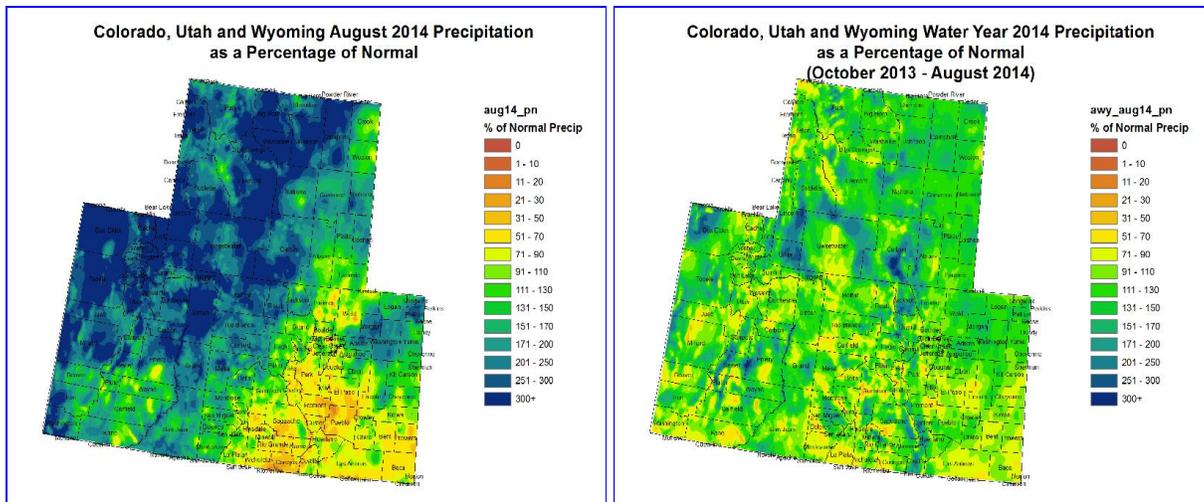
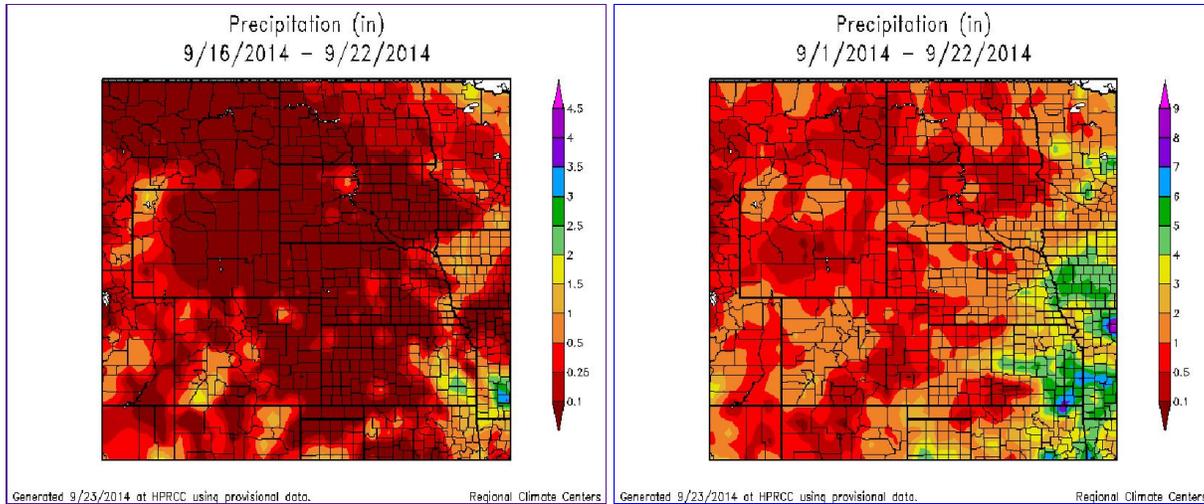


PRECIPITATION



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:

- Good moisture fell over the UCRB over the past week, mainly from the remnants of hurricane Odile.
- The Green river basin received 0.25-1.00" for the week.
- Farther to the south, the Gunnison and San Juan basins picked up above average moisture in the range of 1-2" over the higher terrain. Lower areas around the Four Corners (especially in San Juan county, UT) were drier, receiving less than 0.50".
- Above average moisture also made it into the headwaters of the South Platte and Arkansas basin, mainly in Park and Chaffee counties.
- East of the divide, precipitation was spotty. The wetter areas to the north were over Morgan, Logan and Washington counties, farther to

the south Pueblo, Huerfano and Las Animas counties received normal to above normal precipitation for the week. The central plains were very dry, receiving less than 0.10" over much of the area.

August Precipitation :

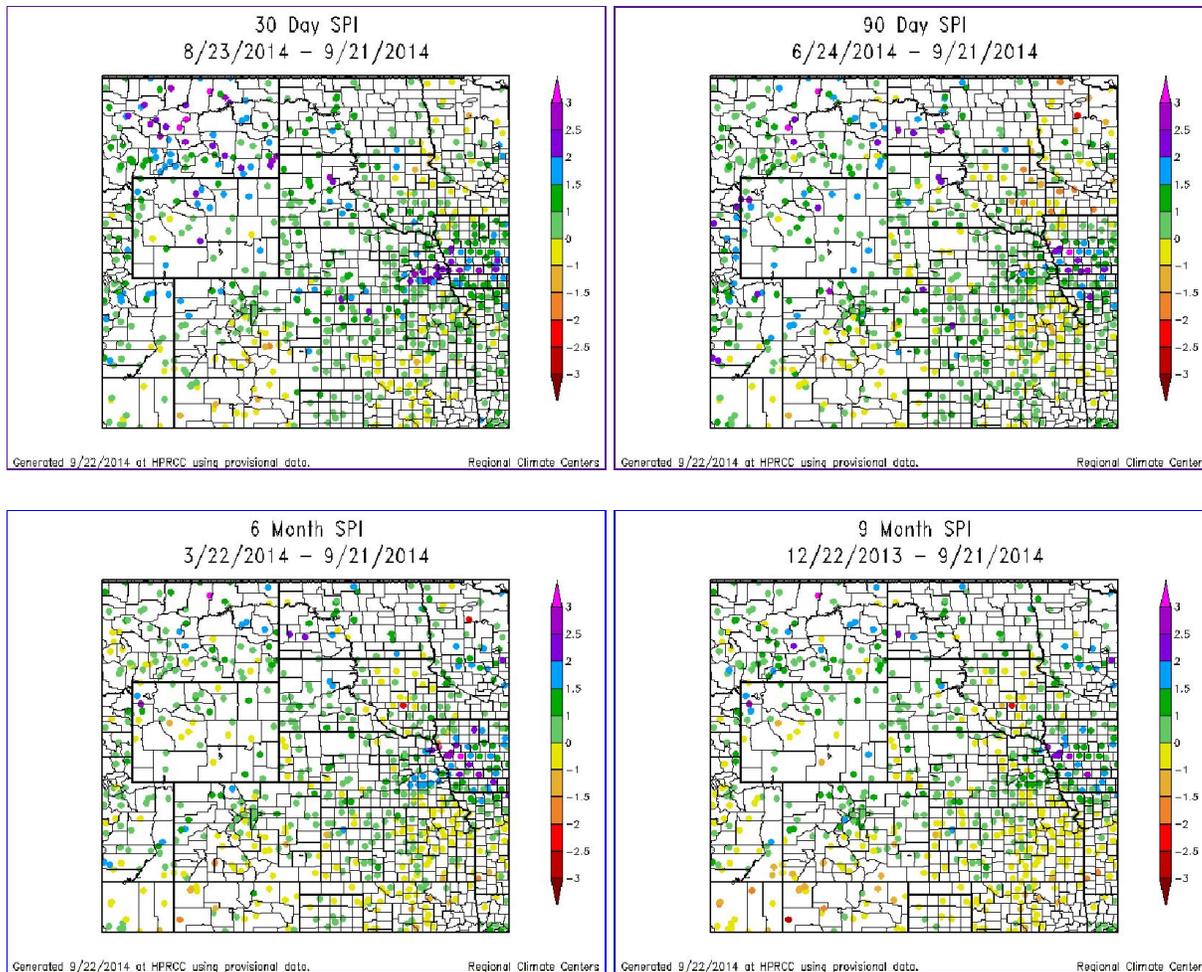
- In the UCRB most of Western Wyoming Eastern Utah received above average precipitation for the month of August with areas of 300+ percent of average in southwest Wyoming, the Wasatch Range in UT and Uintah County, UT.
- The rest of eastern UT down into the Four Corners area saw above average precipitation, 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.

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):

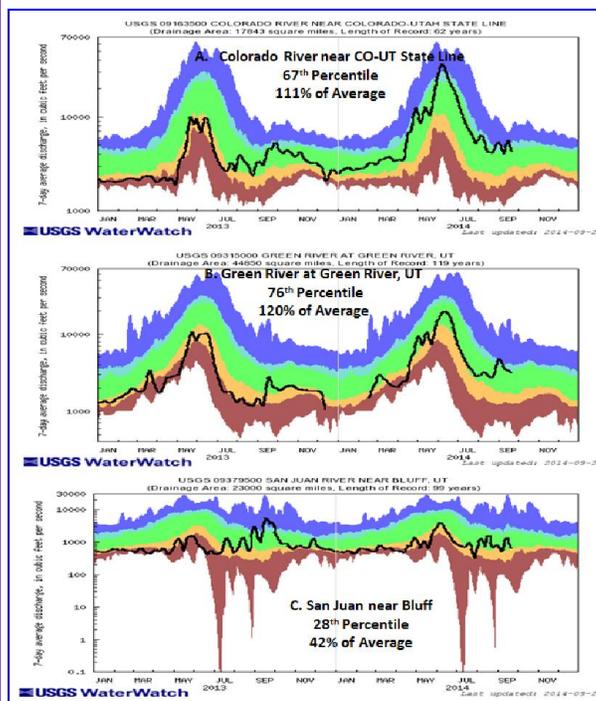
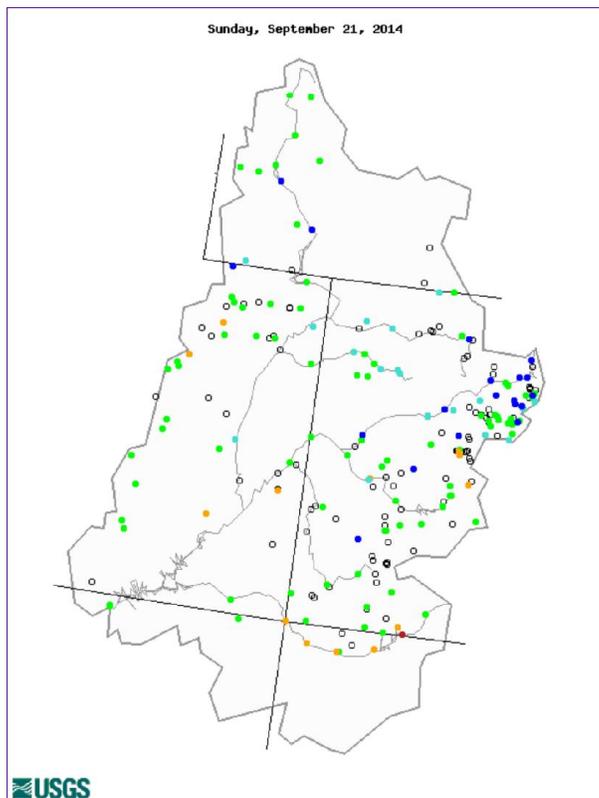
- Much of the UCRB is reporting positive SPI's on the short time scale of 30 days. A few dry SPI's are present in Sublette county, WY down to -1.
- Slightly wet to slightly dry SPI's are being reported around the Four Corners area. SPI's down to -1 are present in San Juan county, Utah.

- The San Luis valley is one of the drier areas in Colorado, with SPI's down to -1.5 on the east side of the valley.
- East of the divide, the northern plains are reporting wet SPI's, however farther to the south in El Paso, Pueblo, Crowley, Otero and Las Animas counties are reporting SPI's down to -2. The driest area is Pueblo county. Farther east near the KS border, areas are reporting wet conditions on the short term.

Long Term (6-month):

- Much of the UCRB is indicating wet SPI's on the 6 month time scale. The driest area is around the Four Corners where SPI's range from -1 to +2. There is also a dry SPI near Hermit (Hinsdale county) that dips down to -1.5 to -2 on the longer time scale.
- The San Luis valley is slightly dry on the longer time scale with SPI's between 0 and -1.
- East of the divide, the northern plains are reporting mainly wet SPI's from 0 to +1.5, however farther south is drier. The driest SPI is in Crowley county and dips down to -1.5. The rest of the area is slightly dry to slightly wet with the spotty precipitation the areas has received.

STREAMFLOW



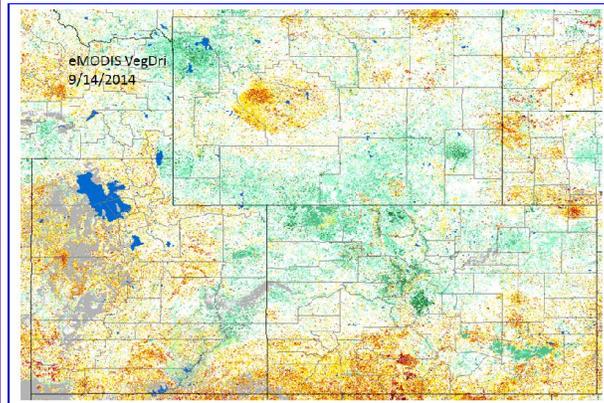
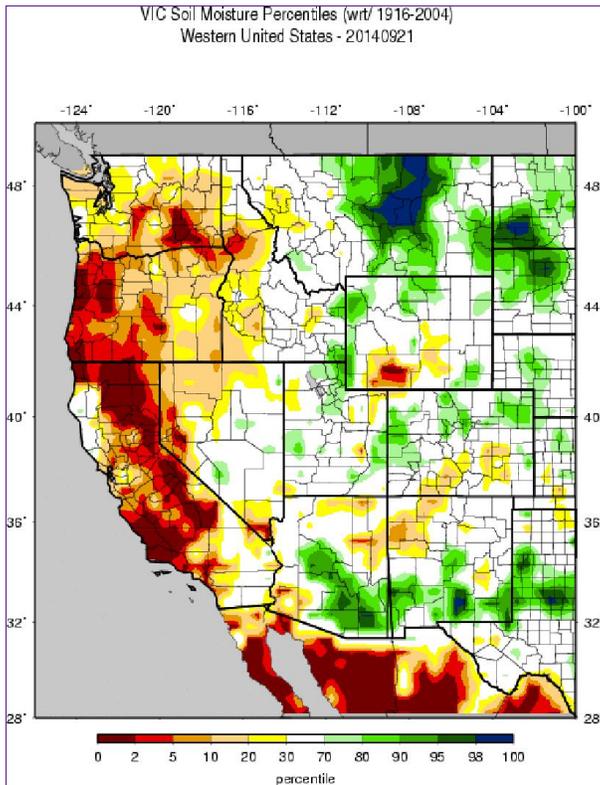
Explanation - Percentile classes							
							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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.

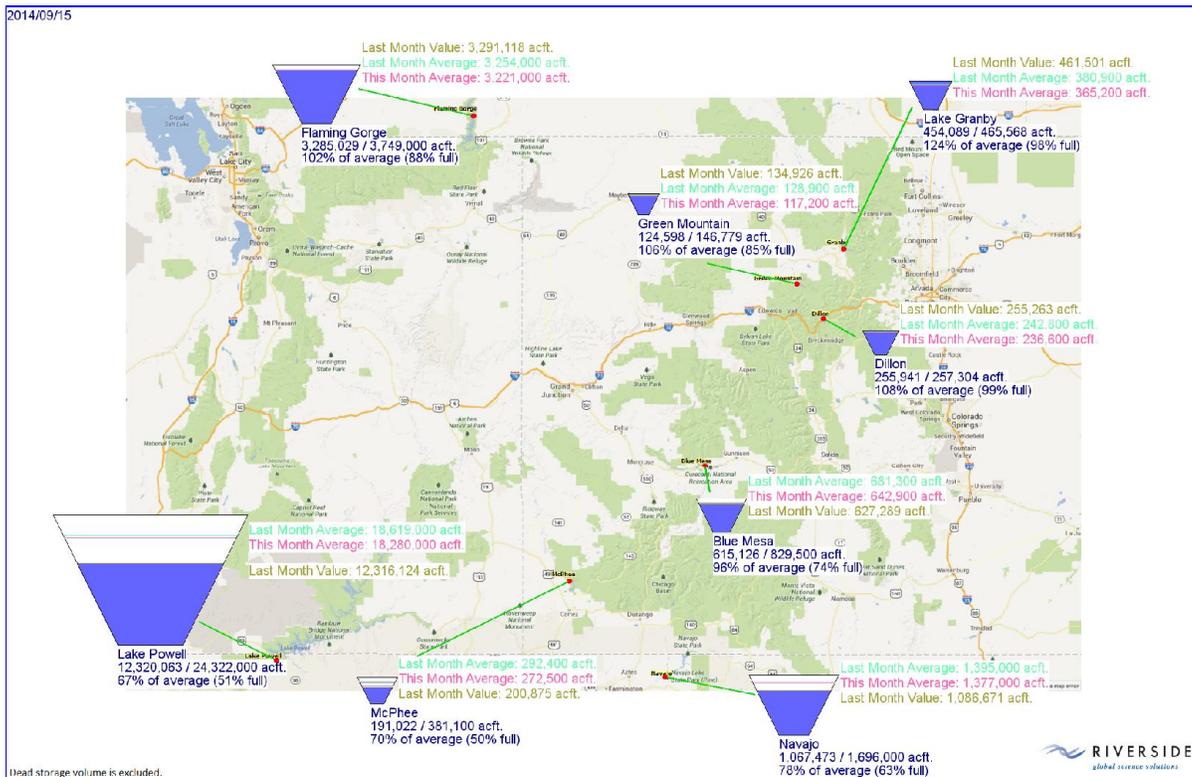
Streamflow Statistics:

- 90% of the gages in the UCRB are reporting above the 25th percentile for the 7-day average streamflow.
- 14% of the gages are reporting much above normal (90th and greater percentile).
- 10% of the gages are reporting in the below normal (10th-24th percentile) range.
- The highest streamflows are in the Upper Green River Basin, Yampa/White River Basins, and the Colorado River Headwaters.
- Streamflow on the Colorado River near the CO-UT state line is well above average, reporting in the 67th percentile (111% of average).
- The Green River at Green River, UT is reporting in the 76th percentile (120% of average).
- The San Juan River near Bluff, UT has again dropped and is in the 28th percentile at 42% 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 51% of average and percent of capacity.

VIC:

- There is a large gradient in VIC modeled soil moisture in the headwaters of the Green River. Sweetwater County, WY is showing soil moisture totals generally between the 0th and 30th percentile. Only about 50 miles to the west near the UT, WY state line soil moisture ranges from the 70th to the 95th percentile. It should be noted that Sweetwater county is often depicted very dry on this modeled soil moisture product.
- Along the UT/CO border, soils are wet and reporting in the 70th to 90th percentile. Surrounding areas are showing normal soil moisture conditions.
- The San Luis valley is showing dry soils, ranging from the 5th to 30th percentiles.
- East of the divide on the plains, a north-south gradient exists. The northern plains are showing moist soil conditions from the 30th to 90th percentile. The southern plains are drier and reporting soil moisture in the 10th to 30th percentiles over Lincoln, El Paso, Pueblo, Crowley and Otero counties.

VegDRI (9/14 Did not update this week):

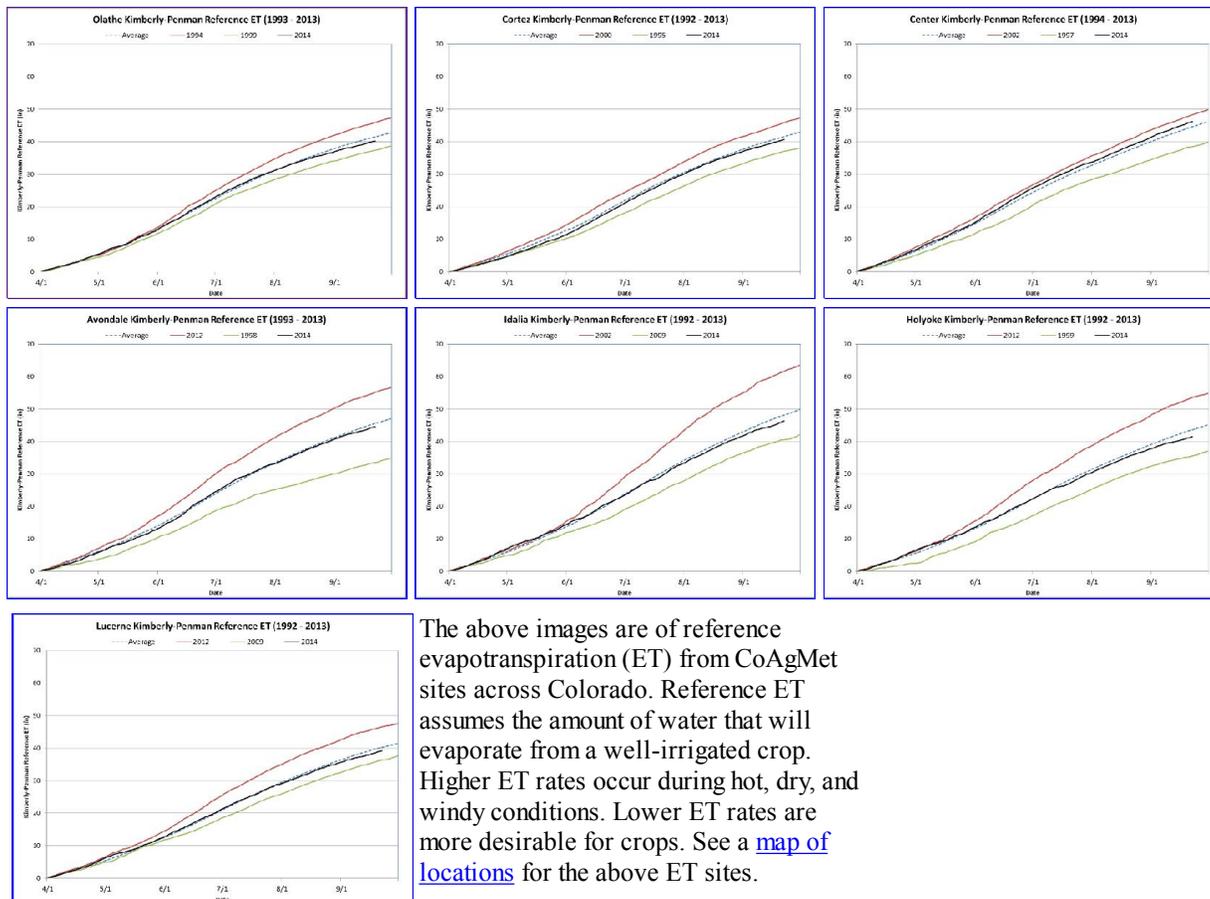
- The VegDRI has shown improvements over southern Wyoming, Eastern Utah and NW Colorado over the past few weeks. Note the moist conditions present in Sweetwater county, WY compared to the VIC product.
- The Four Corners area is still indicating dry vegetation conditions from San Juan county, UT east into the San Luis valley. These areas are mainly in the pre- to moderate drought category.
- The San Luis valley is indicating drier conditions than areas farther west. This index gets down into the severe drought classification in Rio Grande, Alamosa and Conejoes counties.
- Again, east of the divide there is a north-south gradient. The northern plains are doing great in terms of vegetation health and the dry area in Sedgwick county is likely not valid based on ground reports.
- Farther south on the eastern plains is showing a mixed bag of conditions. Irrigated areas along the Arkansas basin are showing wet conditions while the surrounding areas are mainly reporting in the pre- to moderate drought classification.

Reservoirs:

- Most reservoirs (except Dillon) in the drought monitor region are showing volume decreases, which is normal for this time of year.
- Flaming Gorge is 102% of the September average.
- Green Mtn is 106% of September average.
- Lake Granby is 124% of September average.
- Lake Dillon is at 108% of the September average and continues to see volume increases due to the inability to route water through the tunnel (no demand for the water) and increased inflows from wetter conditions.
- Blue Mesa is 96% of the September average.

- Navajo is 78% of the September average.
- McPhee is 70% of the September average.
- Lake Powell is 67% of average and 51% full.

EVAPOTRANSPIRATION



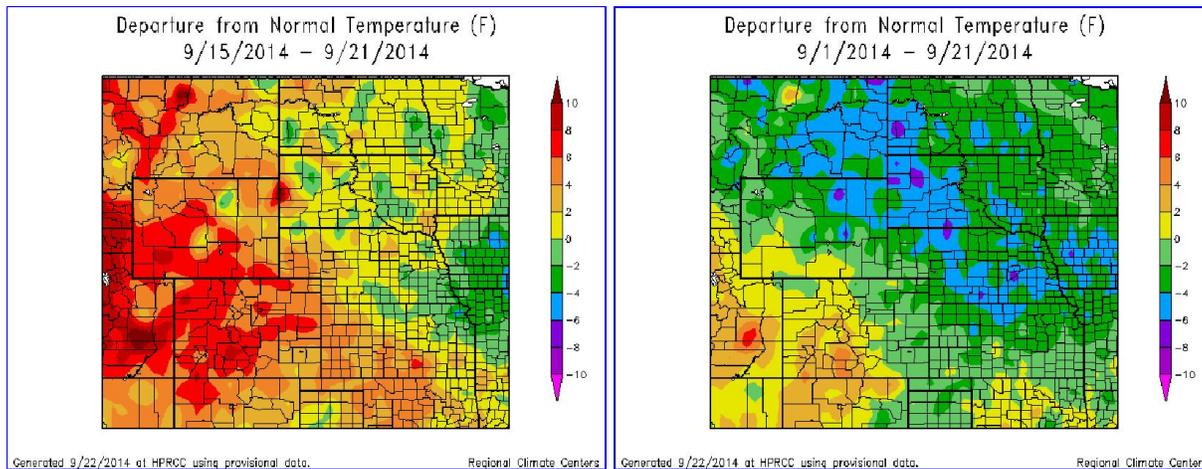
The above images are of reference evapotranspiration (ET) from CoAgMet sites across Colorado. Reference ET assumes the amount of water that will evaporate from a well-irrigated crop. Higher ET rates occur during hot, dry, and windy conditions. Lower ET rates are more desirable for crops. See a [map of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

Reference Evapotranspiration:

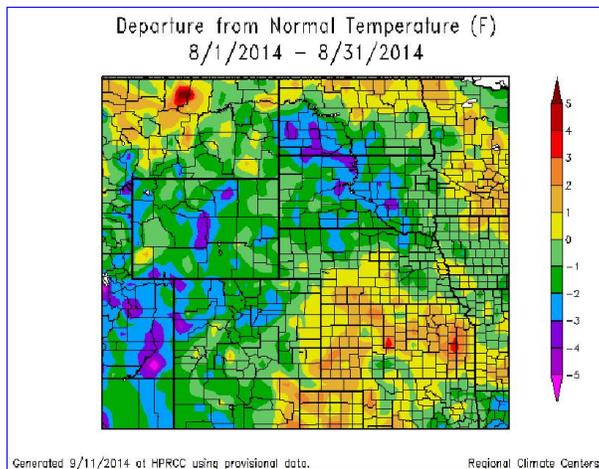
- Olathe: ET has dropped off since the middle of August and is now tracking below average for the growing season to date.
- Cortez: ET is tracking slightly below normal for the growing season, and has been doing so since the middle of August.
- Center: ET has continued to track above normal since early June, but is still much lower than the highest year of 2002.
- Avondale: ET is tracking just slightly below the growing season average, and has dropped farther below normal since the start of September.
- Idalia: ET dropped in mid-July with monsoonal moisture coming into the area. Since the start of September, seasonal ET has fallen even farther below the normal.
- Holyoke: 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, and have been slowly departing further

from normal since the start of September.

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.



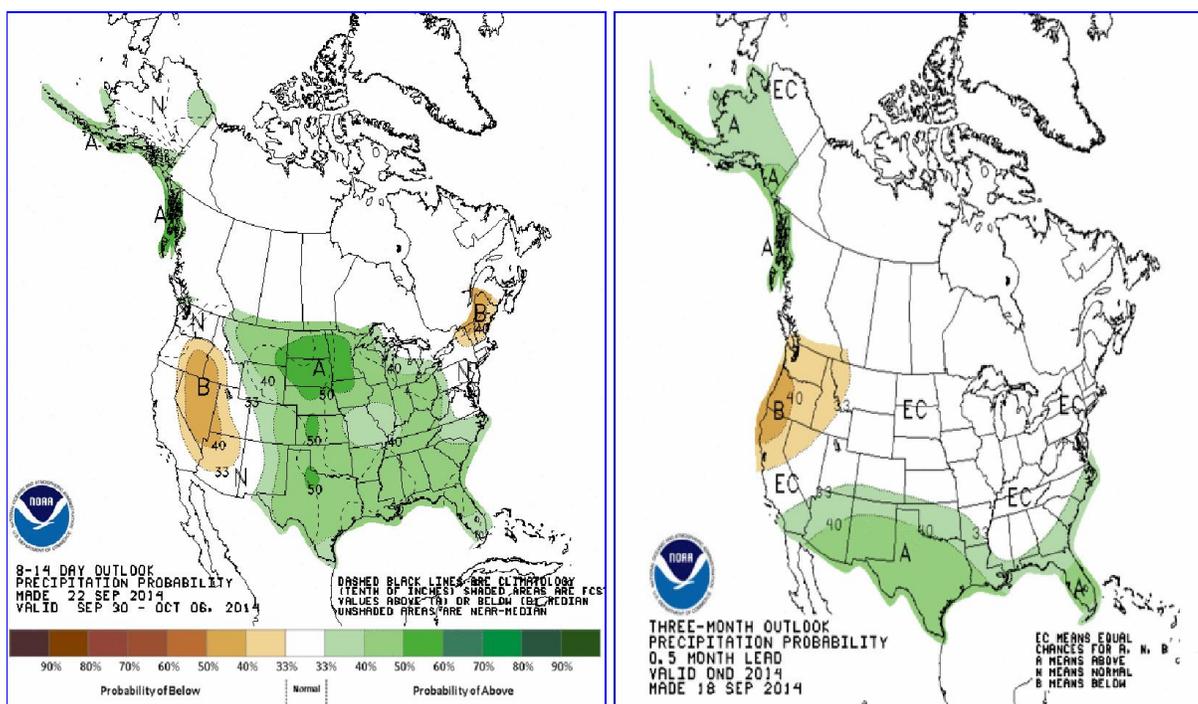
Last Week Temperatures:

- The UCRB saw above average temperatures last week. The Green river basin saw temperatures 6-10 degrees above average. Farther to the south around the Four Corners also saw temperatures 2-10 degrees above the normal for the week.
- The San Luis valley was also warm over the week with temperatures 6-10 degrees above the normal.
- The plains east of the divide were just slightly cooler but still above the normal for the week. Temperatures on the plains ranged from 2-8 degrees above normal. The coolest area was the extreme SE corner of Colorado.

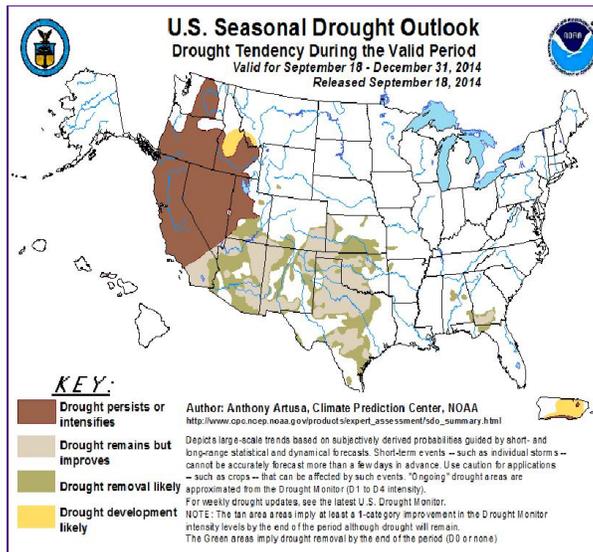
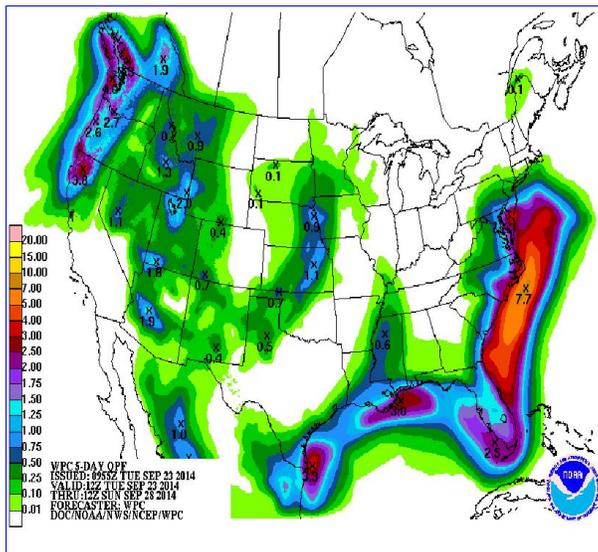
Last Month Temperatures:

- 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.



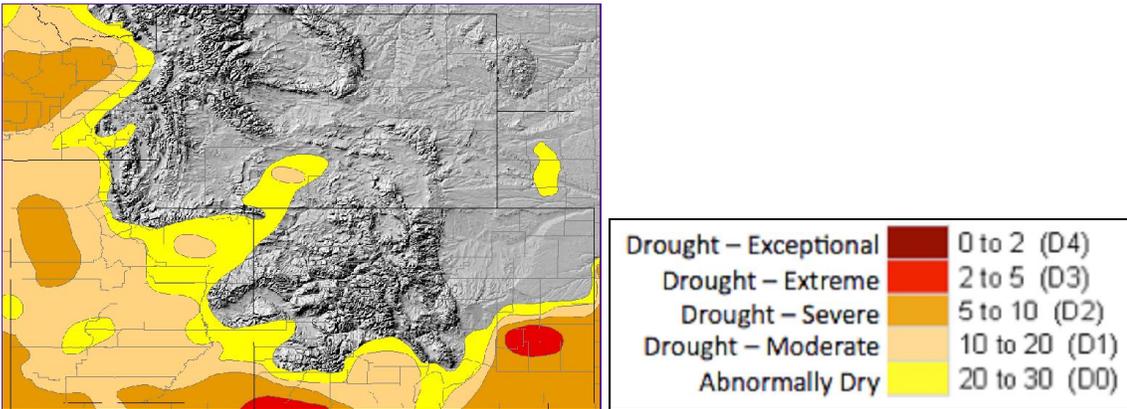
Short Term:

- High pressure begins building into the area today through Thursday. Dry and warm conditions are expected through this period.
- On Thursday evening, another strong Pacific storm will move into the area and bring chances for widespread moisture fo the UCRB. The plains will see increased chances of showers and thunderstorms during this period as well.

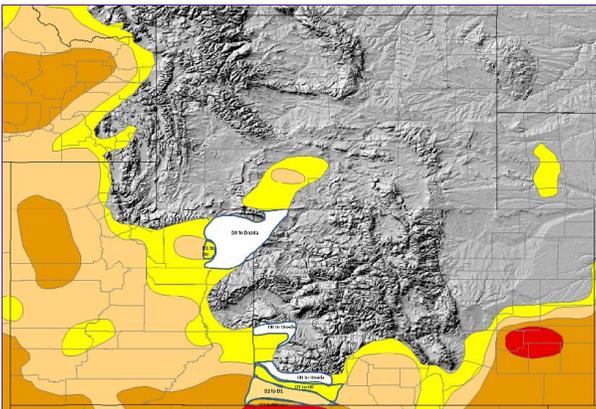
Longer Term:

- The 8-14 day precipitation outlook shows increased chances for above normal precipitation over much of Wyoming and Colorado, but the forecast dries out to the west in Utah.
- The 8-14 day temperature outlook (not pictured) shows chances for below normal temperatures over much of the UCRB and seasonal temperatures for eastern Colorado.
- 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 23, 2014:

Good moisture was received over portions of the Duchesne and San Juan river basins over the past week and month. The Eastern Plains were mainly dry with just some spotty precipitation over the past week.

Recommendations:

With the moisture over the Duchesne and San Juan basins, improvements are suggested. In the Duchesne basin, improvement of D0 to D1 and D1 to D0 is suggested based on 7 and 30 day precipitation totals and recovery in SPI and streamflows. Near the Four Corners, a precipitation gradient seems to exist at the border. Montezuma and La Plata counties in Colorado are suggested to be improved 1 category after 0.50-2" of rain over the past week fell. Precipitation totals dropped off farther to the west in San Juan county Utah, status quo is suggested in that area.