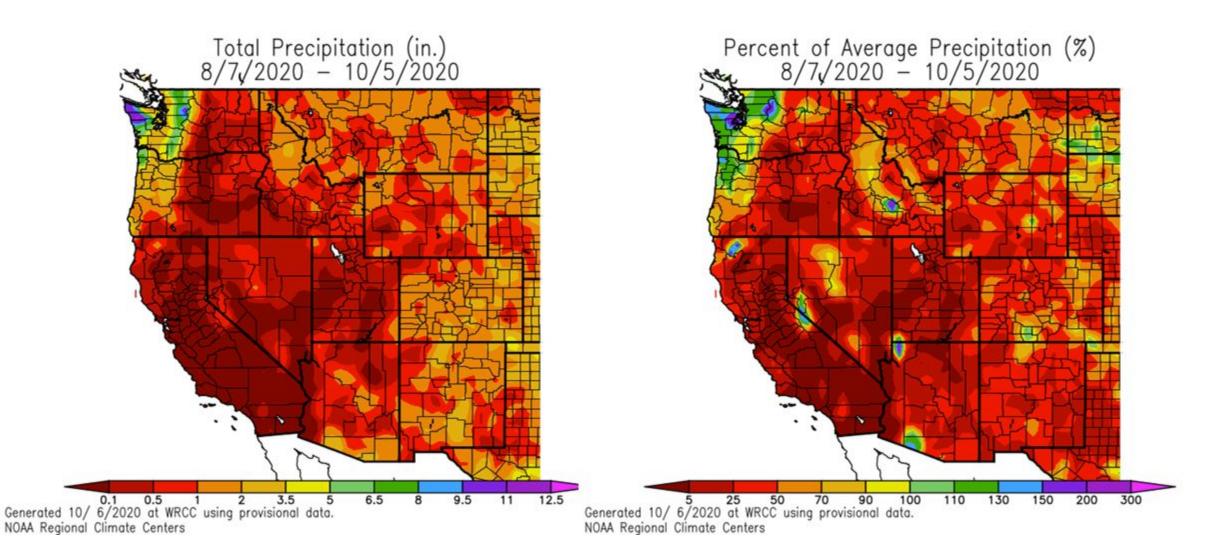


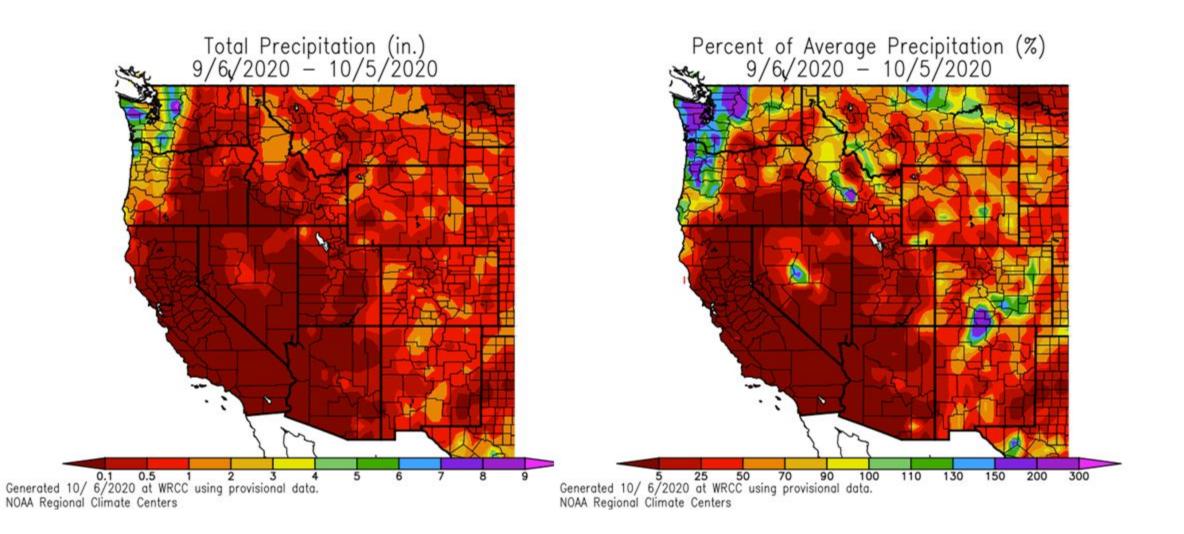
Utah Drought Monitor Webinar

October 6, 2020

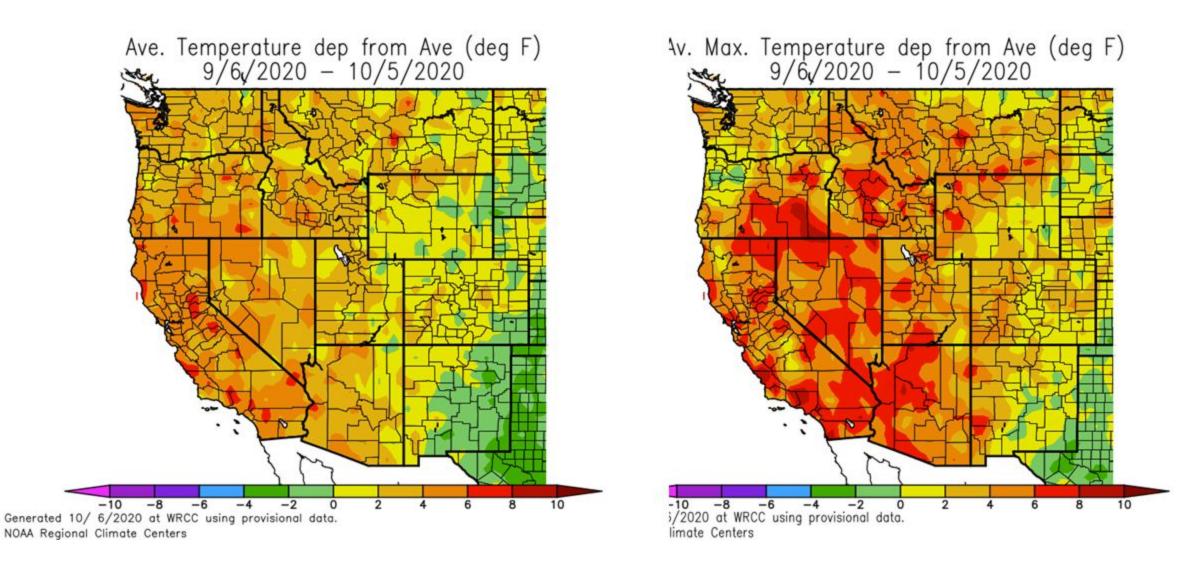
Precipitation 60 day history (Percent of Average)



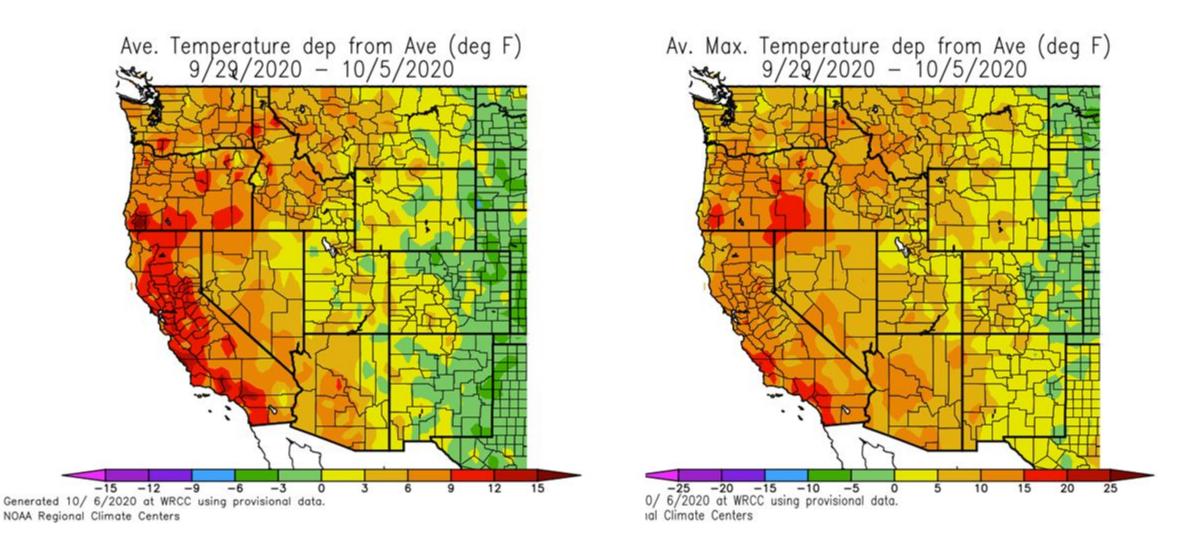
Precipitation 30 day history (Percent of Average)



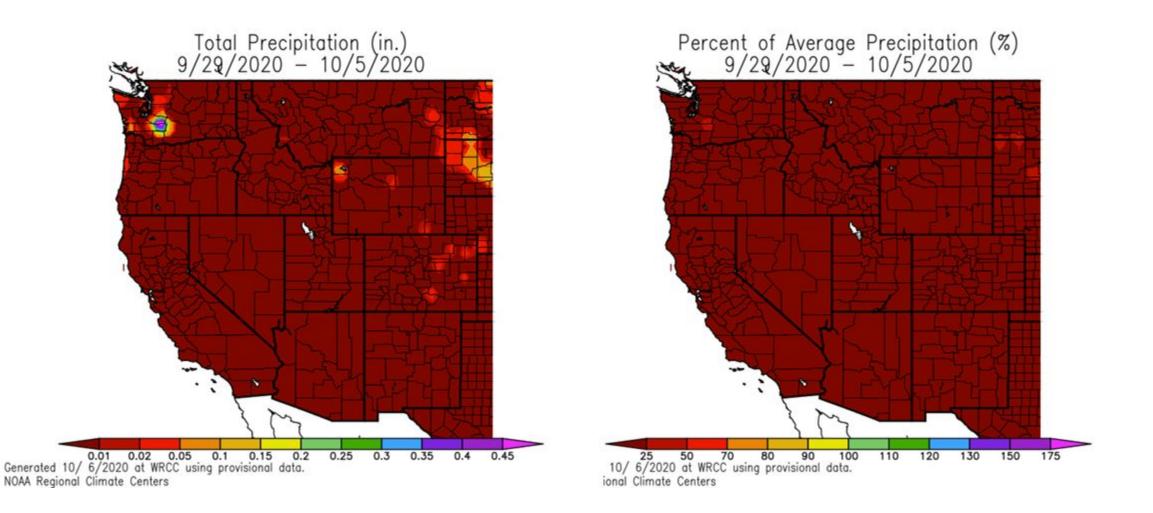
Temperature 30 day (Related to Average)



Temperature 7 day (Related to Average)

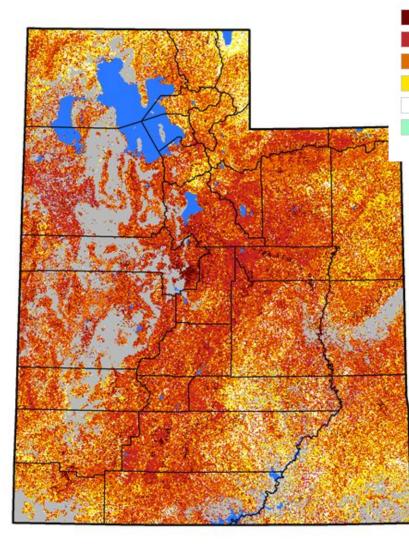


Precipitation 7 day history (Percent of Average)



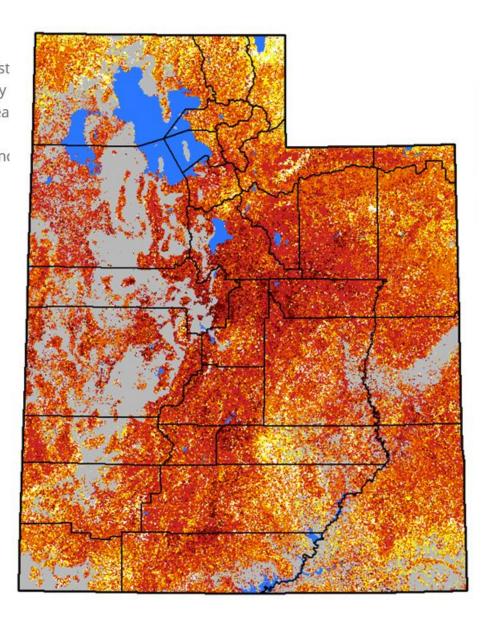
Vegetation Drought Response Index

Complete: Utah

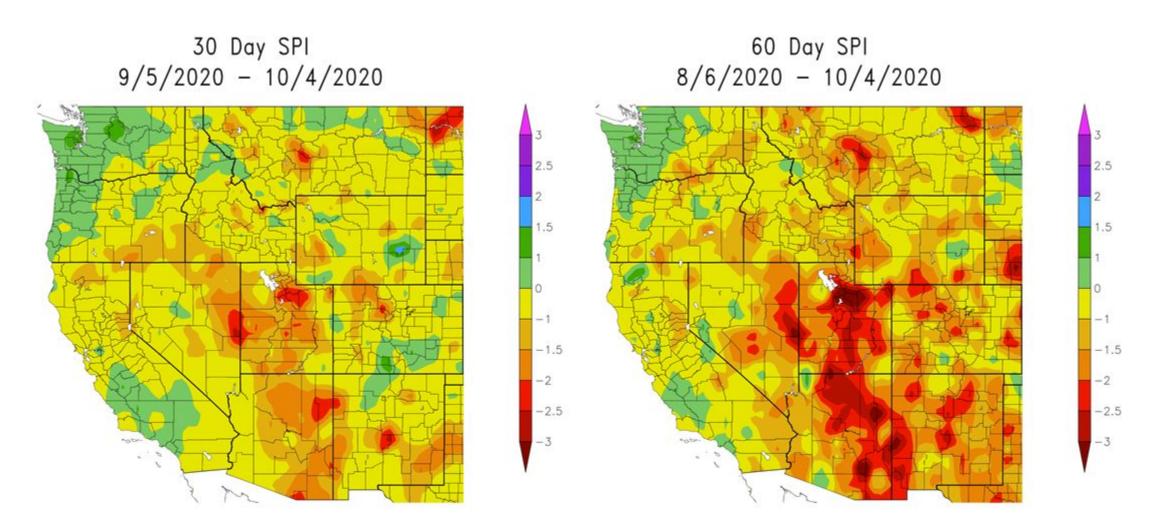


Vegetation Condition





Standardized Precipitation Index



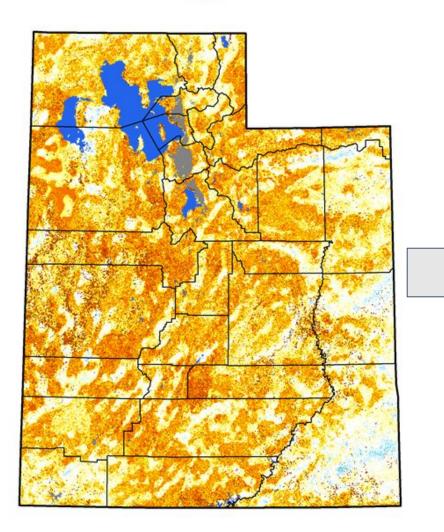
Generated 10/6/2020 at HPRCC using provisional data.

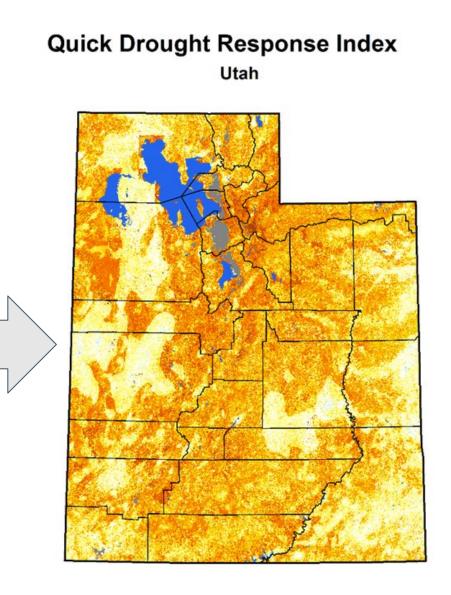
NOAA Regional Climate Centers 020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Quick Drought Response Index

Utah





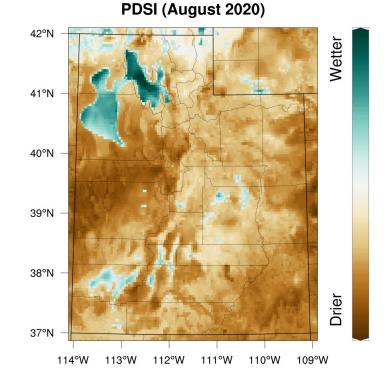
October 4, 2020 (Week 40)

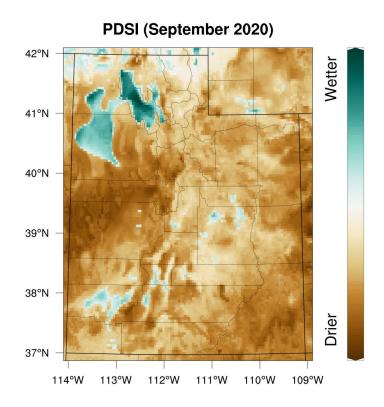
Conditions Relative to 4-Week Historical Average



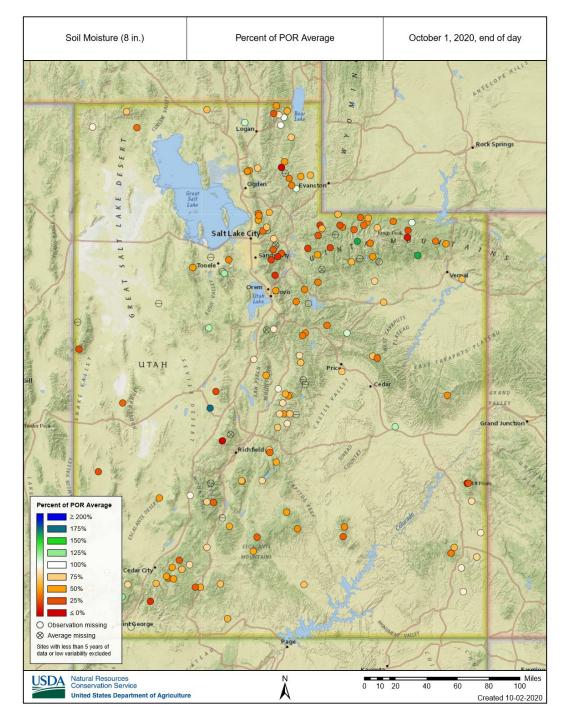
Palmer Drought Severity Index (PDSI):

- ****initial results from UCC project to calculate PDSI in-house.
- One of most predominant drought indices used.
- Temperature and precipitation data used to estimate relative dryness by incorporating a physical water balance model .
- Useful at capturing long-term drought conditions (timescales > 12 months)
- Not effective during snow-season (assumes precipitation is immediately available)





Soil Moisture (Current) SNOTEL & SCAN 8" sensor depth

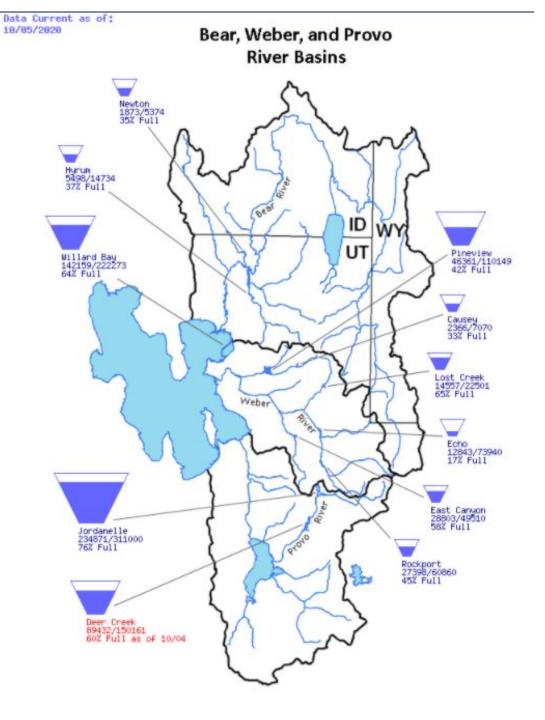


Agency - NRCS Snow Survey

Bear River Basin: roughly the same as two weeks ago

Weber River Basin: gone down up to 4% in the last two weeks

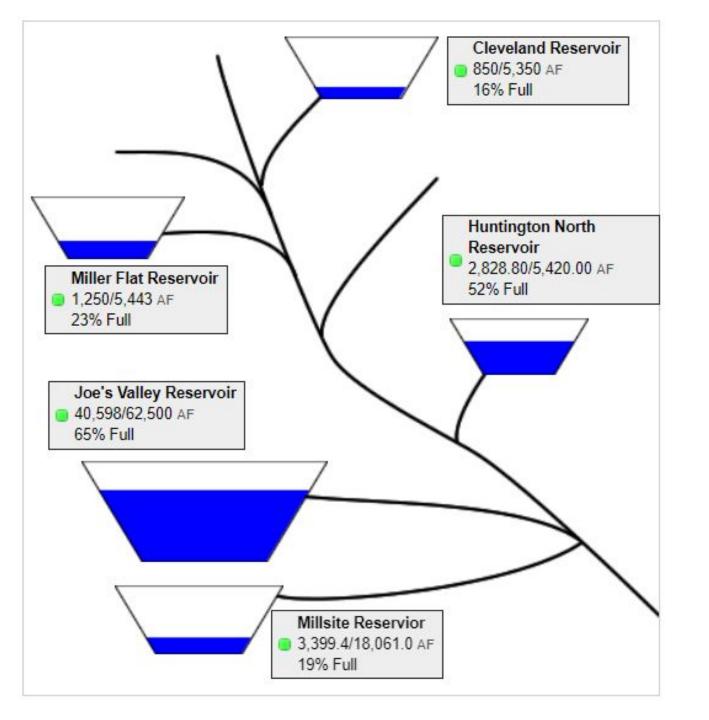
Provo River Basin: gone down 2-3% in last two weeks



Agency - Bureau of Reclamation Presenter - Laura Haskell In the last two weeks: Cleveland Reservoir is down 18%

- Huntington North Reservoir is down 6%
- Millsite Reservoir has gone down 2%
- Remaining reservoirs are within 2% of previous levels

Agency - Emery Water Conservancy District Data Presenter - Laura Haskell



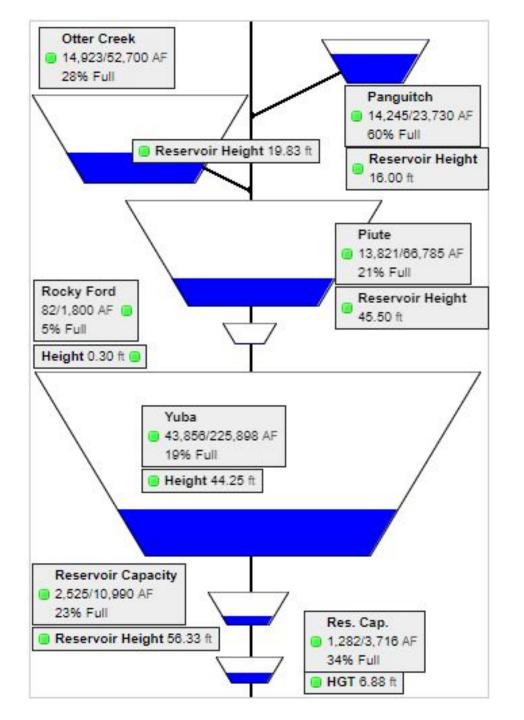
In the last two weeks:

Otter Creek, Panguitch and Piute down 5-7%

Rocky Ford, Gunnison Bend and Yuba remain the same

DMAD has gone up 7%

Agency - Emery Water Conservancy District Data Presenter - Laura Haskell

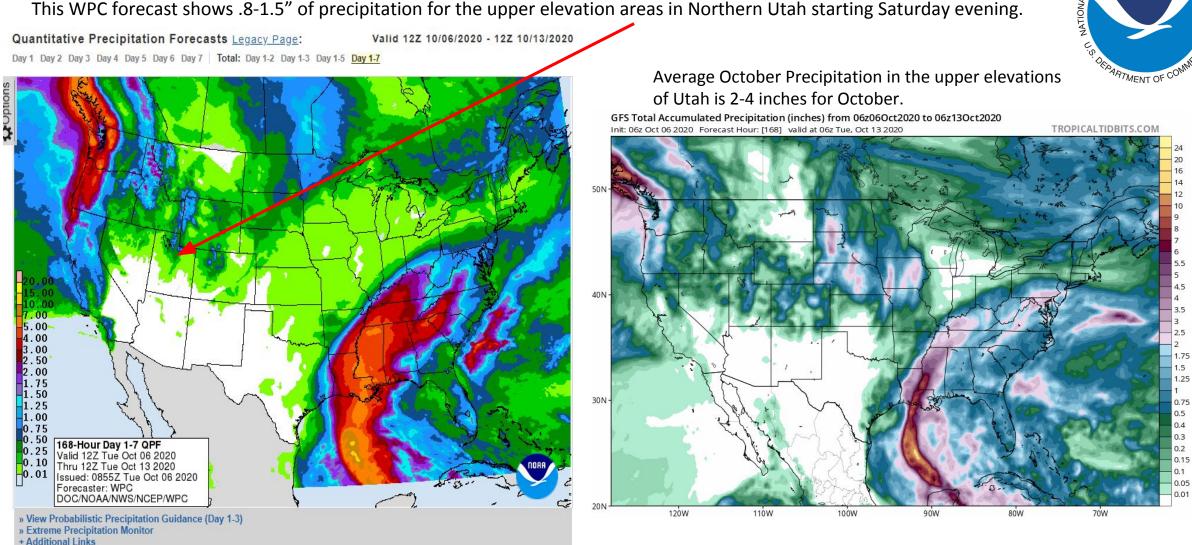


Weather Forecast Office Utah Day 1-7 Outlook

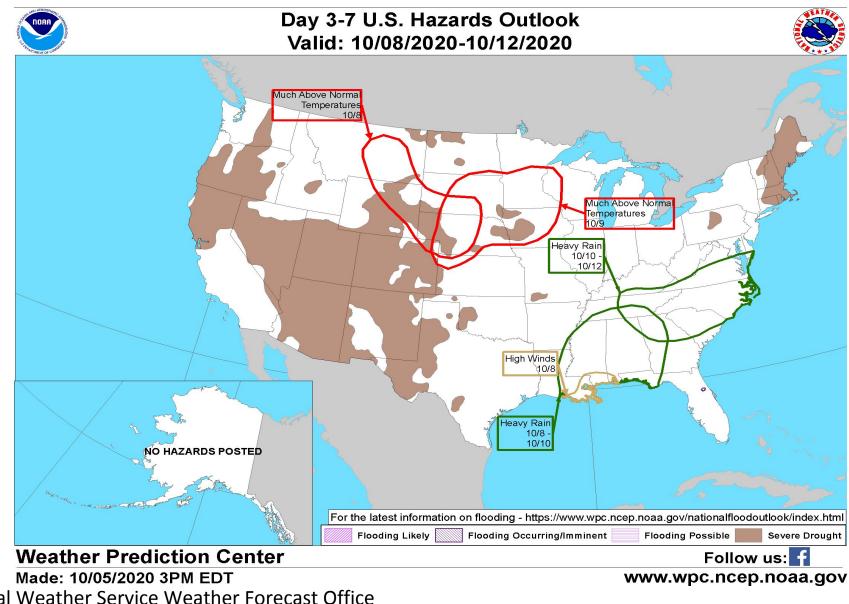
ND ATMOSPHE

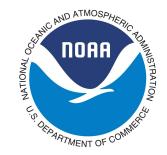
NOAA

This WPC forecast shows .8-1.5" of precipitation for the upper elevation areas in Northern Utah starting Saturday evening.



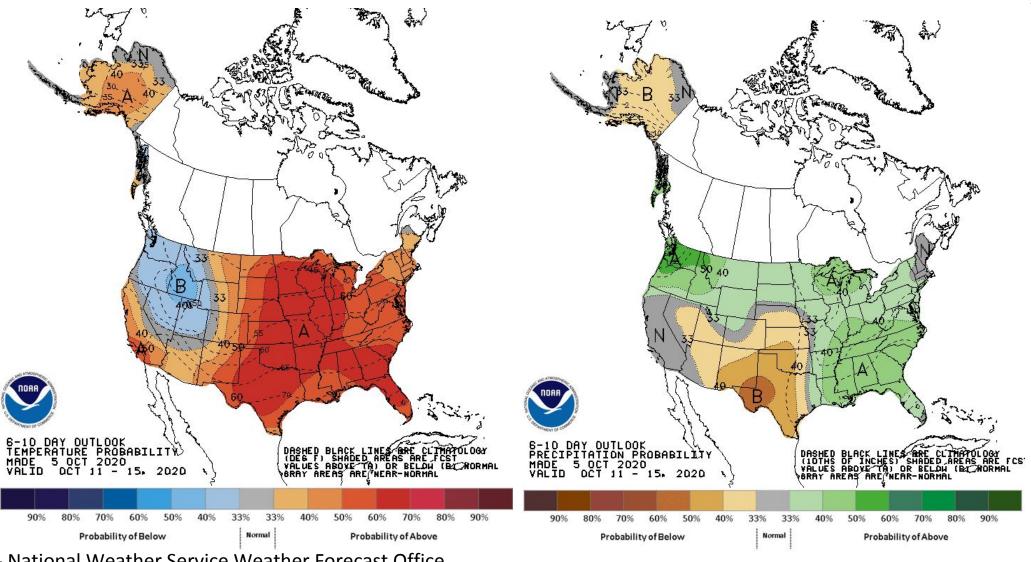
Weather Prediction Center U.S. Day 3-7





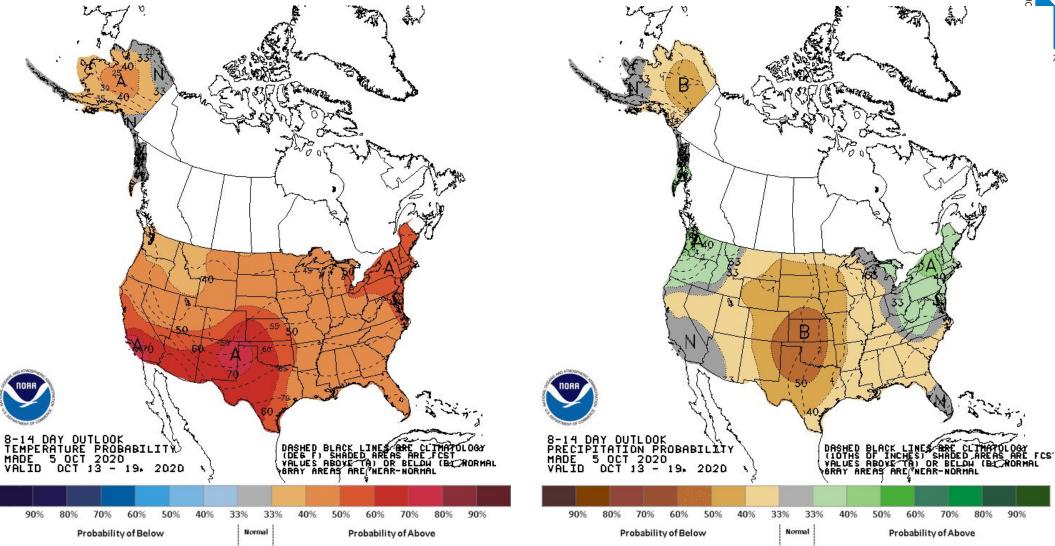
CPC 6 to 10 Day Outlooks - Temperature/Precipitation





CPC 8 to 14 Day Outlooks - Temperature/Precipitation





Week 2 Hazards Outlook

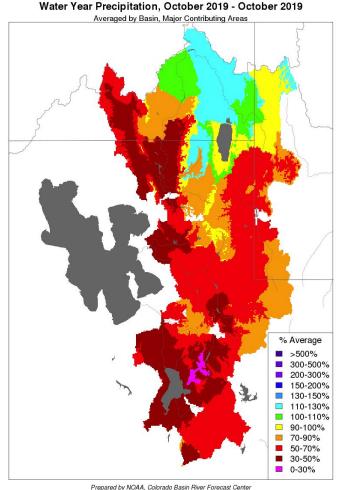
Type and Period Temperature Precipitation Snow Wind Composite Days 8-14 Map No Hazards No Hazards No Hazards No Hazards Probabilistic Days 8-14 Map No Hazards < No Hazards < Vancouver + 25 3 -0 Masia C MINNES Z HINGTON 4 AL Minneapolis P Z 5 REGON Snake WYOMING S R E A NEBRASKA P LAII Salt Lake City UNITED Denver GREAI STATES BAS UTAH Kans COLORADO NEVADA Sacramento KANSAS M Arkansas San Francisco CALIFORNIA Las Vegas Fresno COLORADO Oklahoma PLATEAU City OKLAHON CS Esri, HERE, Garmin, FAO, NOAA, USGS, EPA ARIZONA Los Angeles Above Normal Temperatures Heavy Precipitation **Excessive Heat** Composite High Risk High Risk High Risk Flooding Possible Moderate Risk Moderate Risk Moderate Risk Frozen Precipitation Slight Risk Slight Risk Slight Risk Severe Weather Below Normal Temperatures **High Winds** Heavy Snow High Risk Moderate Risk High Risk Moderate Risk Slight Risk Moderate Risk Slight Risk Slight Risk Composite Map Experimental Probabilistic Outlooks Day 8-14 Temperature Hazards Precipitation Hazards Wind Hazards Snow Hazards

U.S. Week-2 Hazards Outlook - Made October 05, 2020 | About the Hazards Outlook

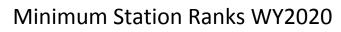


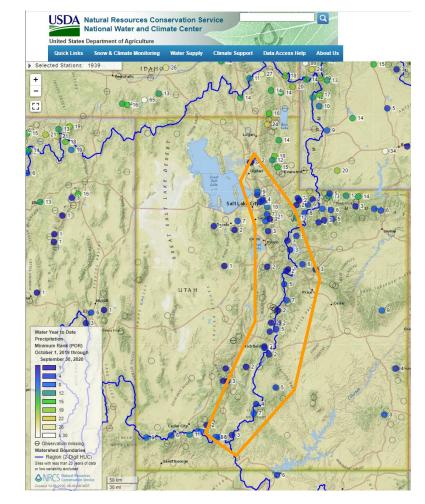
CBRFC Utah Water Year 2020 Precipitation October 2019 - September 2020

Percent of Average WT 2020



Prepared by NOAA, Colorado Basin River Forecast Center Salt Lake City, Utah, www.cbrfc.noaa.gov







As WY2020 Precipitation ranked in the top 10 lowest for most stations within Utah with several exception.

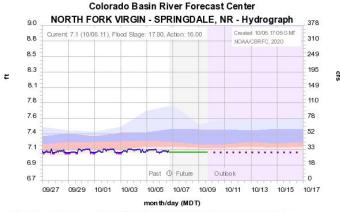
Along the crest of the Wasatch range from the far south to as far north as Ogden values are in the top 5 lowest years for accumulated WY Precip.

These high elevation regions account for the majority of spring runoff and the bulk of our annual WS.

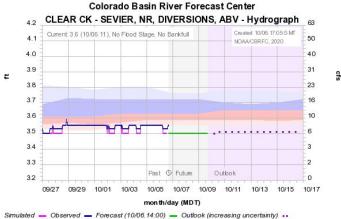
Agency - NOAA NWS CBRFC Presenter - Brent Bernard

Selected Hydrographs from Southern and Central Utah

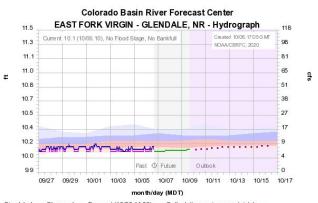




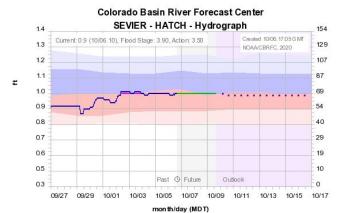
Simulated — Observed — Forecast (10/06.14:00) — Outlook (increasing uncertainty) · · · Historical Exceedance Probability (USGS): 90-75% — 75-50% — 50-25% — 25-10% —



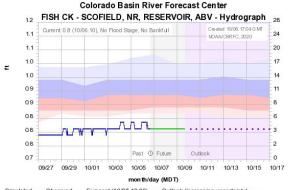
Historical Exceedance Probability (USGS): 90-75% 75-50% 50-25% 25-10%



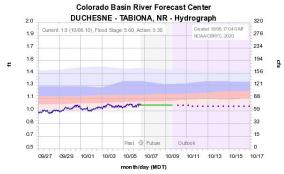
Simulated — Observed — Forecast (10/06.14:00) — Outbook (increasing uncertainty) --Historical Exceedance Probability (USGS): 90-75% 75-50% = 50-25% = 25-10%



Simulated — Observed — Forecast (10/06.14:00) — Outlook (increasing uncertainty) --Historical Exceedance Probability (USGS): 90-75% 75-50% = 50-25% = 25-10% =



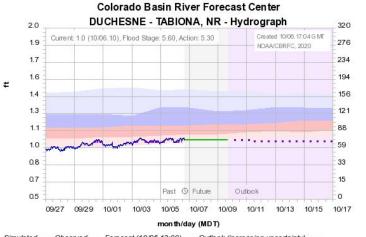
Simulated — Observed — Forecast (10/06.13:00) — Outbook (increasing uncertainty) --Historical Exceedance Probability (USGS): 90-75% 75-50% 50-25% 25-10%



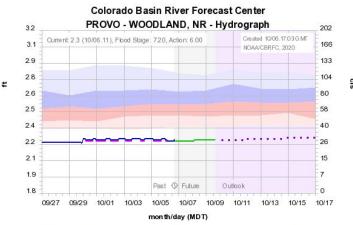
Simulated — Observed — Forecast (10/06.13:00) — Outlook (increasing uncertainty) --Historical Exceedance Probability (USGS): 90-75% 75-50% = 50-25% = 25-10%

Agency - NOAA NWS CBRFC Presenter - Brent Bernard

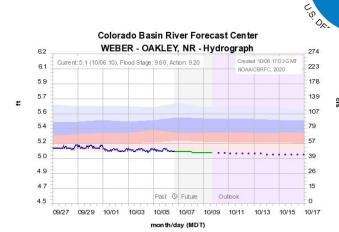
Selected Hydrographs for Northern and Eastern Utah



Simulated — Observed — Forecast (10/06.13:00) — Outlook (increasing uncertainty) ---Historical Exceedance Probability (USGS): 90-75% — 75-50% — 50-25% — 25-10% —



Simulated — Observed — Forecast (10/06.14:00) — Outlook (increasing uncertainty) --Historical Exceedance Probability (USGS): 90-75% 75-50% 50-25% 25-10%



AND ATMOSPHED

NOAA

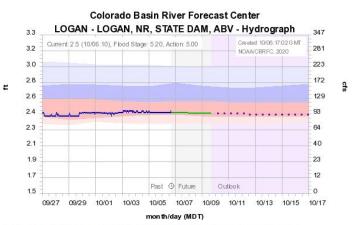
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Simulated — Observed — Forecast (10/06.14:00) — Outlook (increasing uncertainty) --Historical Exceedance Probability (USGS): 90-75% — 75-50% — 50-25% — 25-10%

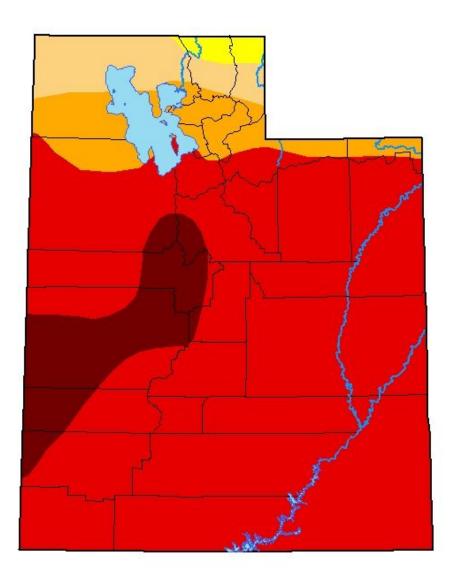
Colorado Basin River Forecast Center BEAR - UTAH-WYOMING STATE LINE, NR - Hydrograph 5.1 265 Created 10/06.17:03G MT Current: 4.0 (10/06.10), Flood Stage: 8.00, Action: 7.70 213 4.9 NOAA/CBRFC, 2020 4.8 168 131 4.6 t 99 45 4.3 72 4.1 50 40 3.8 21 3.7 12 Past 🛈 Future Outbok 3.5 0 09/27 09/29 10/01 10/03 10/05 10/07 10/09 10/11 10/13 10/15 10/17 mon th/day (MDT) Simulated - Observed - Forecast (10/06.14:00) - Outlook (increasing uncertainty) --

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

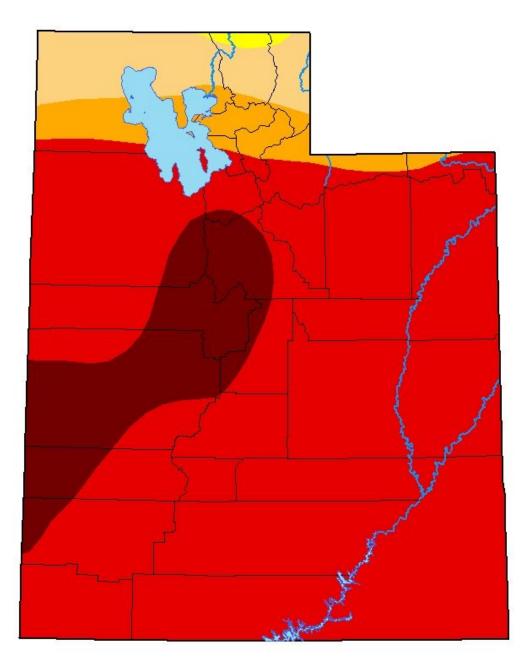




Agency - NOAA NWS CBRFC Presenter - Brent Bernard



September 22, 2020



September 29, 2020