

# **Utah Water Assessment** & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly













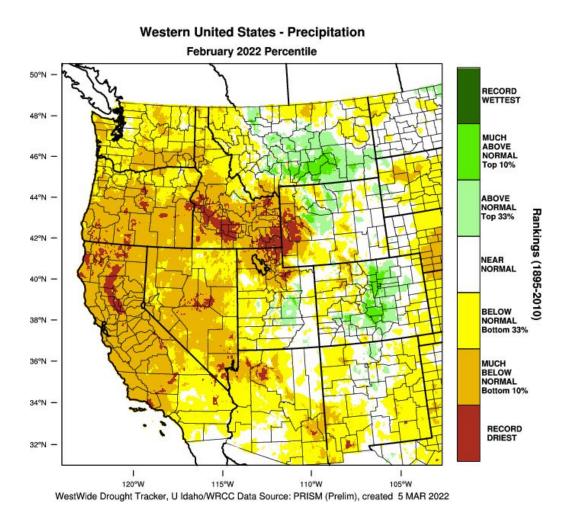




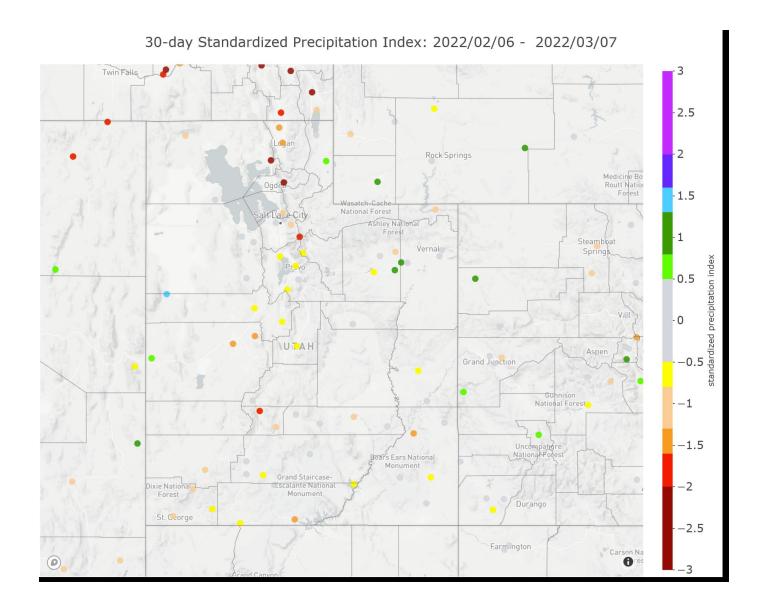
# Utah Water Assessment & Conditions Monitoring Webinar

March 8, 2022

# Feb Precipitation

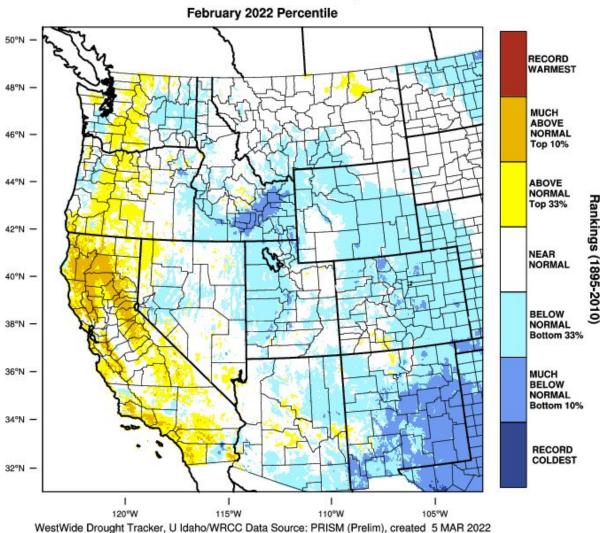


# 30-day SPI



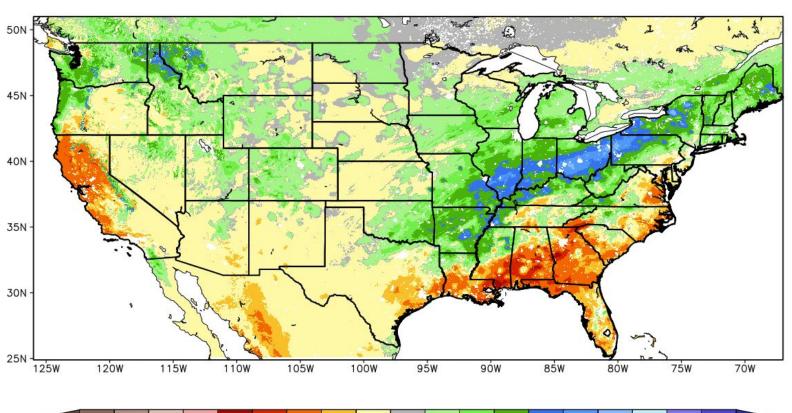
### Feb Temps

#### Western United States - Mean Temperature



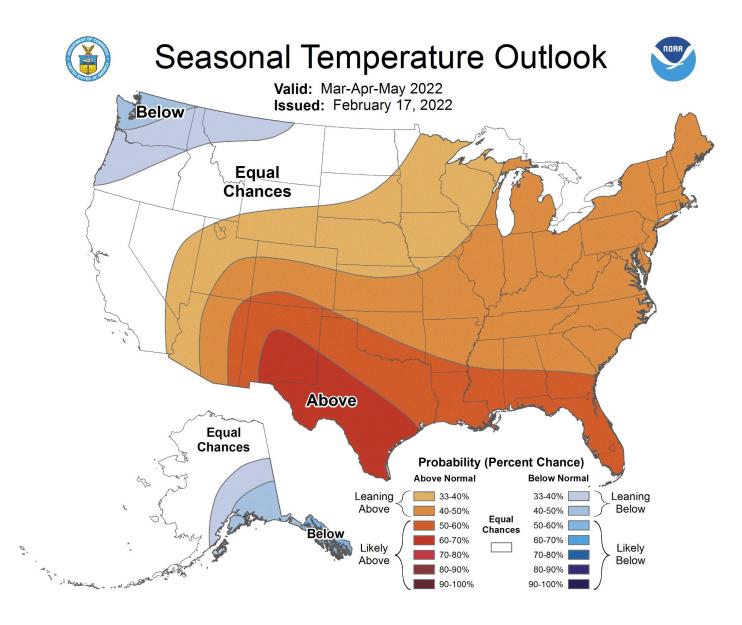
# Modeled Soil Moisture Changes



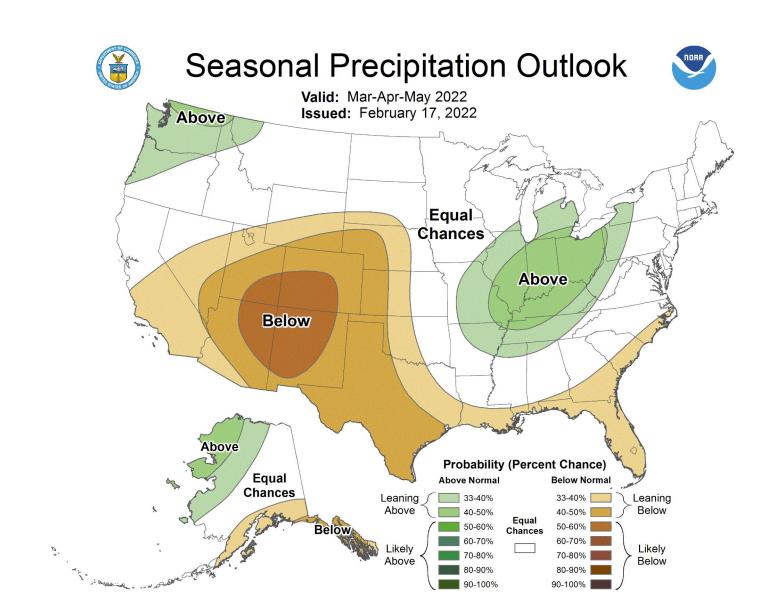




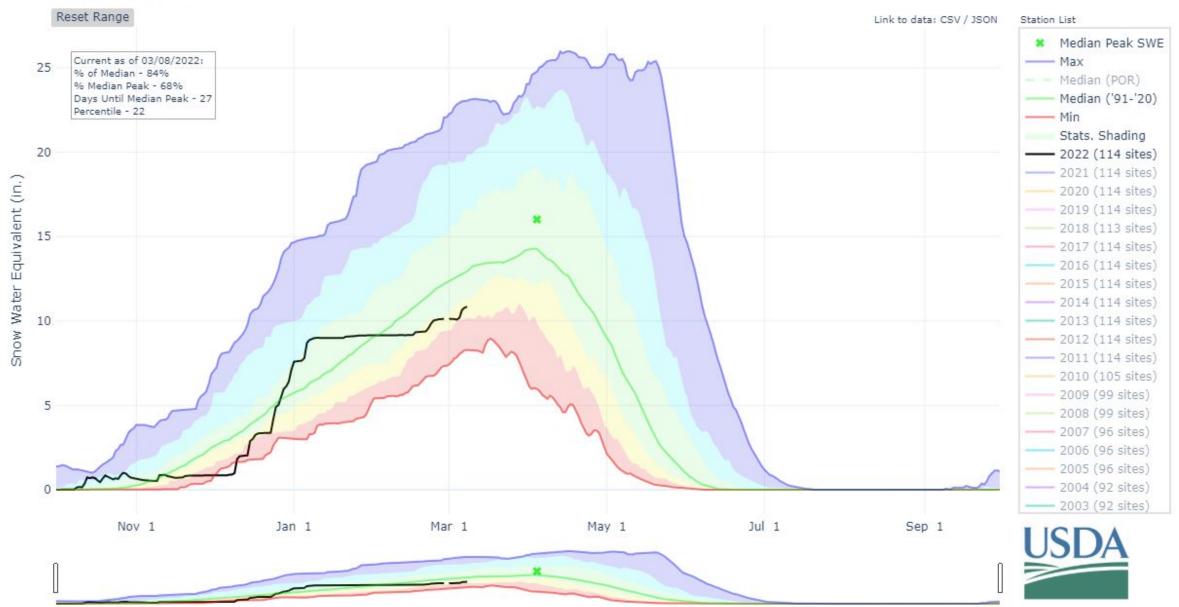
# 3-month temperature outlook

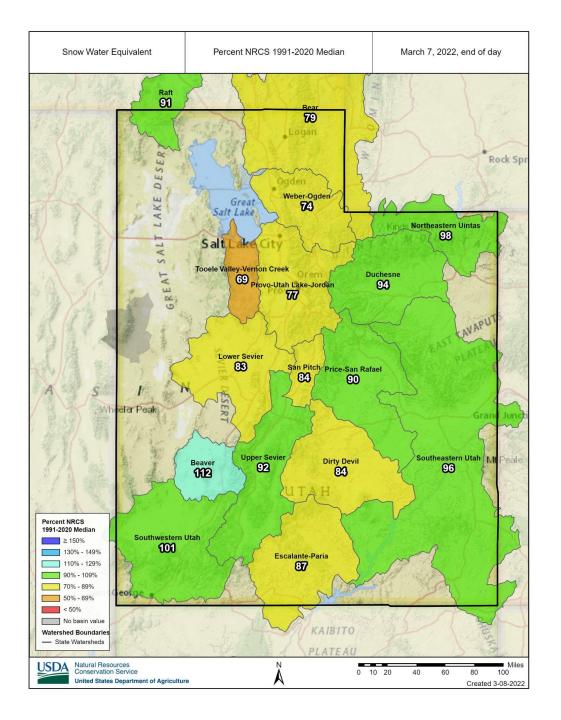


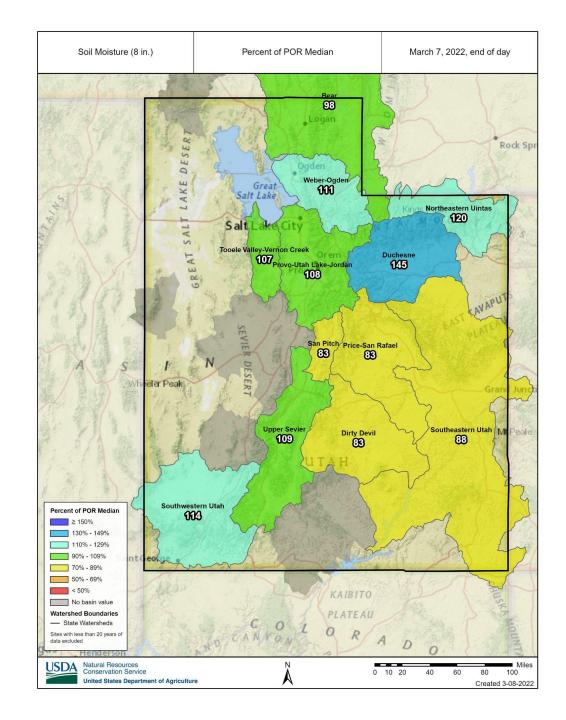
# 3 month outlook Precip



# SNOW WATER EQUIVALENT IN STATE OF UTAH







#### **Basin Reservoir percent of capacity**

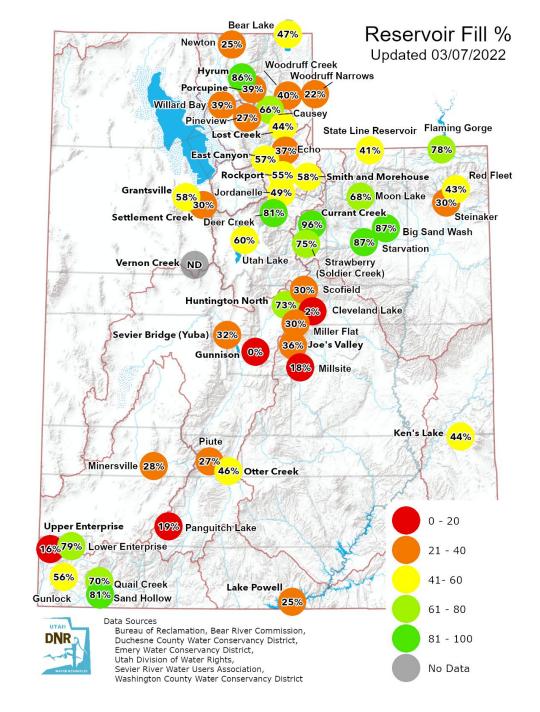
Bear River 51% current 62% last year Cedar/Beaver 27% current 35% last year

Sevier 30% current 42% last year Uintah 75% current 82% last year

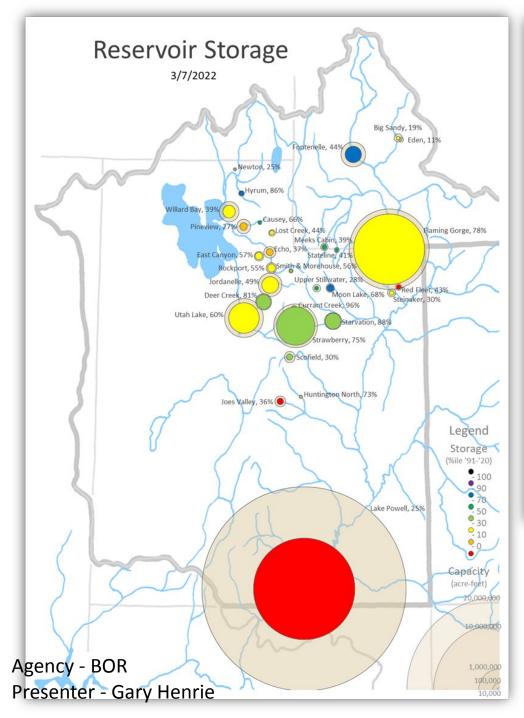
Utah Lake 60% current 74% last year Virgin River 75% current 80% last year

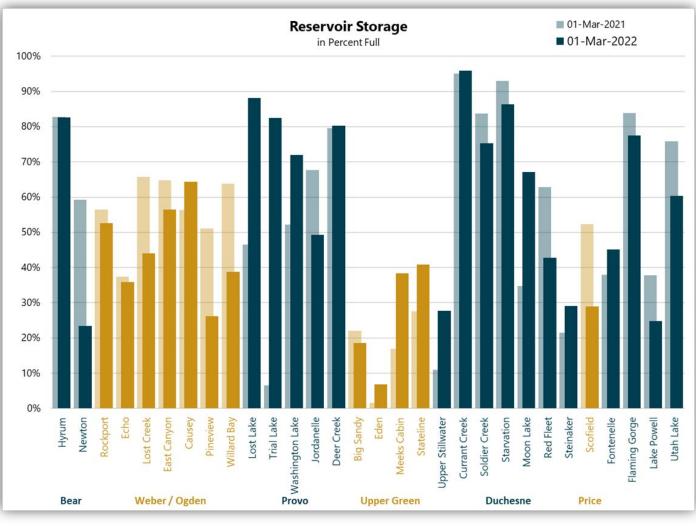
Weber River 41% current 57% last year West Colorado 32% current 55% last year

West Desert 53% current 53% last year



Agency - Division of Water Resources Presenter - Laura Haskell





#### Overall storage:

(Excluding Fontenelle, Flaming Gorge, and Lake Powell)

Current: 61%

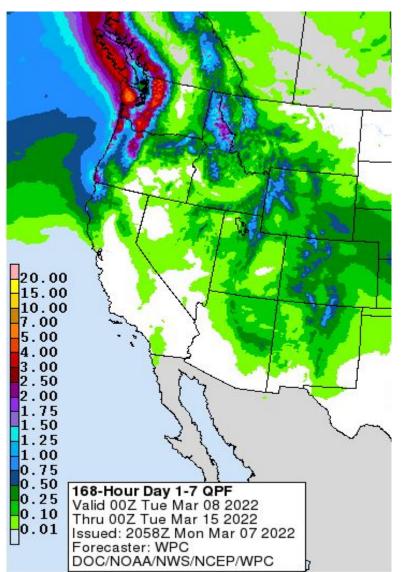
Last year: 72%

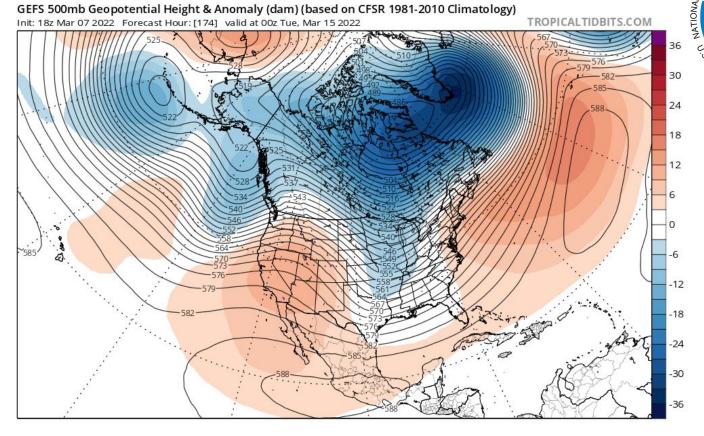
#### Reservoirs storage:

Pineview: -25%
Willard Bay: -25%
Jordanelle: -18%
Strawberry: -8%
Starvation: -7%
Scofield: -23%
Lake Powell: -13%
Utah Lake: -16%



#### Weather Forecast Office Utah Day 1-7 Outlook



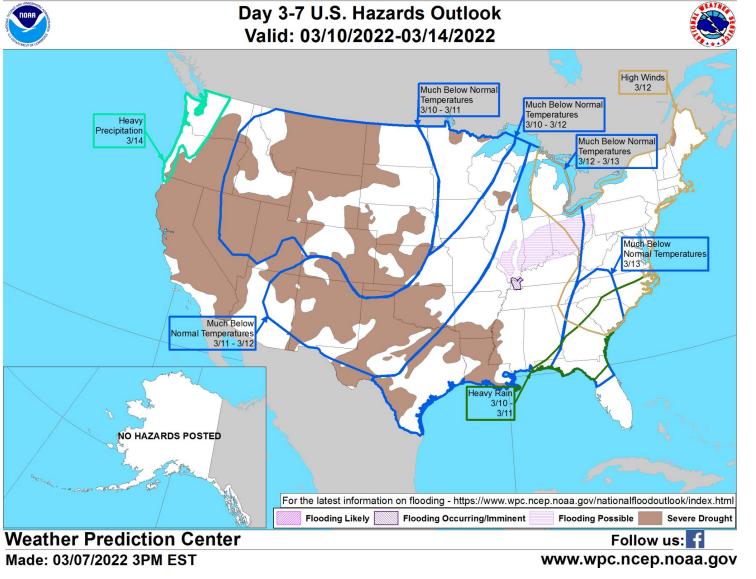


NOAA

- Beneficial storm Tuesday in to Thursday, but normal for this time of year.
- High pressure is forecast to dominate thereafter with minimal additional precipitation.
- Temperatures remain well below average through late week, then moderate to near normal by early next week.

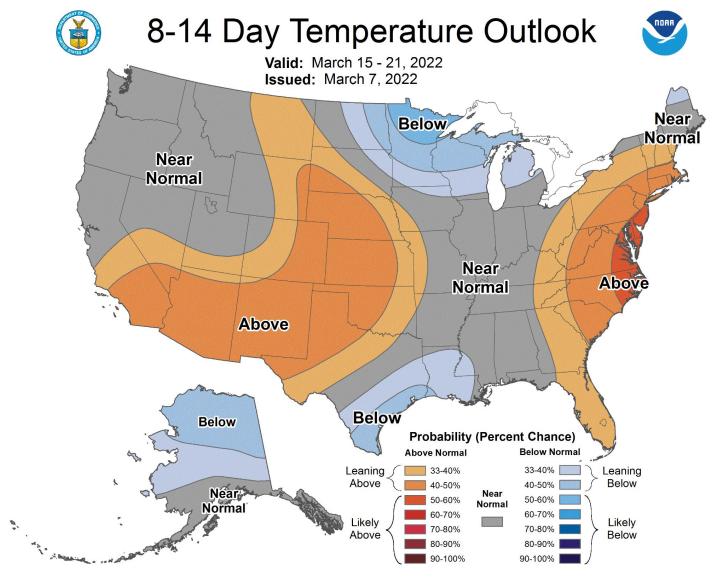


#### Weather Prediction Center U.S. Day 3-7 Hazards Outlook



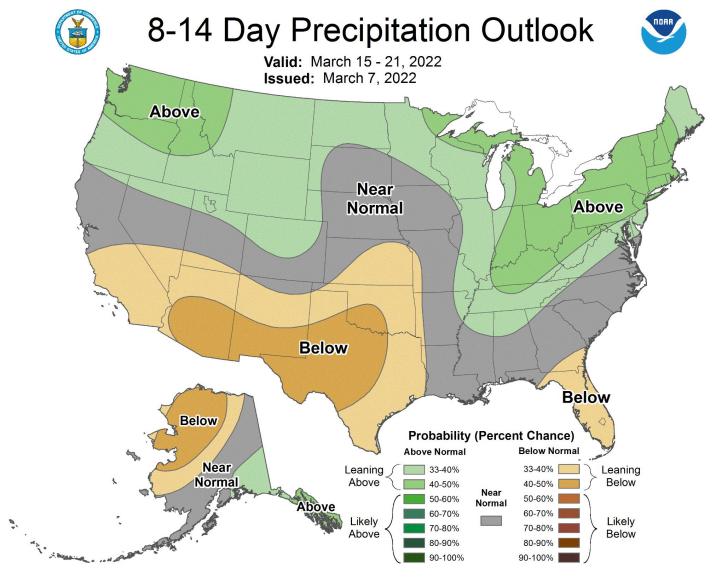


#### Climate Prediction Center 8 to 14 Day Outlooks - Temperature



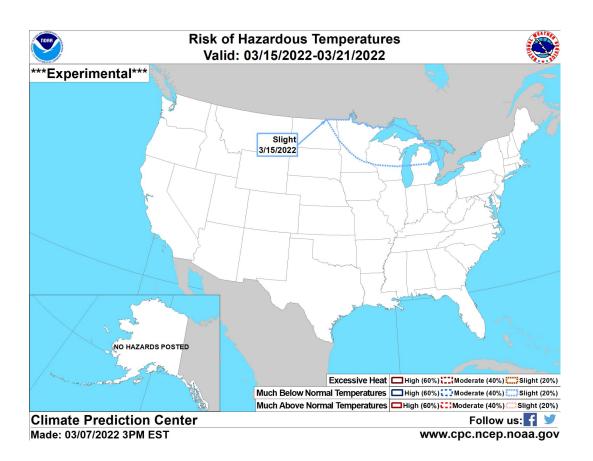


#### Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



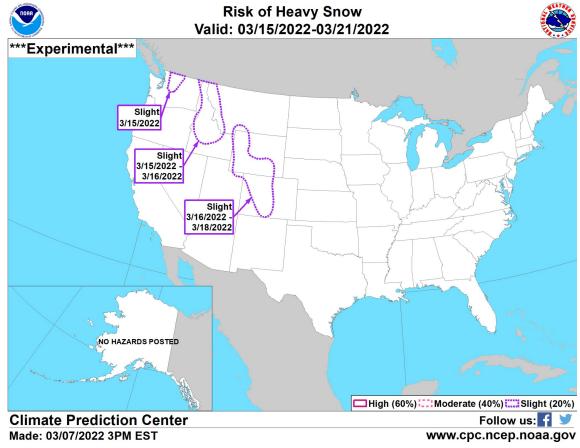


#### Climate Prediction Center U.S. Week-2 Hazards Outlook



- Temperatures largely near normal, no extremes.
- No anomalous snow forecast, but still somewhat active in the north.





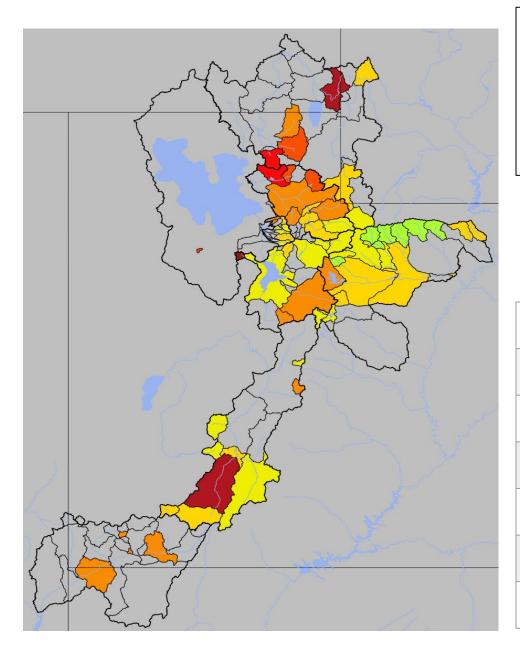
# **Utah Water Supply Forecasts - Overview**

Percent of Average

Below 25% 25% - 35%

35% - 45%

45% - 55% 55% - 65% 65% - 75% 75% - 85% 85% - 95% 95% - 105% 105% - 115% 115% - 125% 125% - 135% 135% - 145% 145% - 155% 155% - 165% 165% - 175% 175% - 185% 185% - 195% 195% - 205% 205% - 225% 225% - 250% Above 250%



- March 1 Forecast for April-July Volume
- April-July Forecast Streamflow Volumes are in percent of <u>1991-2020 average</u>

NOAA

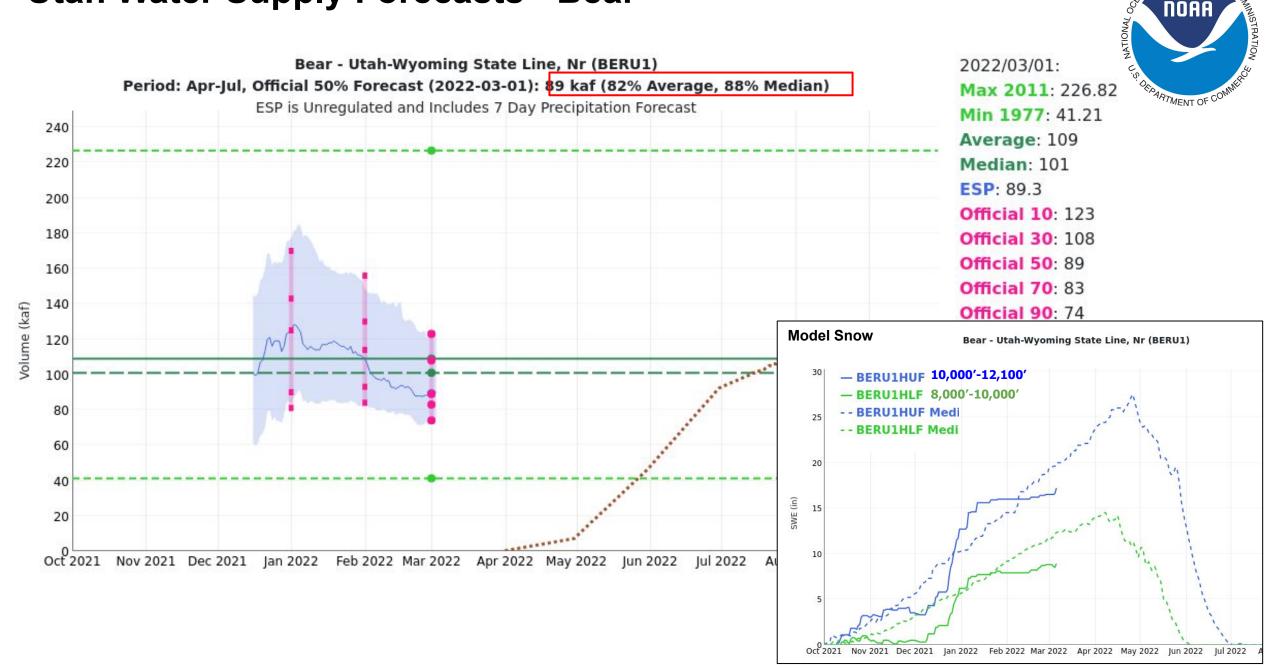
15-25% declines in forecasts from Feb. 1

#### Median value of the...

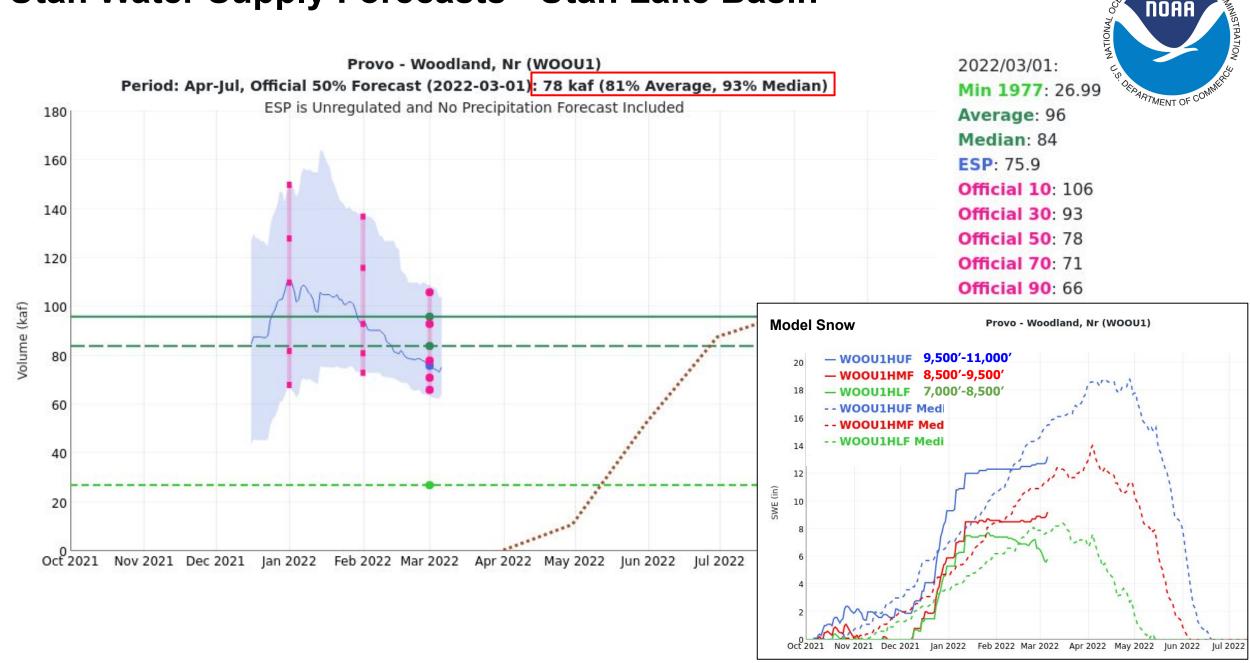
...individual forecasts (in % of average) ...by Forecast Group.

Weber	65%
Bear	60%
Six Creeks	75%
Provo / Utah Lake	70%
Sevier	75%
Duchesne	75%
Virgin	60%

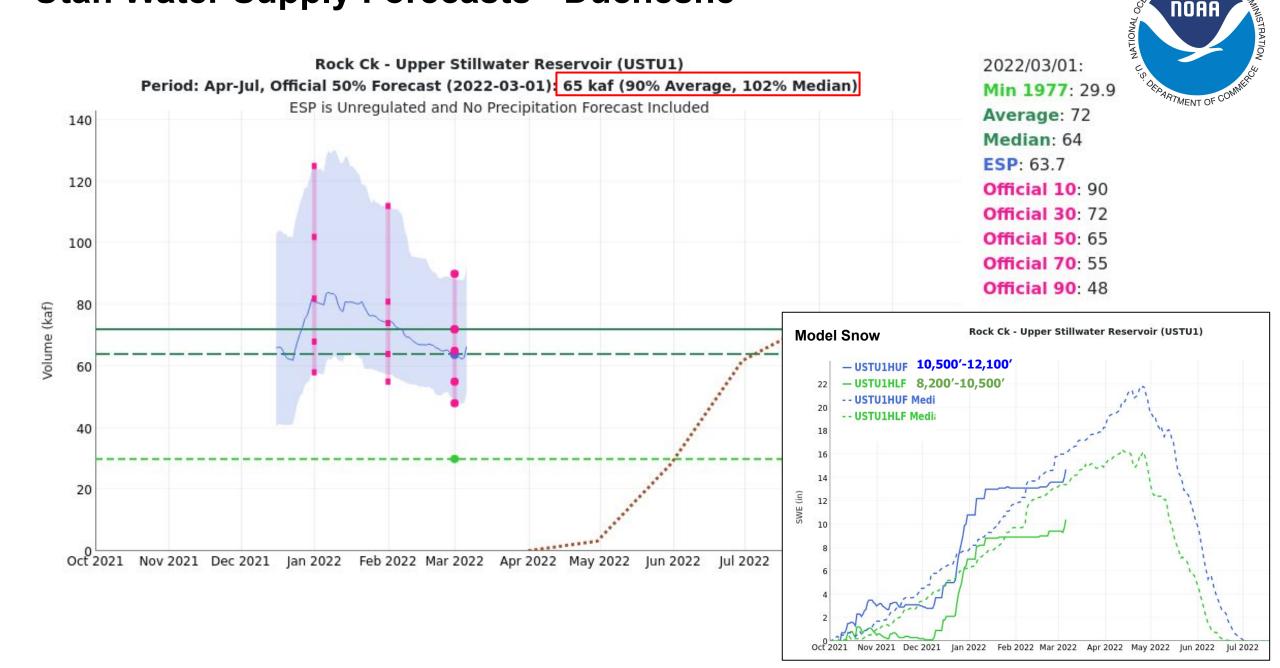
# **Utah Water Supply Forecasts - Bear**



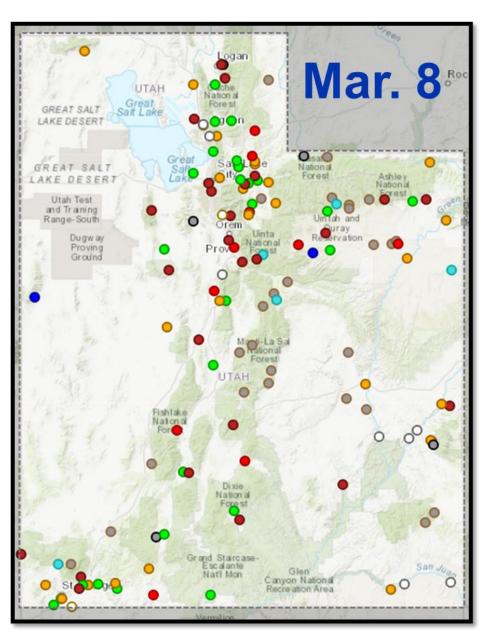
# **Utah Water Supply Forecasts - Utah Lake Basin**



# **Utah Water Supply Forecasts - Duchesne**



#### **Current Streamflow Conditions**

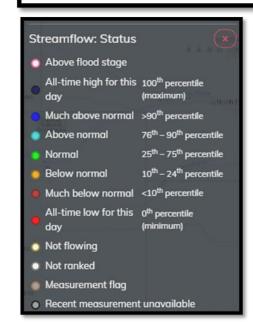


#### Mai

Day-of-Year Status	# Gages	% Gages
All-time high for this day-of-year	0	0.0%
Much above normal for this day-of-year	2	1.5%
Above normal for this day-of-year	5	3.6%
Normal for this day-of-year	28	20.4%
Below normal for this day-of-year	25	18.2%
Much below normal for this day-of-year	25	18.2%
All-time low for this day-of-year	11	8.0%
Not ranked - insufficient record	11	8.0%
Not ranked - no measurement	23	16.8%
Not ranked - stream not flowing	1	0.7%
Not ranked - no recent measurement	6	4.4%

rch 8	Feb.	22
-------	------	----

# Gages	% Gages
0	0.0%
1	0.7%
4	2.9%
24	17.5%
25	18.2%
25	18.2%
11	8.0%
10	7.3%
31	22.6%
2	1.5%
4	2.9%

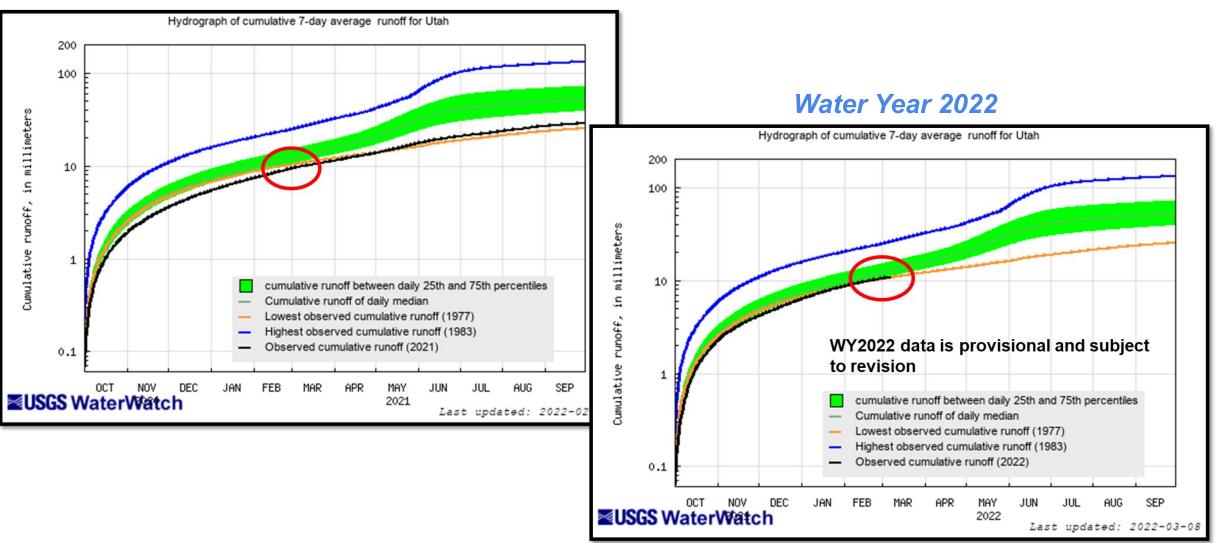


Agency - USGS Utah WSC Presenter - Ryan Rowland



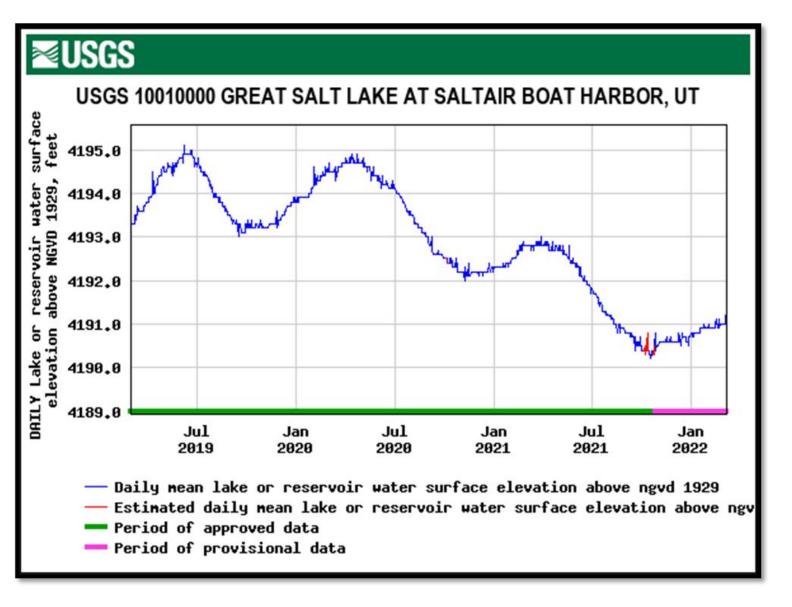
#### **Area Based Cumulative Runoff**

#### Water Year 2021





#### **Great Salt Lake Water Surface Elevation**



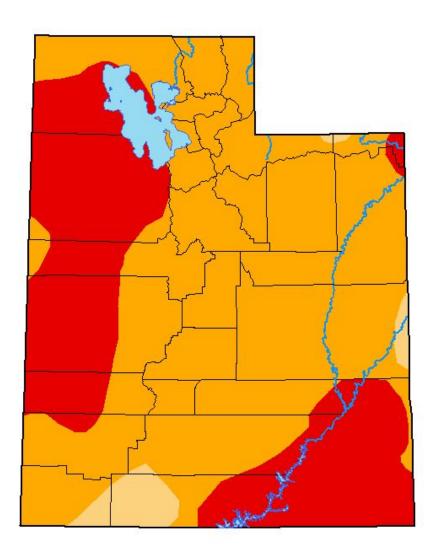
- Mean daily value 3/7/2022
   = 4,191.1' (same as last meeting)
- 4,190.2'10/18/2021(new historic low)



# U.S. Drought Monitor Utah

#### March 1, 2022

(Released Thursday, Mar. 3, 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

#### Author:

Brad Rippey U.S. Department of Agriculture









droughtmonitor.unl.edu