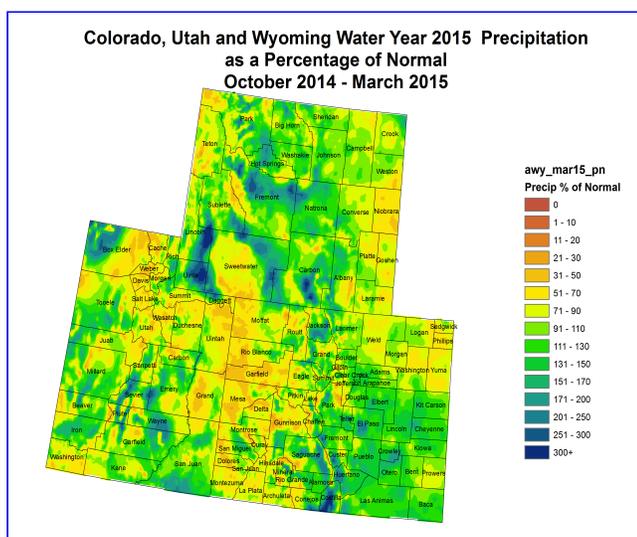
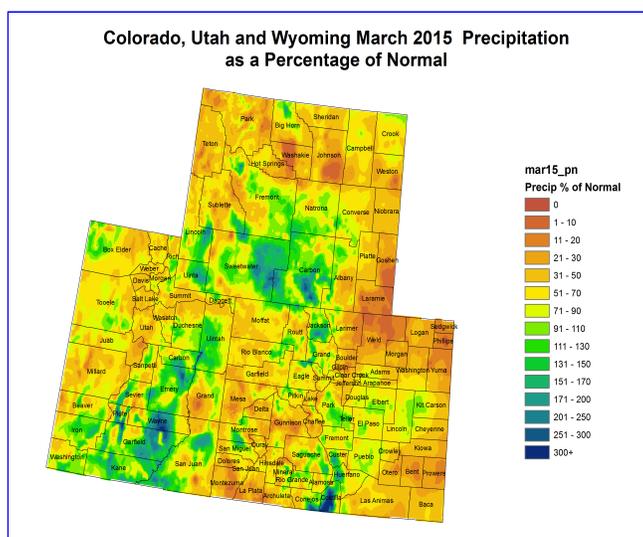
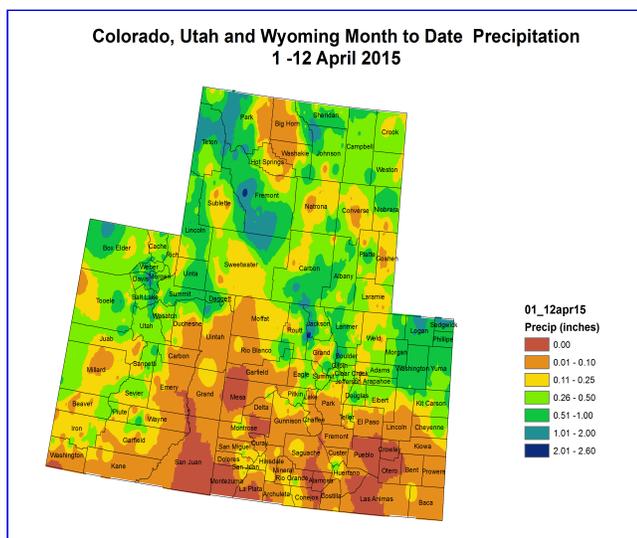
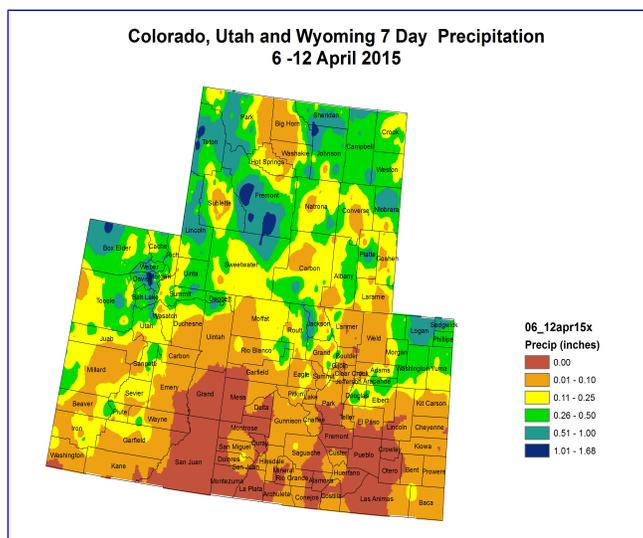


PRECIPITATION



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:

- Another fairly quiet week across the UCRB.
- The Upper Green River Basin saw the highest precipitation amounts in the UCRB last week. Totals in Lincoln and Uinta counties and the higher terrain of Sublette County for the last week were up to 0.50", with an area in Lincoln County seeing up to 1.00".
- In northeastern Utah, precipitation totals were between 0.10 and 0.50" over much of the Wasatch and northern Uintah Ranges.
- The rest of eastern Utah saw less than 0.10 inches, with Grand and San Juan Counties receiving no precipitation the last week.

- Western Colorado was also dry. The highest precipitation amounts fell over the northern Rockies, receiving up to 0.50" in Routt County, near the divide. The rest of western Colorado saw less than 0.10", with most of Mesa and Delta Counties south to the Four Corners area receiving no precipitation. The exception was a spot of 0.10-0.25" in the San Juan Mountains.
- The Rio Grande Basin in southern Colorado saw less than 0.10" over the last week.
- East of the Divide was also dry over the last week, with the exception of a line of precipitation in northeastern Colorado, that included Adams, Arapahoe, Morgan, Washington, Logan, Sedgwick, Phillips and Yuma Counties. Totals in this area were mainly in the 0.25-0.50" range, with Logan County seeing up to 1.00".
- The rest of eastern Colorado saw less than 0.10", with Fremont, Pueblo, Crowley, Otero and Las Animas seeing no precipitation.

March Precipitation:

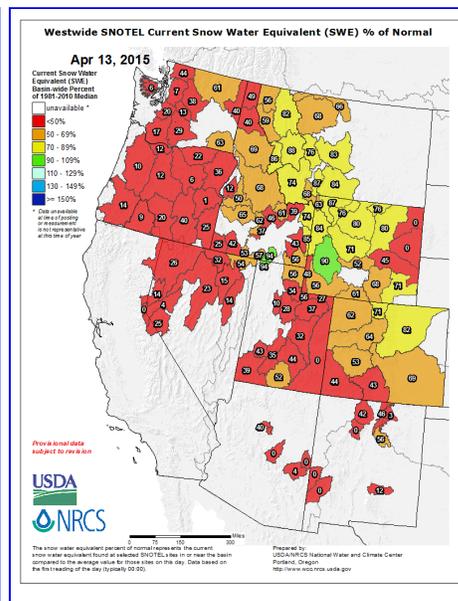
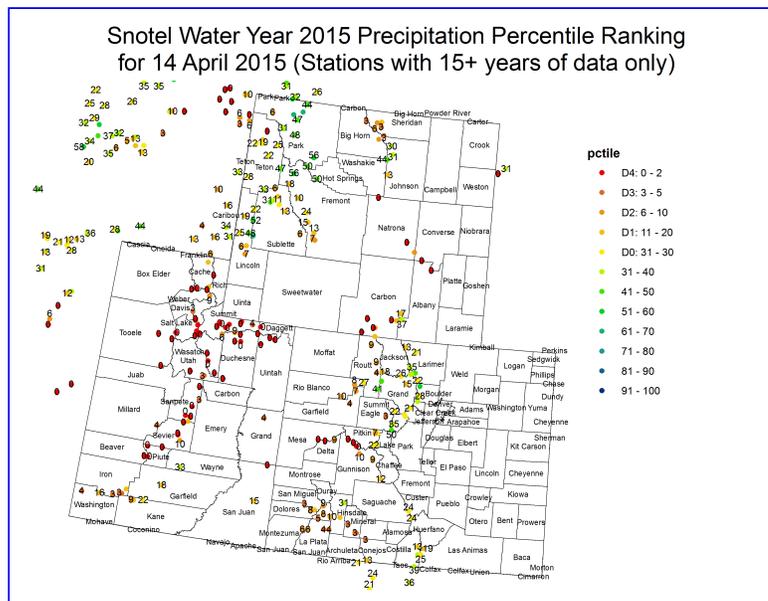
- The headwaters of the Upper Green River received below normal precipitation in most areas with a couple areas above normal in Uintah and Lincoln Counties with up to 150% of normal.
- The Duchesne Basin also received a mixed bag of above and below normal March precipitation. Most of the areas above normal are at lower elevations and do not expect as much precipitation in March. The Uintah Mountain Range only received 30-50% of normal March precipitation.
- The Western Slopes of Colorado were well below average for the month of March. In general, areas received between 30 and 70% of normal March precipitation. There were some spotty exceptions including fractions of Routt, Rio Blanco, Eagle, and Pitkin Counties. South central Montrose County and north central San Miguel County received as much as 170% of normal precipitation for the month of March. The driest areas along the western slopes of Colorado with respect to average were in the Gunnison River Basin, and right near the Four Corners.
- Much like in Utah, the central Colorado Rockies experienced a smaller than average elevational precipitation gradient for the month of march. Valley areas such as the San Luis Valley, the high plains between Cameron and Rabbit Ears Passes, and the high plains between Hoosier and Kenosha Passes experienced above average precipitation for March. In south central Costilla County over 300% of normal precipitation was realized. The higher elevations, however, averaged between 30 and 70% of average precipitation for the month of March.
- Northeast Colorado was dry for the month of March. Areas along the Palmer Divide in Douglas, Elbert, Lincoln, and Kit Carson Counties received near normal March totals at 70-110% of average. Farther north conditions were drier. Much of Weld and Larimer Counties received less than 30% of normal March precipitation.

- In southeast Colorado El Paso and Pueblo Counties received at or near average March precipitation, but farther east where areas are still struggling to come out of drought conditions were drier. Prowers, Bent, and Otero Counties were mostly below 30% of average March precipitation.

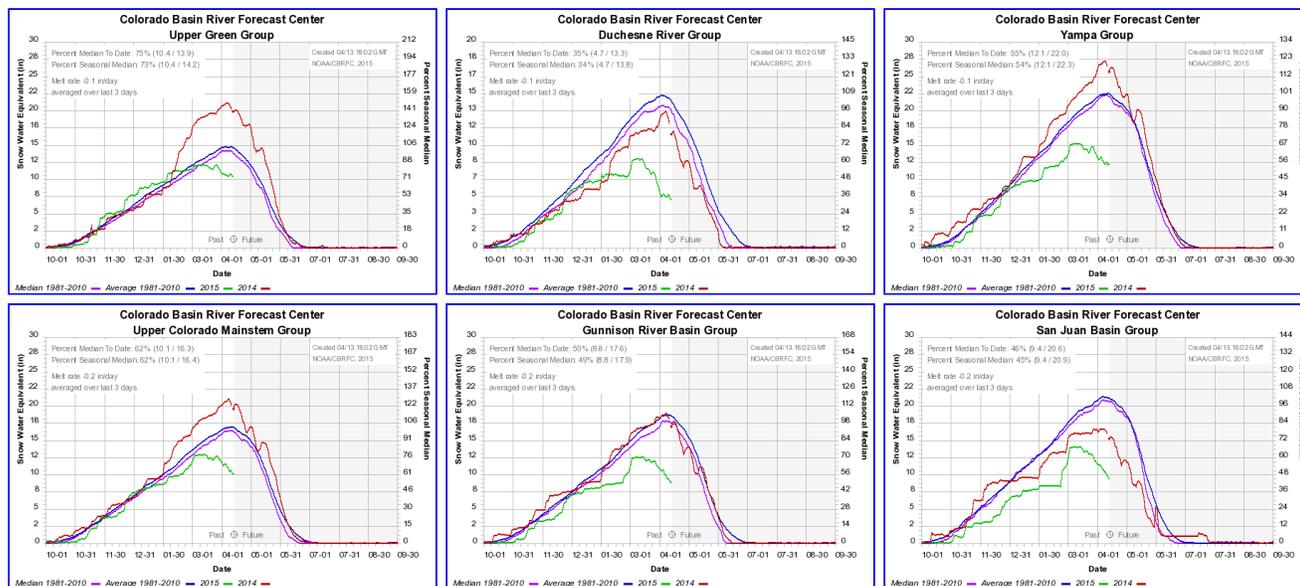
Water Year 2015 Precipitation:

- The Water Year percents of normal have fallen below average for much of the UCRB following a warm, dry winter.
- The Upper Green river basin has seen above normal moisture for the water year through with the exception of south central Sweetwater County which saw 30-90% of normal precipitation.
- Much of Colorado and the UCRB had above average moisture in the mountain valleys, and below average precipitation in the mountains over the month of March.
- The Duchesne River Basin is still near normal for the water year to date in most areas, but parts of northeast Uintah County have seen as little as 30-50% of normal precipitation for the water year to date.
- The headwaters of the Yampa/White have below normal moisture for the water year. Some areas of central Routt County are still holding on to normal precipitation for the water year to date.
- The Upper Colorado has near normal precipitation through Grand/Summit/western Eagle Counties, but dries out considerably west of the headwaters. From Central Eagle down to Mesa County, 30-110% of normal precipitation has fell for the water year through March.
- The San Juan Mountains have seen below normal precipitation for much of the water year. Some areas are near to above normal in Montrose and San Miguel Counties, but the rest of the area is below normal for the water year, mainly 50-90% of normal.
- San Juan County, Utah saw near to above normal moisture with the exception of the northern portion of the county where 50-90% of normal fell.
- The San Luis valley has had well above normal precipitation for the water year to date in some locations. Southern Costilla County has experience over 300% of normal precipitation for the water year to date.
- Much of the Eastern plains are at or above normal for the water year. The driest area is in portions of NE Colorado in Washington/Yuma/Sedgwick and Phillips County which saw 50-90% of normal for the water year.
- The SE plains have seen above normal moisture for the water year, which is much needed and welcomed considering that region has been in drought since September 2010.

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:

- With another dry week across the basin, most percentiles have dropped since last week. However, it merits considerations that there may be some problems with these data, especially in central Utah.
- In the Upper Green River Basin, precipitation percentiles are starting to drop off with recent dryness. They range from the 3rd to the 61st percentile.
- Percentiles in the Wasatch and Uintah Ranges in northern Utah are very low, currently in the 0 to 9th percentile with the vast majority of SNOTEL stations indicating an all-time low.
- There is a large gradient in SNOTEL percentiles between the higher and lower elevation stations in

the northern and central mountains. There is also an east to west gradient with the farther east stations showing higher percentiles.

- The Yampa and White River Basin are showing percentiles in the 0 to 47th percentile range.
- Along the Continental Divide, and slightly east of the divide are mostly above the median, in the 19th to 63rd percentile range.
- SNOTEL stations in the Gunnison Basin are in the 0 to 38th percentile range. The higher percentiles are near the headwaters of the Gunnison River, decreasing in the lower basin and Grand Mesa area.
- The San Juan Mountains are still well below the median in most areas for the water year to date. Precipitation Percentiles are in the 3rd to the 31st percentile range.
- The Sangre de Cristo Mountains are showing precipitation percentiles near the median, between 13th and 58th.

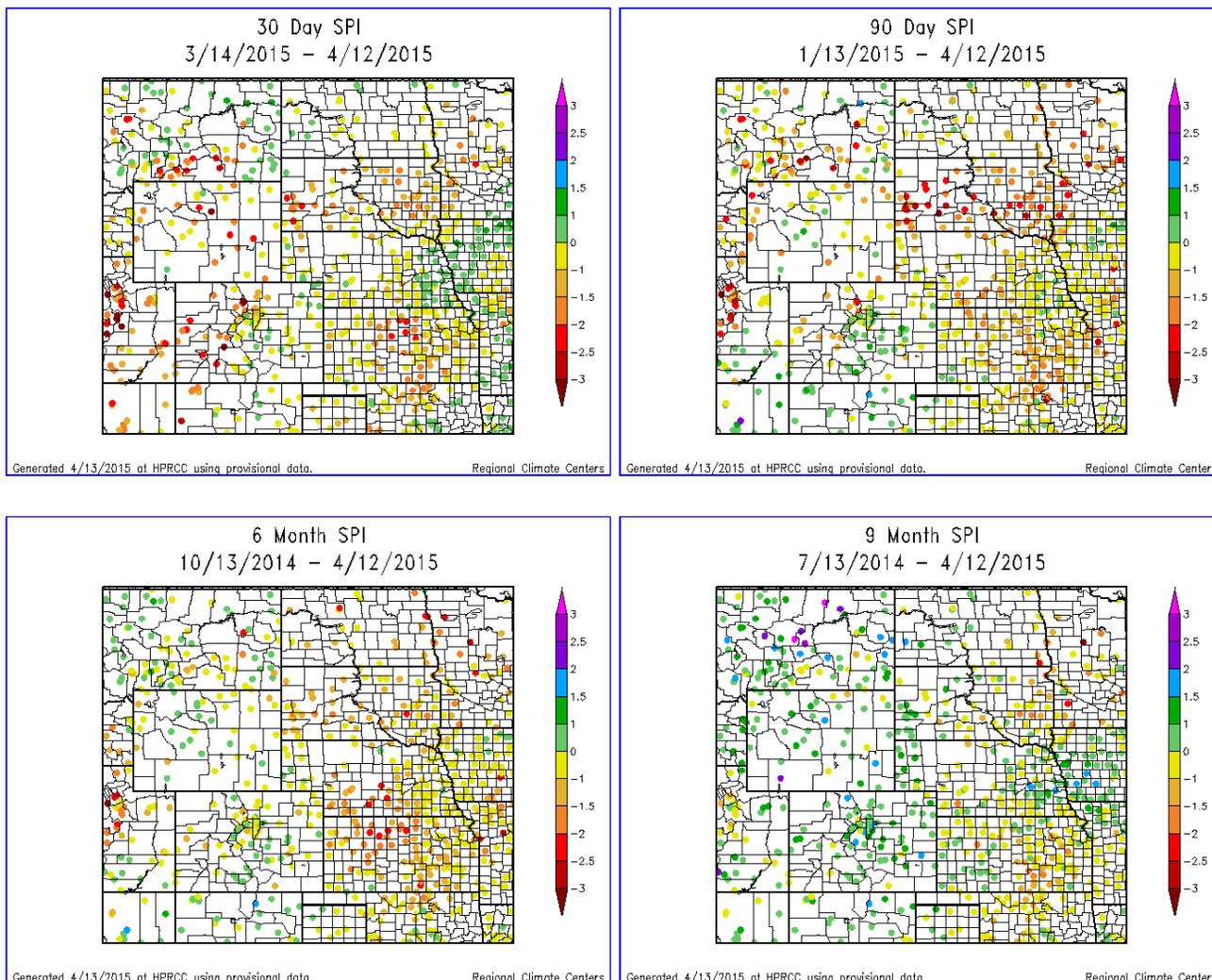
Westwide Snow Water Equivalent (SWE) Percent of Normal:

- Snowpack percent of median in the UCRB is now below normal or much below normal in almost all basins.
- Snowpack in the Upper Green River basin ranges from 48 to 90 percent of median.
- All basins in eastern Utah are much below normal, with one basin completely melted out. This area ranges from 0 to 56 percent of normal. Many SNOTEL sites in Utah have seen the earliest melt out of snow on record.
- Western Colorado ranges from 44 to 64% of the median snowpack for the date. The lowest percent of median is along the San Juan, and the highest is in the headwaters of the Colorado River, still driven by the highest elevations.
- The Rio Grande basin is at 43% of median, the Arkansas is at 69% and South Platte is at 82% of median.

SWE Timeseries Graphs:

- All sub-basins appear to have begun their melt off. This year all basins peaked a couple weeks early and much below normal.
- The Upper Green basin is at 75% of median snowpack for the date. The peak snowpack was 85% of normal.
- The Duchesne basin is at 35% of median snowpack for the date. The peak snowpack was 63% of normal.
- The Yampa-White basin is at 55% of median snowpack for the date. The peak snowpack was 68% of normal.
- The Upper Colorado basin is at 62% of median snowpack for the date. The peak snowpack was 79% of normal.
- The Gunnison basin is at 50% of median snowpack for the date. The peak snowpack was 70% of normal.
- The San Juan basin is only at 46% of median snowpack for the date. The peak snowpack was 67% of normal.

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):

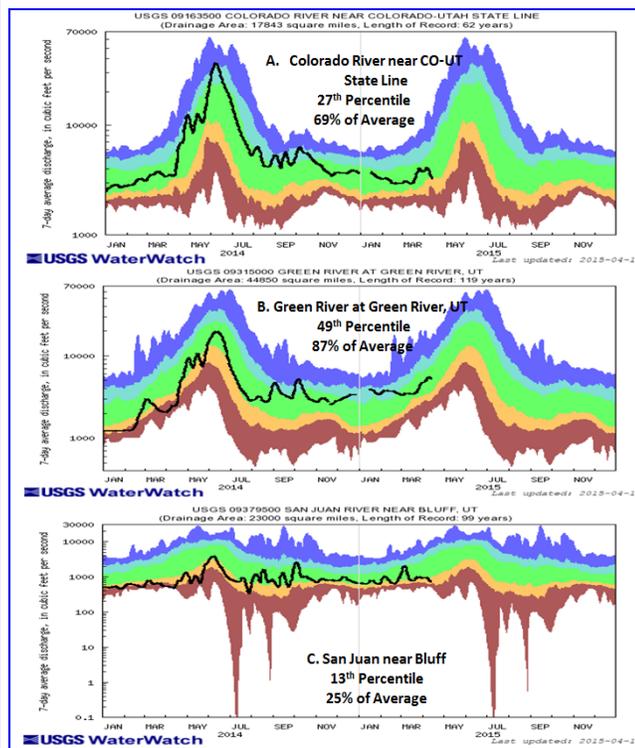
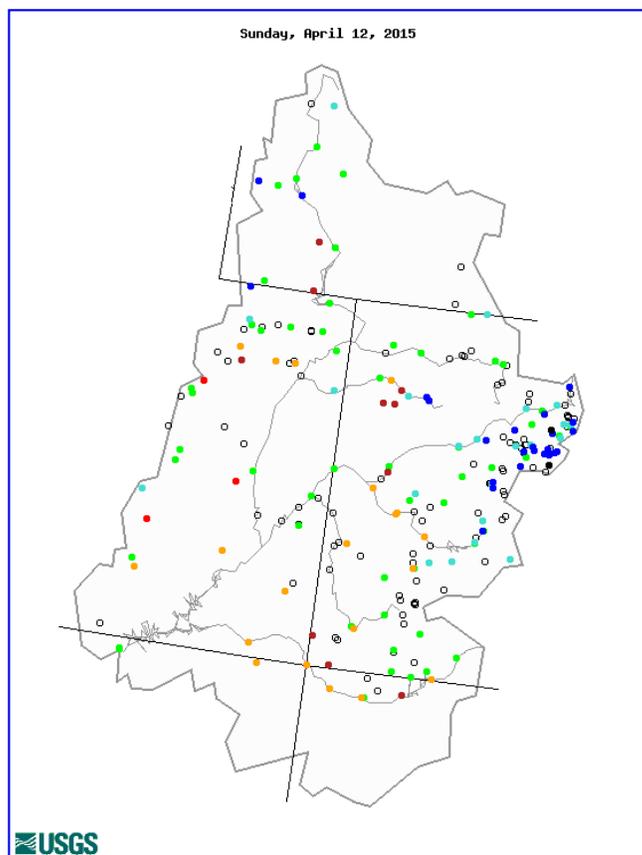
- The Upper Green river basin is showing mostly negative SPI's down to -2. One SPI in Sweetwater County is showing +1.
- Eastern Utah is now completely negative with SPI's between 0 and -3. The northern and central part of Utah are showing the worst SPI's, below -2.5.
- Western Colorado is not much better with SPI's between -1 and -2.5 for most areas with one -3 SPI in Gunnison County.
- The San Luis Valley is slightly dry for the short term with SPI's ranging from 0 to -1, with one SPI at +1.
- NE Colorado is a mix with some dry and some slight wet SPI's, between +1 and -2 with the driest areas in Larimer, Boulder, and Jefferson counties. The wettest SPI's show up in Logan, Sedgwick and Yuma Counties, where there was dryness for the past few months.
- The SE plains are also a mix of wet and dry with SPI's between -1

and +1. The exception is in Otero County where the SPI indicates conditions in the -1 to -1.5 range.

Long Term (6-month):

- The Upper Green, which has been wet on the 6 month timescale, has become dry. SPI's are between 0 and -1.5 in this region. The +1 SPI still shows up in Sweetwater County.
- NE Utah dries out even more with SPI's in the Wasatch between 0 and -2.5, and the Duchesne reporting 0 to -1.5 SPI.
- Western Colorado is now showing dry SPI's through most of the counties, between 0 and -1.5. SPI's in Summit and Lake Counties are still wetter, 0 to +1.
- East of the divide, northeastern and southeastern Colorado are showing dry SPI's, 0 to -1.5. SPI's in Lincoln, El Paso, Pueblo and Fremont Counties have wet SPI's in the 0 to +1 range.
- The Rio Grande basin is wet for long term SPI's, 0 to +1.

STREAMFLOW



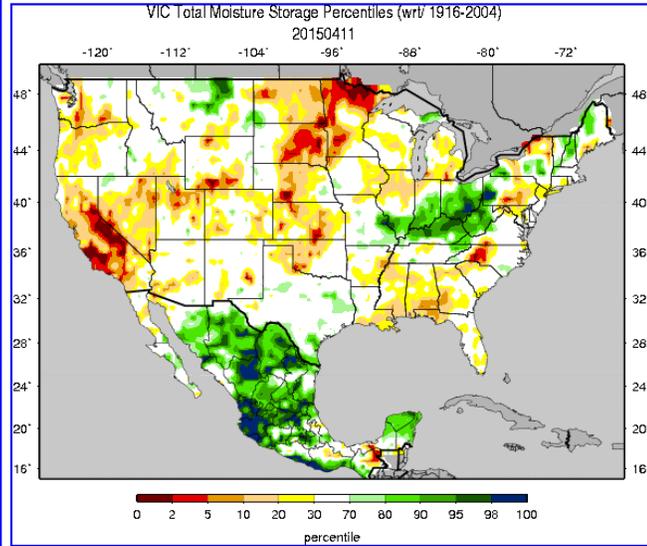
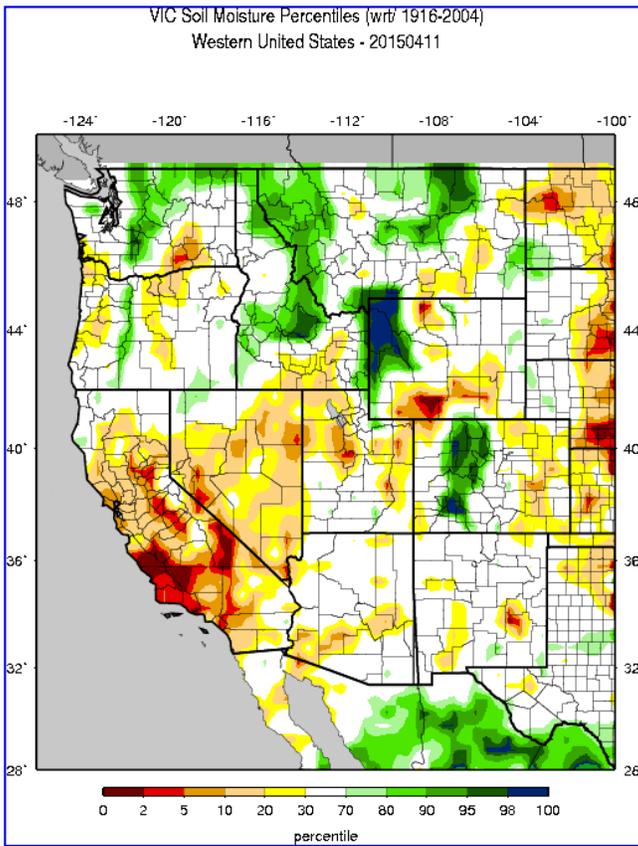
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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.

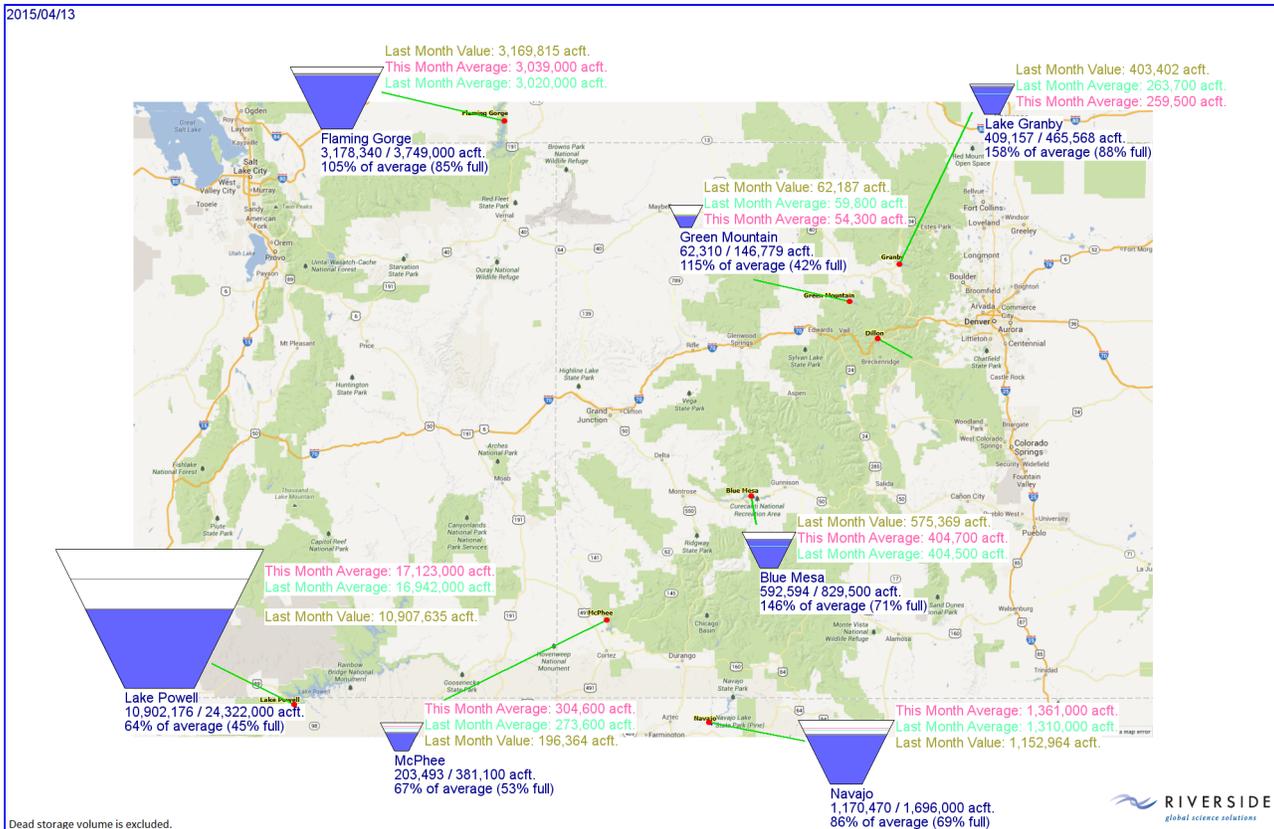
Streamflow Statistics:

- 135 of the 140 gages in the UCRB are now reporting.
 - 75% of the gages in the UCRB are reporting in the normal and above range for 7-day average streamflow. 2 gages in the Colorado River Headwaters are reporting the highest 7-day average flow on record.
 - 15% of the gages are recording below normal for 7-day average streamflow, 7% in the much below normal and 2% of gages are the lowest 7-day average streamflow.
 - The lowest streamflows are the San Juan River Basin, the Duchesne River and the White River basin.
 - Streamflow on the Colorado River near the CO-UT state line is just hanging on in the normal range, currently at the 27th percentile, 69% of average.
 - The Green River at Green River, UT has increased to the 49th percentile(normal range), 87% of average.
 - The San Juan River near Bluff, UT has dropped to below normal flows, at the 13th percentile (25% of average).
-

SURFACE WATER



The top left image shows VIC modeled soil moisture as a percentile ranking. The top right image shows VIC plus SWE total soil moisture storage.



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.

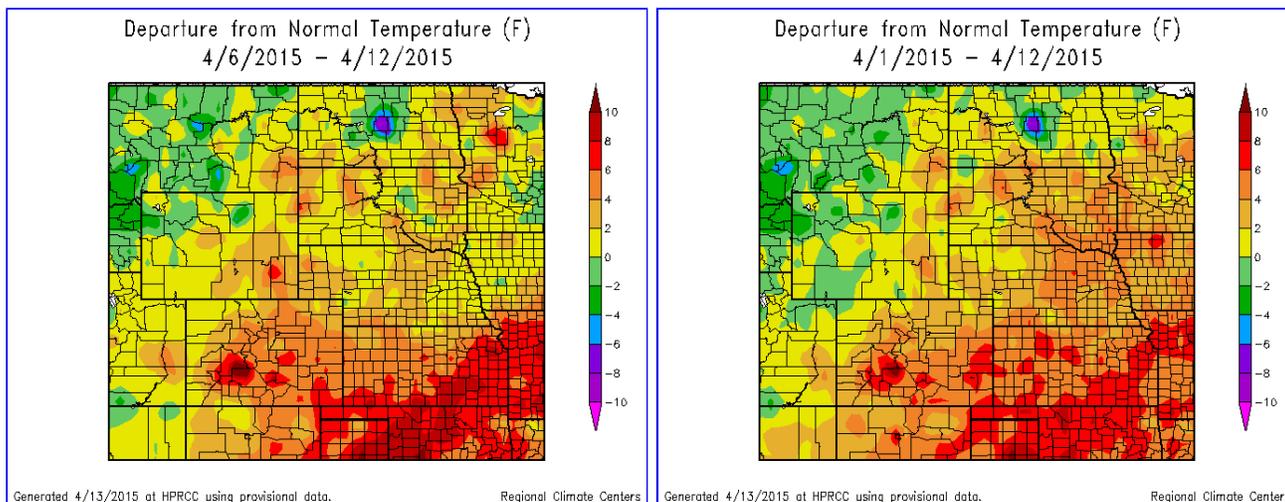
VIC:

- Sweetwater County, WY has been shown as dry by the VIC for a considerable amount of time and continues to depict soils in the 0-30th percentile range over much of the south and eastern part of the county.
- There are some very wet soils in the Upper Green River Basin. Near the Wyoming-Utah state line soil moisture is in the 70-100th percentile range.
- Northeastern UT is now showing drying soils over much of Uintah and Duchesne counties, in the 2nd-30th percentile range. The Wasatch range is still showing normal soils, however the dryness is moving into this area.
- Western CO is still showing a large area of above average soil moisture over the 70th percentile. The highest percentiles are in Routt County. This is unfortunately due to early snowmelt. This wet area is not present in the VIC soil moisture + snow water equivalent graphic.
- The San Juan Mountain region is mostly in the normal range with some isolated areas above the 90th percentile in Ouray county. A dry area of 10th to 30th percentile has popped up in the Four Corners area of Colorado..
- The San Luis Valley is in the normal range.
- The eastern plains are now showing drying soils over much of eastern Colorado, in the 10th to 30th percentile range.
- The Front Range and Denver Metro is still showing normal to wetter soils, especially closer to the divide. Sedgwick County, along with a pocket in Cheyenne, Kiowa and Prowers counties is showing normal soil moistures.

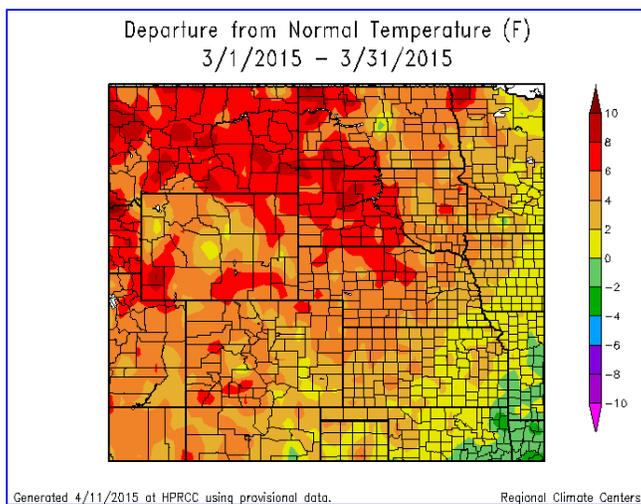
Reservoirs:

- Flaming Gorge is 105% of the April average.
- Green Mtn is 115% of the April average.
- Lake Granby is 158% of the April average.
- Blue Mesa is 146% of the April average.
- Navajo is 86% of the April average.
- McPhee is 67% of the April average.
- Lake Powell is 64% of the April average and is only 45% full.

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.



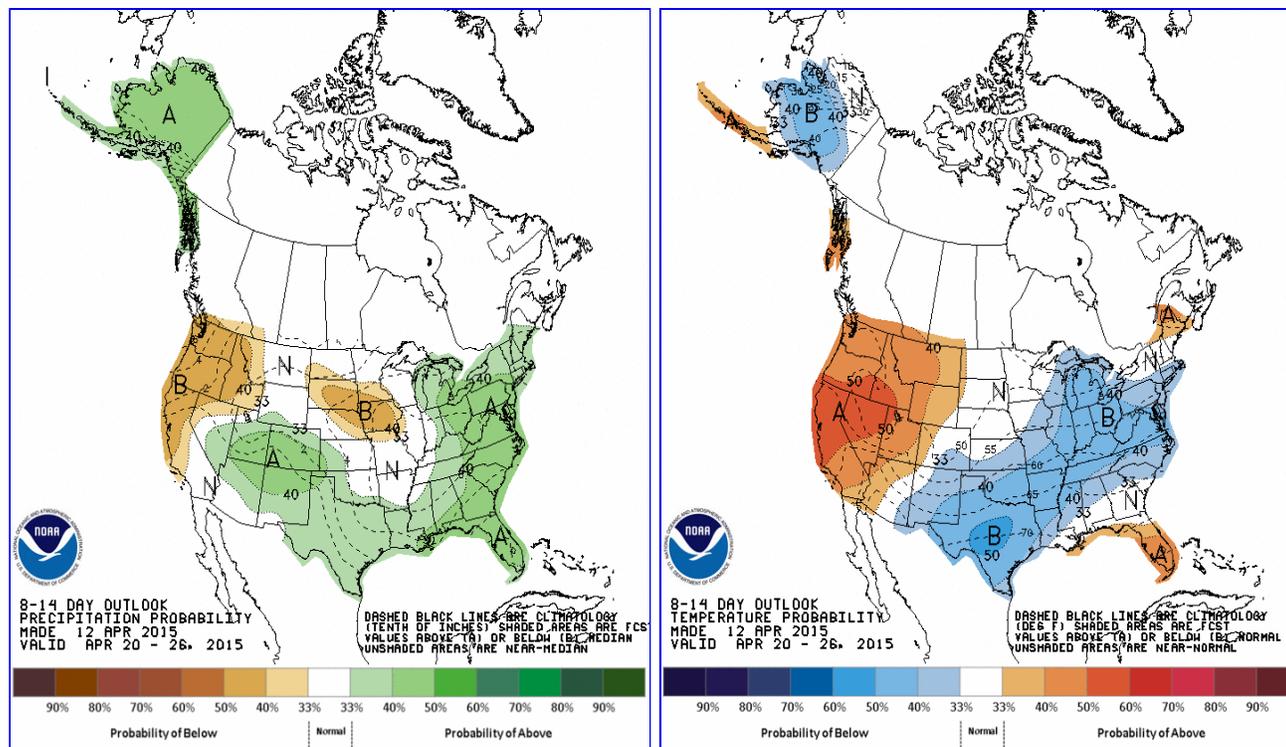
Last Week Temperatures:

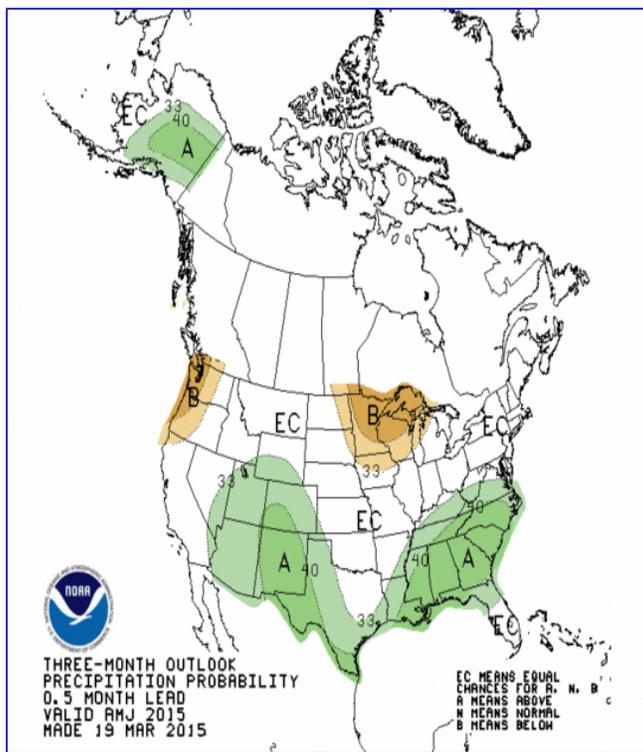
- The UCRB and all the rest of Colorado saw above normal temperatures over the past week for another week with a very small exception in the Upper Green River, only 0 to 2 degrees below average.
- Most of southwestern Wyoming and eastern Utah saw temperatures 0 to 2 degrees above normal. Grand, Emery and northern San Juan Counties in Utah saw temperatures 2 to 6 degrees warmer than normal.
- Western Colorado saw temperatures 2 to 6 degrees above normal through much of the area, while along the CO-UT line was 0 to 2 degrees warmer. The upper Gunnison River and into the northern San Luis Valley was much warmer, seeing temperatures 6 to greater than 10 degrees above average.
- East of the divide mostly saw temperatures in the 4 to 6 degrees above average range. Northeastern Colorado was only 2 to 4 degrees above average, while southeastern Colorado was 6 to 8 degrees above average.

March Temperatures:

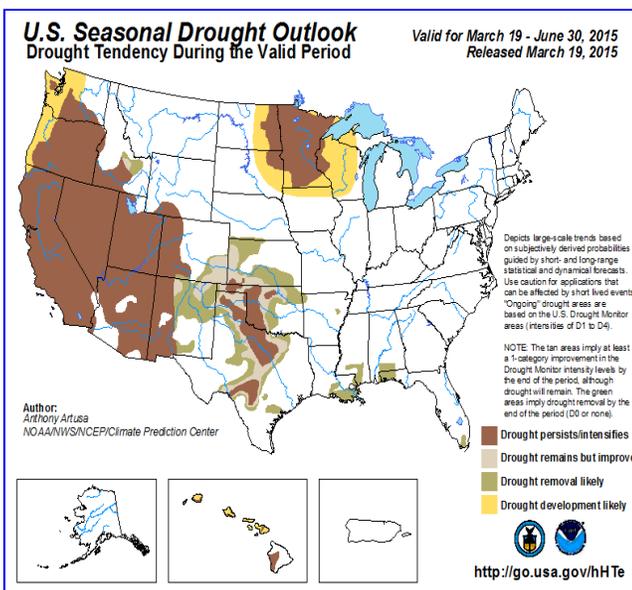
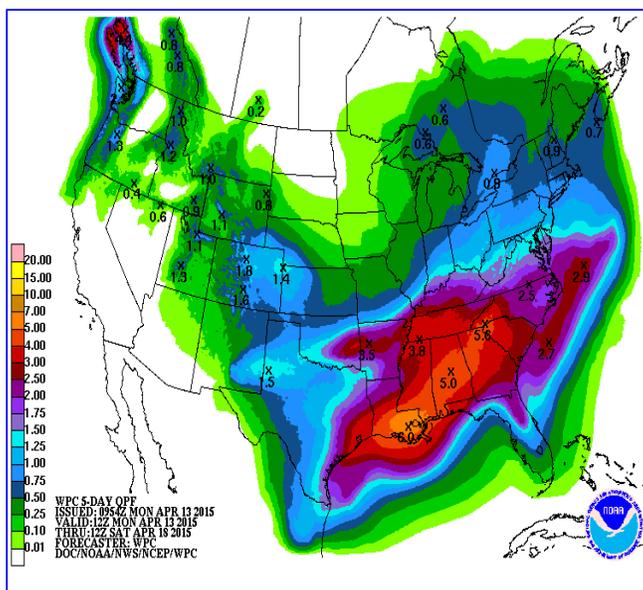
- The month of March yielded above average temperatures for the entirety of the UCRB and eastern Colorado.
- The Upper Green basin was 4-10 degrees above normal for the month. These were the highest temperature anomalies in the region.
- The Wasatch and Uintah ranges were as well as the Duchesne Basin were 4-6 degrees above average for the month of March.
- The Yampa/White/Colorado/Gunnison basins were 4-8 degrees above normal.
- Southeast Colorado was 4-8 degrees above average for the month of March. The highest temperature anomalies were in the Rio Grande Basin in Hinsdale, Mineral, and Rio Grande Counties.
- The San Luis valley was also warm with temperatures 2-6 degrees above normal for the month.
- East of the divide temperature departures from normal weren't quite as high as west of the divide. Temperatures were 0 to 8 degrees above normal. The highest anomalies east of the divide were in northeast Weld County, and the nearest to normal conditions were in Lincoln, Crowley, and Otero Counties.

FORECAST AND OUTLOOK





The top two images show Climate Prediction Center's Precipitation and Temperature outlooks for 8 - 14 days. The middle image shows the 3 months Precipitation outlook. 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: (4/14)

- A cooling trend is imminent for the Upper Colorado River Basin and Colorado east of the divide. The upper level ridge that has dominated conditions is shifting east and a front has begun to enter the northwest side portion of the UCRB. Conditions will be blustery for the UCRB today and tonight with snow showers likely in the

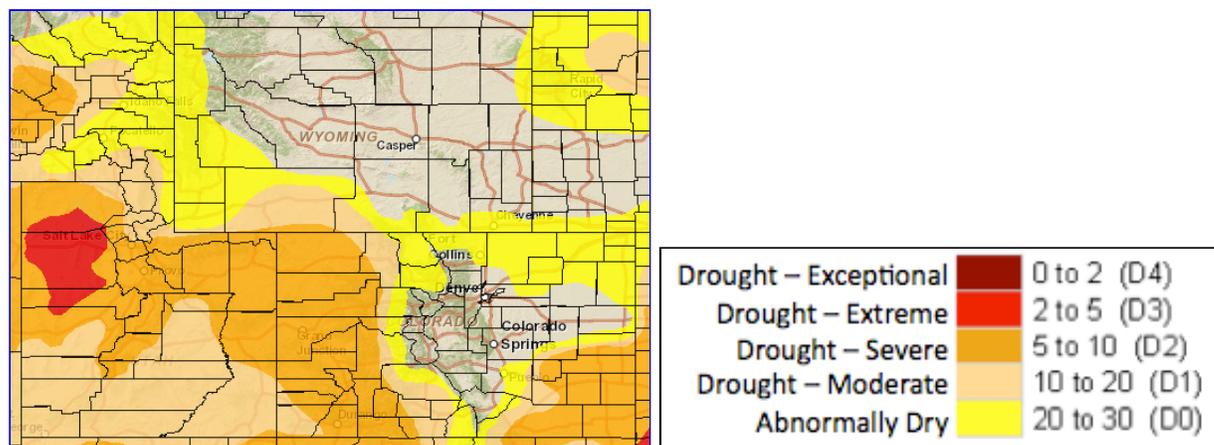
mountains. Conditions for precipitation are most favorable tonight in the Wasatch Range.

- On Wednesday cooler than average condition will set in behind the front across the UCRB. Continued snowfall is likely, especially in the Upper Green River Basin. Snow looks likely for the northwest Rockies as well. East of the divide conditions will be dry and blustery tomorrow morning as the cold front pushes through with a downslope component. This initial wave of energy is forecast to initiate showers along the palmer divide. As these showers move south and east over a fairly moist regime a marginal risk of severity is forecast by the SPC. Precipitation should hold off until later in the evening for the Front Range as upslope conditions develop behind the front.
- Thursday and Friday cooler than average conditions will persist over Colorado and the Upper Colorado River Basin. Most precipitation that falls with the exception of the far eastern plains of Colorado is likely to be snow. Model uncertainty in precipitation totals over this time frame is off the charts, so be ready for anything! Most recent precipitation forecasts are most bullish for the southern Rockies and southeast plains.
- The warming and drying trend is forecast to begin the soonest for southeast Utah, but the cool air will linger for several days. A very flat ridge builds in by Sunday with the most certainty of warming across southern Utah and southern Colorado. On Monday another circulation tracks across the Great Basin and we brace for more possibilities of rain and heavy snow across the UCRB and eastern Colorado.

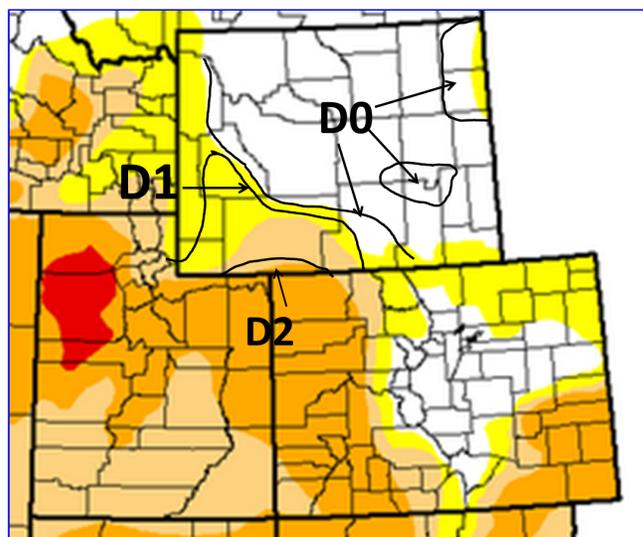
Longer Term:

- The 8-14 day precipitation outlook shows increased chances for above average precipitation for the entirety of Colorado and the UCRB. These chances are most highly enhanced in southeast Utah and southern Colorado.
- The 8-14 day temperature outlook shows increased chances of above average temperatures for eastern Utah and southwest Wyoming, but increased chances for below average temperatures in southeast Colorado.
- The Climate Prediction Center 3-month precipitation outlook shows increased chances for above normal precipitation for the entirety of the UCRB, and the area in Colorado east of the divide for the April to June period with the exception of the northeast corner of Colorado. These chances are highest in southern and western Colorado. This forecast has been made more conservative following a dry March.
- The seasonal drought outlook indicates that drought is expected to persist or intensify in western Colorado and eastern Utah. Drought improvement and removal is forecast as likely for southeast Colorado.

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 April 14, 2015:

It was another warm and dry week through the Upper Colorado River Basin. Parts of the Upper Green Basin received the bulk of precipitation for the UCRB last week. Snowpack in the basin has continued to melt out much earlier than normal. Most sub-basins saw an early below normal peak. In Utah, Snotel sites are seeing the earliest melt out of snow on record, thanks to low snow totals and an early warm up.

Water supplies through the basin seem to be in good shape and should be good through the basin through the summer.

East of the Divide was also dry and warm. Northeastern Colorado was the only area in the region to receive beneficial precipitation. This was much needed after seeing dryness the last few months, however not enough to warrant any improvements. The South Platte and Arkansas Basins saw better snowpack numbers than the UCRB, however the peak of the basins were still lower and earlier than normal.

A storm is on the horizon for Colorado. The largest impacts will mostly be in southeastern Colorado. It will bring cooler temperatures and a chance of snow to the high country. The storm is not expected to help out the low snowpack, but will slow the melt down to keep snowpack steady during the storm.

Recommendations:

UCRB: We are recommending degradations in the Upper Green River Basin. The D0 should be brought north in Carbon County. D1 to be brought north in Carbon and Sweetwater counties and into Sublette, Lincoln and Uinta counties. Finally, the D2 in Sweetwater County should be brought north. Even though there was some precipitation in the area last week, most of the degradations were missed by the precipitation and a result of low snowpack and warm temperatures.

Status quo for the rest of the UCRB. If dryness continues in the Four Corners area over the next few weeks, further degradations will be recommended.

Eastern CO: Status quo for eastern Colorado.

Wyoming: An introduction of D0 into northern Platte, Albany and Carbon counties, southeast Natrona and southwestern Converse Counties. The D0 in Crook and Weston Counties should be brought west to cover most of the counties.