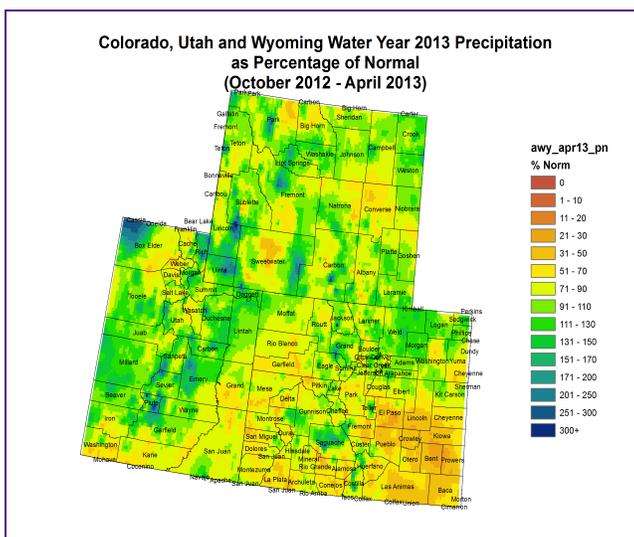
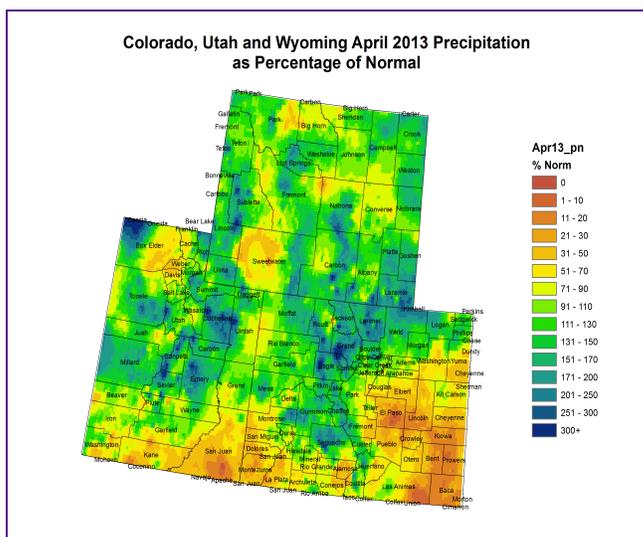
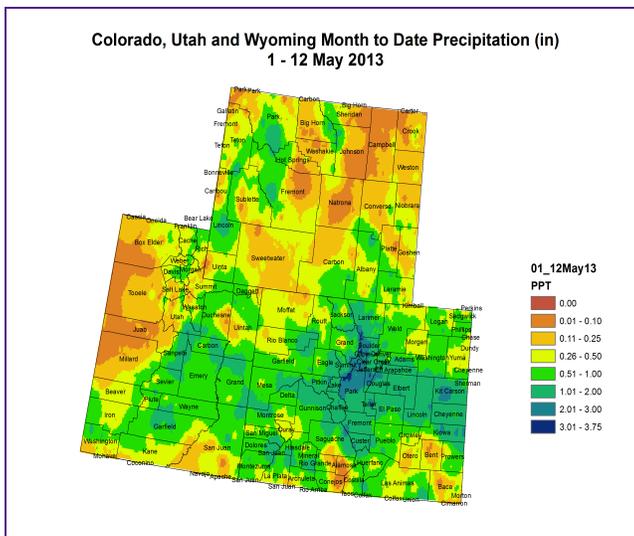
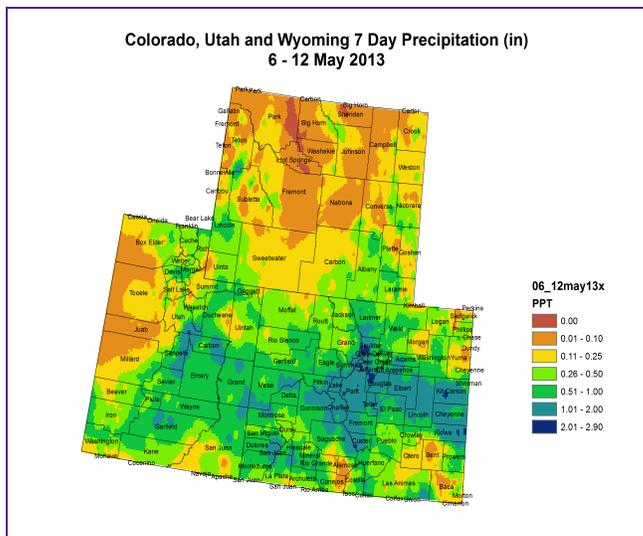


PRECIPITATION



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:

- Parts of the Upper and Lower Green basins in southwest WY and northeast UT are near to above average for the water year
- Parts of the northern CO mountains show near average precipitation for the water year
- Much of western CO and eastern UT are between 30% and 90% of average
- Near average precipitation for much of northeast CO
- Much of the Arkansas basin (in southeast CO) below 50% of average precipitation since October

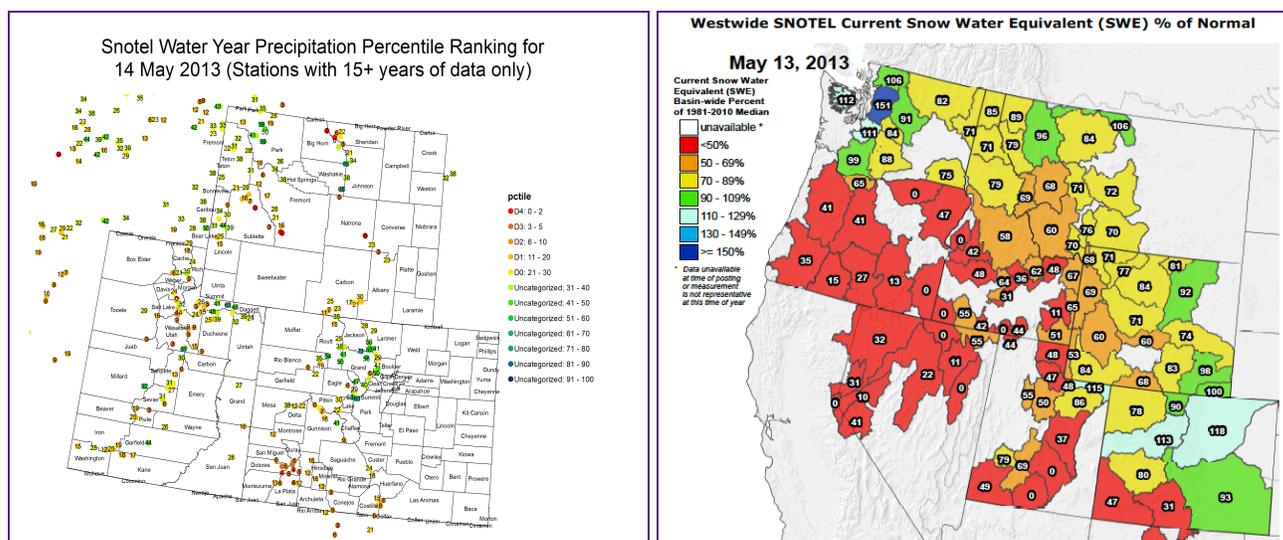
April Precipitation:

- Above average precipitation fell across most of the northern part of the UCRB (with the exception of Sweetwater County, WY which was between 30% and 100% of average precipitation)
- Southeast UT and southwest CO were drier in April, receiving less than 50% of average precipitation in many areas
- Northern CO and southeast WY were above average for the month, receiving over 130% of average precipitation in some areas
- The Front Range mountains and foothills received near average April precipitation
- Southeast CO was drier, seeing less than 30% of average precipitation in many locations

Last Week Precipitation:

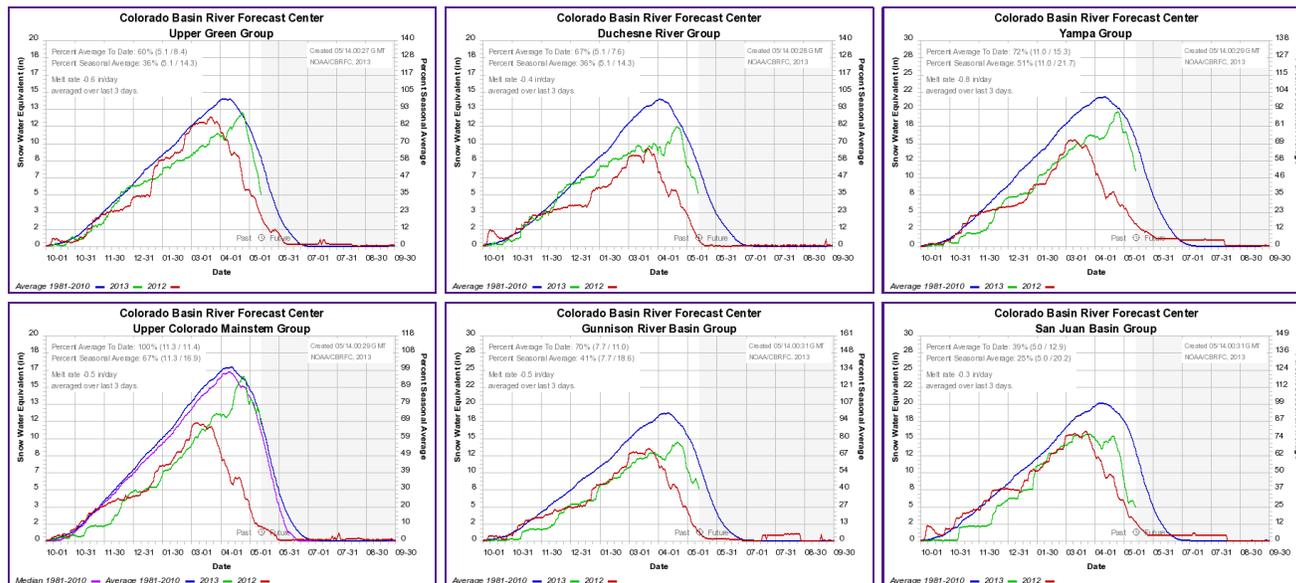
- Much of eastern UT and western CO received between .5 and 2 inches of moisture last week
- The northern fringes of the basin in WY and parts of the Wasatch range in UT were drier, receiving less than .25 inches in many spots
- The central and southern CO mountains received between .5 and 2 inches of precipitation
- Parts of the Front Range and extending into eastern CO received over 1 inch of moisture
- Parts of far northeastern CO and far southeastern CO received less than .5 inches for the week

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:

- Precipitation percentiles near the median around the Duchesne basin in northeast UT
- Wasatch range and central UT percentiles are lower, ranging from the single digits to the 20s
- Western WY percentiles are just below the median with percentiles dropping to single digits and teens just to the east
- Northern and central CO mountains showing improvement with percentiles ranging from the 20s to median
- San Juans in southwest CO in the single digits and teens

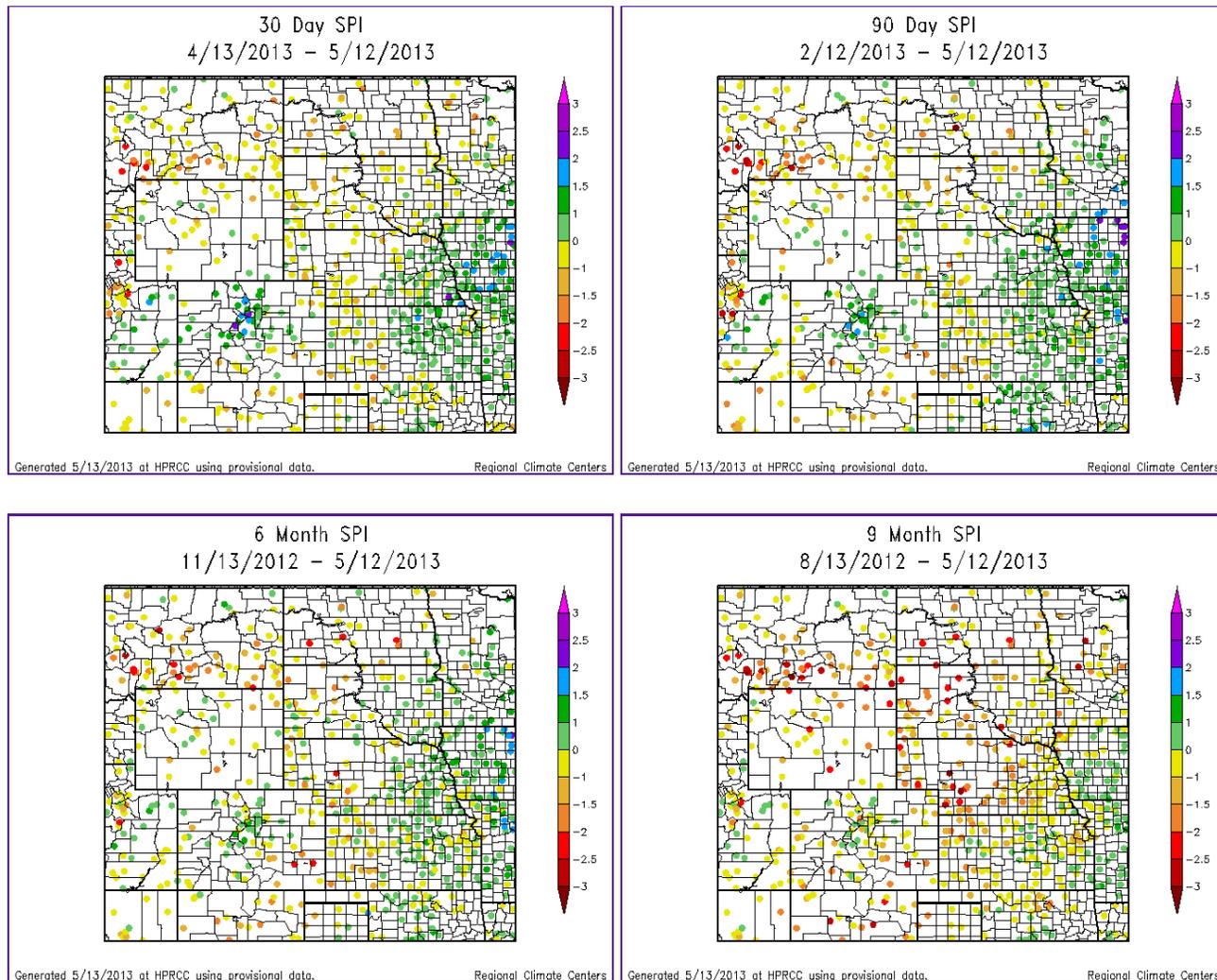
Basin-wide Snow Water Equivalent Percent of Normal:

- Percents of normal will be highly variable during the melt season. Compared with normal melting rates, faster melting or further accumulations can cause anomalously small or large values in percents of normal

SWE Timeseries Graphs:

- The northern areas reached around 90% of normal peak snowpack values, while the southern areas reached less than 80% of normal peak seasonal snowpack
- All graphs show later peak than last year and later peak than normal
- The sub-basins are melting at a rate around .5 inches per day with slower melting over the past few days in the San Juan basin (.3 inches/day) and faster melting in the Yampa basin (.8 inches/day)

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.

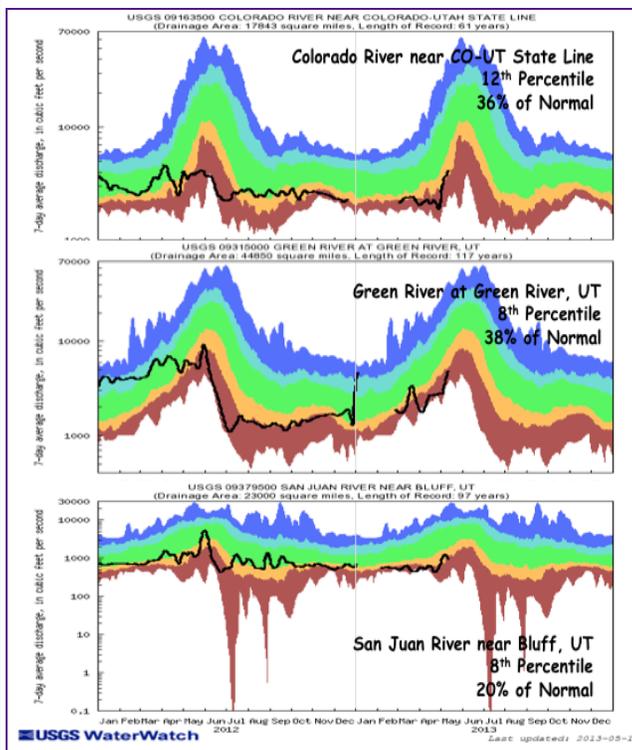
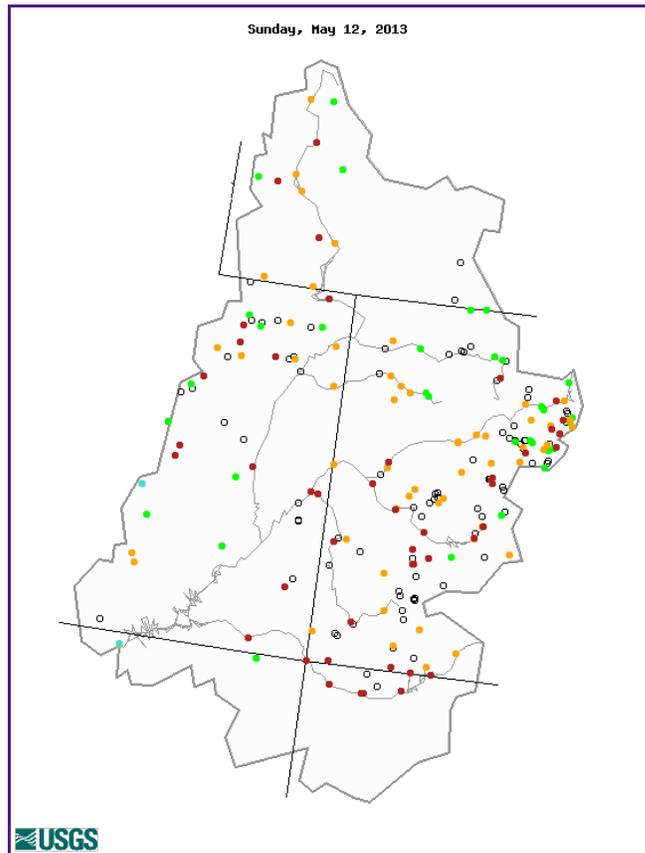
Short Term (30- and 60-day):

- Wetter SPIs in the northern and central CO mountains
- Drier SPIs in southwest WY and northern UT
- Mixed wet and dry SPIs over southeast UT and southwest CO
- Drier SPIs along eastern CO

Long Term (9-month):

- SPIs between 0 and -2.0 in southwest CO and southeast UT
- SPIs between -1 and -2.5 throughout southeast CO
- SPIs between 0 and -1.5 in northeast CO
- -1 to +1 SPIs in northwest CO, northeast UT, and southwest WY
- Mixed wet and dry SPIs in northern UT

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		

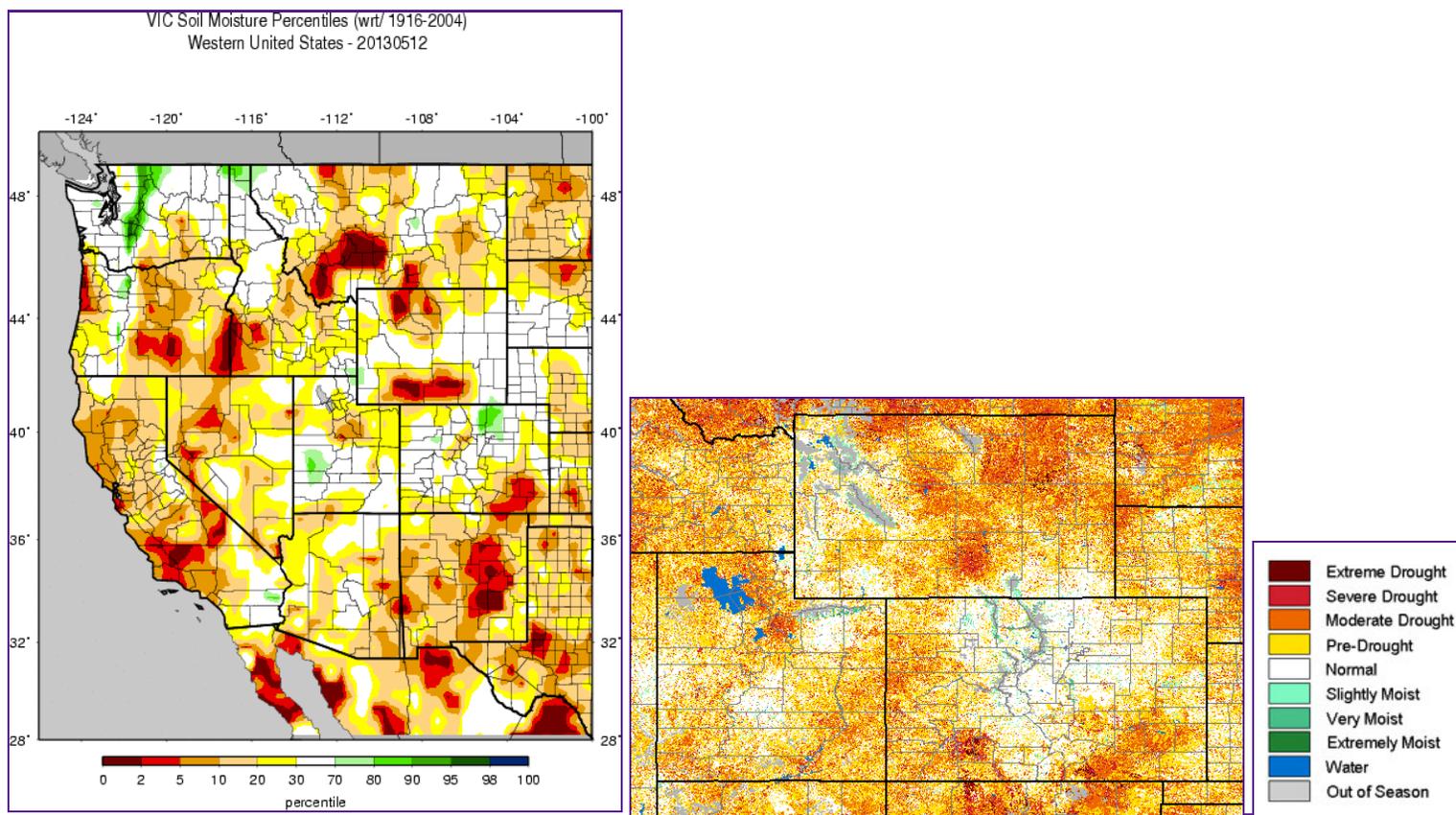
The top left image shows 7-day averaged streamflows as a percentile ranking across the UCRB. The top right image shows 7-day averaged discharge over time at three key sites around the UCRB: The Colorado River at the CO-UT state line; the Green River at Green River, UT; and the San Juan River near Bluff, UT. All streamflow data provided by United States Geological Survey.

Streamflow Statistics:

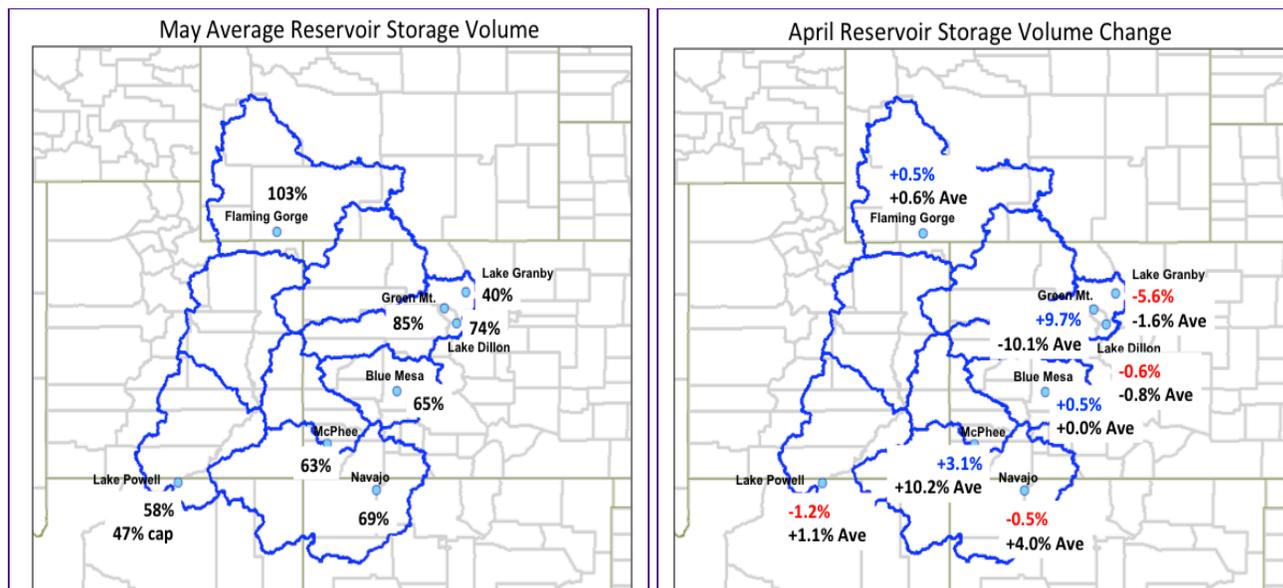
- 26% of gages recording normal to above normal 7-day average streamflows
- 34% of gages recording much below normal or low 7-day average streamflows
- Decrease in flows across much of the basin due to cooler temperatures reducing speed of snowmelt

- 135 gages now reporting
- Two of the three key gages in the basin (Colorado River near the CO-UT state line and the Green River at Green River, UT) have increased in flows this past week
- The Colorado River near the CO-UT state line is reporting below normal flows (at the 12th percentile) and the Green River at Green River, UT and the San Juan River near Bluff, UT are reporting much below normal flows, both at the 8th percentile
- Expect to see sharp increases in flows across the basin as temperatures warm and snowpack continues to melt

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.

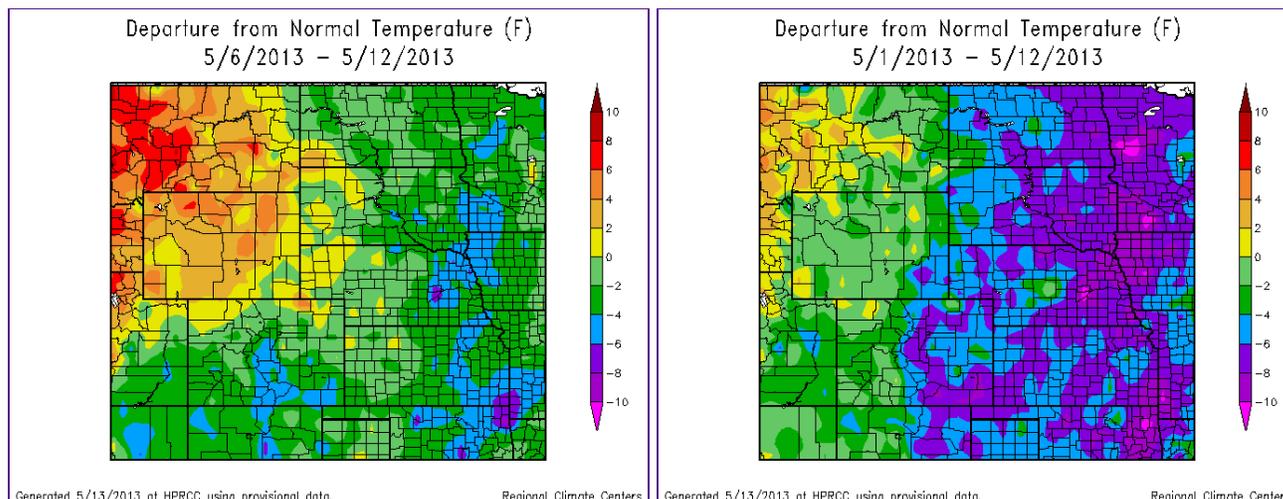
VIC:

- Drier soil moisture conditions over southern WY
- Eastern UT and western CO showing soil moisture below 30th percentile with some areas showing deterioration
- Soil moisture below the 30th percentile for much of southwest CO, but some improvement over the Four Corners from last week
- Soil moisture below the 10th percentile for much of southeast CO
- Near average to wet soil moisture conditions in northern CO

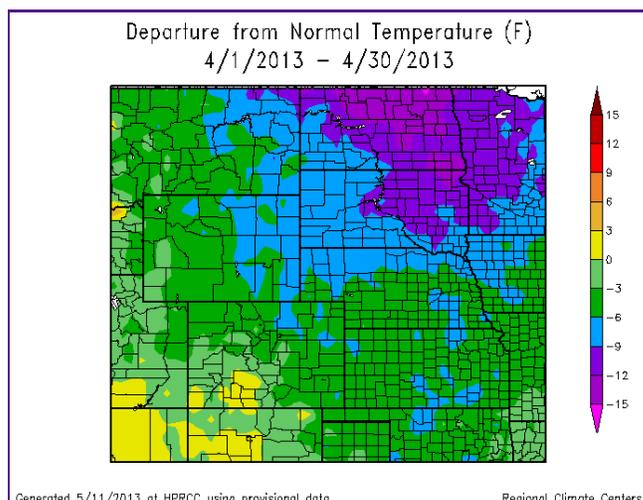
Reservoirs:

- Flaming Gorge is near average volume for May
- Rest of reservoirs below May average (ranging from 40% at Granby to 85% at Green Mountain)
- Flaming Gorge, Green Mountain, Blue Mesa, and McPhee increased in volume over the month of April
- All of the reservoirs, with the exception of Blue Mesa, have been increasing in volume since the beginning of May

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.



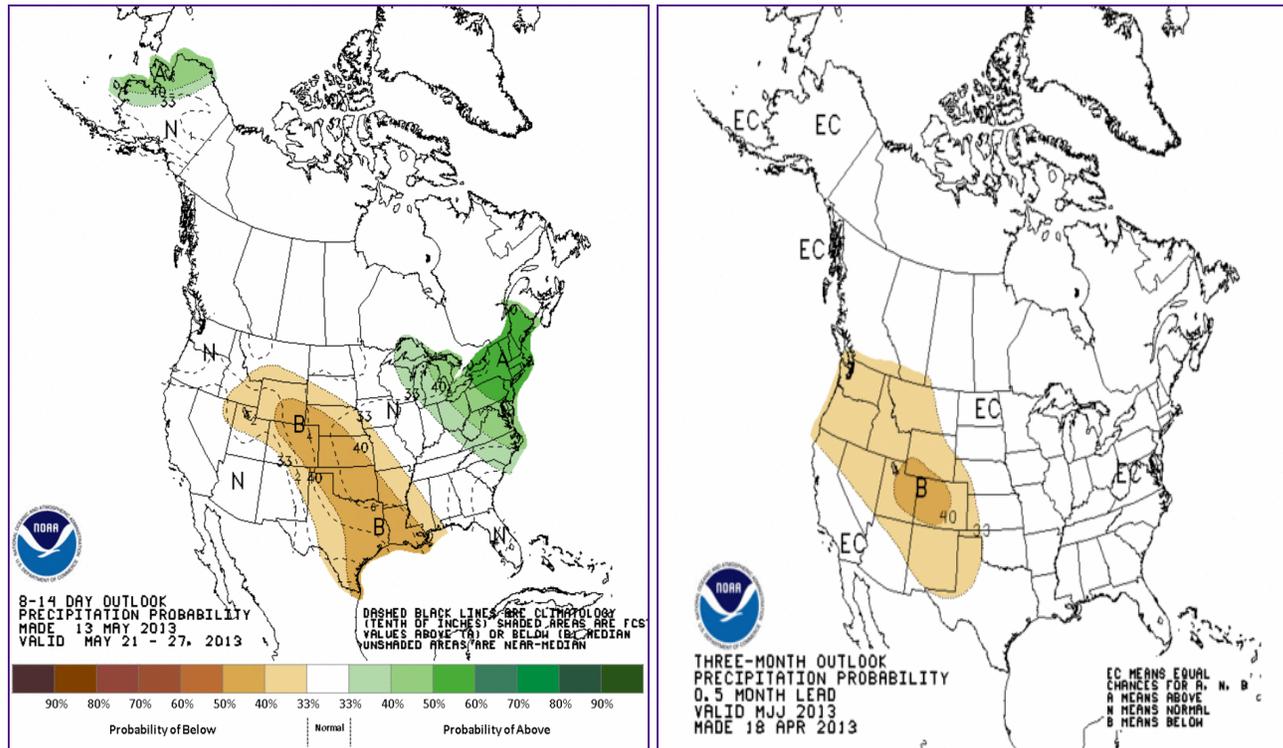
Last Week Temperatures:

- Temperatures above average for the northern part of the UCRB and cooler than average in the southern part of the UCRB
- Temperatures over eastern CO ranged from near average to almost 6 degrees colder than average in southeast CO

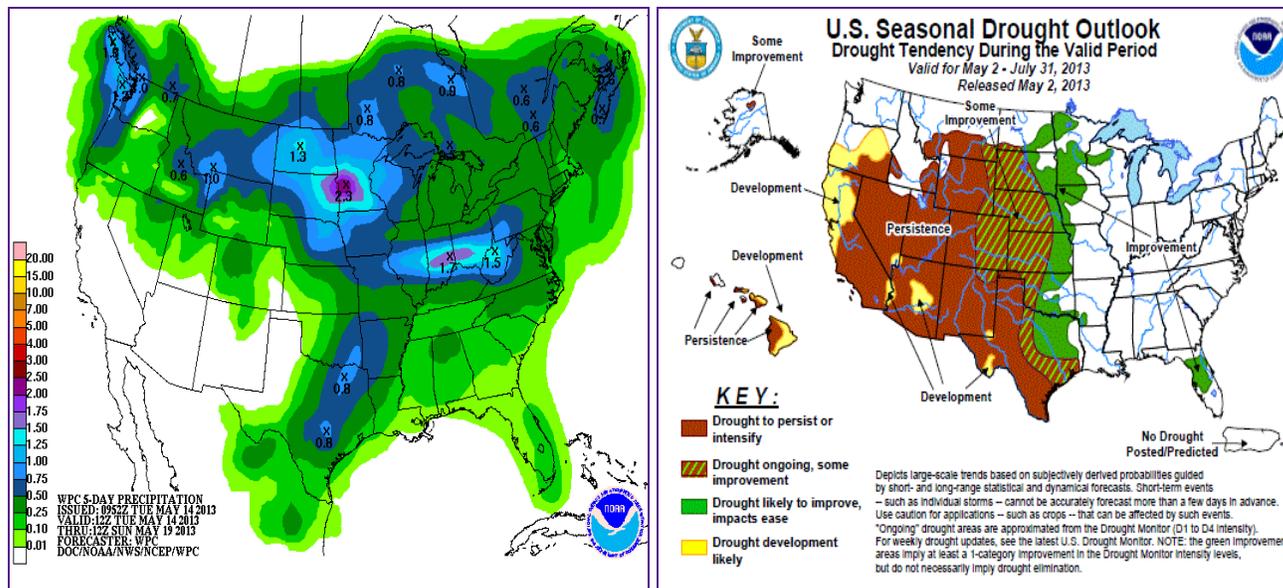
Last Month Temperatures:

- Temperatures throughout the UCRB were cooler than average for the month of April
- Near average to 3 degrees colder than average for the southern half of the basin
- Temperatures 3 to 6 degrees colder than average for the northern half of the basin
- Eastern CO was 3 to 9 degrees below average for the month of April

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.



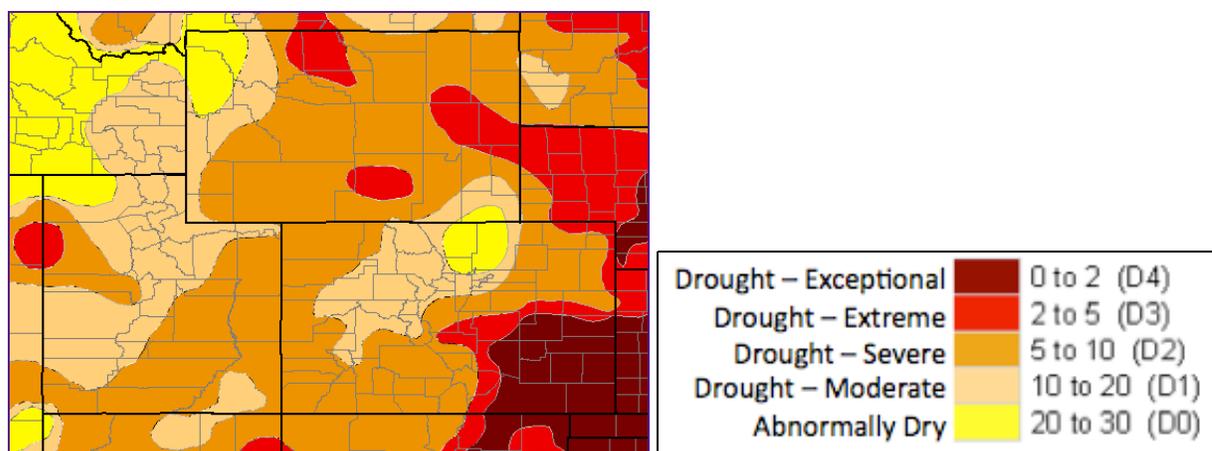
This Week:

- Showery weather will prevail through Friday
- Expect snow accumulations to be spotty and remain above 9000 feet

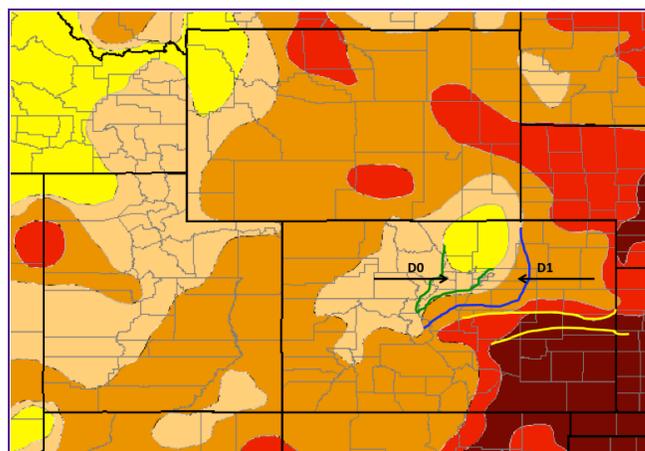
Longer Term:

- Drier and warmer conditions return for the weekend
- The 8 - 14 day outlook shows that near normal precipitation conditions are most likely
- The three month outlook through July shows drier than normal conditions are 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: May 14, 2013

Warming temperatures continue to aide in quickly melting the mountain

snowpack throughout the UCRB. San Juan basin snowpack has mostly melted out, and it's possible that the streamflows in that region have peaked already (earlier and much below normal peak streamflows). Streamflows around the rest of the basin continue to rise, and reservoir volumes are also increasing. Beneficial moisture has continued to accumulate over much of eastern CO though southeastern CO is still struggling from long-term dryness. The area is currently under a warming trend. Though scattered showers are in the forecast, expect much warmer and drier conditions than what has been observed over the past few weeks. A return to cooler, unsettled conditions is a possibility sometime next week.

Recommendations

UCRB: Status quo is recommended for the UCRB in the current depiction of the U.S. Drought Monitor (USDM) map. The San Juan mountains and Four Corners region are still being closely monitored for possible degradations in the future, but not for this week. Though streamflows and SNOTEL precipitation percentiles are still very low, the area did receive around an inch of moisture last week. In southwest WY, possible improvements may be justified in the future around Uinta County, and this area will also be closely monitored.

Eastern CO: The current USDM author has already adjusted the D0 - D4 lines in northeast CO. The trimming of the D3 and D4 in eastern CO look adequate (yellow lines). The D0 expansion is also acceptable (green line). There is a recommendation to slightly adjust the D1 line that the USDM author drew to cover some of Morgan County and further east in Adams and Arapahoe counties (blue line).