

## January 16, 2020 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.

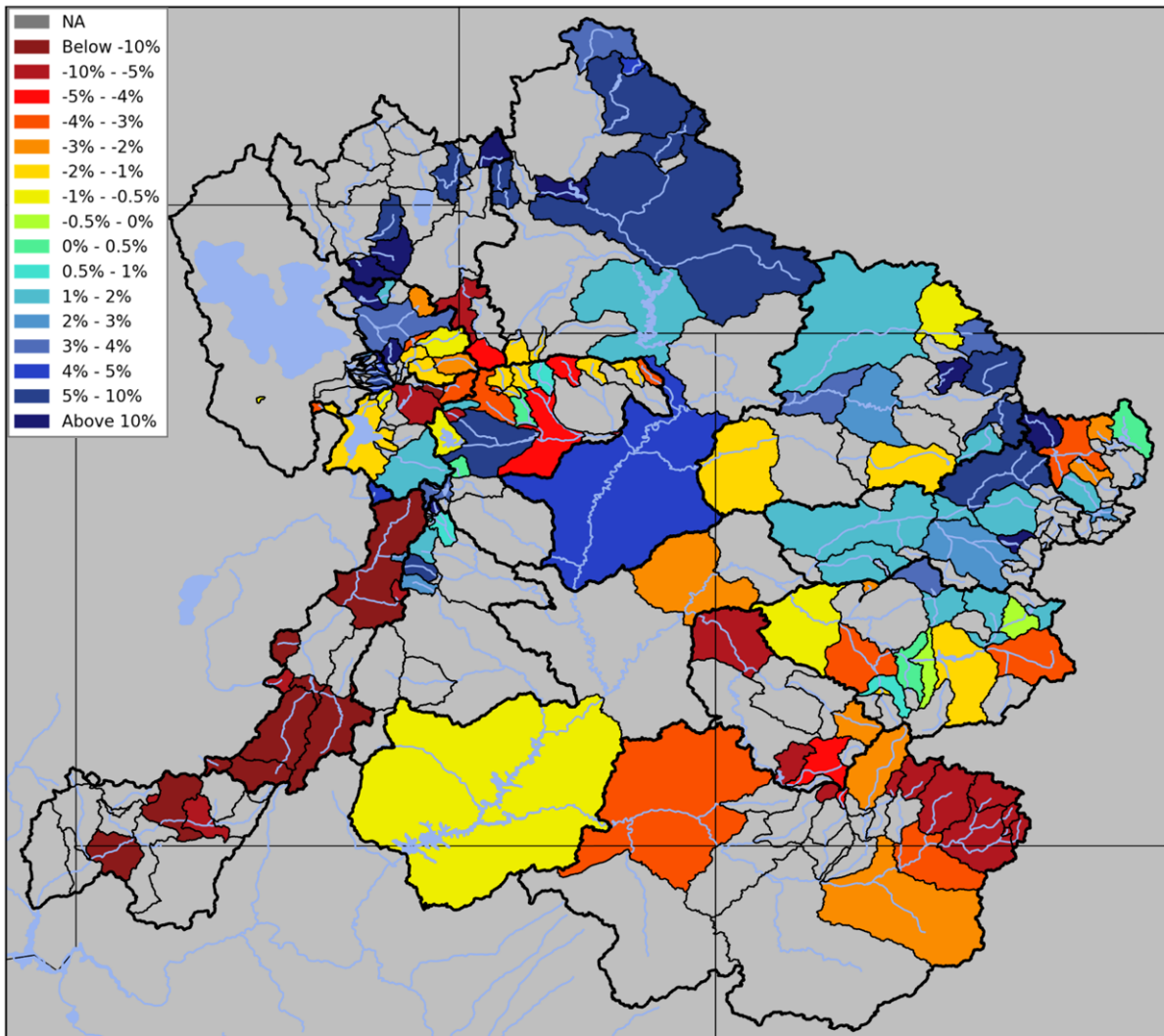
### Water Supply Forecast Summary

As of mid January, April-July water supply volume forecasts remain near to below average throughout the Upper Colorado River Basin and Great Basin. While additional snow has accumulated over the Great Basin and Upper Colorado River Basin, snow conditions as a percent of the 1981-2010 historical median have generally remained the same or slightly worsened since the beginning of the month, with the exception of the northernmost basins (Bear, Weber, Six Creeks, Upper Green, Yampa). Below normal soil moisture conditions across the majority of the Upper Colorado River Basin entering the winter season continue to have a negative impact on water supply forecasts.

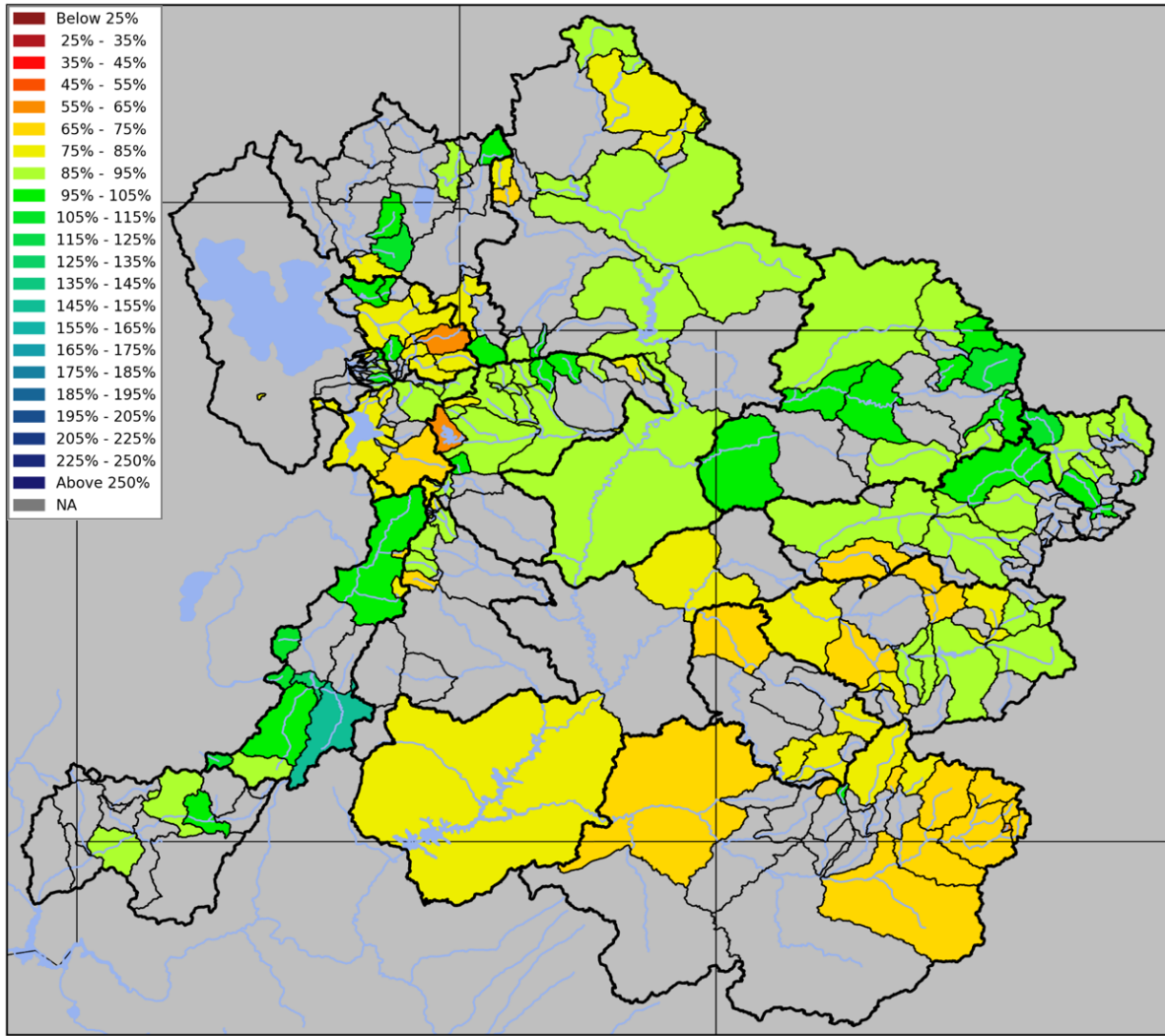
April-July unregulated inflow forecasts for some of the major reservoirs in the Upper Colorado River Basin include Fontenelle Reservoir 620 KAF (86% average), Flaming Gorge 870 KAF (89% of average), Blue Mesa Reservoir 590 KAF (87% of average), McPhee Reservoir 245 KAF (83% of average), and Navajo Reservoir 520 KAF (71% of average). The Lake Powell inflow forecast did not change from the beginning of the month and is 5.9 MAF (82% of average).

Lower Colorado River Basin precipitation was well below average during the first half of January, which has resulted in a decrease in water supply guidance. While Lower Colorado River Basin snow conditions have declined during the past two weeks, mid-January snowpack conditions in the Lower Colorado River Basin generally remain above normal (median). April-July forecast runoff volume guidance in the Virgin River Basin continues to be well above average. January-May runoff volumes in the Lower Colorado River Basin of Arizona remain above median in central Arizona (Verde and Salt basins), while mid-January water supply guidance in the Upper Gila and Little Colorado River basins is near to below the 1981-2010 median.

## Seasonal Water Supply Forecasts



Trend in the April-July runoff volume forecast guidance from January 1 to January 15, 2020.  
(Change in April-July percent of average)



April-July runoff volume guidance as of January 15, 2020.  
(percent of 1981-2010 average)

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

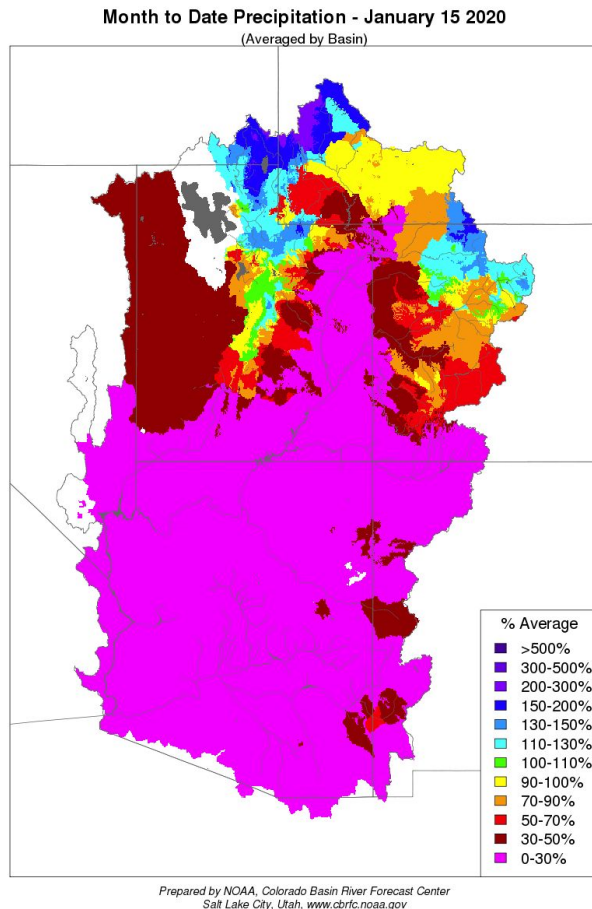
## Water Supply Discussion

### Weather Synopsis

Storm systems during the first half of January generally targeted the northern mountainous areas of the CBRFC forecast area, bringing below average temperatures and above average precipitation to this region. The Great Basin, Upper Green headwaters, and Yampa River Basin benefited the most from the January-to-date weather pattern, while basins to the south experienced drier conditions.

### Precipitation

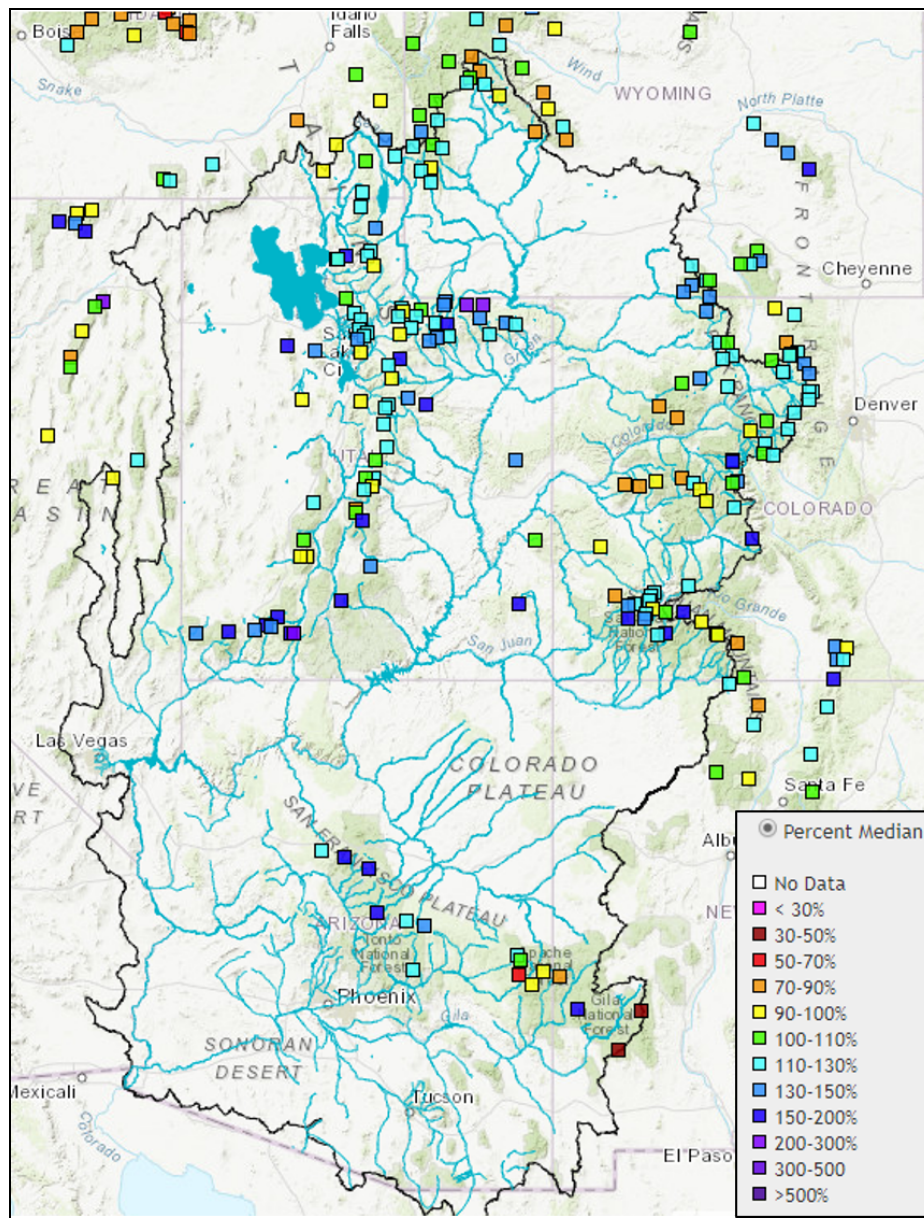
Precipitation during the first half of January was highly variable with some areas receiving above average precipitation and other areas receiving below average precipitation. January-to-date precipitation has favored the Utah-Idaho-Wyoming border, with the Bear and northernmost Upper Green basin receiving above average precipitation. Precipitation was generally above average across the Great Basin, Yampa, and Upper Colorado River Basin above Kremmling. In southwest Colorado, the Gunnison and Dolores basins received below average precipitation while the San Juan basin received much below average precipitation during the first half of January. The Lower Colorado River Basin also received well below average precipitation during the first two weeks of January. The image below shows precipitation during the first half of January, as a percent of average.



January 1-15, 2020 percent of average precipitation.

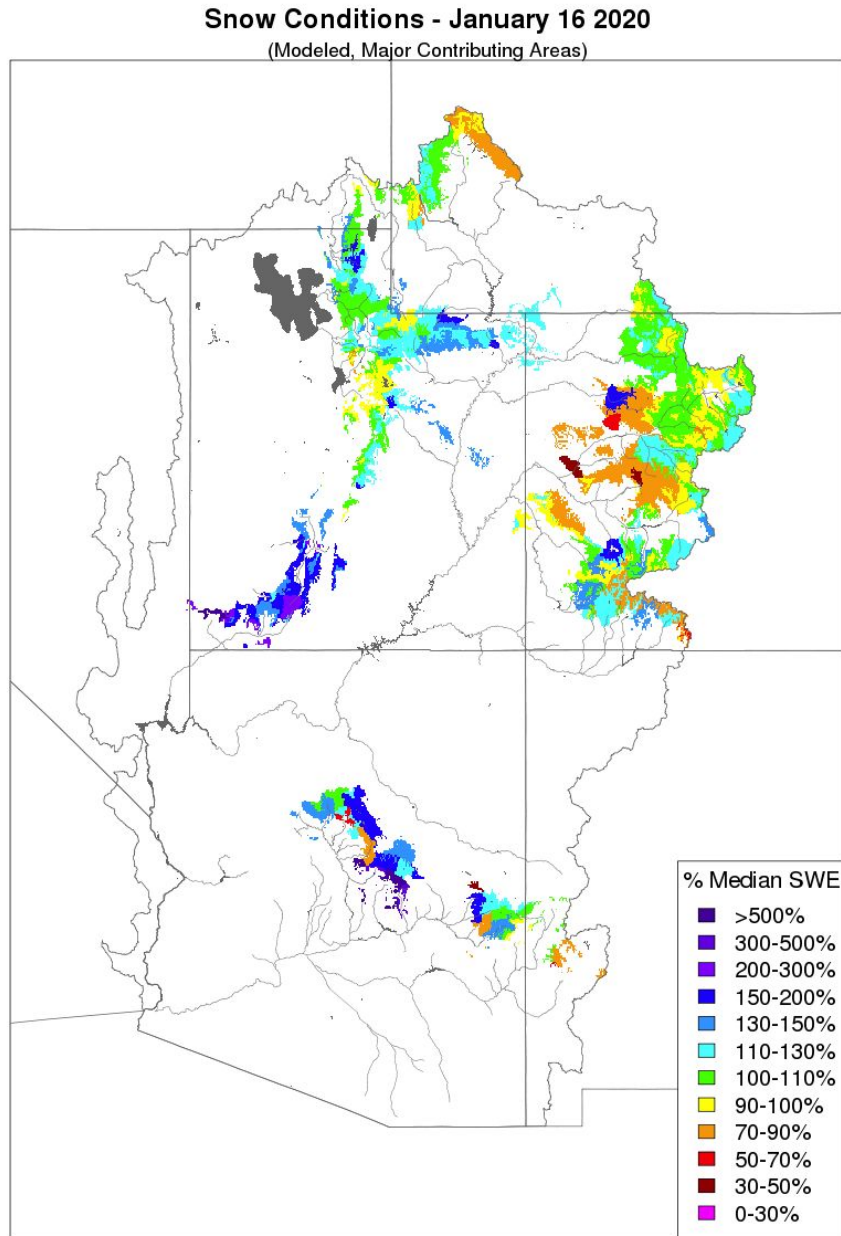
## Snowpack

Snow conditions as of mid-January are generally above normal (median) throughout the CBRFC forecast area. Most SNOTEL stations across the Great Basin and Upper Colorado River Basin accumulated additional snow since the beginning of the year. The highest snow water equivalent (SWE) accumulations over the past two weeks have occurred near the Utah-Idaho-Wyoming border extending south along the Wasatch Range, as well as the headwaters of the Upper Green and Yampa basins. Upper Colorado River Basin percent of median SWE conditions since the beginning of the month have declined the most in the Dolores and San Juan basins in southwest Colorado due to a lack of precipitation. SWE conditions since early January have also declined in Arizona, however snow conditions are currently still near to much above the historical median across much of the Lower Colorado River Basin, with SWE conditions remaining favorable ( $>150\%$  of median) in the Virgin and Verde basins.



Percent median snow conditions as of January 16, 2020.

The image below is the representation of snow in the CBRFC hydrologic model. The snow represented in the model closely mirrors the SNOTEL image.



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

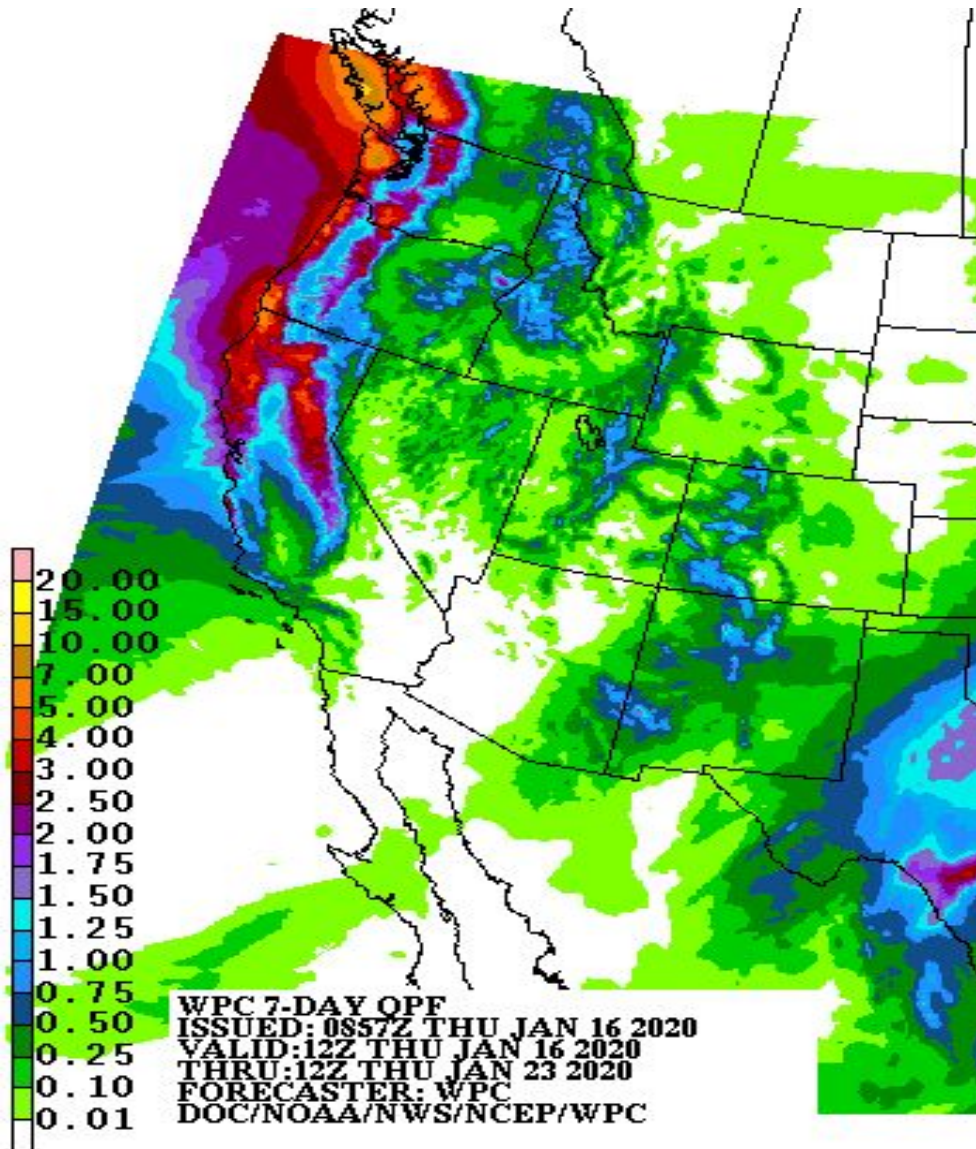
Snow representation from the CBRFC hydrologic model January 16, 2020.

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

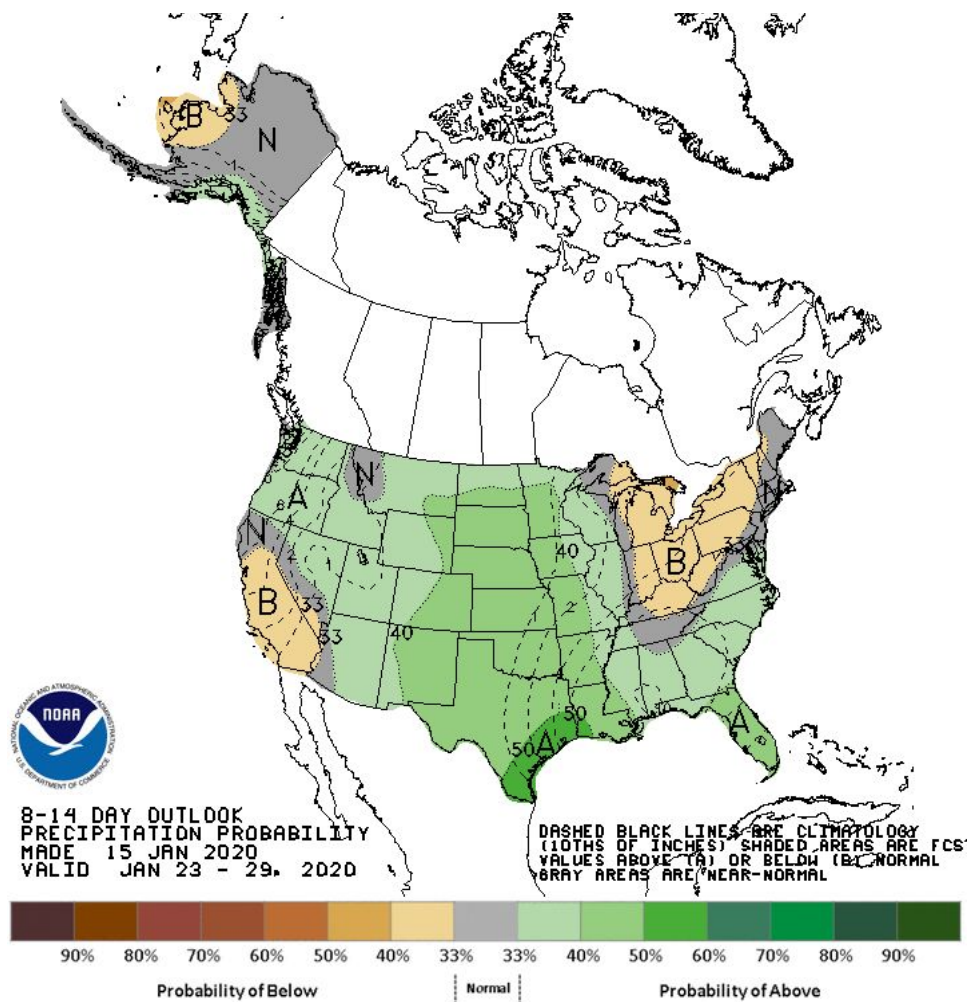
For CBRFC hydrologic model snow click [here](#).

## Upcoming Weather

A fast moving storm system is expected to move across the area today through Friday. Precipitation in the form of snow is expected to fall across the northern basins, with higher amounts forecast over the San Juans. Precipitation will mostly fall as rain over the Upper Gila and Upper Salt basins. A weak ridge of high pressure will build across the Intermountain West this weekend into early next week, with dry conditions prevailing. The weather pattern becomes more uncertain after the middle of next week, however the models suggest a weak trough across the region, which slightly favors above normal precip in the 8-14 day period (January 23-29).



Weather Prediction Center precipitation forecast for Jan 16-23, 2020.



NWS Climate Prediction Center precipitation probability forecast for Jan 23-29, 2020.

For CBRFC's beginning of the month online publication that contains basin conditions, summary graphics, and end of month reservoir content tables, refer to the following links.

**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](#)