Precipitation

The images above use daily precipitation statistics from NWS COOP, CoCoRaHS, and CoAgMet stations. From top to bottom, and left to right: most recent 7-days of accumulated precipitation in inches; current month-to-date accumulated precipitation in inches; last month's precipitation as a percent of average; water-year-to-date precipitation as a percent of average.

Standardized Precipitation Index
Standardized Precipitation Index standardizes precipitation accumulations for a specified time period into percentile rankings. -1.0 to -1.5 is equivalent to a D1 to D2, -1.5 to -2.0 is equivalent to a D2 to D3, -2.0 and worse is equivalent to a D3 to D4. 30- and 60-day SPIs focus on short-term conditions while 6- and 9-month SPIs focus on long-term conditions. SPI data provided by High Plains Regional Climate Center.

Streamflow
The top left image shows 7-day averaged streamflows as a percentile ranking across the UCRB. The top right image shows 7-day averaged discharge over time at three key sites around the UCRB: The Colorado River at the CO-UT state line; the Green River at Green River, UT; and the San Juan River near Bluff, UT. All streamflow data provided by United States Geological Survey.

Surface Water

The top left image shows VIC modeled soil moisture as a percentile ranking. The top right image shows satellite-derived vegetation from the VegDRI product (which updates on Mondays).

The graphs shown below are plots of reservoir volumes over the past full year and current year to date (black). The dashed line at the top of each graphic indicates the reservoir's capacity, and the background color-coded shading provides context for the range of reservoir
levels observed over the past 30 years. The data are obtained from the Bureau of Reclamation. Some of the reservoir percentiles don’t line up at the new year due to differences in reservoir levels at the beginning of 1985 and the end of 2014. Dead storage has been subtracted. Note: Lake Granby data are obtained from the Colorado Division of Water Resources, and only goes back to the year 2000.

Evaporative Demand
The above images are of reference evapotranspiration (ET) from CoAgMET sites across Colorado. Reference ET assumes the amount of water that will evaporate from a well-irrigated crop. Higher ET rates occur during hot, dry, and windy conditions. Lower ET rates are more desirable for crops. See a map of locations for the above ET sites.

The above images are available courtesy of NOAA’s Evaporative Demand Drought Index (EDDI). Drought classification listed is a function of the depth of reference evapotranspiration
accumulated over a given period of record with respect to a climatology of 1981-2010. The
drought categories displayed are in line with the US Drought Monitor's Percentile Ranking
Scheme. Data used to generate these maps come from the North American Land Data
Assimilation System Phase-2 (NLDAS-2) project, which assimilates observations of
temperature, wind speed, radiation, and vapor pressure deficit. The date indicates the last day
of the period of record, and the week number indicates the window size for the period of
record.

**Temperature**

All images show temperature departures from average over different time periods (last 7 days
on top left; month-to-date on top right; last full month on bottom). Temperature departure maps
provided by HPRCC ACIS.

**Outlook**
The top two images show Climate Prediction Center's Precipitation and Temperature outlooks for 8 - 14 days. The middle image shows the Weather Prediction Center's Quantitative Precipitation Forecast accumulation for seven days. The bottom left image shows the 3-month precipitation outlook from Climate Prediction Center, and the bottom right image shows the Climate Prediction Center's most recent release of the U.S. Seasonal Drought Outlook.
Summary and Recommendations
Above is the most recent release of the U.S. Drought Monitor map for the UCRB region. Below shows the proposed changes for this week, with supporting text.
Summary: October 24, 2017

Overall, it's been a quiet week around the Intermountain West as a ridge of high pressure has dominated the weather pattern. Aside from some isolated precipitation accumulations in the higher elevations of the Upper Colorado River Basin, most of the region was relatively dry last week. Most of UT and western CO saw near average temperatures, while the majority of the IMW was warmer than average for the week.

Driest short-term SPIs are mainly focused over southern UT and central AZ. At longer time scales, dryness is evident over eastern UT and western CO. With the quiet week, snowpack numbers are showing below average percentages in many sub-basins, but since it is still very early in the season, these small deficits can be easily made up. Vegetation and soils show dryness where there is current D0 and D1 on the U.S. Drought Monitor map.
The outlook shows warm and dry conditions to continue over the next couple of weeks. But the longer term outlook indicates an increased likelihood for above average precipitation over most of the Upper Colorado River Basin into the winter season, which is good news for snowpack accumulation. At the southern end of the IMW, AZ may see drought conditions worsen with a drier than average outlook possible.

**Recommendations**

**UCRB:** Status quo is recommended.

**Eastern Colorado:** Status quo is recommended.