

## January 17, 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 January Update):**

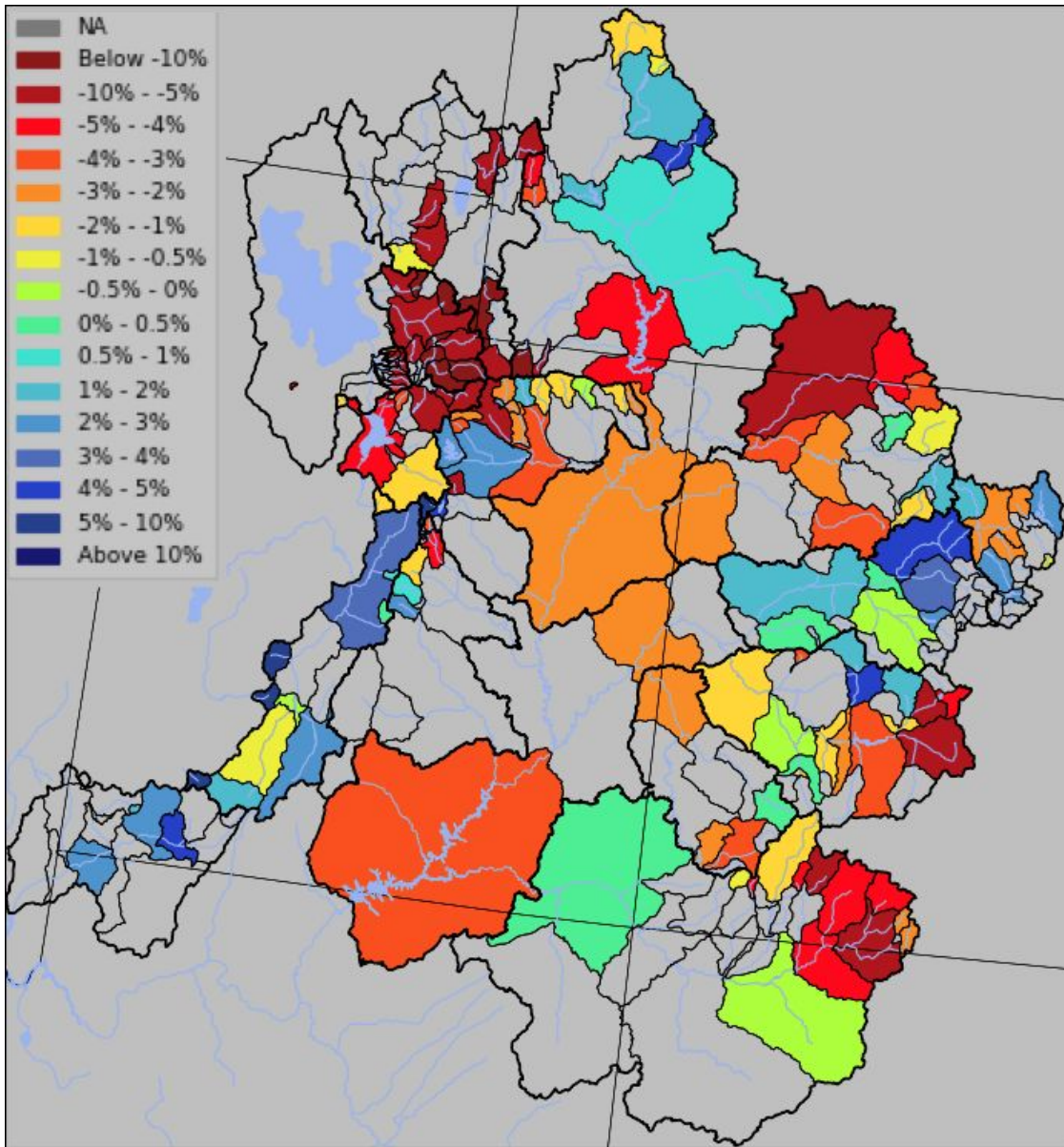
As of mid January seasonal April-July water supply forecasts remained near to slightly above average in the Green River Basin of Wyoming and remain below to much below average farther south through the Colorado and eastern Great Basins. Guidance for some areas did trend slightly higher since early January, but most of these were less than 5 percent of average increases. These areas were limited to headwater tributaries on the Colorado River mainstem, the Green River Basin of Wyoming, and smaller tributaries of the Green River Basin and Colorado River Basin in central and southern Utah. The Sevier River Basin, and Virgin River Basin in central and southern Utah also noted some minor increases in model guidance however the April-July runoff outlook remains much below average.

Some decreases with respect to average were noted in the model guidance in the Dolores and San Juan Basin as well as parts of the Weber and Provo River Basins. However overall forecast updates for most larger reservoirs did not change significantly from the first of the month.

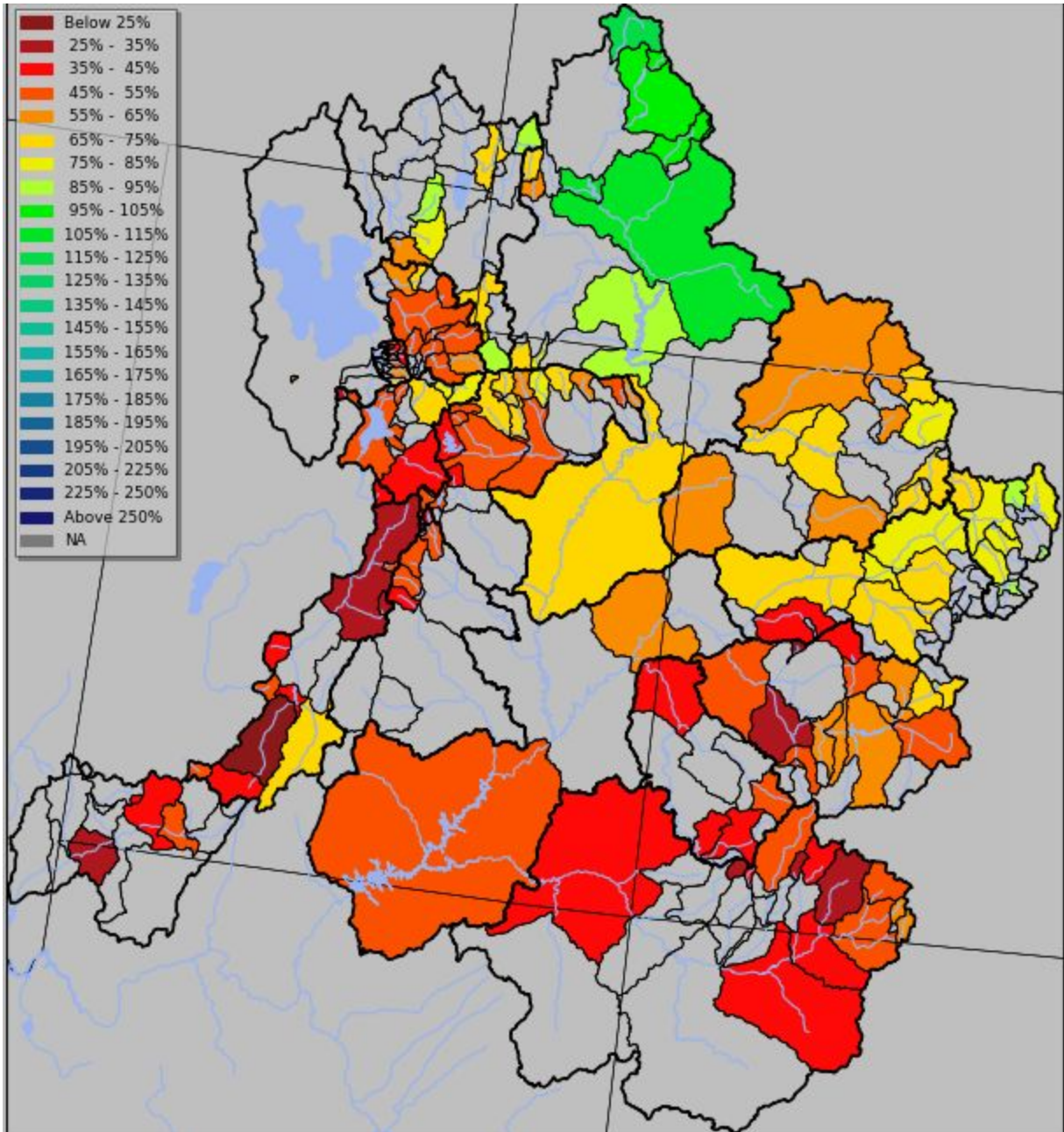
January - May forecast volumes for the Lower Colorado Basin of Arizona and New Mexico remain well below the historical median as dry conditions persist there.

April-July unregulated inflow forecasts for some of the major reservoirs in the Upper Colorado River Basin as of mid January include Fontenelle Reservoir 780 KAF (108% of average), Flaming Gorge 1.00 MAF (102% of average), Blue Mesa Reservoir 420 KAF (62% of average), McPhee Reservoir 125 KAF (42% of average), and Navajo Reservoir 295 KAF (40% of average). The Lake Powell inflow forecast is 3.90 MAF (54% of average).

Seasonal Water Supply Forecasts:



Trend in the April-July runoff volume forecast guidance from January 1st to January 16th 2018  
(Change in April-July percent of average)



April-July runoff volume guidance as of January 16 2017  
(percent of 1981-2010 average)

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

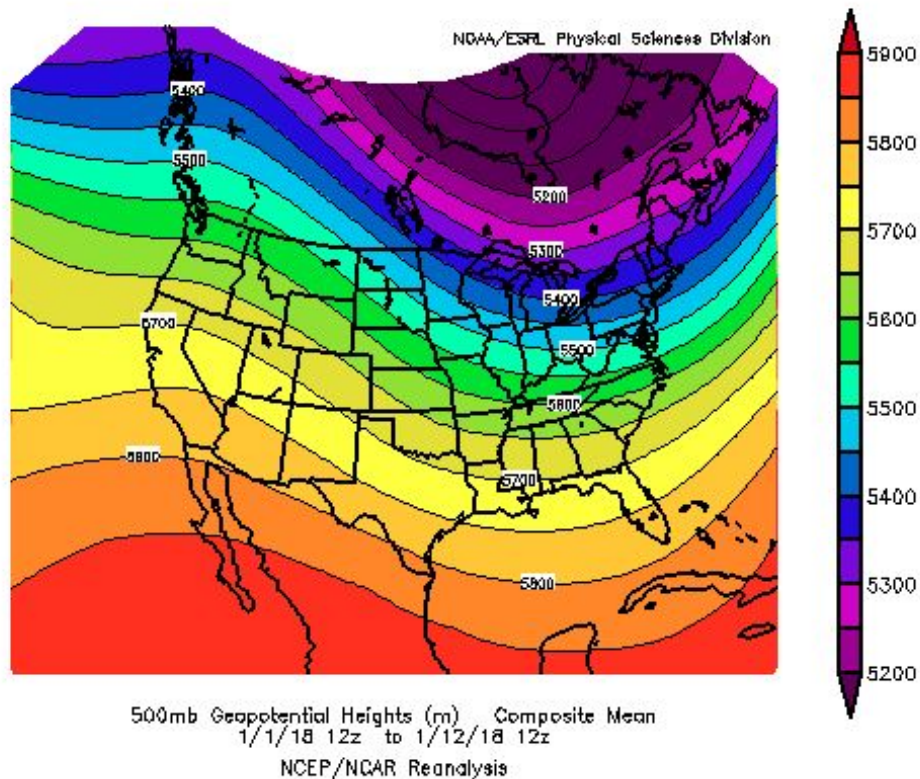
## Water Supply Discussion

### Weather Synopsis:

While the ridge of high pressure over the western U.S. continued to dominate the pattern the first half of January, a storm system did move through during the second week of the month. Precipitation did occur over a widespread area but was not equally distributed regarding amounts. A few areas received precipitation amounts that pushed mid



month totals into the above average category, however in general most areas remained below average for the first half of January.



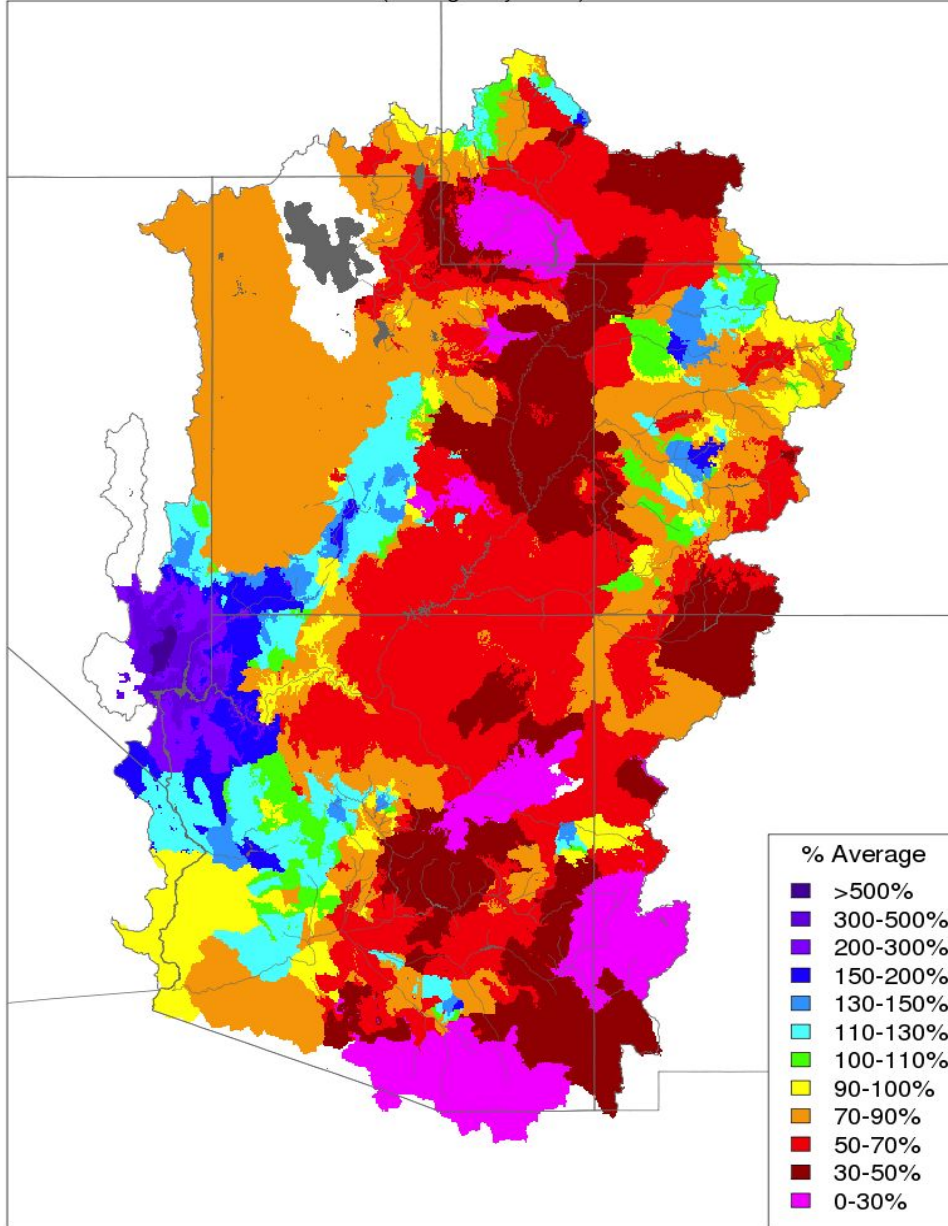
Mean atmospheric pattern for the first half of January. A ridge of high pressure was the dominant feature over the western U.S. with a trough to the east.

### Precipitation and Temperature:

Precipitation for the first half of January was highly variable with some areas receiving above average precipitation and other areas receiving below average precipitation. The Virgin River and the Colorado River below Lake Mead have had 150-200+ percent of average precipitation so far this month. Other areas with above average or near average precipitation for the first half of January include the Green River Basin above Fontenelle Reservoir, the Yampa River Basin, the headwaters of the Upper Colorado River above Kremmling, and small tributaries to the Green River in central Utah. The other major river basins including the Gunnison River Basin, San Juan River Basin, Duchesne River Basin, Bear River Basin, Weber River Basin, and Provo River Basin had below average precipitation.

# Month to Date Precipitation - January 16 2018

(Averaged by Basin)



Prepared by NOAA, Colorado Basin River Forecast Center  
Salt Lake City, Utah, [www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)

Images: January 2018 Days 1-16 percent of average precipitation

## Snowpack:

Overall the snow situation has changed little since early January. Only part of the Green River Basin in Wyoming and Colorado River headwater contain SNOTEL sites indicating near or above normal snow conditions. Elsewhere conditions are much below normal for this time of year, particularly farther south in the CBRFC forecast area. Several sites indicate less than 30% of median snow conditions in the Gunnison, San Juan, Dolores River Basins, over the southern half of Utah and in the Lower Colorado River Basin of Arizona and New Mexico.

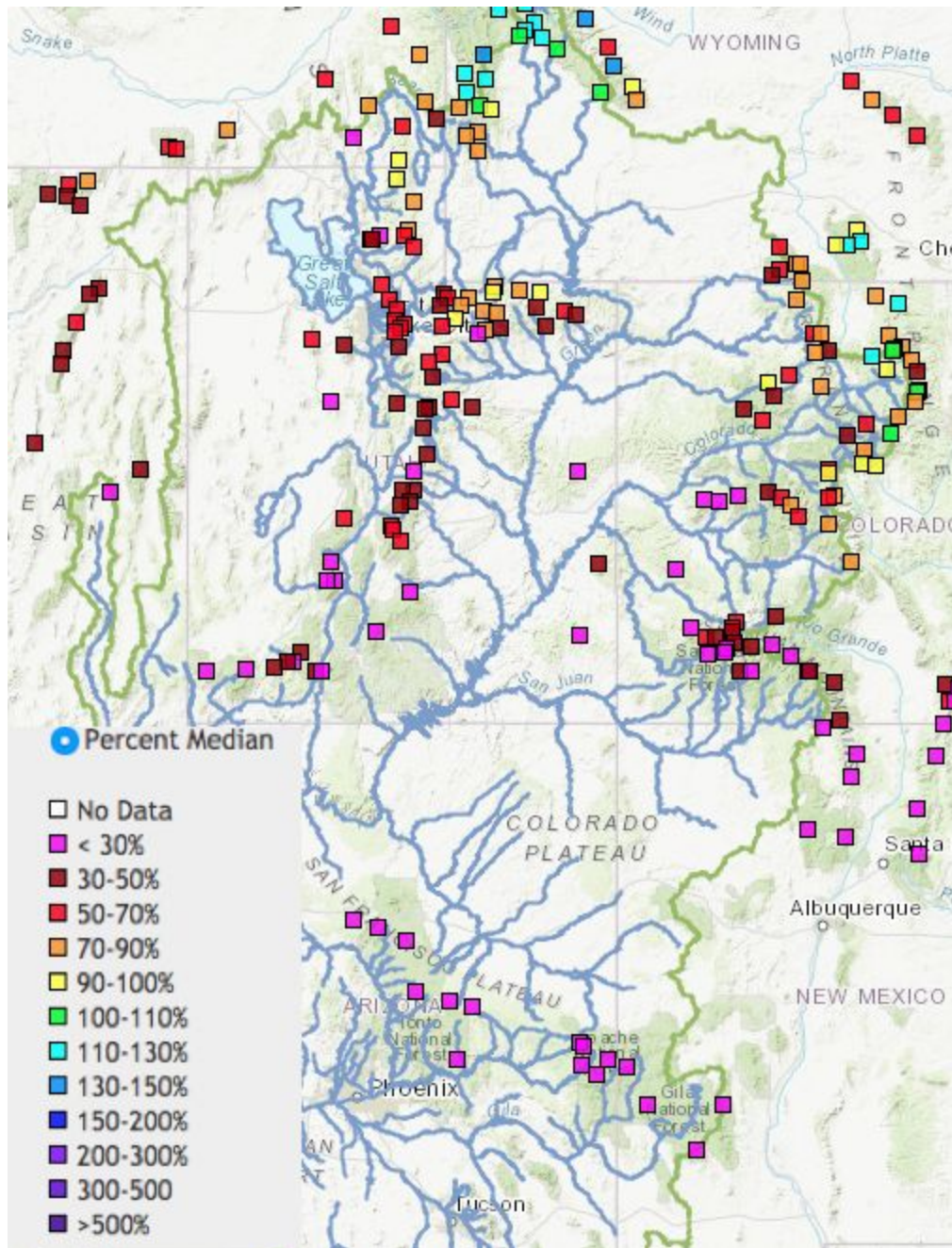
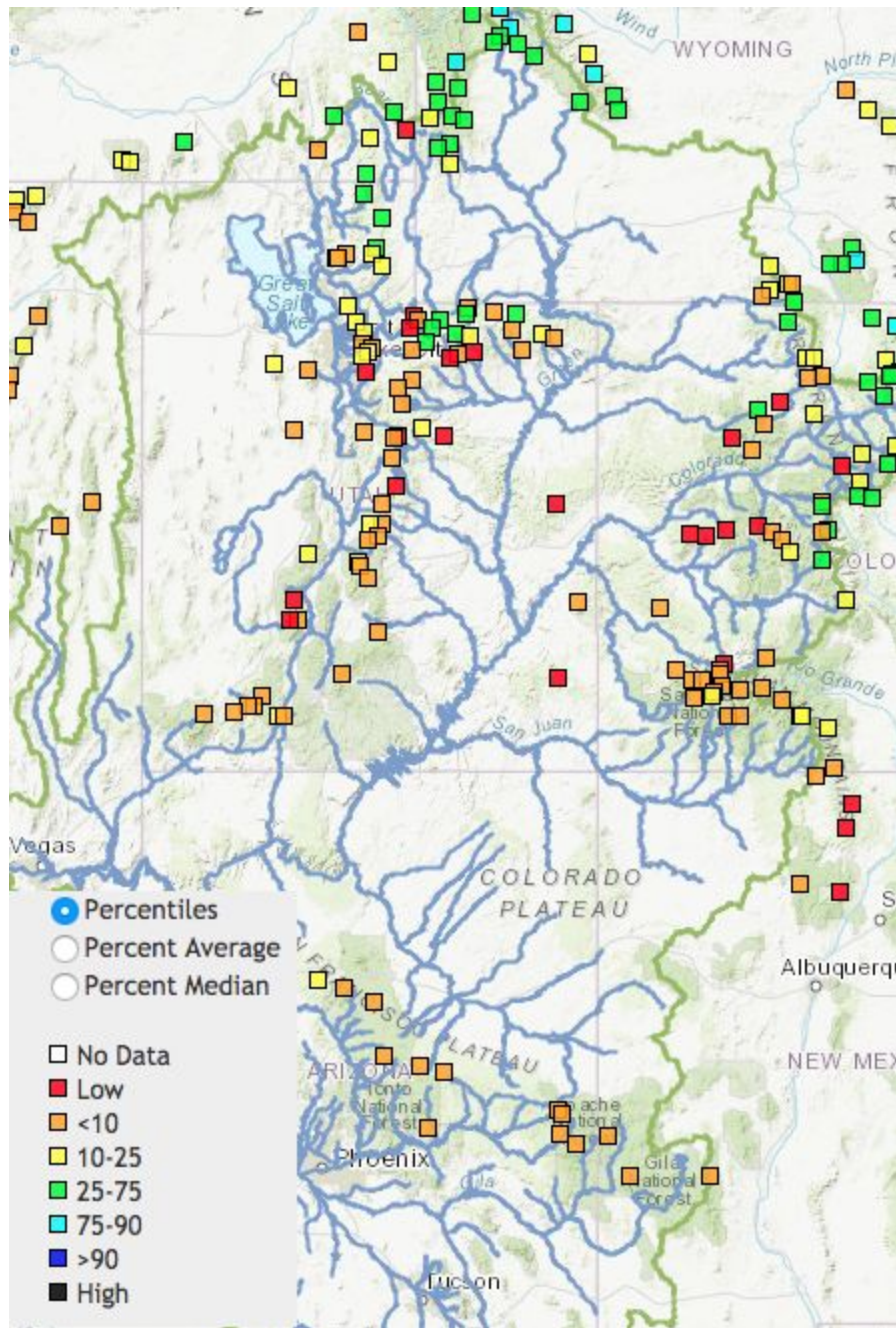


Image: Percent Median Snow Conditions as of January 17th 2018

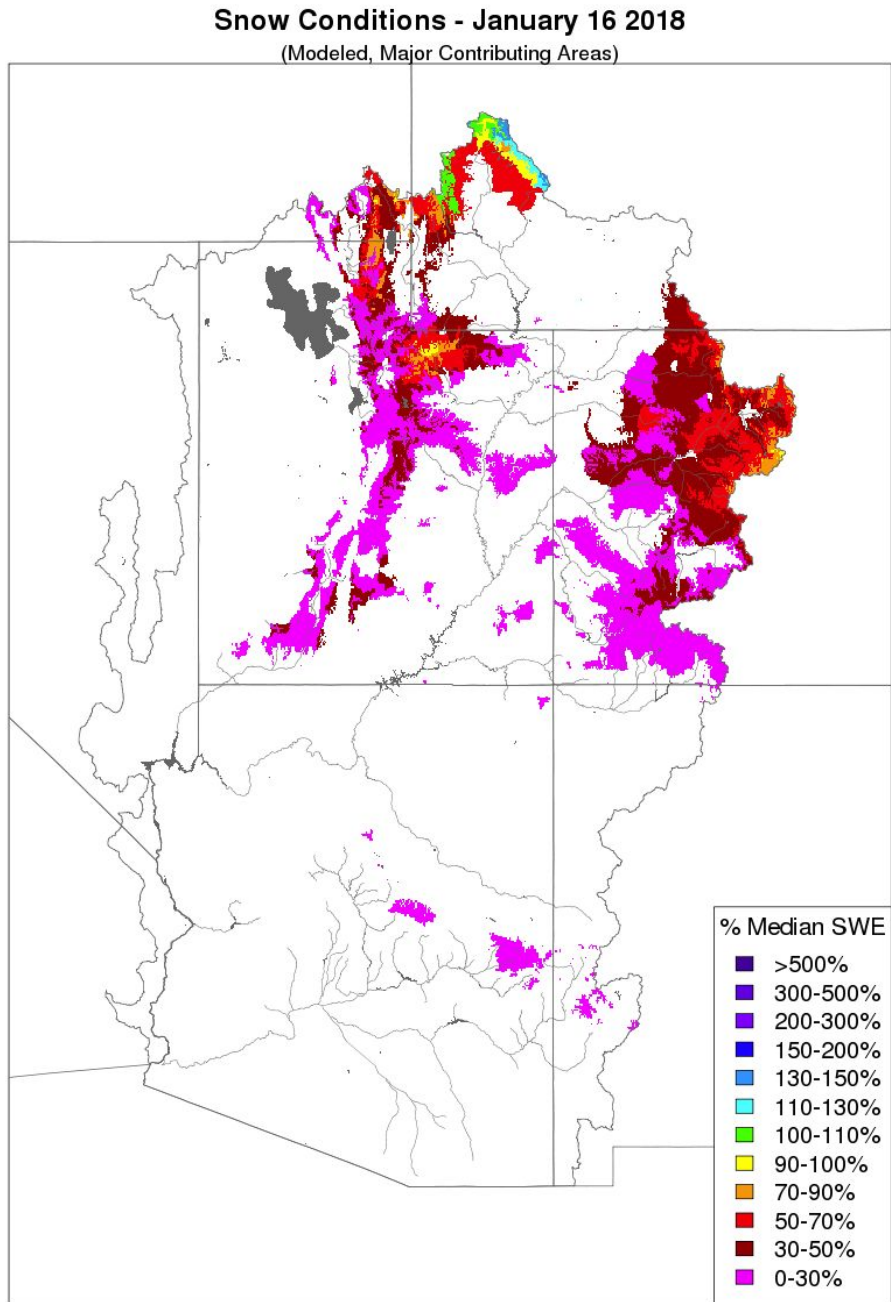


The snow percentile image displayed below indicates where the current snow measurement ranks in the historical record (typically 35-40 years) for each site. Sites with red boxes indicate the lowest values on record for this time of year. Sites with orange boxes are in the bottom 10 percent of the record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



Snow Percentile Image: Historical SNOTEL ranking as of January 17th 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 despite the storm system the second week of January.



Modeled Snow: Snow representation from the CBRFC hydrologic model January 17th 2018



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

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

### Upcoming Weather:

A more favorable pattern for precipitation will impact the CBRFC forecast area over the next 7-10 days. The first storm system moving through the weekend of Jan 20-21 should bring widespread precipitation with heaviest amounts over the northern half of the forecast area. Subsequent storm systems are likely to benefit areas farther to the north including the northern Great Basin, Green River Basin of Wyoming, and northern Colorado with less precipitation over the southern areas that include the Dolores and San Juan River Basins, southern Utah, and the Lower Colorado River Basin of Arizona and New Mexico. January may exit on the dry side with a high pressure ridge over the area.

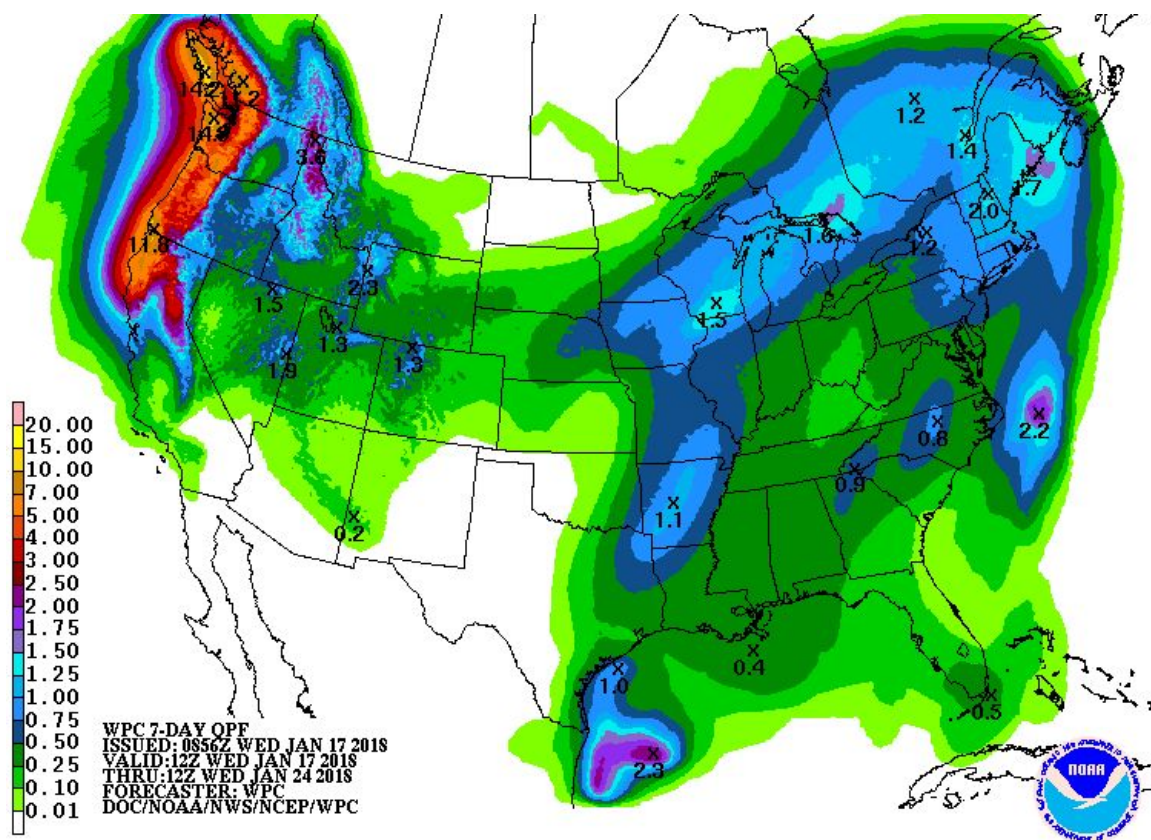


Image: NWS Weather Prediction Center precipitation forecast for Jan 17th - Jan 24th 2018

### 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](#)