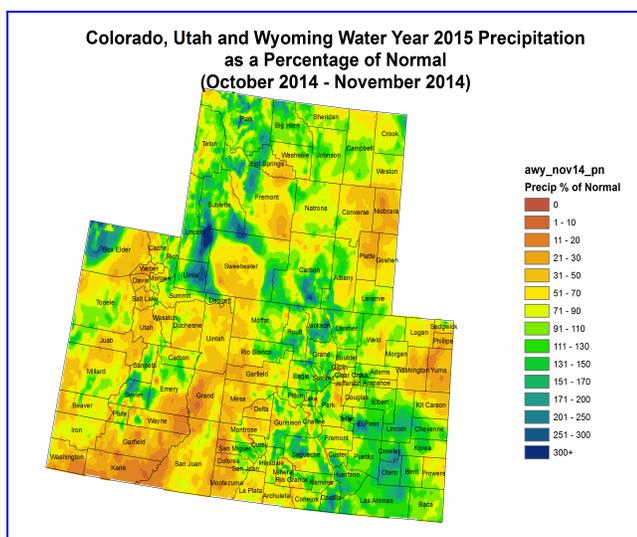
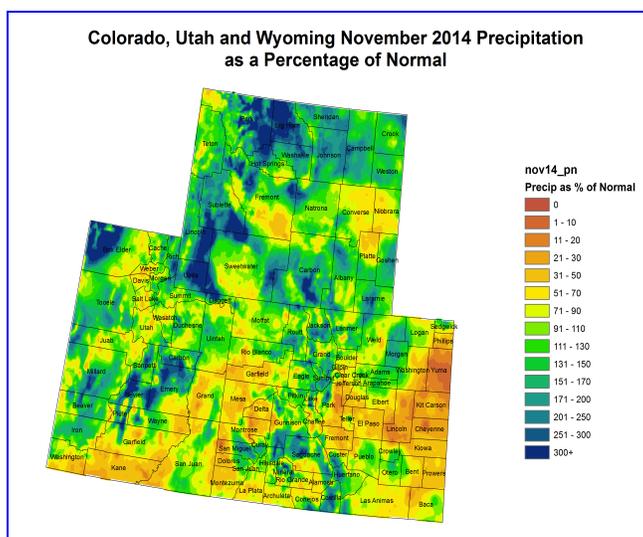
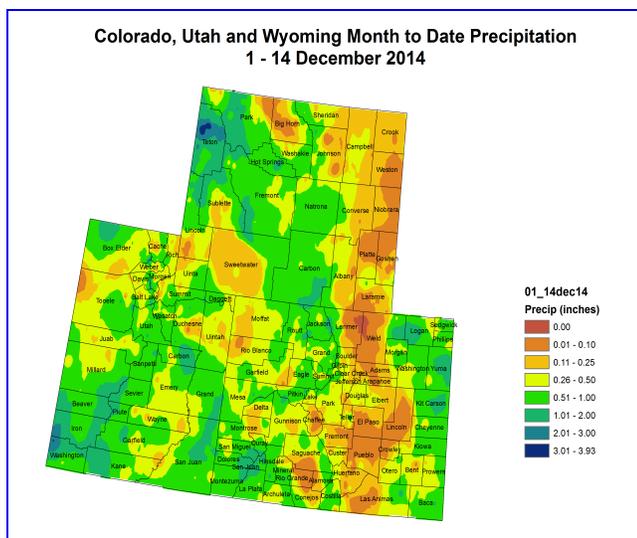
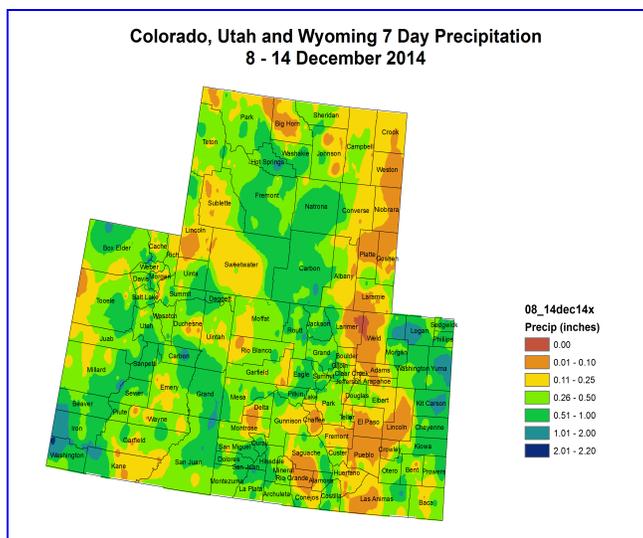


PRECIPITATION



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:

- Last week was dry in the northern portions of the UCRB, with most of the Upper Green Basin receiving less than 0.25" of precipitation. Eastern Sweetwater county and Uinta county did see up to 1.00".
- Northeastern UT saw better precipitation in the northern Uintah Mountains with up to 1.00", with the Wasatch Mountains seeing up to 0.50". The eastern counties in Utah also saw up to 1.00".
- The Four Corners region saw up to 0.50" over most of the area with northern San Juan County, UT seeing up to 1.00".
- The northern and central mountains in Colorado saw between 0.25"

- 1.00". Routt, Jackson, Eagle and Pitkin counties saw the highest totals, over 0.50".
- The San Juan Mountains in southeast CO received up to 1.00".
- The San Luis Valley was dry receiving less than 0.25" in the valley, with up to 0.50" in the hills surrounding the valley.
- East of the Divide saw a mix of precipitation amounts last week. The Front Range, along the Divide saw up to 0.50". The eastern border counties saw the best precipitation, with much of the area seeing between 0.50" to 1.00" Logan, Yuma and Kit Carson saw areas between 1.00" to 2.00" of a rain/snow mix.
- The southeastern Colorado counties saw less, however amounts were still beneficial, between 0.25" and 0.50".
- The I-25 corridor from Larimer/Weld counties all the way down to Las Animas County, mainly seeing less than 0.25".

November Precipitation:

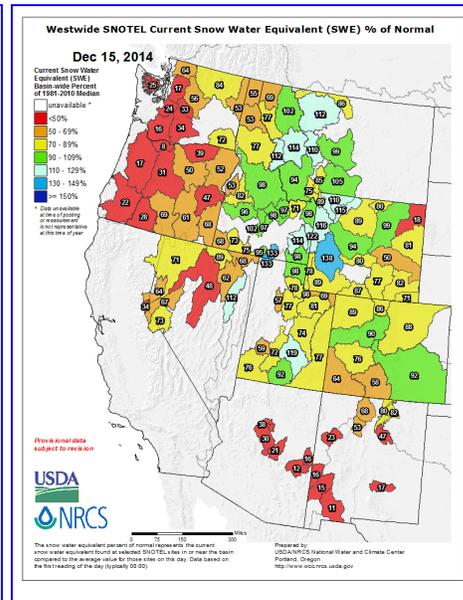
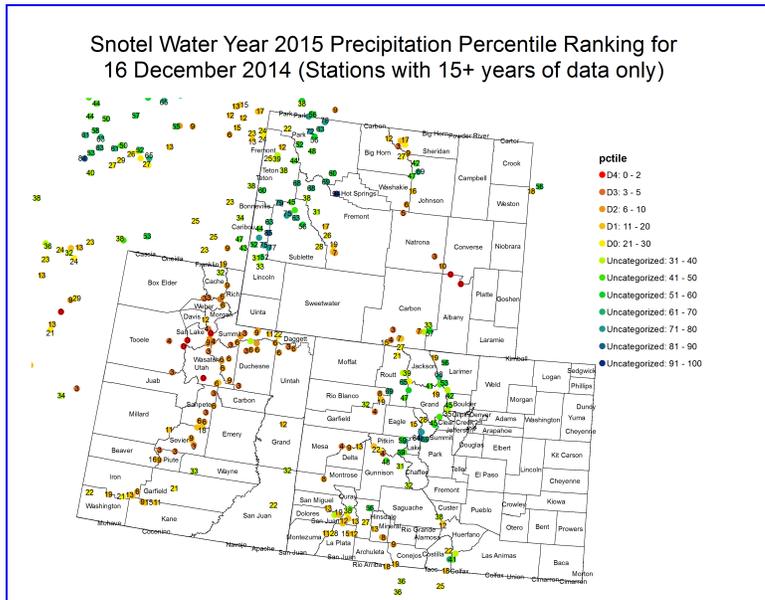
- The month of November brought good moisture to the high country of the UCRB following a warm and dry October.
- The Upper Green saw greater than 300% of normal for the month over much of Uinta, Lincoln and Sublette counties. Sweetwater county also saw near normal moisture for the month over the northern half of the county.
- The Wasatch had above normal moisture while the Uintahs were slightly drier but still near normal for the month.
- Much of the high country in Colorado had above normal moisture for November. The lower elevations of the UCRB in Colorado and Utah were drier reporting less than 70% of normal precipitation. San Juan county, Utah is an exception to this and saw near to slightly above normal precipitation for the month.
- The Rio Grande basin saw above normal moisture over the higher terrain but moisture on the valley bottom was less than 90% of normal.
- East of the divide saw near to slightly above normal moisture to the NE and SE however, parts of the Arkansas, South Platte and Republican basins from Park/Fremont counties east to the border saw less than 50% of normal for the month. This is a climatically drier time of year for this region.

Water Year 2015 Precipitation:

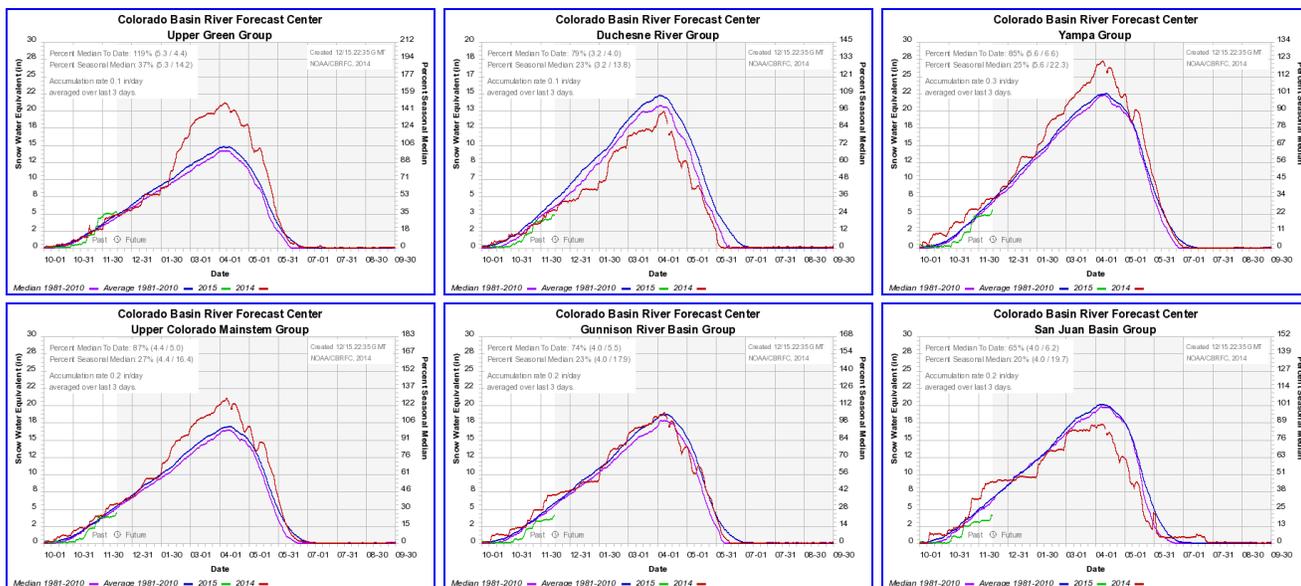
- Two months into the water year, much of the higher terrain of the UCRB is at or above normal in terms of precipitation, much of this moisture fell in November.
- The southern edge of the Uintahs are drier, reporting less than 70% of normal.
- The southern basins are also slightly drier than the northern basins, but still near normal.
- The lower elevations of the UCRB are reporting below 90% of normal from Sweetwater county in Wyoming south to the Four Corners. Areas of San Juan county, UT are slightly better.

- East of the divide in Colorado, the NE plains are reporting precipitation less than 90% of normal from Weld county east and south to Kit Carson county.
- Areas south of about I-70 are reporting above normal moisture for the water year through November. Portions of Kiowa and Prowers are slightly below normal.

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:

- The northern tier of the UCRB is reporting precipitation percentiles above the median over the Green.
- Percentiles in the Yampa-White headwaters are mostly near the median, but there is quite a spread from the 8th to the 69th percentile.
- Most SNOTEL sites in the Wastach and Uintah mountains in Utah are reporting below the 10th percentile.
- There is a large gradient in the Gunnison River Basin from the headwaters down to where it meets the Colorado Mainstem. Percentiles are near the median at the headwaters, but dip below the 10th percentile lower in the river basin.
- The San Juans are highly variable with percentile rankings ranging from 8th to the 56th percentile.
- The headwaters of the South Platte and Arkansas basins are reporting near the median.
- The Sangre de Cristo mountains are reporting percentiles from the 12th to the 41st.

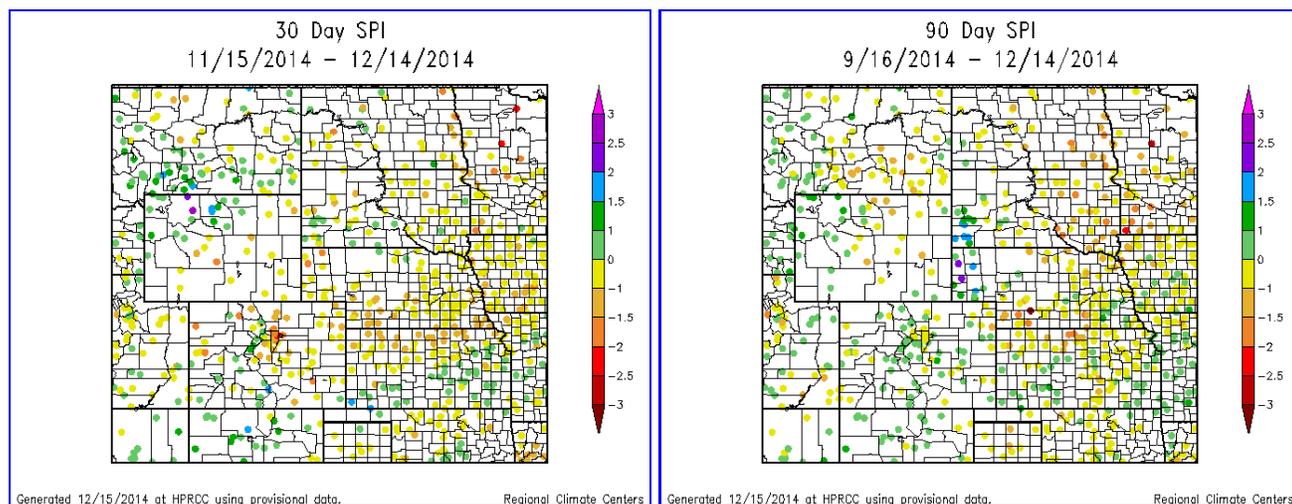
Basin-wide Snow Water Equivalent (SWE) Percent of Normal:

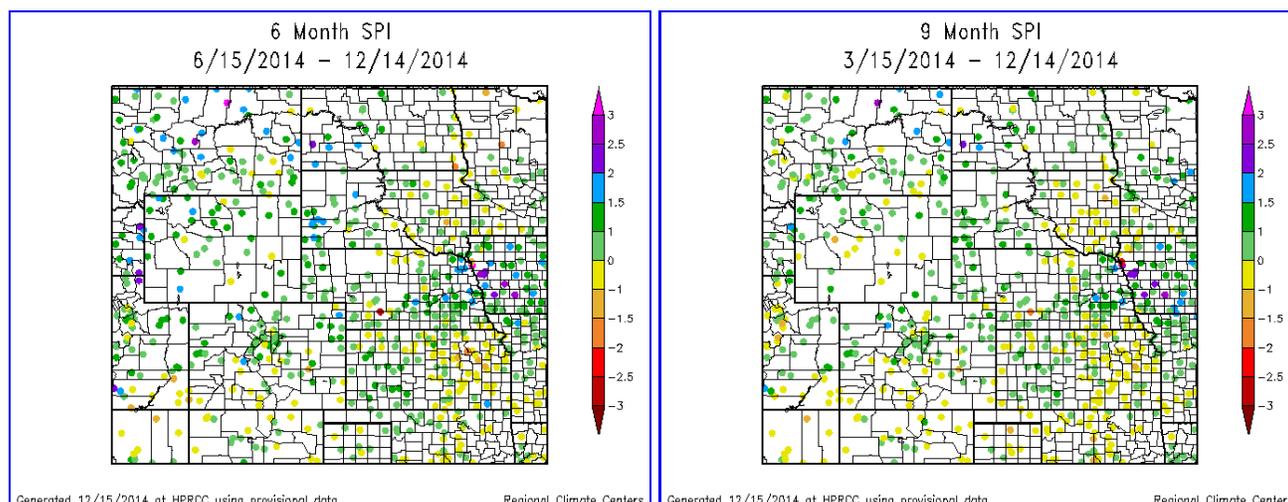
- Most basins in the UCRB have seen a decrease in snowpack percent of normal.
- In the north end of the UCRB most sub-basins are now reporting below average SWE percent of normal. Values in this area are between 69 to 138% of average. The highest sub-basin is in the Upper Green Basin
- The Colorado River Mainstem in Western Colorado has increased a small amount from last week and is at 90% of normal, up from 88% last week..
- The southern basins are below normal ranging between 64% and 77% of normal.
- Both the South Platte and Arkansas basins are reporting very near, but below normal SWE for the date, 88 and 92% of normal, respectively. the Rio Grande basin is down to 58% of normal.

SWE Timeseries Graphs:

- The Upper Green basin is at 119% of median snowpack to date.
- The Duchesne basin is only at 79% of median snowpack to date.
- The Yampa-White basin is at 85% of median snowpack to date.
- The Upper Colorado basin is at 87% of median snowpack to date.
- The Gunnison basin is at 74% of median snowpack to date.
- The San Juan basin is only at 65% 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.

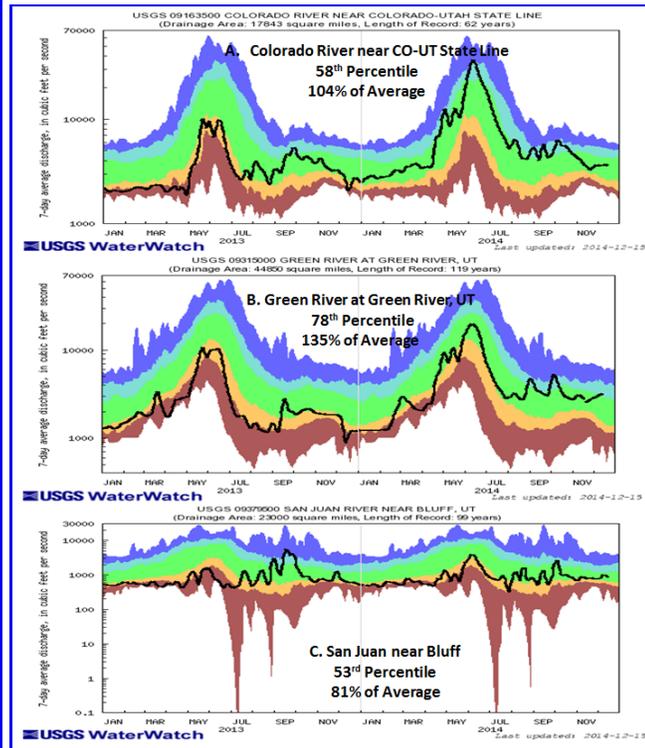
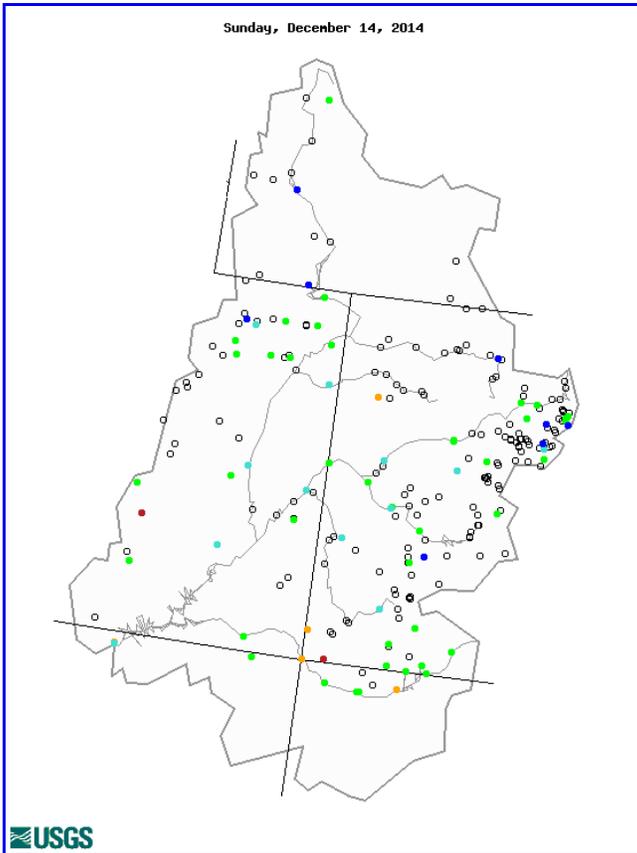
Short Term (30-day):

- Short term SPI's throughout the UCRB are mostly on the dry side (-1.5 to 0), but a few wet SPI's remain near the Four Corners, in the Gunnison Basin and along the Divide in the Northern and Central Mountains. Drier SPI's down to -2 are showing up in Routt, Rio Blanco and Mesa counties in CO.
- The Wasatch and Uintahs ranges in northern UT are reporting between +1 and -1.
- The Four Corners area in SE Utah/SW Colorado is reporting widely variable SPI's ranging from -1 to +1.
- The San Luis Valley is reporting SPI's from +2 to -1.
- In northeast Colorado SPI's are mainly between -2 and 0. The driest showing up in the Denver area and in Yuma County.
- Southeast Colorado is reporting SPI's between 0 to -1 on the 30-day timescale. Otero County is showing an SPI down to -2.

Long Term (6-month):

- For the longer term, much of the UCRB continues to report wet SPI's. The Four Corners is the driest area and is reporting SPI's from 0 to -1.5.
- The San Luis Valley is showing a mixed bag with slightly dry to slightly wet (-1 to +1) SPI's.
- East of the divide, the NE plains are mainly reporting wet SPI's, however south of about I-70 is more variable. Those SPI's range from +1 to -1.5

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		

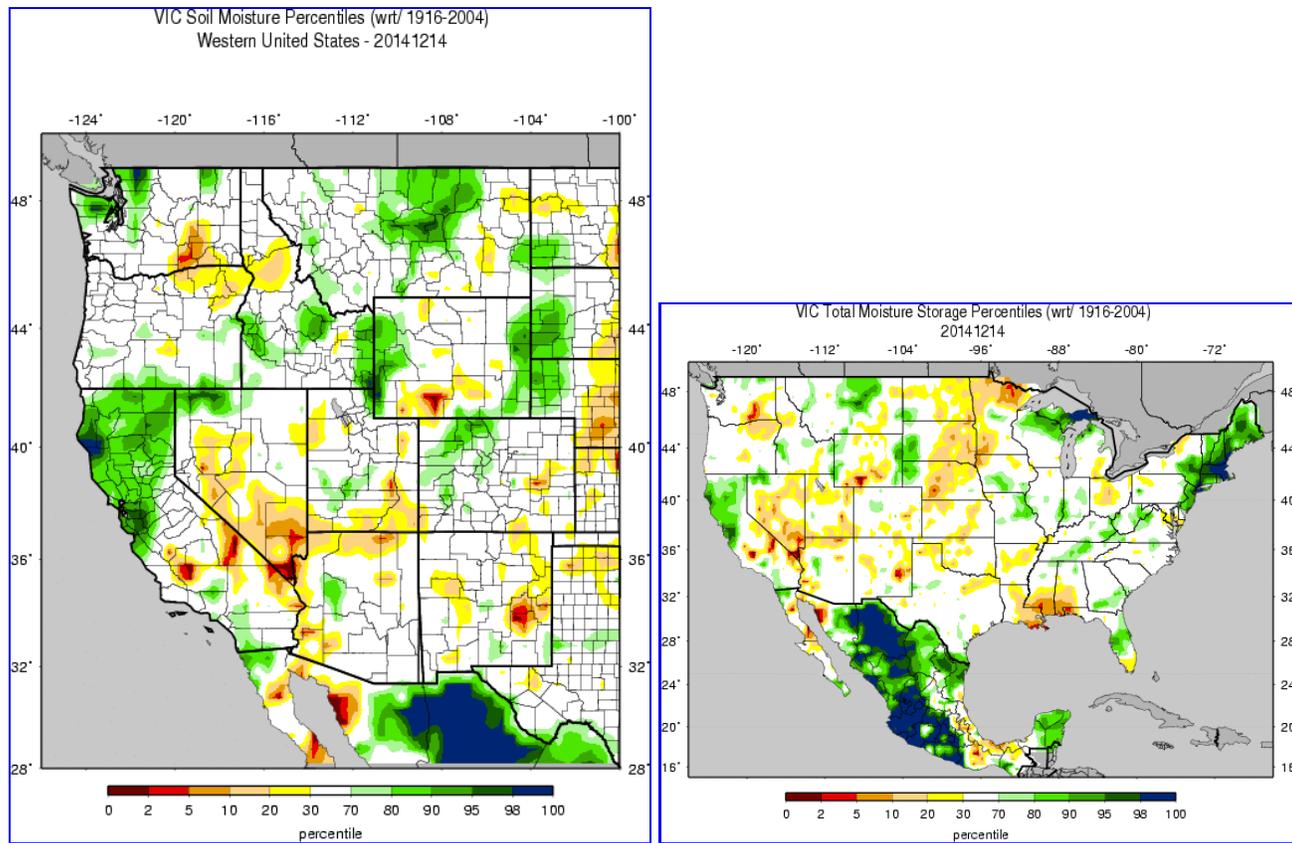
The top left image shows 7-day averaged streamflows as a percentile ranking across the UCRB. The top right image shows 7-day averaged discharge over time at three key sites around the UCRB: The Colorado River at the CO-UT state line; the Green River at Green River, UT; and the San Juan River near Bluff,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

Streamflow Statistics:

- Of the 68 gages reporting in the UCRB this week streamflows are still at or above normal.
- 90% of the gages are in the normal to much above normal for 7-day average streamflow.
- 10% of gages in the UCRB are reporting 7 day normal streamflow in the below to much below normal ranges (none are record low). The lower flows are mainly along the San Juan river.
- Streamflow on the Colorado River near the CO-UT state line is in the normal range, reporting in the 58th percentile (105% of normal).
- The Green River at Green River, UT continues to report increased flows and is reporting at the 78th percentile (135% of normal).

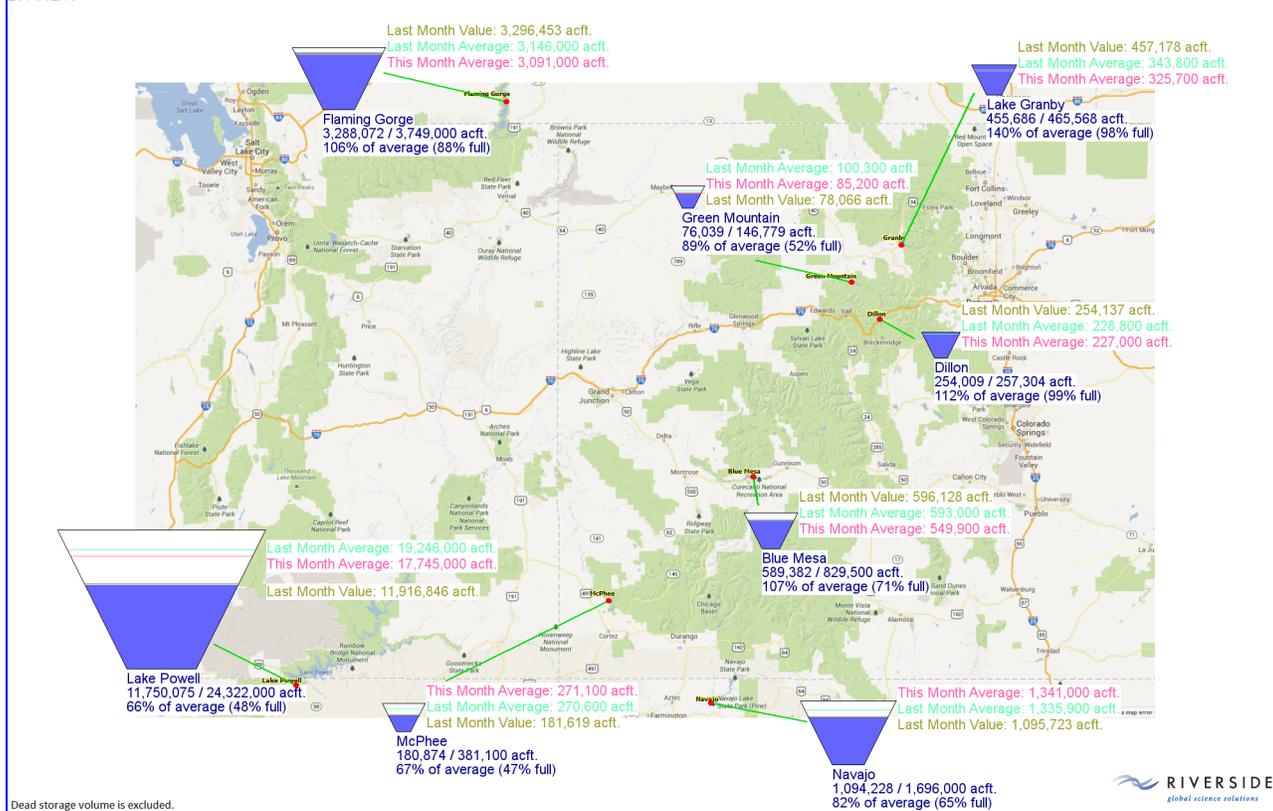
- The San Juan River near Bluff, UT is reporting at the 53rd percentile (80% of average).

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.

2014/12/15



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:

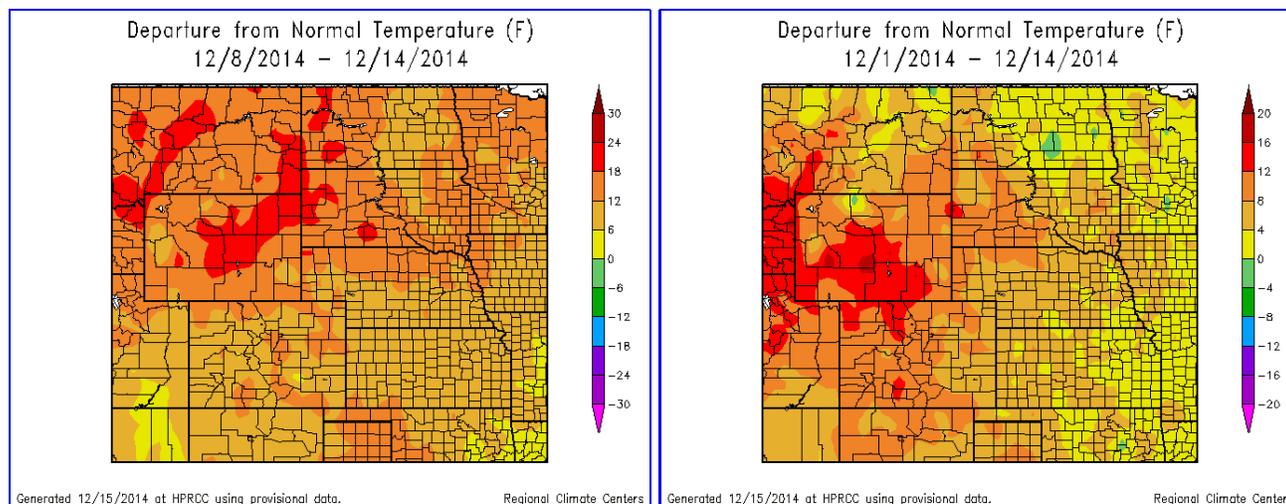
- Sweetwater County, WY has been shown as dry by the VIC for a considerable amount of time and continues to depict soils between the 0th and 30th percentile in the area.
- Western CO is still showing a large area of above average soil moisture above the 70th percentile
- Soil moisture in the Four Corners area is starting to show drying particularly in San Juan County, UT extending to the north and west up into Emery County, UT and east into Montezuma and Dolores counties in CO. Percentiles here range from 2nd to 30th.
- The San Luis Valley has rebounded to the normal range.
- 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, but starting to dry out. Lincoln County has been the driest where soil moisture is between the 2nd and 30th percentiles. Kit Carson, Bent and Las Animas Counties are starting to show soil moisture between the 10th and 30th percentile.

Reservoirs:

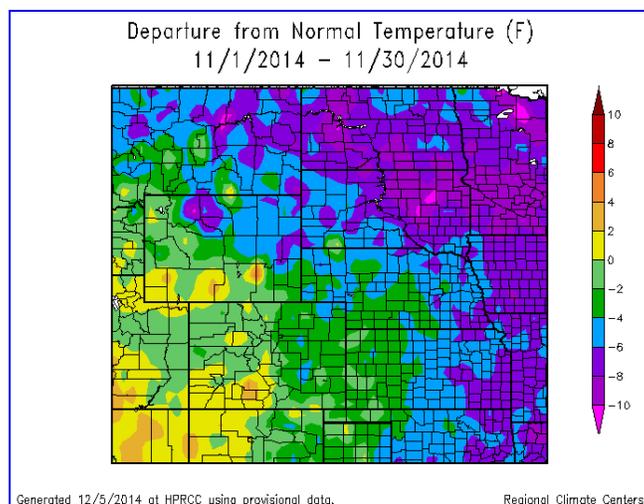
- Flaming Gorge is 106% of the December average.

- Green Mtn is 89% of December average.
- Lake Granby is 140% of December average.
- Lake Dillon is at 112% of the December average.
- Blue Mesa is 107% of the December average.
- Navajo is 82% of the December average.
- McPhee is 67% of the December average.
- Lake Powell is 66% of December average and has dropped to 48% 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:

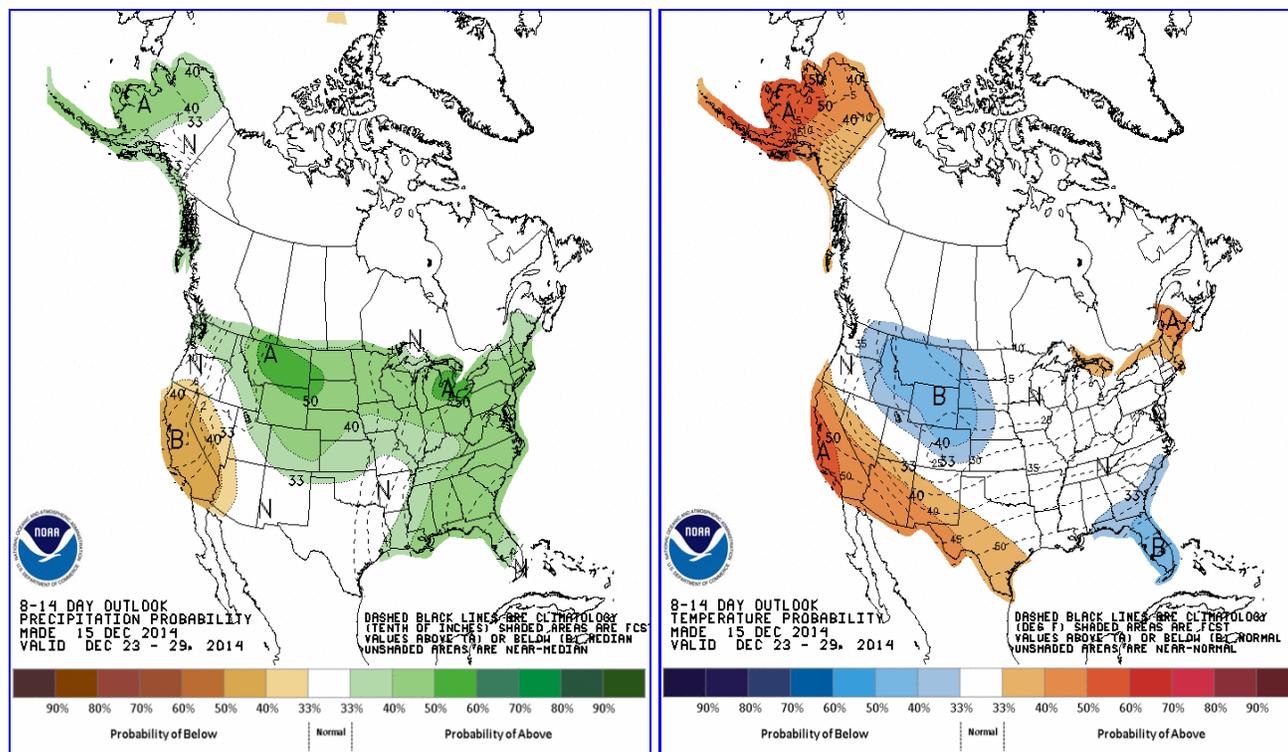
- Temperatures across the UCRB and eastern CO were well above normal last week.
- Wyoming saw the highest above average temperatures at 12 to 18 degrees above normal. Central and northeastern WY (outside of the

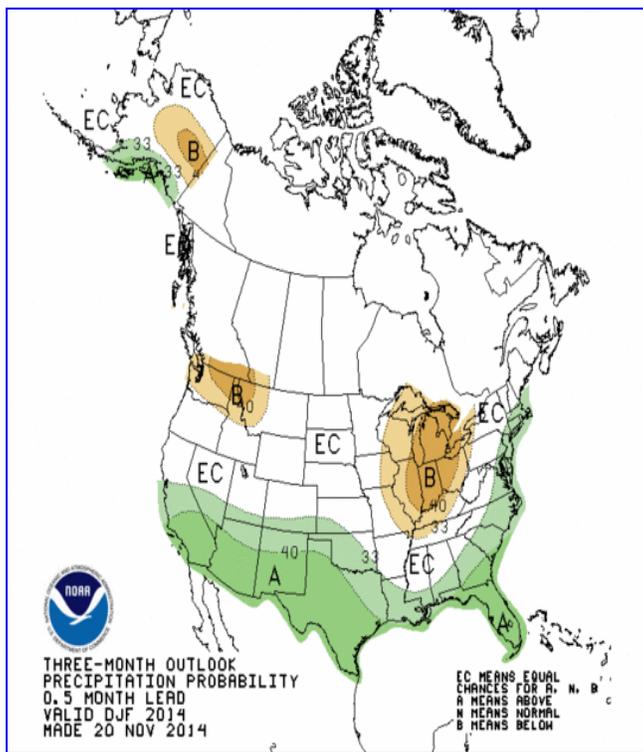
- basin) were 18 to 24 degrees warmer than normal.
- Northern CO and UT saw some of the 12 to 18 degrees warmer temperatures.
- The rest of the UCRB and much of eastern CO saw temperatures 6 to 12 degrees above average, with the southern Front Range seeing 12 to 18 degrees warmer than average.

Last Month Temperatures:

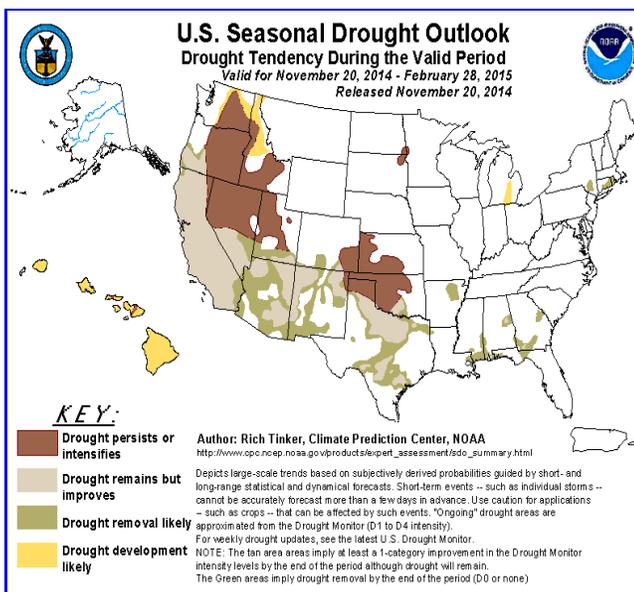
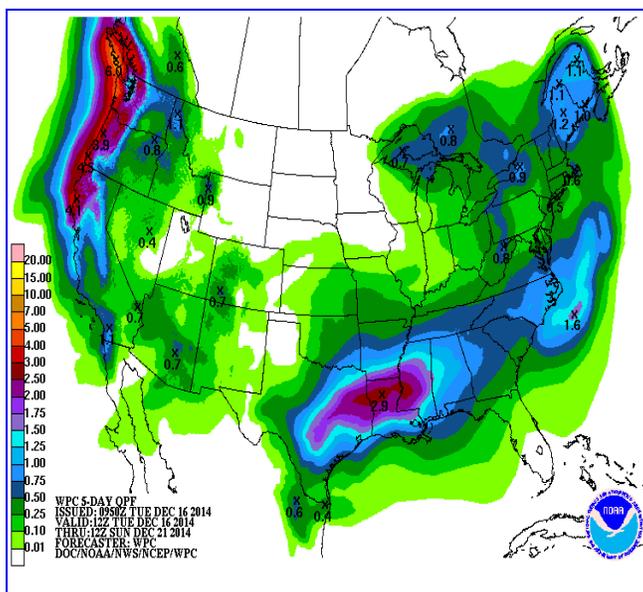
- November temperatures in the UCRB were slightly warmer than average in the Green river basin and the Four Corners regions, but the rest of the area saw below normal temperatures. Much of the region was in the 0 to 4 degrees below normal temperature range.
- The San Luis valley was one of the warmest regions with temperatures 0 to 4 degrees above the normal for the month.
- East of the divide was cold for the month of November. The plains ranged from 0-6 degrees below normal for the month.

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:

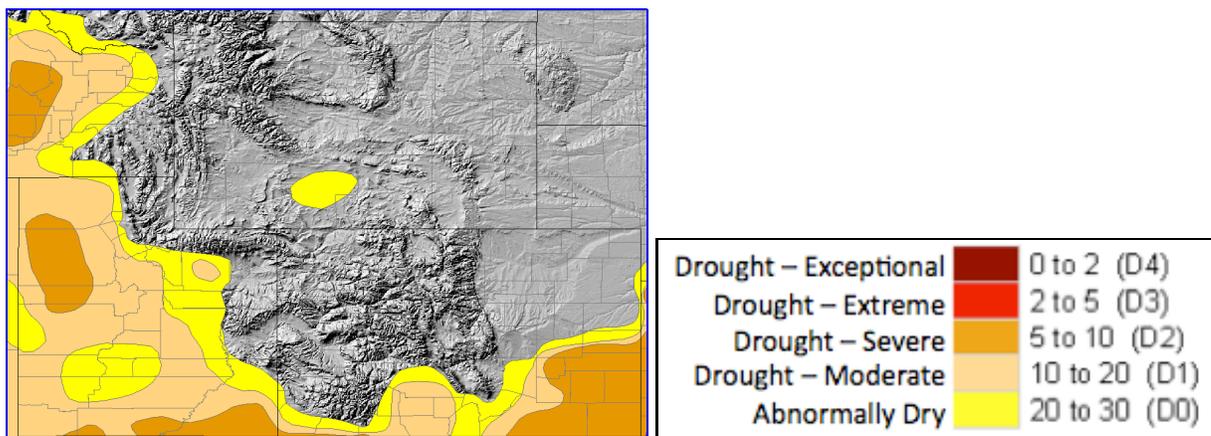
- Early Wednesday morning a shortwave trough moves into the UCRB from the Great basin. This system will not bring a large temperature change, but is likely to bring some beneficial moisture to southwest Colorado and the San Juan Mountain Range, which is below average for snowpack thus far this year.

- The northern UCRB will stay chilly over the next several days with some light snowfall possible. Mountains in west and central Colorado, such as in Pitkin County could receive over half an inch of moisture.
- East of the divide light snow will be possible, especially near the Palmer Divide, between Wednesday afternoon and Thursday evening. Temperatures will be in the 20s and 30s.
- Over the 4-5 day period flow aloft over the drought monitor region becomes west northwesterly. Temperatures will stay mostly stable until a warming trend comes into place for Monday and Tuesday ahead of the next weather system.

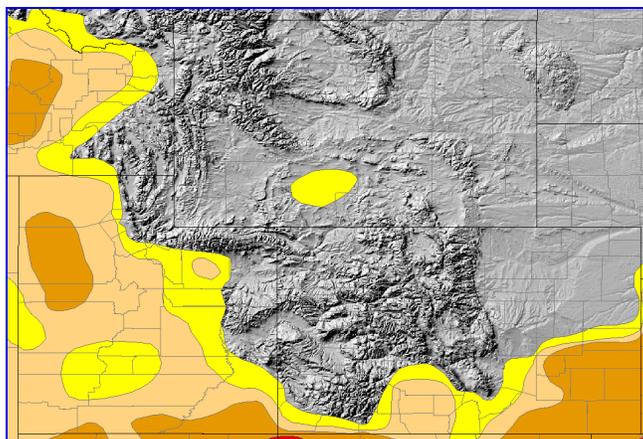
Longer Term:

- The 8-14 day precipitation outlook shows increased chances for above average precipitation over the northern half of the UCRB. The southern half sees either slightly increased chance for above average precipitation or equal chances of above and below average. East of the divide the 8-14 day outlook shows increased chances for above average precipitation, especially in northeast Colorado.
- The 8-14 day temperature outlook shows increased chances for below average temperatures for the northern half of the UCRB, but equal chances of above and below average temperatures for the southern portion of the UCRB. East of the divide chances are also increased for below average temperature, especially in northern Colorado.
- 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 December 16, 2014:

It was another warm week across the UCRB and eastern Colorado. The northern portion of the UCRB in the Upper Green River was dry, with less than 0.25" over the week, however the rest of the basin saw more than 0.25", with areas up to 1.00".

After being dry through November and the first week of December, eastern Colorado finally saw beneficial precipitation with several reports over 1.00" of rain/snow from the weekend storm that hit the area. The short term SPIs in the area are still showing dryness at -1 to -1.5 for the past 30 days.

Recommendations:

UCRB:

Status Quo. With the precipitation the past week no degradations are needed, and not enough fell to warrant any improvements.

Eastern CO:

Status Quo. Eastern CO has been very dry, however the rain and snow last week was enough to hold off any degradations. We still need to keep an eye on this area, if it dries out again.