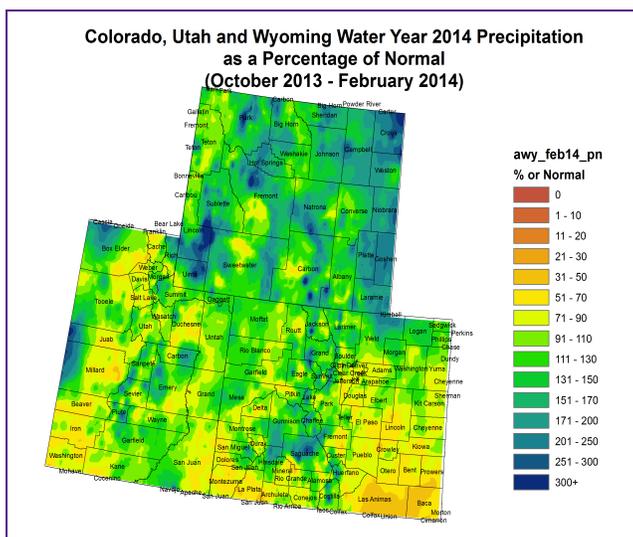
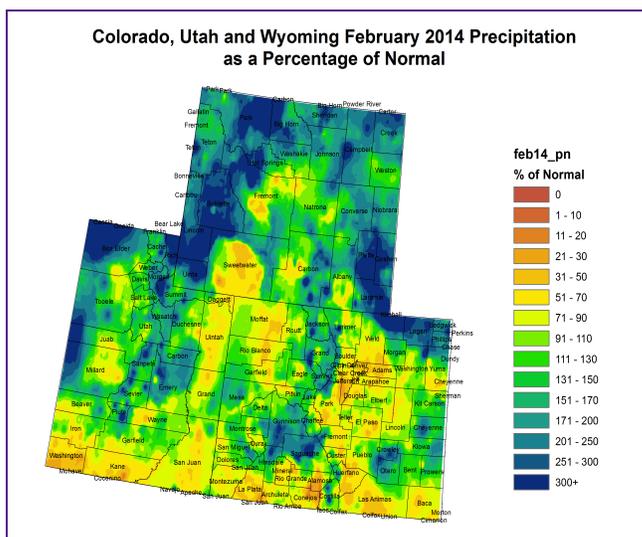
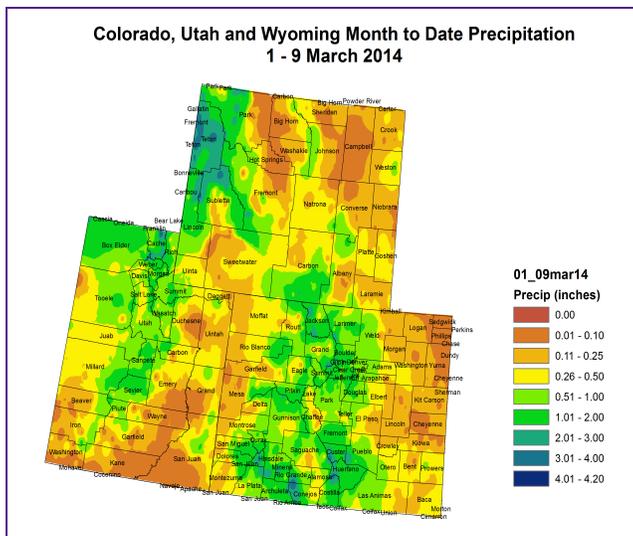
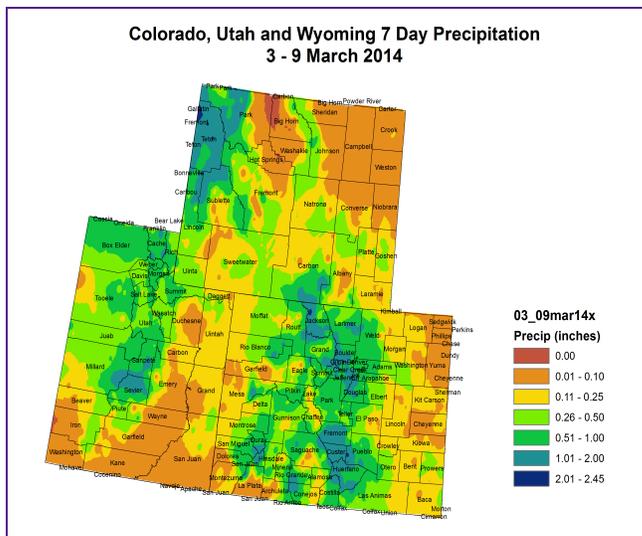


PRECIPITATION



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:

- Most precipitation over the last week fell in the higher elevations in the UCRB
- The eastern portion of the Basin in the northern and central CO mountains received between 0.25 - 2.00", with the higher amounts in the higher elevations along the divide.
- The western valleys and northern portion of the basin saw lower

amounts of precipitation, less than 0.25".

- The Wasatch Range in northern UT saw beneficial precipitation ranging between 0.50 - 1.00".
- The four corners area was dry with less than 0.1", while the San Juan Mountains saw beneficial precipitation between 0.25 - 2.00".
- East of the divide in Colorado was a mix. The Front Range and Foothills saw beneficial moisture of 0.50 - 2.00", which was a mix of rain and snow. The eastern Plains saw less than 0.10" for the week.
- The Rio Grande basin, in southern CO, finally saw beneficial precipitation with amounts between 0.50 - 2.00".

February Precipitation:

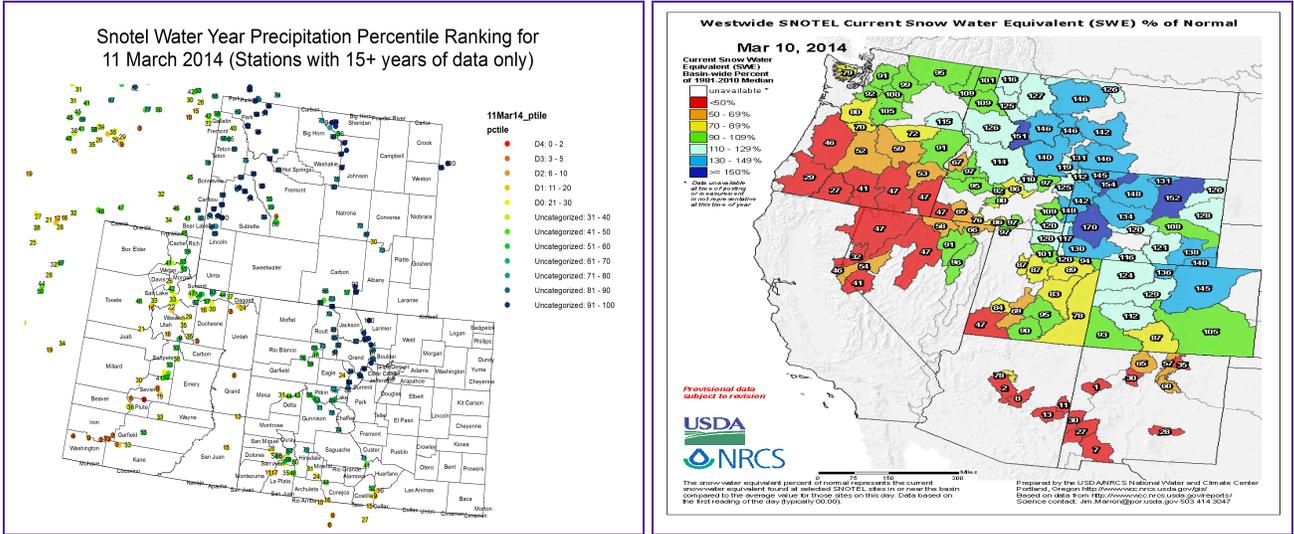
- The Upper Green River basin and Wasatch mountains saw much above normal precipitation in February. Large areas of 300% or more are present in Western Wyoming and NE Utah.
- The lower Yampa basin and eastern Utah saw below normal precipitation in February.
- The northern, central and southern mountains in Colorado saw near normal to above normal precipitation in February.
- The four corners area was dry in February receiving less than 70% of normal precipitation for the month.
- East of the divide saw above normal precipitation for February farther east (SE Wyoming and NE Colorado were >300% of normal) on the plains while areas closer to the Front Range saw below average moisture in February.
- The Crowley/Otero area saw near normal to above normal moisture in February, which was very much needed. That moisture also made it farther east into Cheyenne, Kiowa, Bent and Powers counties bringing normal to above conditions in February.
- The I-25 corridor was dry for February, but February is normally dry along the Front Range.
- The San Luis Valley saw below normal moisture through much of the valley bottom in February.

Water Year Precipitation (Oct-Feb):

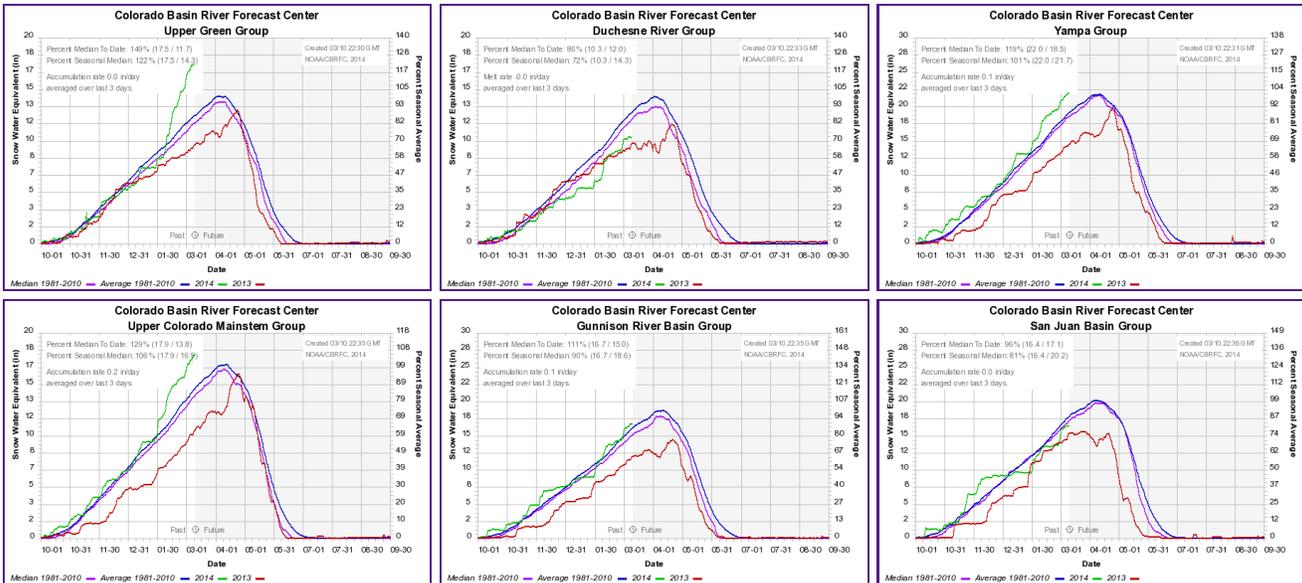
- Much of the UCRB is showing normal to above conditions for the water year through February.
- The driest areas are present in eastern Utah and the four corners area. Those areas saw less than 90% of normal.
- Much of the mountainous areas of the UCRB are reporting above normal conditions, particularly in the Green River basin.
- Much of the state of Wyoming has seen normal to above normal precipitation since the start of the water year.
- East of the divide in CO, conditions for the water year are above normal over the NE plains and deteriorate to the South, particularly south of I-70 and east of I-25.

- Las Animas and Baca counties saw less than 50% of their normal water year precipitation through February. Below normal water year precipitation predominates much of the lower Arkansas valley.

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:

- SNOTEL precipitation is at or above the median for the northern and eastern part of the UCRB with drier percentiles along the western and southern portions
- Percentiles in the Upper Green region are mostly above the 75th percentile.
- In the northern and central CO mountains percentiles are at or above the median percentile, with most SNOTEL sites along the divide above the 80th percentile, lower to the west.
- The Wasatch and Uintah ranges are showing mixed precipitation percentiles ranging from the teens and 20s to above the median.
- Percentiles in the San Juan's have improved with recent moisture over the past few weeks. They range from teens in the lower elevations to near to above the median.

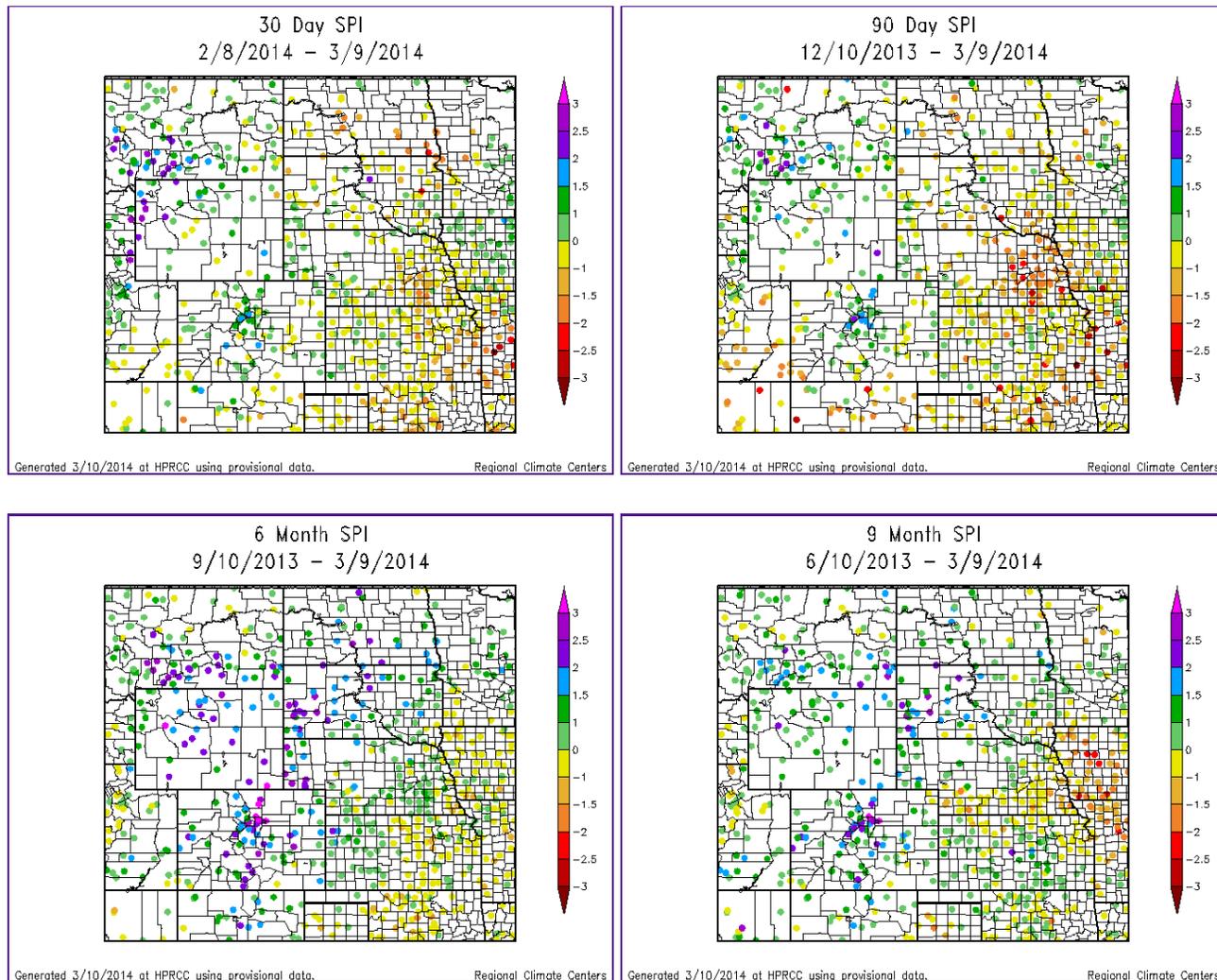
Basin-wide Snow Water Equivalent (SWE) Percent of Normal:

- The eastern and northern sub-basins in the UCRB currently have near to above normal snowpack, with the highest values in southern WY
- Snowpack in eastern UT is between 78% and 120% of normal
- Snowpack in southwest CO is also slightly below normal at 93%
- East of the basin, snowpack is above normal, with the exception of the Rio Grande Basin at 87%

SWE Timeseries Graphs:

- The Upper Green river basin in Wyoming has seen steady increases in SWE since early January. The basin is reporting at 149% of normal and has already surpassed the normal seasonal peak SWE.
- The Duchesne basin saw a good increase in SWE during the last week in February, however fell a bit this week to 86% of normal to date.
- The Yampa basin continues to report above normal as it has for much of the snow accumulation season. The basin is currently reporting 119% of normal to date and is currently at the seasonal peak, a month early.
- The Upper Colorado basin is also continuing to track above normal at 129%. The basin has also surpassed the normal seasonal peak SWE.
- The Gunnison basin is reporting at 111% of normal.
- The San Juan basin also picked up beneficial moisture over the last week of February. The basin is now reporting 96% of normal to date after leveling out and losing some snowpack.

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):

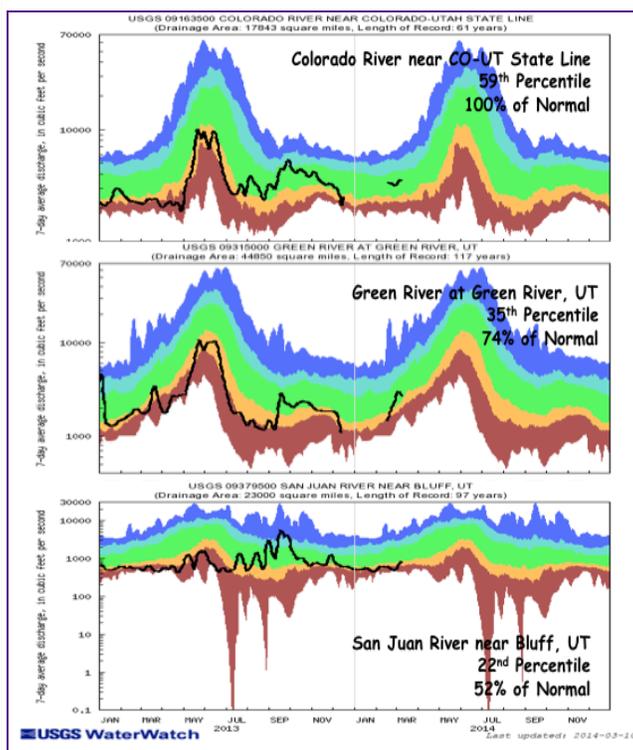
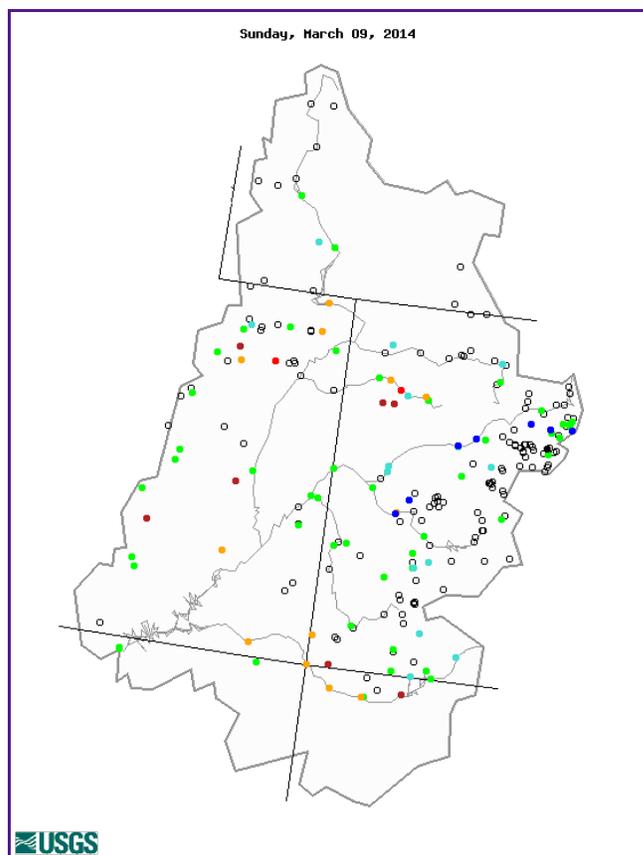
- SPIs across most of the higher elevations of the UCRB are showing wet indicators
- The Wasatch range in central UT is showing SPIs between 0 and +2.5
- Western WY SPIs are mostly between 0 and +2.5 with slightly drier SPIs (between -1 and +2.5) to the east along the Wind River range
- The northern and central CO mountains are showing mostly positive SPI (+1 to +2), with a few drier SPI showing up (0 to -1) in the valleys.
- Most of northern, central, and eastern CO are showing wet indicators, with SPIs between -2.5 and +2. The lowest SPI is in Las Animas county near Trinidad.

- The Four Corners region improved on the short term with recent moisture. Those SPI's are now in the -1 to +1 range.

Long Term (6-month):

- Most of the UCRB shows wetter long-term SPIs with the exception of the Wasatch and Four Corners areas.
- The driest area of the UCRB on the longer term is northern Utah near the Wasatch range where SPIs range from -1 to +2.
- The Four Corners area is still slightly dry on the longer term with SPI's from -1 to +1.5.
- The rest of the UCRB indicates wet conditions, with SPIs ranging from 0 to +3
- The driest areas on the plains remain in the lower Arkansas valley from Pueblo to Otero county.

STREAMFLOW



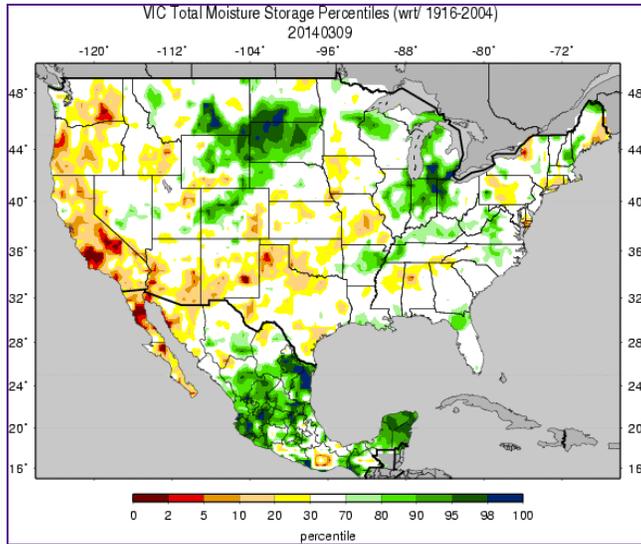
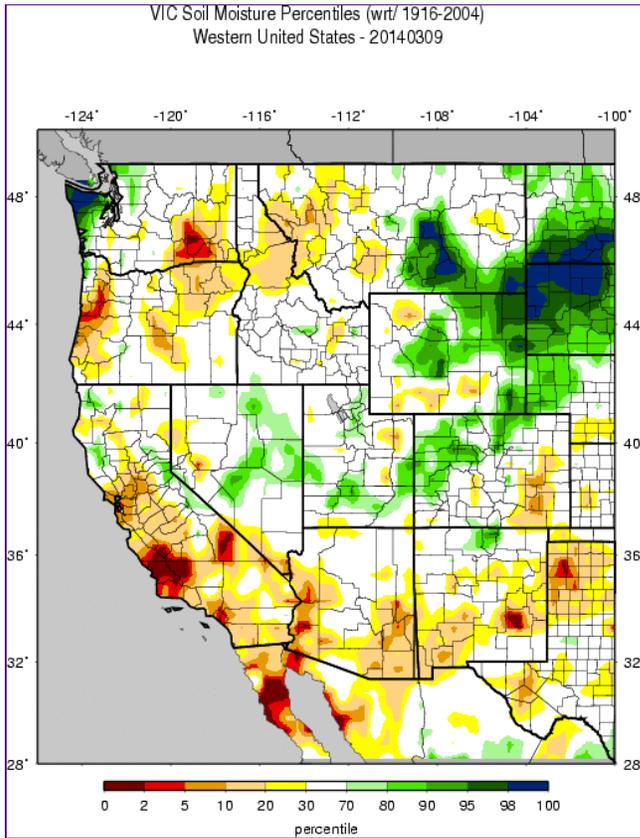
Explanation - Percentile classes							
							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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.

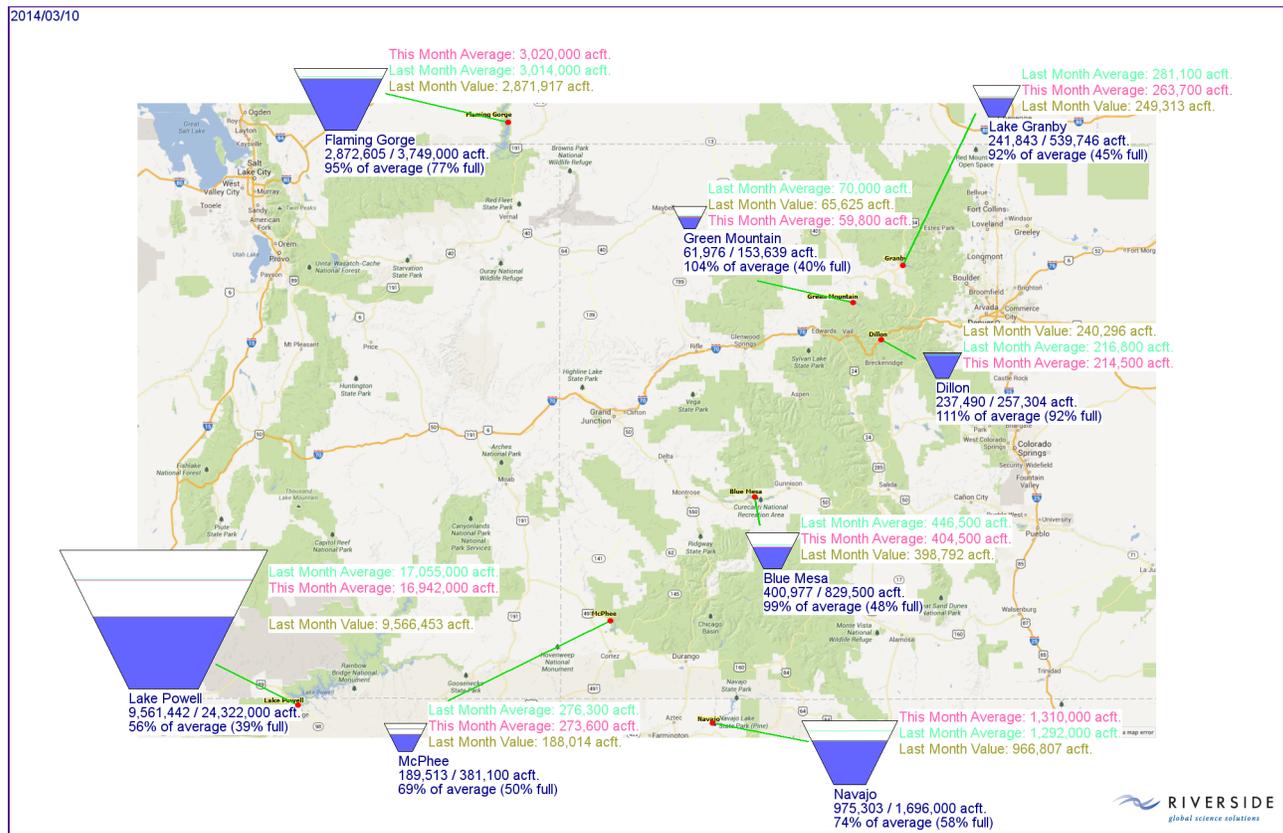
Streamflow Statistics:

- The number of reporting gages (not ice affected) has increased to 92.
- 75% of the gages in the UCRB are reporting normal (25th to 75th percentile) or above 7-day average streamflows
- 13% of the gages are recording much below normal (below the 10th percentile) 7-day average streamflows.
- The driest streams are in the San Juan Basin in SW Colorado and middle Green River in northeast UT and northwest CO.
- Flows on the Colorado River near the CO-UT state line is reporting the 59th percentile, 100% of normal.
- The Green River at Green River, UT is currently at the 35th percentiles, 74% of normal, this is a decrease from last week.
- The San Juan River near Bluff, UT is reporting at the 22nd percentile and 52% of normal which has improved since last week.

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:

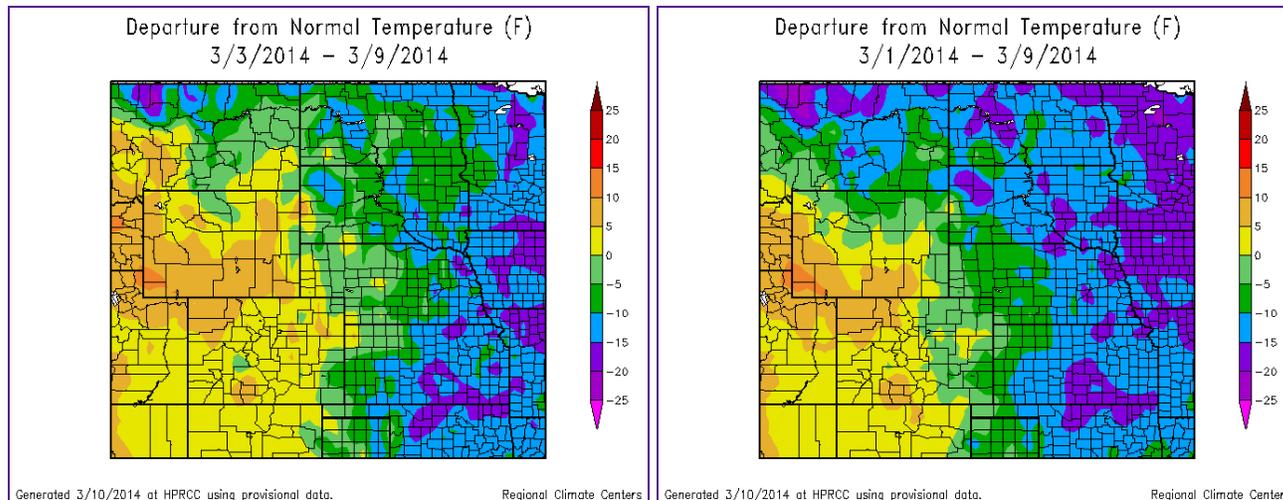
- Most of the UCRB is showing near average to wet soil moisture conditions.
- Soil moisture across most of western CO and parts of eastern UT are between the 70th and 95th percentiles.
- Some spots of southern WY and northern UT are slightly drier, with soil moisture percentiles between the 5th and 30th percentiles.
- Most of eastern WY is showing wet soil moisture.
- The lower Arkansas valley, east of the divide, is reporting dry soil moisture conditions with percentiles in the 2nd to 30th percentile range. The driest area is centered over Otero county.
- Adding in SWE for total moisture storage, conditions are even wetter for western CO and even drier for northern UT with the below normal snowpack conditions.

Reservoirs:

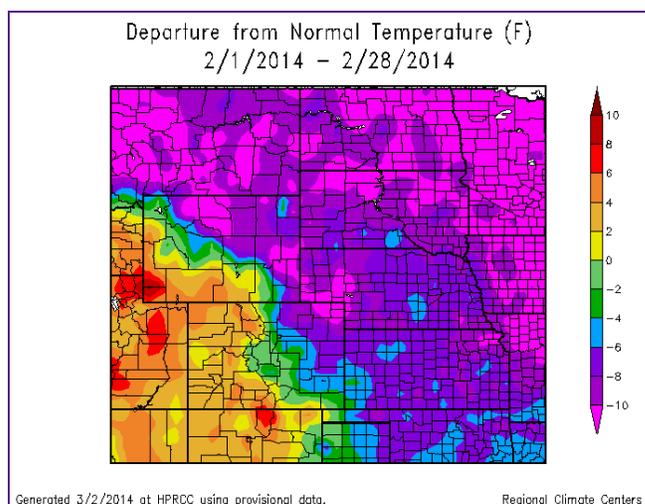
- All of the major northern reservoirs in the UCRB are near to above their March averages, ranging between 92% (Lake Granby) and 111% (Dillon Reservoir) of average

- The southern reservoirs are below average, ranging between 56% (Powell) and 74% (Navajo) of average
- Blue Mesa in the Gunnison basin increased in volume most of this winter (when it normally decreases) and is now at 99% of average
- Navajo, McPhee, and Blue Mesa have seen slight increases since the end of last month while the remaining reservoirs have seen slight decreases.

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 normal temperatures over the past week

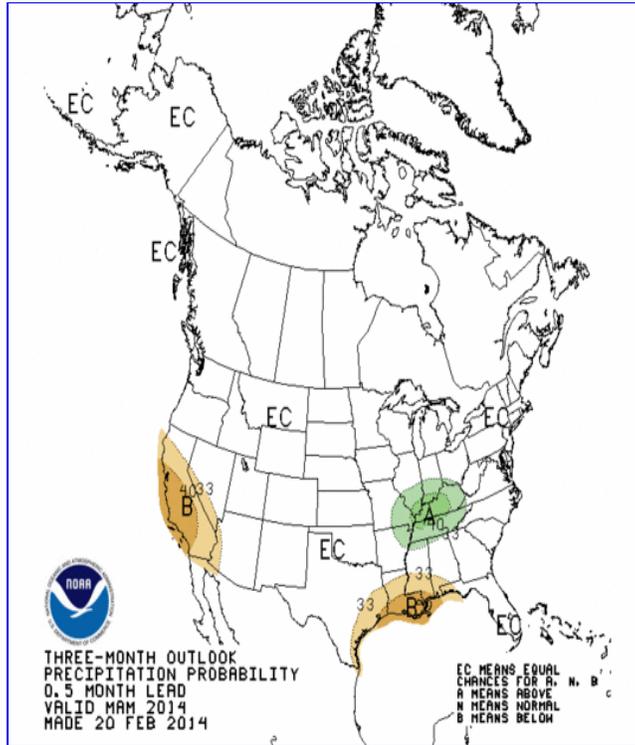
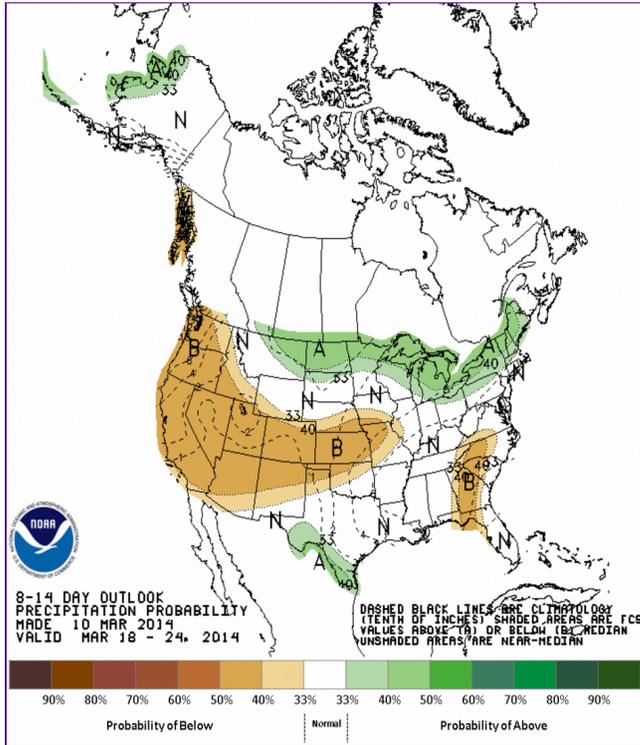
between 0 to 15 degrees above normal.

- The northern portion of the basin in SW WY, NW CO and NE UT saw 5 to 10 degrees above normal.
- The southern half of the basin mostly had 0 to 5 degrees above normal.
- East of the divide was a mix of 0 to 5 degrees below average in NE and SE CO and warming up to 0 to 5 degrees above average moving west towards the Front Range.

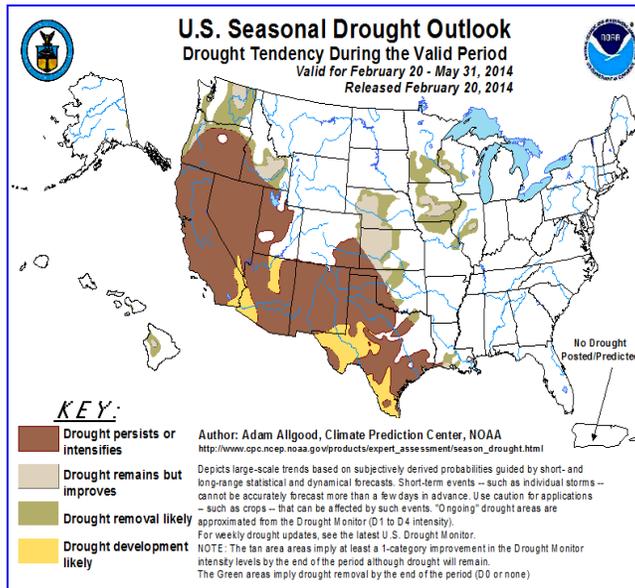
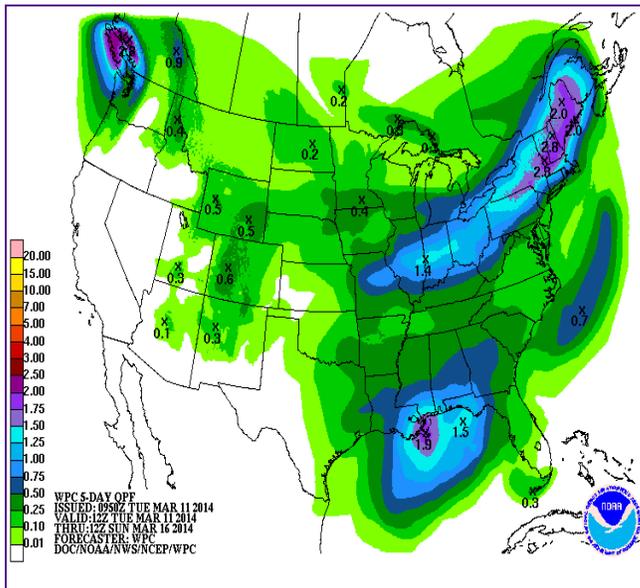
Last Month Temperatures:

- The UCRB mainly saw above normal temperatures in February ranging from near normal along the divide to 10 degrees above normal.
 - The warmest areas were in Utah and SW Wyoming with temperatures near normal to 10 degrees above normal for the month.
 - Western Colorado was mainly in the 2-4 degrees above normal range for February.
 - The Rio Grande basin was also warm with temperatures 2-8 degrees above normal.
 - East of the divide was a completely opposite situation with temperatures ranging from near normal at the divide to more than ten degrees below normal farther to the east. The effects of these cold temperatures on the plains winter wheat crop can only be assessed once it emerges from dormancy.
 - The coldest areas were in north central and eastern Wyoming as well as the NE corner of Colorado. Temperature departures moderated slightly on the SE plains of Colorado but remained 2 to 8 degrees below the February normal.
-

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:

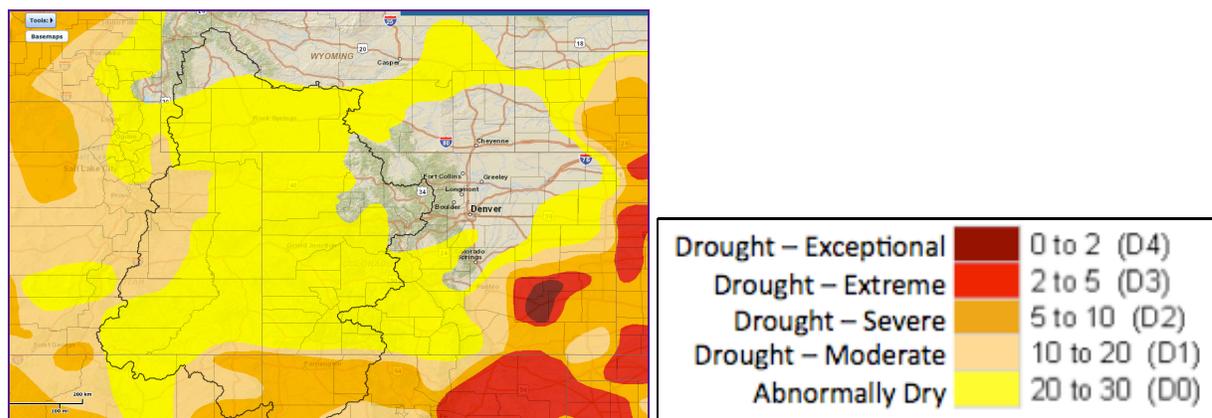
- Another fast moving system will bring 3-6 inches of snowfall in the northern mountains through Tuesday night.

- Valley areas will see light accumulations. Southwest CO and southeast UT will be partly sunny but cooler.
- This system has potential to spill over to the eastern plains and bring cooler temperature, wind and 1 - 2 inches of snow through Tuesday night. Highest accumulations are more likely along the Foothills.
- Blowing dust is expected in southeast CO with this system.
- Wednesday through Monday will mainly be dry with a chance of rain/snow late Saturday to early Sunday in eastern CO.

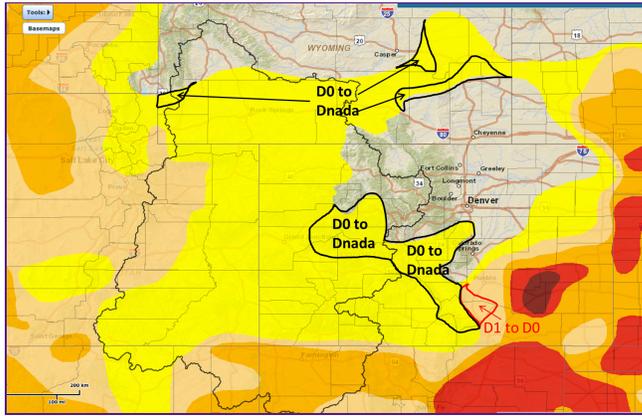
Longer Term:

- The 8-14 day precipitation outlook shows higher probability of below normal precipitation across the UCRB and eastern CO, with much of WY a chance of normal precipitation.
- The CPC 3-month outlook shows equal chances for wet, dry, or near normal conditions across the entire basin for March-April-May
- The seasonal drought outlook shows a probability of drought persisting across the western portion of the basin and across southeast CO and northern UT

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: March 11, 2014

Beneficial moisture fell in the northern and central mountains once again, helping out the already high snowpack in the Upper Colorado River mainstem and improving snowpack in the Gunnison basin, bringing improvements to the area. Once again, the Four Corners region missed out on the beneficial precipitation. The San Juan Mountains did receive some precipitation, helping the snowpack and streamflow in the San Juan River basin to increase a bit, still low.

Northeastern Utah also received very beneficial precipitation in the Wasatch Range, helping the snowpack to finally reach the normal for this date. The Uintah Range and Duchesne Basin continues to have lower than average snowpack.

East of the Divide, beneficial precipitation fell in central and southern CO to help improve conditions. The Upper Arkansas Basin snowpack is now above the normal for this date, helping to justify improvements. The lower portion of the Arkansas River Valley in eastern CO is still very dry, however is finally receiving beneficial precipitation.

Recommendations**

UCRB: With the precipitation falling this week and above average snowpack, improvements are recommended. The D0 in Eagle, Pitkin, northern Gunnison, NE Delta, eastern Mesa and Garfield Counties is to be removed.

In the northern portion of the basin in southwest WY, per Tony Bergantino, trimming of the D0 in Lincoln County is recommended.

Eastern Colorado: D1 improved to D0 in southwestern Pueblo County, and Huerfano County is recommended after receiving up to 2 inches of precipitation in the last week.

D0 to be removed from the upper Arkansas River Basin in Chaffee, Fremont,

Custer and Northern Huerfano. This improvement is also extending up into Park, Douglas, Jefferson and the southern Lake counties. Positive SPI numbers, above median SNOTEL Precipitation Percentile, and above normal snowpack percent for this area justify the improvements.

Southeastern Wyoming: Per Tony Bergantino. D0 improvement to Dnada recommended for northeast Carbon, Albany, Platte and Goshen counties.