



Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors



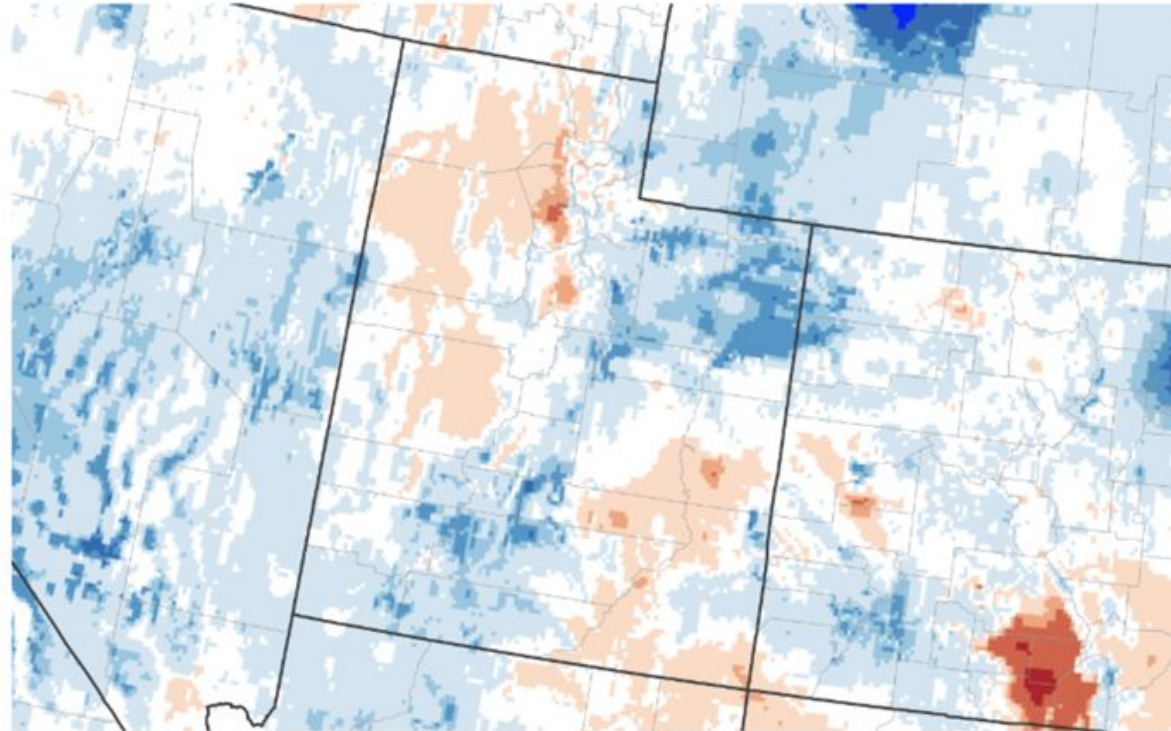


Utah Water Assessment & Conditions Monitoring Webinar

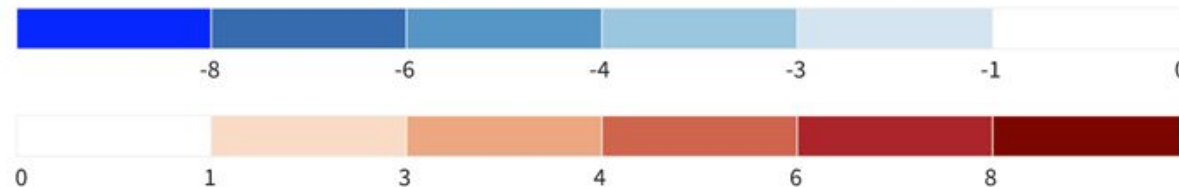
January 24, 2023

Temperature 30 day (Related to Average)

30-Day Departure from Normal Maximum Temperature (°F)



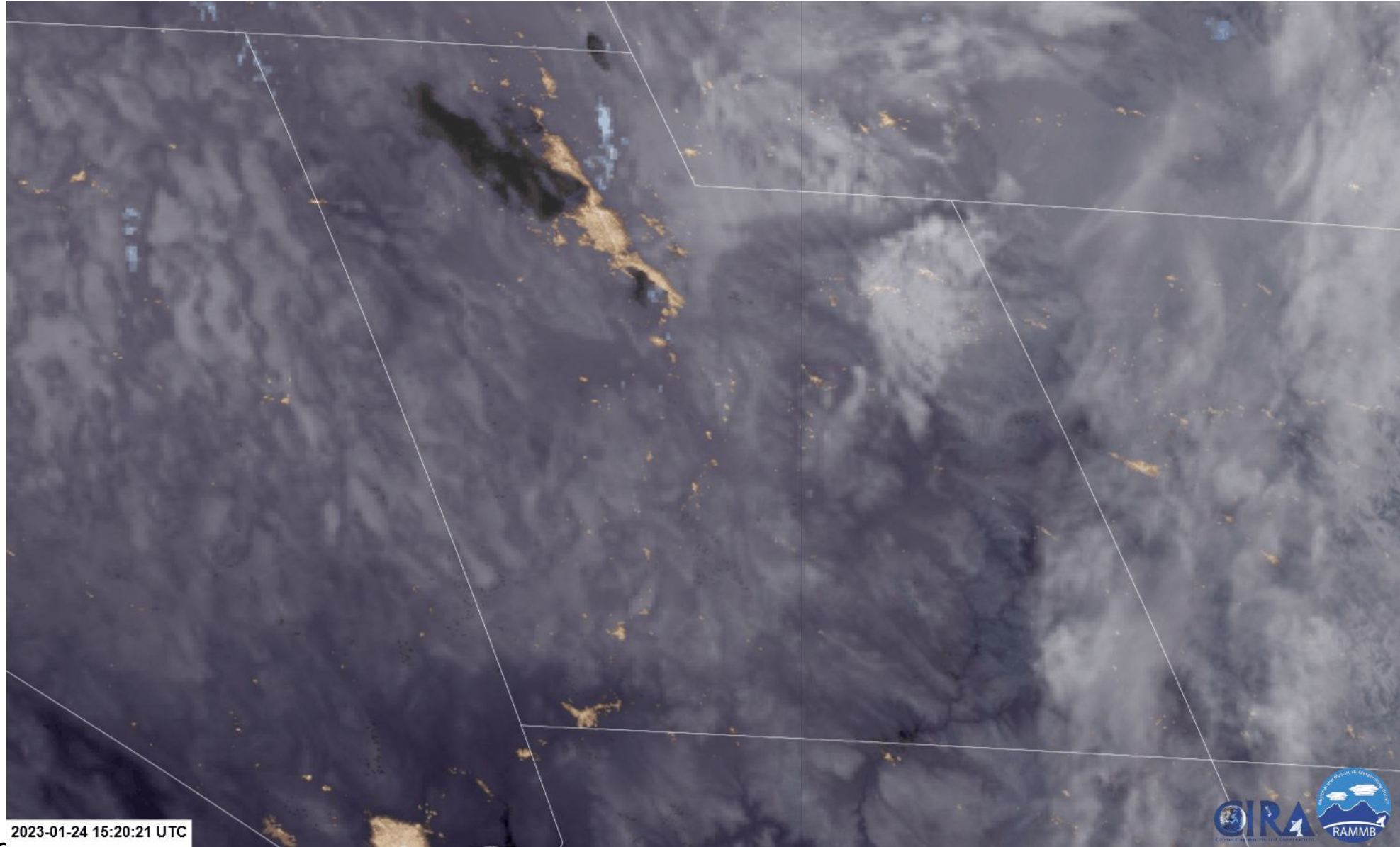
Departure from the 1991-2020 Normal Max Temperature (°F)



Source(s): UC Merced, Climate Engine
Data Valid - 01/21/23

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

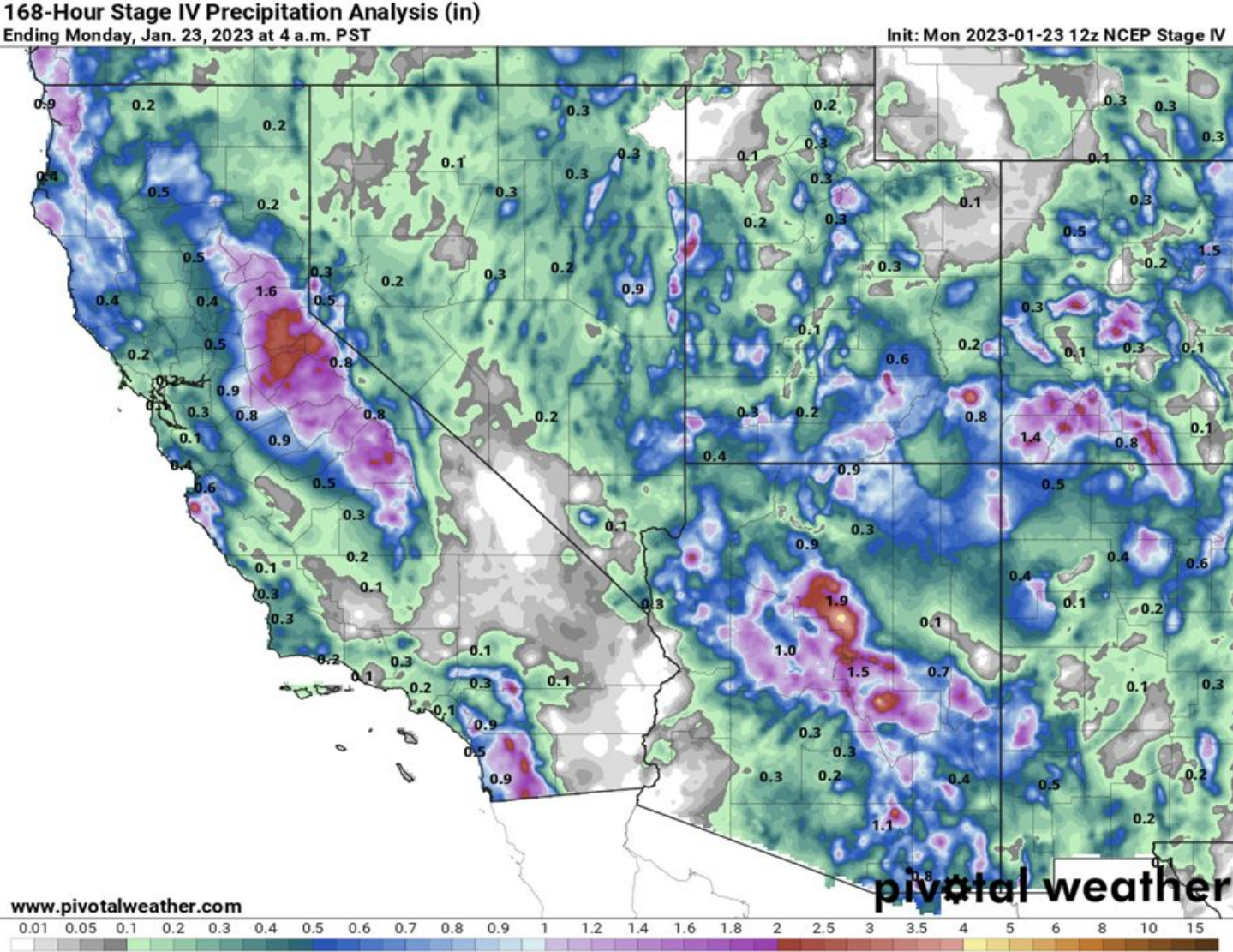
Temperature 30 day (Related to Average)



Agency - Utah Climate Center

Presenter - Jon Meyer

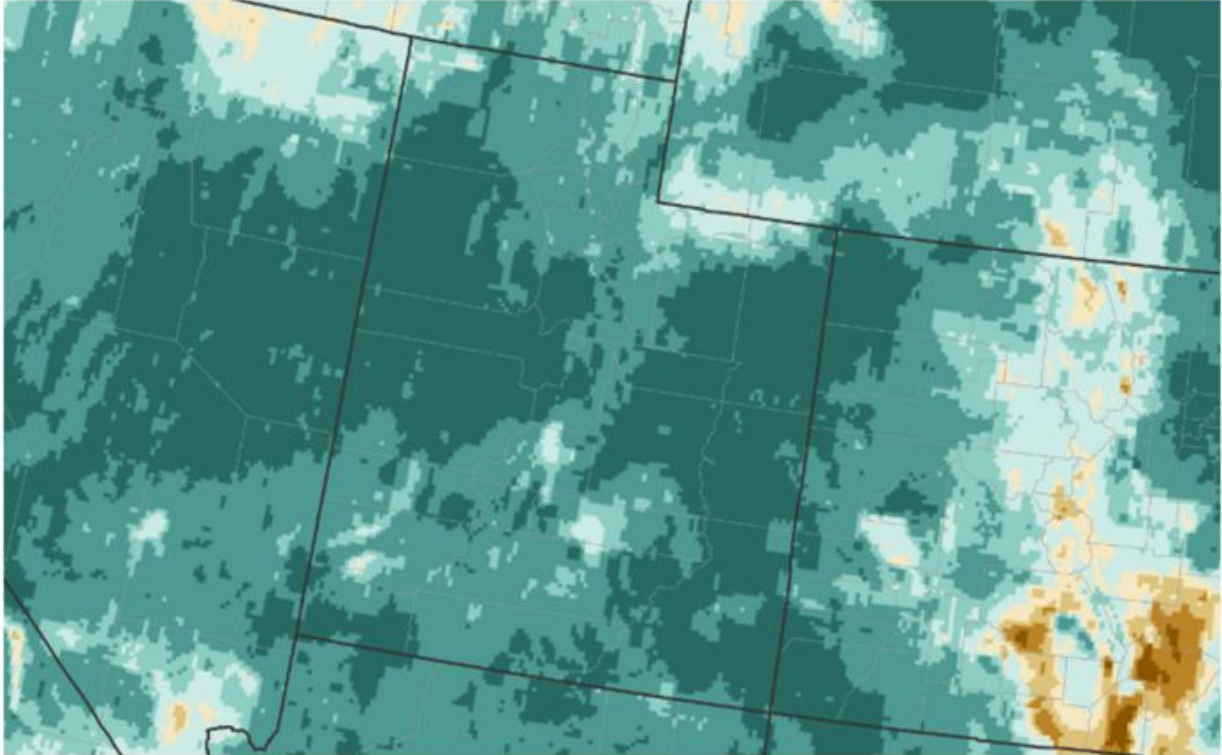
Precipitation 7 day history



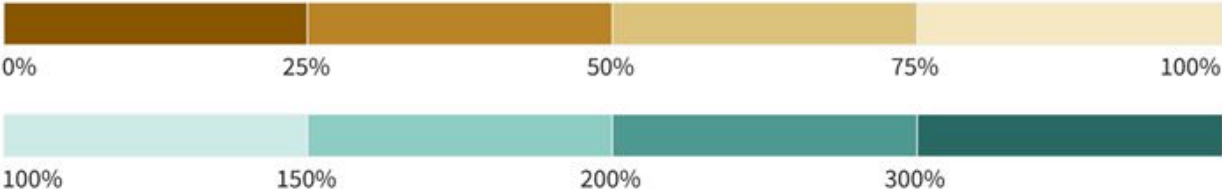
Agency - Utah Climate Center
Presenter - Jon Meyer

Precipitation 30 day history (Percent of Average)

30-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)

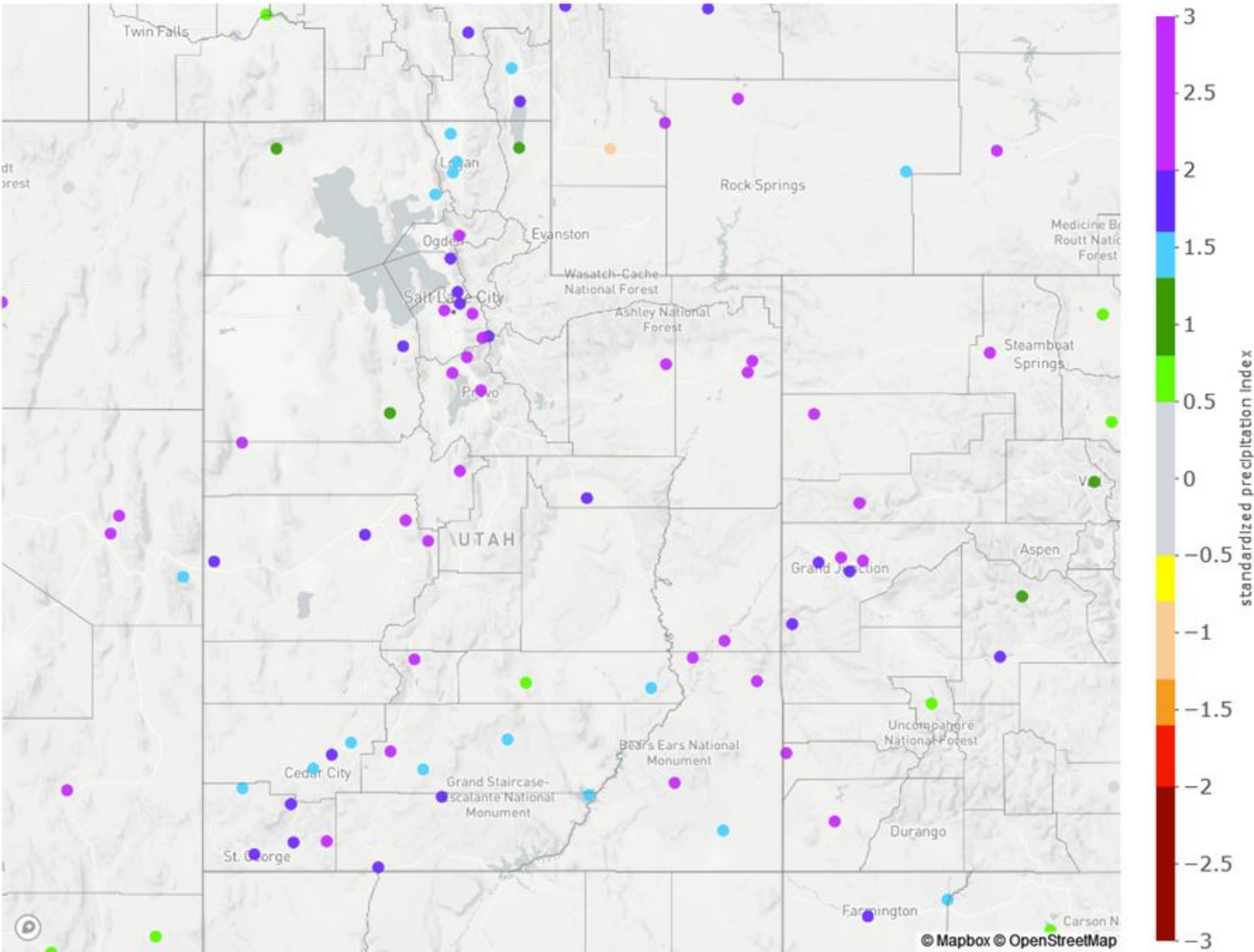


Source(s): UC Merced, Climate Engine
Data Valid - 01/21/23



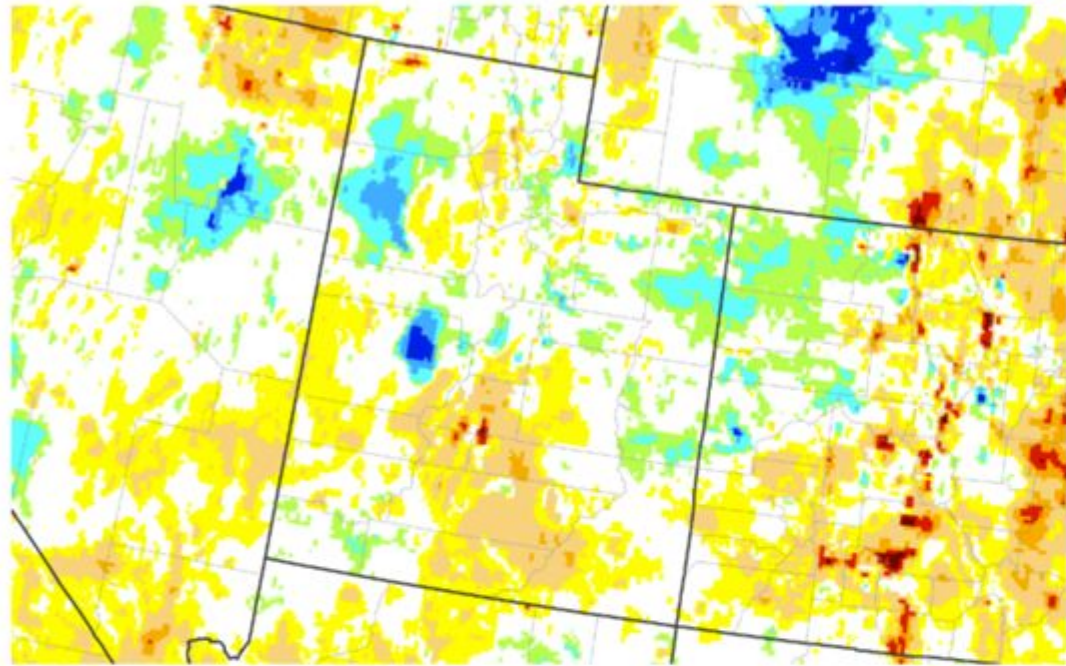
Temperature 30 day (Related to Average)

30-day Standardized Precipitation Index: 2022/12/24 - 2023/01/22



Agency - Utah Climate Center
Presenter - Jon Meyer

Long-Term Multi-Indicator Drought Index (MIDI)



Dry Conditions



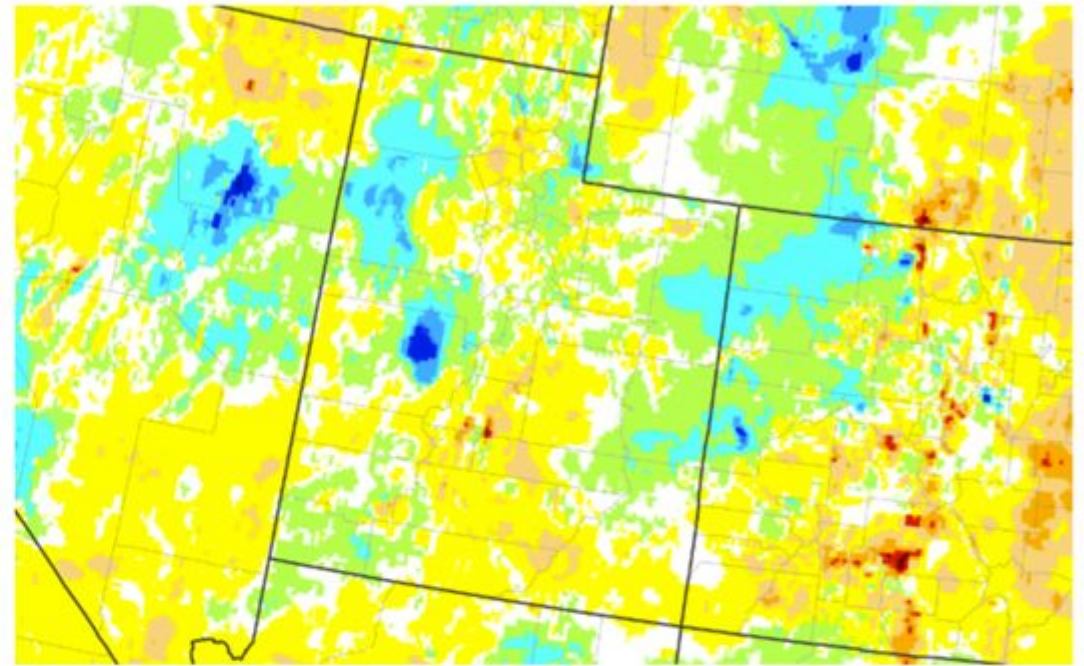
Wet Conditions



Source(s): UC Merced
Data Valid - 01/15/23

Drought.gov

Palmer Drought Severity Index (PDSI)



Dry Conditions (Relative)



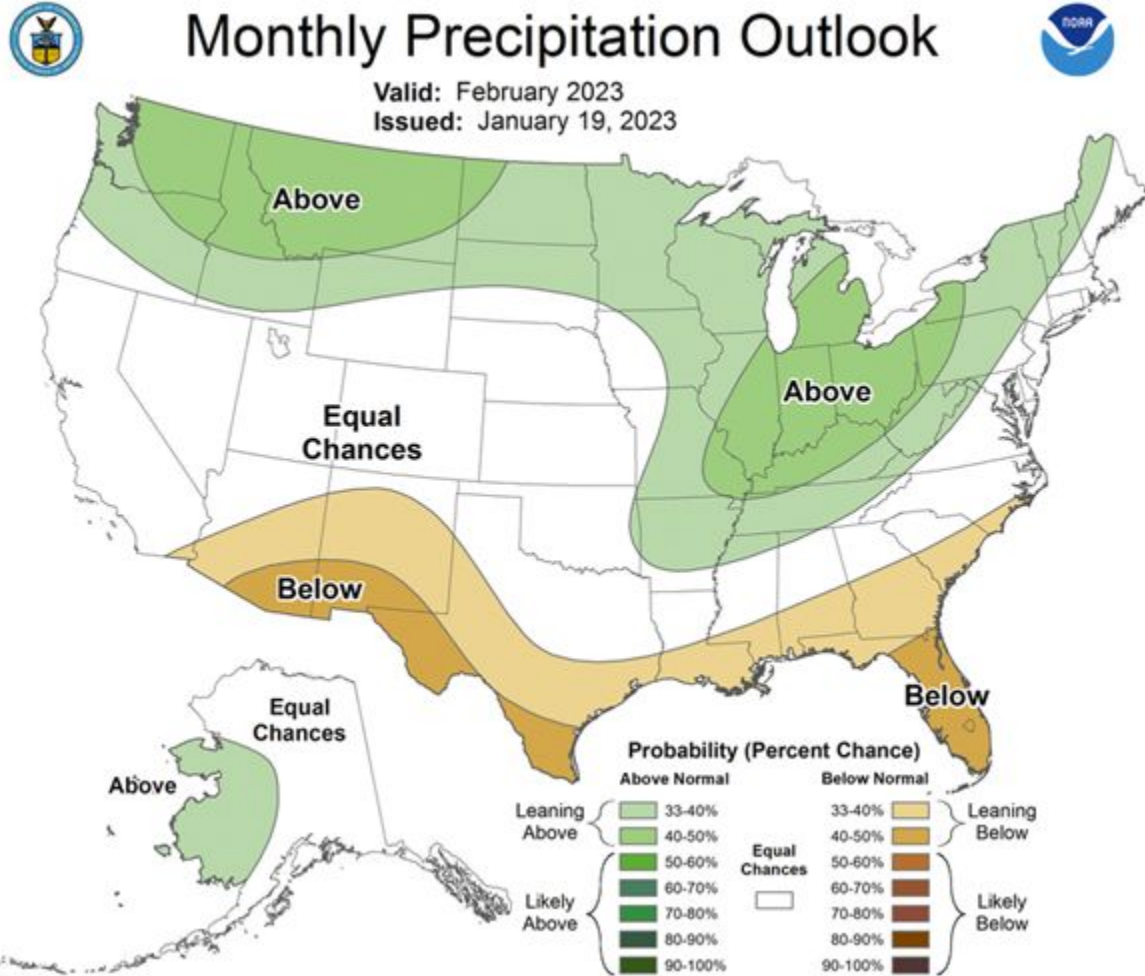
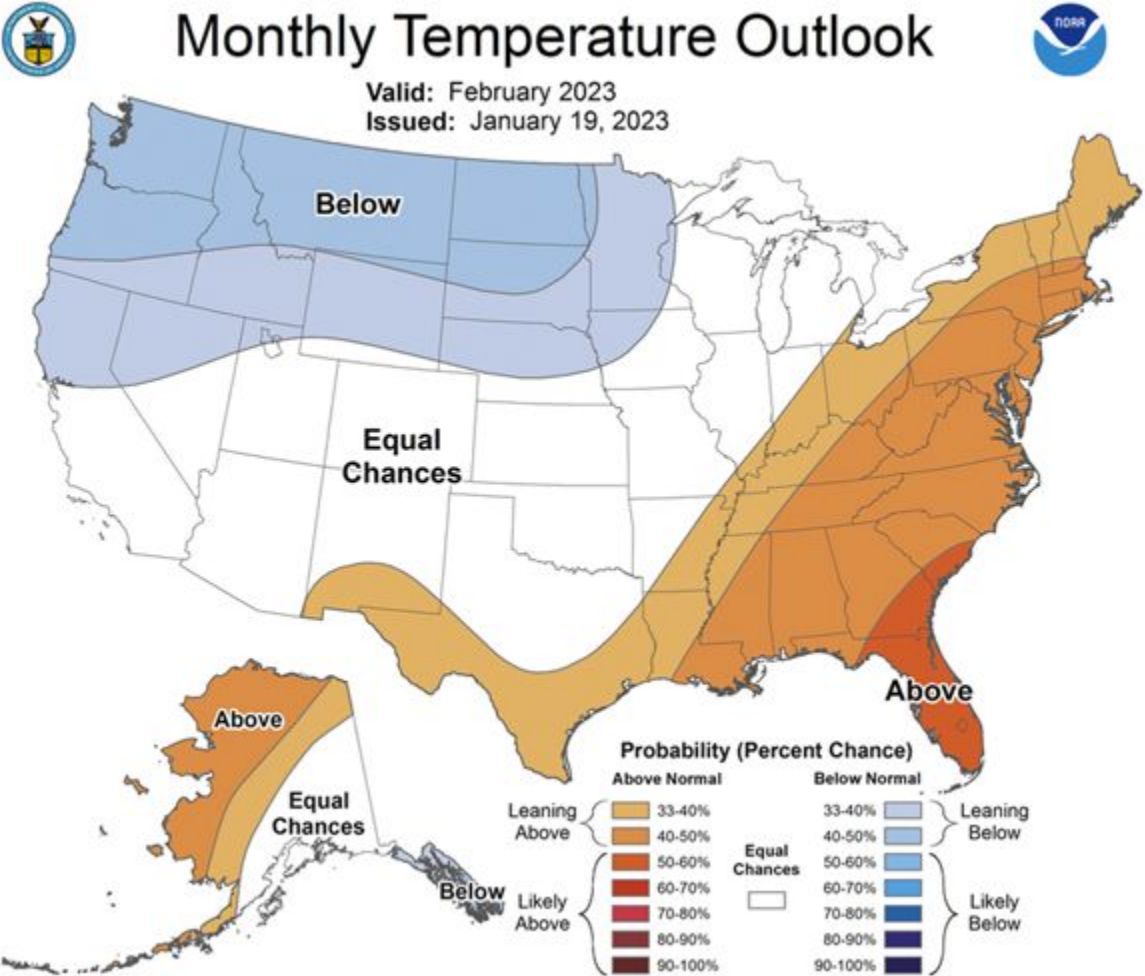
Wet Conditions (Relative)



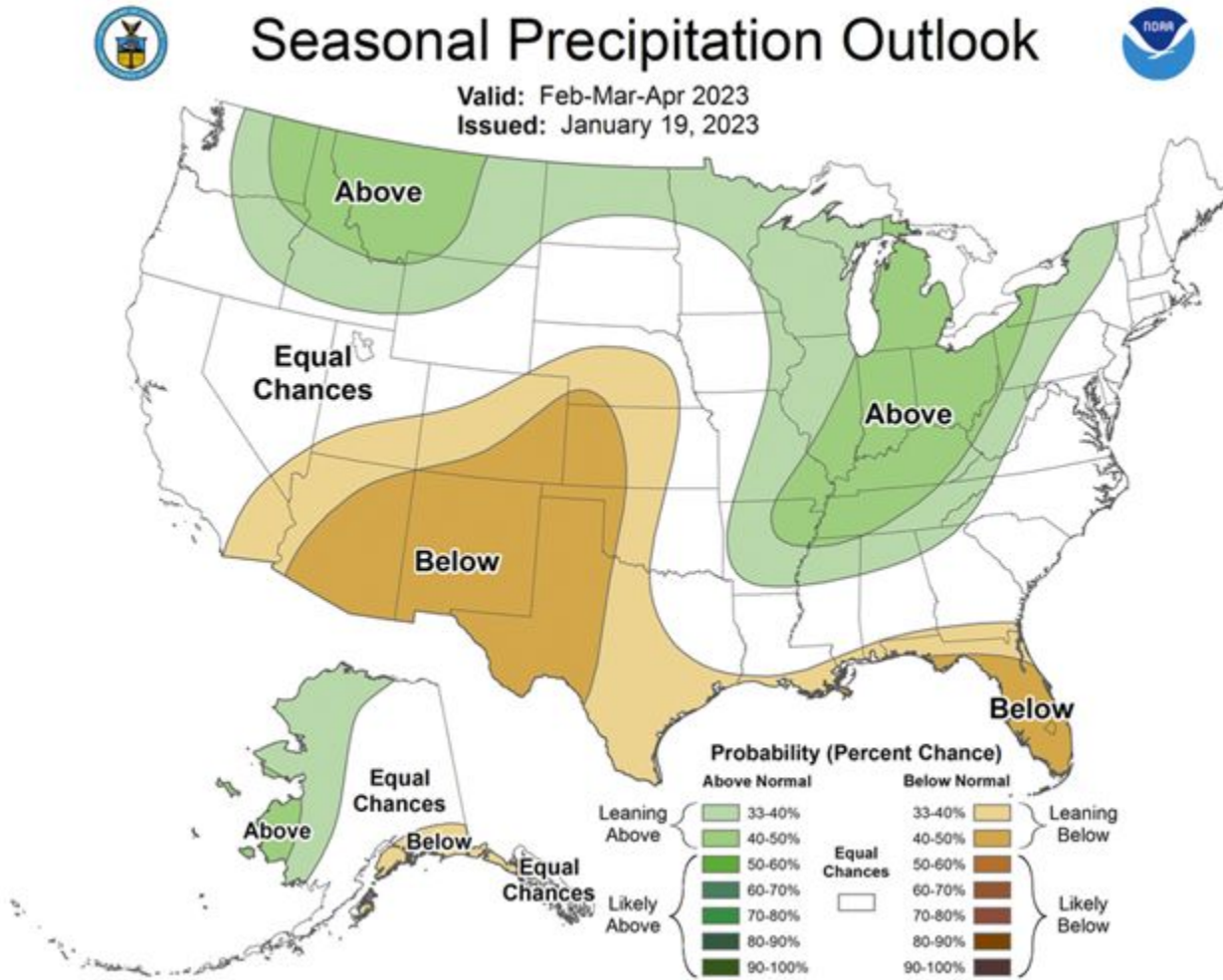
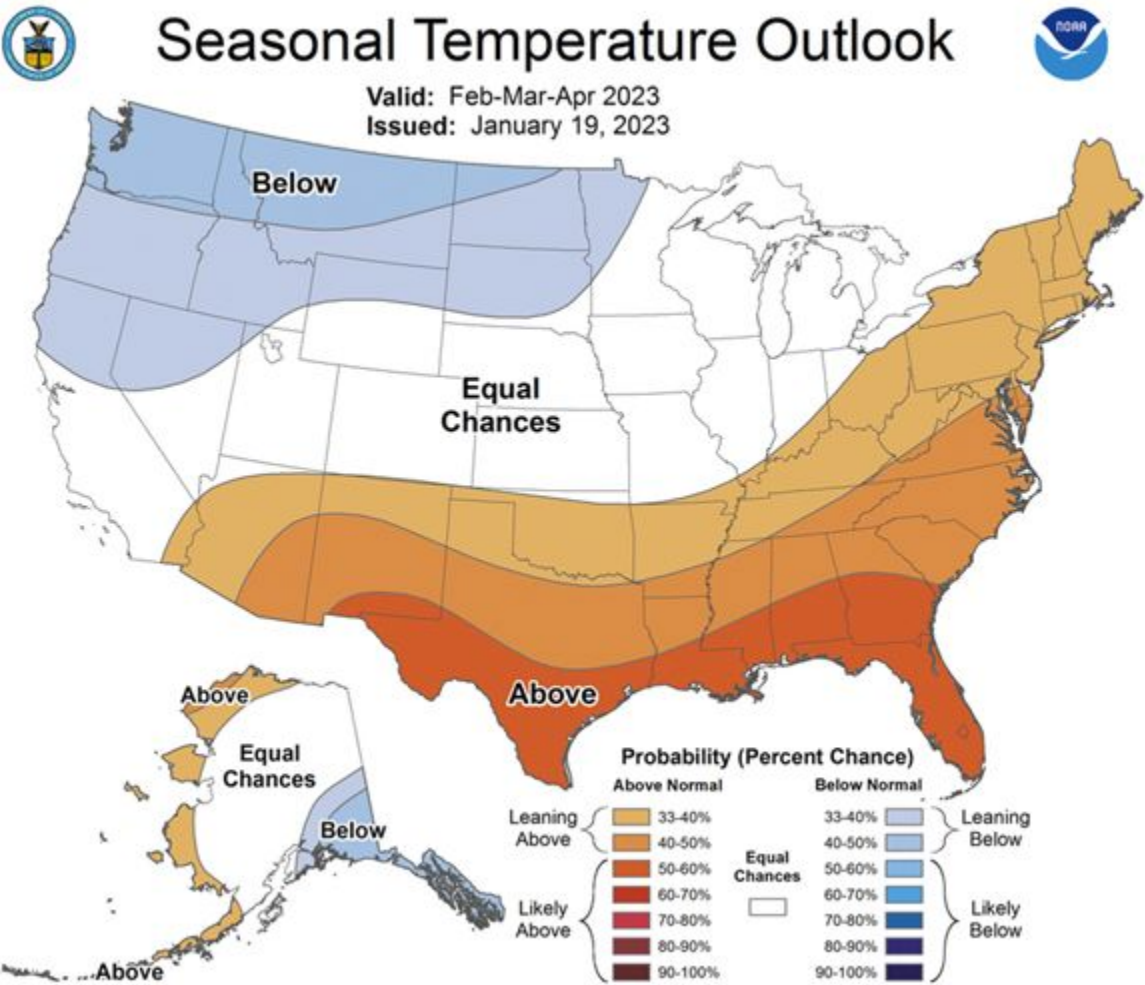
Source(s): UC Merced, Climate Engine
Data Valid - 01/15/23

Drought.gov

CPC February Outlook



CPC Feb-Apr Outlook



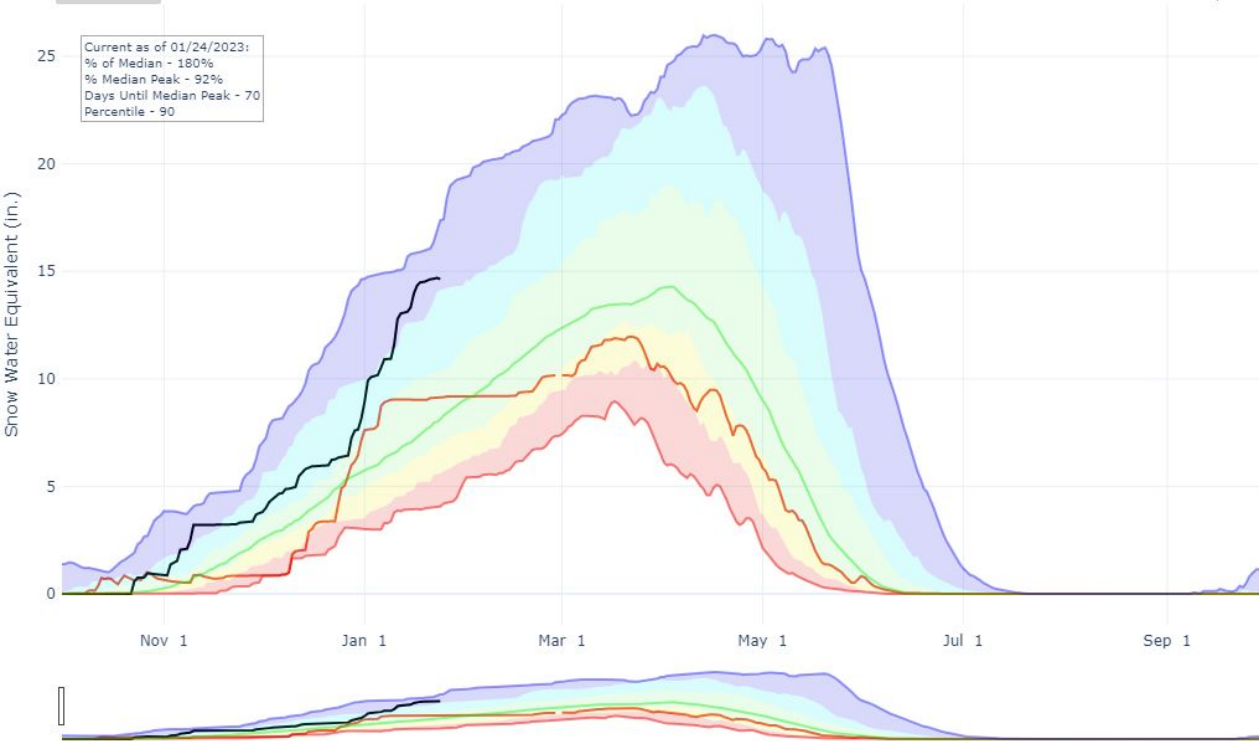
Snowpack

SNOW WATER EQUIVALENT IN STATE OF UTAH

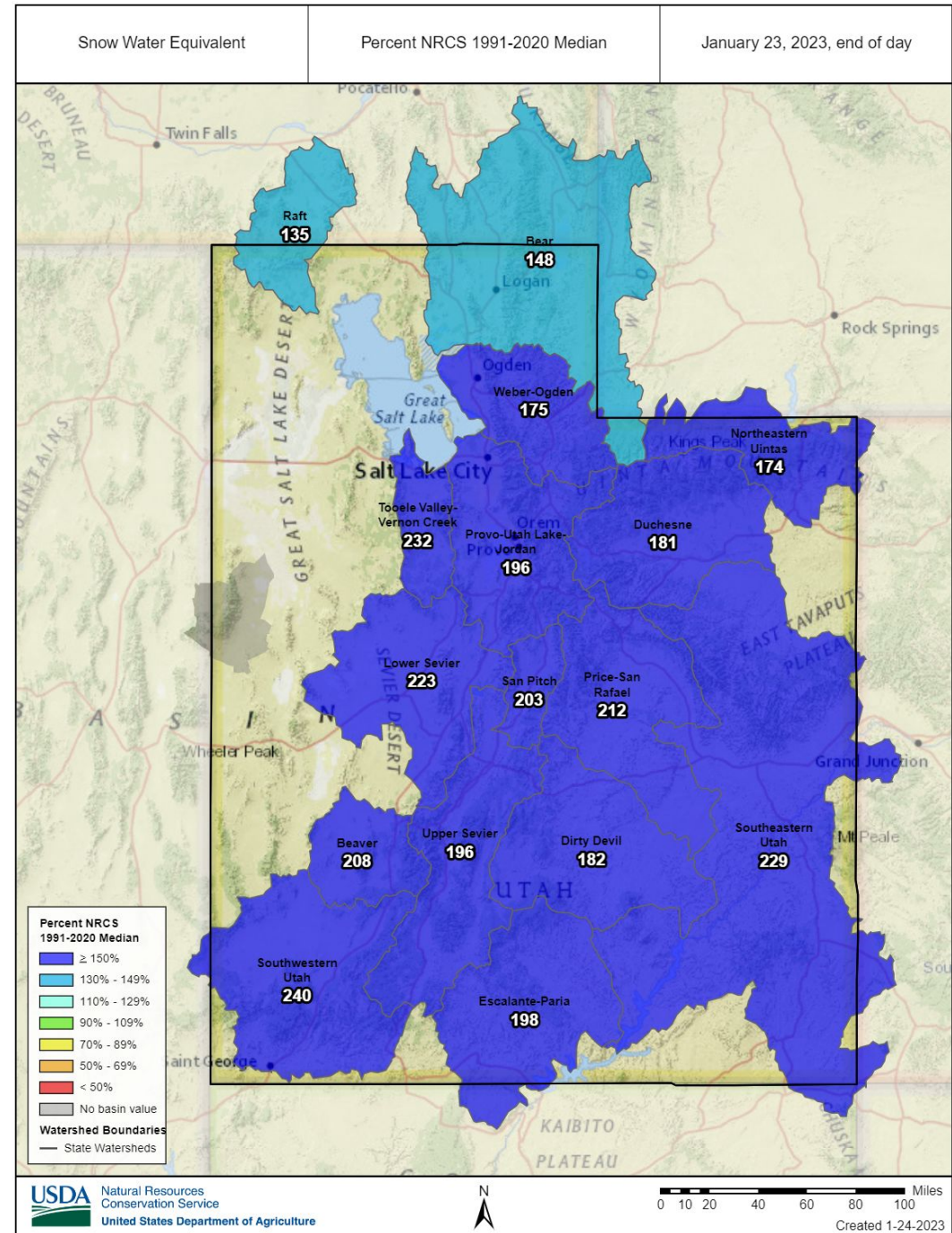
Reset Range

Current as of 01/24/2023:
 % of Median - 180%
 % Median Peak - 92%
 Days Until Median Peak - 70
 Percentile - 90

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



- Station List
- ★ Median Peak S
 - Max
 - Median (POR)
 - Median ('91-'2
 - Min
 - Stats. Shading
 - 2023 (114 site)
 - 2022 (114 site)
 - 2021 (114 site)
 - 2020 (114 site)
 - 2019 (114 site)
 - 2018 (113 site)
 - 2017 (114 site)
 - 2016 (114 site)
 - 2015 (114 site)
 - 2014 (114 site)
 - 2013 (114 site)
 - 2012 (114 site)
 - 2011 (114 site)
 - 2010 (105 site)
 - 2009 (99 sites)
 - 2008 (99 sites)
 - 2007 (96 sites)
 - 2006 (96 sites)
 - 2005 (96 sites)
 - 2004 (92 sites)



- Percent NRCS 1991-2020 Median
- ≥ 150%
 - 130% - 149%
 - 110% - 129%
 - 90% - 109%
 - 70% - 89%
 - 50% - 69%
 - < 50%
 - No basin value
 - Watershed Boundaries
 - State Watersheds



Agency - NRCS Snow Survey
 Presenter - Jordan Clayton

SNOW WATER EQUIVALENT IN STATE OF UTAH

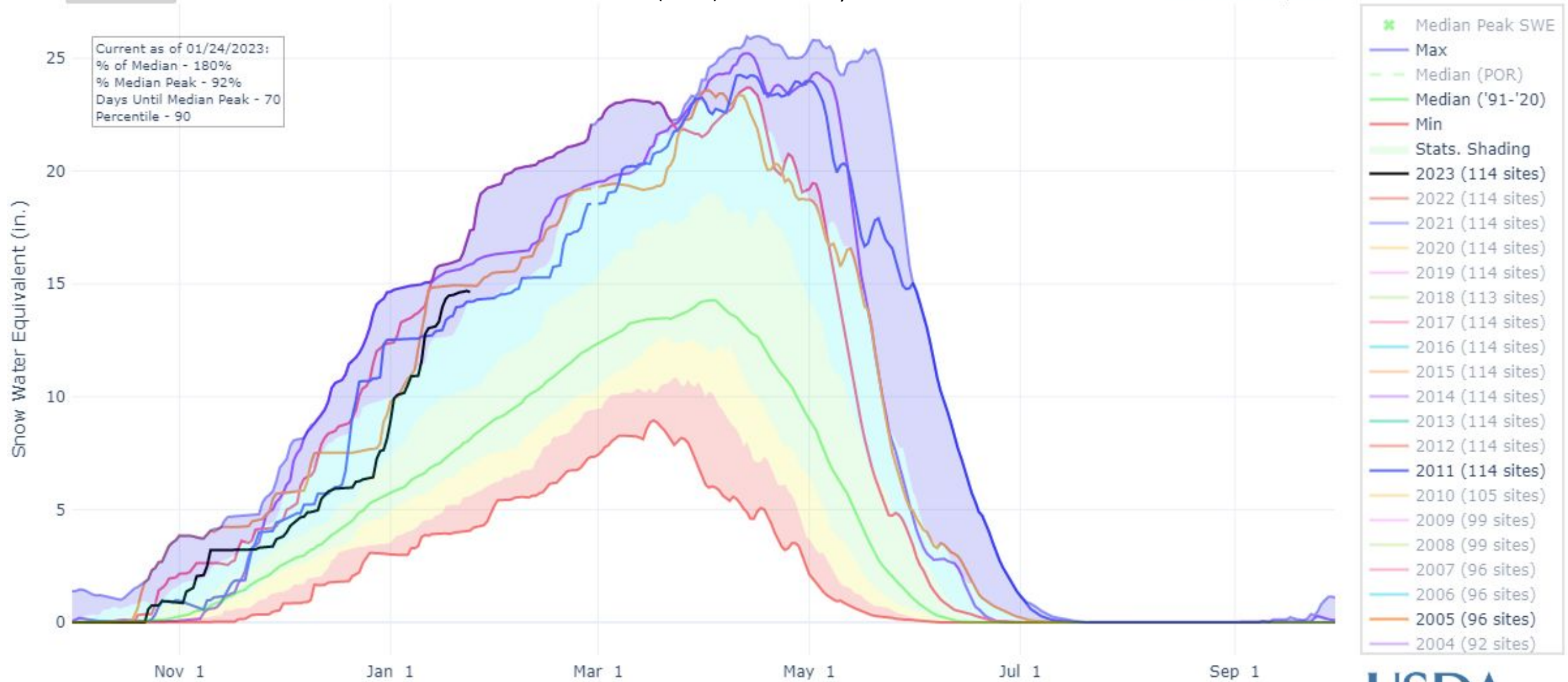
Reset Range

Current as of 01/24/2023:
% of Median - 180%
% Median Peak - 92%
Days Until Median Peak - 70
Percentile - 90

- Only years with more SWE on this date: 1984, 1997, & 2005
- Slightly higher than 2011
- Best winter (so far) in almost 20 years!

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

Station List

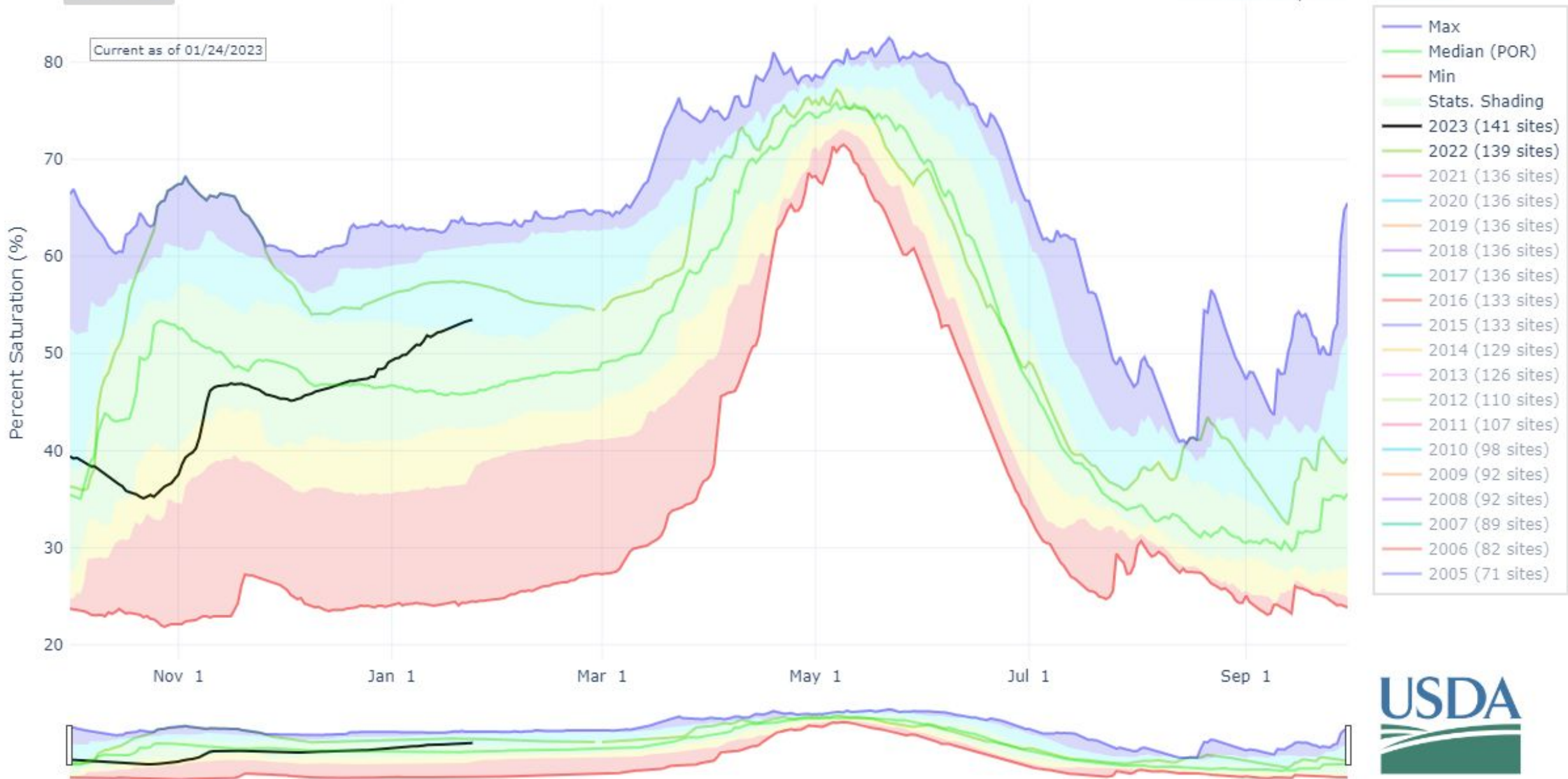


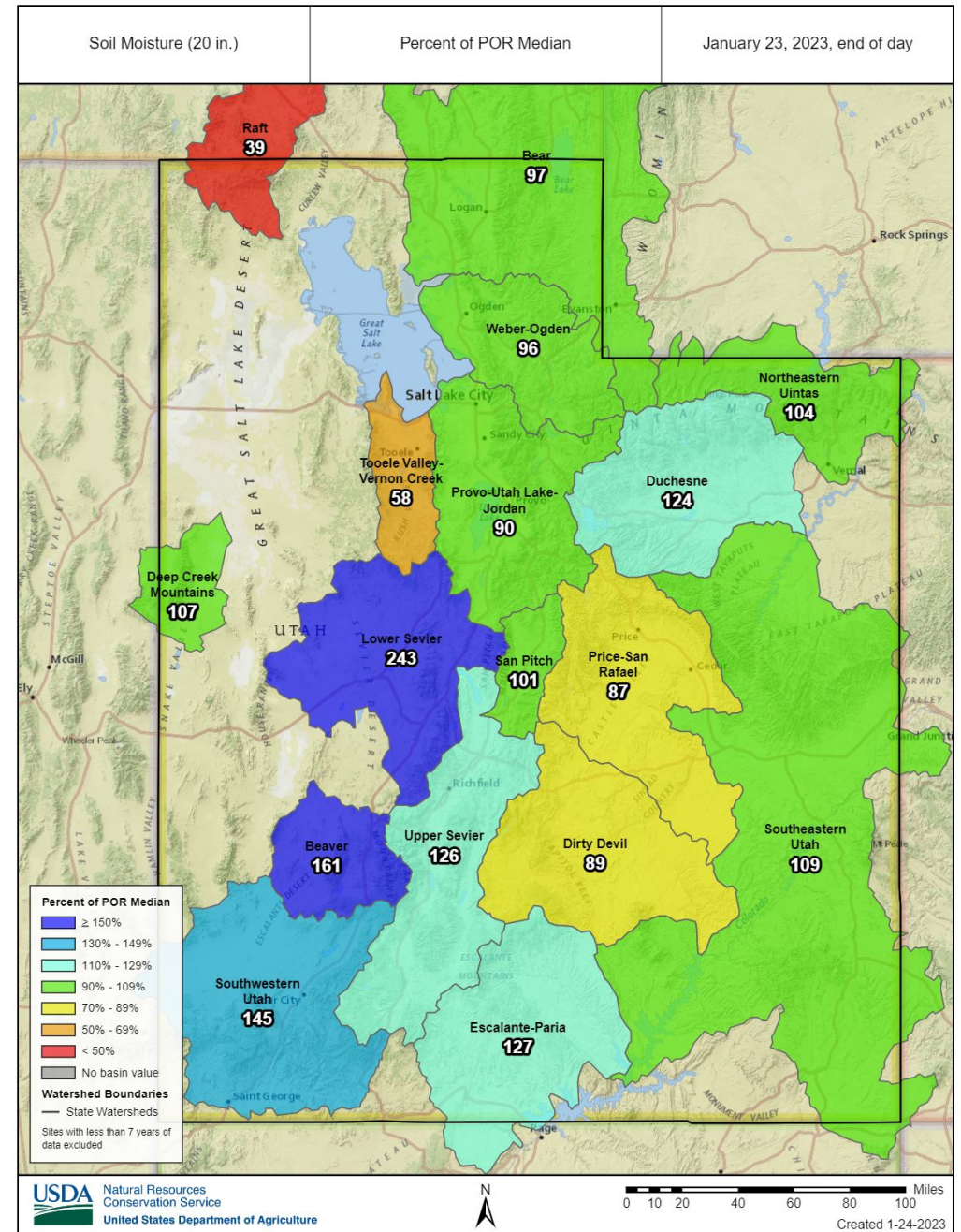
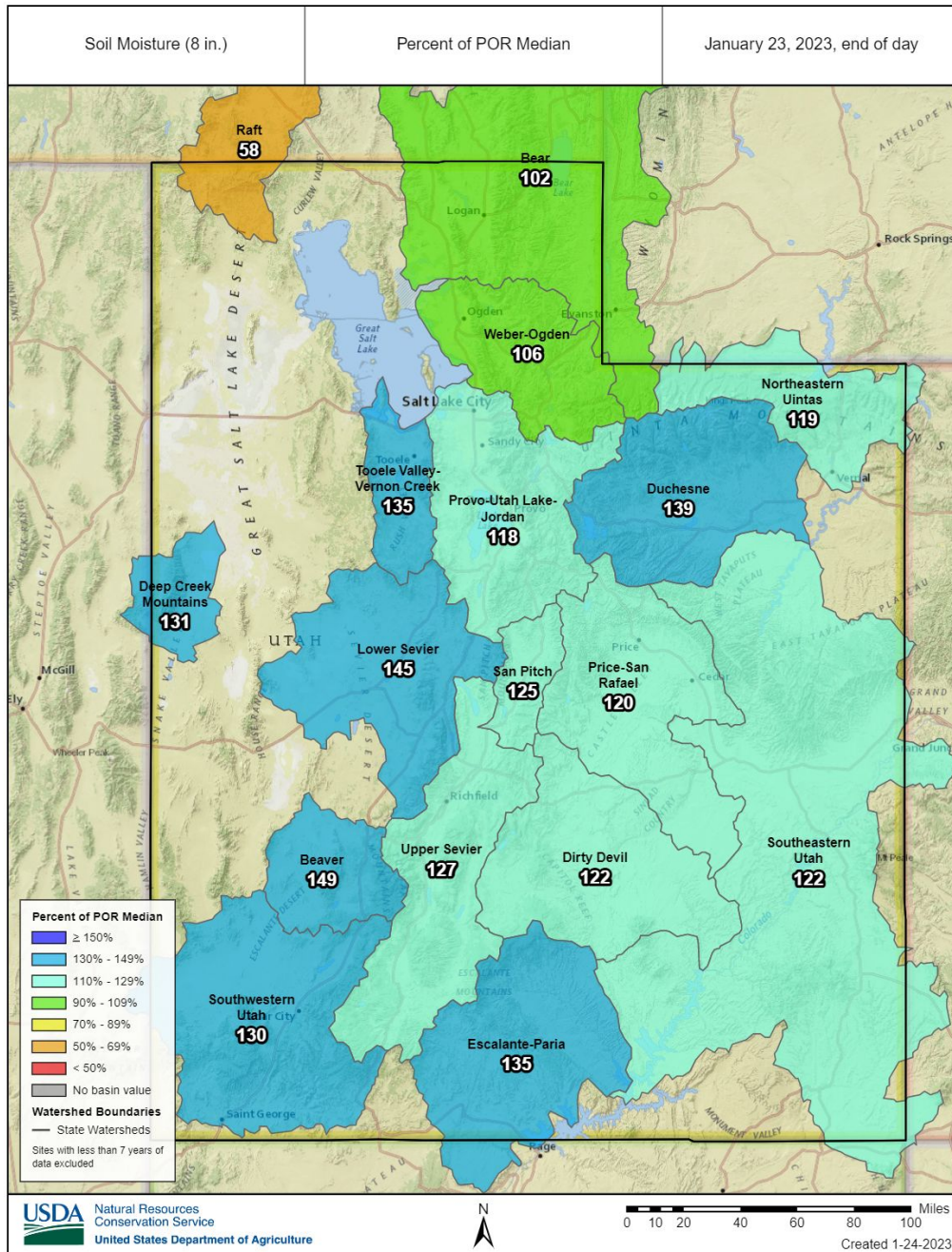
DEPTH AVERAGED SOIL SATURATION IN STATE OF UTAH

Reset Range

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

Station List



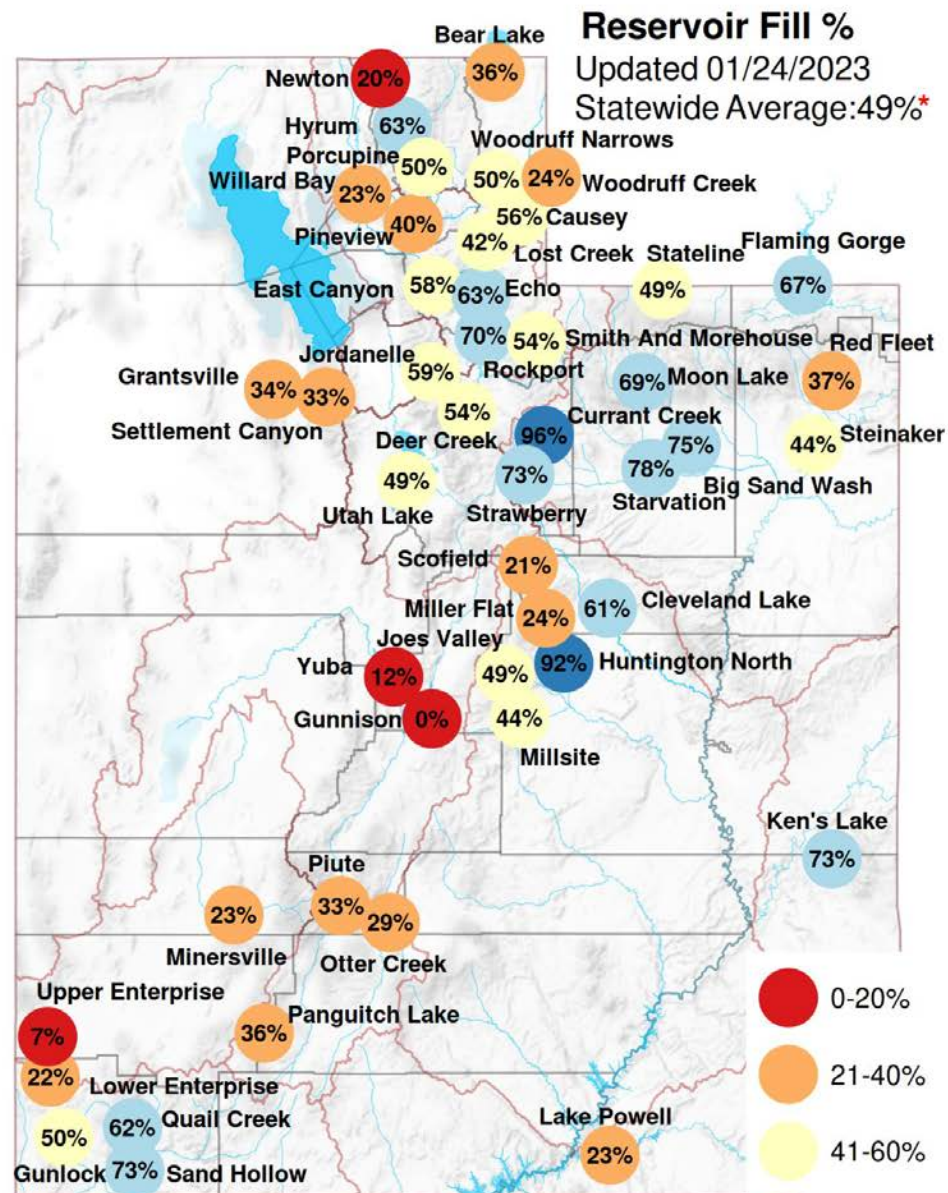


Reservoir levels

Current statewide average 49%

This time last year 47%

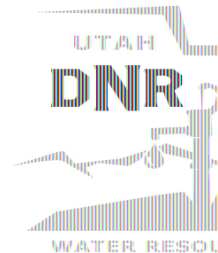
Median this time of year 58%



Data Sources: water.utah.gov/reservoirlevels

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

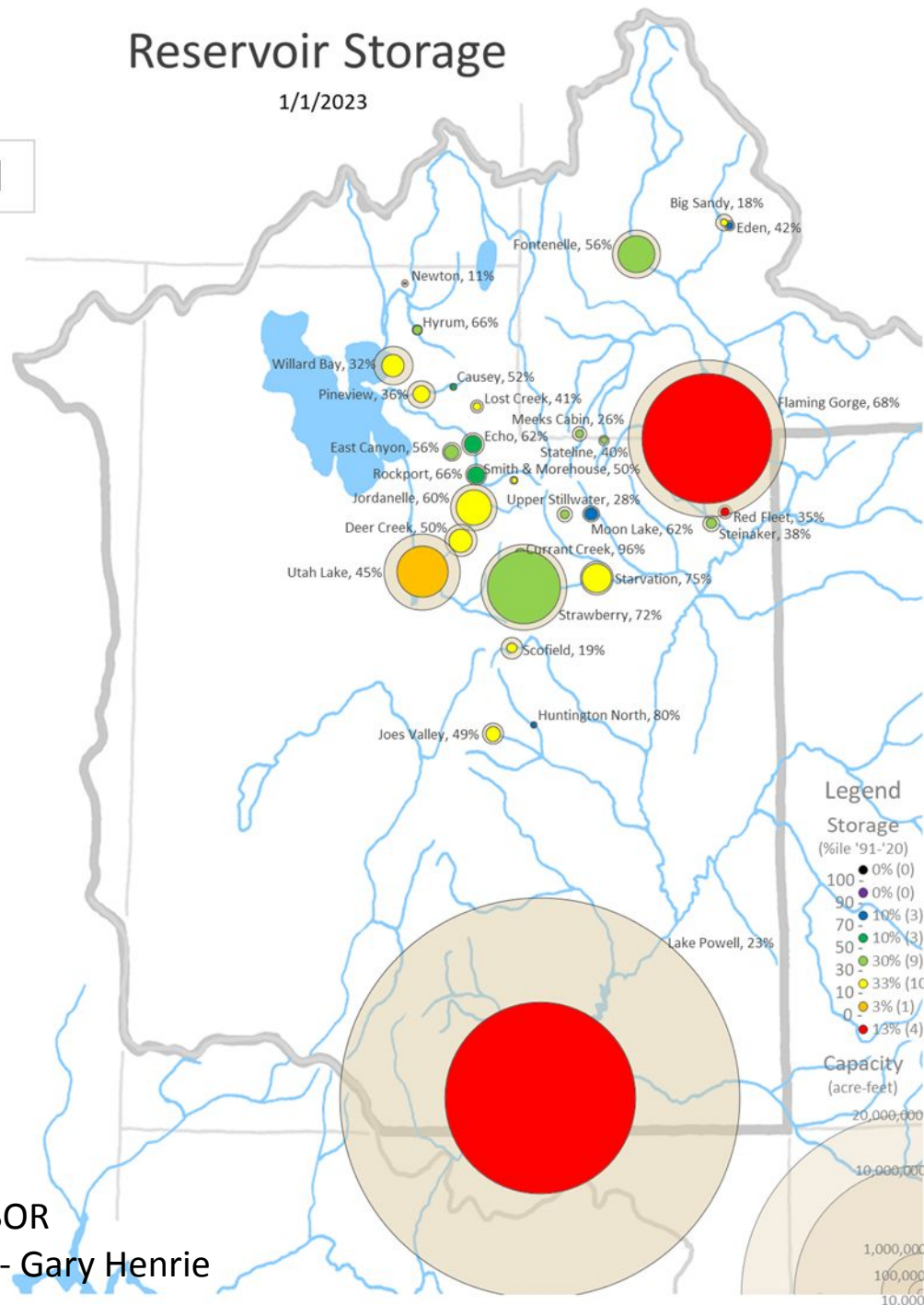
Total capacity including these is 38%



Reservoir Storage

1/1/2023

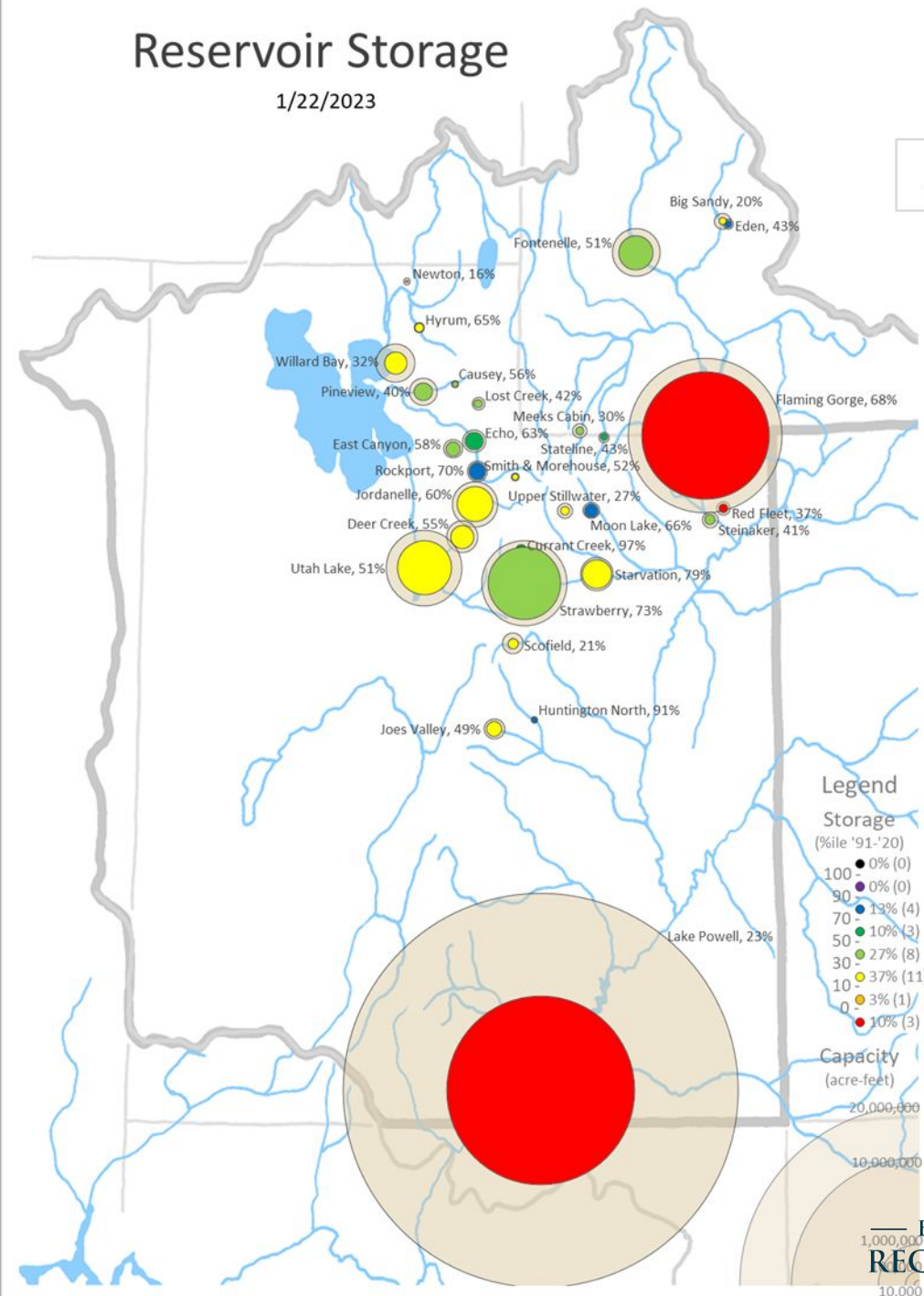
56% full



Reservoir Storage

1/22/2023

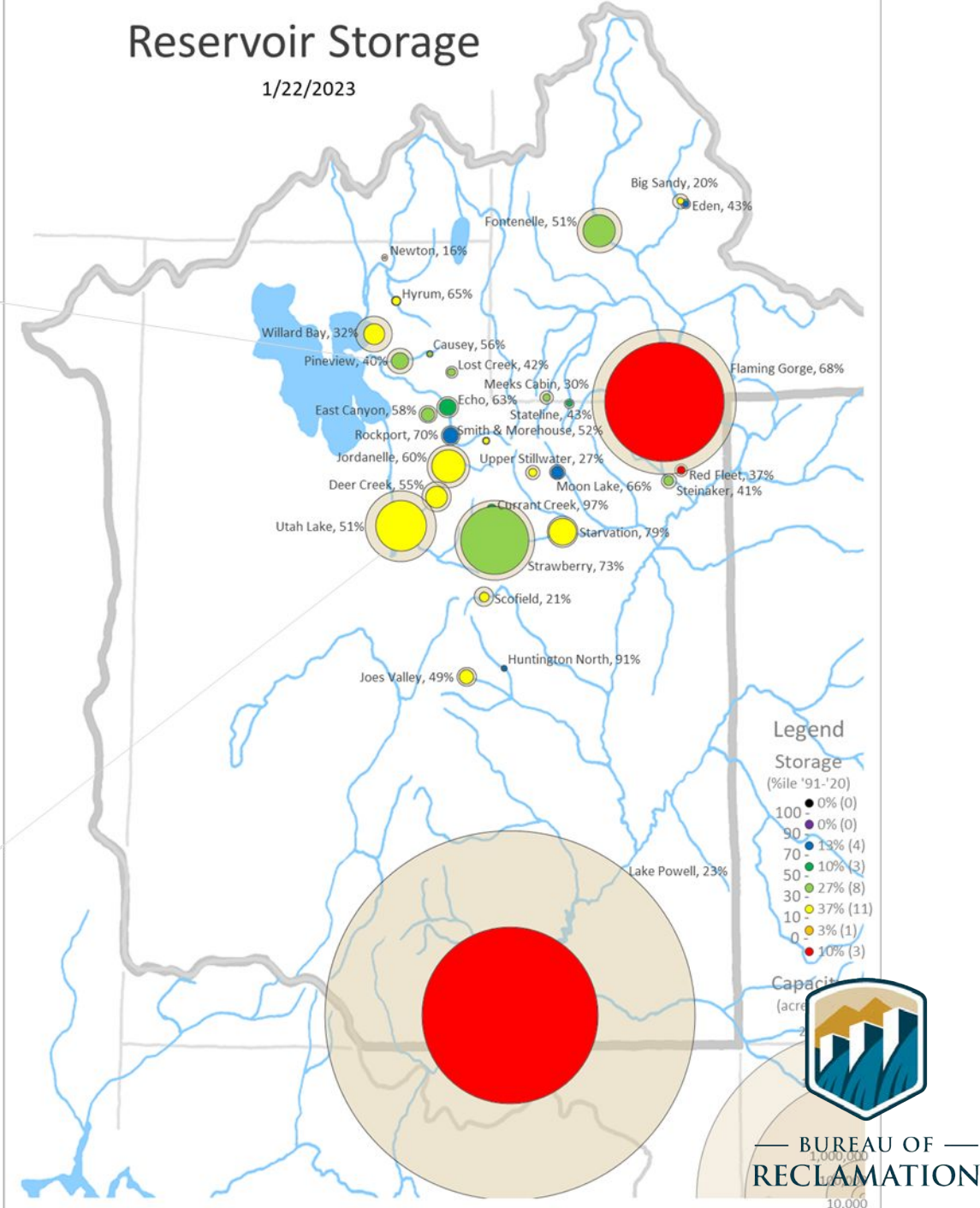
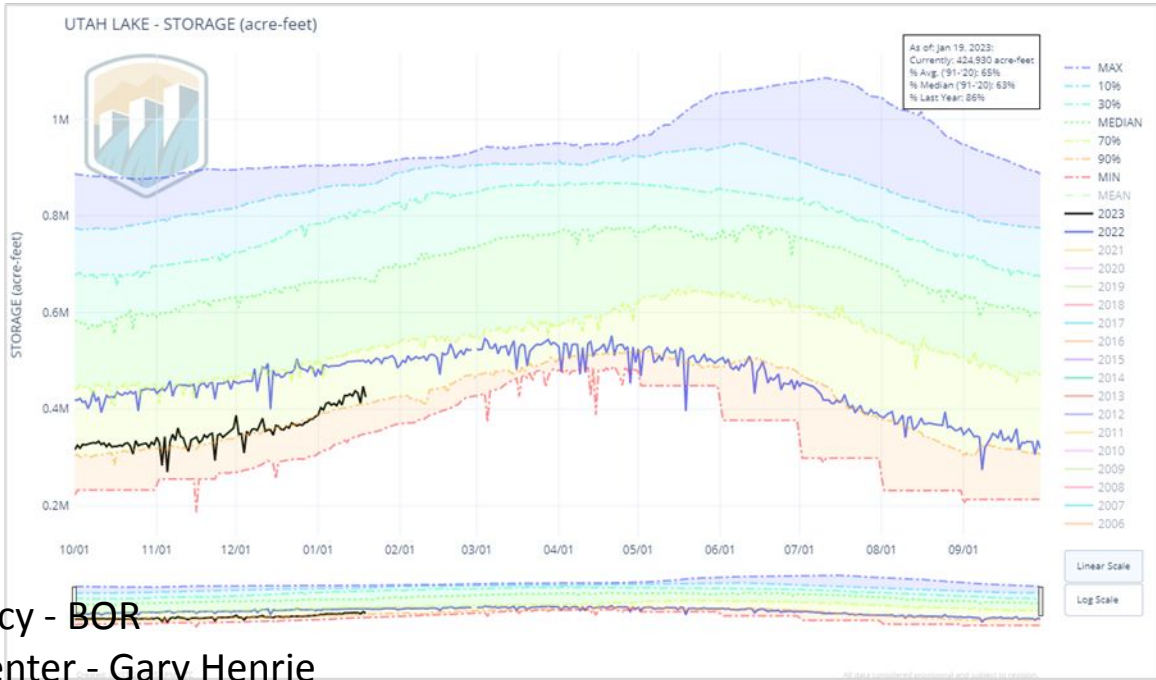
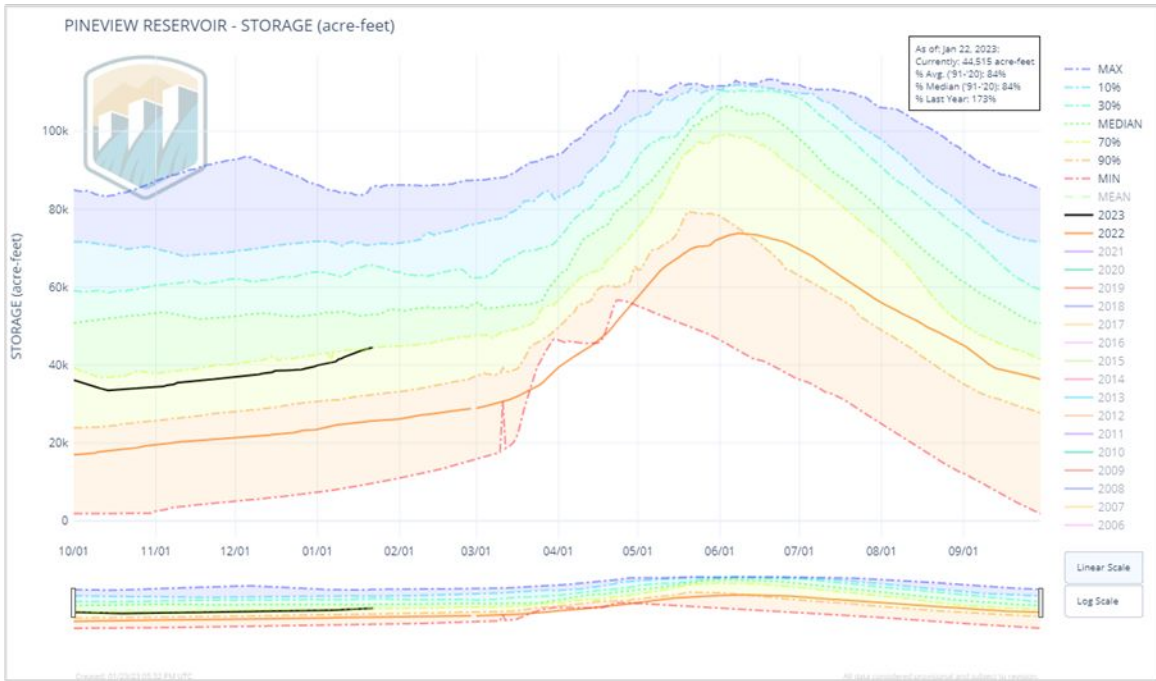
58% full



Agency - BOR
Presenter - Gary Henrie

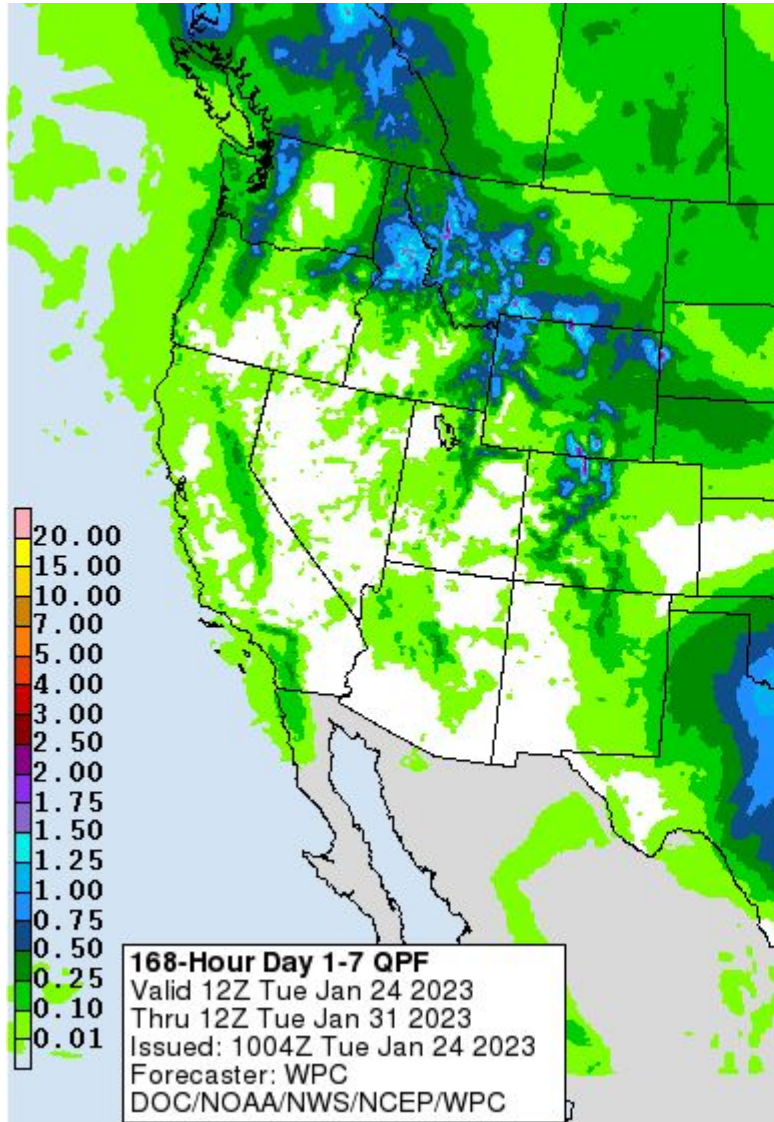


BUREAU OF RECLAMATION



Agency - BOR
 Presenter - Gary Henrie

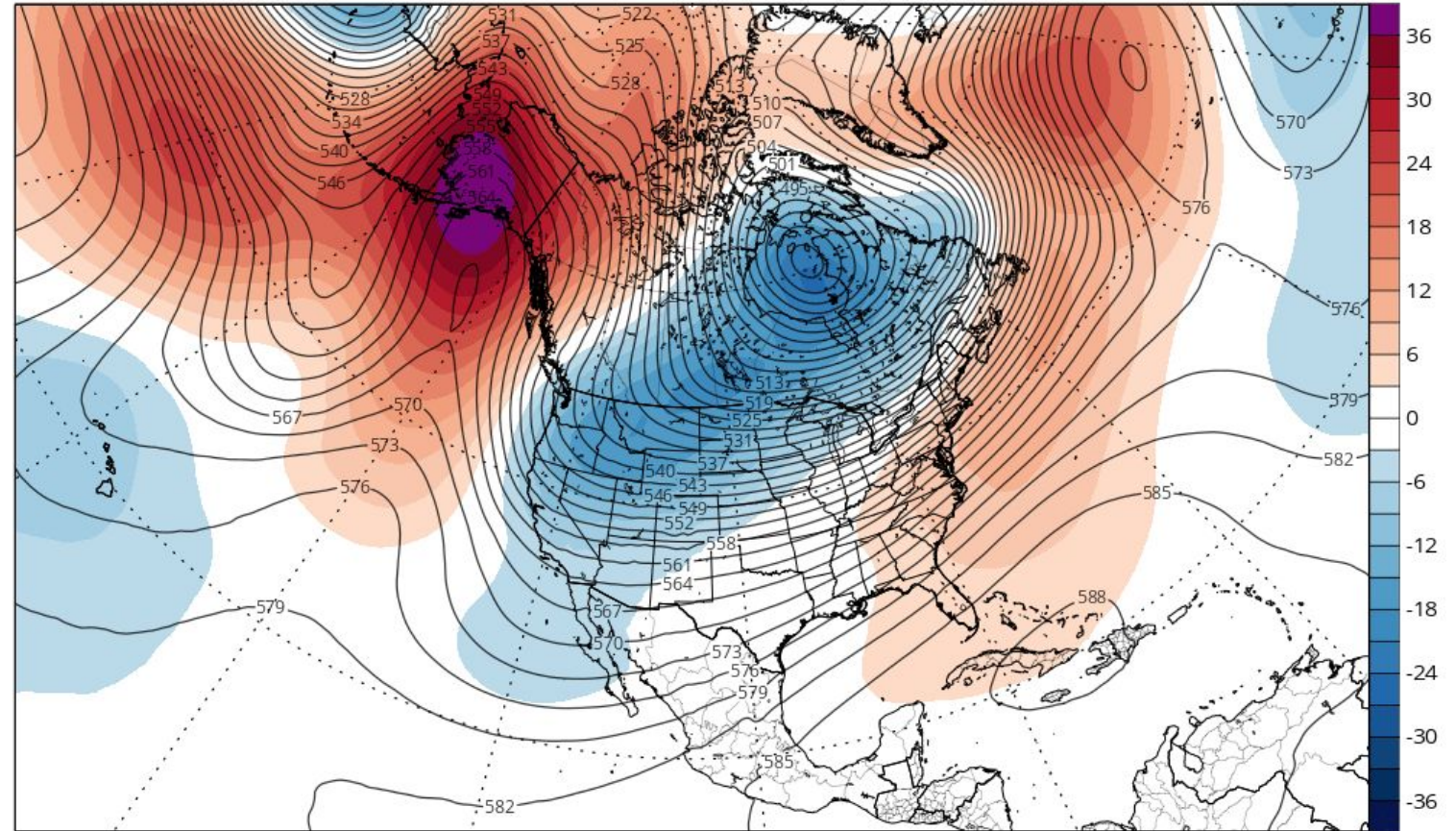
Weather Forecast Office Utah Day 1-7 Outlook



GEFS 500mb Geopotential Height & Anomaly (dam) (based on CFSR 1981-2010 Climatology)

Init: 12z Jan 24 2023 Forecast Hour: [132] valid at 00z Mon, Jan 30 2023

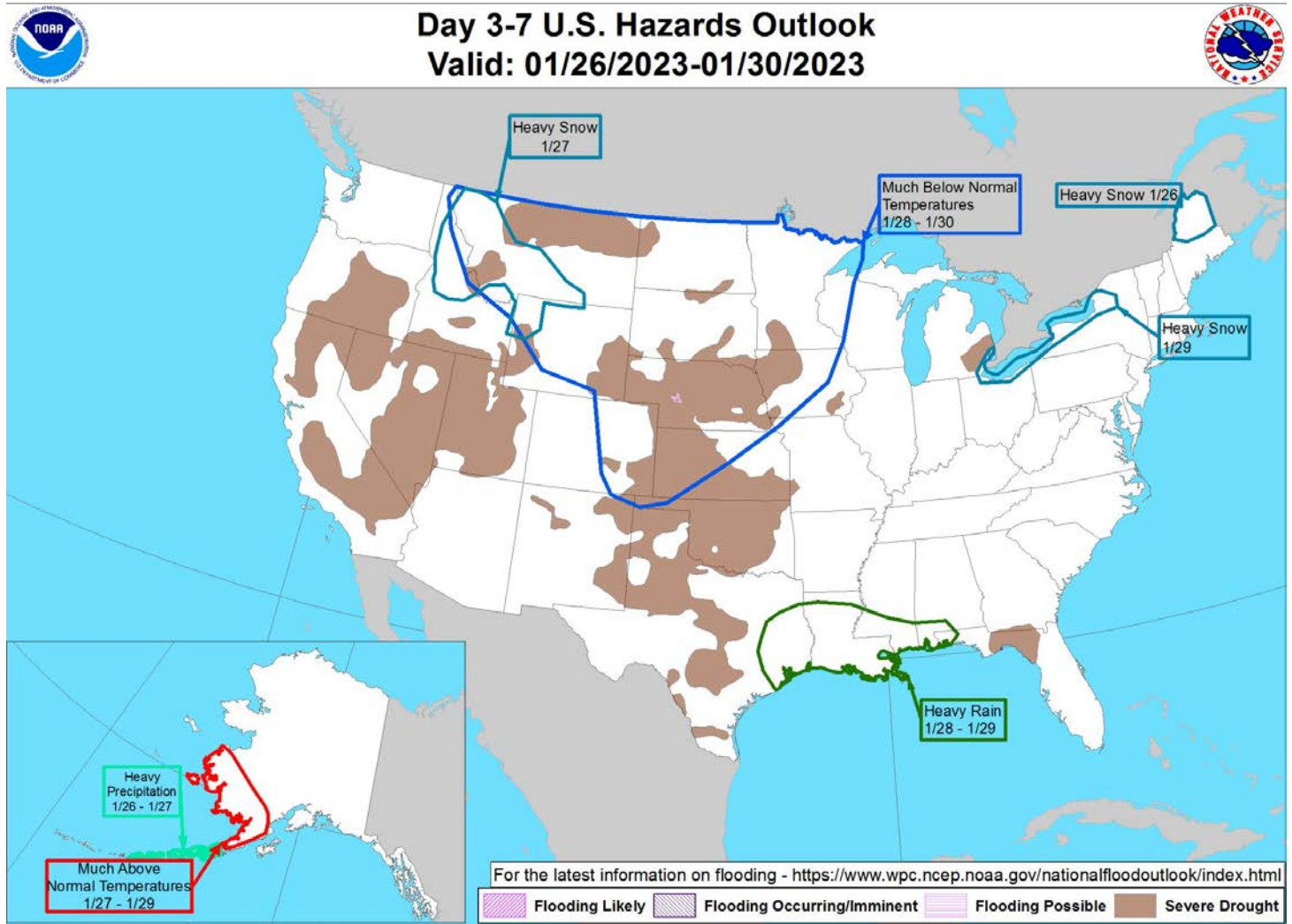
TROPICALTIDBITS.COM



Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

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



Weather Prediction Center
Made: 01/23/2023 3PM EST

Follow us: www.facebook.com/NOAAWeather
www.wpc.ncep.noaa.gov

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

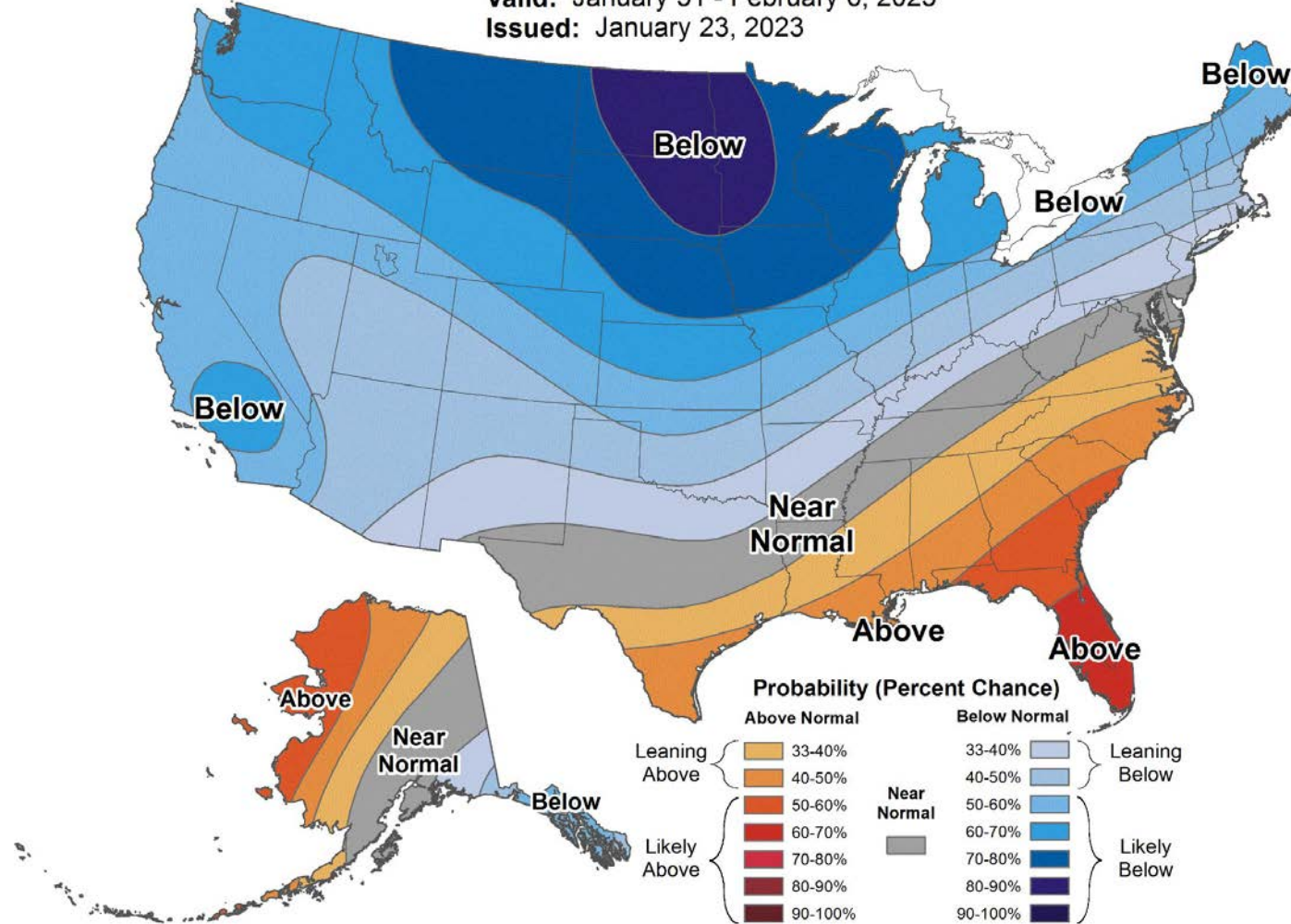
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



8-14 Day Temperature Outlook



Valid: January 31 - February 6, 2023
Issued: January 23, 2023



Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

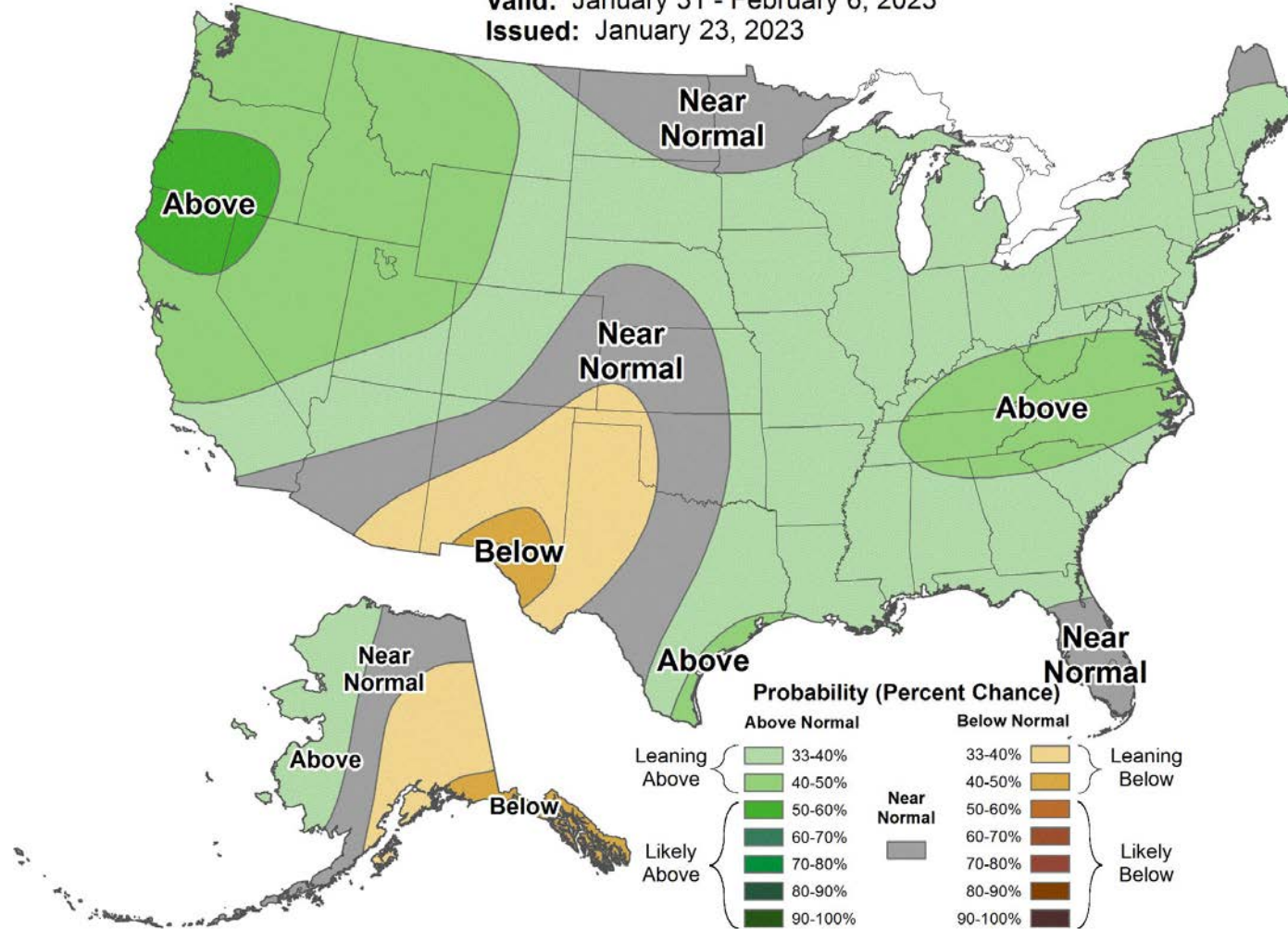
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



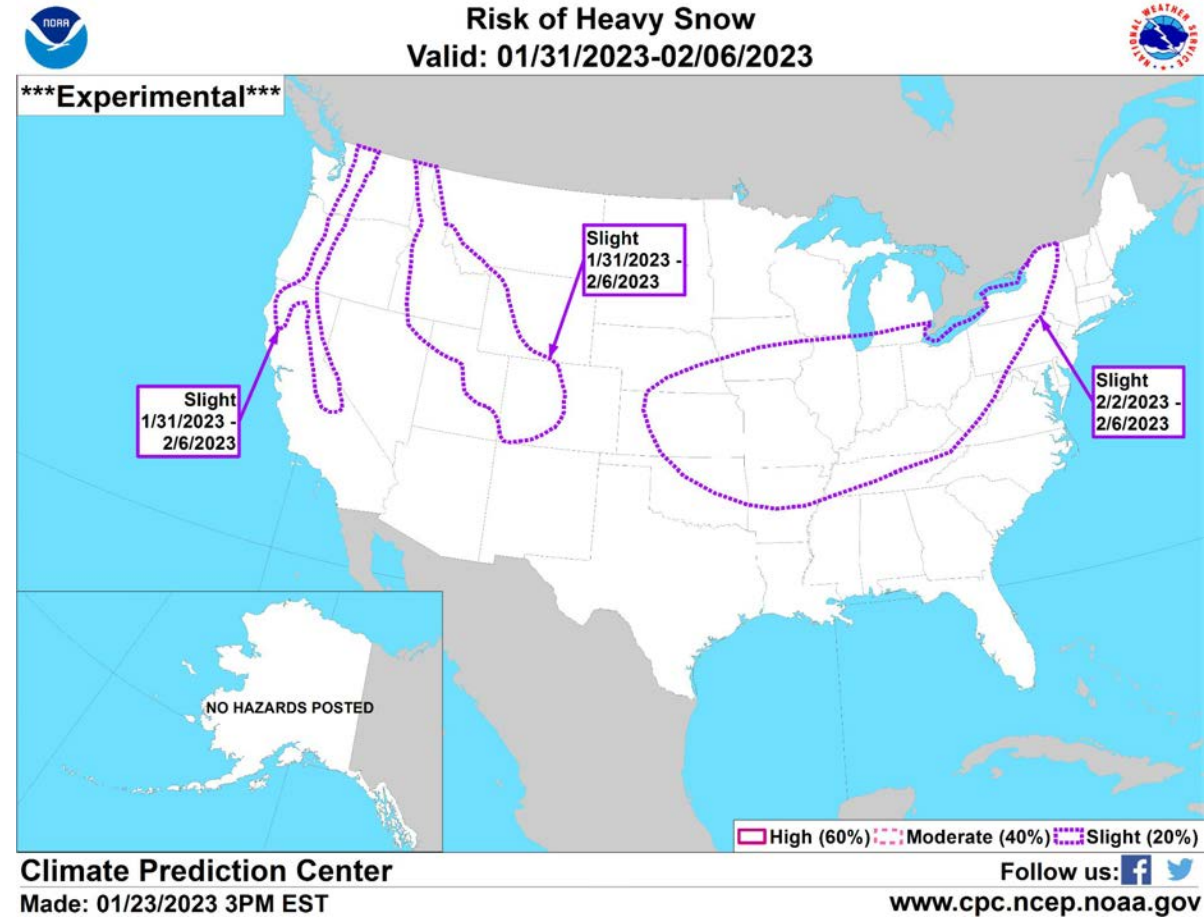
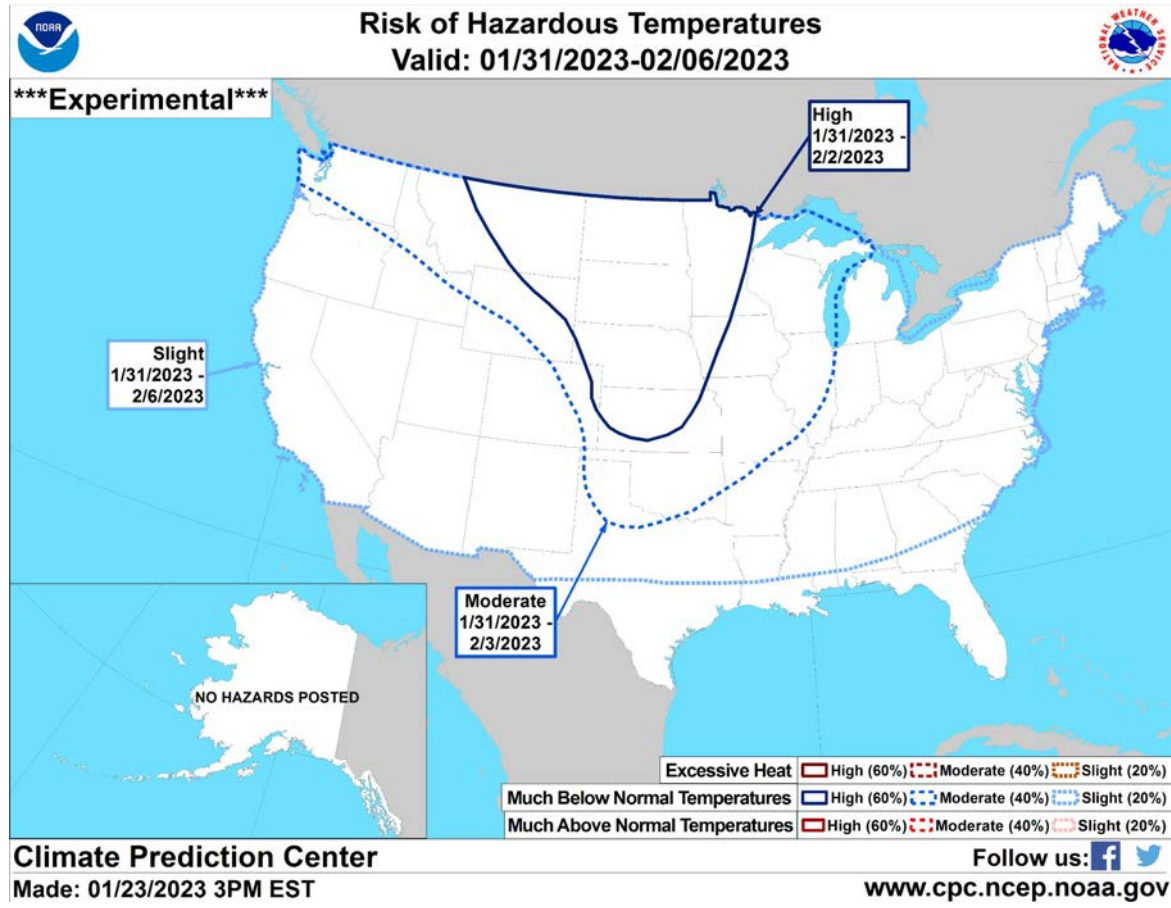
8-14 Day Precipitation Outlook



Valid: January 31 - February 6, 2023
Issued: January 23, 2023



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



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

Water Supply Forecasts / Runoff (Percent of Average)

Map of seasonal water supply forecasts

Summary of conditions at:

Weber

Bear

Six Creeks

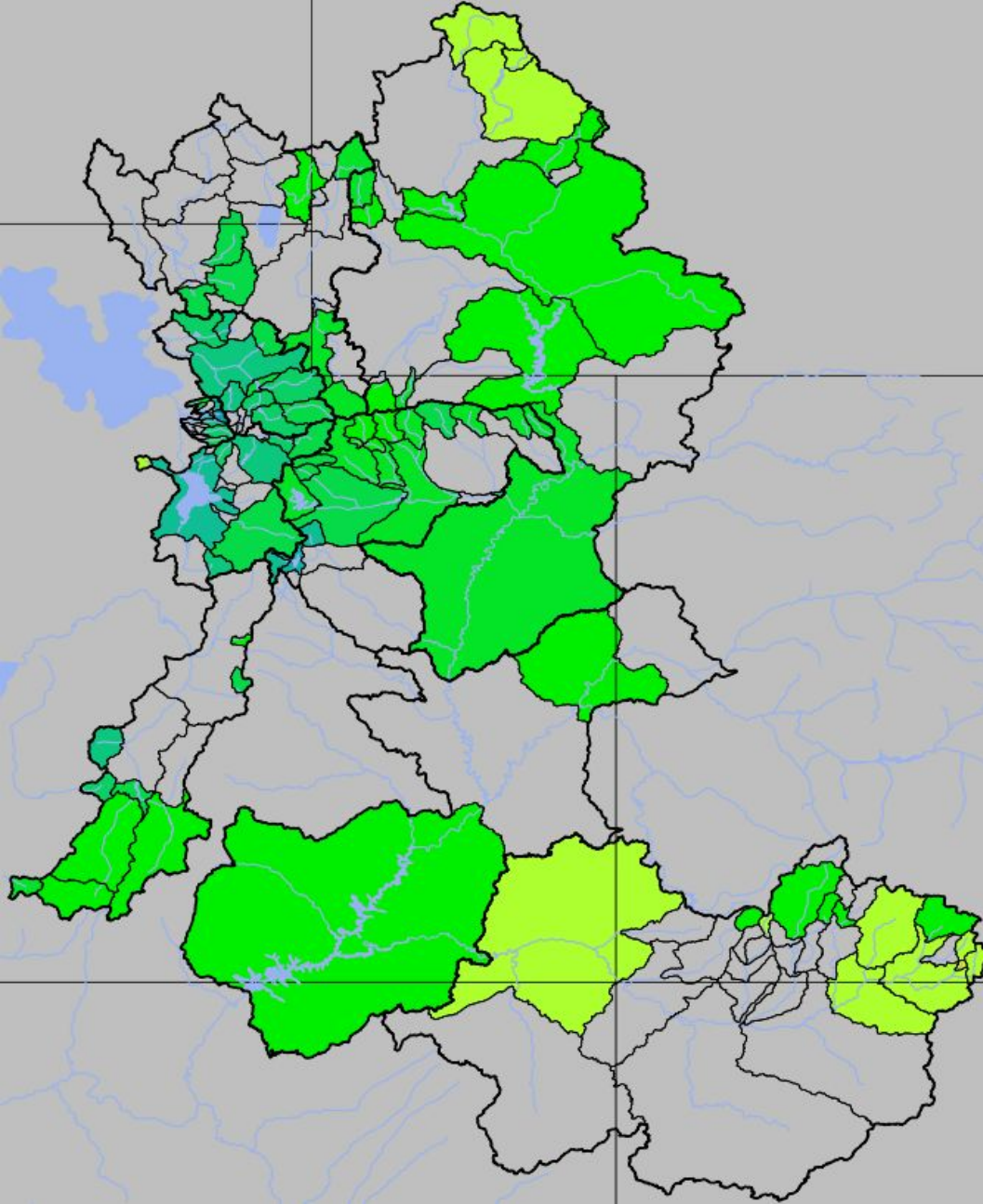
Utah Lake

Sevier

Green River

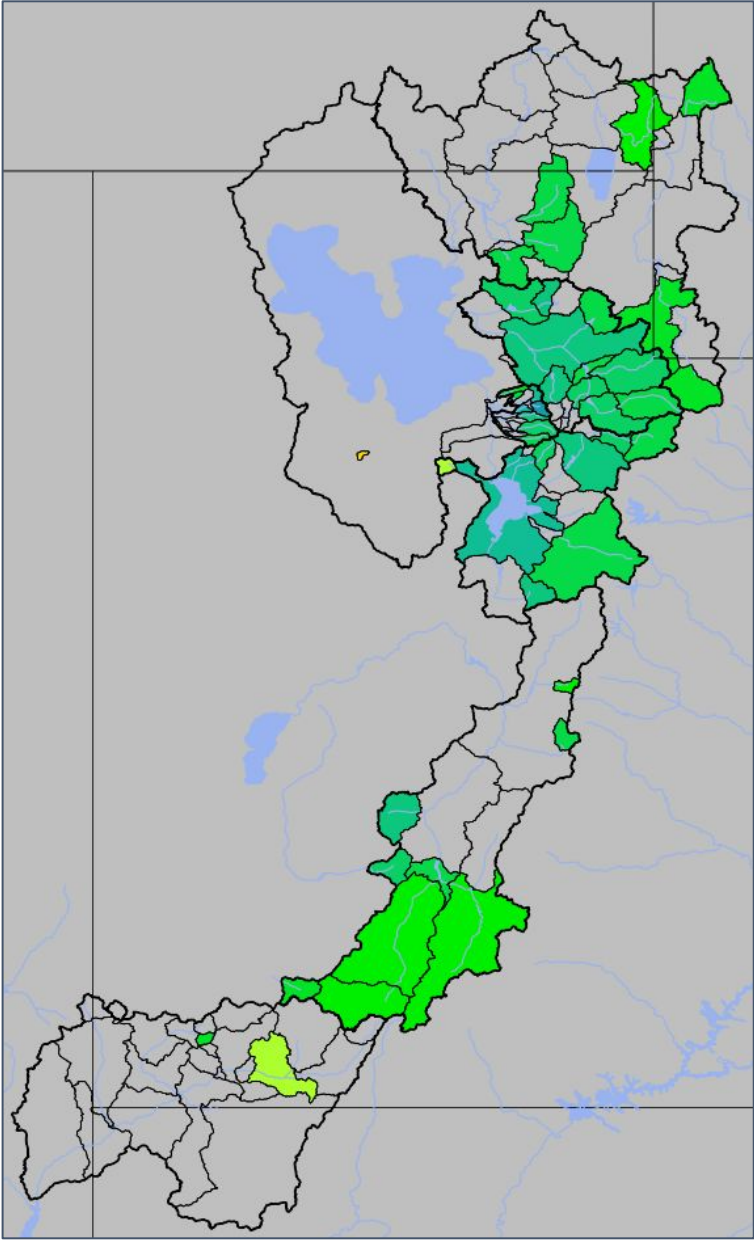
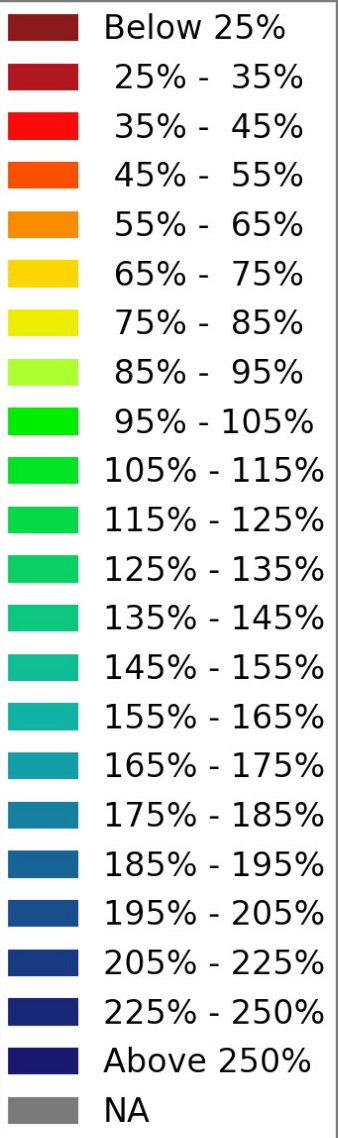
San Juan

Lake Powell



Utah Water Supply Forecasts - Overview

Percent of Average

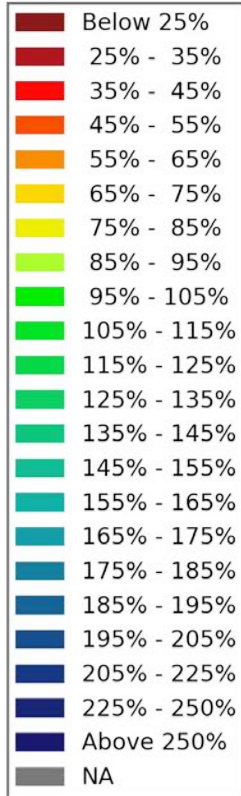


- January 1 forecast for April-July volume
- April-July forecast streamflow volumes are in percent of 1991-2020 average.

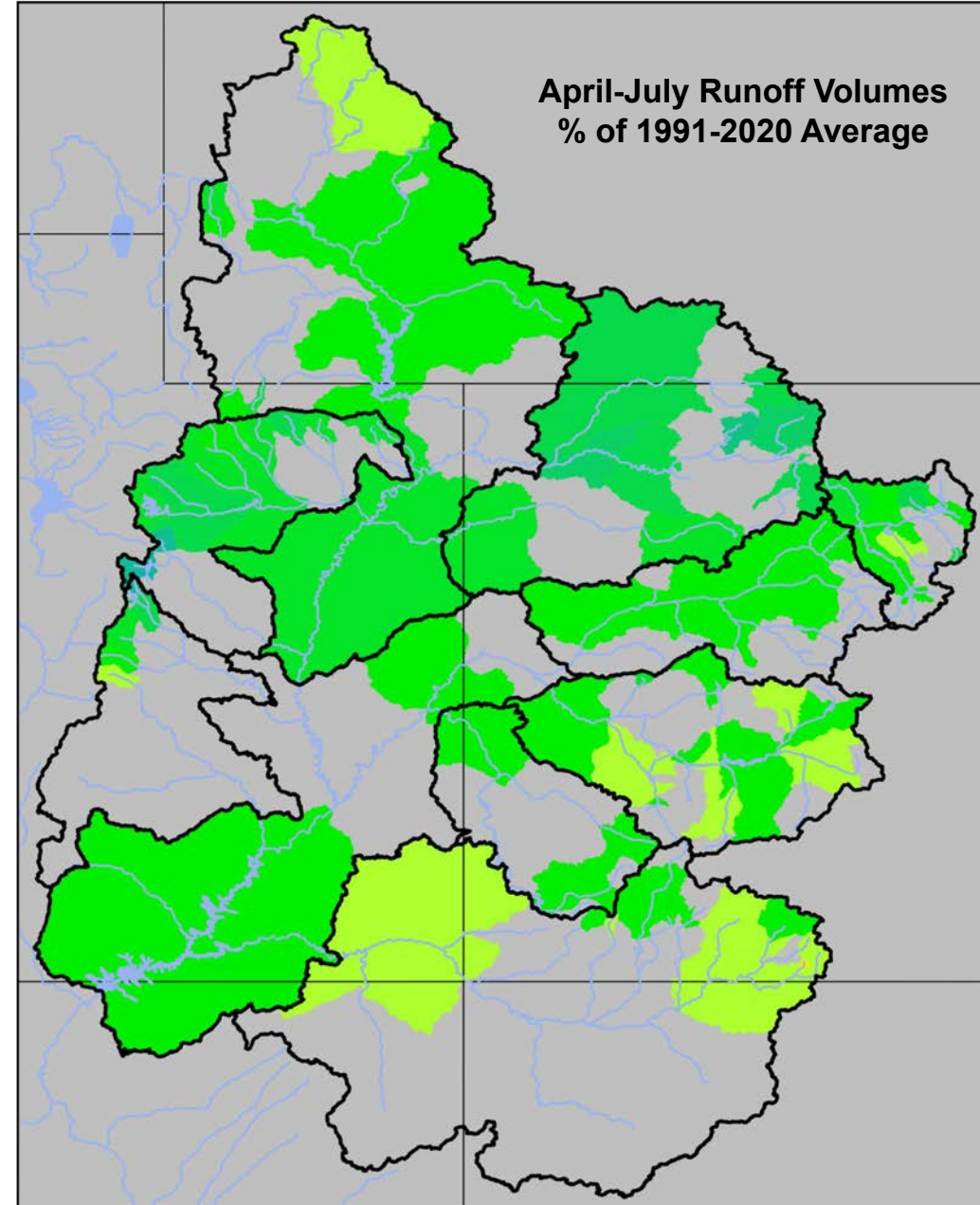
Median forecasts by forecast group.

Weber	130%
Bear	110%
Six Creeks	135%
Provo / Utah Lake	125%
Sevier	110%
Duchesne	110%
Virgin	100%

Jan 1st Water Supply Forecasts: Upper Colorado



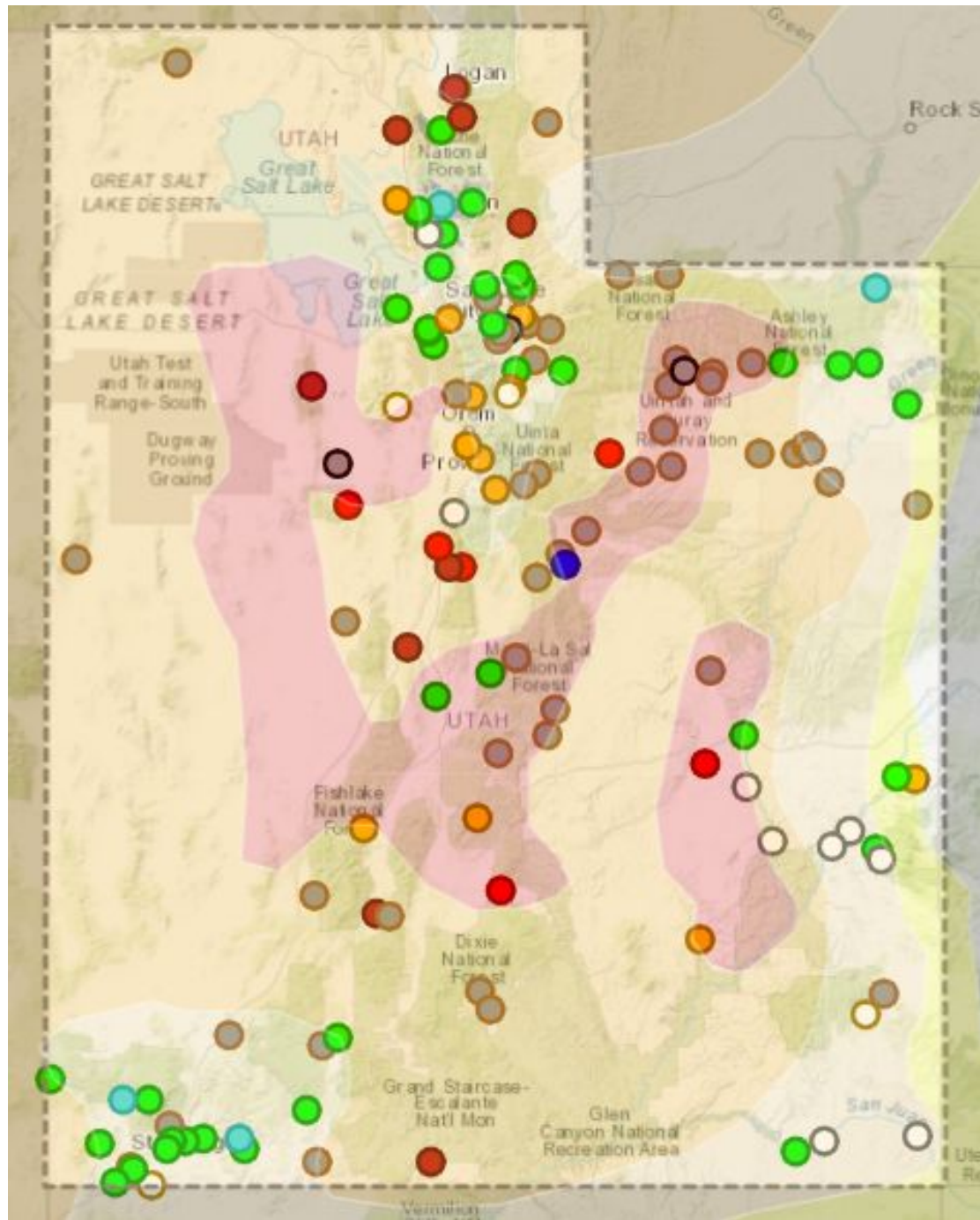
Upper Green	100%
Lower Green	140%
San Juan	90%
Lake Powell	117% (mid month)



Lake Powell summarizes the hydrologic conditions throughout the Upper Colorado River Basin.

Streamflow

Some gages are affected by ice



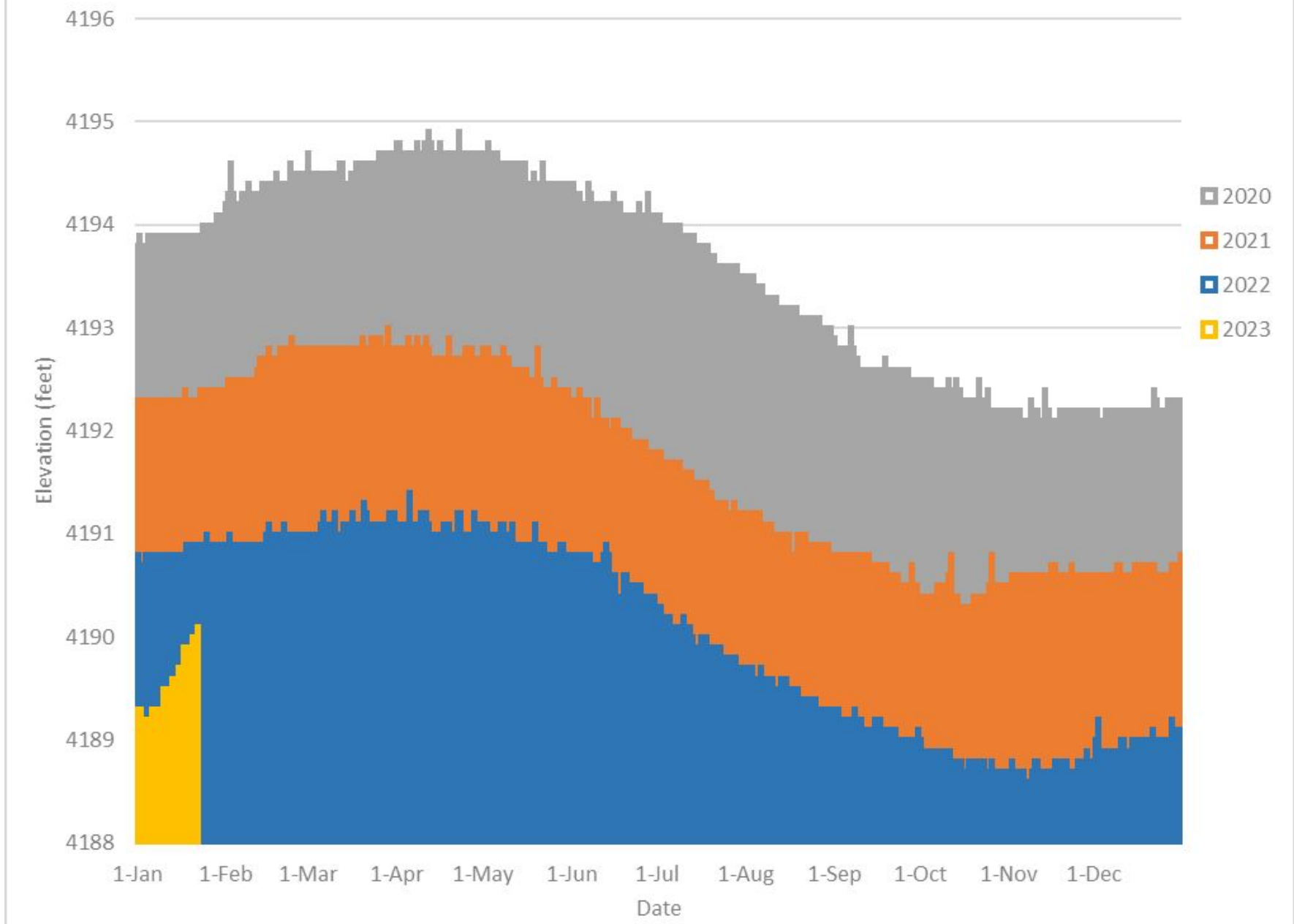
Streamflow: Status

- 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

100 th percentile (maximum)
>90 th percentile
76 th – 90 th percentile
25 th – 75 th percentile
10 th – 24 th percentile
<10 th percentile
0 th percentile (minimum)

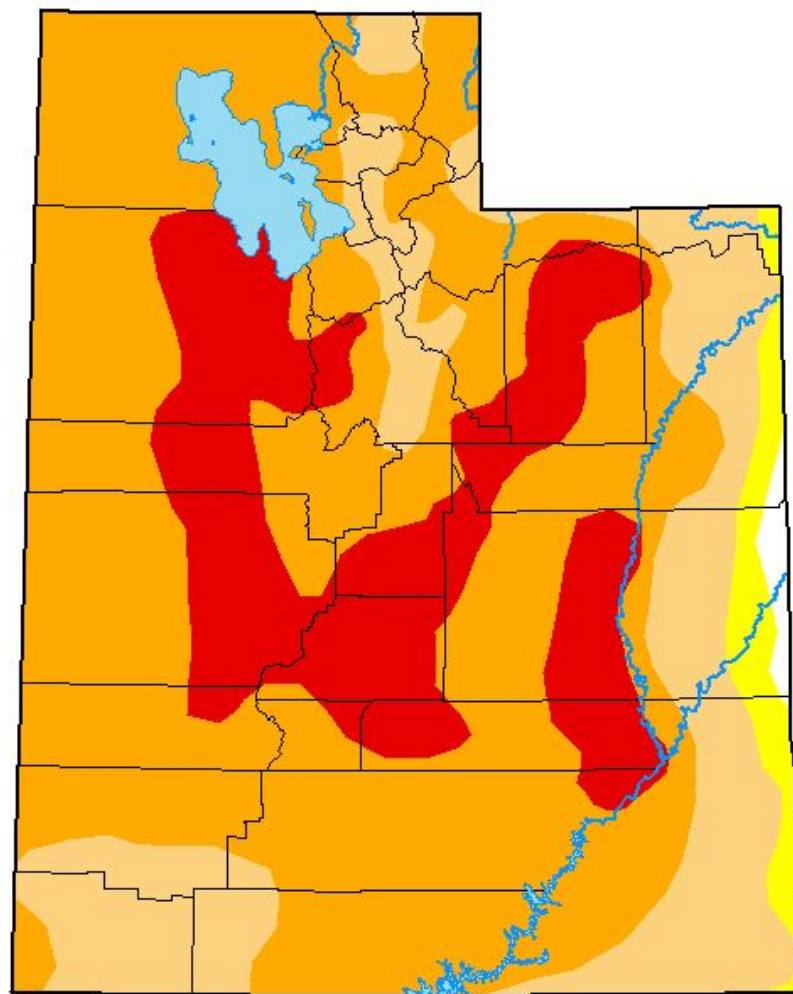
Great Salt Lake Elevations

South Arm









U.S. Drought Monitor Utah

January 17, 2023
(Released Thursday, Jan. 19, 2023)
Valid 7 a.m. EST



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 <http://droughtmonitor.unl.edu/About.aspx>

Author:

Deborah Bathke
National Drought Mitigation Center



droughtmonitor.unl.edu