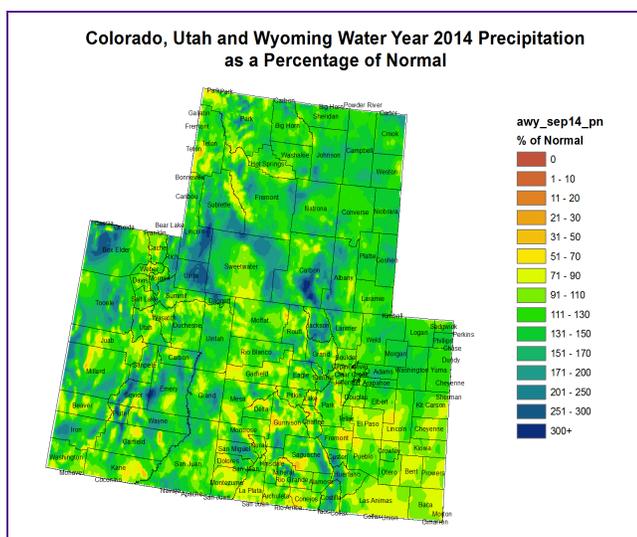
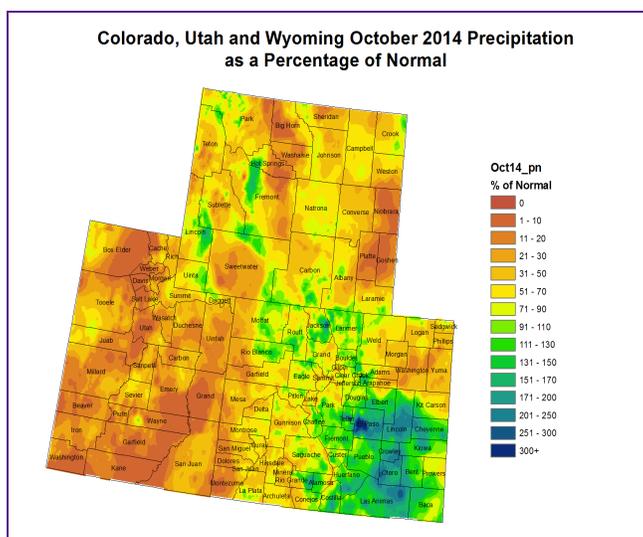
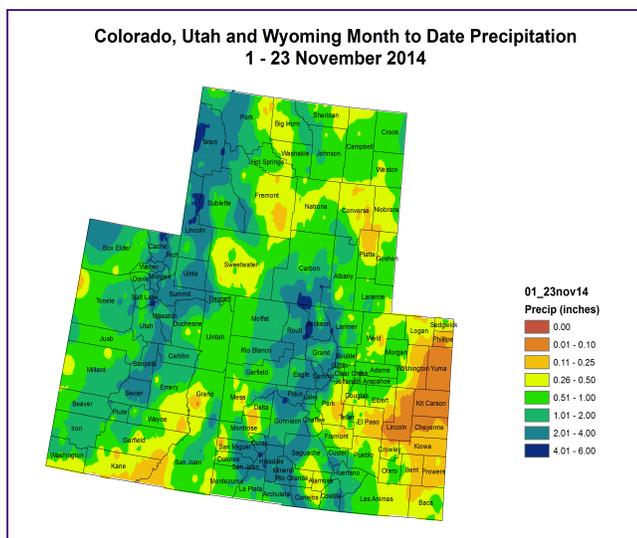
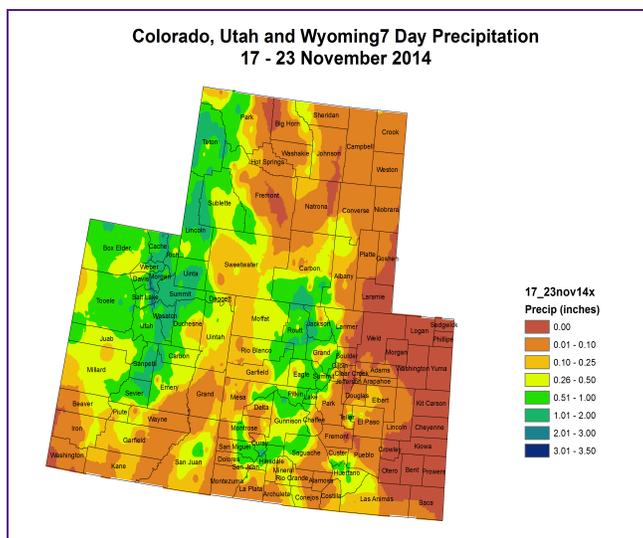


PRECIPITATION



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.

Last Week Precipitation:

- As is to become expected this time of year, precipitation over the past week in the drought monitor region was focused over high terrain.
- Southwestern WY in Uinta, Lincoln and the mountains of Sublette counties received between 0.50-2.00" of precipitation. Sweetwater County was drier seeing between 0.10-0.50".
- The Wasatch and Uintah mountains in northern UT picked up 1.00 - 2.00" in most locations. The valleys to the east were drier picking up less than 0.25" in most areas.

- The northern/central and San Juan mountains of Colorado picked up 0.50-1.00" with isolated areas receiving up to 2".
- The San Luis Valley stayed mostly dry, and had less than 0.25" of precipitation. Northern Saguache County along with Custer and Huerfano counties received up to 1.00".
- East of the divide conditions were drier. In northeast Colorado the Front Range saw some spill over from the high country snow, seeing up to 1.00". Less than 0.25" on the plains.

October Precipitation:

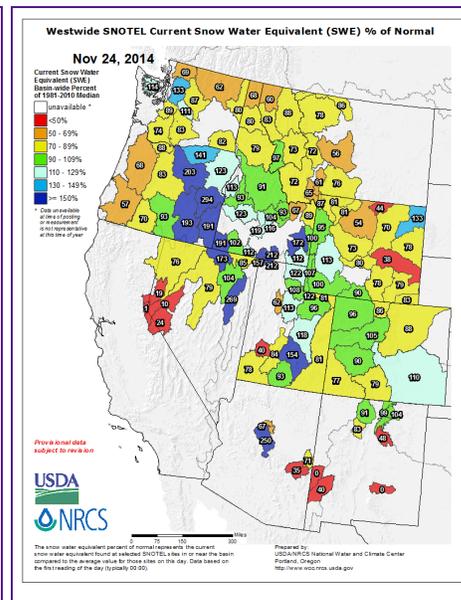
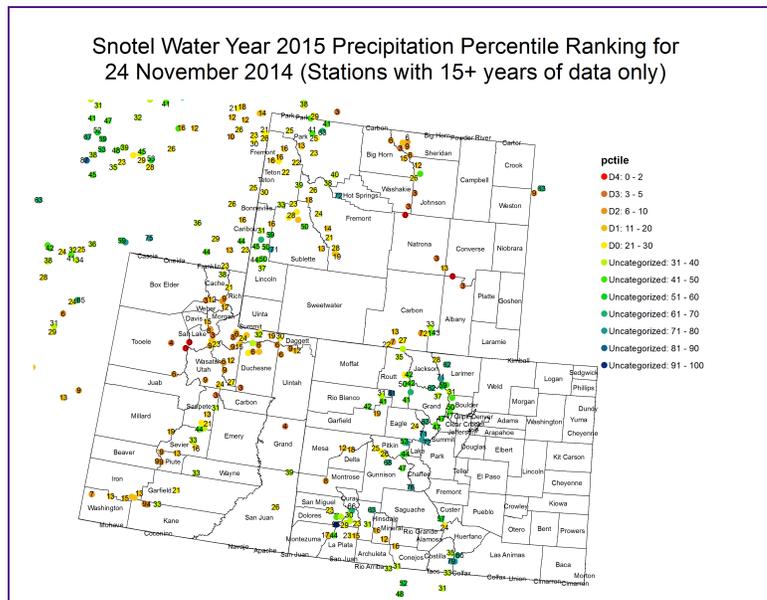
- The majority of the UCRB had a well below average October for precipitation. The headwaters of the Green River in WY saw less than 50% of normal precipitation, with the exception of eastern Lincoln and northern Sweetwater counties seeing normal to slightly above normal precipitation.
- Eastern UT saw less than 50% of normal precipitation for October with areas seeing less than 30% of normal.
- Western CO was a bit better, however much of the area is 50-70% below average. The exceptions are parts of Moffat, Rio Blanco and Routt counties, which saw slightly above average precipitation.
- The San Luis Valley, in Alamosa, Rio Grande and Costilla counties saw above average precipitation for October.
- East of the divide, southeastern CO saw above average precipitation for the month. Much of the area south of the Palmer Divide saw at or above normal precipitation. Prowers and Kiowa counties were slightly below average.
- Northeastern CO saw below average precipitation, mainly less than 50% of normal. The Front Range, especially Jackson, Larimer and Boulder counties were at or slightly above average for the month.

Water Year 2014 Precipitation:

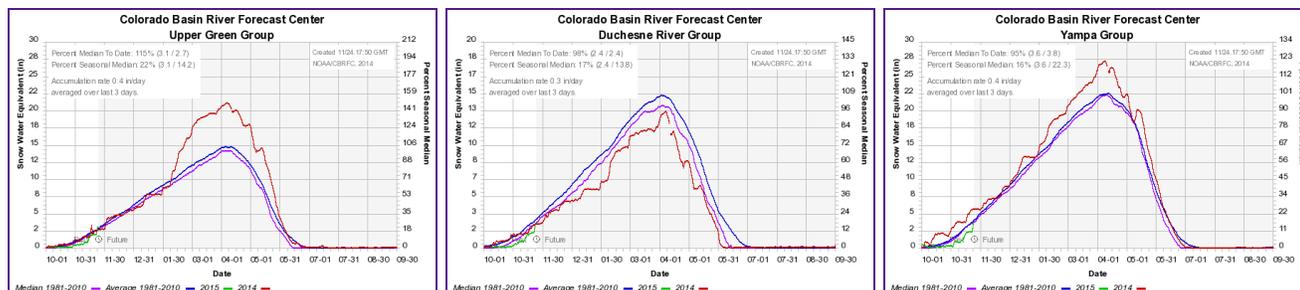
- Much of the UCRB is now near or above average for the Water Year through August, with spotty areas below average.
- Most of the northern portion of the basin in Wyoming is above average, with portions of Lincoln, Uinta, and southern Sublette counties 200% to 250% of average.
- Much of eastern UT is now near average, with no widespread areas clearly above or below normal. The distinction between above areas with above and below a normal water year here is very spotty.
- Western Colorado is a bit spottier than Utah with precipitation as a percent of average, however much of the area is near average for the Water Year. Most of the western slopes are between 70 and 110% of average for the water year. Some spotty areas including parts of San Miguel, Mineral, and Mesa Counties were over 200% of average for the water year.
- The northern portion of the Colorado River headwaters area is still much above average, mainly greater than 130% of average.
- East of the Divide a north-south gradient exists in water year precipitation as a % of average. The north-south gradients in soil

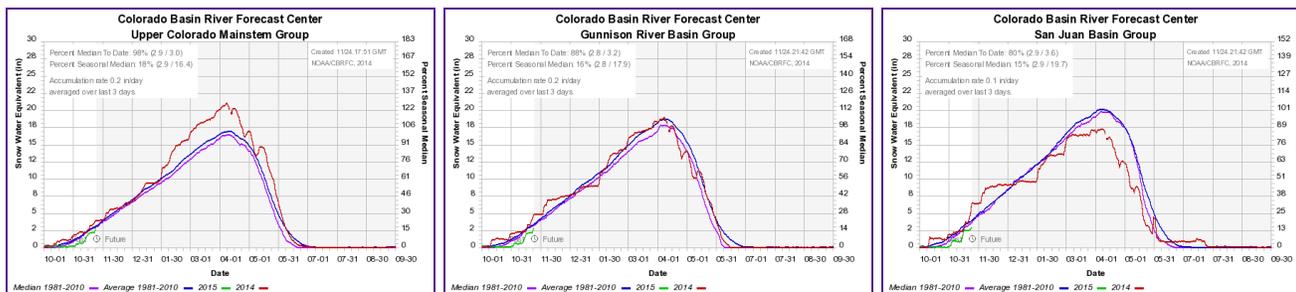
- moisture and vegetative health echo this gradient quite clearly.
- Almost all of the northeastern plains were above average for the 2014 water year. Percents of average were between 90 and 150.
 - Most of the Front Range was between 90 and 130% of average for the water year.
 - Southeastern CO has improved, but still came in below normal for the 2014 water year across the majority of the region. Totals were mainly between 70 and 110% of average.
 - A strip in the southern Colorado Rockies extending through Costilla, Huerfano, and Custer Counties had an above average water year. Totals were between 150 and 250% of average.

SNOTEL AND SNOWPACK



The top left image shows the Natural Resources Conservation Service's SNOTEL water-year-to-date precipitation percentile rankings. The top right 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).





SNOTEL Precipitation Percentiles:

- In the headwaters of the Green River in Lincoln and Sublette Counties in Wyoming percentiles range from the teens (very dry), up to the 40s (lower end of normal). The lower numbers are on the eastern side of Sublette County, while the higher numbers are on the western side of the county and in Lincoln County.
- The Uintah and Wasatch Mountains have also seen lower precipitation to kick off the water year, in the single digits and teens, with some percentiles in the low 20s.
- The northern and central mountains of Colorado are doing better with most percentiles ranging from the mid-20s up to the low 70s for precipitation to date.
- The headwaters of the Colorado in Summit county are doing better than other areas. Some percentiles here are as high as the 72nd percentile.
- There is a west-east gradient in precipitation percentiles in the Gunnison River Basin. Mesa County is as low as the 12th percentile, but up in the headwaters of the Gunnison some percentiles are in the 70s.
- Percentiles in the San Juans range from the 15th percentile on the south side of the range to the 60s in the northern side of the range.
- In the Rio Grande Basin, percentiles range from 15th-52nd percentile. The East side of the Rio Grande basin is looking slightly better off than the western portion.

Basin-wide Snow Water Equivalent (SWE) Percent of Normal:

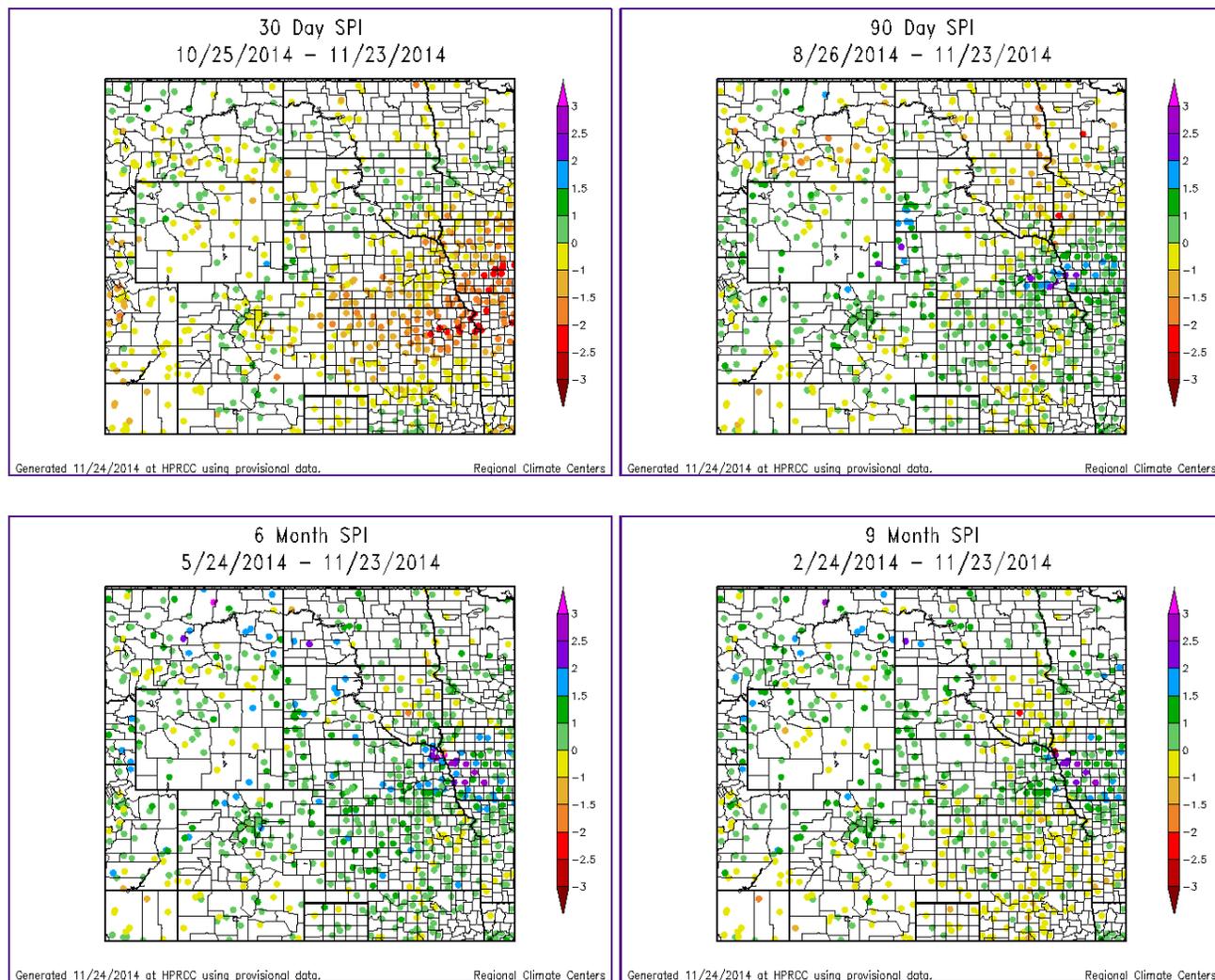
- Most basins that feed the Upper Colorado River saw large improvements in snowpack the past two weeks. Most of the northern sub-basins are now above their median snowpack, while most of the central and southern sub-basins are still below median.
- The northern Green River in southwest WY snowpack numbers are above normal, between 100% and 113% of normal.
- The Wasatch and Uintah ranges in UT are all near or above normal, ranging from 96% in the Duchesne Basin, to 122% in the northern Wasatch Range.
- The Western slope of Colorado is mostly behind for snowpack, although a great improvement, ranging between 77% in the Four Corners up to 105% along the Colorado Mainstem.
- East of the divide snowpack is 88% of normal for the South Platte, 110% for the Arkansas basin and 79% in the Rio Grande Basin..

SWE Timeseries Graphs:

- All river basins have seen an increase in snowpack the past few weeks, most northern groups near or above median. The southern groups are still below median to date.
- The Upper Green Group is at 115% of median snowpack to date.
- The Duchesne is at 98% of median snowpack to date.
- The Yampa-White is at 95% of median snowpack to date.
- The Upper Colorado Mainstem Group is at 98% of median snowpack to date.

- The Gunnison Group is at 88% of median snowpack to date.
- The San Juan Group is at 80% of median snowpack to date.

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.

Short Term (30-day):

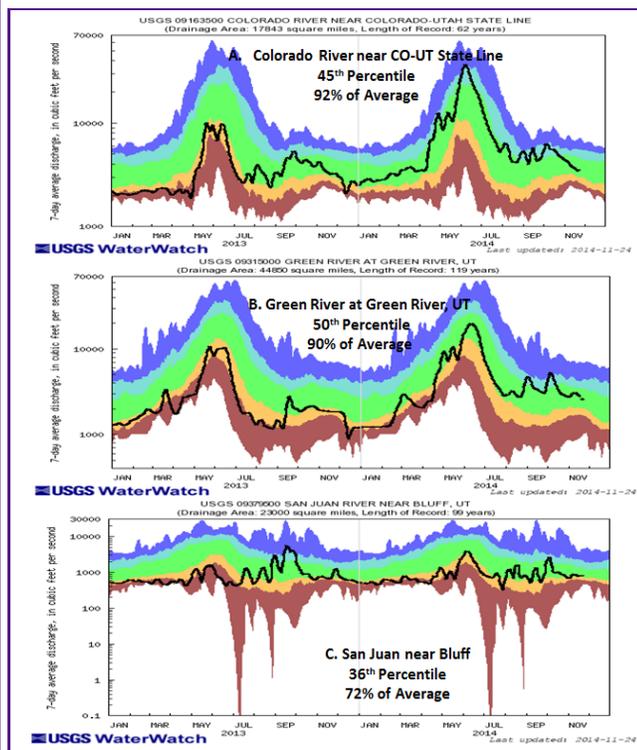
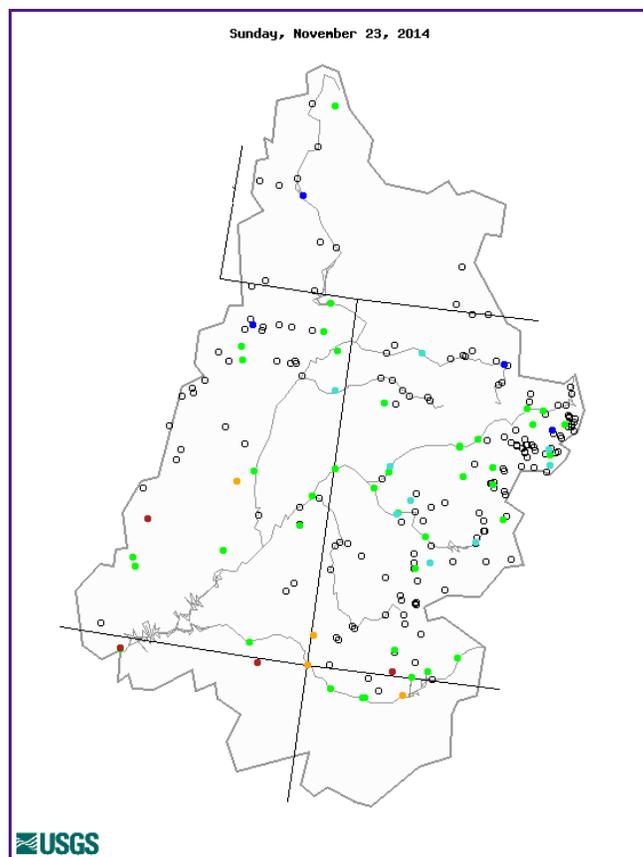
- SPIs are for the past 30 days in the UCRB have dried out significantly in transitioning from the end of a productive monsoon to an underwhelming beginning to the snow season. With the last few weeks of snow in the mountain, SPIs have improved.
- Much of the UCRB is now showing SPIs between 0 and -1. Some SPIs in the Wasatch Range in UT are slightly drier, down to -1.5.
- Along the Divide and in Gunnison County, SPIs are better between 0 and +1.
- The San Luis Valley has near average SPIs that range from -1 to +1.

- East of the divide, SPIs range from -1.5 to +1. The wetter SPIs show up in Larimer and Adams counties. The driest SPIs show up in Yuma, Kit Carson, southern Lincoln, northern El Paso and Las Animas Counties.

Long Term (6-month):

- For the longer term, much of the UCRB continues to report wet SPIs. There are a few dry areas reported around the Four Corners and near the Wasatch/Uintah ranges in UT. These are between 0 and -1. There is one SPI near Lake Powell of -2 to -1.5. The rest of the area is reporting SPIs between 0 and +2.5.
- The San Luis Valley is showing a mixed bag with slightly dry to slightly wet (-1 to +1) SPI's.
- East of the divide, most SPIs are showing up as wet, between 0 and +1.5, with a few showing +2. A few SPIs in eastern CO in Larimer, Lincoln, Las Animas and Prowers counties are at -1.

STREAMFLOW



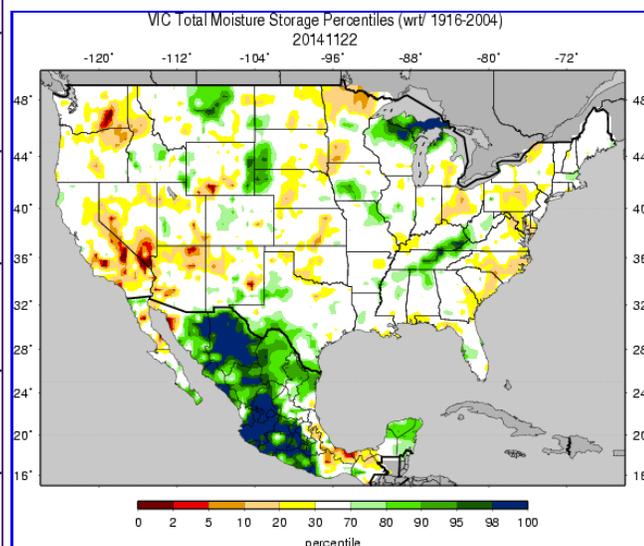
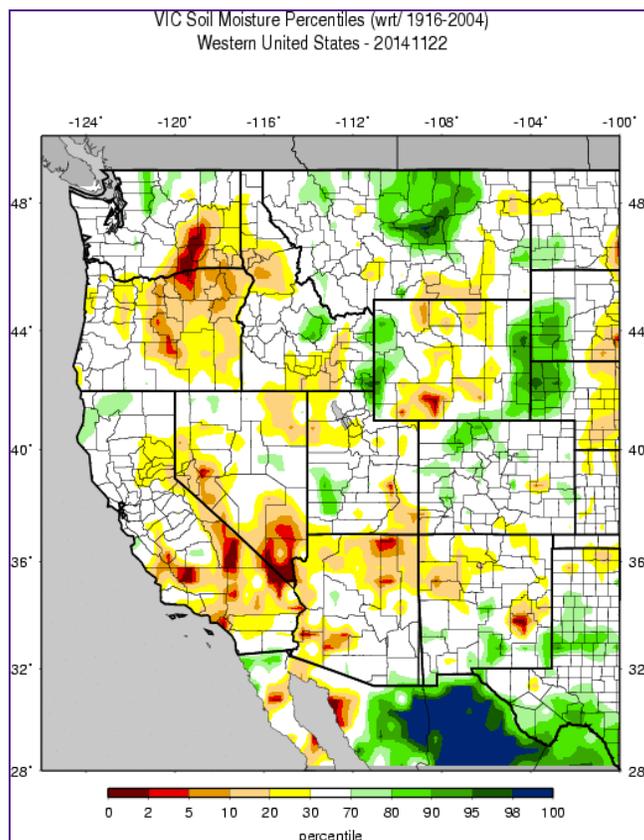
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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.

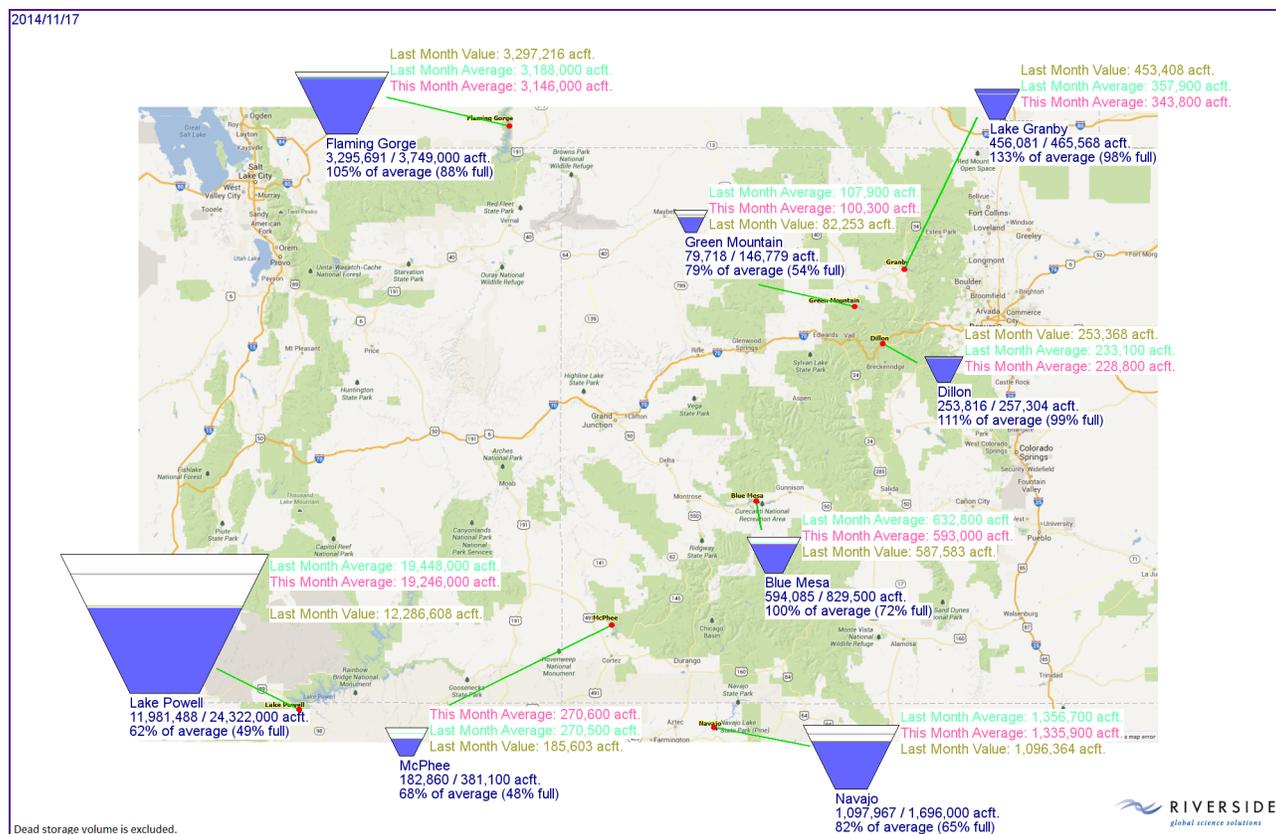
Streamflow Statistics:

- Streamflows over much of the UCRB are mostly in the average range with only 61 out of 140 gauges reporting this week. Down from 122 reporting 2 weeks ago.
- 89% of the gages are in the normal to much above average the for 7-day average streamflow.
- 11% of gages in the UCRB are reporting 7 day average streamflow in the below to much below normal ranges (none are record low). These gages are scattered between the San Juan Basin and Southern Utah
- Streamflow on the Colorado River near the CO-UT state line is average range but has been dropping, reporting in the 45th percentile (92% of average).
- The Green River at Green River, UT is showing decreasing flows and is in the 50th percentile (90% of average).
- The San Juan River near Bluff, UT is reporting at the 36th percentile (72% of average).

SURFACE WATER



The top left image shows VIC modeled soil moisture as a percentile ranking. The top right image shows VIC plus SWE total soil moisture storage.



The above image shows last month's and this month's current volumes of the major reservoirs in the UCRB, with percent of average and percent of capacity.

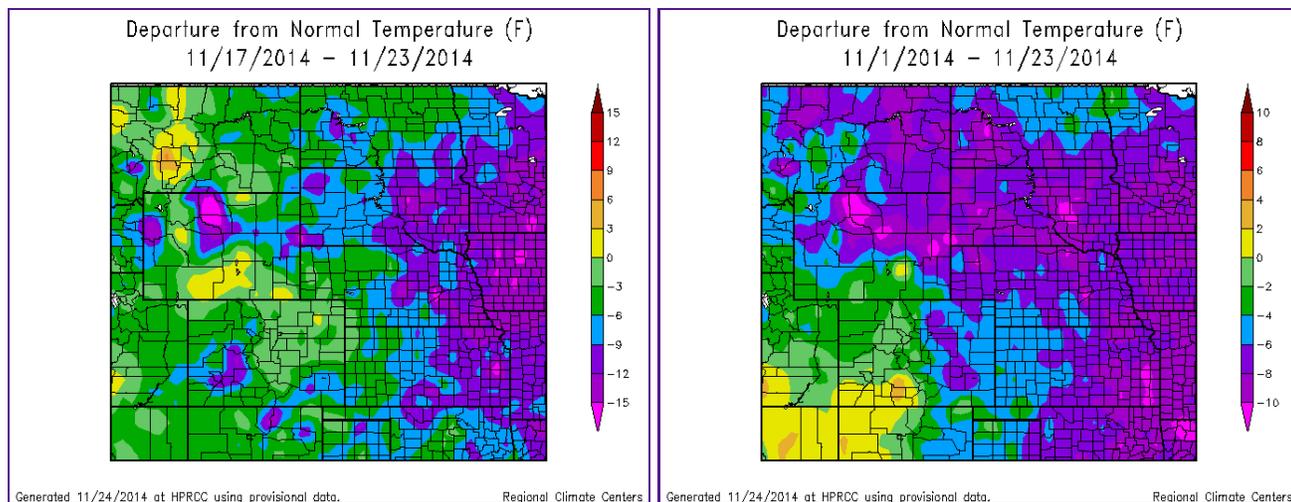
VIC:

- Sweetwater County, WY has been shown as dry by the VIC for a considerable amount of time and continues to depict soils between the 0th and 30th percentile in the area.
- Western CO is still showing a large area of above average soil moisture above the 70th percentile
- Soil moisture in the Four Corners area is starting to show drying particularly in San Juan County, UT extending to the north and west up into Emery County, UT. Percentiles here range from 5th to 20th.
- The San Luis Valley has rebounded to the normal range showing percentiles between 30 and 70, with part of Costilla County drier, between the 20th and 30th percentile.
- East of the divide, the northern plains are showing normal to just above normal soil moisture conditions.
- Soil moisture conditions are in the normal range in southeast Colorado. The exception is southern Lincoln County where soil moisture is between the 10th and 30th percentile and southwestern Las Animas, 20th-30th.

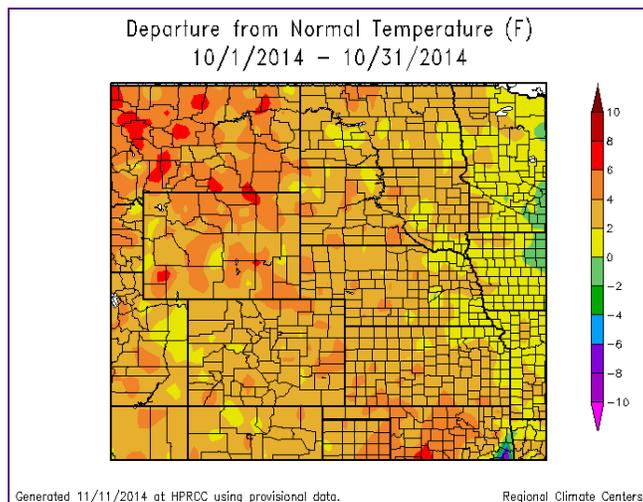
Reservoirs:

- A few of the Reservoirs in the UCRB continue to increase in volume as a consequence of an above average monsoon season in August and early September. Lake Granby, Blue Mesa, Dillon and Navajo all had increases last month. Flaming Gorge, Green Mountain, McPhee and Lake Powell decreased in volume last month.
- Flaming Gorge is 105% of the November average.
- Green Mtn is 79% of November average.
- Lake Granby is 133% of November average.
- Lake Dillon is at 111% of the November average.
- Blue Mesa is 100% of the November average.
- Navajo is 82% of the November average.
- McPhee is 68% of the November average.
- Lake Powell is 62% of November average and 49% full.

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.



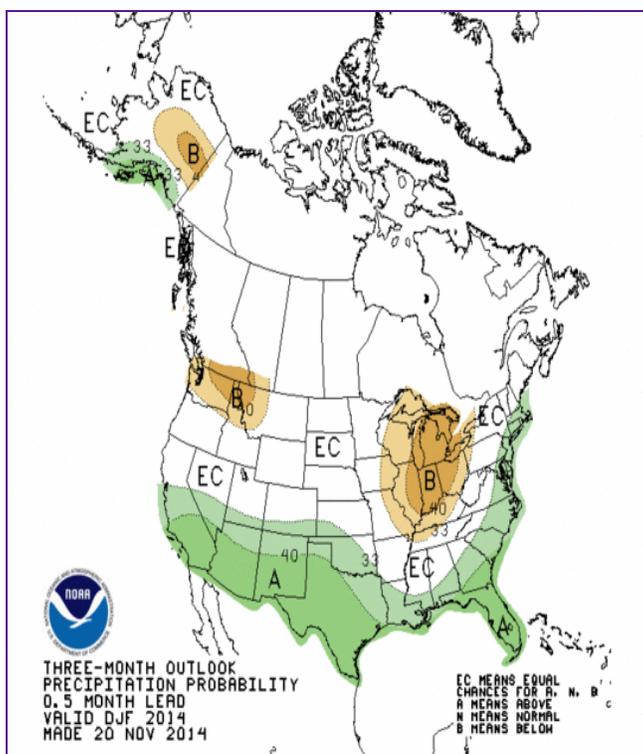
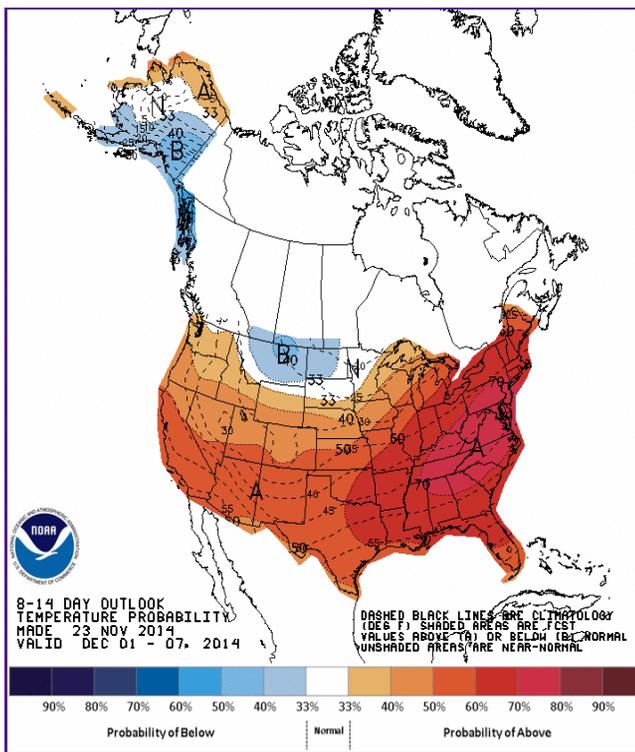
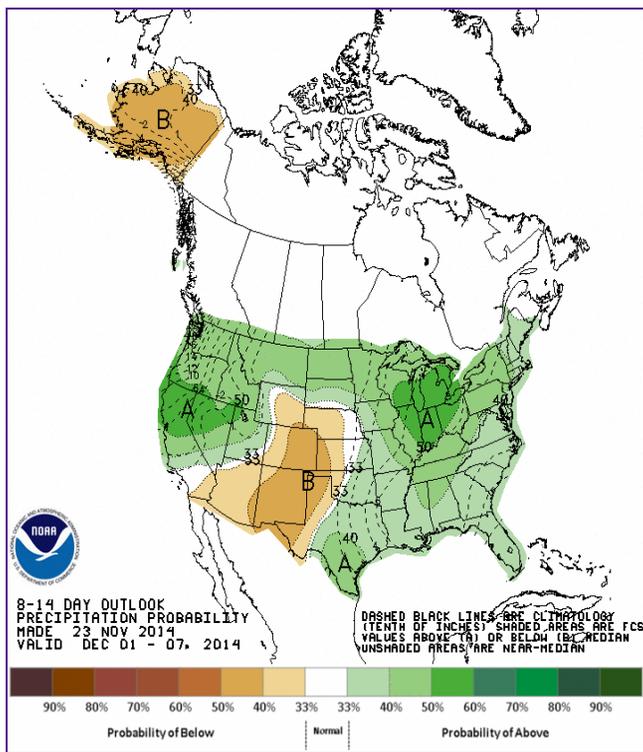
Last Week Temperatures:

- Most of the UCRB saw 0 to 6 degrees below average temperatures for the last week, with a few cooler areas.
- Sweetwater County in southern WY was the only area above average for the basin, 0 to 3 degrees above average.
- Gunnison County and the San Juan Mountains saw temperatures down to 15 degrees below average.
- East of the divide was also below average. Most of northeastern CO was 0 to 3 degrees below average. Southwestern CO was mostly 0 to 6 degrees below average with Otero, Bent, Prowers, Baca and Las Animas Counties seeing temperatures 9 degrees cooler than average.

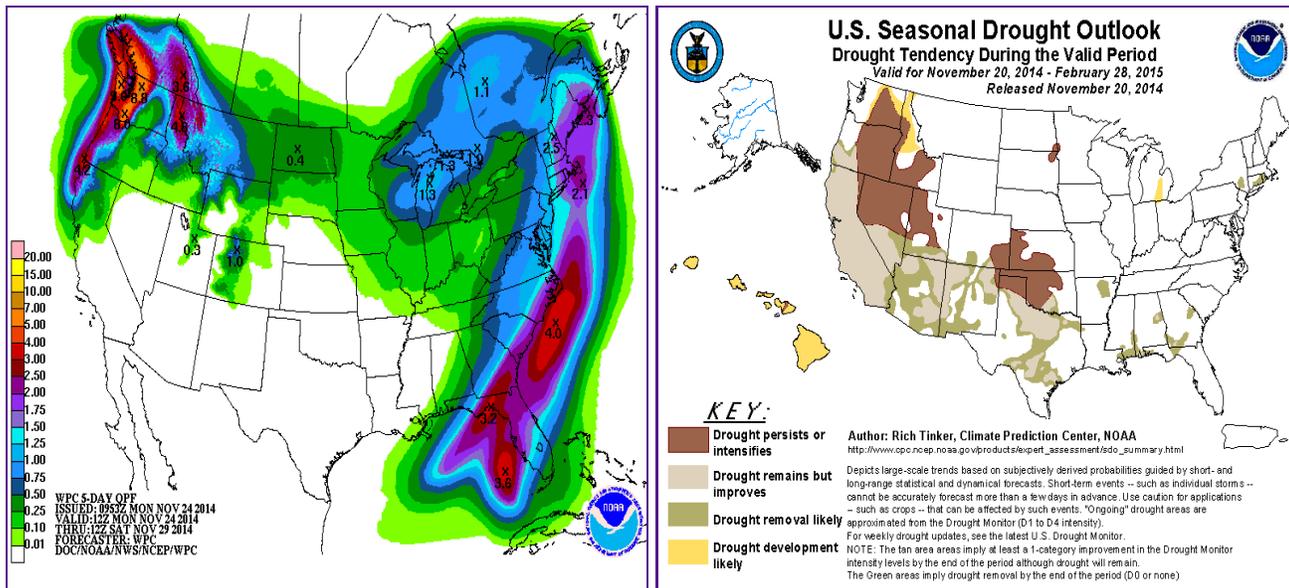
Last Month Temperatures:

- October temperatures in the UCRB, Wyoming and Colorado were above average.
- Most of the basin saw temperatures 2 to 4 degrees warmer than average, with southwestern WY up to 8 degrees above average. There was an area of 0 to 2 degrees above average that caught Duchesne, Uintah and Grand counties in UT and Mesa and Garfield counties in CO.
- Eastern CO also saw 2 to 4 degrees above average for October. Southeastern WY and northern CO were warmer up to 6 degrees above average.

FORECAST AND OUTLOOK



The top two images show Climate Prediction Center's Precipitation and Temperature outlooks for 8 - 14 days. The middle image shows the 3 months Precipitation outlook. The bottom left image shows the Hydrologic Prediction Center's Quantitative Precipitation Forecast accumulation for the five days between Tuesday 12Z and ending Sunday 12Z. The bottom right image shows the Climate Prediction Center's most recent release of the U.S. Seasonal Drought Outlook.



Short Term:

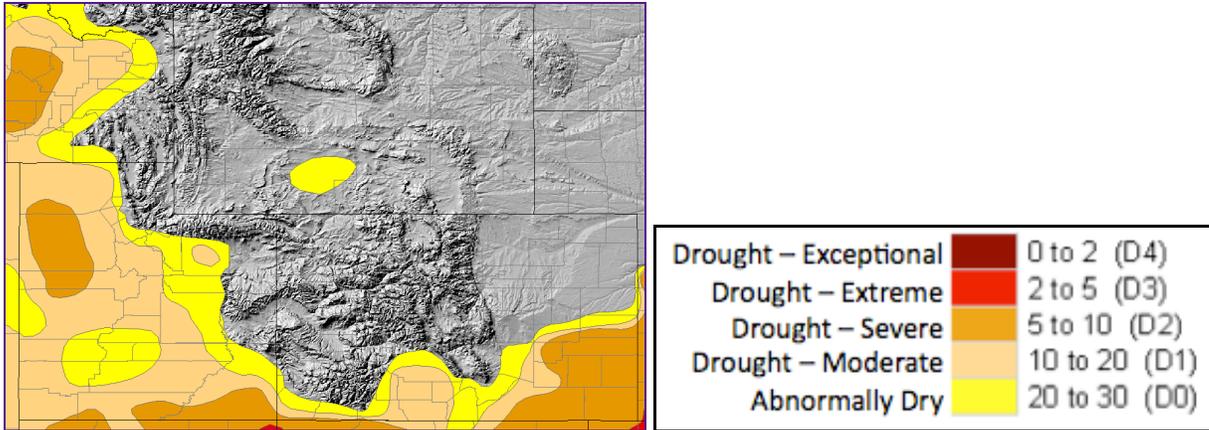
- The UCRB is expected to warm back up through the week as the trough that moved in this weekend and brought cooler air to the region is replaced by high pressure from the southwest. Some additional snow accumulations are possible through Tuesday for the northeastern Uintahs and for the northwestern Rockies mainly in Routt, Jackson, Grand, and Larimer Counties. These warmer, drier conditions should persist through the weekend as models currently show the next wave developing off the Pacific Coast taking its time moving eastward.
- East of the divide windy conditions are likely to persist through Tuesday night for the northern Front Range and northeastern plains. Areas out east along I-70 and along the I-25 corridor from Denver down to Pueblo may see an isolated snow shower this afternoon, but accumulations will be either low or non-existent. Conditions east of the divide should become calm, warm, and pleasant for Wednesday through Friday. Early next weekend conditions may be blustery again as cooler air moves in from the north. The brunt of the cold air is currently forecast to miss Colorado to the north and east.

Longer Term:

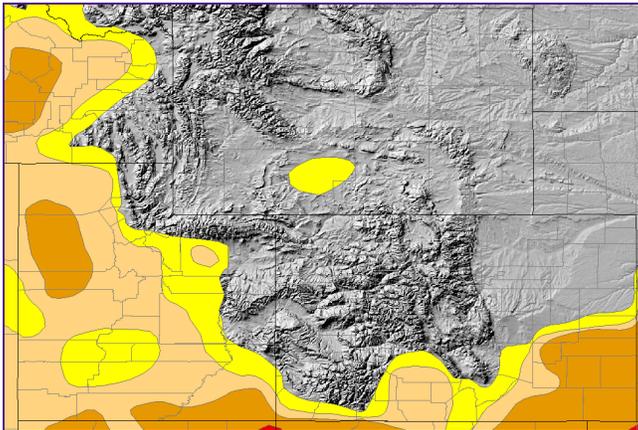
- The 8-14 day precipitation outlook shows increased chances for above average moisture for the northern reaches of the UCRB. More beneficial moisture may be on the way for the Wasatch and Uintah Ranges in this time frame. In Colorado chances are increased for below normal precipitation, but this is most strongly correlated with the area east of the divide.
- The 8-14 day temperature outlook shows increased chances for above normal temperatures across the drought monitor region. The highest chances for above normal temperatures are in southern Colorado and Utah.

- The CPC 3-month outlook shows increased chances for above normal winter precipitation for southern Colorado and Utah. Farther north in the drought monitor region equal chances are forecast for above and below normal winter precipitation.
- The seasonal drought outlook indicates that drought is expected to persist or intensify in southeast Colorado and northeast Utah. the Four Corners Region, and the San Luis Valley are more likely to see improvement or removal.

U.S. DROUGHT MONITOR



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 for November 25, 2014:

The high terrain of the Upper Colorado River Basin (UCRB) received another round of beneficial snowfall over the past week which took a chunk out of the deficits in seasonal snowpack to date. This was enough to bump up most snowpack numbers in the northern portion of the basin to at or above average. Farther south in the basin, snowpack is now between 75 and 90% of normal.

East of the divide precipitation was lower, only benefiting the Front Range along the Divide. Temperatures were below normal for a second

week, although not as cold as the previous week.

Streamflows have been dropping across the UCRB this week, but remain near normal. The number of streamflow gages reporting has dropped significantly as a result of the below freezing temperatures. Reservoirs continue to be in great shape in northern Colorado and Wyoming, but are far from full further south.

Recommendations:

UCRB:

Status Quo: With the increase in snowpack over the last two weeks, concern for degradation over the basin have lessened. The Four Corners area remains below average for both precipitation and snowpack, however snowpack has increased with cooler than normal temperatures.

Eastern CO:

Status Quo: Much of eastern Colorado was drier for another week, however temperatures remained cooler than normal. Short term SPIs are starting to dry out in Yuma, Kit Carson and Las Animas counties, so this area will need to be watched in the next few weeks if dryness persists and temperatures increase.