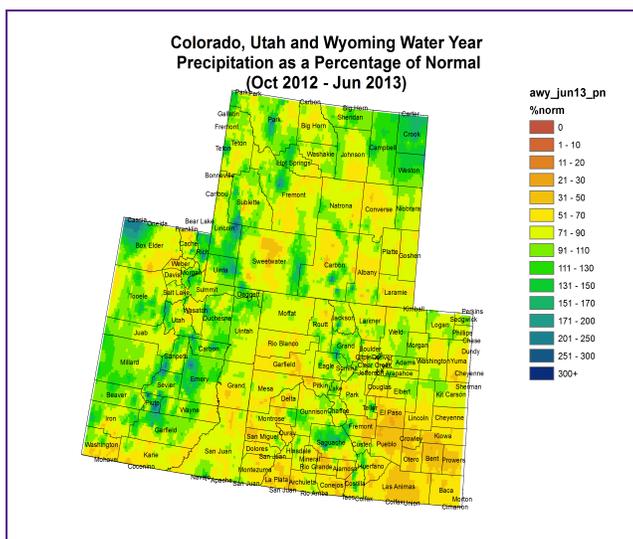
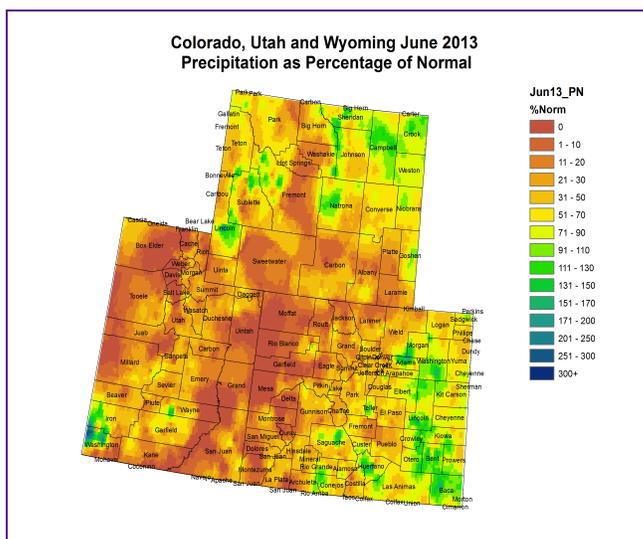
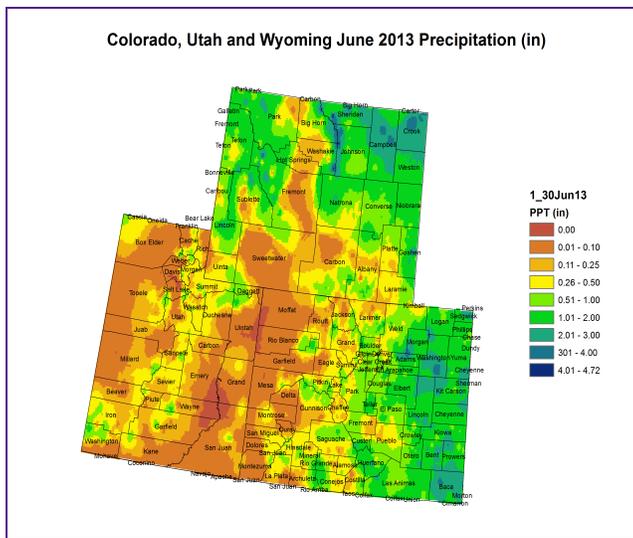
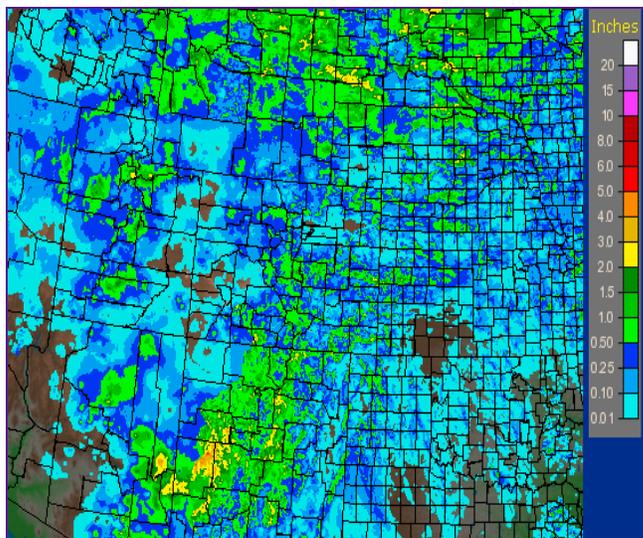


PRECIPITATION



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

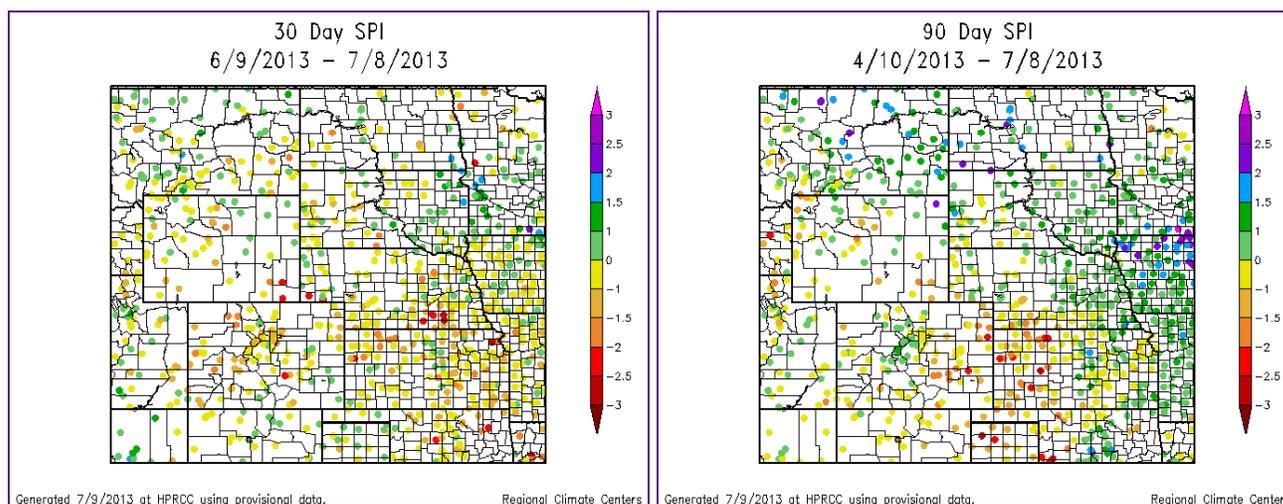
June Precipitation:

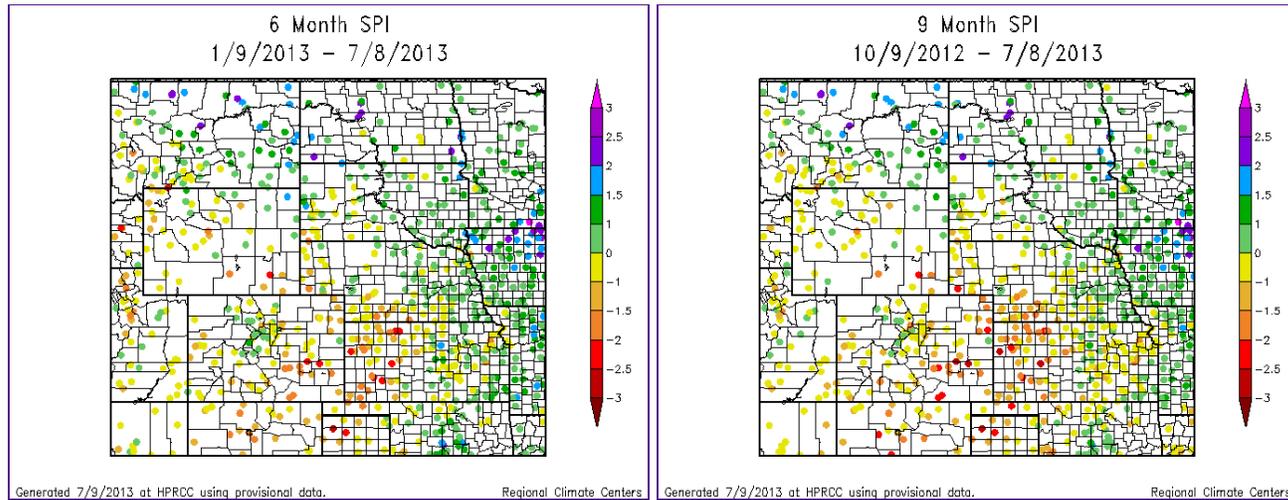
- Most of the UCRB received less than 20% of average precipitation for the month of June
- A couple of isolated areas in the San Juans in southern CO and the higher elevations in western WY received more than 50% up to near average moisture for the month
- Much of northern CO and southern WY were very 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 lower elevations of the basin received less than .10 inches of moisture. The higher elevations received between .10 and 1. inch of precipitation for the week
- East of the basin, most of eastern CO received between .10 and .50 inches. Several areas saw some heavier isolated storms, resulting in weekly accumulations between .50 and 1 inch
- Wyoming received more widespread larger accumulations between .50 and 2 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.

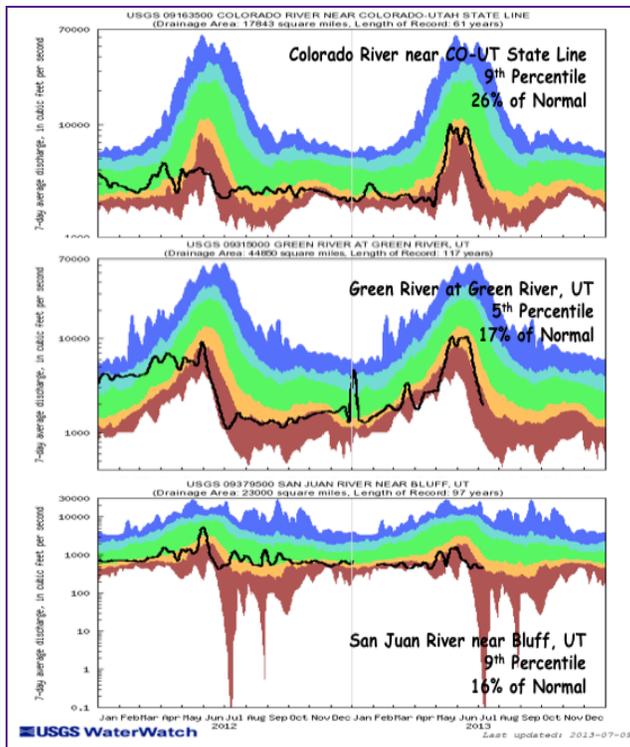
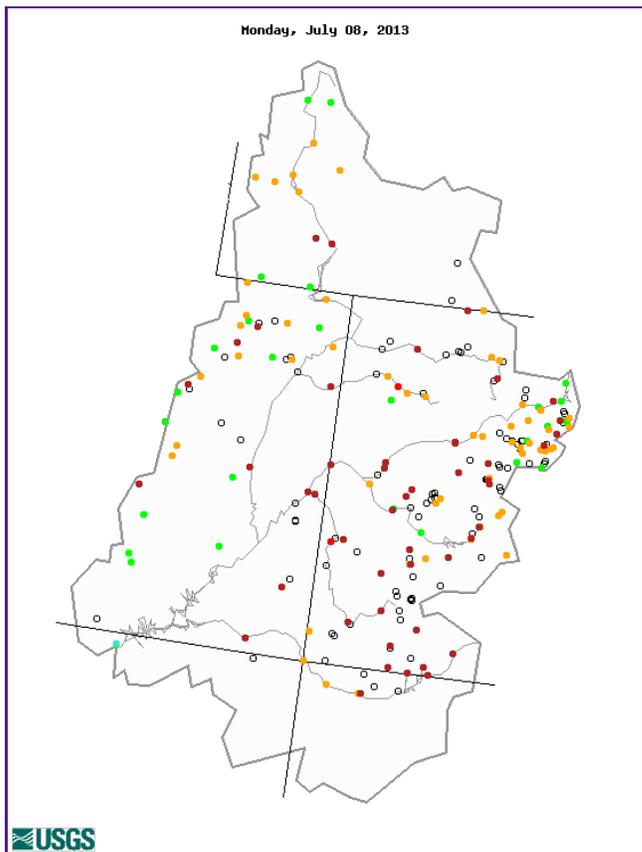
Short Term (30-day):

- SPIs between 0 and -2 for most of the UCRB, with some spotty wet SPIs
- Front Range SPIs between 0 and -1.5
- SPIs between 0 and -1.5 in northeast CO
- SPIs below -2 for southeast WY, with wet SPIs in northeast WY
- Variable in southeast CO: very dry SPIs around Pueblo, but wetter SPIs in far southeast CO

Long Term (6-month):

- Most SPIs between 0 and -1 for the majority of the UCRB
- Wetter SPIs around the northern and central CO mountains and drier SPIs in northern UT
- SPIs between 0 and -1 for the Colorado Front Range
- Drier SPIs between -1 and -2 in southeast CO and southern CO
- Northeast CO seeing SPIs between 0 and -1.5

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.

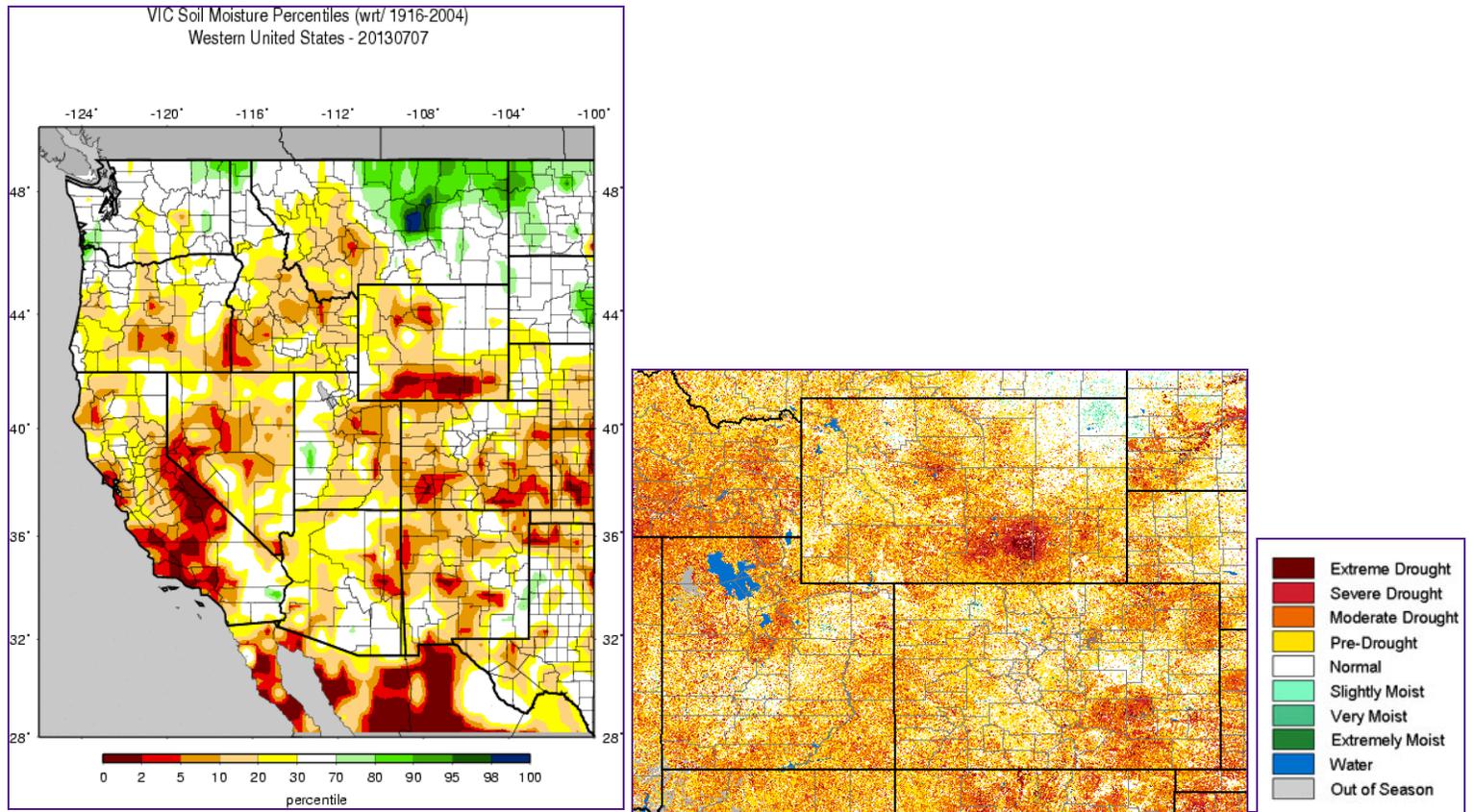
Streamflow Statistics:

- 24% of gages recording normal to above normal 7-day average streamflows
- 36% of gages recording much below normal or low 7-day average streamflows
- One record low streamflow recording on the Dolores River in southwest CO
- Overall, a slight increase in streamflows across the basin last week
- Just a few near normal flows scattered in different regions of the basin
- Much lower flows along the San Juan, Gunnison, and Dolores rivers
- Three key gages around the basin are all recording much below normal

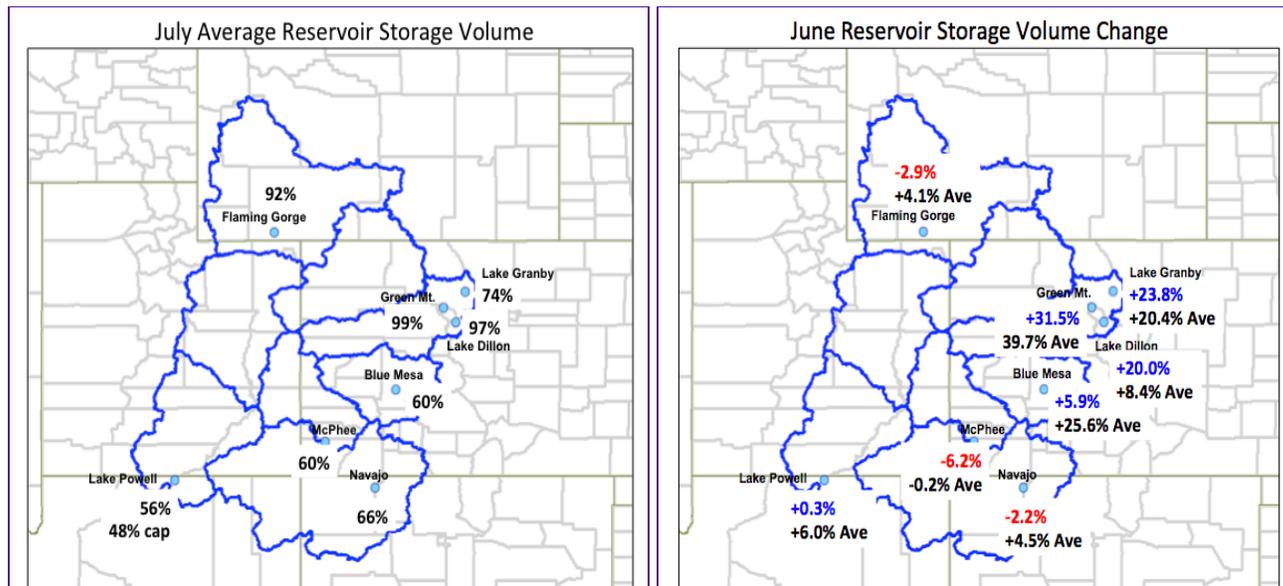
flows

- Flows on the Colorado River near the CO-UT state line and the Green River at Green River, UT peaked with almost near normal flows, but have rapidly dropped and are now recording at the 9th and 5th percentiles, respectively
- Streamflow on the San Juan River near Bluff, UT did not see a large seasonal peak and is currently recording flows at the 9th 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:

- Some improvement in modeled soil moisture in the northern part of the basin
- Soil moisture ranges from near normal to the 10th percentile of dryness in southwest WY with very dry soil moisture conditions across most of southern WY
- Most of northeast UT below the 10th percentile, while western CO shows soil moisture mostly below the 20th percentile
- Most of the Four Corners region below the 20th percentile, with one area in southwest CO showing extremely dry soil moisture conditions
- Eastern CO showing soil moisture mostly below the 20th percentile, with much drier soil moisture to the south
- Northeast WY showing improvement with near normal soil moisture conditions

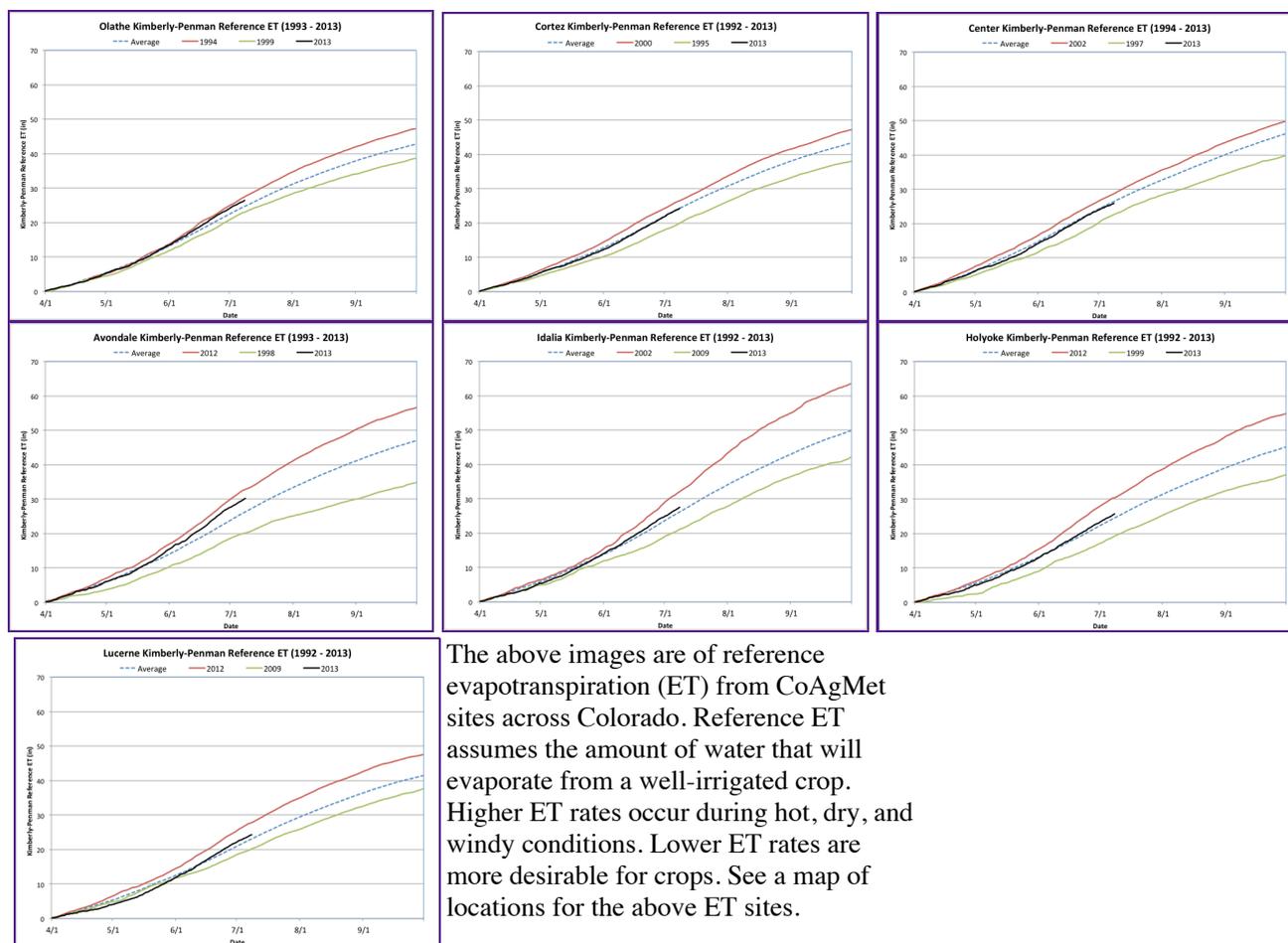
VegDRI:

- Very dry vegetation showing up along the Wasatch Range in northern UT with slightly better (but still dry) vegetation conditions along the Uintahs
- Most of the basin showing vegetation conditions in the pre-drought to moderate drought categories
- Southeast WY showing very dry vegetation conditions with much improved vegetation over northeast WY
- Very dry vegetation over northeast and southeast CO

Reservoirs:

- Flaming Gorge, Green Mountain, and Dillon all slightly below their July averages
- The remaining reservoirs range between 56% of average (Lake Powell) and 74% of average (Granby)
- Flaming Gorge, McPhee, and Navajo decreased in volume during June
- Lake Powell and Blue Mesa showed overall slight increases, but began decreasing in late June
- Lake Powell increased less than 1%, when 6% is what normally occurs during June
- Granby, Dillon, and Green Mountain continue to see large increases

EVAPOTRANSPIRATION



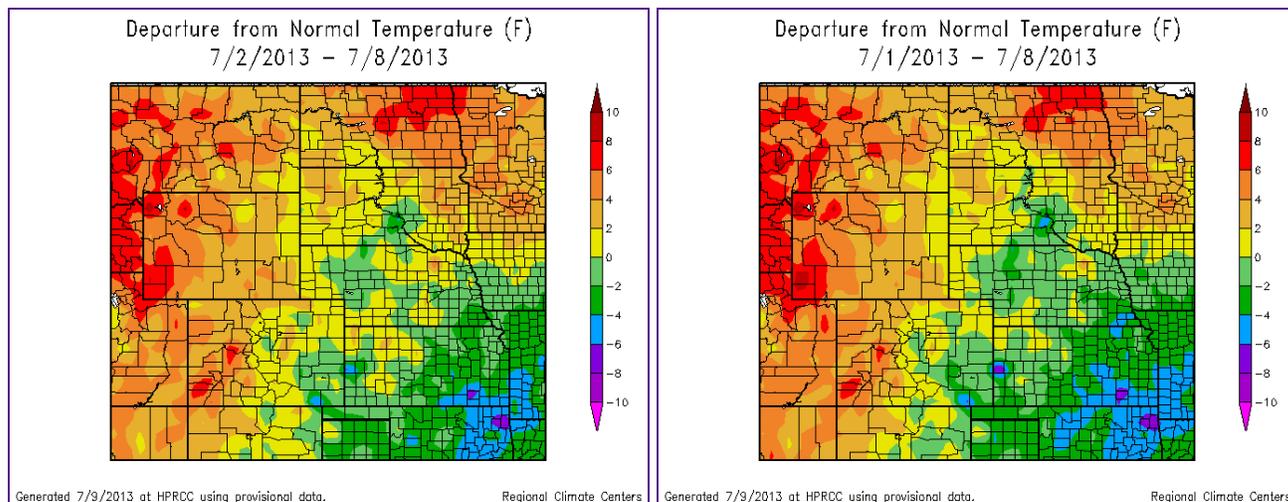
Reference ET:

- Olathe: Above average ET since the beginning of the growing season, approaching the high year.
- Cortez: Near normal growing season ET to date
- Center: ET was below average for most of May, but has seen an

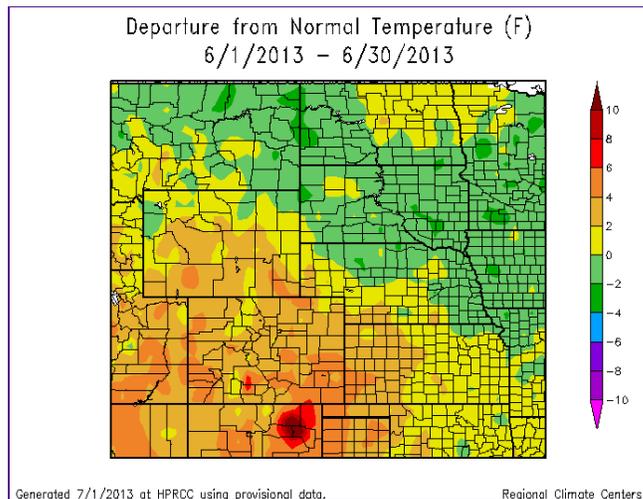
increase in ET and is now closer to average

- Avondale: For most of May, ET was near average but recent warm temperatures, low dew points and winds have increased ET above normal, but still lower than the maximum 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 above average since early June
- 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
- Daily ET rates for most of eastern CO are between .25 and .40 inches

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.



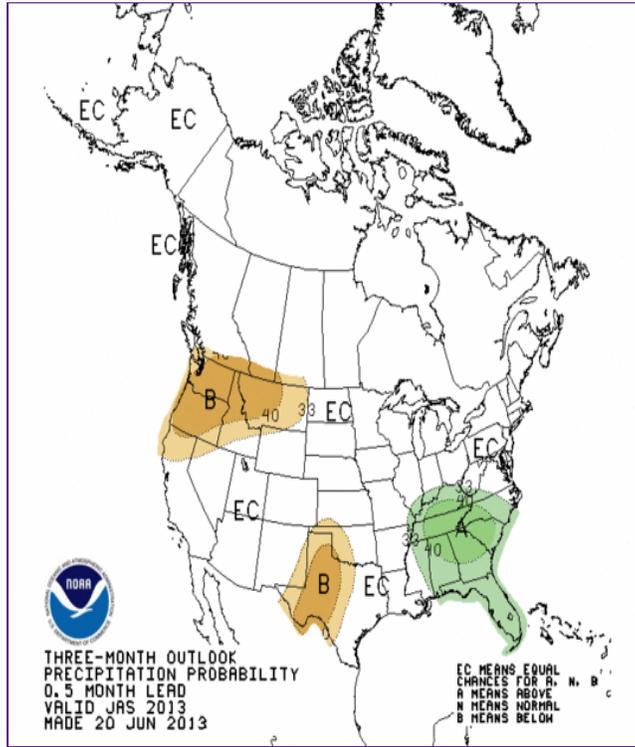
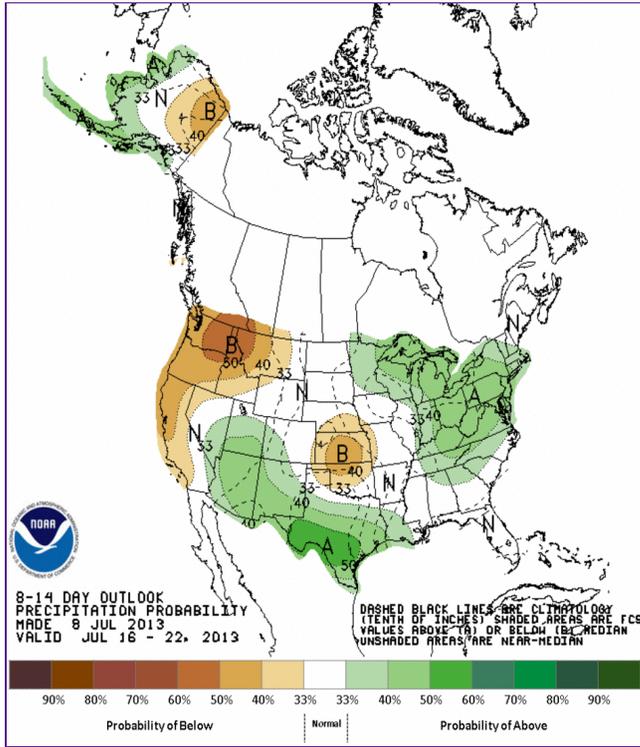
Last Week Temperatures:

- Temperatures were above average for most of the basin last week, ranging between 2 and 6 degrees warmer than average, with temperatures more than 6 degrees above average for the northern parts of the basin
- Temperatures across eastern WY were near average to 4 degrees above average
- Across eastern CO, temperatures were closer to average, with slightly cooler than average temperatures throughout southeast CO

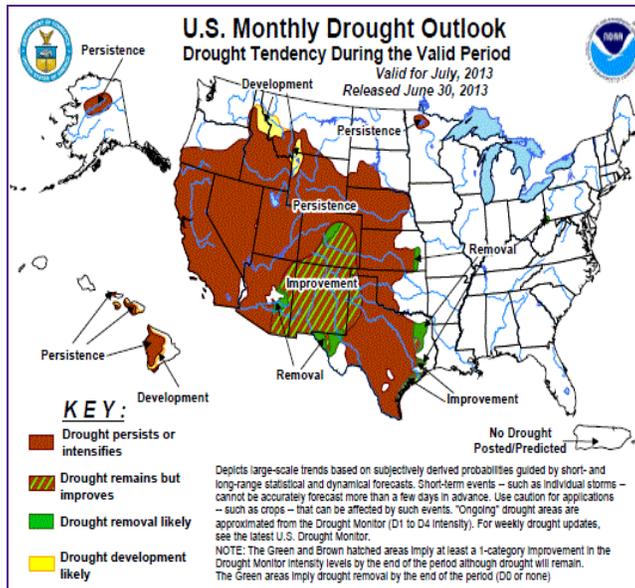
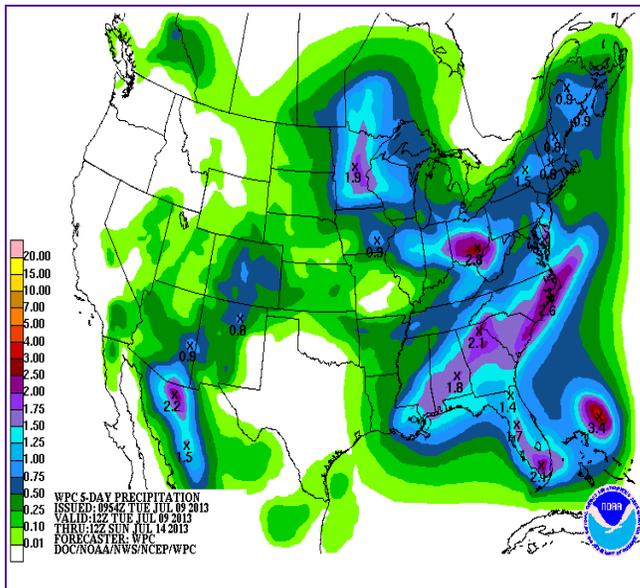
Last Month Temperatures:

- 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:

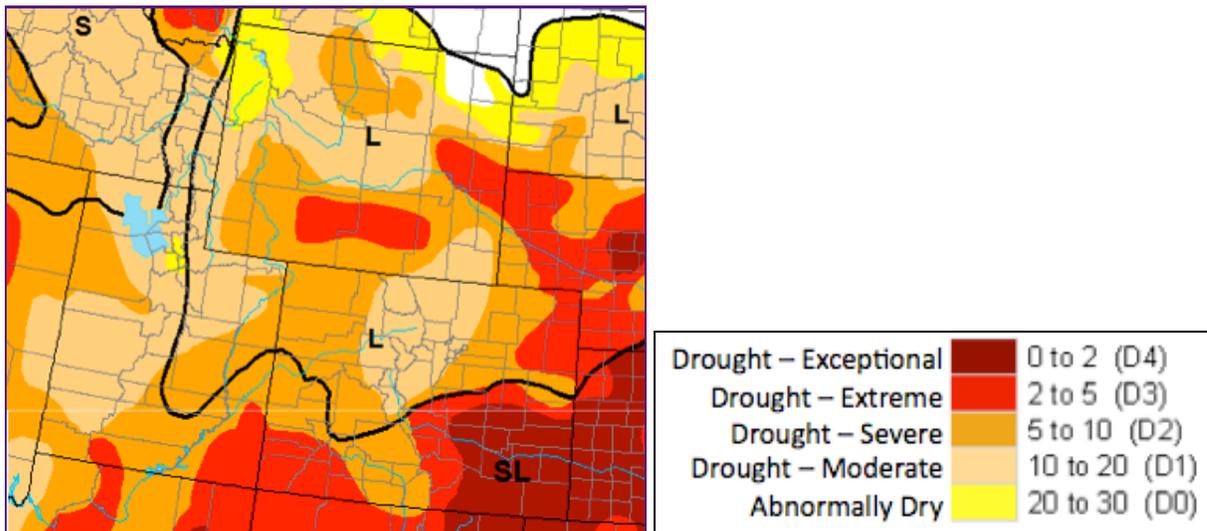
- Expect isolated gusty thunderstorms (with only light accumulations for the beginning of the forecast period) throughout the basin with very hot temperatures associated with high pressure in the region

- Later in the week, deep monsoonal moisture will entrain into the basin again, bringing an increased chance of daily thunderstorms throughout the region

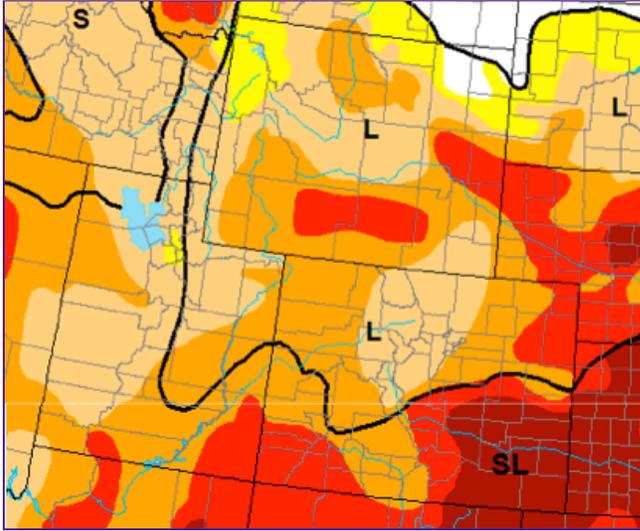
Longer Term:

- The 8-14 day outlook suggests that the monsoon pattern will continue into next week, with greater chances for above average moisture in the basin and near normal precipitation east of the basin
- 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 9, 2013

Daily isolated thunderstorms have become a regular occurrence for the basin and eastern plains over the past week. The isolated nature of the storms, accompanied with windy conditions and hot temperatures, could mean that the precipitation is not providing much drought relief at this time. But the monsoon looks to be underway at this time, which could provide further relief for the southern portions of the basin in the next month. Otherwise, after two drier winters (with some late season snow this year providing minor improvement), reservoirs and streams look to be struggling, and vegetation/soils in the area are likely showing signs of drought stress.

Recommendations**

UCRB: With some locally heavier accumulations in the Wasatch region last week, the current U.S. Drought Monitor (USDM) author has recommended a very small area of improvement. Aside from this, status quo is recommended for the rest of the UCRB. Locally larger storms have not been enough to provide much relief at this time. In the northern mountains of CO, where daily storms have been occurring and things are beginning to green, some improvement could possibly be an option in the coming weeks, but at this time, D1 is representative.

Eastern CO/WY: The USDM author has recommended some more improvement in northeast WY, where consistent rain has fallen and improvements have been seen in the soil moisture and VegDRI products. Status quo is recommended for the rest of CO and southern WY. Isolated thunderstorms are regularly occurring throughout the region, but they are of little benefit at this time. Storms are quickly followed by very hot temperatures and windy conditions. Additionally, plants show stress only a day or two after a storm.