

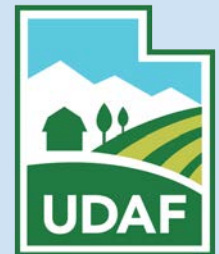


Utah Water Conditions (drought webinar)

The meeting will begin shortly



Thank you to our contributors

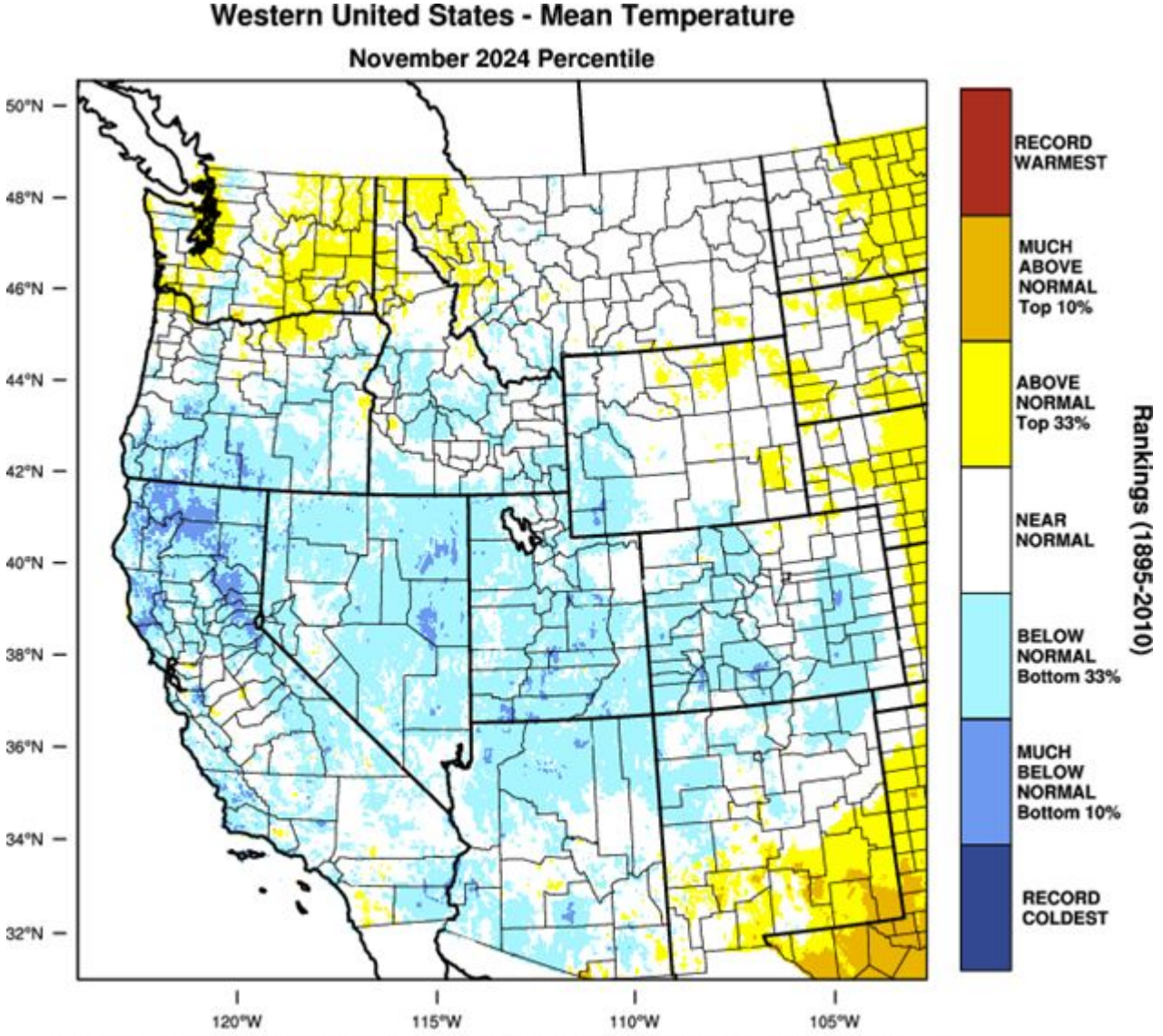




Utah Water Conditions Update

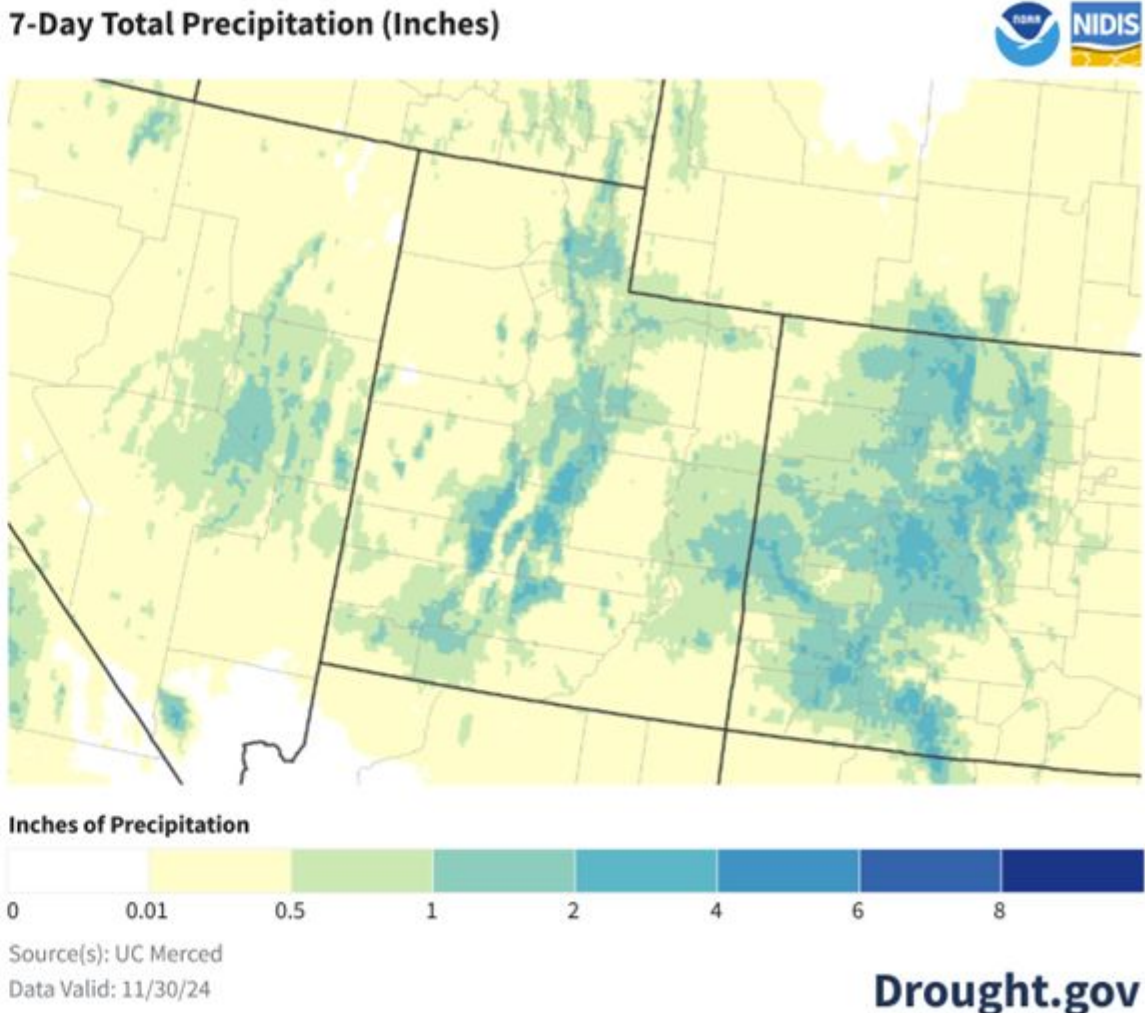
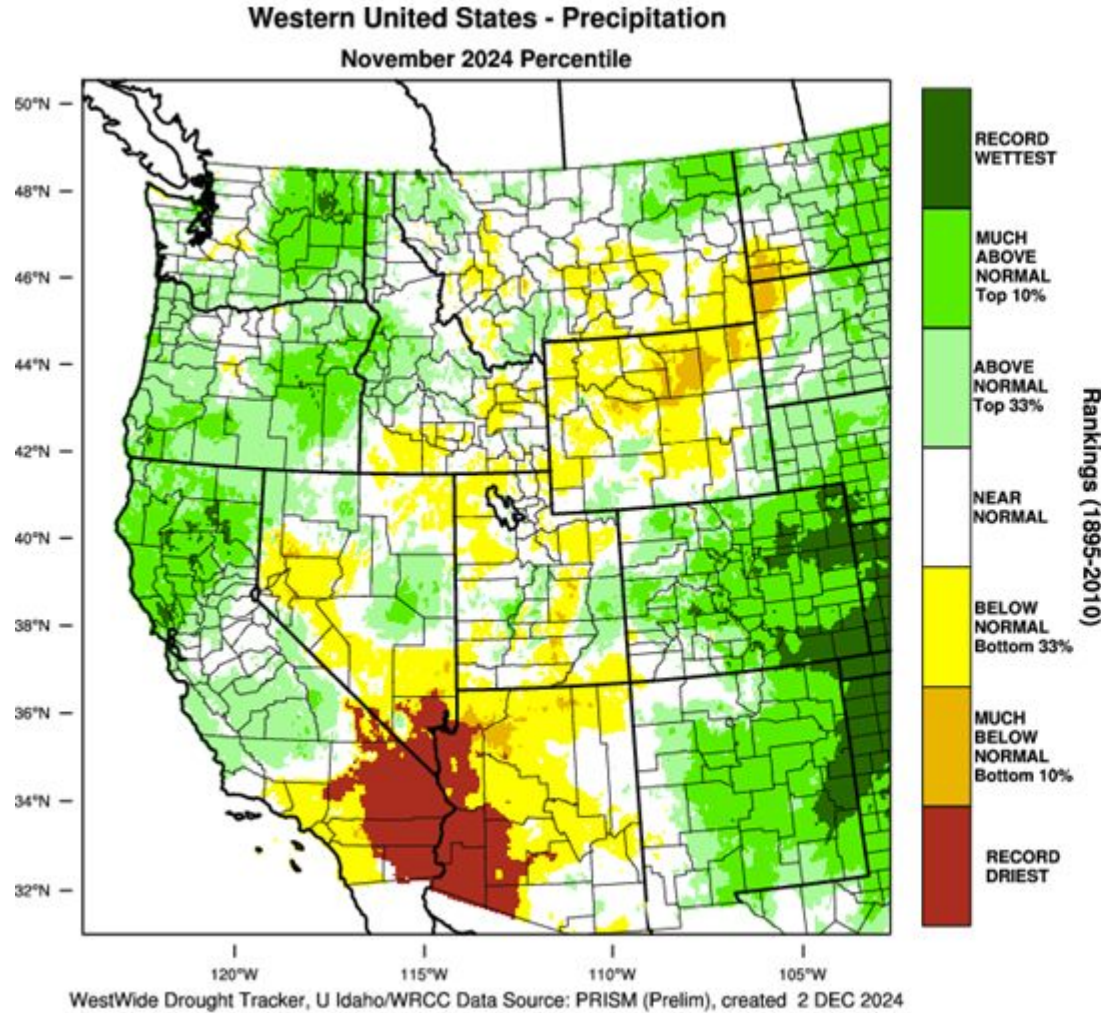
December 3, 2024

Temperature (November Summary)



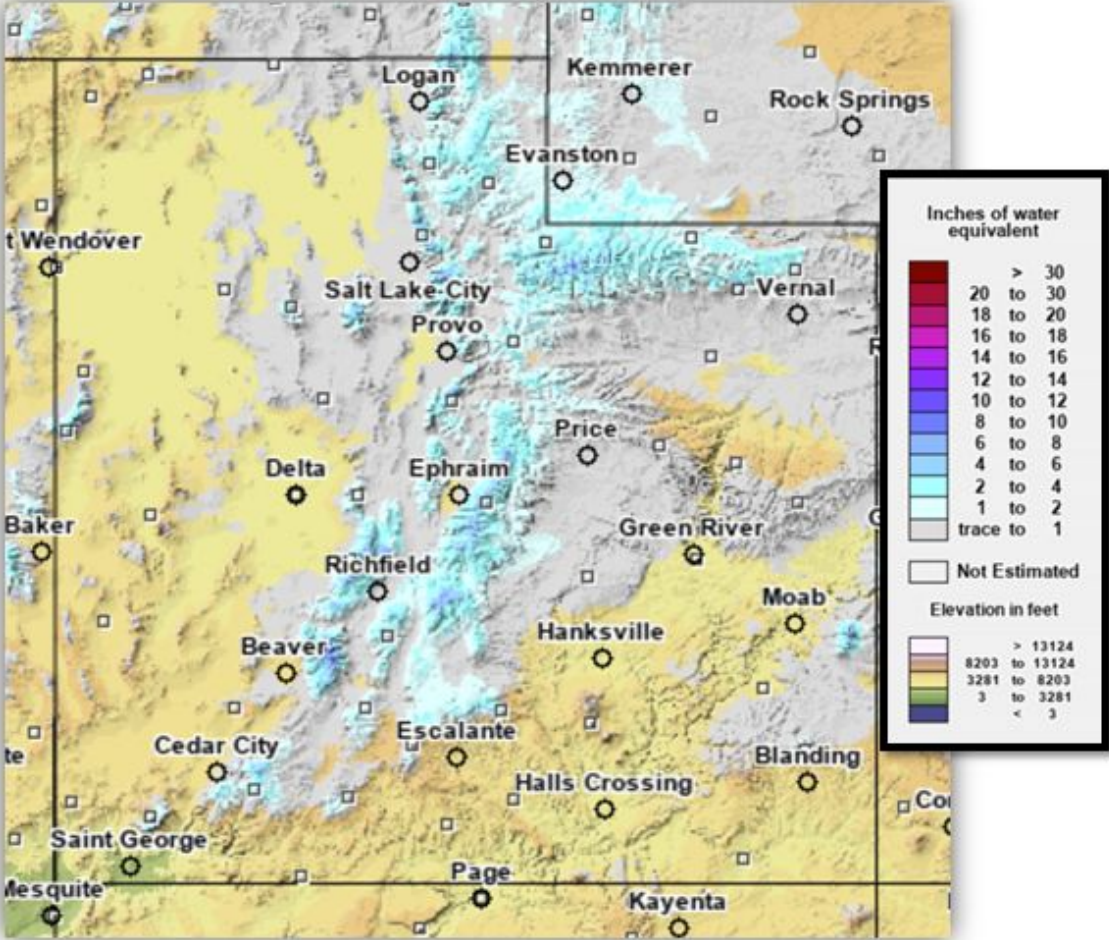
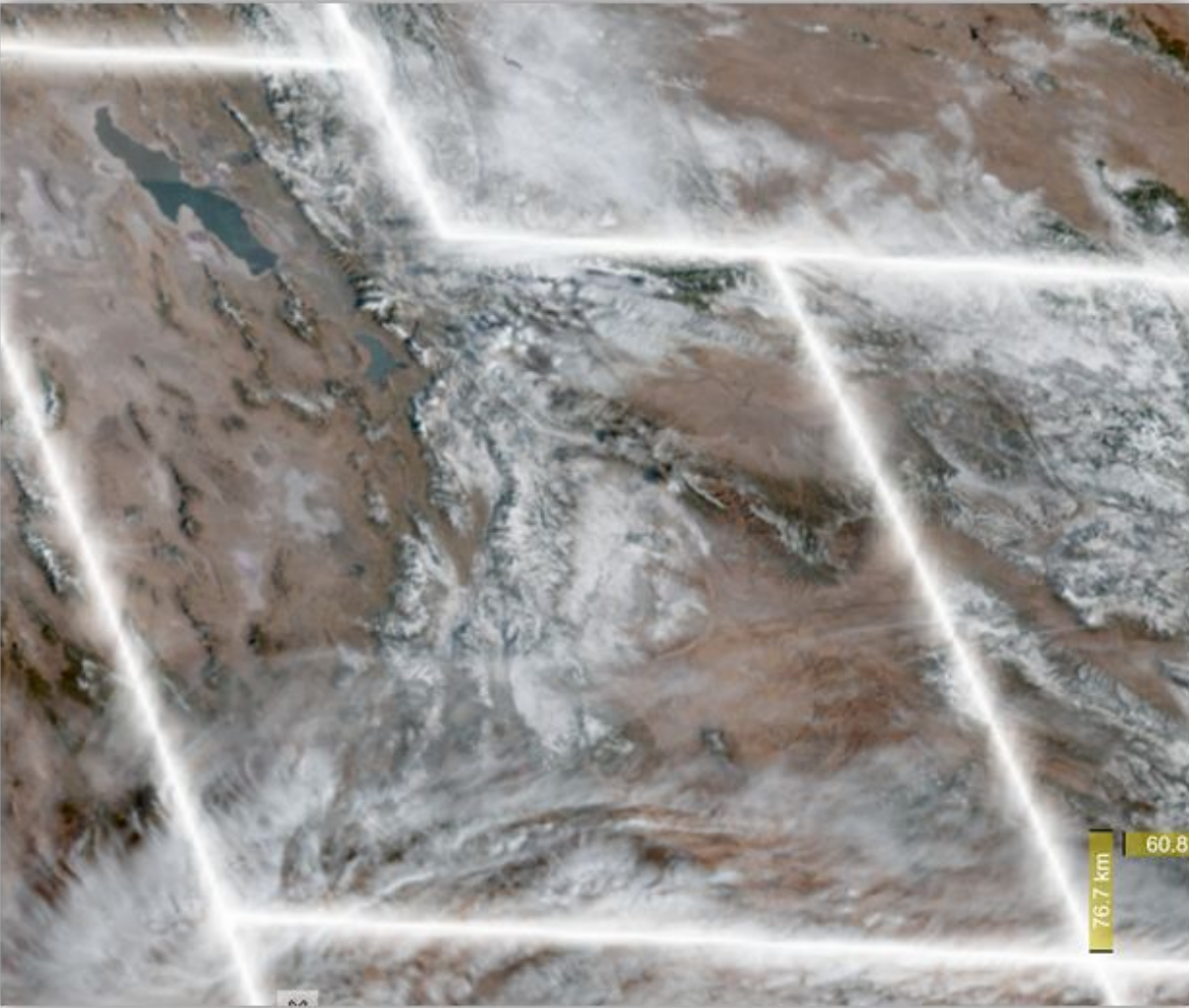
WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 DEC 2024

Precipitation (November Summary)



Agency - Utah Climate Center
Presenter - Jon Meyer

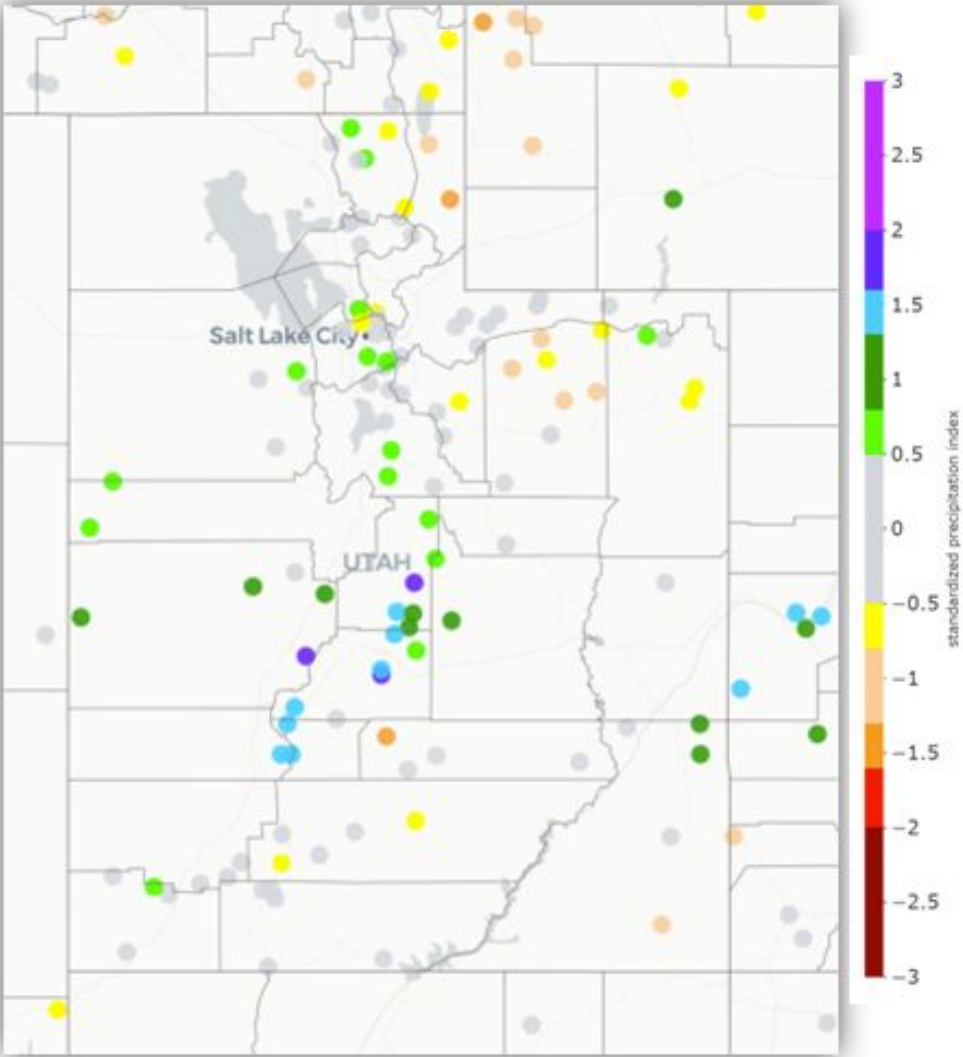
Current Snow Cover



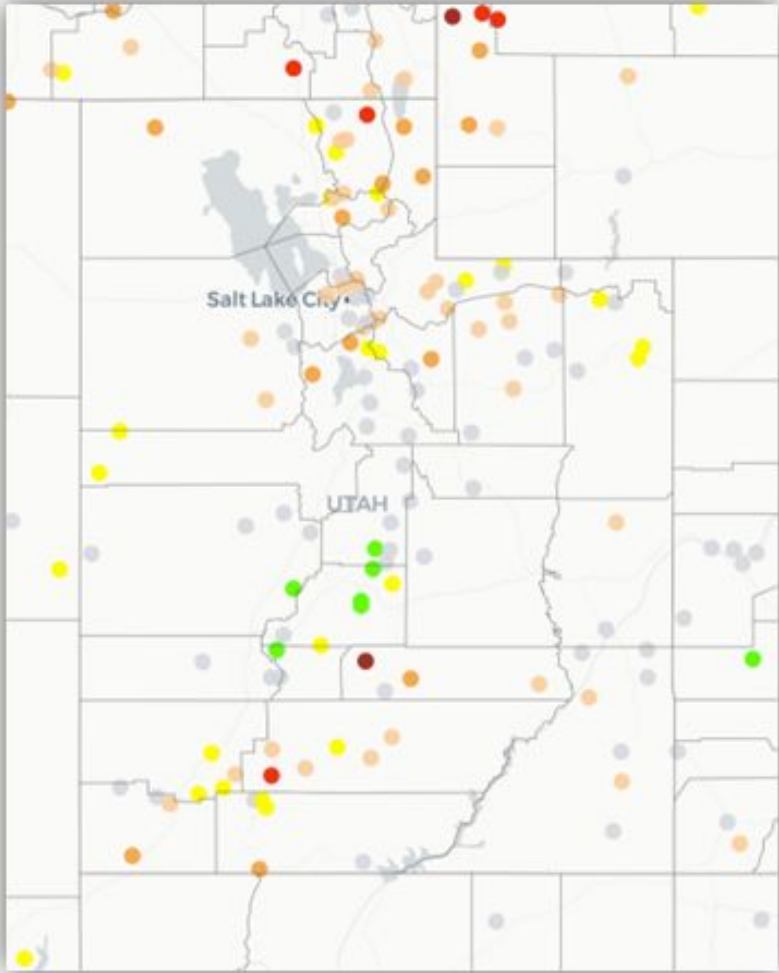
Agency - Utah Climate Center
Presenter - Jon Meyer

Standardized Precipitation Index (SPI)

30-day Standardized Precipitation Index: 2024/11/03 - 2024/12/02

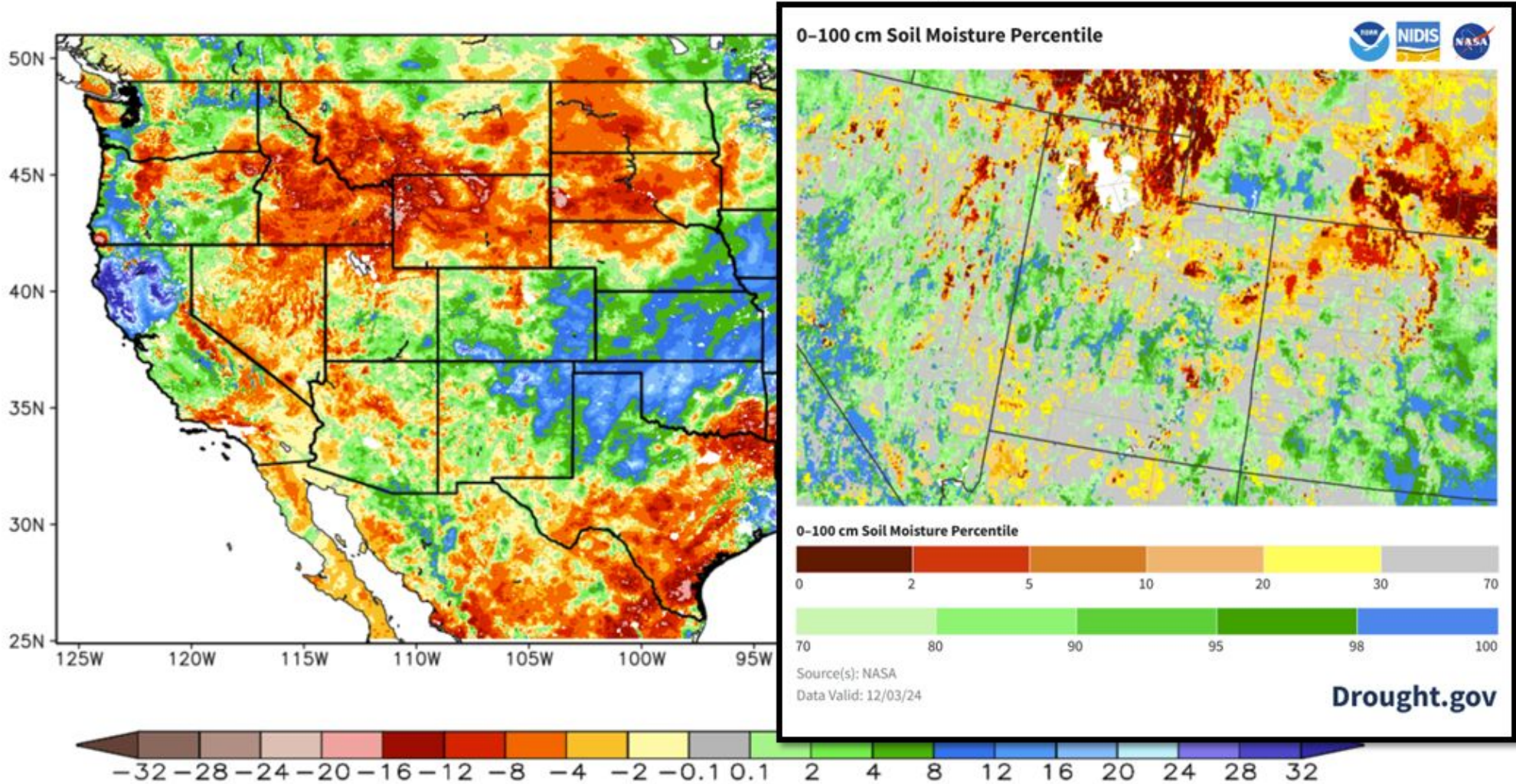


90-day Standardized Precipitation Index: 2024/09/04 - 2024/12/02



Soil Moisture Conditions

1-Year Difference in Column Relative Soil Moisture (%) valid 12z 03 Dec 2024



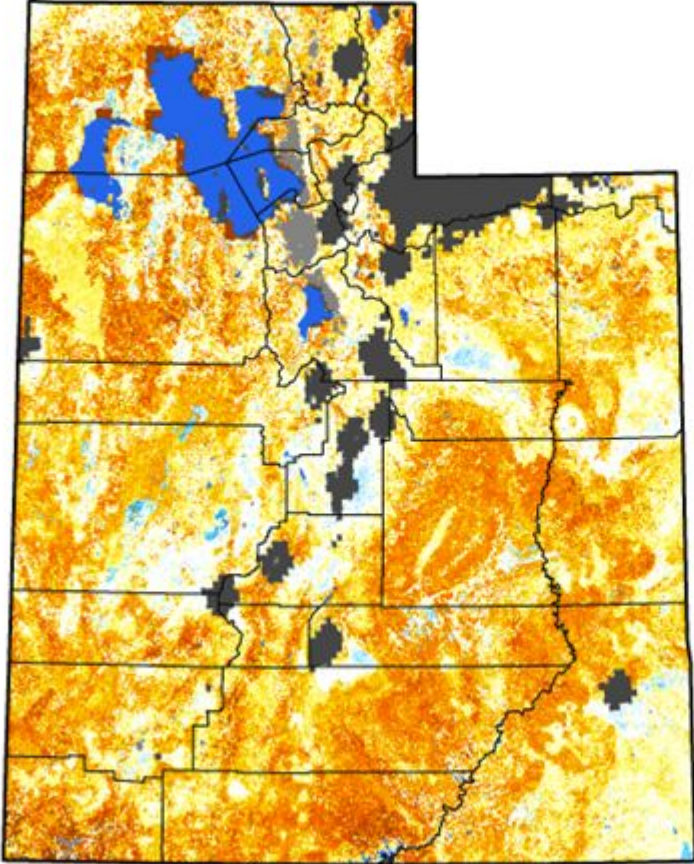
****NOTE****
****Experimental****

Agency - Utah Climate Center
Presenter - Jon Meyer

Short-Term Drought Trends

Quick Drought Response Index Utah

December 1, 2024
(Week 48)



Conditions Relative to 4-Week Historical Average

- Wetter
- Near Average
- Drier
- Out of Season
- Urban
- No Data
- Water



Extended Range Outlook (December)

C3S multi-system seasonal forecast

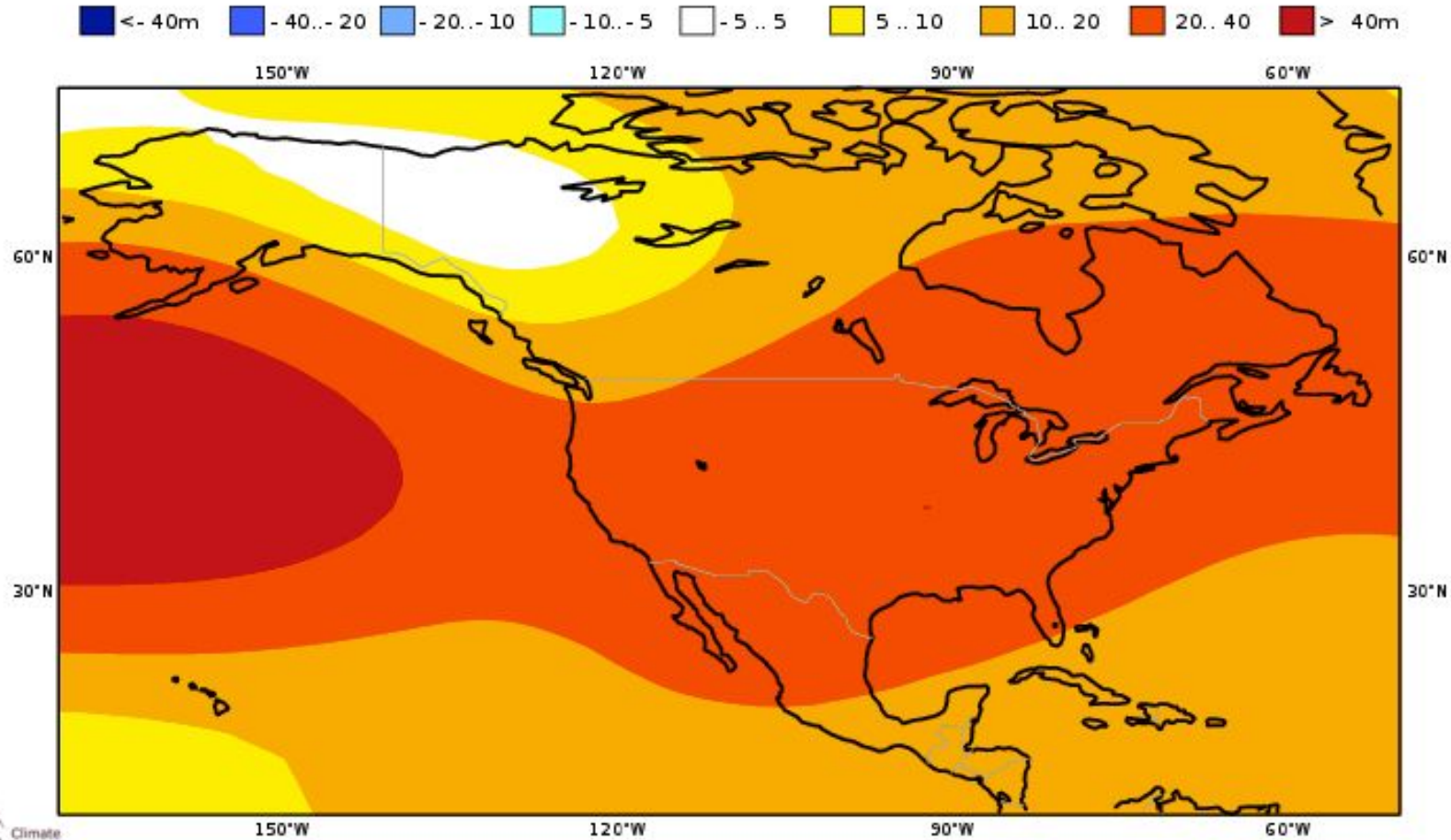
ECMWF/Met Office/Météo-France/CMCC/DWD/NCEP/JMA/ECCC

Mean Z500 anomaly

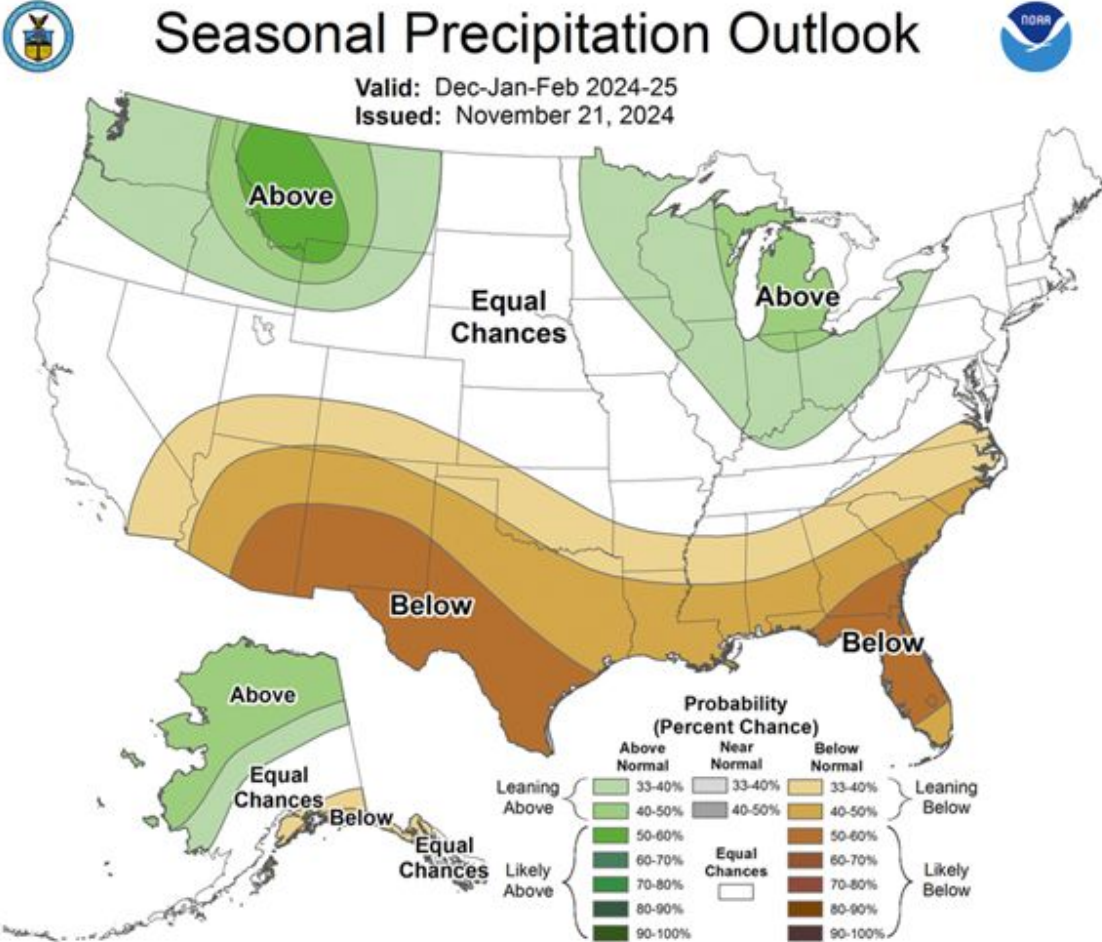
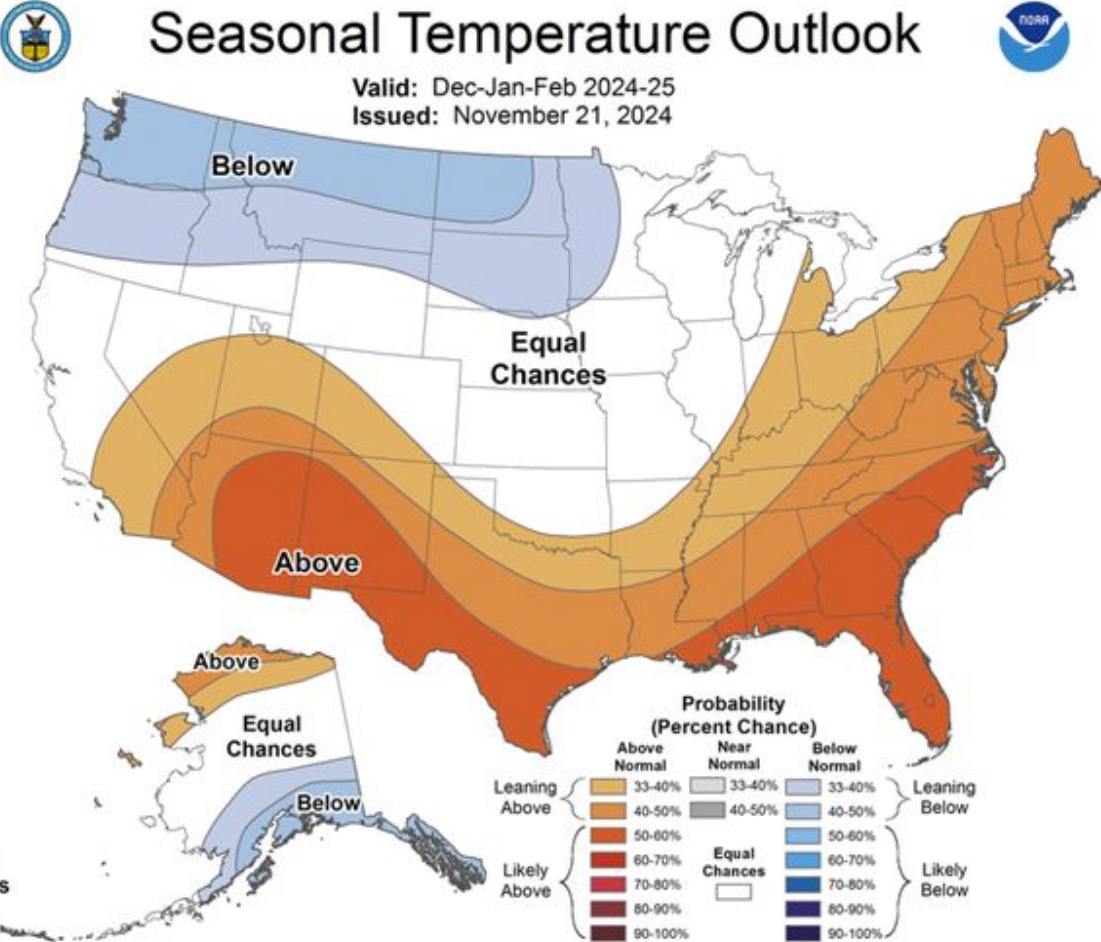
DEC 2024

Nominal forecast start: 01/11/24

Variance-standardized mean

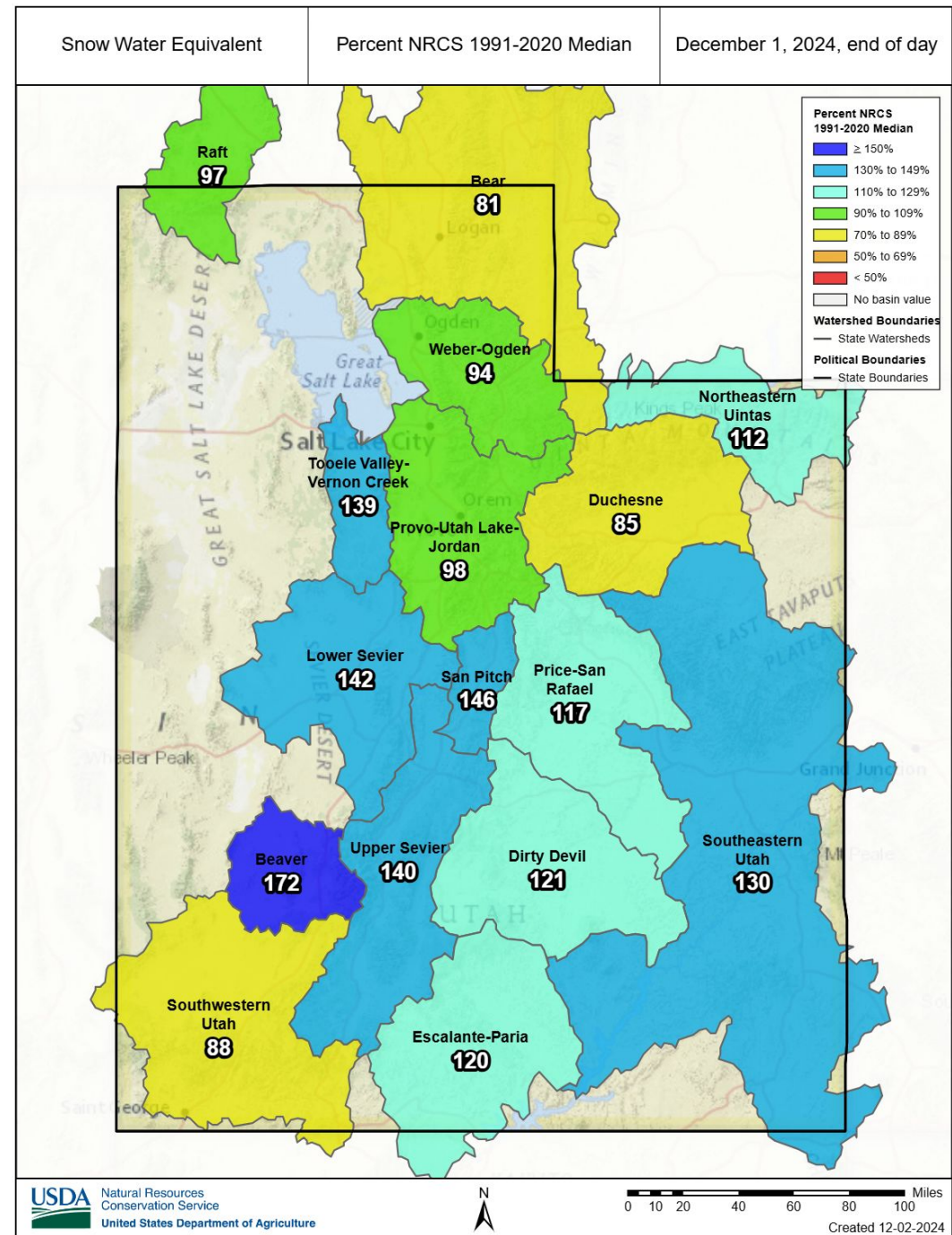
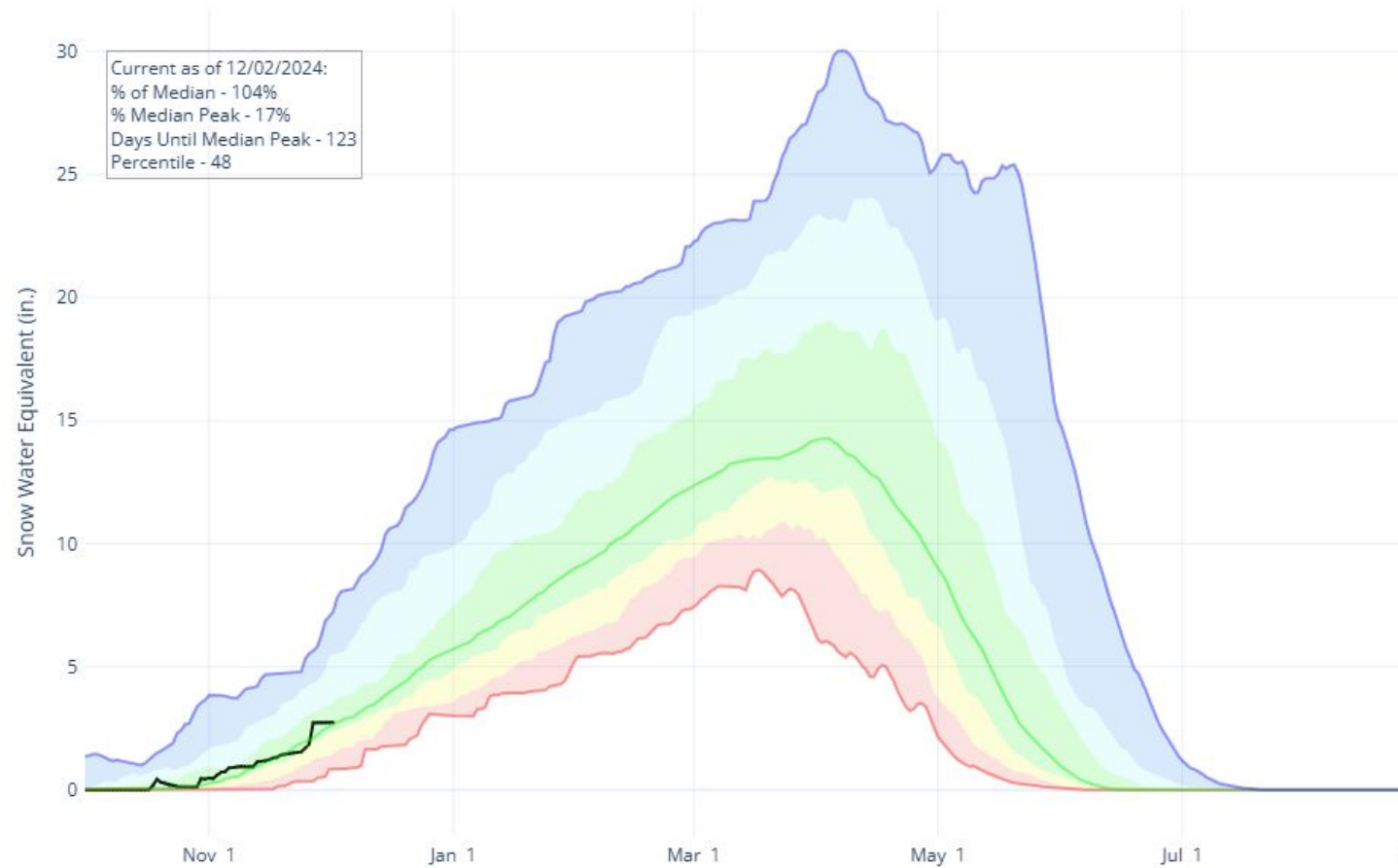


CPC Outlook (Dec-Feb)



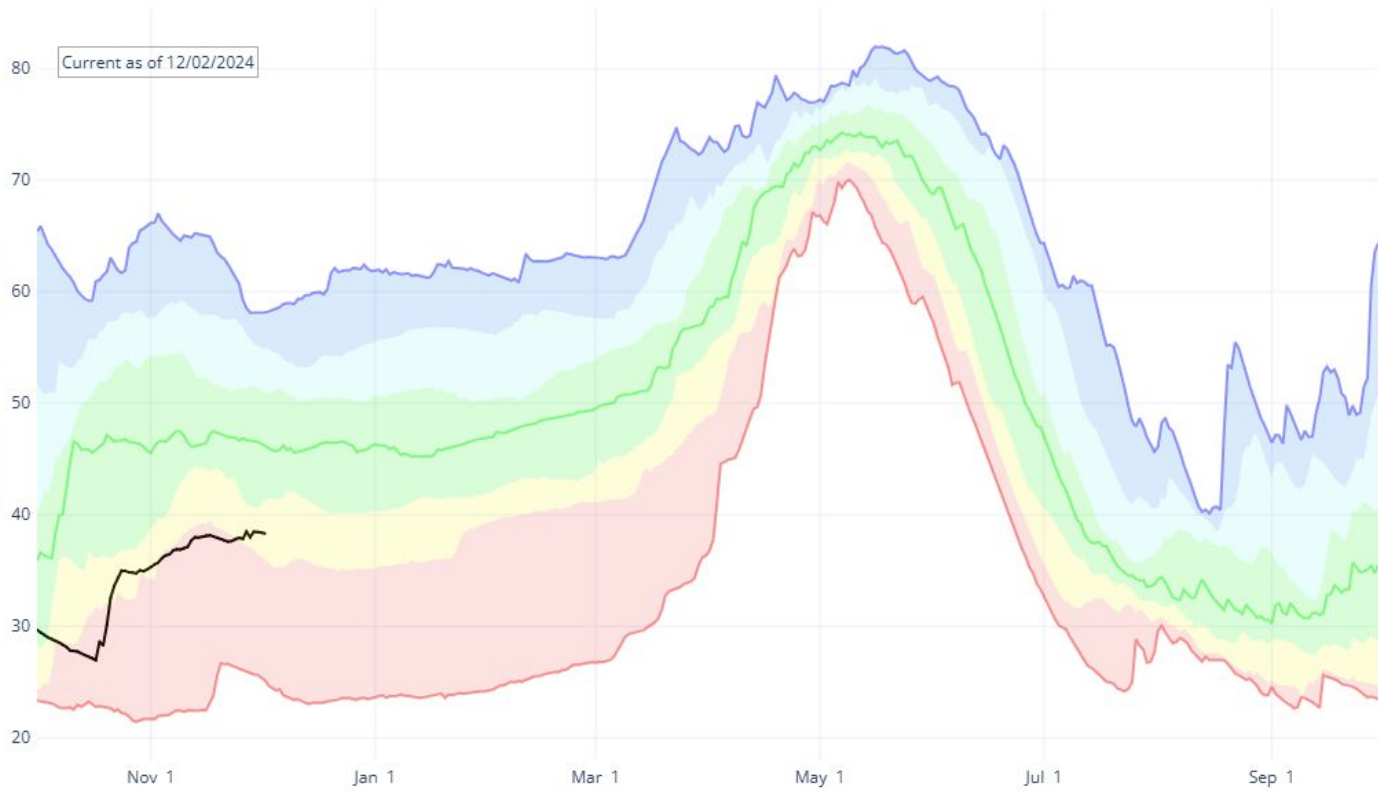
Snowpack

SNOW WATER EQUIVALENT IN STATE OF UTAH

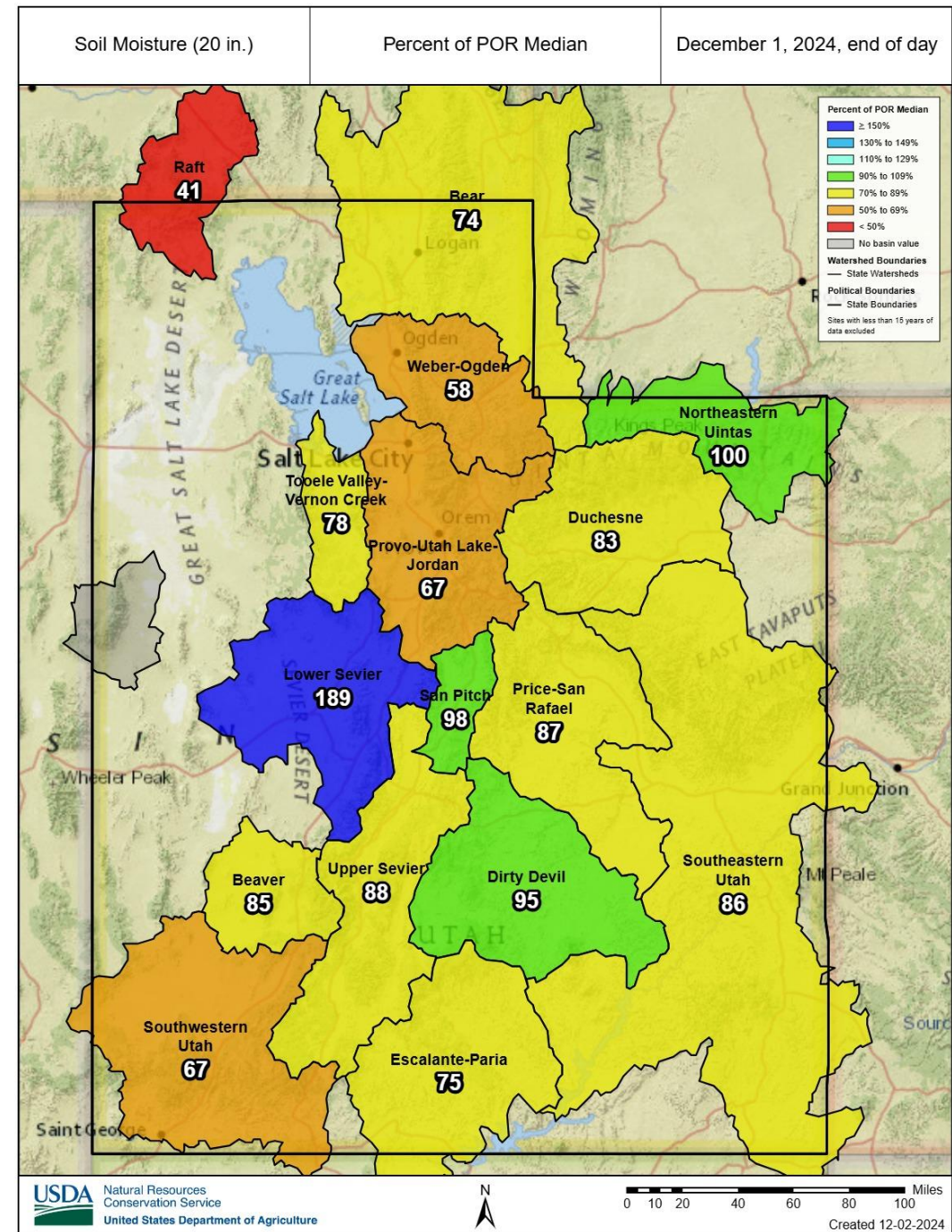


Soil Moisture

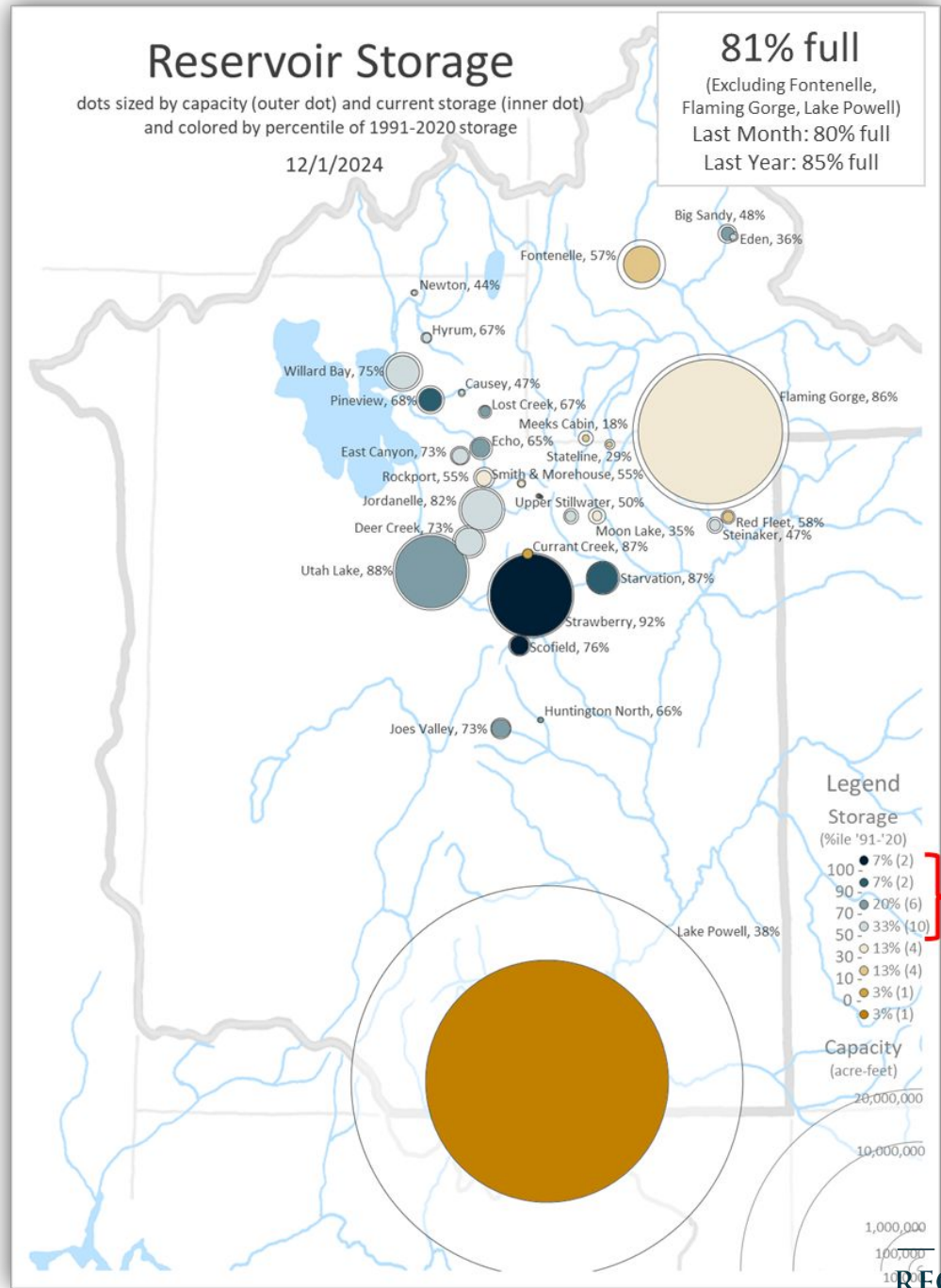
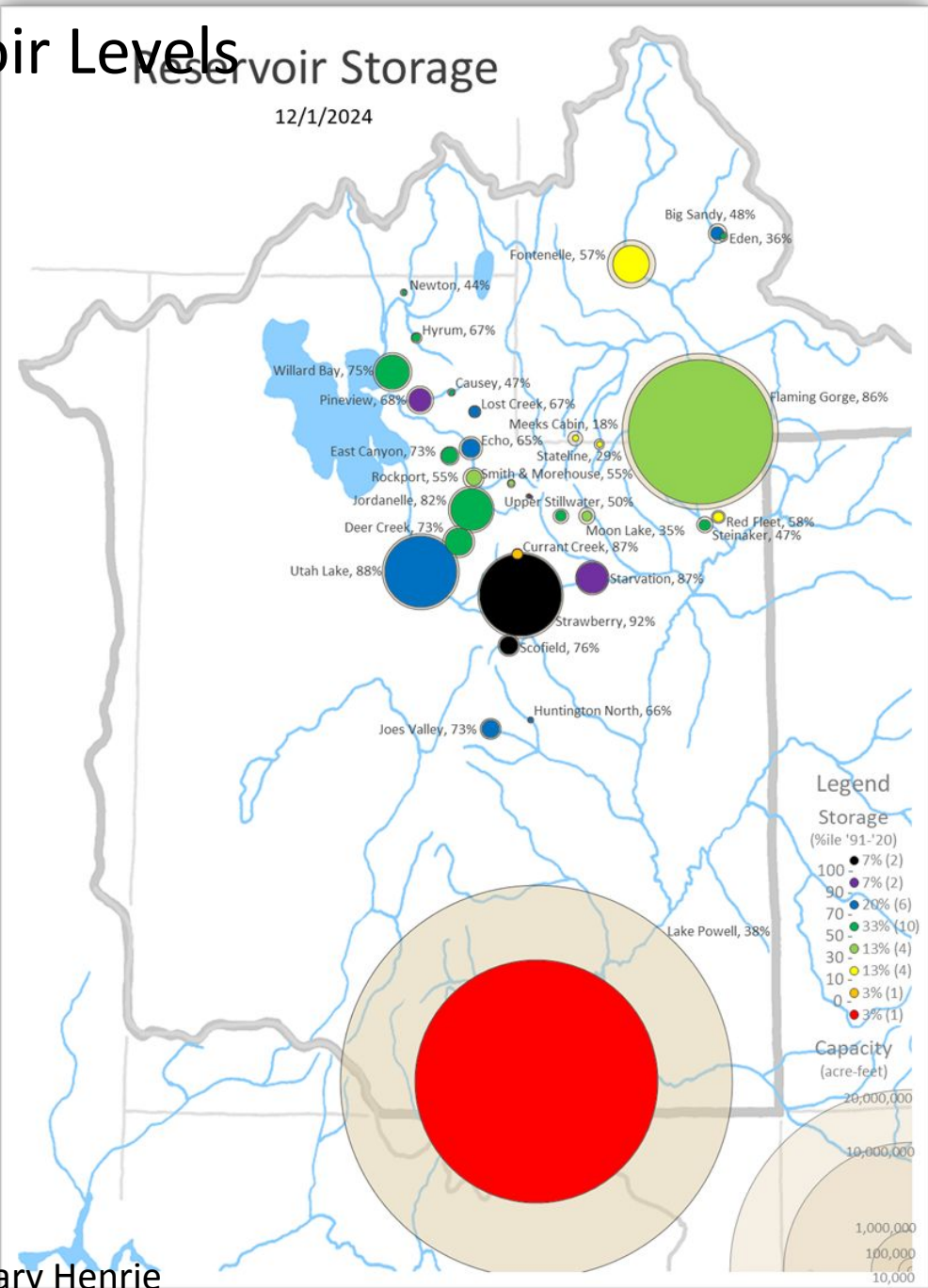
AVG. SOIL MOISTURE (8",20") IN STATE OF UTAH



Agency - NRCS Snow Survey



Reservoir Levels



20 of 30
>median

Agency - BOR
Presenter - Gary Henrie



BUREAU OF RECLAMATION

Reservoir Levels



Agency - BOR
Presenter - Gary Henrie



BUREAU OF
RECLAMATION

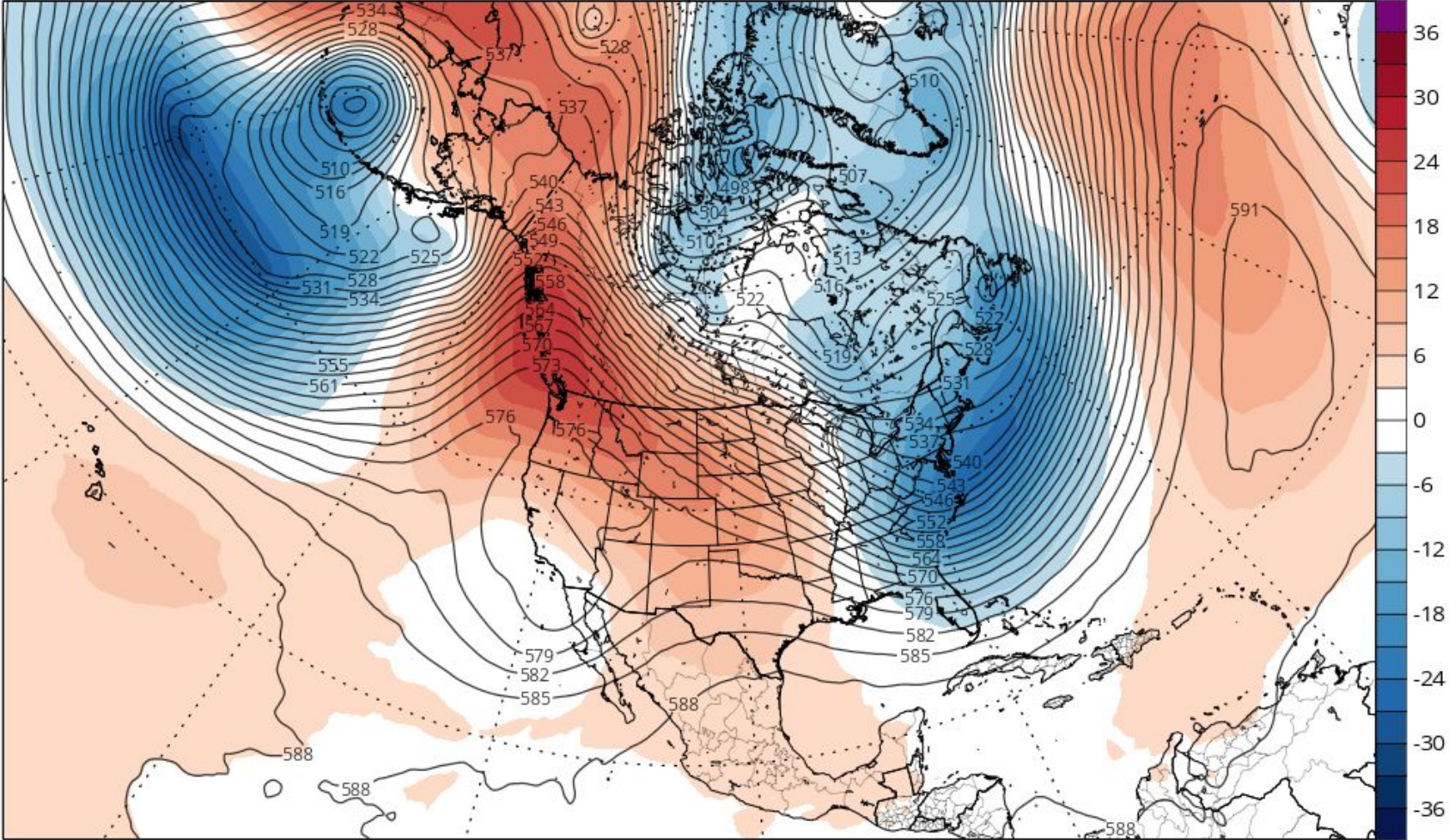
Weather Forecast Office Utah Day 1-7 Outlook



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

Init: 12z Dec 03 2024 Forecast Hour: [6] valid at 18z Tue, Dec 03 2024

TROPICALTIDBITS.COM



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

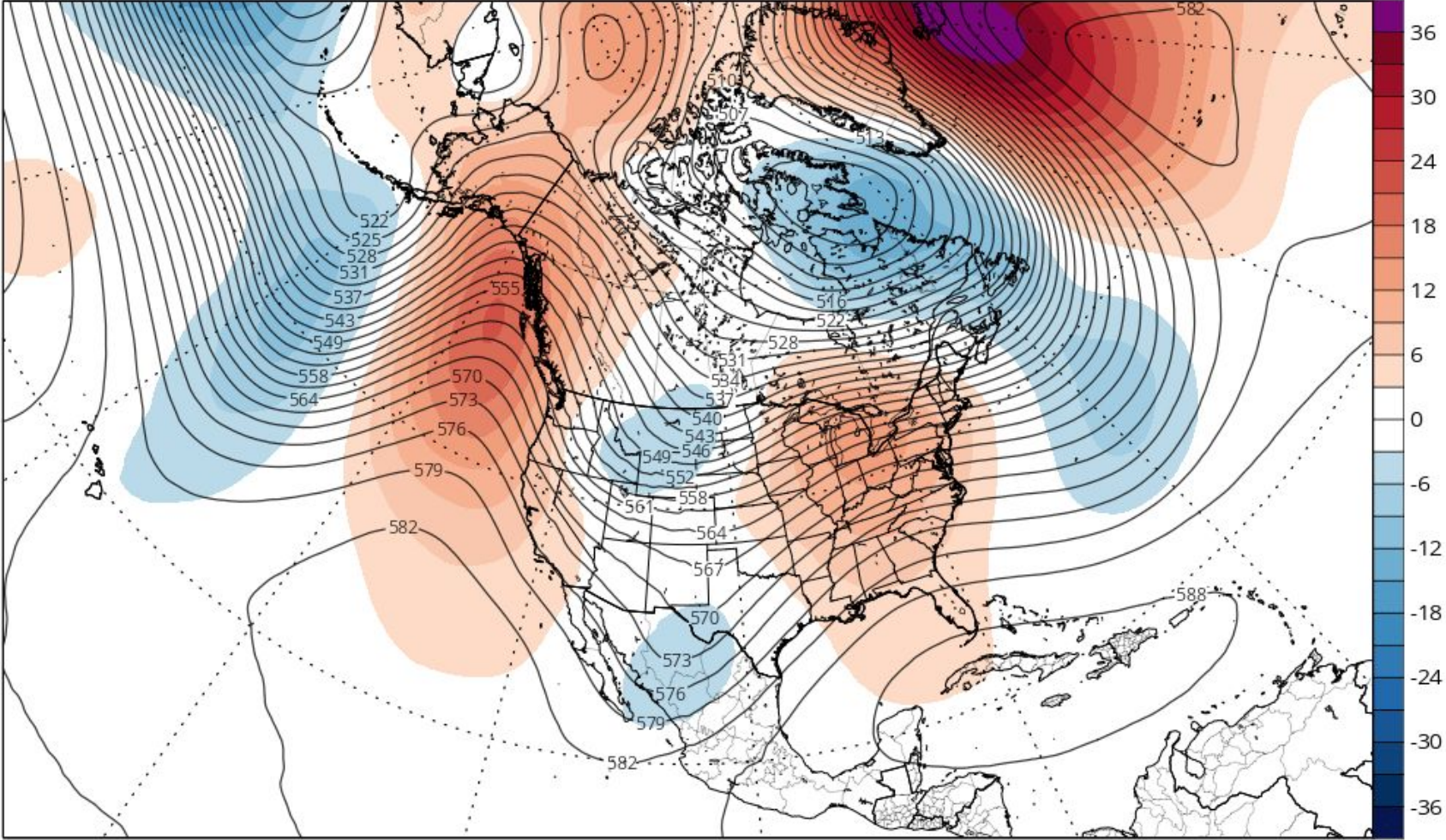
Weather Forecast Office Utah Day 1-7 Outlook



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

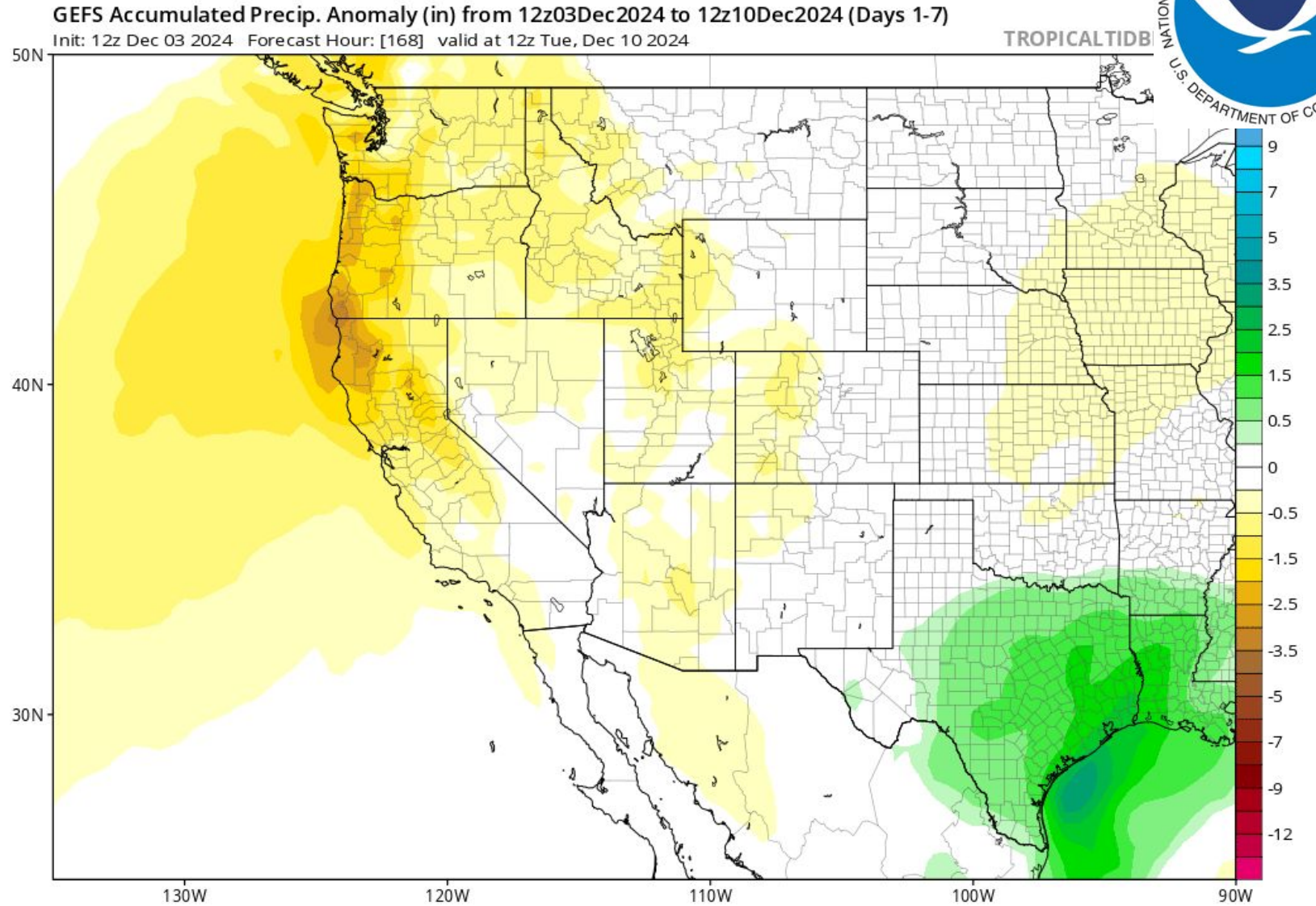
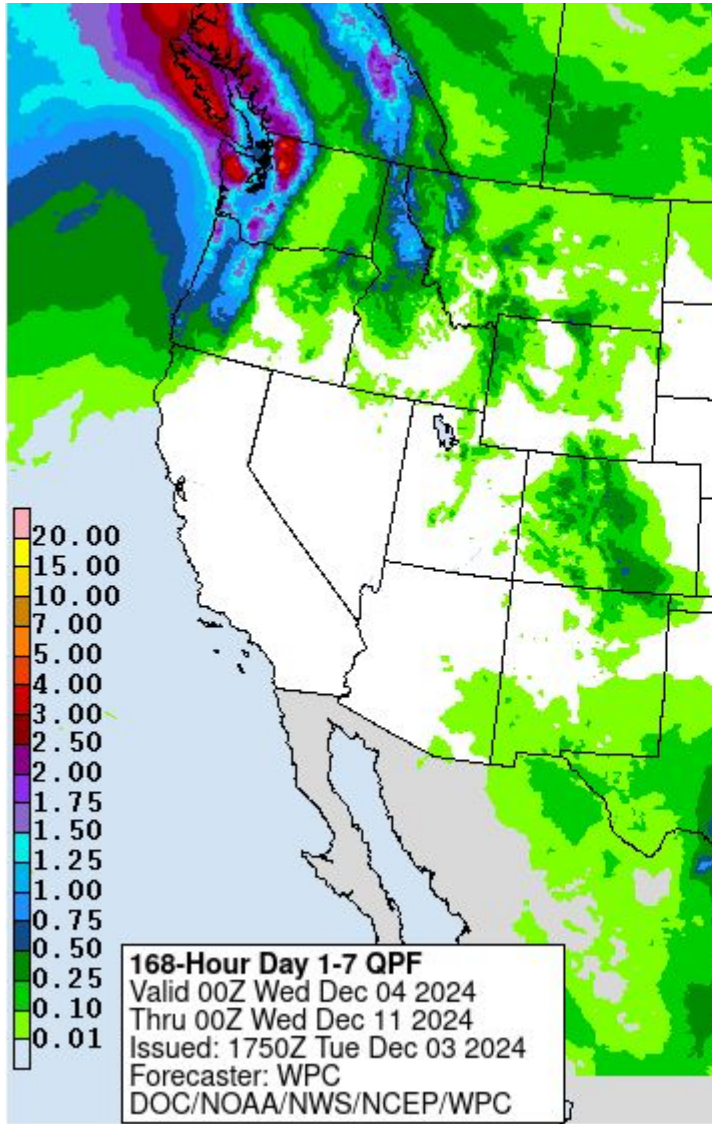
Init: 12z Dec 03 2024 Forecast Hour: [132] valid at 00z Mon, Dec 09 2024

TROPICALTIDBITS.COM



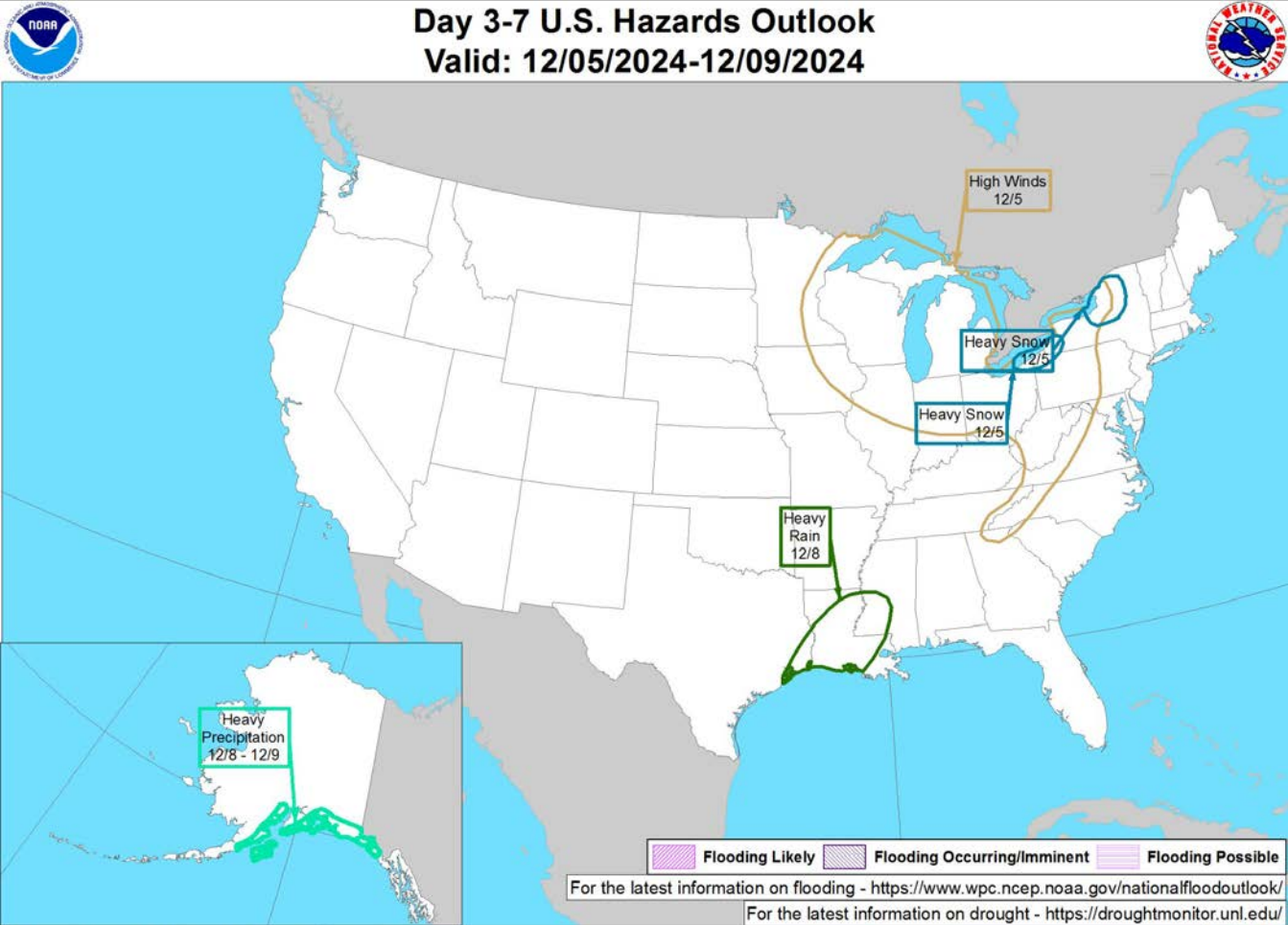
Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

Weather Forecast Office Utah Day 1-7 Outlook



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

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



Weather Prediction Center
Made: 12/02/2024 02:32 PM EST

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

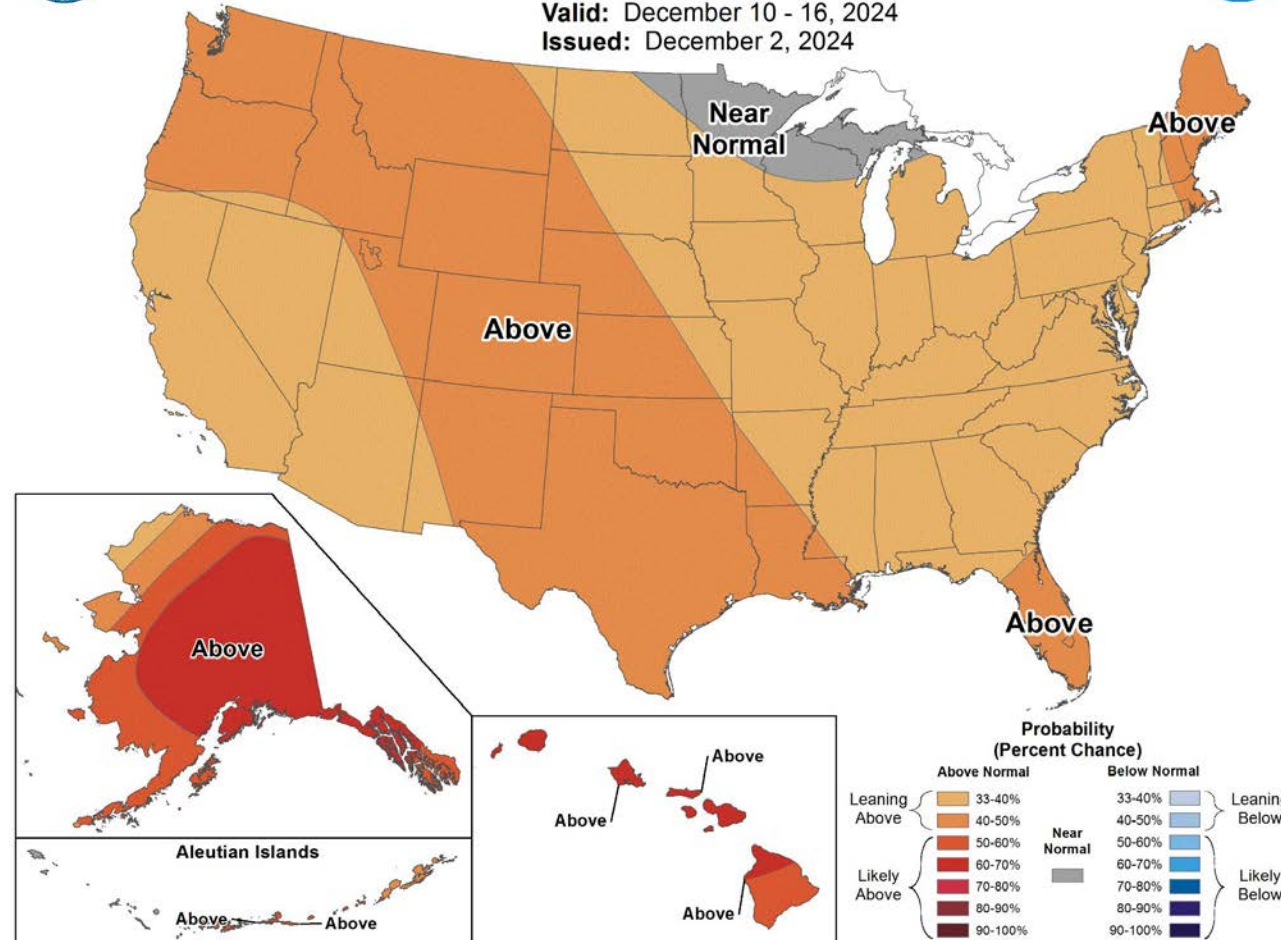
Agency - National Weather Service Weather Forecast Office
Presenter -

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



8-14 Day Temperature Outlook

Valid: December 10 - 16, 2024
Issued: December 2, 2024



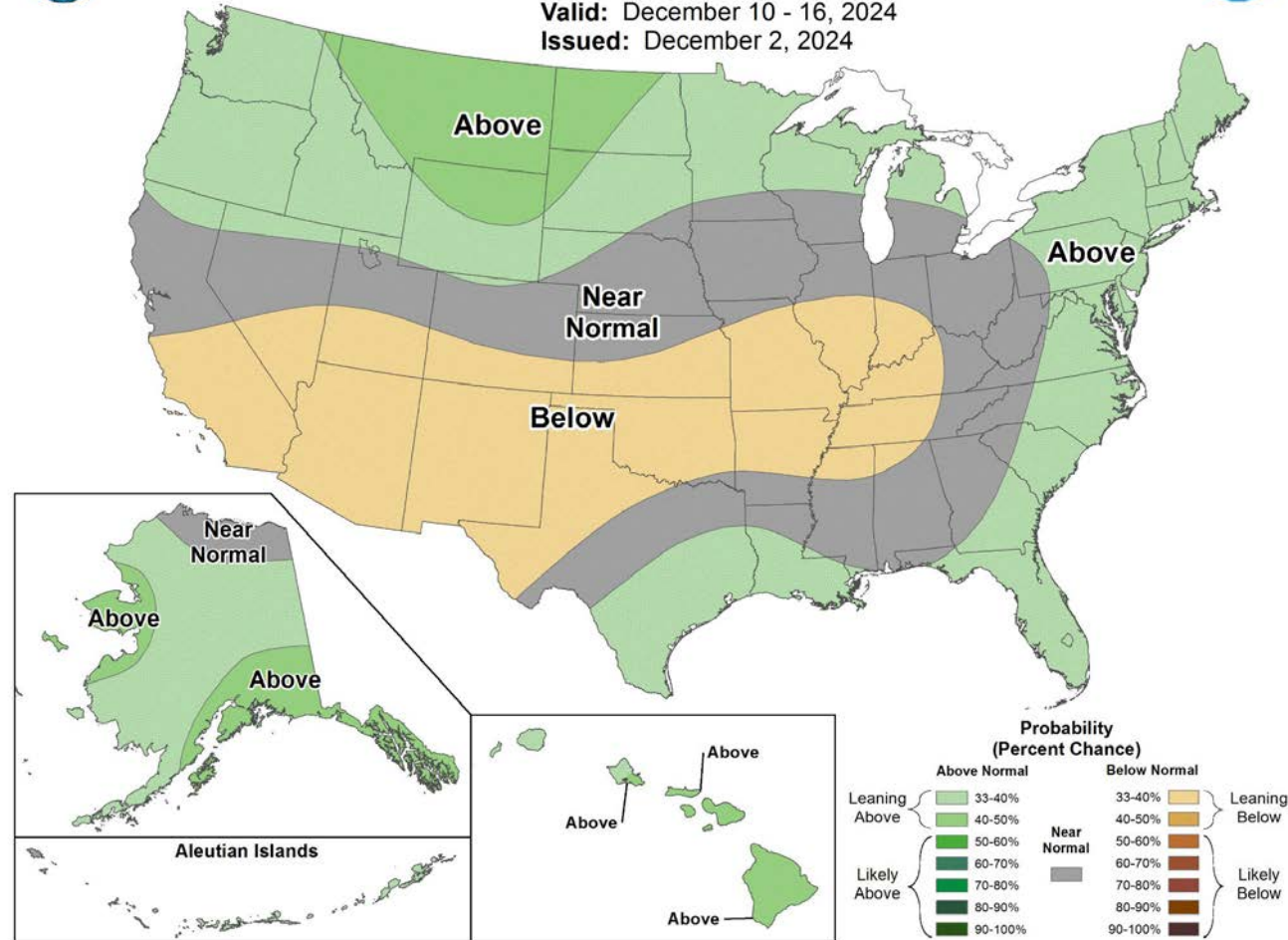
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



8-14 Day Precipitation Outlook

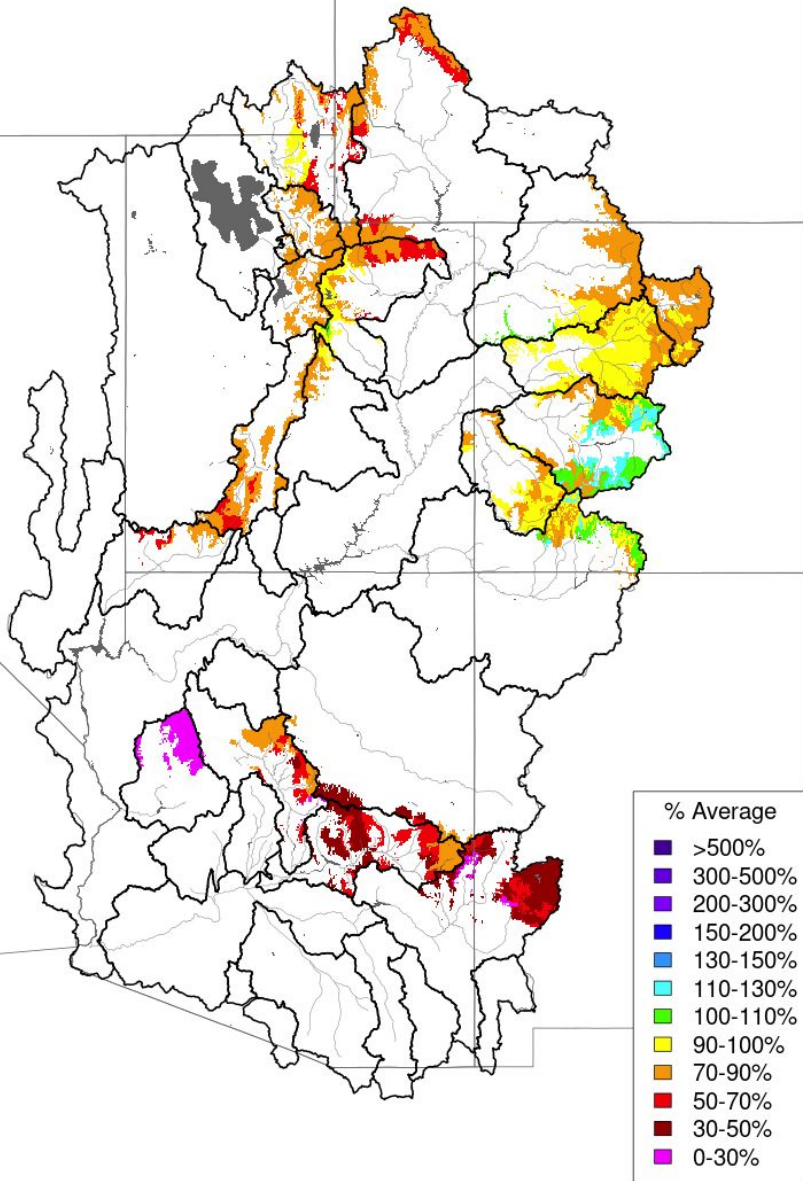


Valid: December 10 - 16, 2024
Issued: December 2, 2024



Soil Moisture - Fall - 2024 (November 15)

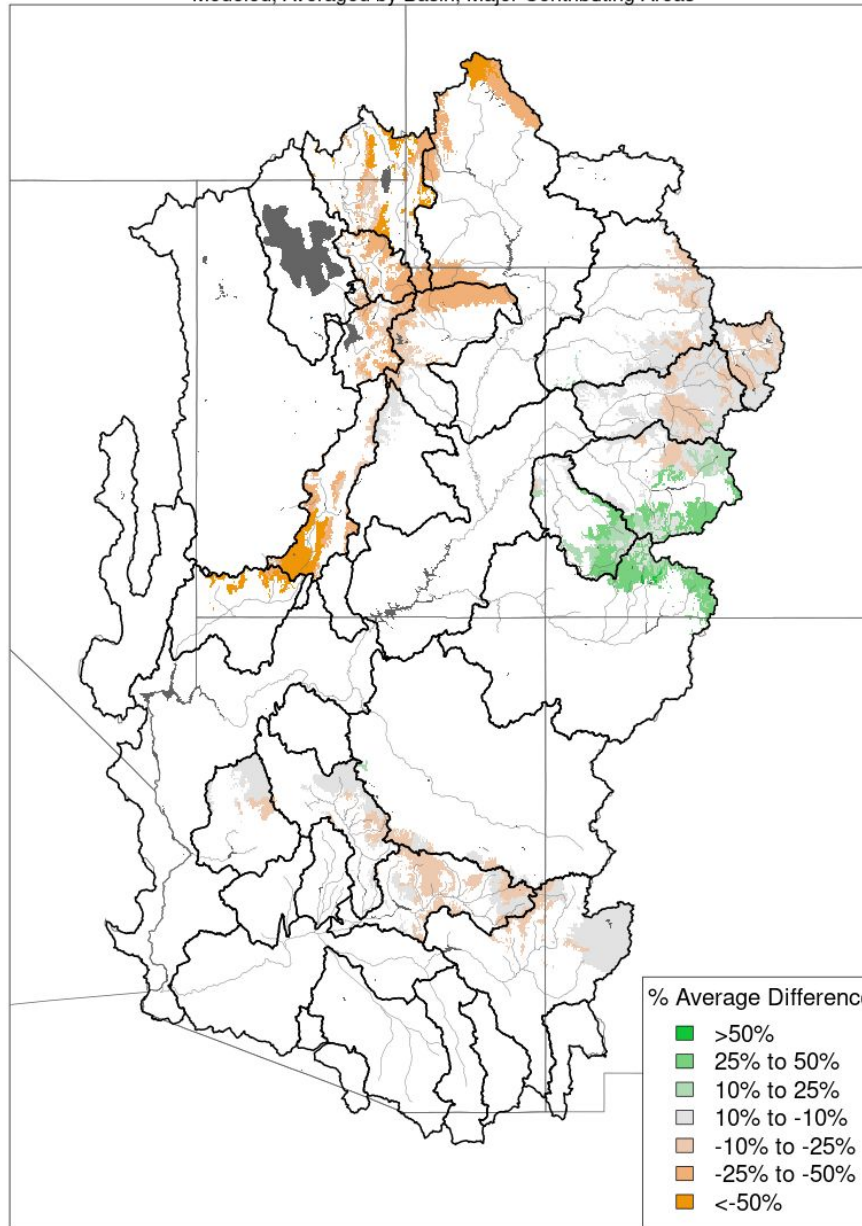
Modeled, Averaged by Basin, Major Contributing Areas



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

Soil Moisture - Fall - 2024 vs 2023

Modeled, Averaged by Basin, Major Contributing Areas



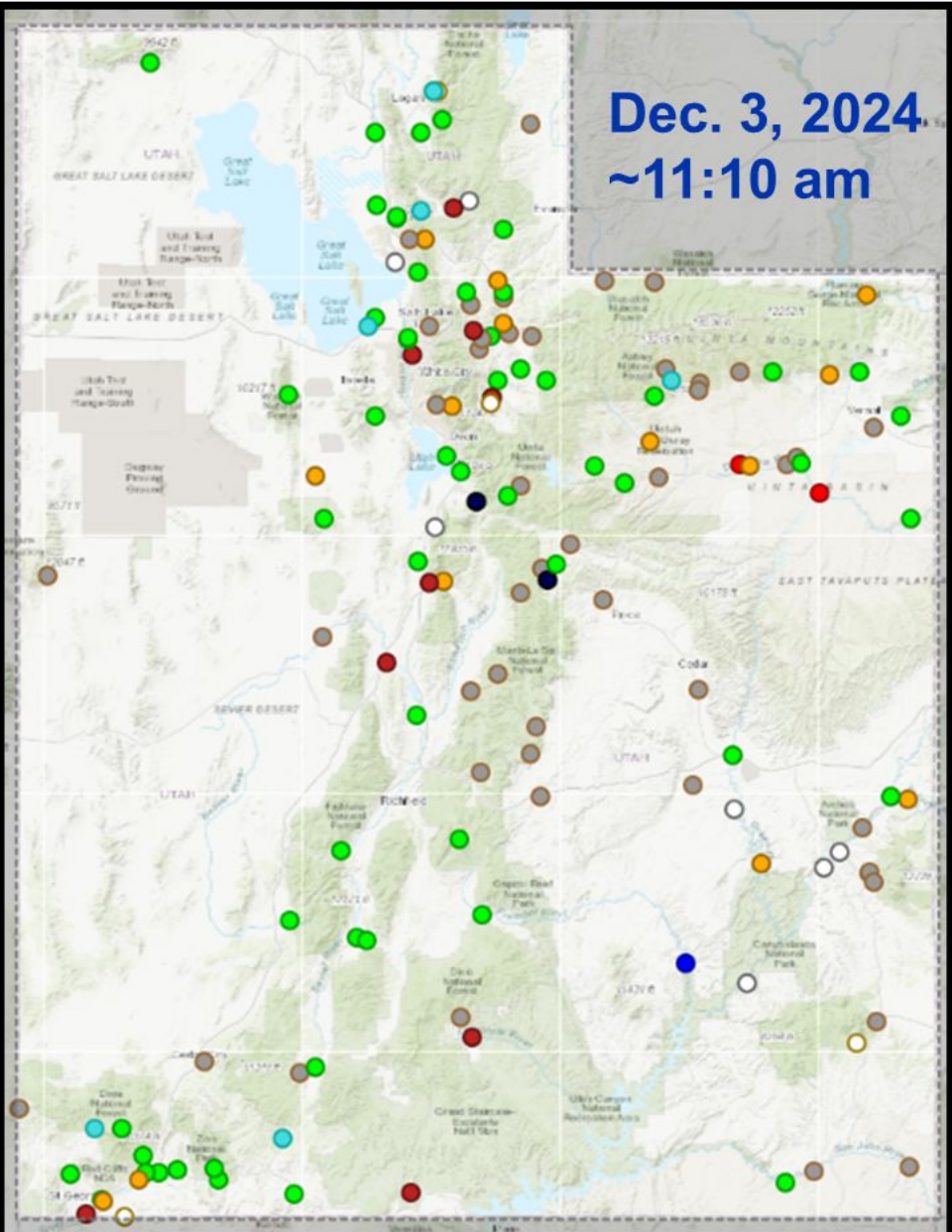
Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov



We just issued our Fall Soil Moisture maps. Generally drier conditions over Utah, could be indicative of runoff efficiency in this water year.

Current Streamflow Conditions

Dec. 3, 2024
~11:10 am



Day-of-Year Status	Nov. 5	Dec. 3
All-time high for this day-of-year	1.4%	1.4%
Much above normal for this day-of-year	2.7%	0.7%
Above normal for this day-of-year	6.1%	4.1%
Normal for this day-of-year	45.3%	38.5%
Below normal for this day-of-year	16.9%	9.5%
Much below normal for this day-of-year	8.1%	6.1%
All-time low for this day-of-year	1.4%	1.4%
Not ranked - insufficient record	9.5%	9.5%
Not ranked - no recent measurement	2.7%	2.0%
Not ranked - no measurement	3.4%	24.3%
Not ranked - stream not flowing	2.7%	2.7%

Streamflow: Status

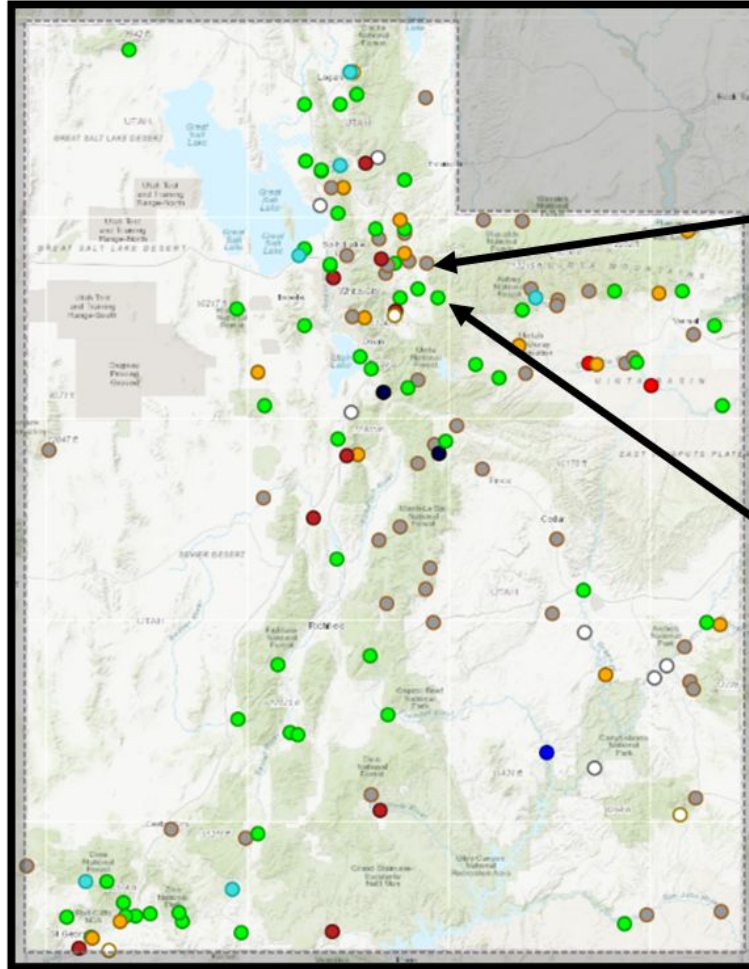
- Above flood stage
- All-time high for this day (100th percentile (maximum))
- Much above normal (>90th percentile)
- Above normal (76th – 90th percentile)
- Normal (25th – 75th percentile)
- Below normal (10th – 24th percentile)
- Much below normal (<10th percentile)
- All-time low for this day (0th percentile (minimum))
- Not flowing
- Not ranked
- Measurement flag
- Recent measurement unavailable

Provisional data, subject to revision

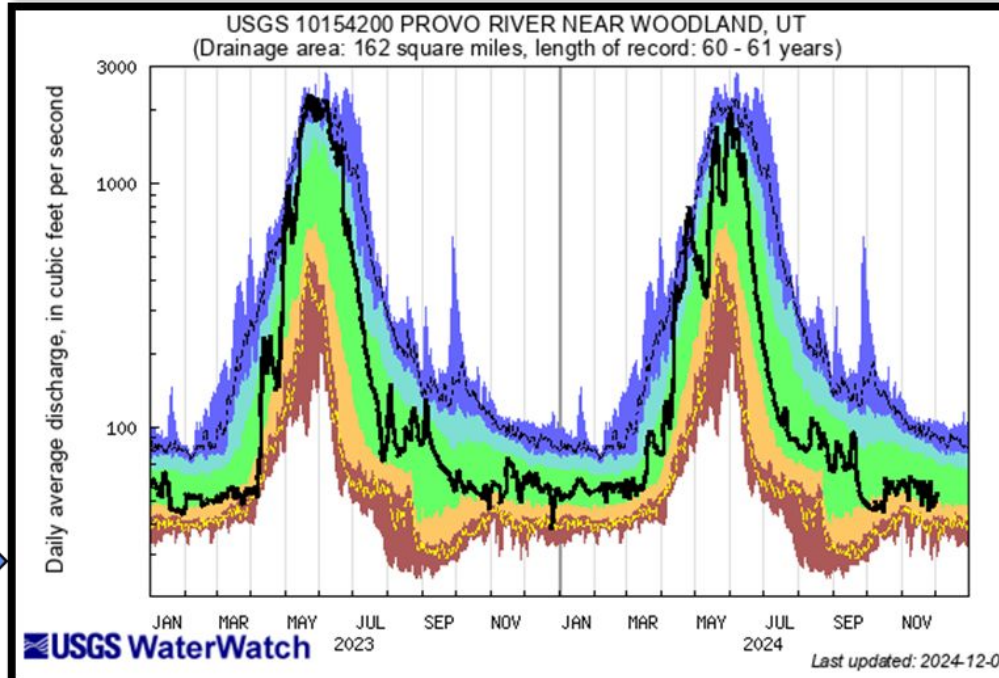
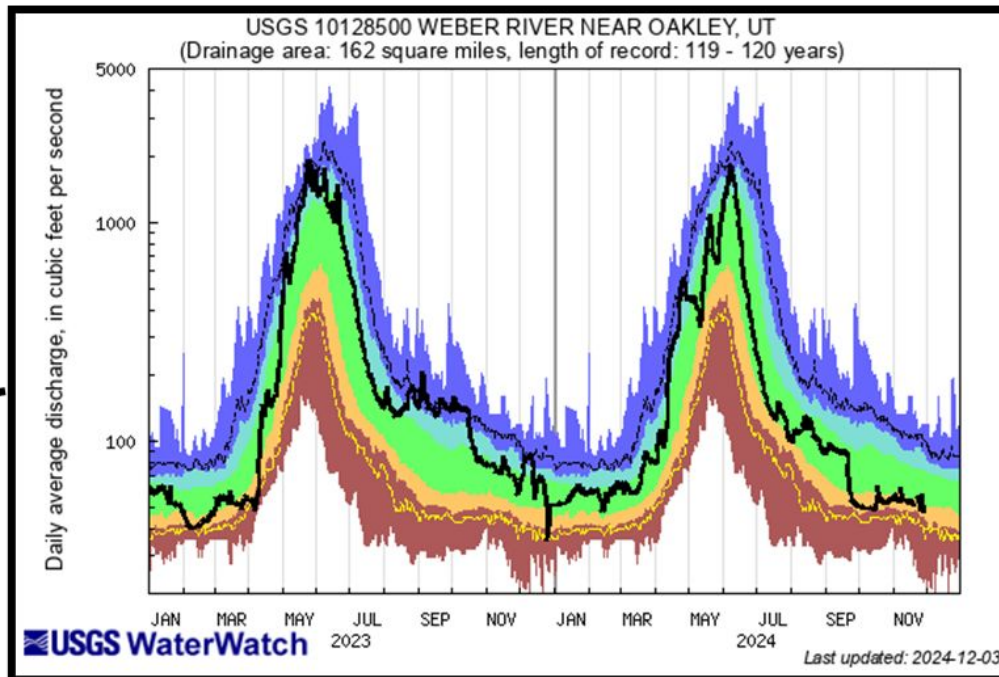
Agency - USGS Utah WSC
Presenter - Ryan Rowland



Streamflow at Selected Gages

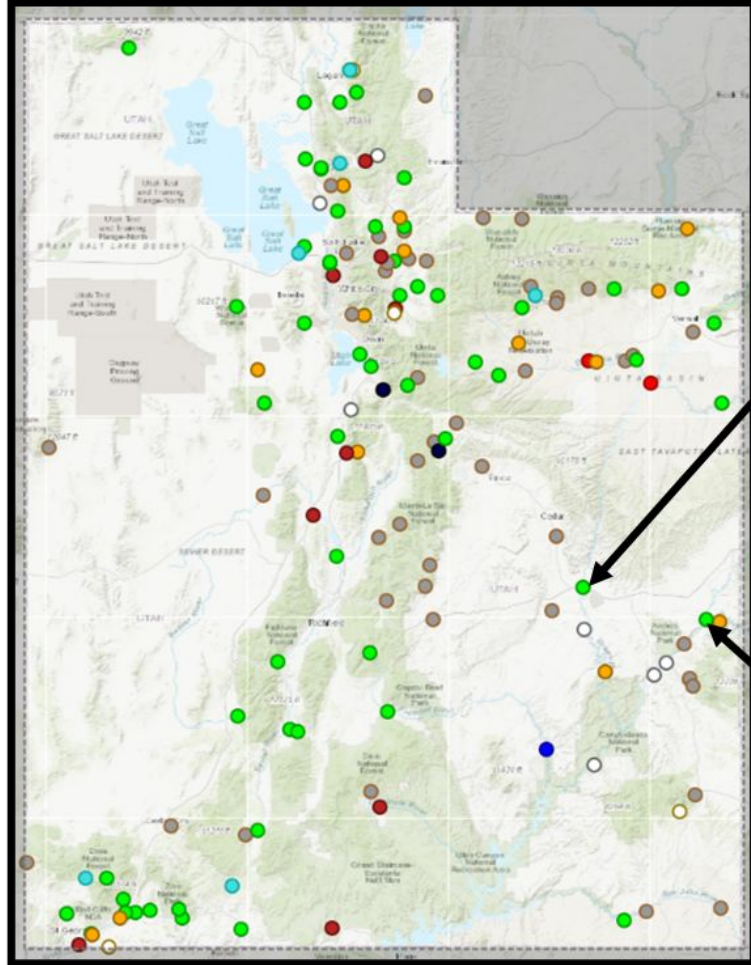


Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

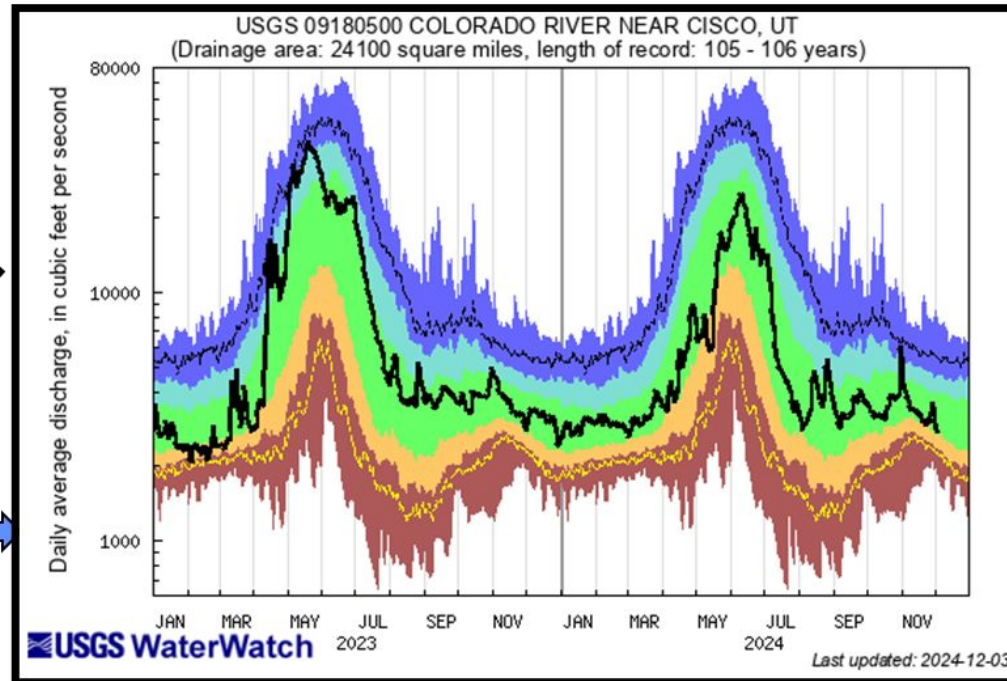
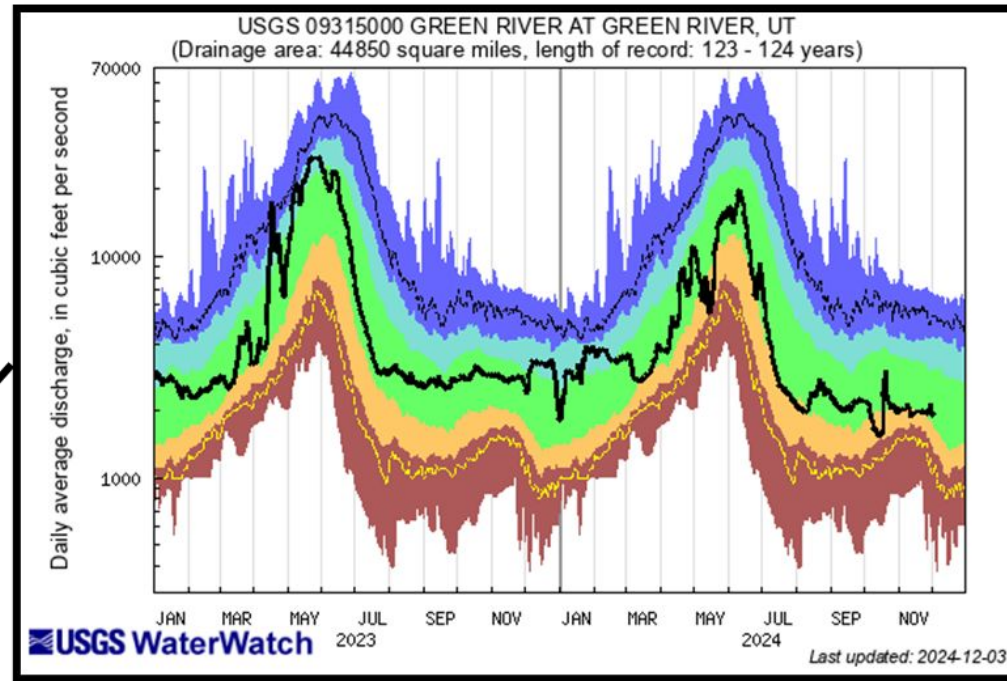


Provisional data, subject to revision

Streamflow at Selected Gages

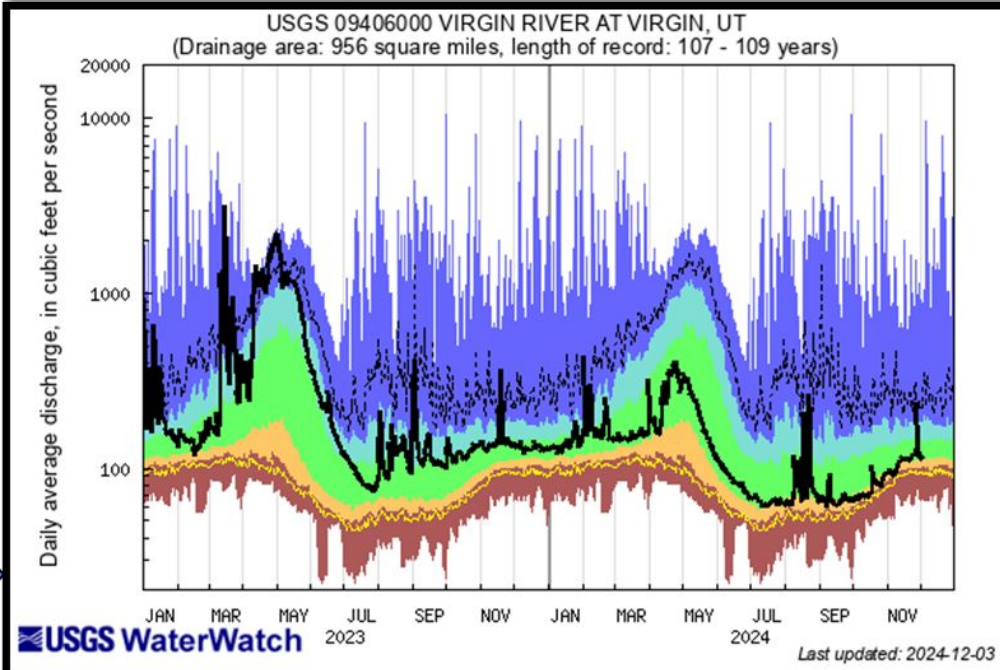
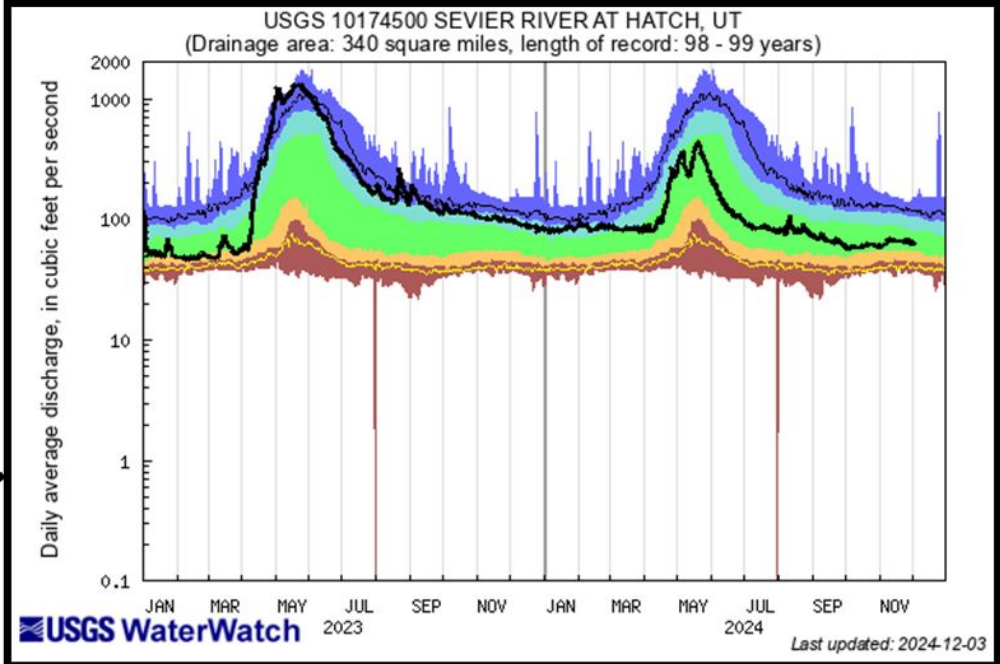
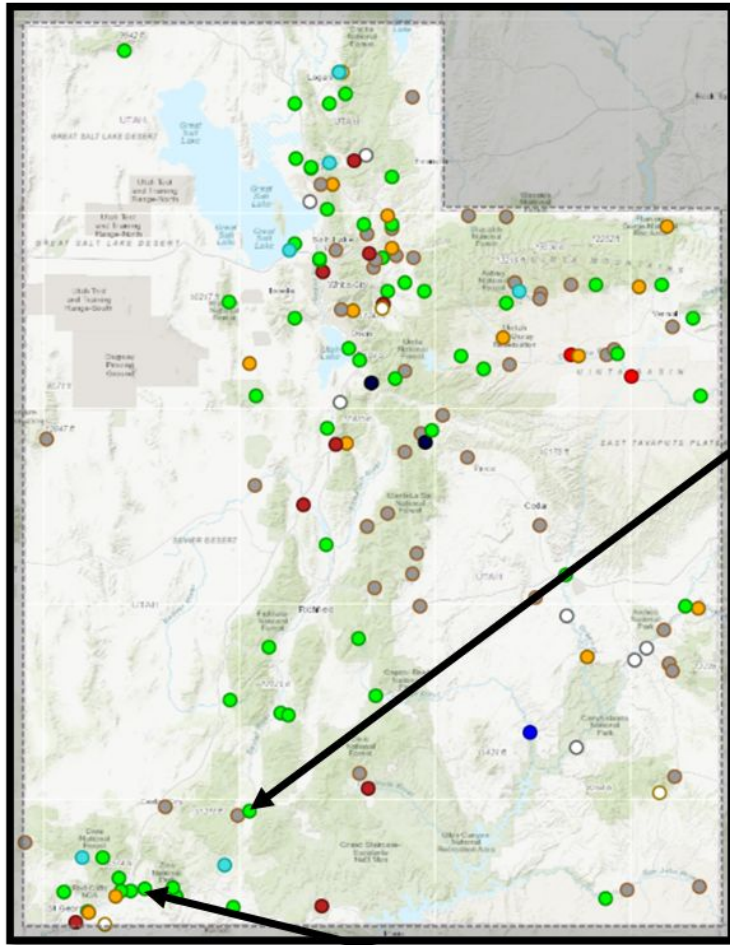


Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow



Provisional data, subject to revision

Streamflow at Selected Gages



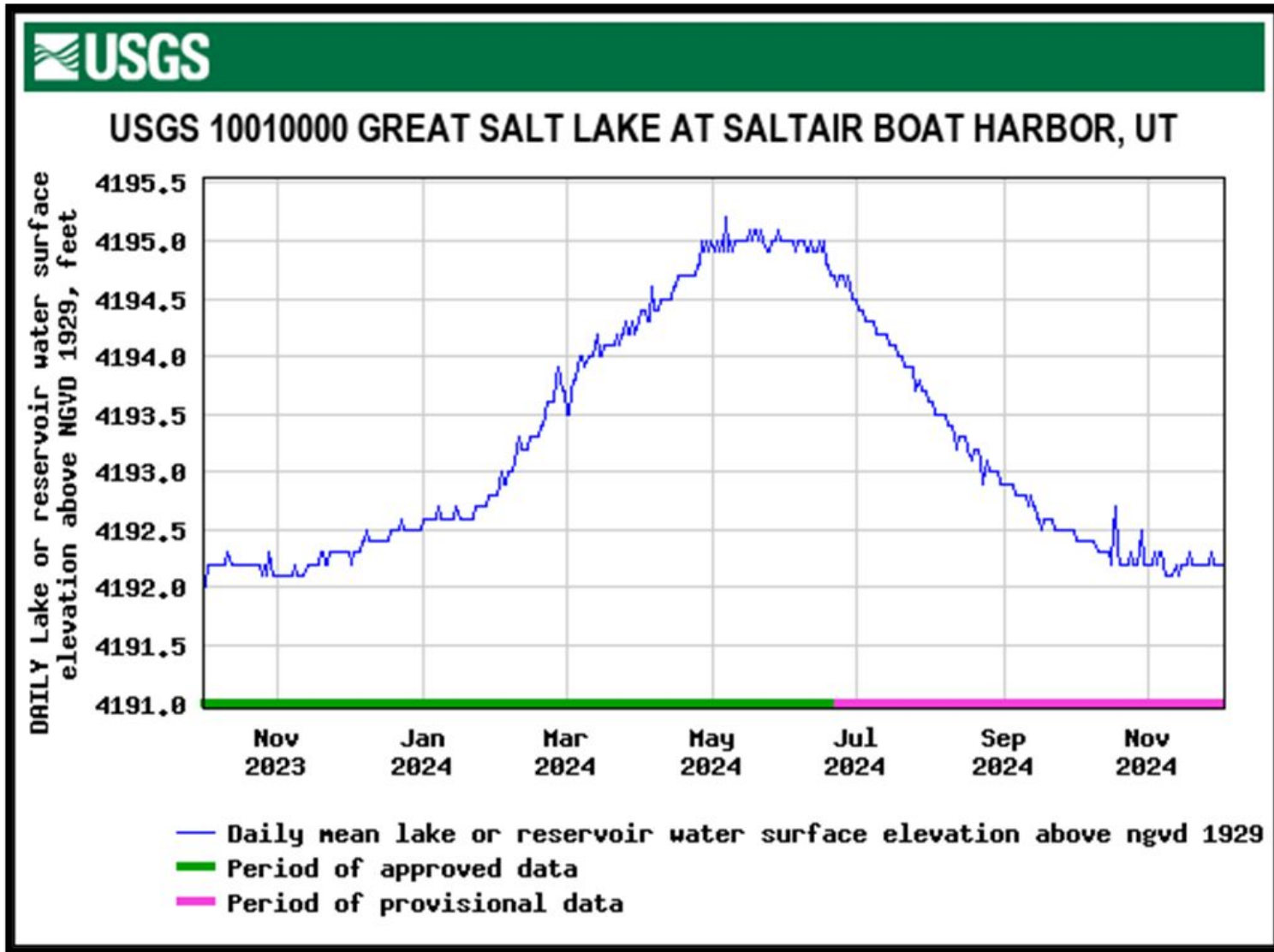
Provisional data, subject to revision

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	Flow

Agency - USGS Utah WSC
Presenter - Ryan Rowland

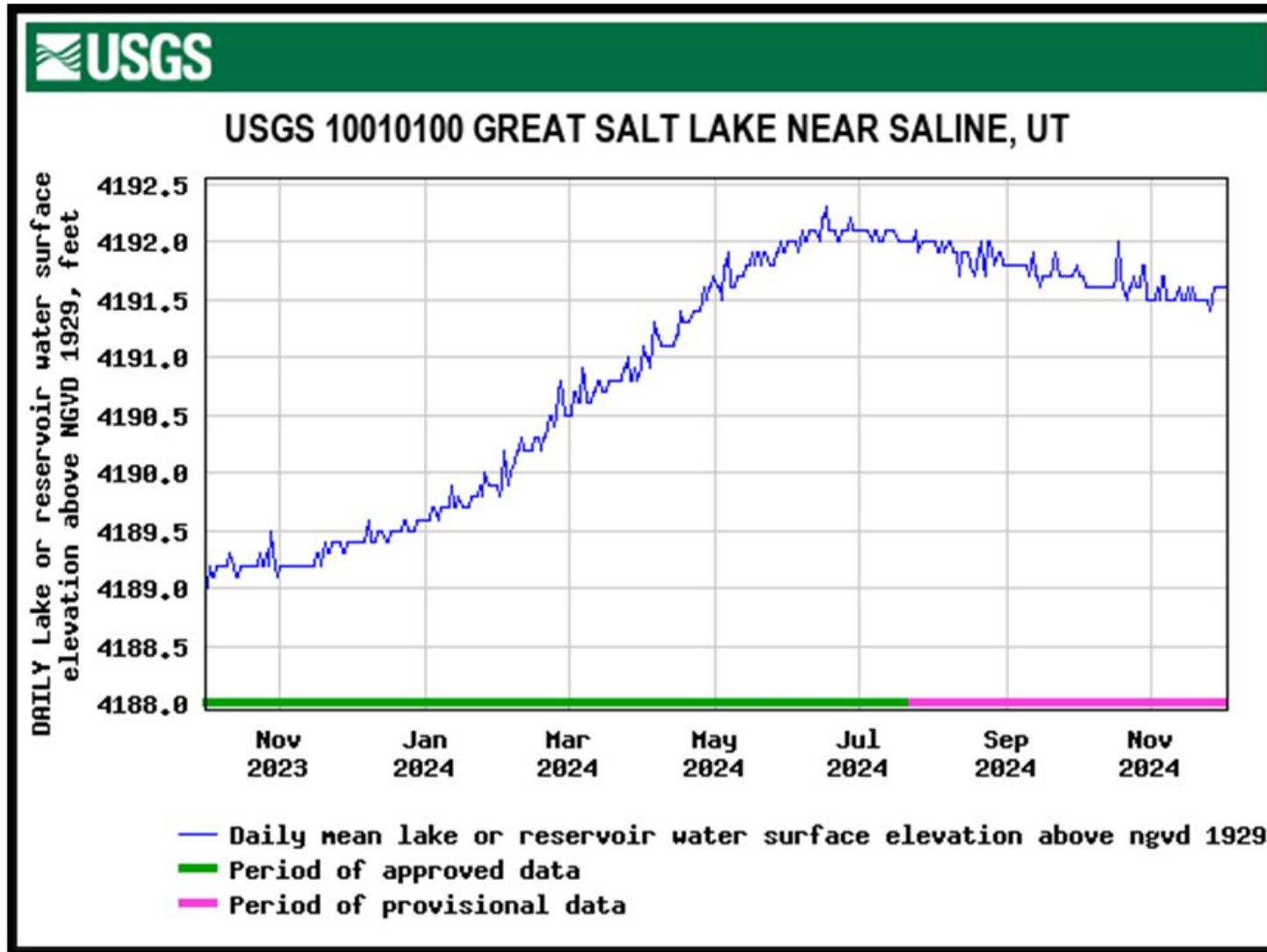


Great Salt Lake Water Surface Elevation – South Arm



- Daily value 12/2/2024 = 4,192.2'
- Daily value 11/4/2024 = 4,192.2'
- Down 3.0' since Seasonal peak on 5/7/2024

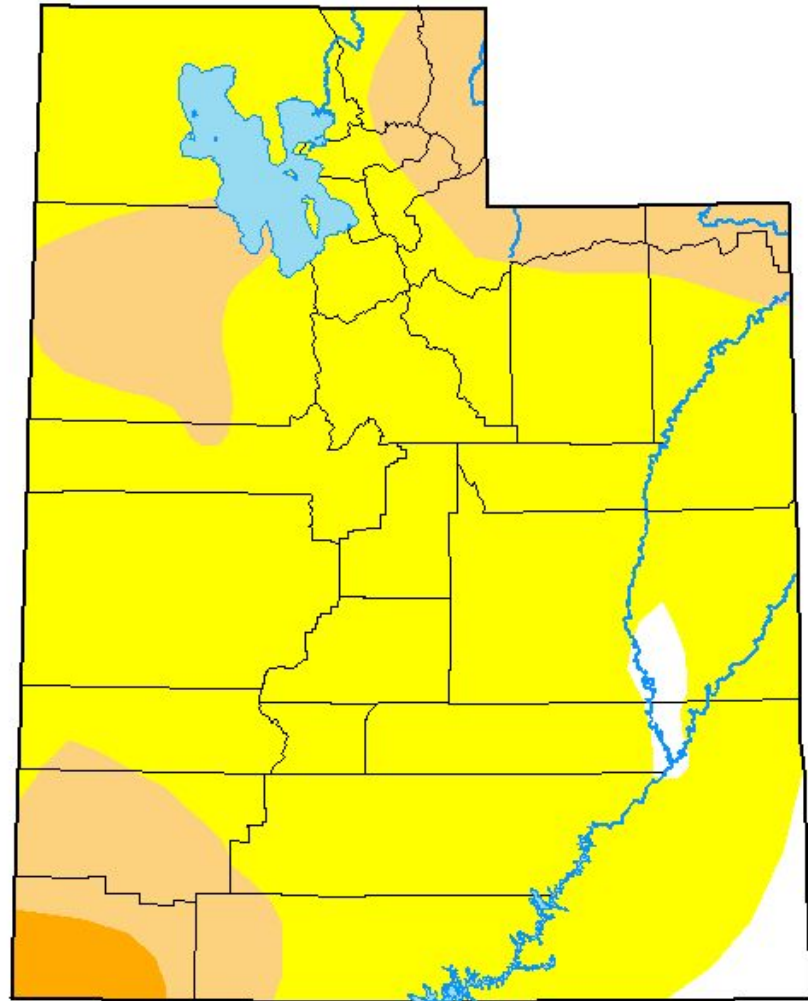
Great Salt Lake Water Surface Elevation – North Arm









□ Daily value
12/2/2024 =
4,191.6'

□ Daily value
11/4/2024 =
4,191.5'

November 26, 2024
(Released Wednesday, Nov. 27, 2024)
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 <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu

To report on conditions between meetings:

Submit a report on CMOR drought website

Email Lhaskell@utah.gov

email drought@utah.gov