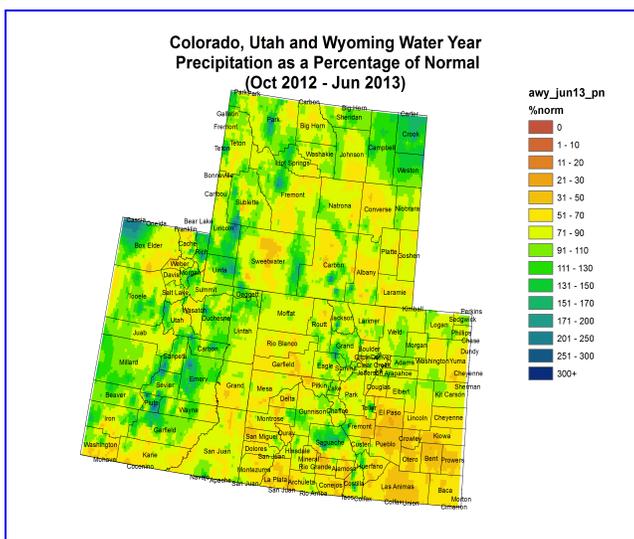
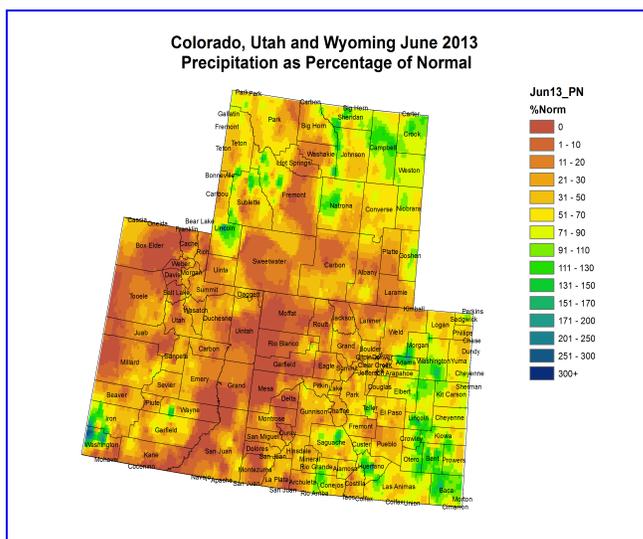
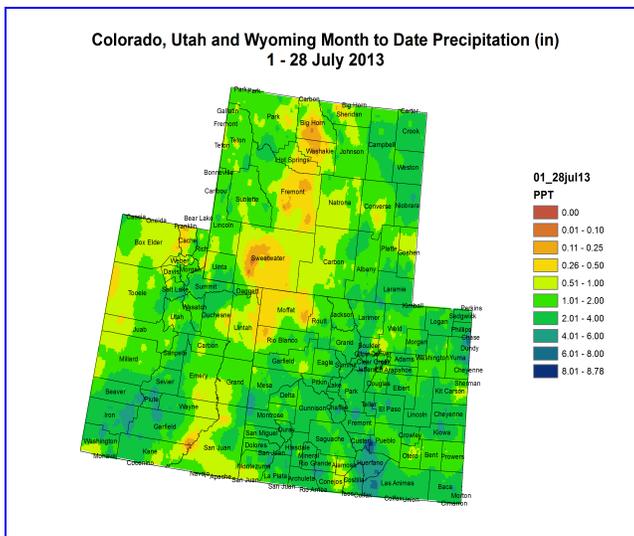
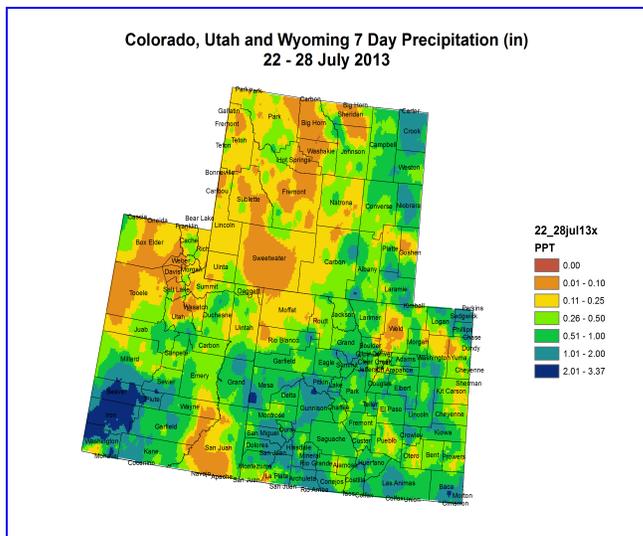


PRECIPITATION



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.

WYTD Precipitation:

- Much of northeastern UT and western WY have seen near average precipitation for the water year with some drier areas in the Wasatch mountains and in Sweetwater County, WY
- Eastern UT and western CO have received between 50% and 90% of average precipitation for the water year, with slightly drier conditions in southwest CO
- The northern and central CO mountains are near average
- Northeast CO is near to slightly below average with some drier patches around Washington and Yuma counties

- Southeast CO and the San Luis Valley are below 70% of average with many areas lower than 50% of average

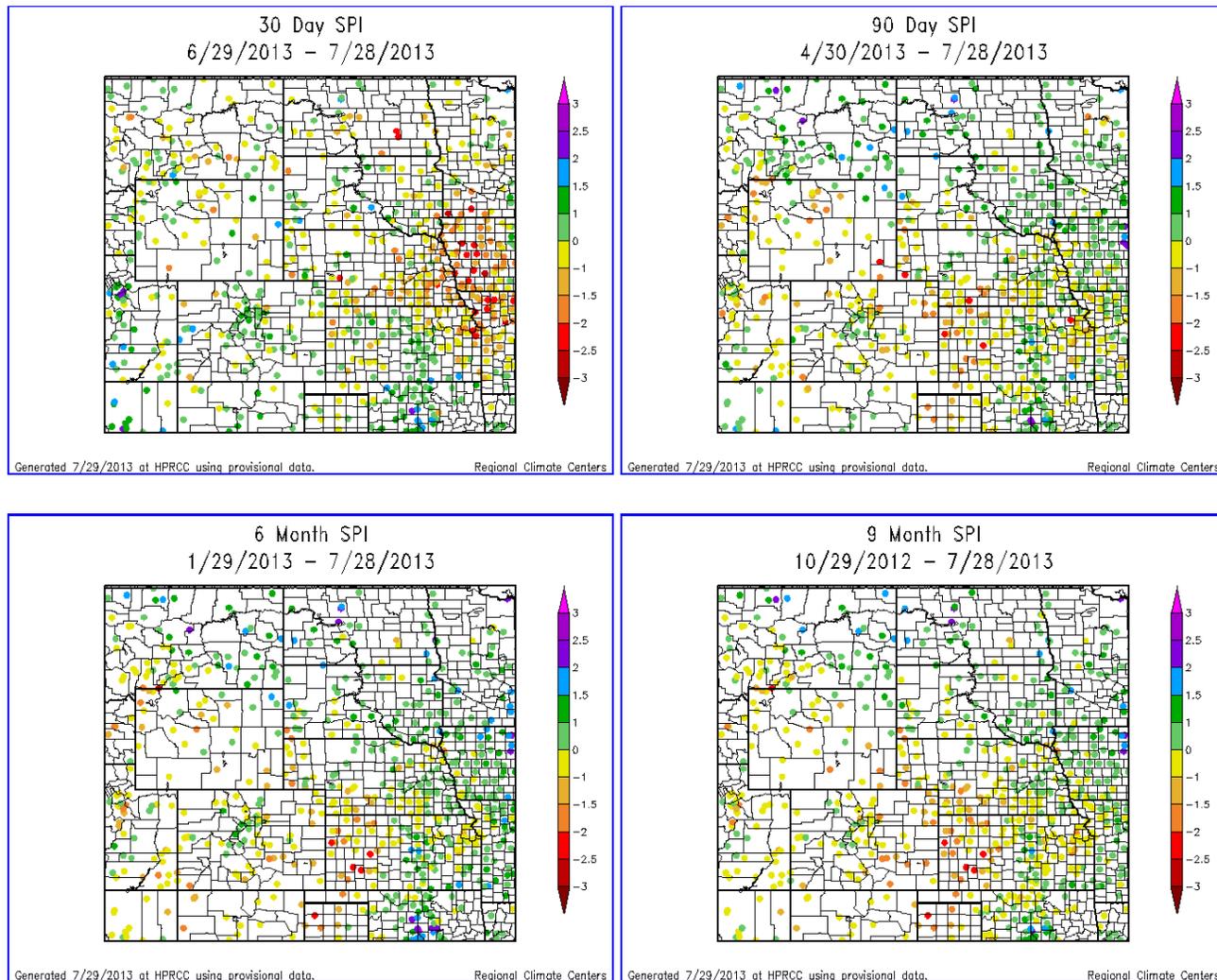
June Precipitation:

- Most of the UCRB received less than 20% of average precipitation for the month of June
- A couple of isolated areas in the San Juans in southern CO and the higher elevations in western WY received more than 50% up to near average moisture for the month
- Much of northern CO and southern WY were very dry, receiving less than 50% of average precipitation
- Many parts of eastern CO received near average moisture for the month, though some spots (the Front Range mountains in Fremont and Pueblo counties, many parts of the Urban Corridor, and the San Luis Valley) were much drier than average

Last Week Precipitation:

- Most of the UCRB in western CO and eastern UT received beneficial moisture over the past week with widespread amounts of 0.50 - 1.00 inches with isolated areas reporting 2+ inches.
- The northern portion of the UCRB in WY and northwestern CO was drier over they past week with less than 0.25 inches.
- The Wasatch and Uintahs in UT saw slightly lower amounts of 0.10 - 0.50" with isolated areas up to 2 inches.
- Precipitation on the eastern plains remained active over the past week. NE plains saw variable precipitation of 0.25-2.00". Logan, Sedgwick and Phillips counties saw the most generous amounts of 0.5 to 2 inches.
- Northern Washington and Yuma and central Weld counties were mostly missed by much of the precip, only seeing up to 0.10 inches.
- In the Arkansas basin, widespread precipitation fell over much of the basin with amounts between 0.25 - 1.00". Isolated areas in Las Animas, Huerfano, Crowley and Kiowa counties saw up to 2.00", with Baca county receiving near 3.00 inches. Pueblo, Otero and Prowers counties saw larger areas of less than 0.25 inches.

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 (60-day):

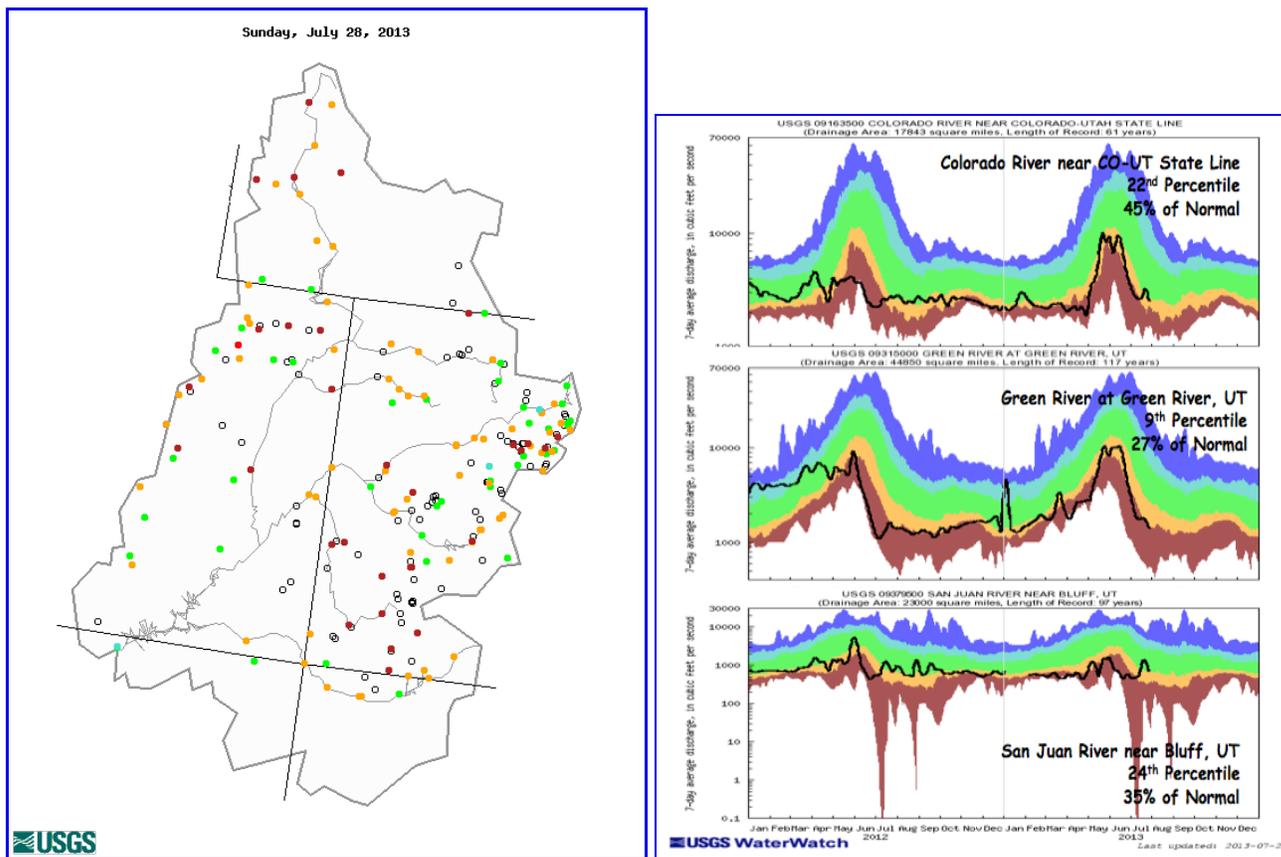
- The northern portion of the UCRB is showing SPI's from 0 to -2.5, with the driest in the Upper Green.
- The 4 corners area is showing near normal SPI's ranging from +1 to -2, driest in Montezuma county, CO.
- The northern mountains in CO are showing lower SPI's than the central mountains.
- Some stations in the Arkansas basin on the Eastern Plains of CO are now indicating wet conditions with SPI's up to +1 with the majority in the short term between 0 and -1.
- The northeastern plains are slightly drier with SPI's between 0 and -1.5.
- The Rio Grande basin is near normal on the short term ranging from

+1 to -1.

Long Term (6-month):

- Most SPIs between +1 and -1 for the majority of the UCRB with dryer SPIs in the 4-corners area down to -2.5.
- Northern Utah is showing dry SPI's of 0 to -2, the Upper Green River in Wyoming is also drier with SPI's from 0 to -2.
- NE Colorado SPI's range from 0 to -1.5 on the longer time scale.
- The Arkansas basin continues to have long term deficits with the longer term showing SPI's of 0 to -2 predominating much of that basin.
- The Rio Grande basin is showing slightly drier conditions on the longer term with SPI's of 0 to -1.

STREAMFLOW



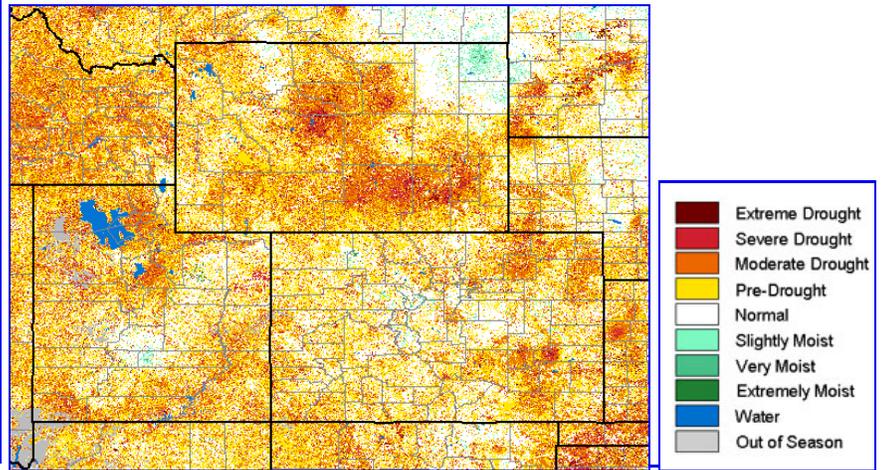
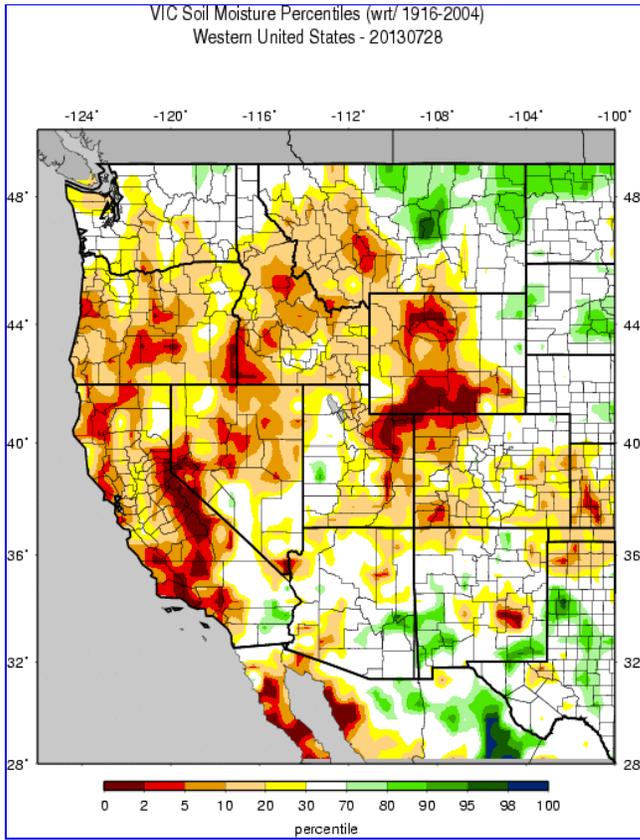
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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.

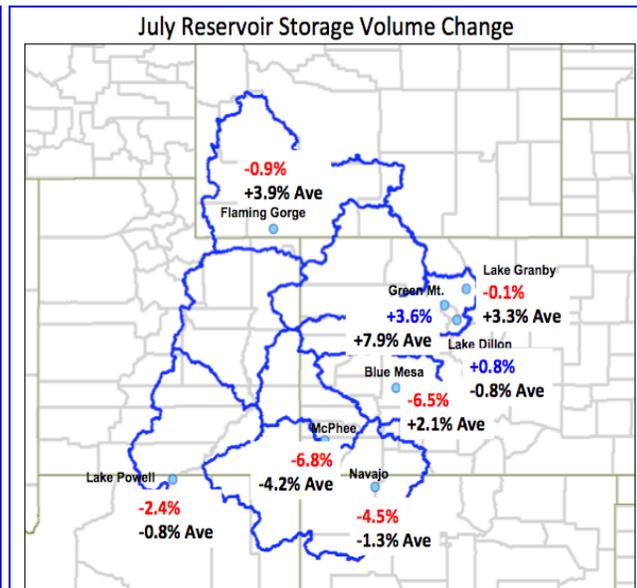
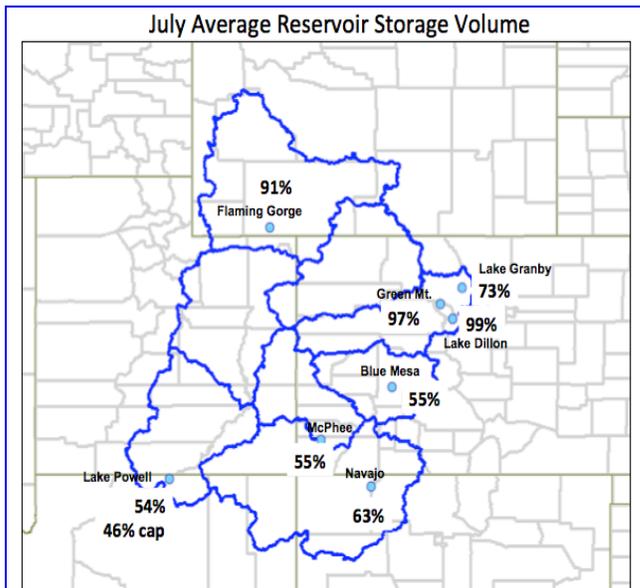
Streamflow Statistics:

- 40% of gages recording normal to much above normal 7-day average streamflows
 - 21% of gages recording much below normal 7-day average streamflows and 38% are recording below normal.
 - Overall, a decrease in streamflows across the basin last week
 - Three key gages around the basin all showed decreased streamflows since the last week to below normal or much below normal after beneficial monsoonal moisture.
 - The Colorado at the CO-UT state line saw a decrease in flows and is reporting in the 23rd percentile (48% of average)
 - The Green River at Green River, UT saw another decline in flow to much below normal in the 9th percentile (27% of average). This basin did not benefit as much from the monsoonal moisture as did the southern portion of the basin.
 - The San Juan river near Bluff, UT decreased in flow as well and is now back to below normal, reporting in the 19th percentile (30% 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 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:

- Very dry soil moisture conditions (0 to 5th percentile) are widespread through Sweetwater and Carbon counties in Wyoming.
- NE Utah also is showing dry soil moisture conditions in the 0 to 10th percentiles.
- The Four Corners area is showing soil moisture percentiles between the 5th and 20th percentiles.
- The Arkansas basin showed improvement once again over the past week. The far eastern plains in the Arkansas are reporting soil moisture percentiles in the range of the 5th to 30th percentiles. The driest areas are shown along the CO/KS border.
- NE Colorado is showing normal soil moisture percentiles through much of the area.
- Southern Washington and Yuma counties show a distinct drying down through Lincoln, Kit Carson and into the Arkansas basin.

VegDRI:

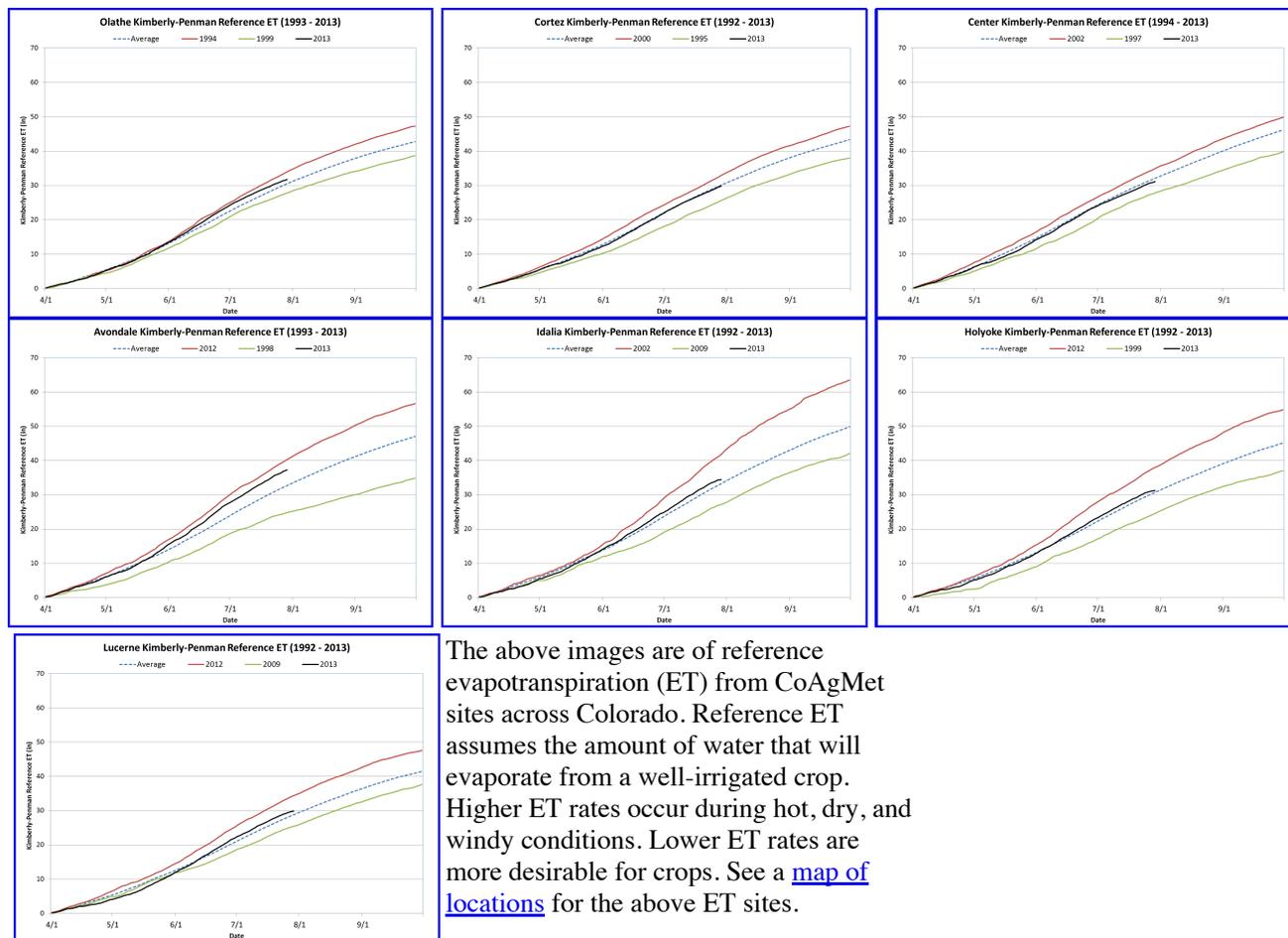
- VegDri is showing dry vegetation conditions in the Wasatch and Uintahs in Utah, in the pre- to moderate drought category, with more severe drought showing up in the northern Uintahs.
- Much of southern Wyoming is showing pre to moderate drought with the worst conditions (severe drought) in Carbon and Albany counties (not in UCRB). The Upper Green is showing widespread pre to moderate drought.
- The Four Corners area remains in pre to moderate drought conditions as well with some slight improvements with recent moisture.
- The Arkansas basin has improved to indicate pre-drought and moderate drought through Pueblo, Crowley, Otero, Bent, Las Animas, Prowers and Baca counties. Eastern Kiowa county still has severe drought showing up.
- The NE plains of Colorado through Eastern Weld, Morgan, Logan, Washington, Yuma, Phillips and Sedgwick counties indicate moisture in the pre to severe drought categories.

Reservoirs:

- Flaming Gorge, Blue Mesa, McPhee, Navajo, and Lake Powell have been decreasing volume since the beginning of July. This is normal for the southern reservoirs, though decreases are still larger than average
- Green Mountain and Lake Dillon continue to increase in volume, while Lake Granby has begun decreasing slightly.
- Green Mountain and Dillon are very close to their July averages.
- Flaming Gorge is 91% of average, and the rest of the reservoirs range from 54% (Lake Powell) to 73% (Granby)

- Lake Powell is currently at 46% of capacity and is seeing much below average daily inflows into the reservoir

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.

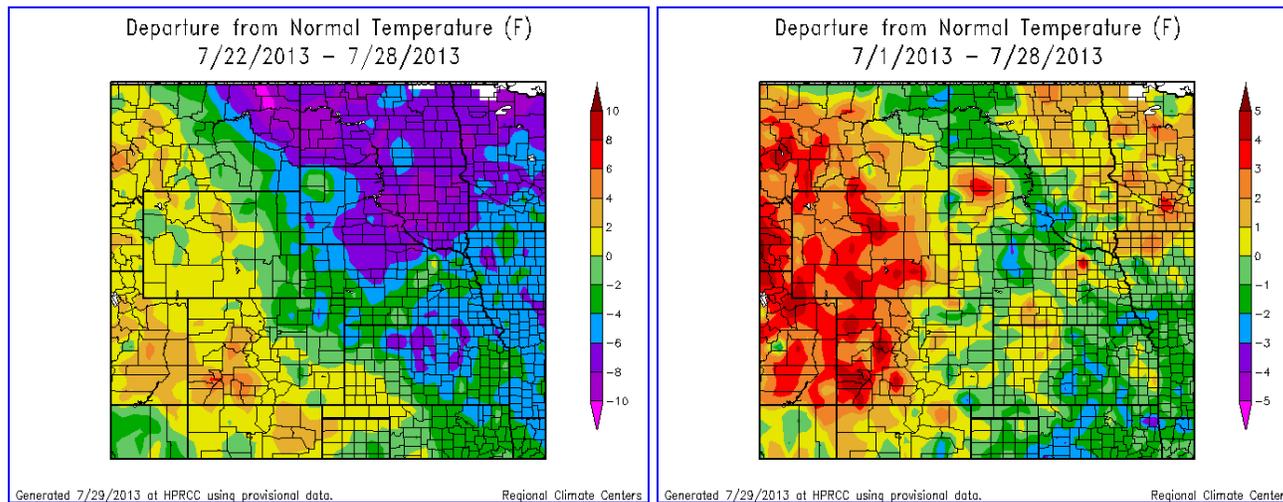
Reference ET:

- Olathe: Above average ET since the beginning of the growing season, approaching the high year, the last weeks have ET rates have slowed thanks to cooler temperatures and higher humidity.
- Cortez: Near normal growing season ET to date
- Center: Slightly below normal ET, rates had increased in June but with the monsoon arrival ET rates have dropped off.
- Avondale: For most of May, ET was near average but ET rates remain high even with the arrival of the monsoon. ET is approaching the high year of 2012.
- Idalia: Below average ET for most of April and May, increased and is now showing above average ET rates
- Holyoke: ET was slightly below average for April but has been slightly above average since early June. The last week, ET has been

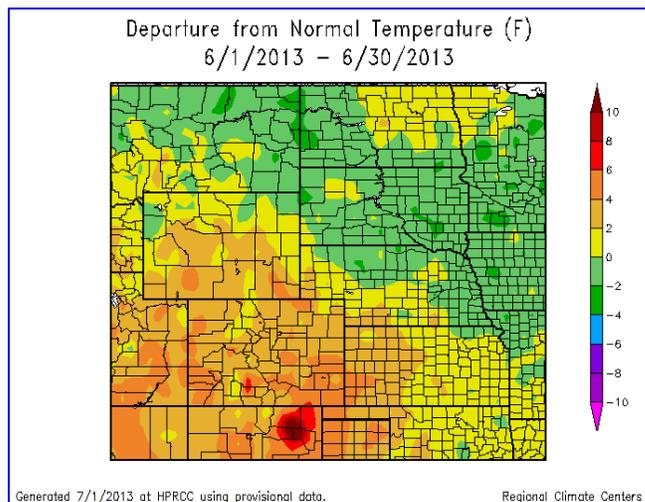
very low, and is almost back to average.

- Lucerne: ET has been lower than the previous minimum year of 2009 for much of April and May but has ramped up, and is now above average with slowing in ET rates as well.

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:

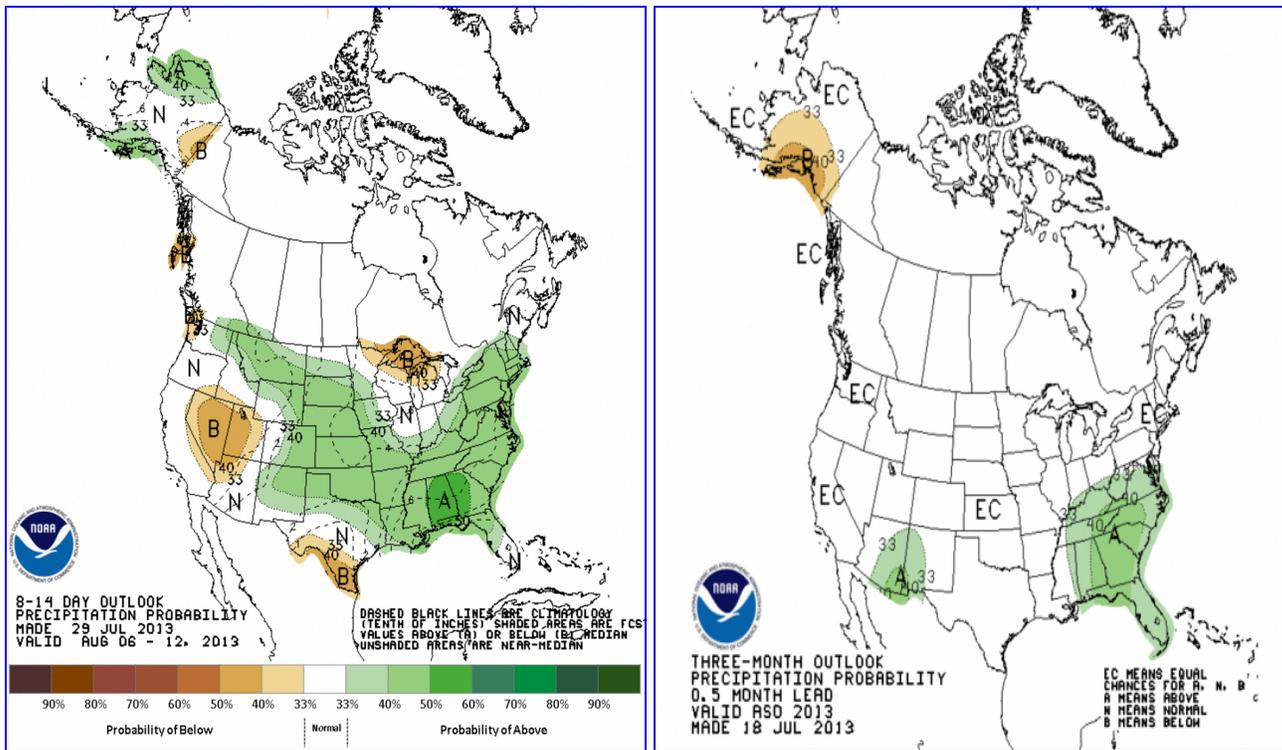
- The northern UCRB saw temperatures 2-6 degrees above normal over the past week.
- The San Juan river basin saw areas up to 8 degrees above normal for the week..

- East of the divide, northeastern Colorado saw temperatures 0 to 6 degrees below normal.
- Southeast CO near normal temperatures.

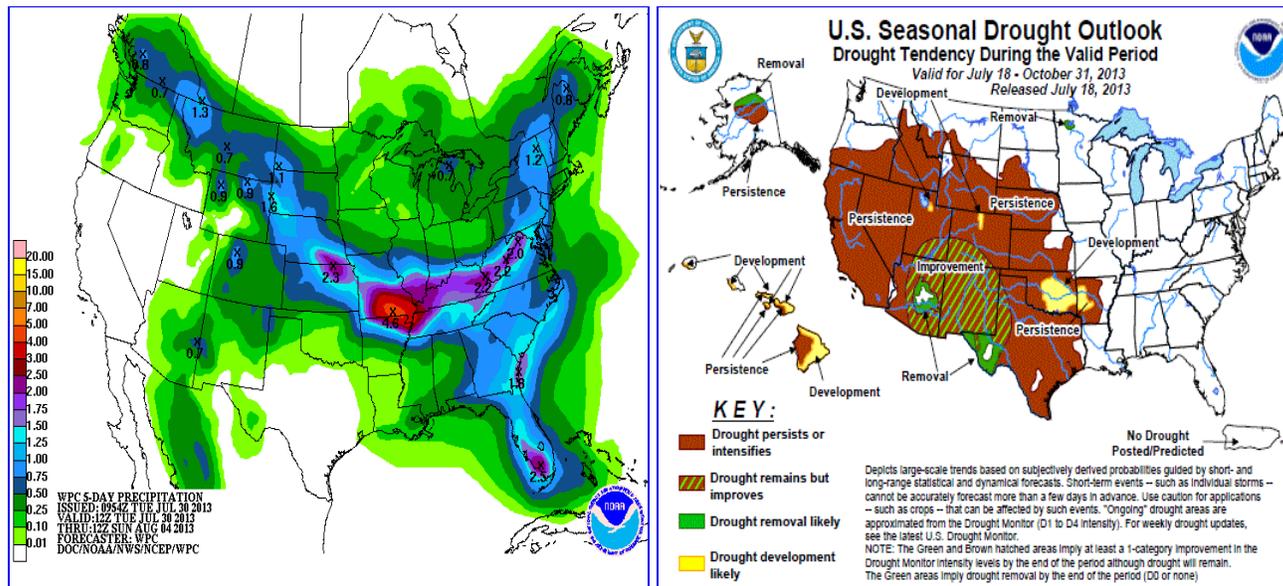
Last Month Temperatures:

- Most of the basin saw temperatures 2 to 6 degrees warmer than average for the month of June
- Southeast WY, northeast CO, and the Front Range urban corridor experienced temperatures 2 to 4 degrees above average
- Southeast CO was warmer, seeing temperatures 4 to 6 degrees above 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.



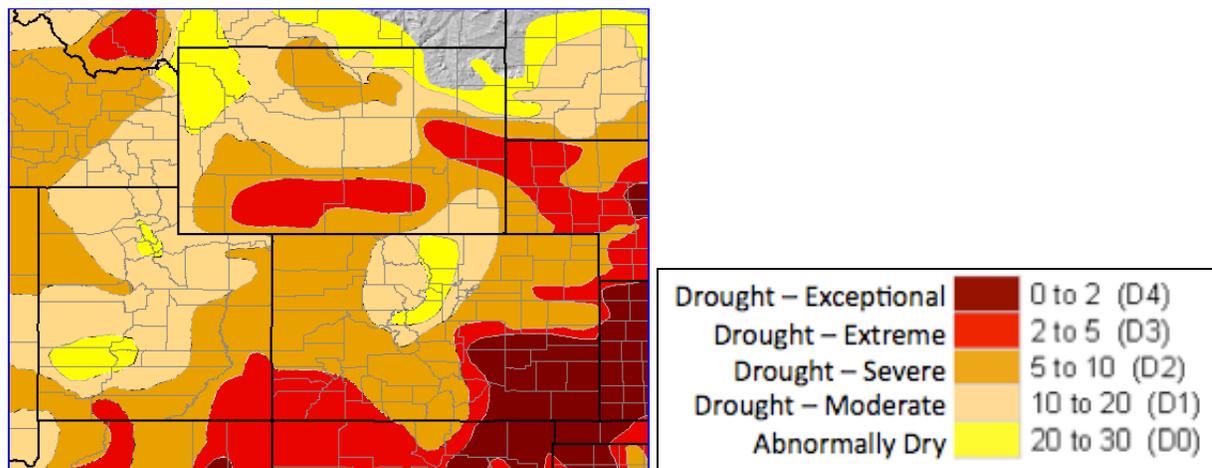
This Week:

- Thunderstorm activity will remain suppressed through the middle of the week for much of the basin
- Showers and storms will increase again late this week into the weekend with a return of monsoonal moisture
- Precipitation accumulations will be greatest in and along the continental divide of Colorado

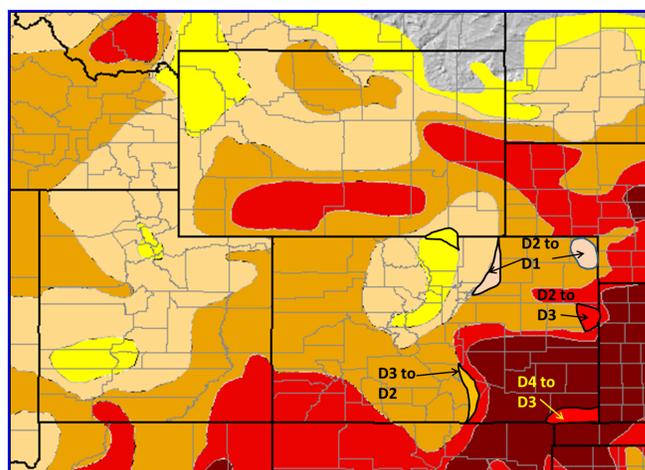
Longer Term:

- The 8-14 day outlook suggests that the monsoon pattern will favor the eastern half of the UCRB into next week
- The three month outlook shows equal chances for wet, dry, or normal conditions for the region
- The drought outlook shows the possibility for some drought improvement in southern CO with drought persistence throughout the rest of the region

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: July 30, 2013

Monsoonal moisture continued in Colorado and much of the UCRB bringing more beneficial moisture to much of the basin and east of the basin in Colorado. The northern part of the UCRB in northwestern CO and southwestern Wyoming remained dry for another week.

Recommendations**

UCRB:

There was discussion to bring D3 into Moffat county in NW CO, however status quo is recommended for the week in this area. Status quo is recommended over the rest of the basin.

Eastern CO:

Improvement from D2 to D1 is recommended for eastern Weld County from

the improvement from recent precipitation and cooler than normal temperatures. D1 improvement is also recommended for Sedgwick and Phillips counties in NE CO.

Improvement of D1 to D0 in Larimer County in CO and into Laramie and Albany counties in Wyoming from recent beneficial precipitation.

Improvement from D3 to D2 is recommended in western Pueblo county and east into Huerfano and Las Animas counties after precipitation totals for July are 4.00 - 8.00".

Improvement from D4 to D3 in southern Baca county.

Expansion of the D3 in eastern Kit Carson county. This area has missed most of the storms and conditions are degrading.

There was discussion of removing the D3 from Washington counties due to green up, however data does not support this improvement at this time.