Utah Water Assessment & Conditions Monitoring
(Drought Webinar)

The meeting will begin shortly

UTAH CLIMATE CENTER

NOAA

USGS science for a changing world

NRCS Natural Resources Conservation Service

UDAF

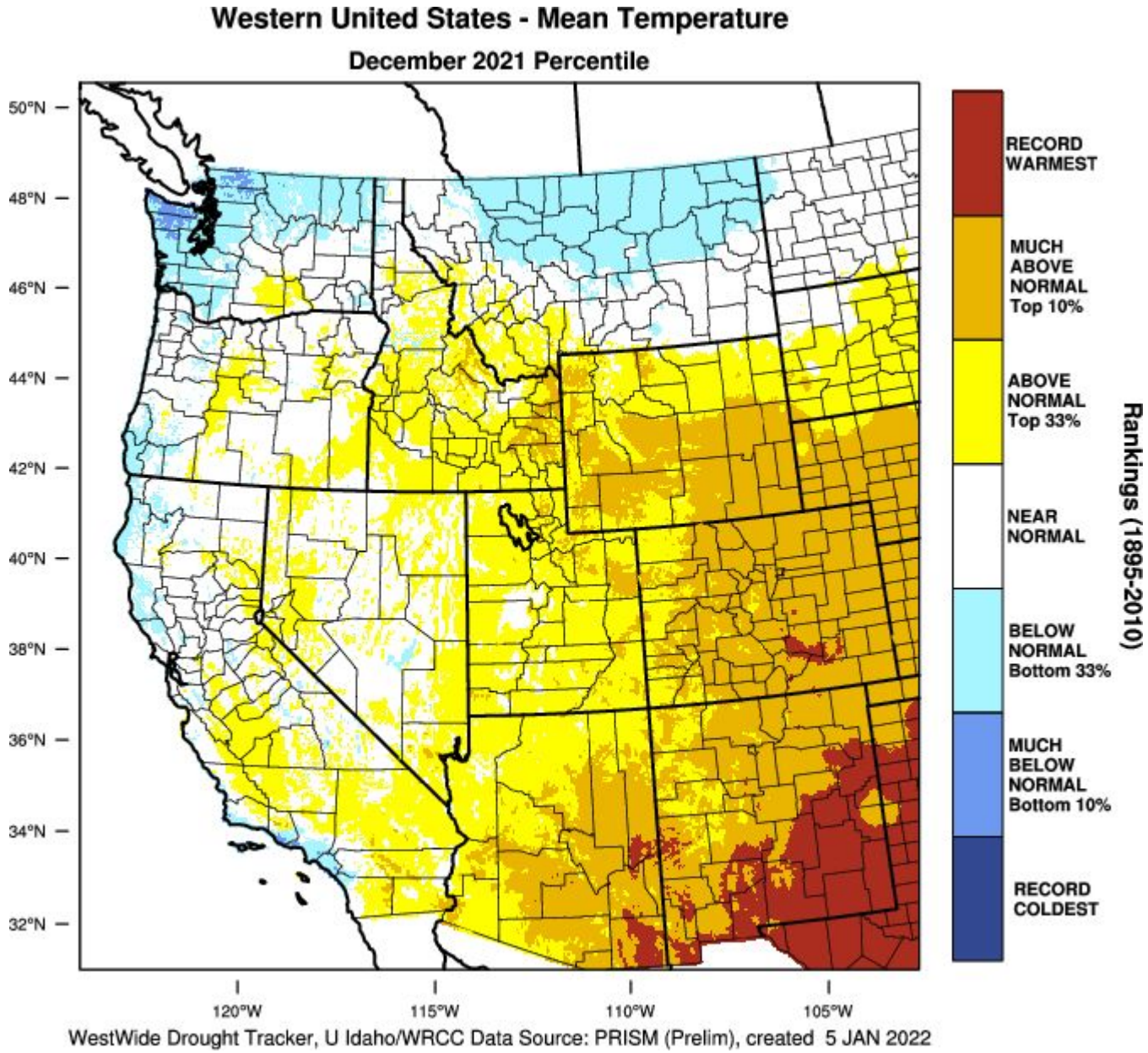
UTAH DNR WATER RESOURCES

Thank you to our contributors

Utah Water Assessment & Conditions Monitoring Webinar

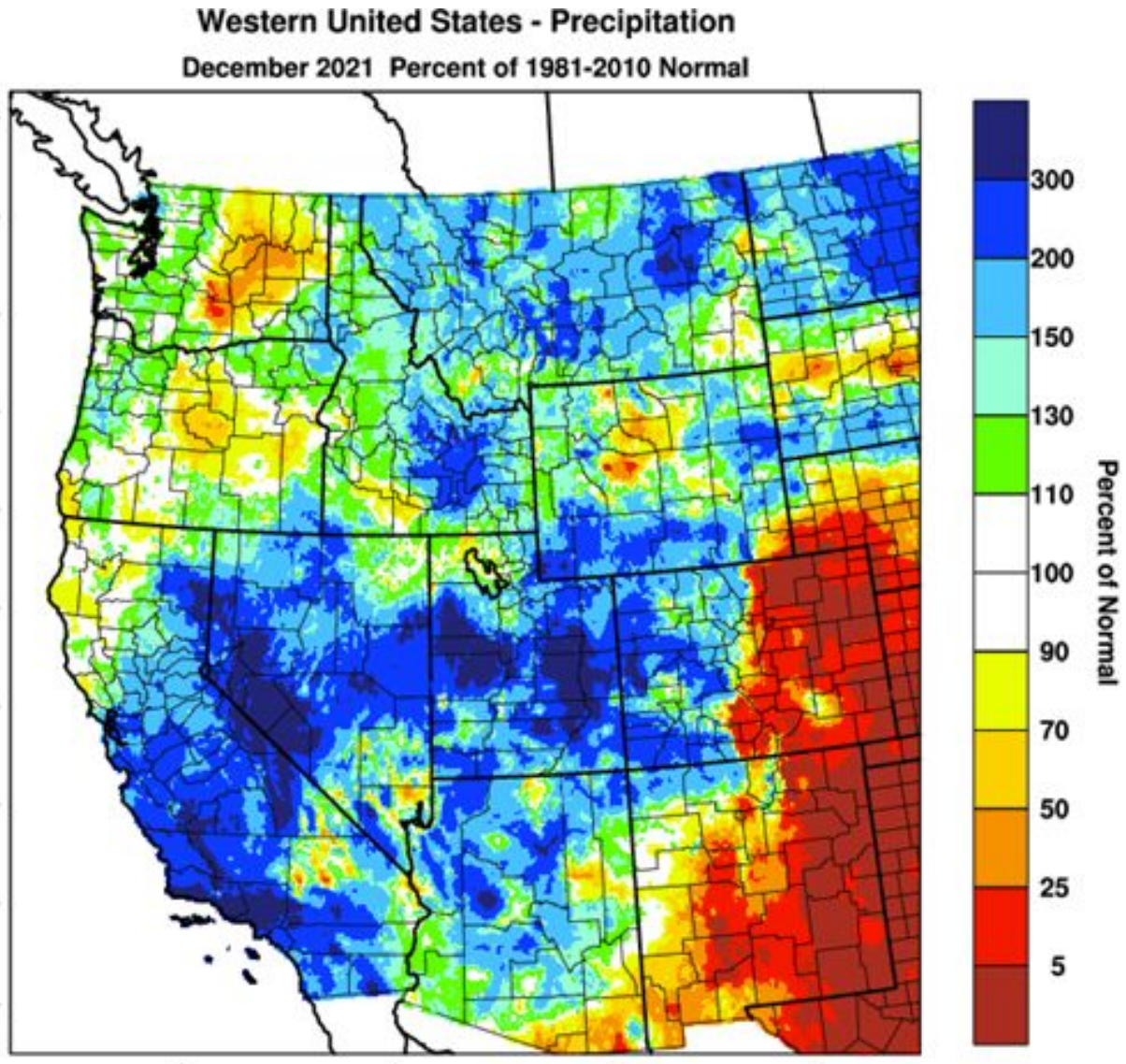
January 11, 2022

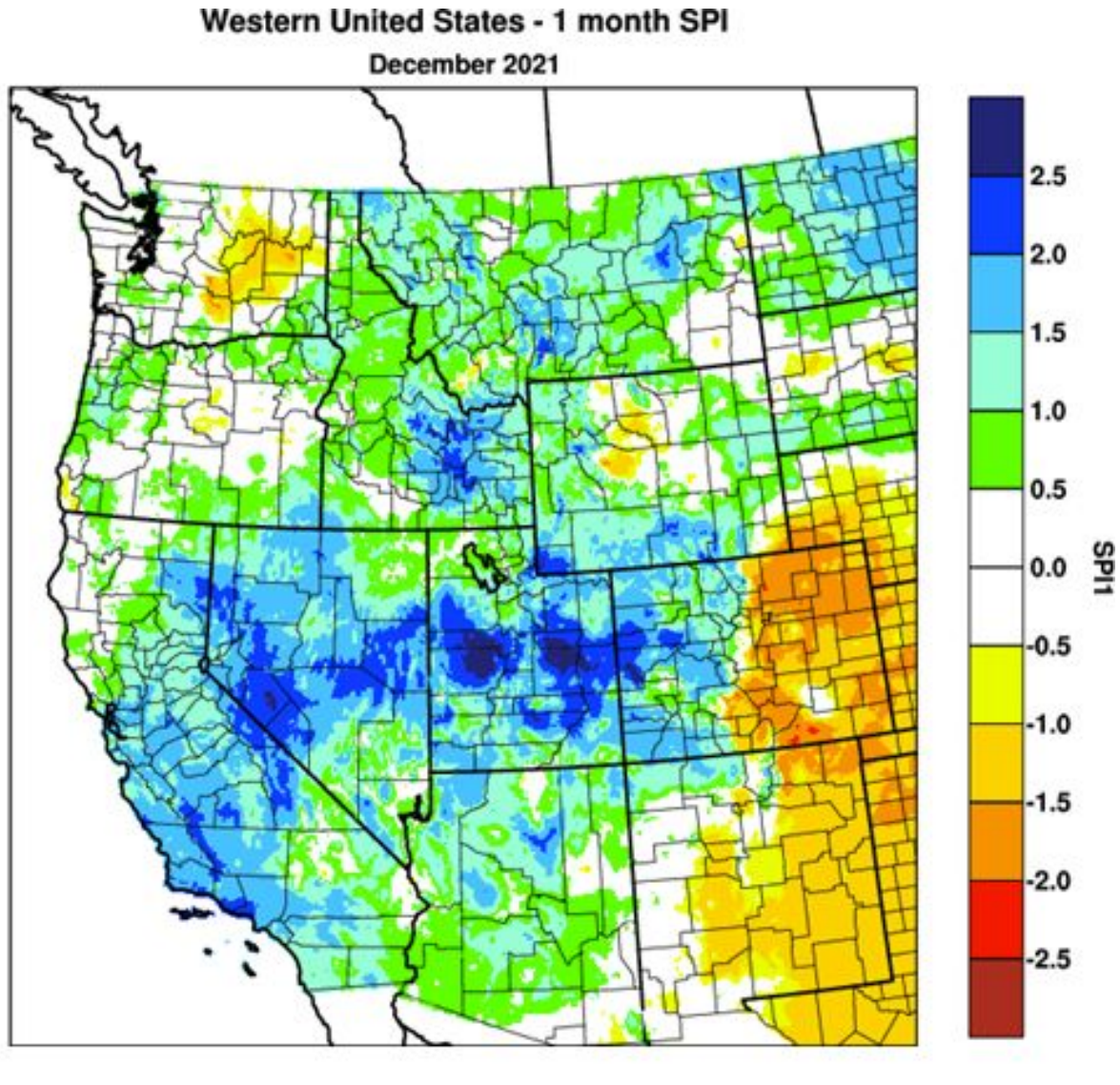
December’s Temperatures



Agency - Utah Climate Center
Presenter - Jon Meyer

December's Precipitation





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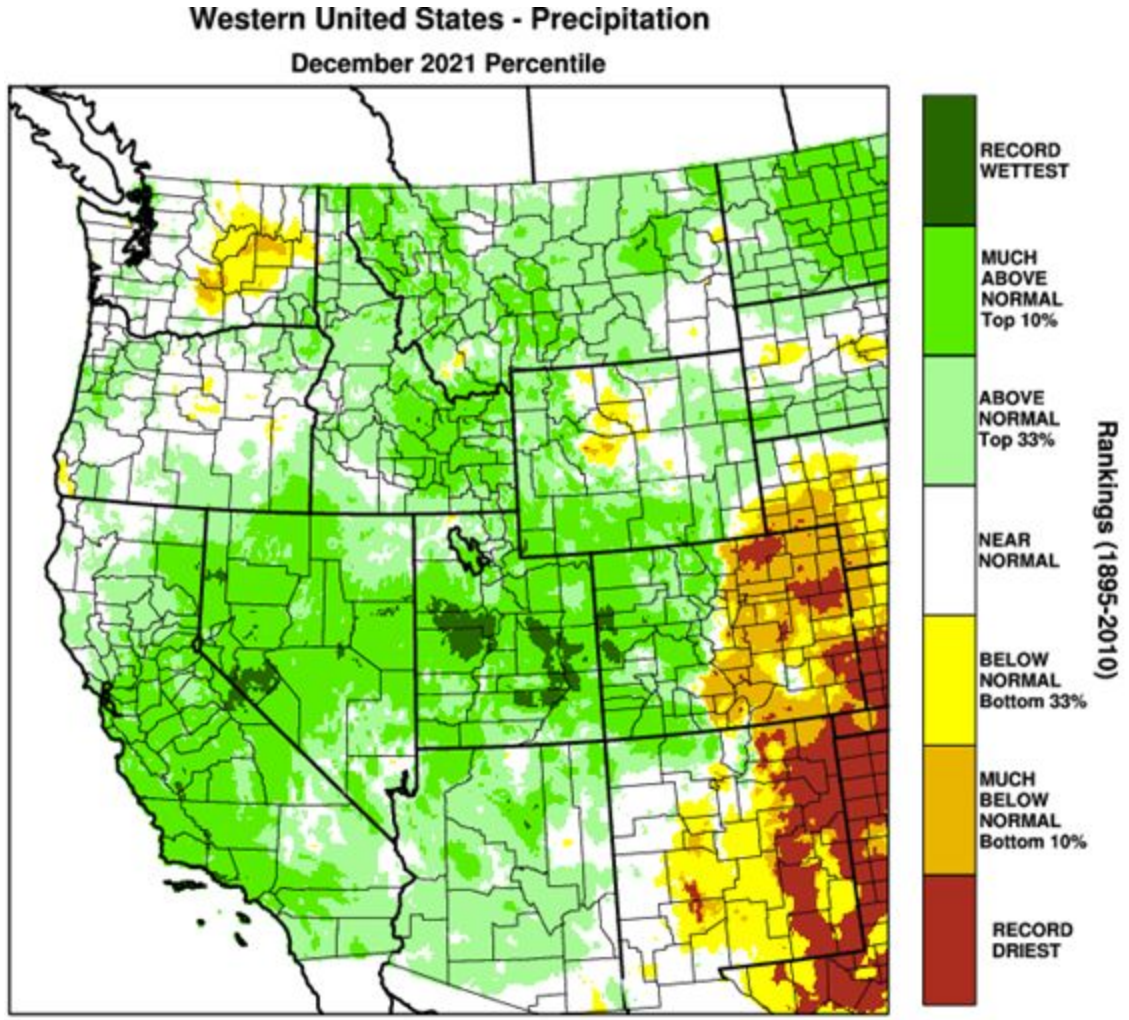
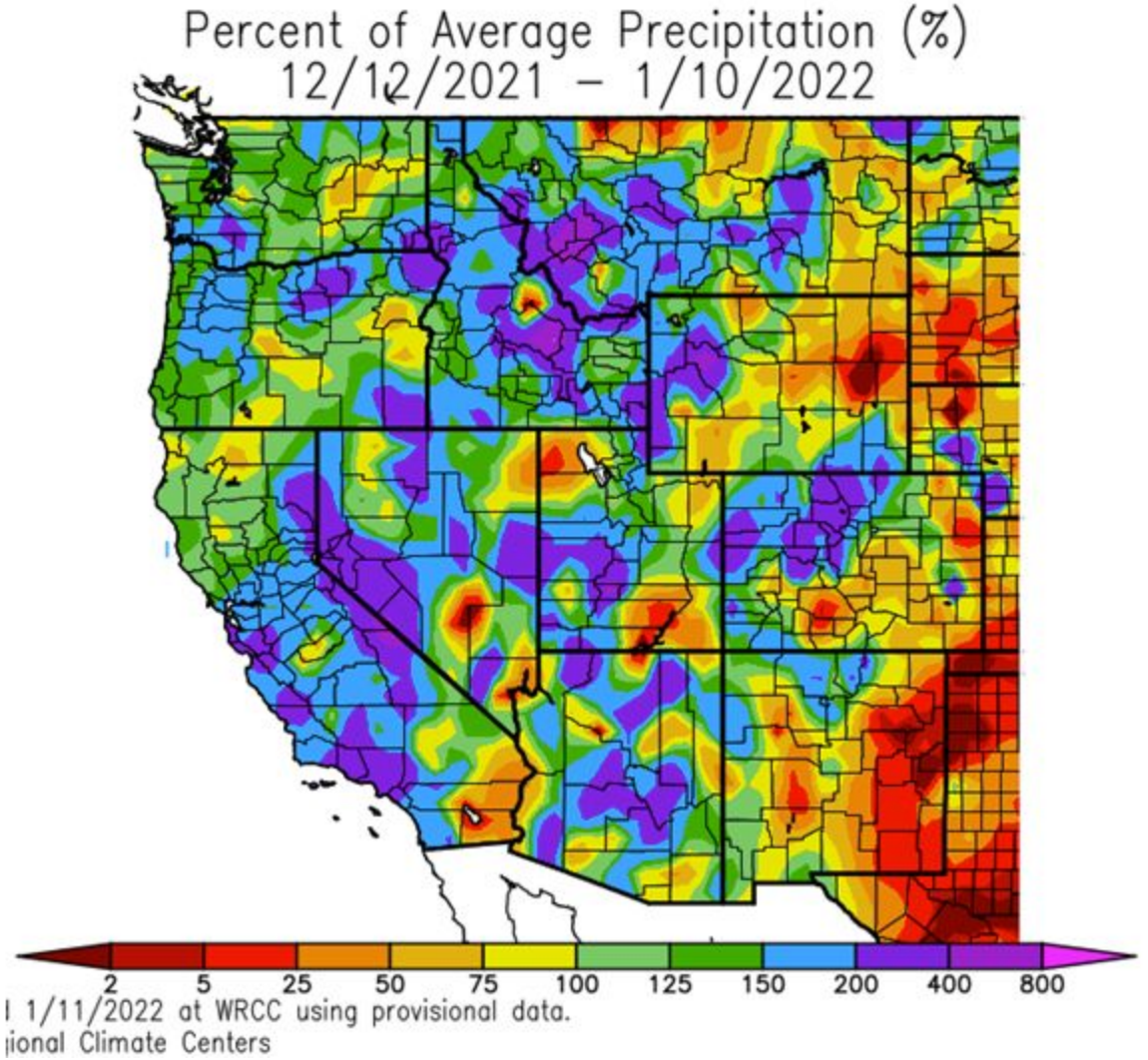
Presenter - Jon Meyer

30-day Precipitation





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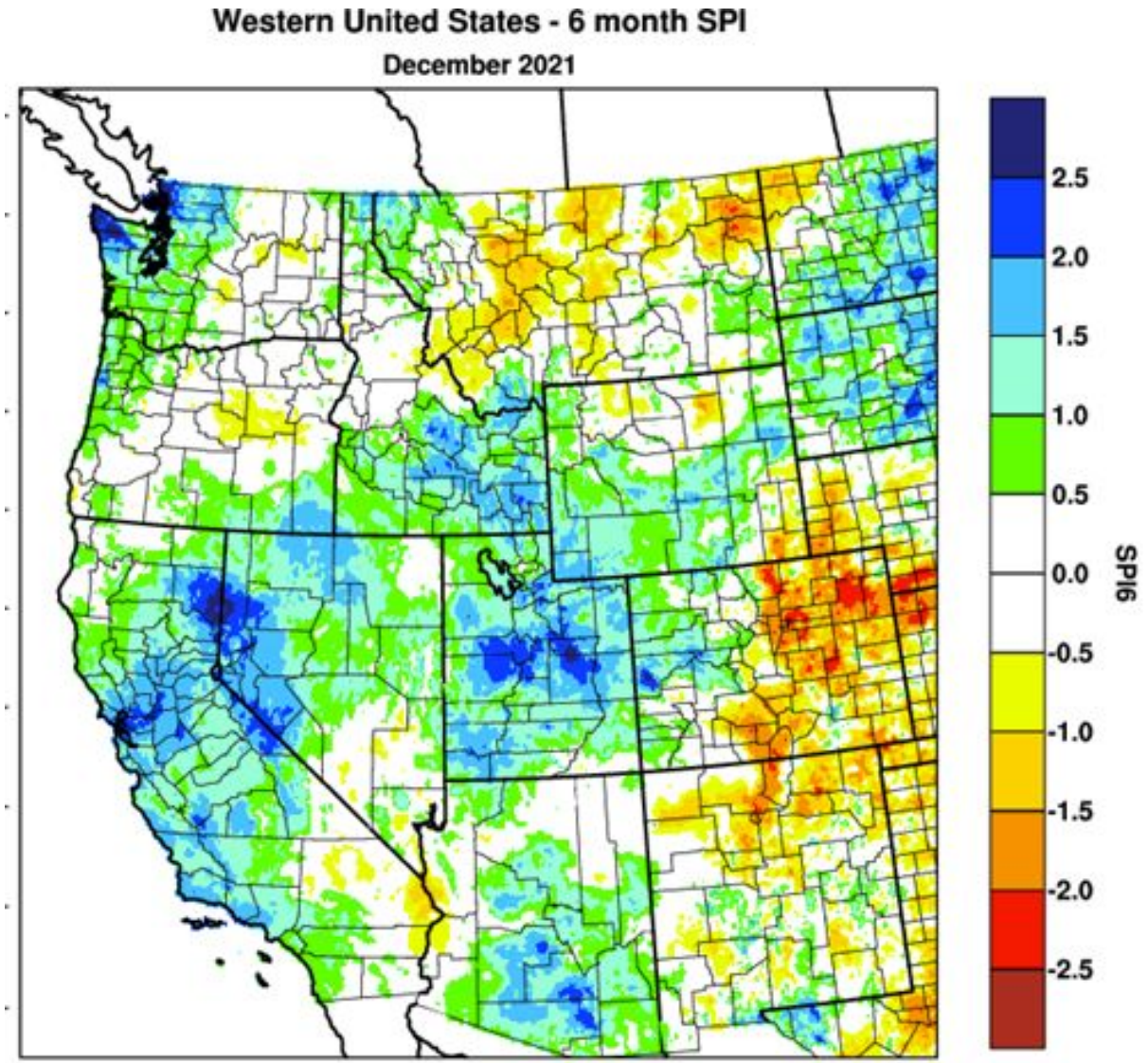
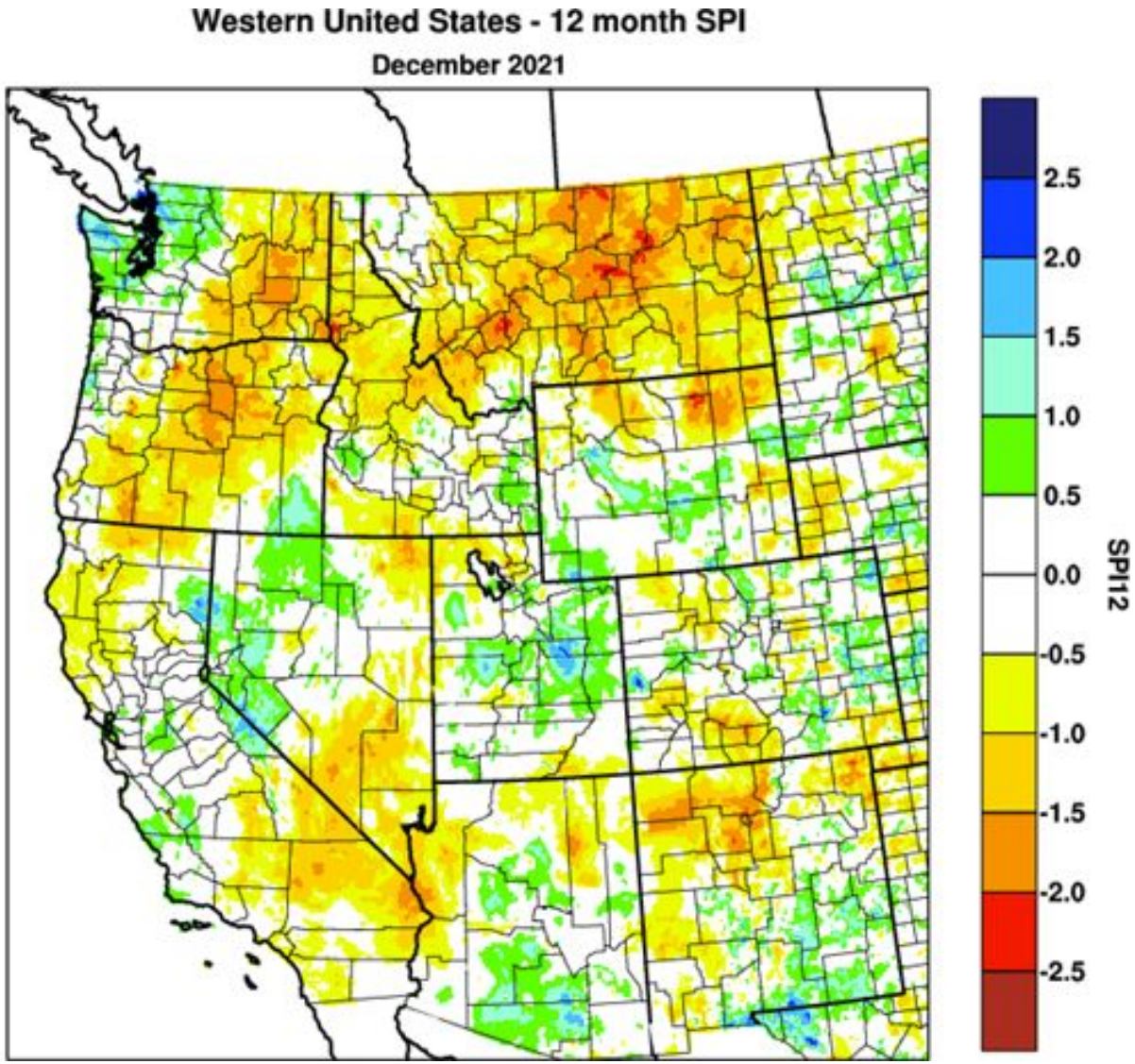
2021 Precipitation Overview





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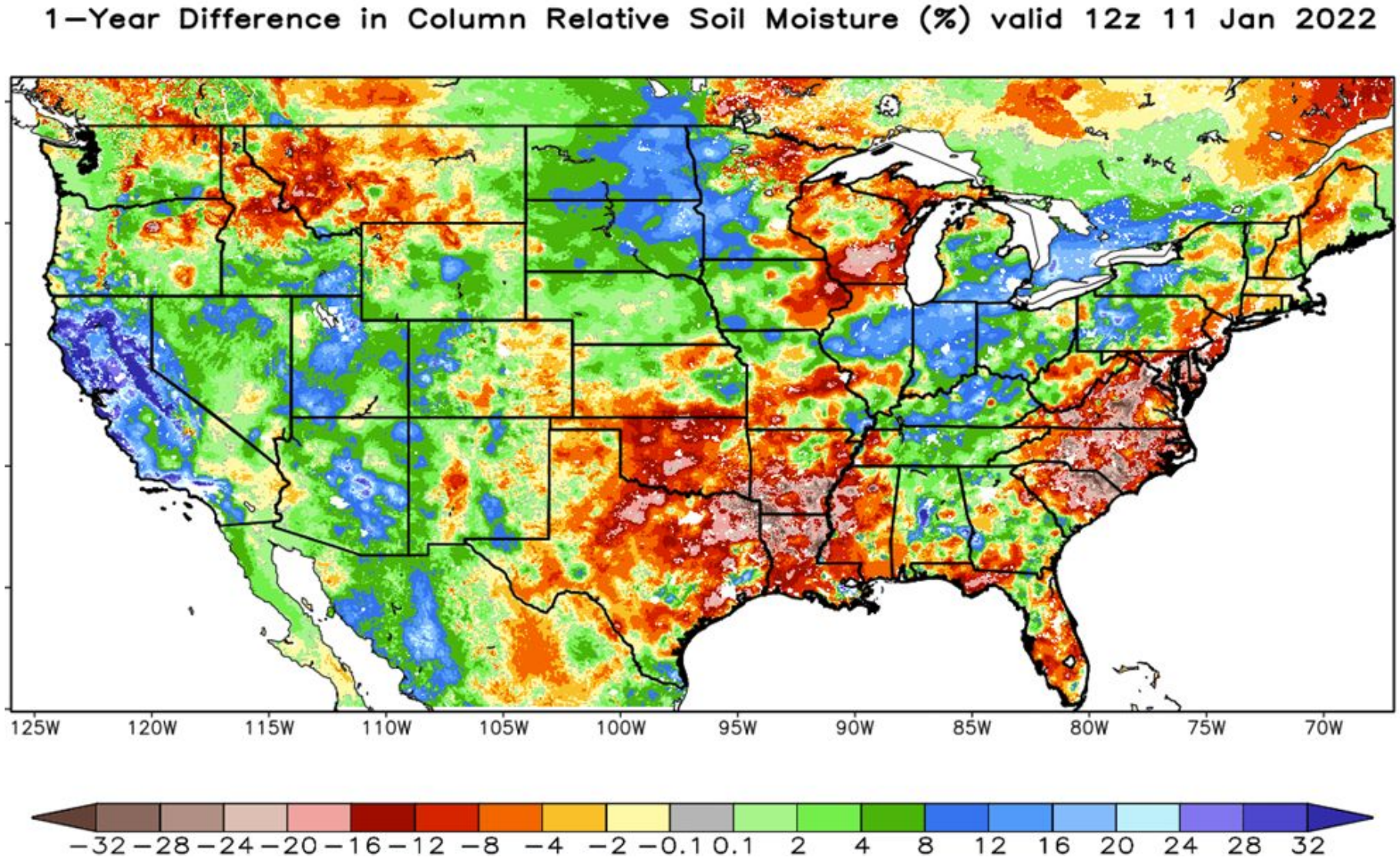
Presenter - Jon Meyer

Year-over-Year Soil Moisture Improvements



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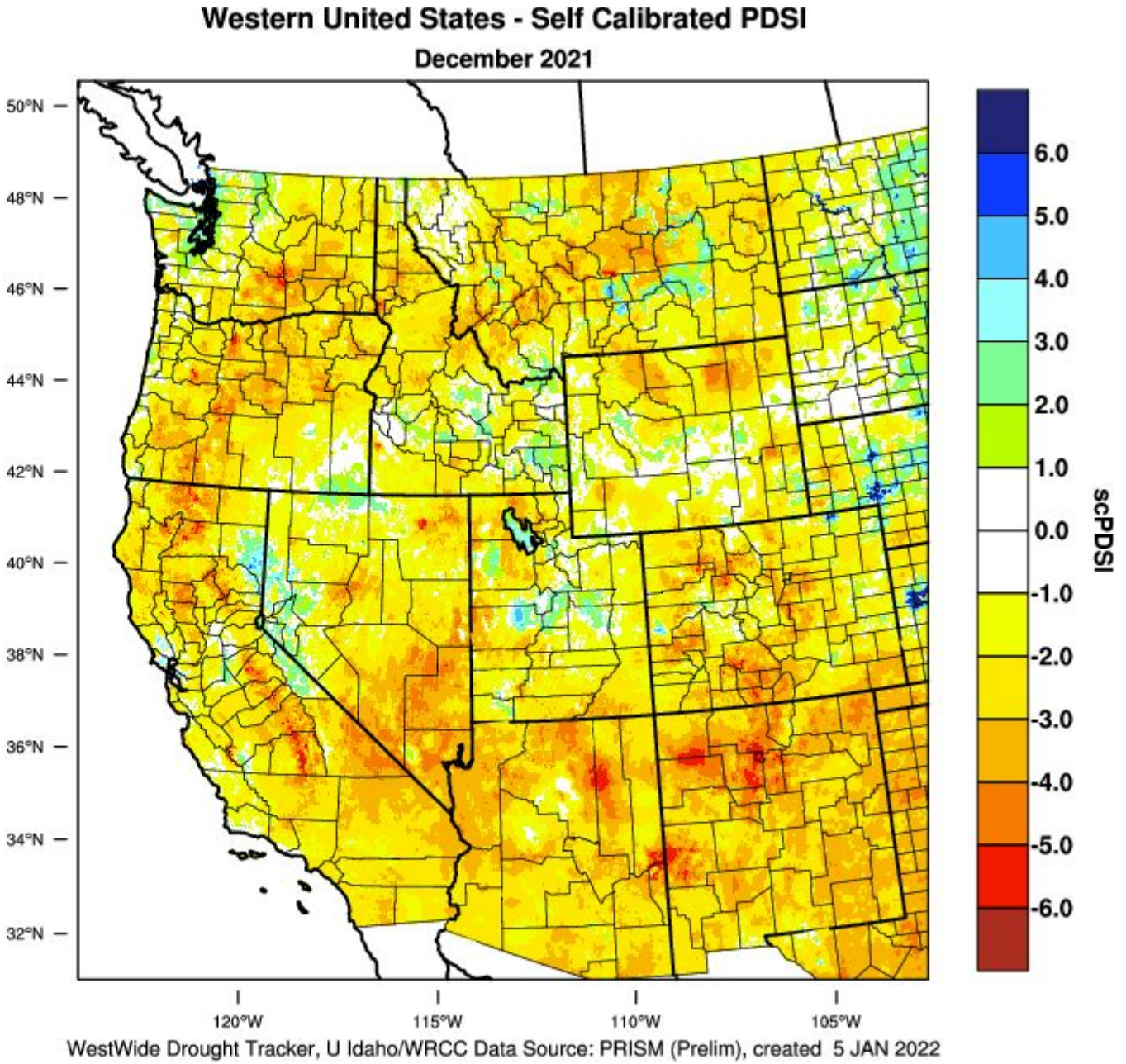
Presenter - Jon Meyer

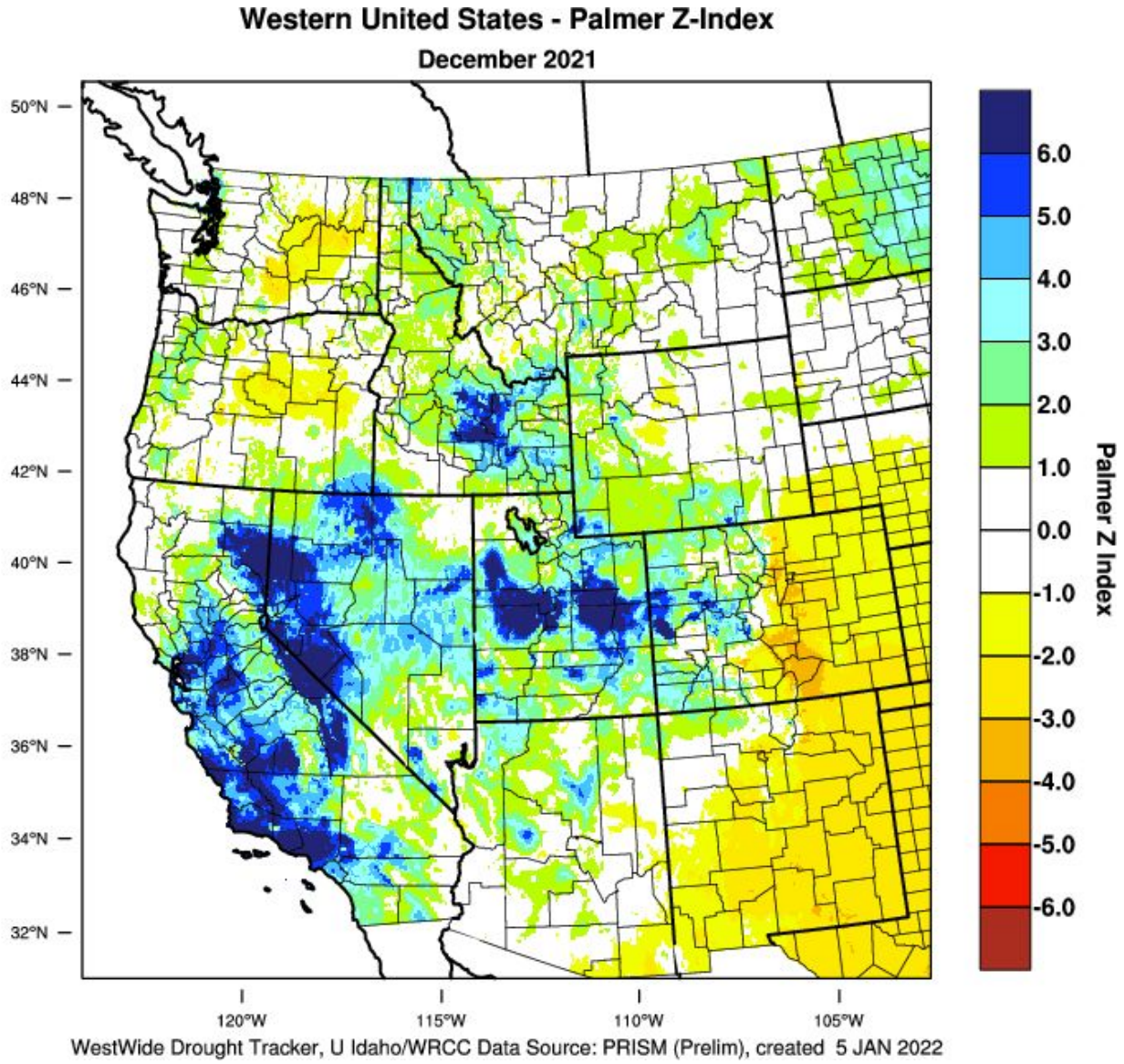
December's Palmer Drought Severity Index

Palmer Drought Severity Index. PDSI is based on a simplified water budget that considers water supply (precipitation), demand (evapotranspiration) and loss (runoff). PDSI uses temperature, precipitation, and soil data to determine the accumulated water excess or deficit.



Agency - Division of Water Resources
Presenter - Laura Haskell

December's PDSI Z-Index (Short-Term Perspective)



The Palmer Z Index measures short-term drought on a monthly scale. The Z-value is also referenced to the specific location and the climate for that time of year.

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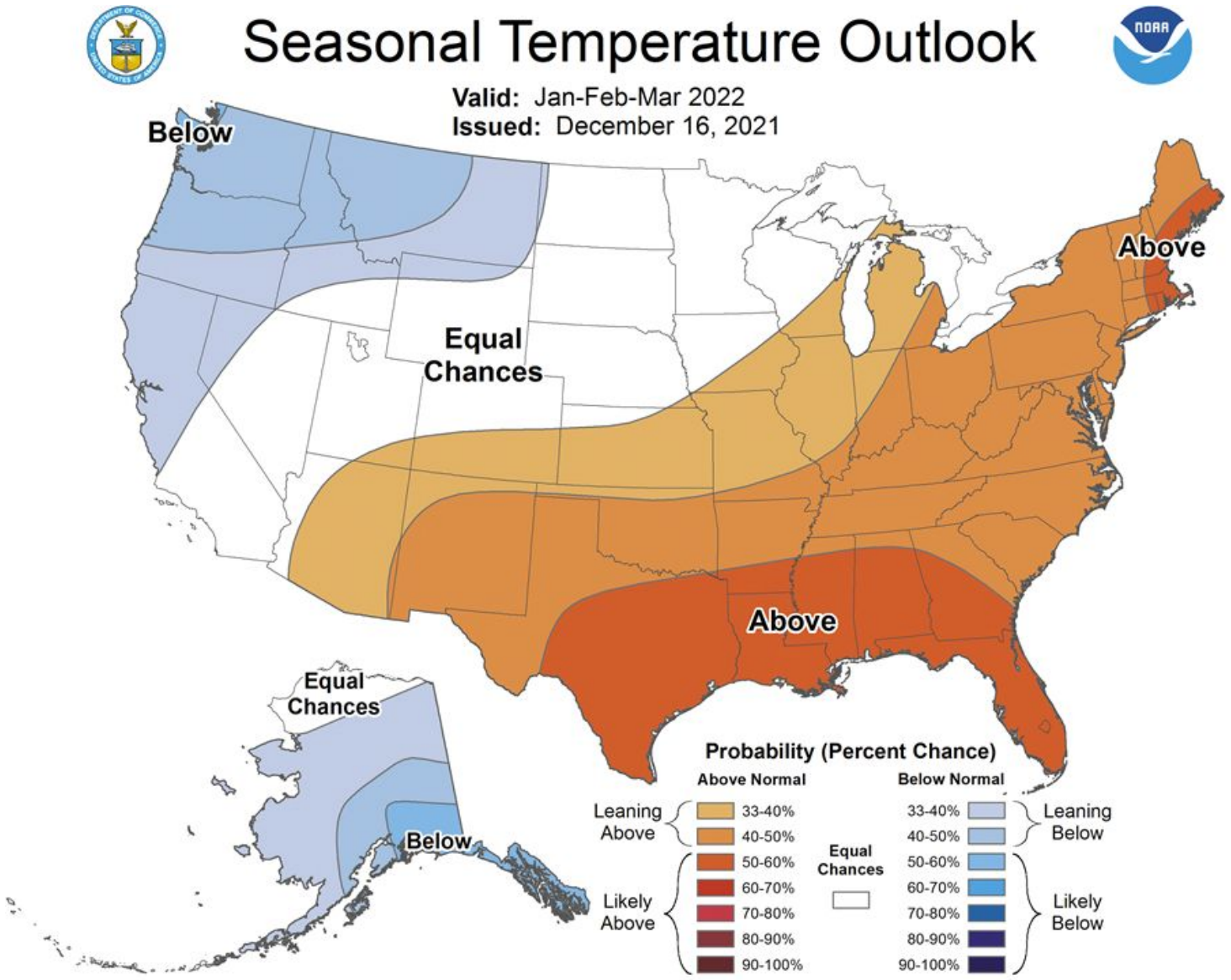
Presenter - Jon Meyer

CPC Jan-March Temperature Outlook



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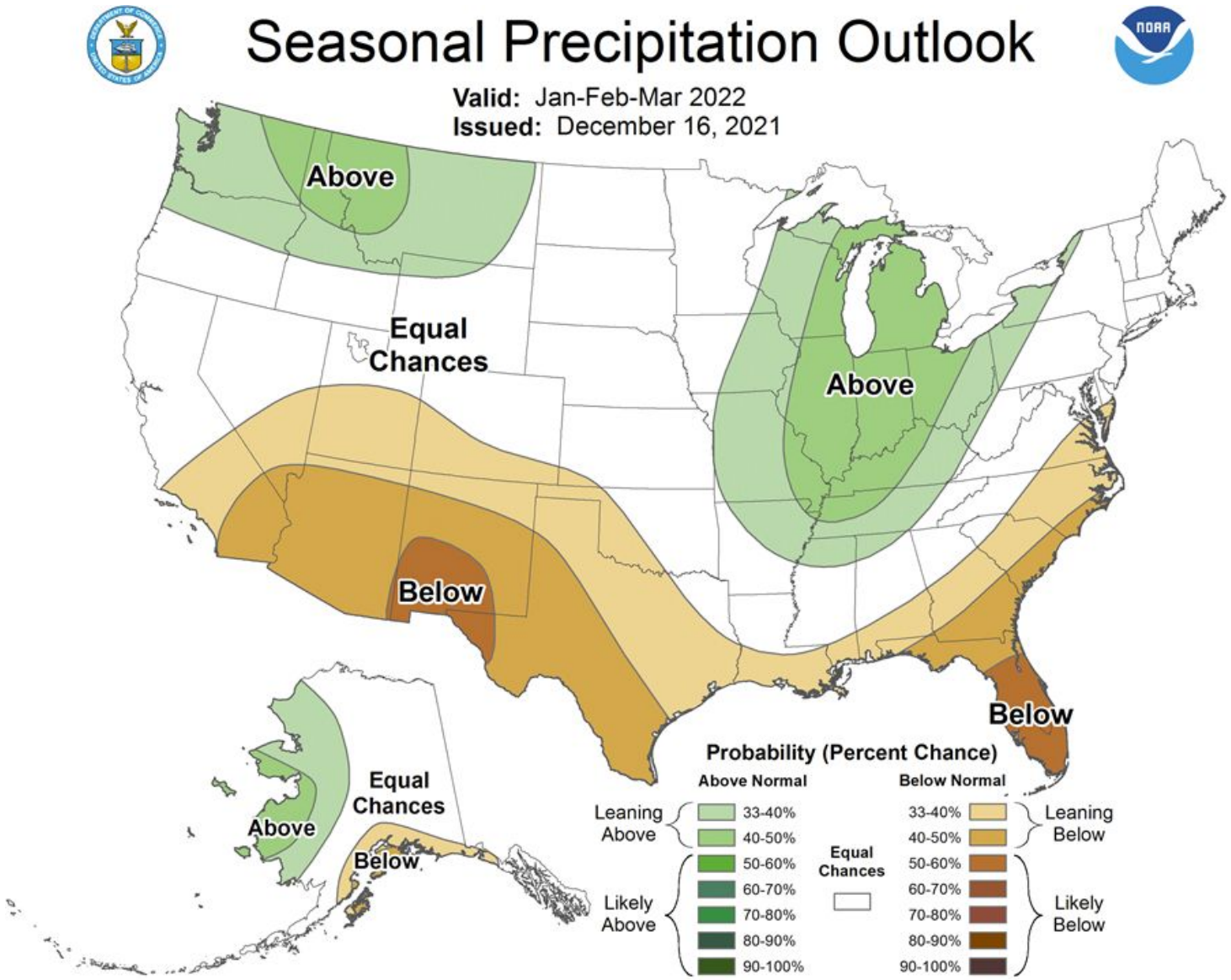
Presenter - Jon Meyer

CPC Jan-March Temperature Outlook



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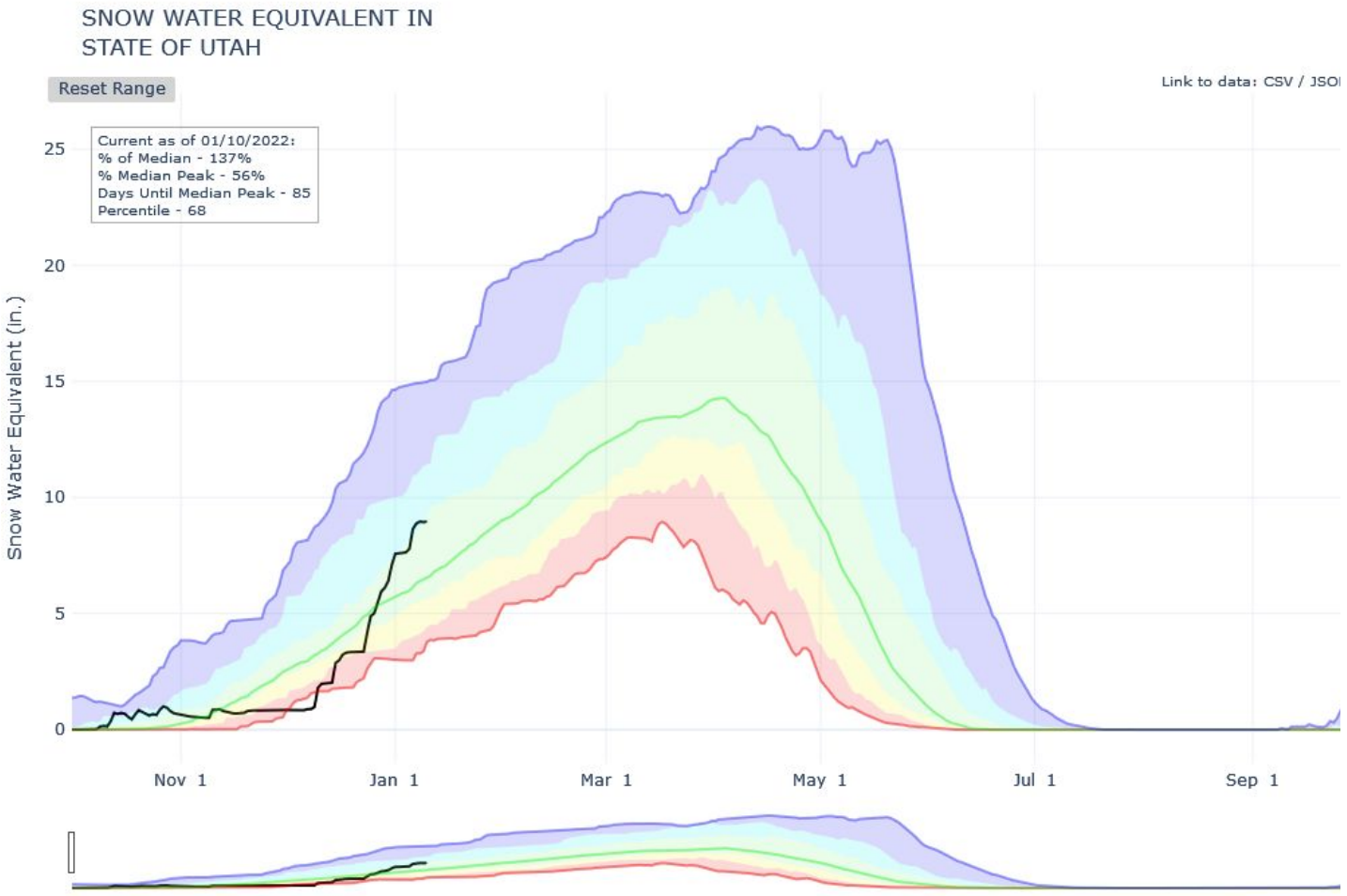
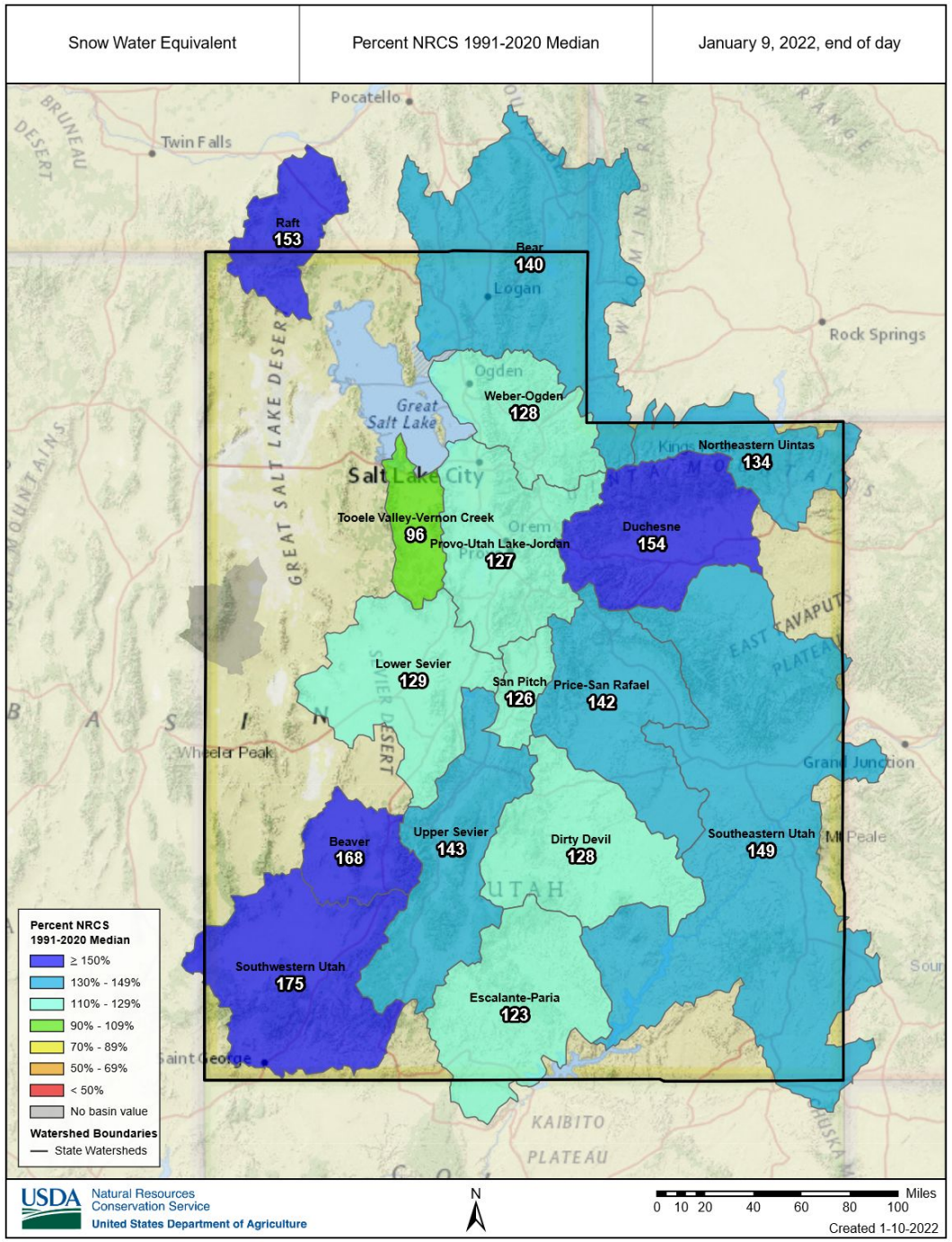
Presenter - Jon Meyer

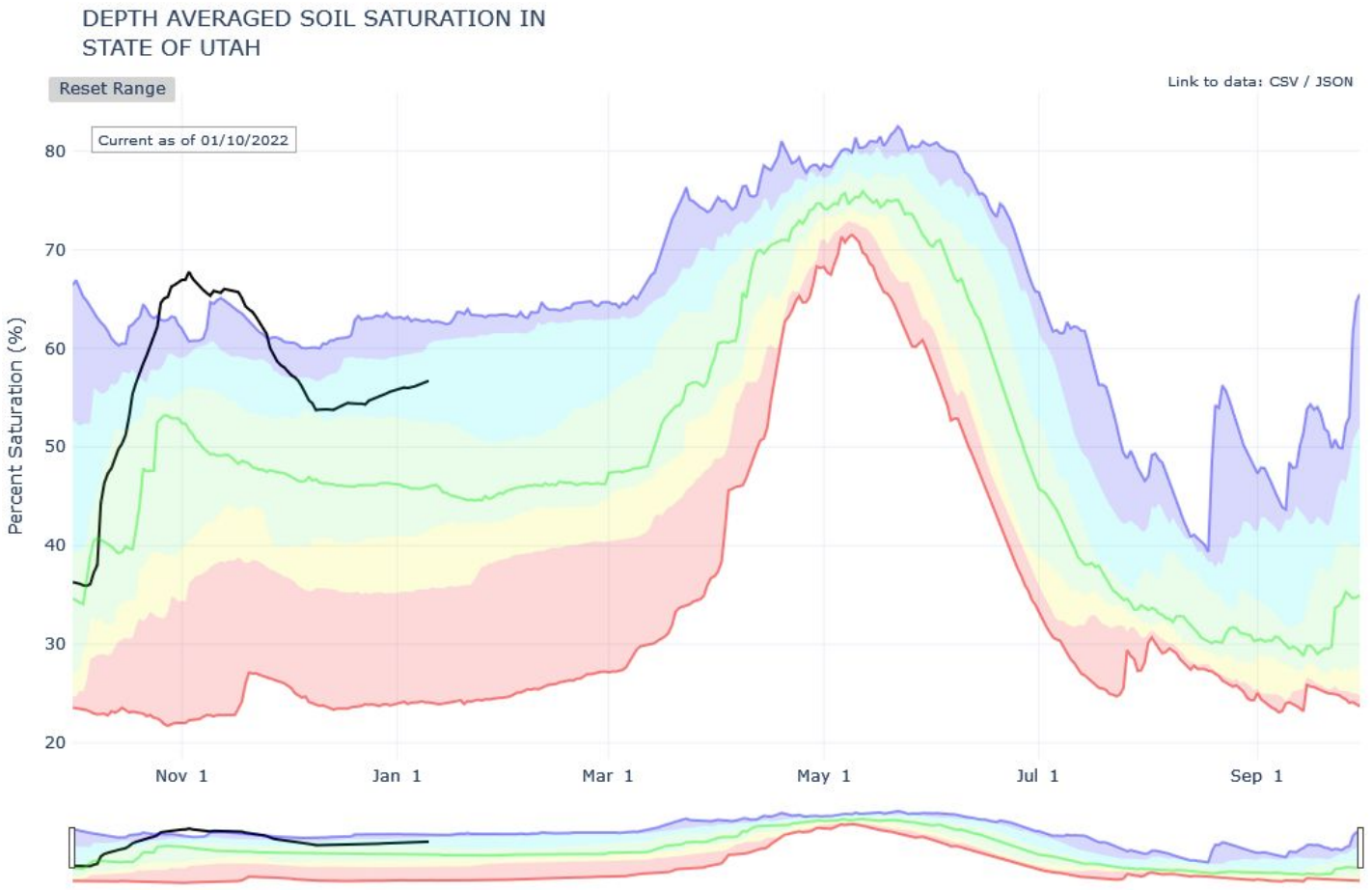
Snowpack

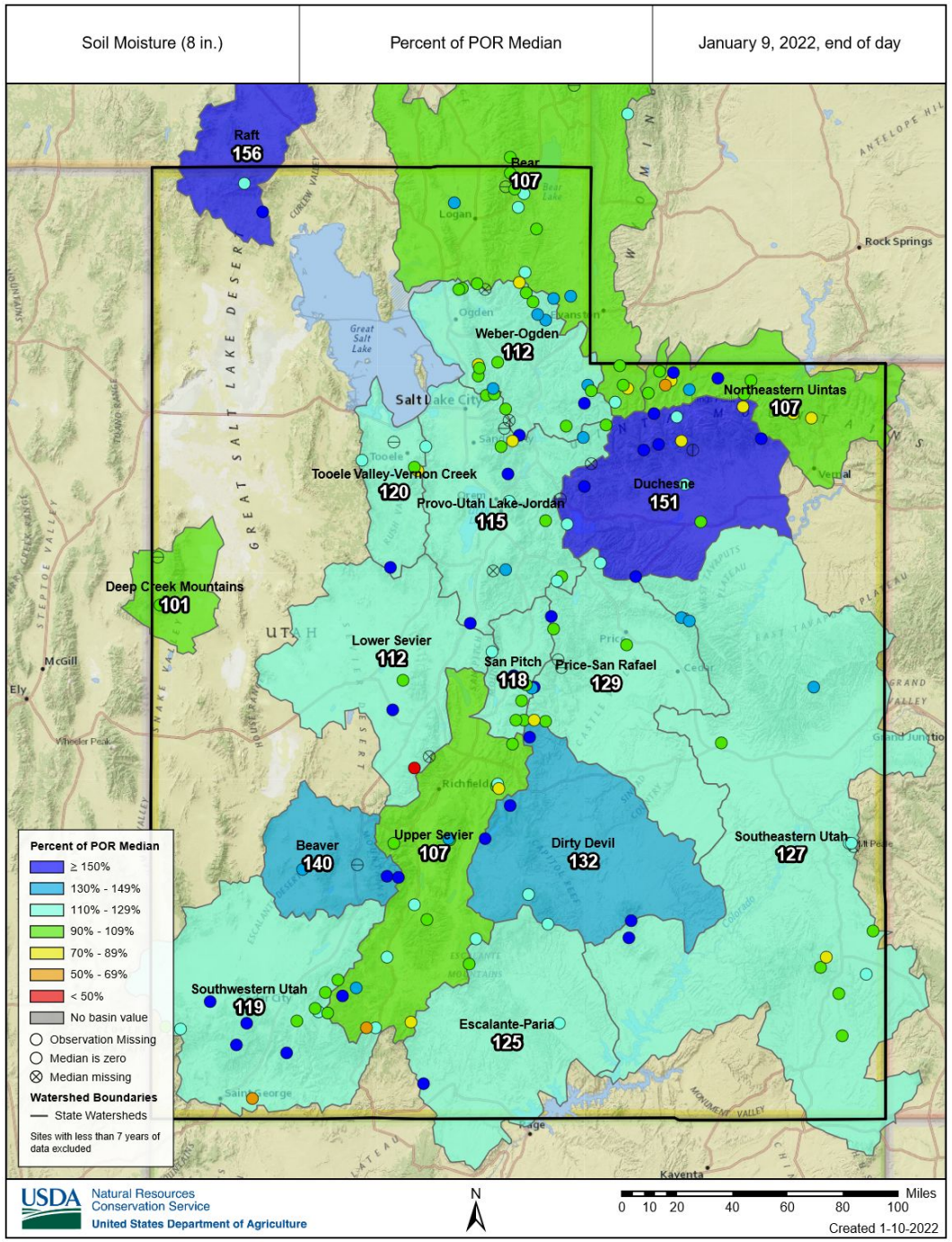




Agency - NRCS Snow Survey
Presenter - Kent Sutcliffe

Soil Moisture





Agency - NRCS Snow Survey
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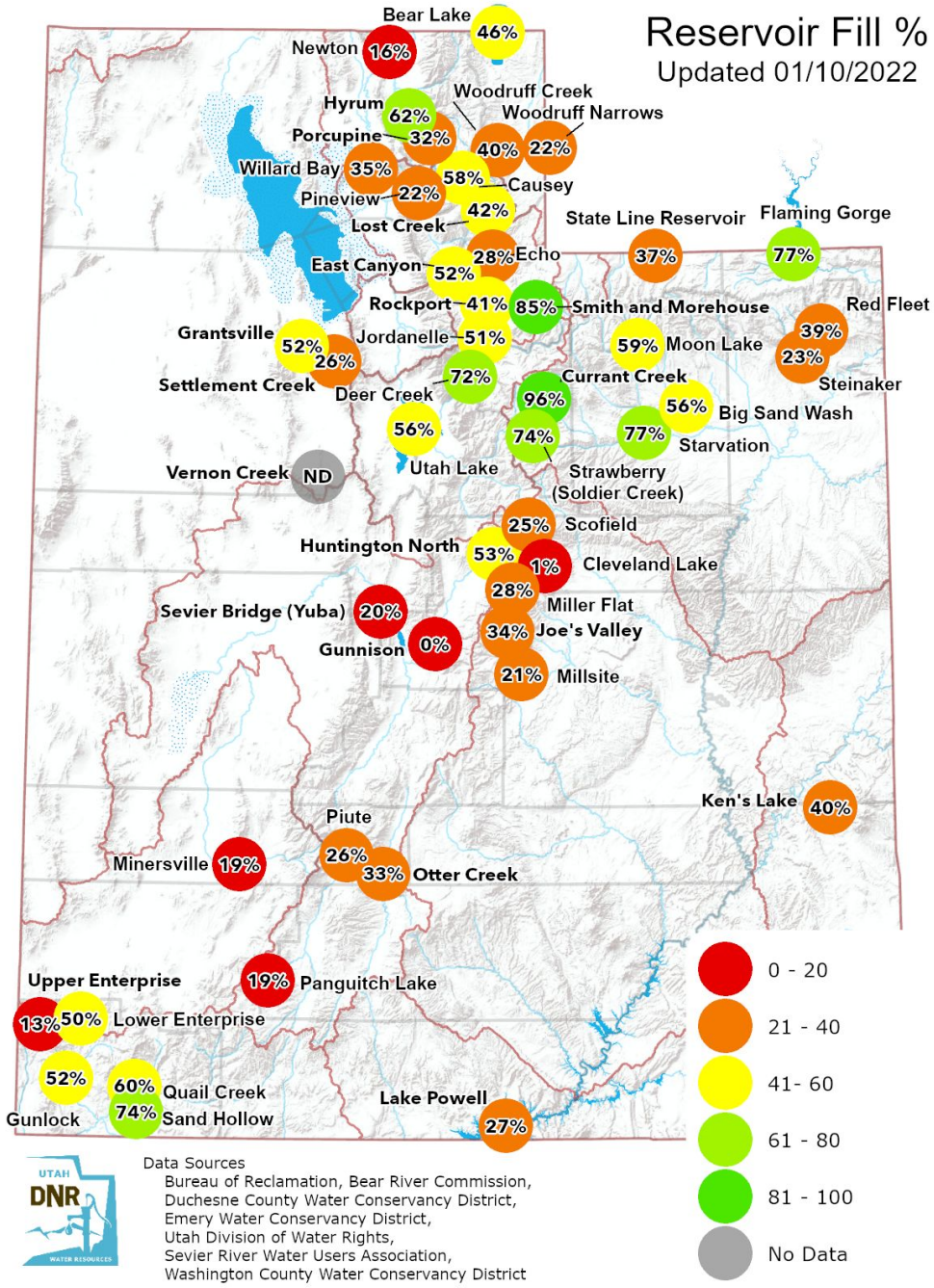
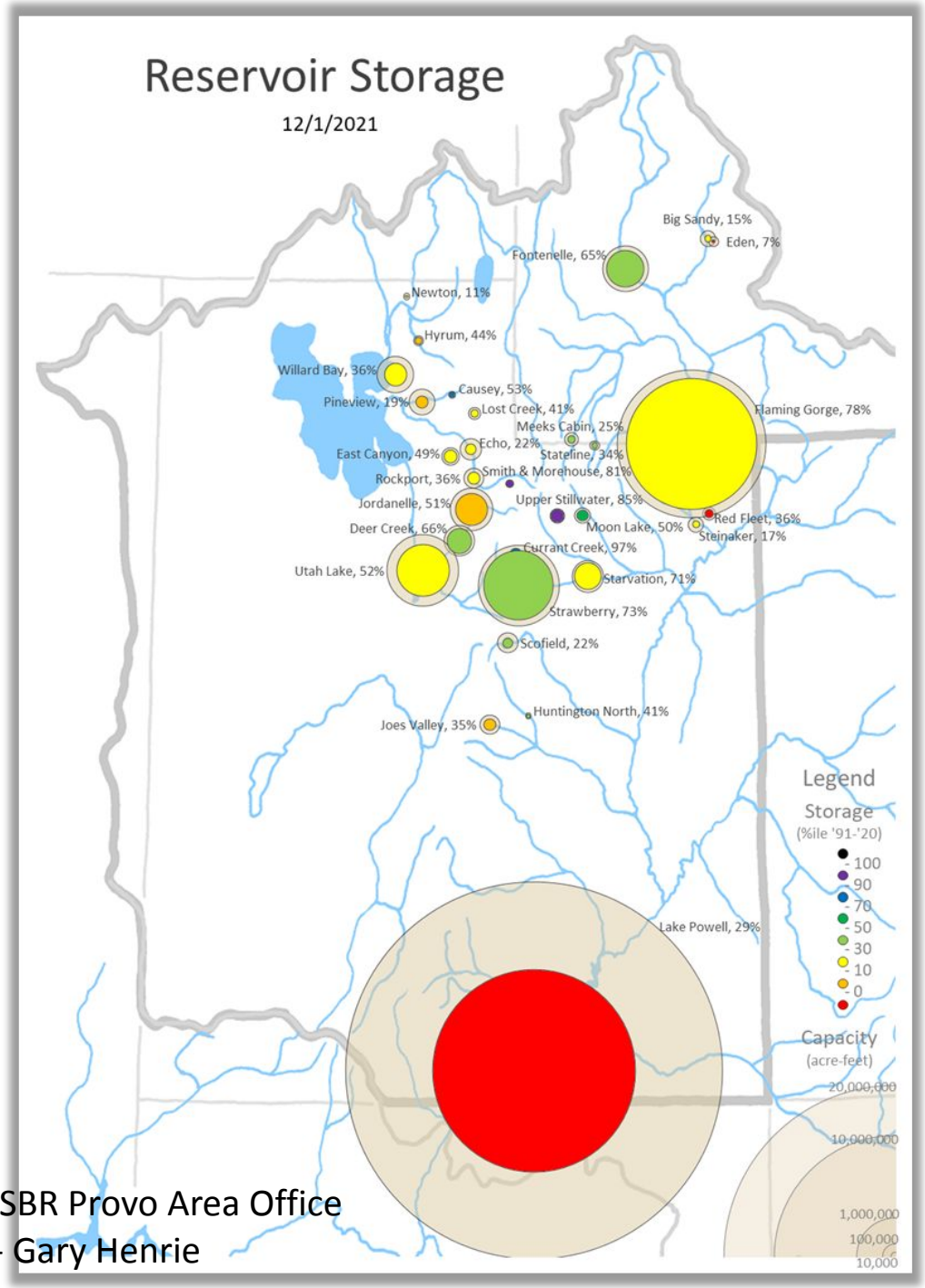
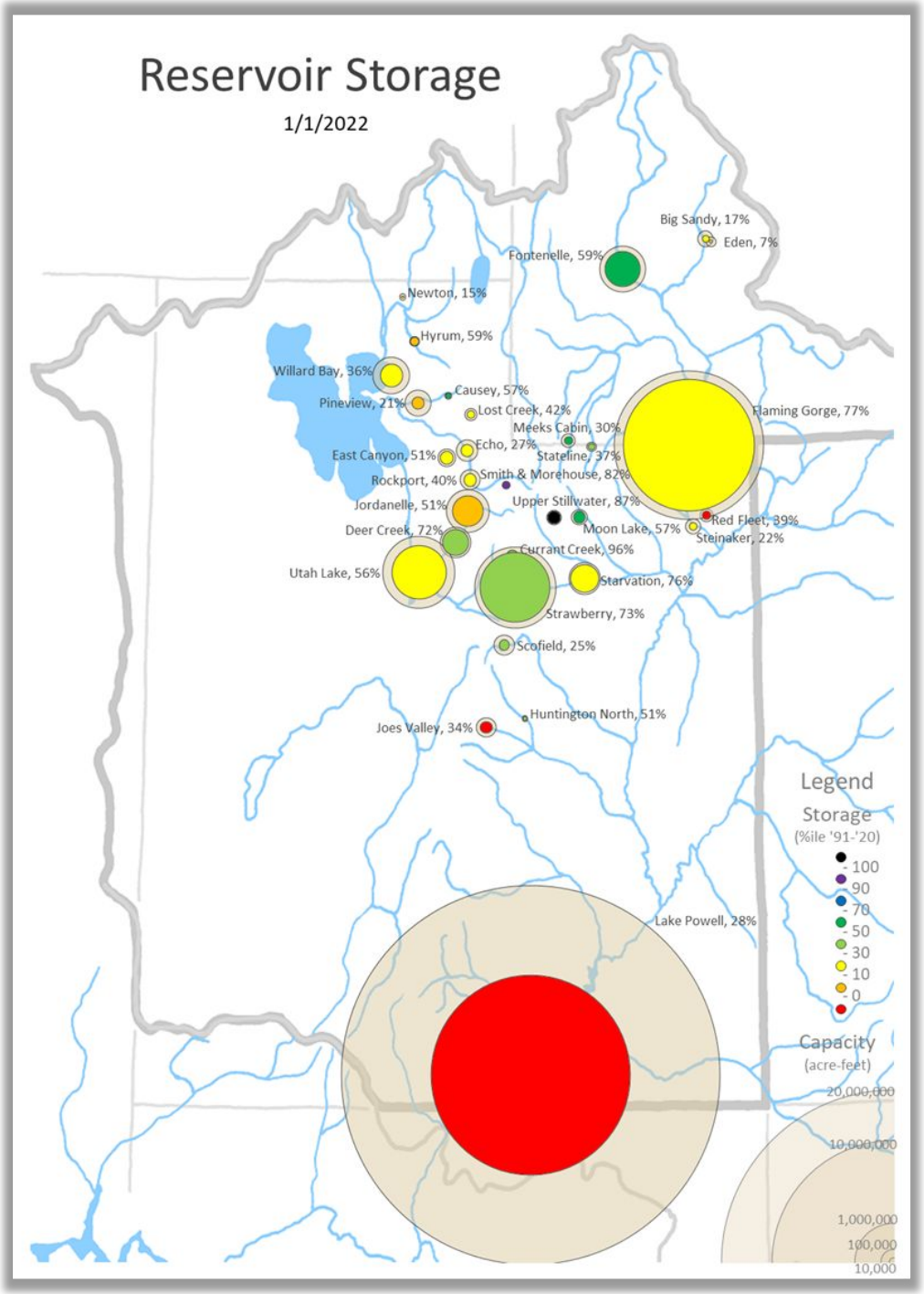


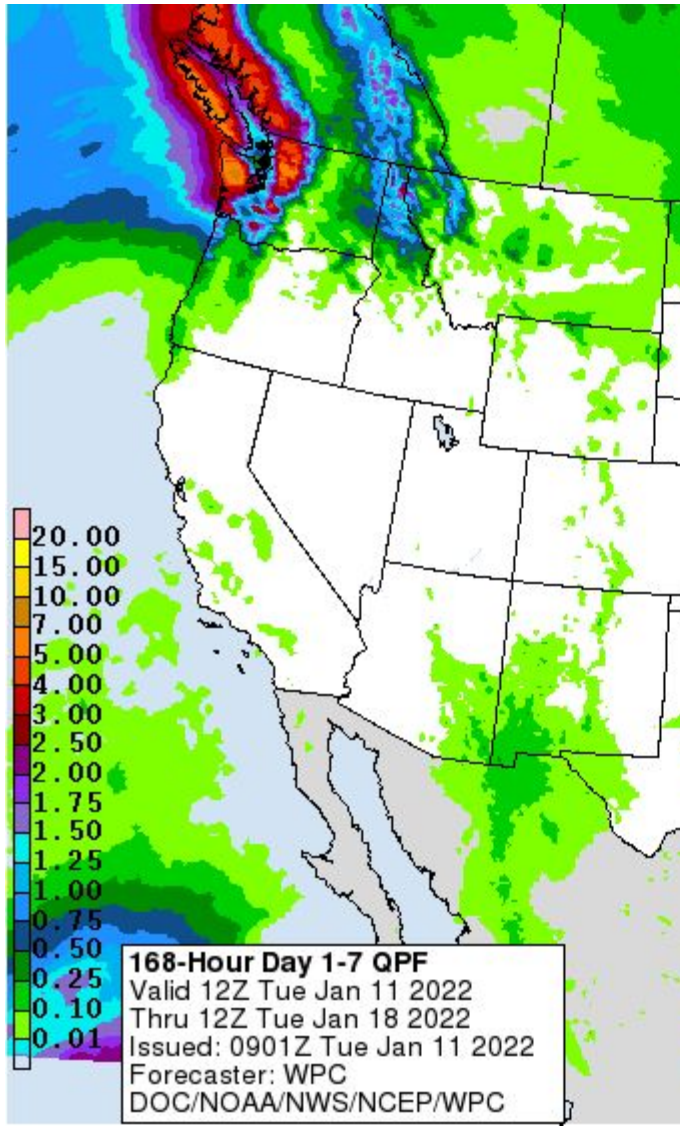
Agency - Division of Water Resources
w/various data
Presenter - Laura Haskell

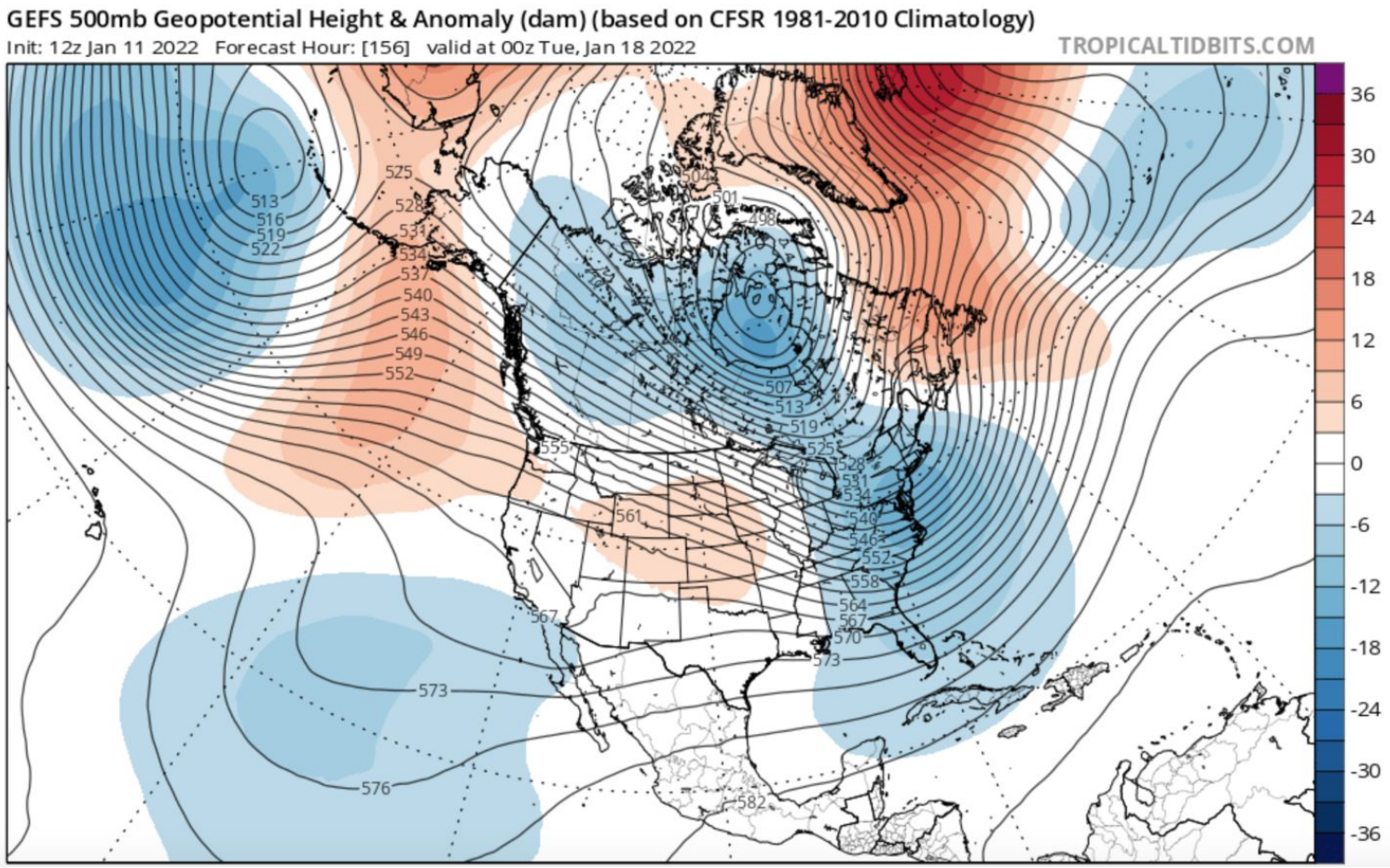




Agency - USBR Provo Area Office
Presenter - Gary Henrie

Weather Forecast Office Utah Day 1-7 Outlook

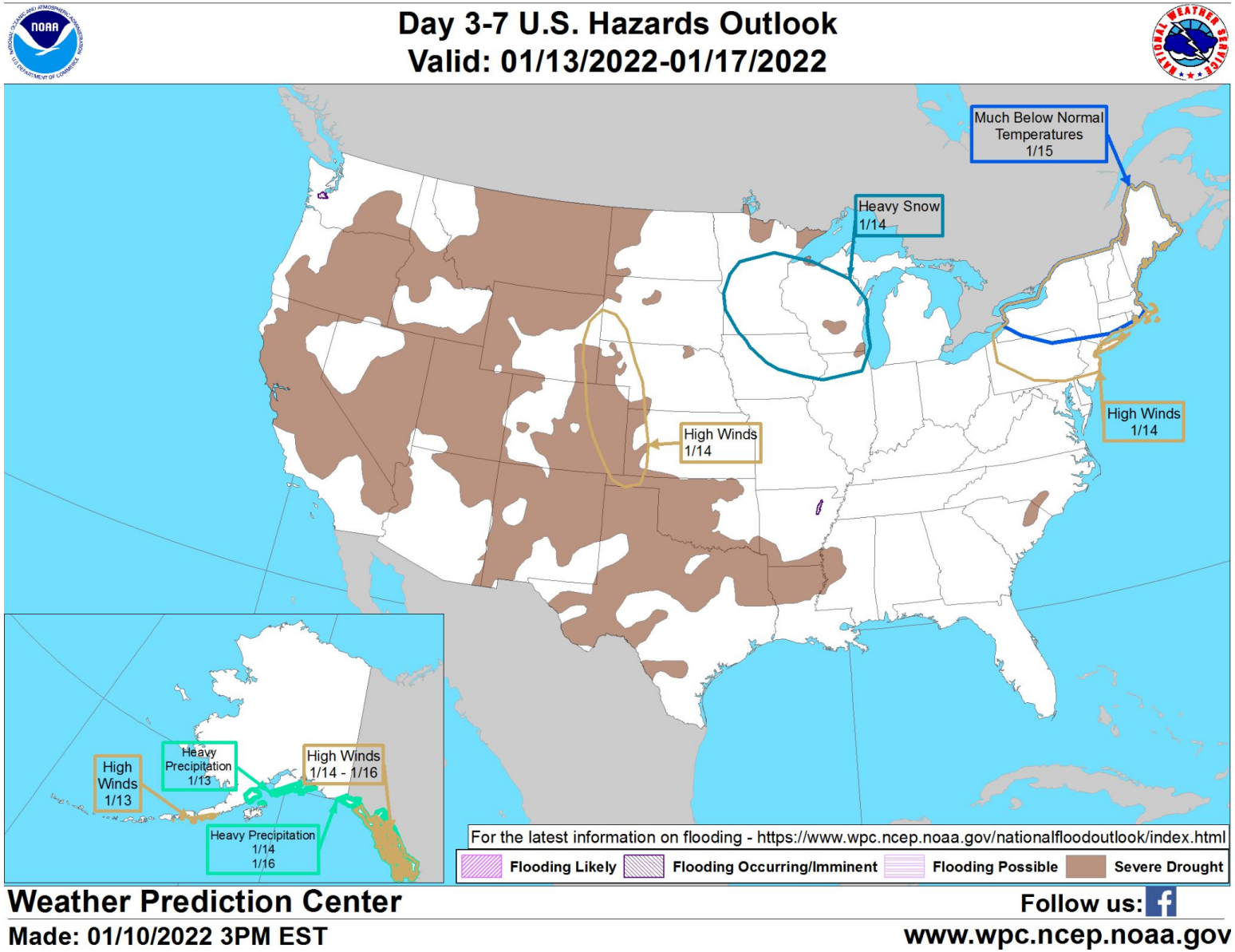




- High pressure will dominate this week
  - Above normal temperatures, especially mountains and southwest
  - Dry across the state

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

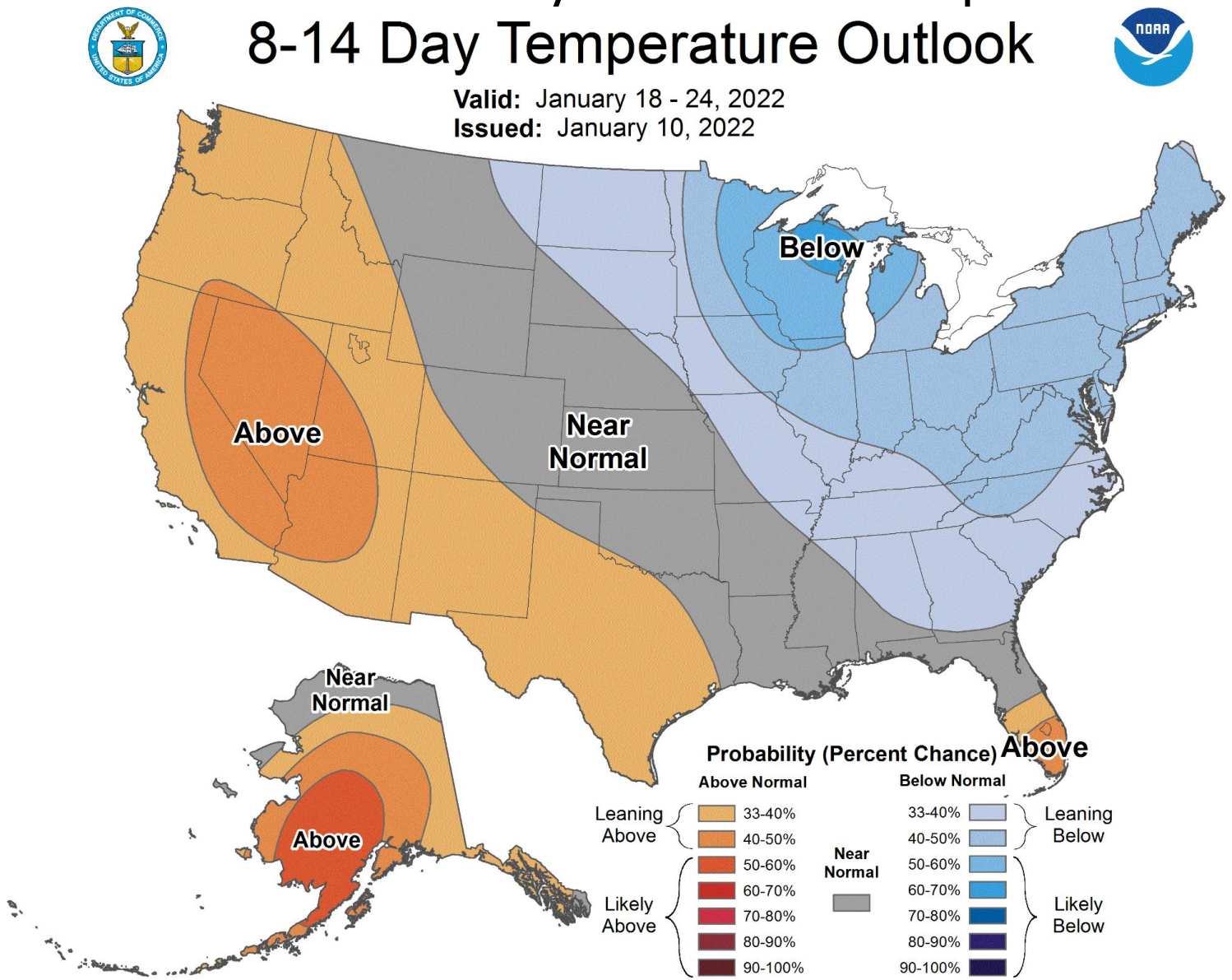
Weather Prediction Center U.S. Day 3-7 Hazards Outlook



Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

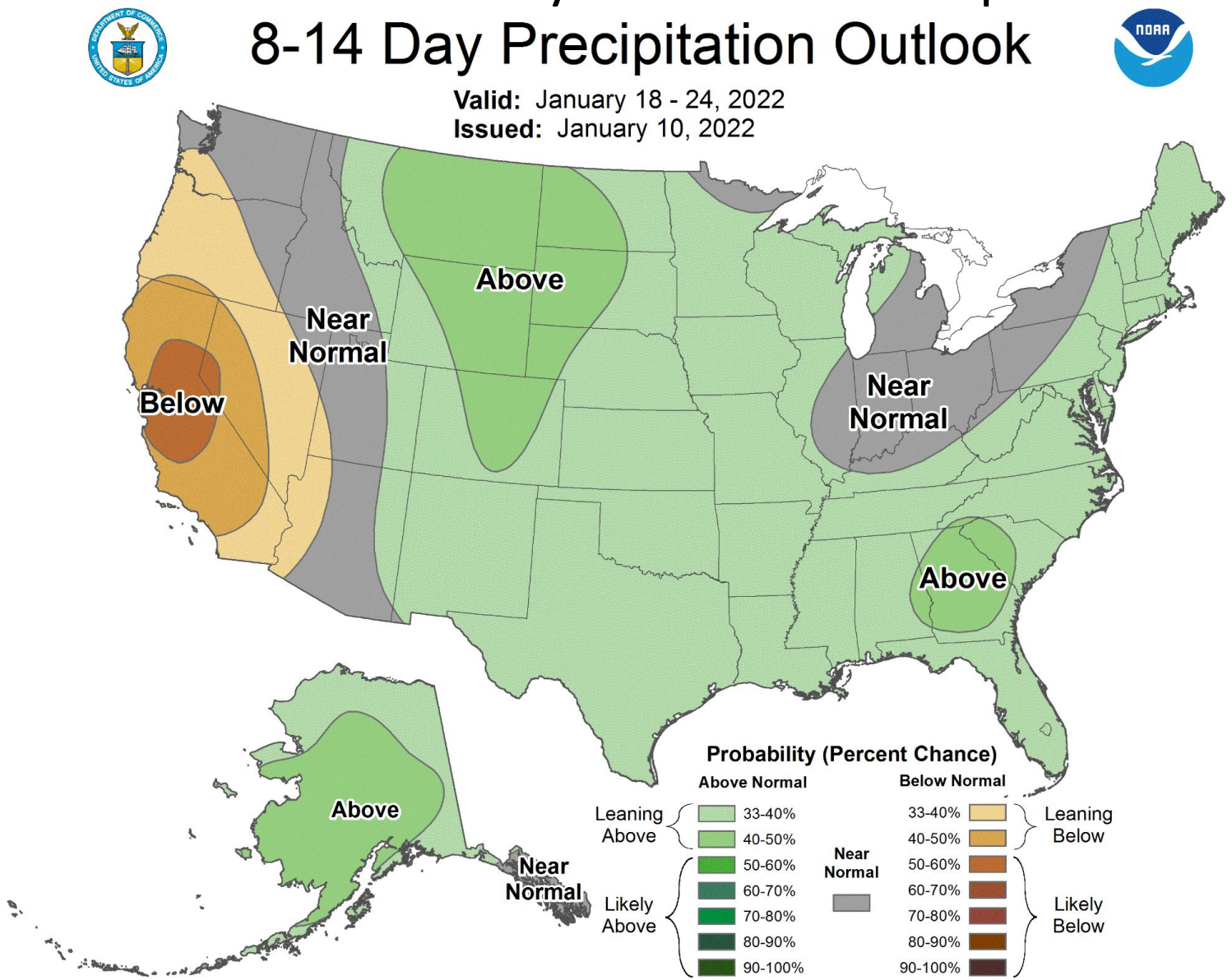
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

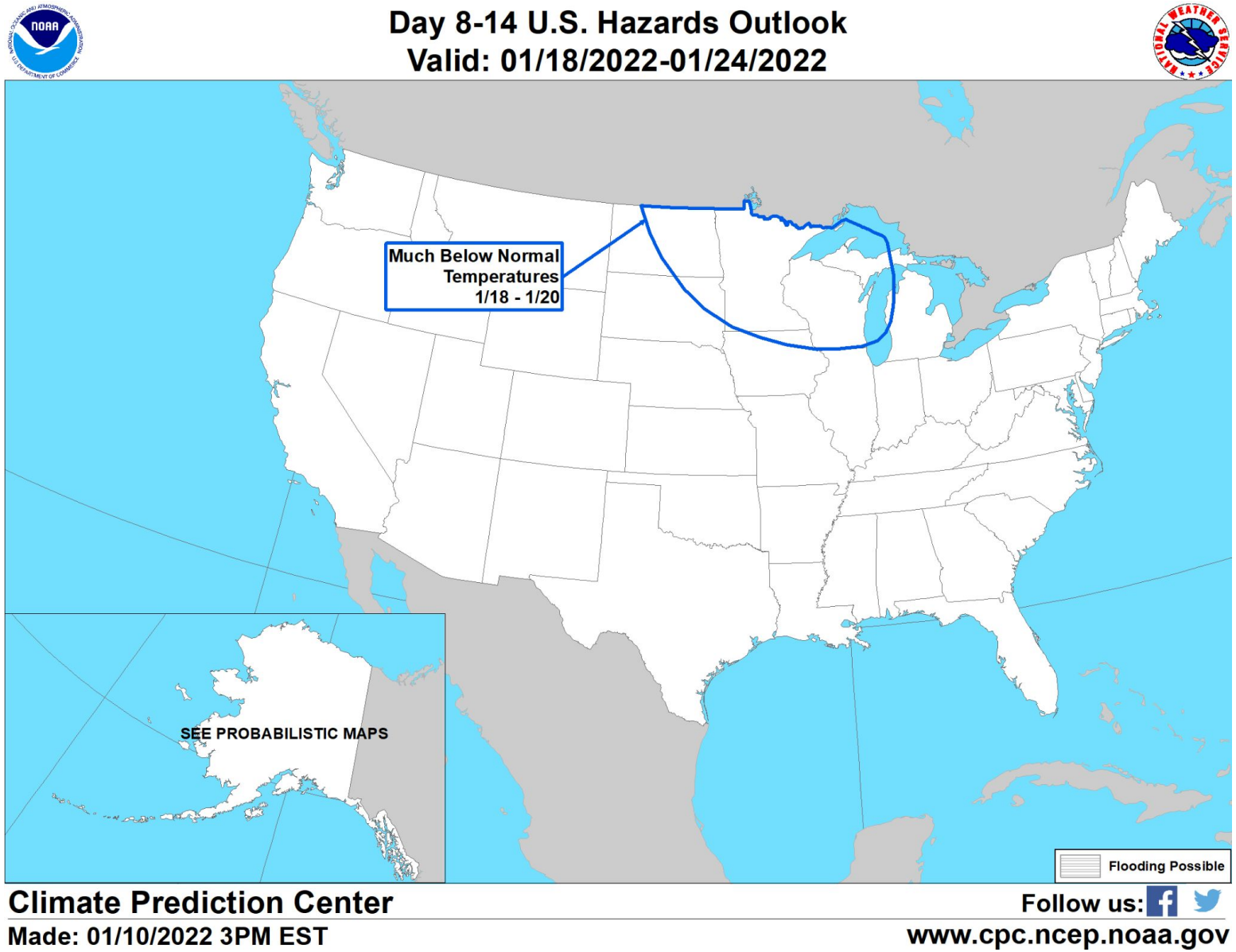
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

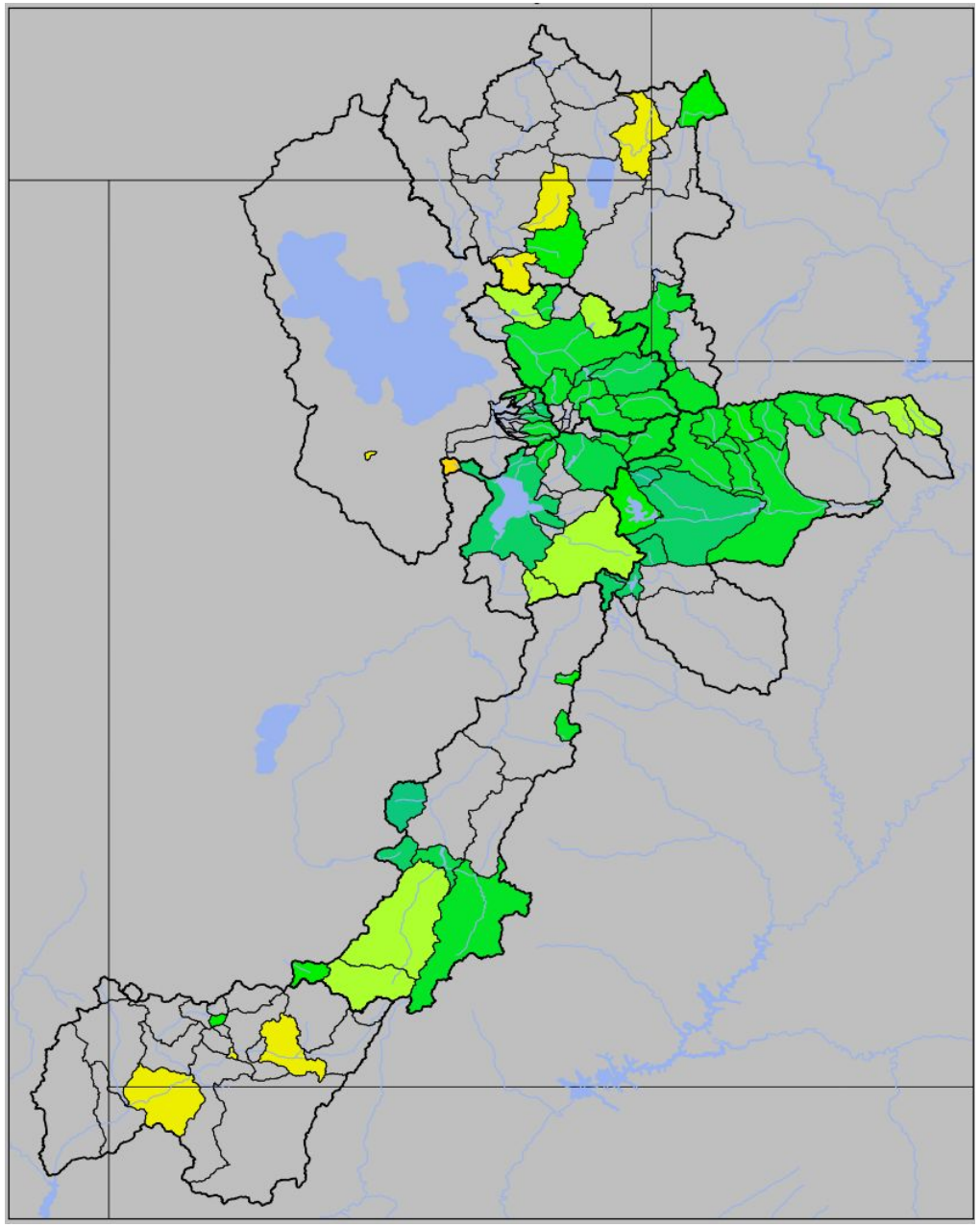
Climate Prediction Center U.S. Week-2 Hazards Outlook



Agency - National Weather Service Weather Forecast Office

Presenter - Glen Merrill

Utah Water Supply Forecasts - Overview



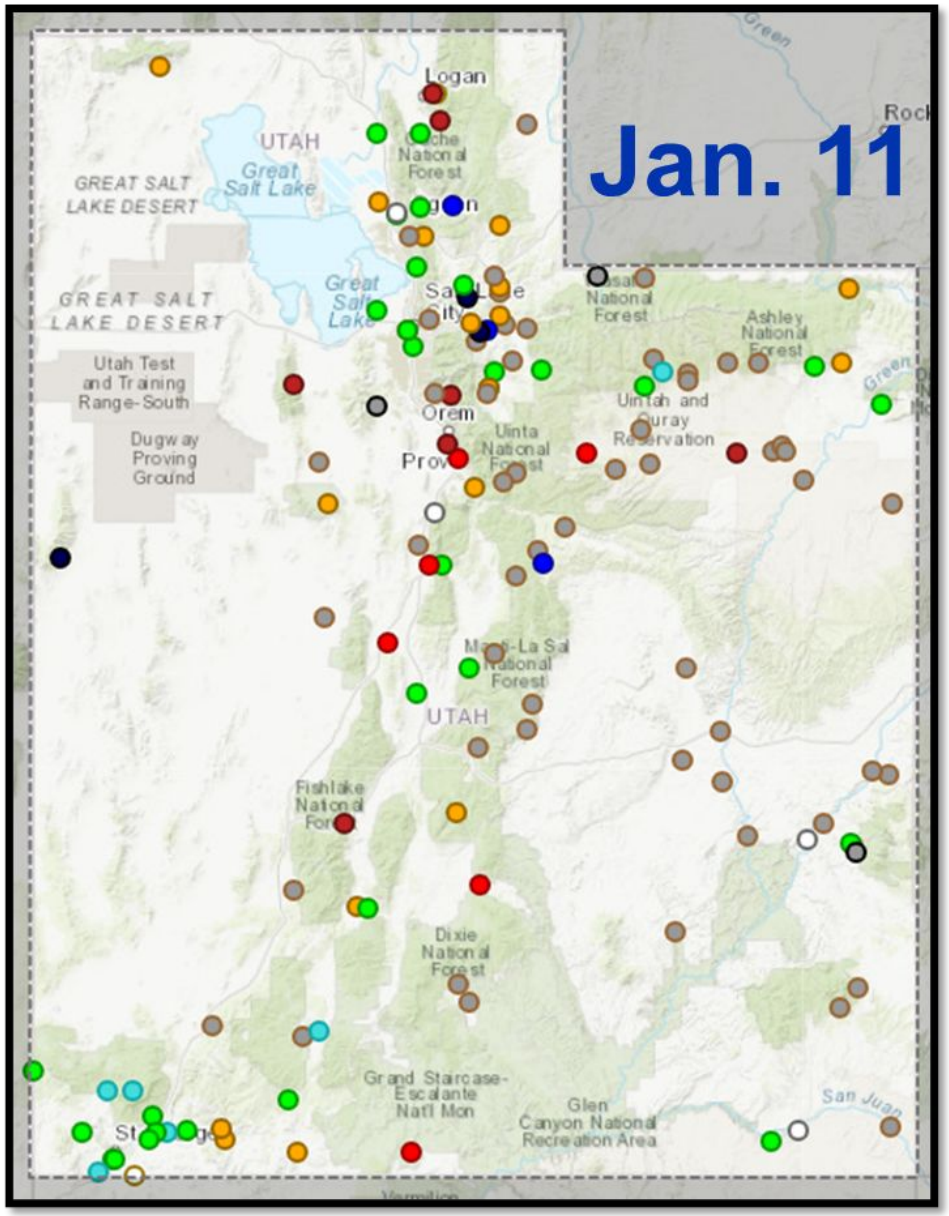
- January 1 Forecast for April-July Volume in 1000's acre feet (KAF)
- April-July Forecast Streamflow Volumes are in percent of 1991-2020 average

Median value of the…
...individual forecasts (in % of average)
...by Forecast Group.

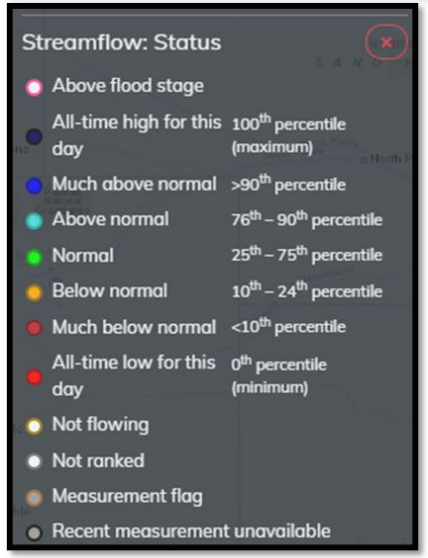
Weber	110
Bear	95
Six Creeks	115
Provo / Utah Lake	110
Sevier	105
Duchesne	110
Virgin	90

www.cbrfc.noaa.gov

Current Streamflows



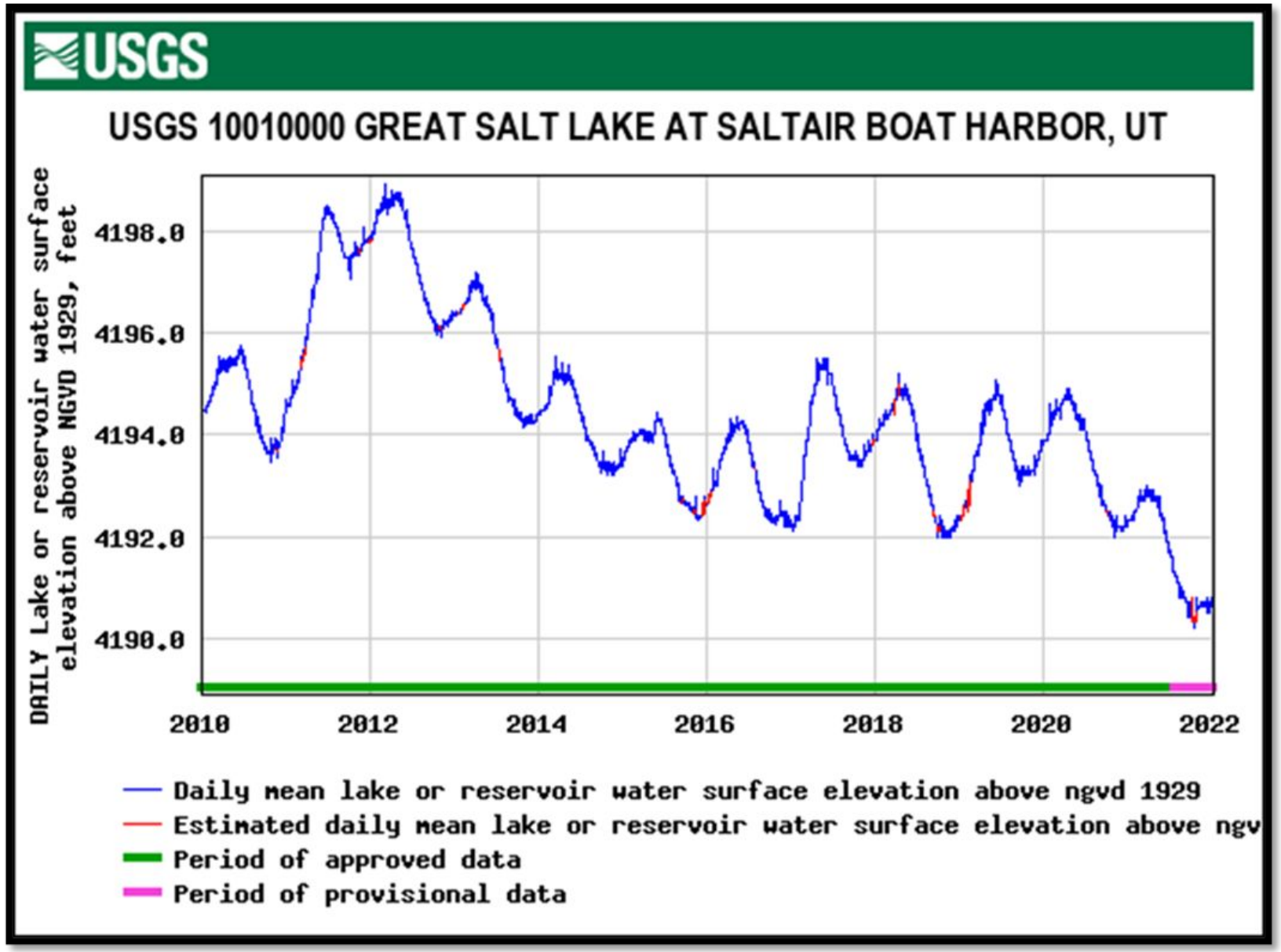
Day-of-Year Status	# Gages	% Gages
All-time high for this day-of-year	3	2.2%
Much above normal for this day-of-year	3	2.2%
Above normal for this day-of-year	6	4.4%
Normal for this day-of-year	30	21.9%
Below normal for this day-of-year	18	13.1%
Much below normal for this day-of-year	7	5.1%
All-time low for this day-of-year	6	4.4%
Not ranked - insufficient record	9	6.6%
Not ranked - no measurement	47	34.3%
Not ranked - no recent measurement	6	4.4%
Not ranked - stream not flowing	2	1.5%



Agency - USGS Utah Water Science Center
Presenter - Ryan Rowland

USGS science for a changing world

Great Salt Lake Water Surface Elevation



- Average seasonal increase 2.2’
- Average seasonal decrease 2.3’
- Last season’s increase 1.0’
- Last season’s decrease 2.8’

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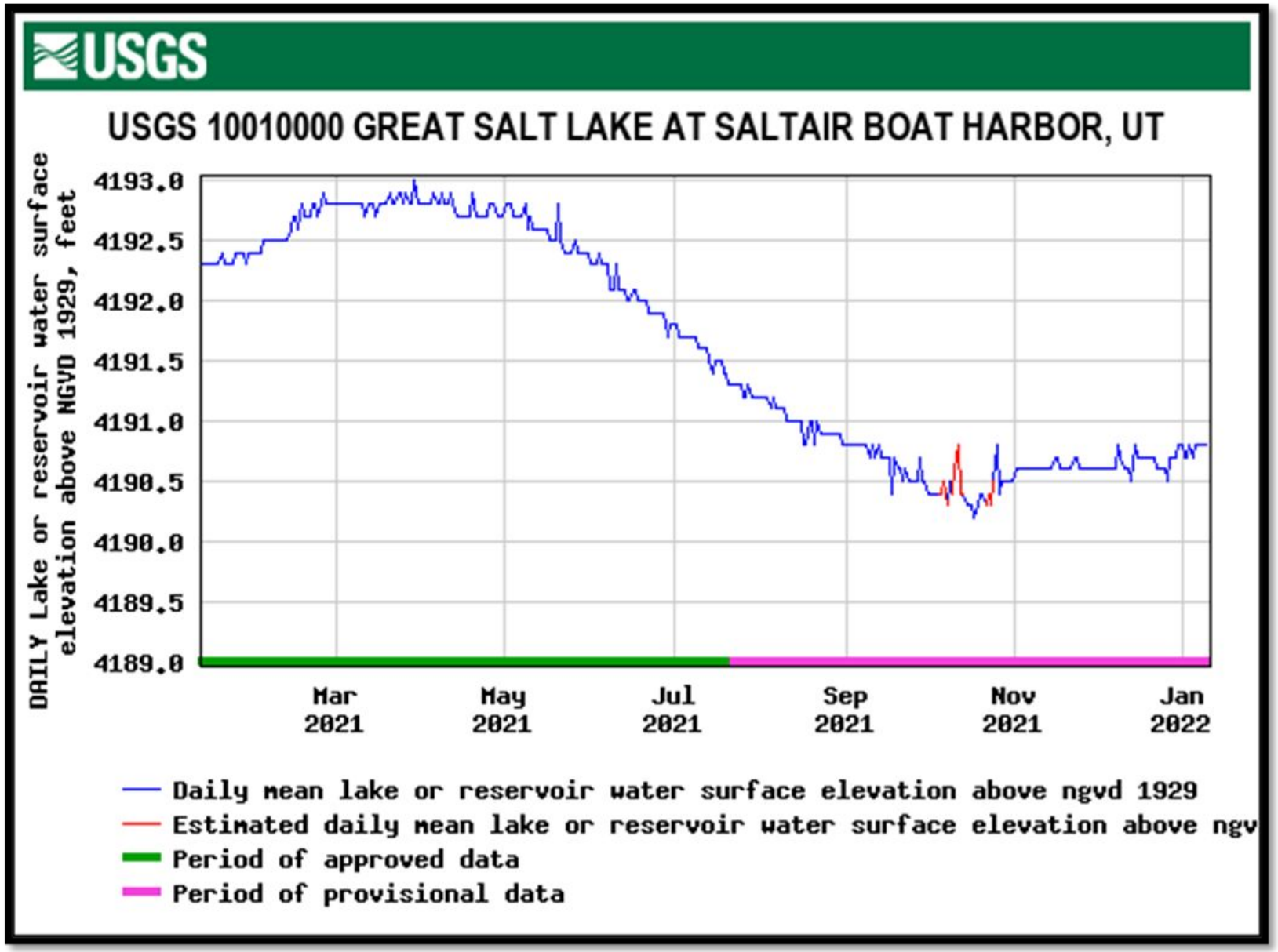
USGS science for a changing world

Great Salt Lake Water Surface Elevation



- Mean daily value 01/10/2022 = 4,190.8’
- 4,190.2’ 10/18/2021 (new historic low)

Agency - USGS Utah Water Science Center
Presenter - Ryan Rowland

USGS science for a changing world

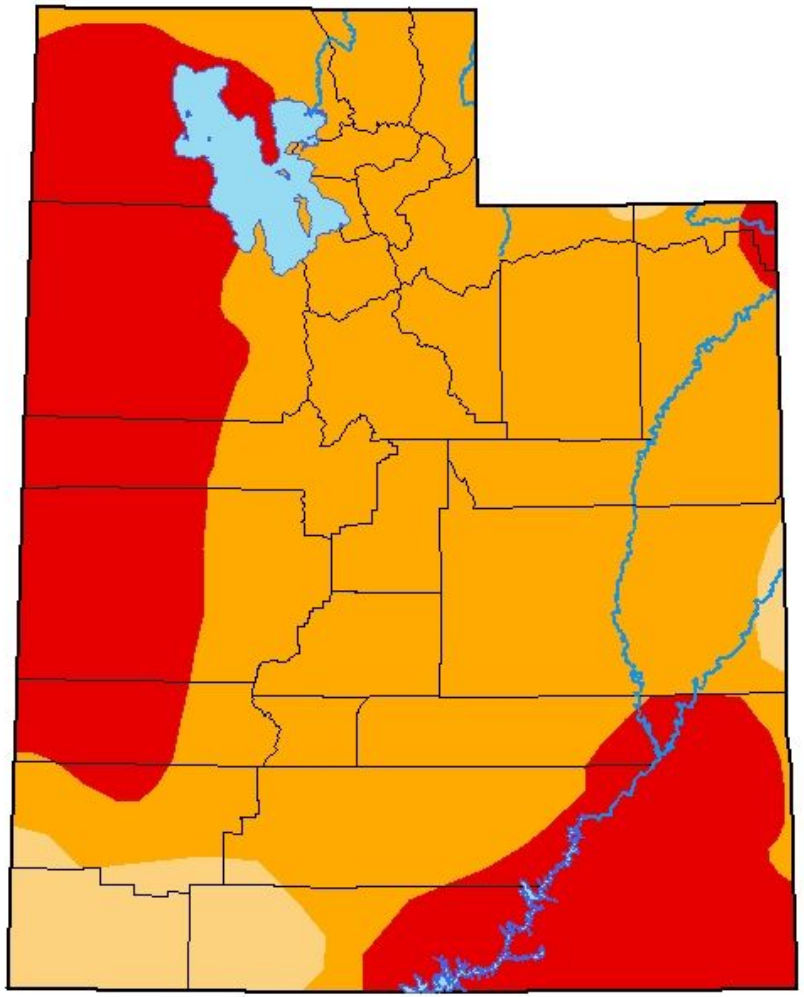
U.S. Drought Monitor

Utah

January 4, 2022

(Released Thursday, Jan. 6, 2022)

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

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CPC/NOAA/NWS/NCEP

droughtmonitor.unl.edu