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:**

- The largest precipitation totals in the drought monitor region over the past week were in the central Colorado Rockies. Much of Summit County received 0.50-1.00" of precipitation. An area southwest of Aspen near the Maroon Belles had over an inch.
- The Upper Green Basin received 0.01-0.10" of precipitation in most areas. A large portion of Sweetwater County in Wyoming had no precipitation.
- It was a dry week for eastern Utah, which received between 0 and 0.10" of precipitation.

http://climate.colostate.edu/~drought/current_assessment.php
Southwest Colorado was mostly dry with the exception of some of the high terrain near Wolf Creek Pass where totals were between 0.50 and 1.00".

Northwest Colorado had a below average week of precipitation. Totals near the Colorado-Utah state line were under a tenth of an inch. Much of Routt County was between 0.10 and 0.25" while areas of the high terrain were anywhere from 0.25 to 1.00".

The southeast quadrant of Colorado was the beneficiary of more precipitation over the past week than the northeast quadrant. North of the Palmer Divide totals were mostly below a tenth of an inch. Up near the Palmer divide and eastward along the i70 corridor totals were anywhere from 0.10-0.50". Some areas west of Fort Collins and Boulder received over a quarter of an inch, such as up near Cameron Pass.

Most of the southeast quadrant of Colorado had between 0.10 and 0.50" of precipitation over the past week. Parts of Pueblo and Las Animas Counties received 0.50-1.00".

December Precipitation:

- The month of December brought good moisture to the high country of the UCRB following.
- The Upper Green River Basin saw greater than 100% of normal for the month. Most of Uinta County, eastern Sweetwater County and southern Sublette County in Wyoming saw better than 200% of average for the month.
- The Wasatch and Uintah ranges in Utah were near to slightly above normal for the month, with the exception of northern Uintah County, which saw 50 - 90% of normal precipitation.
- Much of the higher elevations in western Colorado saw above normal moisture for December. The lower elevations were drier reporting less than 90% of normal precipitation.
- The Four Corners area and the San Juan Mountains in southwest CO saw near to above normal precipitation. South of the San Juan Mountains were below normal however.
- The Rio Grande basin saw below normal precipitation in the San Luis Valley, and above normal precipitation in the mountains surrounding the valley. The Sangre de Cristo mountains received over 300% or normal.
- East of the divide saw near to above normal precipitation through much of eastern Colorado and Wyoming. the northeastern counties in Colorado saw greater than 300%. El Paso, eastern Fremont, Pueblo and parts of Crowley and Lincoln counties were quite a bit drier for the month, seeing less than 70% or normal.

Water Year 2015 Precipitation:

- Three months into the water year, much of the higher terrain of the UCRB is at or above normal precipitation.
• The Upper Green River basin in Sublette, Lincoln and Uinta counties are above normal, while much of Sweetwater County is drier, receiving less than 90% of normal for the Water Year to date.
• The Uintah Range in Utah are drier, reporting less than 90% of normal, with much of the southern side of the range less than 70% of normal.
• The southern portion of the basin is drier, with much of the lower elevations seeing less than 70% of normal precipitation for the water year to date.
• The San Juan Mountains and headwaters of the Gunnison River are at or above normal.
• The Rio Grande basin is showing better percent of normal, with the higher elevations surrounding the San Louis Valley at or above normal. The Valley is drier, but still near normal (70% and above).
• East of the divide in Colorado, the eastern plains recovered nicely in December, now reporting at or above normal precipitation for the water year. Portions of Weld, Washington, Phillips and Yuma counties are slightly drier, with areas between 70% - 90% of normal.
• Portions of Otero, Crowley, Bent and Las Animas counties, where drought has been the worst, have seen better than 150% of normal for the water year to date.

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 Green River Basin, precipitation percentiles are still mostly above the median, but have been falling over the last couple weeks. Precipitation for the water year ranges from the 37-79th percentile.
- There are missing data in the Duchesne River Basin because of some errors that were found, and the data that are there may be suspect, but percentiles in the Duchesne Basin are very low, currently in the 0-9 range.
- The Wasatch Range is having an average year farther south in Sevier and Sanpete Counties where SNOTEL precipitation percentiles are ranging from 30-74. Farther north there are, once again, missing data, but the stations with data available are only at the 18th percentile.
- The northern mountains of Colorado (Yampa, White, Upper Colorado) are showing a very mixed bag of percentiles, but in general are having a bit of a rough go of things this water year to date. Some of the lower totals are in Garfield and Rio Blanco Counties, and in Carbon County up in southern Wyoming. The wettest area with respect to normal in the northern Rockies so far this water year has been the very high terrain in Lake, Summit, and Park Counties. Here SNOTEL precipitation percentiles are above 80.
- The West-Central Colorado mountains (Grand Mesa, Gunnison) are showing percentiles above the median in the headwaters, but farther downstream percentiles drop into the 8th to 58th percentile. The lowest are on the Grand Mesa in Delta county, however they are quite variable.
- The San Juan mountains in SW Colorado are reporting percentiles well below the average with the exception of a station in Hinsdale County at the 53rd percentile for the water year. The rest of the area is between the 13th and 28th percentile.
- The Rio Grande Basin is dry on the western side of the basin where percentiles range from 9th to 19th, on the eastern side of the basin, percentiles are mainly above the 30th.

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

- There are a number of basins missing data this week including the Wasatch Range, Duchesne Basin, Upper Rio Grande, Upper Colorado near Lake Powell, and the Green River.
- The Northern and Central Mountains in Colorado are reporting SWE from 81 - 96% of normal, which is down 4-6% from this time last week.
- The San Juan Basin near the Four Corners is currently well below normal snowpack for the winter at only 67% of normal.
- East of the divide basin snowpack is still healthy. The Arkansas River Basin is at 117% of average, and the South Platte Basin is at 98% of average.

**SWE Timeseries Graphs:**

- The Upper Green basin is at 112% of median snowpack to date, which corresponds to a 10% decrease from this time last week.
- The Duchesne basin is at 81% of median snowpack to date, which is down from 91% of median snowpack last week.
- The Yampa-White basin is at 77% of median snowpack to date, down 7% from last week.
- The Upper Colorado basin is at 94% of median snowpack to date, down 3% from last week.
- The Gunnison basin is at 82% of median snowpack to date, down 6% from last week.
- The San Juan basin is only at 70% of median snowpack to date, down 5% from last week.

**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):

- The Green River Basin is showing SPI's slightly to moderately below normal from -1.5 to 0.
- The Wasatch Range is showing SPI's in the normal range between -1 and 1.
- SPI's in southeast Utah are slightly above normal and are nearly unanimously between 0 and 1.
- The majority of western Colorado stations in the Yampa, Colorado, and Gunnison are reporting SPI's in the normal range between -1 and 1. There is a SPI in Steamboat between -1.5 and -1.
- Central Colorado and some of the area along the Palmer Divide are showing some the most favorable SPI's in the region. Here SPI's range from -1 all the way up to +2.
- The San Juans are reporting SPI's between -1 and +1.
- East of the Continental Divide and north of the Palmer Divide, most stations are reporting SPI's above zero. South of the Palmer Divide SPI's are a little less favorable. There are SPI's between -1 and -1.5 in Otero and Las Animas Counties.
- Burlington is showing a SPI in the +1.5-2 range.
- The San Luis Valley is average SPI's for the short time scale between -1 and +1.

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, reporting SPI's from 0 to -1.
- The San Luis Valley is reporting slightly dry to slightly wet (-1 to +1) SPI's.
- East of the divide, most of Eastern Colorado is reporting mainly wet SPI's between 0 and +2. There are a number of exceptions to this mainly south of the Palmer Divide, but also including Sedgwick County, reporting between -1 and 0. A couple SPI's in Southern Colorado have slipped back below -1 on the six month timescale in Crowley and Las Animas Counties.

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:**

- Only 49 of the 140 stream gages in the UCRB are reporting. Most, or all others are ice affected.
- 37% of the reporting gages are in the above to high range for 7-day average streamflow, but none are at a record high.
- 53% of gages in the UCRB are reporting 7-day streamflow in the normal range of 25-75th percentile (none are record low).
- 10% of the gages are reporting below normal and no gages are in the much below or record low categories.
- The Green River at Green River, UT is reporting in the 90th percentile at 171% of average for this time of year.
- Streamflow on the Colorado River near the CO-UT state line is no longer ice affected and is reporting in the 63rd percentile at 107% of average.
The San Juan River near Bluff, UT is flirting with the below normal range reporting at the 30th percentile and 59% 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 in the 2-30th percentile range over much of the eastern part of the county.
- Northeastern UT is showing normal to wet soils, with the exception of Uintah County, which is showing dry soils between the 10th and 30th percentile in some areas.
- There are some very wet soils in the Upper Green River Basin. Near the Wyoming-Utah state line soil moisture is in the 70-95th percentile range.
- Western CO is still showing a large area of above average soil moisture over the 70th percentile. The highest percentiles are in Grand County.
- The Four Corners Region is showing mostly normal soil moisture with an area in Montezuma County, CO and San Juan County, UT that is between the 10th and 30th percentile.
- The San Luis Valley is mostly in the normal range, with a pocket in the 20-30th percentile range.
- East of the divide, much of the eastern plains are showing normal soil moisture, the exception is southern Lincoln county where soil moisture percentiles range from the 5th to 30th. This area also extends into Crowley and Kit Carson counties.
- The southern edge of Las Animas County is also a bit drier, in the 10-30th percentile range.

http://climate.colostate.edu/~drought/current_assessment.php
Reservoirs:

- Flaming Gorge is 106% of the January average.
- Green Mtn is 86% of the January average.
- Lake Granby is 141% of the January average, 93% full.
- The data for Lake Dillon are missing this week, but the reservoir was very near full last week.
- Blue Mesa is 111% of the January average.
- Navajo is 83% of the January average.
- McPhee is 67% of the January average.
- Lake Powell is 65% of the January average and is only 46% 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:

http://climate.colostate.edu/~drought/current_assessment.php
• Much of the UCRB experienced at least slightly above average temperatures last week. The only areas below normal were parts of the Central Rockies, the San Luis Valley, and the Sangre de Cristos.
• The Green River Basin was very warm with temperatures 5-15 degrees above normal for the week.
• The Duchesne River Basin realized temperatures anywhere from 0-10 degrees above normal.
• The Four Corners were near normal, but 0-5 degrees above for the week.
• Northwest Colorado was a mixed bag of above and below normal temperatures. Parts of Moffat and Routt Counties were 0-5 degrees below normal. Near the Colorado-Utah State line temperatures were 5-10 degrees above normal. The rest of the area was in the 0-5 degrees above normal range.
• The Rio Grande basin experienced temperatures between 5 degrees below and above normal.
• East of the divide temperatures were above normal, especially near the Colorado-Kansas state line. The Front Range was 0-5 degrees above normal. Farther east on the plains Sedgwick, Phillips, Yuma, Kit Carson, and Cheyenne Counties were all in the 5-10 degree above normal range.
• Southeast Colorado was 0-5 degrees above average with the exception of parts of Las Animas, Pueblo, Otero, and Crowley Counties, and most of Huerfano County. These areas were 0-5 degrees below average.

Last Month Temperatures:

• Despite the cold temperatures the last week of December, the UCRB and eastern Colorado saw a warmer than normal month of December.
• December temperatures in the UCRB were 2 to 10 degrees warmer than normal. Southwestern WY, northeastern UT and northwestern CO saw the most above normal temperatures, 8 to 10 degrees warmer than normal.
• Western Colorado was 4 to 6 degrees warmer than normal, with areas along the Divide were 2 to 4 degrees warmer.
• The San Luis Valley saw temperatures 4 to 10 degrees warmer than normal.
• East of the divide, thanks to the last December freeze, Eastern Colorado was only 0 to 2 degrees above normal for the month. Northeastern Colorado and a small pocket in eastern Pueblo and Crowley counties were 0 to 2 degrees cooler than normal.

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:

- Eastern Colorado and the Upper Colorado River Basin are currently reaping the benefits of being roughly 180 degrees out of phase with blizzard-stricken New England in a large synoptic wave pattern. A shortwave disturbance will cool off the western side of the basin late tonight into Wednesday morning and then cool the northeast corner of Colorado Thursday morning as it is ejected eastward from the lee side of the Rockies. This system will not bring the full force of winter, and temperatures will stay above seasonal averages. Precipitation accumulations from this trough are expected to be marginal, but not insignificant in the northwest Rockies of Colorado, the Wasatch Range, and the Green River Headwaters.

- As the jet stream splits west of the Pacific Coast the south fork may deliver some significant precipitation to the UCRB this week. A trough is expected to develop over southern California on Thursday and deliver moisture to the UCRB and southeast Colorado by Friday morning. The best precipitation from this system will miss to the south of our region, but the San Juan range, which has been dry, may receive up to an inch of precipitation in some areas. This system has a surprisingly warm core for this time of year, and precipitation is only likely to fall as snow over the higher elevations.

- Precipitation accumulations in the UCRB over the next seven days are expected to be most favorable in the Four Corners Region. Areas of the northern Rockies and Sangre de Cristos could receive upwards of half an inch of precipitation. East of the divide a dry week is expected for the most part with some light precipitation possible in southeast Colorado and the foothills near the Sangre de Cristos.

Longer Term:

- The 8-14 day precipitation outlook shows increased chances for
below average precipitation across eastern Colorado and the UCRB. Southeast Colorado is forecast near equal chances of above and below average precipitation. The area with the highest odds of below average precipitation is south Utah near Lake Powell.

- The 8-14 day temperature outlook shows increased chances for above average temperatures in eastern Colorado and the Upper Colorado River Basin. These chances are strongest in the headwaters of the Green River and in the Wasatch and Uintah Ranges of Utah.

- The Climate Prediction Center 3-month precipitation outlook shows increased chances for above normal precipitation for the drought monitor region for the February to April period with the exception of the Upper Green River Basin. Here there are equal chances of above and below normal precipitation. Chances for above average precipitation are maximized in the four corners region.

- 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 January 27, 2015:

Eastern Colorado and the Upper Colorado River basin are currently basking under an unseasonal subtropical high pressure system that arrived out of the southwest. While the warm air does feel like a very nice reprieve from winter it is a bit disconcerting in the context of drought. The challenge in the Upper Colorado River Basin (UCRB) this week appears to be weighing short-term warmth and dryness against lucrative August and September rains, and above average December snowfall in many regions.

Recommendations:

**UCRB:** The warm, dry conditions over the past couple weeks have had a large impact on basin-wide snowpack for the Duchesne, Yampa, White, Gunnison, and San Juan River Basins. Snowpack in these basins have now fallen anywhere from 10-18% with respect to the median over the last two weeks. On longer timescales SPI's are still wet across much of western Colorado, and streamflows are above average in many areas, so it's not a dire drought scenario at this point. It will take a couple moisture-packed systems to catch up on snowpack though, so the classification of "abnormally dry" is justified.

D0 is being recommended for the following area:

- On the northern boundary use the north end of the Duchesne and Yampa River Basins up into Carbon and Sweetwater Counties in Wyoming to join the area of D0 already present.
- On the eastern boundary the D0 would be extended from Utah all the way into Colorado, and be drawn in based primarily on where the majority of SNOTEL water year to date numbers are below the 30th percentile. This would include northern Routt County, western Moffat, Rio Blanco, and Garfield Counties, Mesa, Montrose, San Miguel, Ouray, and Delta Counties, and southern Gunnison County.

**Eastern Plains:** Status quo is recommended as this region is in their dry season. Huerfano and Pueblo Counties were on our radar for degradations last week, but the area received some beneficial moisture this week and experienced near average temperatures, so this is not the week to make degradations.