Utah Water Conditions
(drought webinar)

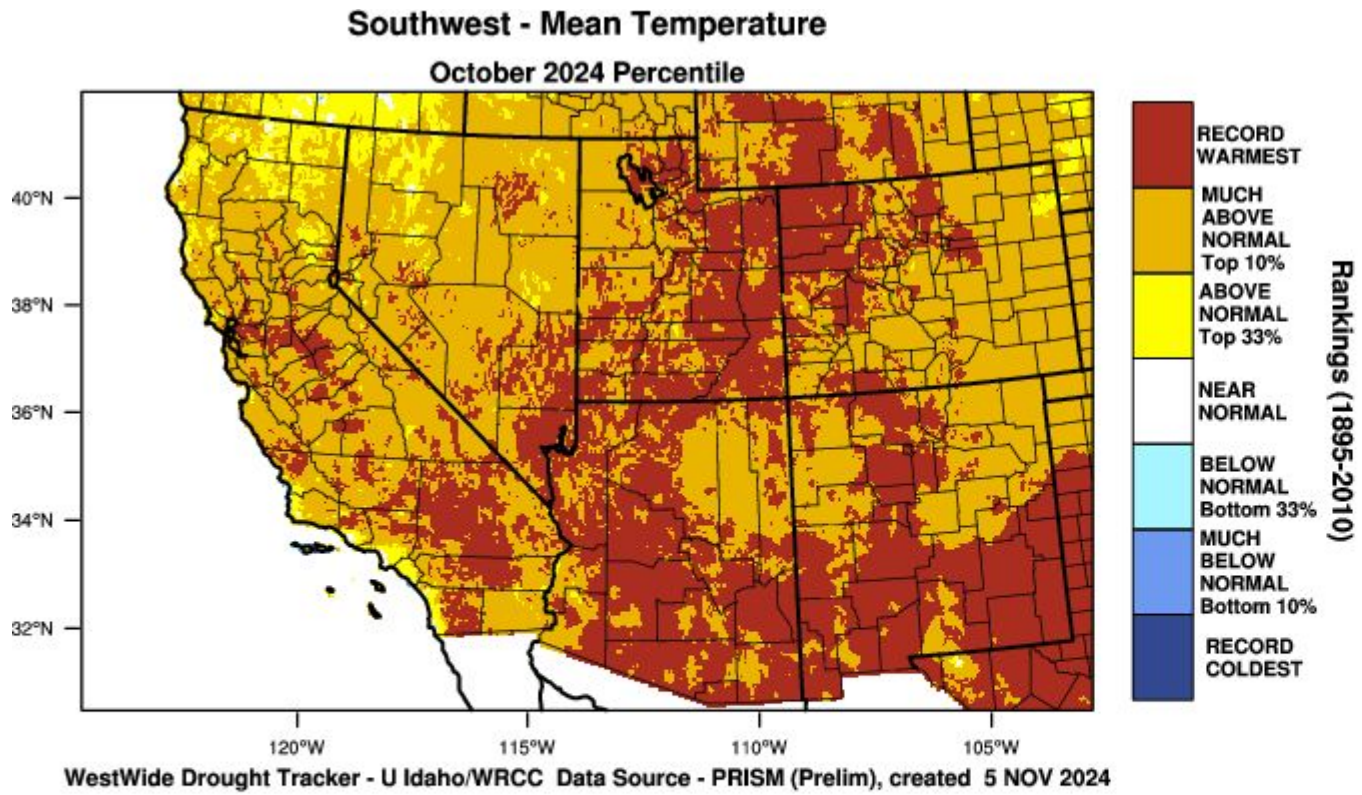
The meeting will begin shortly

Thank you to our contributors

Utah Water Conditions Update

November 5, 2024

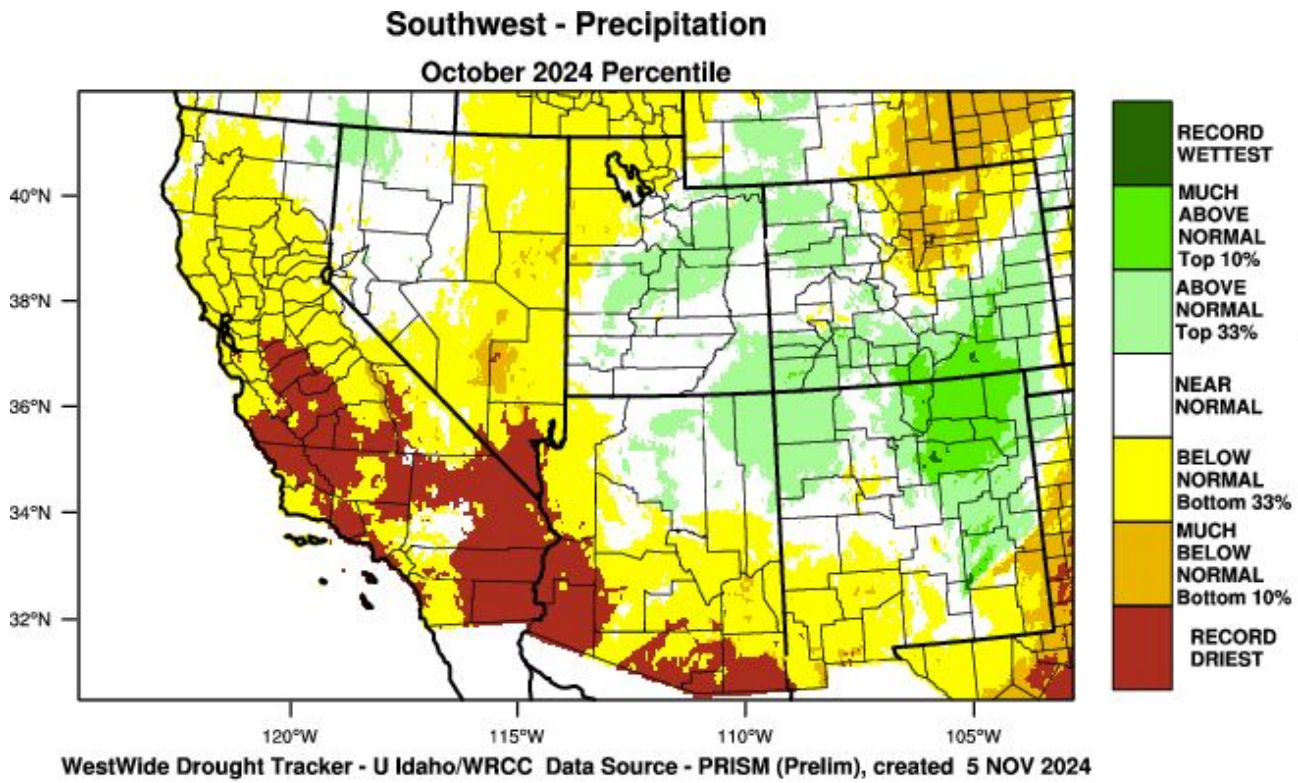
Recent Temperatures

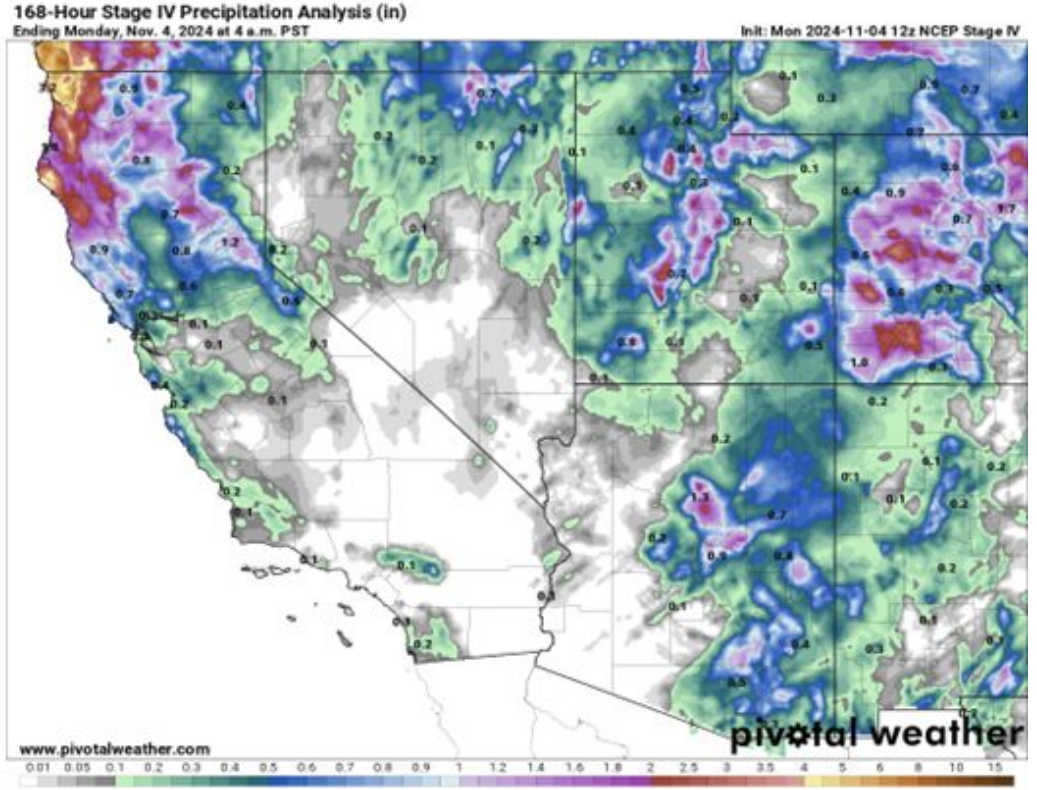


September 2024 **1-Month**	65.7°F (18.7°C)	60.6°F (15.9°C)	5.1°F	128th Coolest 3rd Warmest
Aug–Sep 2024 **2-Month**	69.0°F (20.6°C)	65.0°F (18.3°C)	4.0°F	127th Coolest 4th Warmest
Jul–Sep 2024 **3-Month**	71.0°F (21.7°C)	67.2°F (19.6°C)	3.8°F	127th Coolest 4th Warmest
Jun–Sep 2024 **4-Month**	71.0°F (21.7°C)	66.4°F (19.1°C)	4.6°F	130th Coolest 1st Warmest
May–Sep 2024 **5-Month**	67.5°F (19.7°C)	64.0°F (17.8°C)	3.5°F	126th Coolest 5th Warmest
Apr–Sep 2024 **6-Month**	64.4°F (18.0°C)	61.0°F (16.1°C)	3.4°F	128th Coolest 3rd Warmest
	Ties: 2000, 2012			

Agency - Utah Climate Center
Presenter - Jon Meyer

Precipitation





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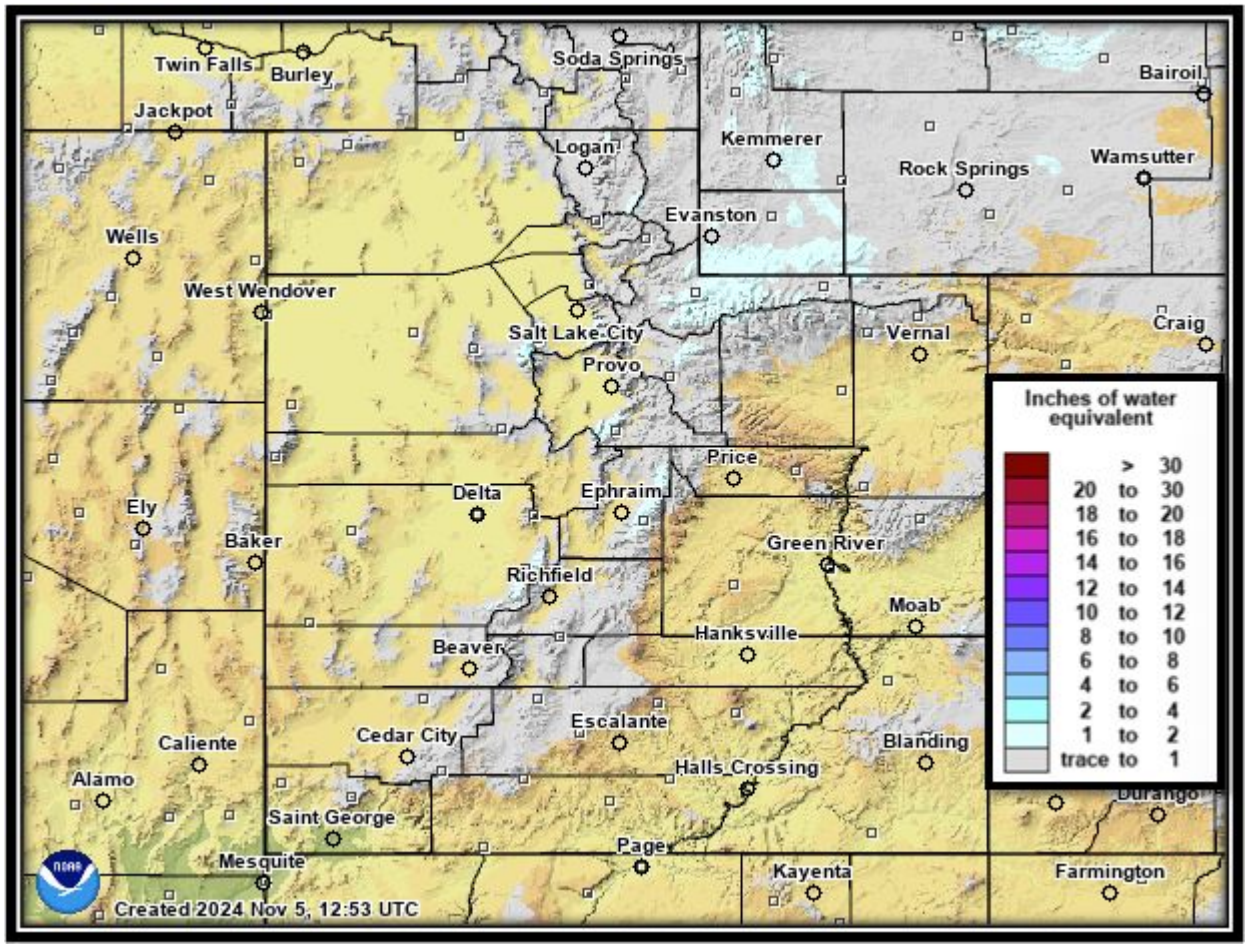
Presenter - Jon Meyer

Snow accumulation has begun



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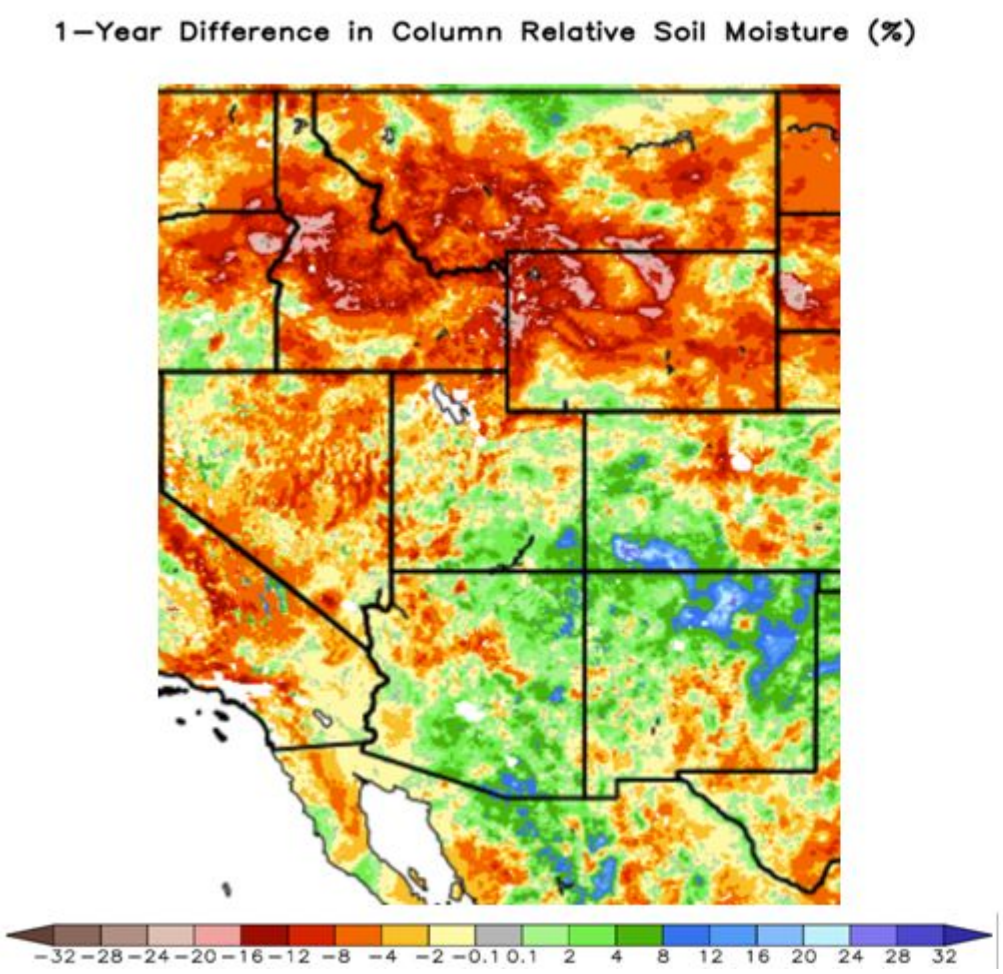
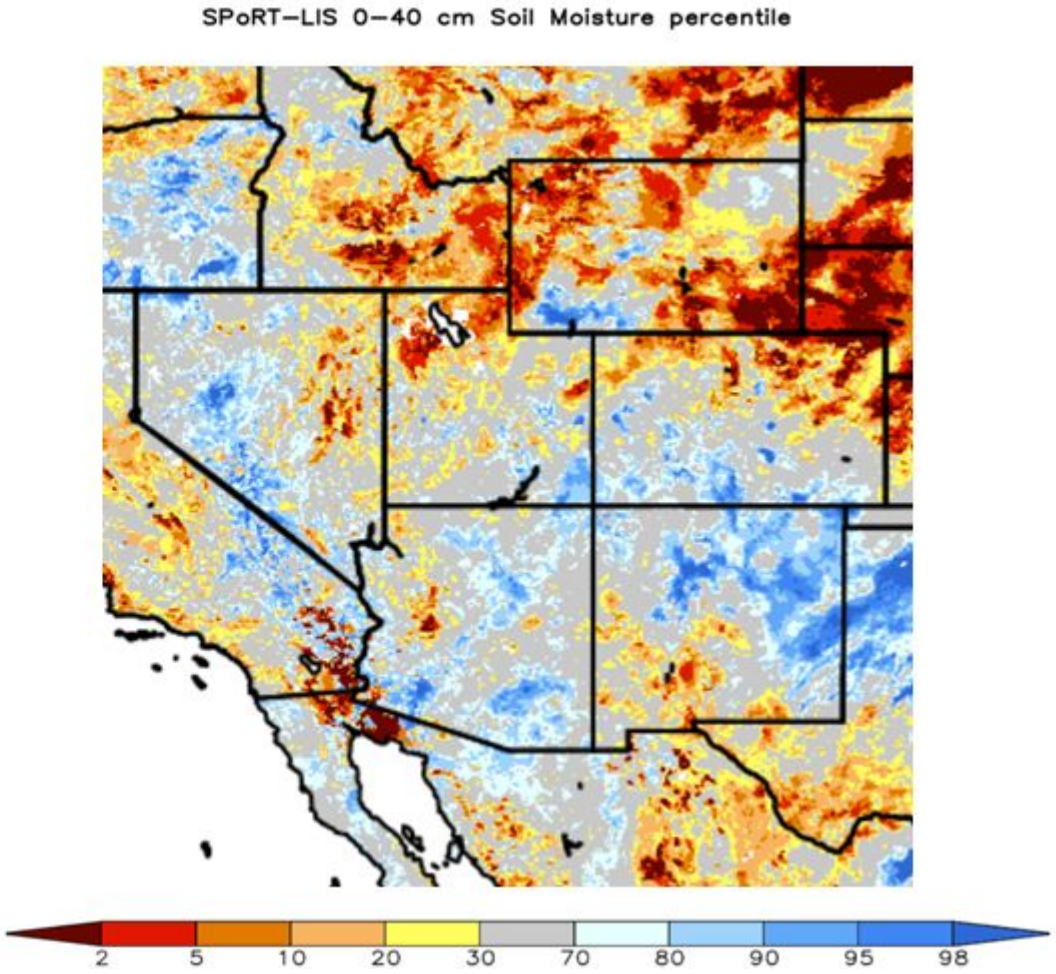
Presenter - Jon Meyer

Soil Moisture Changes and Current Conditions





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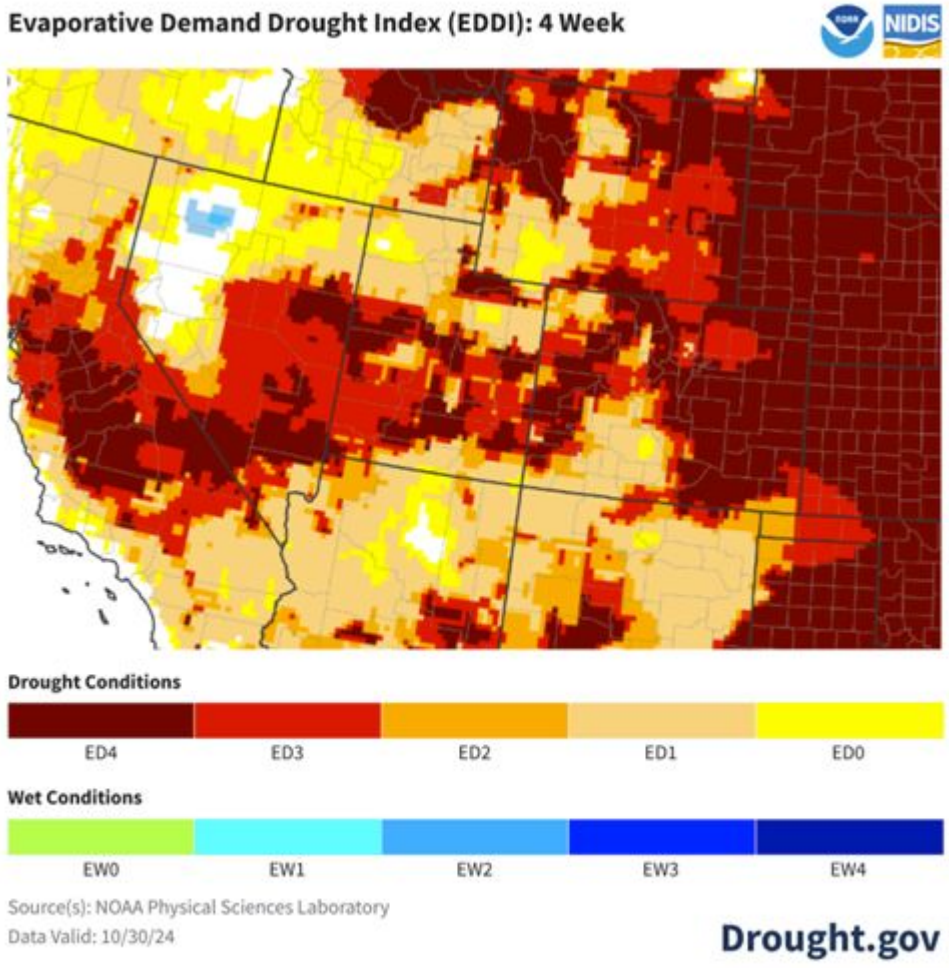
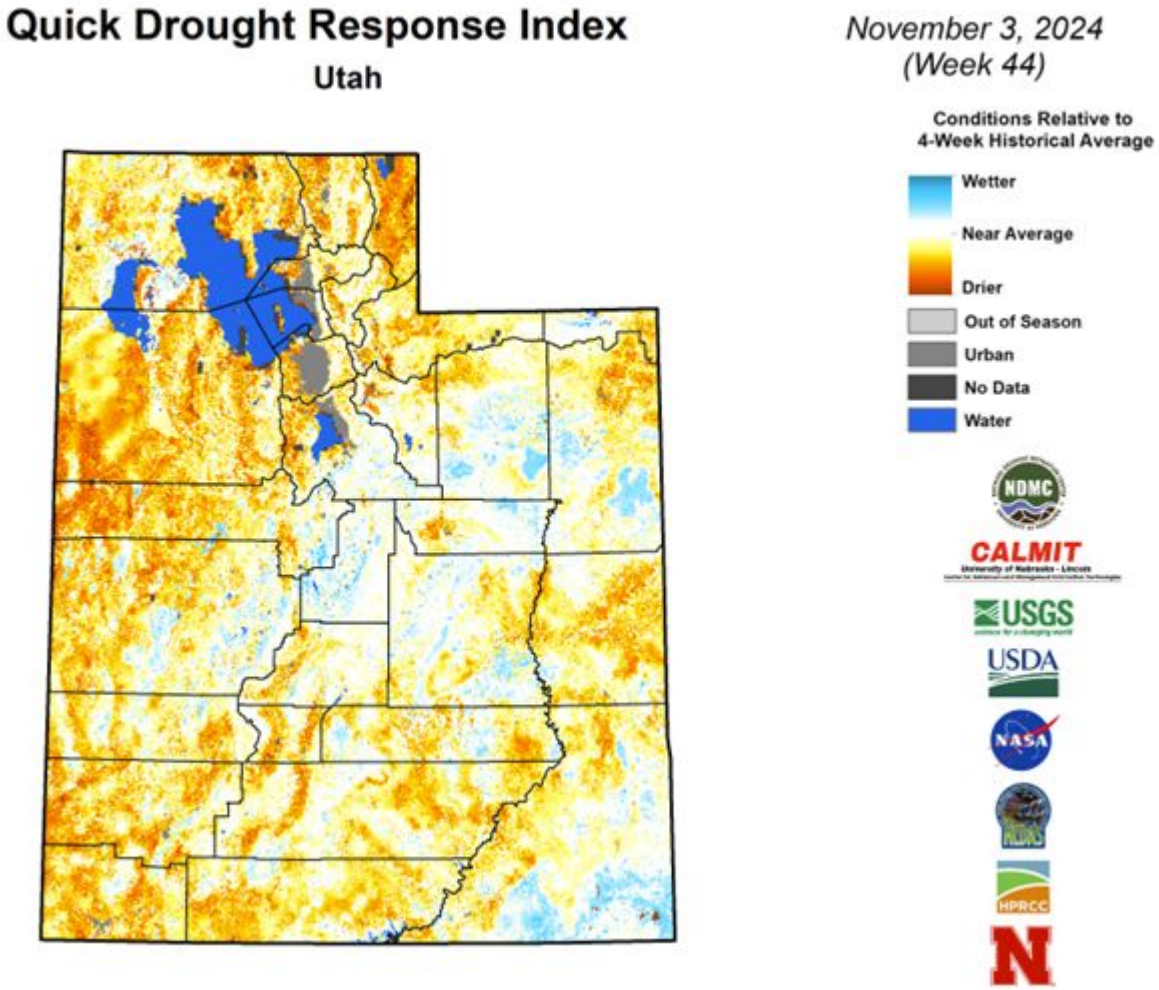
Short-Term Drought Pressure





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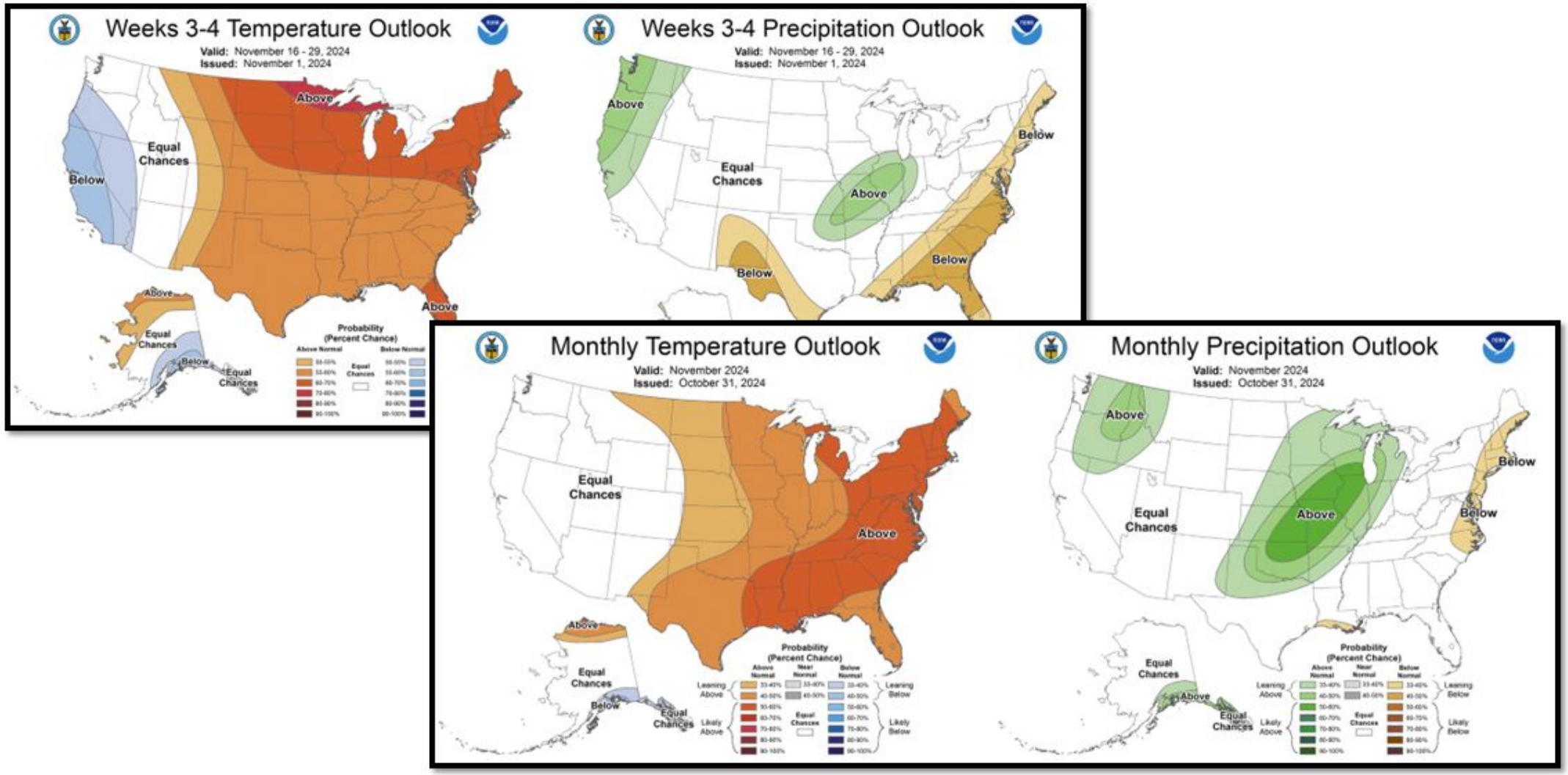
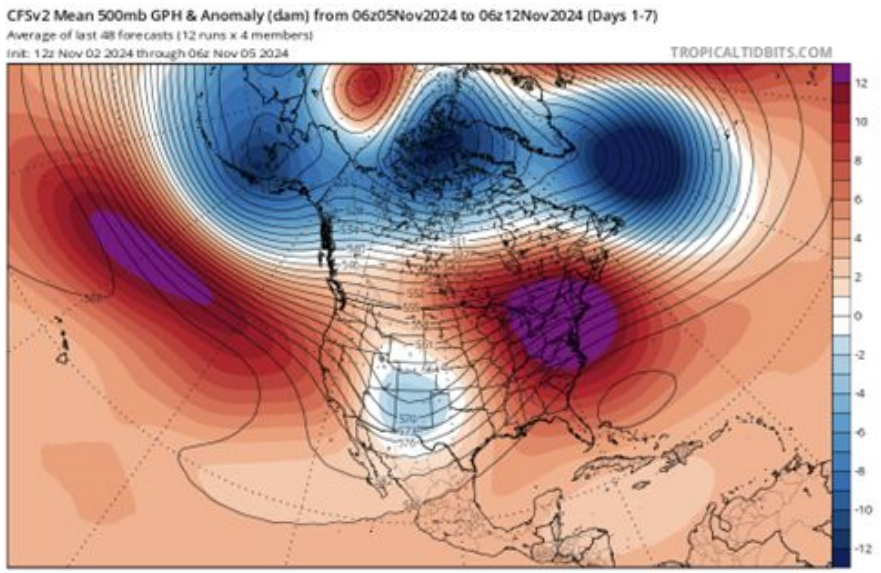
Presenter - Jon Meyer

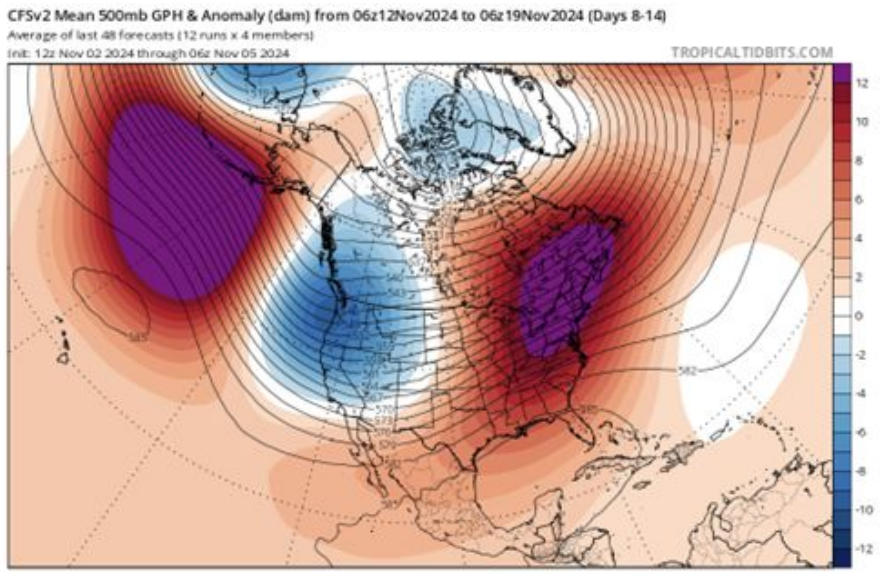
CPC November Conditions Outlook

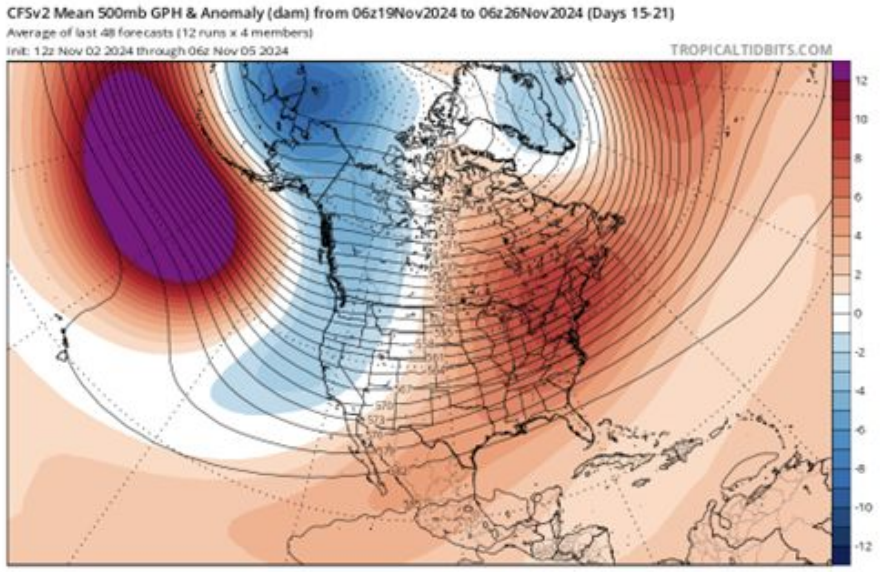


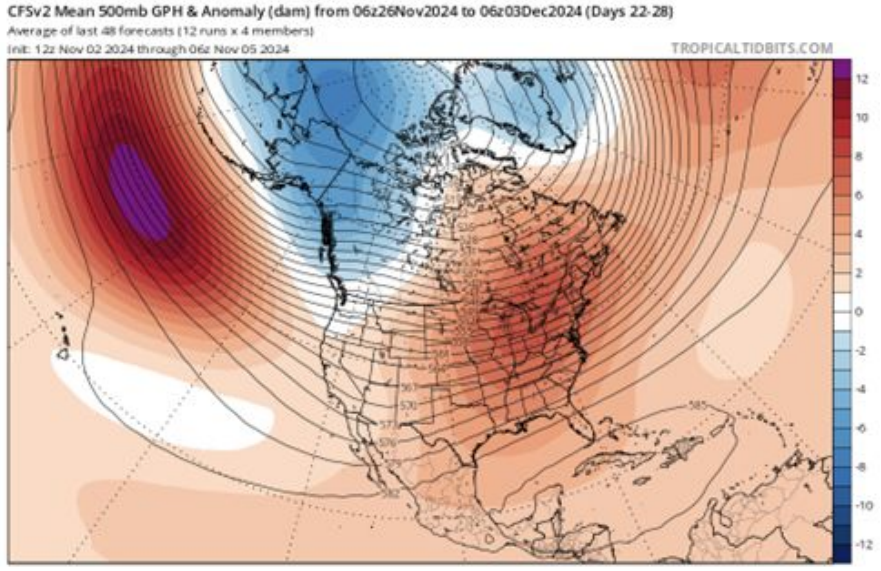
Agency - Utah Climate Center
Presenter - Jon Meyer

Model Forecast Perspective for November Conditions









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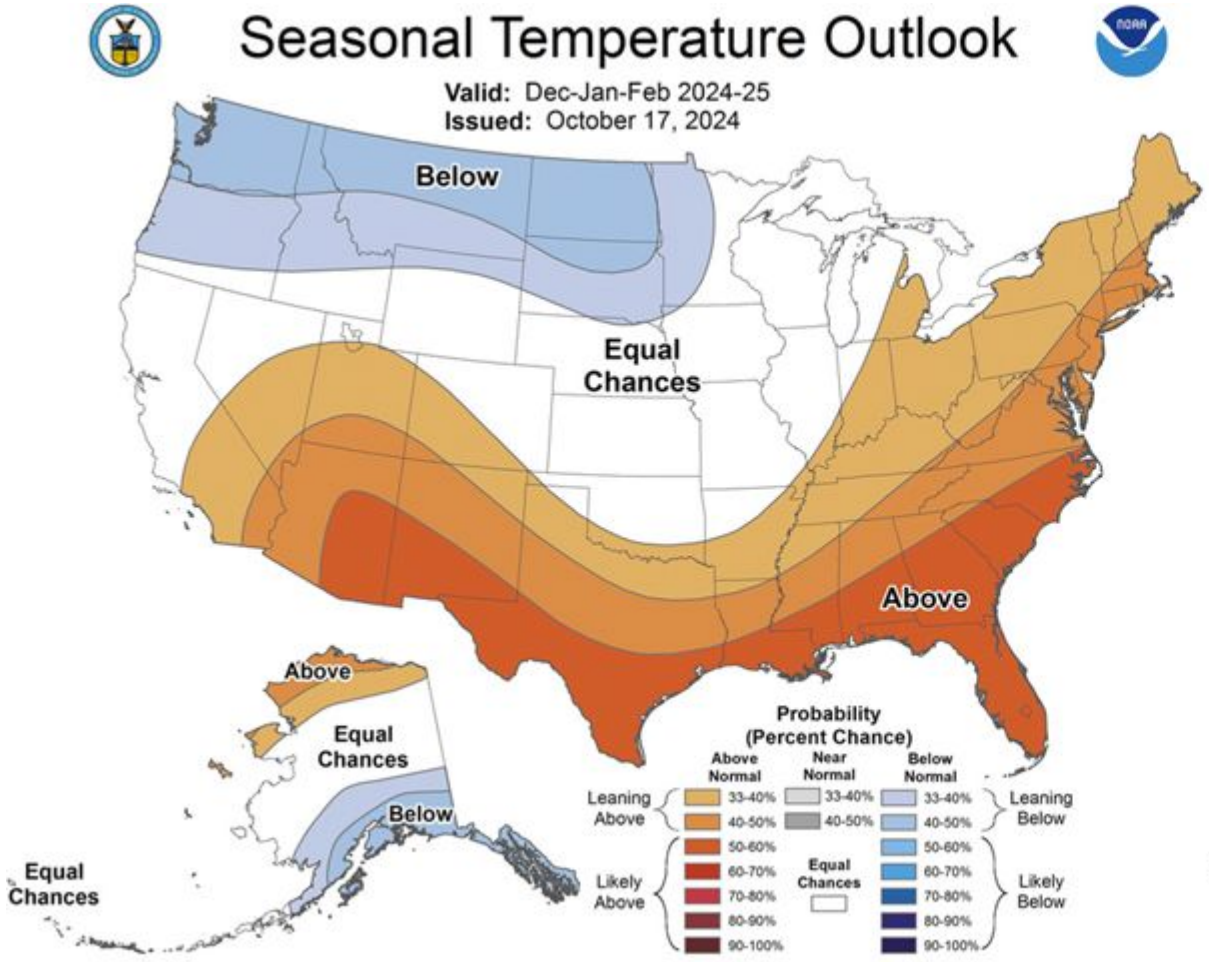
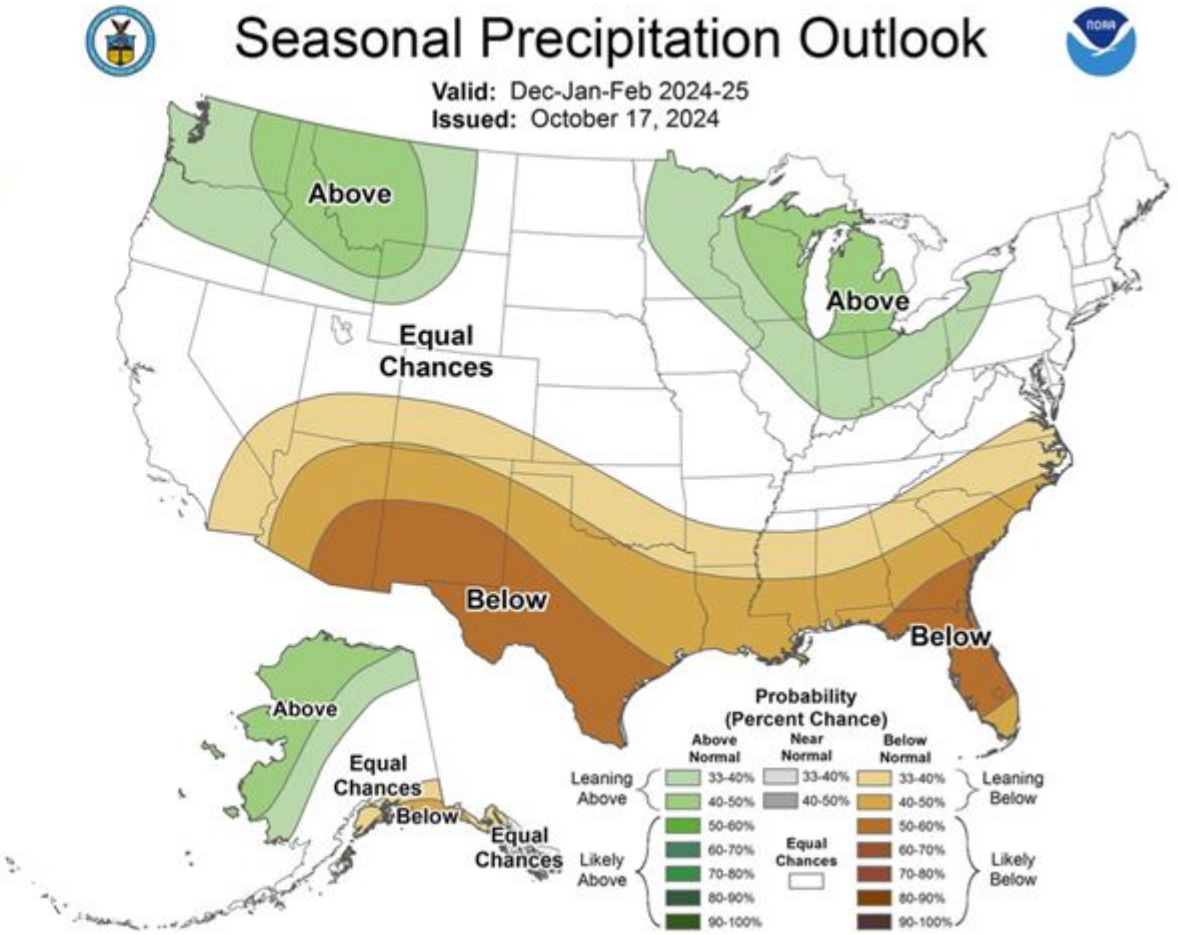
CPC Winter Outlook





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Presenter - Jon Meyer

ENSO Update: trending towards weaker and less impactful season

ENSO Alert System Status: **La Niña Watch**

ENSO-neutral conditions are present.*

Equatorial sea surface temperatures (SSTs) are near-to-below-average in the central and eastern Pacific Ocean.

La Niña is favored to emerge in September-November (60% chance) and is expected to persist through January-March 2025.*

The majority of dynamical models indicate a transition to La Niña in October-December 2024, while the average of the statistical models predicts ENSO-neutral.

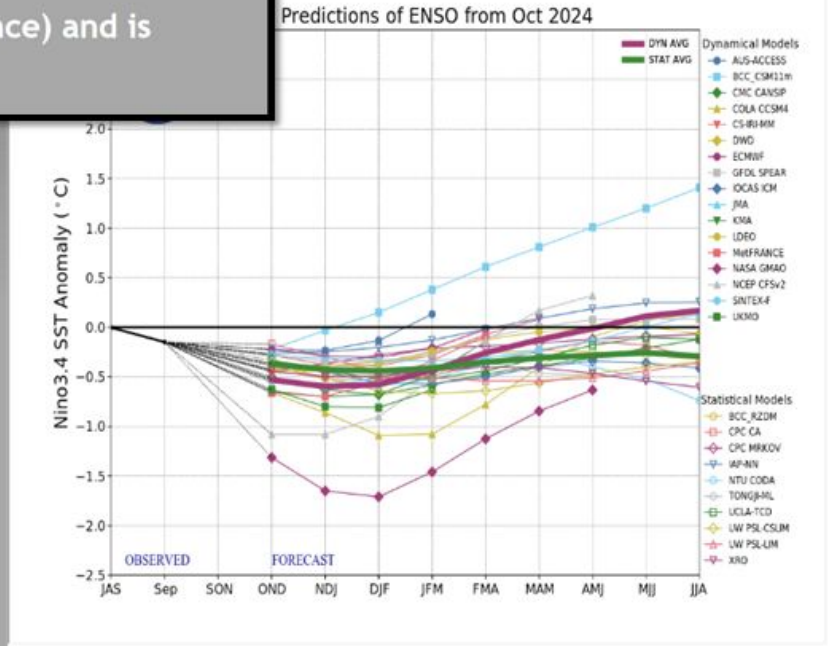


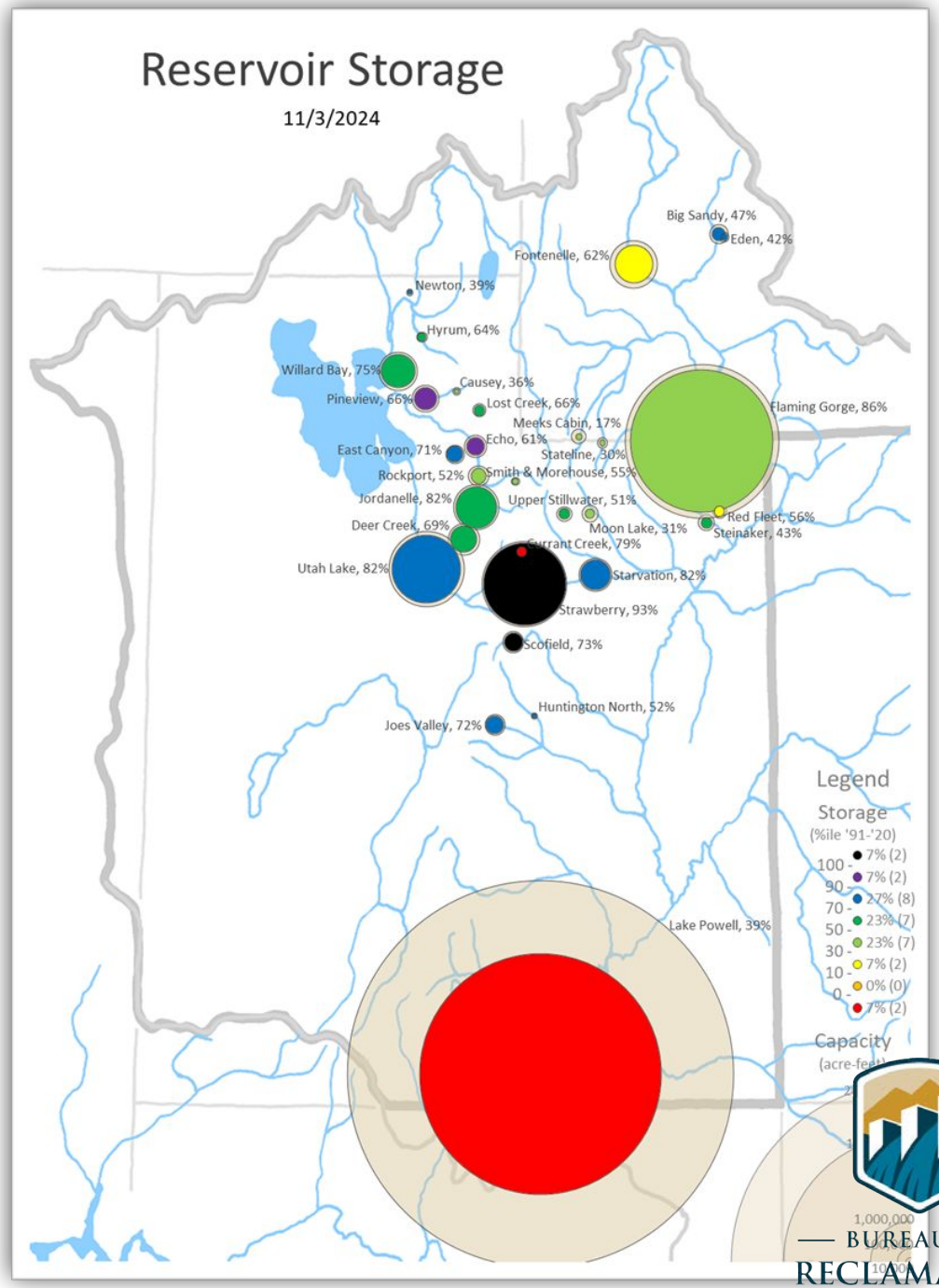
Figure provided by the International Research Institute (IRI) for Climate and Society (updated 18 October 2024).

Agency - Utah Climate Center
Presenter - Jon Meyer

Reservoir Levels

- Irrigation season is over, reservoirs are passing minimum releases and storage is gradually increasing.
- Reservoir storage overall is at 80% full
  (Excluding Powell, Flaming Gorge, Fontenelle)
  - 19 of 30 individual reservoirs are above median
  - 7 of the 11 below-median reservoirs are above the 30th percentile
  - Lake Powell is still much lower than desired
  - Translation: There is some variation from reservoir to reservoir, but storage in general is excellent! Lake Powell is the only highly concerning reservoir.
- Reservoir conditions likely won't change significantly until spring.

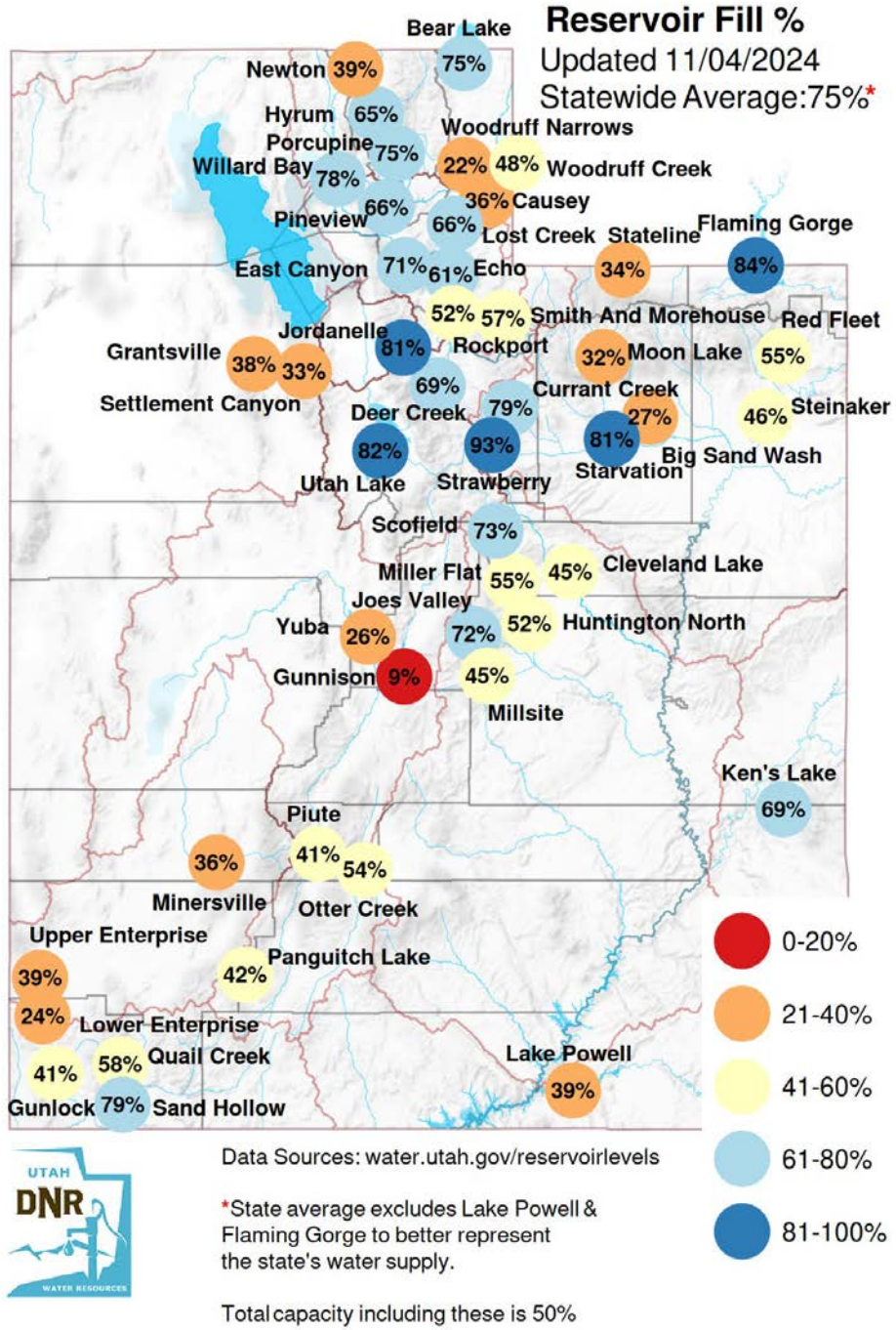
The map to the right shows reservoir storage with reservoir dots sized by capacity (outer dot) and current storage (inner dot) and colored by current storage as a percentile of 1991-2020 storage for this date



Agency - BOR
Presenter - Gary Henrie

BUREAU OF RECLAMATION

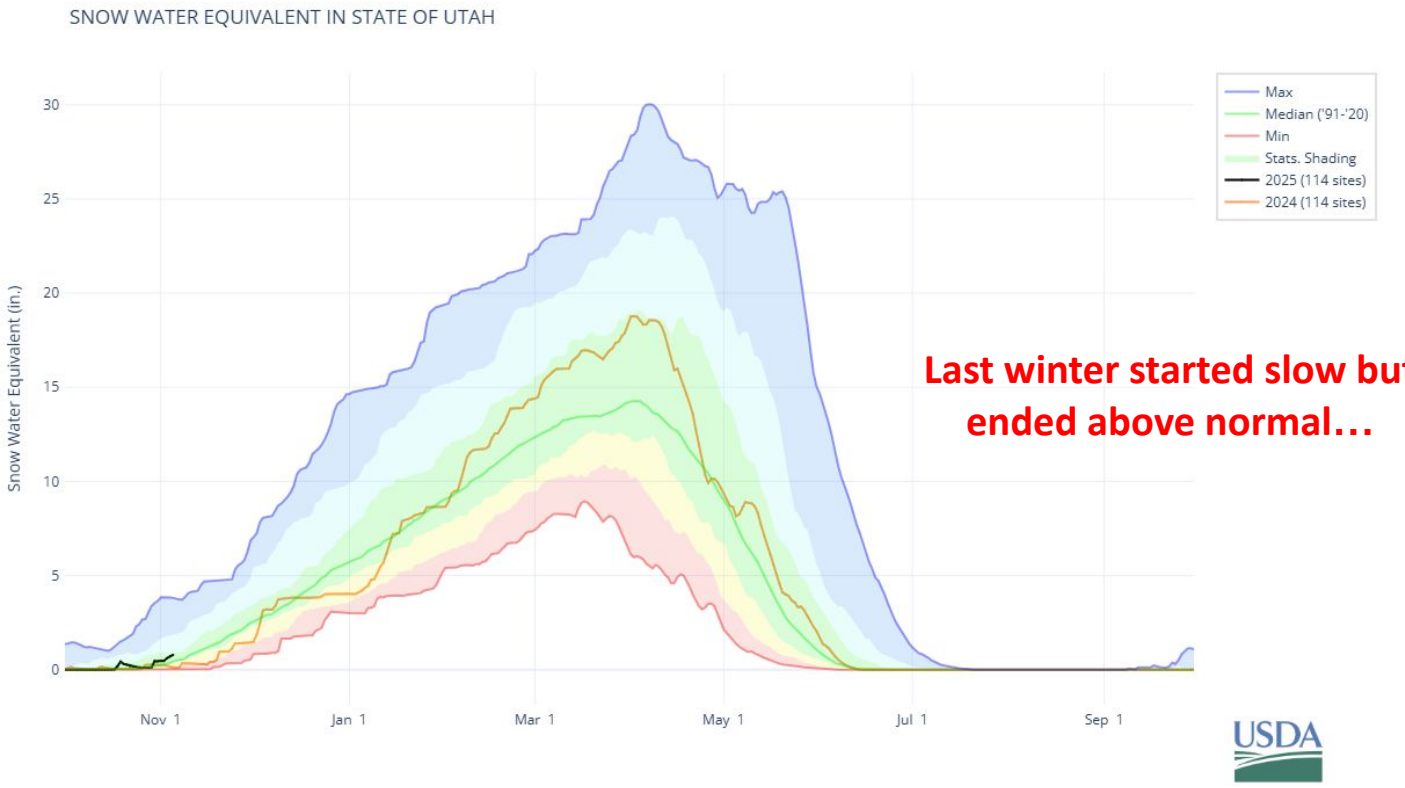
Almost all reservoirs are at median level or above



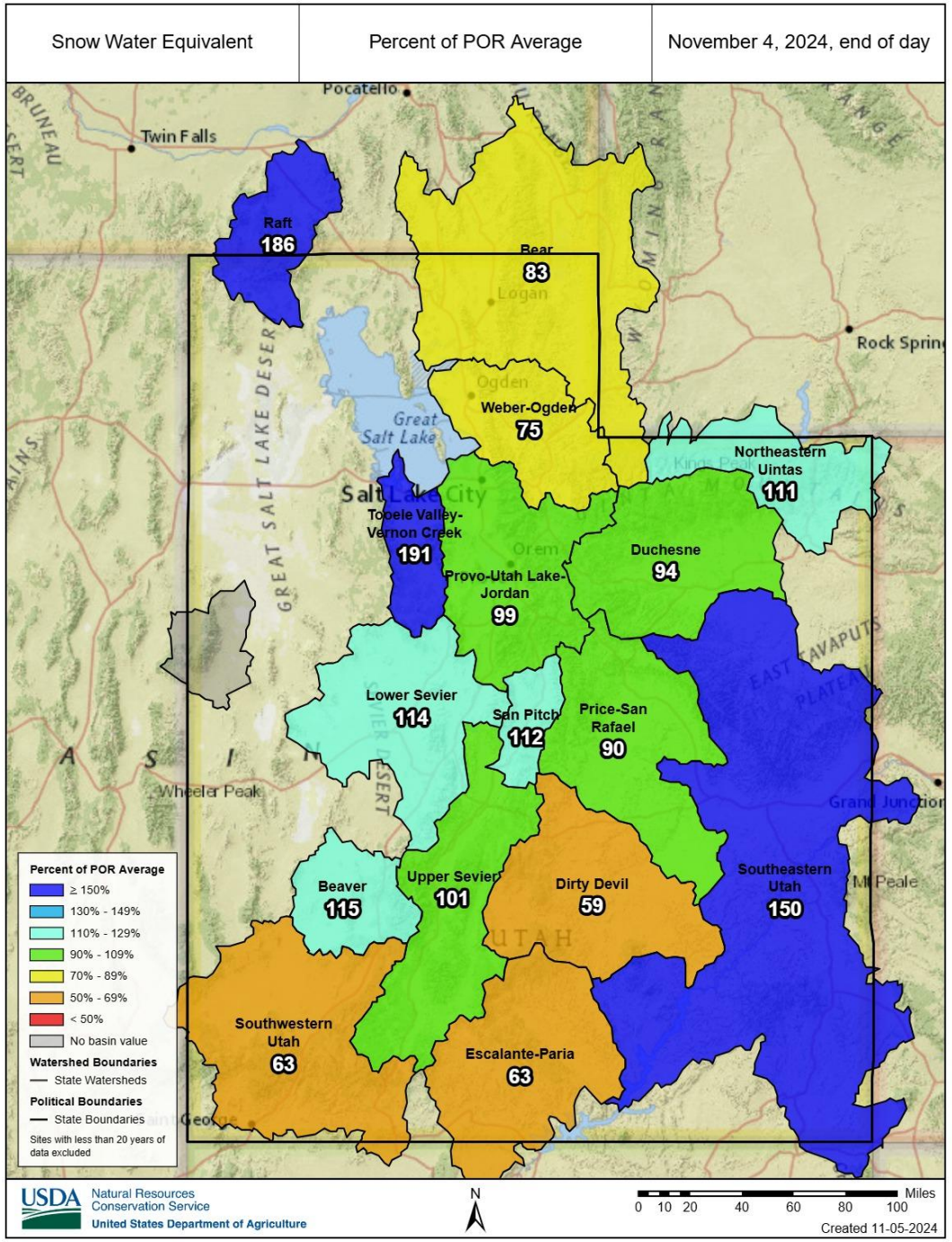
Agency - Division of Water Resources
Presenter - Laura Haskell

Snowpack

Too early in snow accumulation season for %normal values to be meaningful…

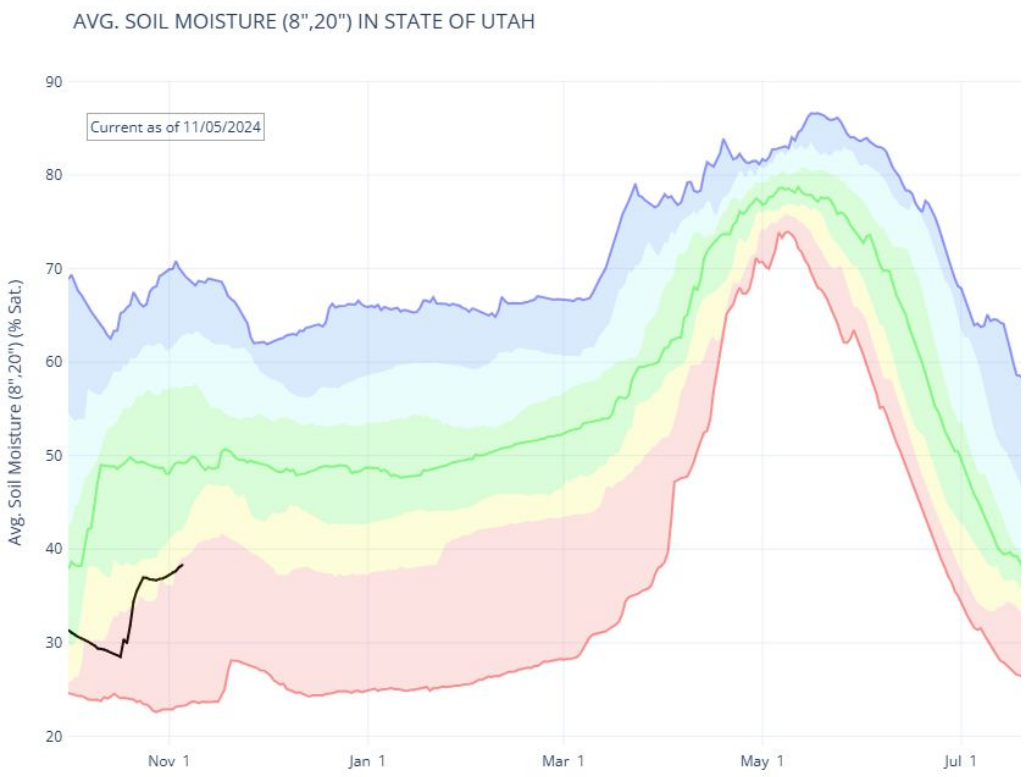


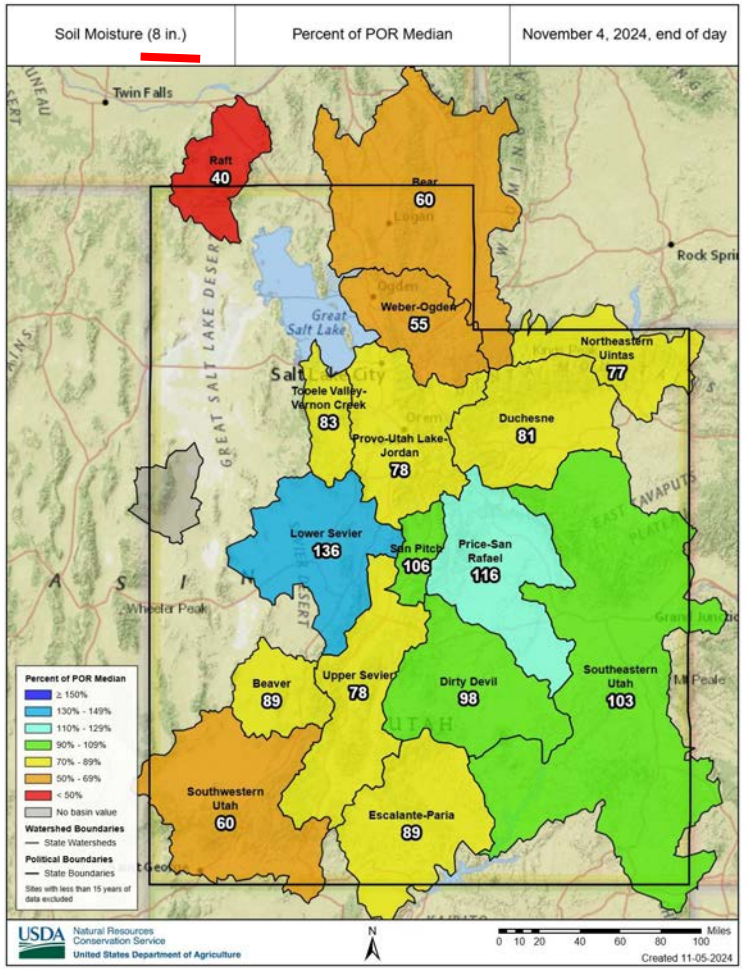
Last winter started slow but ended above normal…

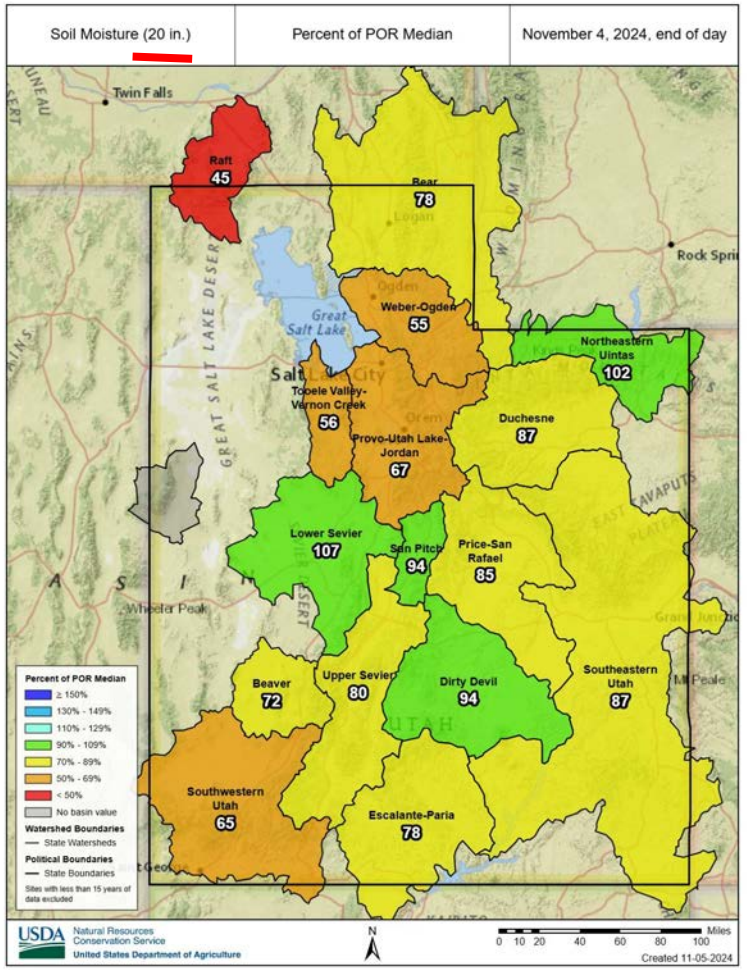


Agency - NRCS Snow Survey
Presenter - Jordan Clayton

Soil Moisture



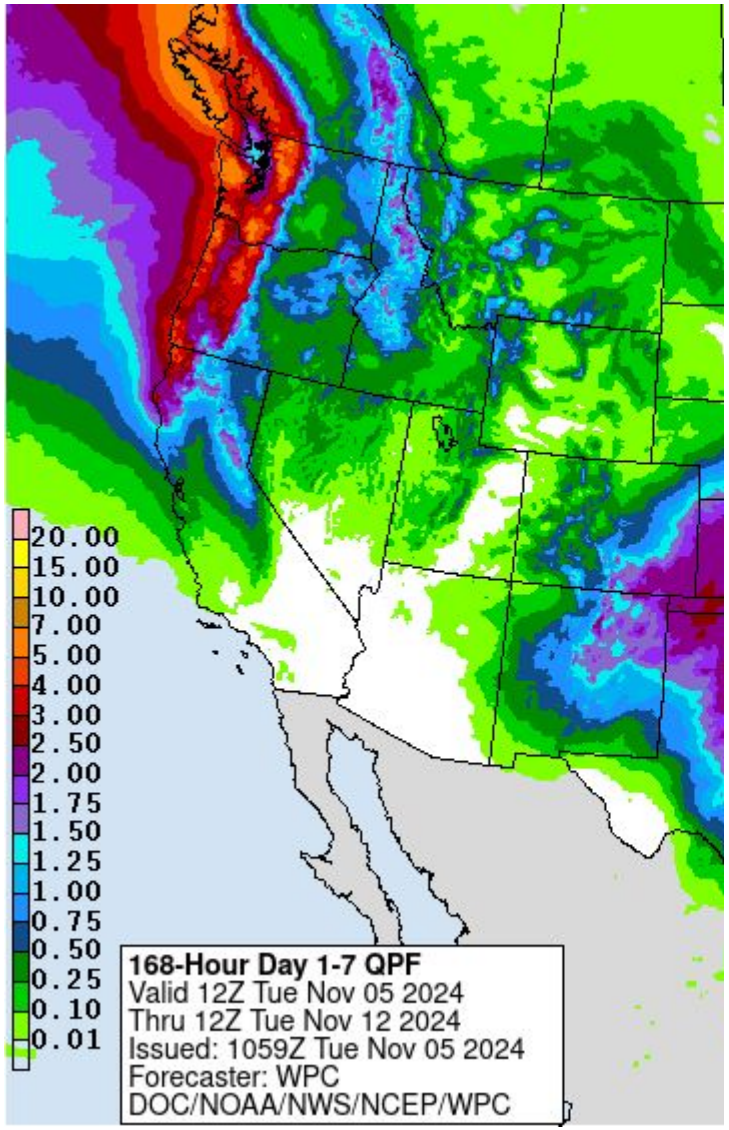


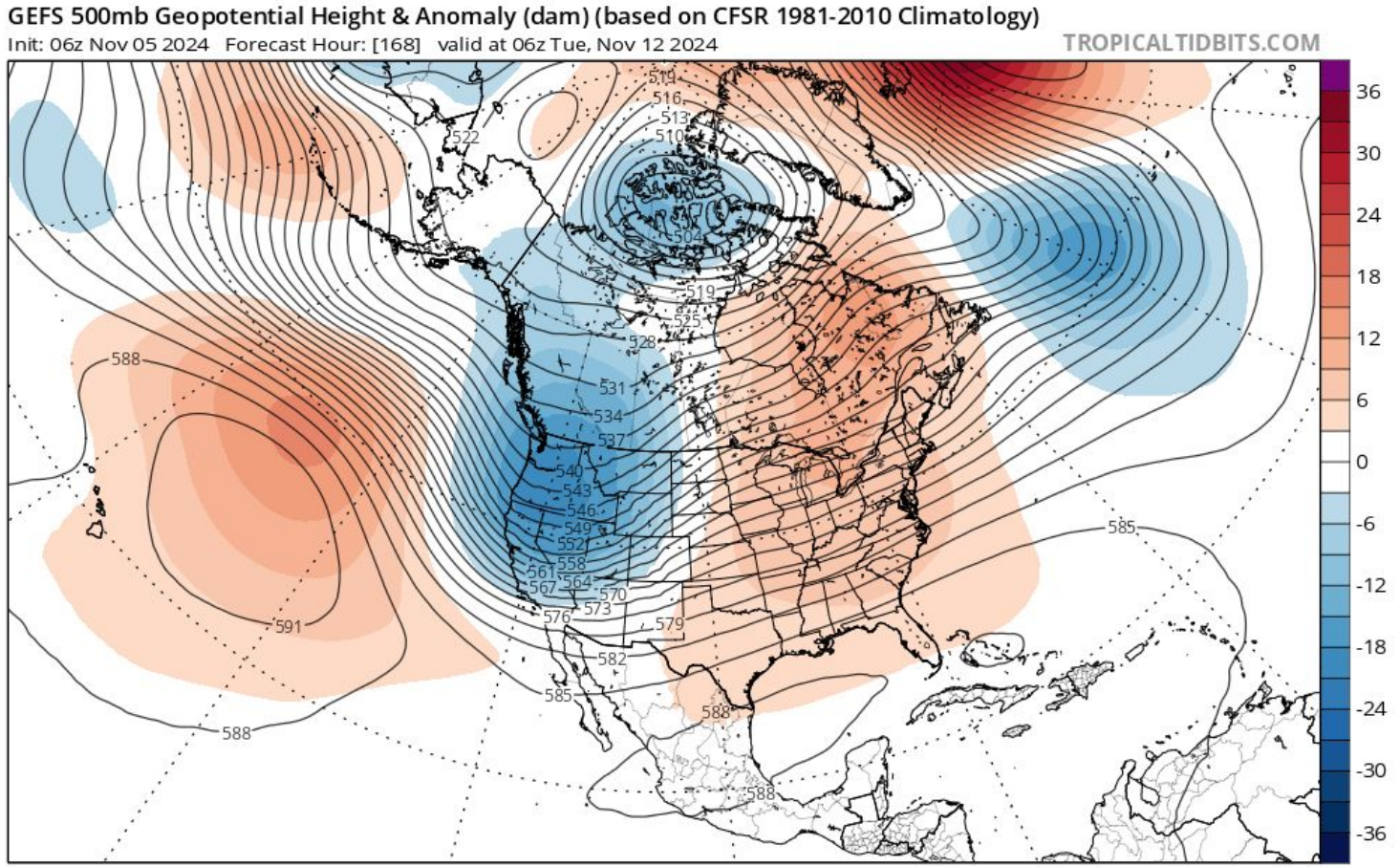


- **Statewide soil moisture still hovering close to bottom 10th percentile**
- **Medium depth soils wetter from recent events (esp SE Utah)**
- **Deeper (20”) below normal soil moisture in most locations**

Agency - NRCS Snow Survey
Presenter - Jordan Clayton

Weather Forecast Office Utah Day 1-7 Outlook

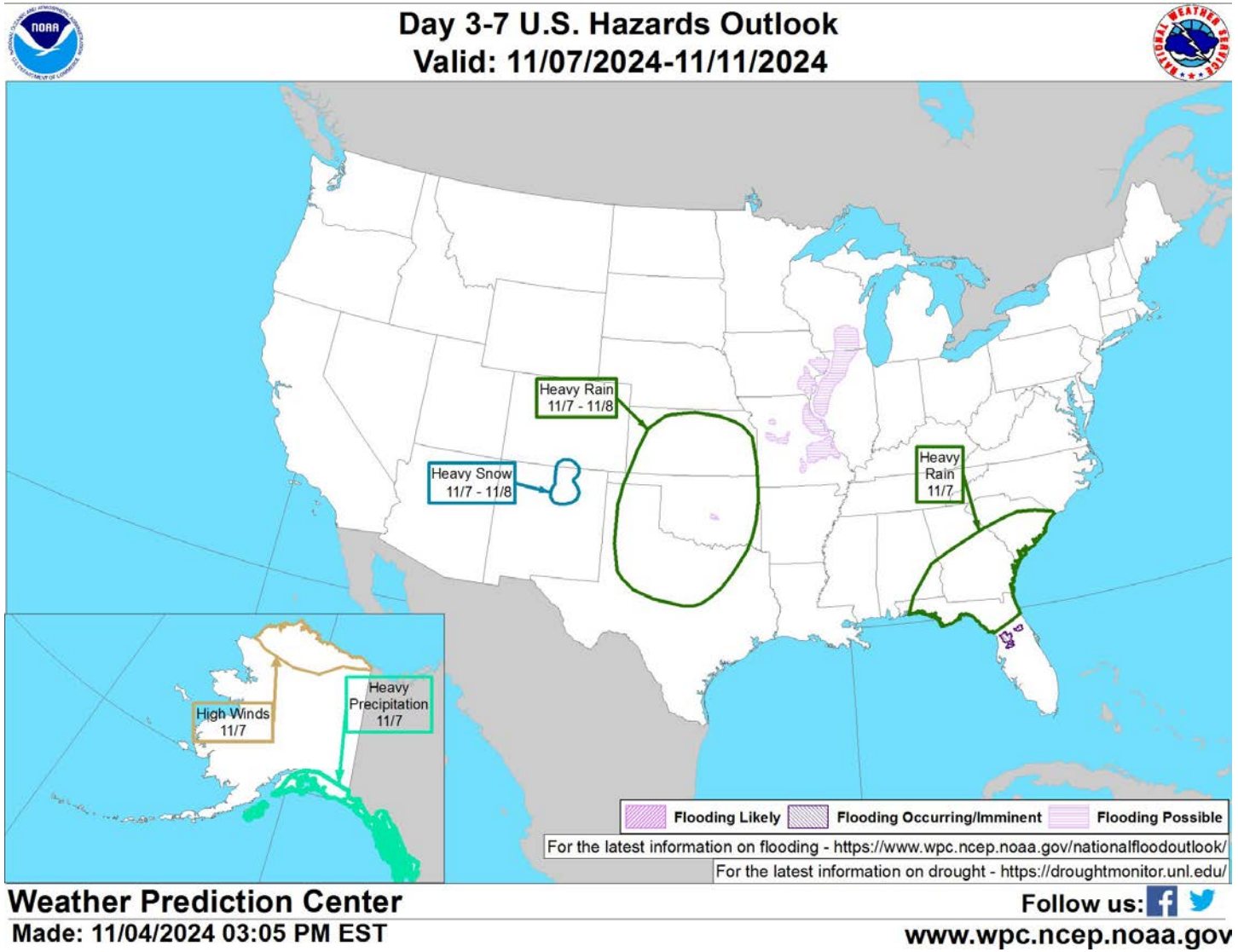




Agency - National Weather Service Weather Forecast Office

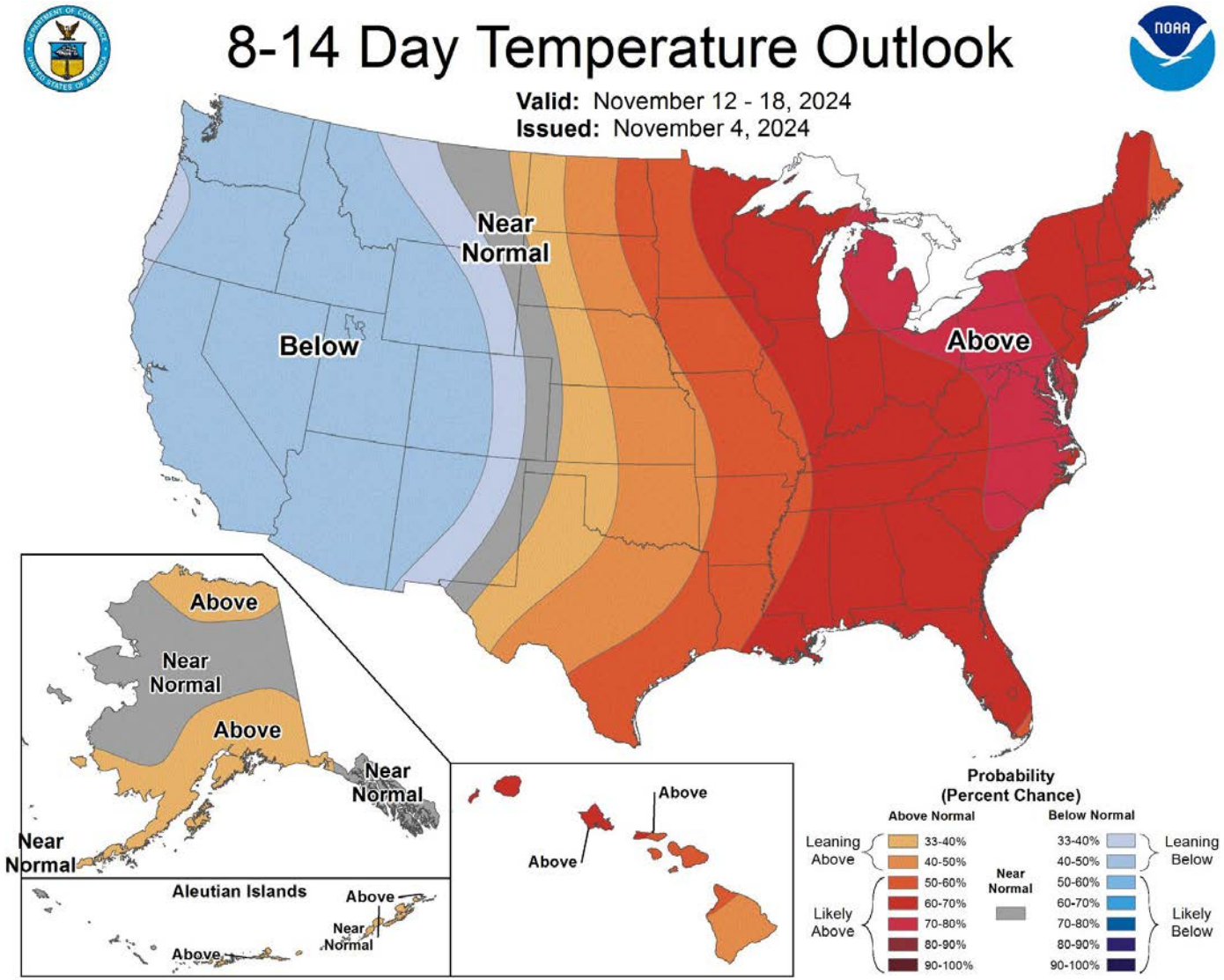
Presenter - Glen Merrill

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



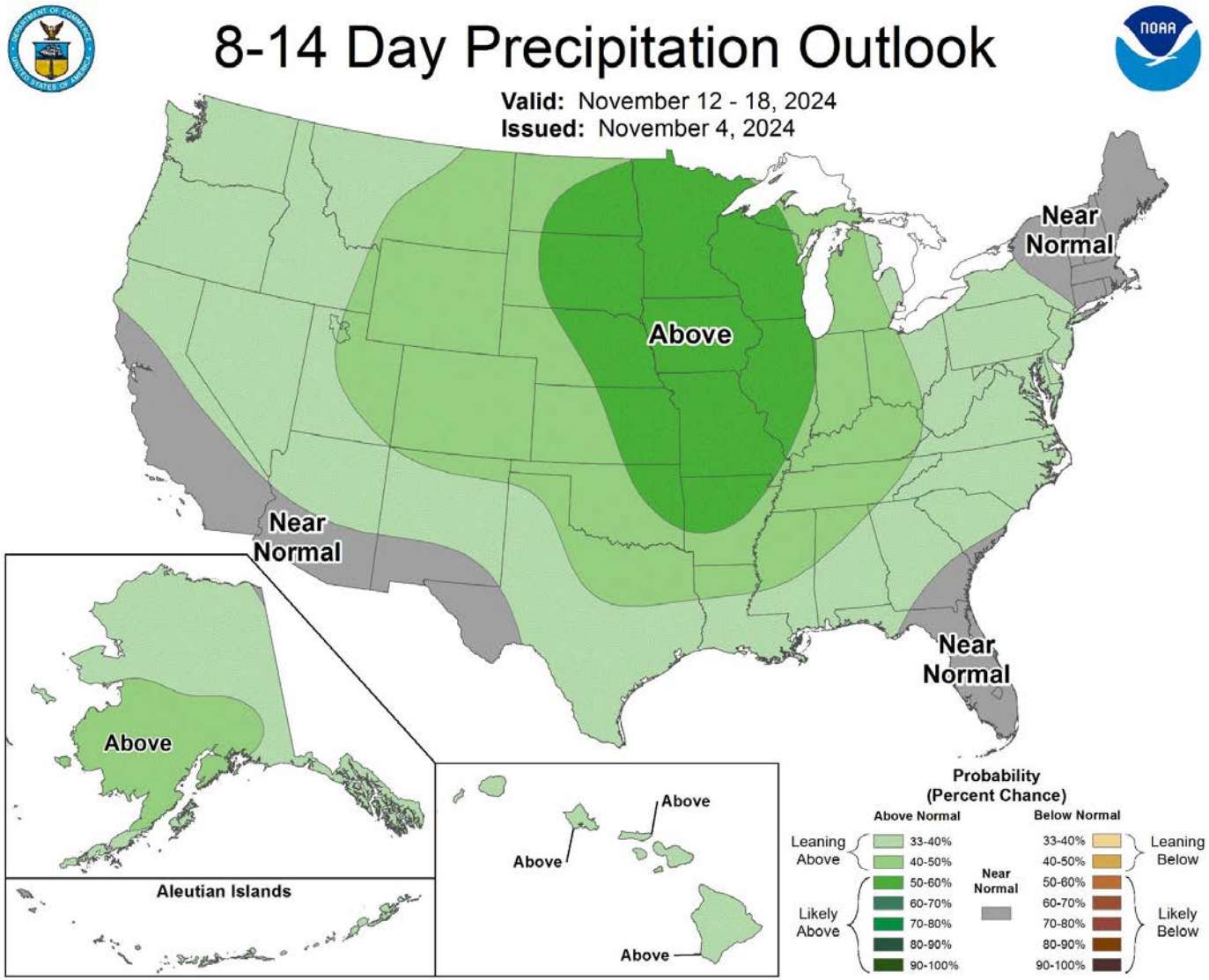
Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



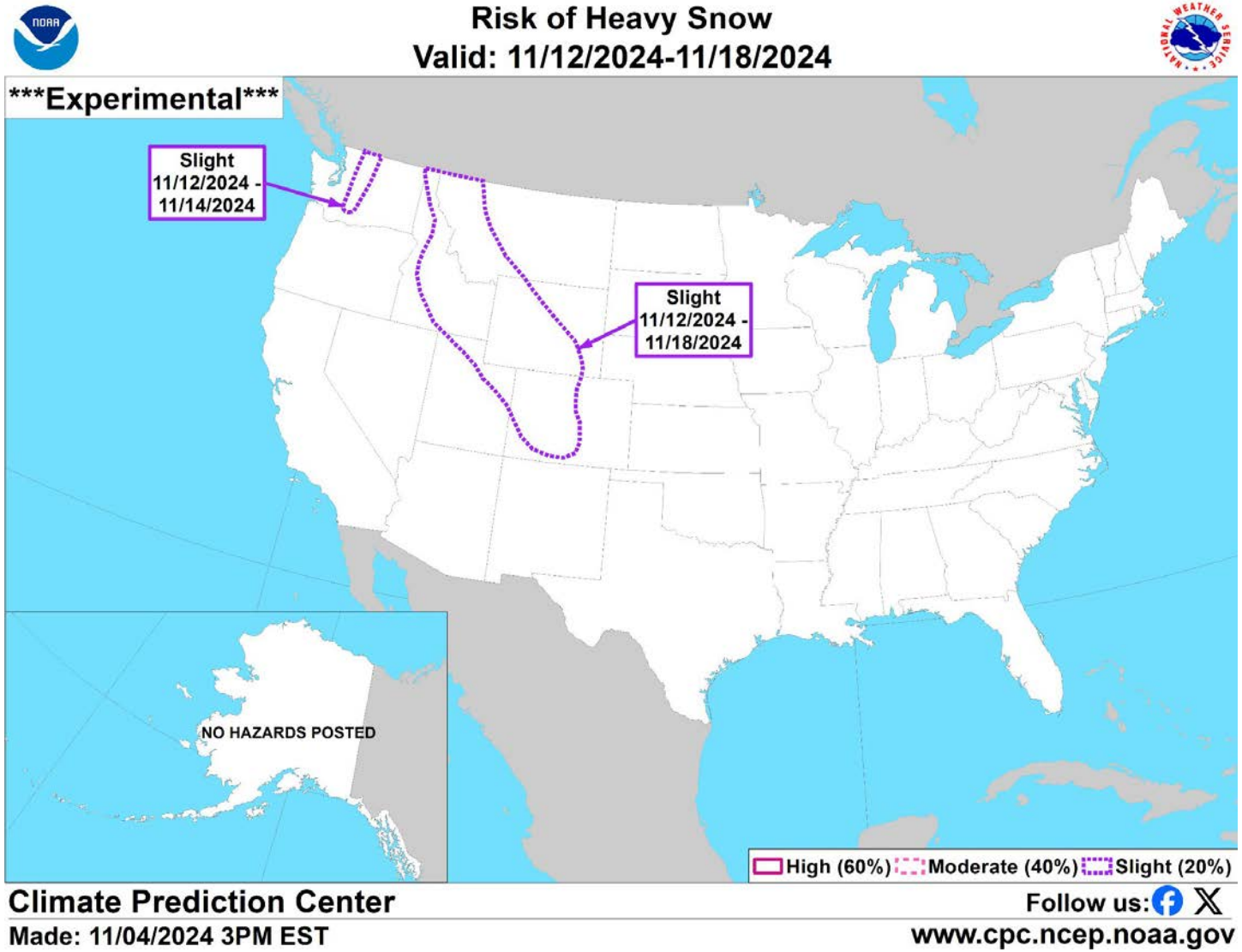
Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

Climate Prediction Center 8 to 14 Day Outlooks - Precipitation

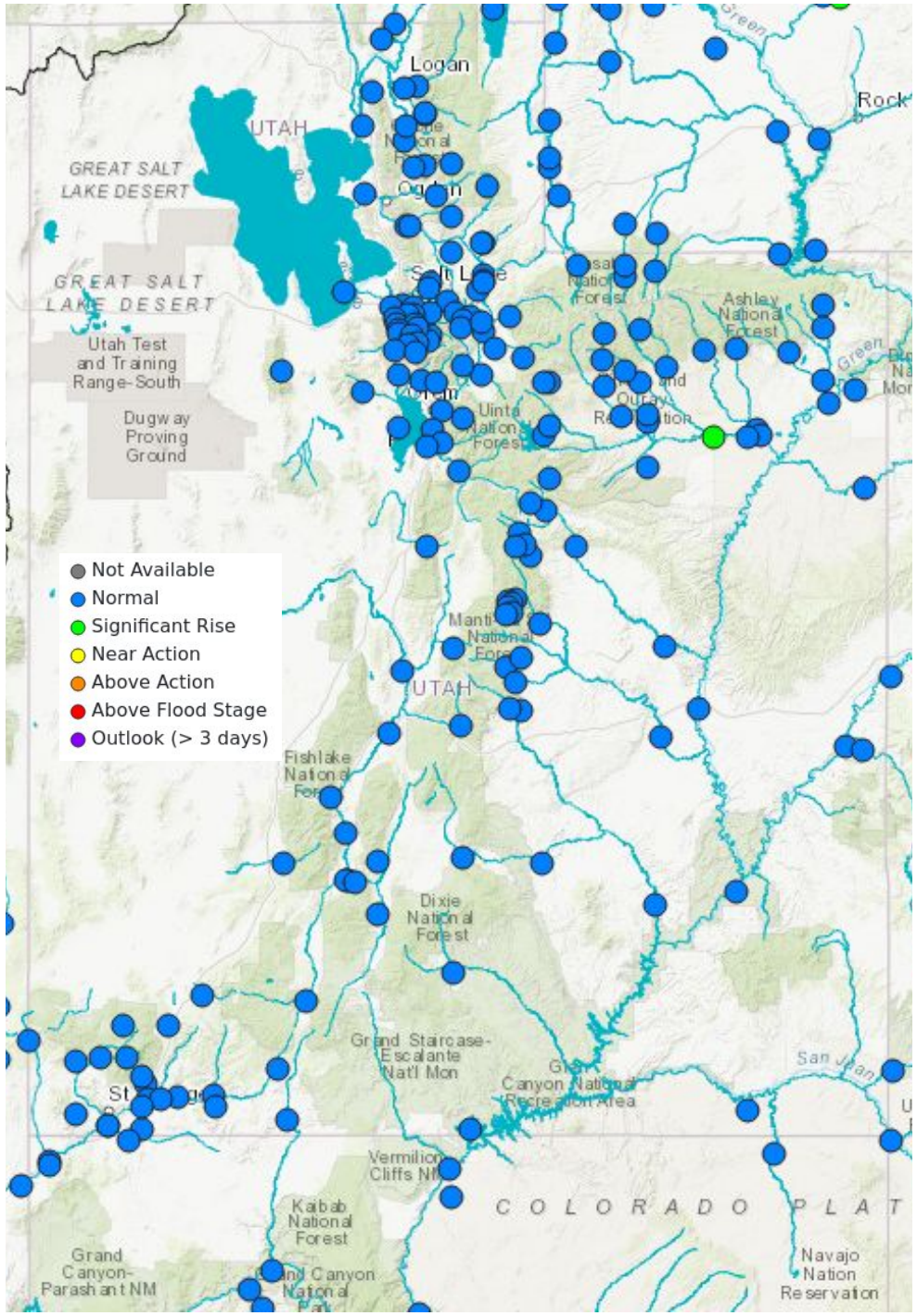


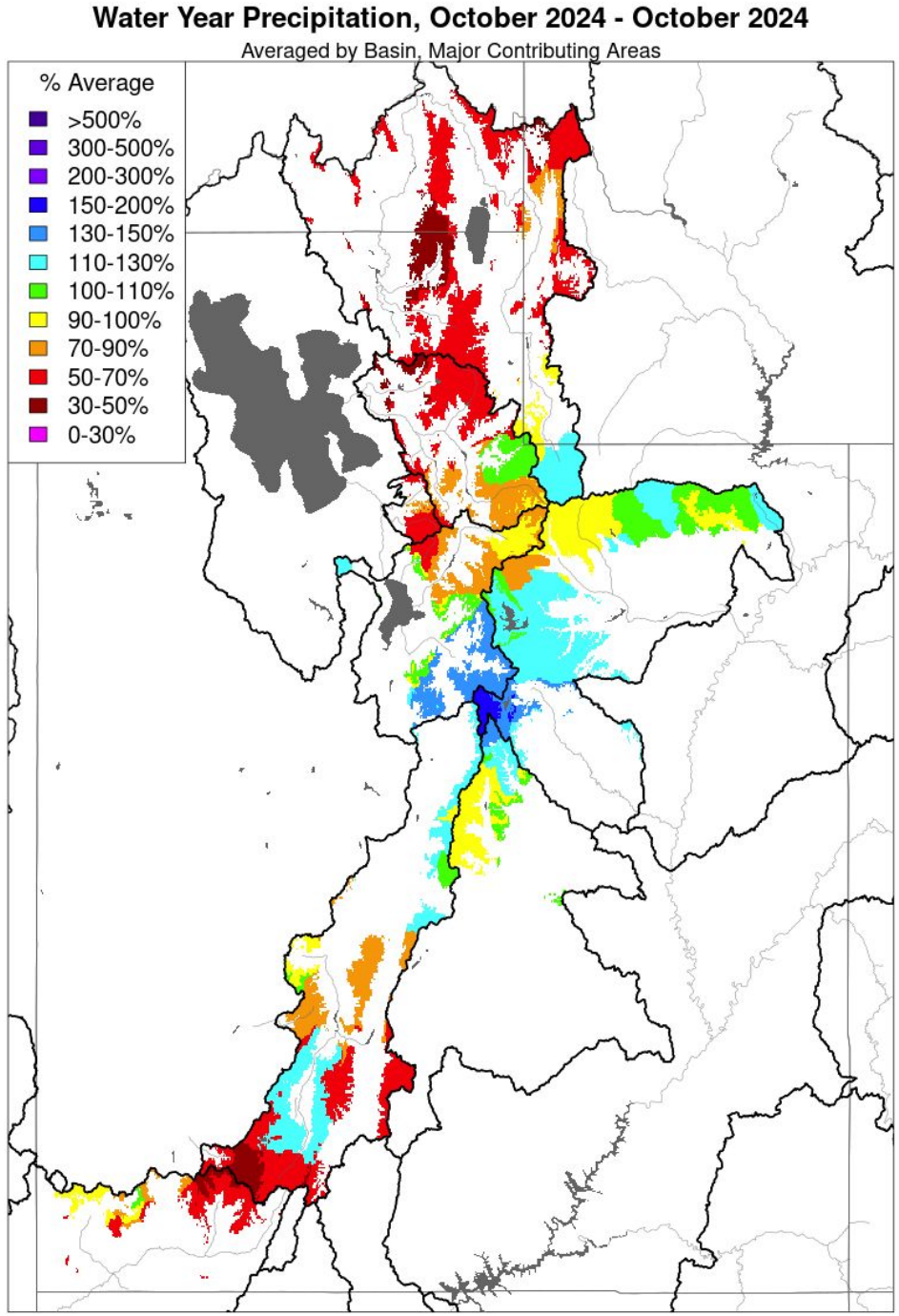
Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

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



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

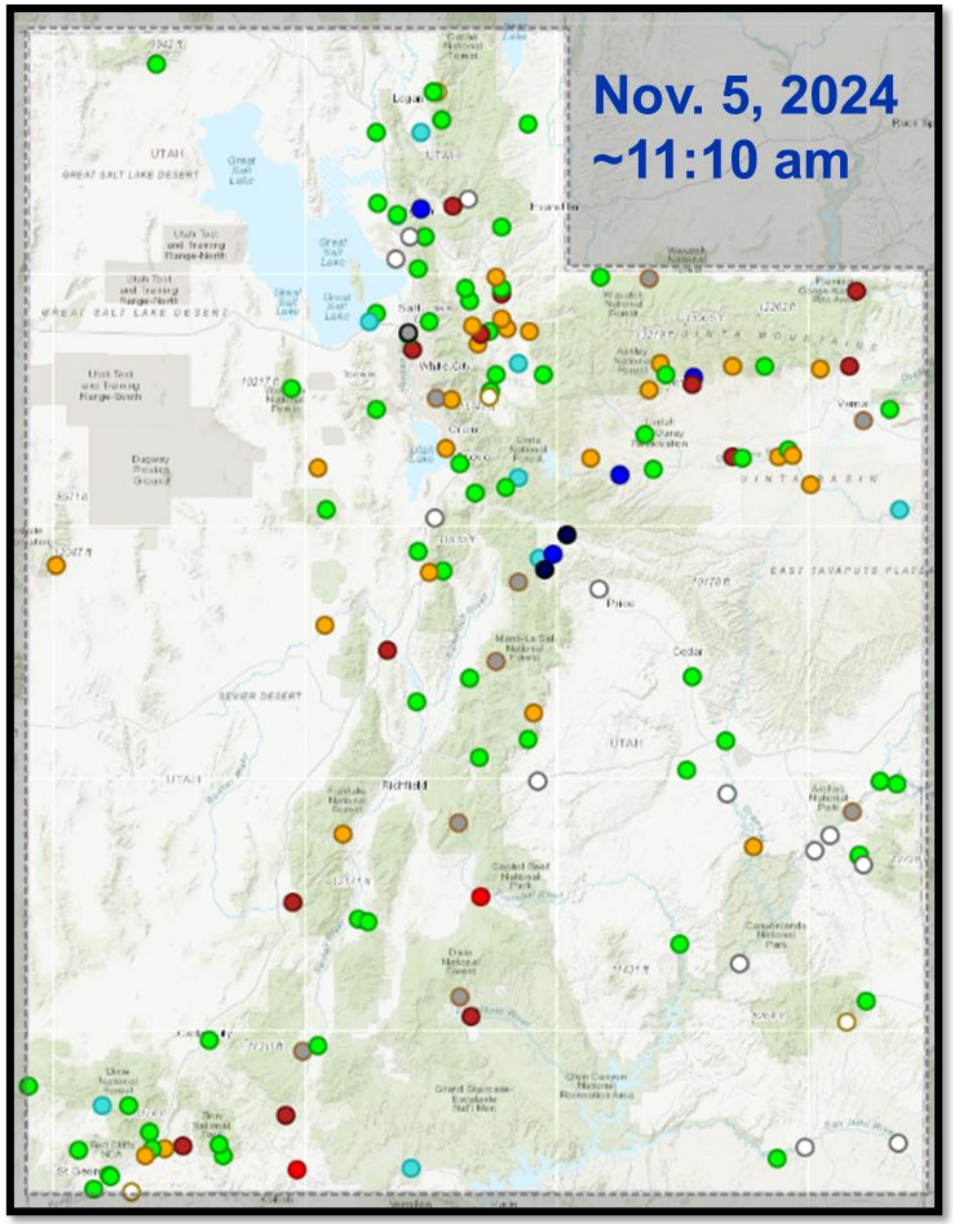




Dry start to the water year, but still very early and uncertainty is still high.

Soil moisture maps will be published this month.

Current Streamflow Conditions



National Water Dashboard

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	4	2.7%
Above normal for this day-of-year	9	6.1%
Normal for this day-of-year	67	45.3%
Below normal for this day-of-year	25	16.9%
Much below normal for this day-of-year	12	8.1%
All-time low for this day-of-year	2	1.4%
Not ranked - insufficient record	14	9.5%
Not ranked - no recent measurement	4	2.7%
Not ranked - no measurement	5	3.4%
Not ranked - stream not flowing	4	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

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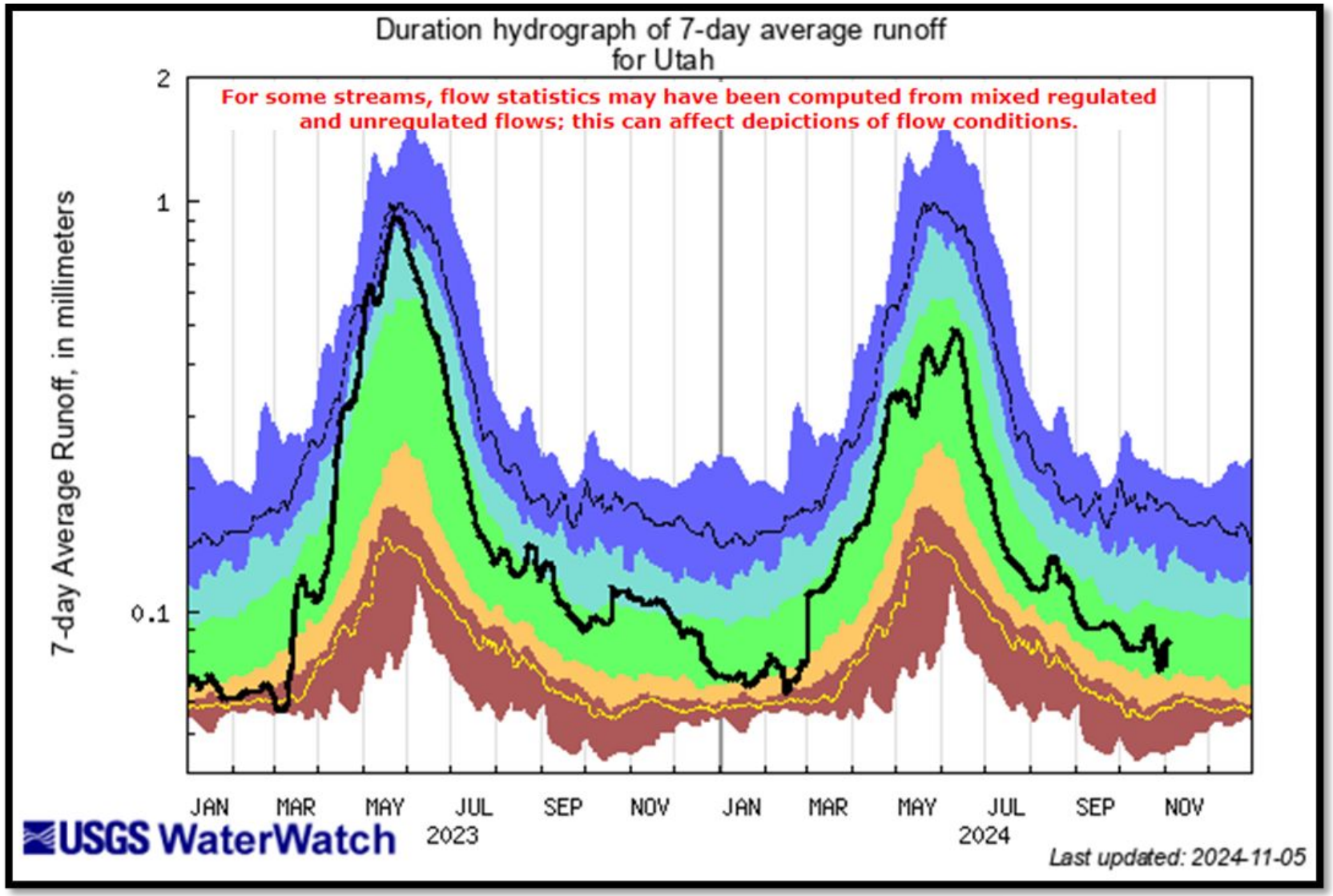
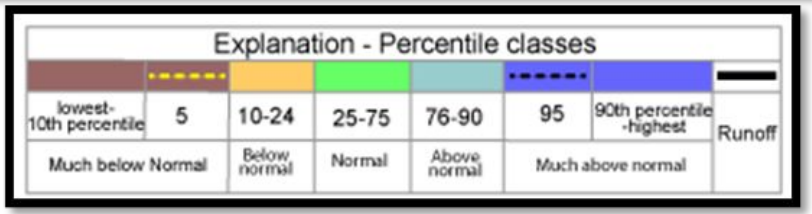
Utah Area-Based Runoff Duration Hydrograph





Provisional data, subject to revision

- **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.**

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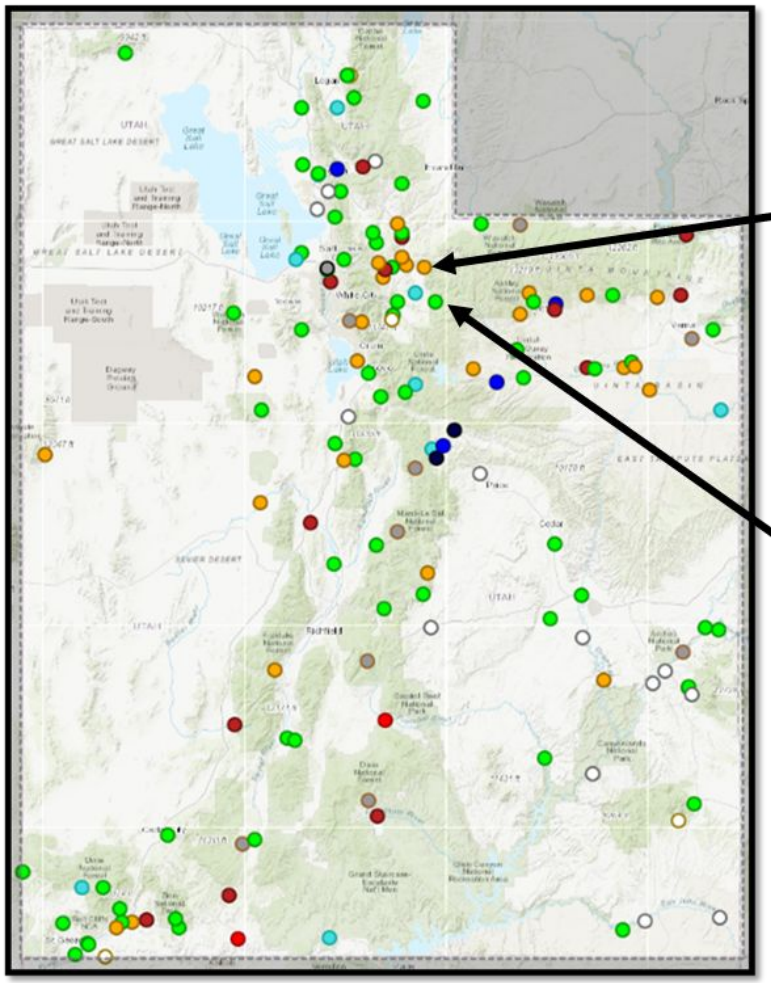
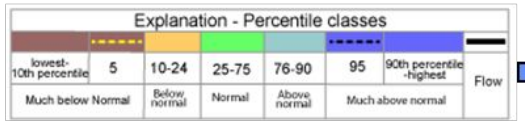
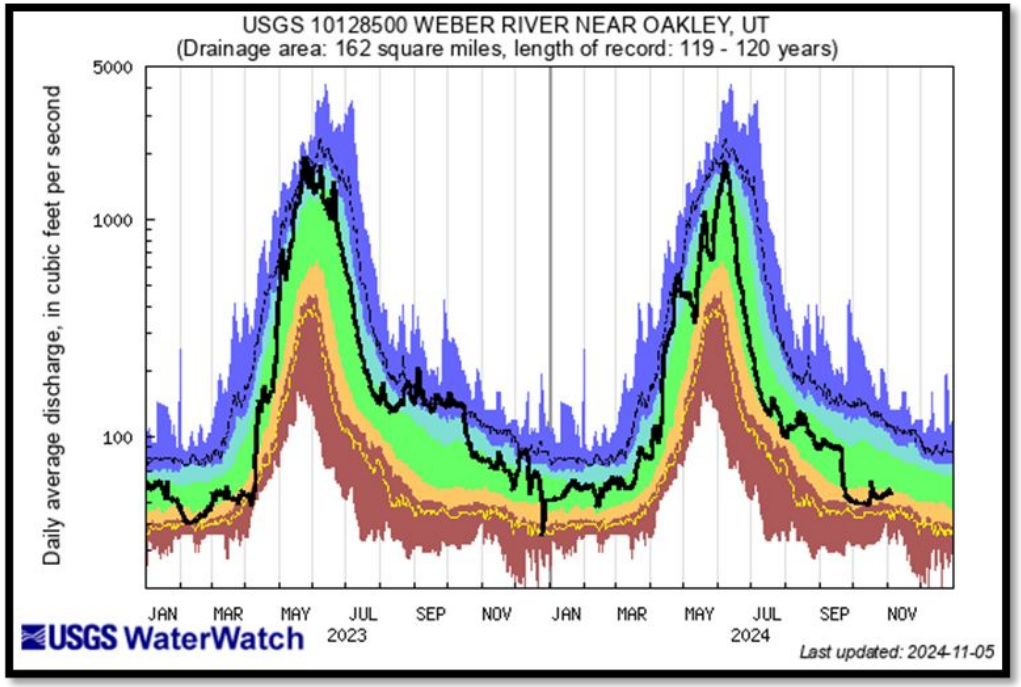
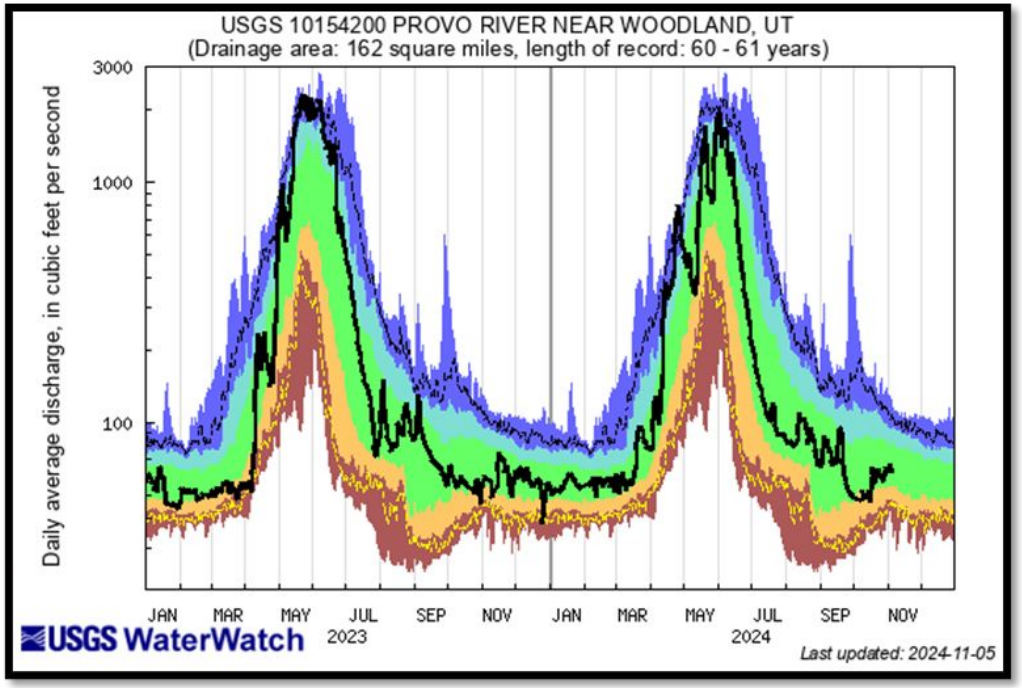
Streamflow at Selected Gages









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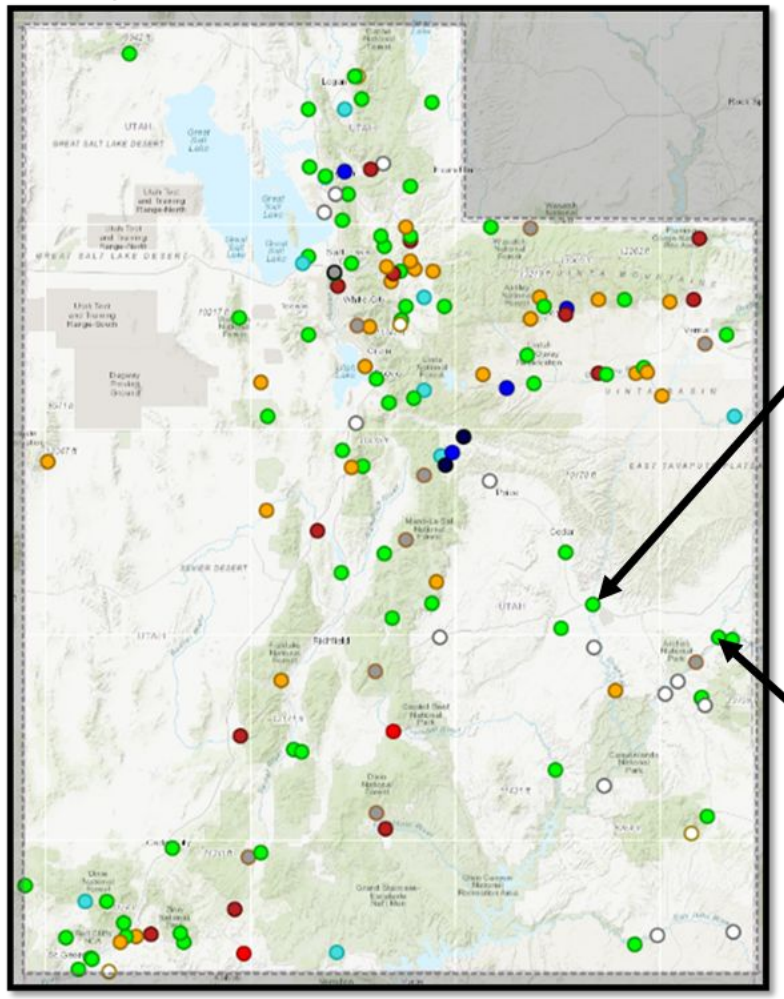
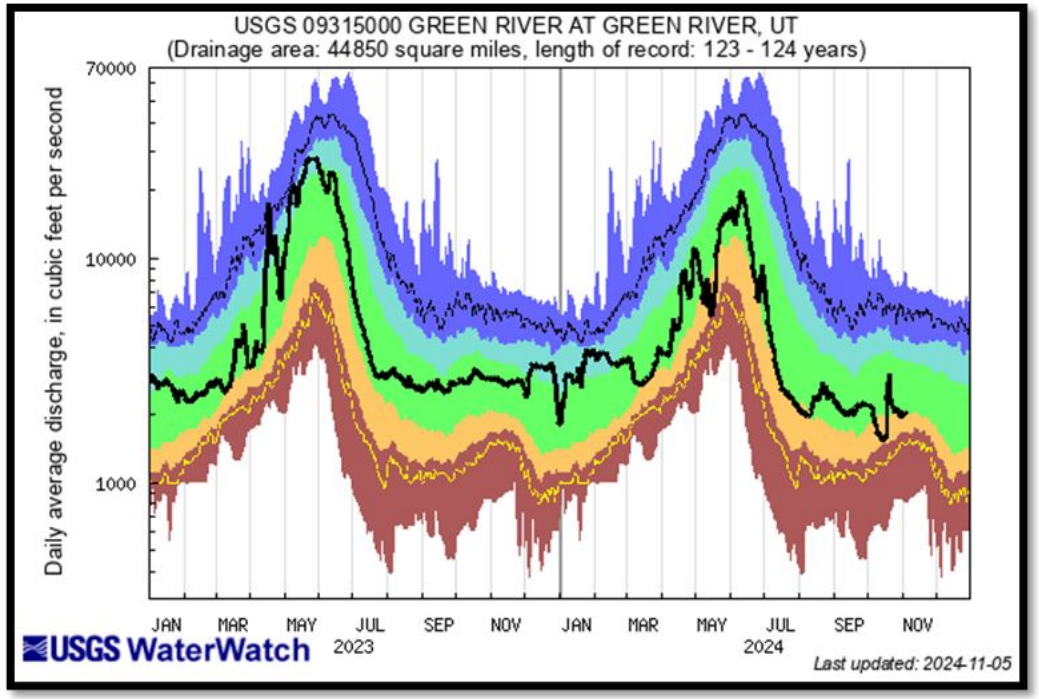
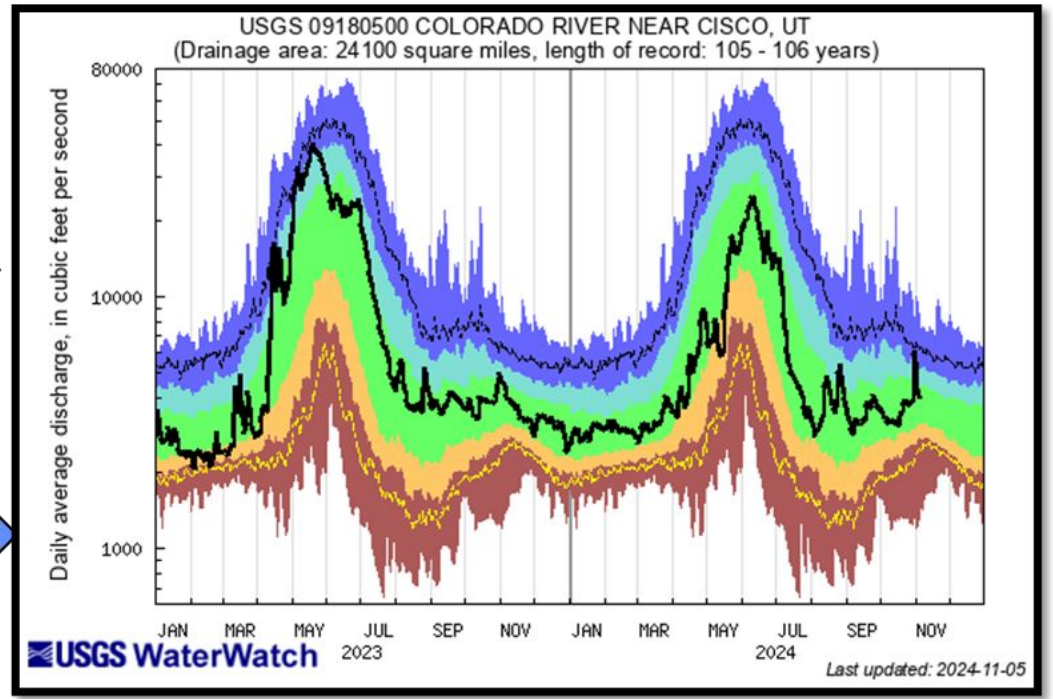
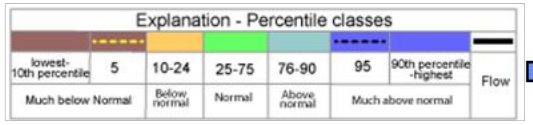
Streamflow at Selected Gages









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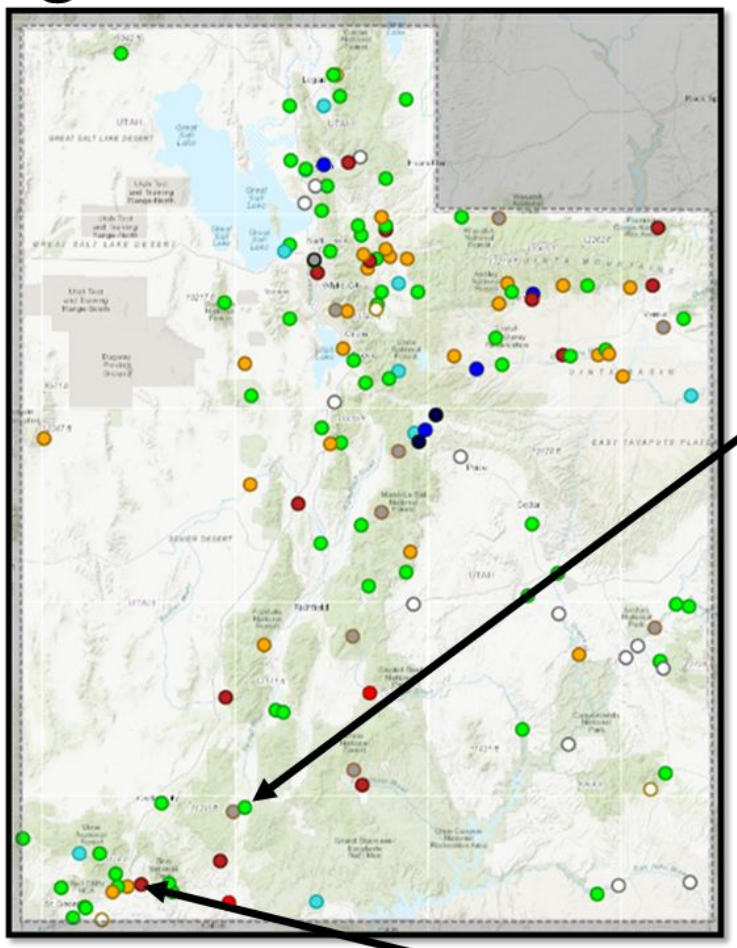
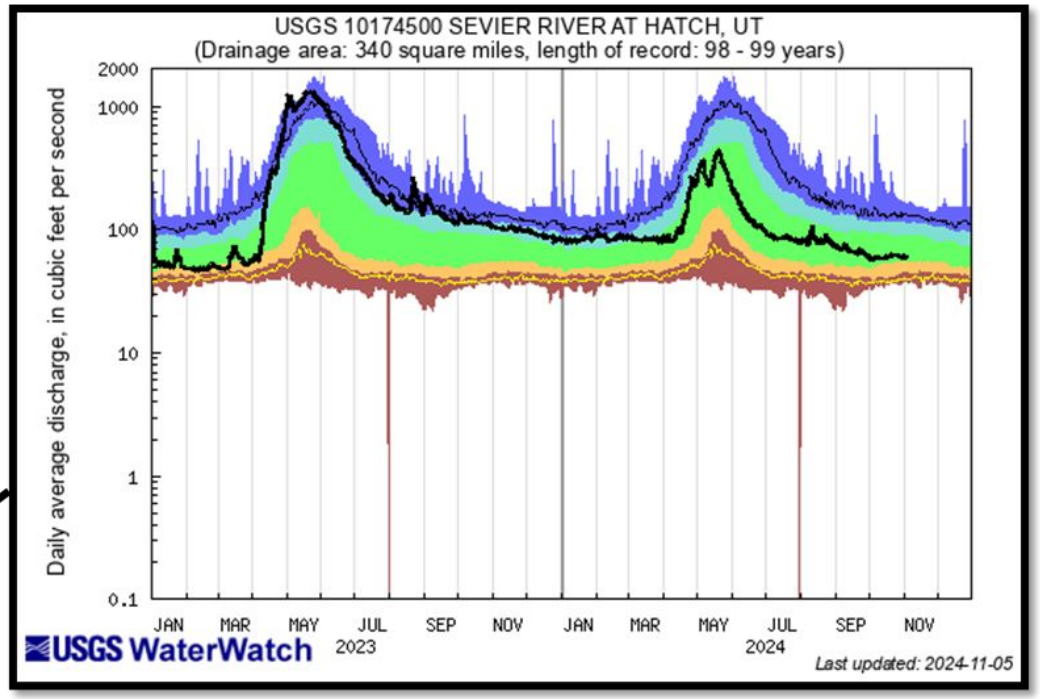
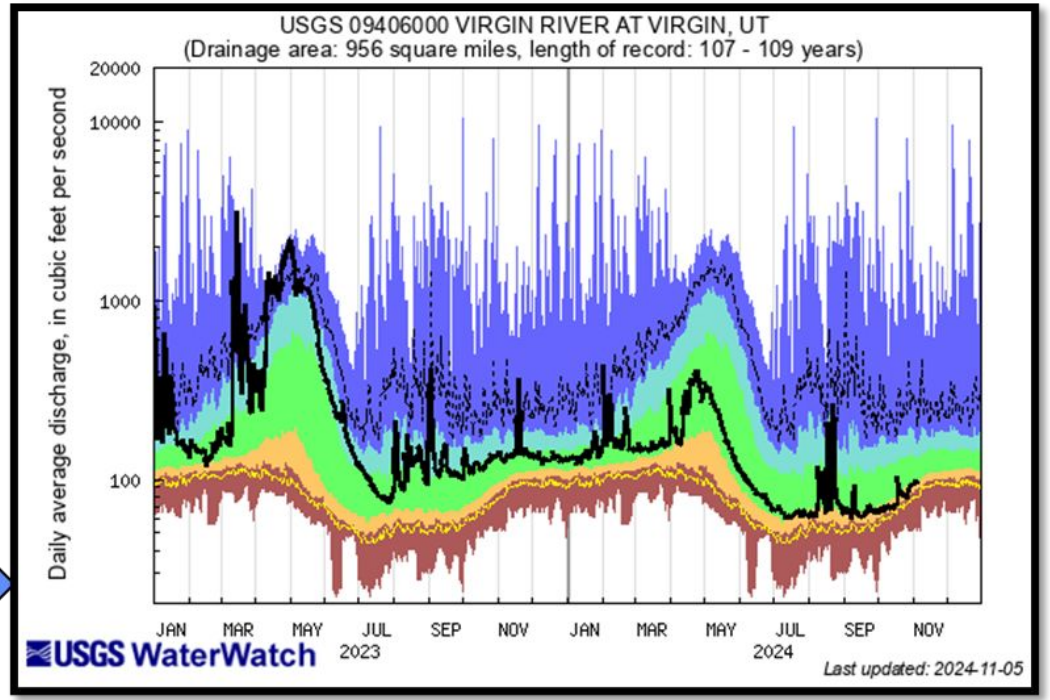
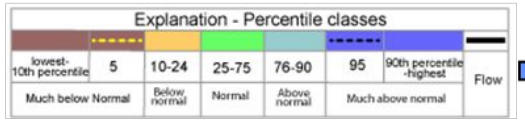
Streamflow at Selected Gages









Provisional data, subject to revision

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Presenter - Ryan Rowland

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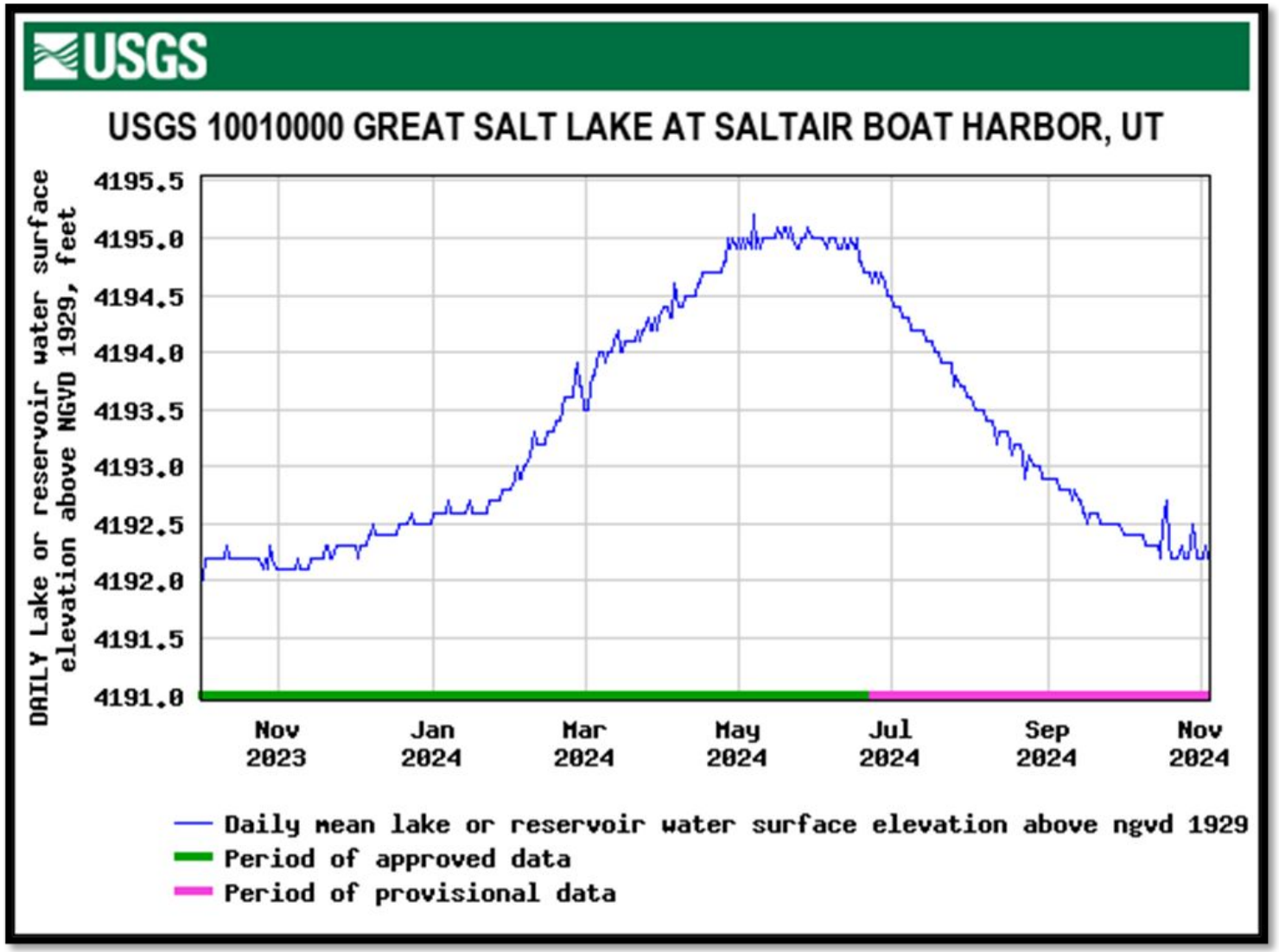
Great Salt Lake Water Surface Elevation – South Arm



- Daily value 11/4/2024 = 4,192.2’
- Daily value 9/9/2024 = 4,192.8’
- Down 3.0’ since Seasonal peak on 5/7/2024

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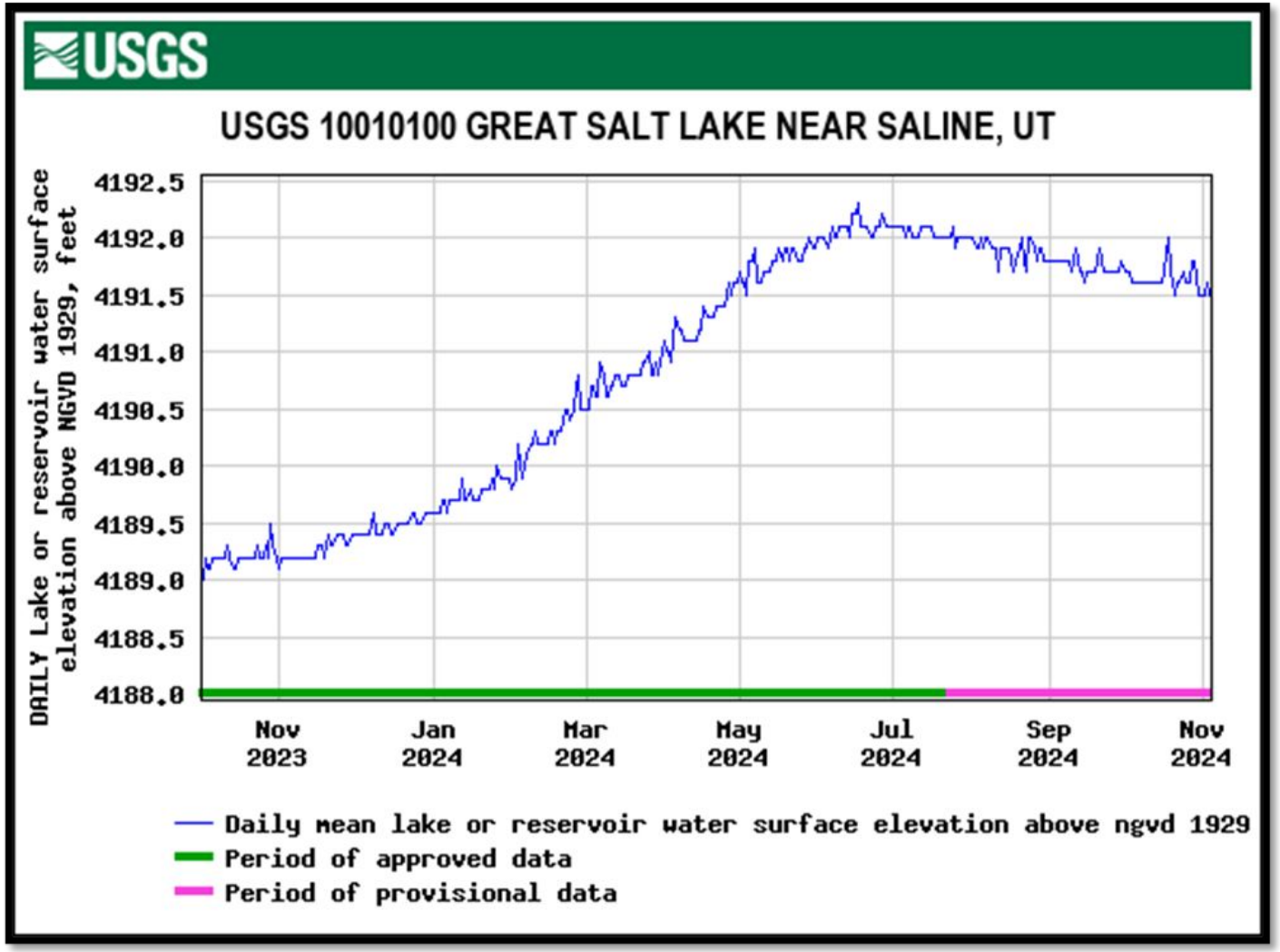
Presenter - Ryan Rowland

USGS science for a changing world

Great Salt Lake Water Surface Elevation – North Arm



- Daily value 11/4/2024 = 4,191.5’
- Daily value 9/9/2024 = 4,191.8’
- Down 0.8’ since Seasonal peak on 6/17/2024

Agency - USGS Utah WSC
Presenter - Ryan Rowland

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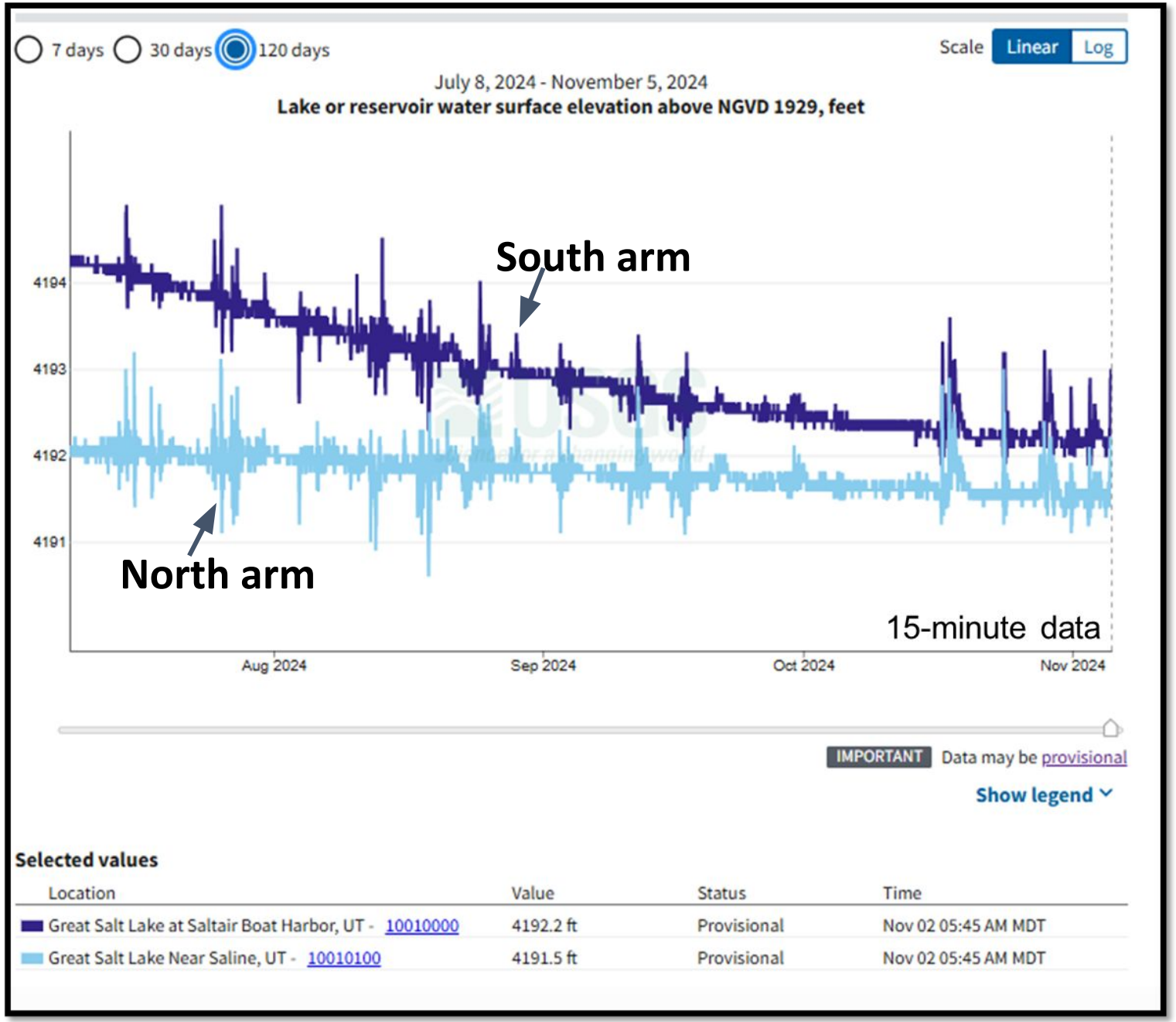
Great Salt Lake Water Surface Elevations



Provisional data, subject to revision

Agency - USGS Utah WSC
Presenter - Ryan Rowland

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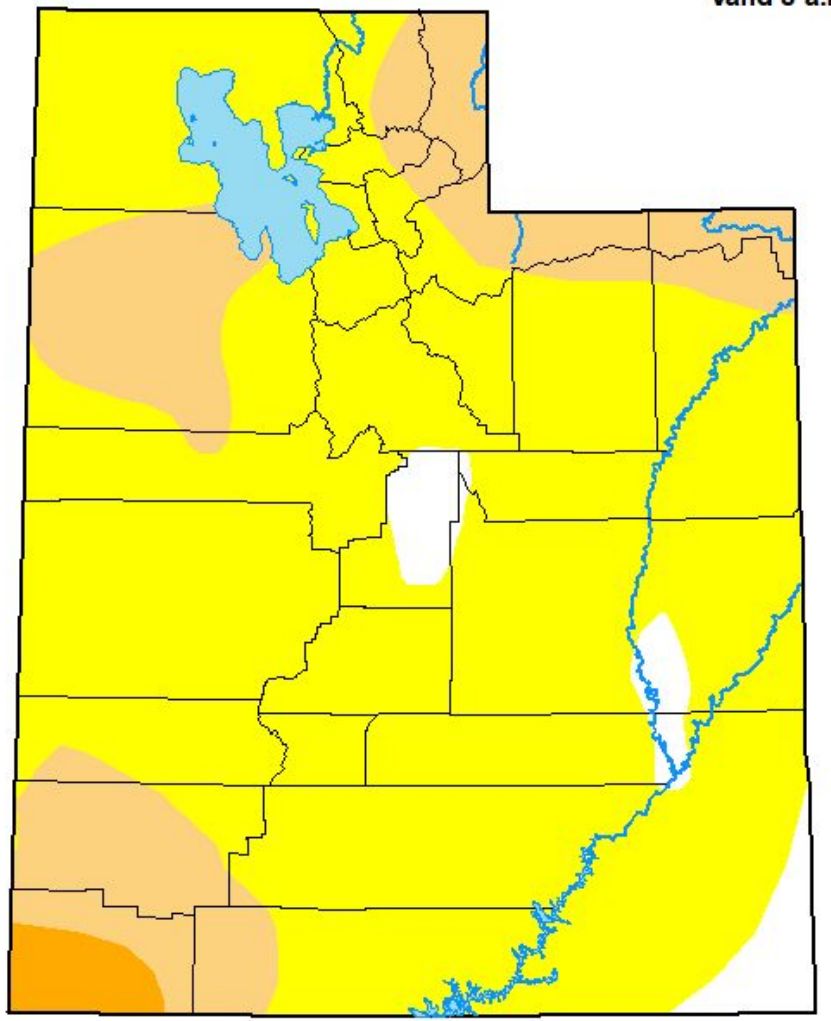
U.S. Drought Monitor
Utah

October 29, 2024

(Released Thursday, Oct. 31, 2024)

Valid 8 a.m. EDT



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:

Brian Fuchs
National Drought Mitigation 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