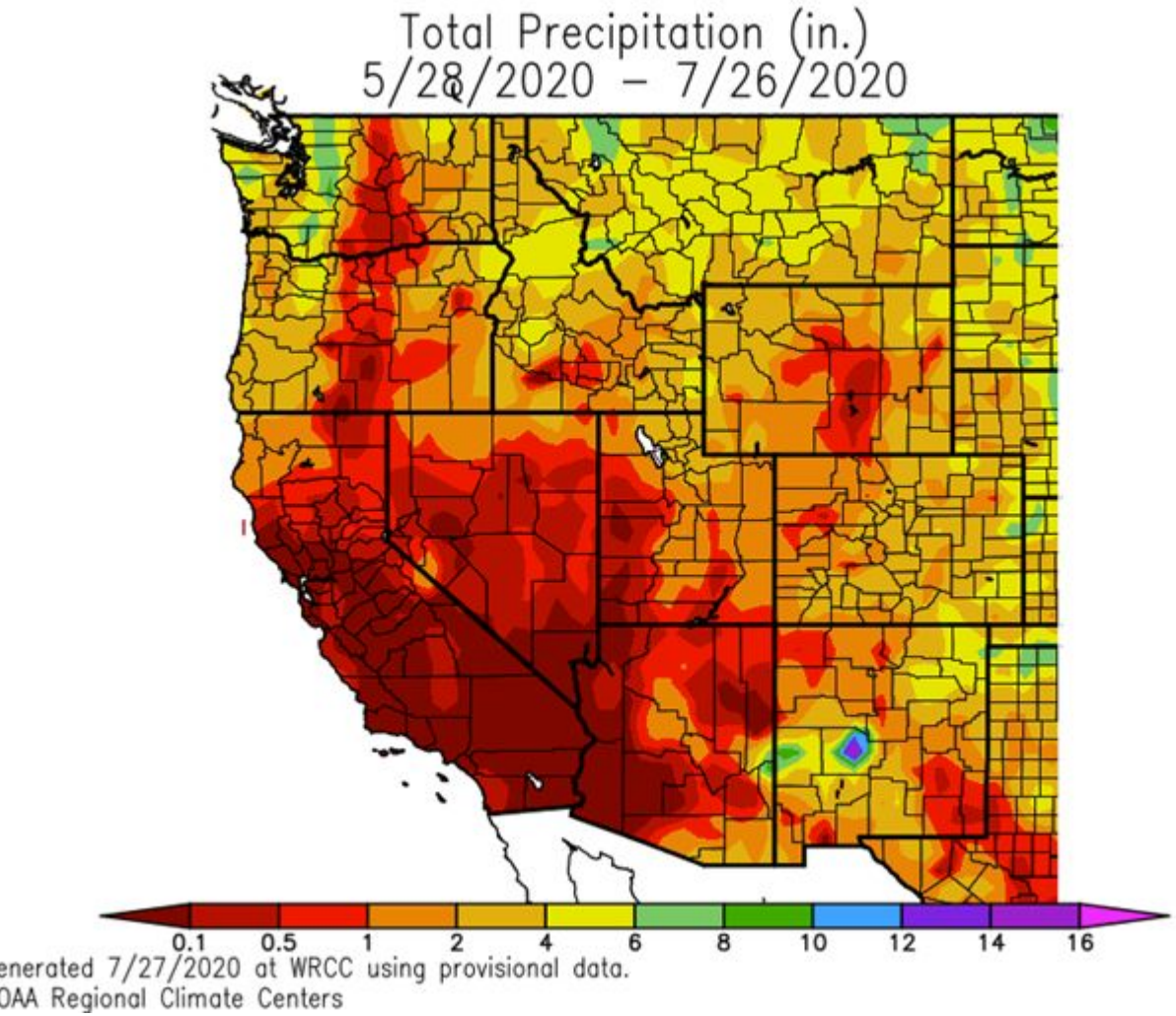
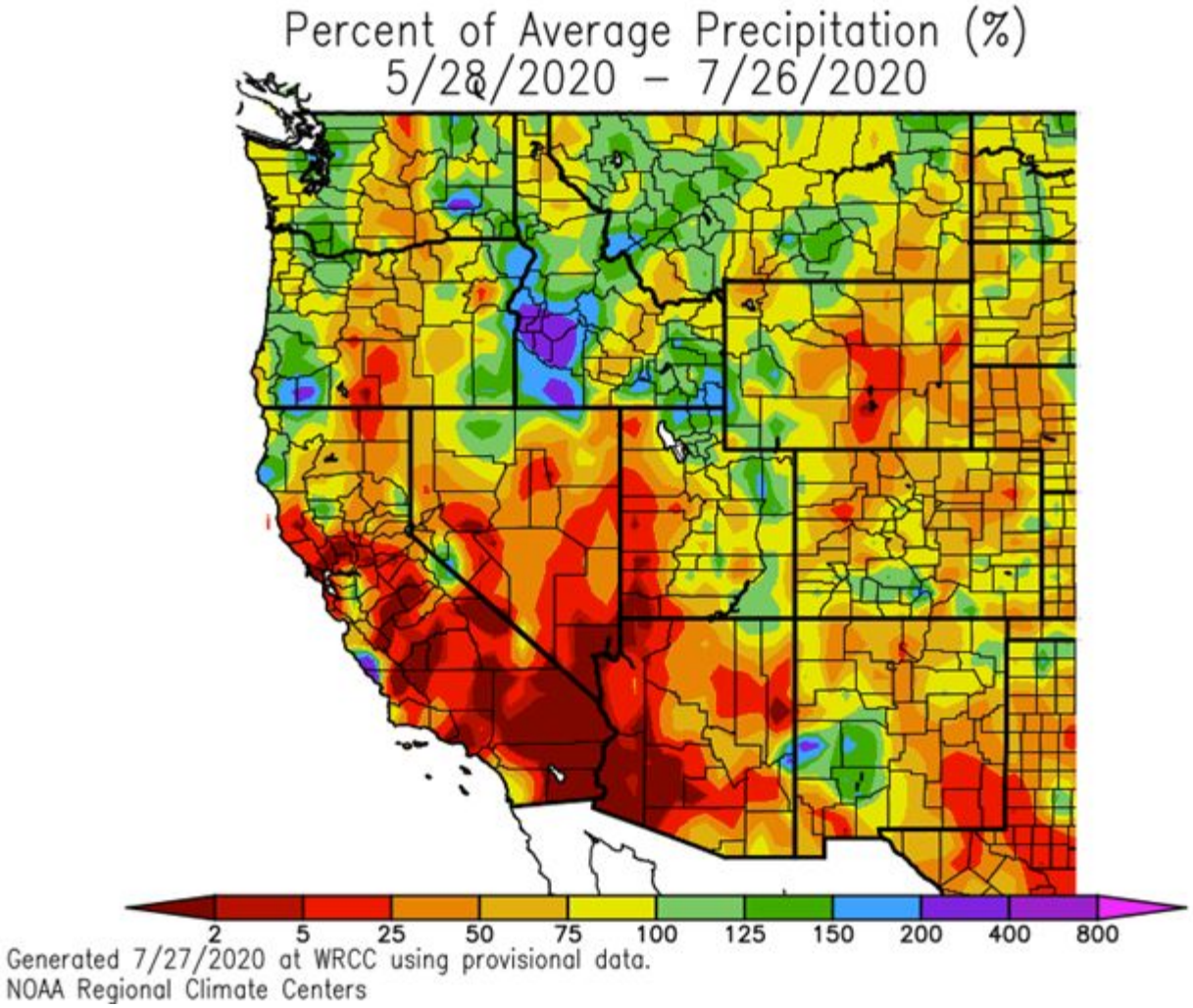
Utah Drought Monitor Feedback Webinar

July 28, 2020

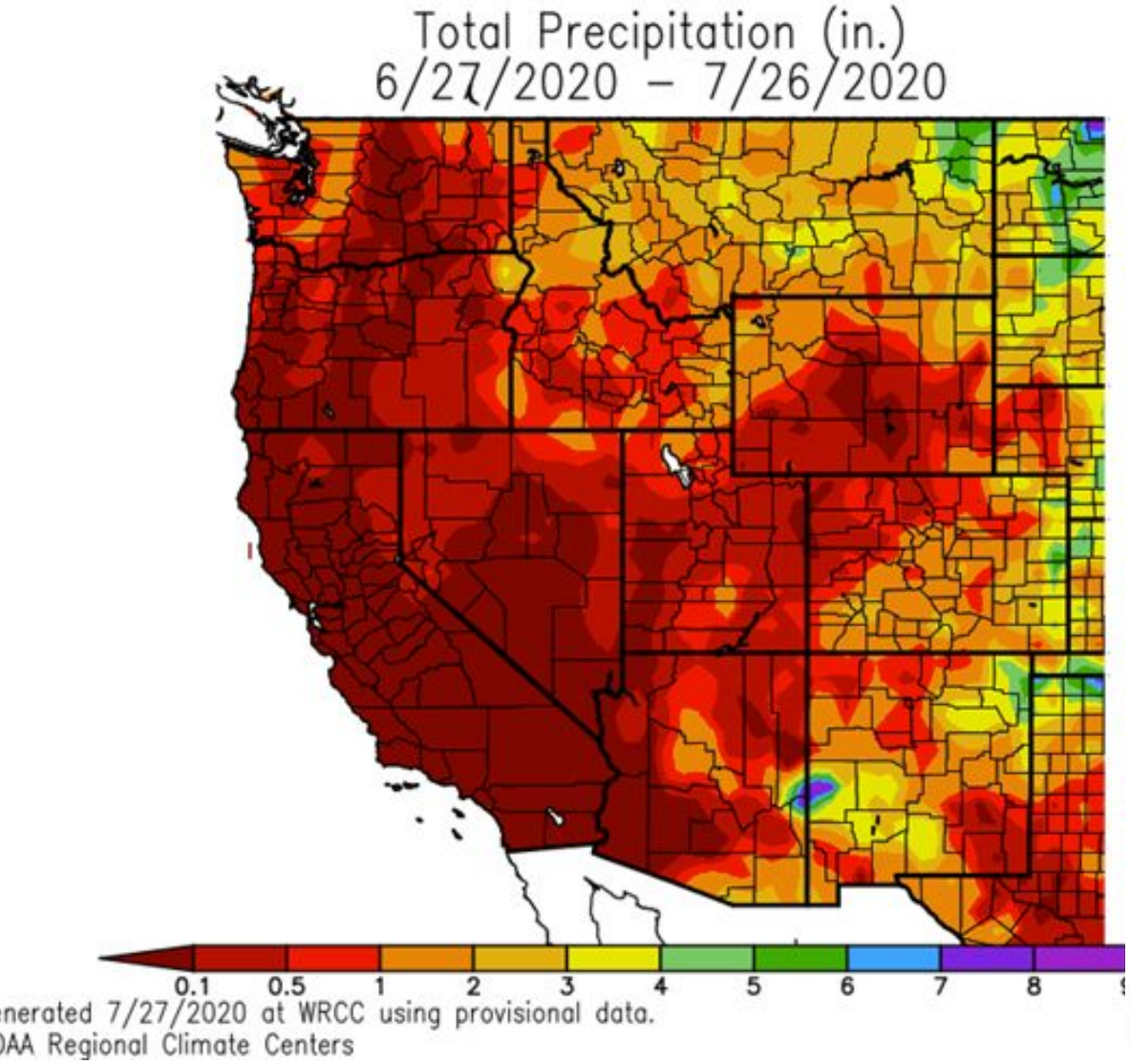
Precipitation 60 day history (Percent of Average)

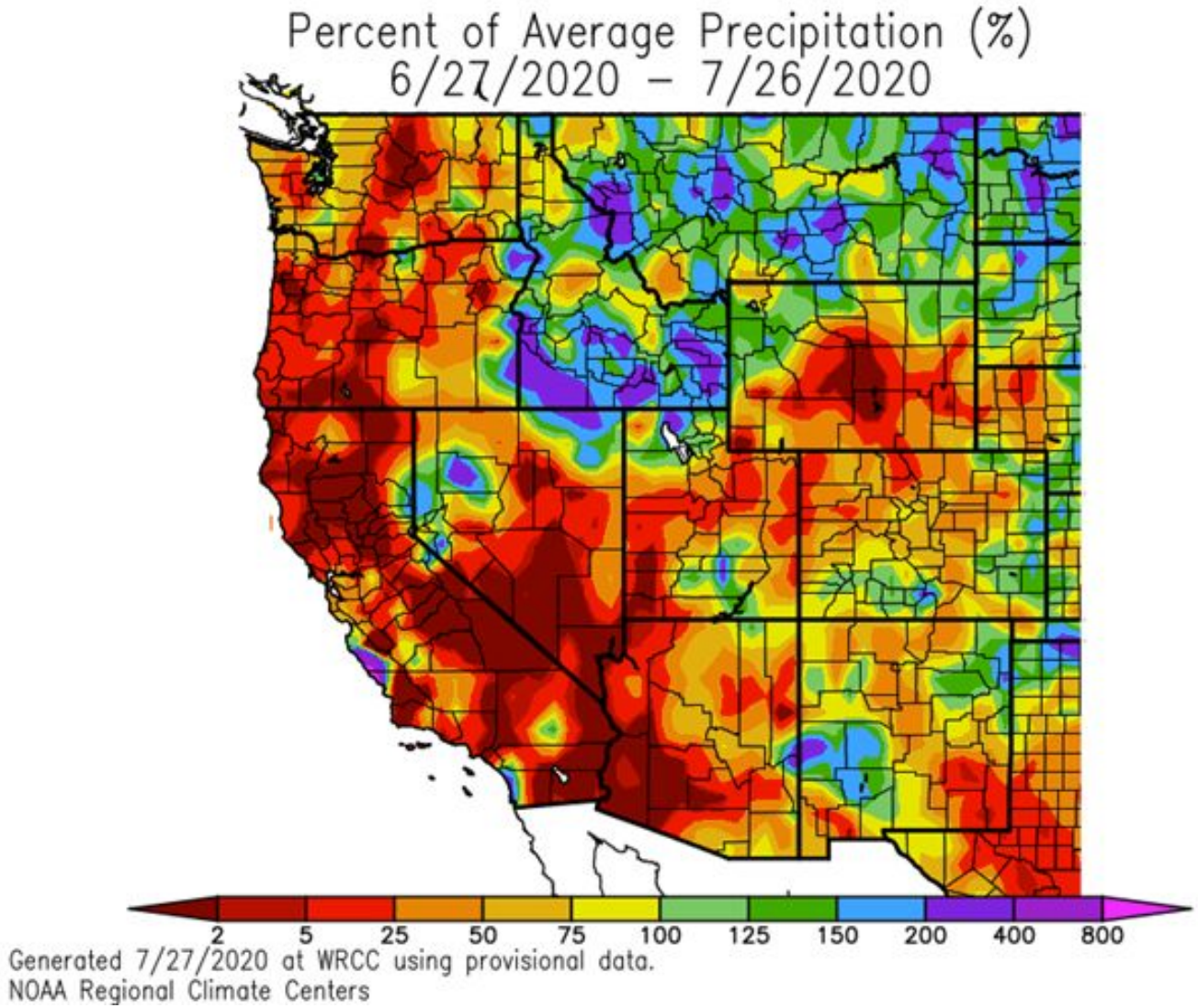




Agency - Utah Climate Center
Presenter - Jon Meyer

Precipitation 30 day history (Percent of Average)





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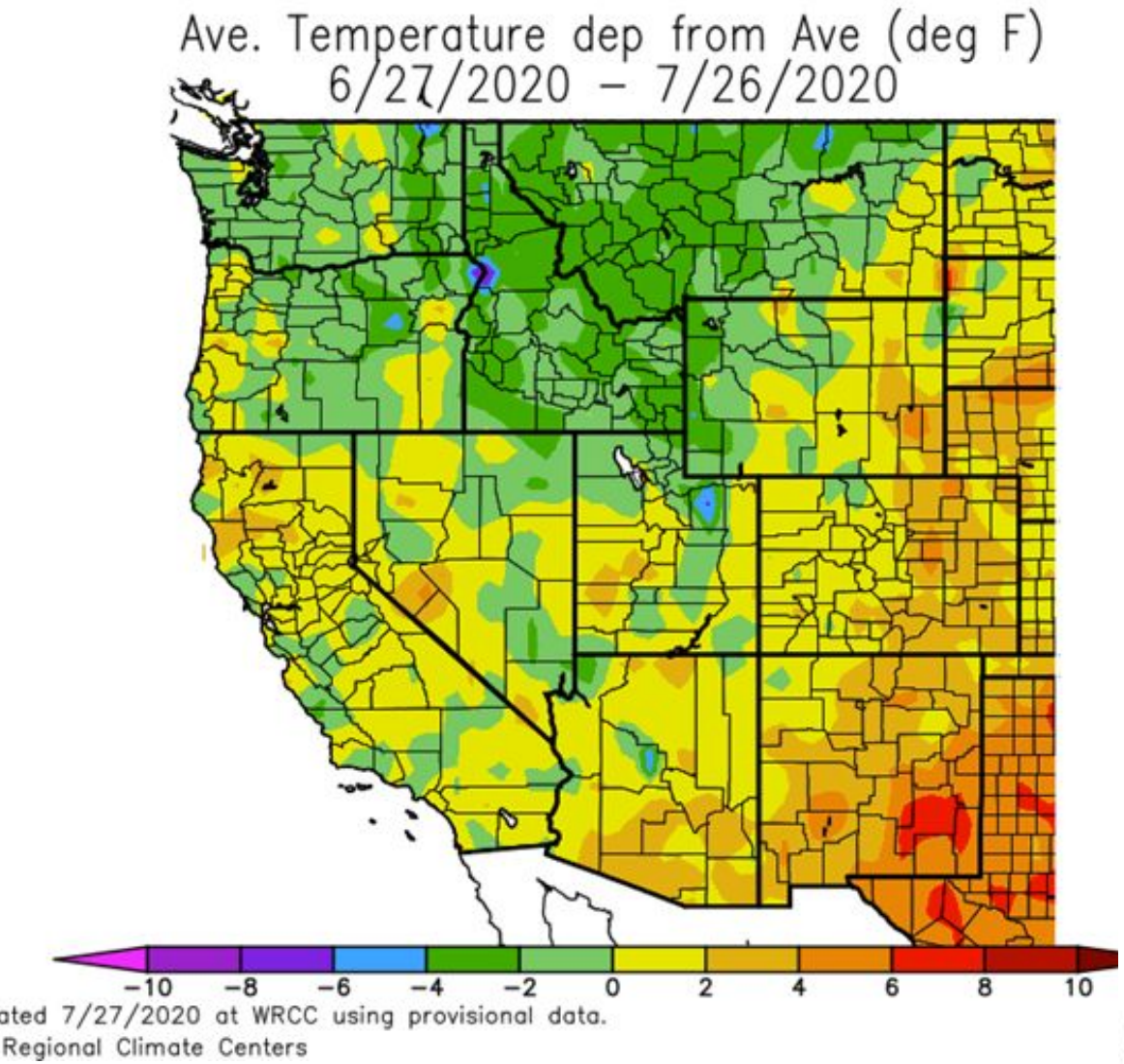
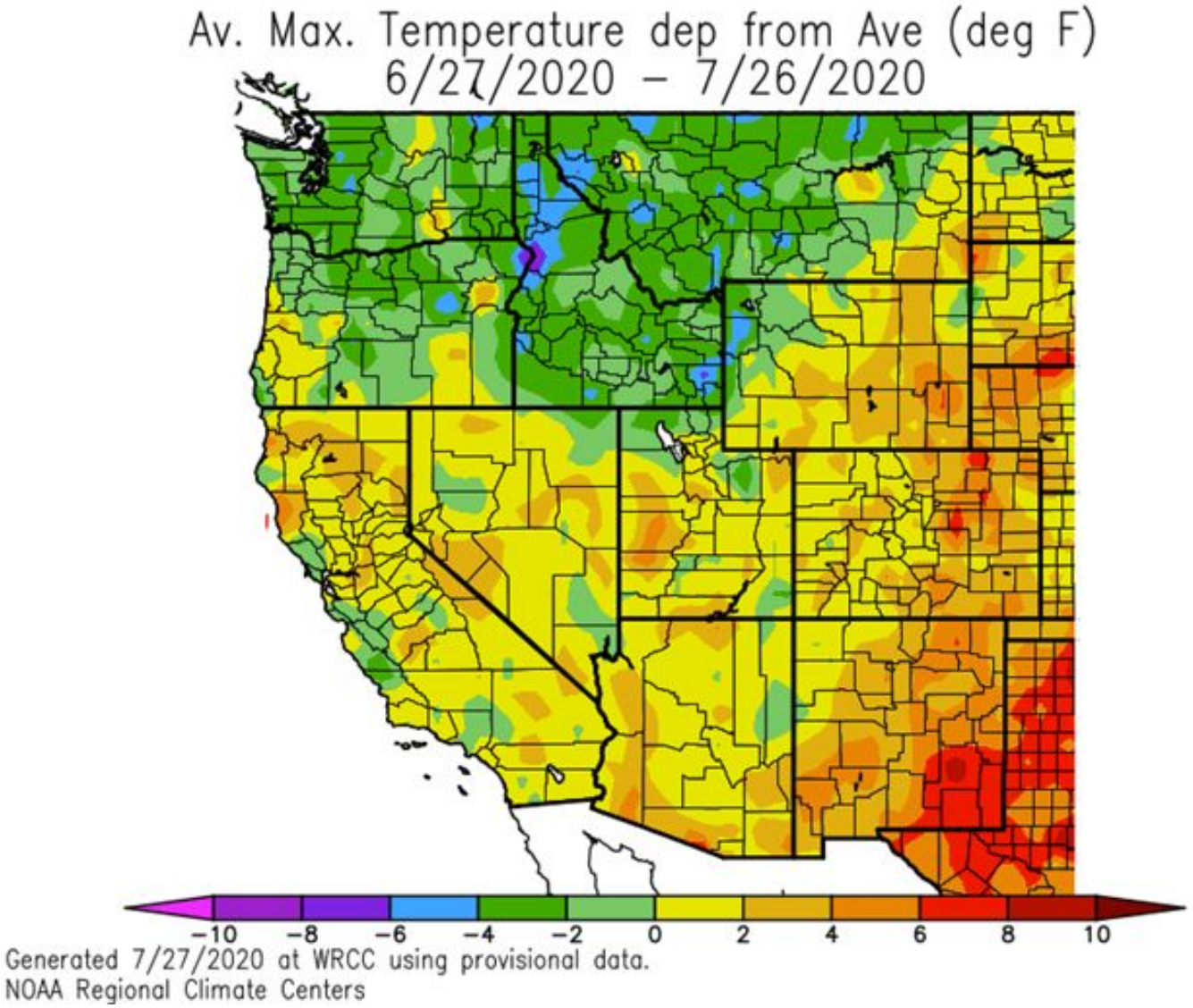
Temperature 30 day (Related to Average)





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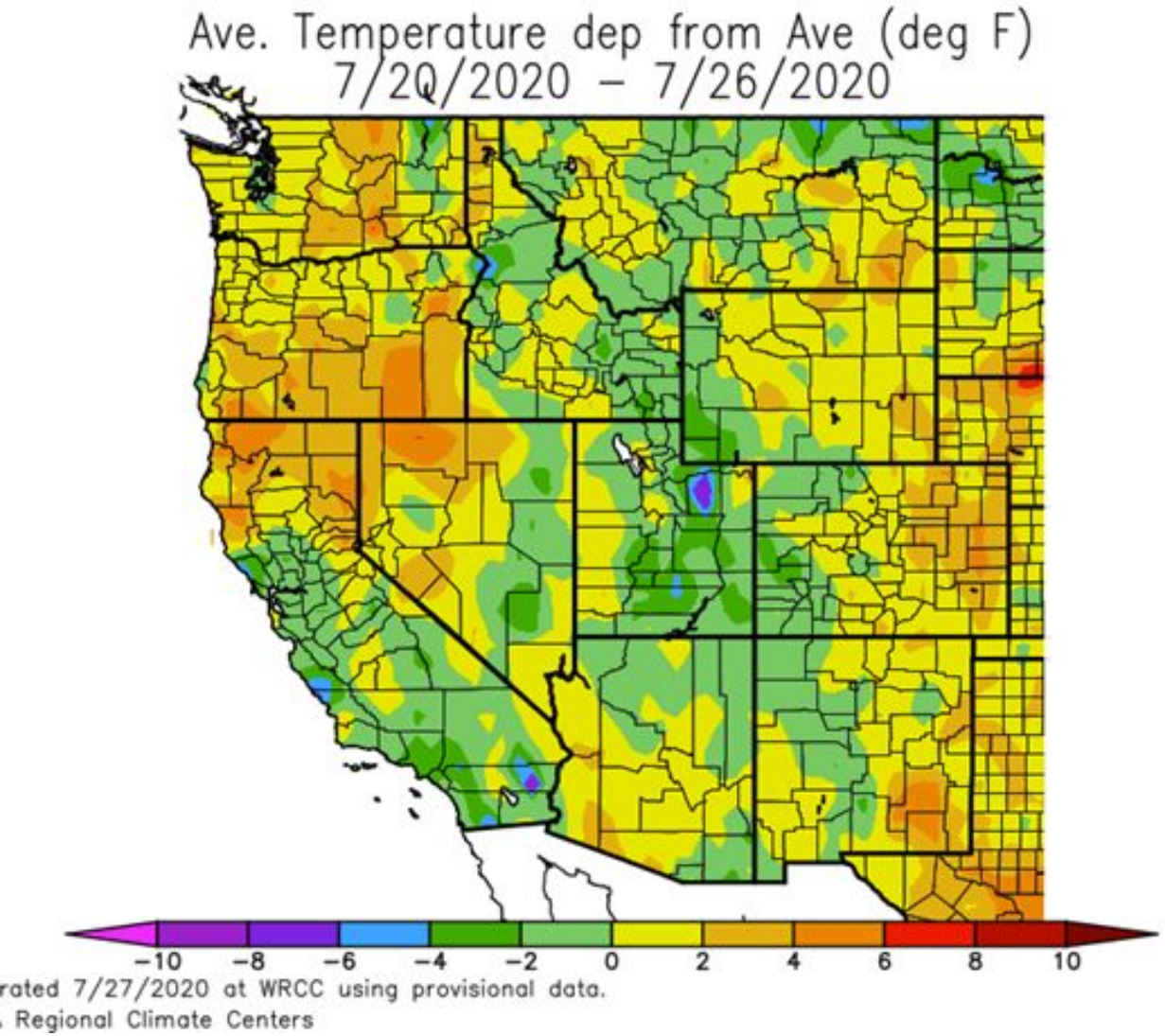
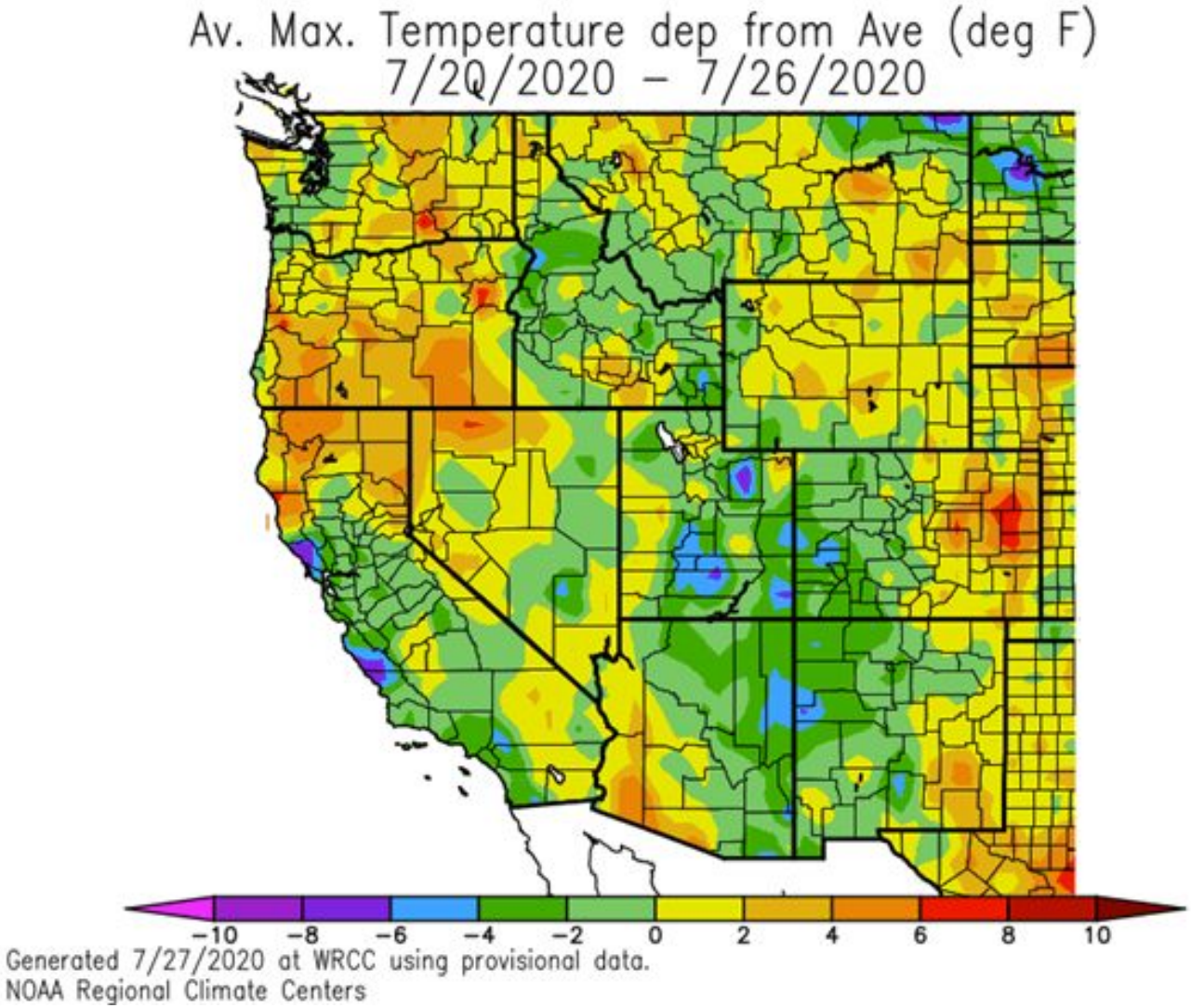
Temperature 7 day (Related to Average)





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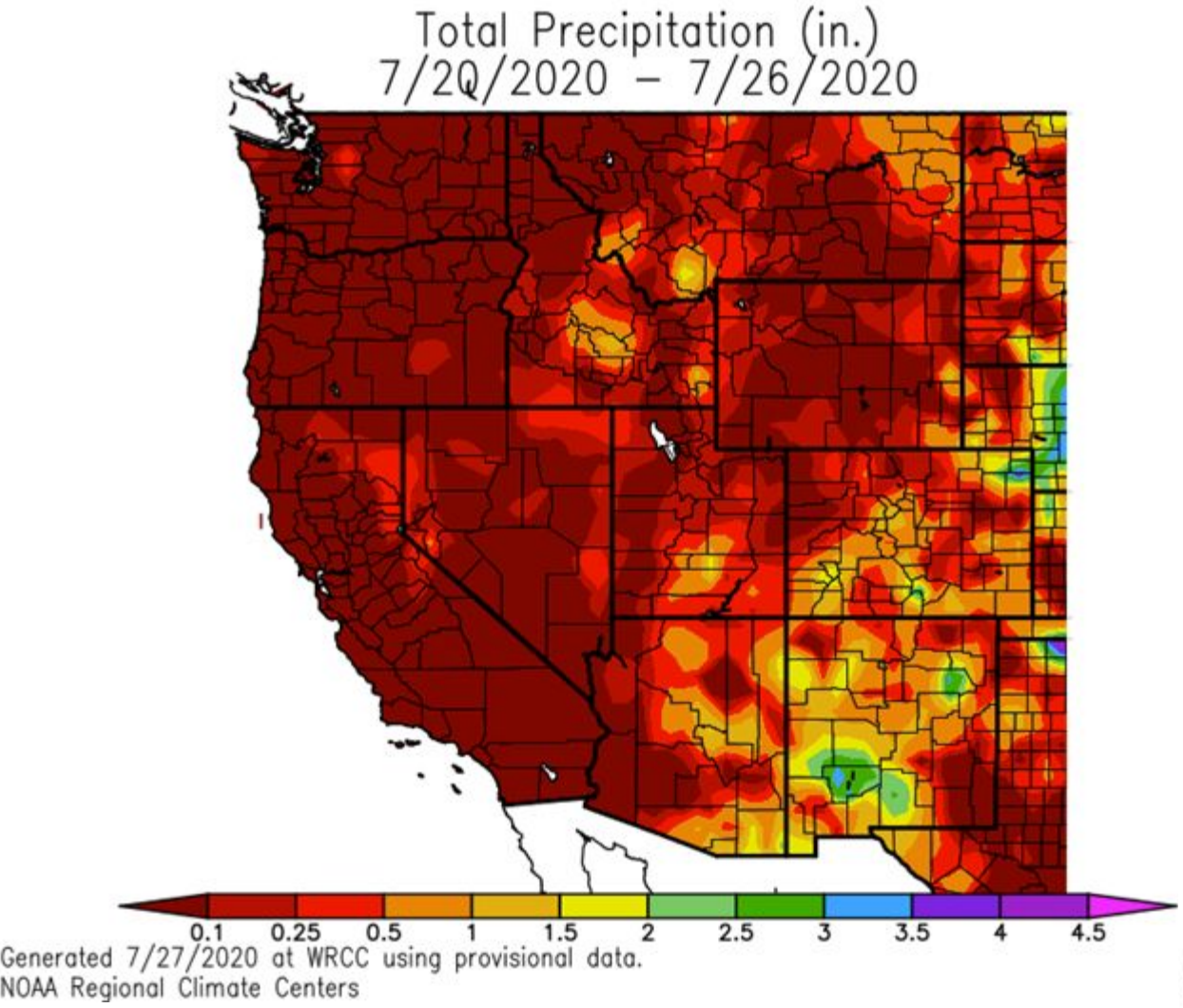
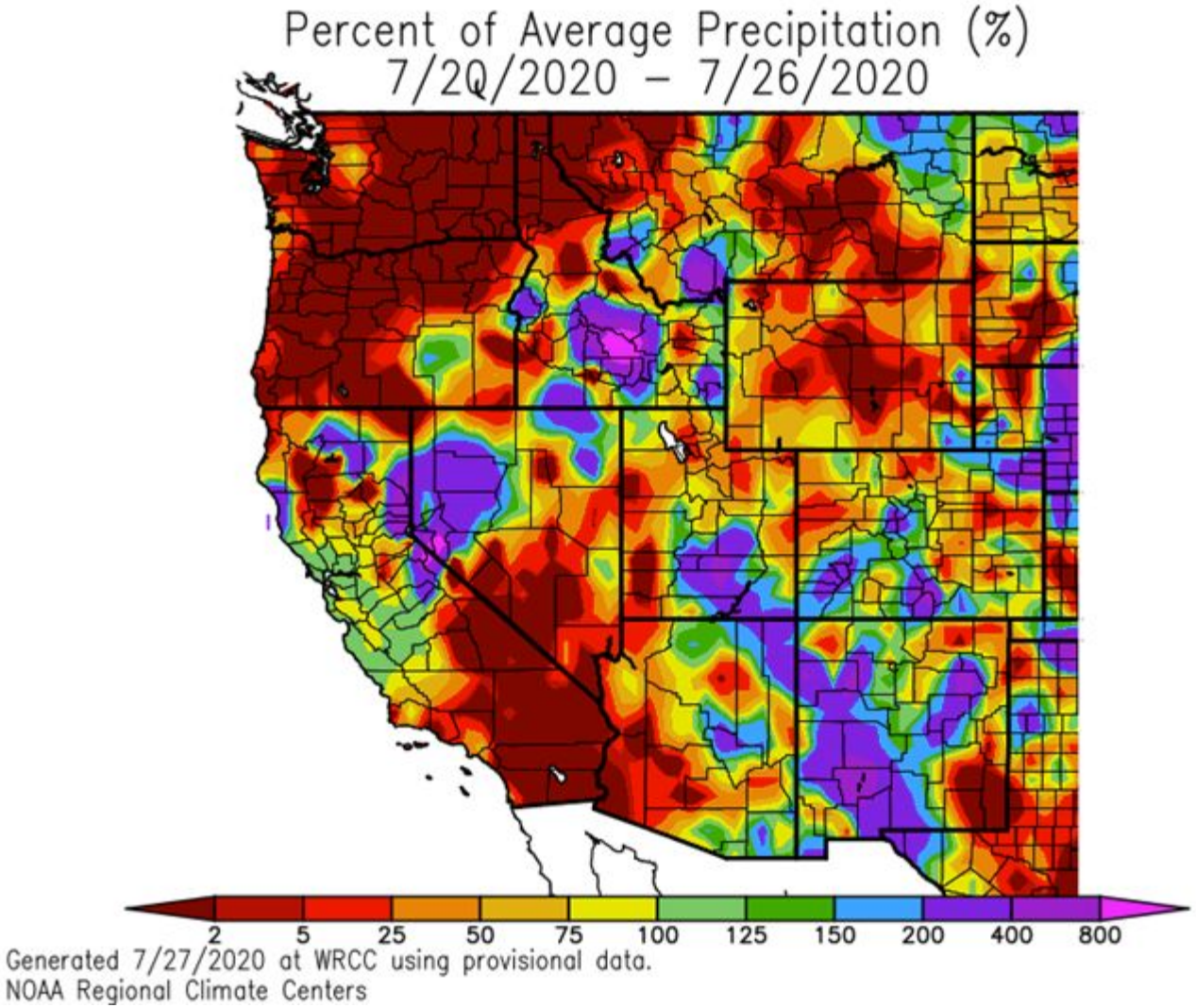
Precipitation 7 day history (Percent of Average)





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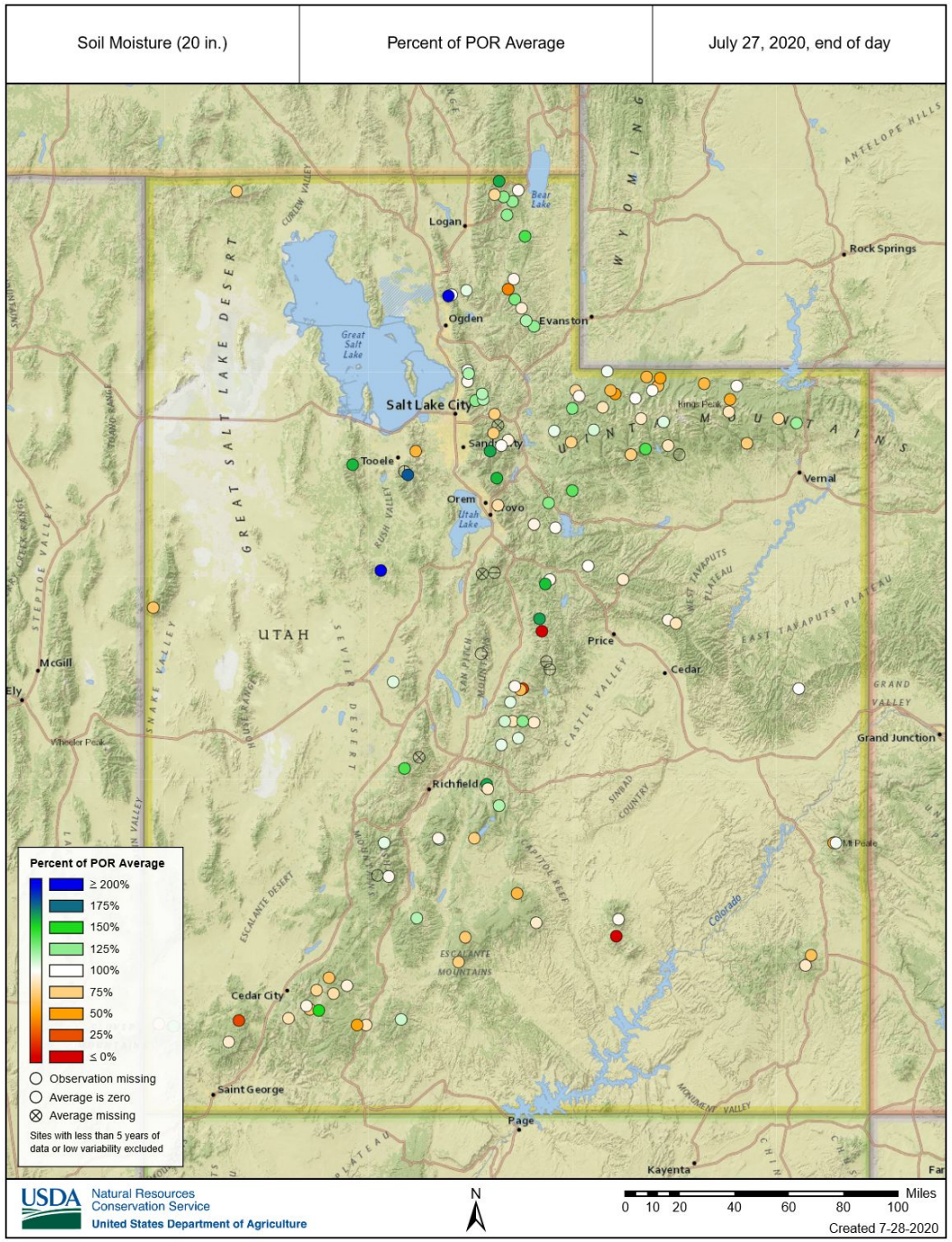
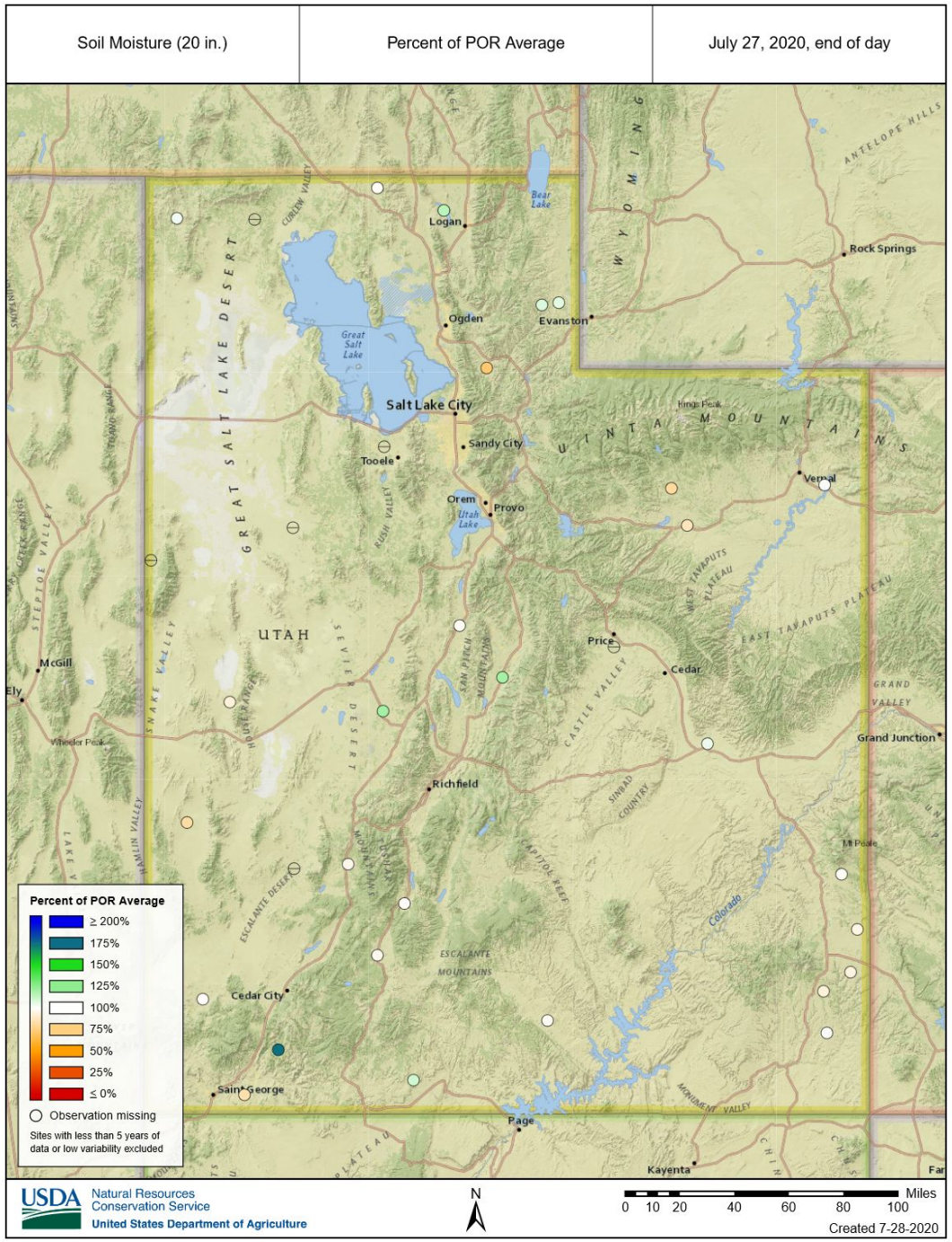
Presenter - Jon Meyer

Soil Moisture (Current) Mountain sites (SNOTEL)



Agency - NRCS Snow Survey
Presenter - Jordan Clayton

Soil Moisture (Current) Valley locations (SCAN)



Agency - NRCS Snow Survey
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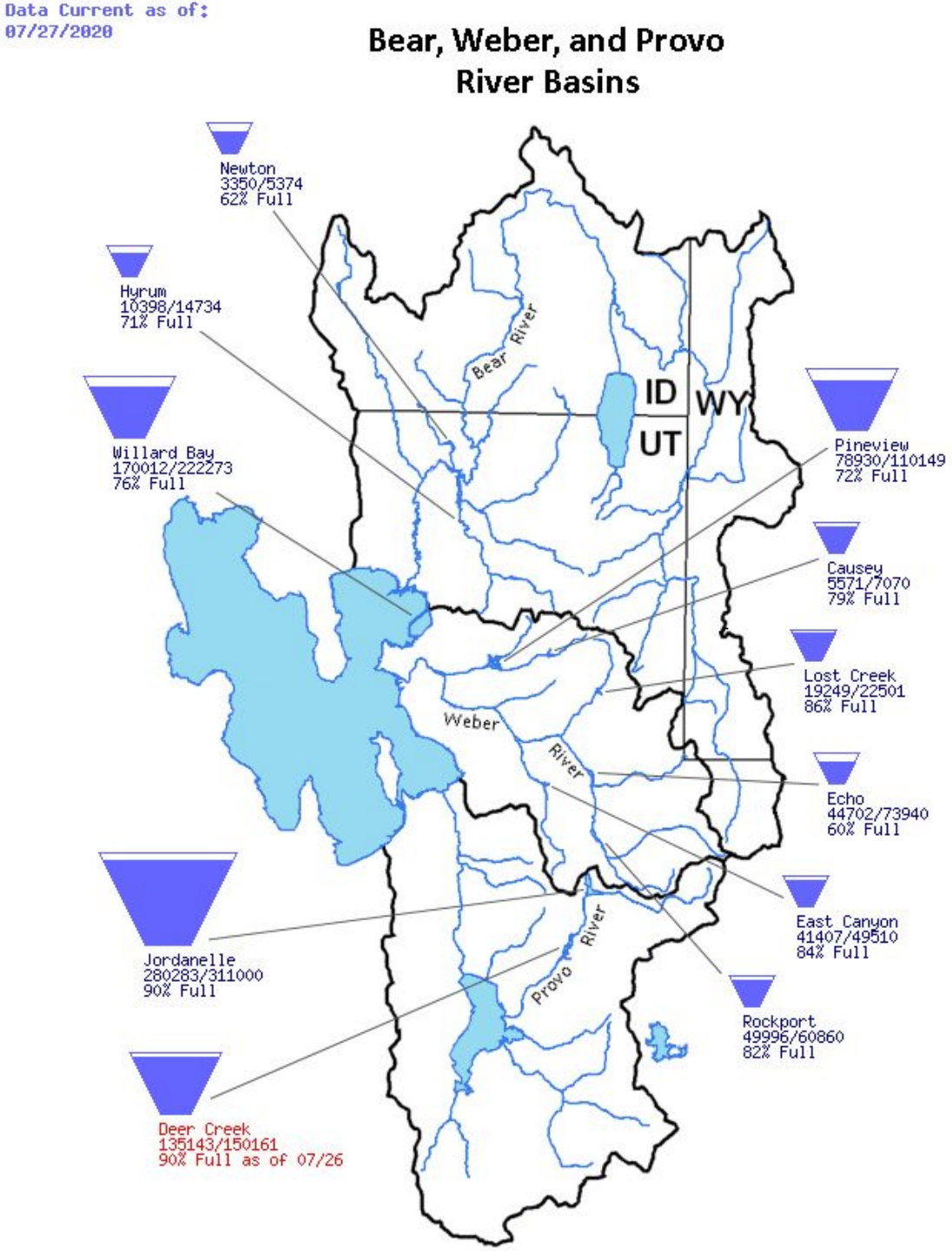
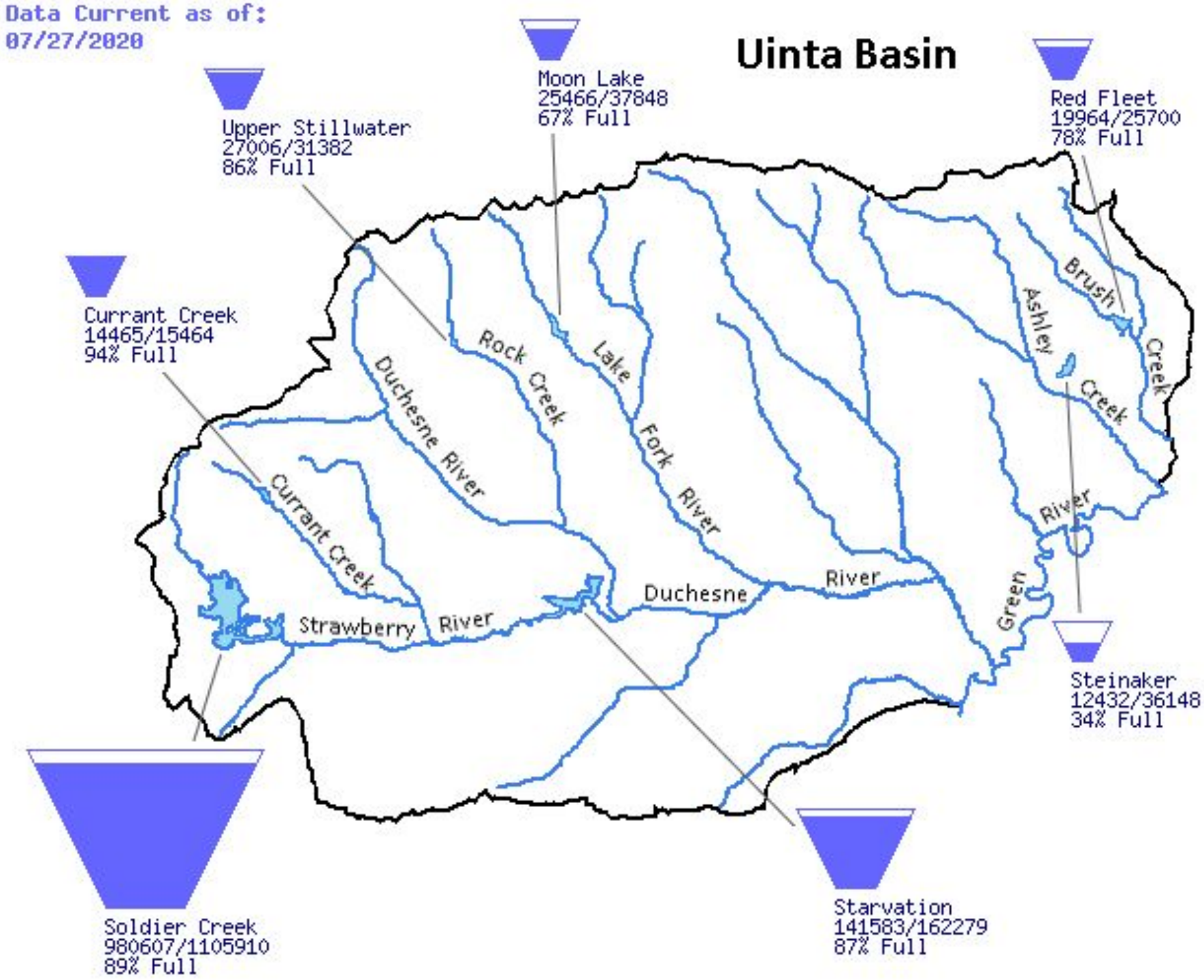
Reservoir Levels
USBR



https://www.usbr.gov/uc/water/basin/

Presenter - Laura Haskell

Reservoir Levels
USBR



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Reservoir Levels
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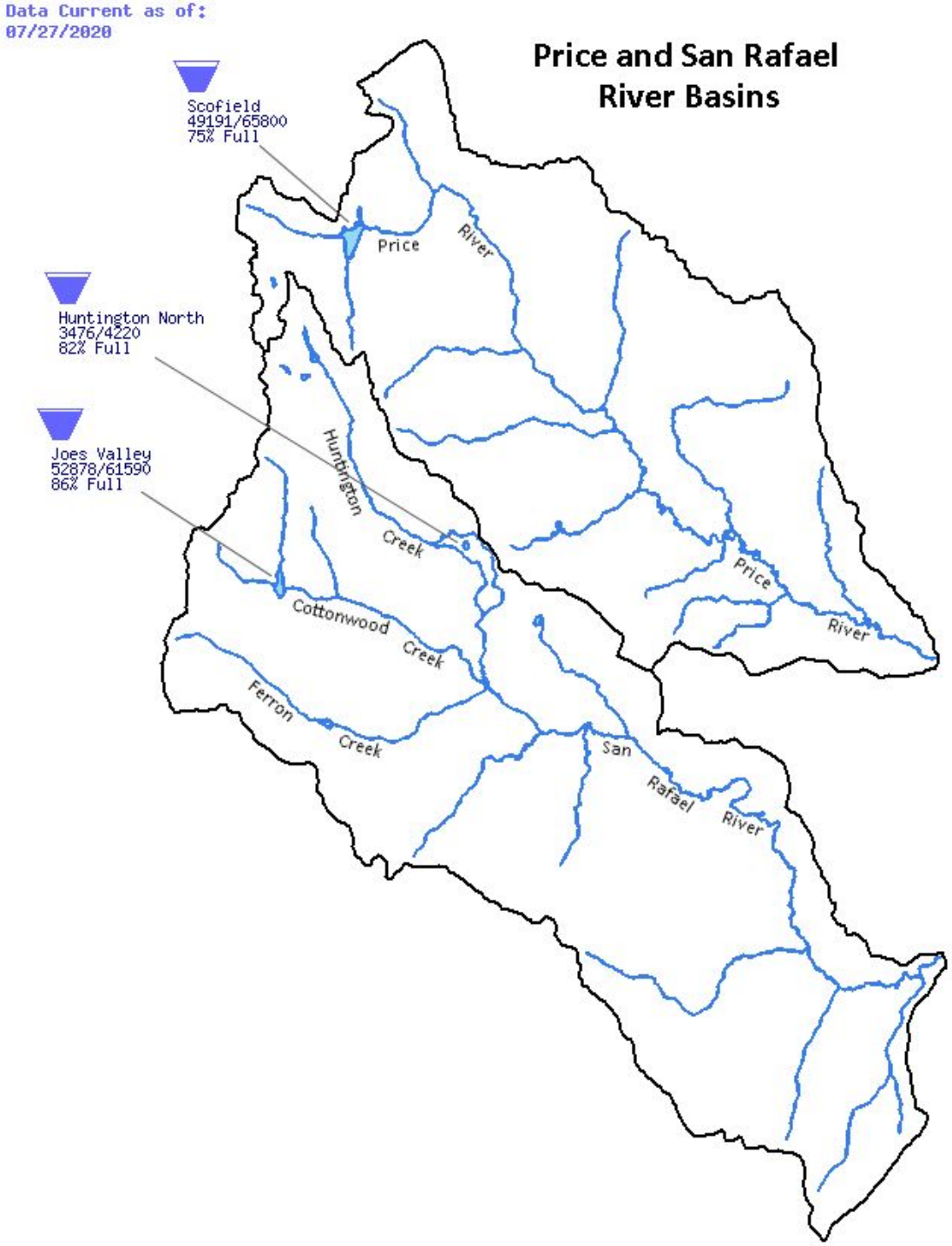

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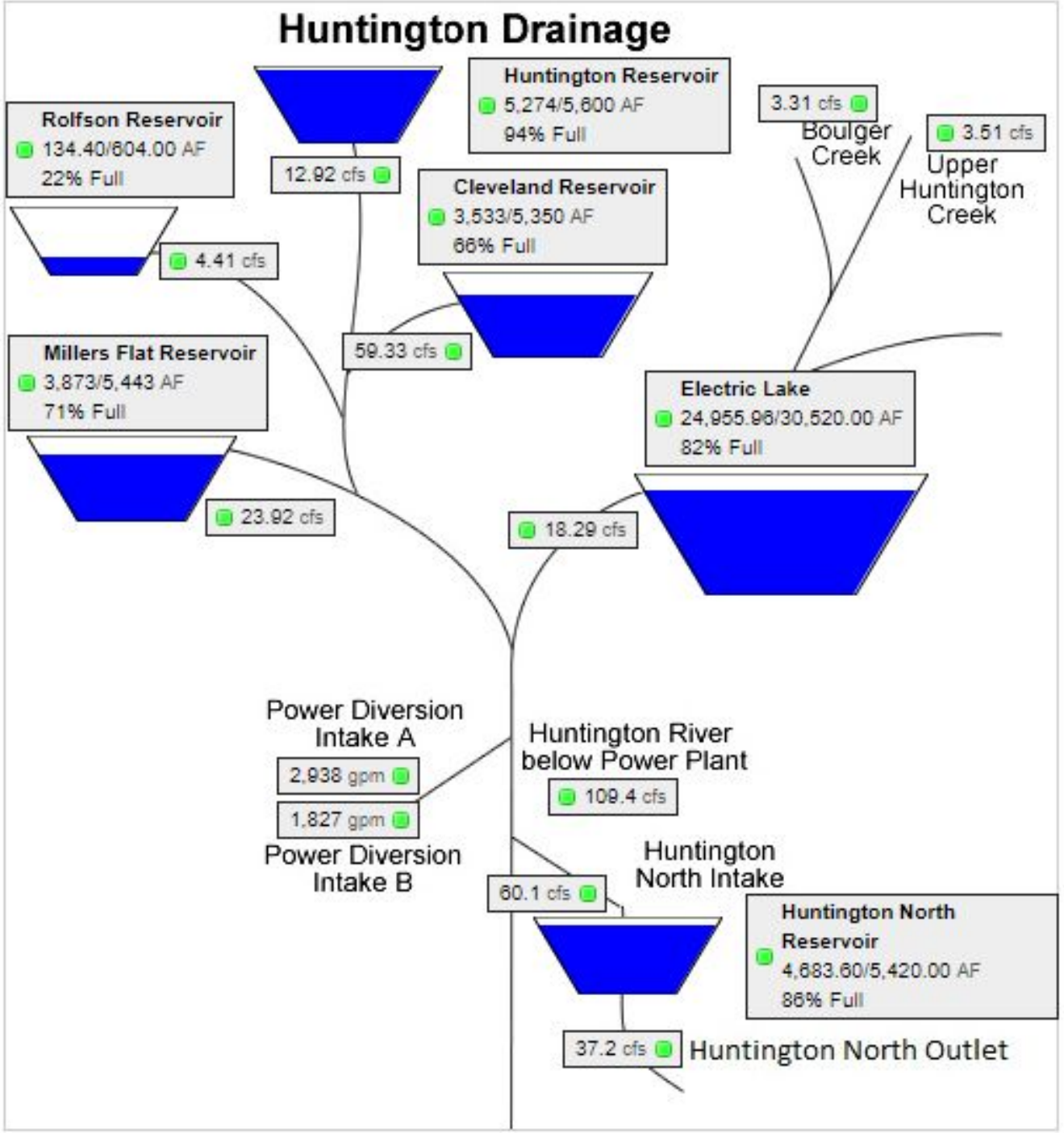
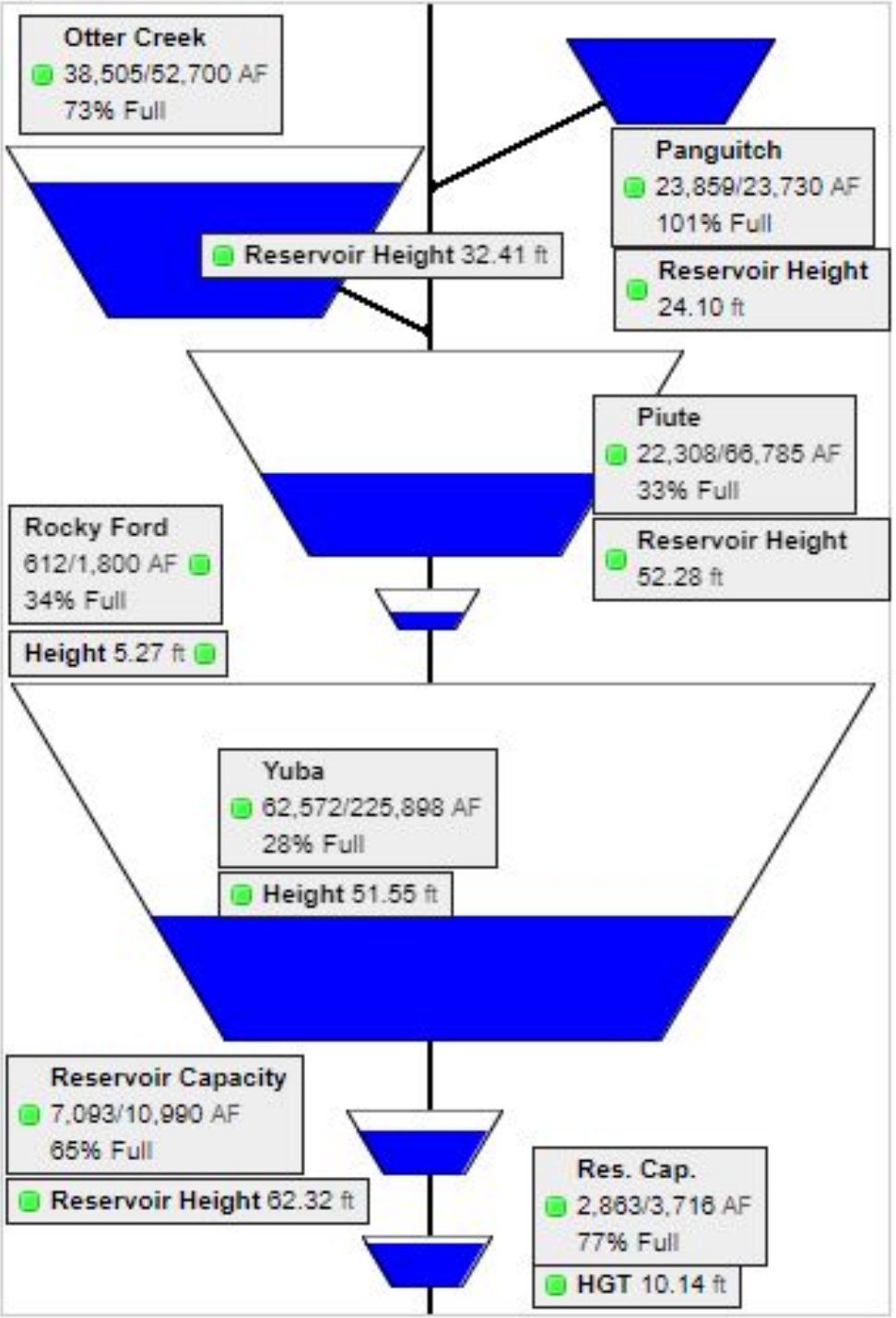
Reservoir Levels
Emery Water
Conservancy District



http://www.ewcd.org/reservoirs/upper-huntington-drainage-teacups/

Presenter - Laura Haskell

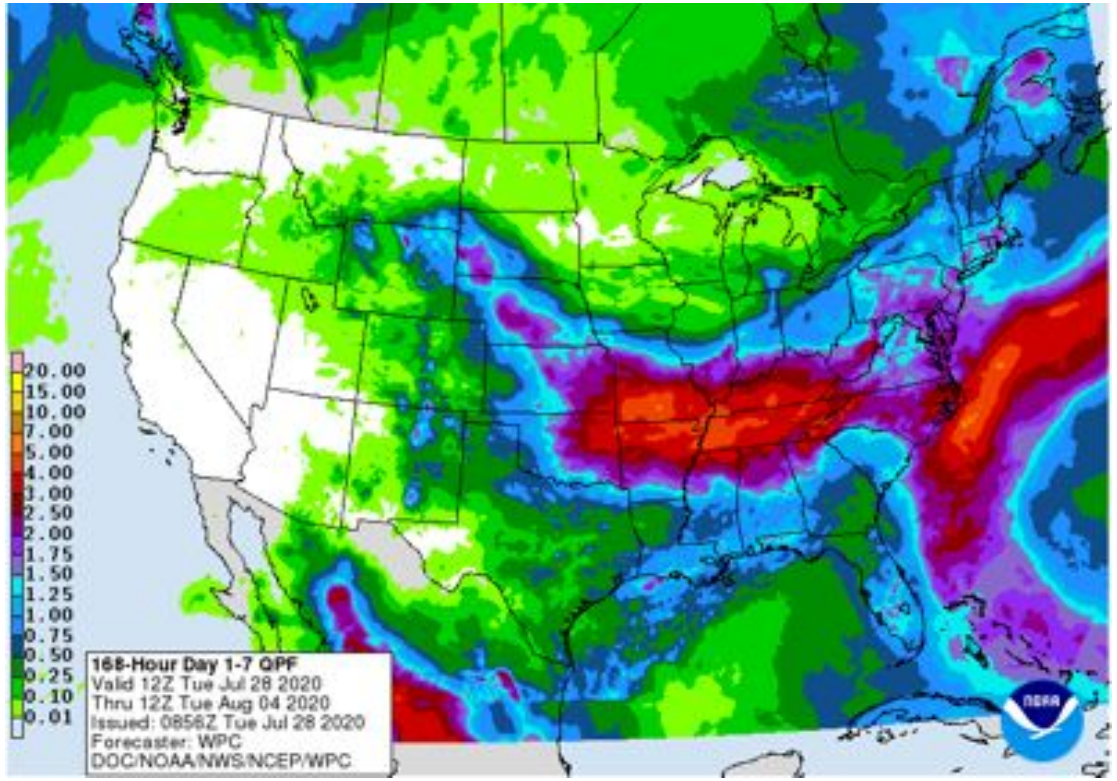
Reservoir Levels
Sevier River Water Users



http://www.sevierriver.org/reservoirs/teacup-diagram-of-reservoirs/

Presenter - Laura Haskell

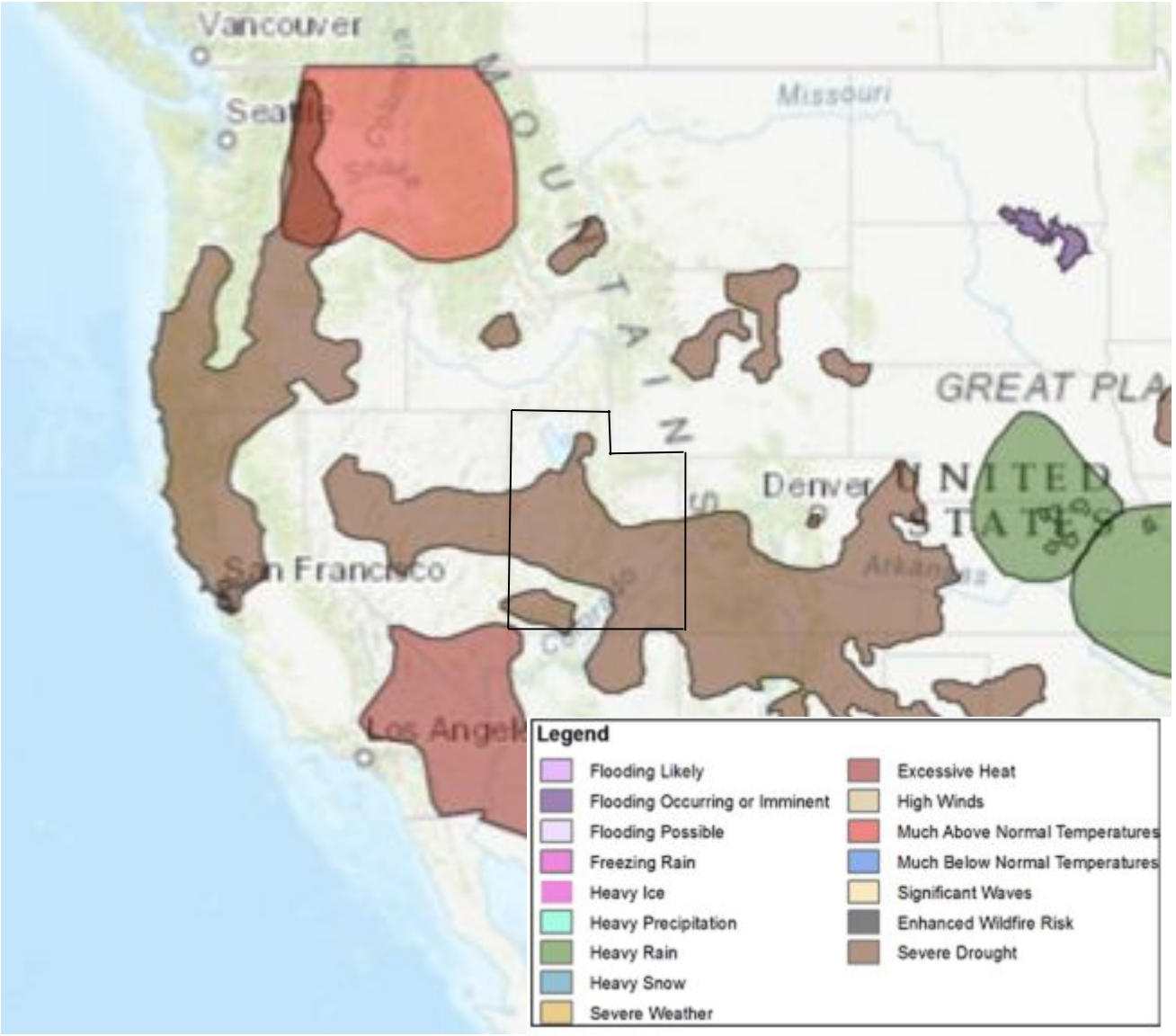
Weather Forecast Office Utah Day 1-7 Outlook



- Scattered showers and storms north and east today.
- High pressure will elongate over the desert southwest mid/late week.
- Monsoonal moisture will remained pinned over central Mexico.
- Dry southwest flow will dominate the area.
- Temperatures in large 3-5 degrees above normal.

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

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



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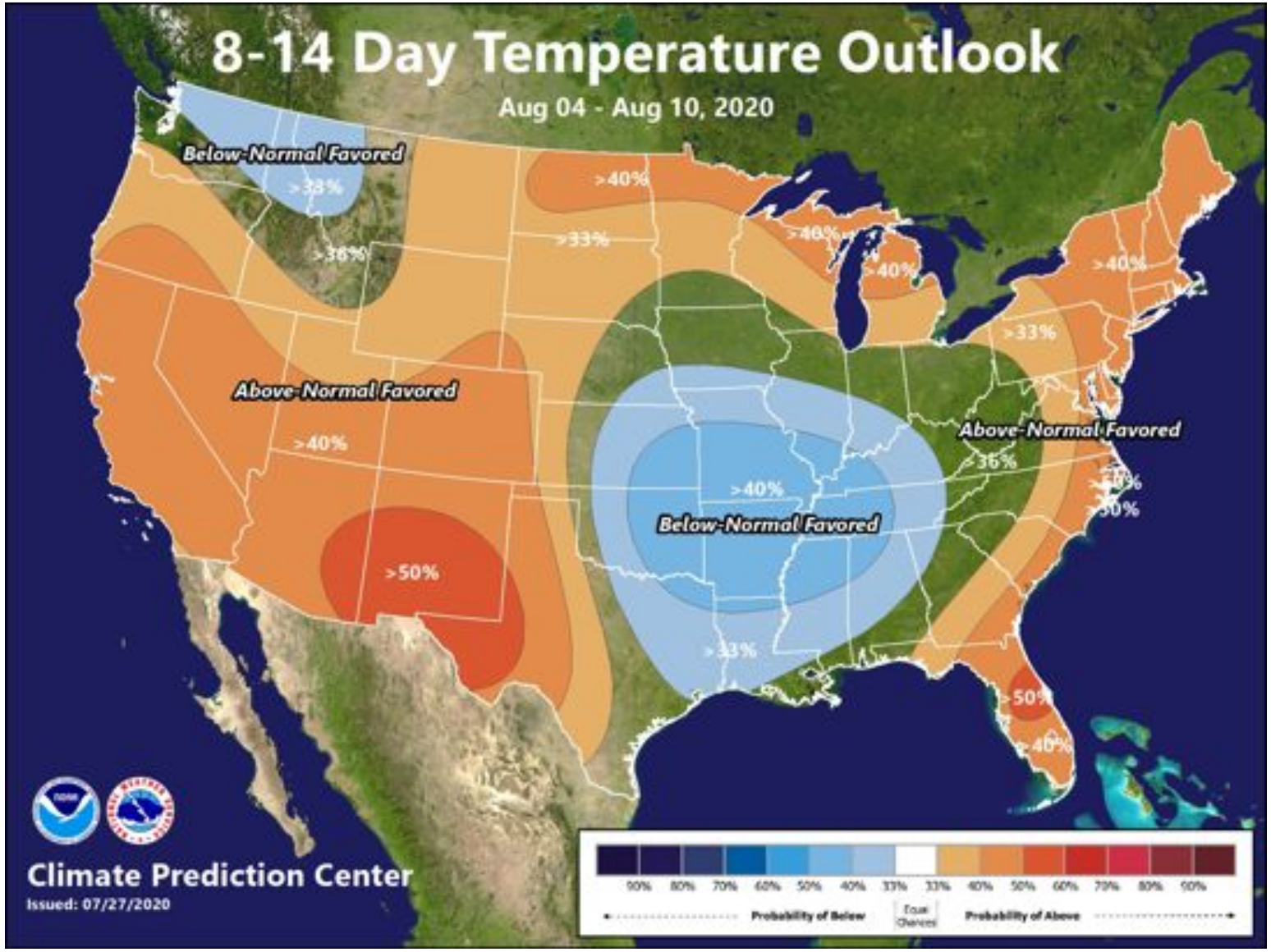
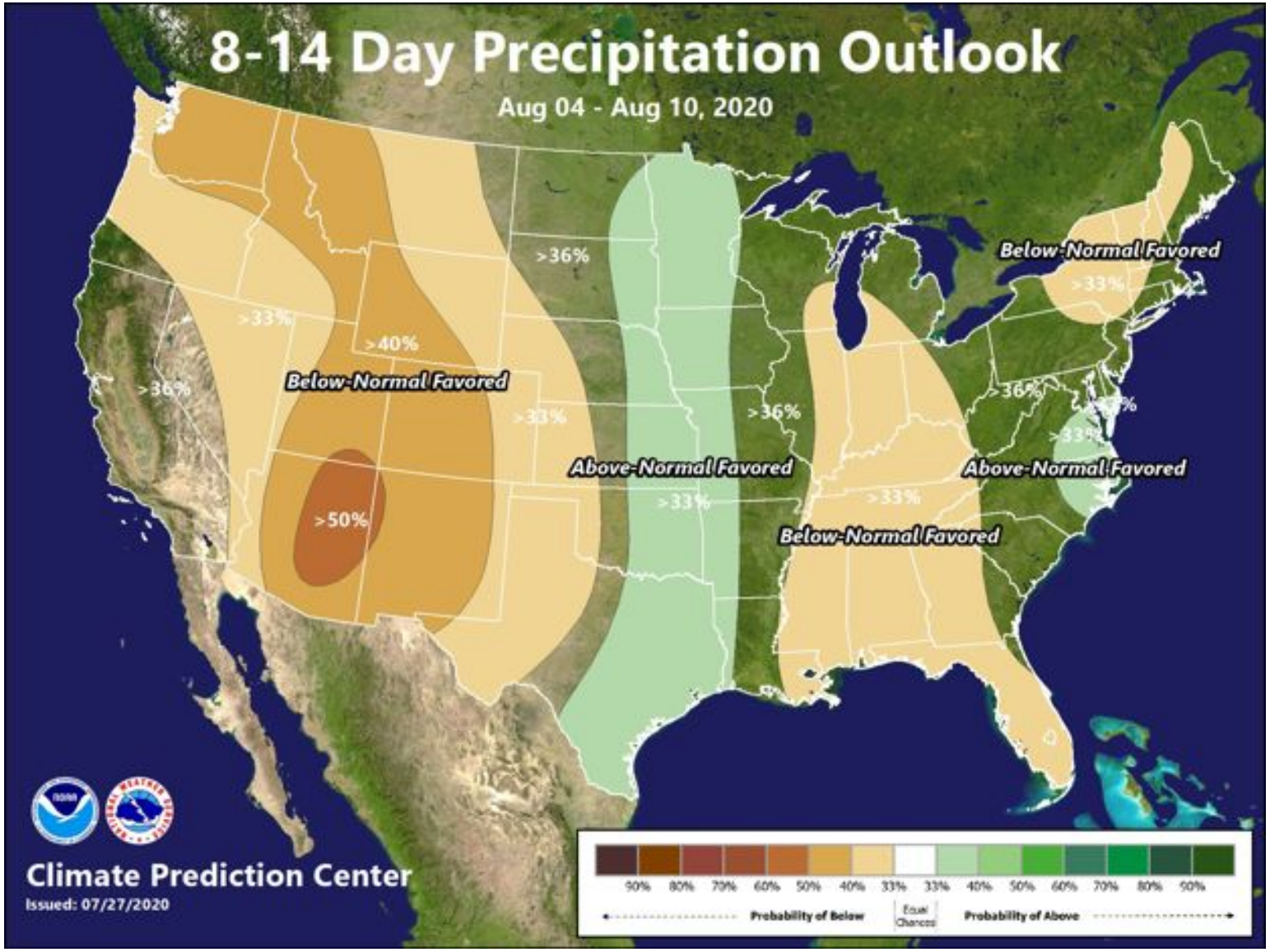
Climate Prediction Center 8 to 14 Day Outlooks - Temperature



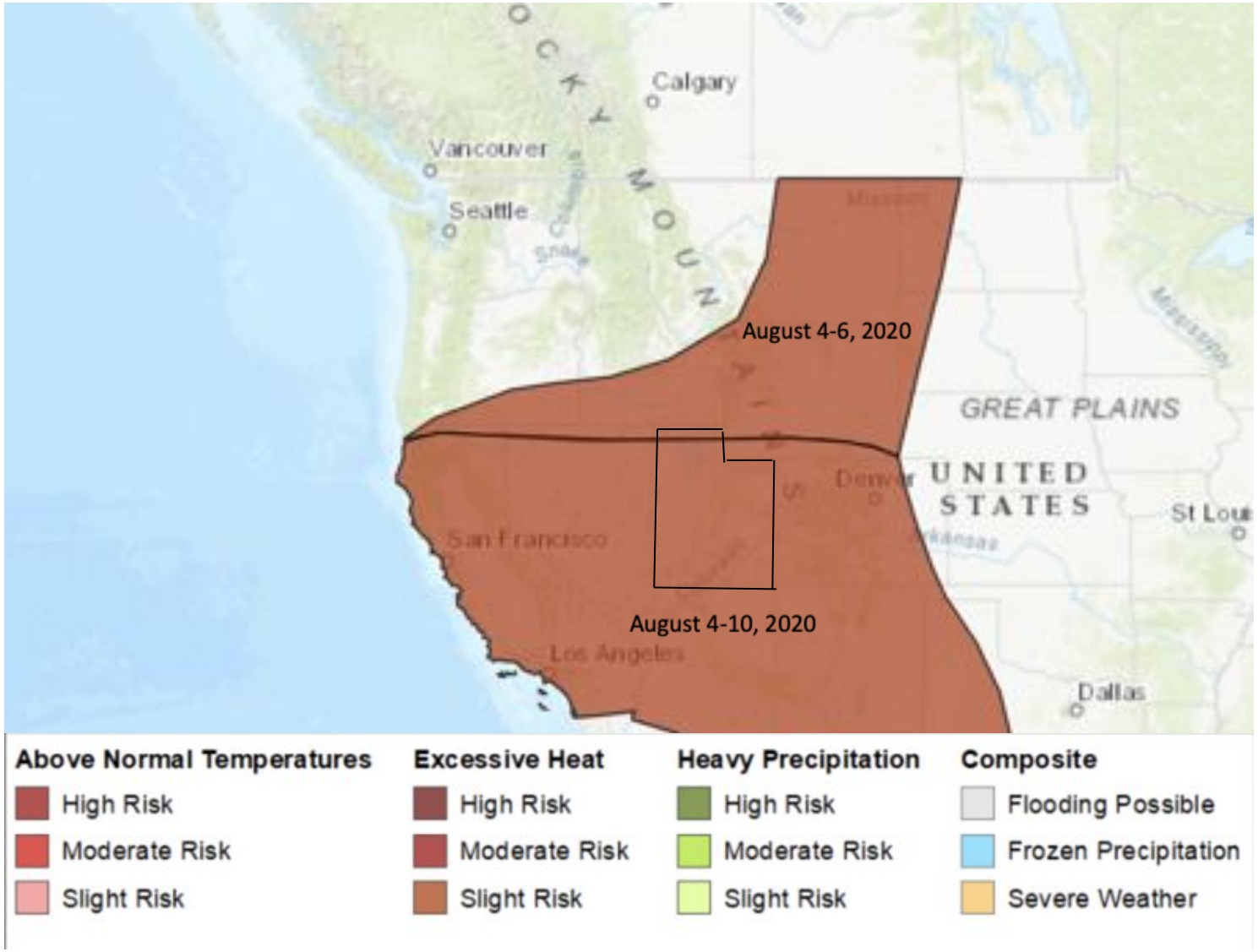
Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

Climate Prediction Center 8 to 14 Day Outlooks - Precipitation

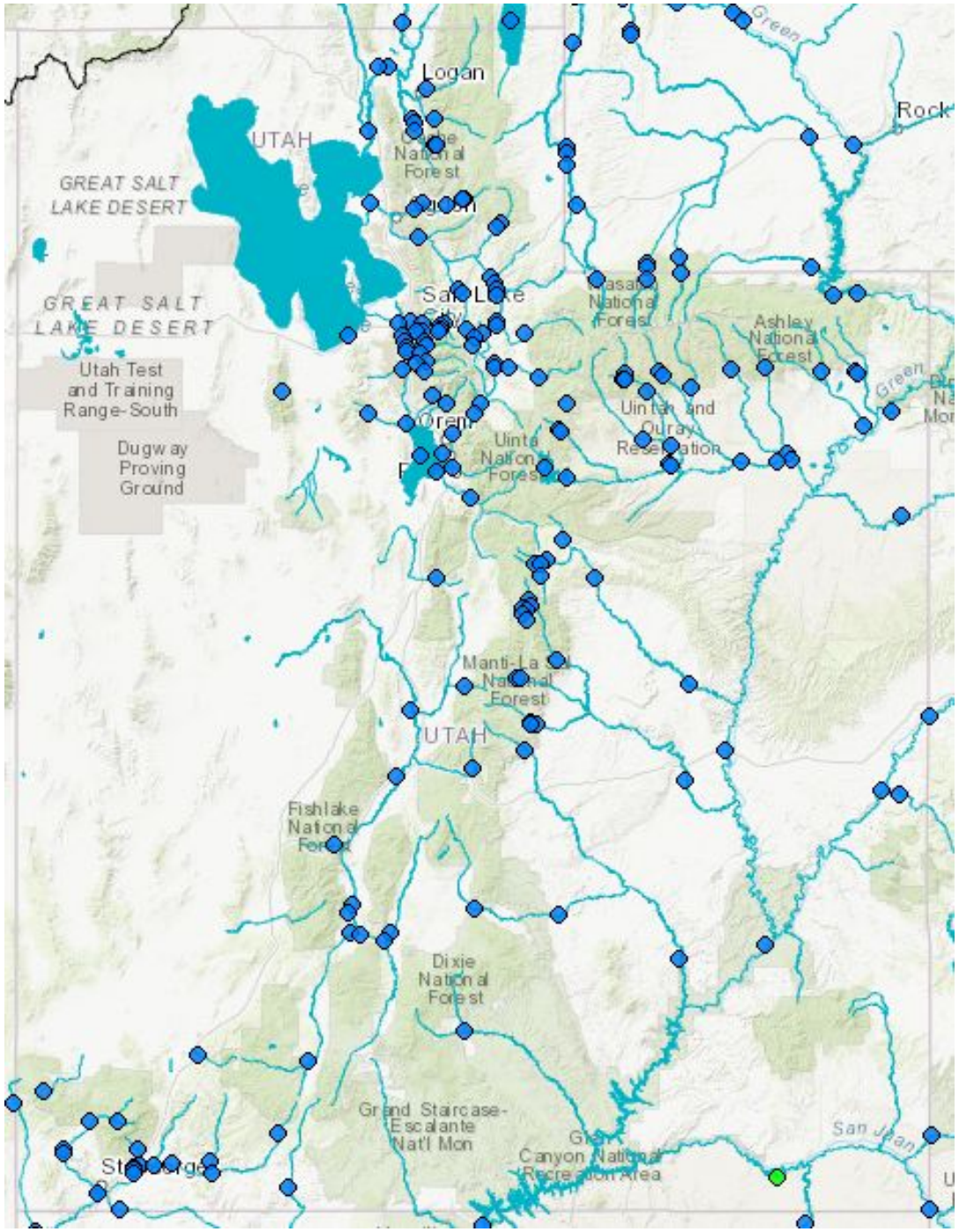


Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

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

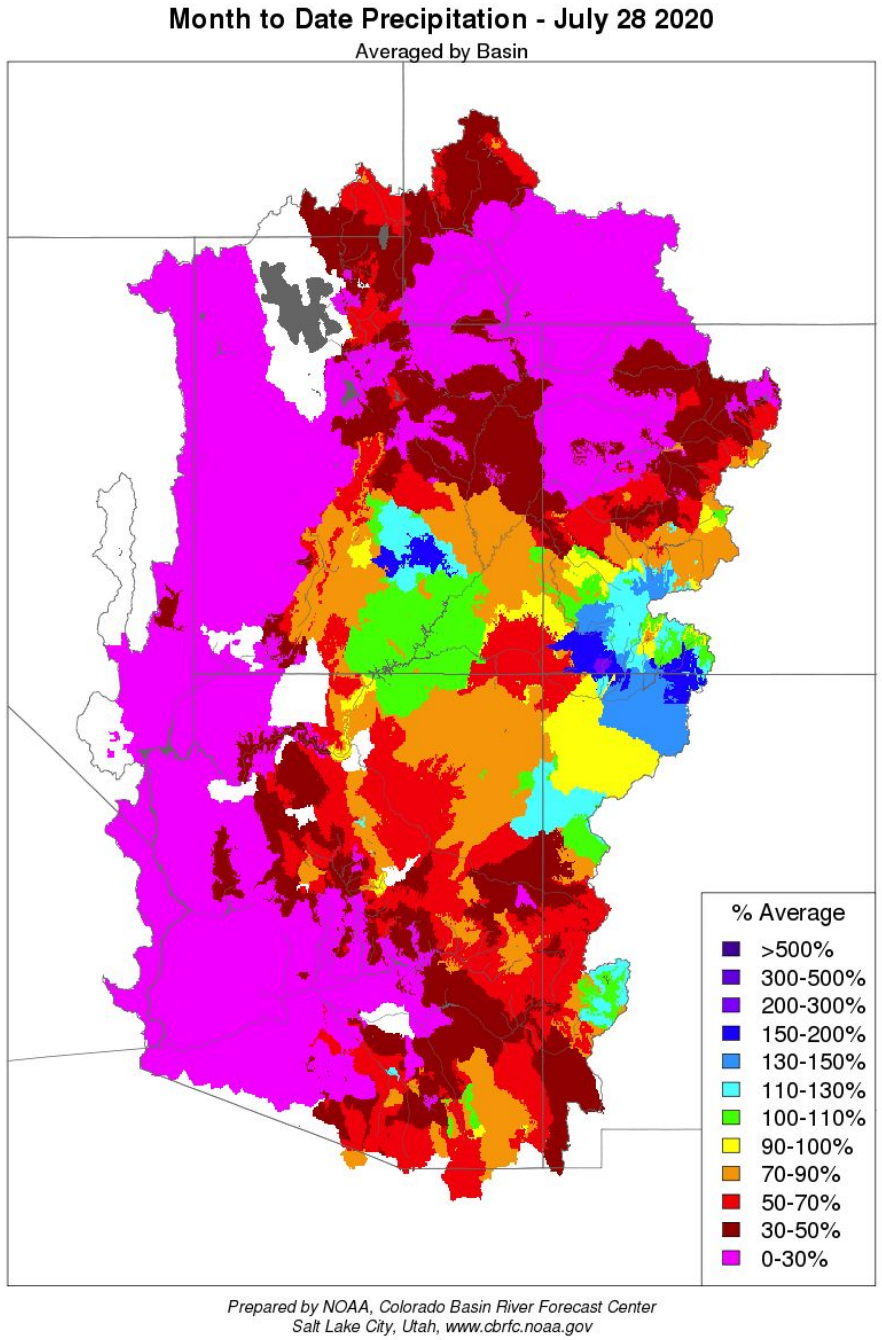


Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill



Continued dry and hot conditions throughout the state, flows have typically been well below average for this time of year

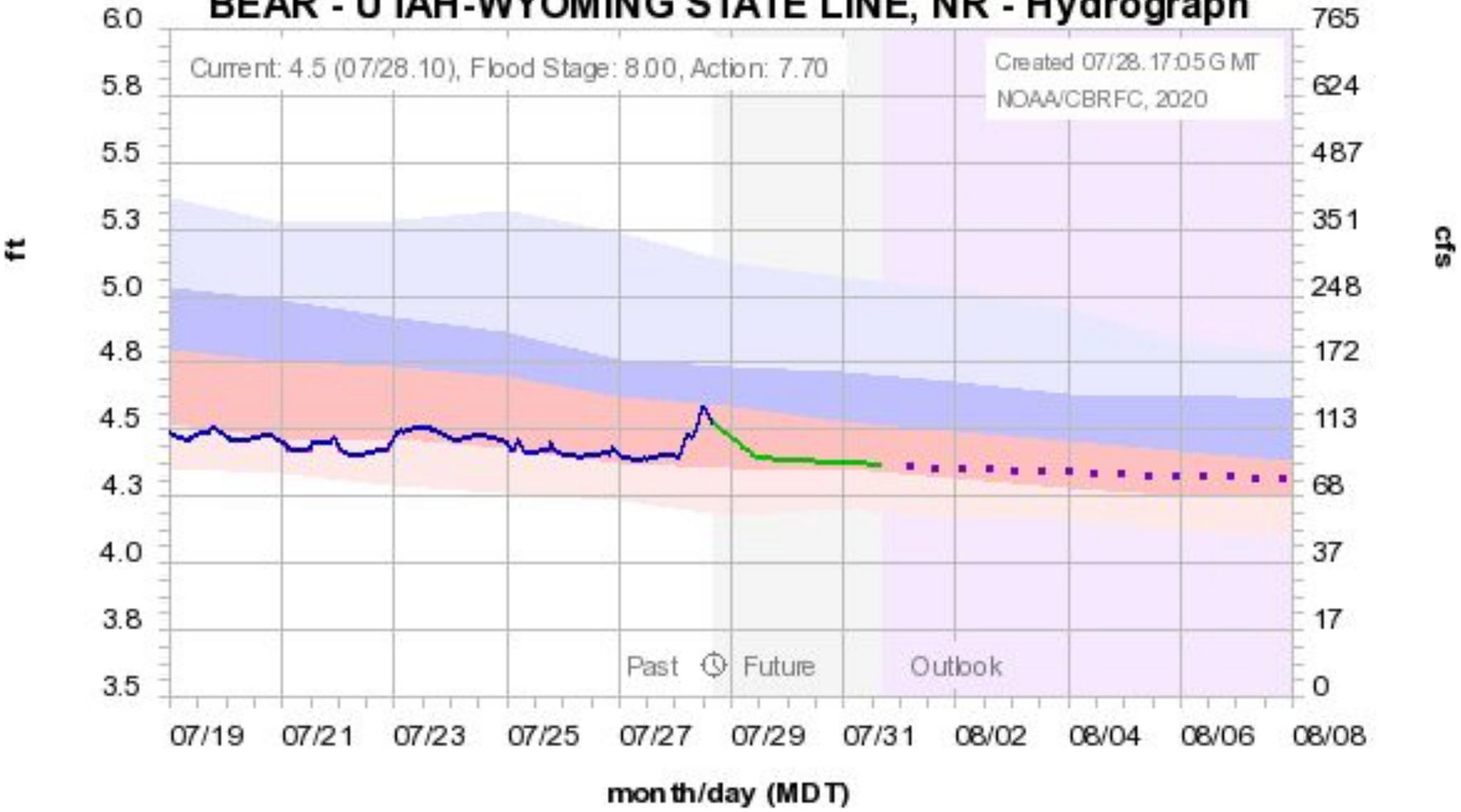
High pressure ridge is expected, pushing monsoon moisture out of our area, and continued low flows are forecasted over the next 10 days



Southeast Utah has had some localized precipitation, but it's important to realize that percents of average this time of year can be misleading. Small amounts of precipitation can cause big changes to percents of average in areas that are typically dry this time of year.

Colorado Basin River Forecast Center

BEAR - UTAH-WYOMING STATE LINE, NR - Hydrograph

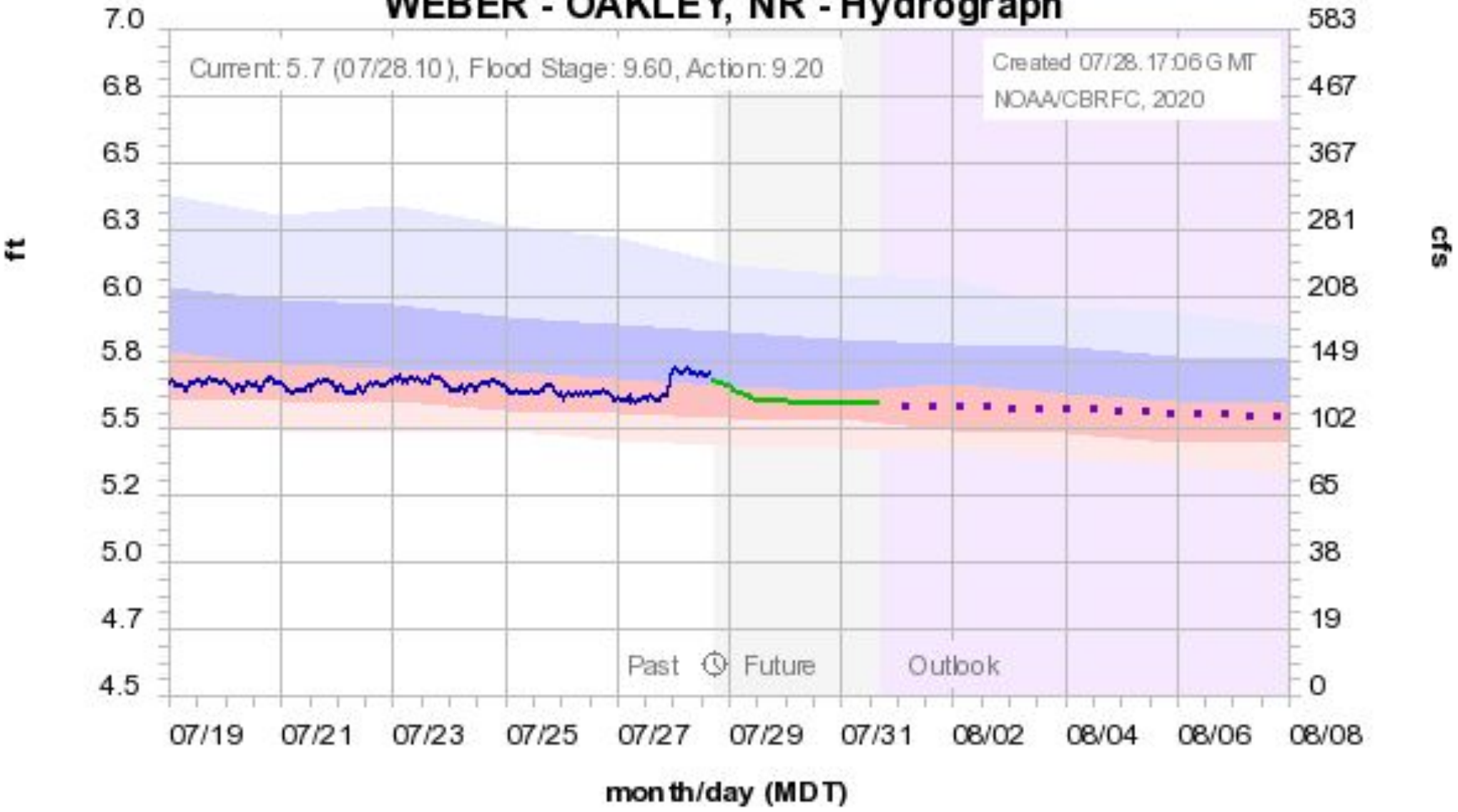


Simulated — *Observed* — *Forecast (07/28.14:00)* — *Outlook (increasing uncertainty)* ··

Historical Exceedance Probability (USGS): *90-75%* *75-50%* *50-25%* *25-10%*

Colorado Basin River Forecast Center

WEBER - OAKLEY, NR - Hydrograph



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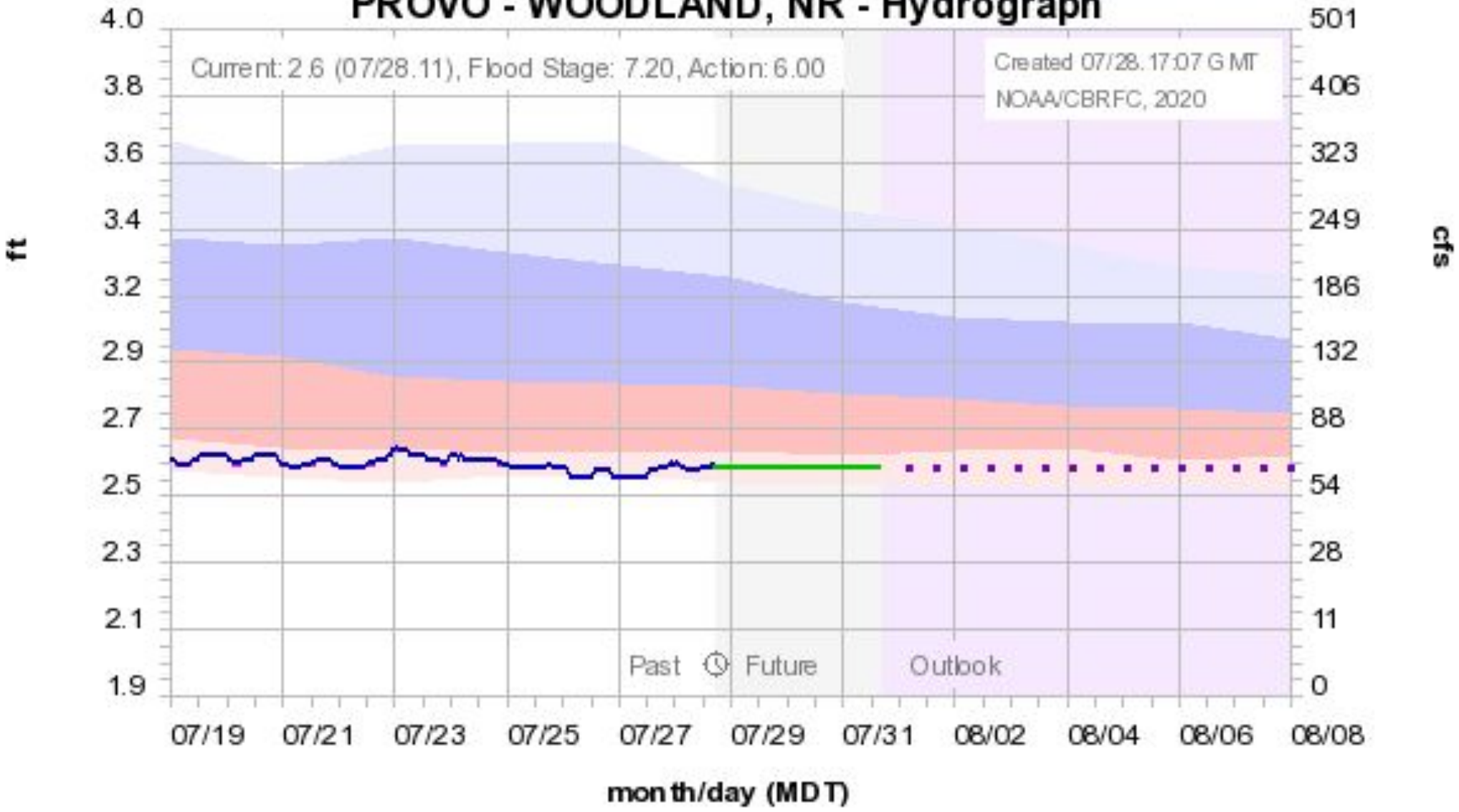
PROVO - WOODLAND, NR - Hydrograph



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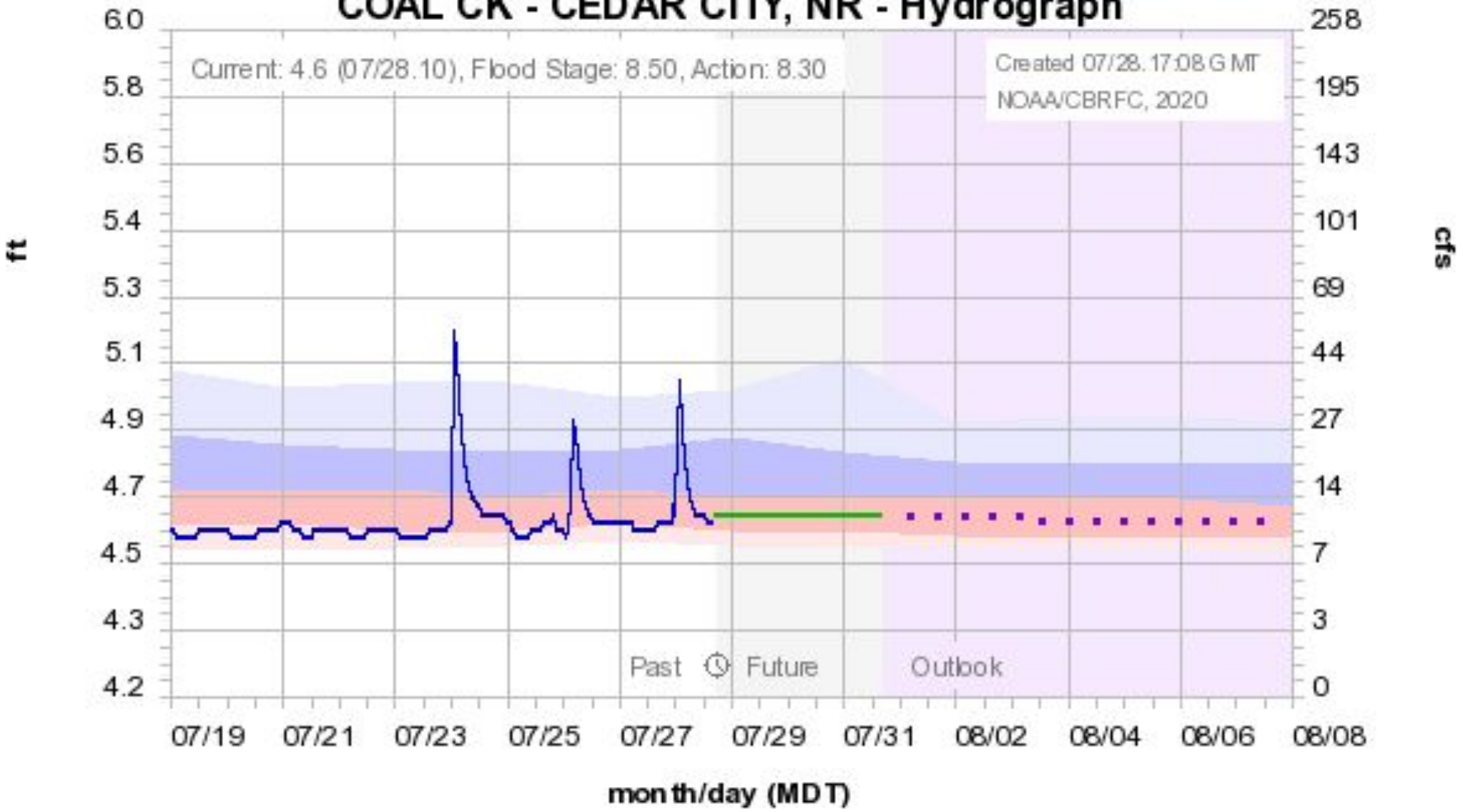
Colorado Basin River Forecast Center

COAL CK - CEDAR CITY, NR - Hydrograph



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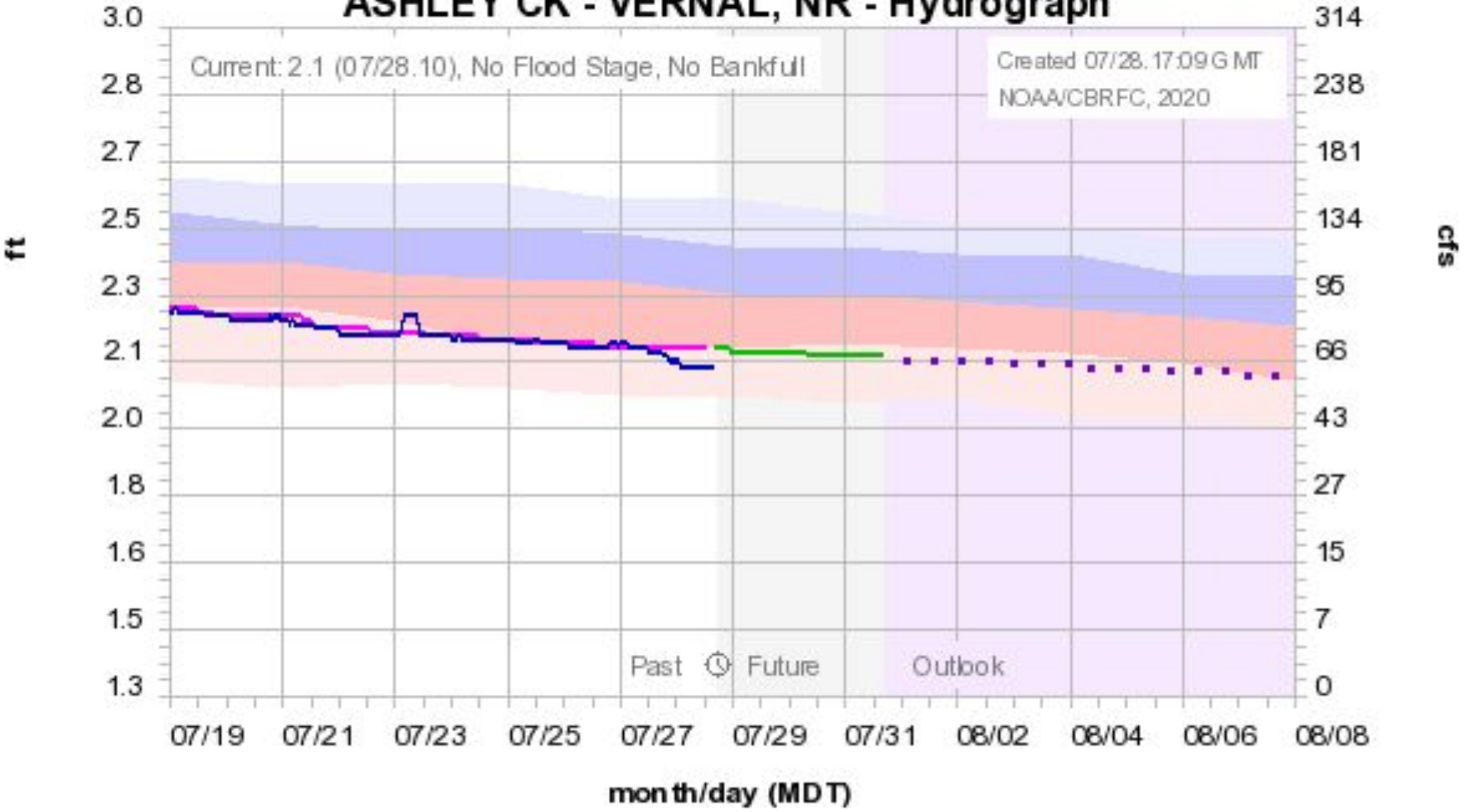
Colorado Basin River Forecast Center

ASHLEY CK - VERNAL, NR - Hydrograph



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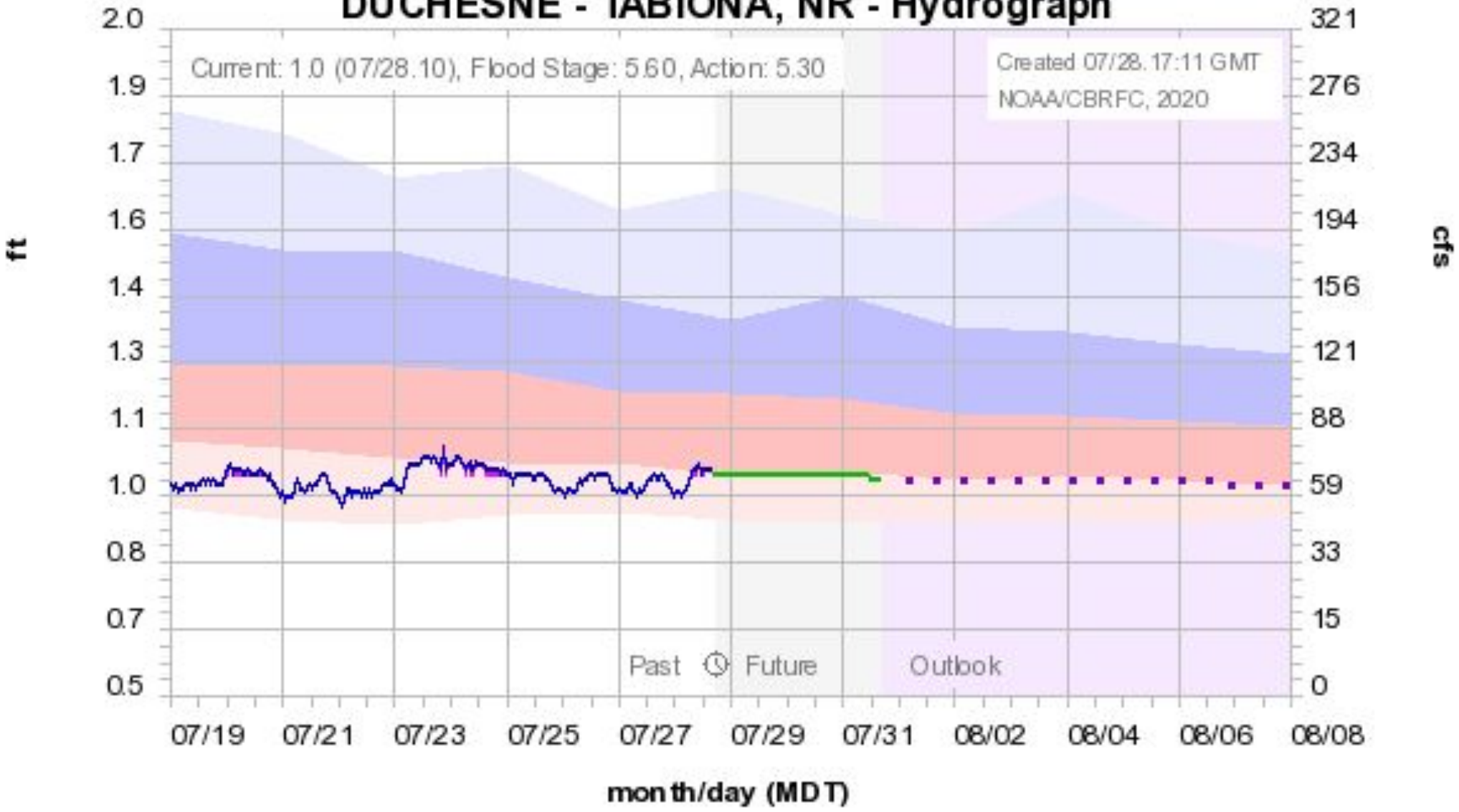
Colorado Basin River Forecast Center

DUCHESNE - TABIONA, NR - Hydrograph



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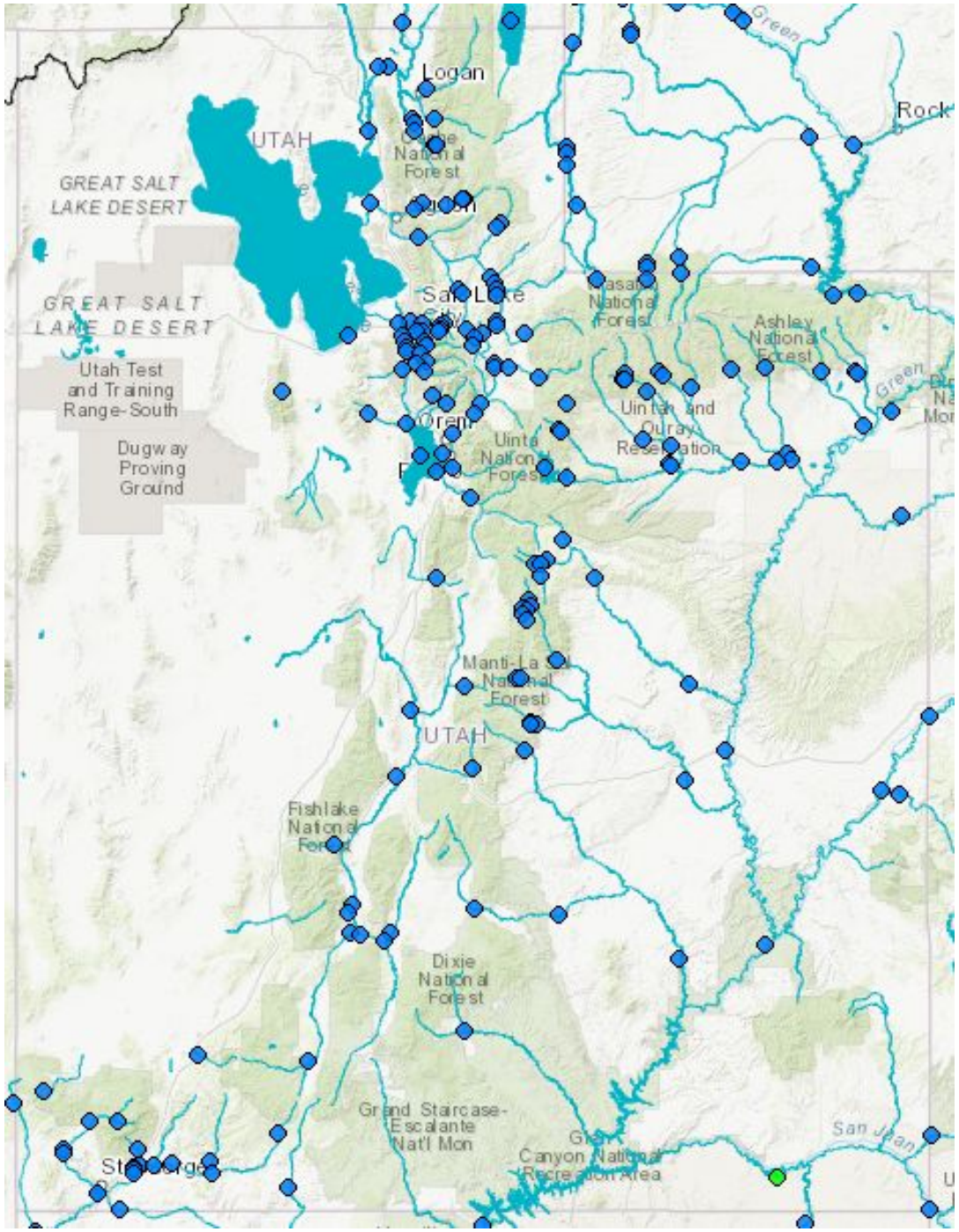
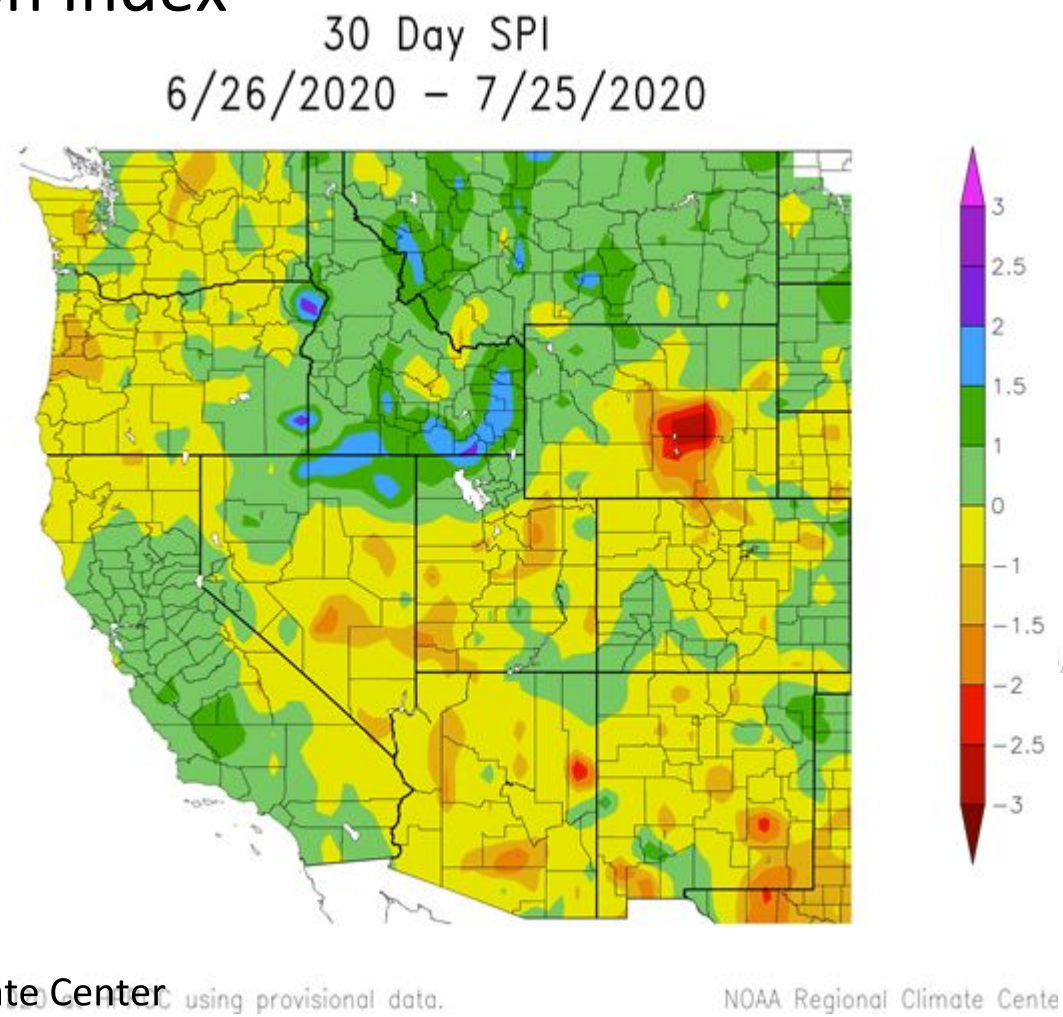


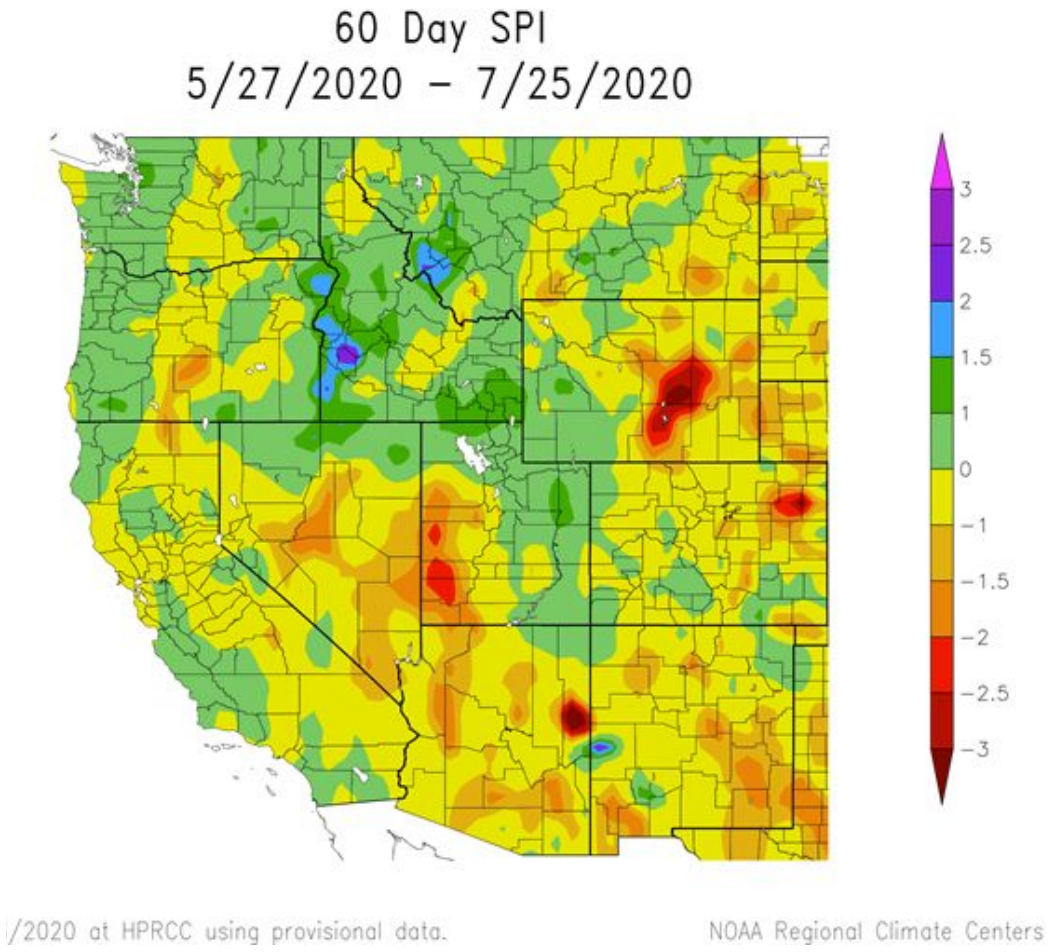
Continued dry and hot conditions throughout the state, flows have typically been well below average for this time of year

High pressure ridge is expected, pushing monsoon moisture out of our area, and continued low flows are forecasted over the next 10 days

Drought Index:

Standardized Precipitation Index (SPI)





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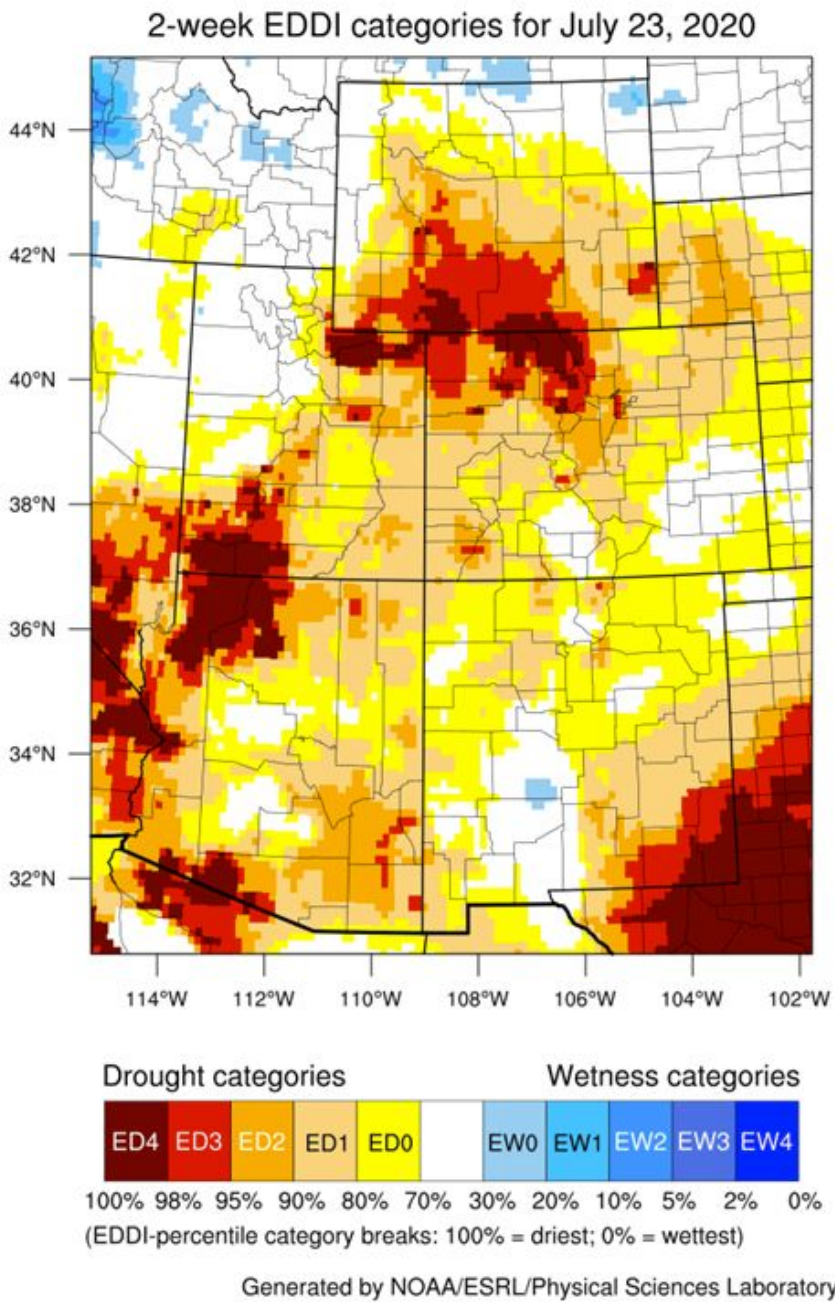
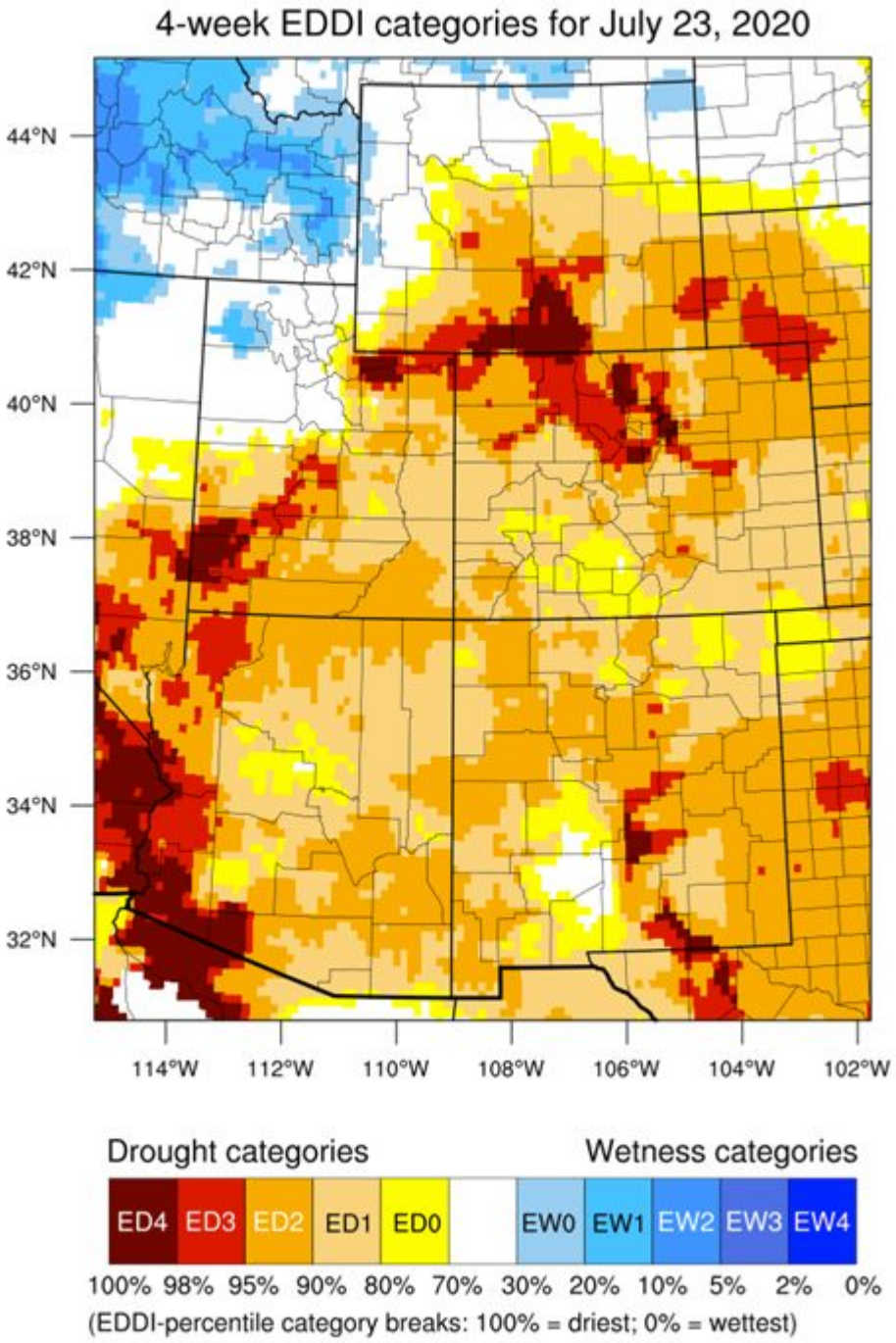
Drought Index:

Evaporative Demand Drought Index (EDDI)





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Presenter - Jon Meyer

Drought Index:

Evaporative Demand Drought Index (EDDI)

EDDI: A useful indicator of the evaporative demand (“thirst”) placed on the surface by atmospheric conditions of temperature, humidity and wind.

- Good at seeing the precursors of “flash” drought as EDDI can help quantify rapid loss of soil moisture and the associated positive drought feedback.
- Can also help monitor long-term drought.
- EDDI’s value is based on historical conditions of these atmospheric drivers of evaporative demand so time windows are important to consider.
- Most useful as a drought predictor during warm season. Less-so during cool season when evaporation plays less of a role in the water cycle.

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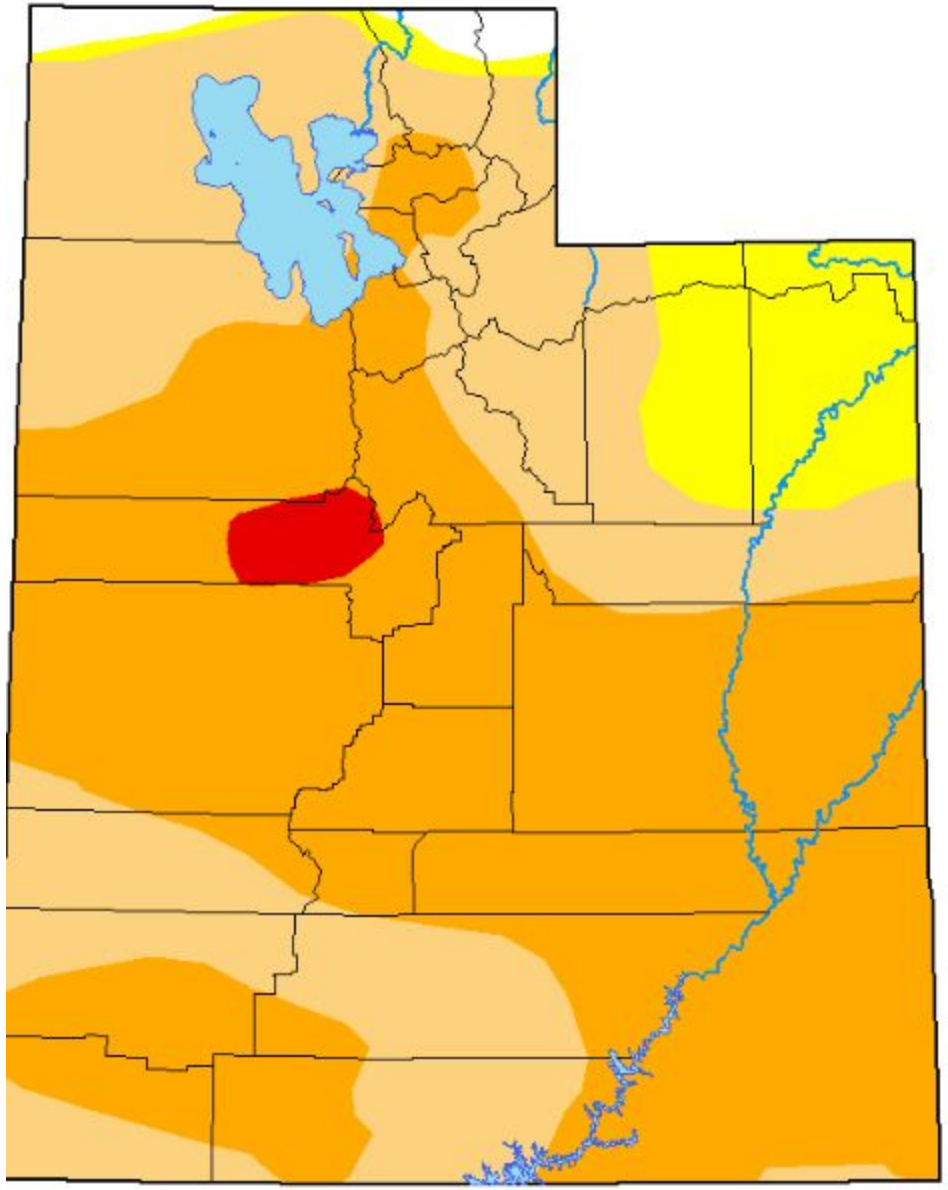
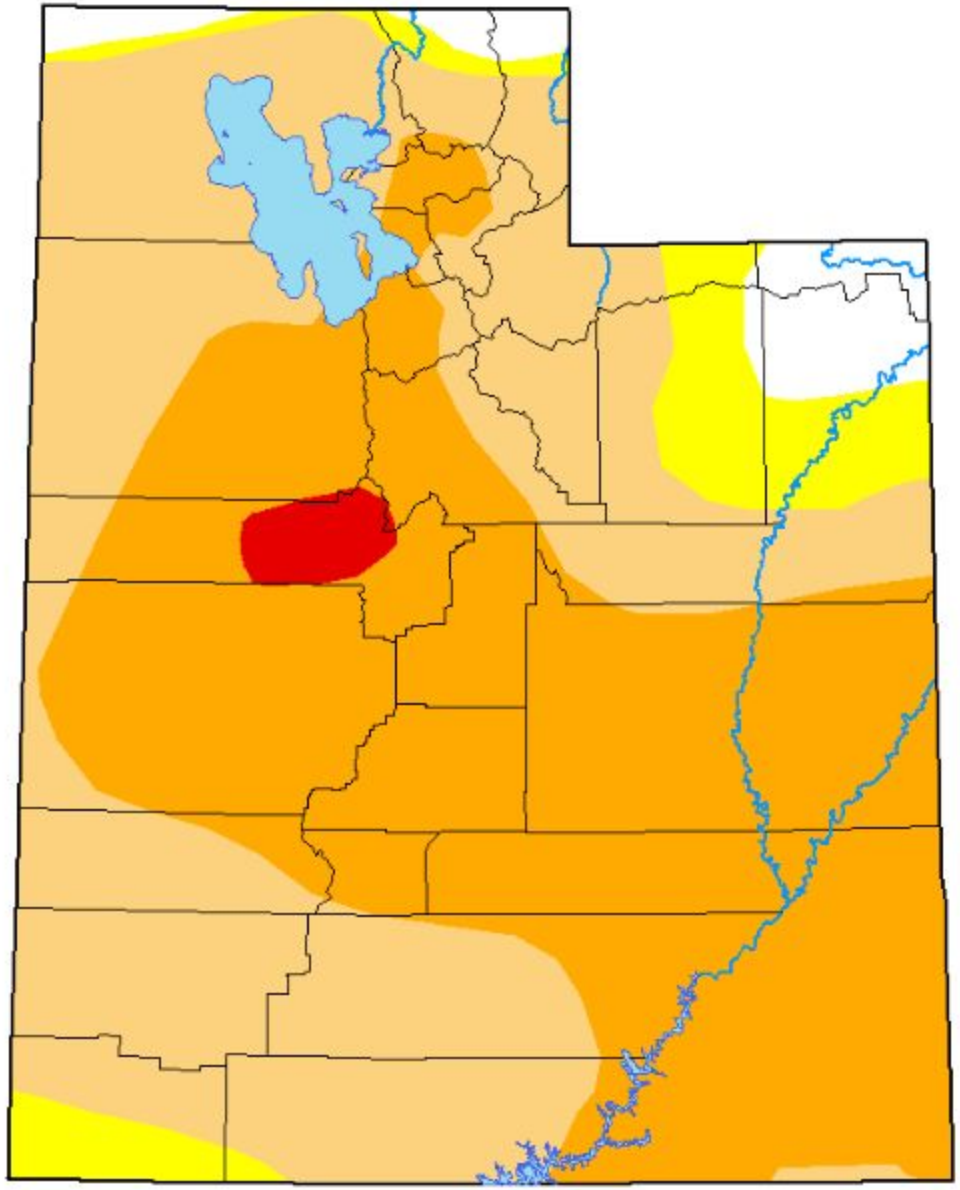
Past drought webinars are available on the Division of Water Resources website at

https://water.utah.gov/water-data/drought/



July 21, 2020



July 14, 2020