**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:**

- The northern half of the UCRB received the most precipitation over the last week, most areas seeing greater than half an inch.
- In southwestern WY, Lincoln, Uinta and Sweetwater counties saw between 0.50 and 1.00" with southern Uinta and eastern Sweetwater seeing 1.00 - 2.00". Sublette County mostly received less than 0.50", with the eastern part of the county seeing slightly more.
- Northeastern UT also received beneficial precipitation, between 0.50" and 1.00" in the Wasatch and Uintah Ranges, spreading down to...
northern Emery and Grand Counties. The northern portion of the Uintah range in Summit and Daggett counties saw between 1.00" and 2.00".

- Southeastern UT missed out on much of the precipitation, seeing less than 0.50".
- Western CO mostly saw precipitation amounts greater than 0.50", and up to 2.00" in the northern mountains. The northern San Juan mountains also saw above 0.50" for the past week.
- The Four Corners area was drier with less than 0.50".
- East of the basin saw spotty precipitation. Northeastern CO saw mostly greater than 0.50" with Washington, Sedgwick, Phillips, Yuma and Kit Carson counties seeing greater than 1.00" and some areas over 2.00". Weld and Logan Counties were mostly missed, seeing less than 0.50". The northern Front Range also received between 0.50" and 1.00".
- In southern CO, Kiowa, Prowers, Baca and parts of Bent and Otero counties received between 0.50 and 1.00". The remainder of the counties saw less than 0.50" with Lincoln, Crowley, Pueblo and Las Animas counties seeing less than 0.25".
- The San Luis Valley also saw less than 0.25".

**August Precipitation**:

- In the UCRB most of Western Wyoming Eastern Utah received above average precipitation for the month of August with areas of 300+ percent of average in southwest Wyoming, the Wasatch Range in UT and Uintah County, UT.
- The rest of eastern UT down into the Four Corners area saw above average precipitation, mostly in the 150% to 250% of average range.
- Most of western Colorado also received above average precipitation for August, ranging from 100% of average in the Four Corners area to 300% of average in Moffat County in northwestern CO.
- Along the Divide in central and southern CO, precipitation was less for August, with Lake Chaffee, Saguache, Hinsdale and the eastern San Juan Mountains receiving between 50% to 90% of average, the lower amounts in the valleys.
- East of the divide saw spottier precipitation for August. Much of the northern Front Range saw near average precipitation, with the southern Front Range from Park County south, seeing below average precipitation in the range of 50% to 90% of average with spotty areas seeing less than 50% of average.
- The northeastern CO counties saw much above average precipitation, mainly 150% to 100% of average precipitation for August.
- Southeastern CO once again saw below average precipitation, in the range of 50% to 90% of average with spotty areas in Crowley, Otero and Las Animas counties seeing near average precipitation.
- Most of the Rio Grande basin also saw lower than average precipitation for the month, with the eastern part of the basin seeing near to slightly
above average precipitation.

**Water Year Precipitation (Oct-Aug):**

- 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 300% of average. Central Sweetwater and eastern Sublette counties are 70% to 90% of average.
- Much of eastern UT is now near average, with some areas in the Duchesne River basin a little drier than average of the Water Year (70%-90%).
- Western Colorado is a bit spottier with precipitation, however much of the area is near average for the Water Year. Parts of Moffat, Rio Blanco, Garfield, Delta and Gunnison counties, along with the southern San Juan Mountains in CO are 50%-90% of average.
- The Colorado River headwaters area is still much above average, mainly greater than 150% of average.
- East of the Divide in eastern WY and northeastern CO is mostly above average with percent of average precipitation in the 100-200% range.
- Southeastern CO has improved, seeing near average for the Water Year through August, however large areas in Bent Prowers, Baca and Las Animas counties are still in the 70%-90% of average range.
- The Rio Grande Basin in southern CO has seen above average precipitation in the western and eastern parts of the basin, and below average precipitation in the valley for the Water Year.

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**STANDARDIZED PRECIPITATION INDEX**

![30 Day SPI: 8/2/2014 - 8/31/2014](image)

![90 Day SPI: 6/3/2014 - 8/31/2014](image)
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 in the UCRB are all showing wet for the past 30 days. The wettest SPIs are in the Upper Green River basin in WY (1.5 to 2) and northern UT and the middle Colorado River near the CO/UT border (1.5 to 2.5).
- The rest of the basin is seeing SPI in the 0 to +1.5 range.
- The Rio Grande River basins short term SPIs are showing up as drier, in the 0 to -1 range.
- East of the Divide, the Front Range is now showing mostly drier SPI, 0 to 1, with a few +1 SPI around the Denver Metro area.
- Northeastern CO is seeing wetter SPI in the 0 to 2.5 range.
- Southeastern CO SPIs show a mix of are near normal in the -1 to +1 range for the past 30 days.

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

- The longer time scale is showing mostly wet SPIs for the UCRB. The Green River basin is reporting SPIs between 0 to +1 on the 6 month time scale.
- Eastern Utah is now showing wetter conditions with SPIs between 0 to +1.5. The Duchesne River Basin has returned to above normal on the 6 month SPI timescale, but this rain mostly came in a short amount of time over the two weeks of August.
- SPIs in western Colorado are mainly wet with SPI's reporting from +2 to -1. The drier areas are in Grand and Gunnison counties.
- The San Juan Mountains are showing SPIs ranging from -2 to +1.
- The Rio Grande basin is showing 6-month SPIs ranging between -1 and 1, the drier SPIs in the valley.
• East of the divide most stations reporting SPI in northeast CO to the Front Range are in the wetter range of 0 to +1.5, with one SPI on the Adams/Arapahoe County border up to +2.
• Southeastern CO is still showing some dryness, however improving with SPIs ranging between -1 to +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:

• 59% of the gages in the UCRB are reporting normal and above normal.
7-day average streamflow.

- 32% of the gages are reporting much above normal (90th and greater percentile) and 3% reporting the highest 7-day average streamflow.
- 5% of the gages are reporting in the below normal (10th-25th percentile) range.
- The highest streamflows are in the Upper Green River Basin, Duchesne River Basin, and the Colorado River Headwaters.
- Streamflow on the Colorado River near the CO-UT state line is in the above average range, reporting in the 94th percentile (153% of average).
- The Green River at Green River, UT is reporting in the 90th percentile (87% of average).
- The San Juan River near Bluff, UT has dropped off again after having rebounded just recently. Flows are now in the 33rd percentile at 48% of average.

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 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:

- The VIC soil moisture model is showing wetter soils in the upper Headwaters of the Green River in Sublette, with percentiles above the 70th. In Sweetwater County, the soils dry out a lot, with much of the county below the 30th percentile and the central part of the county below the 5th.
- The Uintah Range in northeastern UT has improved, however soil moisture is still showing below the 30th percentile, down to the 5th percentile. There is a much smaller area in western Uintah County down to the 2nd percentile.
- Wetter soils (70th percentile +) are being shown just in the Wasatch Range in northern UT, in the Colorado River Headwaters, along the Colorado River near the UT/CO border and west of the Four Corners area in southeast UT.
- East of the Divide, the VIC is showing most eastern Wyoming and Colorado in normal and above normal soil moisture. Northeastern CO and southeastern WY are showing wetter conditions with soil moisture at the 70th percentile and above.

http://climate.colostate.edu/~drought/current_assessment.php
Drier soils are showing up in Carbon County, WY, Lincoln and Bent counties in southeastern CO and the northern San Luis Valley.

**VegDRI:**

- The VegDRI product in general is depicting much poorer conditions than the VIC soil moisture product.
- The upper Green River Basin in WY is mostly showing moist vegetation conditions, including most of Sweetwater County. Some pre-drought conditions are starting to show up in parts of Sublette County.
- Most of northeastern Utah is depicting pre to moderate drought conditions. Rich County in northern UT is showing slightly moist vegetation.
- The Four Corners area and most of southwestern CO is very dry and reporting vegetation conditions in the moderate to severe drought conditions.
- Much of the high country in Colorado is showing near normal or above normal vegetation conditions. The most moist conditions according to VegDRI are in Summit, Lake, and Clear Creek Counties.
- East of the divide shows slightly above normal conditions along the Front Range. Farther East along the Northern Plains conditions stay normal or slightly above normal.
- Sedgwick County is showing moderate to severe drought conditions, however this is not really in agreement with ground reports in the area and high wheat yields.
- Baca and Las Animas Counties show pre to moderate drought conditions.
- Central Kiowa County now shows some areas of above average vegetative health.
- A swath of moist conditions is present in Otero and Bent Counties along the Arkansas River.
- The east side of the Rio Grande basin is showing moist vegetation conditions, but that dries out rapidly on the west side of the basin.

**Reservoirs:**

- Most of the reservoirs saw volume decreases through August, which is normal to see this time of year.
- Flaming Gorge is 102% of the September average.
- Green Mtn is 115% of September average.
- Lake Granby is 126% of September average.
- Lake Dillon finished August at 104% of August average and saw a slight volume increase during the month.
- Blue Mesa is 98% of the September average.
- Navajo is 79% of the September average.
- McPhee is 74% of the September average.
Lake Powell is 67% of average and 51% full.

EVAPOTRANSPIRATION

The above images are of reference evapotranspiration (ET) from CoAgMet sites across Colorado. Reference ET assumes the amount of water that will evaporate from a well-irrigated crop. Higher ET rates occur during hot, dry, and windy conditions. Lower ET rates are more desirable for crops. See a map of locations for the above ET sites.

Reference Evapotranspiration:

- Olathe: ET is tracking below normal for the growing season after experiencing very low ET over the past week.
- Cortez: ET is tracking slightly below normal for the growing season.
- Center: ET has continued to track above normal since early June, but is still much lower than the highest year.
- Avondale: ET is tracking just slightly below the growing season average.
- Idalia: ET dropped in mid-July with monsoonal moisture coming into the area. ET has tracked slightly below the normal since then.
- Holyoke: Similar to Idalia, ET dropped off in mid-July and continues to track below average for the growing season.
- Lucerne: ET rates are tracking slightly below average for the growing season since the end of July.
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:

- The UCRB saw almost exclusively below average temperatures over the past week. Most areas were between 2 and 4 degrees below average with areas of 4 to 6 degrees below average.
- The Four Corners area, was mainly 2 to 4 degrees below average.
- East of the divide, most of Colorado and Wyoming saw below average temperatures in the range of 2 to 4 degrees below average.
- The only area above average in Colorado was Baca County, seeing temperatures up to 2 degrees above average.

Last Month Temperatures:

http://climate.colostate.edu/~drought/current_assessment.php
- August temperatures in the UCRB, Wyoming and much of Colorado were mostly below average.
- The Upper Green River basin in WY were mostly 0 to 2 degrees below average.
- Eastern and northern UT saw temperatures mainly 3 degrees below average with a few areas 4 degrees cooler than average.
- Western CO also saw temperatures below average. The far western counties saw temperatures 3 degrees below average, while the rest of the Colorado River Basin area in CO saw 2 degrees below average for August.
- East of the divide most of the Front Range was between 0 and 2 degrees below average for August with a few areas 3 degrees below average.
- The eastern plains were a mix of near normal temperatures. Most of the counties along the CO/KS border were 0 to 1 degree above average for the month, while counties further west were slightly cooler than average.
- Crowley and Otero Counties saw temperatures down to 3 degrees below average.

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:

- Mostly dry weather pattern will be in the UCRB through Wednesday. Thursday may bring scattered thunderstorms over the area. Temperatures will be slightly warmer than normal. Friday into the weekend could bring another shot of monsoonal moisture over the mountains.
- East of the divide, will be dry and hot through Wednesday, bringing an increase to fire danger in the mountains. Moisture will increase Thursday, bringing a chance of showers and thunderstorms into the weekend with cooler temperatures.

Longer Term:

- The 8-14 day precipitation outlook shows increased chances for below normal precipitation over the northern UCRB, southern Wyoming and northern Colorado. Average precipitation is expected for southern and eastern Colorado.
- The 8-14 day temperature outlook (not pictured) shows increased chances of below normal temperatures for the UCRB, Wyoming and much of Colorado. Southeastern CO has chances of near normal temperatures.
- The CPC 3-month outlook shows higher chances for wetter than normal conditions over the UCRB in Utah, Colorado, and Wyoming for the late August-mid November time period.
- The seasonal drought outlook indicates that drought is expected to persist or intensify across northeast Utah and southwest Wyoming.
- Drought in the Four Corners region is anticipated to continue, but improve with some removal likely.
- Drought in the southeast CO is anticipated to continue, but improve. Little to no removal is likely.
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 September 2, 2014:

The western and northern portions of the UCRB saw a much above average precipitation for August. This area has been dry, however the precipitation increased SPIs to be positive at all stations out to 6 months. Streamflow has also increased to above normal for many of the gages in the Duchesne River basin.

It was a drier week in southeastern UT, however, August precipitation was above average for this area as well, prompting possible improvements.

The rest of the basin had an average month of precipitation, except for some of the southern counties in Colorado.

East of the basin saw a mix of precipitation for August. Northeastern Colorado and Eastern Wyoming saw much above average precipitation, while
southeastern Colorado was once again below average through most of the area. Southeastern Colorado did see up to 1.00" of precipitation over the last week, however with the August being below average and the persistent drought, no improvements will be recommended.

**Recommendations**

**UCRB:**

A 1-category improvement is being recommended for northeastern Utah, northwestern CO and Sweetwater County, WY, EXCEPT for the area in eastern Sweetwater County to remain D1.

We would like to recommend a 1-category for all of eastern UT in the UCRB, however this area received little precipitation over the last week, so this will be left to the drought monitor author.

**Eastern Plains:**

Status quo for eastern Colorado and Wyoming.