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:**

- A dry week over much of the basin with most areas receiving less than 0.10” over the last week.
- The northern portion of the basin in northern Sublette County, WY did receive between 0.25 - 1.00", with areas up to 2.00".
- Most of the southern half of the basin received less than 0.1", with spotty amounts up to 1" in the San Juans.
- East of the basin, most of WY and eastern CO were drier receiving less than 0.1" and many areas receiving no precipitation the last week.
- In southern CO, the Sangre De Cristo range received amounts up to 1.00".

**November Precipitation:**

- The majority of the northern half of the UCRB received below average precipitation, between 20 - 70% of average for the month, with some isolated areas near or slightly above average.
- The central portion of the basin in western CO and eastern UT, received between 50% - 130% of average precipitation, the higher amounts along the CO-UT border and west.
- Most of the Four Corners region and the CO River valley in southern UT were wetter, receiving between 90% and 200% of average precipitation for the month, with southern UT above 300% of average.
- The Wasatch range and other higher elevations in central UT received much below average precipitation.
- East of the basin, in eastern CO and WY was drier, receiving between 20% - 70% of average for the month.
- The upper Arkansas basin and the Rio Grande basin in southeast CO saw beneficial precipitation, with above average precipitation, to more than 300% of average.
- Southeastern CO was also drier, between 50% - 90% of average.

**Water Year Precipitation:**

- Much of the UCRB has seen near and above average precipitation through the first two months of WY2014.
- The Wasatch and southern Duchesne ranges has been drier with 50% - 90% of average.
- Most areas of eastern UT and western CO received between 90% and 130% of average precipitation for WY2013, with some spotty areas less than 70% of average.
- Northeast CO was near average 70% to 130% of average.
- The rest of eastern and southeastern CO has been below average, in the range of 30% to 70% of average, with some areas up to 90% of average.
- The upper Arkansas basin and Rio Grande basin are above average for the start of WY 2014 thanks to an above average November.

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**SNOWTEL AND SNOWPACK**

http://climate.colostate.edu/~drought/current_assessment.php
SNOTEL Water Year Precipitation Percentile Ranking for 3 December 2013 (Stations with 15+ years of data only)

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:

- Most of the UCRB is showing near and above median percentiles since the beginning of the water year, although have decreased since last week in most basins.
- The northern and central CO mountains are showing percentiles mostly above the 50s, with the highest percentiles around North Park.
- The Uintas in northeast UT are showing percentiles slightly below the median, while the Wasatch mountains in northern UT are drier, with some percentiles now in the single digits and teens.
- In the northern portion of the basin, percentiles are mixed with a few drier, but most in the Wyoming
range are around the median, with wetter percentiles along the Wind River range
• The southern ranges are wetter, with percentiles throughout southwest CO mostly above the median

**Basin-wide Snow Water Equivalent Percent of Normal:**

• Most of the sub-basins in the UCRB are near to above average snowpack
• All of CO and the southern part of the UCRB are showing snowpack above average
• The northern part of the basin and northeast UT are slightly drier, with snowpack ranging from 70% to 85% of average

**SWE Timeseries Graphs:**

• The Duchesne basin is showing below average SWE to date, currently at 77% as of December 2nd.
• The remaining basins are all showing above average SWE accumulations to date, and have had a slight increase the last week.

**STANDARDIZED PRECIPITATION INDEX**

![30 Day SPI](image1)

![90 Day SPI](image2)

![6 Month SPI](image3)

![9 Month SPI](image4)
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):**

- Most of the UCRB shows -1 to +1 mixed SPIs.
- Northern UT and the Wasatch range show mainly drier SPIs between 0 and -1.5
- Slightly wetter SPIs show up in western CO
- Southwestern WY has dried out with SPIs now between 0 and -1.
- The CO Front Range and eastern plains are showing mainly drier SPIs between 0 and -1.5
- The Rio Grande basin, in southern CO, show wetter SPIs between 1 and 2.5.
- Eastern WY is mainly dry, with some SPIs down to -2

**Long Term (6-month):**

- The longer timescale of 6 months shows a much wetter depiction than the shorter term.
- Much of the UCRB shows wet SPIs ranging from -1 to +2. The drier SPIs show up in northern UT
- East of the Continental Divide is mainly wet with the exception of the continued drought stricken area around Crowley/Lincoln/Otero counties with SPIs from +1 to -1.5
- NE Colorado in Phillips/Sedgwick/Yuma counties is also slightly drier with SPIs between 0 and -1.

**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.

**Streamflow Statistics:**

- 79% of gages recording normal and above 7-day average streamflow
- 15% of gages recording much above normal to high flows
- 21% of the gages are recording below the normal range (an increase from 18% last week), with only 1% reporting record low flows
- 94 stations currently reporting (not affected by ice), compared to 135 one month ago
- The Colorado River near the CO-UT state line and the San Juan River near Bluff, UT are both reporting flows in the near normal range, at the 38th and 53rd percentiles respectively
- The Green River at Green River, UT is reporting below normal flows at the 25th percentile

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 above left image shows the percent of average volumes of the major reservoirs in the UCRB. The above right image shows the percent change in volume over a specific time period for the reservoirs.

**VIC:**

- Majority of the UCRB is showing near normal to wet soil moisture conditions
- Parts of northern UT and southwest WY showing slightly dry soil moisture, with percentiles ranging from the 10th to the 30th
- Soil moisture conditions are at or above the median percentile throughout northwest CO
- Northeastern CO and eastern WY are also showing wet soil moisture conditions
- Southeast CO continues to experience dry soil moisture conditions, with the lower Arkansas basin showing soil moisture percentiles below the 20th percentile and isolated areas down to the 5th percentile.

**Reservoirs:**

- For November, many reservoirs saw an increase (Flaming Gorge, Granby, Blue Mesa, McPhee, and Navajo), which is not normal for this time of year
- Green Mtn saw normal volume decreases for this time of year while decreases at Dillon was less than average
- Lake Powell had a slightly larger than average decrease for November
- The northern reservoirs are all near their December averages, ranging from 95% (Flaming Gorge) to 109% (Dillon) of average
- The southern reservoirs are all below December average, though they have seen some improvement over the past couple months. They range from 56% (Lake Powell) to 74% (Navajo) of average for
December

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:

- Many parts of the northern and central UCRB saw warmer than average temperatures last week, however the valley area in Sublette County, WY, saw cooler than average temperature
- The southern and western portions of the basin saw cooler temperatures, between 0 and 6 degrees cooler than average
- Temperatures in the Rio Grande Basin were 6 to more than 15 degrees cooler than average
Most of eastern CO was 3 to 6 degrees warmer than average with some areas up to 12 degrees above average

Far southeastern CO was slightly cooler than average, 0 to 3 degrees below average

**Last Month Temperatures:**

- The basin saw a mix of cooler and warmer than average temperatures for the month of November
- The northern basin saw mostly 0 to 3 degrees warmer than average, with southern Sublette County, WY 0 to 2 degrees cooler than average
- The eastern and central portions of the basin were 0 to 3 degrees above average
- Eastern UT and along the CO river Valley saw 0 to 2 degrees cooler than average
- East of the basin was also a mix
- Most of northeast CO 0 to 3 degrees above average
- Southeast CO was 0 to 2 degrees cooler than average, with areas closer to the mountains were slightly warmer than average
- The upper Arkansas River and Rio Grande River basins were 0 to 2 degrees cooler than average.
- Most of WY experienced temperatures 0 to 3 degrees warmer than average

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**FORECAST AND OUTLOOK**
The top two images show Climate Prediction Center’s Precipitation outlooks for 8 - 14 days (top left) and 3 months (top right). 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:

- A strong winter storm will impact the area through Wednesday with heavy snow and bitterly cold temperatures
- Snow amounts expected in the mountains of 1 to 3 feet and amounts up to 1 foot in the valleys and Front Range are expected
- Lower snow amounts will fall on the Plains, with cold temperatures
- After Wednesday, the cold will remain into next week with a chance of snow

Long Term:

- The 8-14 day precipitation outlooks shows increased possibility of wetter than average conditions for the northern portion of the basin, a chance for near normal precipitation in the central and western portion of the basin, and a chance for below normal precipitation in the eastern portion of the basin and eastern CO.
- The CPC 3-month outlook shows equal chances for wet, dry, or near average conditions for most of the UCRB, with a slightly increased chance of drier conditions across the southern edge of the basin
- The seasonal drought outlook shows that drought persistence is likely in the areas of the basin that are still in drought
**Summary: December 3, 2013**

The last week in the Upper Colorado River Basin was mostly dry with the northern portion of the basin the only area receiving beneficial precipitation. November had a mix of precipitation with most of the northern basin below average, and much of the southern basin above average.

Eastern CO was also dry for the last week with much of the area receiving no precipitation. Much of eastern CO was below average for the month of November, with above average precipitation around the Upper Arkansas and Rio Grande basins.
A large winter storm with heavy snow amounts and cold temperatures is forecast to come into the area starting Tuesday afternoon through Wednesday. The cold will persist into next week, with a chance of snow after Wednesday.

Recommendations**

**UCRB:**

After a dry week and the up coming storm status quo is recommended for the UCRB

**Eastern Colorado:**

After a dry week and the up coming storm status quo is recommended for Eastern CO and the rest of Wyoming