



# Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors

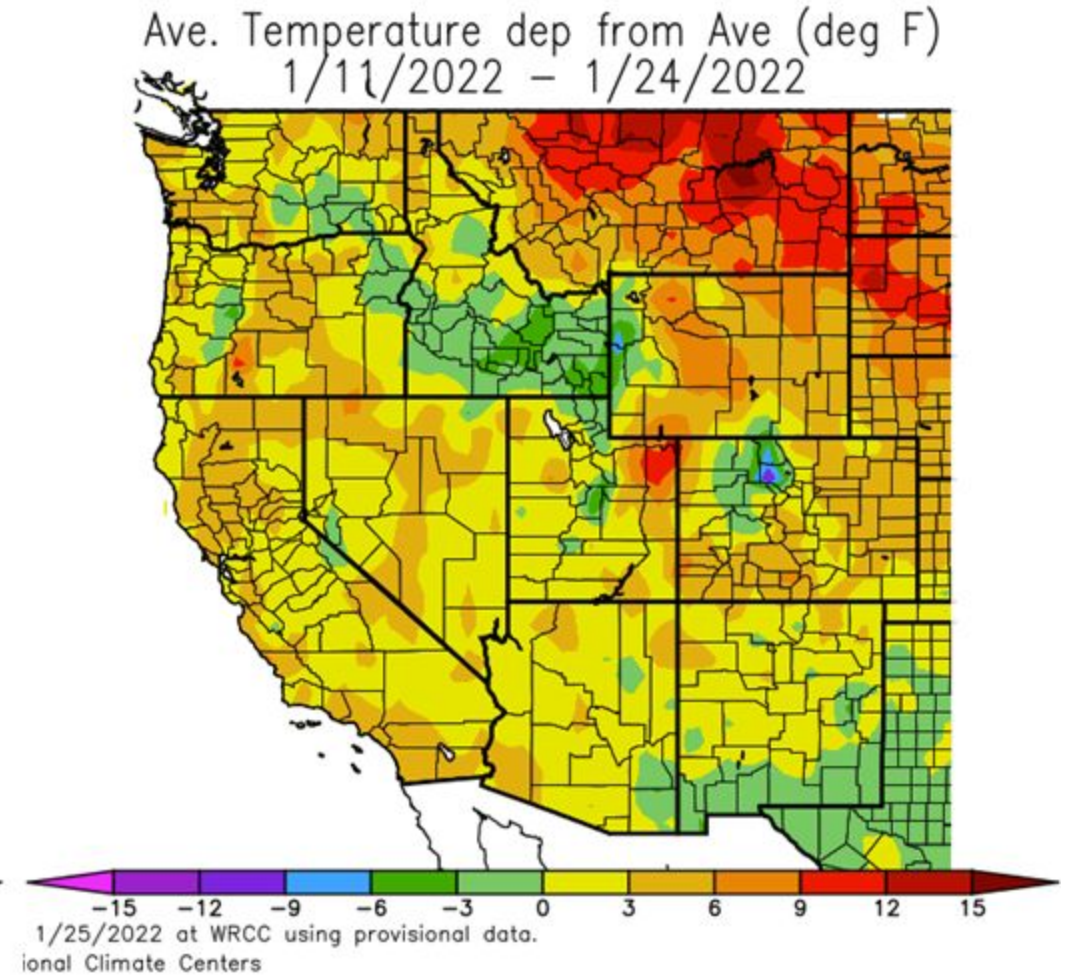
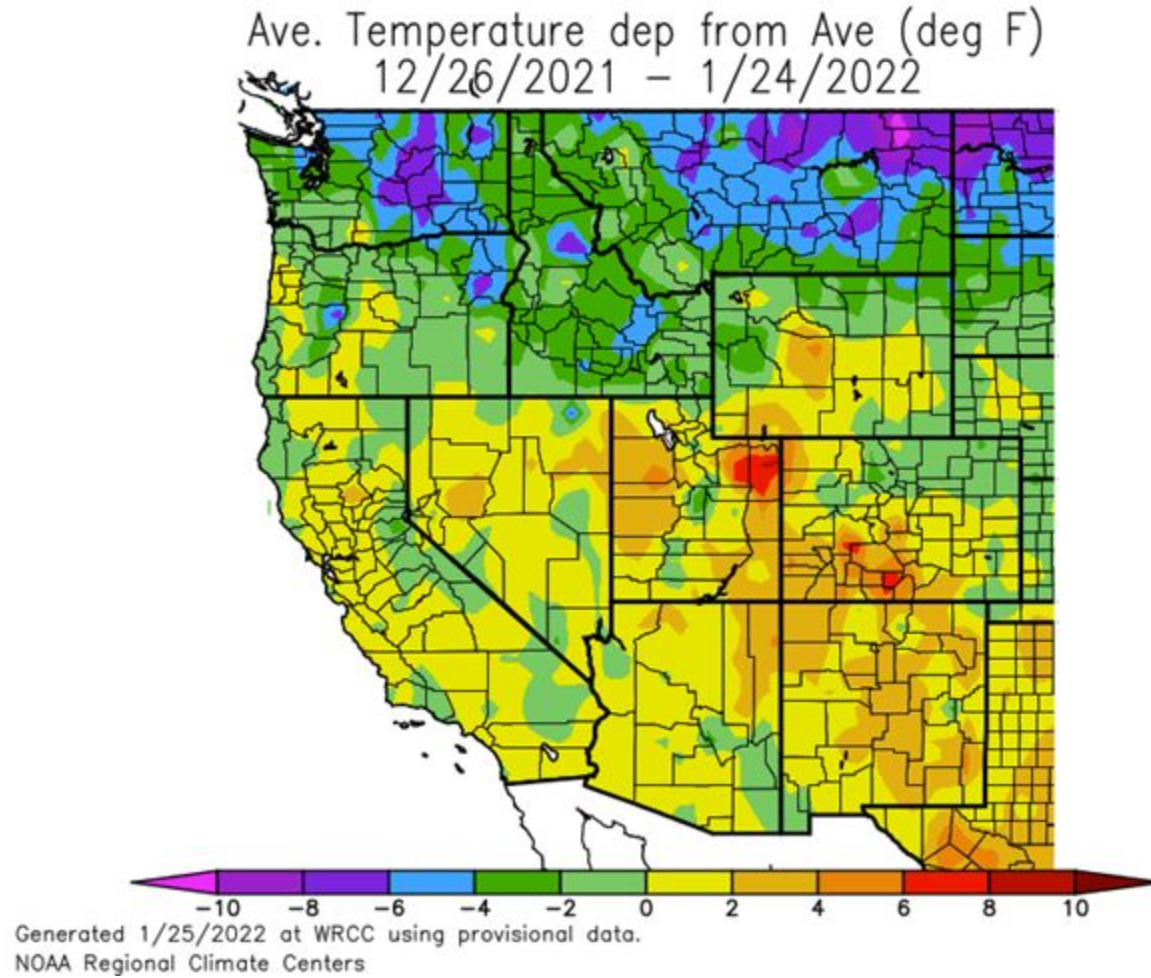




# **Utah Water Assessment & Conditions Monitoring Webinar**

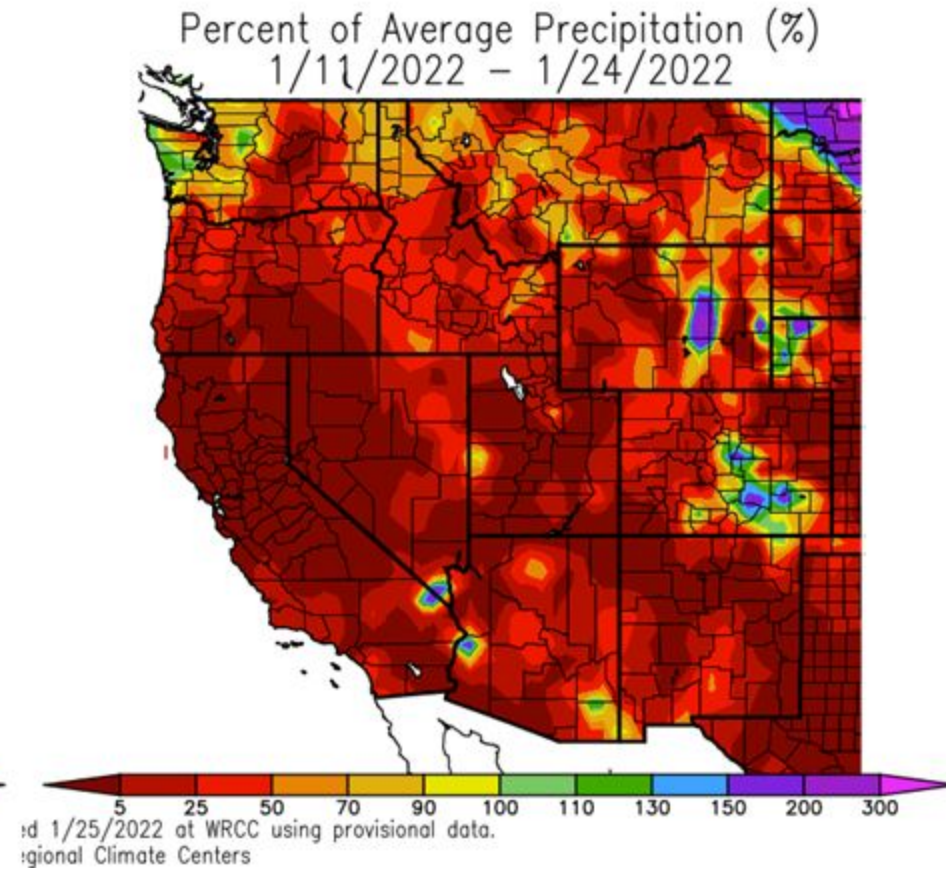
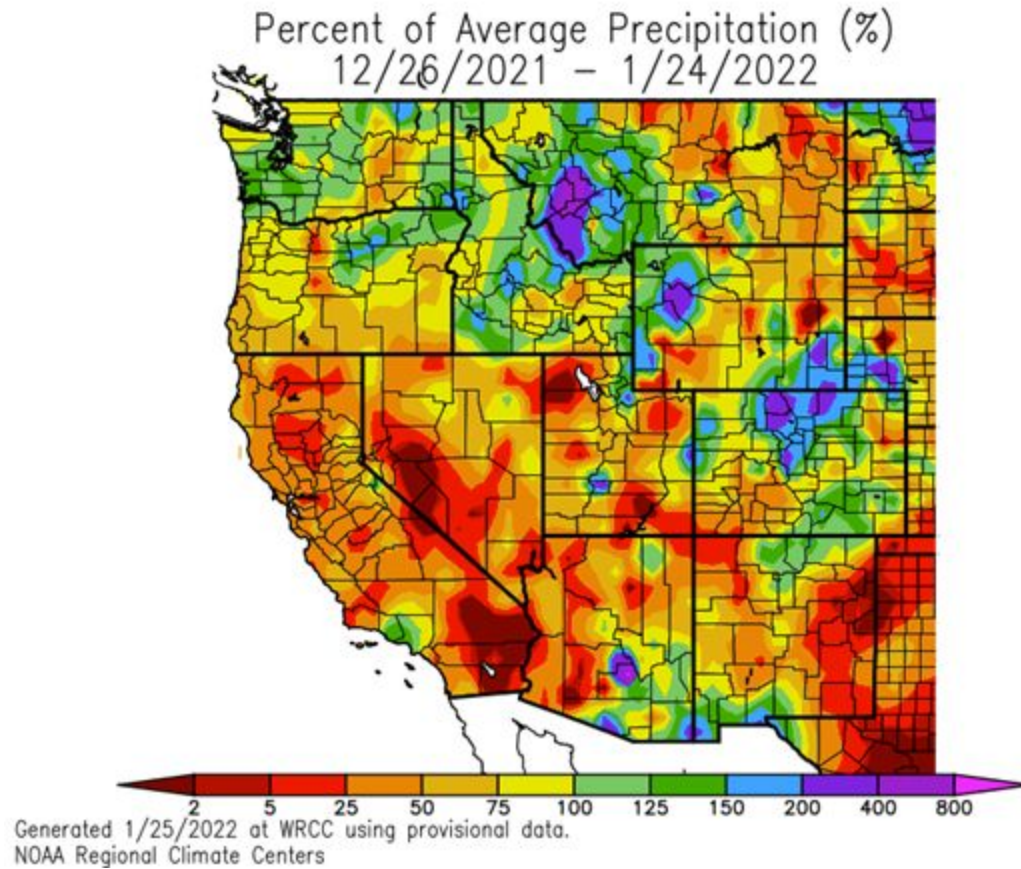
**January 25, 2022**

# Temperature (30-day and 14-day)



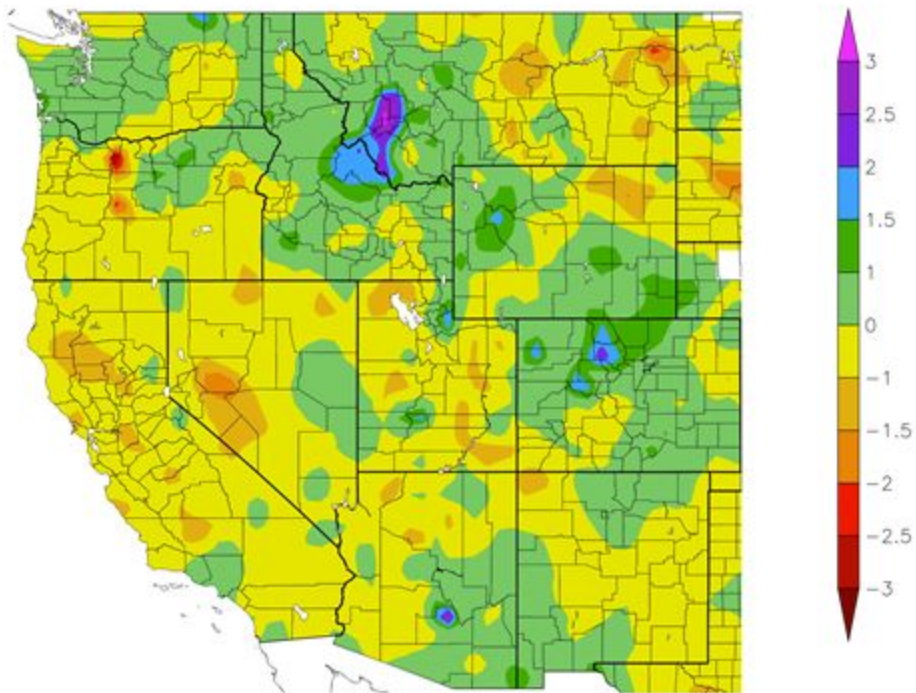


# Precipitation (30-day and 14-day)



# 30-day Standardized Precipitation Index (SPI)

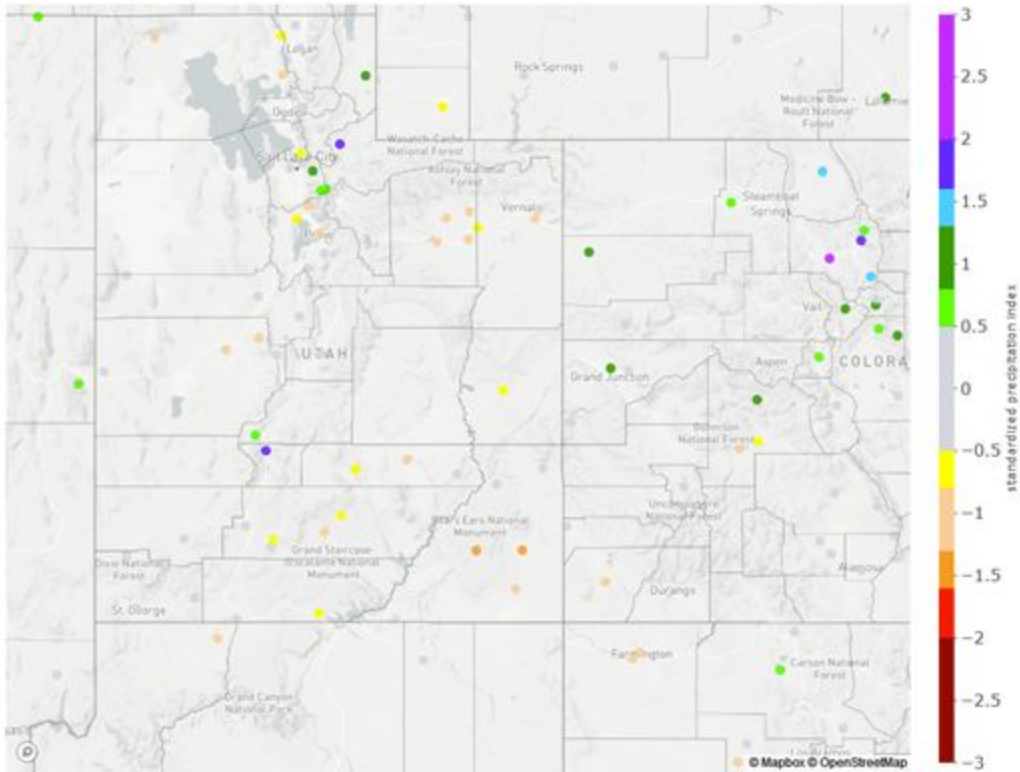
30 Day SPI  
12/26/2021 – 1/24/2022



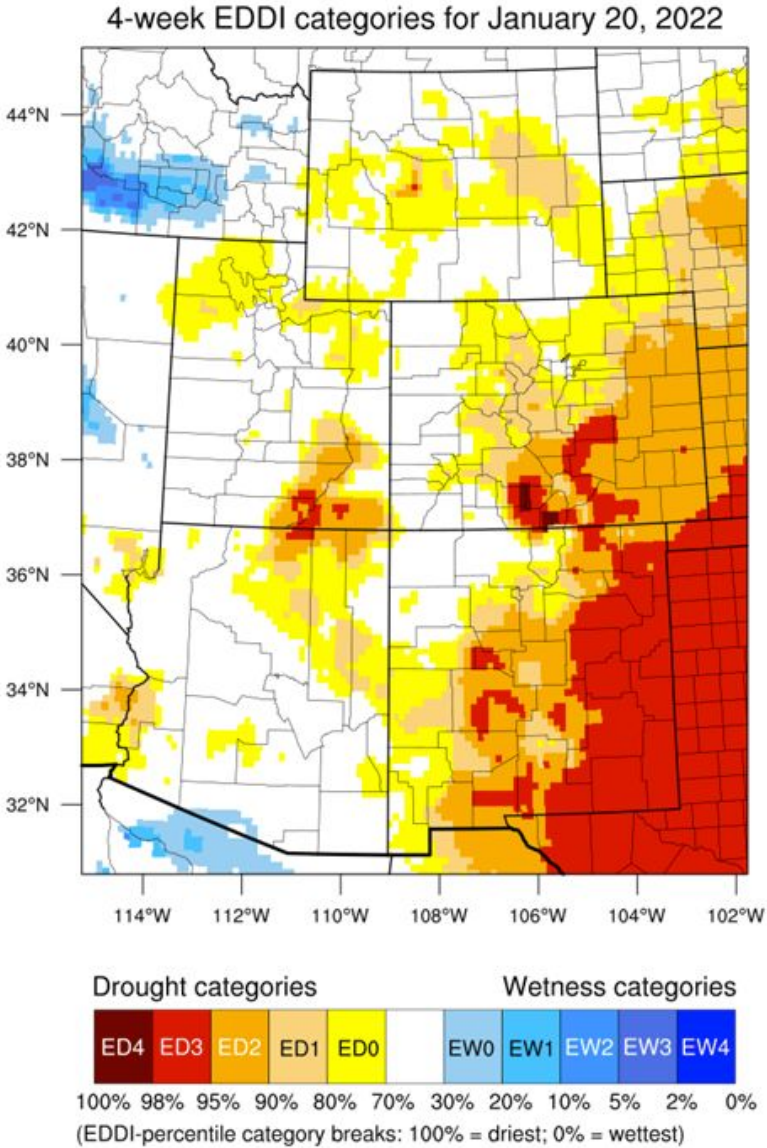
Generated 1/25/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

30-day Standardized Precipitation Index: 2021/12/26 - 2022/01/24

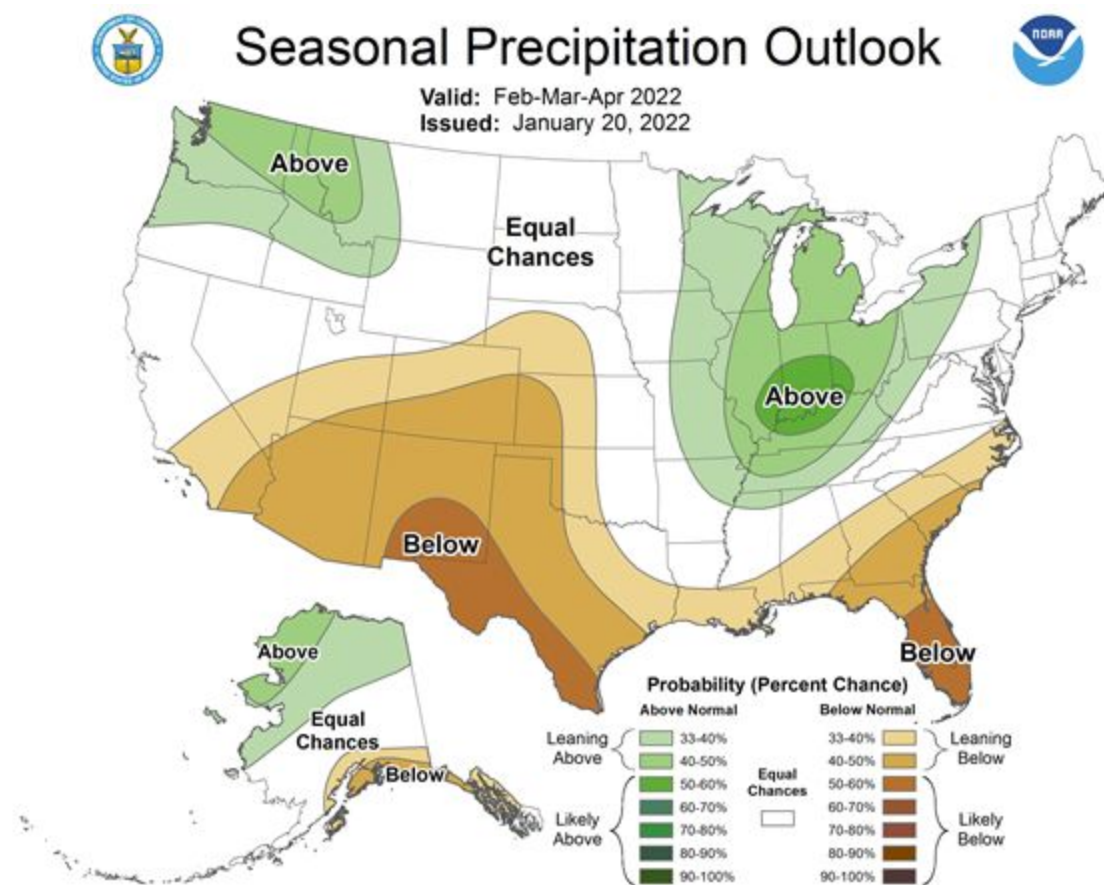
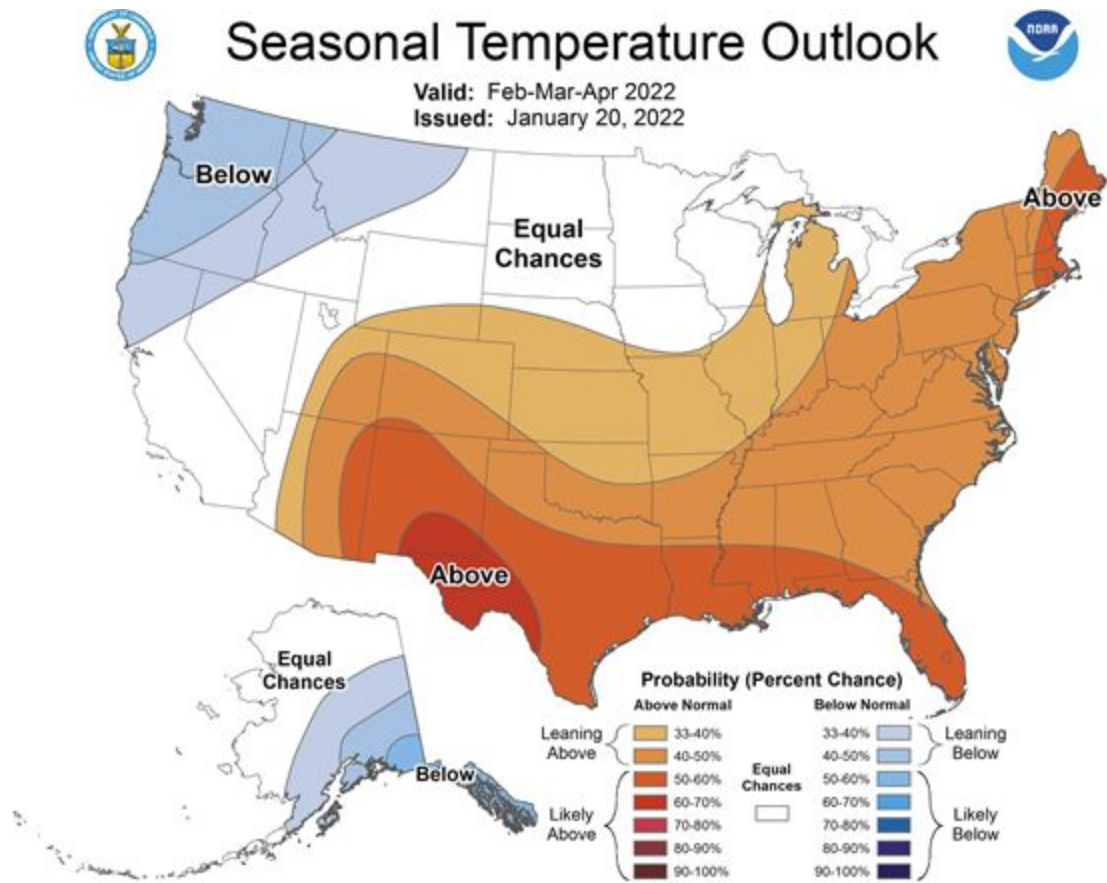


# 4-week Evaporative Demand Drought Index (EDDI)





# Seasonal Outlook (Feb-April)

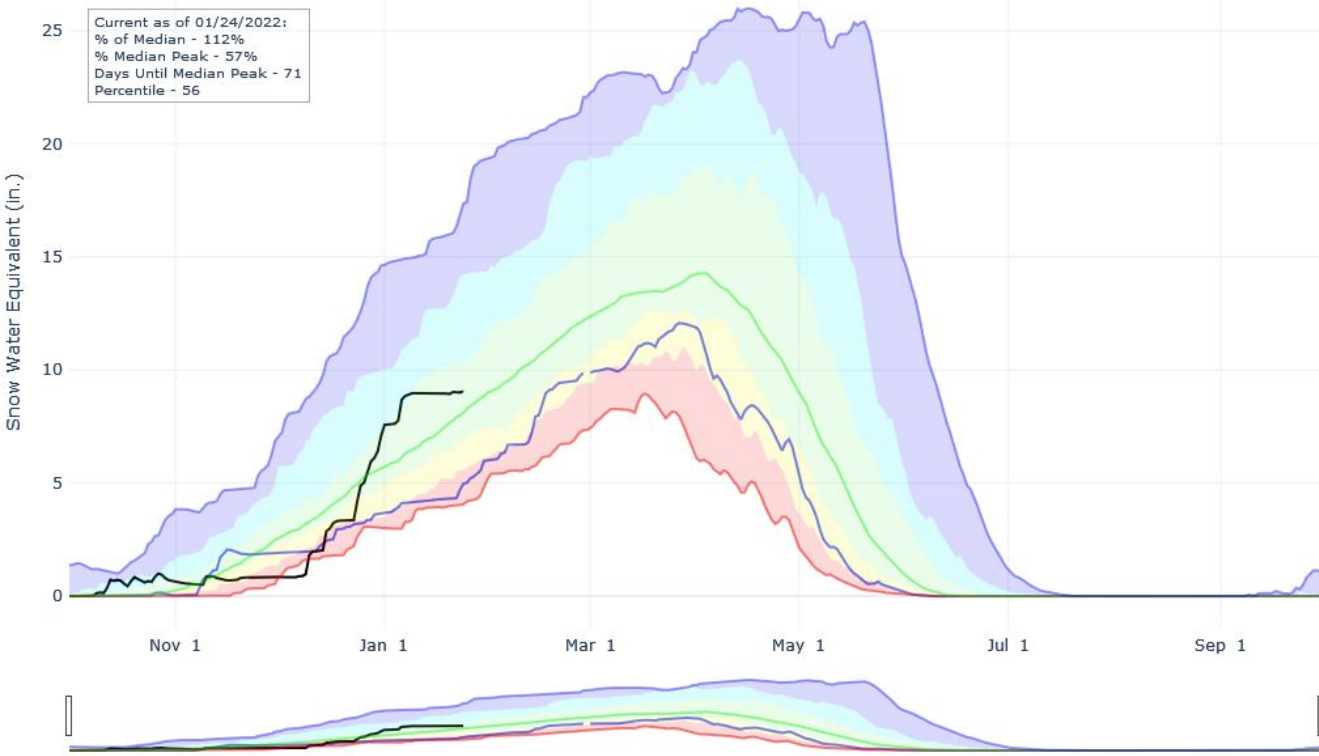


# Snowpack

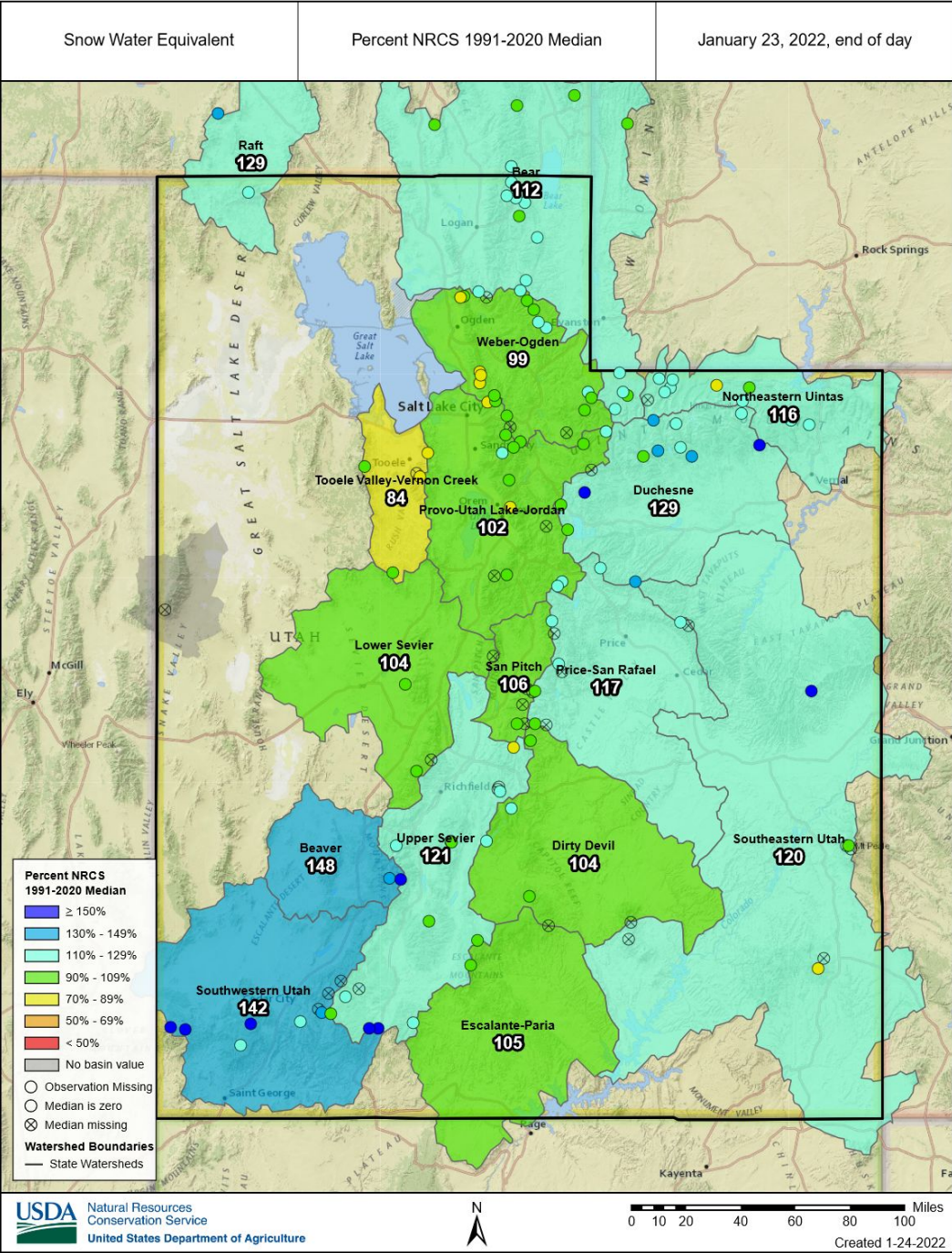
## SNOW WATER EQUIVALENT IN STATE OF UTAH

Reset Range

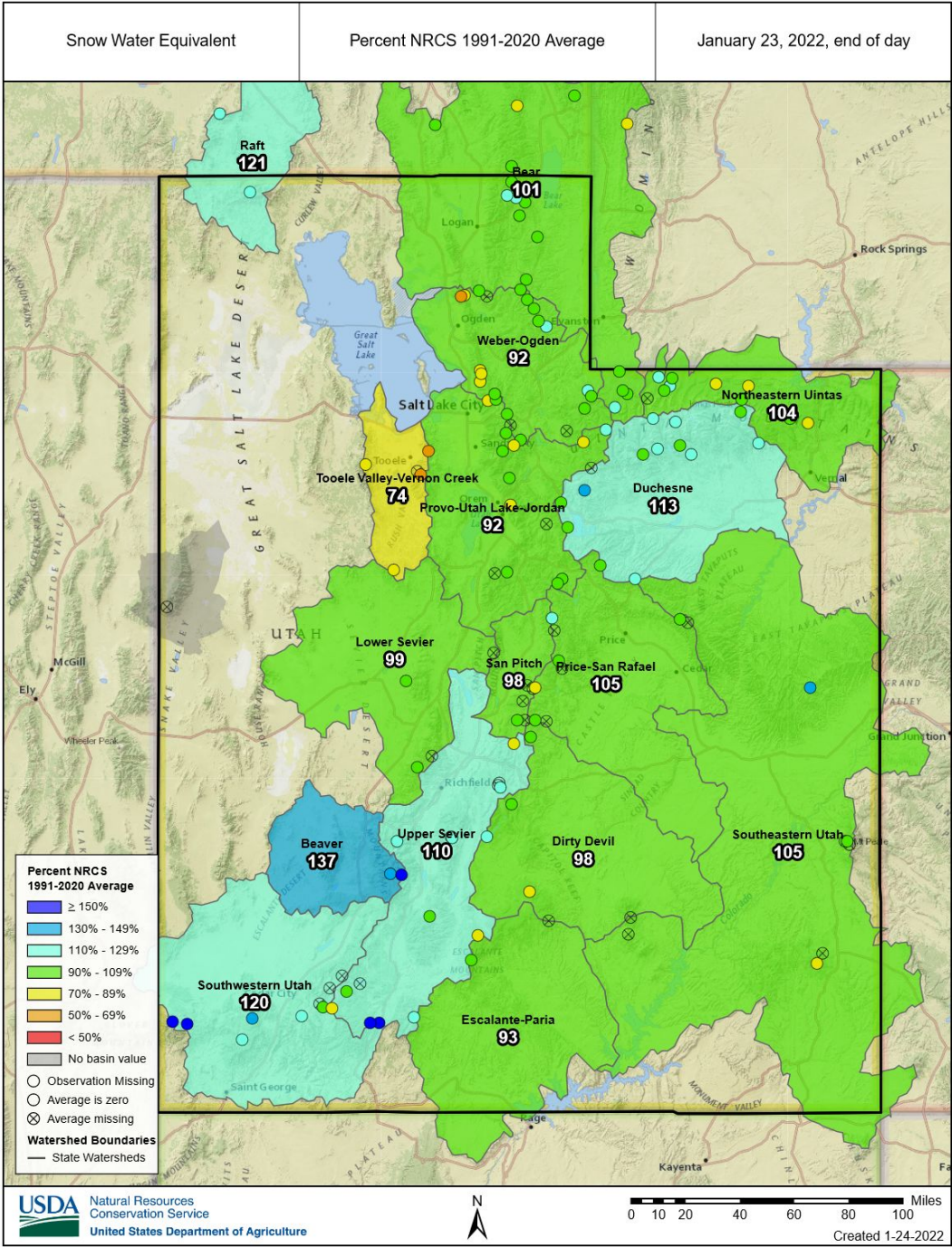
[Link to data: CSV / JSON](#)



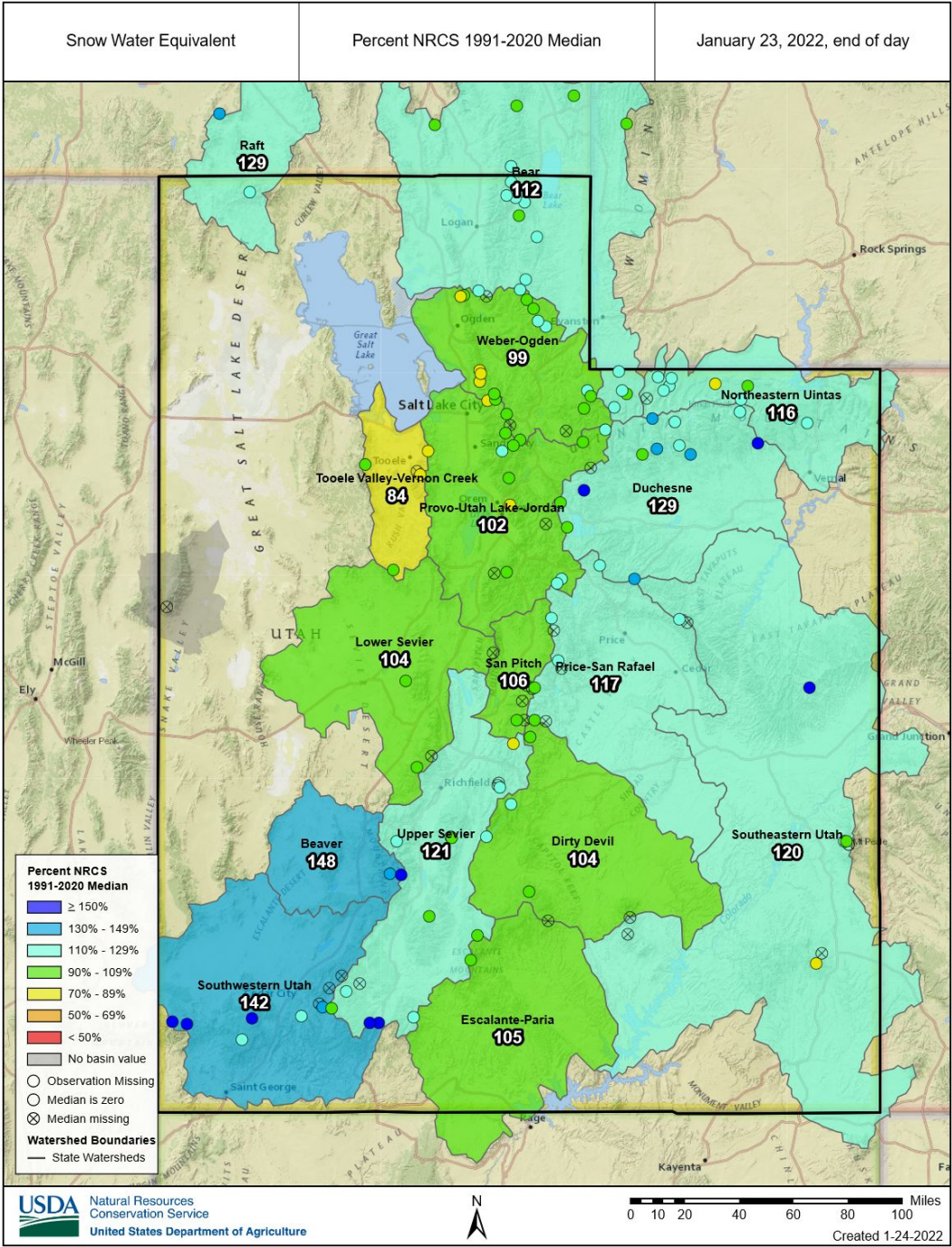
Agency - NRCS Snow Survey  
Presenter - Jordan Clayton







% of average



% of median



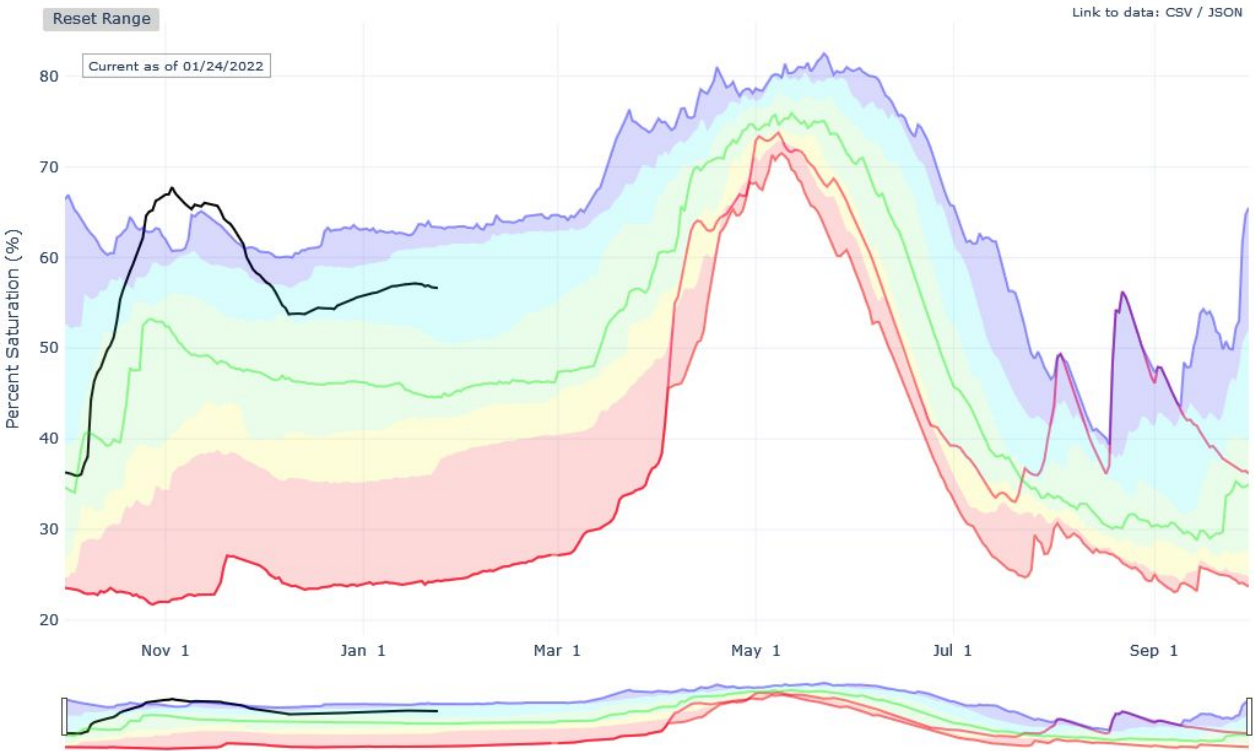
# Soil Moisture

DEPTH AVERAGED SOIL SATURATION IN STATE OF UTAH

Reset Range

Current as of 01/24/2022

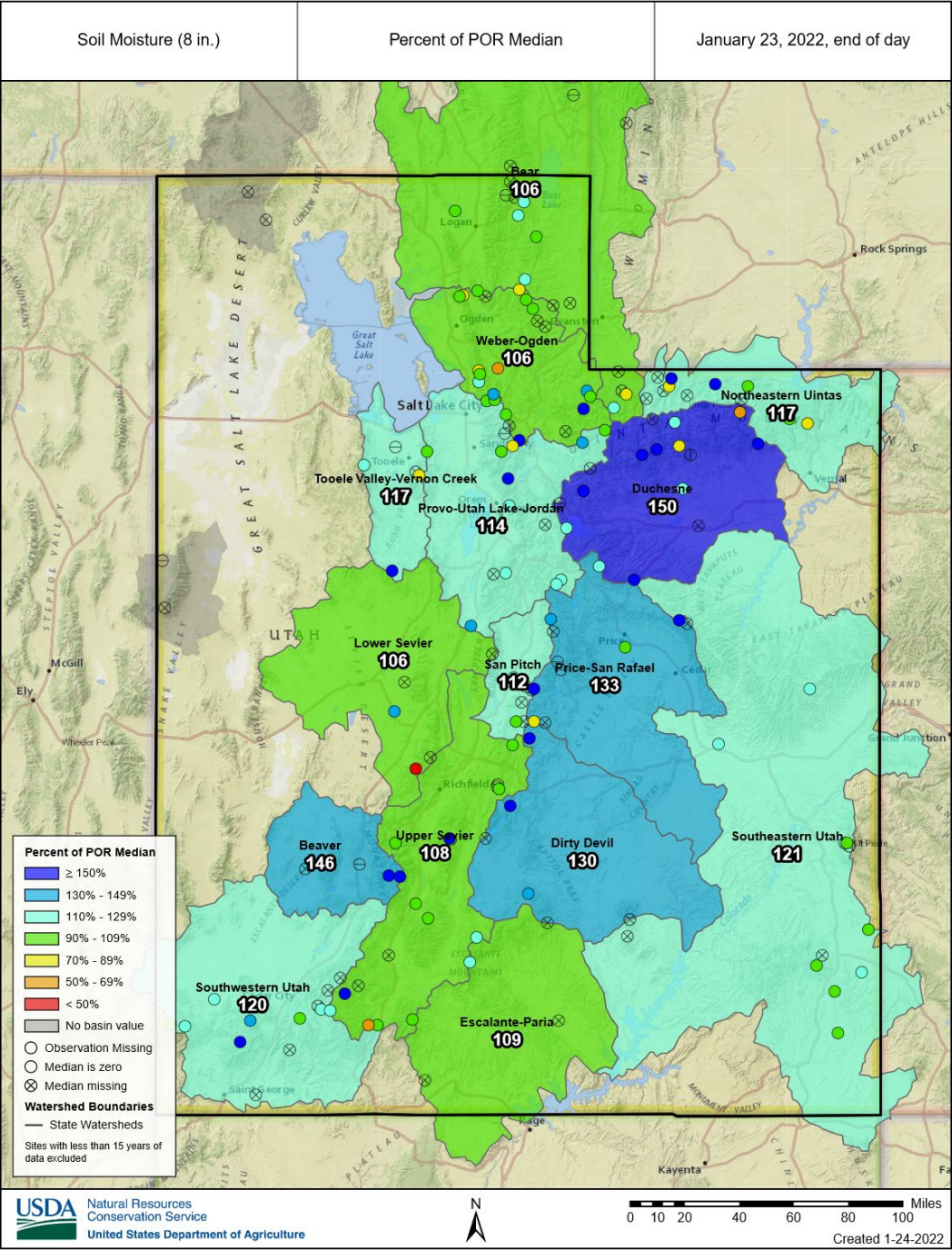
Link to data: CSV / JSON



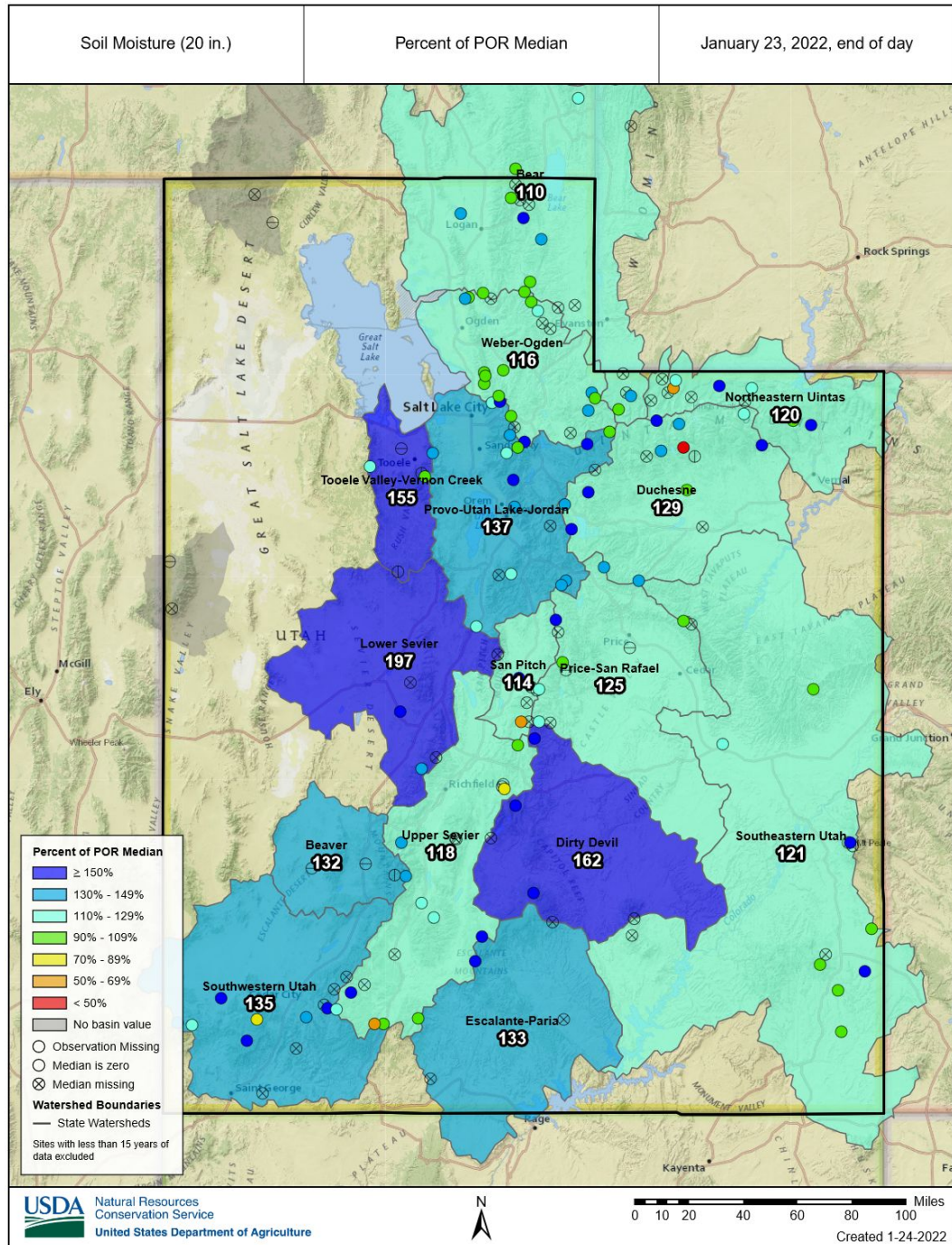
- Station List
- Max
  - Median (POR)
  - Min
  - Stats. Shading
  - 2022 (139 sites)
  - 2021 (136 sites)
  - 2020 (136 sites)
  - 2019 (136 sites)
  - 2018 (136 sites)
  - 2017 (136 sites)
  - 2016 (133 sites)
  - 2015 (133 sites)
  - 2014 (129 sites)
  - 2013 (126 sites)
  - 2012 (110 sites)
  - 2011 (107 sites)
  - 2010 (98 sites)
  - 2009 (92 sites)
  - 2008 (92 sites)
  - 2007 (89 sites)
  - 2006 (82 sites)
  - 2005 (71 sites)



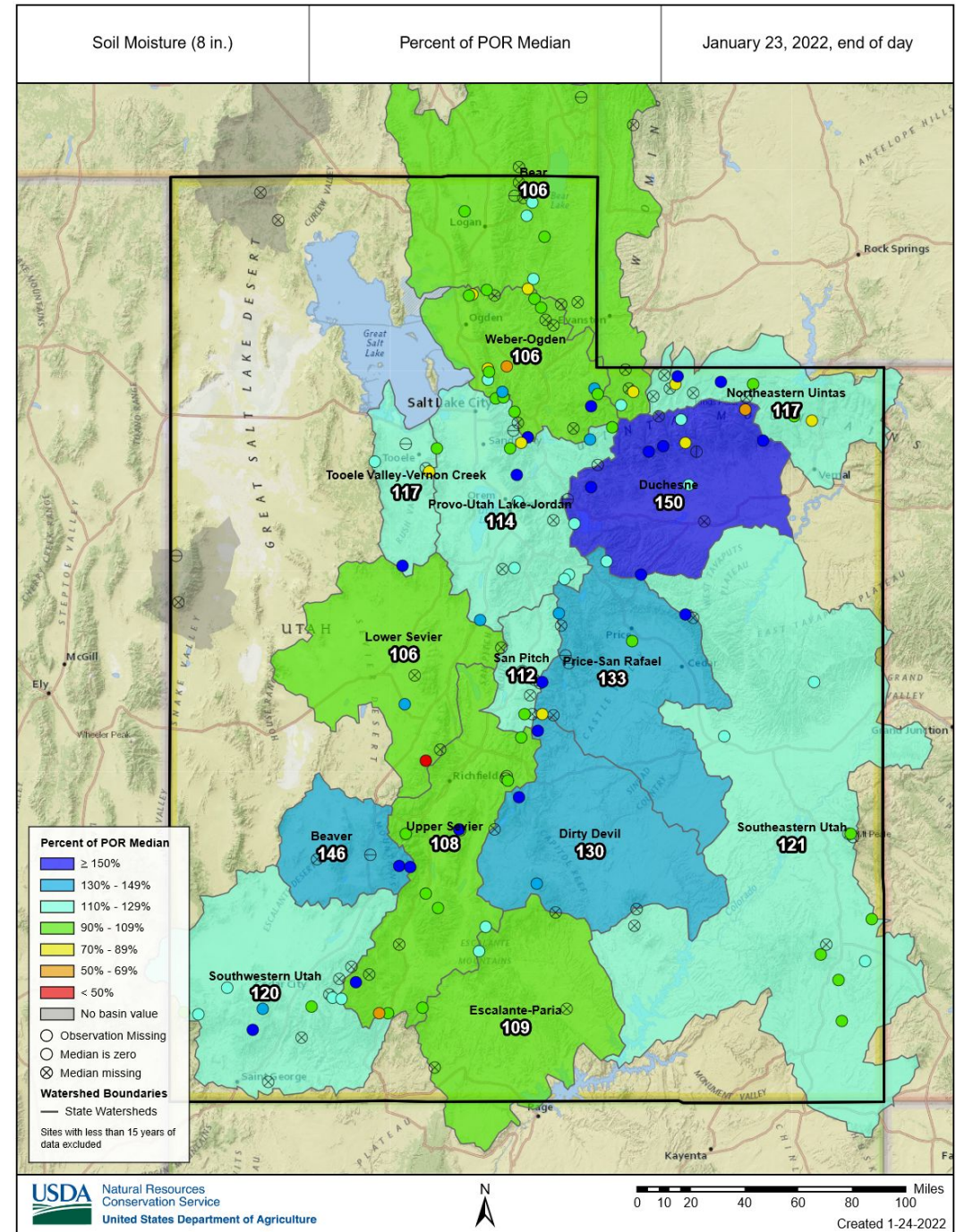
Agency - NRCS Snow Survey  
Presenter - Jordan Clayton







20" depth

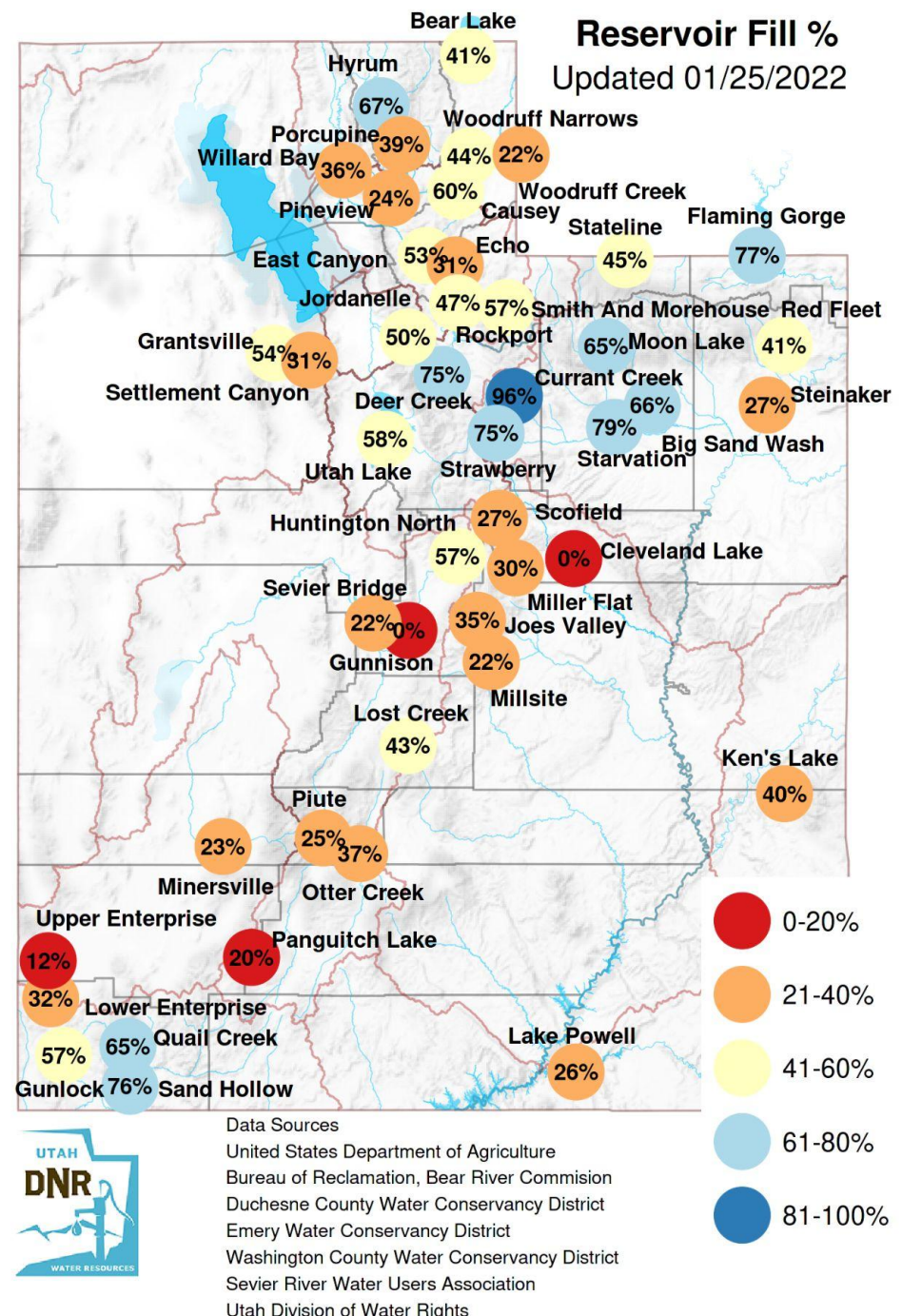


8" depth

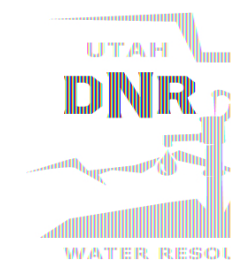


# Reservoir Fill %

Updated 01/25/2022

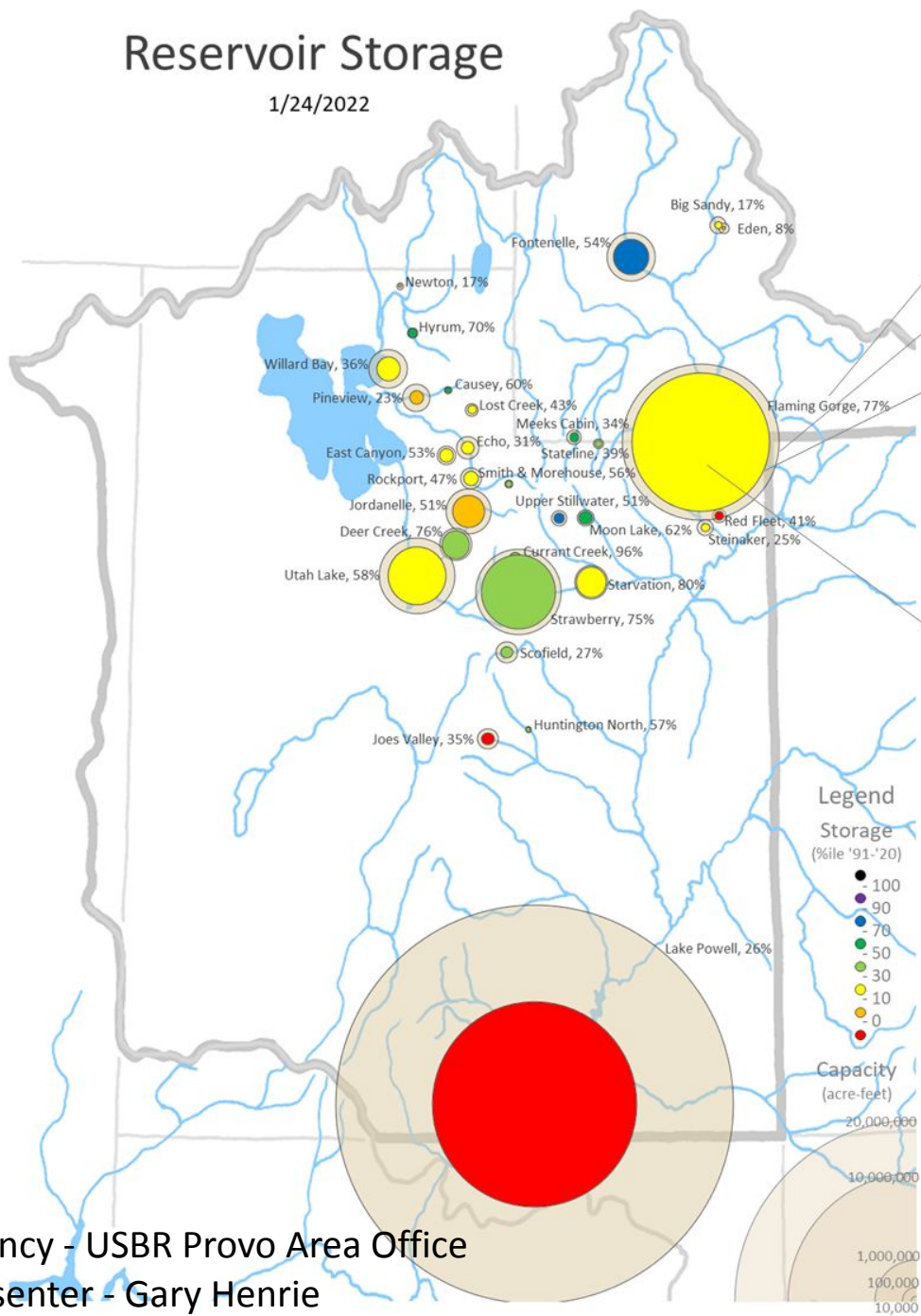


Agency - Division of Water Resources  
 Presenter - Laura Haskell



# Reservoir Storage

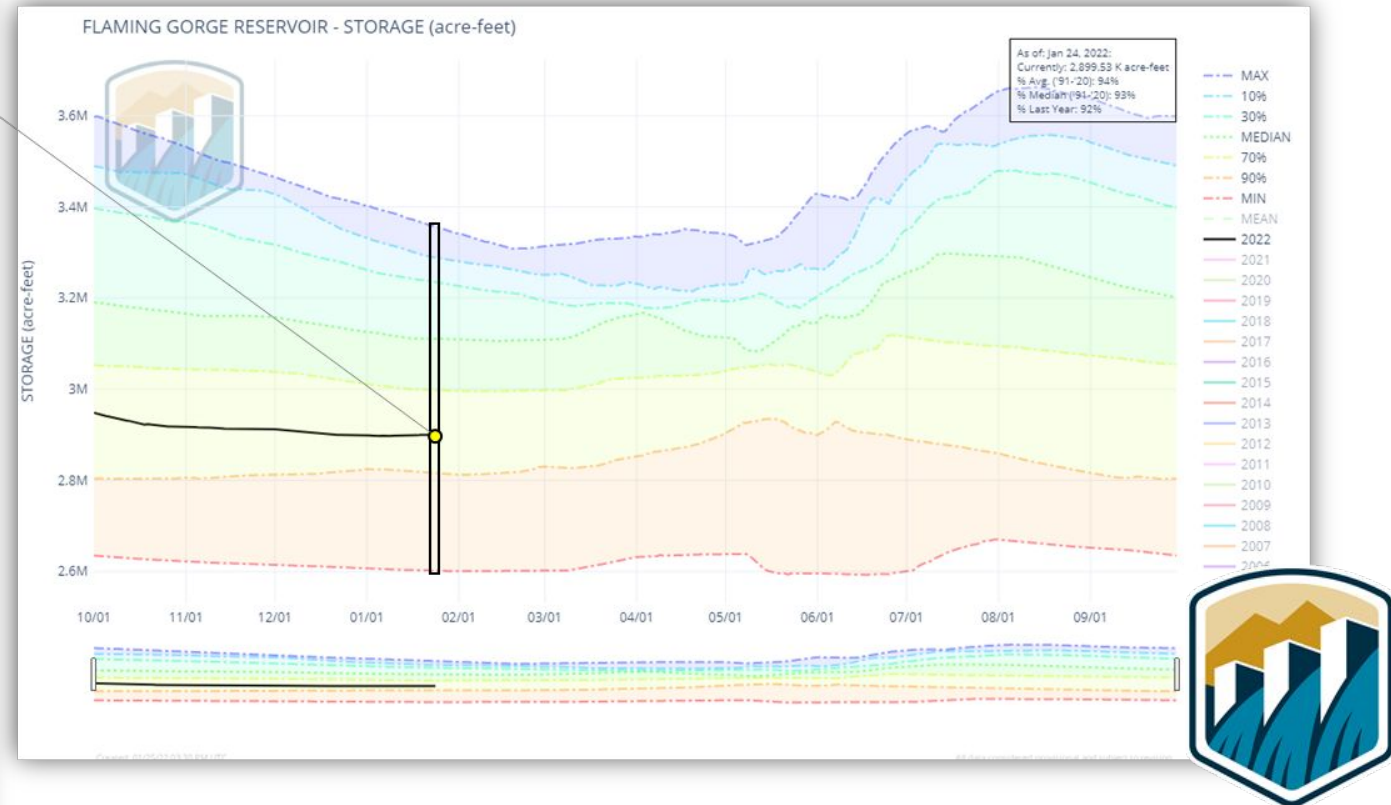
1/24/2022



## Reservoir storage graphic shows...

- Reservoir name, current percent full (text)
- Reservoir Live Capacity (outer dot)
- Reservoir current Live Storage (inner dot)
- Colored by percentile of 1991-2020 storage for this date

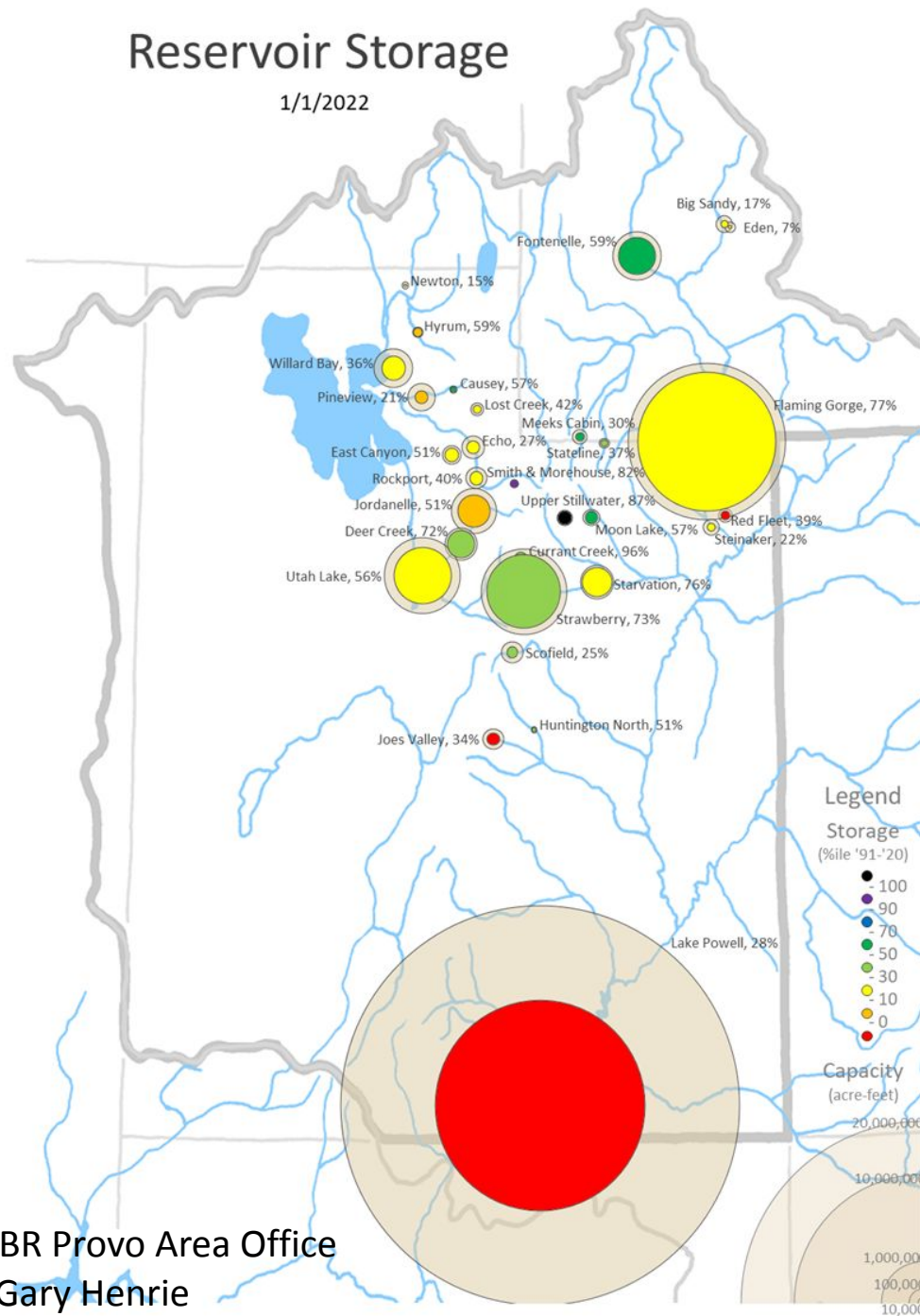
<https://www.usbr.gov/uc/water/index.html> "Reservoir Data"





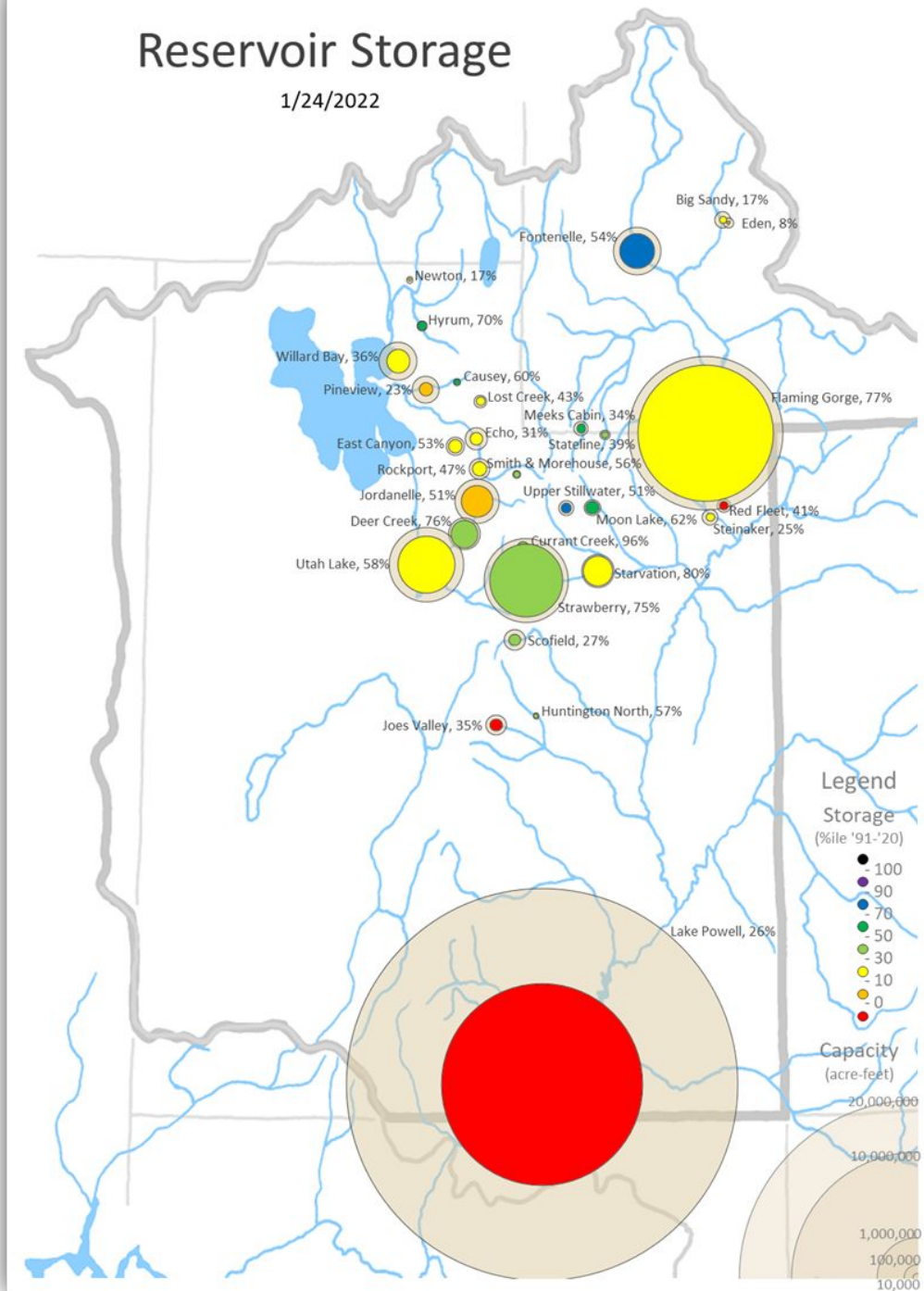
# Reservoir Storage

1/1/2022



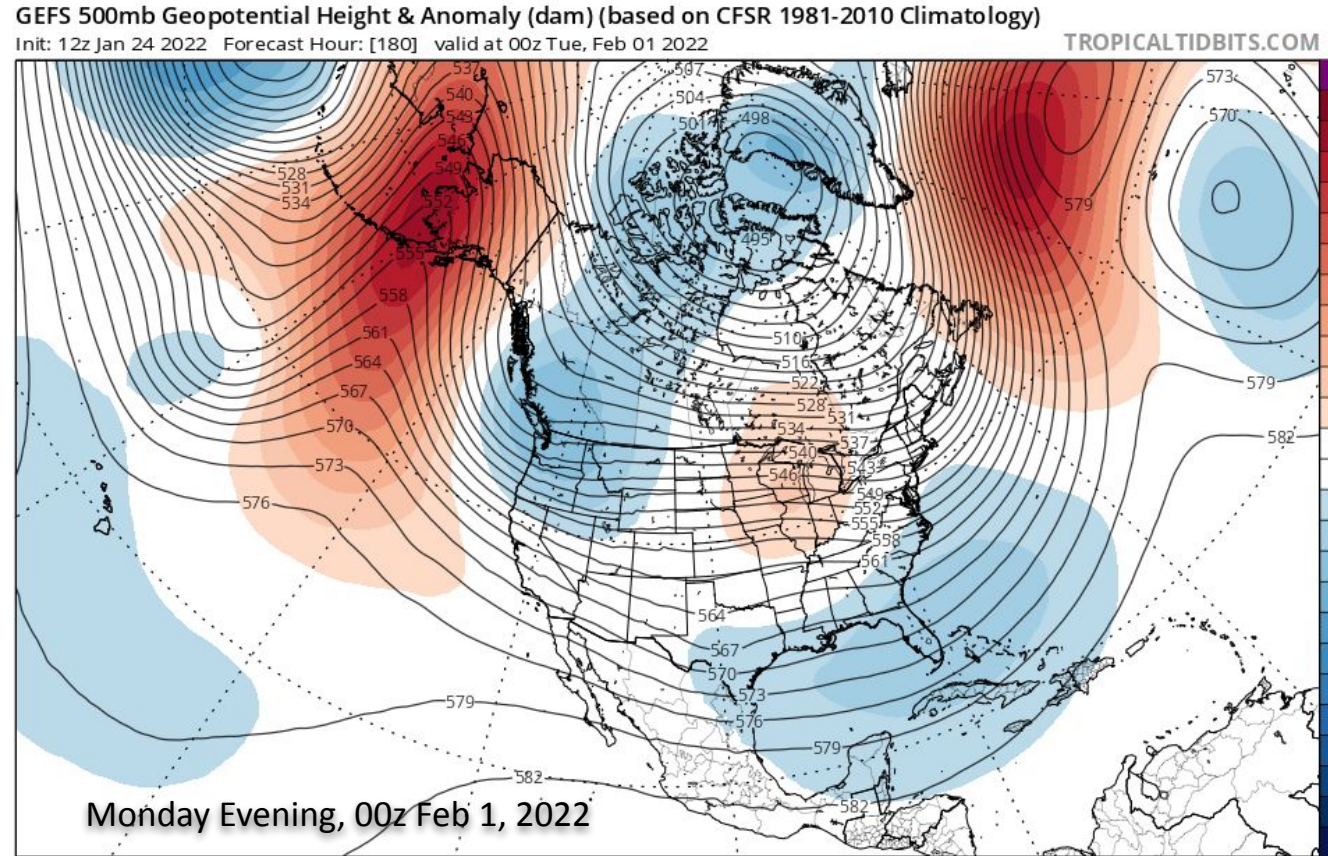
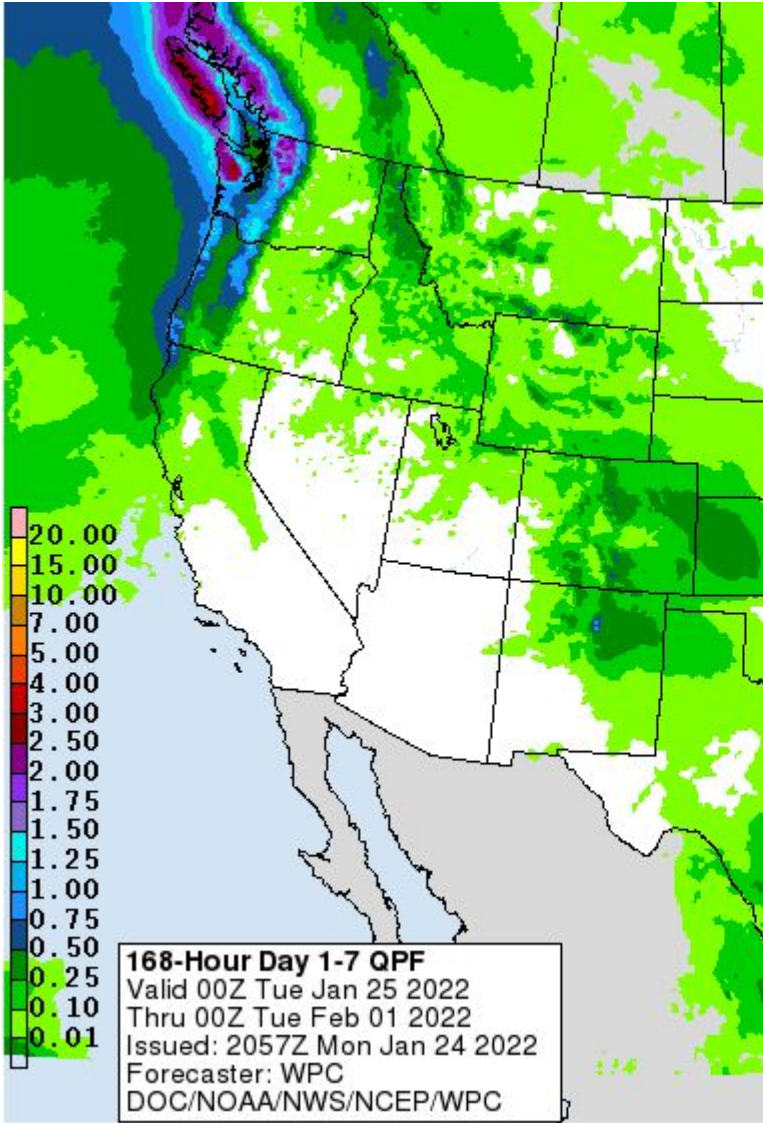
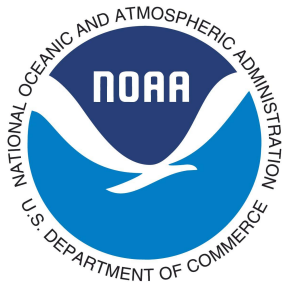
# Reservoir Storage

1/24/2022



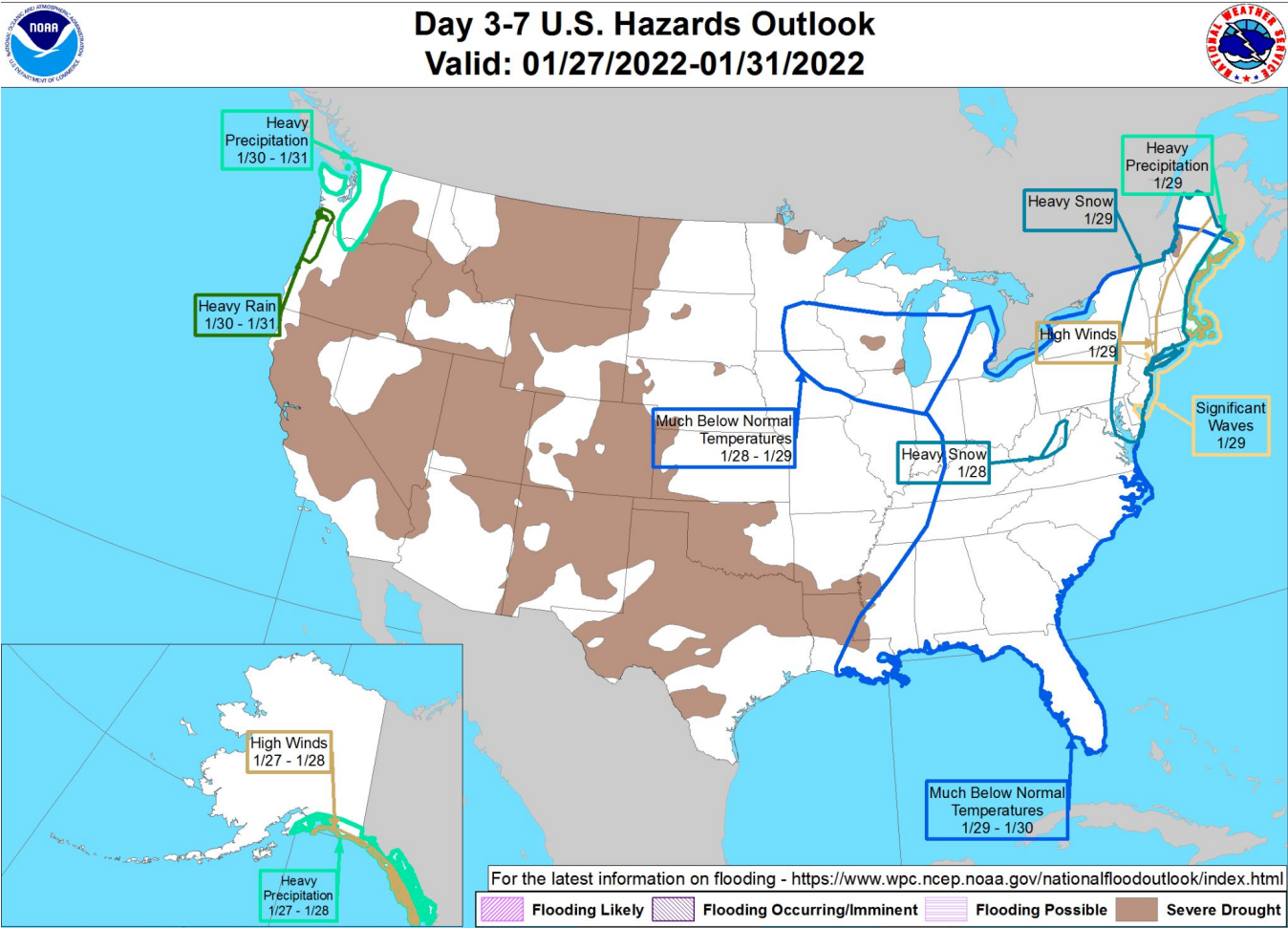


# Weather Forecast Office Utah Day 1-7 Outlook



- Dry conditions through the upcoming weekend, dominated by high pressure.
- Temperatures near to slightly above normal
- Positive signals begin once again early next week

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



**Weather Prediction Center**

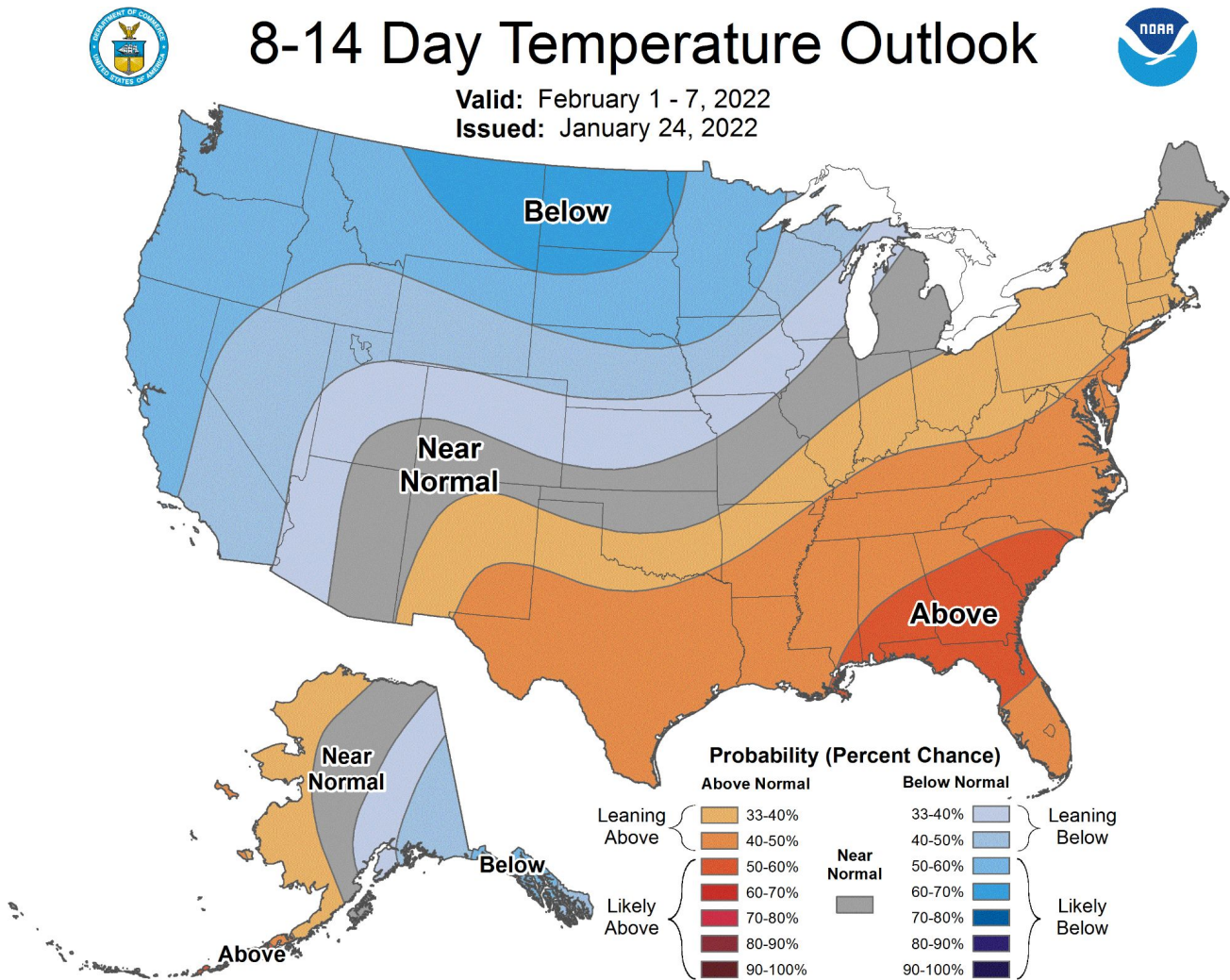
Made: 01/24/2022 3PM EST

Follow us:

[www.wpc.ncep.noaa.gov](https://www.wpc.ncep.noaa.gov)

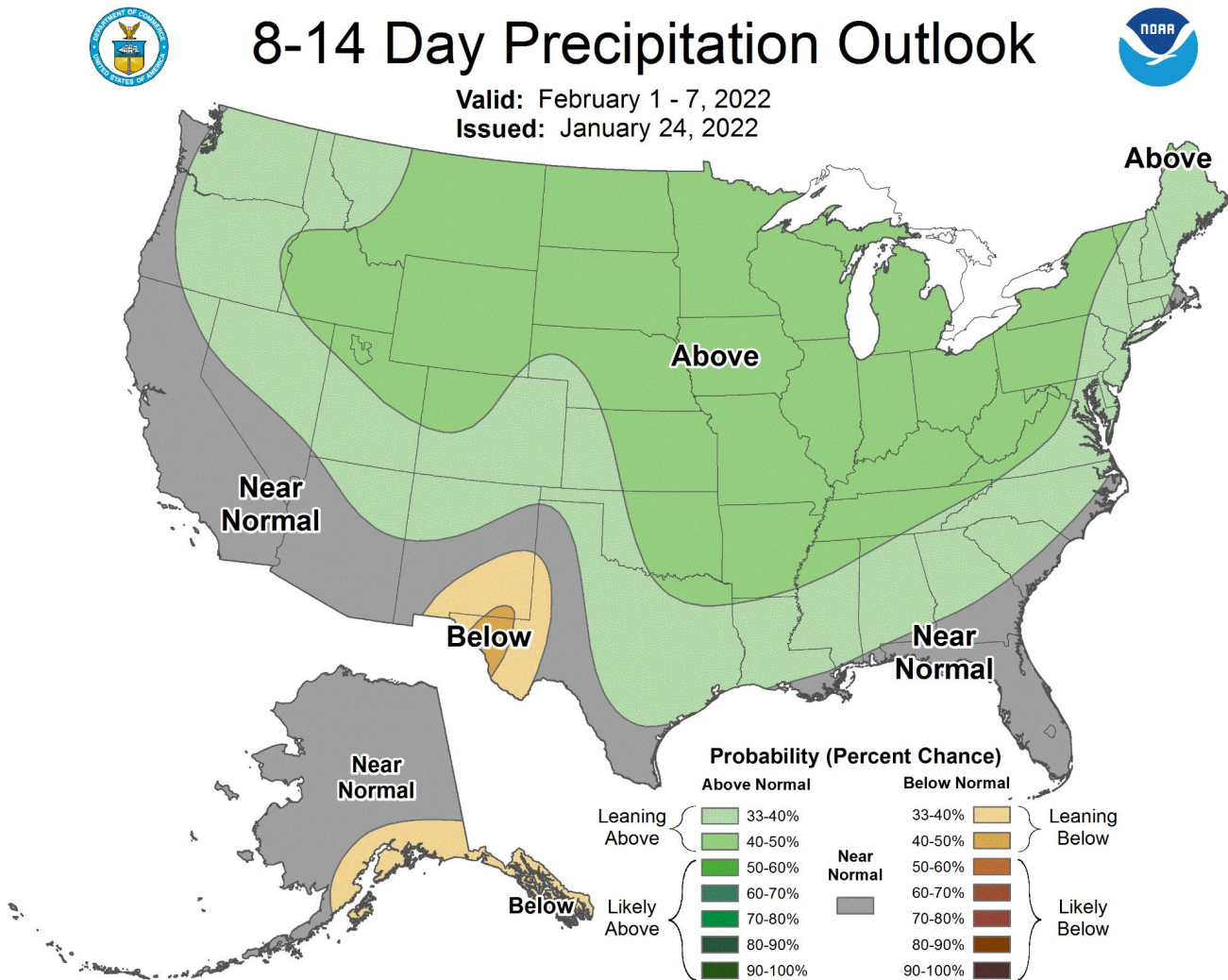


# Climate Prediction Center 8 to 14 Day Outlooks - Temperature

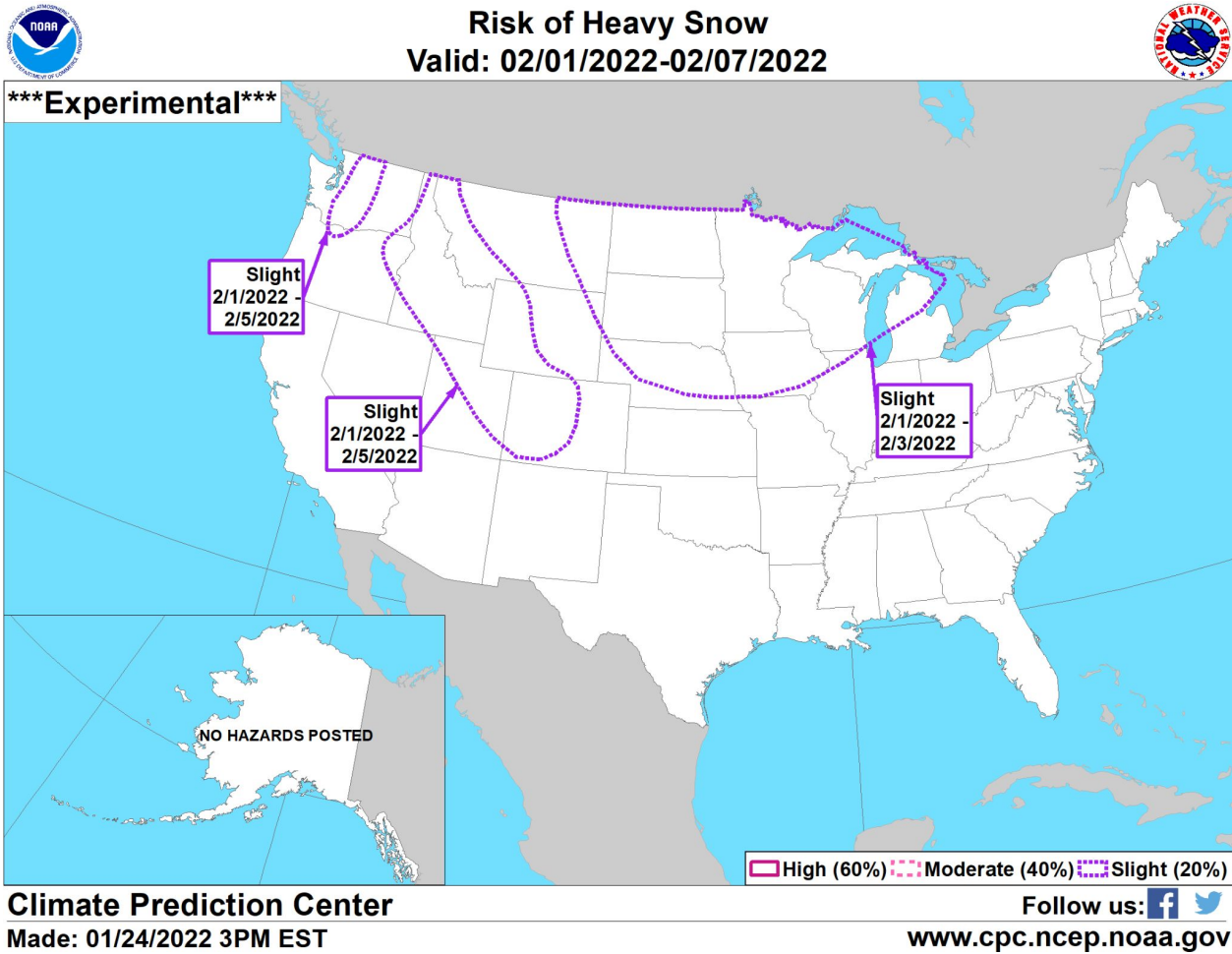
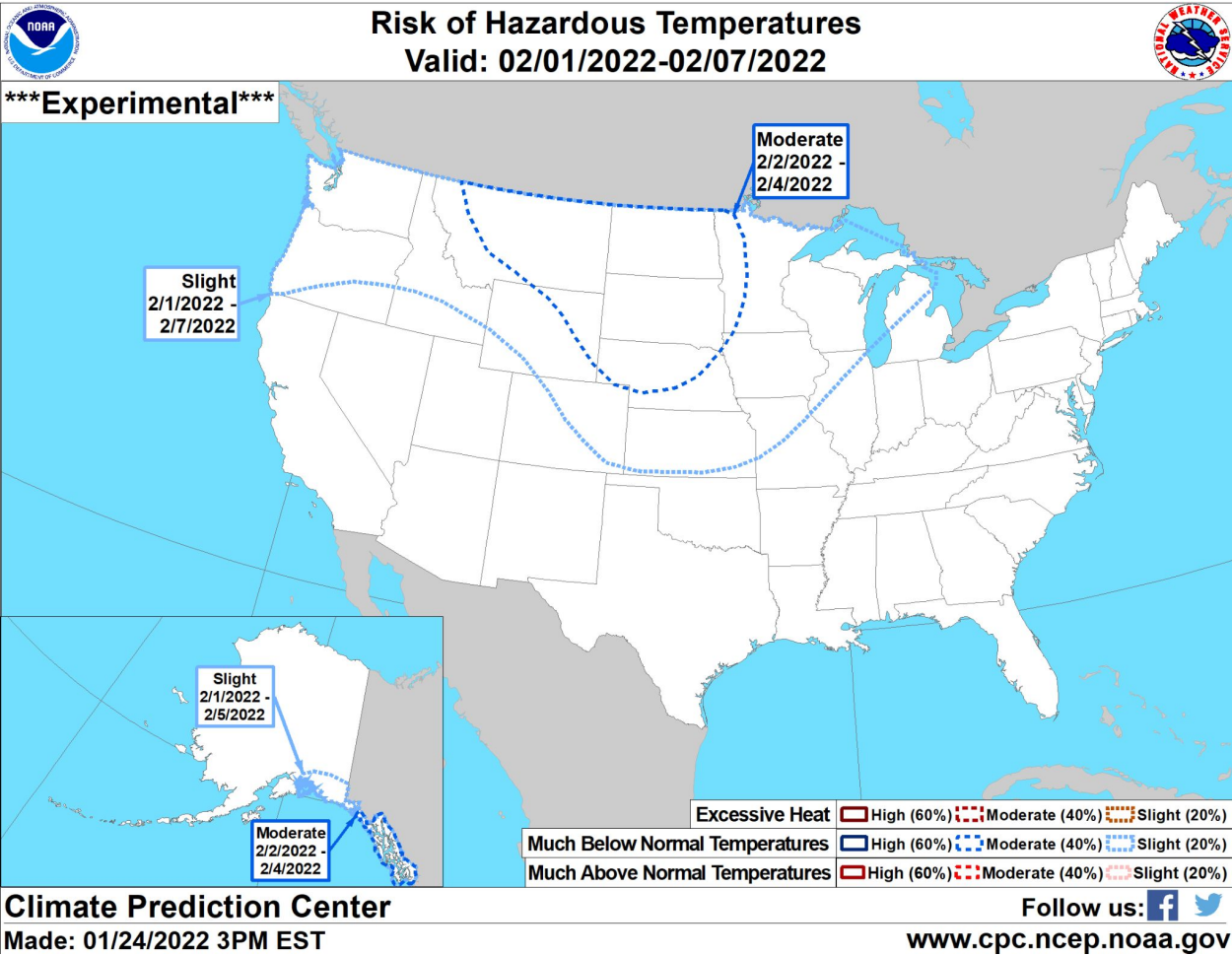
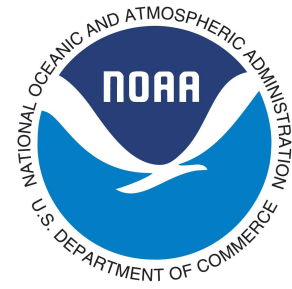




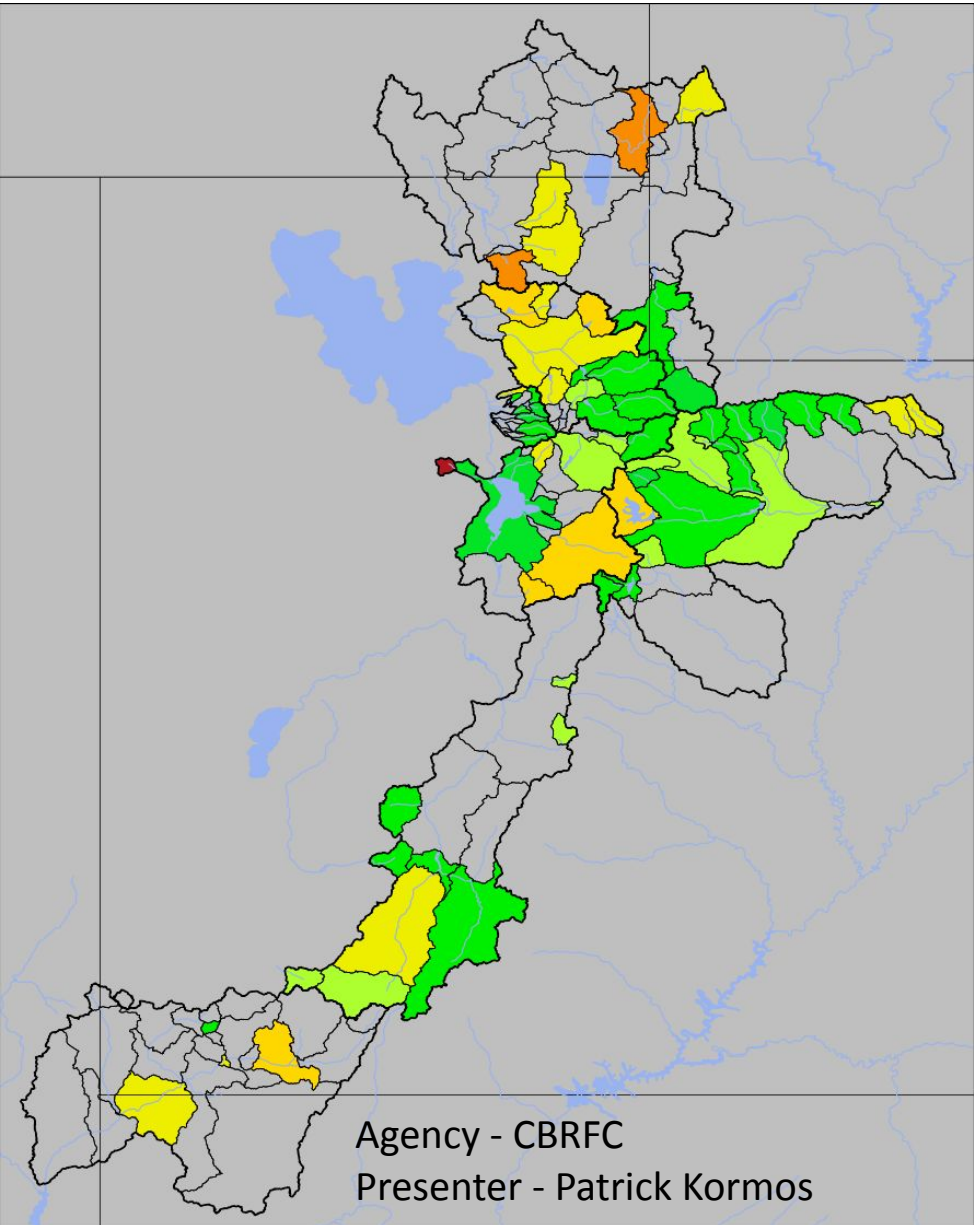
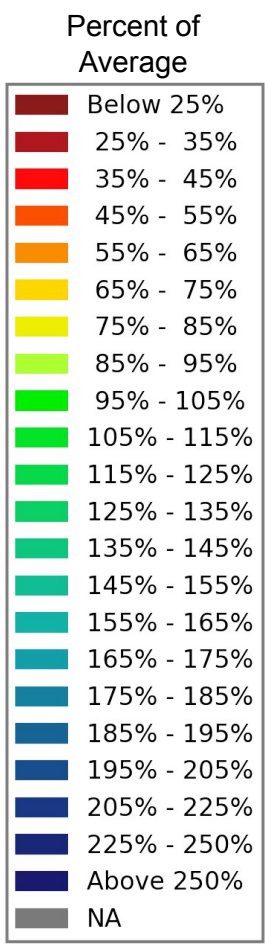
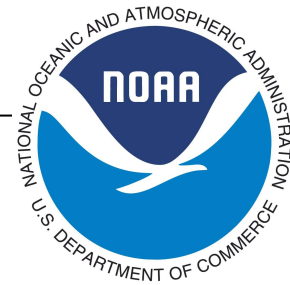
# Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



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



# Utah Water Supply Forecasts

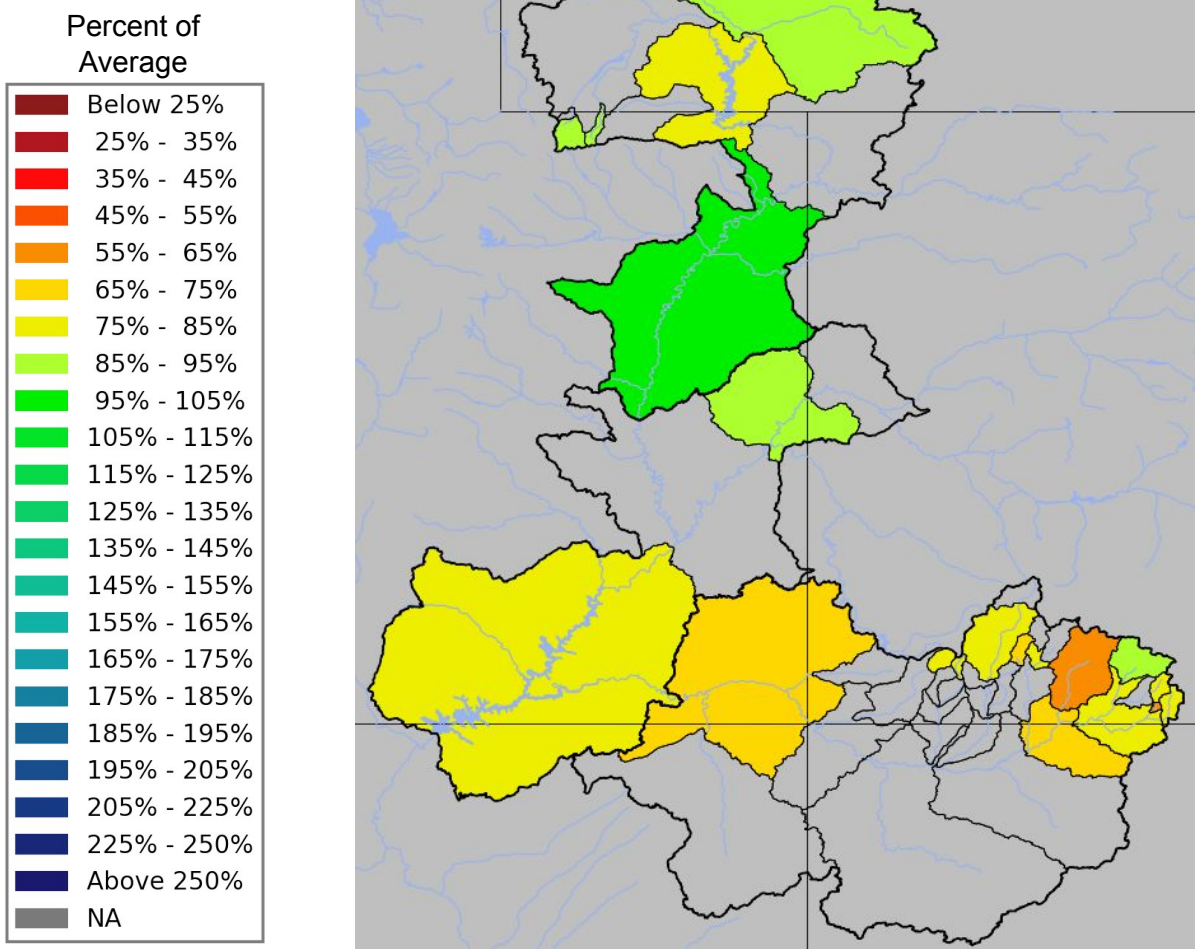
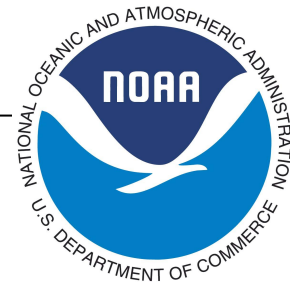


- Model Guidance Jan. 24 Forecast for April-July Volume.
- All median forecasts have dropped.
- April-July Forecast Streamflow Volumes are in percent of 1991-2020 average

Forecast Group	Median Forecast (% avg)
Weber	90
Bear	80
Six Creeks	100
Provo / Utah Lake	90
Sevier	90
Duchesne	95
Virgin	75



# Utah Water Supply Forecasts



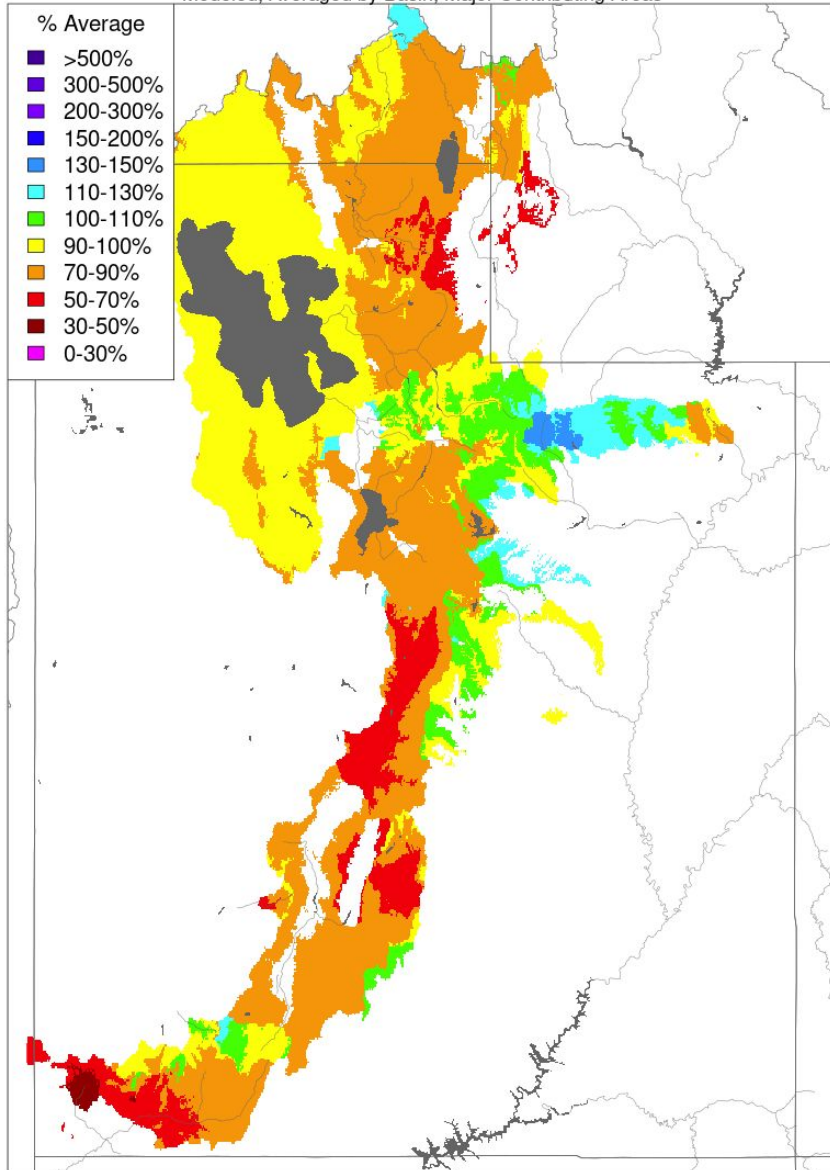
- Model Guidance Jan. 24 Forecast for April-July Volume.
- All median forecasts have dropped.
- April-July Forecast Streamflow Volumes are in percent of 1991-2020 average

Forecast Group	Median Forecast (% avg)
Upper Green	85
San Juan	75
Powell (mid month, specific)	95

# Utah Water Supply Forecasts

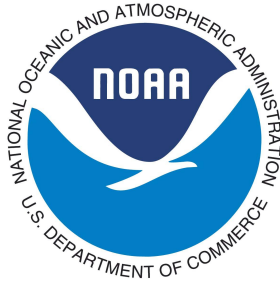
Soil Moisture - Fall - 2021 (November 15)

Modeled, Averaged by Basin, Major Contributing Areas



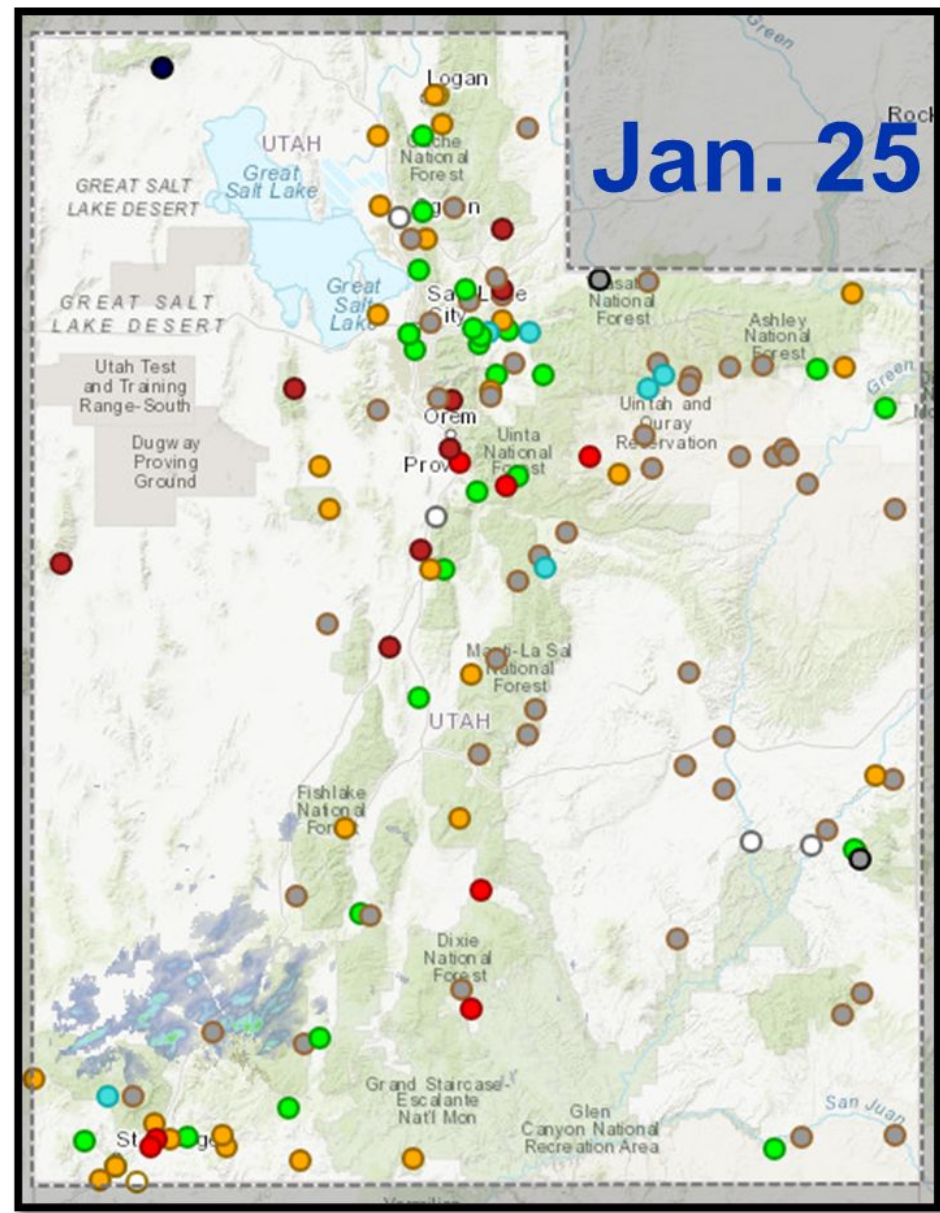
Prepared by NOAA, Colorado Basin River Forecast Center  
Salt Lake City, Utah, [www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)

- Reminder that modeled deeper soil water was below normal in many parts of Utah to start our the water year
- Snowpack can be above normal while forecasts are below normal





# Current Streamflows



Day-of-Year Status	# Gages	% Gages
All-time high for this day-of-year	1	0.7%
Much above normal for this day-of-year	0	0.0%
Above normal for this day-of-year	6	4.4% █
Normal for this day-of-year	28	20.4% █
Below normal for this day-of-year	28	20.4% █
Much below normal for this day-of-year	8	5.8% █
All-time low for this day-of-year	7	5.1% █
Not ranked - insufficient record	9	6.6% █
Not ranked - no measurement	43	31.4% █
Not ranked - no recent measurement	5	3.6% █
Not ranked - stream not flowing	2	1.5%

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<sup>th</sup> percentile (maximum)

>90<sup>th</sup> percentile

76<sup>th</sup> – 90<sup>th</sup> percentile

25<sup>th</sup> – 75<sup>th</sup> percentile

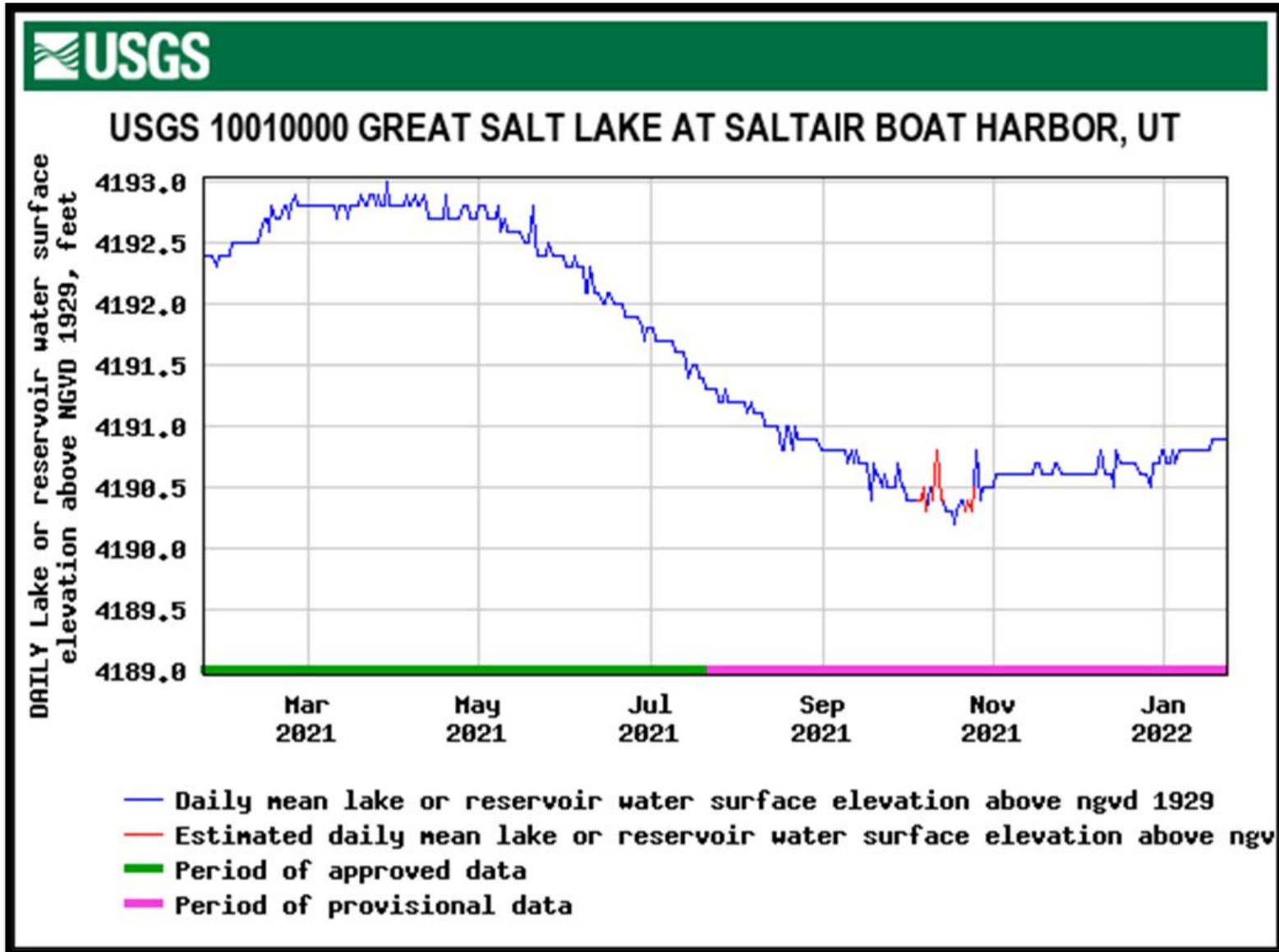
10<sup>th</sup> – 24<sup>th</sup> percentile

<10<sup>th</sup> percentile

0<sup>th</sup> percentile (minimum)



# Great Salt Lake Water Surface Elevation



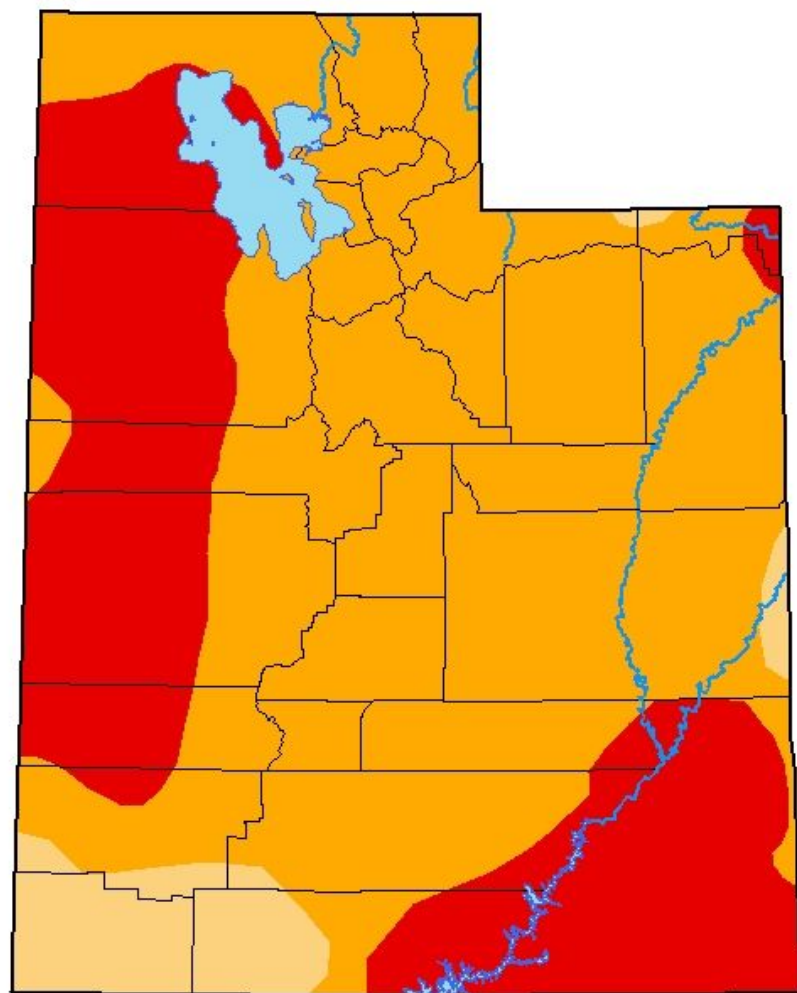
- ❑ Mean daily value  
01/23/2022 =  
4,190.9'
- ❑ 4,190.2'  
10/18/2021  
(new historic low)



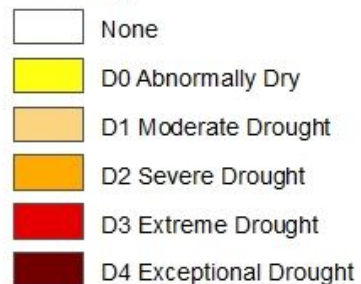
# U.S. Drought Monitor

## Utah

January 18, 2022  
(Released Thursday, Jan. 20, 2022)  
Valid 7 a.m. EST



### 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>*

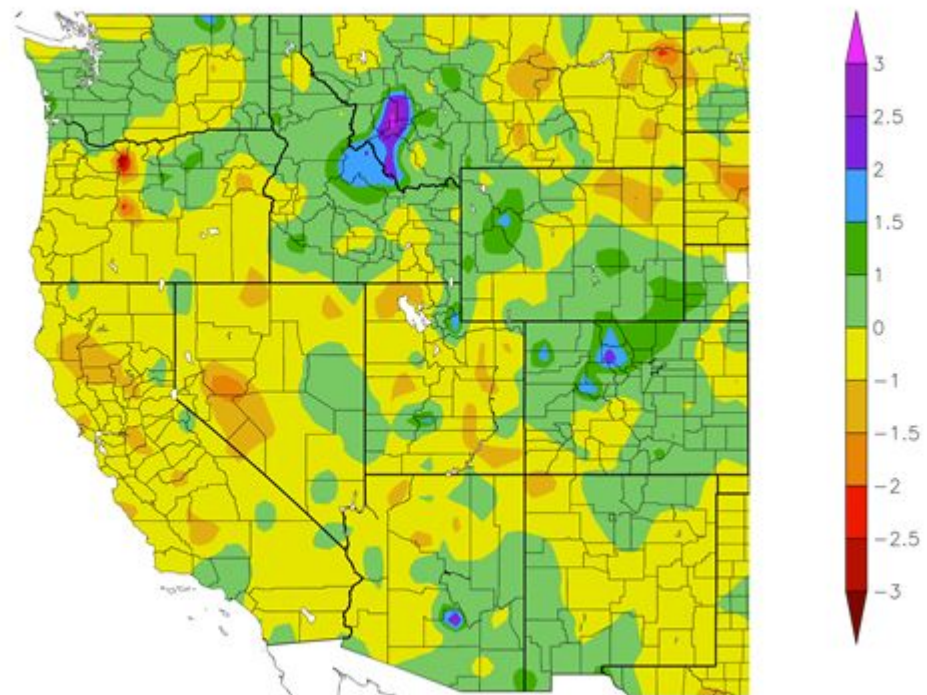
### Author:

Brian Fuchs  
National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

30 Day SPI  
12/26/2021 – 1/24/2022



022 at HPRCC using provisional data.

NOAA Regional Climate Center