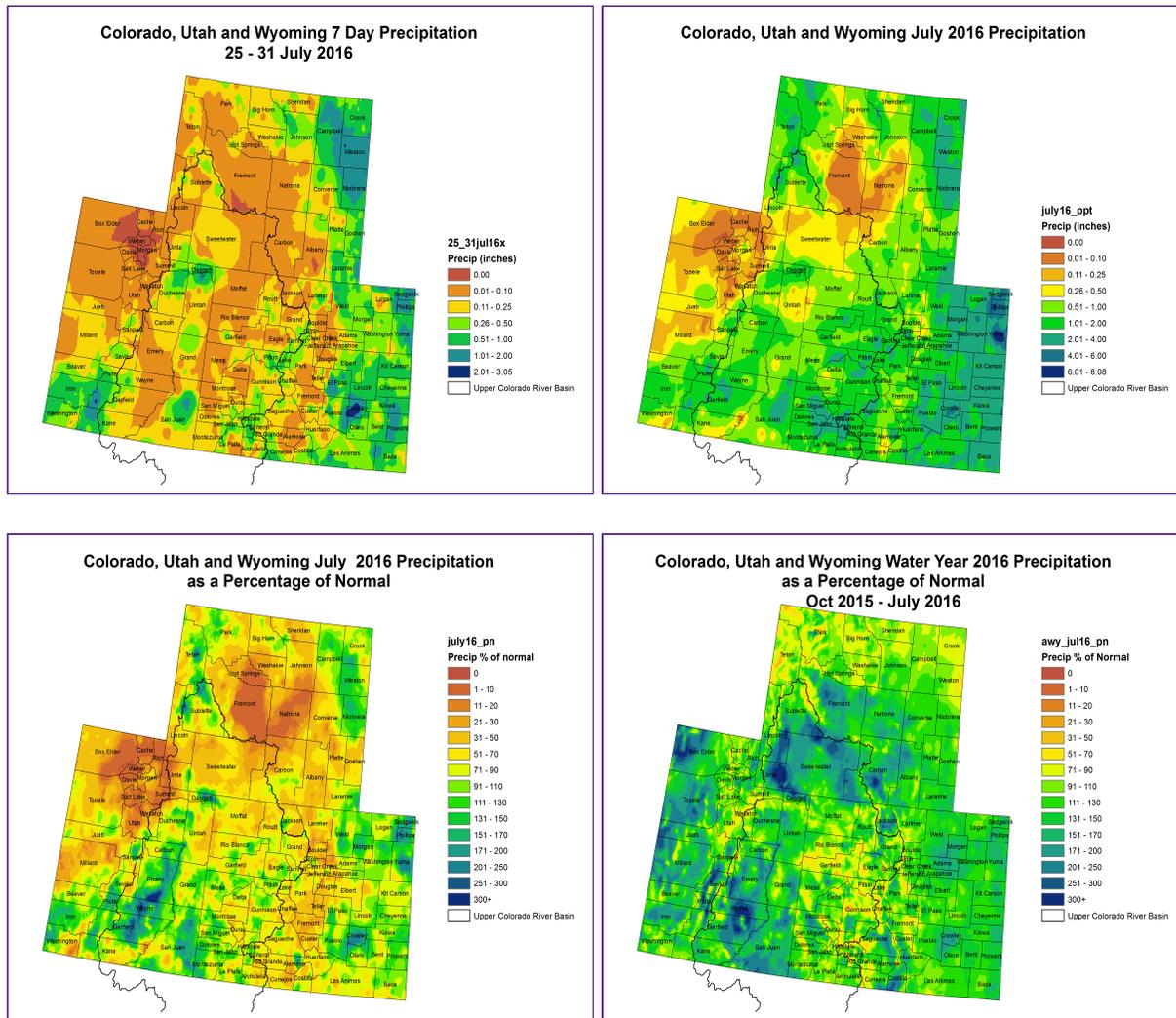
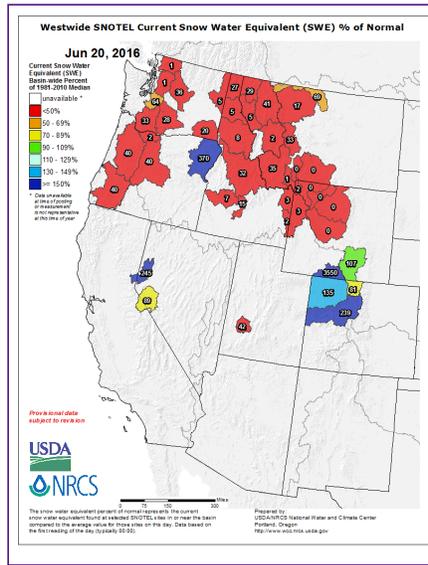
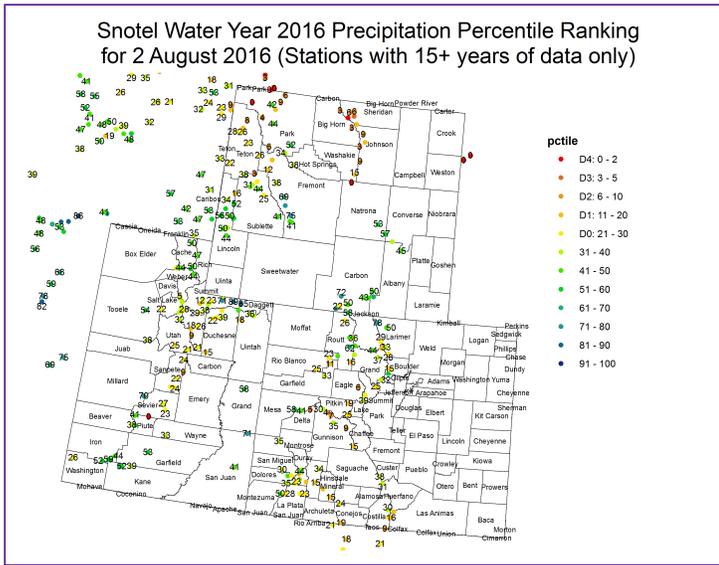


PRECIPITATION

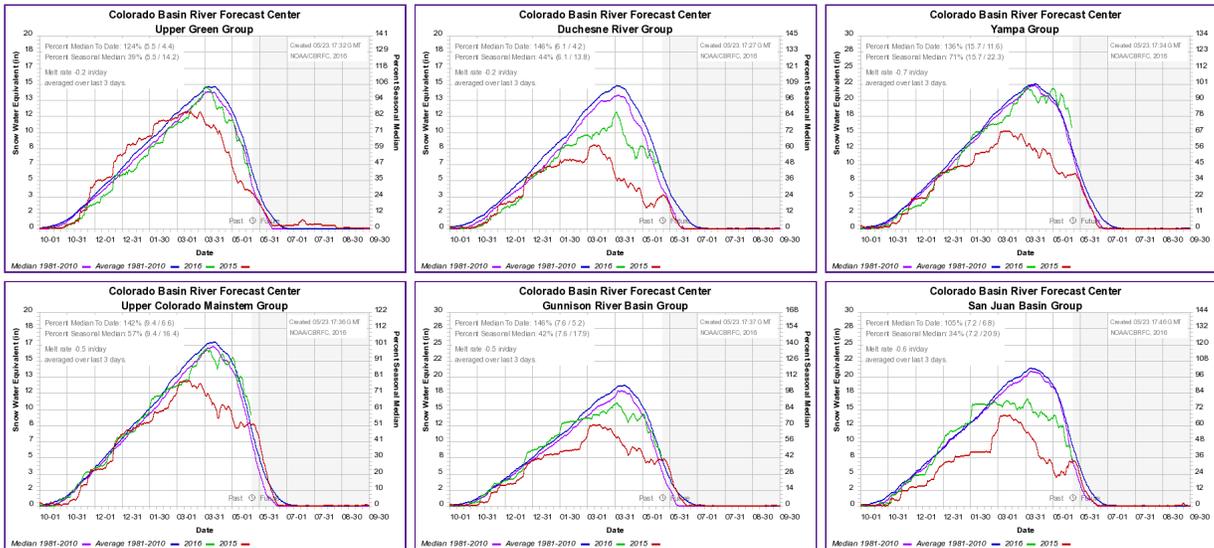


The images above use daily precipitation statistics from NWS COOP, CoCoRaHS, and CoAgMet stations. From top to bottom, and left to right: most recent 7-days of accumulated precipitation in inches; current month-to-date accumulated precipitation in inches; last month's precipitation as a percent of average; water-year-to-date precipitation as a percent of average.

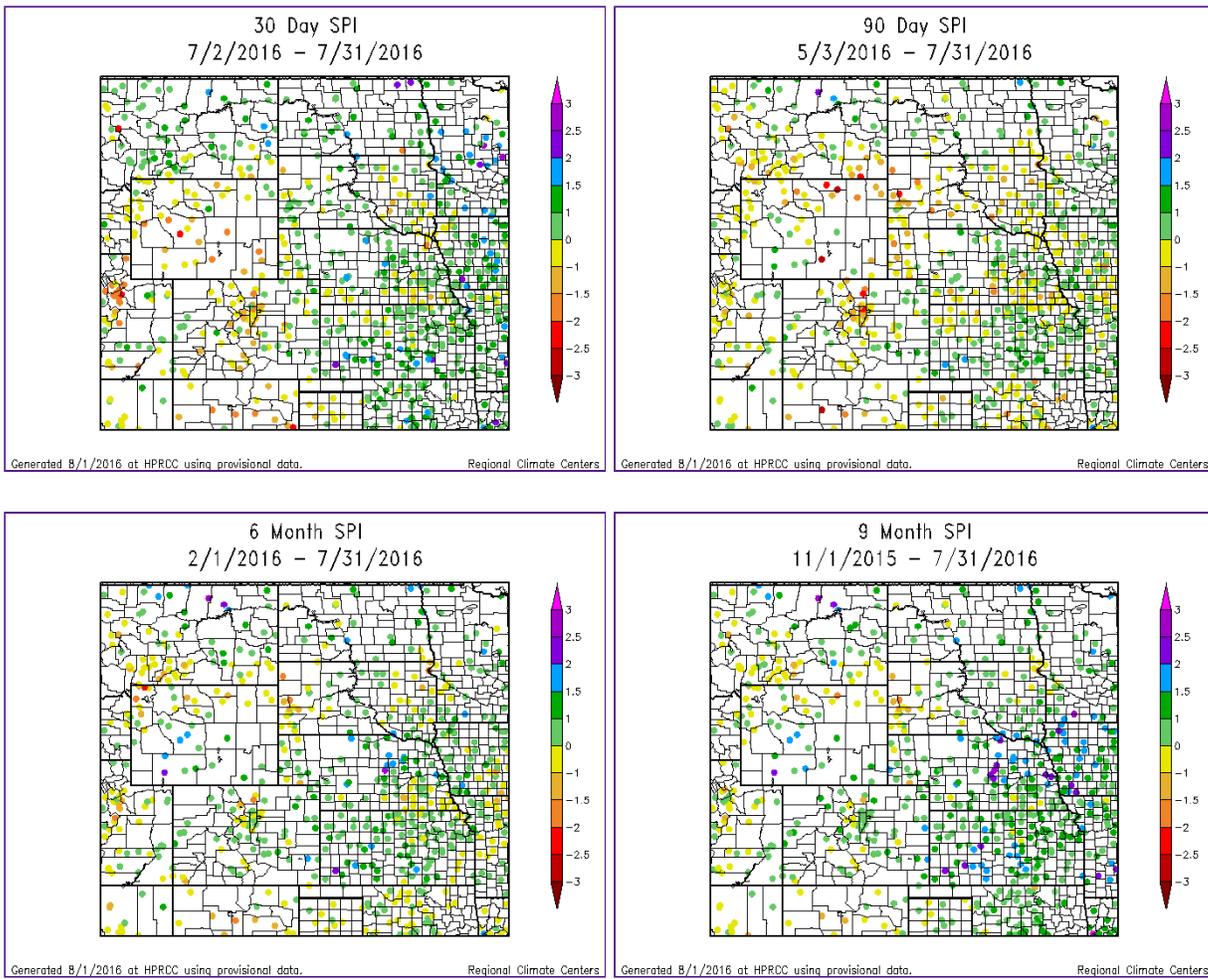
SNOTEL AND SNOWPACK



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).

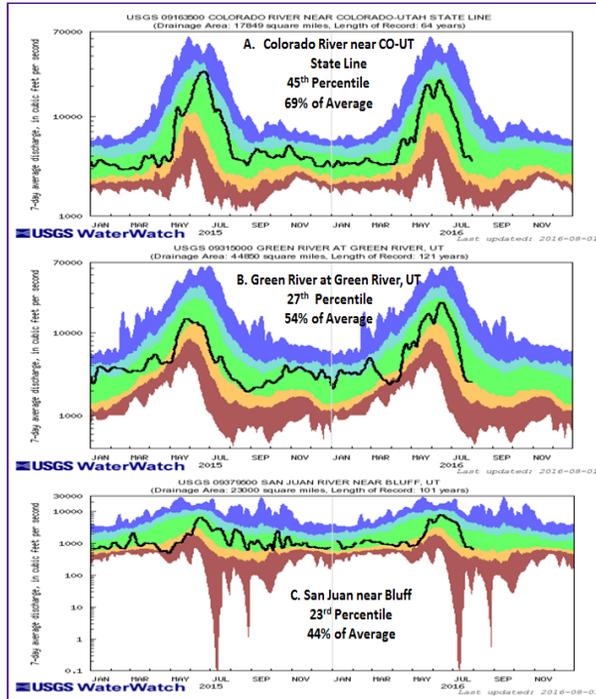
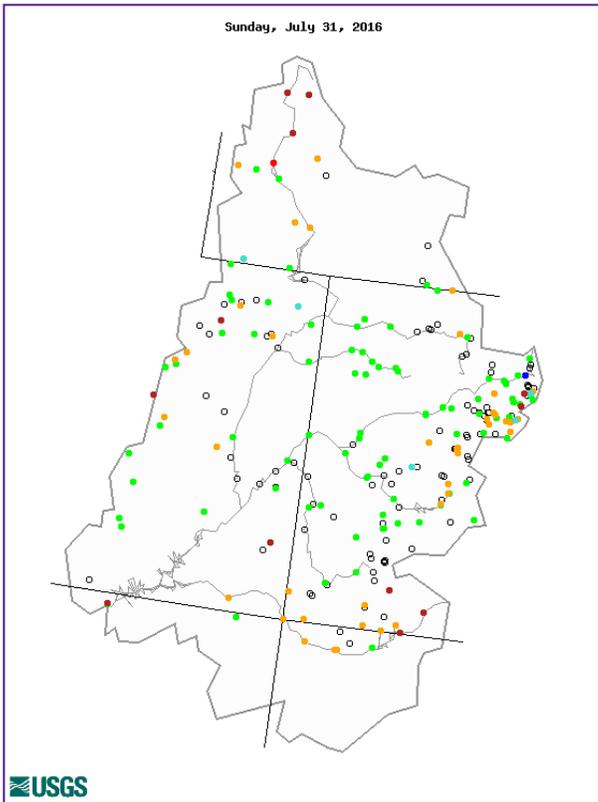


STANDARDIZED PRECIPITATION INDEX



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.

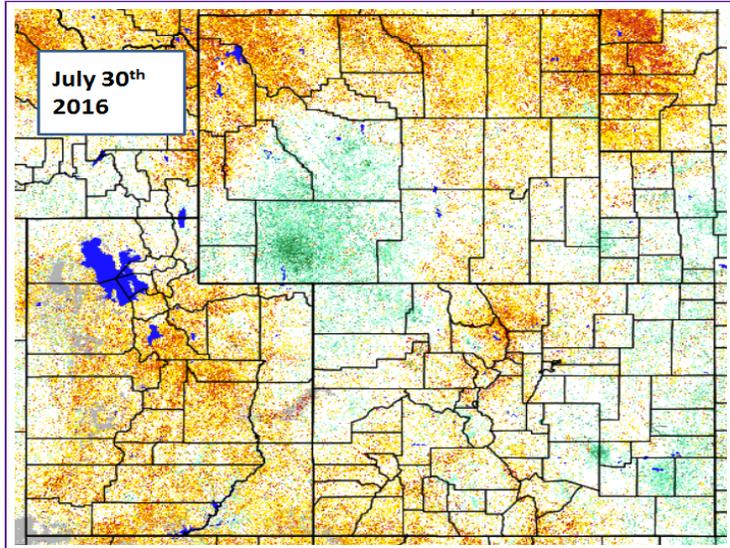
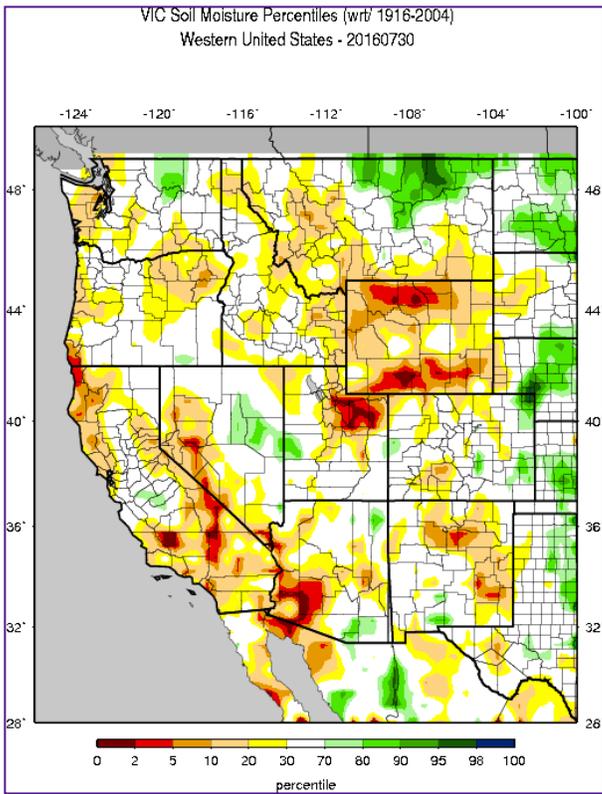
STREAMFLOW



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		

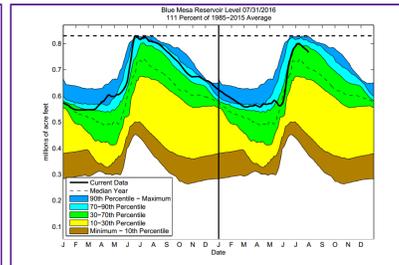
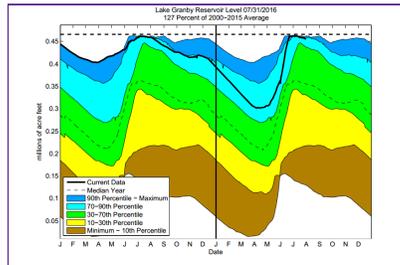
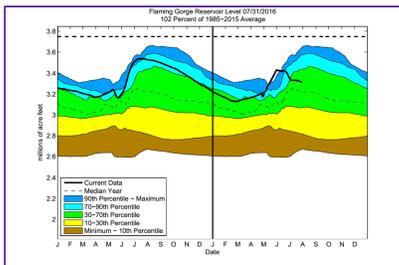
The top left image shows 7-day averaged streamflows as a percentile ranking across the UCRB. The top right image shows 7-day averaged discharge over time at three key sites around the UCRB: The Colorado River at the CO-UT state line; the Green River at Green River, UT; and the San Juan River near Bluff,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

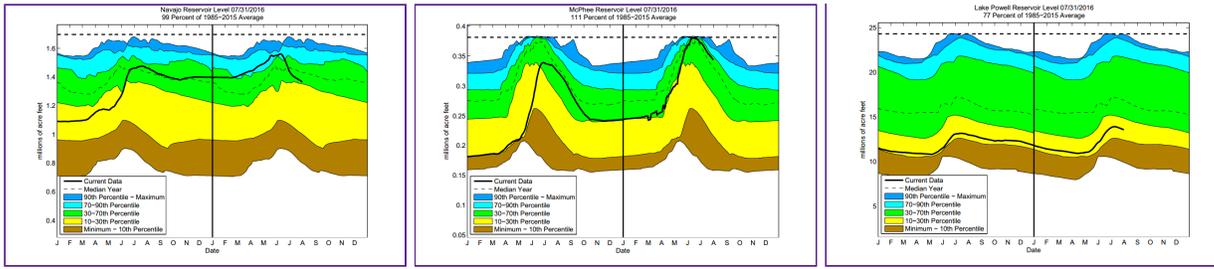
SURFACE WATER



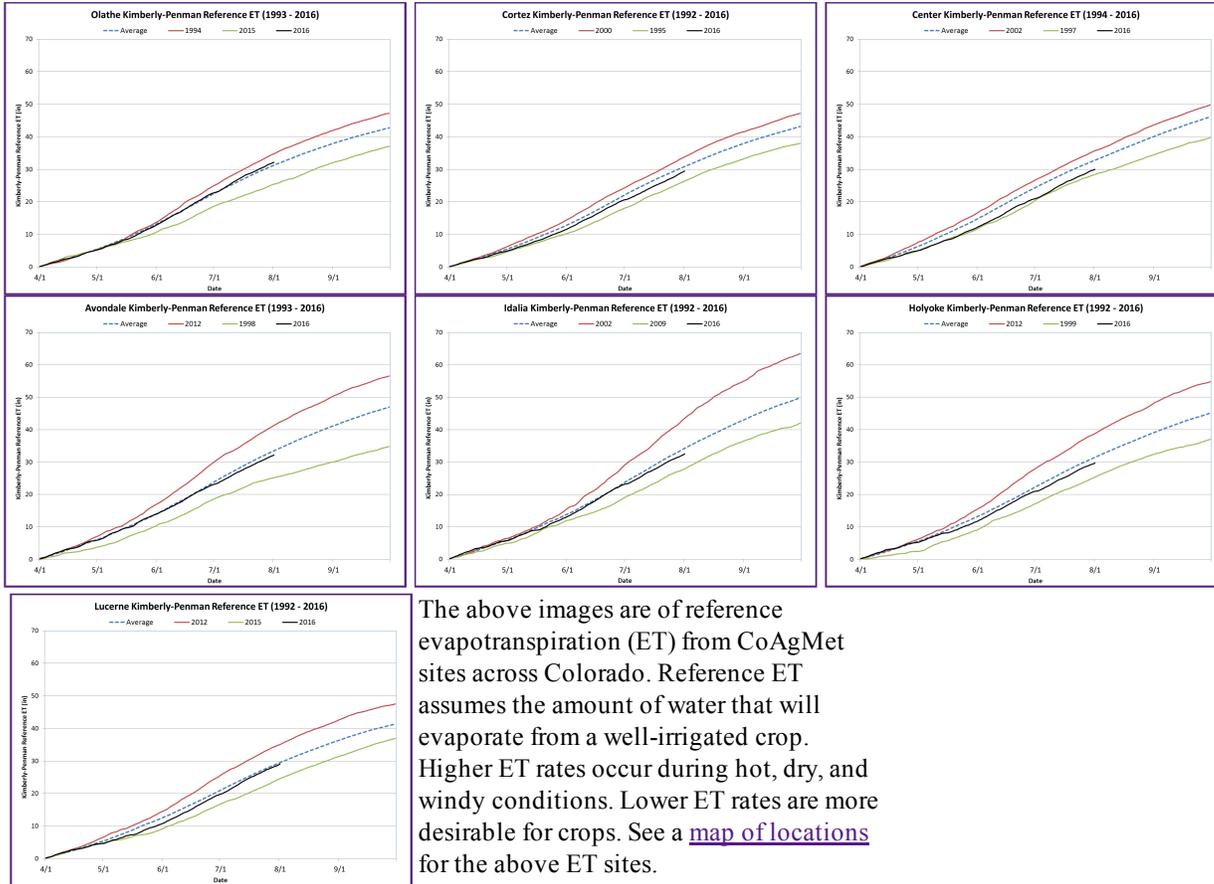
The top left image shows VIC modeled soil moisture as a percentile ranking. The top right image shows satellite-derived vegetation from the VegDRI product (which updates on Mondays).

The graphs shown below 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.

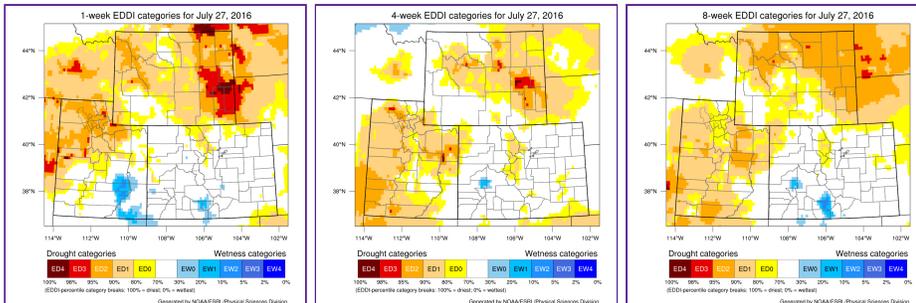


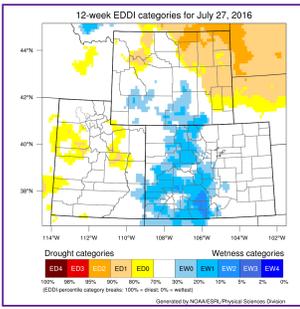


EVAPOTRANSPIRATION



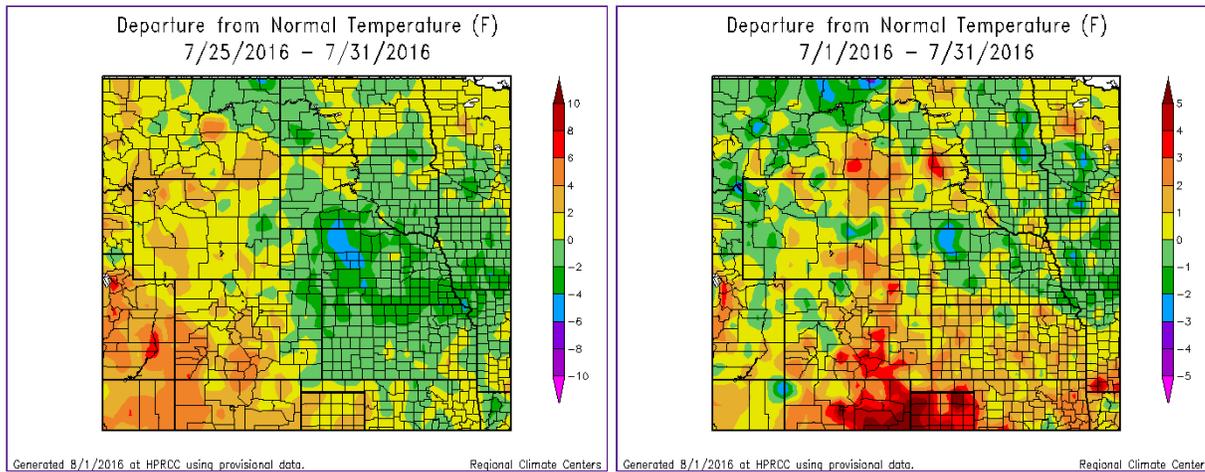
The above images are of reference evapotranspiration (ET) from CoAgMet sites across Colorado. Reference ET assumes the amount of water that will evaporate from a well-irrigated crop. Higher ET rates occur during hot, dry, and windy conditions. Lower ET rates are more desirable for crops. See a [map of locations](#) for the above ET sites.



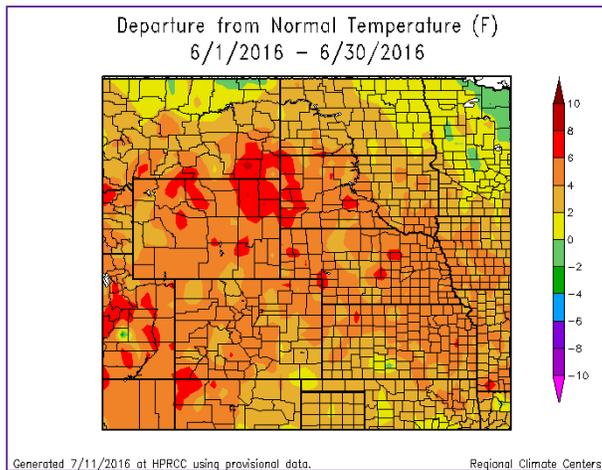


The above images are available courtesy of NOAA's Evaporative Demand Drought Index (EDDI). Drought classification listed is a function of the depth of reference evapotranspiration accumulated over a given period of record with respect to a climatology of 1981-2010. The drought categories displayed are 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..

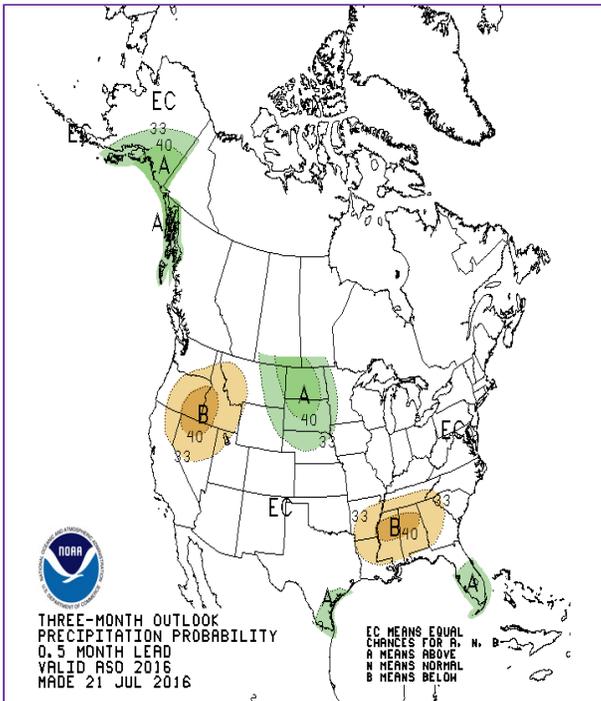
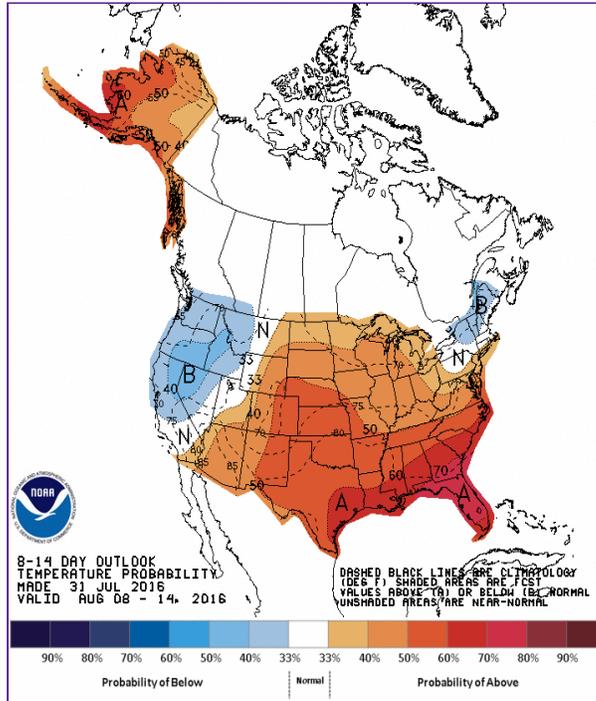
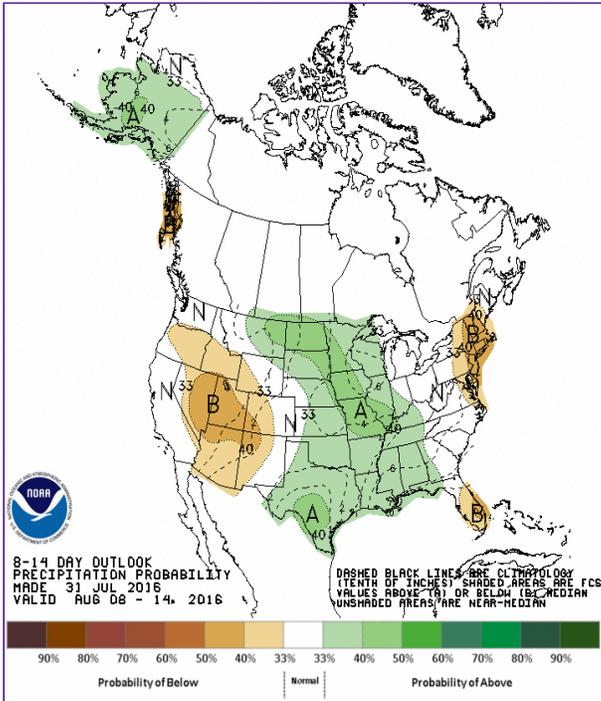
TEMPERATURE



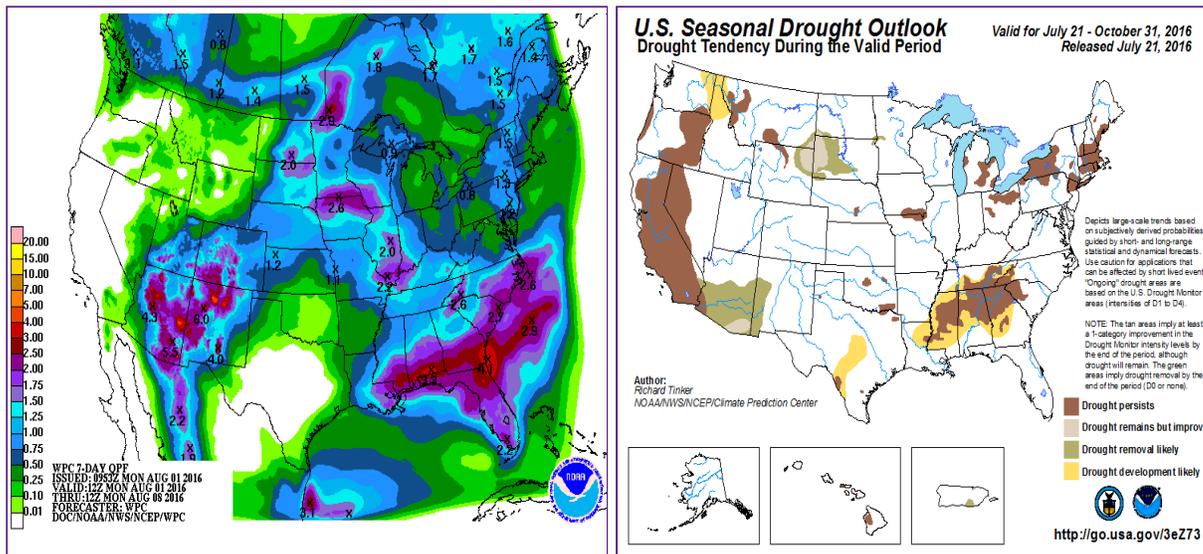
All images show temperature departures from average over different time periods (last 7 days on top left; month-to-date on top right; last full month on bottom). Temperature departure maps provided by HPRCC ACIS.



FORECAST AND OUTLOOK



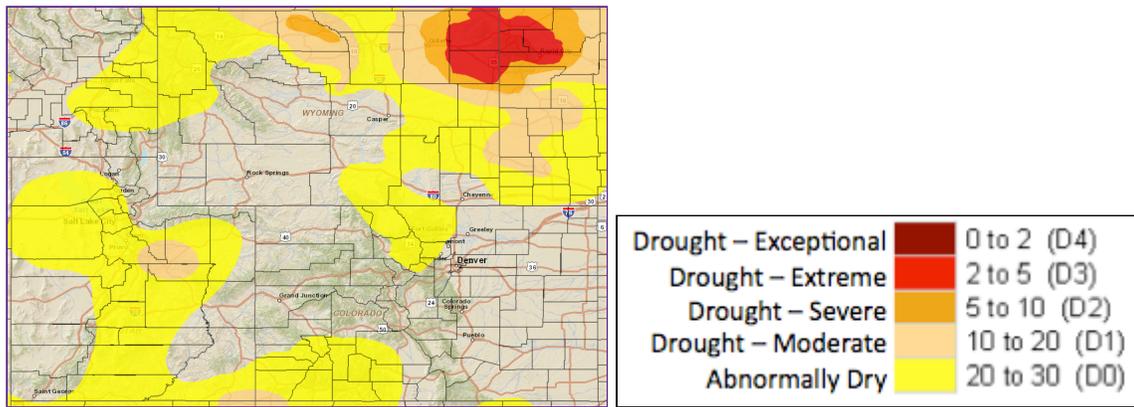
The top two images show Climate Prediction Center's Precipitation and Temperature outlooks for 8 - 14 days. The middle image shows the 3 months Precipitation outlook. The bottom left image shows the Weather Prediction Center's Quantitative Precipitation Forecast accumulation for the seven days between Tuesday 12Z and ending Tuesday 12Z. The bottom right image shows the Climate Prediction Center's most recent release of the U.S. Seasonal Drought Outlook.



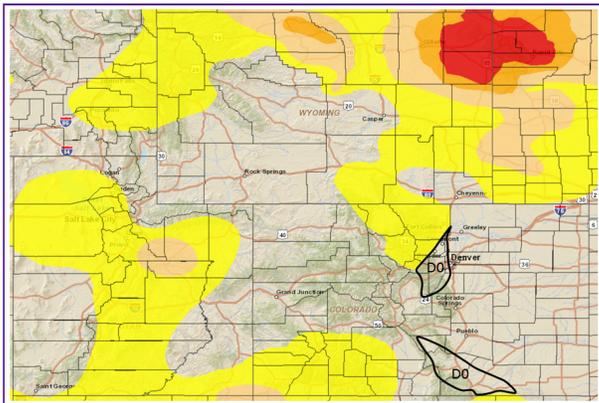
Short Term: (8/2)

- A surge of monsoonal moisture is on track to develop this week. This will bring slightly cooler temperatures to the UCRB with increased precipitation. This is true for eastern Colorado as well, but impacts will be more muted. The areas where the heaviest rain is predicted are the San Juans and Sangre de Cristos. Over Two inches of rainfall is likely in these areas. Western Colorado and southern Utah are predicted to receive over 0.50" in the coming week. The Upper Green River Basin will be drier by comparison. Eastern Colorado will see some heavy-slow moving thunderstorms in areas, but precipitation totals will be highly variable.
- **Longer Term:**
 - The 8-14 day precipitation outlook shows increased chances for below average precipitation for the Upper Colorado River Basin and all of eastern Colorado except the extreme northeast corner. These chances are most highly enhanced in the western portion of the basin.
 - The 8-14 day temperature outlook shows increased chances for above average temperatures for the southeast portion of the UCRB and for the entirety of eastern Colorado. These chances are most highly enhanced in the southeast corner of Colorado.
 - The Climate Prediction Center August through October outlook shows equal chances of above an below average precipitation for the entirety of the UCRB and eastern Colorado.
 - The seasonal drought outlook for Colorado and the UCRB shows no likely drought development over the next three months.

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: August 2nd, 2016

The last week brought warmer and drier than average conditions to the Upper Colorado River Basin. Temperatures averaged 0-4 degrees above normal in the northern portion of the basin, and 2-6 degrees above normal in the southern portion of the basin. Precipitation totals were mostly below 0.25". There were some stronger thunderstorms in the Uintah Mountain Range and along the Colorado Rockies. These storms unloaded 0.50-1.00" of precipitation. Temperatures in eastern Colorado were mostly within two degrees of normal for the week. Precipitation totals for the week averaged near 0.50" east of the divide. Strong isolated storms dropped 1.00-2.00" of precipitation with a bull's-eye in Crowley County of 2.35". The San Luis Valley and Front Range were drier than areas farther out on the plains. These areas received less than 0.25".

Looking at conditions over the last three months, precipitation and evaporative demand are by and large in the normal range for the Upper Colorado River Basin. Lower than average precipitation has been recorded near the headwaters of the Colorado River, in the Duchesne River Basin, and in the San Juan River Basin. This is well-reflected by USGS streamflow observations and by MODIS satellite-detected vegetative health conditions. Seasonal precipitation deficits are evident east of the Continental Divide both along the northern Front Range, and in southern Colorado in the lee of the Sangre de Cristos. This is also evident looking at remotely-sensed vegetative health conditions. The northern Front Range is running more extreme short-term deficits, but is still running a long-term surplus, so streams and reservoirs are not below average. The lee of the Sangre de Cristos (Las Animas, Huerfano, and Custer Counties) in southern

Colorado are beginning to show both short and long term indicators of drought.

Recommendations

UCRB: Status Quo

Eastern Colorado: It is recommended that D0 be extended into central Las Animas County, Huerfano County, and Custer County. This area has received 50-75% of normal precipitation over the past 60 days. This is leading to growing precipitation deficits in the Trinidad and Walsenburg areas for the year to date. USDA-reported impacts include anomalously dry and crispy grasslands with grasshoppers becoming a nuisance.

It is recommended that D0 in northern Colorado be expanded to include Jefferson, southeast Boulder, northwest Douglas, northeast Park, and southeast Clear Creek Counties. This area has been much drier than normal since the beginning of May with 90-day SPIs ranging from -1 to -2.5. Precipitation peaks in this area in May and June. These short-term precipitation deficits may be difficult to erase.