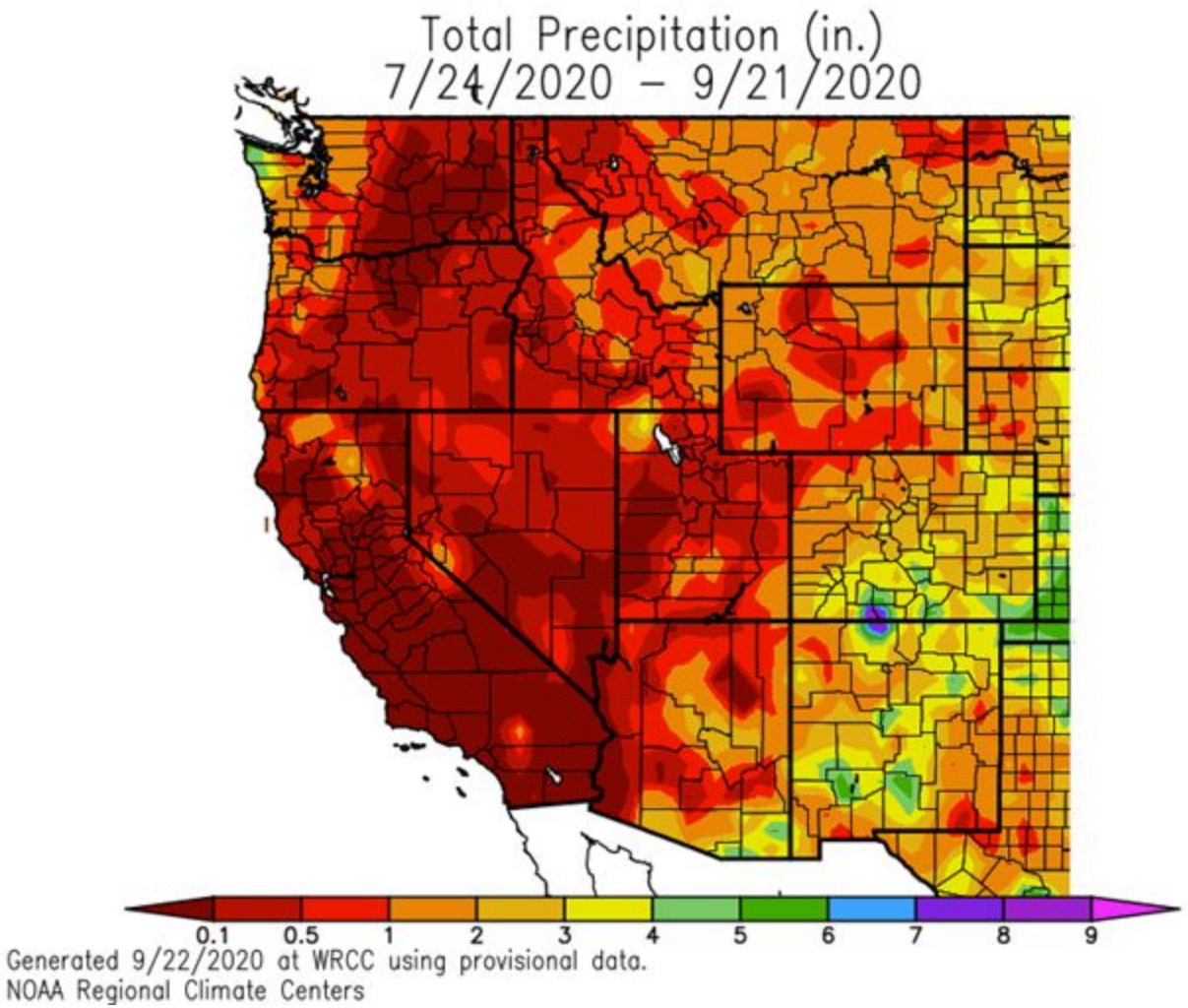
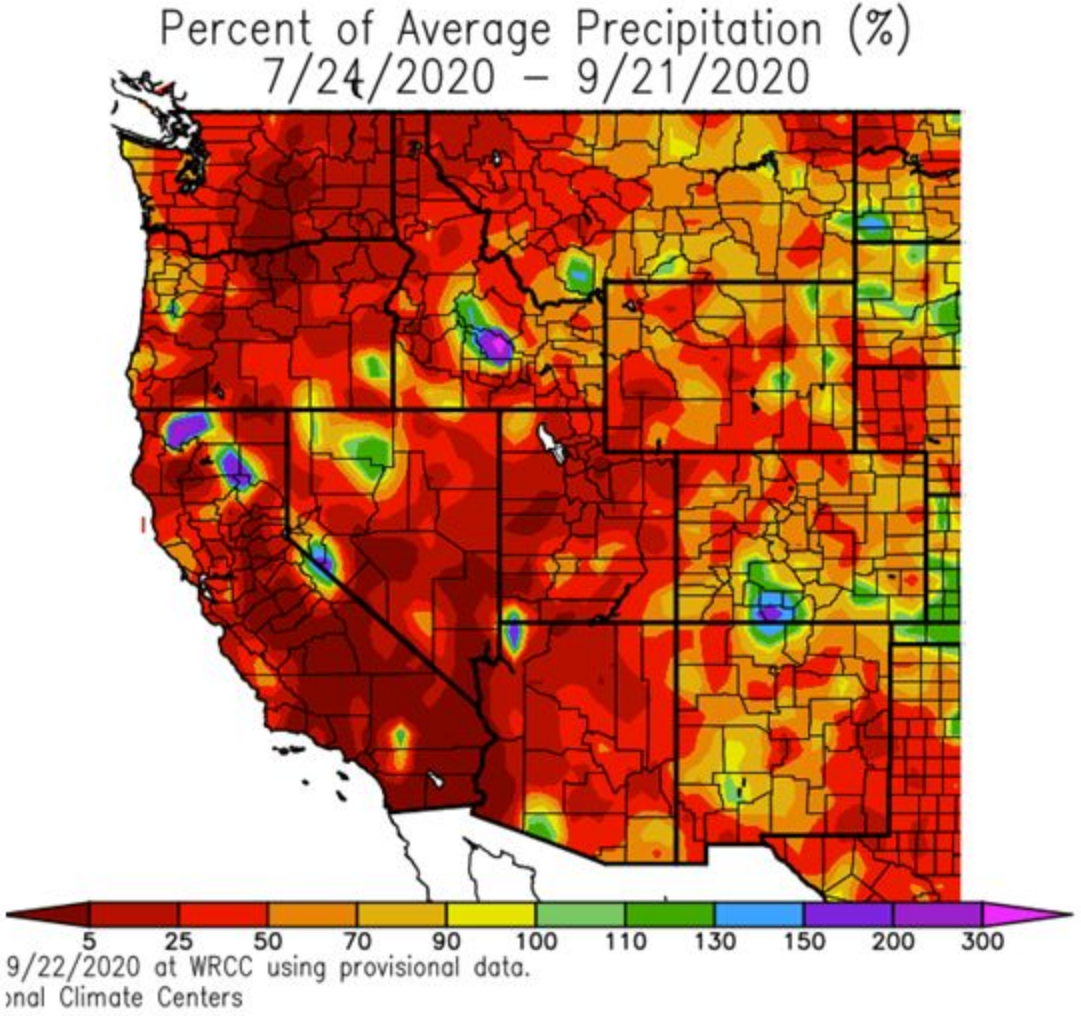
Utah Drought Monitor Webinar

September 22, 2020

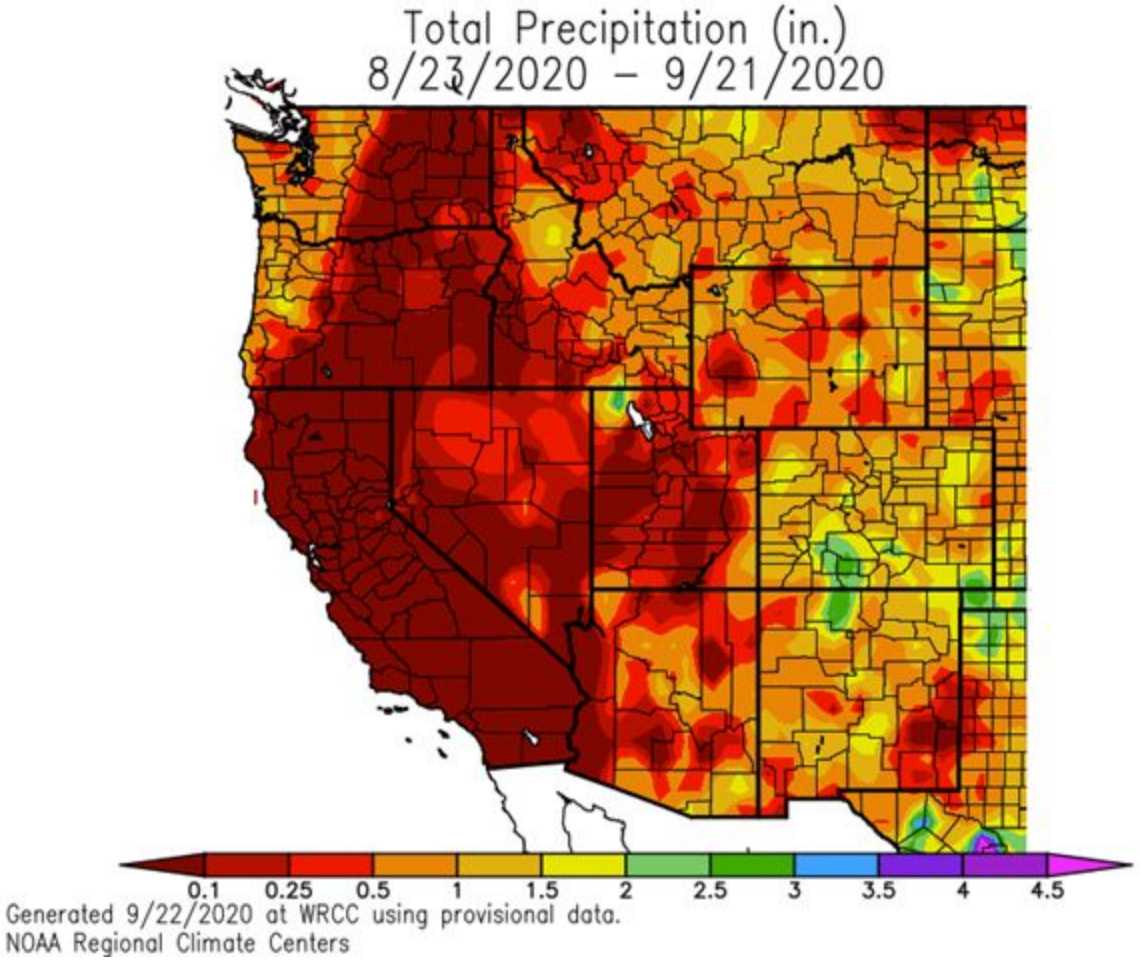
Precipitation 60 day history (Percent of Average)

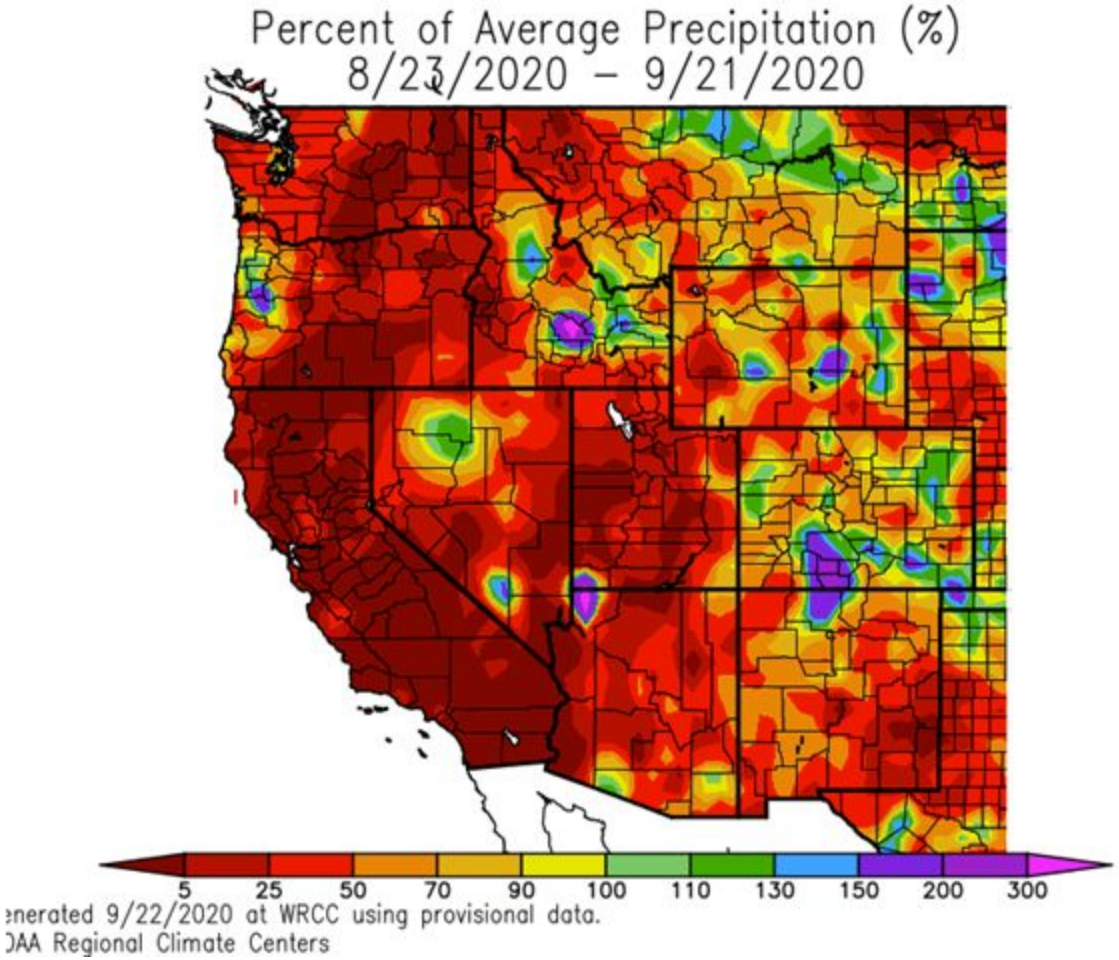




Agency - Utah Climate Center
Presenter - Jon Meyer

Precipitation 30 day history (Percent of Average)





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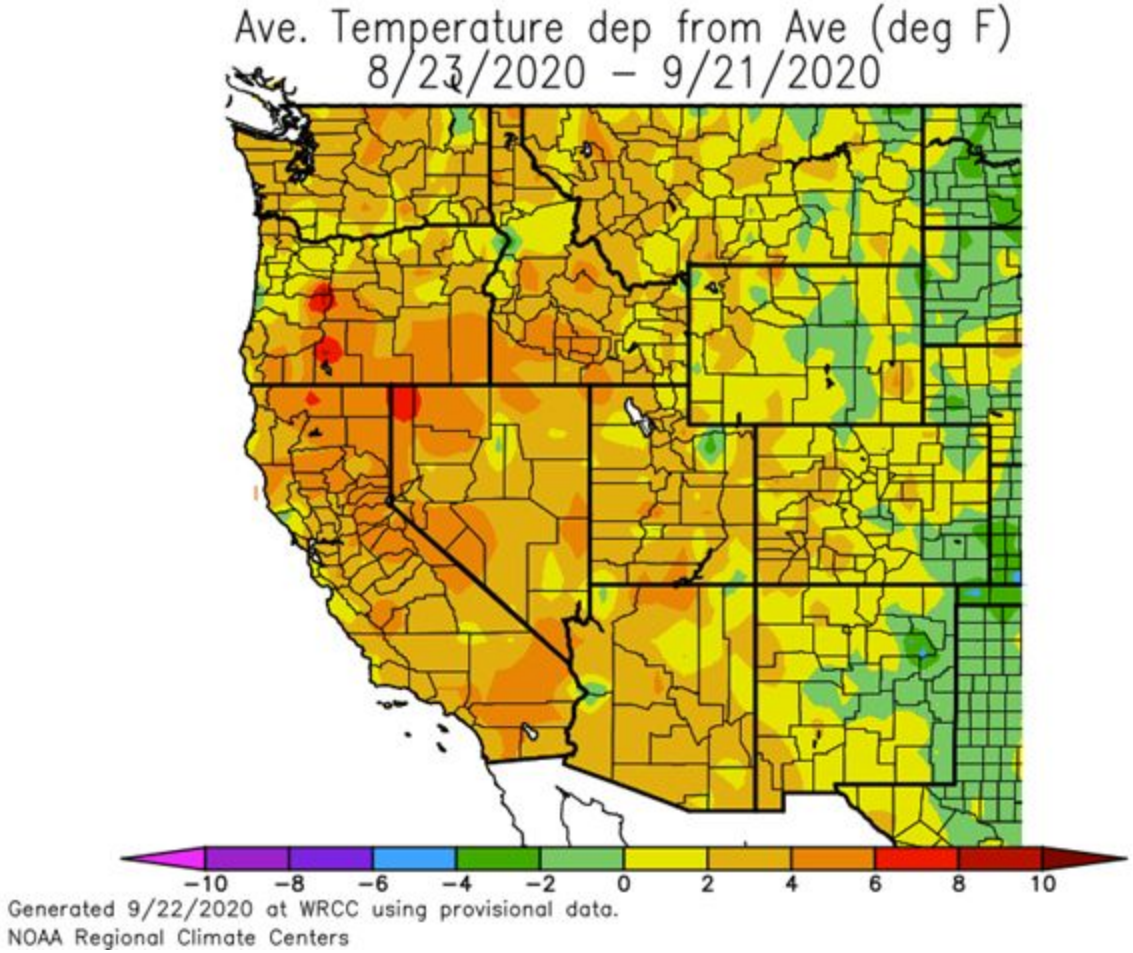
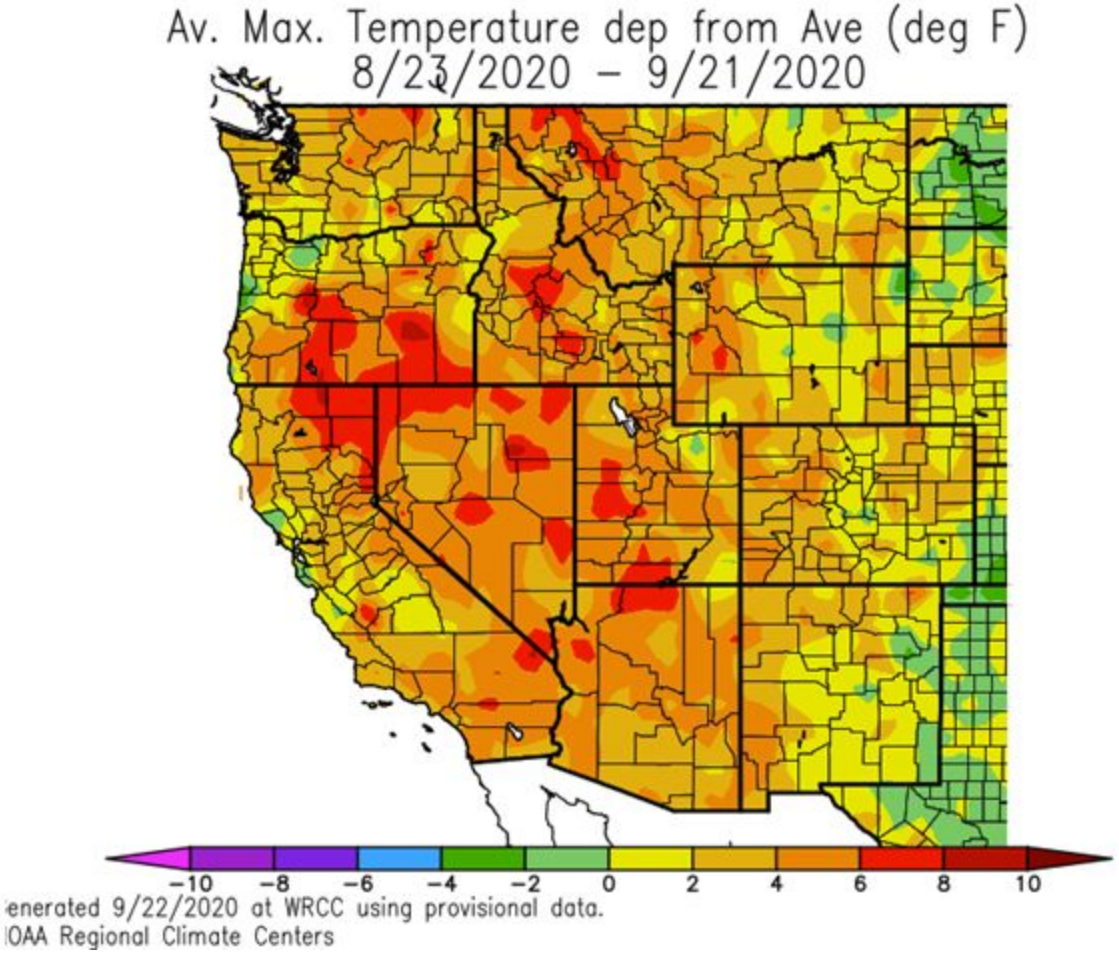
Temperature 30 day (Related to Average)





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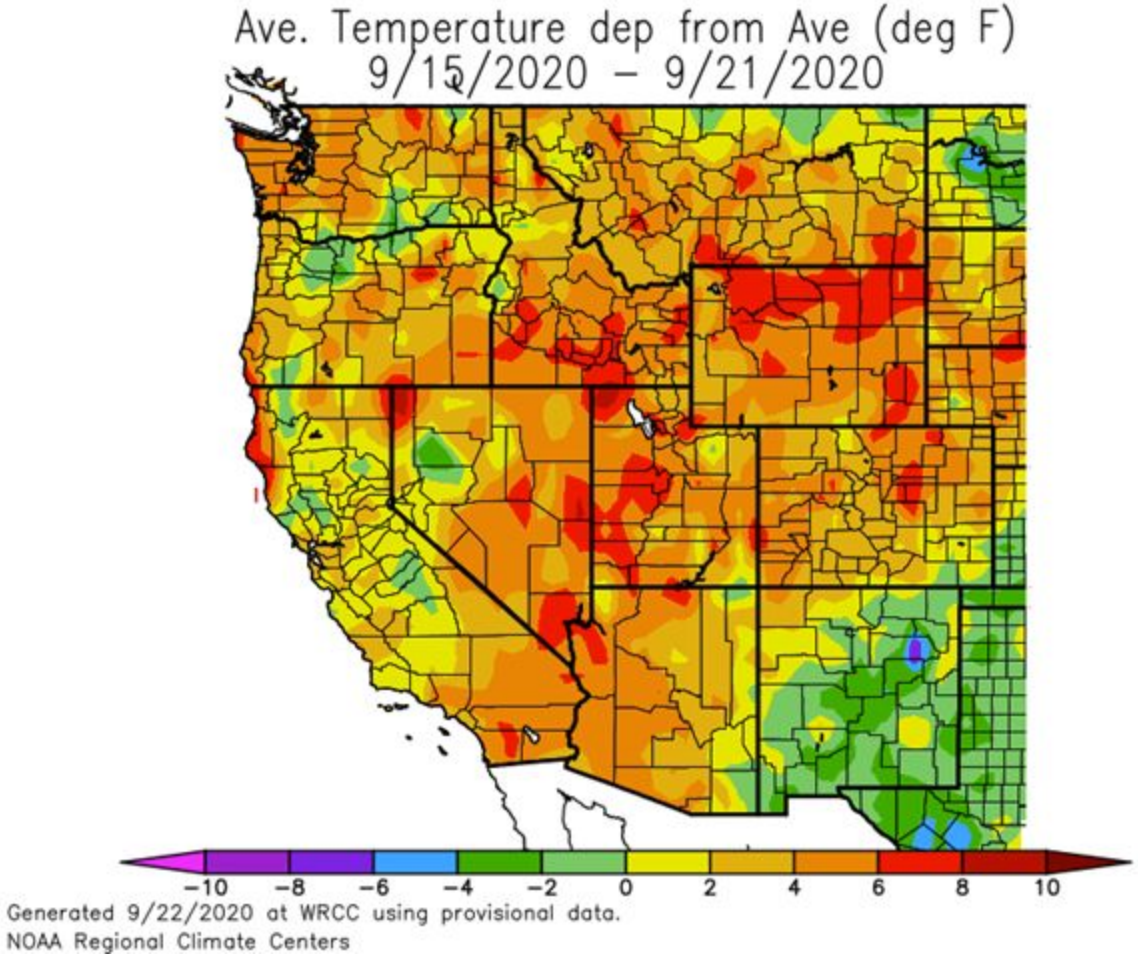
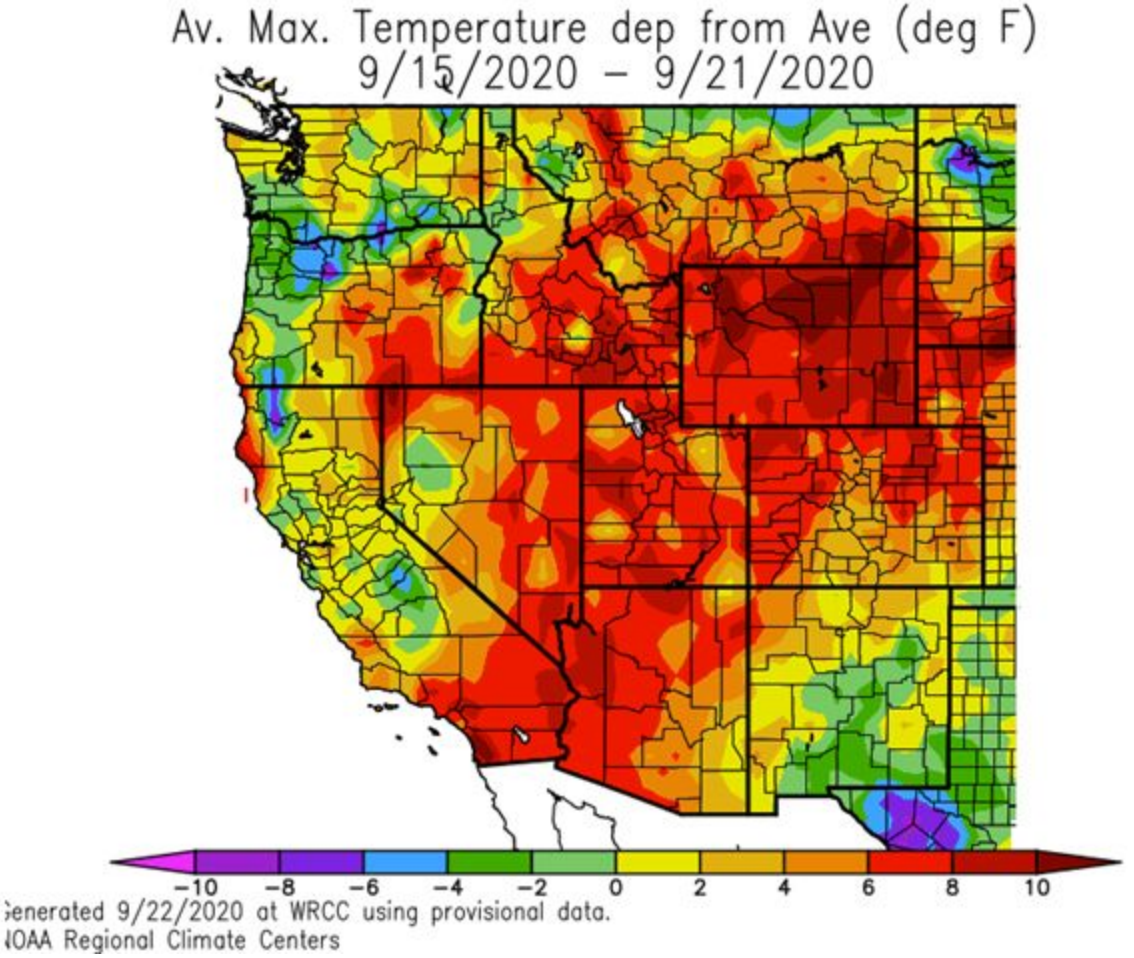
Temperature 7 day (Related to Average)





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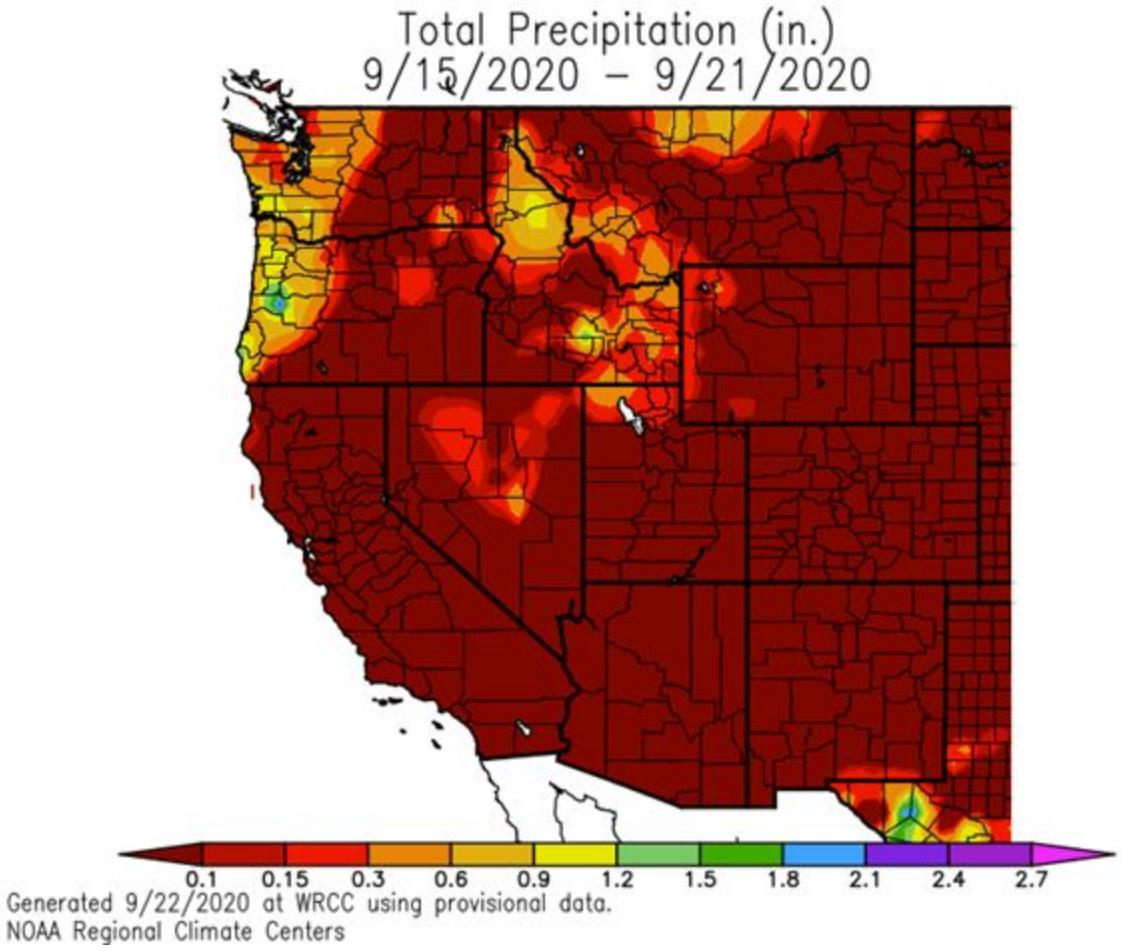

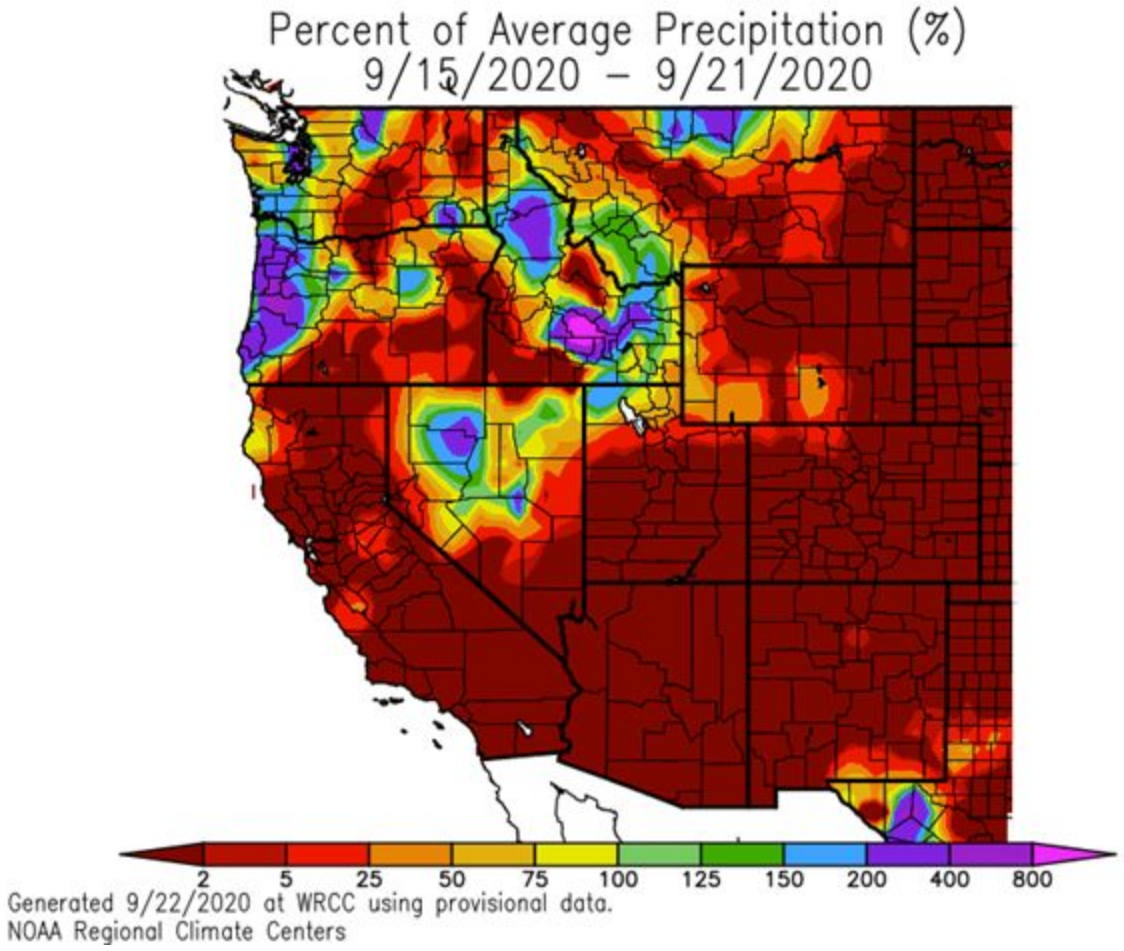

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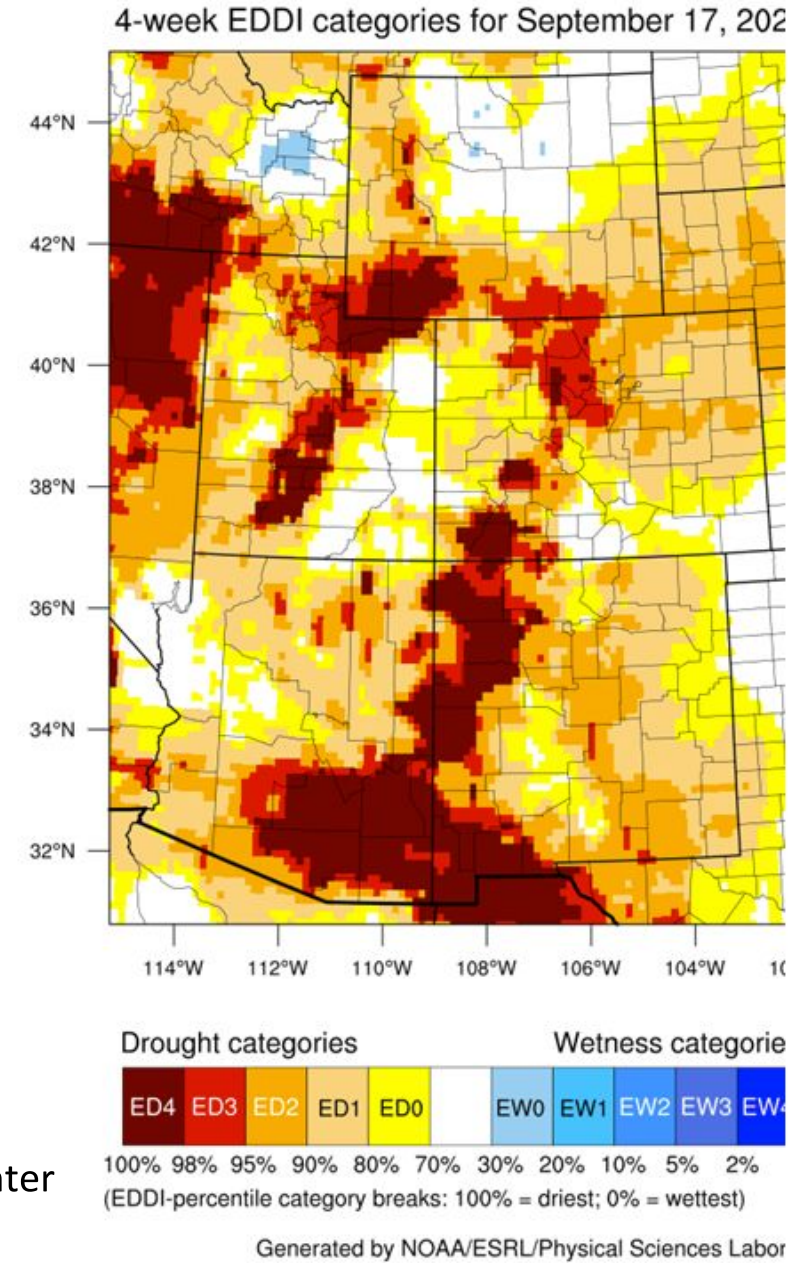
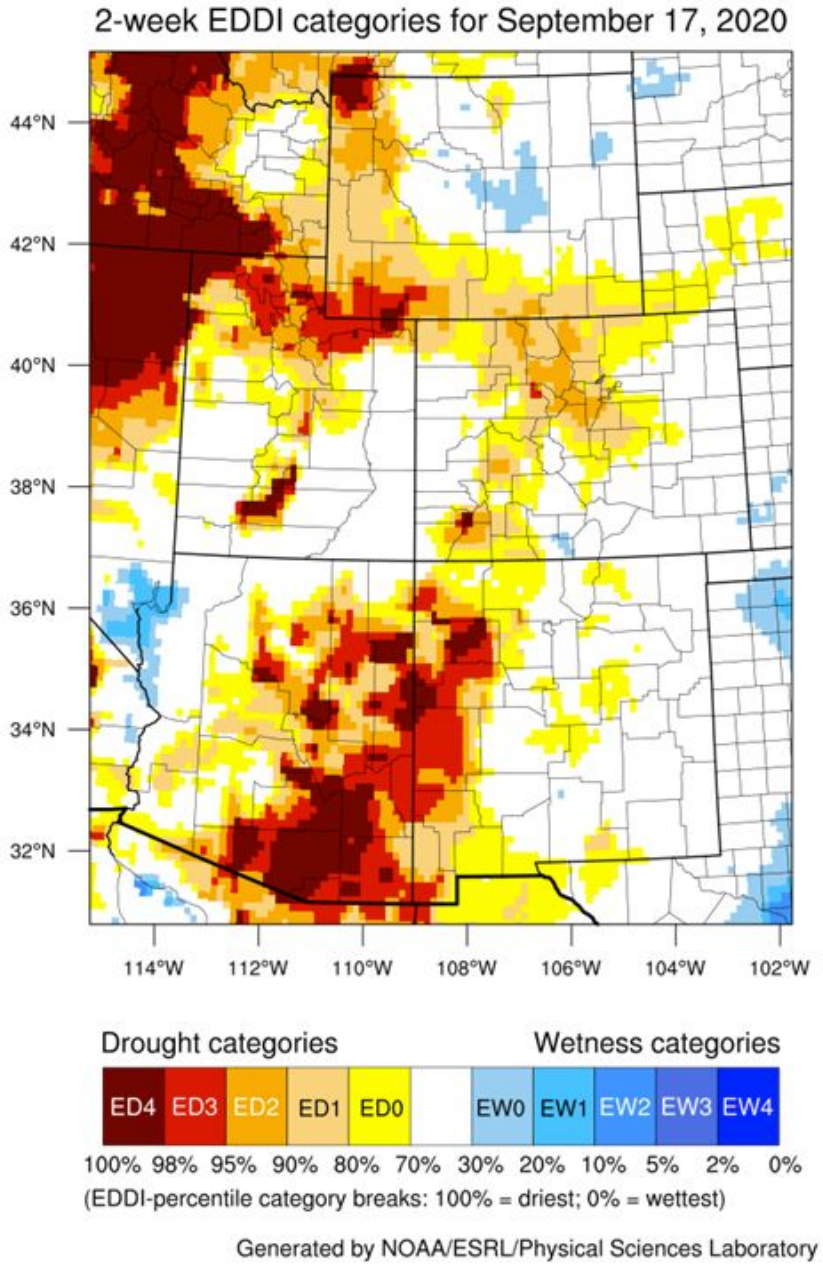
EDDI Drought Index





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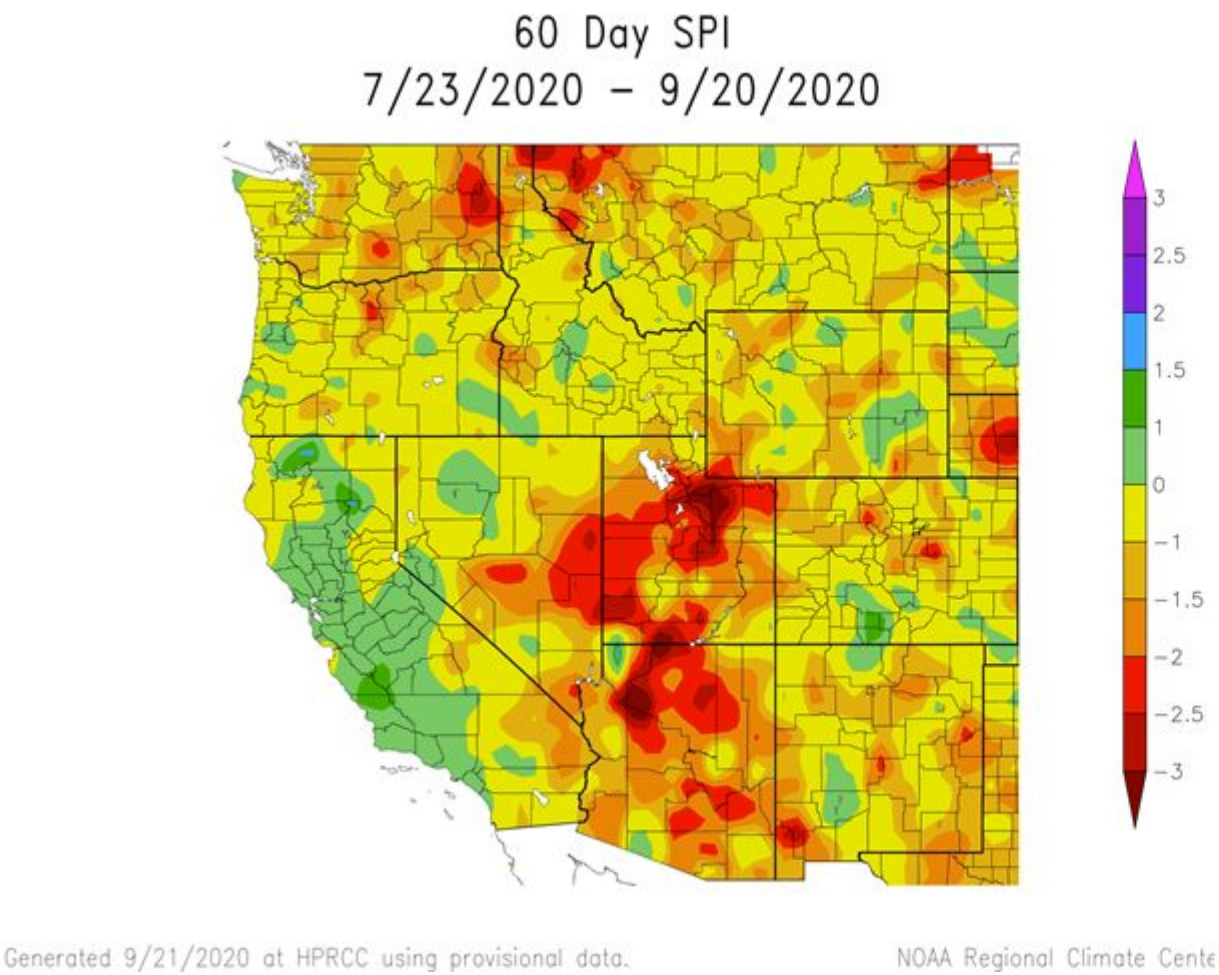
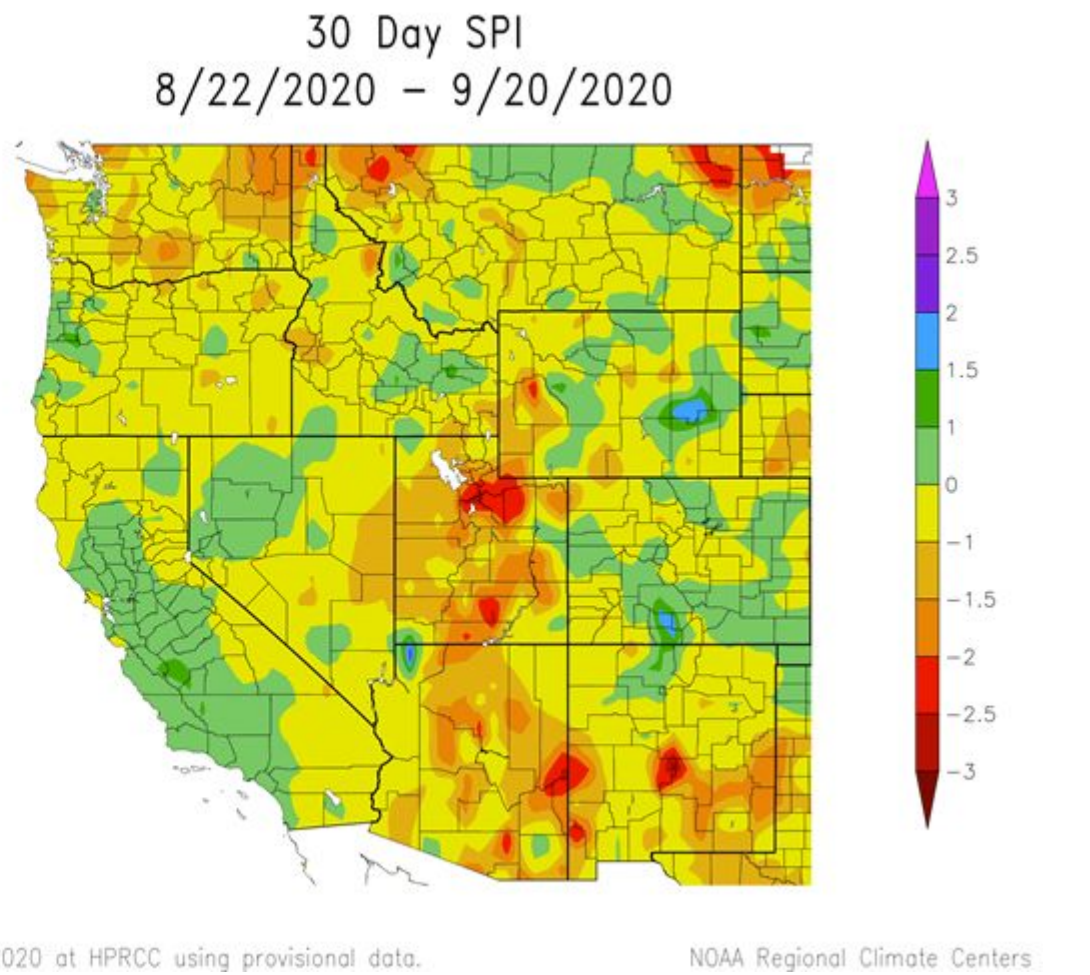
SPI Drought Index





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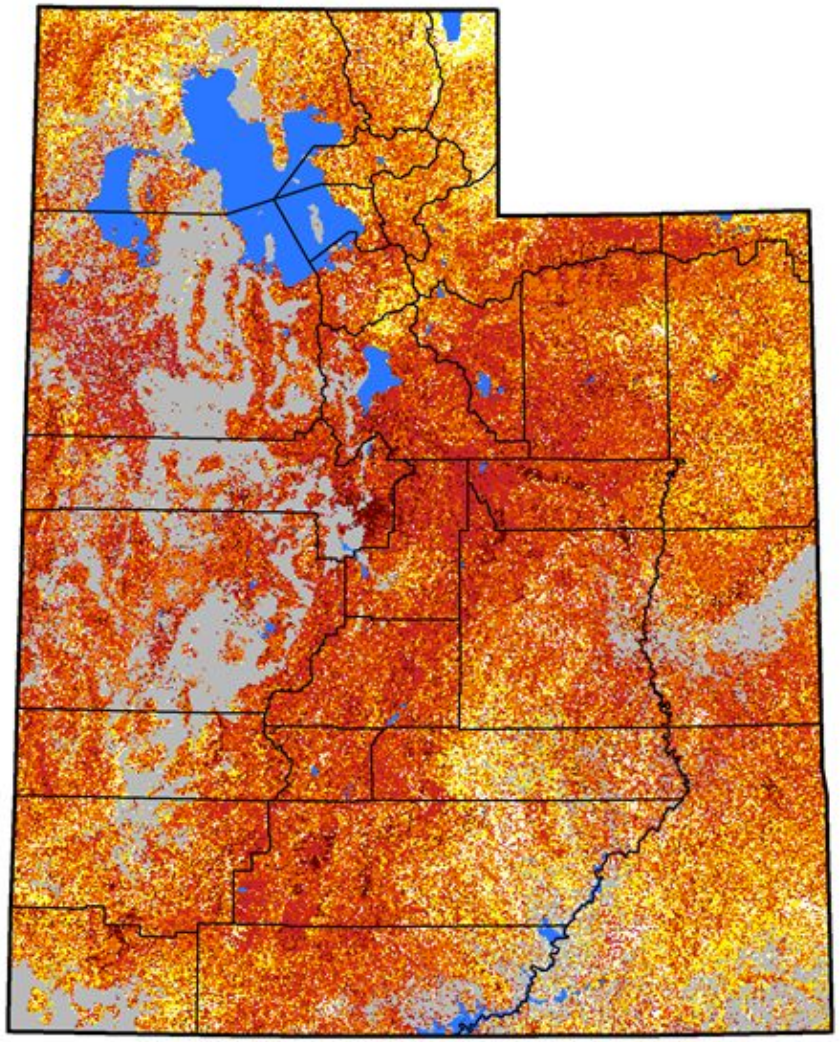
Presenter - Jon Meyer

Vegetation Drought Response Index

Complete: Utah

September 20, 2020



Vegetation Condition

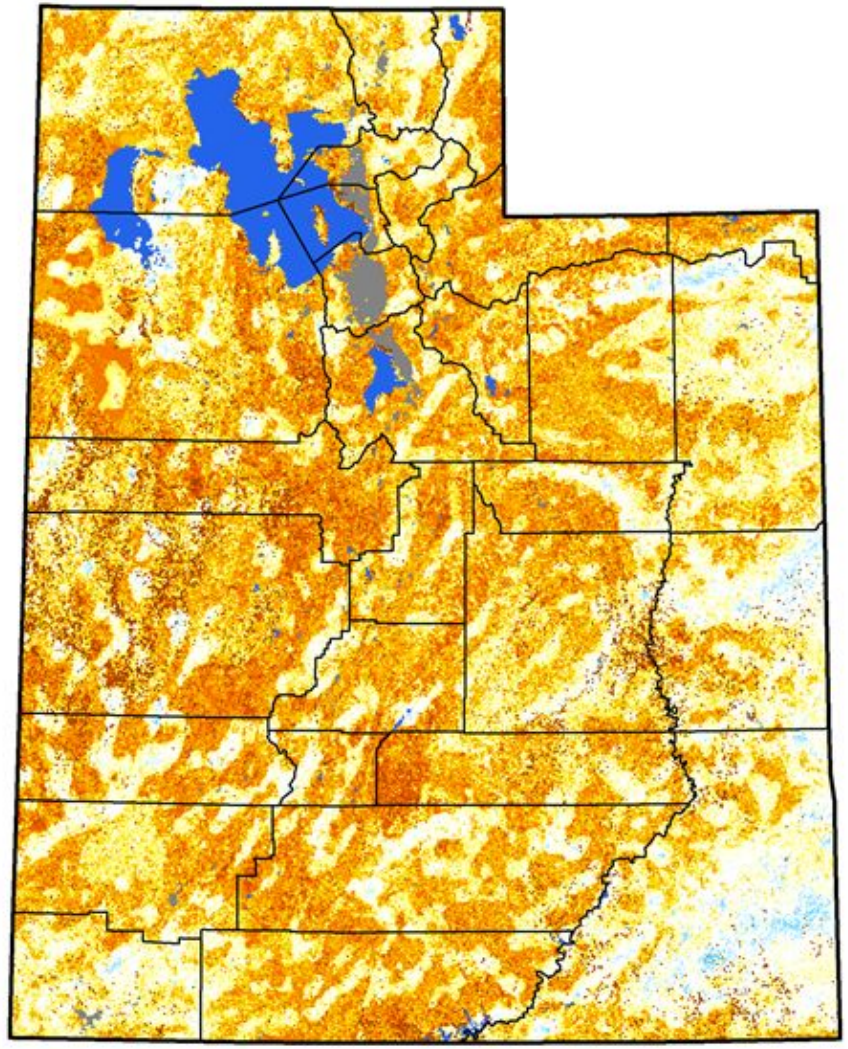
- Extreme Drought
- Severe Drought
- Moderate Drought
- Pre-drought stress
- Near Normal
- Unusually Moist
- Very Moist
- Extreme Moist
- Out of Season
- Water

Agency - Utah Climate Center
Presenter - Jon Meyer

Quick Drought Response Index

Utah

September 20, 2020
(Week 38)



Conditions Relative to 4-Week Historical Average

- Wetter
- Near Average
- Drier
- Out of Season
- Urban
- No Data
- Water

Agency - Utah Climate Center
Presenter - Jon Meyer

Climate Summary:

- With the exception of recent modest northern Utah precipitation activity, the entire state remains well below expected rainfall across long-term and short-term timescales. While ongoing dryness is indicated by the SPI index, general short-term improvements to the degree of dryness are found. However, areas experiencing the greatest drought (central and southeastern Utah) remain the worst off.

- Total rainfall over the last 60 days remains under 1" for the majority of the state, with much of that area seeing less than 0.5" and some seeing less than 0.1". The degree of recent dryness shown in the QuickDri index confirms the ongoing drought conditions.

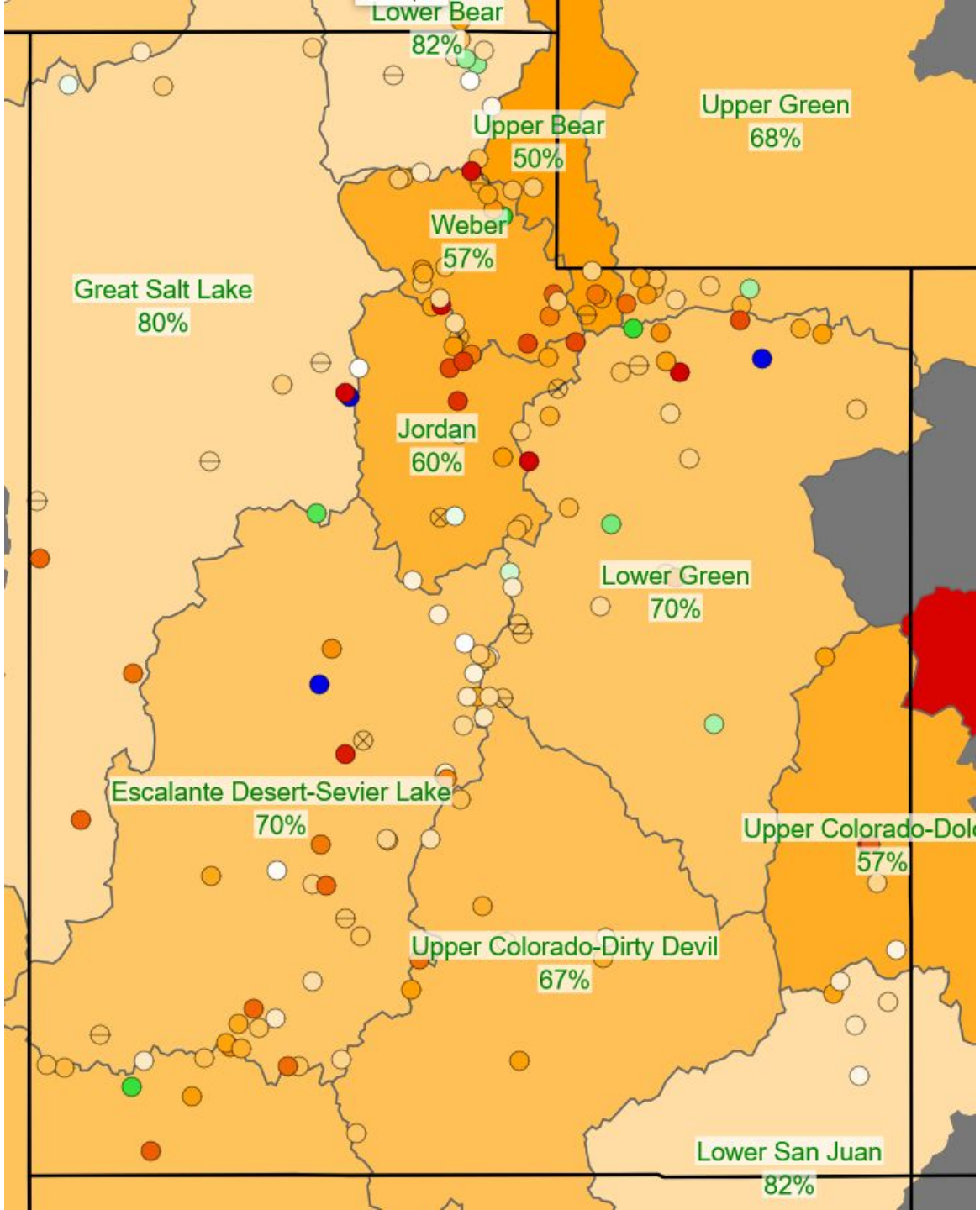
- Temperatures continue to run above normal across all timescales with recent weeks seeing an increase in the magnitude of anomaly in both average and max daytime temps.

- Despite ongoing above-seasonal temperatures and dry skies, improvements to the recent EDDI index is assumed to be related to the gradual climatological cooling trend that will naturally drive down the atmosphere's evaporative demand.

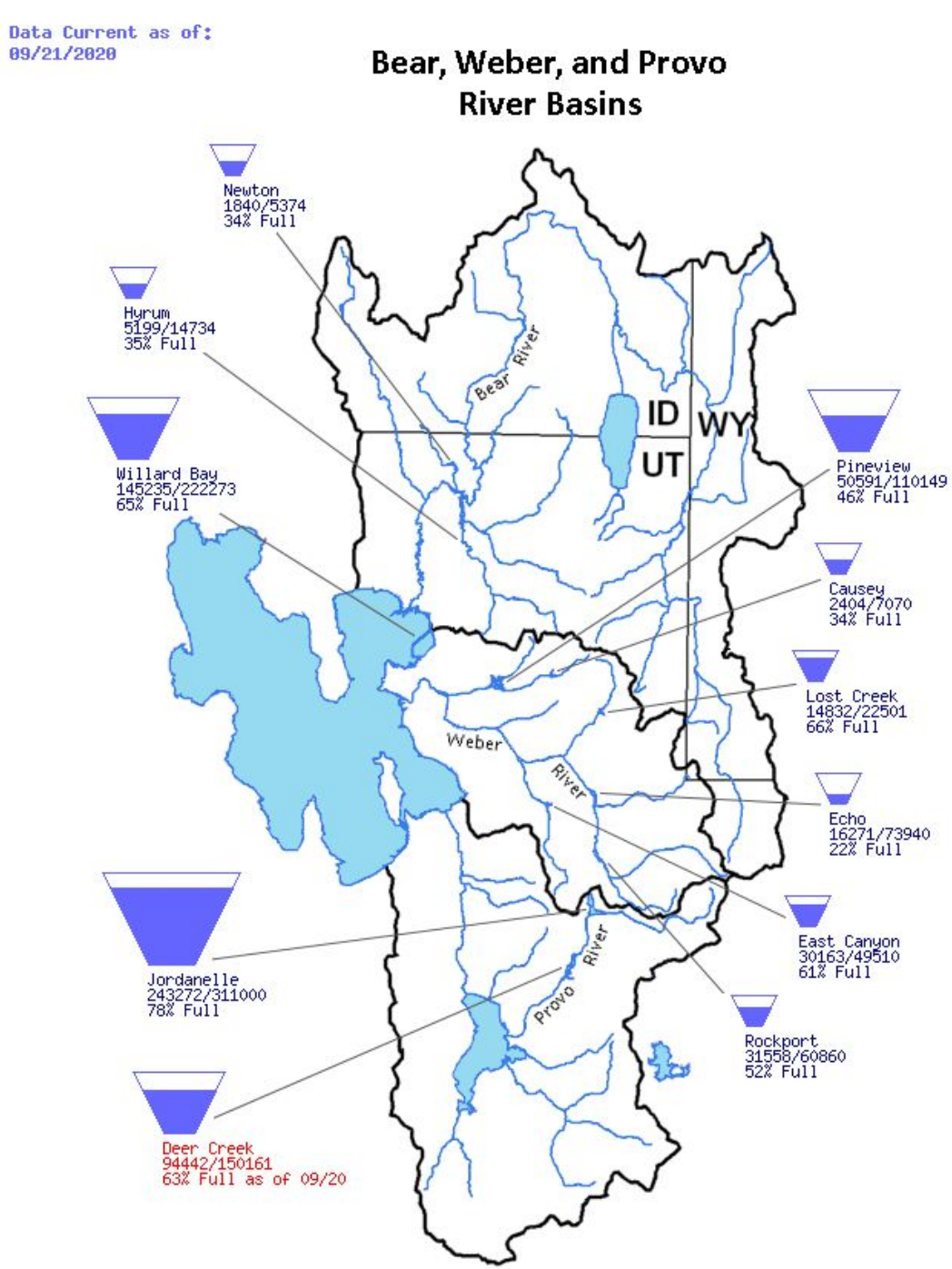
- Given the low soil moisture, lack of precipitation and above-seasonal temperatures, vegetation response indices continue to indicate a high degree of stress on plant life.

Agency - Utah Climate Center
Presenter - Jon Meyer

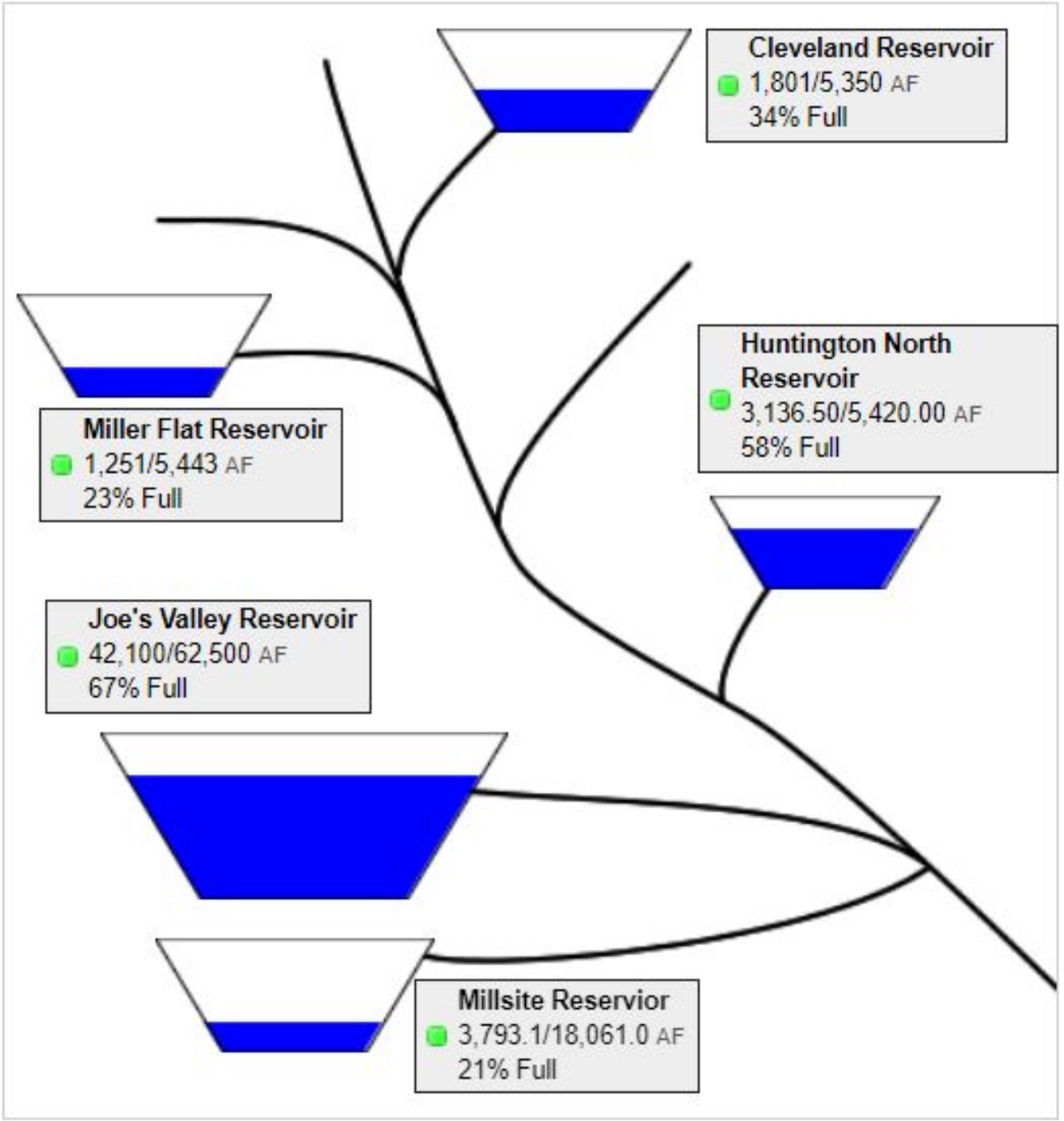
Soil Moisture (Current)
SCAN & SNOTEL data
8” depth sensor



Agency - NRCS Snow Survey
Presenter - Jordan Clayton

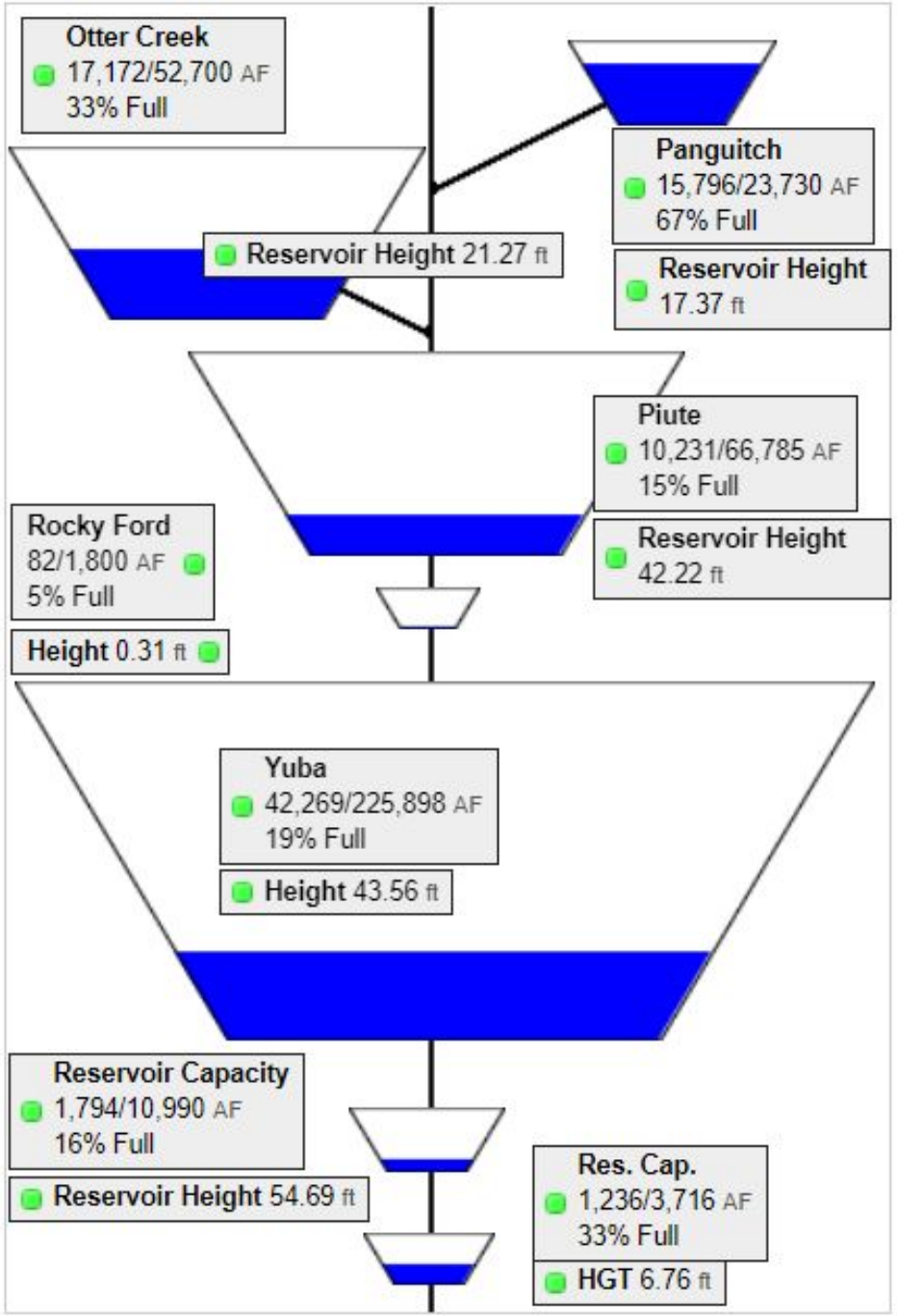


Agency - Bureau of Reclamation
Presenter - Laura Haskell



Agency - Emery Water Conservancy District data

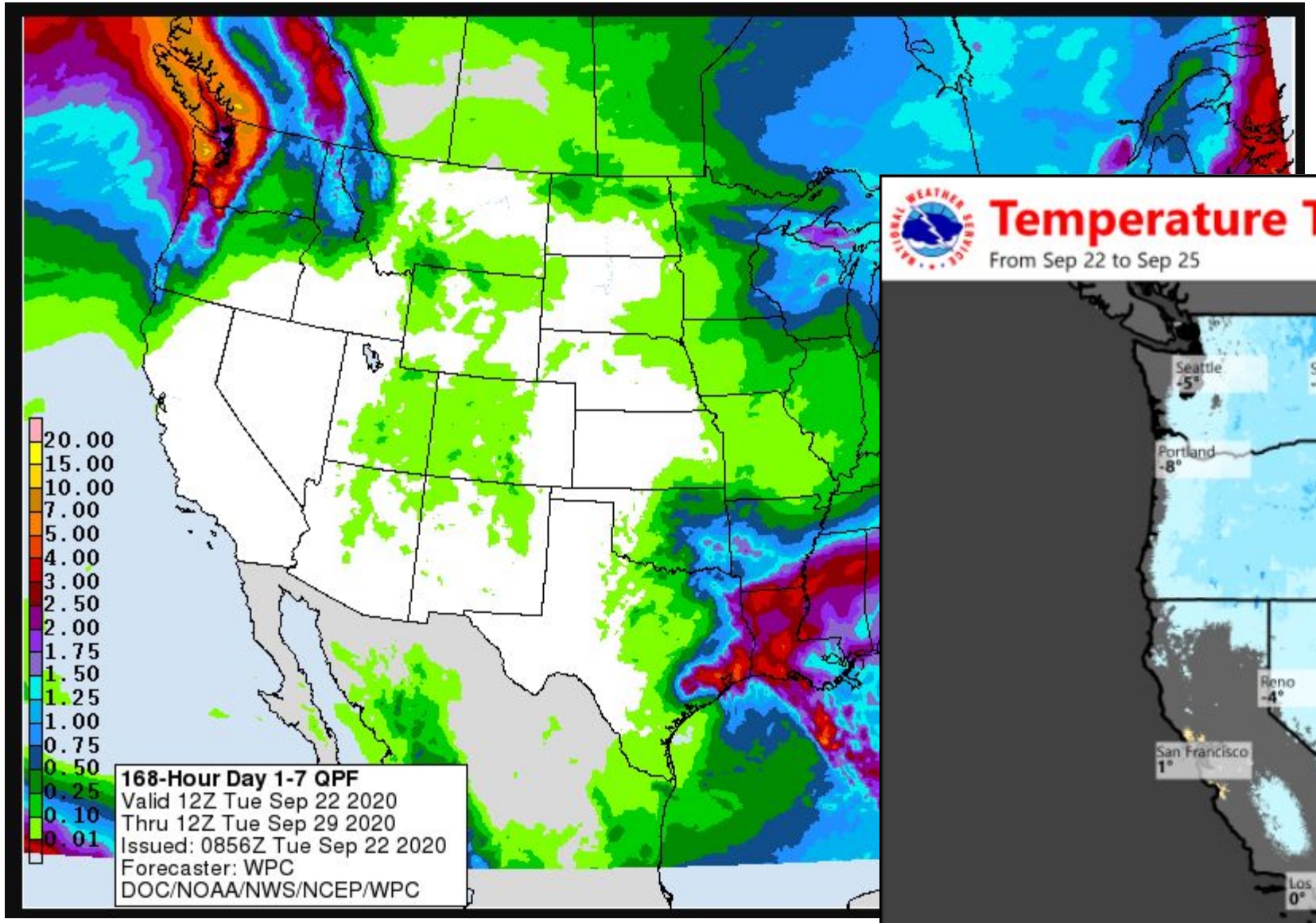
Presenter - Laura Haskell

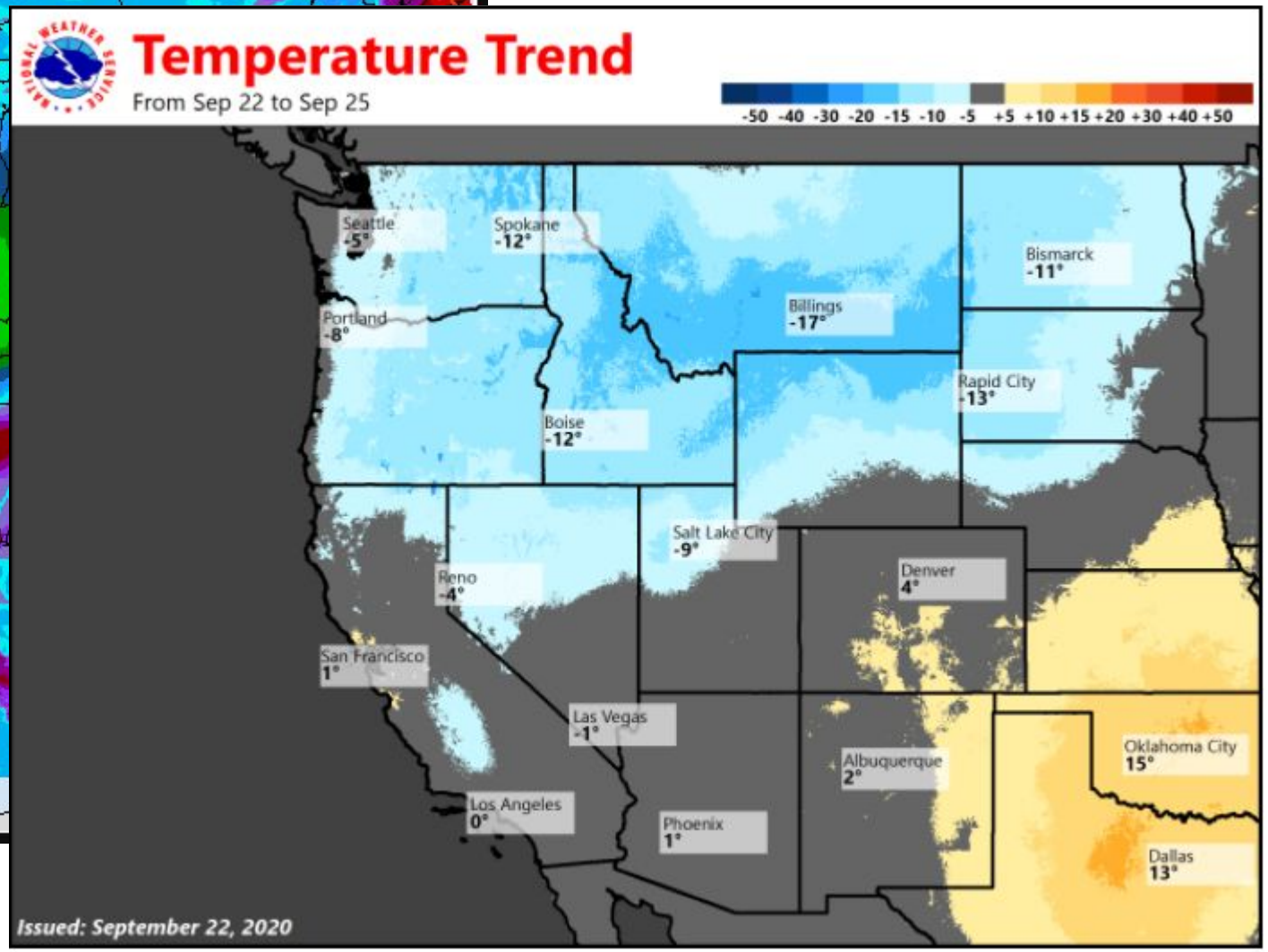


Agency - Sevier River Water Users Association data

Presenter - Laura Haskell

Weather Forecast Office Utah Day 1-7 Outlook

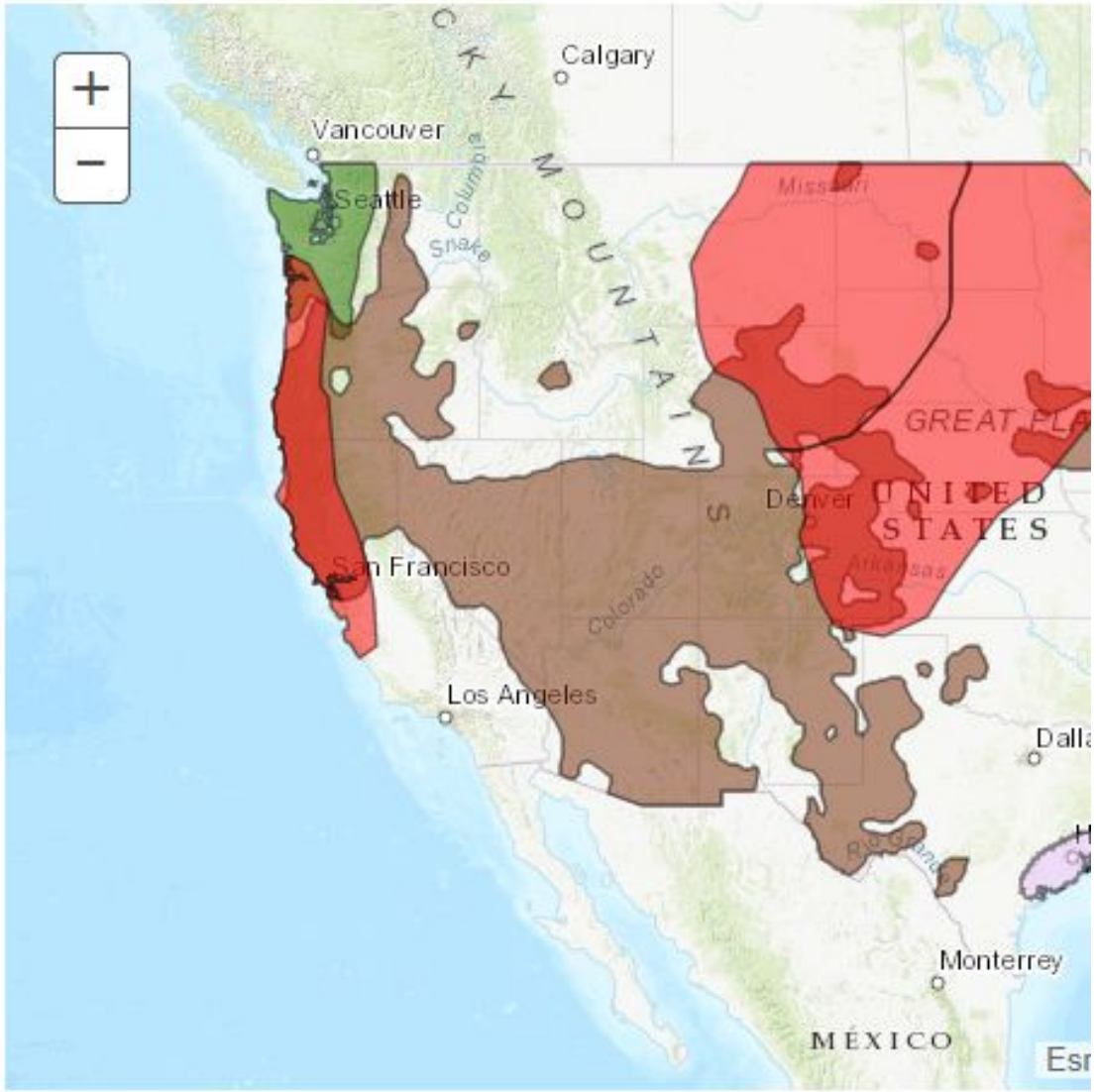


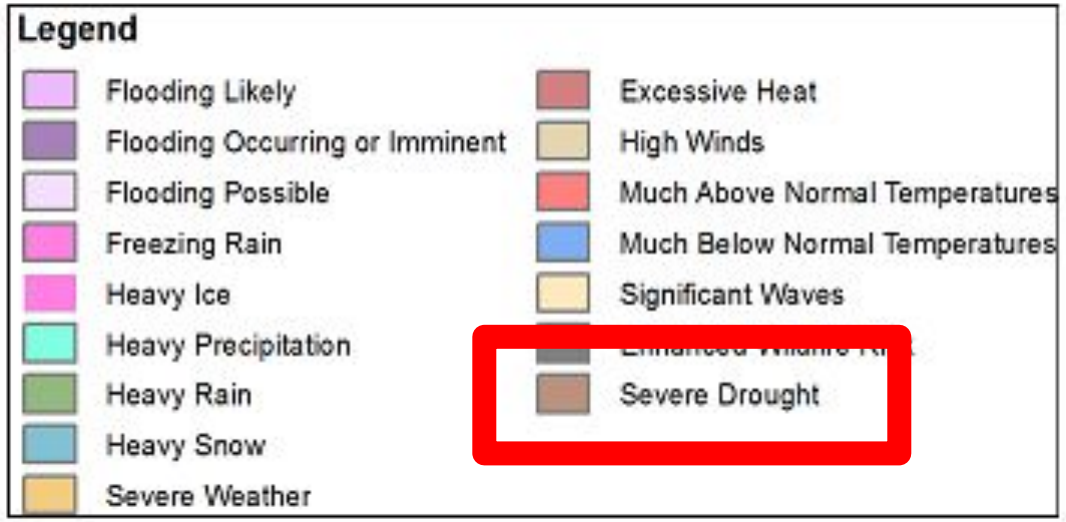


Agency - National Weather Service Weather Forecast Office

Presenter - Christine Kruse

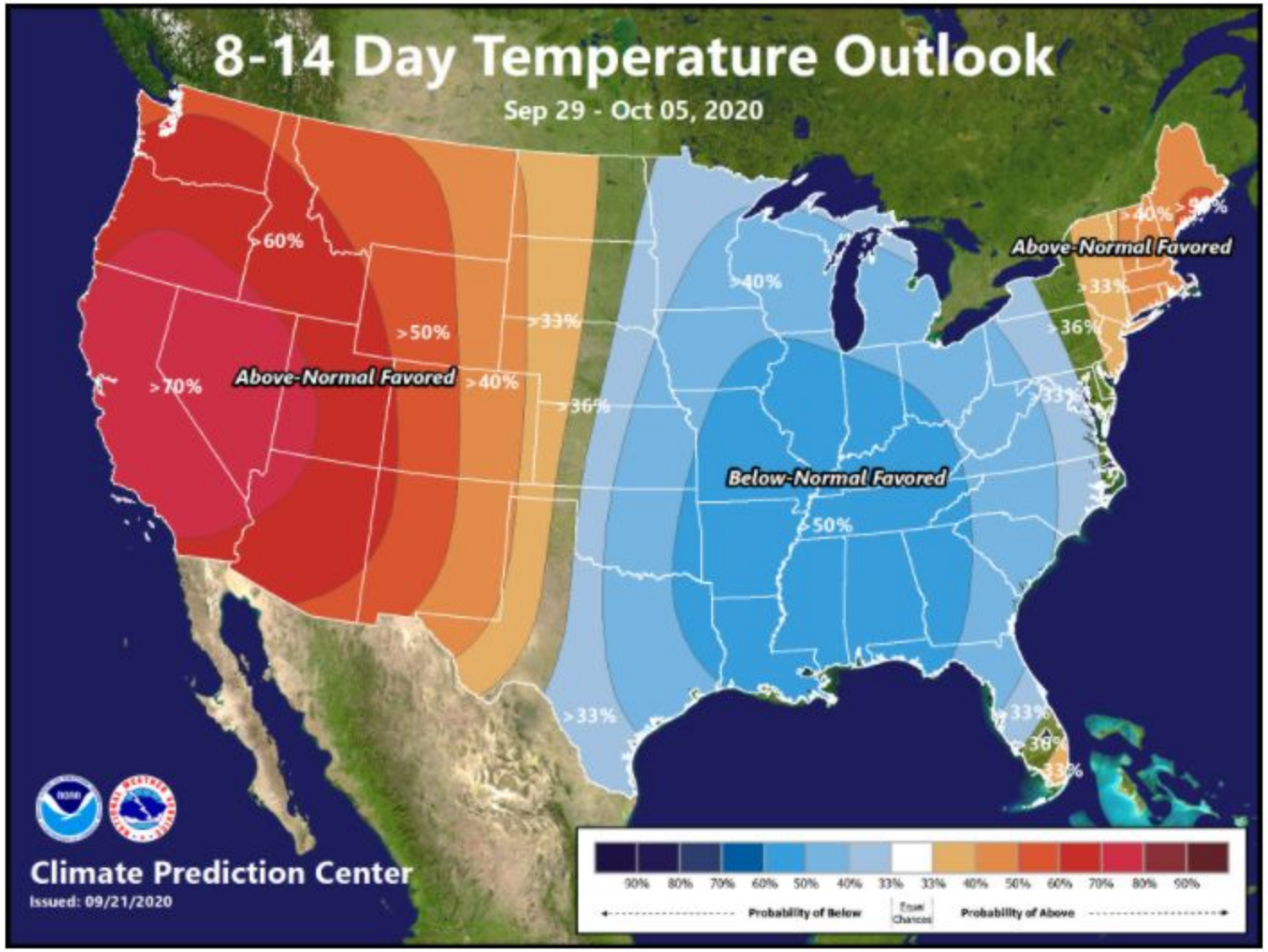
Weather Prediction Center U.S. Day 3-7 Hazards Outlook





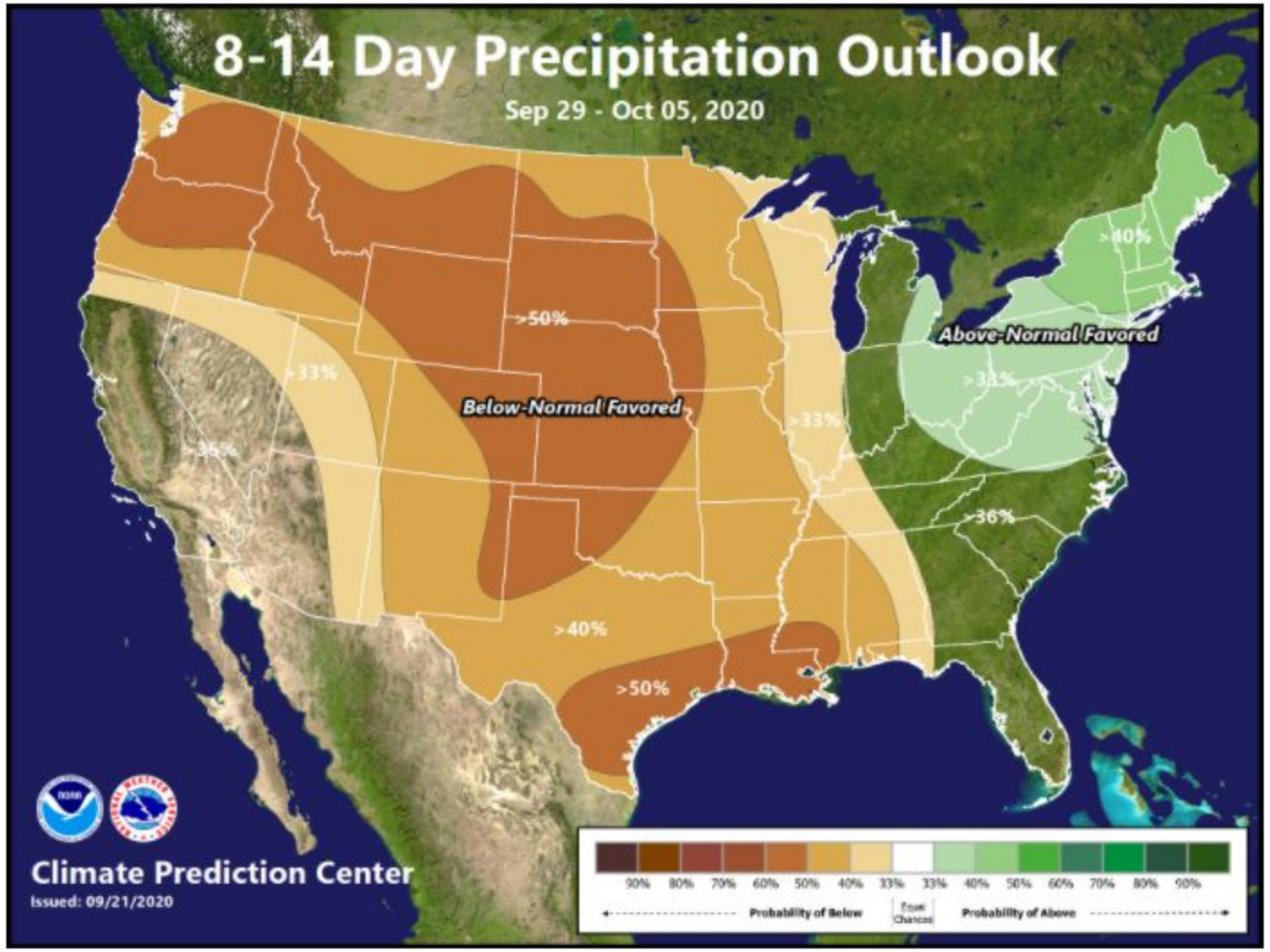
Agency - National Weather Service Weather Forecast Office
Presenter - Christine Kruse

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



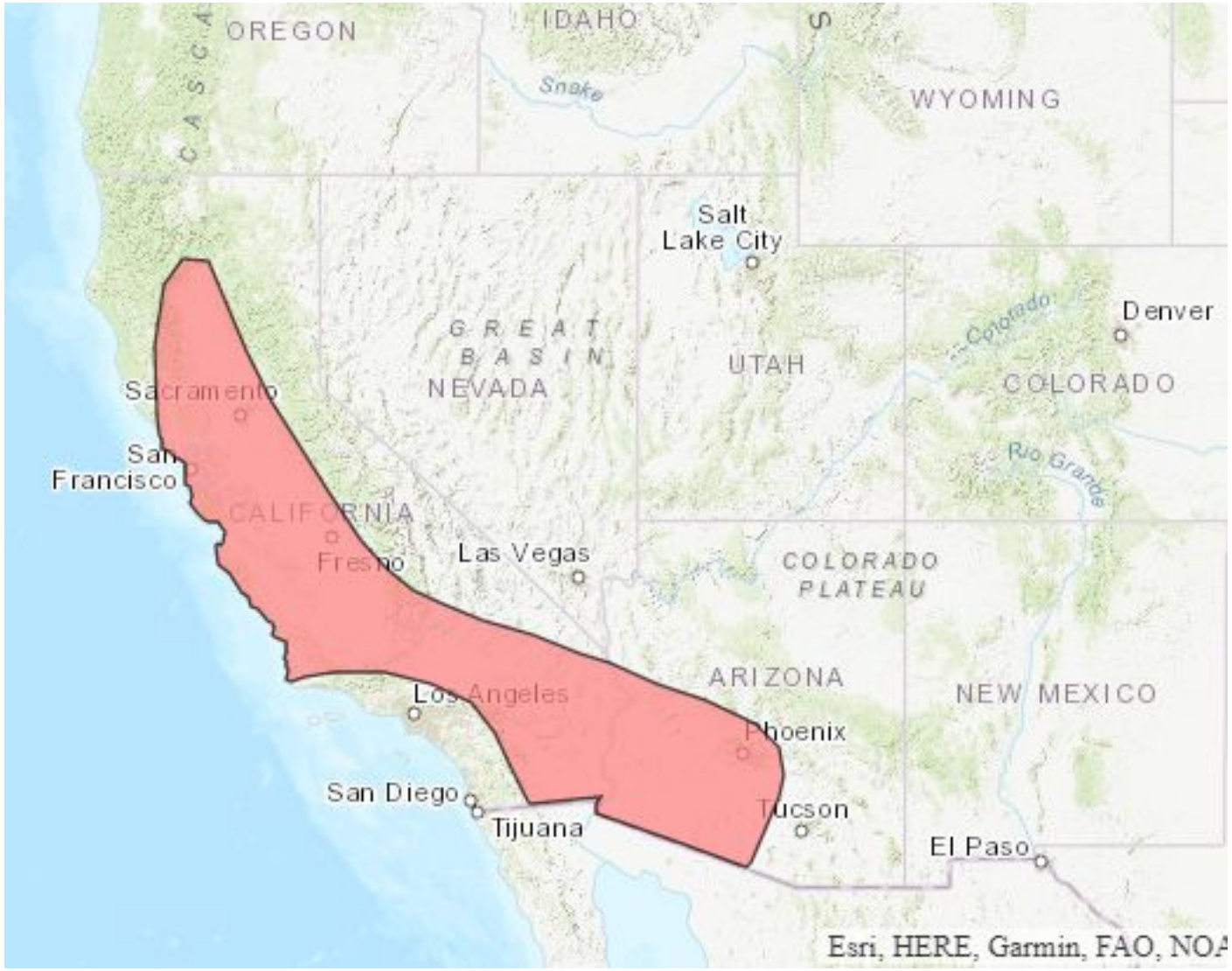
Agency - National Weather Service Weather Forecast Office
Presenter - Christine Kruse

Climate Prediction Center 8 to 14 Day Outlooks - Precipitation

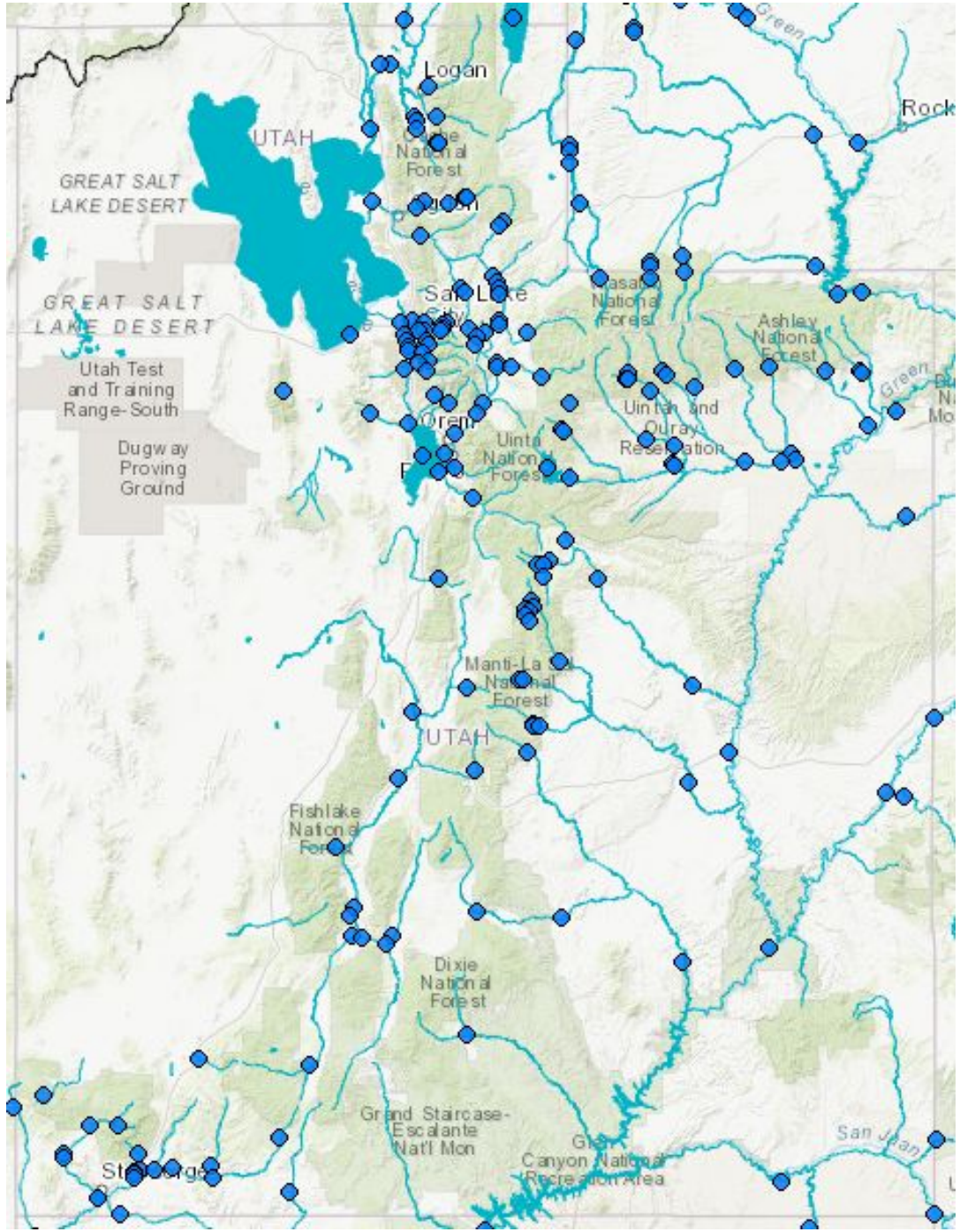


Agency - National Weather Service Weather Forecast Office
Presenter - Christine Kruse

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



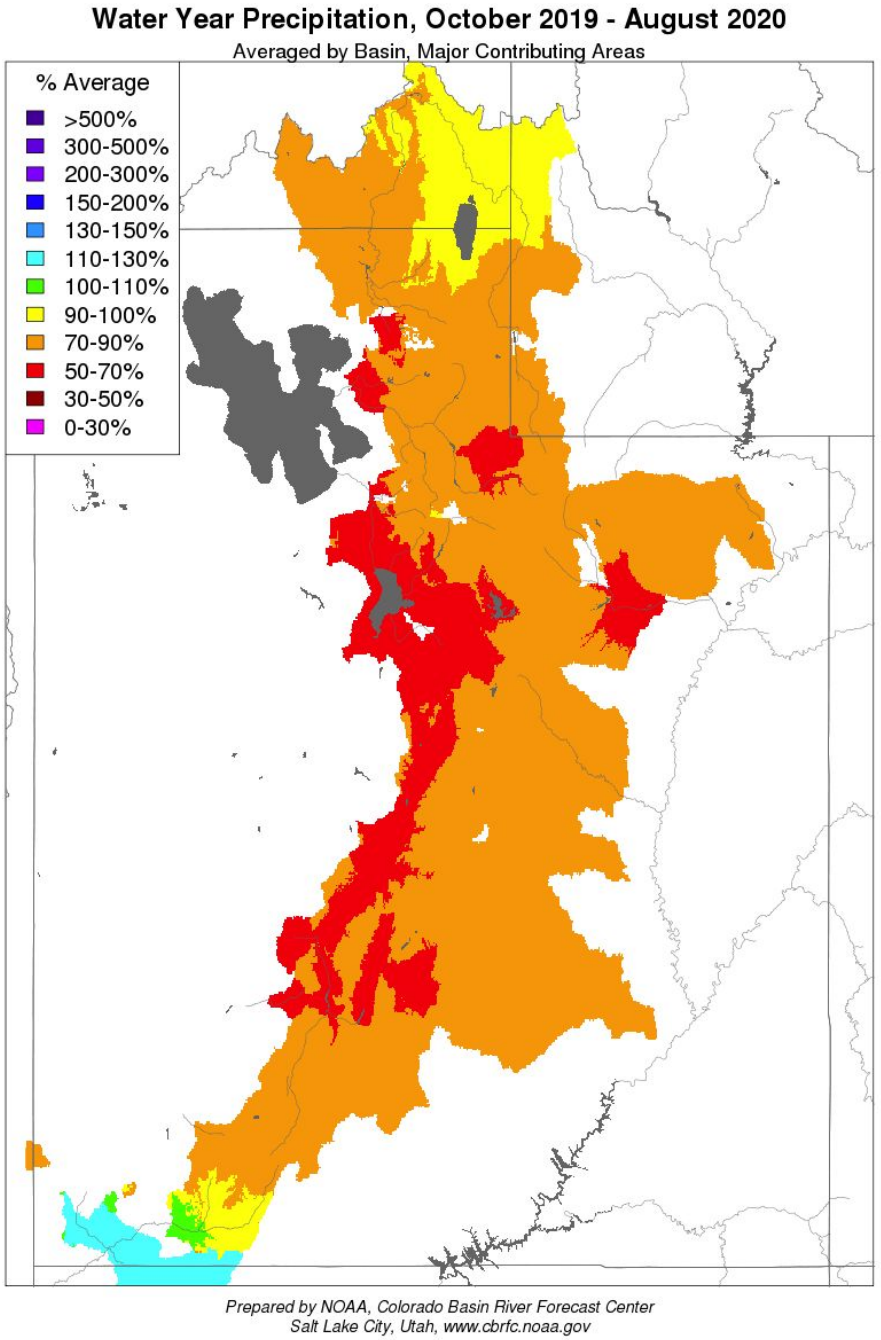
Agency - National Weather Service Weather Forecast Office
Presenter - Christine Kruse

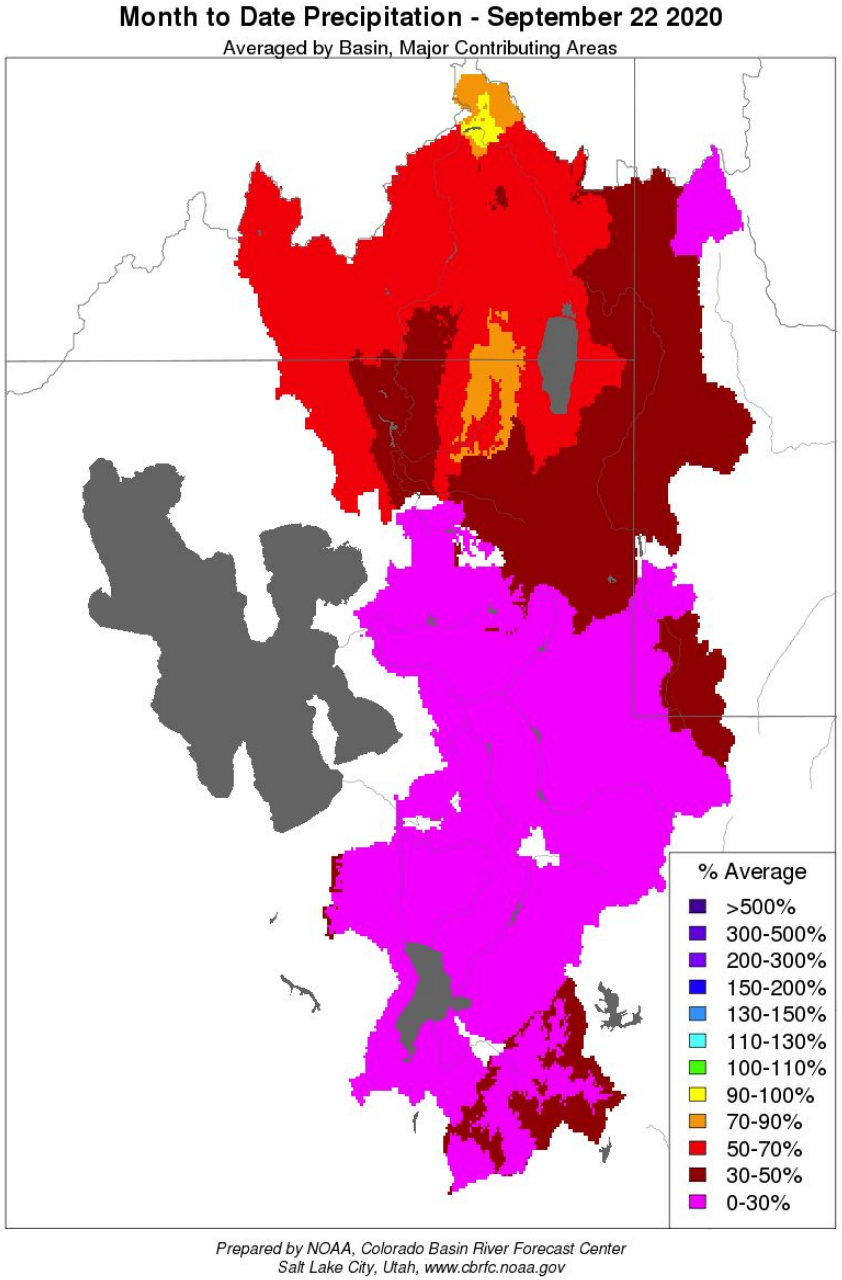


Continued dry conditions have yielded flows that are well below average for this time of year.

Little precipitation is forecasted over the next ten days, and there is no significant hydrologic activity forecasted in the near term.

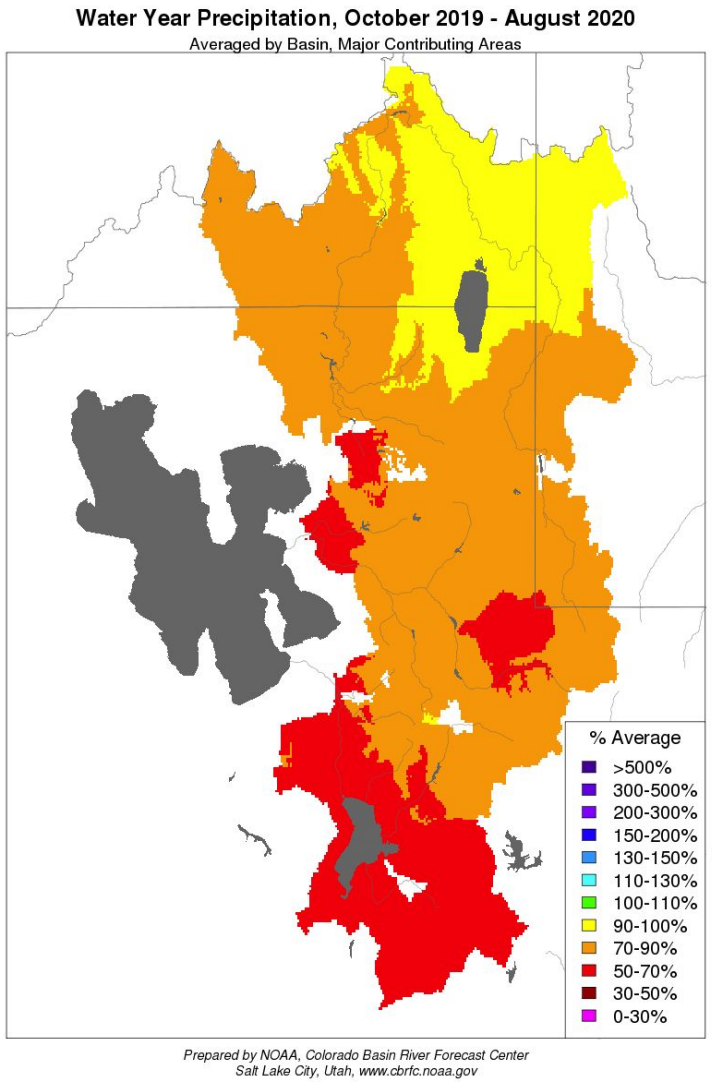
La Nina conditions are forecasted for next winter season. Depending on the strength of the event, we may incorporate this information into forecasts along the Virgin River. Regardless, we are working to improve how we incorporate information from teleconnections, like ENSO, into our forecasts.



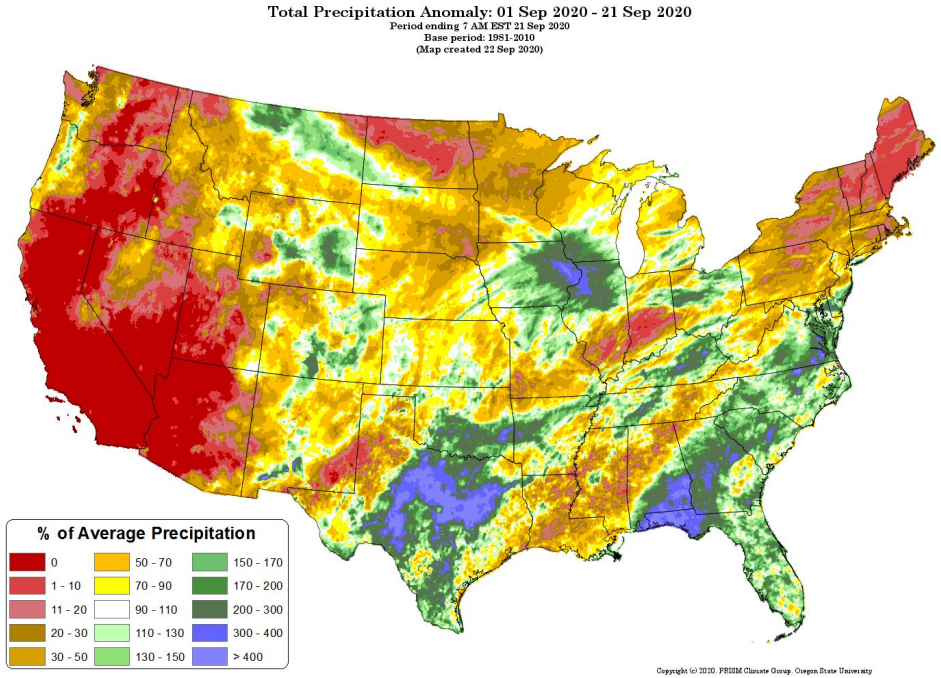


Dry conditions have been prevalent over Utah for the entire "Water Year 2020". September has been extremely dry to date.

Water Year 2020



September Month to Date percent of average precipitation.



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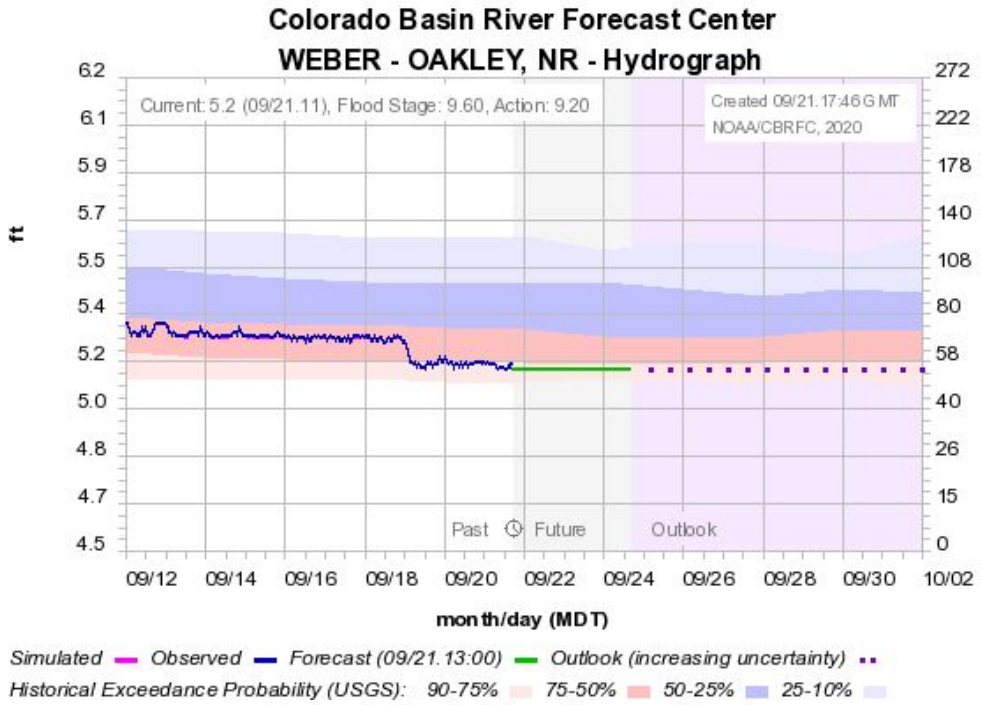
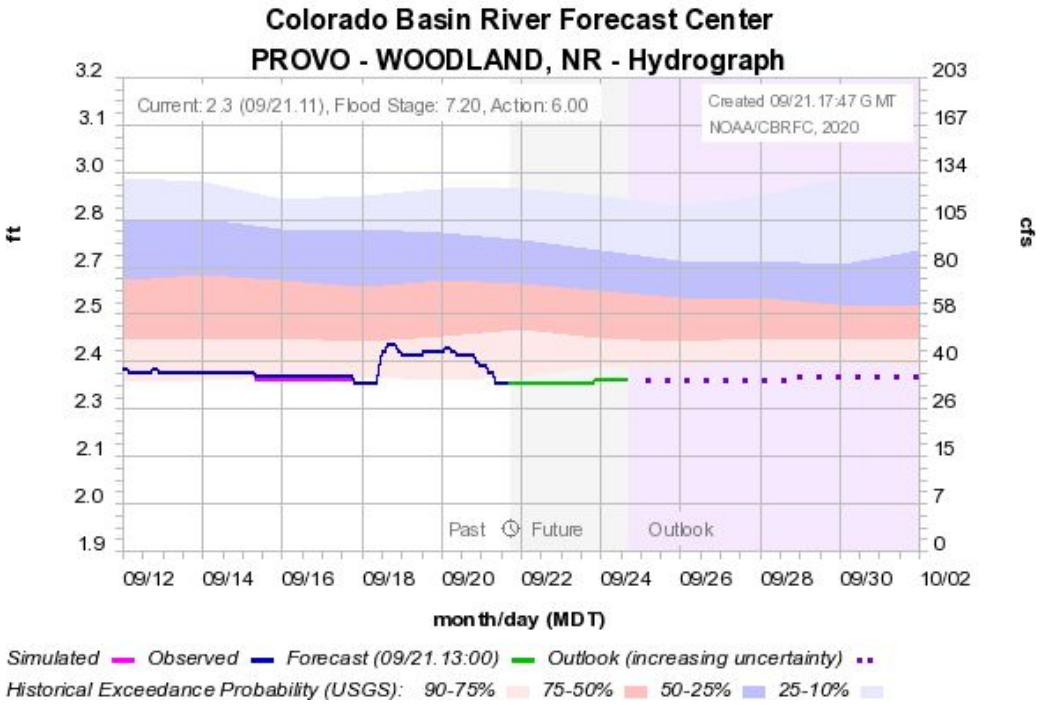
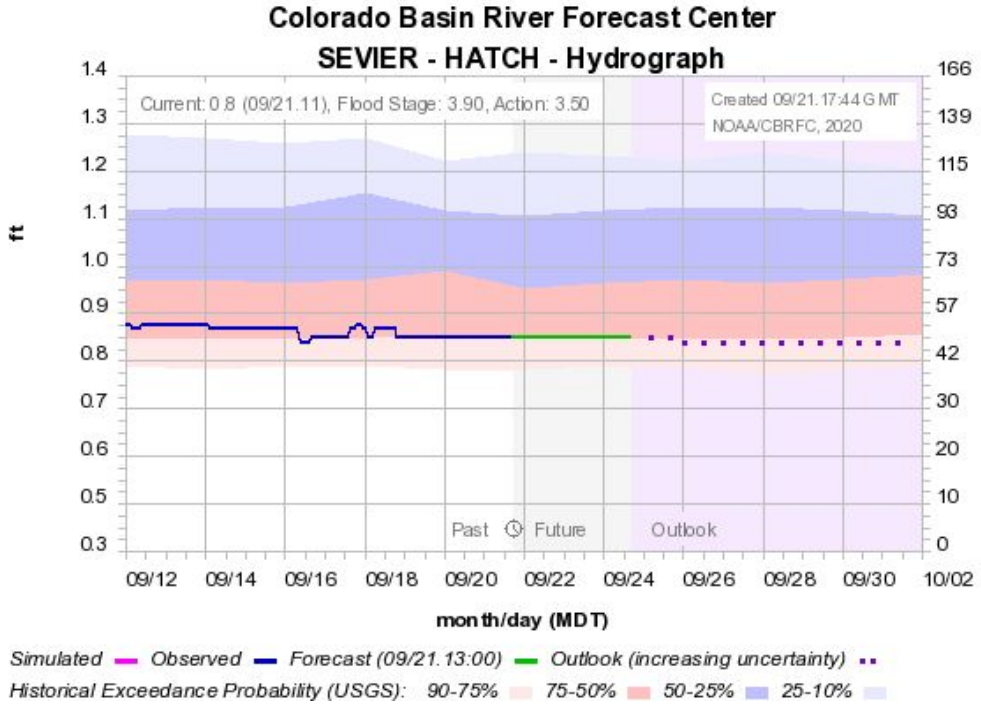
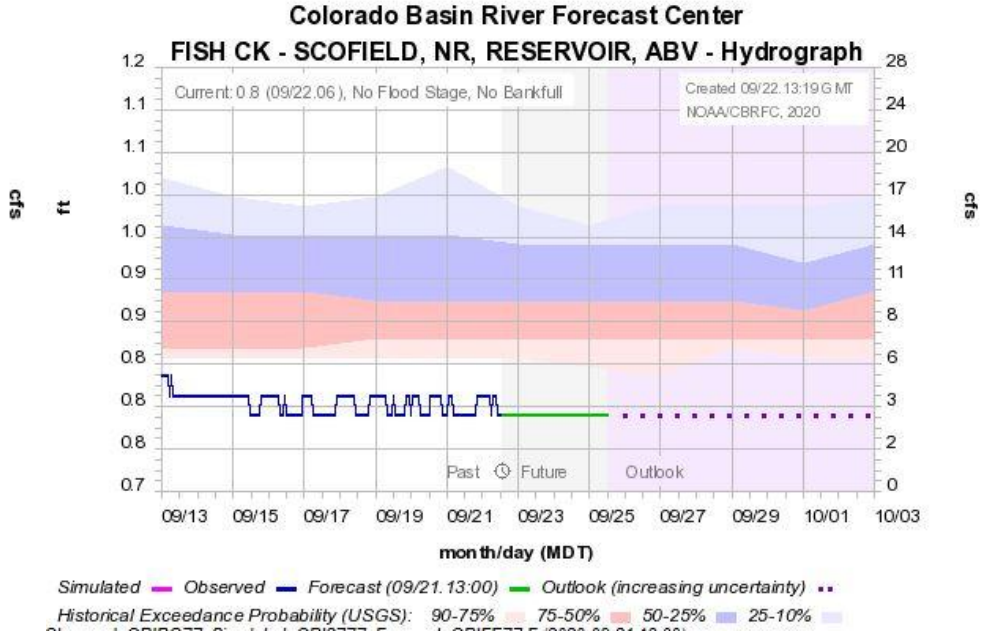




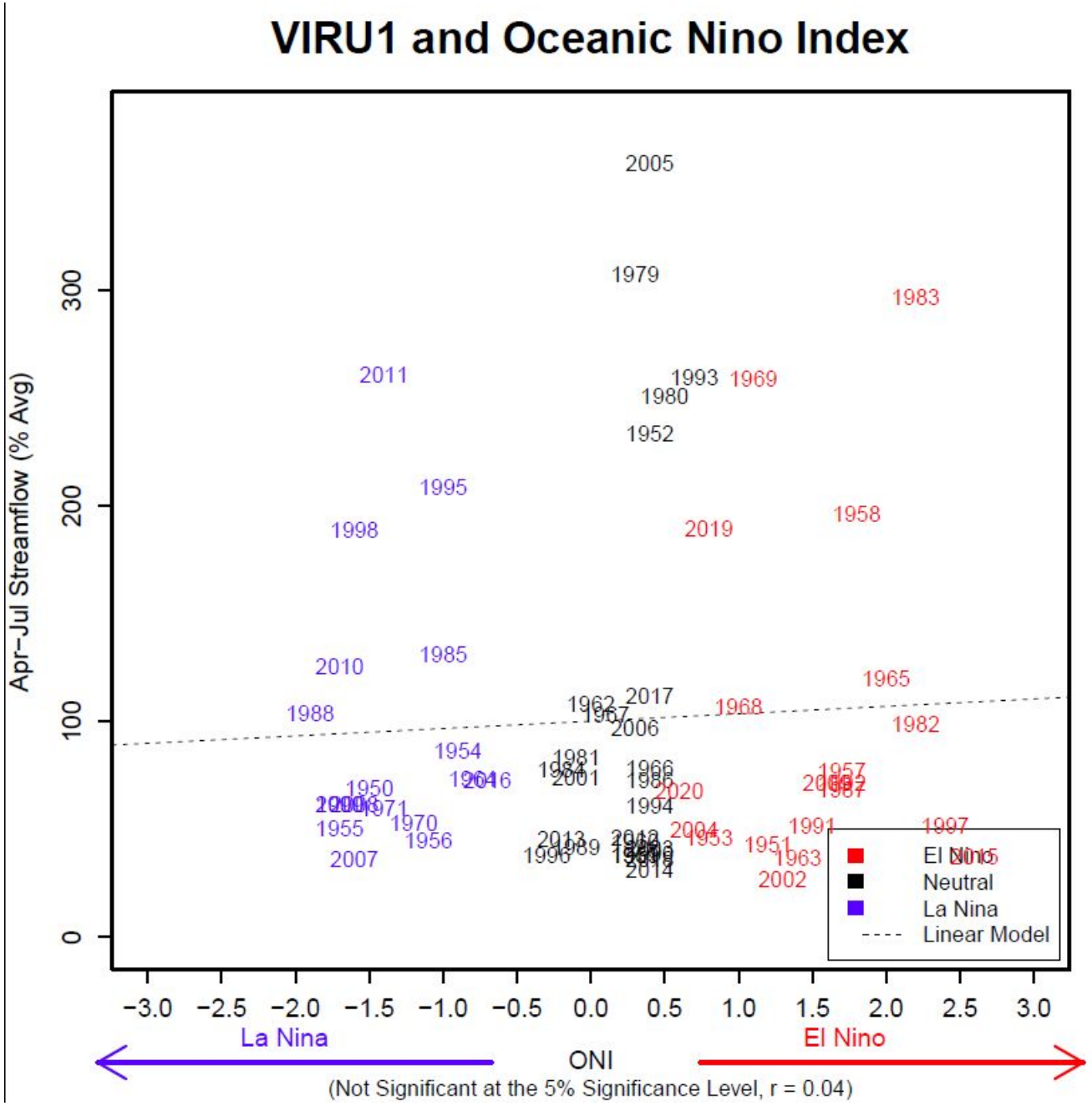


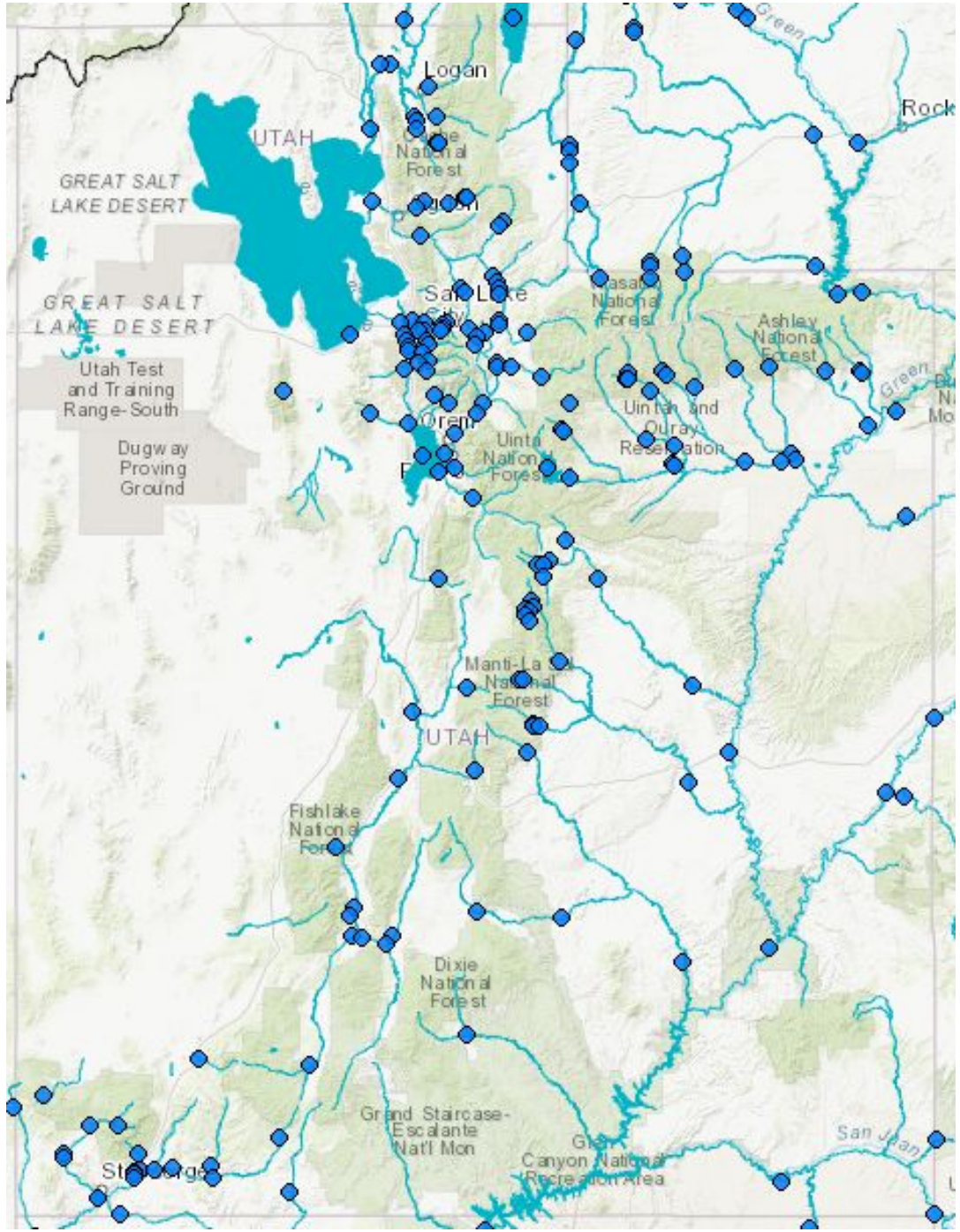


Much below average precipitation conditions have contributed significantly to much below average flows throughout the state.

ENSO Conditions

- ENSO Status
  - La Nina Advisory
  - SSTs and atmospheric circulation is consistent with La Nina
  - La Nina conditions are present and likely to continue through Winter (75% chance)
- Water Supply
  - For Utah, there is no correlation between ENSO and streamflow, so we do not use this information (In the Lower Basin, we do)
  - Working to develop this further





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