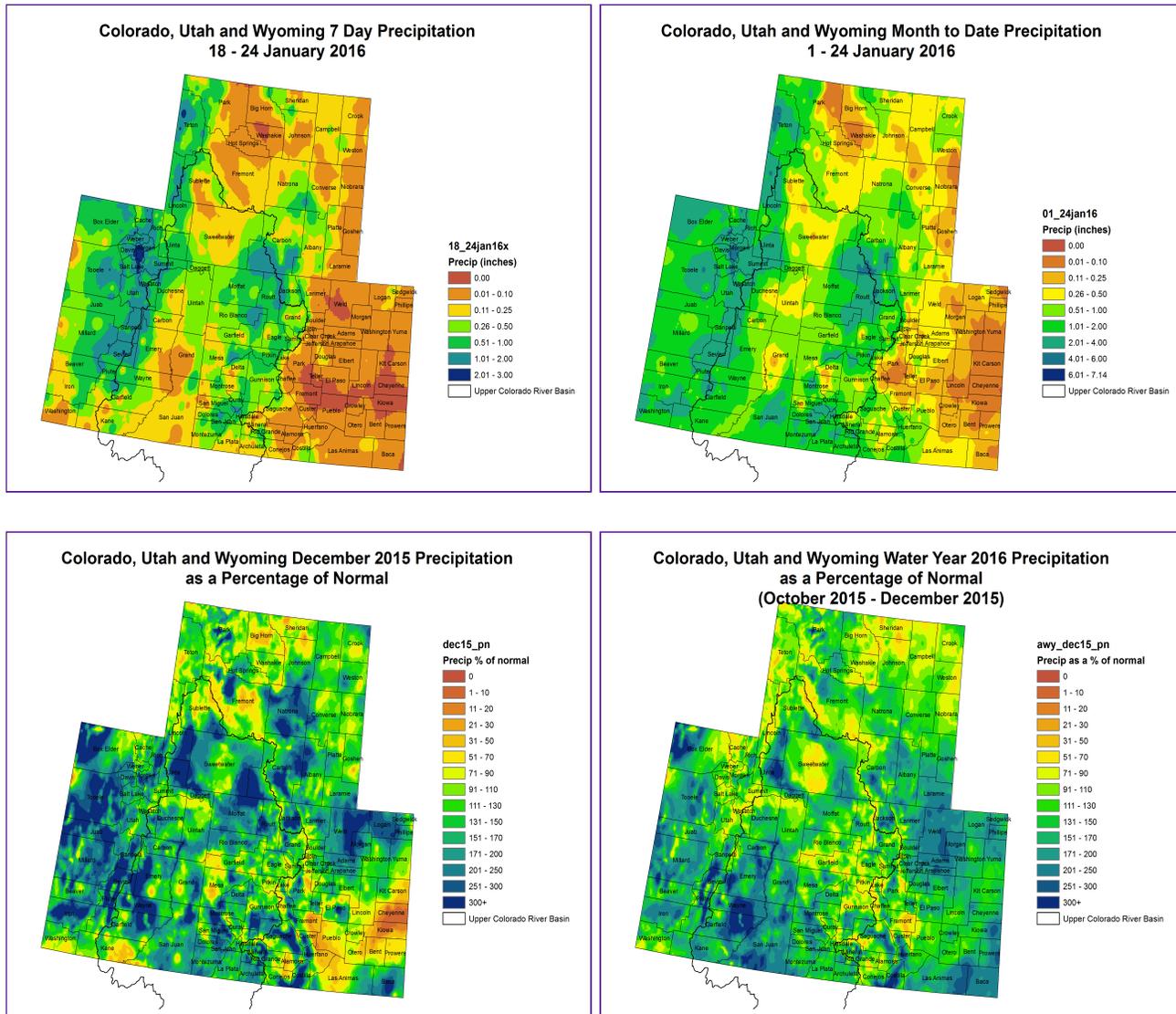


PRECIPITATION



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:

- The UCRB had an average to moderately wet week of precipitation with areas east of the divide remaining dry.
- The Upper Green River Basin was a mix of wet and dry that scaled with elevation. Lincoln and Uintah Counties were mostly above 0.50" for the week. Sweetwater County was largely in the 0.11-0.25" range.
- The high elevations of Utah had a good week of moisture. Over 0.50" fell through the Uintahs. Areas farther south in Grand and San Juan Counties experienced 0-0.25" of precipitation over the past

week.

- It was a fruitful week for most of western Colorado with most of the low-lying areas picking up at least 0.25". Headwaters of the Yampa and White Basins received 1.00-2.00" of precipitation. The Elk and San Juan Mountain Ranges picked up over 0.50".
- The San Luis Valley Received mostly 0-0.25" with parts of the Sangre de Cristos receiving a little more.
- East of the divide conditions were very dry. A couple small areas such as along the Palmer Divide picked up over 0.10", but most of the eastern portion of the state received less than that. Much of the Arkansas River Basin had no precipitation at all.

December Precipitation:

- December for the Upper Colorado River Basin was mostly in the normal range at 70-130% of normal. One area in northern Mesa County was over 300% of normal, as was an area in Grand County, Utah. Some portions of western Garfield and Mesa counties, however, were below 50% of normal.
- The Yampa and North Platte river basins both received above-average precipitation for the month of December, as did the Green River basin in Wyoming. There were a few areas in central Sweetwater County that only reached into the 70% of normal range.
- December precipitation for eastern Utah was, for the most part, at or above normal. A few standouts were areas in Emery, Grand, Kane, and southwestern San Juan counties that were only in the 20-30% of normal range, while large areas in Emery, Wayne, and Garfield counties were 300+% of normal, as were a couple of spots in Grand and San Juan counties.
- Southwestern Colorado was also at or above normal in terms of precipitation, with a dry spot in the Rio Grande River basin.
- Eastern Colorado was generally above normal for precip in the northeast and southeast corners, and much below normal in east-central Colorado. Areas in Cheyenne and Kiowa counties were as low as the 10% of normal range, while the corners of the state were over 300% of normal.

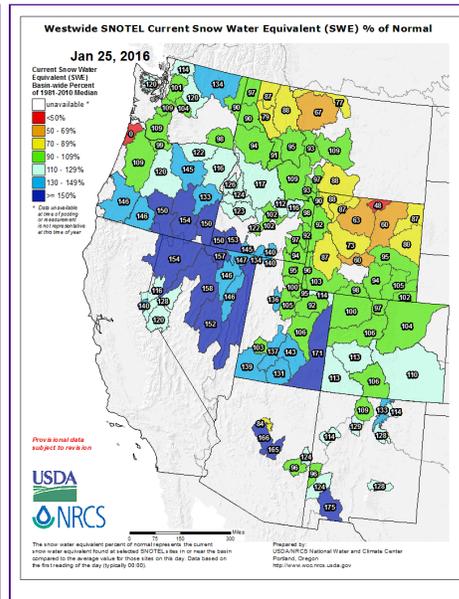
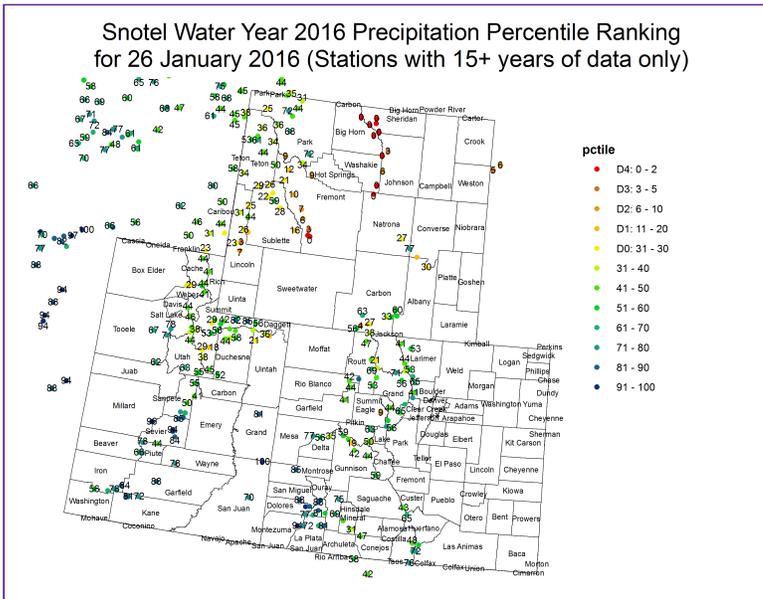
Water Year 2015 Precipitation (Oct-Sep):

- As a result of a very wet Spring, Colorado east of the divide is still above average across the board for the water year to date with a few small exceptions. Isolated areas of Custer and Huerfano Counties are showing below 100% of average.
- The UCRB is mostly close to, but a little below normal for the water year to date.
- Most of the Upper Green River Basin is between 50 and 90% of normal for the water year to date. Central Sweetwater County is in great shape at over 110% of normal.
- Northeastern Utah is mostly between 75 and 100% of normal for the water year to date. Farther to the west over higher terrain

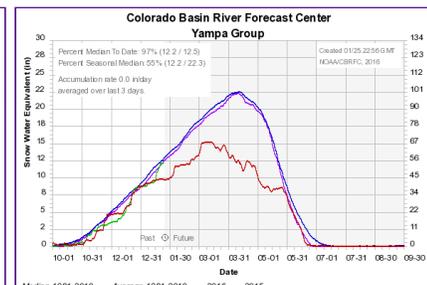
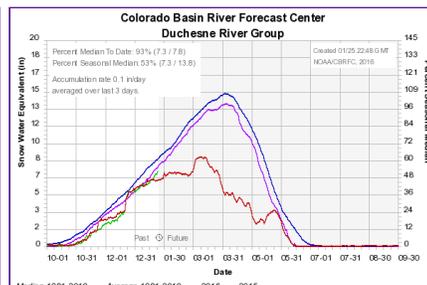
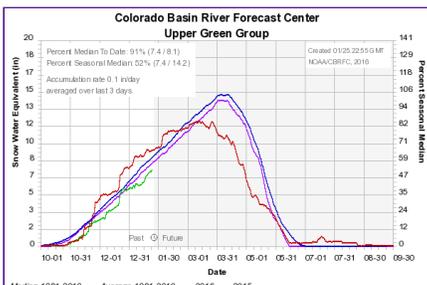
percentages are a little lower at between 50 and 75%.

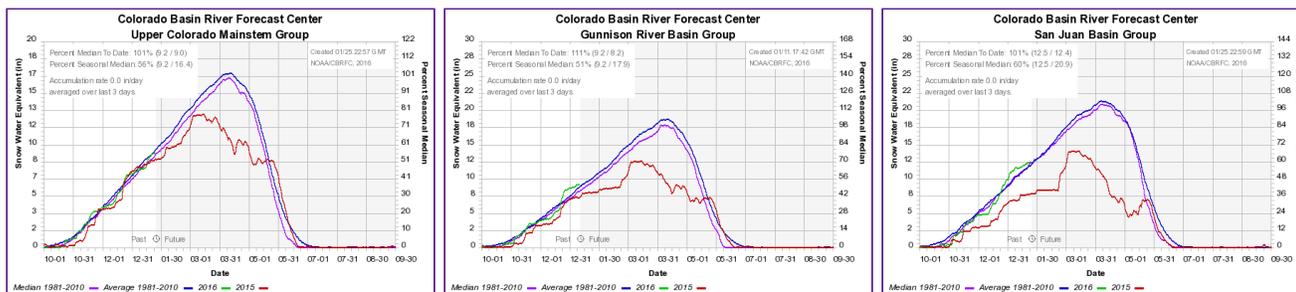
- Southeastern Utah has balanced out to a fairly typical water year to date. The area is between 75 and 125% of normal.
- AHAPS indicates a very dry band in Conejos, Rio Grande, Mineral, and southwest Saguache Counties. Here precipitation is less than 50% of average for the water year to date. Radar does tend to struggle in this area, so it may be worth taking another look at when our precipitation figures update. Most of western Colorado is just slightly dry. The area is between 75 and 110% of normal for the water year to date.
- The Rio Grande Basin is now showing a mixed bag of above and below normal water year to date conditions. Southern Costilla County is doing very well at over 150% of normal for the water year to date.

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).





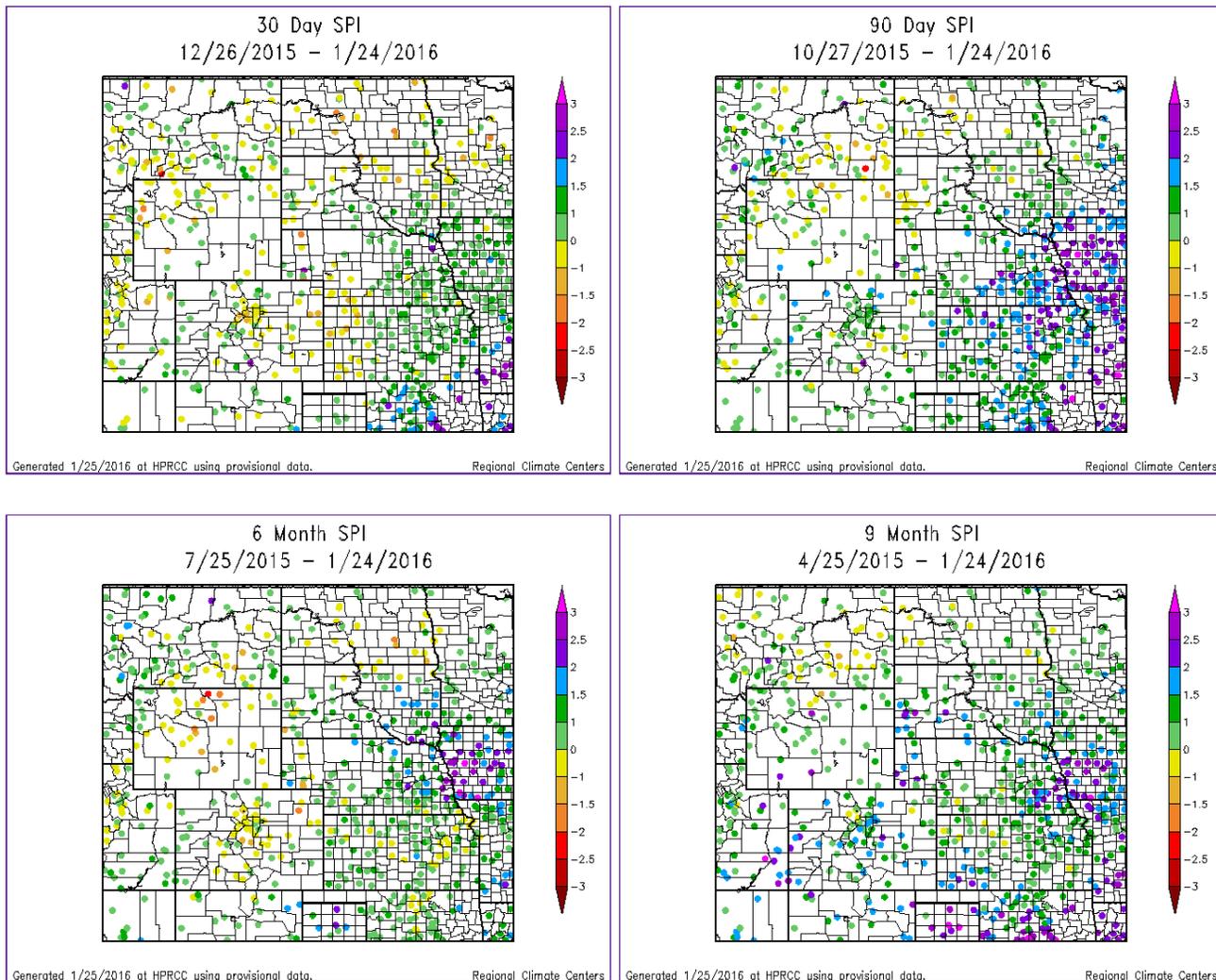
SNOTEL Precipitation Percentiles:

- SNOTEL Water Year precipitation percentiles in the Upper Green Basin are mostly below the median. Percentiles in the northern portions of Sublette County are mostly in the 20-40th percentile range. Percentiles in Lincoln and southern Sublette counties are below the 20th percentile.
- The Uintah Range is in the average range, but there is a lot of spread. SNOTEL water year to date percentiles are between 21st and 85th.
- In the Wasatch Range there is a gradient from north to south with the northernmost percentiles being the lowest. The southern Wasatch Range and all SNOTEL precipitation percentiles in southeast Utah are well above average with one exception in Plute County.
- The northern Rockies in Colorado extending into Wyoming percentiles are in the normal range. A few percentiles in Routt, Larimer and along the Divide in Grand counties, are above the 60th percentile. There is one lingering anomaly at the 4th percentile that may be an error.
- The Rockies of central Colorado have fallen a little in percentile ranking, but are still in pretty good shape. There is an anomaly in Eagle County at the 9th percentile, but the rest range from the 19th to 63rd percentile.
- The San Juans are well above average for the water year to date. Percentiles are above the median, with most above the 70th percentile. Percentiles in Mineral and Hinsdale Counties are lagging behind a little bit.
- The Sangre de Cristos are slightly above average, and range from 43-76.

SWE Timeseries Graphs:

- Most river basins stayed right about on track with median snowfall numbers through the week. The biggest rise with respect to the median was the Yampa River Basin (+4%), and the biggest fall was in the San Juan River Basin (-4%).
- The Upper Green Basin is slightly below normal, at 91% of median snowpack for the season to date.
- The Duchesne basin is at 93% of median snowpack.
- The Yampa River Basin is at 97% of median snowpack to date.
- The Upper Colorado River Mainstem is now at 101% of median snowpack.
- The Gunnison Basin is at 111% of median snowpack for the season to date.
- The San Juan Basin is at 101% of median snowpack to date.

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 in the UCRB are mostly in the normal range (-1 to +1) over the past 30 days.
- The Green River Basin is nearly all in the normal range with one SPI in northern Sweetwater County of -1.5 to -1.
- Northeastern Utah is showing SPIs that are a bit low. Most are between -1 and 0, but a couple are between -1.5 and -1.
- Southeast Utah is also showing SPIs primarily between 0 and +1. There are a couple SPIs between -1 and 0 and between +1 and +1.5.
- Western Colorado is showing mostly favorable SPIs following last week's precipitation. All along the western side of the state SPIs range from 0 to +1.5. Near the divide in Summit, Park, and Clear Creek Counties SPIs dry out quite a bit. Here SPIs range from -1.5 to 0.
- Eastern Colorado 30-day SPIs are now mostly in the dry range. Only Larimer, Weld, Logan and Pueblo counties are showing

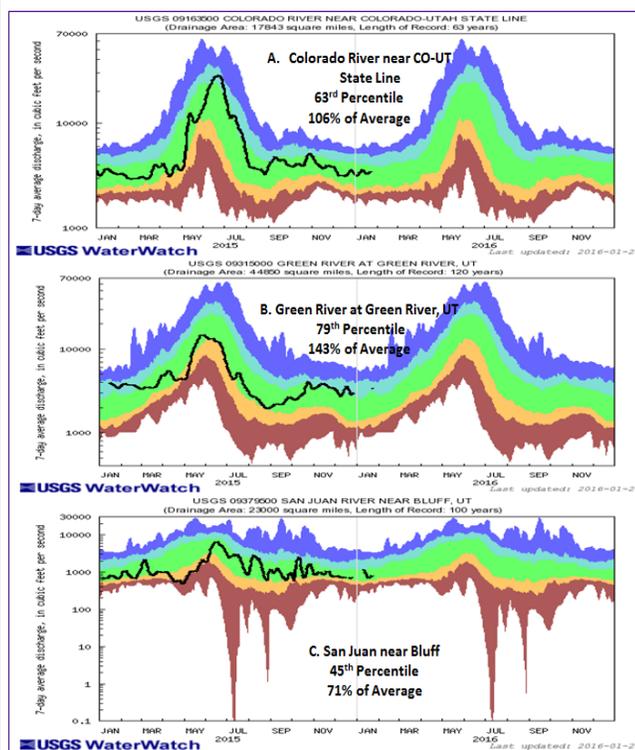
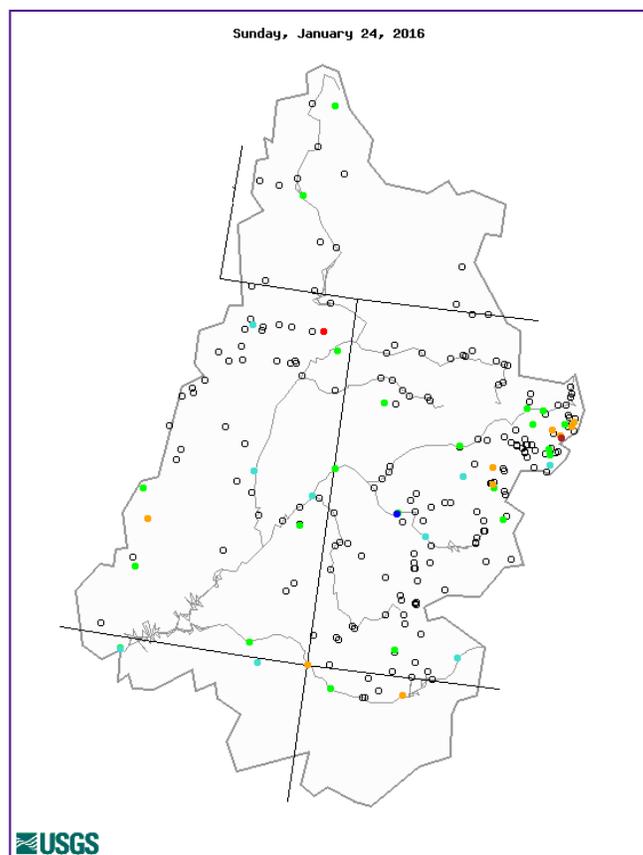
positive SPIs, mainly in the 0 to +1 range, Larimer County is in the +1 to +1.5 range. All other SPIs are in the 0 to -1 range, with a few between -1 and -2.

- The Rio Grande Basin showing SPIs that are all positive. One SPI in eastern Alamosa County is above +3.

Long Term (6-month):

- 6-month SPIs in the UCRB are trending a bit on the wetter side for lower elevations and a bit on the drier side for higher elevations.
- The Upper Green River basin is in the normal range with SPIs between -1 and +1.
- Eastern Utah 6-month SPIs are mostly wet with the vast majority of SPIs between 0 and +1.5.
- Western Colorado is showing SPIs mostly between -1 and +1. The driest SPIs show up in Grand, Summit, Lake, and Gunnison Counties.
- The San Luis Valley is showing 6-month SPIs in the normal range.
- East of the divide the majority of 6-month SPIs are between -1 and +1. The northeast corner of the state is still showing some long-term dryness with SPIs down to -2. There are patches of dryness in Park, Crowley, El Paso, and Pueblo Counties as well.

STREAMFLOW



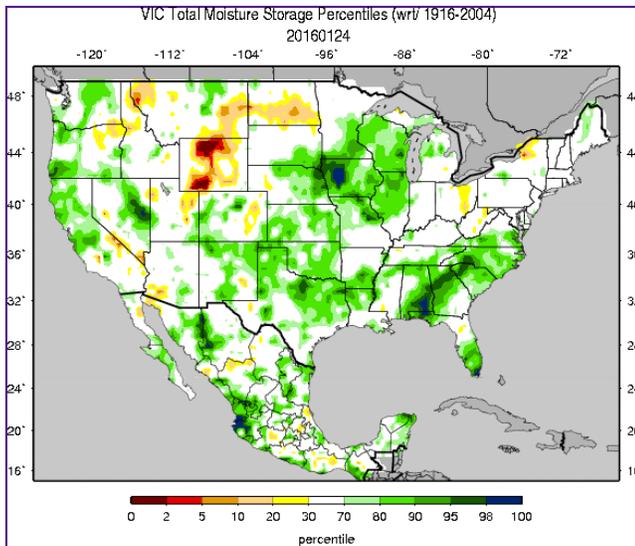
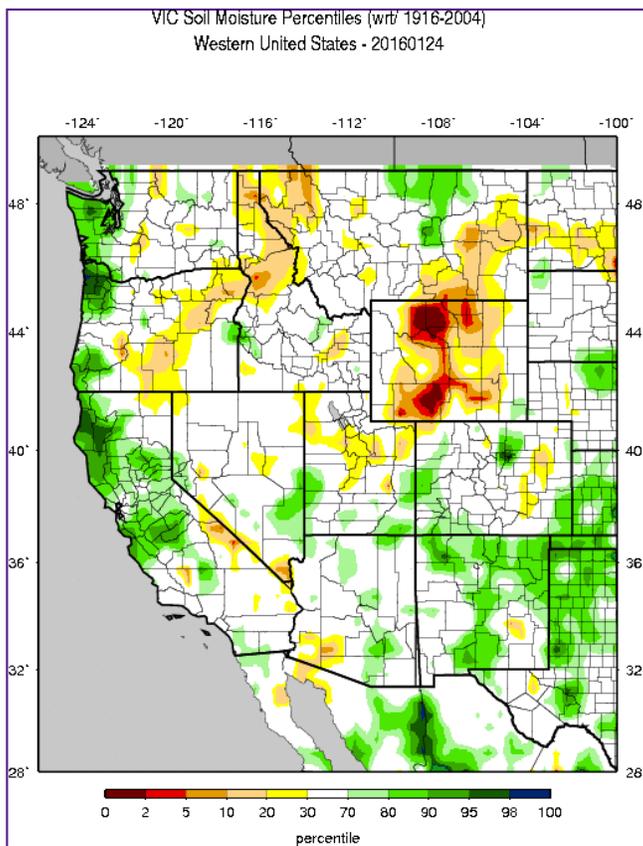
Explanation - Percentile classes							
							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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.

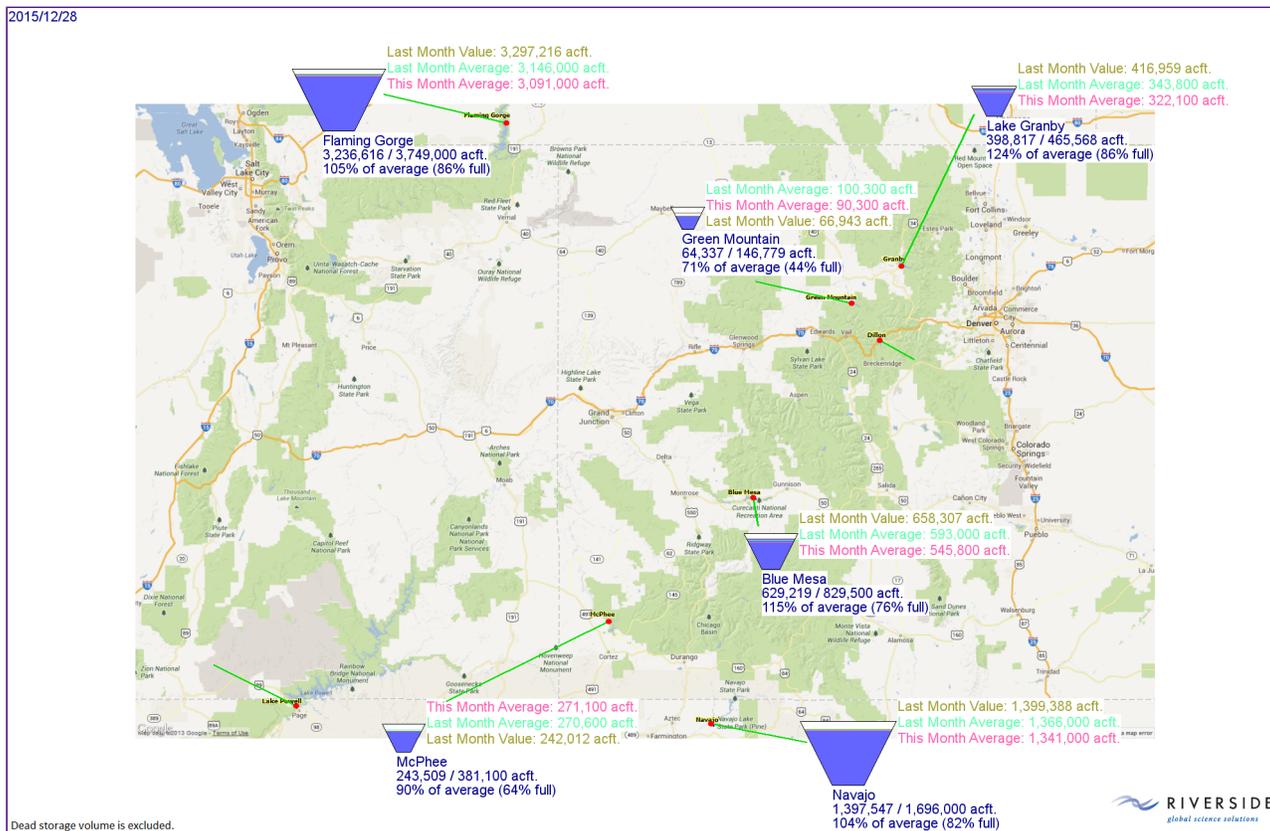
Streamflow Statistics:

- The majority of stream gages in the UCRB are now ice-affected and not reporting. Only 43 out of over 100 gages are not ice-affected.
- 75% of gages are reporting in the normal to much above normal range for the 7-day average streamflow.
- 2% of gages reporting are in the below normal to much below normal range.
- The Colorado River at the CO-UT state line is at 106% of normal and in the 63rd percentile.
- The Green River at Green River, Utah is reporting at 143% of average, which corresponds to the 79th percentile.
- The San Juan River near Bluff has trended back up a bit over the past week. Flows are at the 45th percentile, or 71% of average.

SURFACE WATER



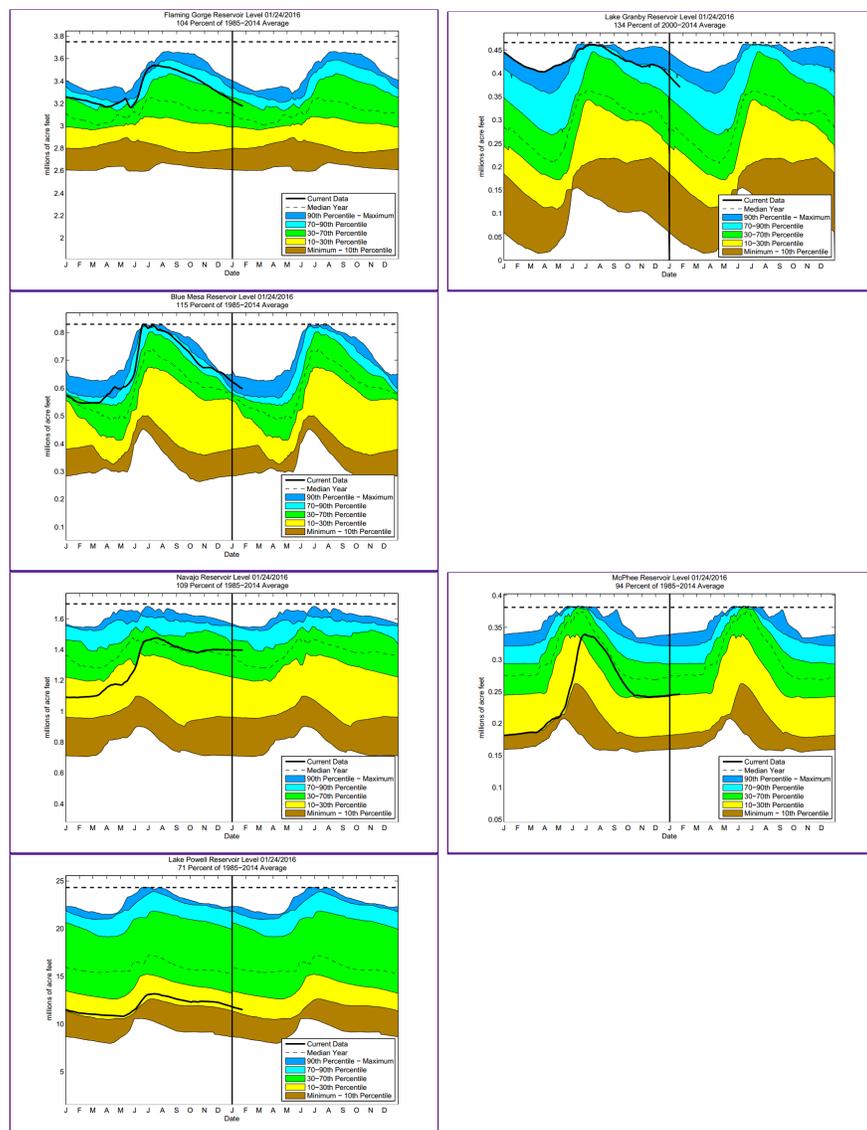
The top left image shows VIC modeled soil moisture as a percentile ranking. The top right image shows VIC+SWE.



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.

The graphs shown belo are plots of reservoir volumes over the past full year and current

year to date (black). The dashed line at the top of each graphic indicates the reservoir's capacity, and the background color-coded shading provides context for the range of reservoir levels observed over the past 30 years. The data are obtained from the Bureau of Reclamation. Some of the reservoir percentiles don't line up at the new year due to differences in reservoir levels at the beginning of 1985 and the end of 2014. Dead storage has been subtracted. Note: Lake Granby data are obtained from the Colorado Division of Water Resources, and only goes back to the year 2000.



VIC:

- Modeled soils moisture in the Green River Basin in Wyoming continues to be much below normal. In eastern Sweetwater County, soil moisture is below the 2nd percentile. All of Sweetwater, and now parts of Sublette and Uinta Counties are below the 30th percentile.
- Soils in eastern Utah are mostly in the normal range with a bit of a gradient from northwest to southeast. Areas farther north and west such as Duchesne, Uintah, and Emery Counties are indicating some dry patches of soil between the 10th and 30th percentile. Some areas farther south and east such as eastern San Juan and eastern Grand Counties are showing soils between the 70th and 90th

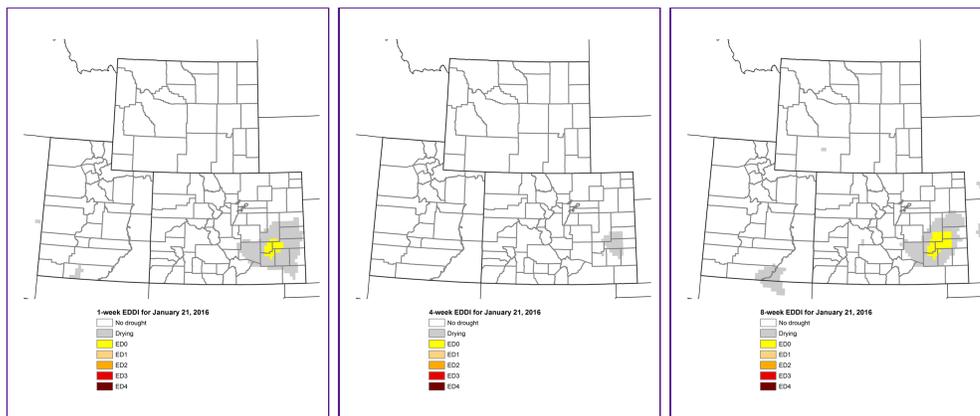
percentile.

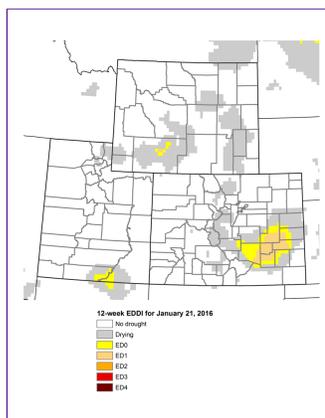
- Soils in western Colorado are by and large either in the normal range or a bit above normal. Areas farther south are more likely to be above normal. Some dry soils extend down into Moffat County from the north.
- Soils in the Upper Rio Grande part of Colorado are mostly in the normal range with some wetter soils near the Colorado-New Mexico border.
- Soils in northeastern Colorado are mostly in the normal range. Jefferson, Broomfield, Adams, Boulder, and southern Weld Counties are showing wet soils up to the 98th percentile. Some areas in east-central Colorado are showing soil moisture in the 10th-30th percentile range, but most of the high plains are in the normal range. Eastern Washington County in particular is dry and is in the 10th-20th percentile range.
- Soils in southeast Colorado range from dry to wet. In eastern Pueblo and El Paso Counties as well as Crowley and Otero Counties soils are still showing up below the 30th percentile. Soils in the southeast corner of the state in Baca, Prowers, and eastern Kiowa Counties are between the 70th and 90th percentile.

Reservoirs (based on the graphs below the map):

- Flaming Gorge is at 104% of average.
- Lake Granby is at 134% of average.
- Green Mountain is now at 71% of the December average and 44% full.
- Blue Mesa is at 115% of average.
- Navajo is at 109% of average.
- McPhee is at 94% of average.
- Lake Powell is 71% of average.

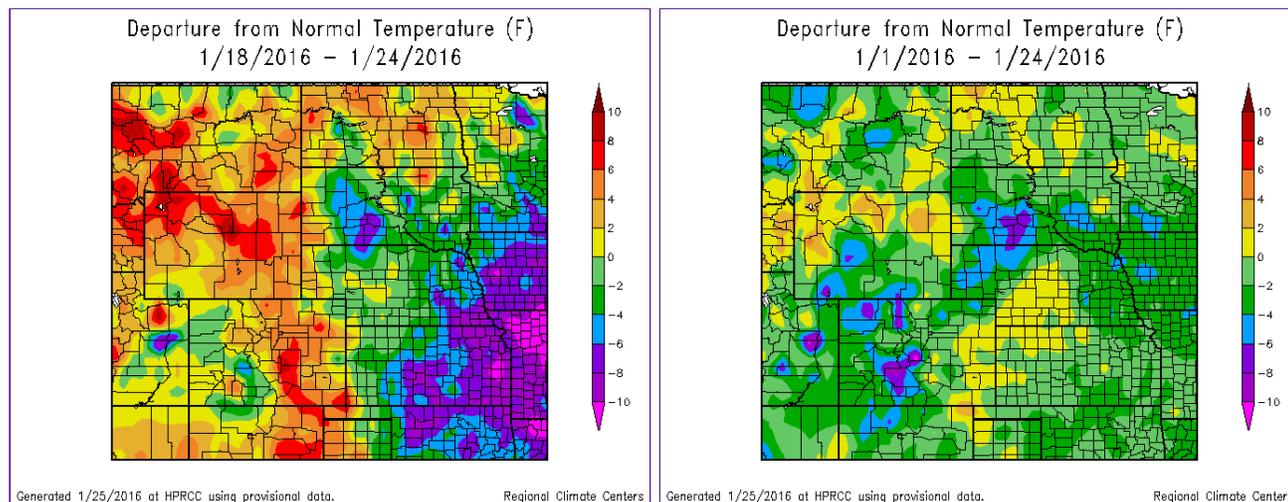
EVAPOTRANSPIRATION



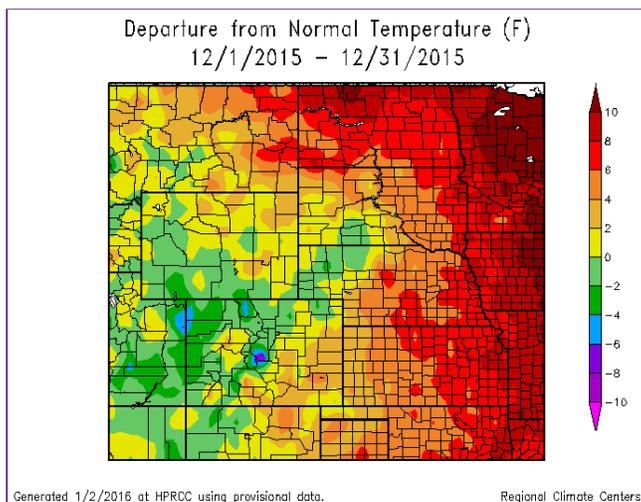


The above images are available courtesy of NOAA's Evaporative Demand Drought Index (EDDI). Drought classification listed is a function of the depth of reference evapotranspiration accumulated over a given period of record with respect to a climatology of 1981-2010. The drought categories displayed are in line with the US Drought Monitor's Percentile Ranking Scheme <http://droughtmonitor.unl.edu/AboutUs/ClassificationScheme.aspx>. Data used to generate these maps come from the North American Land Data Assimilation System Phase-2 (NLDAS-2) project, which assimilates observations of temperature, wind speed, radiation, and vapor pressure deficit. The date indicates the last day of the period of record, and the week number indicates the window size for the period of record..

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:

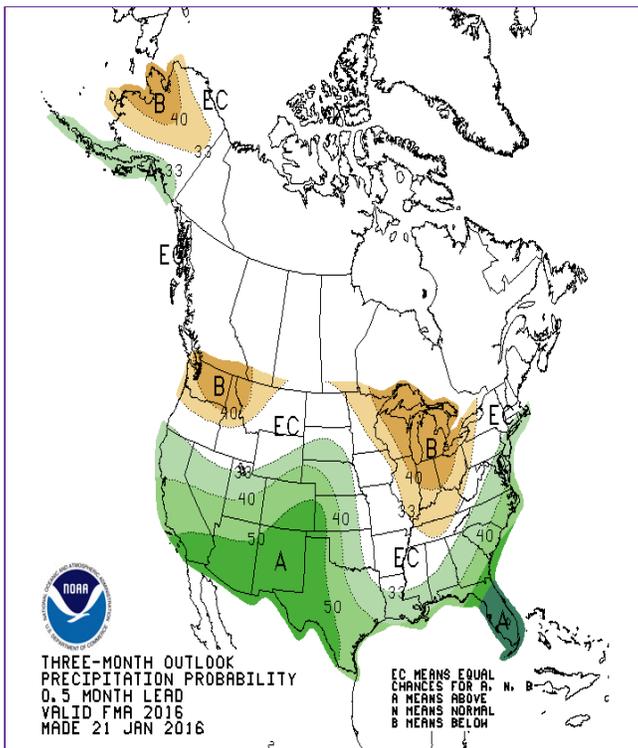
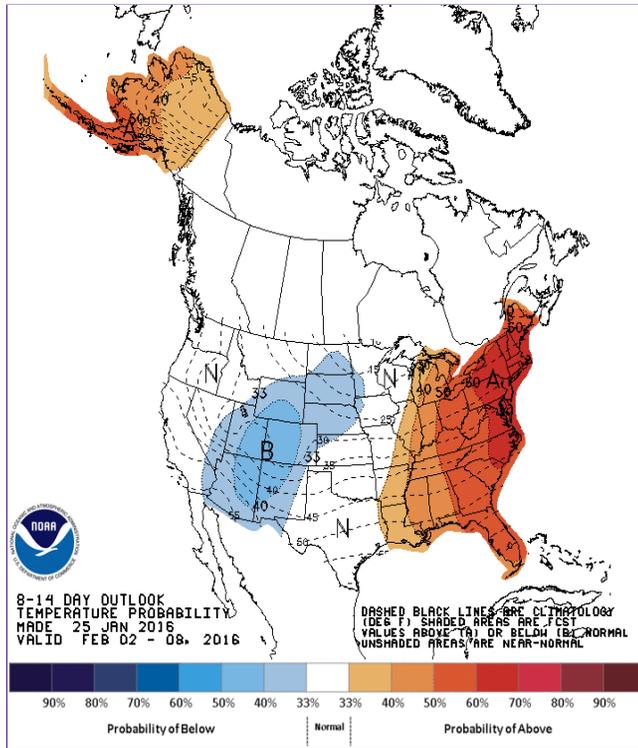
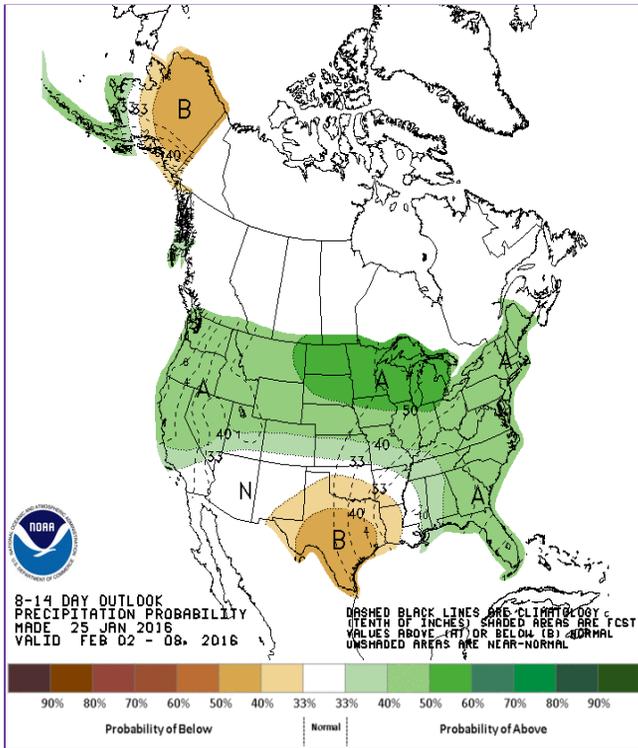
- In contrast to much of January thus far, temperatures were above average over the last week for most of the UCRB and eastern Colorado.
- The Upper Green River Basin had temperatures mostly 0-6 degrees above average for the week.
- Temperatures in eastern Utah were quite variable with a dipole from Emery County, where temperatures were 8 degrees below average, to Duchesne County immediately to the north, where temperatures with up to 8 degrees above average.
- Western Colorado was mostly within two degrees on either side of normal. Mineral and Hinsdale Counties had the highest anomalies at 4-6 degrees above normal, and Gunnison and Saguache Counties had the lowest anomalies at 4-6 degrees below normal.
- Most of Colorado east of the divide was much above normal for the week. Elbert, El Paso, Pueblo, and Las Animas Counties were especially warm at 6-10 degrees above average.
- Temperatures toward the eastern state line trended back towards normals, but were still 6-8 degrees above normal in the southeast part of the state.
- Temperatures in the Rio Grande Basin were close to normal.

December Temperatures:

- The UCRB for the month of December was generally about normal in terms of temperatures. Parts of Garfield, Eagle, and Pitkin counties were about 4 degrees above normal, while further downstream in Mesa County temperatures were 4 below normal.
- The Green River basin in Wyoming were in the normal range for temperatures, as was eastern Utah. Eastern Uintah County was up to 6 degrees below normal.
- Southwest Colorado as also in the normal range for temperatures in the month of December, between -4 and +4 degrees of normal.
- Eastern Colorado was in the normal range of temperatures in the northeast portion of the state, while further southeast temperatures trended towards the warm side at mostly 2 to 4 degrees warmer than

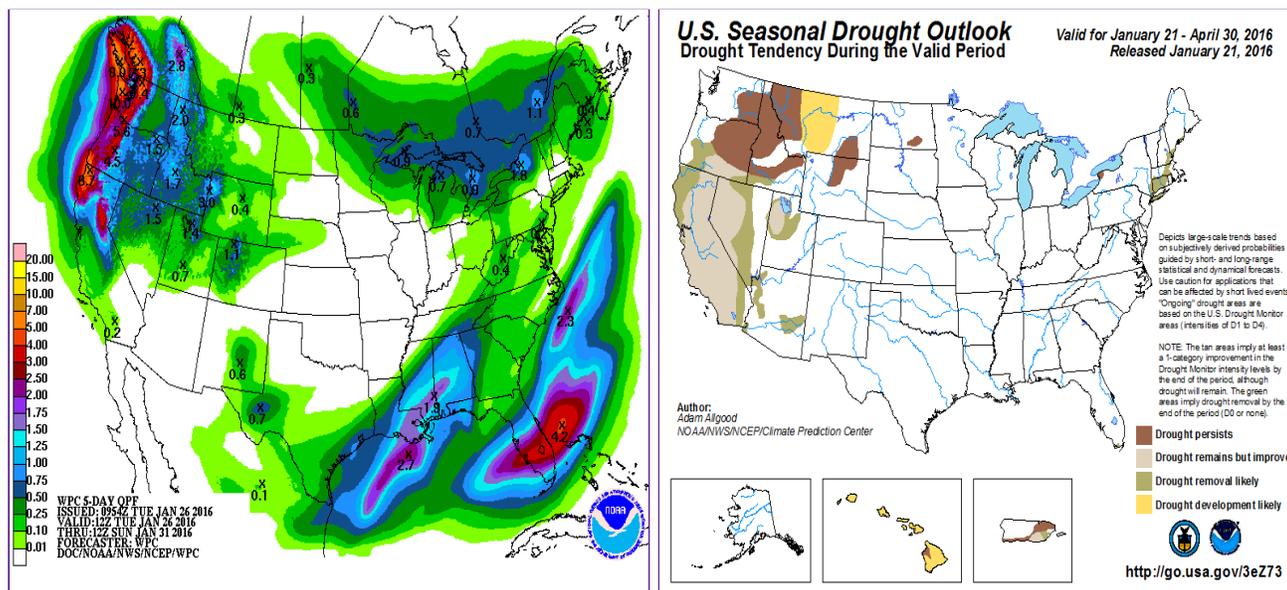
average. North Bent County was nearly 6 degrees above normal. One major standout is southern Park County which saw December temperatures roughly 8 degrees below normal.

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.



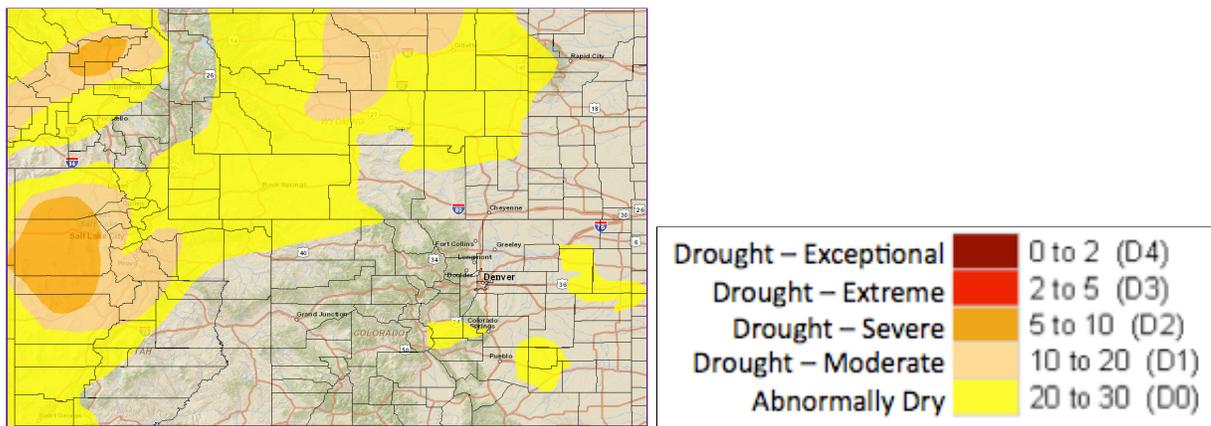
Short Term: (1/26)

- Currently high pressure over the Rockies is pushing cool air southward on the east side of the divide and warm air northward on the west side of the divide. This center of this high should float off east by tomorrow allowing warmer air to flow over the UCRB and eastern Colorado.
- Warmer air and no precipitation is expected Wednesday and Thursday of this week for the UCRB and eastern Colorado.
- Snow returns to the Jackson Hole area Friday morning, and begins to impact the Wasatch mountains and Colorado Rockies by Friday night.
- On Saturday afternoon cooler air descends into the UCRB from the north and snow becomes possible for lower elevations in western Colorado and northeast Utah.
- Sunday morning this wave is ejected out onto the Central Plains leaving cooler, but not arctic temperatures in its wake. Some light snow will be possible east of the divide in northern Colorado. Southeast Colorado will stay dry and windy if the storm's path does not change.
- Totals from this weekend's storm are likely to exceed half an inch in the mountains of western Colorado and western Wyoming. Wasatch and Uintah Ranges have a chance and good moisture, but are a little too far south and west. The Jackson Hole area is in the best position for high totals with over two inches possible.
- Models have been fairly consistent in bringing a large storm onshore from the Pacific early next week. This could bring some large snow totals to parts of the UCRB, but it's too early to pinpoint where.

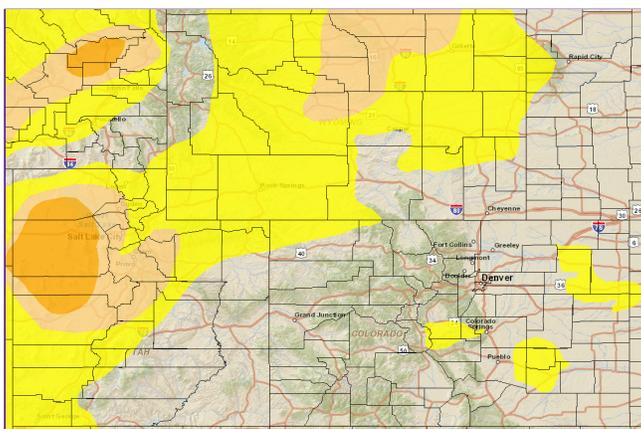
Longer Term:

- The 8-14 day precipitation outlook shows increased chances for above average precipitation for the most of the UCRB and eastern Colorado. These odds are maximized farthest north. Areas in extreme southern Colorado and extreme southeast Utah are forecast equal chances of above and below average precipitation.
- The 8-14 day temperature outlook shows increased chances for below average temperature for literally the entirety of the UCRB and most of eastern Colorado. These odds maximize in western Colorado and eastern Utah. Extreme southeast Colorado is forecast equal chances of above and below average temperatures.
- The Climate Prediction Center February through April precipitation outlook shows increased chances for above average precipitation for all but the far northwest end of the UCRB and all of eastern Colorado. These odds maximize in southeast Colorado.
- The seasonal drought outlook for February through April indicates that no drought development is likely in the UCRB or eastern 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: January 26, 2016

Temperatures over the past week were slightly above average for the UCRB with some good precipitation for the Uintah Mountain Range, and for the northern Rockies in Colorado and Wyoming. With the coming weekend's storm expected to once again favor the Upper Green River Basin and the Yampa and White Basin the most favorable snowpack with respect to average seems to be shifting from south to north. East of the divide conditions were warm and dry. This is expected to continue through the week. Some light precipitation is possible for northeast Colorado this coming weekend, but southeast Colorado is forecast to stay warm and dry again.

SPIs are low at both one and six month timescales now for Washington County in northeast Colorado, and for Summit, Park, and Clear Creek Counties in central Colorado. For the time, this appears less problematic in central Colorado as Colorado Mainstem and South Platte snowpack for the year to date are still in good shape and SNOTEL water year to date precipitation percentiles are still in the normal range. The VIC model shows drier soils in Washington County that corroborate the lower SPIs, and even though potential evapotranspiration is very low in the winter with respect to other times of year, 12-week EDDI is showing some drying at the southern end of Washington County.

Recommendations:

UCRB: Status quo. Southern Carbon County is looking like it could be improved to Dnada in the near future if the forecast pans out, but a couple low SNOTEL precipitation percentiles are keeping me cautious.

Eastern Colorado: Status quo. D0 looks like it could be extended slightly in southeast and northeast Colorado, but any changes made would be very fine scale.