

February 15, 2018 Water Supply Forecast Discussion

The [Colorado Basin River Forecast Center \(CBRFC\)](#) geographic forecast area includes the Upper Colorado River Basin, Lower Colorado River Basin, and Eastern Great Basin.

Water Supply Forecast Summary (Mid February Update):

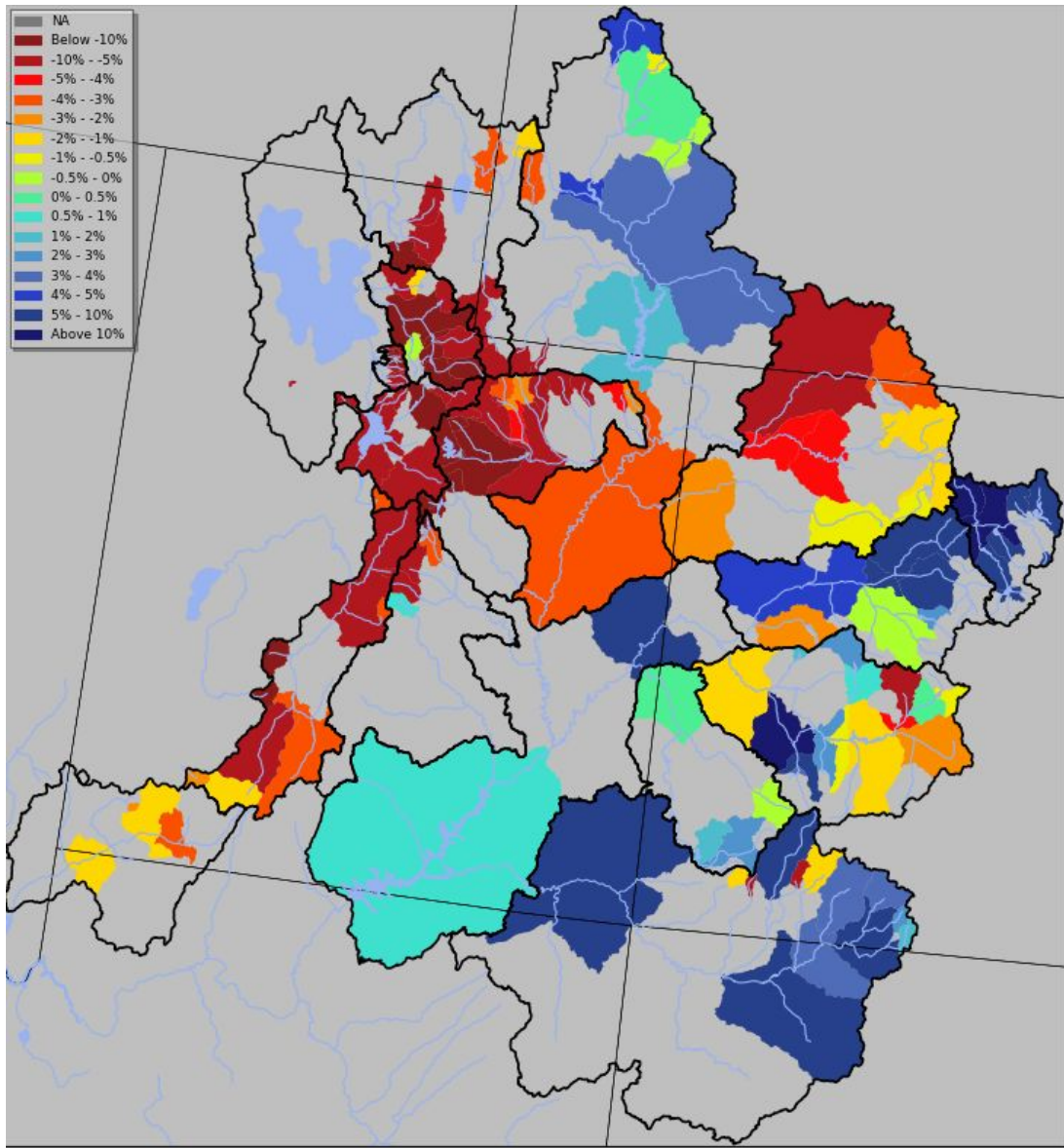
The overall water supply outlook for the Colorado River and eastern Great Basins has changed little from early February. Forecast guidance continues to indicate near to slightly above average April-July runoff volumes in the Green River Basin headwaters of Wyoming, and near average in eastern headwater basins of the Colorado River mainstem. Below average runoff volumes are likely everywhere else with lowest volumes as a percent of average in southwest Colorado extending into central and southern Utah.

Recent storms did bring some snow to higher elevations and a slight increase in model forecast guidance in parts of the San Juan, Dolores, Colorado River mainstem, and Green River Basin headwaters between early and mid February. However, the changes were not large enough to have much impact on the forecast outlook in these areas. The weather pattern has recently become more progressive with an increase in storm systems possibly impacting the CBRFC forecast area. An extended period with above average precipitation is needed before much improvement in forecasts would be realized.

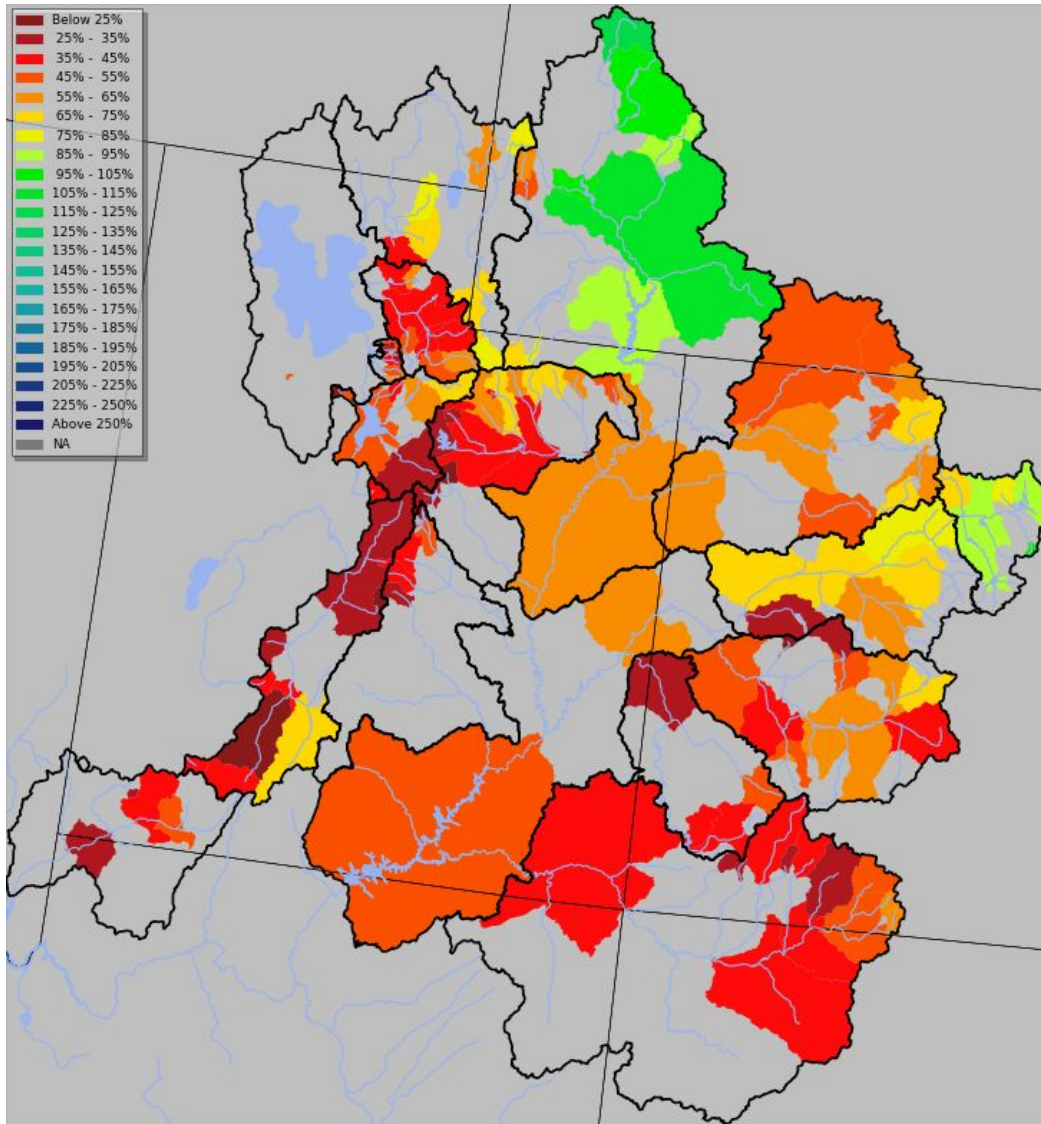
February - May forecast volumes for the Lower Colorado Basin of Arizona and New Mexico remain well below the historical median as dry conditions have dominated the first part of February.

April-July unregulated inflow forecasts for some of the major reservoirs in the Upper Colorado River Basin as of mid February include Fontenelle Reservoir 750 KAF (103% of average), Flaming Gorge 870 KAF (89% of average), Blue Mesa Reservoir 395 KAF (58% of average), McPhee Reservoir 110 KAF (37% of average), and Navajo Reservoir 260 KAF (35% of average). The Lake Powell inflow forecast is 3.40 MAF (47% of average).

Seasonal Water Supply Forecasts:



Trend in the April-July runoff volume forecast guidance from February 1st to mid February 2018
(Change in April-July percent of average)



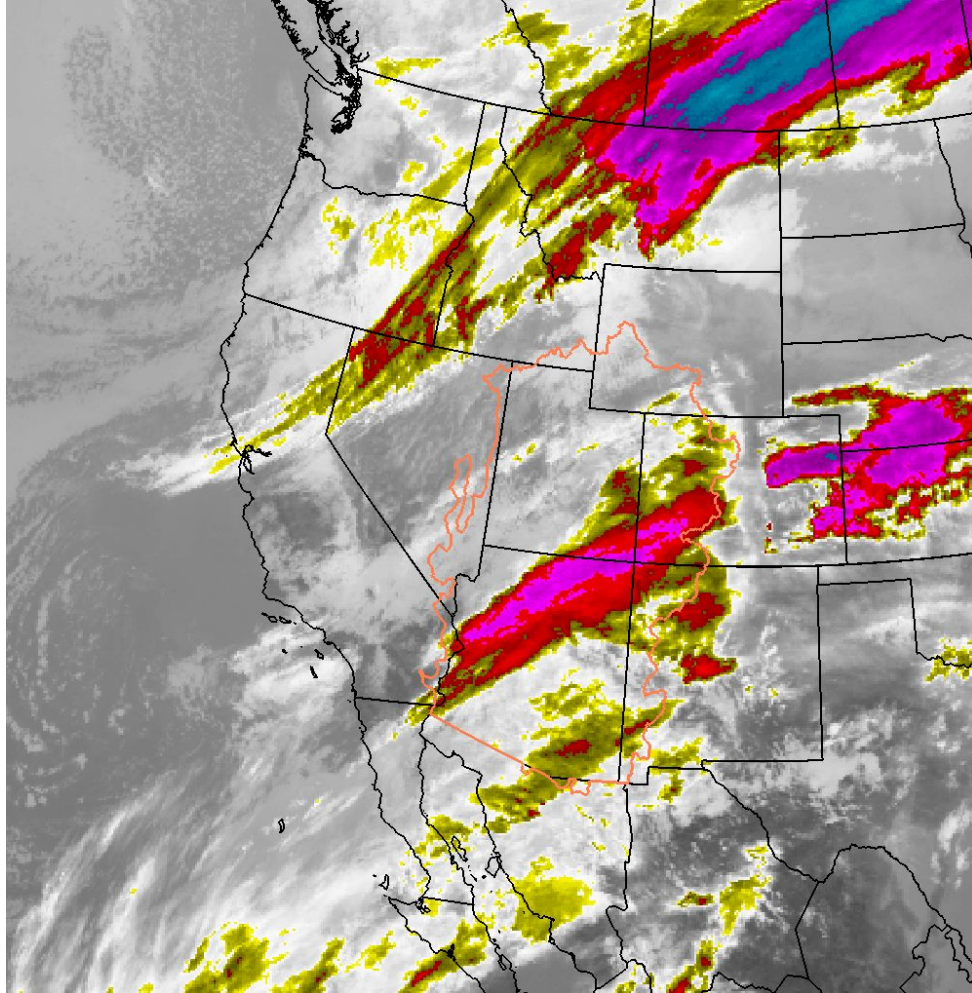
April-July runoff volume guidance as of February 14th 2018
(percent of 1981-2010 average)

For specific site water supply forecasts click [here](#)

Water Supply Discussion

Weather Synopsis:

February started out with a ridge of high pressure dominating the CBRFC forecast area. Significantly above average temperatures and below average precipitation were the result. By the second week of the month the weather pattern had become more progressive with an increase in storm activity. This brought precipitation to some areas that have been quite dry through the winter. Although precipitation has been on the light side for most areas during the first half of February additional storms in this weather pattern may bring more widespread precipitation to the area during the second half of the month.



Satellite image from February 14 2018

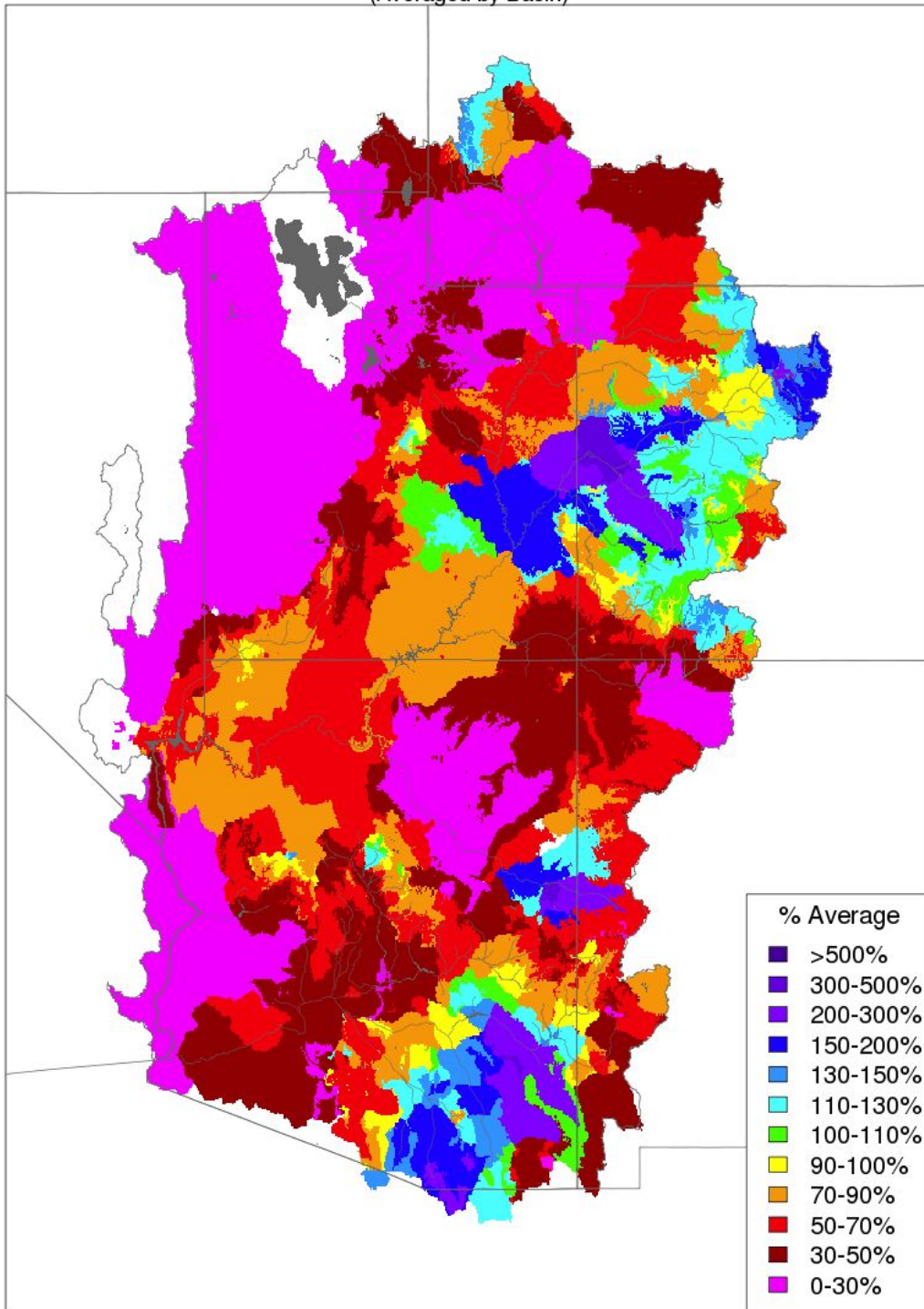
This image shows a rare storm system impacting the southwest part of the CBRFC forecast area. Another storm system is dropping in from the North.

Precipitation and Temperature:

Precipitation has been below average for the first half of February over most areas. However an increase in storm activity during the second week of the month has brought some precipitation to areas that have seen little so far this winter. This includes the Dolores River Basin, parts of the Gunnison and San Juan Basin, western parts of the Colorado River mainstem, and over part of the Gila River Basin in southeast Arizona. Storm systems moving around the periphery of the western U.S. high pressure ridge have impacted the extreme northern headwaters of the Green River Basin of Wyoming and eastern Colorado River headwaters. That continued to be the case early in February prior to the recent weather pattern change. Those impacts are reflected in the precipitation image below.

Month to Date Precipitation - February 15 2018

(Averaged by Basin)



Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

Images: February 2018 Days 1-15 percent of average precipitation

Snowpack:

Near or above average snow conditions continue to be limited to the extreme northern headwaters of the Green River Basin and eastern headwaters of the Colorado River Basin. Snow conditions remain very poor in most other areas with many locations reporting less than 50 percent of median and a few less than 30 percent of median. Those areas with some of the lowest snowpack conditions with respect to normal include lower elevations of the Great Basin in northern Utah, smaller tributaries of the Green River throughout central Utah, parts of the Duchesne River Basin and the Virgin River Basin in southwest Utah. Snowpack less than 40 percent of median also extends from the western Gunnison River Basin into the Dolores and San Juan River Basins.

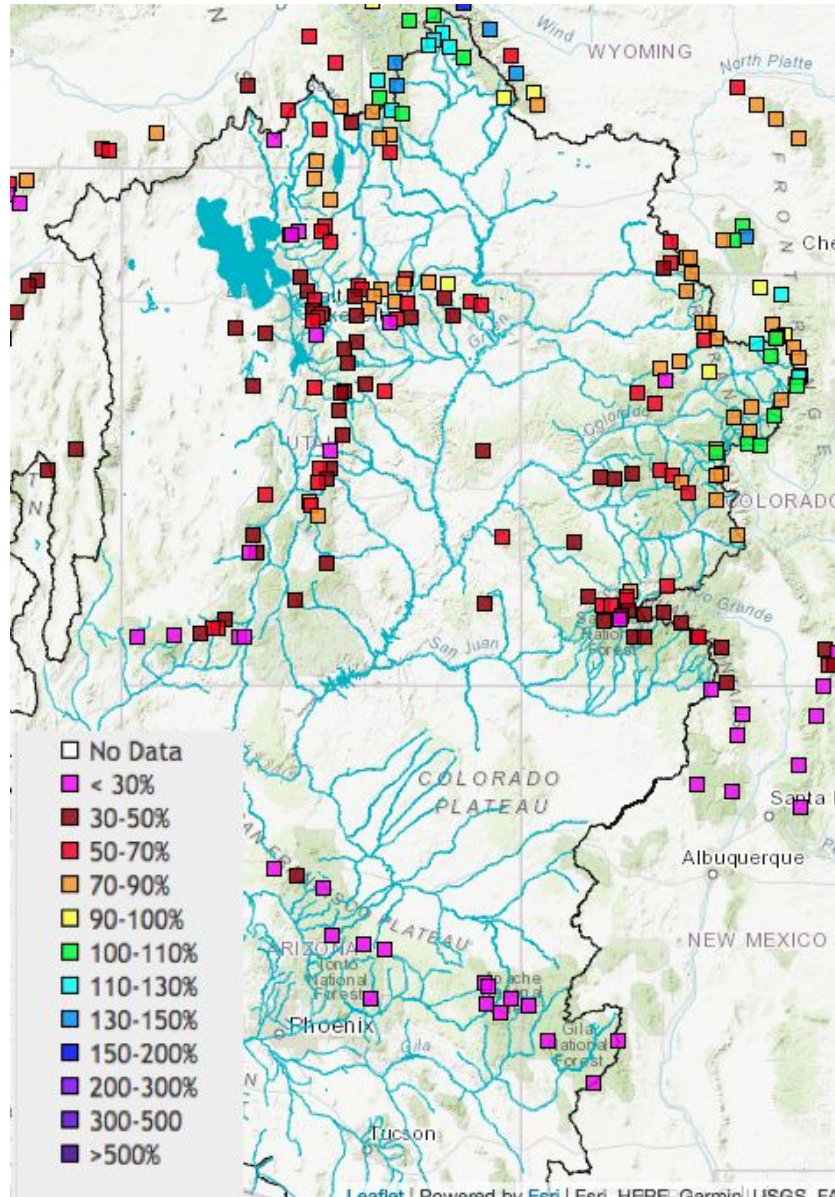
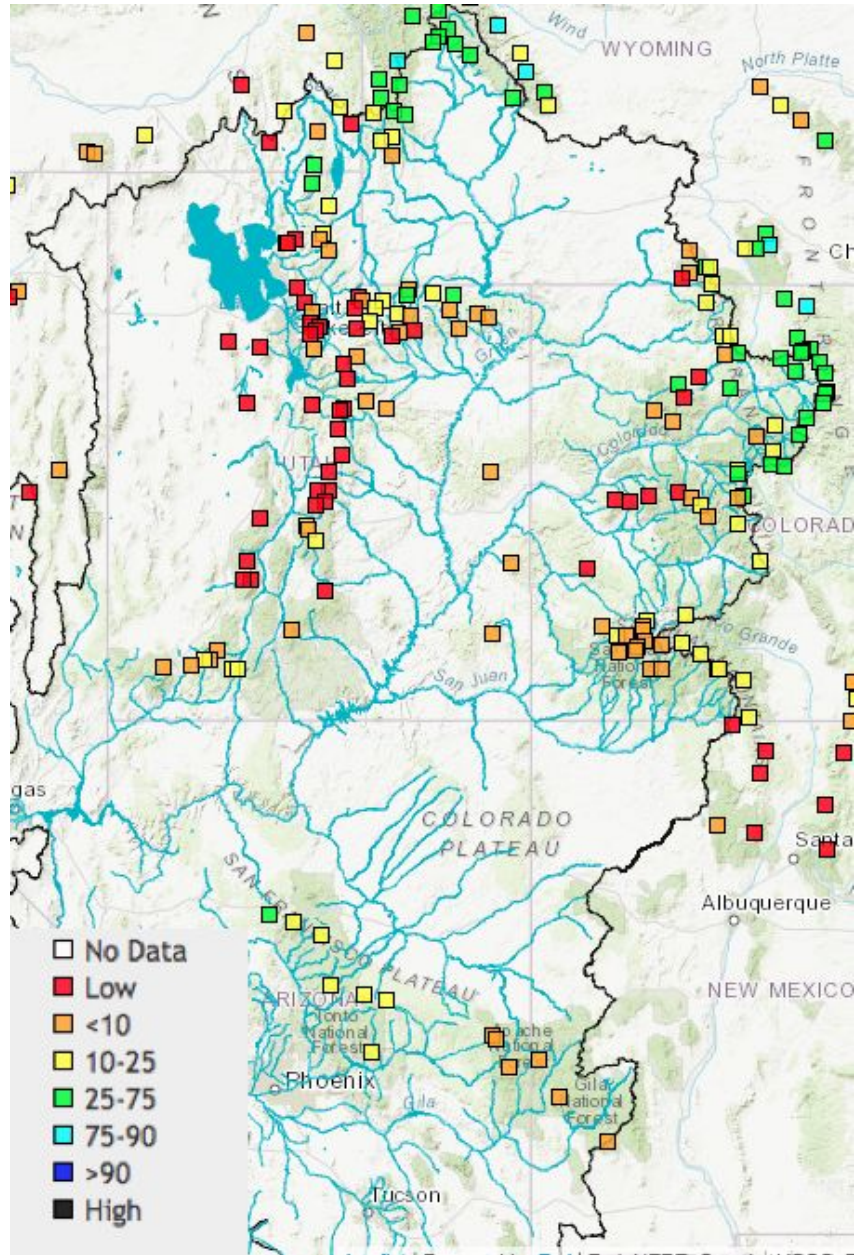


Image: Percent Median Snow Conditions as of February 14th 2018

The snow percentile image displayed below indicates where the current snow measurement ranks in the historical record (typically 35-40 years) for each site. Sites with red boxes indicate the lowest values on record for this time of year. Sites with orange boxes are in the bottom 10 percent of the record with most ranking as either the 2nd or 3rd lowest for this time of year.

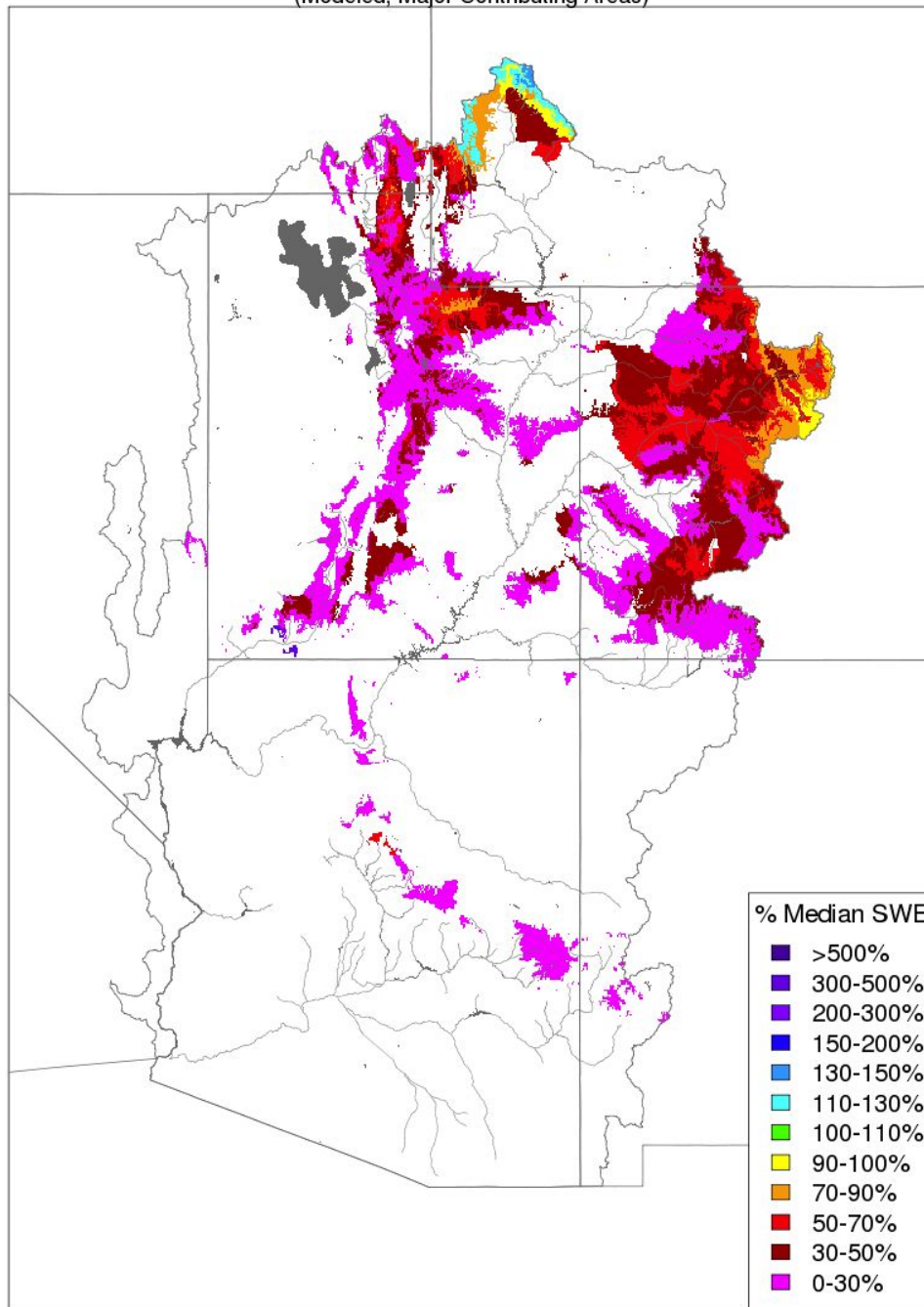


Snow Percentile Image: Historical SNOTEL ranking as of February 14th 2018

The image below is the representation of snow in the CBRFC hydrologic model. The snow represented in the model closely mirrors the SNOTEL image. The takeaway message is that poor snowpack conditions continue to be widespread.

Snow Conditions - February 14 2018

(Modeled, Major Contributing Areas)



Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

Modeled Snow: Snow representation from the CBRFC hydrologic model February 14th 2018

For updated SNOTEL information refer to click [here](#)

For CBRFC hydrologic model snow click [here](#)

Upcoming Weather:

The weather pattern has become more active over the CBRFC forecast area. A large low pressure system is expected to develop over the area during the third week of the month. Although precipitation amounts will vary across the forecast area the precipitation should be widespread and impact areas that have been quite dry through the recent winter months, possibly including the Lower Colorado River Basin. Longer range guidance suggests the weather pattern will remain progressive beyond the third week of February. This will keep the forecast area open to additional storm systems, although where the greatest precipitation impacts will occur is less certain at this time.

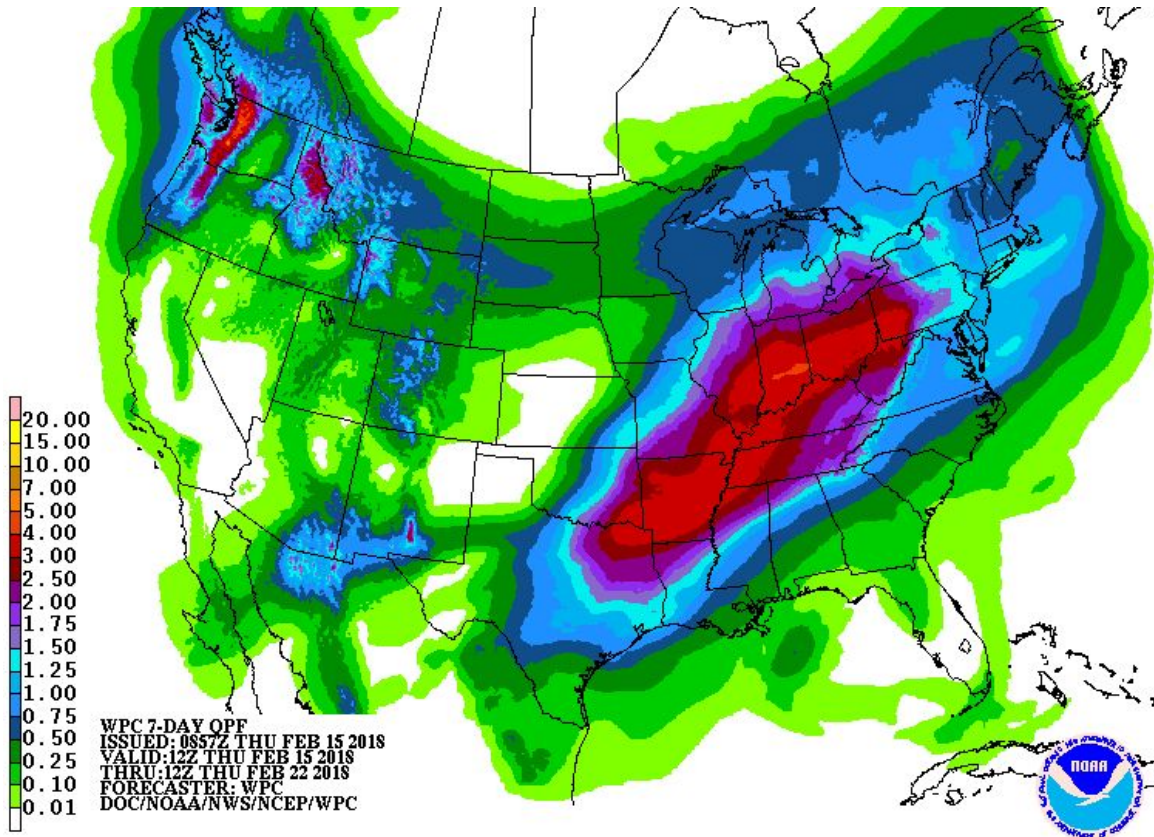


Image: NWS Weather Prediction Center precipitation forecast for Feb 15th - Feb 22nd 2018

End Of Month Reservoir Content Tables

- [Green River Basin](#)
- [Upper Colorado River Basin](#)
- [San Juan River Basin](#)
- [Great Salt Lake Basin](#)
- [Sevier Basin](#)

Basin Conditions and Summary Graphics

- [Green River Basin](#)

[Upper Colorado River Basin](#)

[San Juan River Basin](#)

[Great Salt Lake Basin](#)

[Sevier River Basin](#)

[Virgin River Basin](#)