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.

**Snotel and Snowpack**
The above image shows sub-basin averaged snow water equivalent accumulations as a percent of average. The images below show accumulated snow water equivalent in inches (green) compared to average (blue) and last year (red) for several different sub-basins across the UCRB (and were created by the Colorado Basin River Forecast 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

http://climate.colostate.edu/~drought/current_assessment.php
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 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: November 14, 2017

Last week the Intermountain West region was mostly dry seeing less than 0.10" of precipitation over most of the region. The high elevations in Colorado along the Divide, the Uintah Mountains in northeast Utah and northern Sublette County, WY saw between 0.25 and 0.50". The Front Range in eastern Colorado saw similar amounts, in the 0.25 to 0.50" range, with parts of Boulder and Larimer counties seeing up to 1.00".
Standardized Precipitation Index for most of the IMW is on the dry side of the scale for the past 30-days with the exception of northwestern Wyoming. The short-term SPIs are mainly in the -1 to -2 range for much of western Colorado and most of Utah. Longer term SPIs are still dry in the 0 to -2 range for most of the UCRB.

Eastern Colorado SPIs are in the 0 to -1.5 range for the short term and improves nicely with most SPIs in the 0 to +1.5 range for the 6 month, especially southeastern Colorado.

While still early in the snowpack season, basins in Wyoming and northern Colorado are seeing near normal accumulations for this early in the season, however south of the Colorado River and in Utah snowpack is much below normal. There is still plenty of time to recover as we have seen in recent years. Above normal temperatures this month for the southern part of the UCRB are not helping the snowpack.

Streamflow through the Upper Colorado River Basin is still looking fine with a majority of the reporting streamgages in the normal streamflow range. More below normal flows are starting to show up in the basin, along the White River and the southern portions of the basin. Eastern Colorado streamflow still looks great with a majority of gages in the normal and above normal range.

The precipitation outlook for the next week looks favorable for precipitation in the mountains and dry on the plains.

**Recommendations**

**UCRB:** Status quo is recommended. The Four Corners Region continues to be our area of focus as the area saw a weak 2017 monsoon. The region did remain dry over the past week, but D0 and D1 currently appear to be in the right places based on current precipitation and soil moisture indicators and on the ground reports

**Eastern Colorado:** Status quo is recommended. The short-term has been dry in southeast Colorado, during the dry time of year. With the above normal water year 2017 covering the recent dryness and lack of on the ground impacts, degradation is not justified.