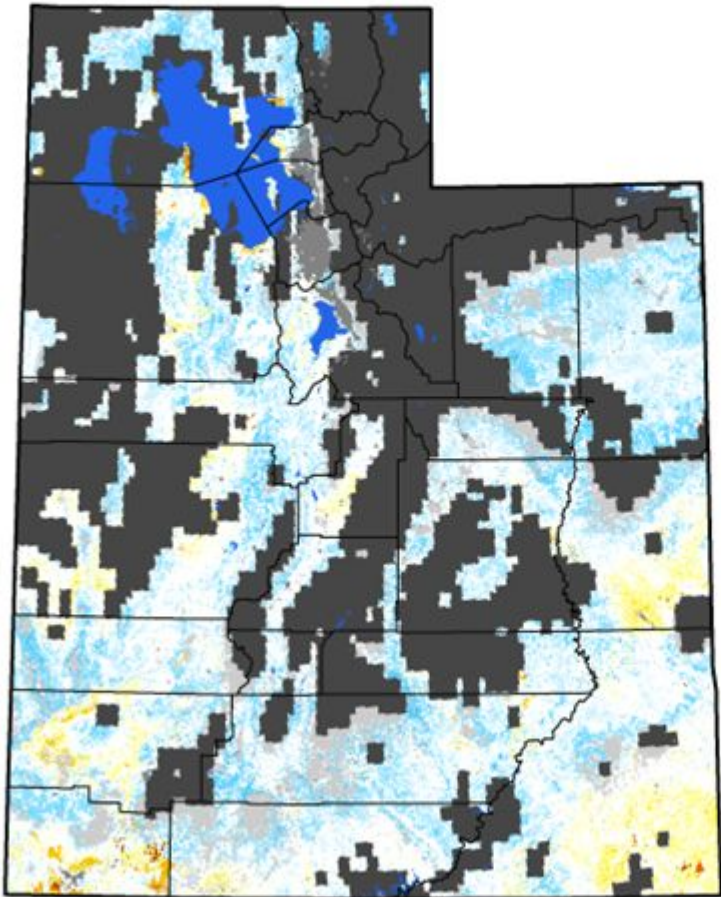
Short- and long-term drought indicators



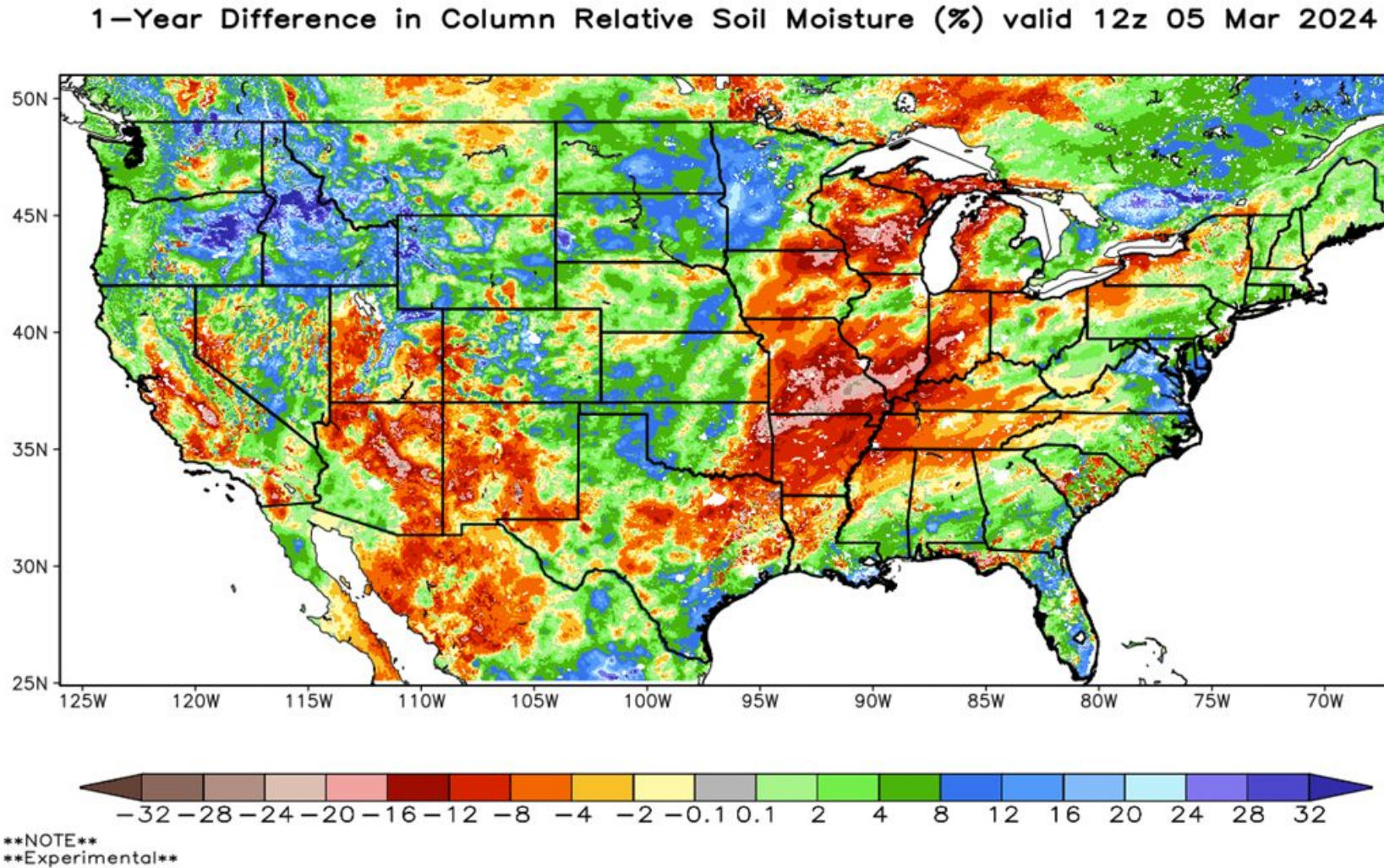
Quick Drought Response Index

Quick Drought Response Index Utah

February 25, 2024
(Week 8)



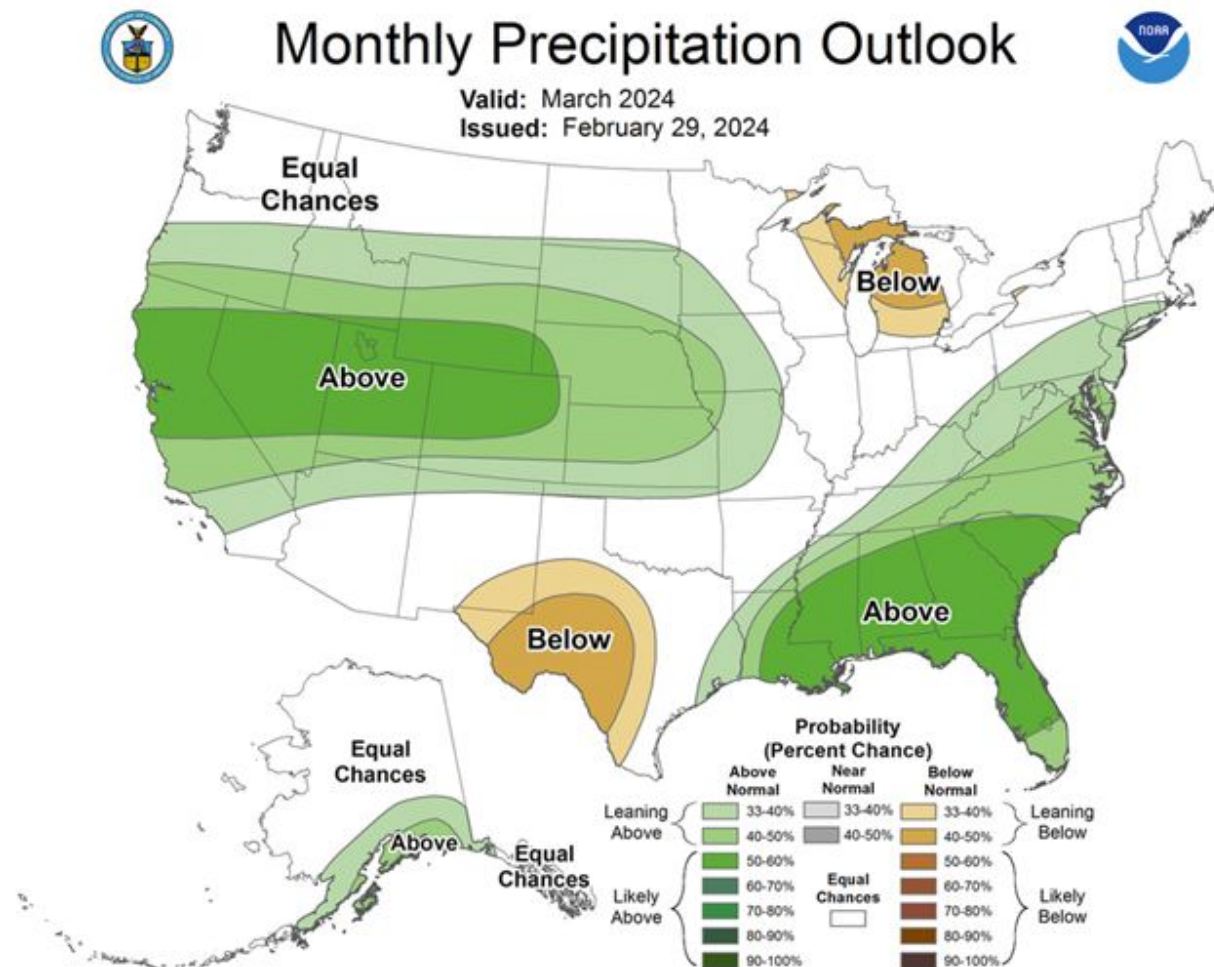
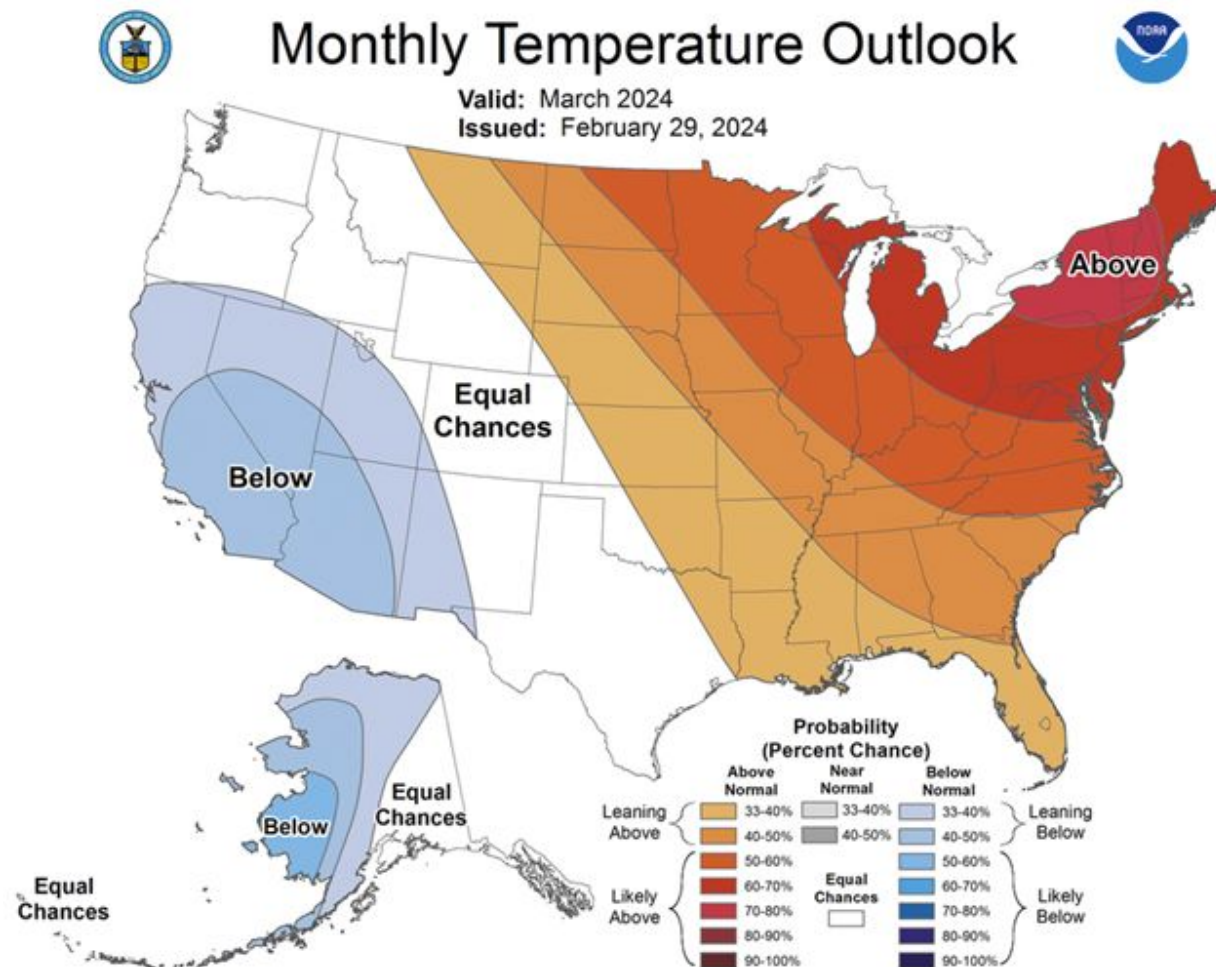
Year-over-year soil moisture changes



Agency - Utah Climate Center

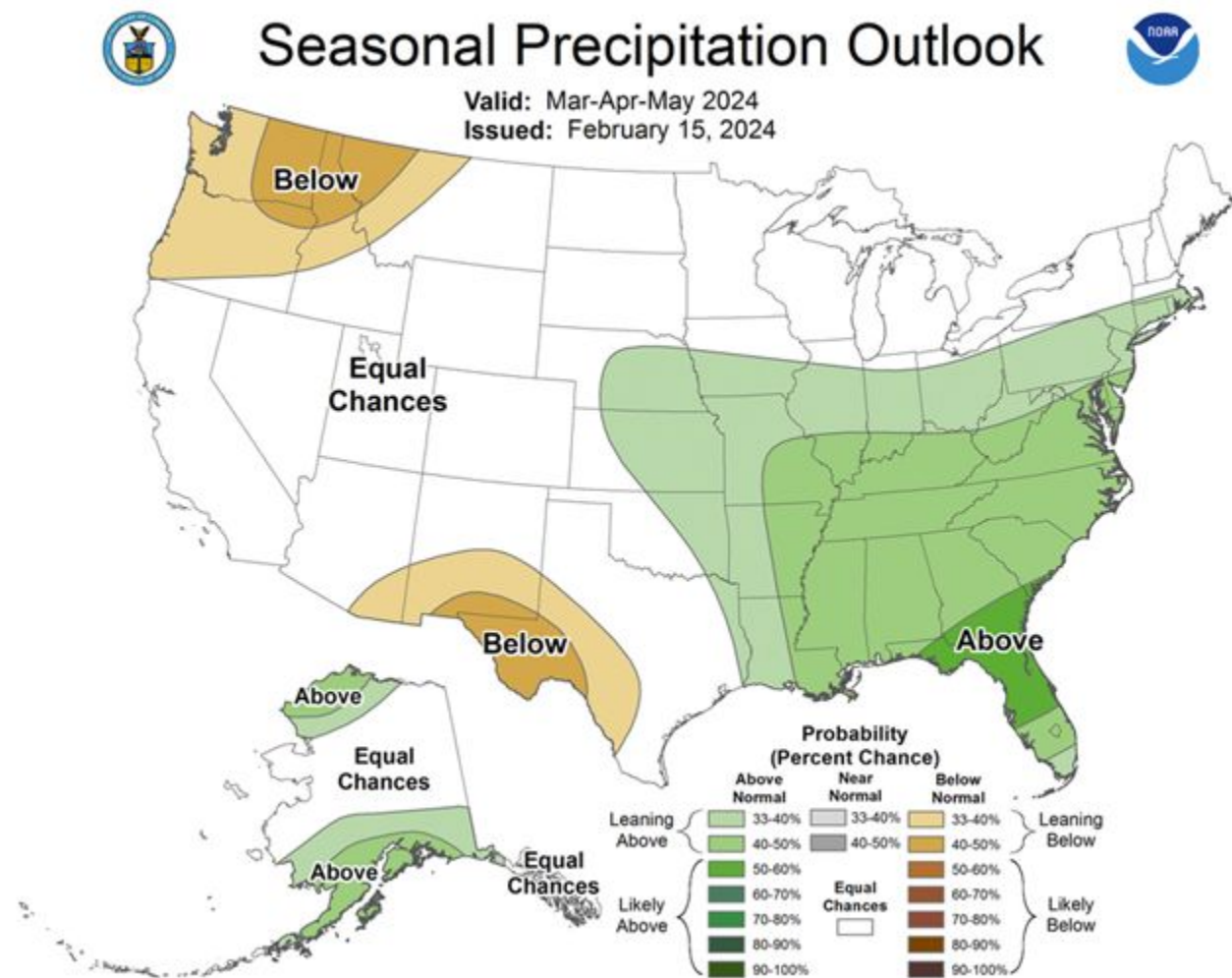
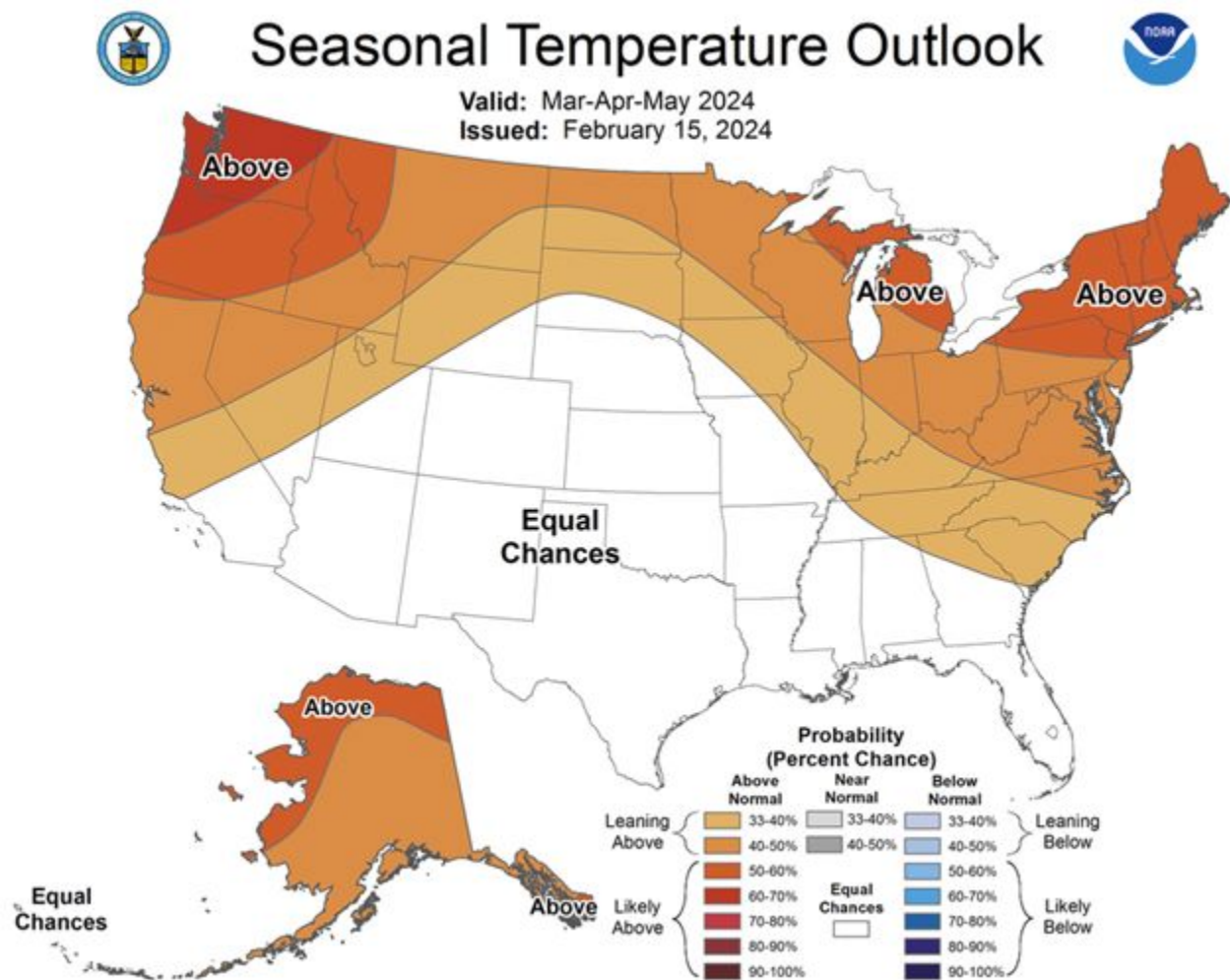
Presenter - Jon Meyer

CPC March Outlook



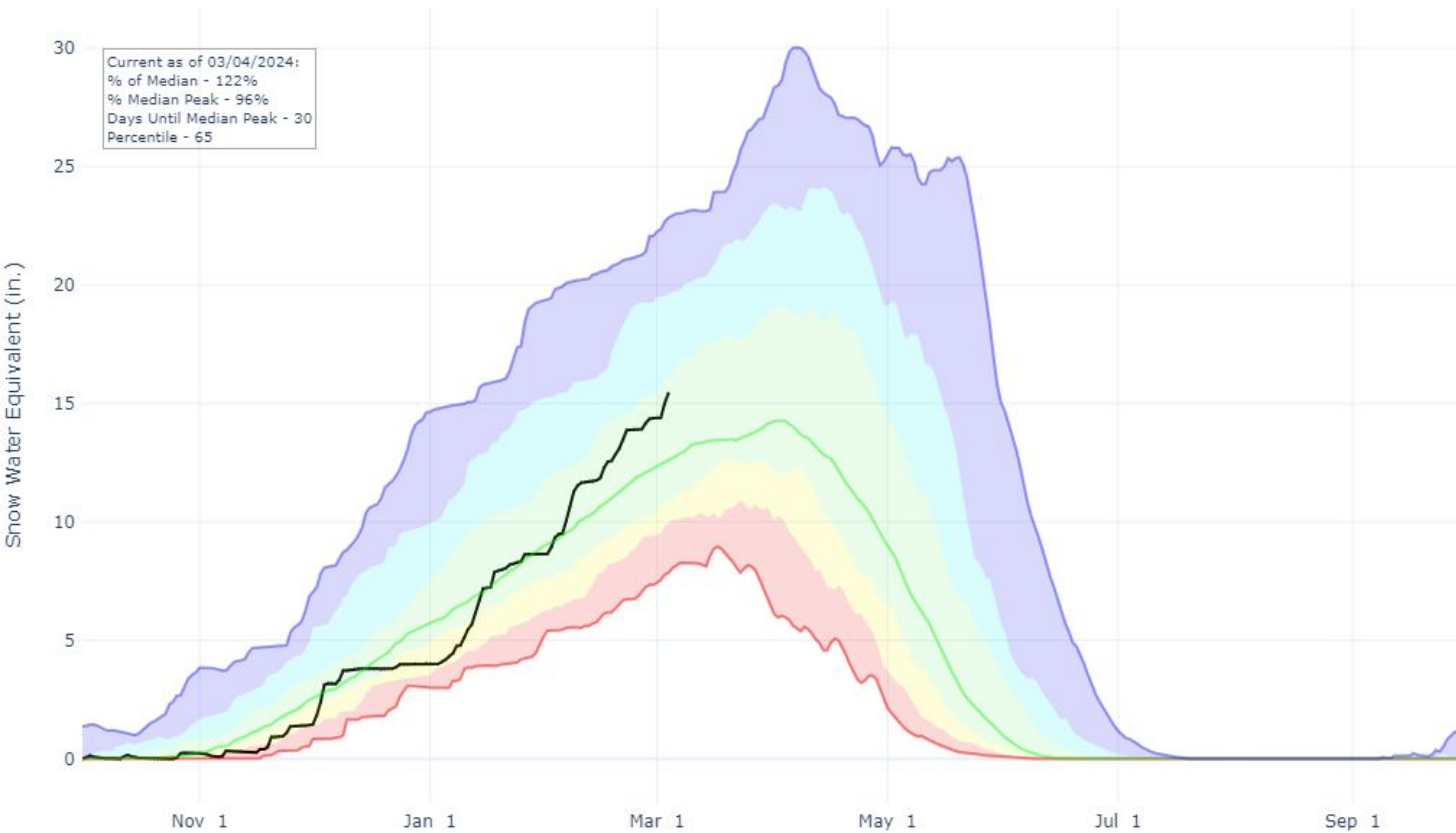
Agency - Utah Climate Center
Presenter - Jon Meyer

CPC March-May Outlook

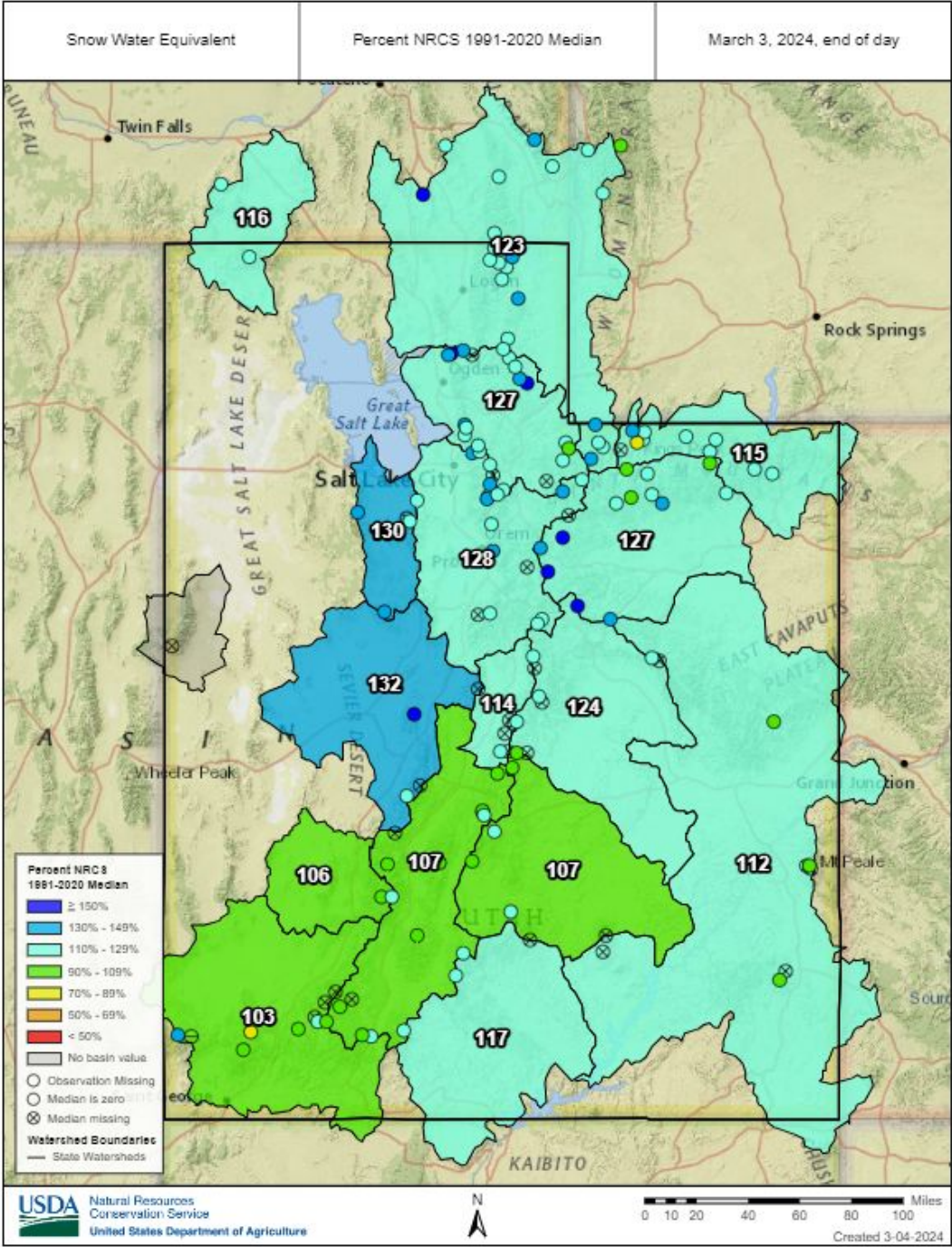


Snowpack

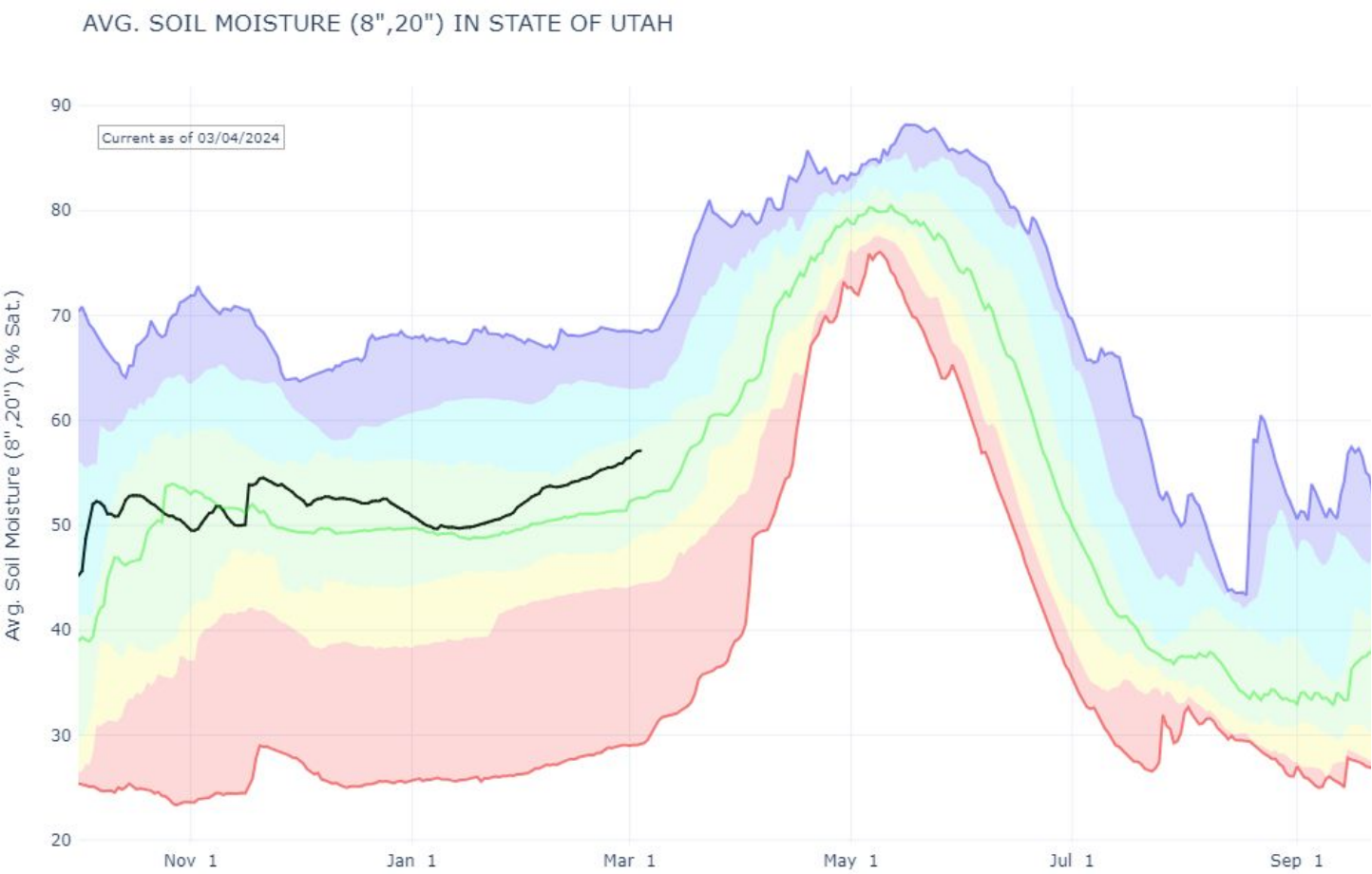
SNOW WATER EQUIVALENT IN STATE OF UTAH



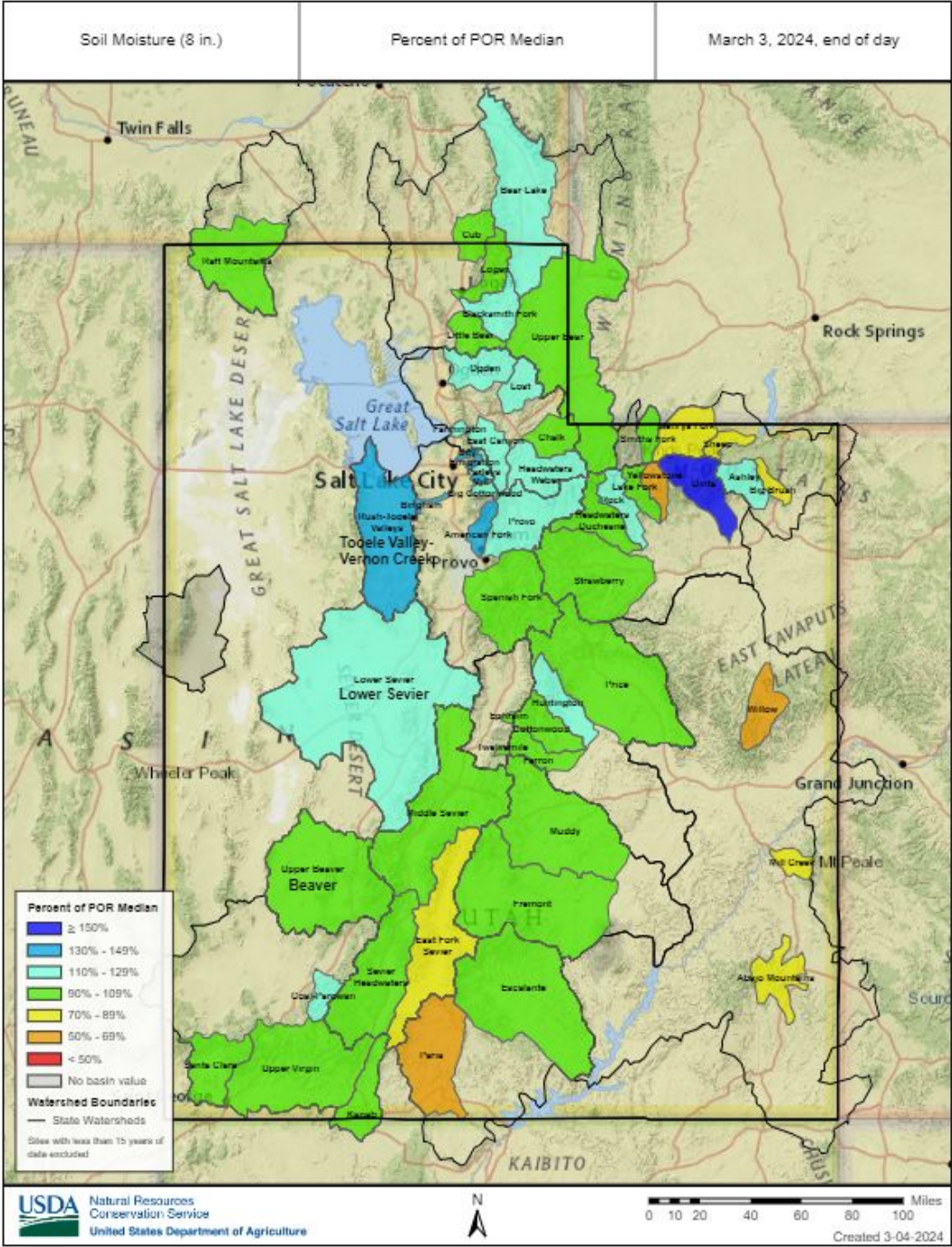
Agency - NRCS Snow Survey
Presenter - Jordan Clayton



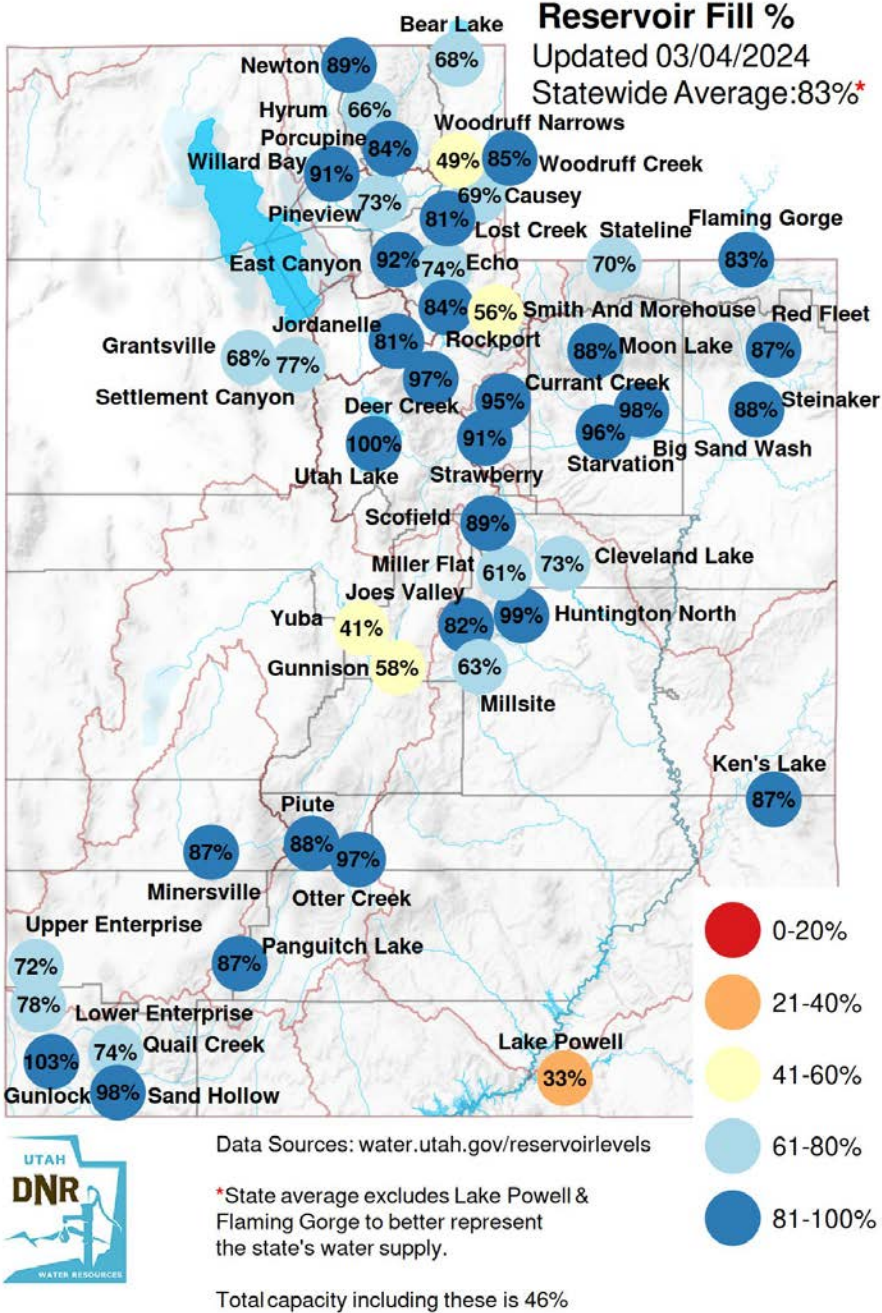
Soil Moisture



Agency - NRCS Snow Survey
Presenter - Jordan Clayton



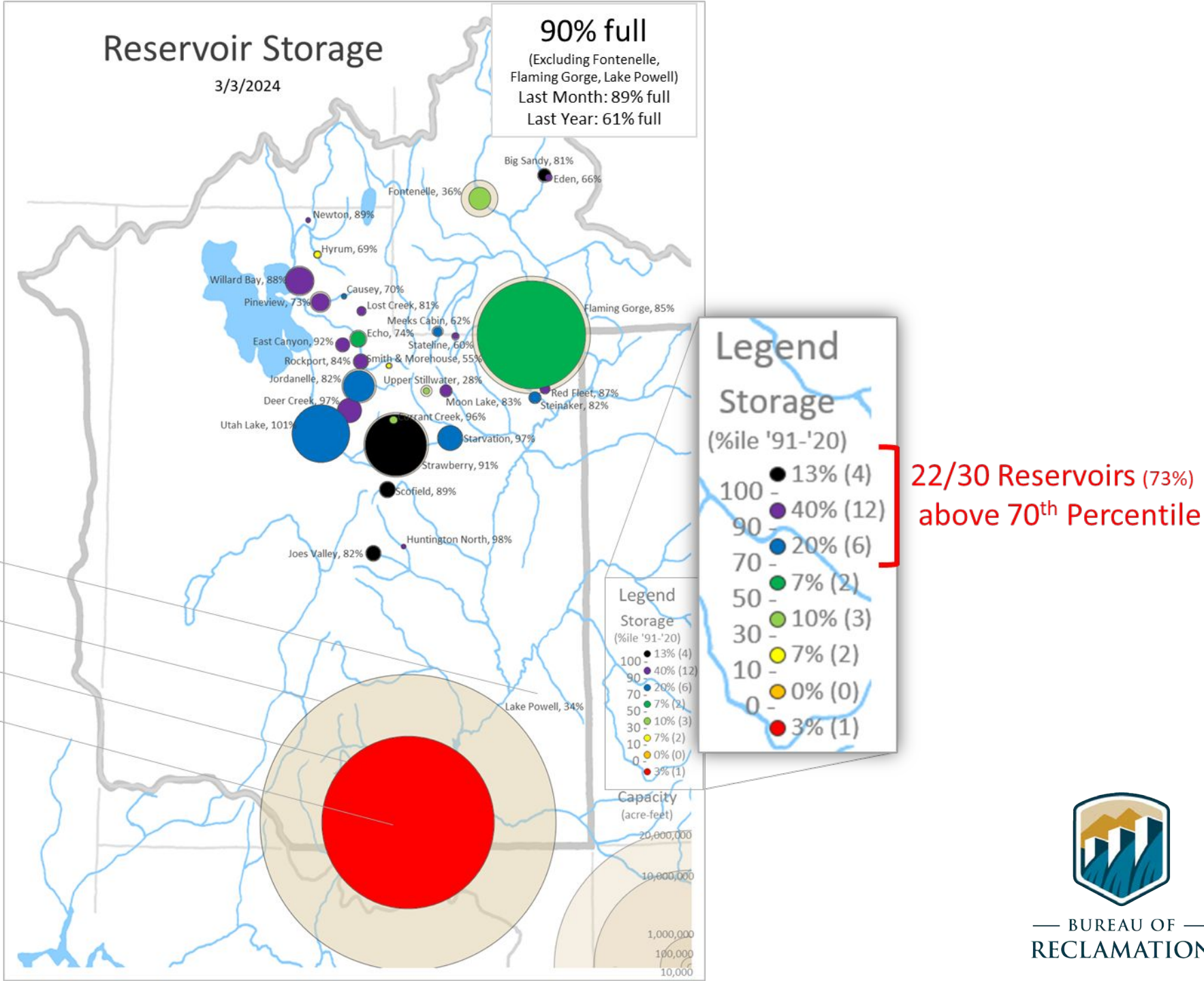
Current statewide 83%
Last Year 52%
Median 63%



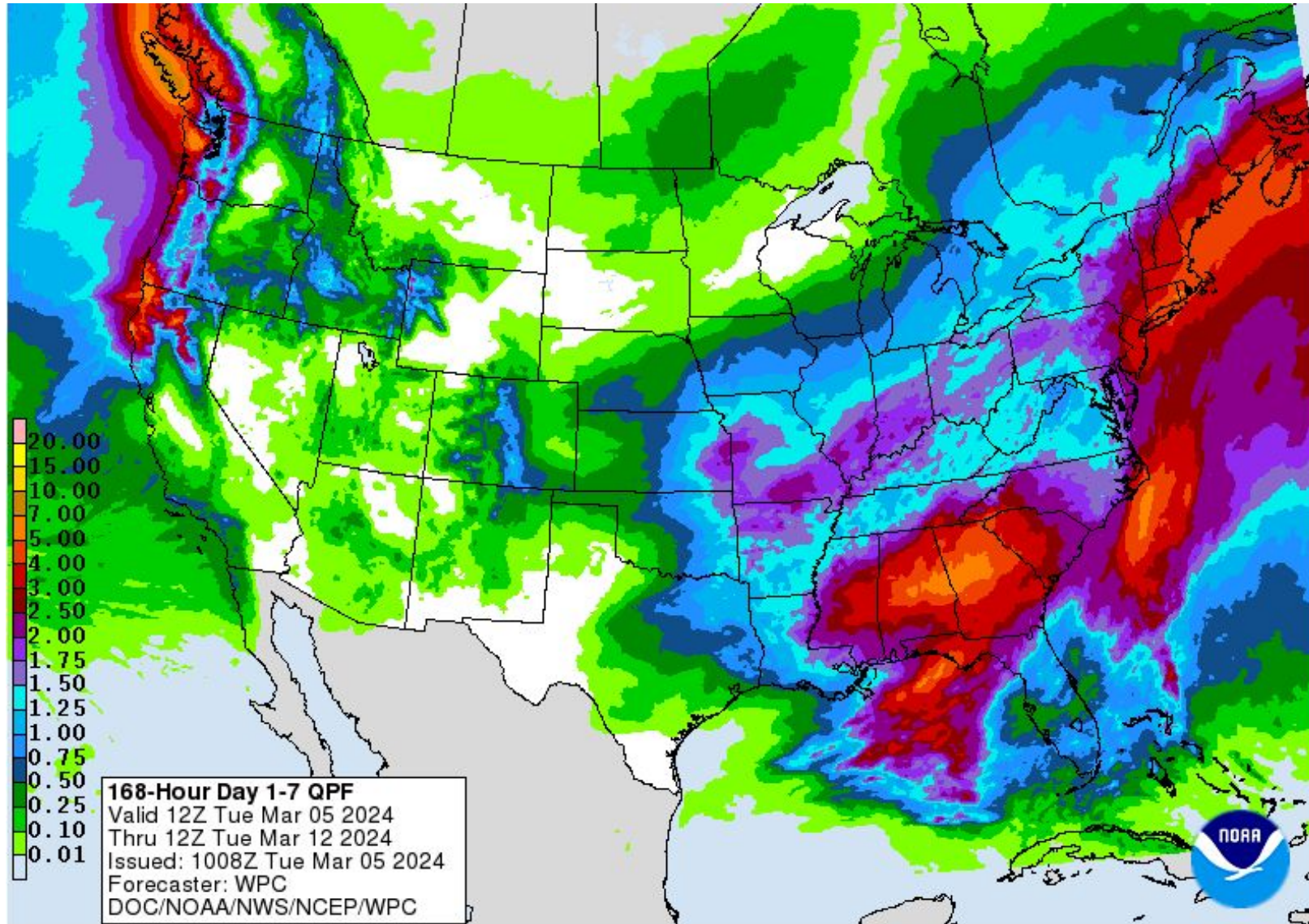
Reservoir Levels

Reservoir, % full
Capacity
Current Storage
Percentile ('91-'20)

Agency - BOR
Presenter - Gary Henrie



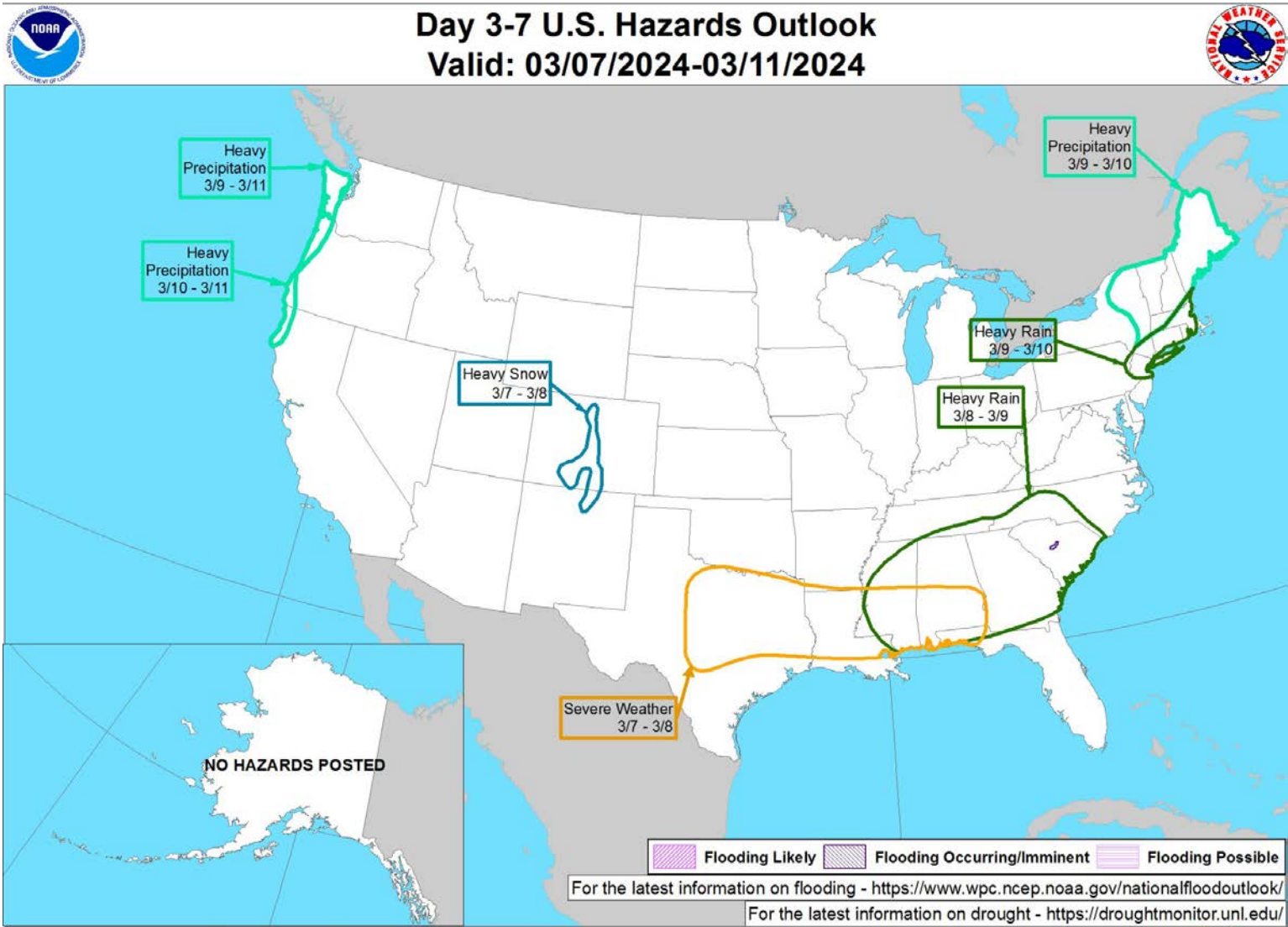
Weather Forecast Office Utah Day 1-7 Outlook



Agency - National Weather Service Weather Forecast Office

Presenter - Hayden Mahan

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



Weather Prediction Center

Made: 03/04/2024 03:06 PM EST

Follow us:  

www.wpc.ncep.noaa.gov

Agency - National Weather Service Weather Forecast Office
Presenter - Hayden Mahan

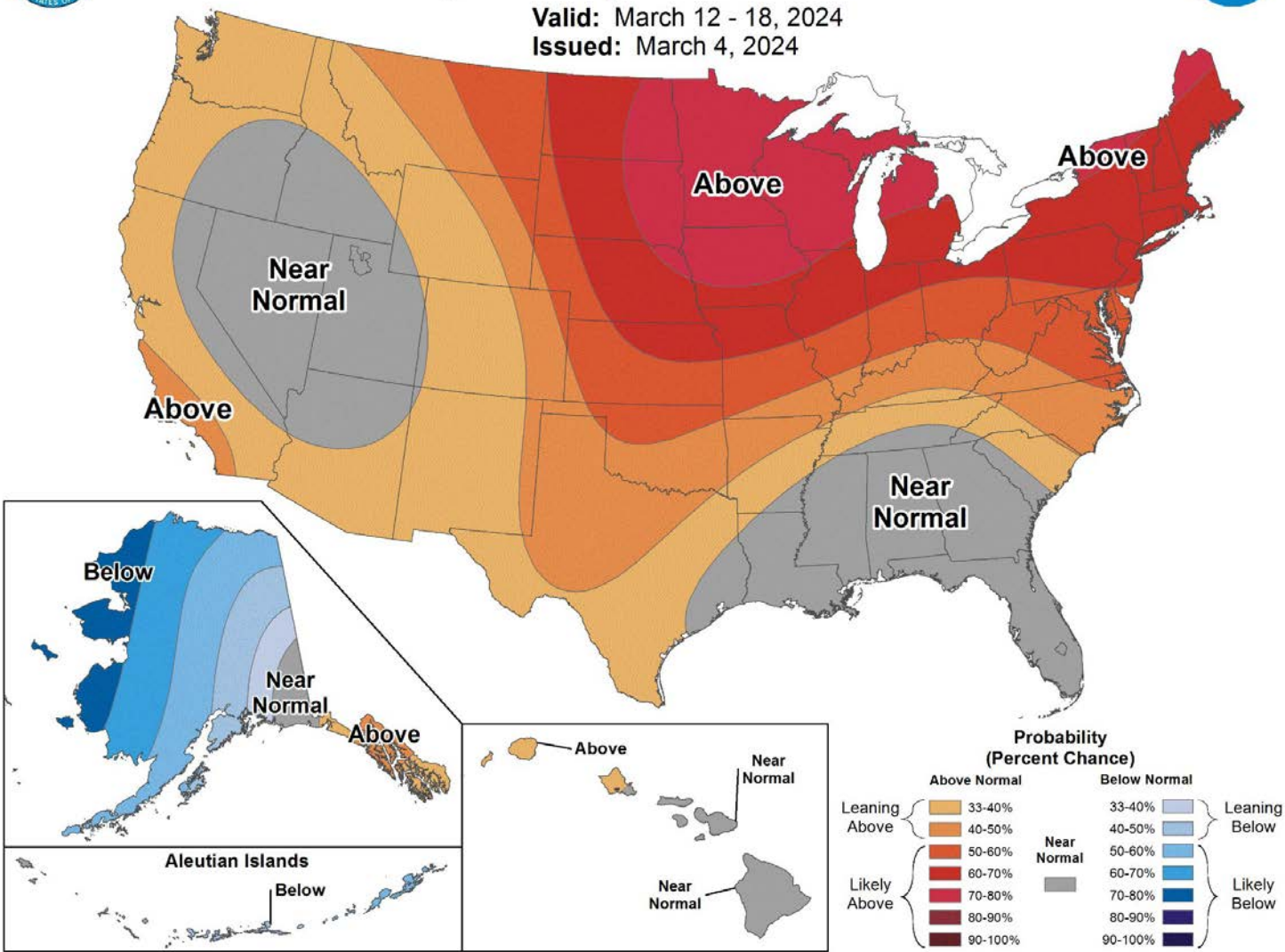
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



8-14 Day Temperature Outlook



Valid: March 12 - 18, 2024
Issued: March 4, 2024



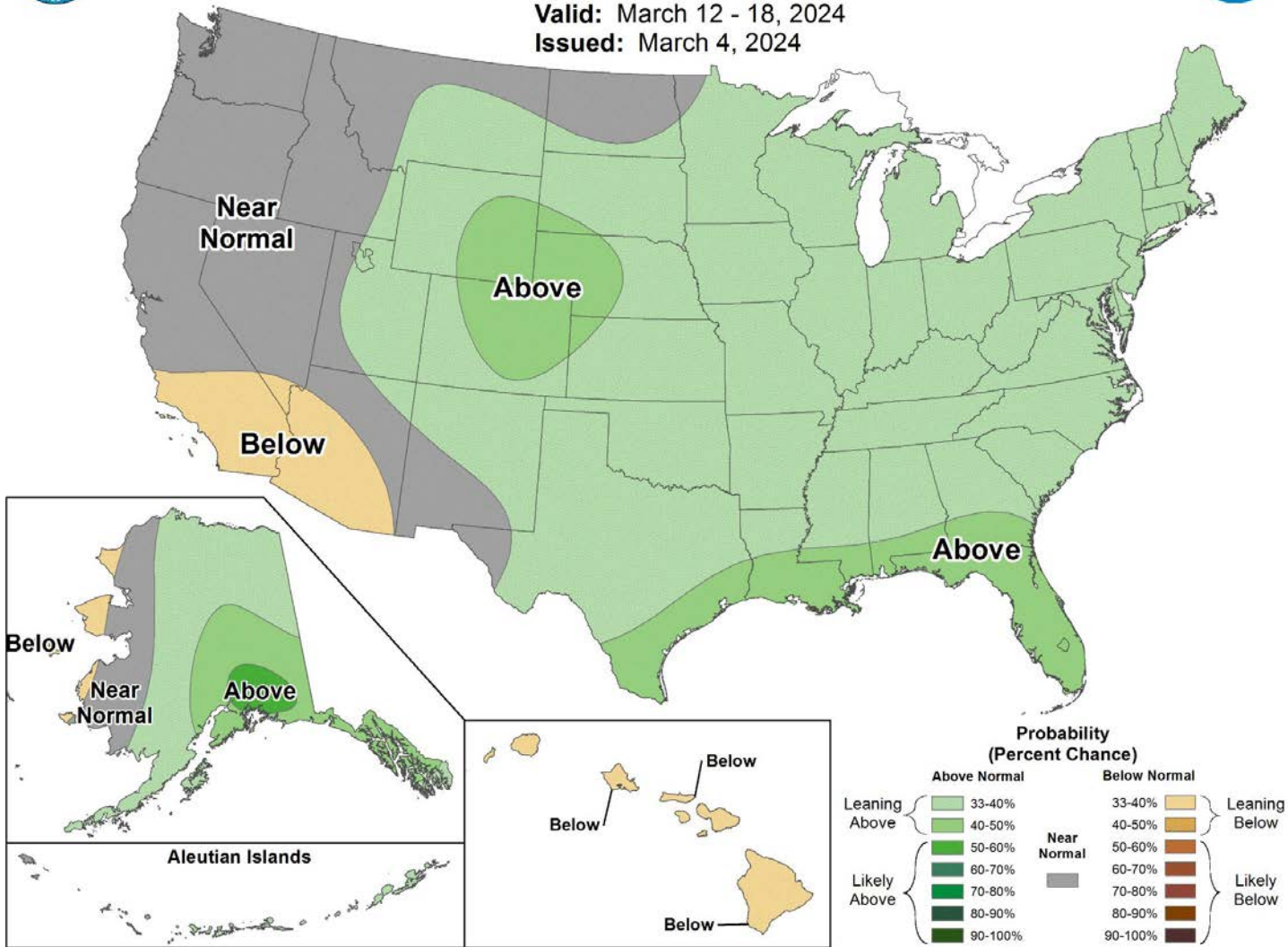
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



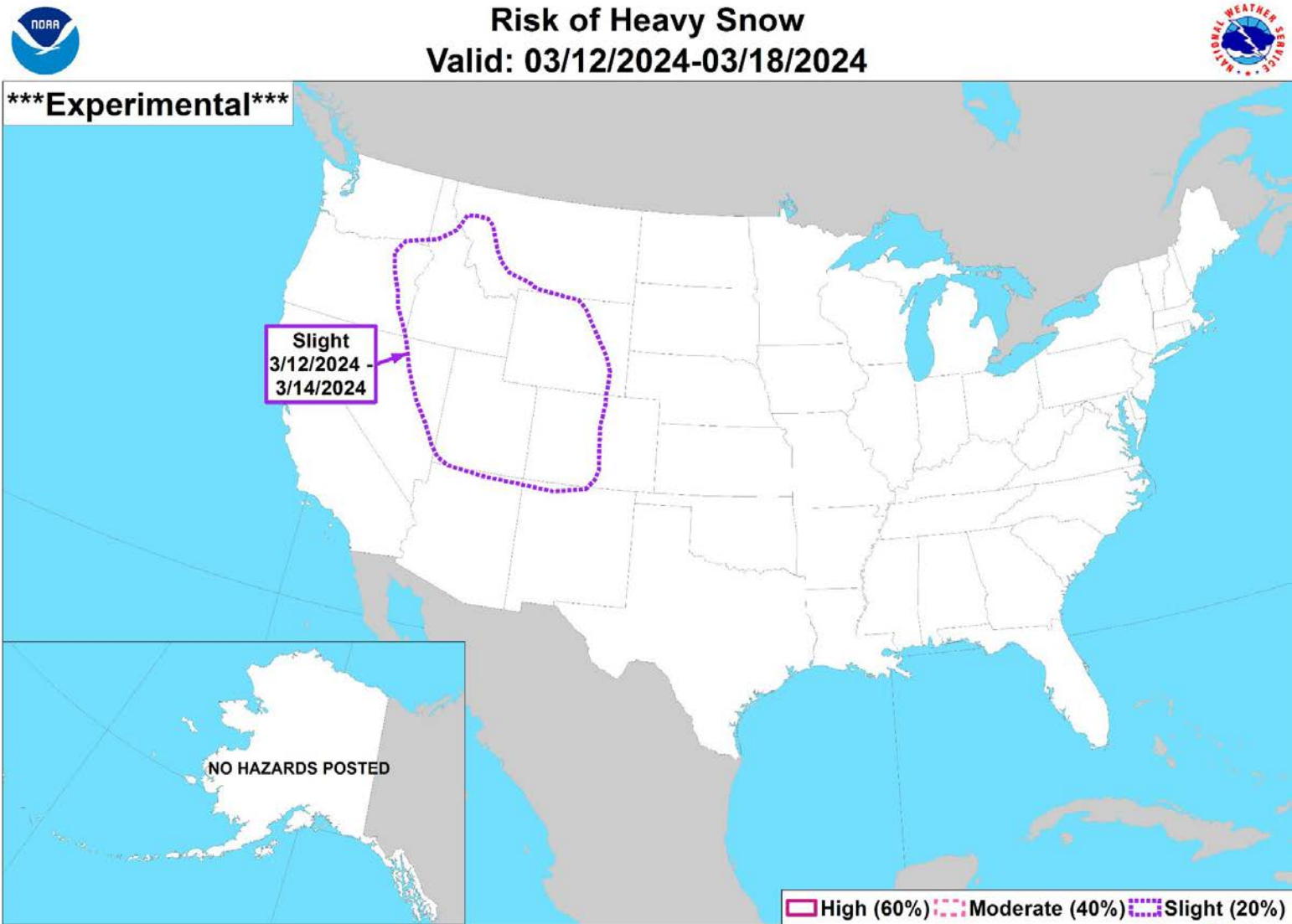
8-14 Day Precipitation Outlook



Valid: March 12 - 18, 2024
Issued: March 4, 2024



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



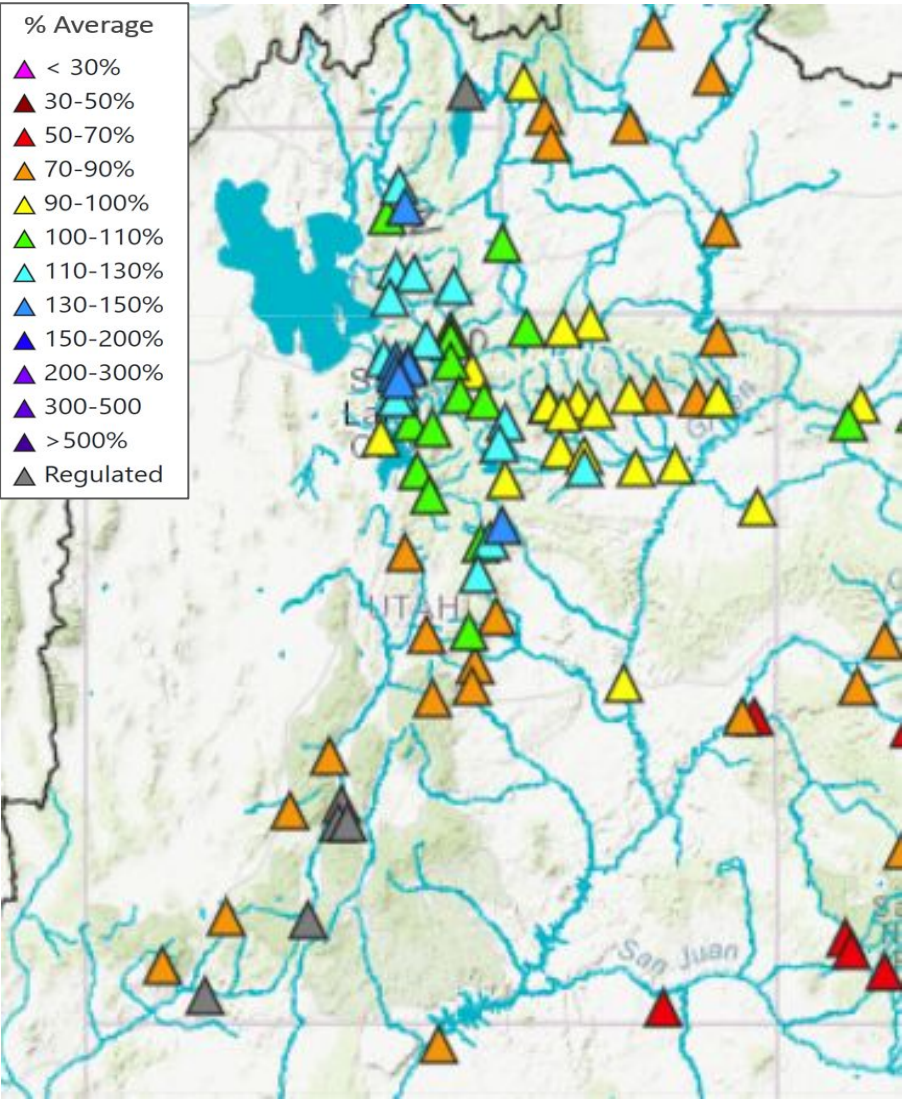
Climate Prediction Center

Made: 03/04/2024 3PM EST

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

Agency - National Weather Service Weather Forecast Office
Presenter - Hayden Mahan

Utah Water Supply Forecasts: Overview



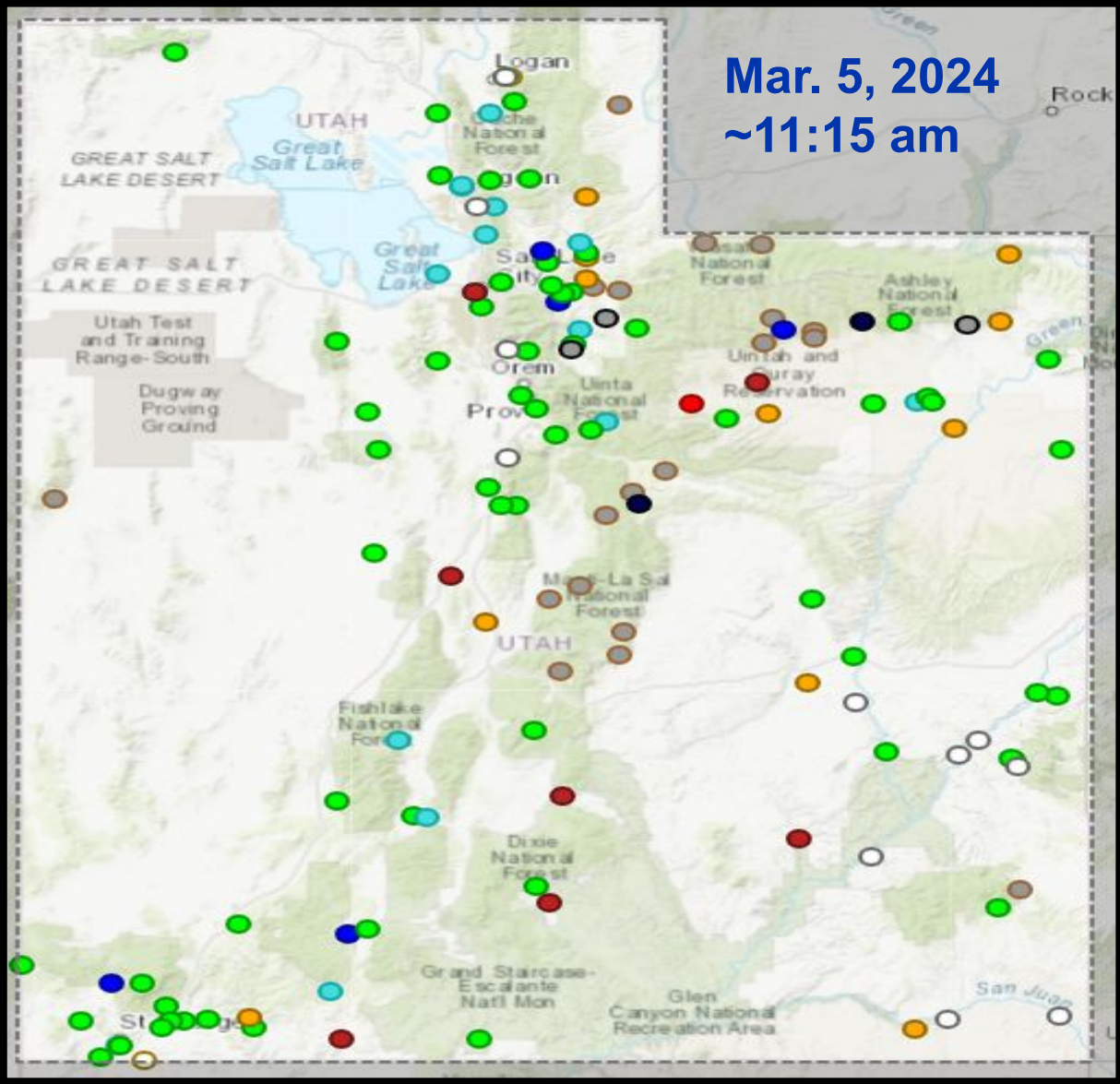
March 1 forecast for April-July volume is generally higher than February 1 forecast

April - July forecast streamflow volumes are in percent of 1991-2020 average.

The timing and magnitude of spring runoff is ultimately a result of SWE conditions, spring weather, and antecedent soil moisture conditions

Watershed	March 2024 Forecast Range (% Avg)	March 2024 Median	Feb 2024 Median	Jan 2024 Median
Bear River Basin	98% - 135%	102%	84%	80%
Weber River Basin	100% - 123%	107%	87%	74%
Six Creeks Basin	111% - 135%	133%	107%	92%
Provo River Basin	82% - 108%	104%	88%	75%
Duchesne River Basin	88% - 139%	98%	73%	62%
Virgin and Sevier River Basins	75% - 126%	87%	83%	68%

Current Streamflow Conditions



Day-of-Year Status	# Gages	% Gages
All-time high for this day-of-year	2	1.4%
Much above normal for this day-of-year	5	3.6%
Above normal for this day-of-year	16	11.5%
Normal for this day-of-year	62	44.6%
Below normal for this day-of-year	11	7.9%
Much below normal for this day-of-year	7	5.0%
All-time low for this day-of-year	1	0.7%
Not ranked - insufficient record	11	7.9%
Not ranked - no measurement	18	12.9%
Not ranked - no recent measurement	4	2.9%

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)

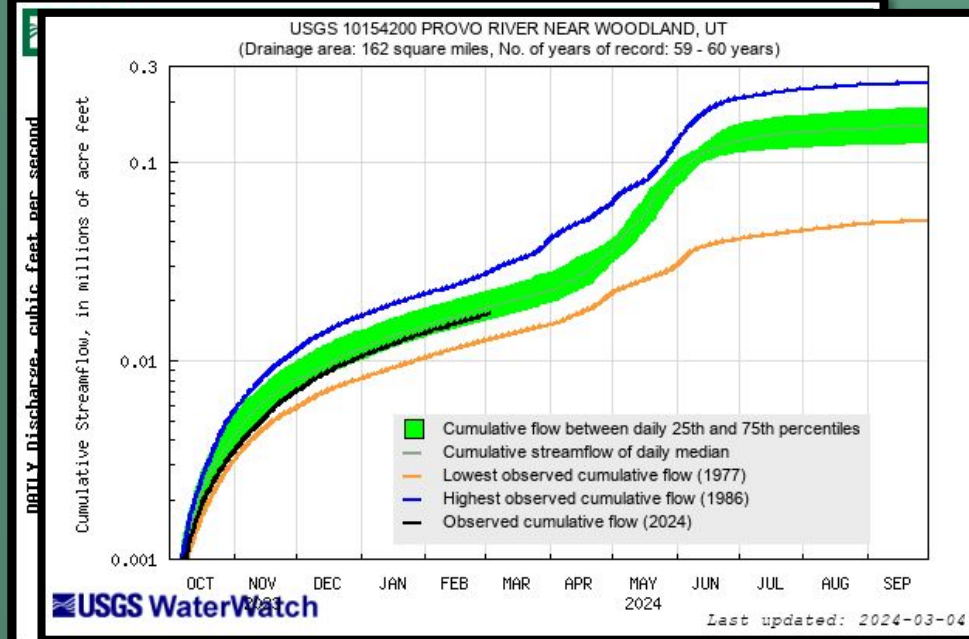
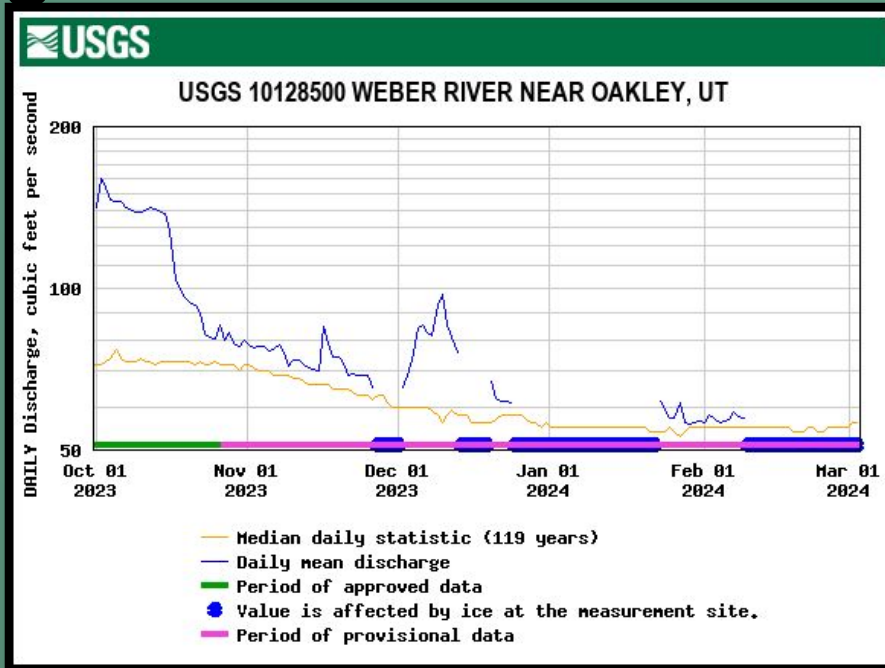
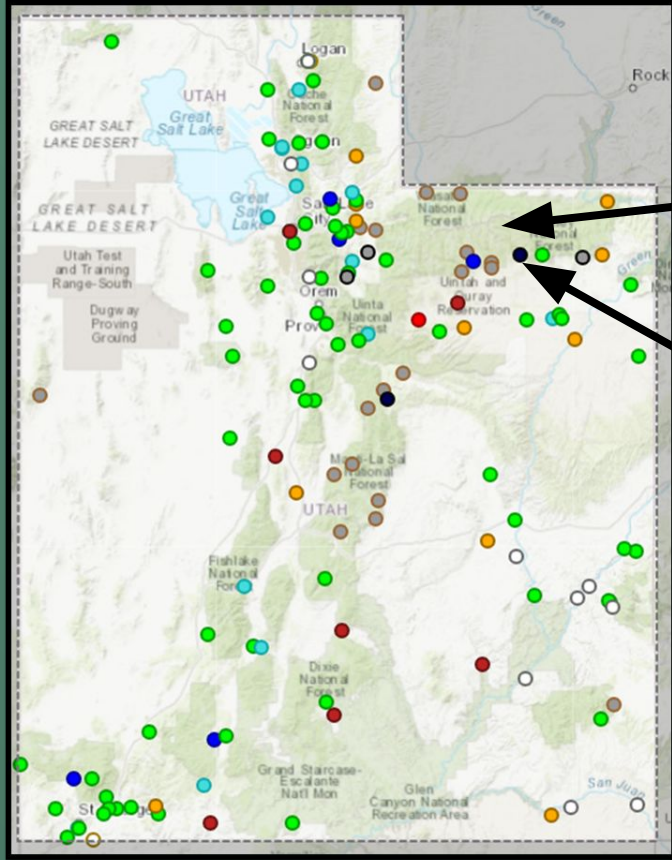


National Water Dashboard

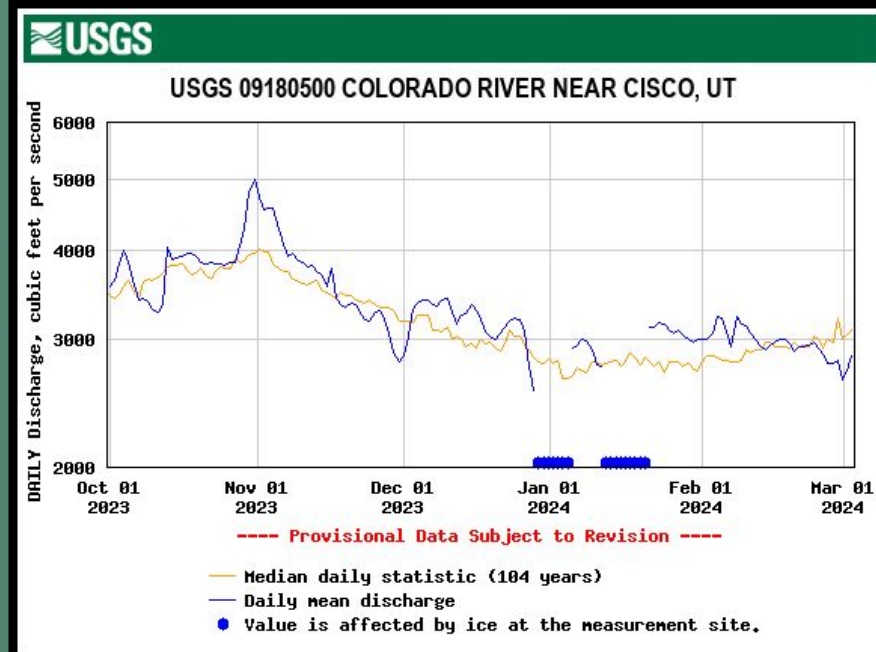
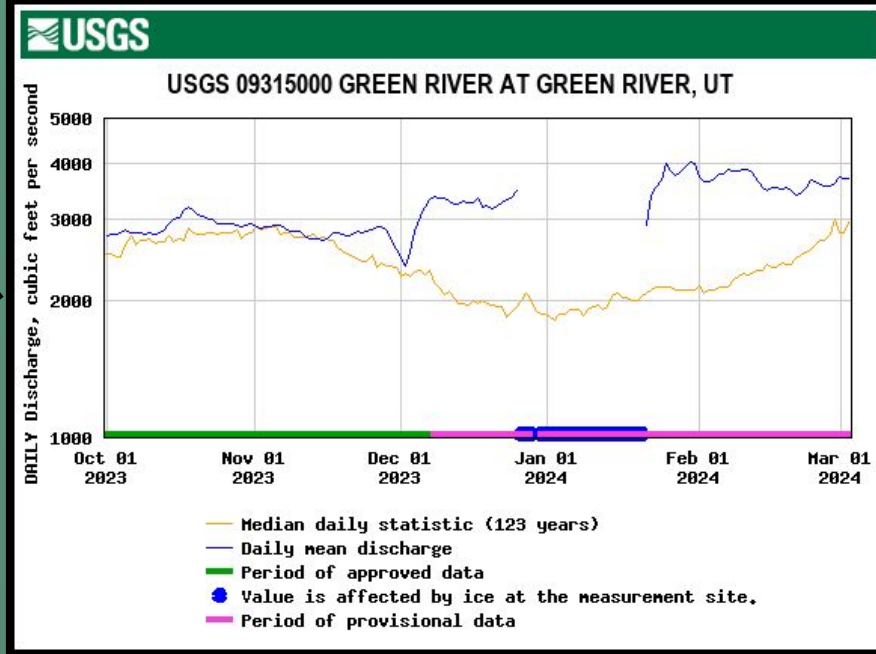
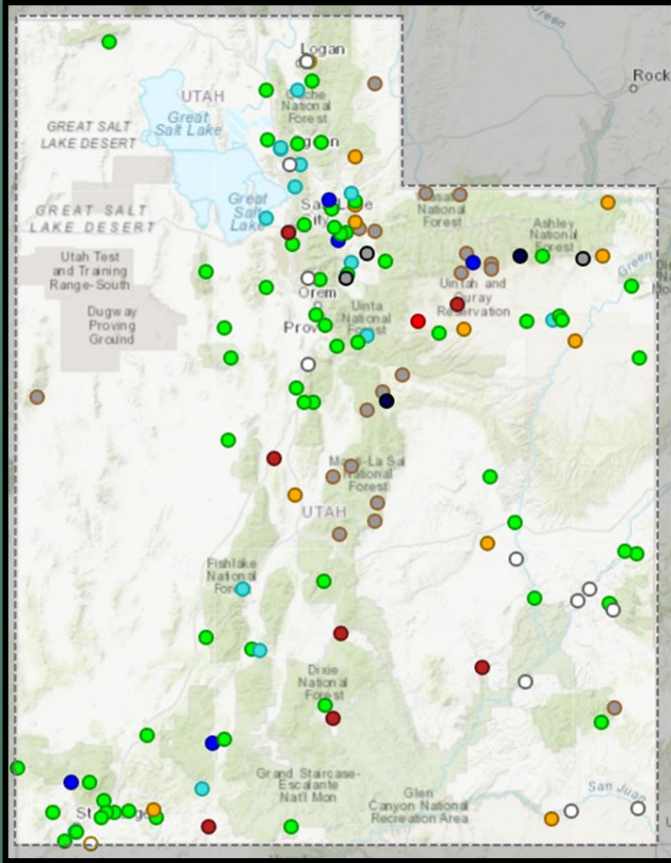
*Sites must have at least 10 years of streamflow record to be ranked on this graphic

Provisional data, subject to revision

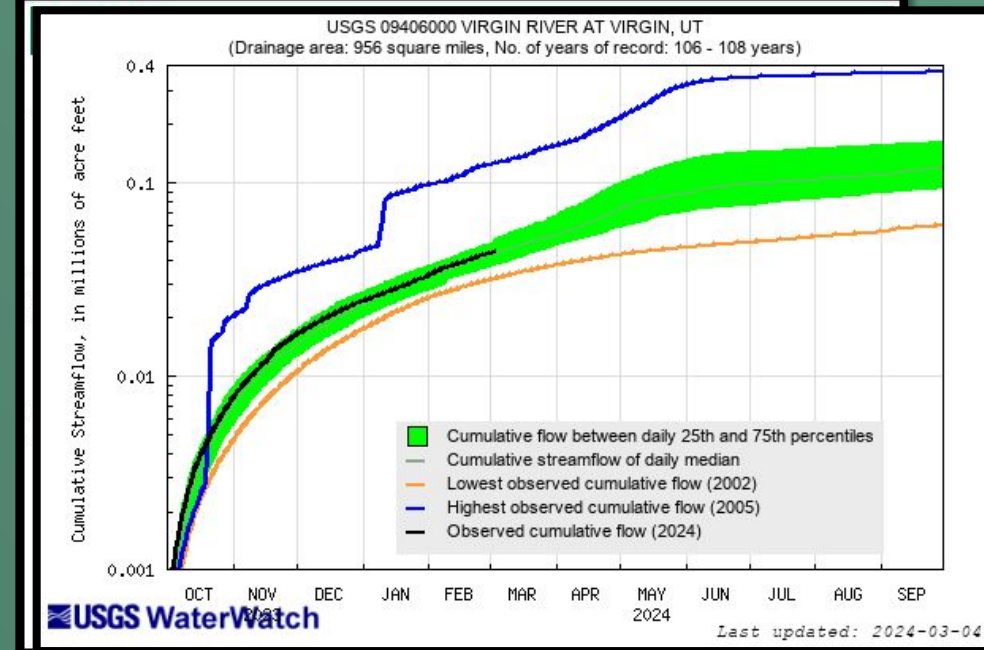
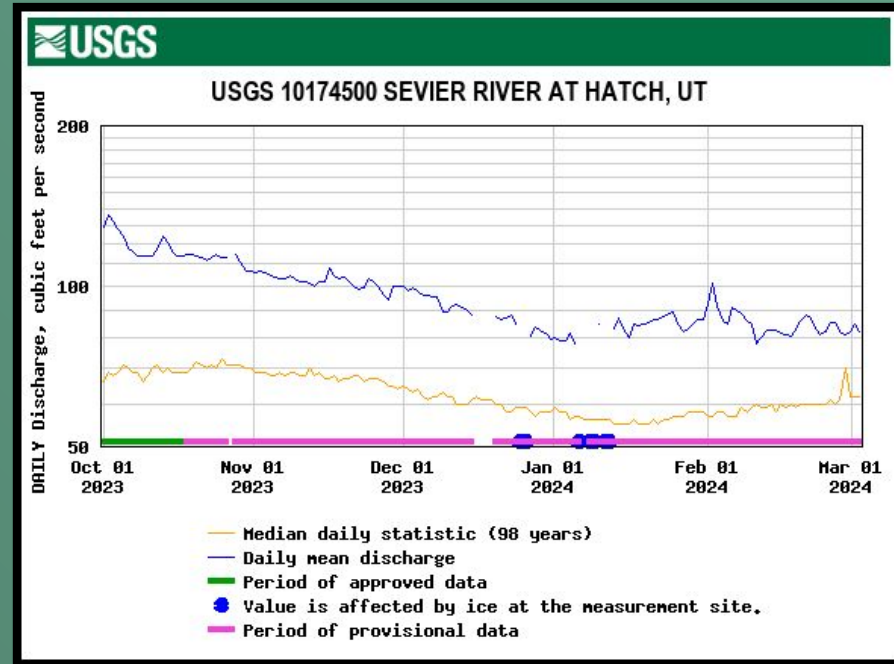
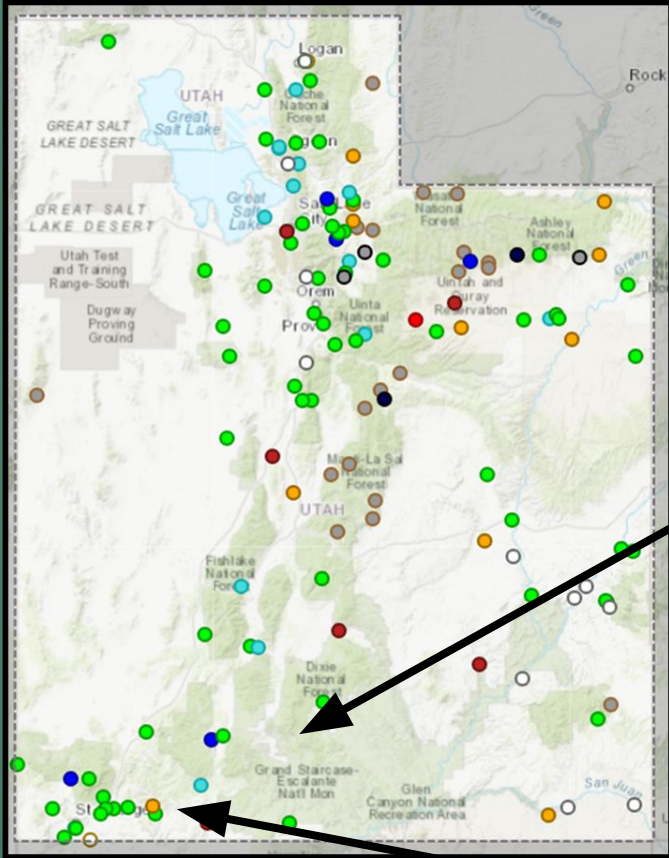
Streamflow at Selected Gages



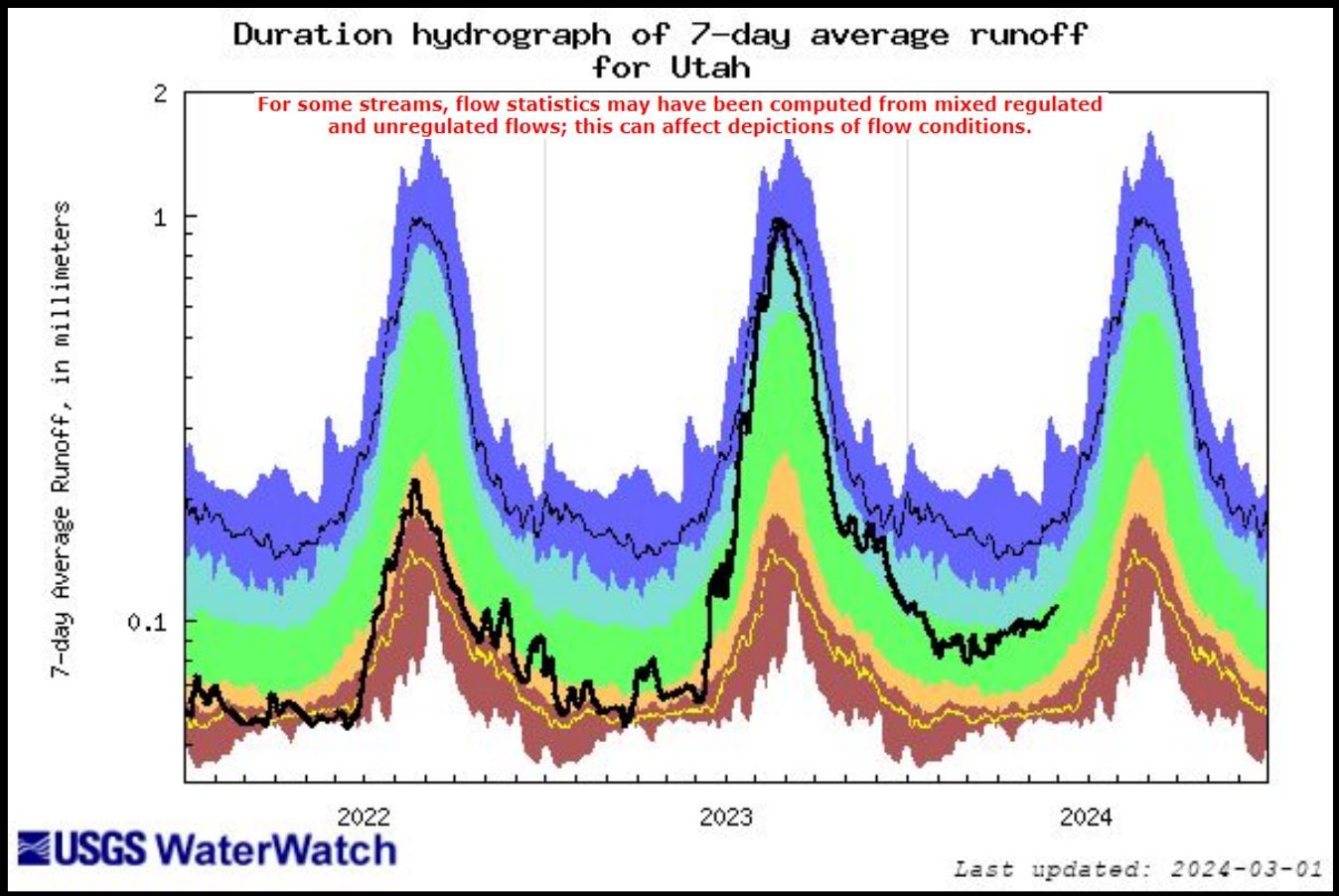
Streamflow at Selected Gages



Streamflow at Selected Gages



Utah Area-Based Runoff Duration Hydrograph

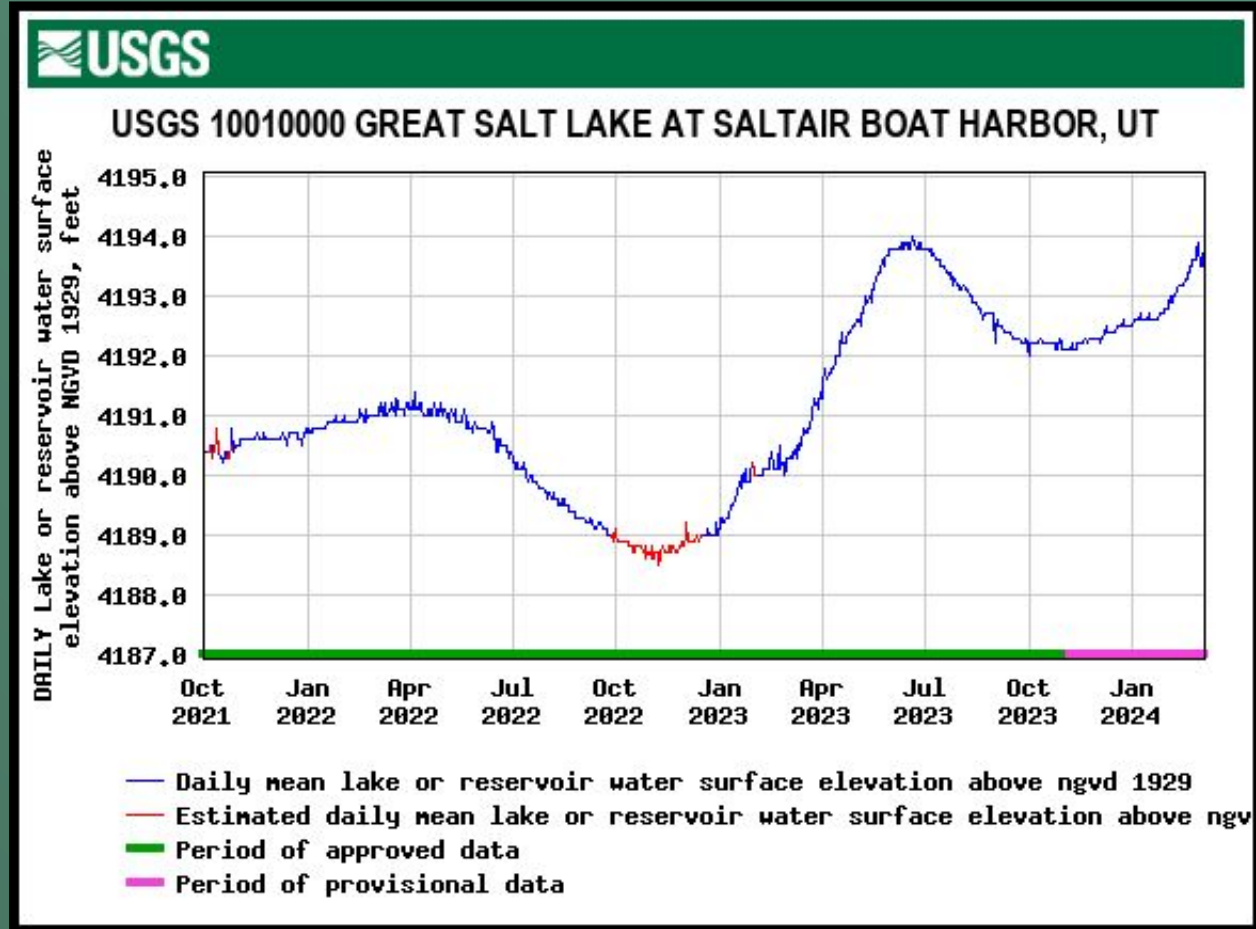


- ❑ The Runoff Duration Hydrograph is a graphical presentation of area-based runoff (the black line) calculated as a weighted average of HUC 8-runoff, plotted over the long-term statistics of runoff for each day or month of the year for each area.
- ❑ Very provisional due to ice estimates that need to be completed

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

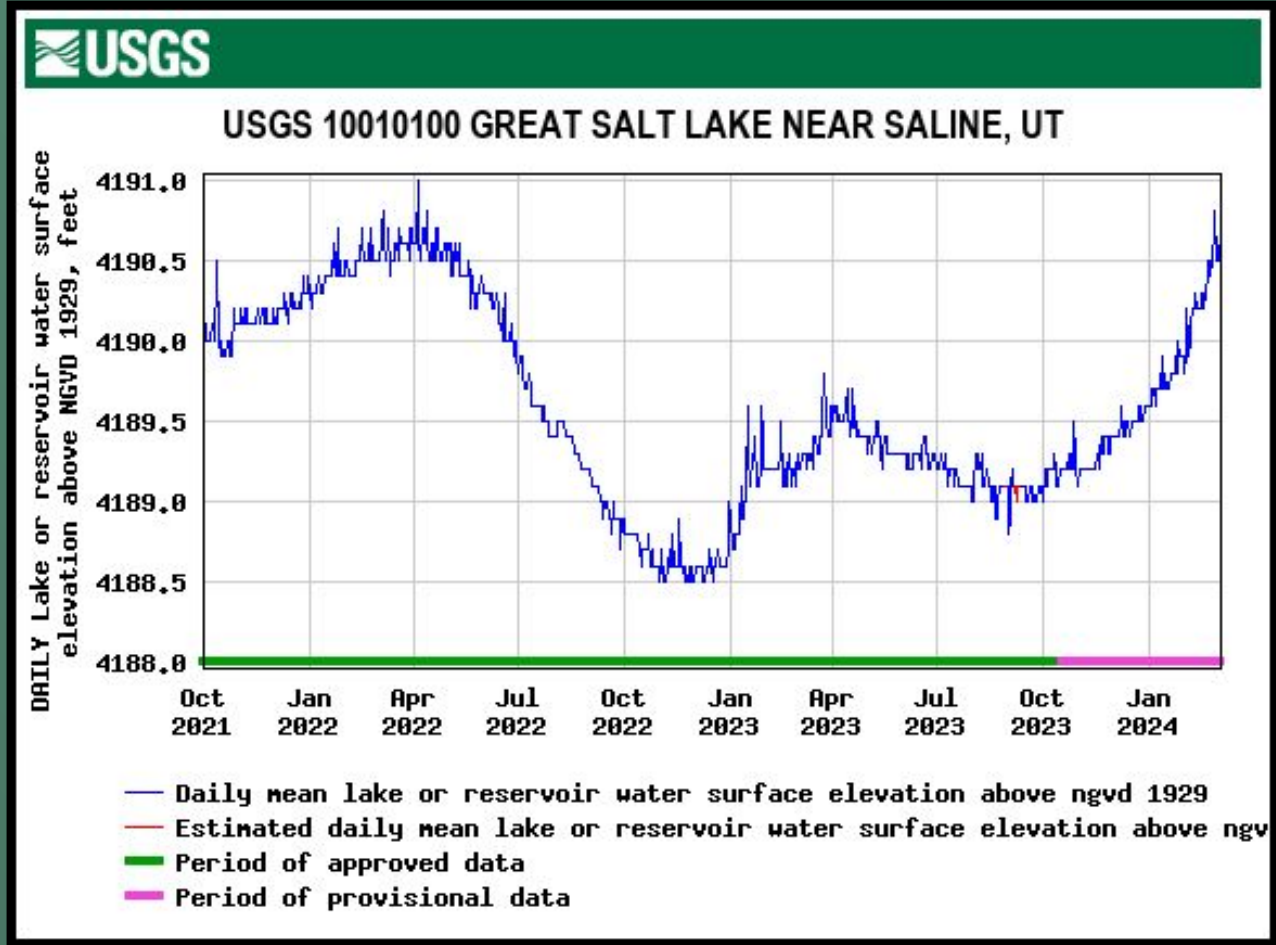
Provisional data, subject to revision

Great Salt Lake Water Surface Elevation – South Arm



- ❑ Daily value 3/4/2024 = 4,193.8'
- ❑ Up 1.8' since seasonal minimum in October 2023

Great Salt Lake Water Surface Elevation – North Arm



- ❑ Daily value 3/4/2024 = 4,190.7'
- ❑ Up 1.9' since seasonal minimum in September 2023

Contact Information



View from Gilbert Bay, Great Salt Lake, October 2018

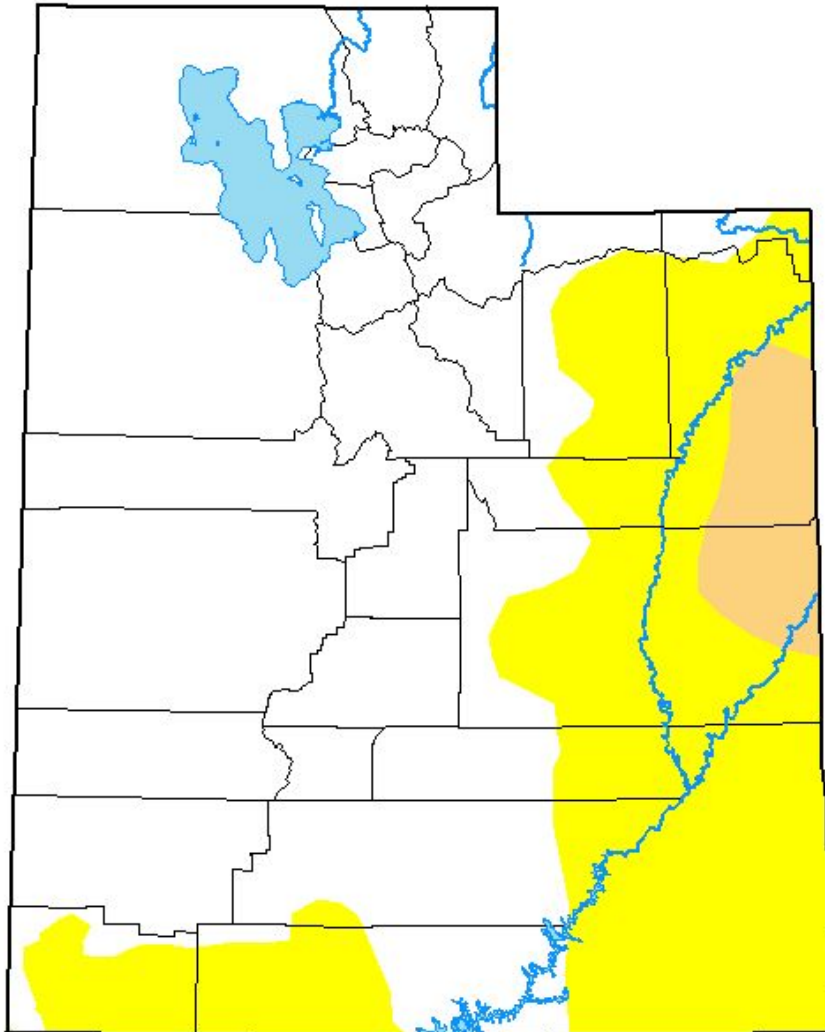
Ryan Rowland
Data Chief
USGS Utah Water Science Center
rrowland@usgs.gov
Office: 801-908-5036
Cell: 801-573-8716

U.S. Drought Monitor Utah

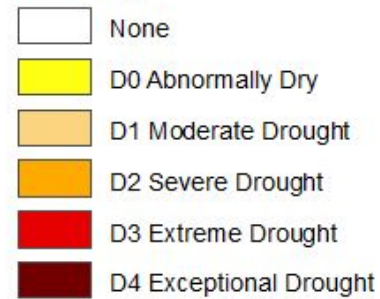
February 27, 2024

(Released Thursday, Feb. 29, 2024)

Valid 7 a.m. EST



Intensity:



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

Author:

Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

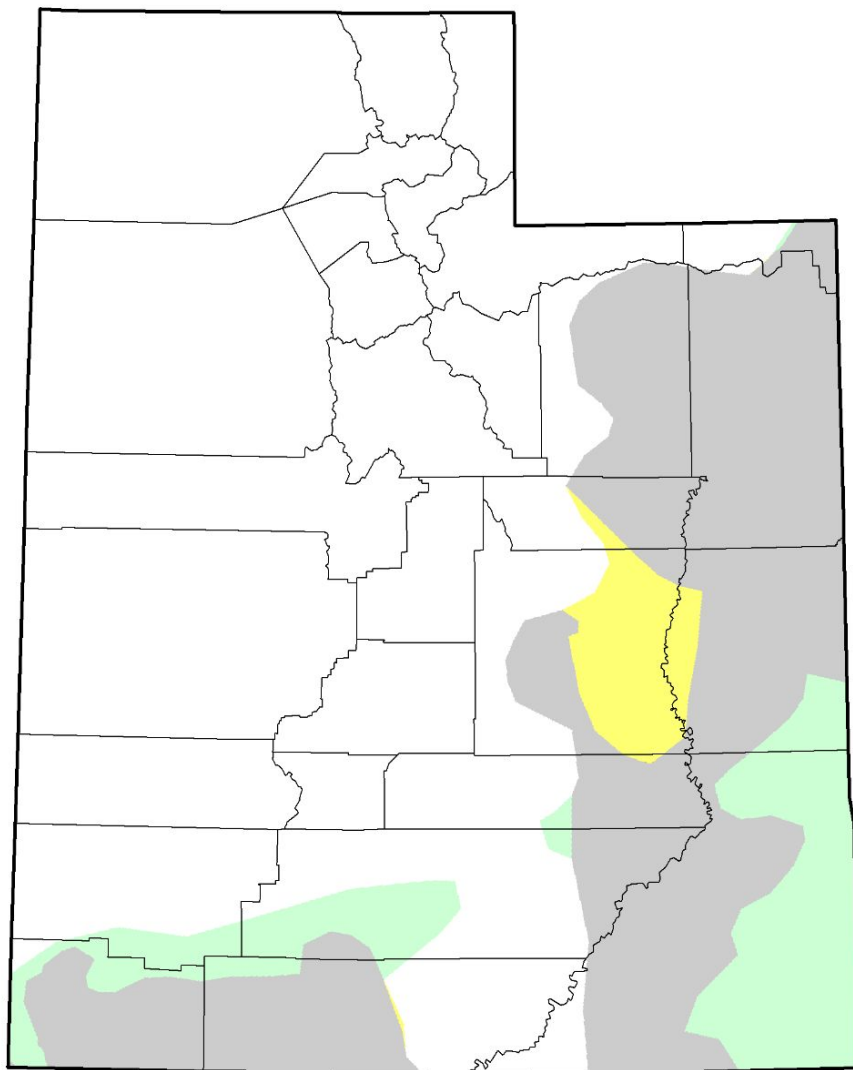
To report on conditions between meetings:

Submit a report on CMOR drought website

Email Lhaskell@utah.gov

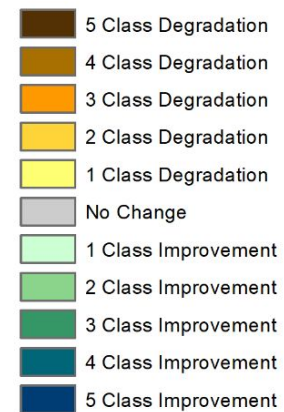
email drought@utah.gov

U.S. Drought Monitor Class Change - Utah 4 Week



February 27, 2024
compared to
January 30, 2024

droughtmonitor.unl.edu



April webinar
April 9th?
April 16th?