

2024 Runoff Ready Update

April 16, 2024



2023 Spring Runoff Recap

Record Snowpack

- 200+% of normal in watersheds

Drought

- Soil Moisture – extremely low
- Reservoir and Lake Storage
 - Utah Lake – low
 - Great Salt Lake – low

Comparison to 1983

- Improvements since 1983

State, County, City Declarations

Season Progression

- Gradual warming

Photo Credit: [Flooding in Wasatch Hollow — Salt Lake City, Utah – YouTube](#)



2023 Spring Runoff Recap Cont.

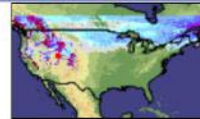
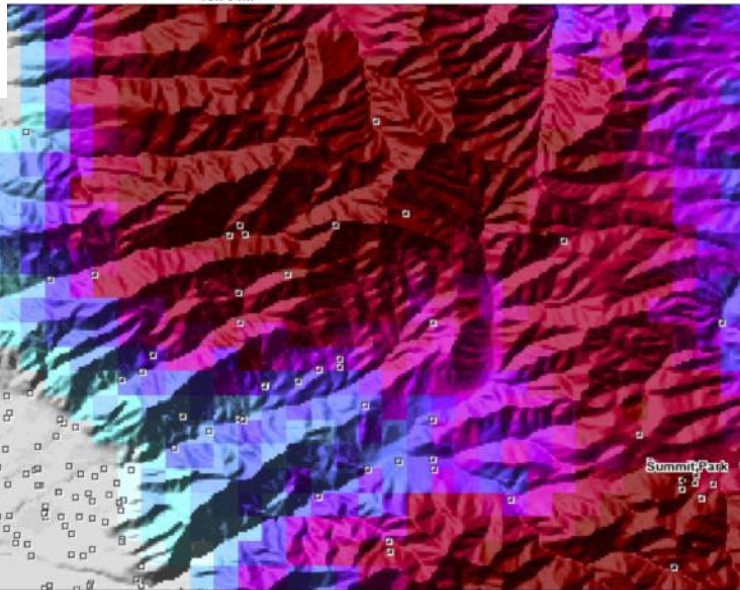
2023 Snowpack Magnitude



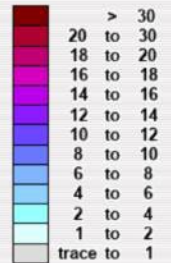
(Trent Nelson | The Salt Lake Tribune) High water levels in Salt Lake City's Sugar House Park on Wednesday, April 26, 2023.

Modeled Snow Water Equivalent for 2023 April 1, 18:00 UTC
18.76 mi

April 1st



Inches of water equivalent



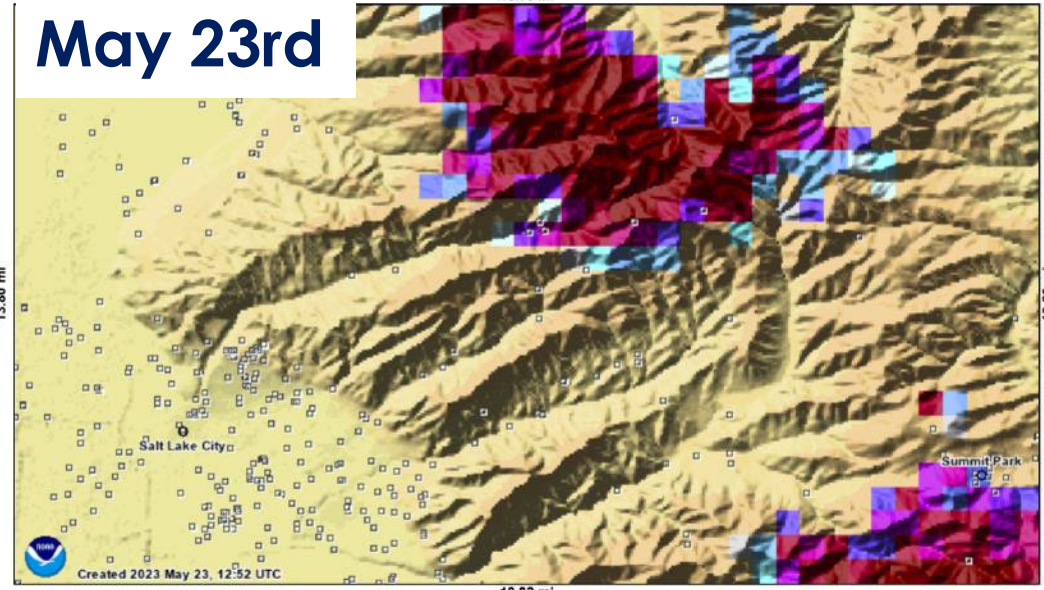
Not Estimated

Elevation in feet

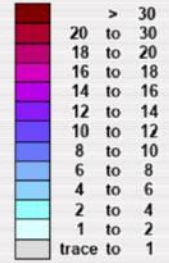


Modeled Snow Water Equivalent forecasted for 2023 May 23, 18:00 UTC
18.76 mi

May 23rd



Inches of water equivalent



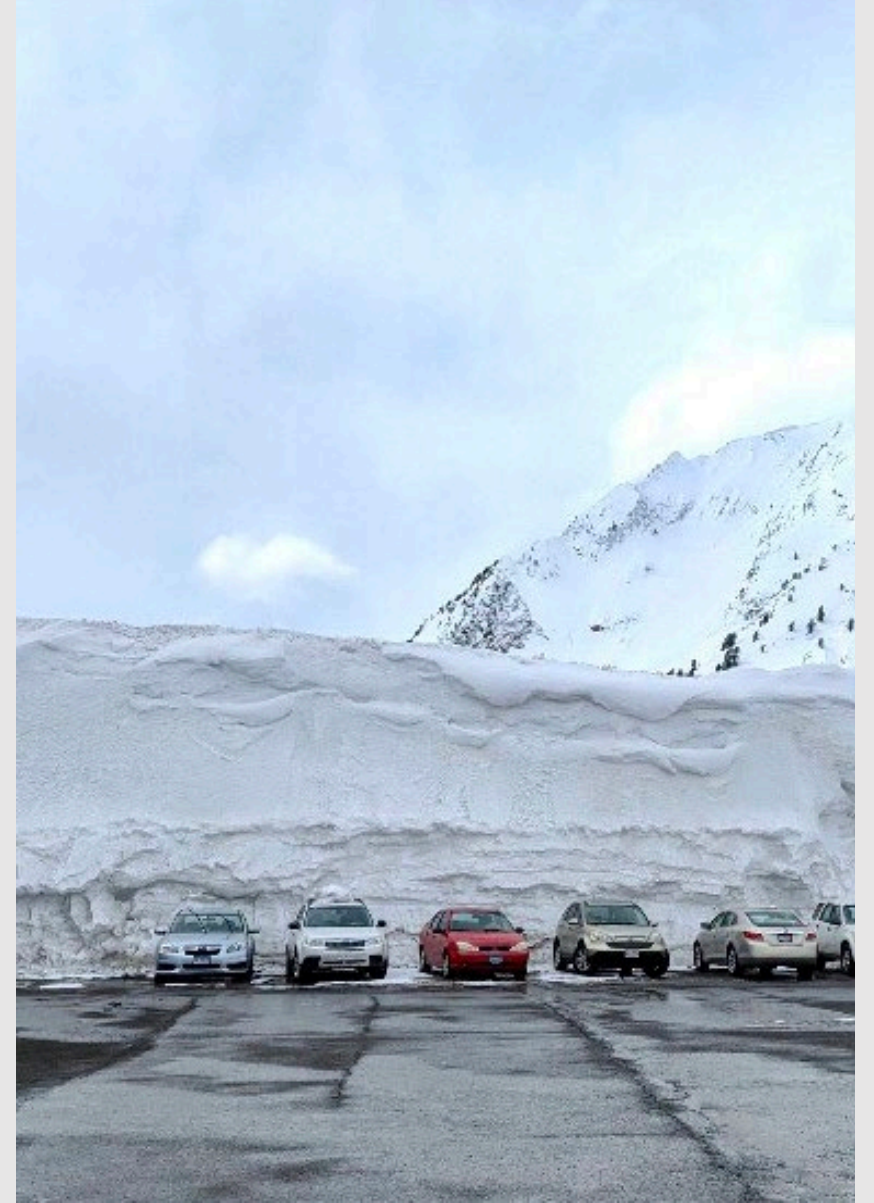
Not Estimated

Elevation in feet



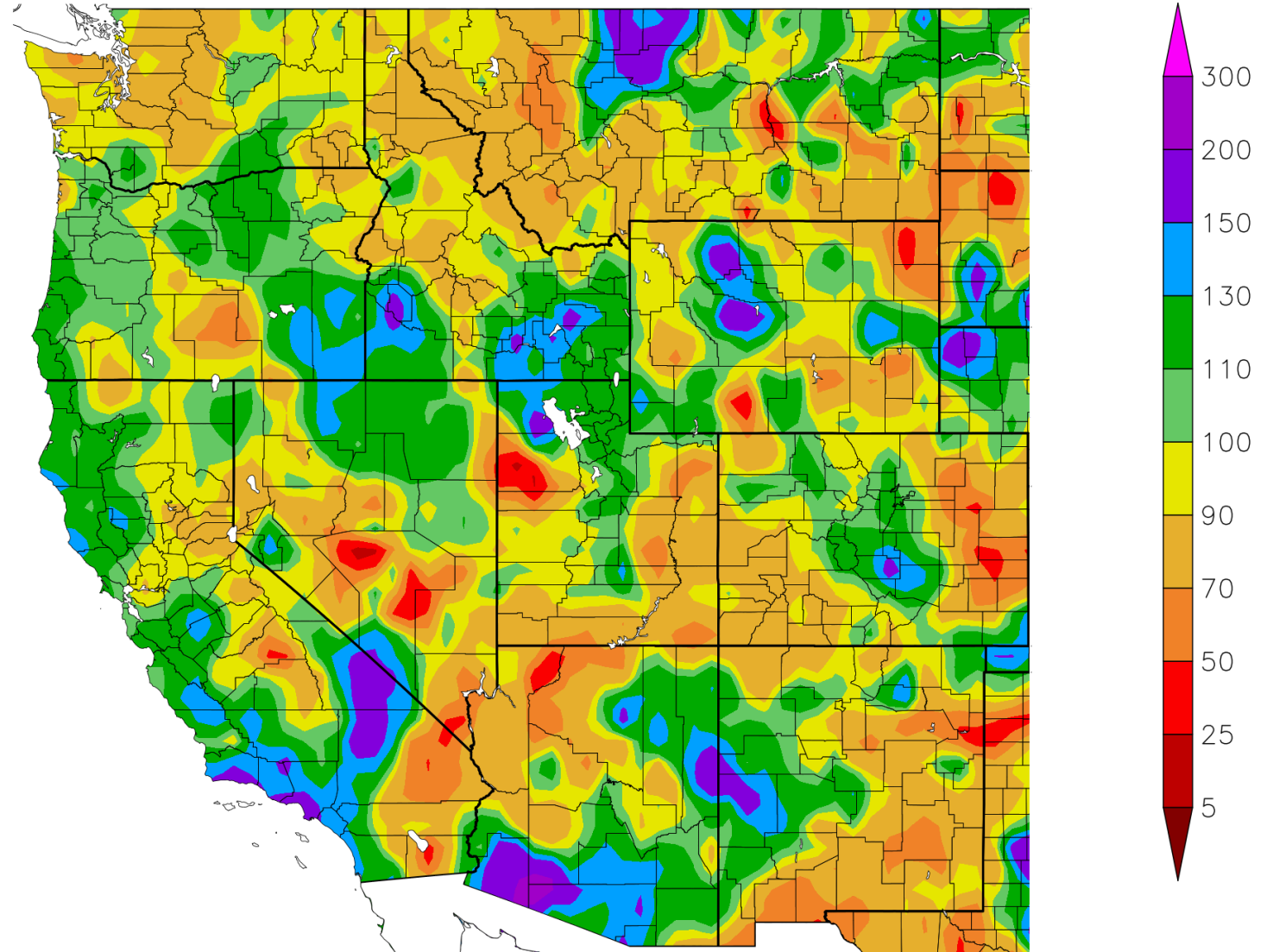
2024 Snowpack Current Conditions

Released April 16, 2024



Western United States: Precipitation Water Year (WY)

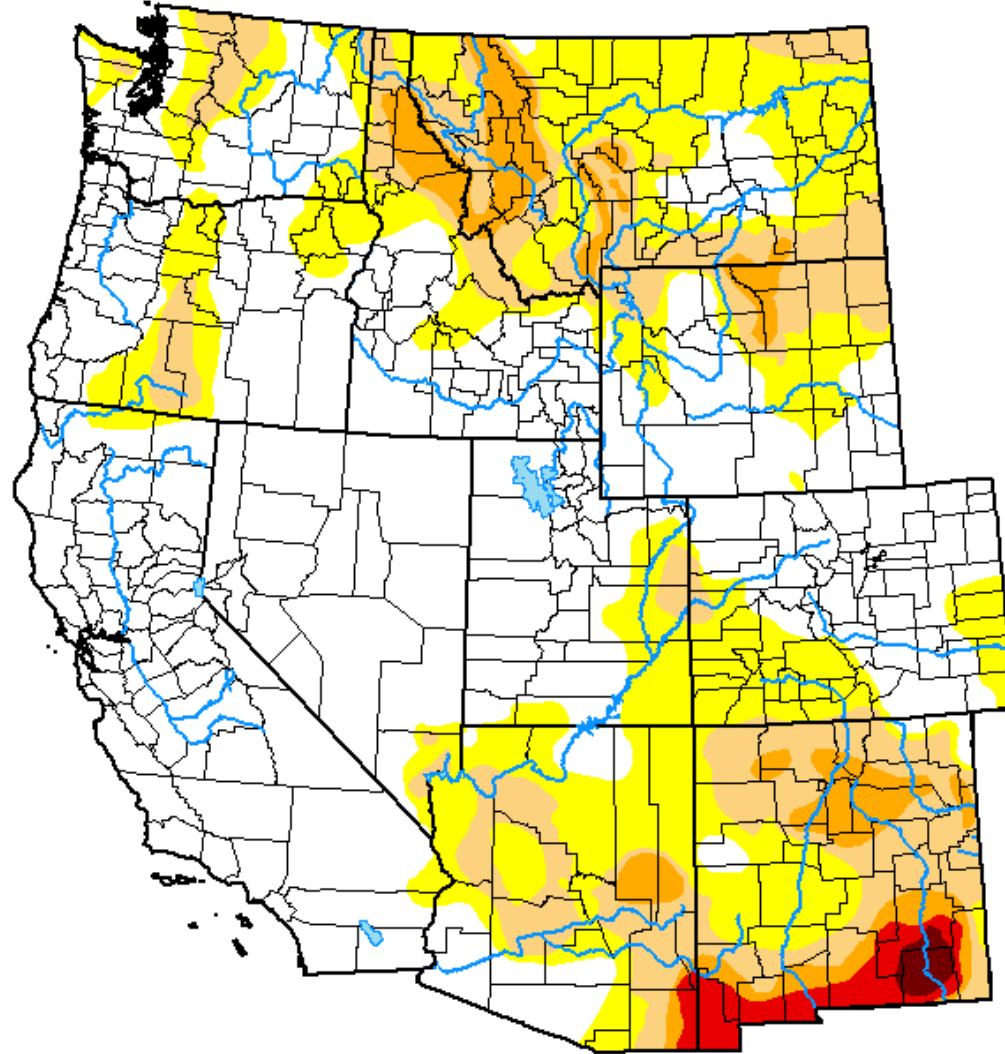
Percent of Normal Precipitation (%)
10/1/2023 – 4/15/2024



Western United States: Drought Monitor

U.S. Drought Monitor Western U.S.

April 9, 2024
(Released Thursday, Apr. 11, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	54.63	45.37	21.08	6.85	1.84	0.36
Last Week 04-02-2024	52.27	47.73	22.35	7.89	2.01	0.36
3 Months Ago 01-09-2024	48.96	51.04	27.28	13.43	4.57	0.66
Start of Calendar Year 01-02-2024	51.19	48.81	25.08	13.17	4.67	0.66
Start of Water Year 09-26-2023	55.99	44.01	31.24	17.70	6.09	0.70
One Year Ago 04-11-2023	44.43	55.57	27.08	7.34	1.44	0.06

Intensity:



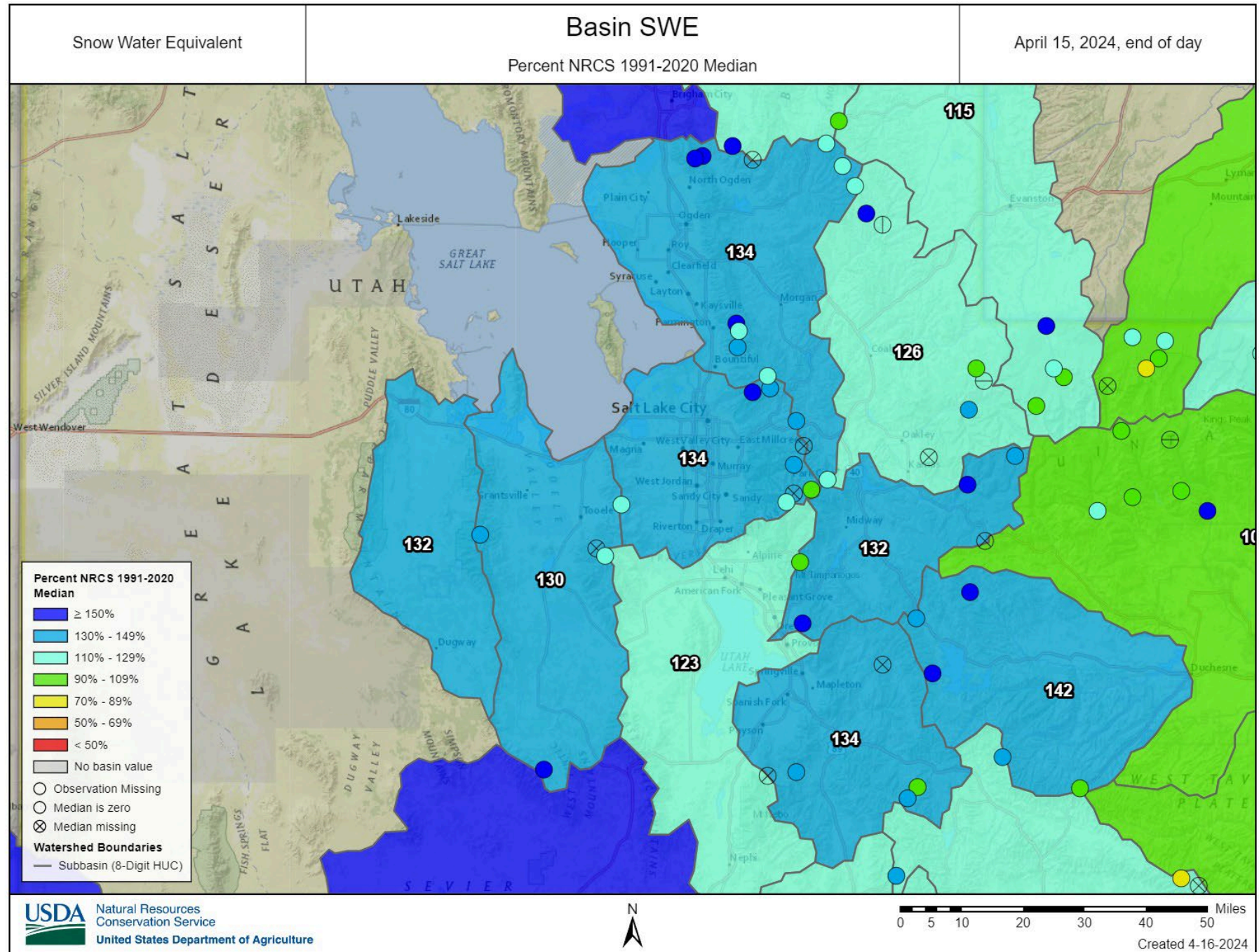
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

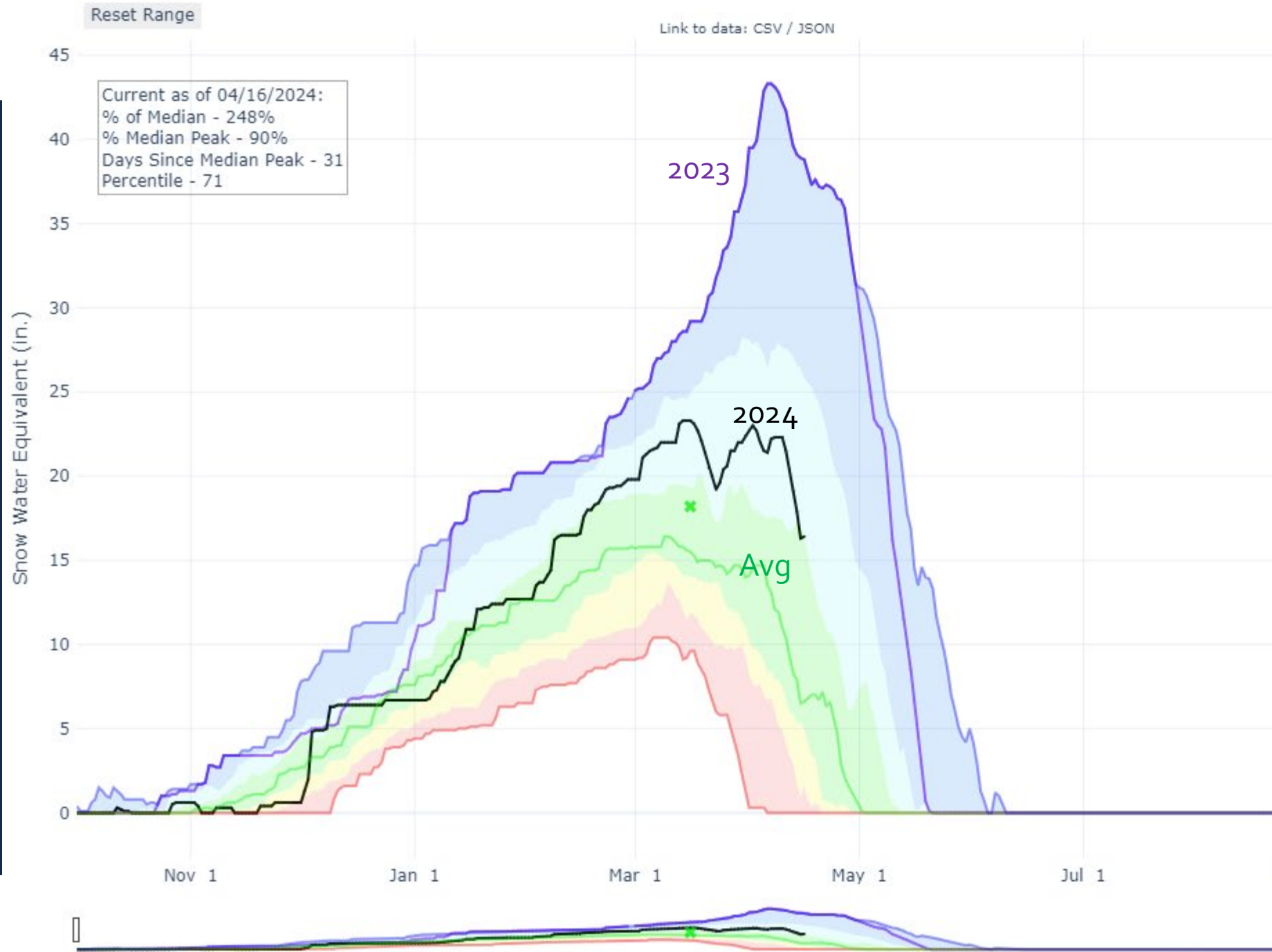
Brad Pugh
CPC/NOAA



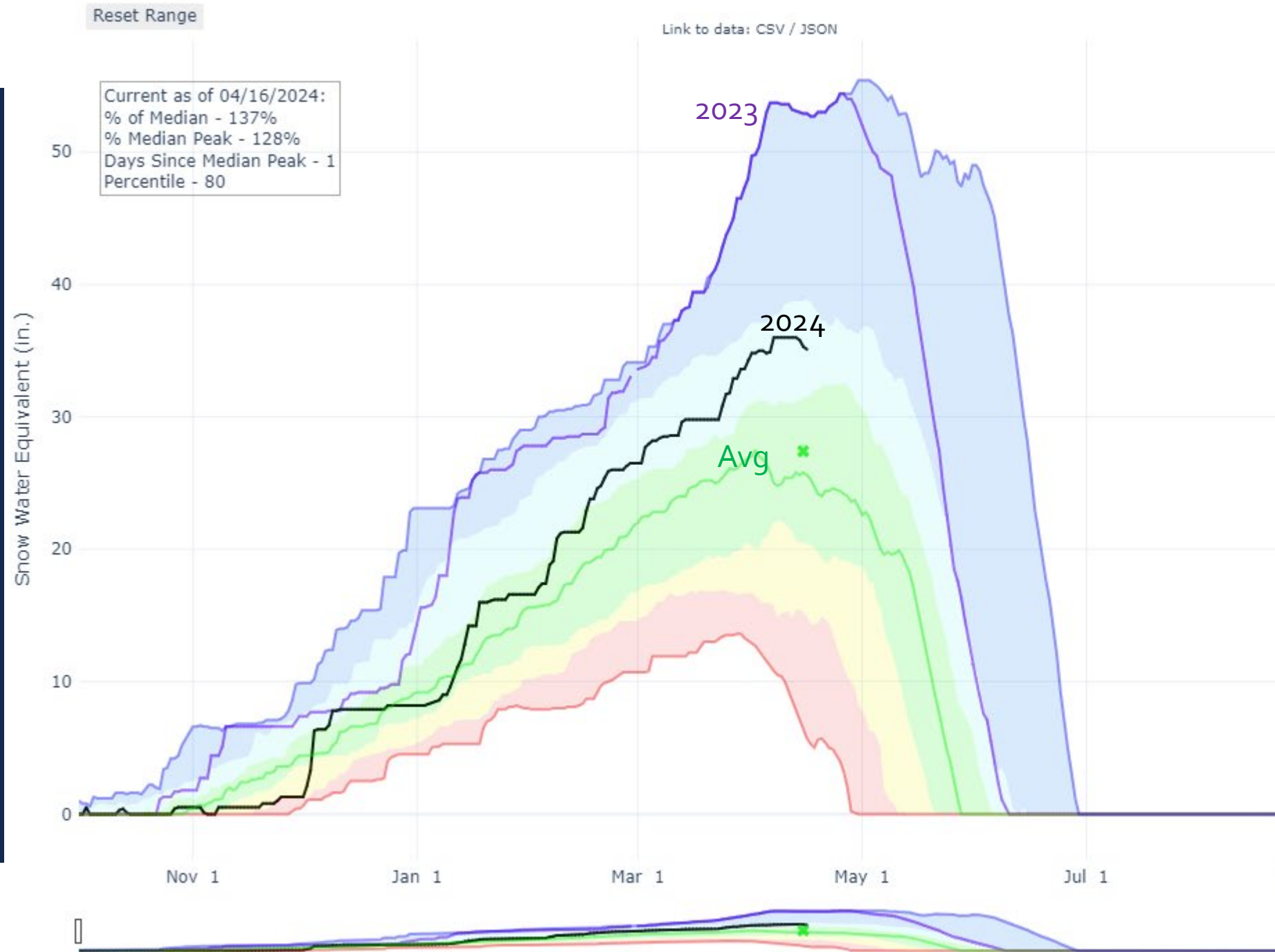
Northern Utah Basins: SWE



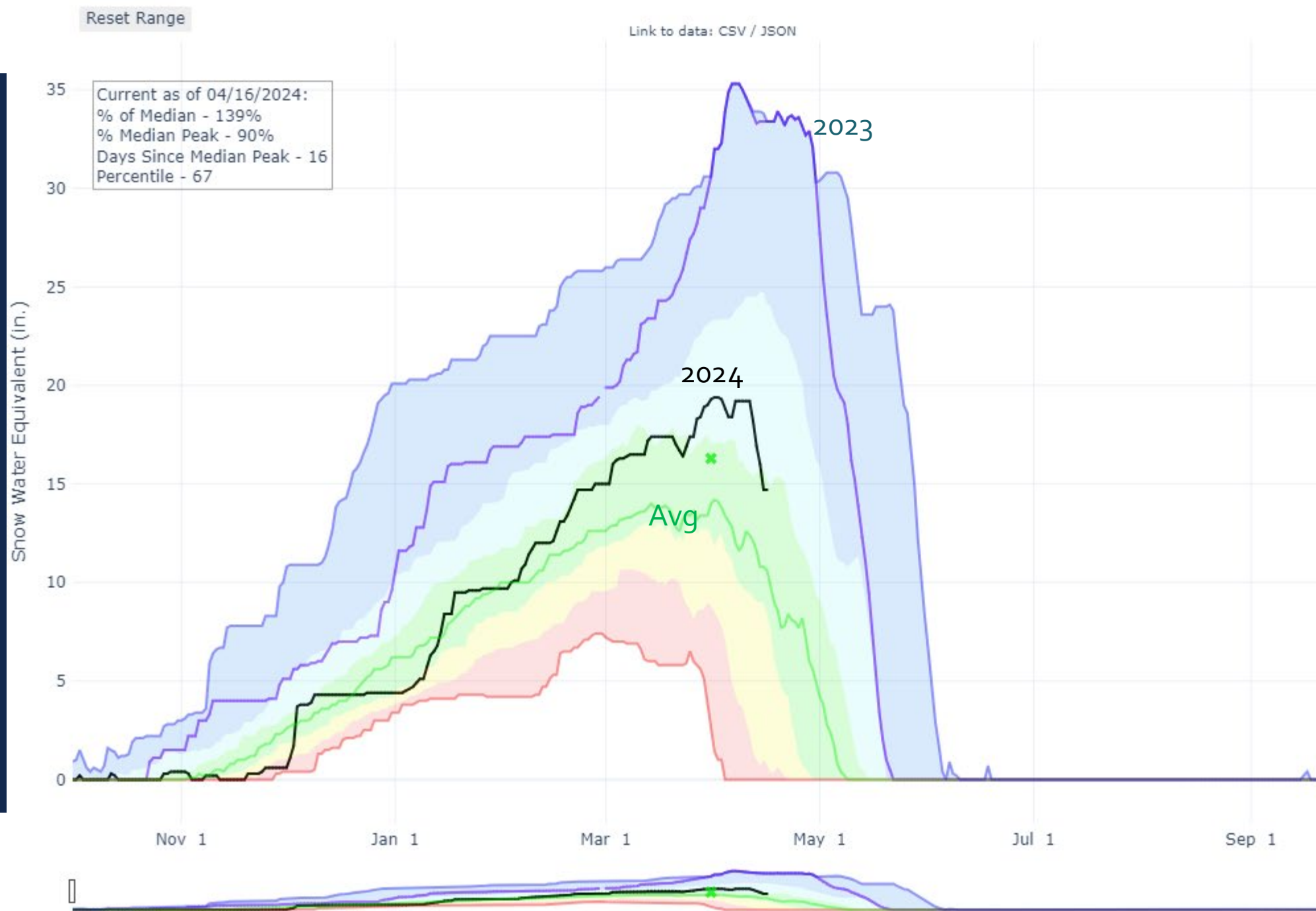
City Creek SWE at Louis Meadow



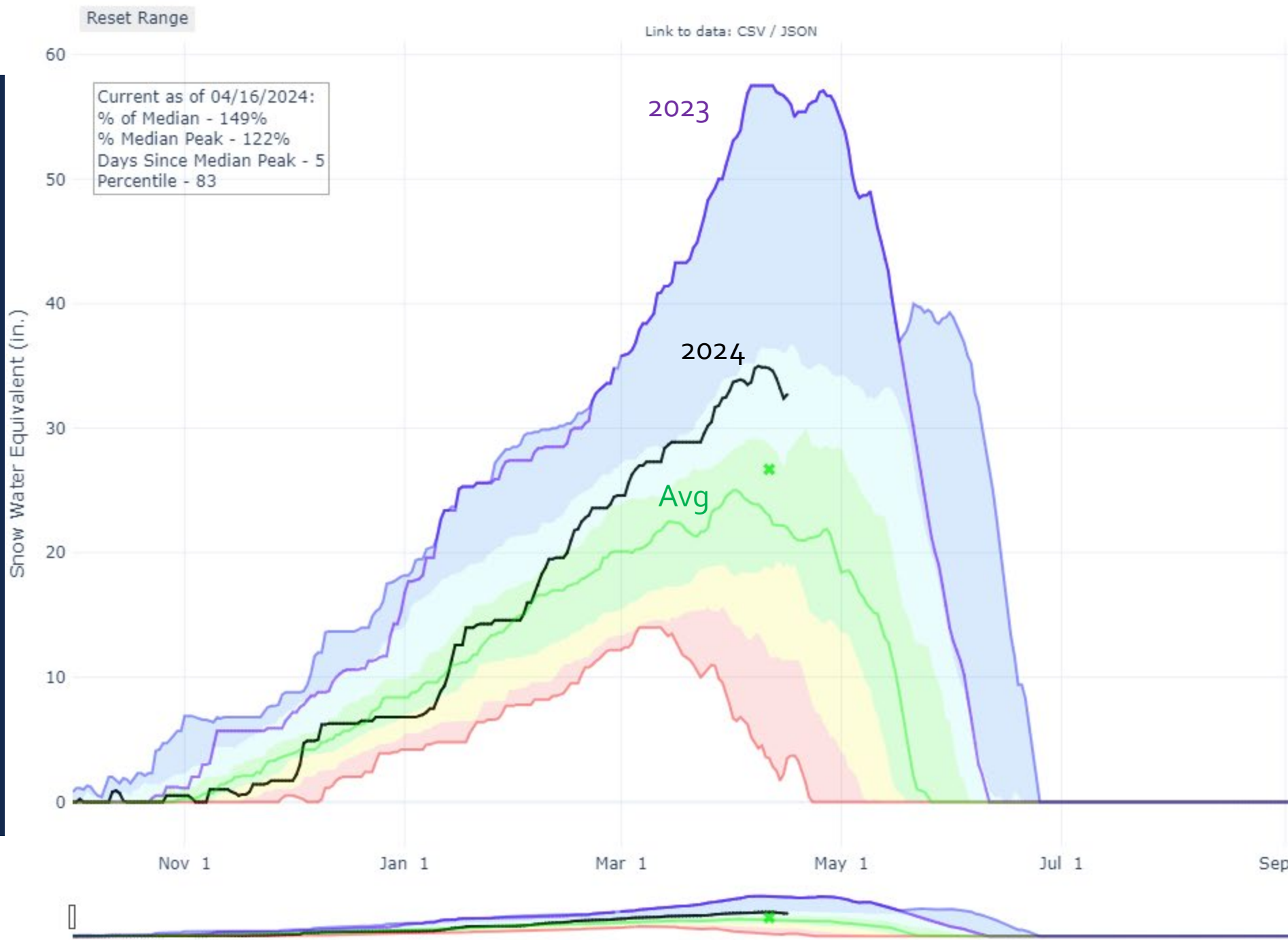
City Creek SWE at Lookout Peak



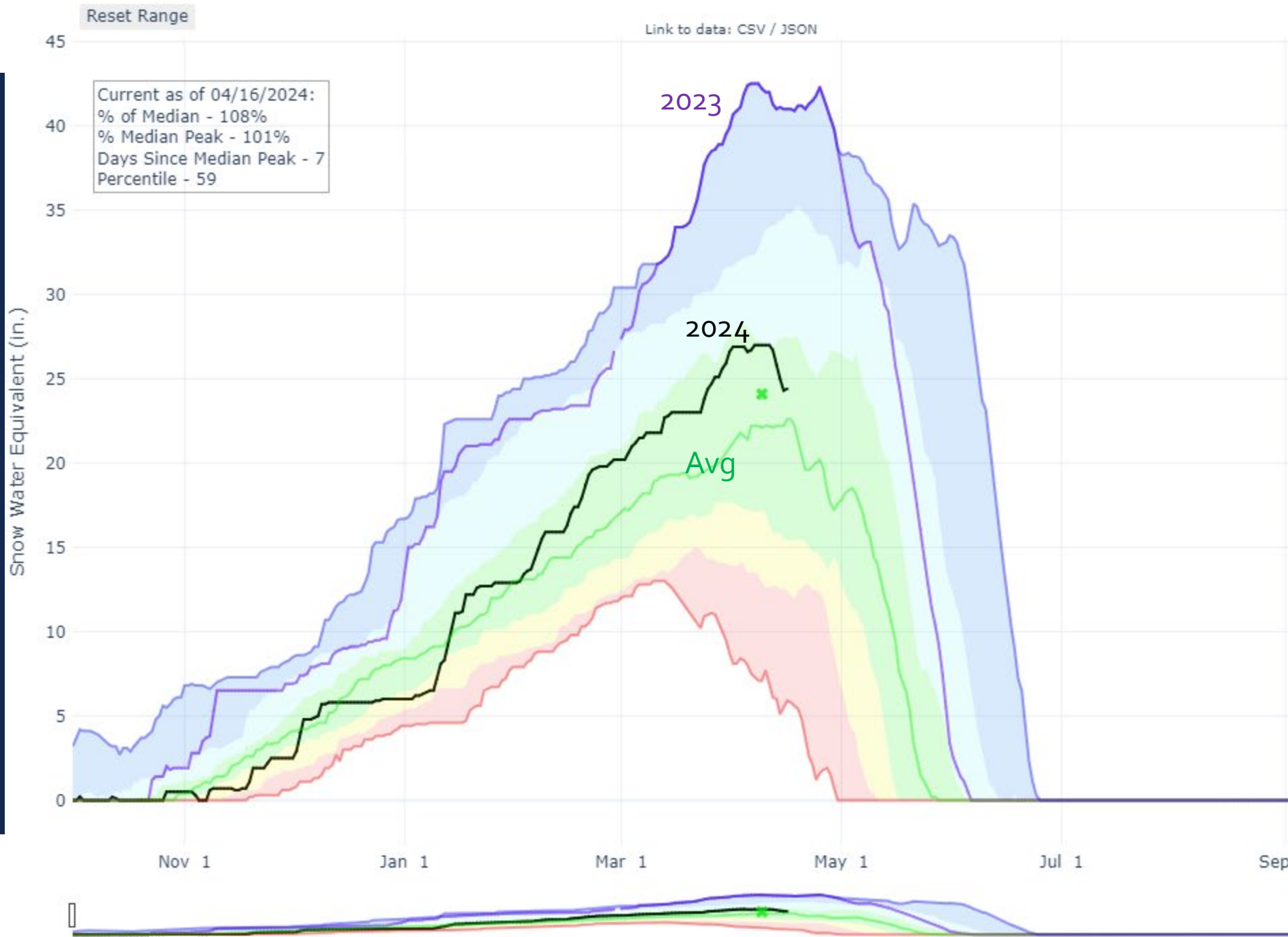
Parley's Creek SWE at Parley's Summit



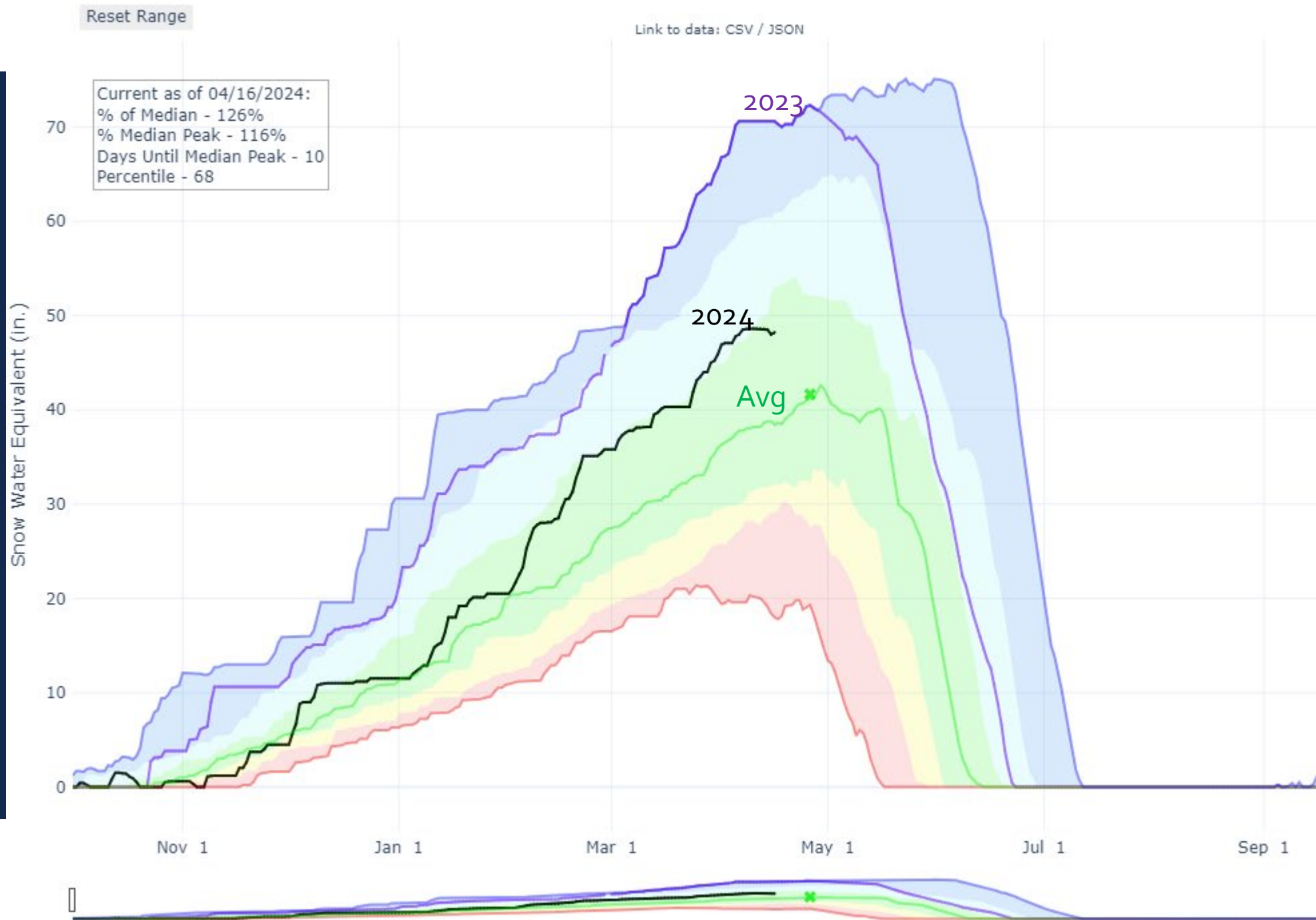
Big Cottonwood SWE at Mill D



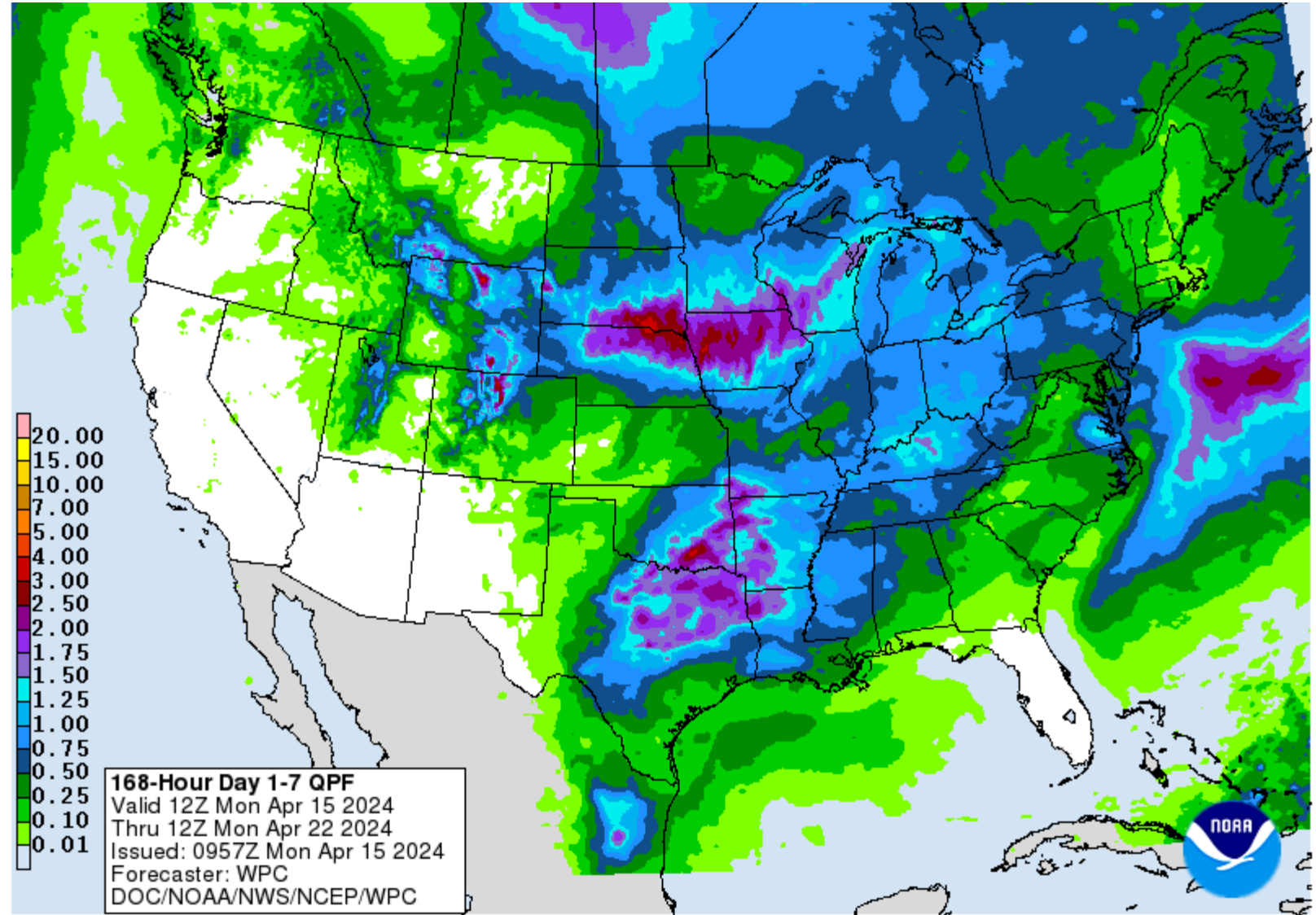
Big Cottonwood SWE at Brighton



Little Cottonwood SWE at Snowbird



7 Day Precipitation Forecast





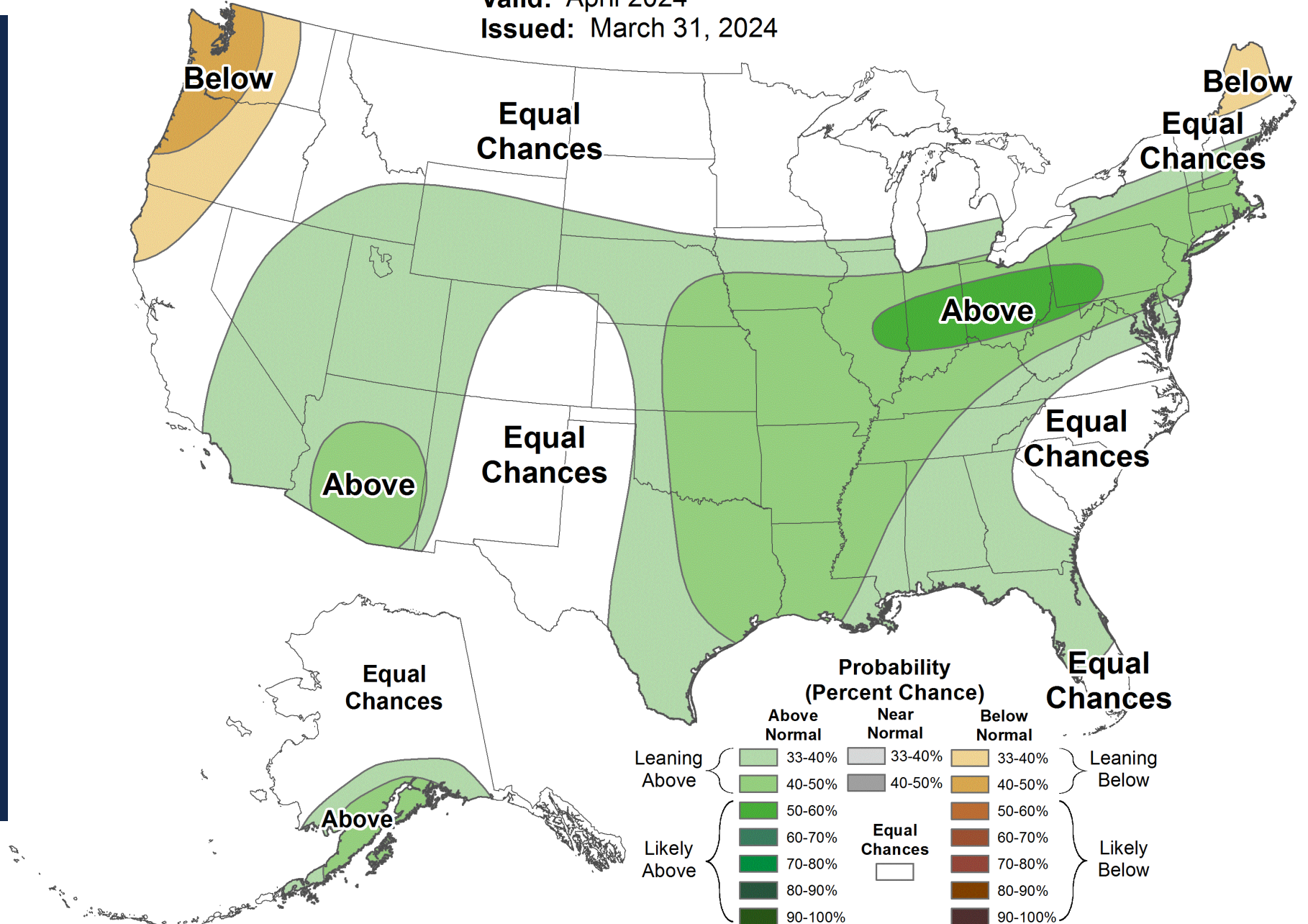
Monthly Precipitation Outlook



Valid: April 2024

Issued: March 31, 2024

Monthly Precipitation Forecast





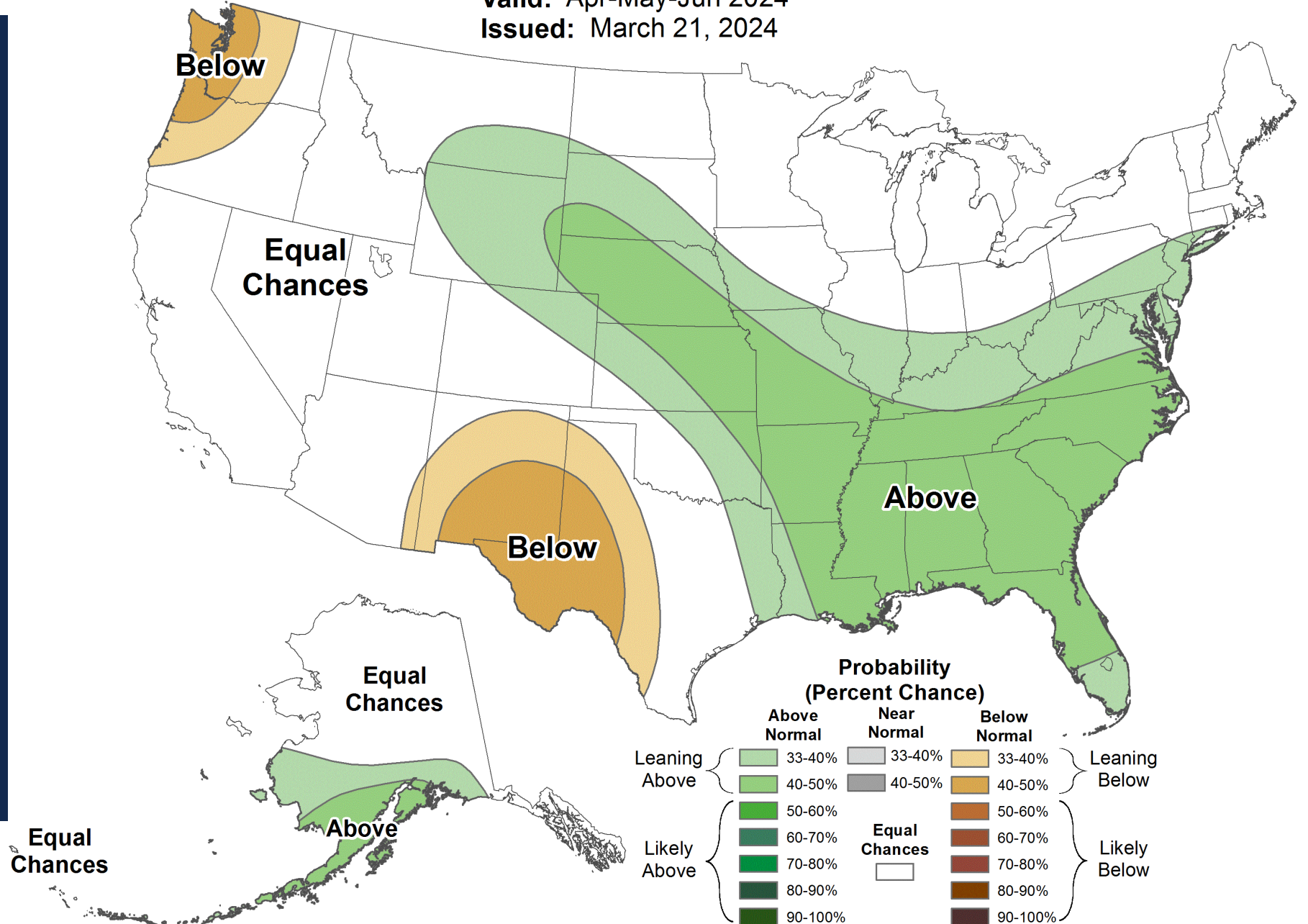
Seasonal Precipitation Outlook



Valid: Apr-May-Jun 2024

Issued: March 21, 2024

Seasonal Precipitation Forecast





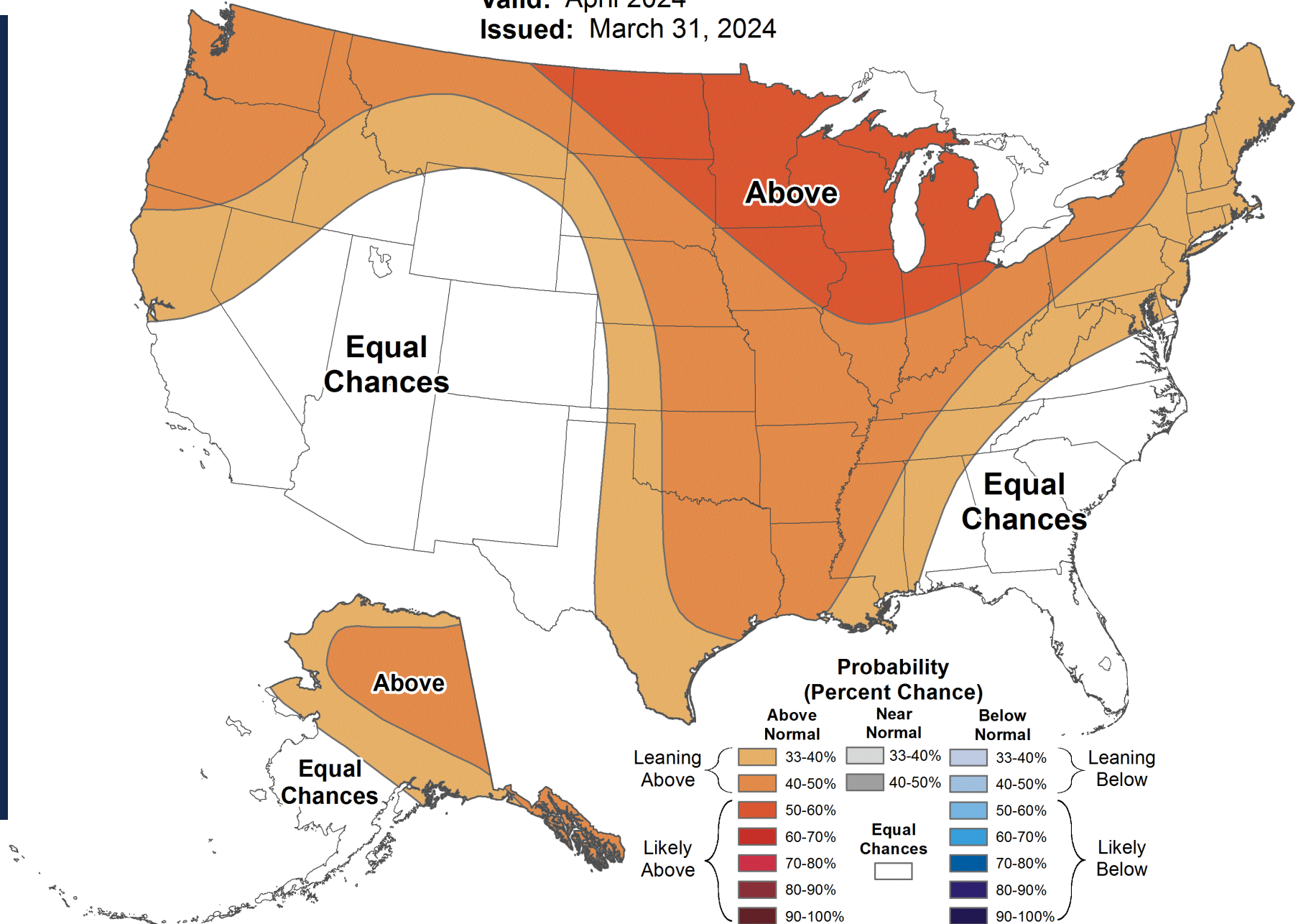
Monthly Temperature Outlook



Valid: April 2024

Issued: March 31, 2024

Monthly Temperature Forecast





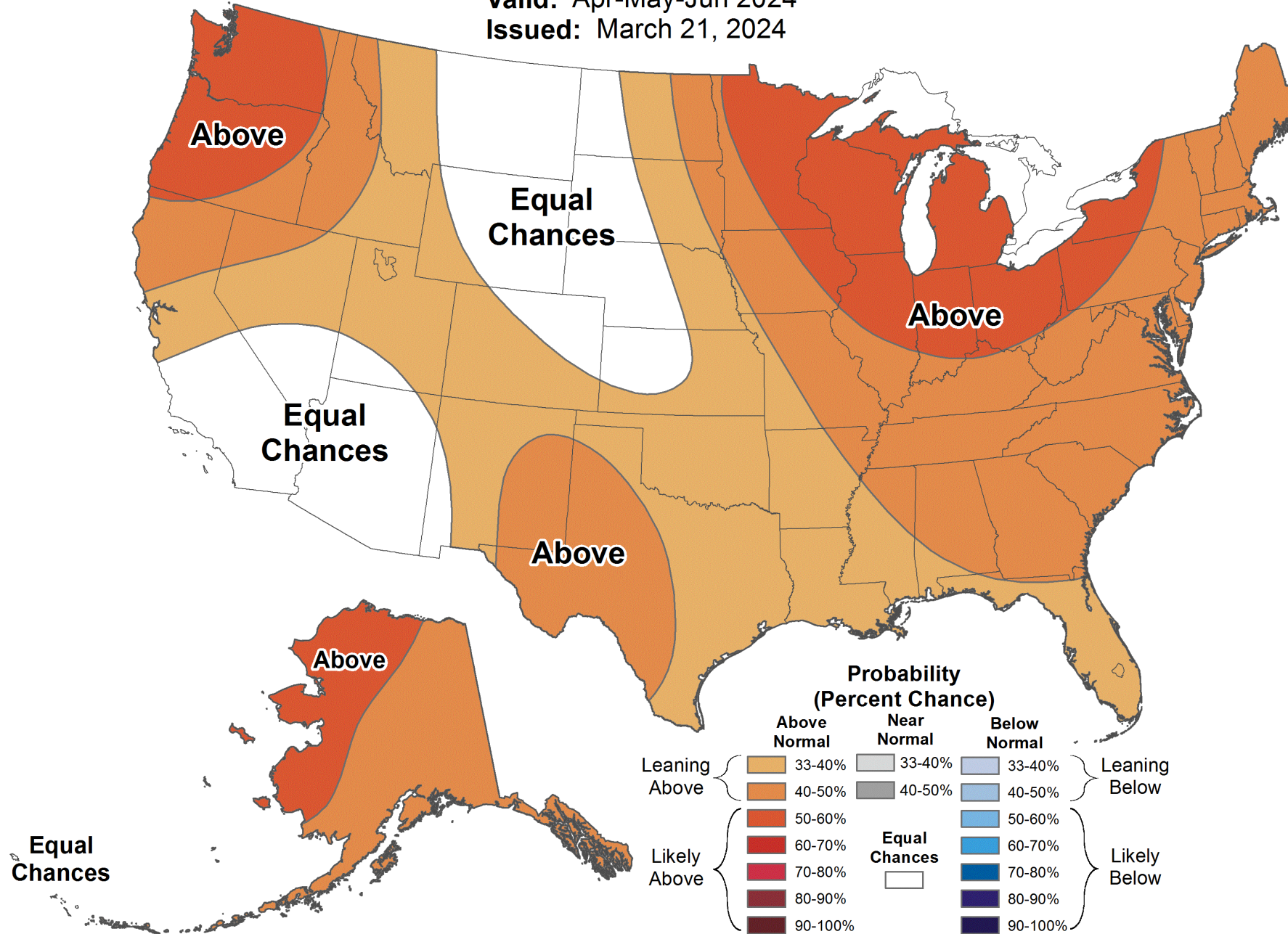
Seasonal Temperature Outlook



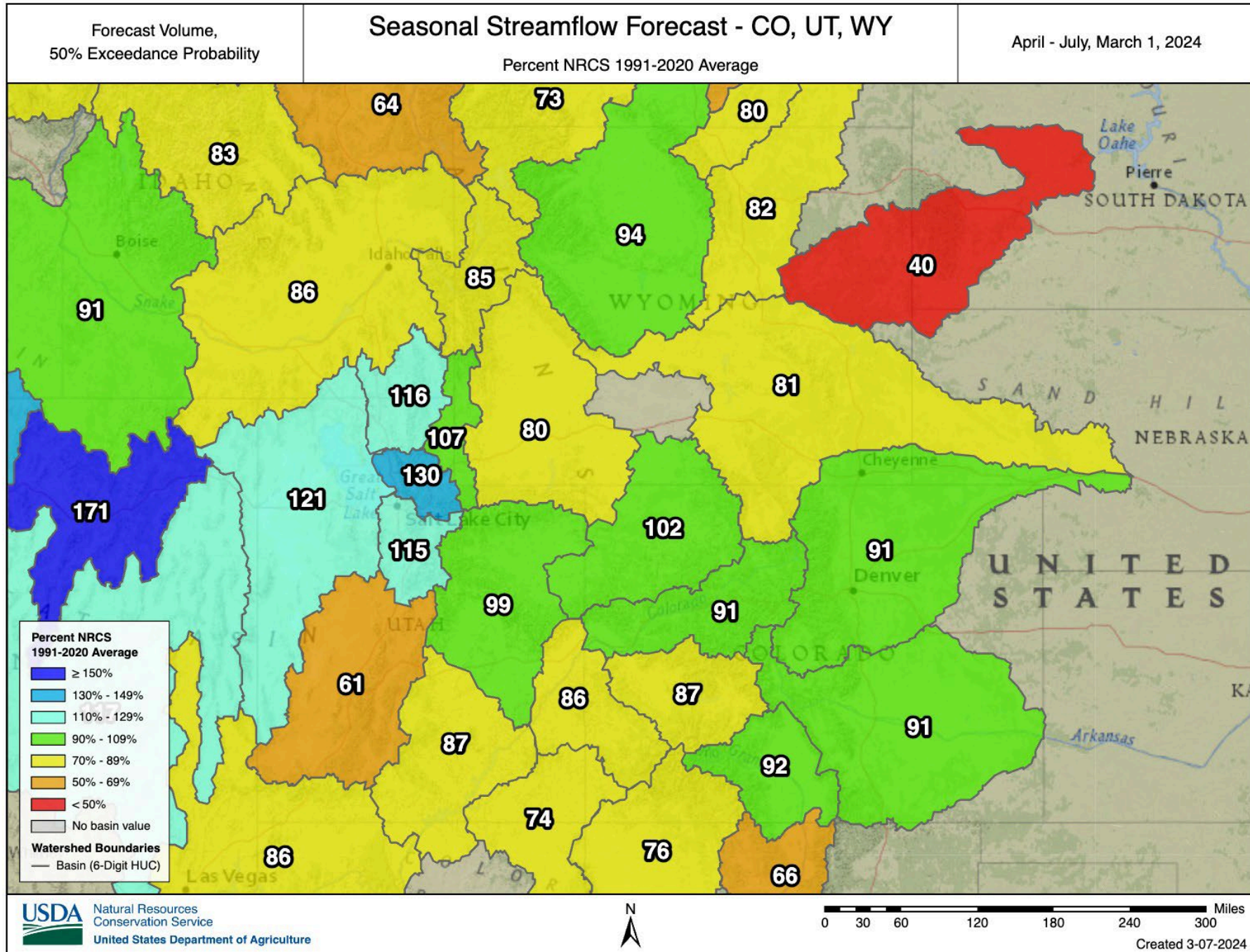
Valid: Apr-May-Jun 2024

Issued: March 21, 2024

Seasonal Temperature Forecast



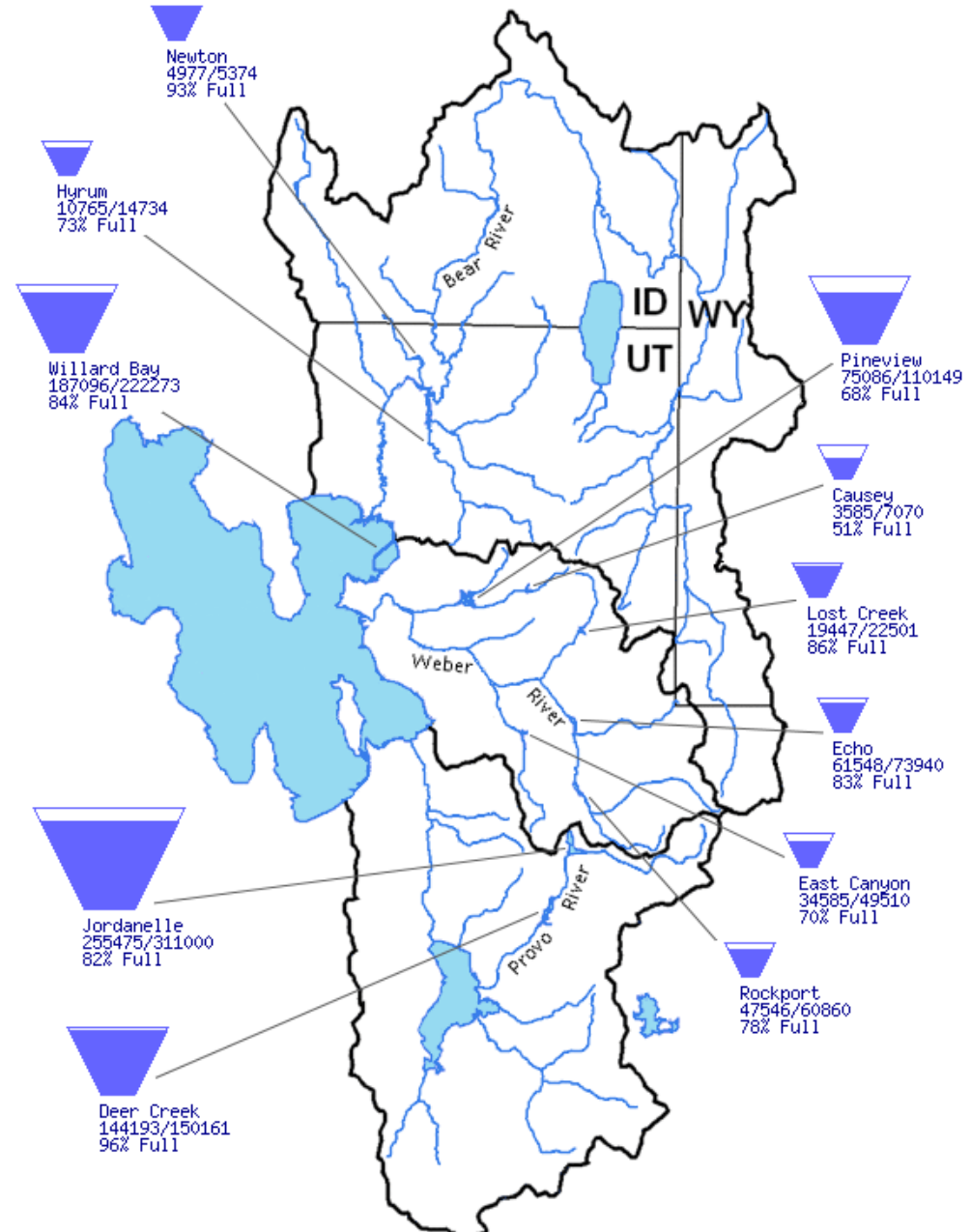
Seasonal Streamflow Forecast



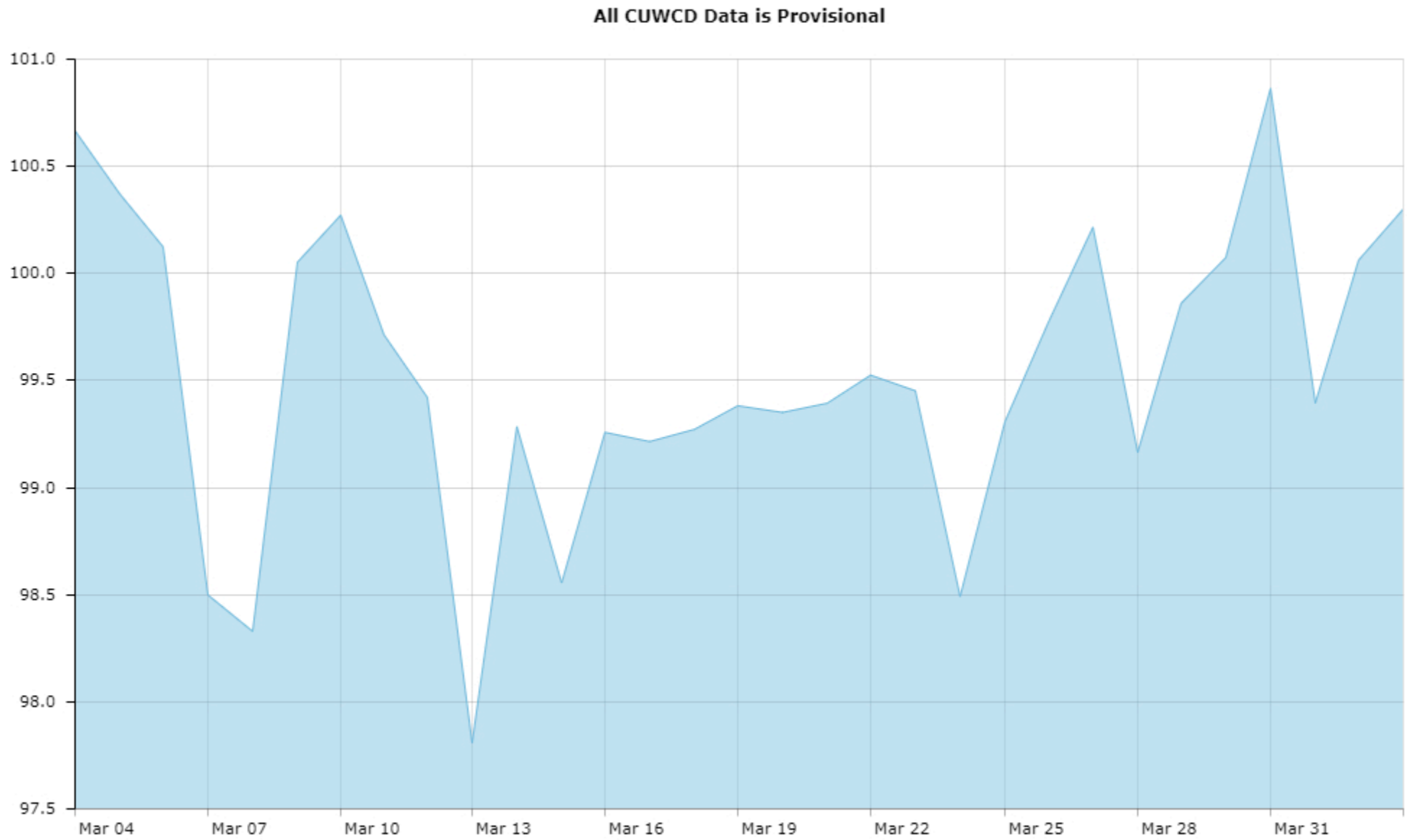
Wasatch Reservoirs: % full as of April

Data Current as of:
04/14/2024

Bear, Weber, and Provo River Basins



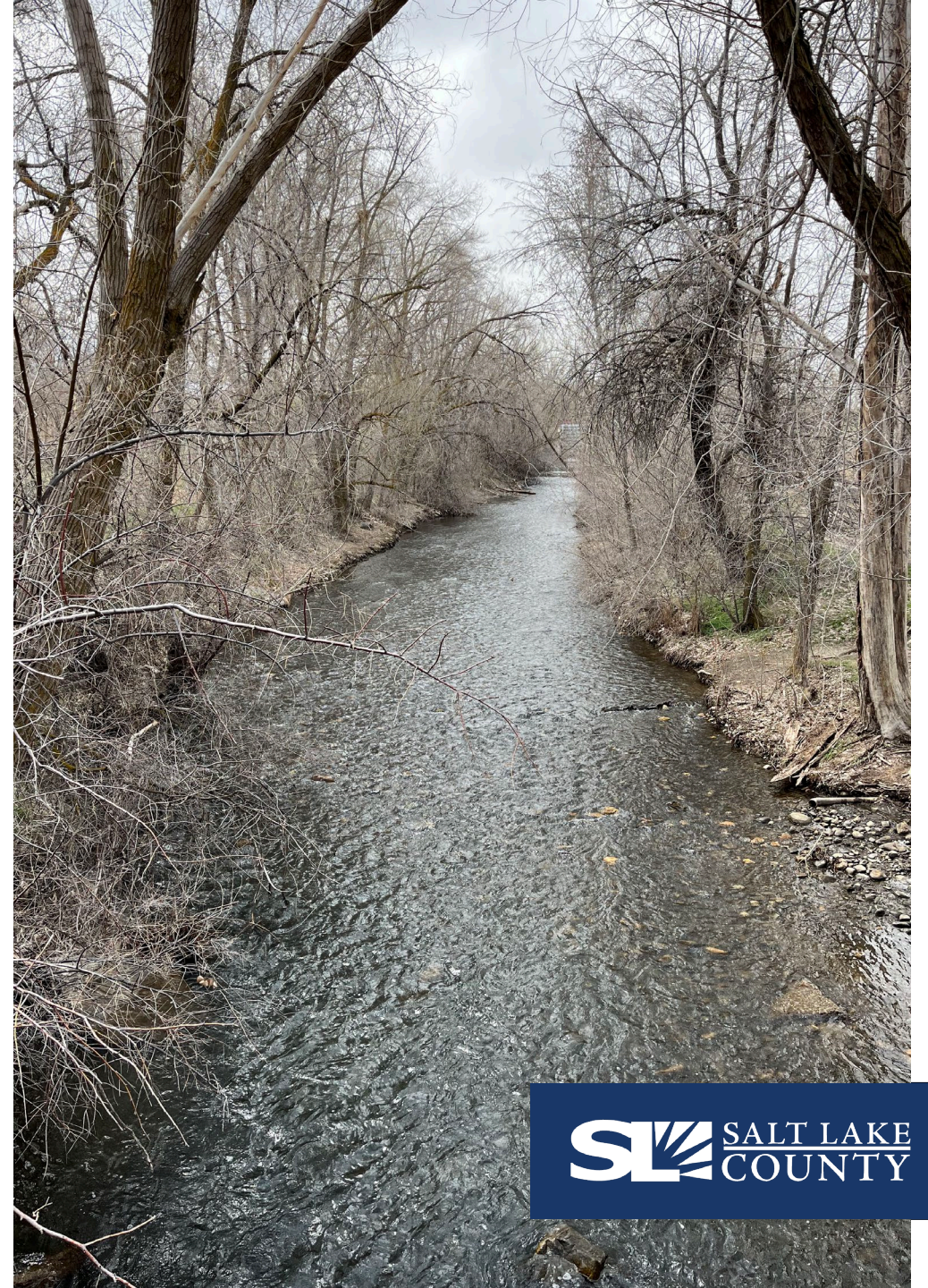
Utah Lake: at compromise



Comparison from 2023 to 2024

2023

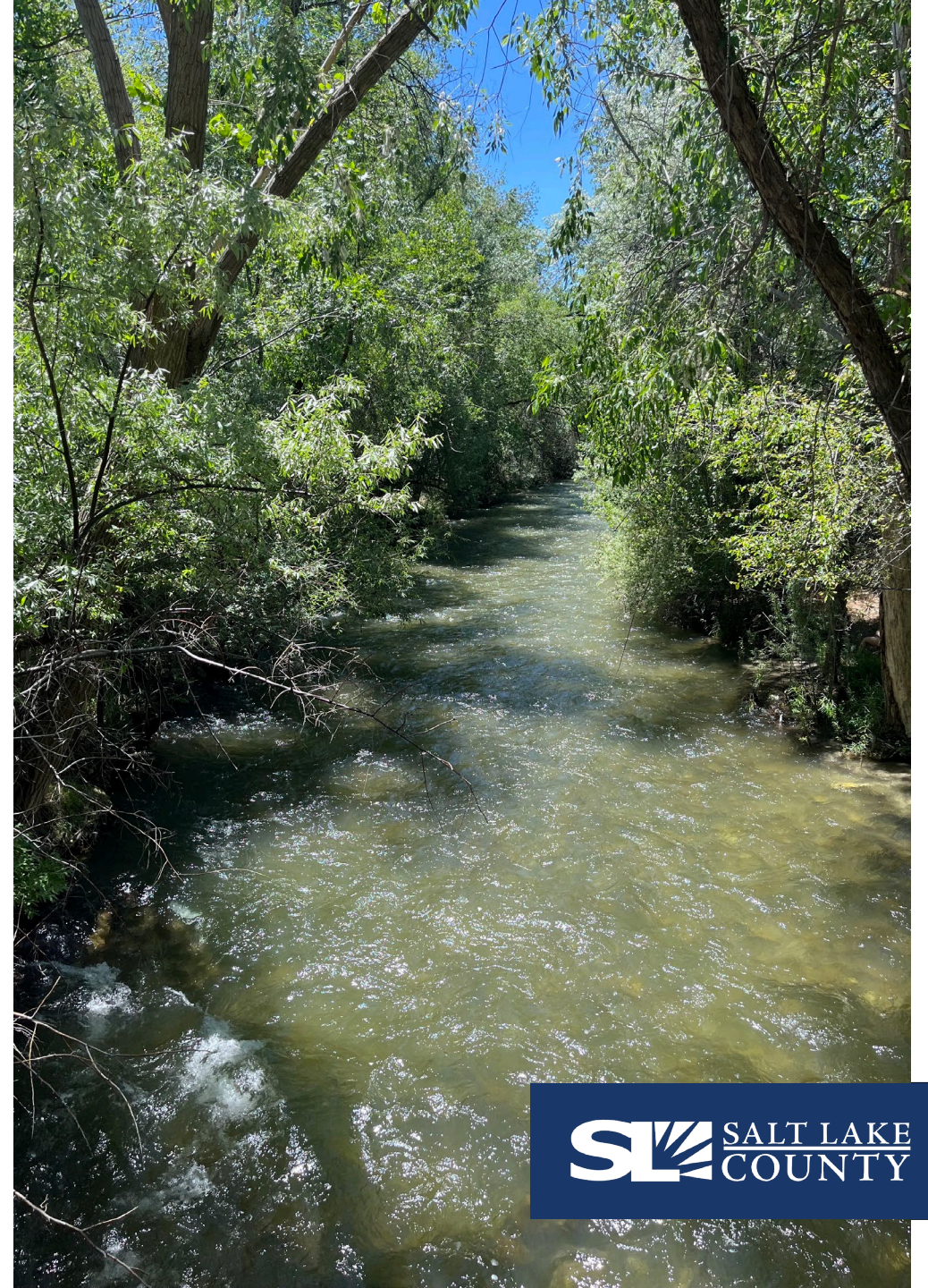
- Record snowpack 200+% of normal
- Record drought conditions leading into winter
- Soil Moisture – extremely low
- Reservoir & Lake Storage (lots of room)
 - Utah Lake – Low
 - Jordanelle – Low
 - Deer Creek – Low
 - Great Salt Lake – Low



Comparison from 2023 to 2024 (cont.)

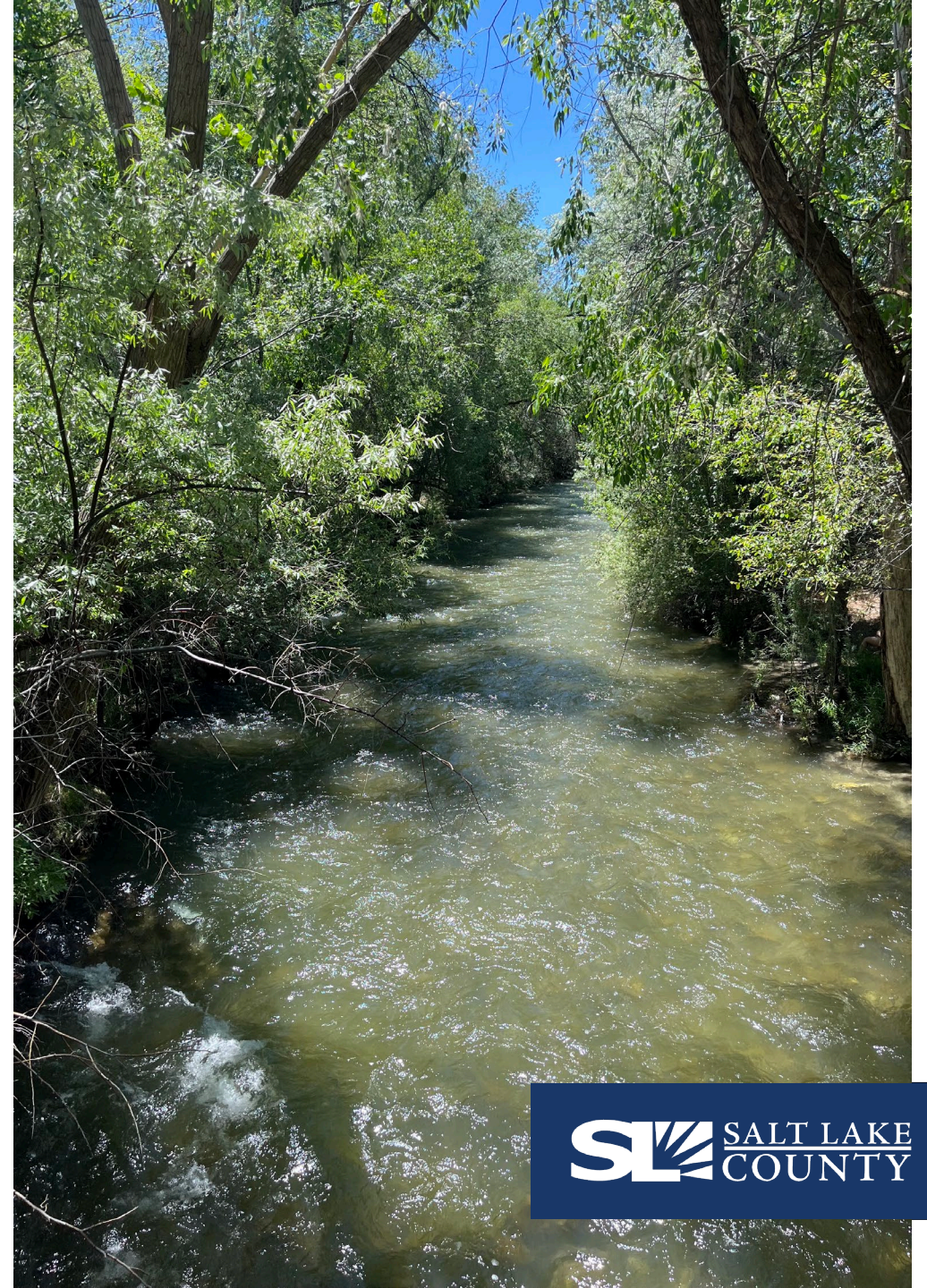
2024

- Snowpack 130% of normal
 - Less low and mid level elevation snow
- Soil Moisture – extremely high
- Reservoir & Lake Storage (no room)
 - Utah Lake – Full
 - Jordanelle – Full
 - Deer Creek – Full
 - Great Salt Lake – Rising



Response in 2023 supports 2024 efforts

- Less debris in creeks due to 2023 preventative efforts
- Dredging of 10 Flood Control(FC) Detention Basins
- FC has all the sandbags we can store



2024 Runoff Ready Preparation

- Spring Runoff Prep collaboration with cities and towns
- Utah Lake/Jordan River Coordination with State
- Public outreach and education program, including dedicated website and social media engagement
 - <https://slco.org/runoff-ready/>
- Resource collaboration with municipalities
 - 15,000 filled sandbags and 823,000 unfilled sandbags
 - Two (2) Sandbagger Machines ready to go
 - FC Crews walking creeks for debris removal
 - Staging equipment on Emigration & Parley's Creeks
 - Coordinate all response with cities

2024 Runoff Ready Preparation (cont.)

- Flood Control & Watershed will continuously monitor precipitation and snowpack data
- Systems in place to retrieve real-time data Precipitation, Snowtel, and Stream Flow information
- Utilize data-driven decision-making process to prioritize equipment staging and resource allocation

Typical Peak Runoff Date Ranges by Waterway

City Creek ----- May 15th to May 25th

Emigration Creek ----- April 15th to May 10th

Parley's Creek ----- April 10th to May 10th

Mill Creek ----- May 20th to June 10th

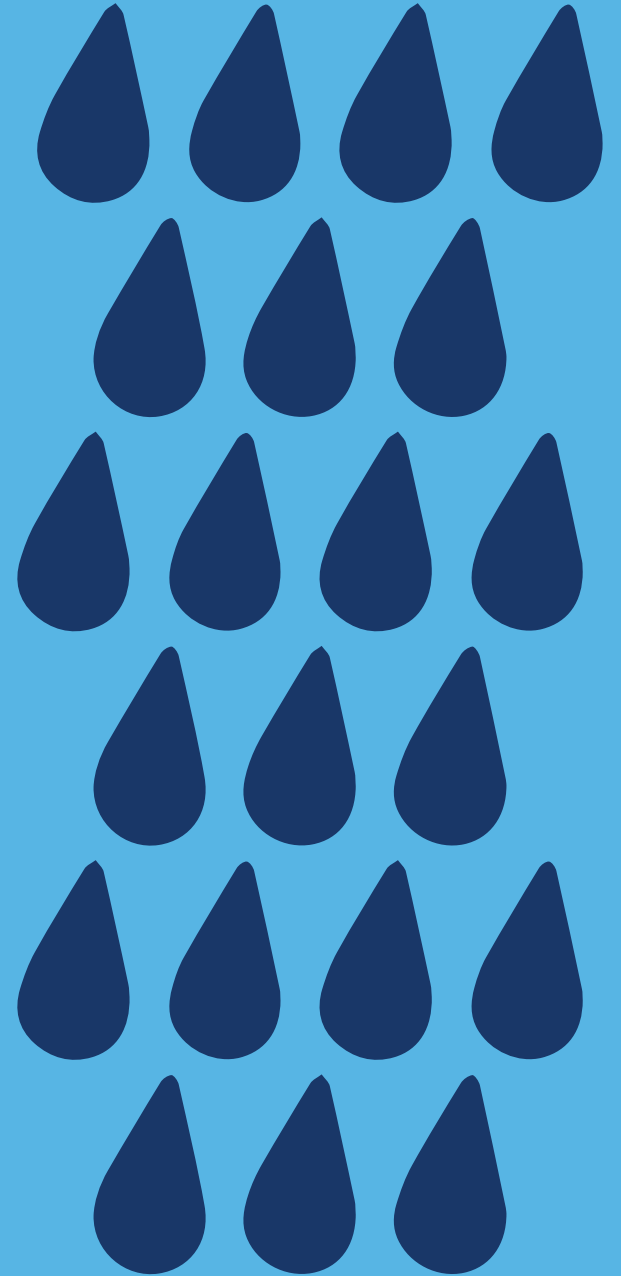
Big Cottonwood Creek ----- May 20th to June 25th

Little Cottonwood Creek ----- June 5th to June 25th

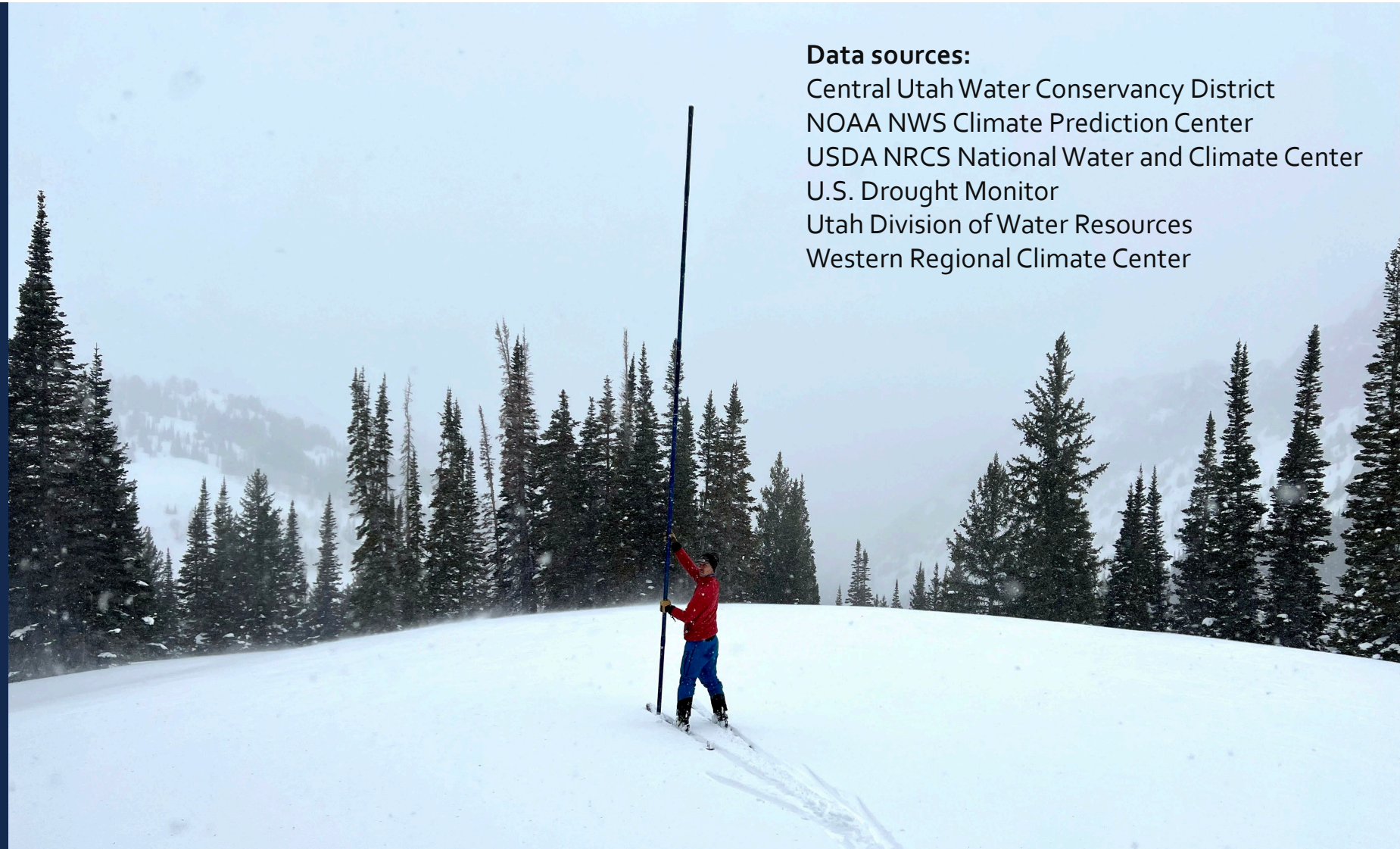
Current Status

1. Controlled releases from Utah Lake to the Jordan River
 - Additional 800 to 1,500 cfs, more than double last year
 - Gates are fully open
 - Jordan River trail will have limited access in some areas through July
 - Coordinating with Parks and Rec for Jordan River Trail impacts
2. Ground water issues in the surrounding areas along the river
3. Jordan River will be flowing bank full in low-lying areas
4. Additional flows will be sent down Surplus Canal
5. Lower Jordan River will not be affected, currently
6. Controlled releases from Little Dell Reservoir to Parley's Creek
7. Emigration and Parley's Creeks are actively running off

Thank You
Questions?



Contact:
Salt Lake County
Flood Control
(385) 468-6600



Data sources:

Central Utah Water Conservancy District
NOAA NWS Climate Prediction Center
USDA NRCS National Water and Climate Center
U.S. Drought Monitor
Utah Division of Water Resources
Western Regional Climate Center

<https://slco.org/runoff-ready/>