

## May 17, 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.

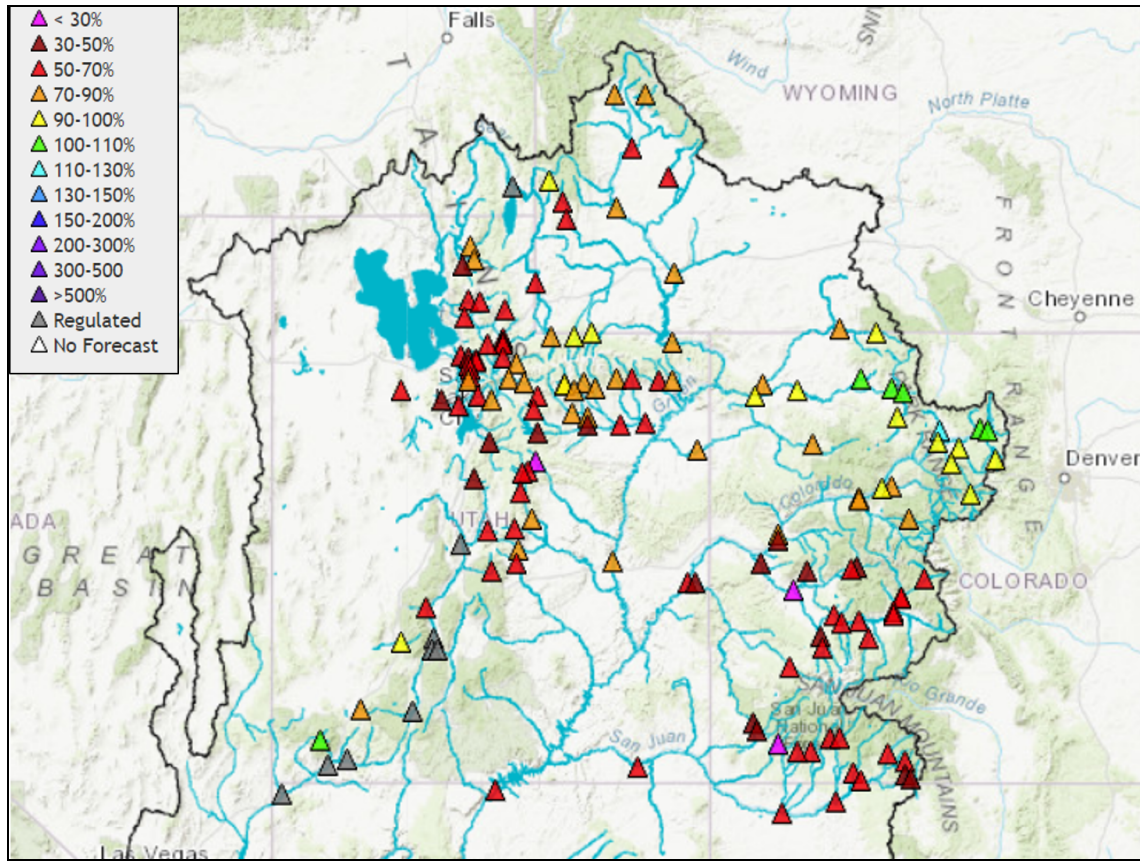
### Water Supply Forecast Summary

April-July water supply volume forecasts are near to below average throughout the Upper Colorado River Basin and Great Basin. Mid-May observed snow water equivalent (SWE) conditions are generally below normal (median) across the Upper Colorado River Basin and Great Basin. Runoff volume guidance during the first half of May has generally remained similar or declined across the Great Basin and Upper Colorado River Basin. Within the Upper Colorado River Basin, the highest forecast volumes with respect to average are in the Upper Colorado River mainstem and White/Yampa basins, where volume guidance is generally near the 1981-2010 historical average. Mid-May water supply volume guidance is generally slightly below average in the Green and Duchesne basins and well below average across southwest Colorado (Gunnison, Dolores, San Juan basins).

April-July unregulated inflow forecasts for some of the major reservoirs in the Upper Colorado River Basin include Fontenelle Reservoir 640 KAF (88% average), Flaming Gorge 820 KAF (84% of average), Blue Mesa Reservoir 395 KAF (59% of average), McPhee Reservoir 103 KAF (35% of average), and Navajo Reservoir 365 KAF (50% of average). The Lake Powell inflow forecast is 4.4 MAF (61% of average), a four percent decrease from May 1.

Water supply volume guidance in the Great Basin is most favorable in the Bear River Basin, where forecasts are near to slightly below average. The April-July water supply outlook in the Six Creeks, Weber, Provo/Utah Lake, and Sevier basins is slightly below to well below average.

## Seasonal Water Supply Forecasts



Upper Colorado, Great, Virgin River Basins: April-July runoff volume guidance as of May 17, 2020.  
(percent of 1981-2010 average).

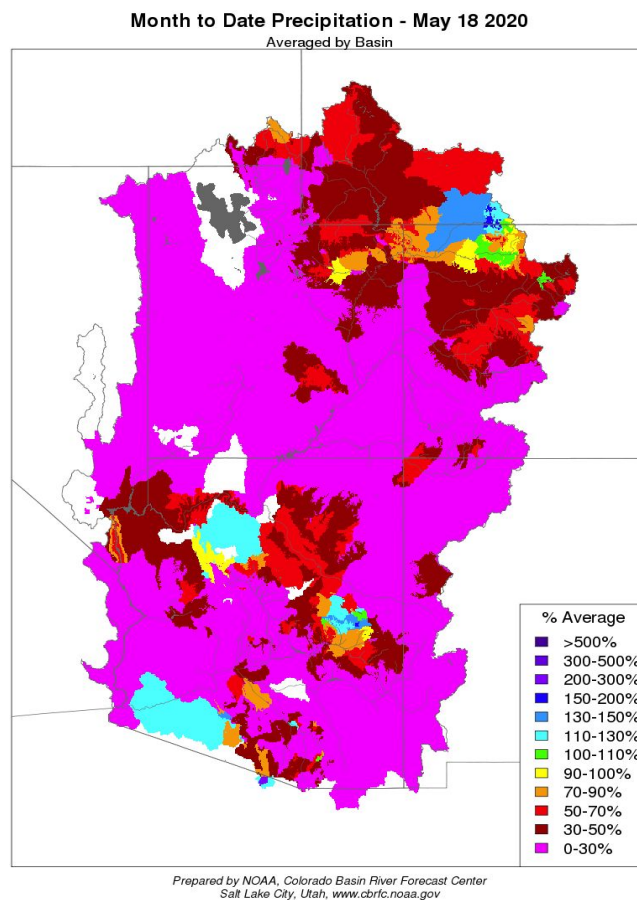
For specific site water supply forecasts click [here](#)

## Water Supply Discussion

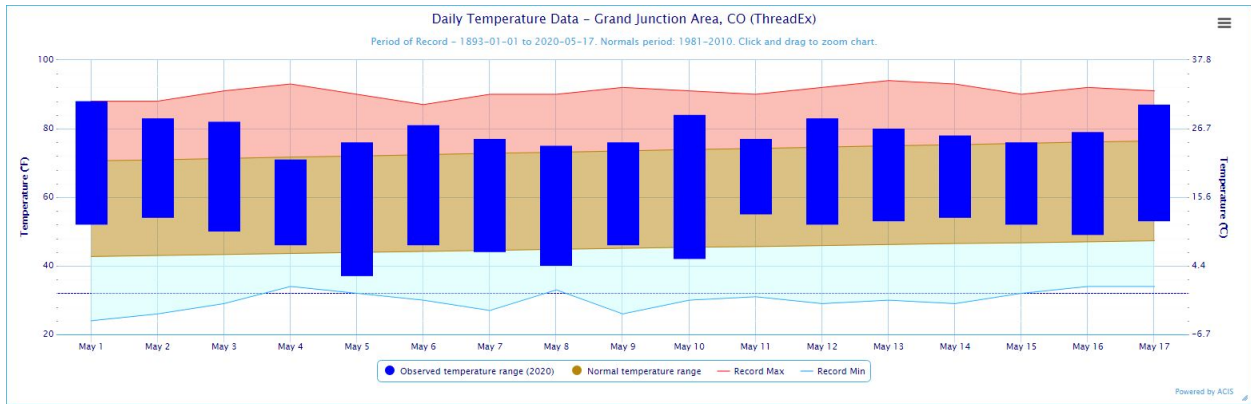
### Weather Synopsis (May 1-17)

May has started where April left off, with dry conditions prevailing across much of the Upper Colorado and Great Basins. The weather pattern over the first half of the month has been dominated by anomalous ridging over the Intermountain West, resulting in near to above normal temps and efficient snowmelt. While there have been brief cooldowns behind fronts, a prolonged period of below normal temps and widespread cloud cover has not occurred so far this month. A few weak storm systems have clipped the northern half of Colorado, bringing showers and some heavy rain to a few basins. An area of showers and thunderstorms developed along the Wyoming-Colorado border on May 3, bringing 1-2 inches of precipitation to the Little Snake/Yampa basins. More widespread precipitation (0.5-1 inches) occurred on May 11-12 over portions of the Upper Colorado mainstem and Yampa basins.

Outside of the aforementioned basins that received a day or two of decent precipitation, the first half of May has seen below to well below normal precipitation. This is especially true over much of the Great Basin and southwest Colorado (0-30% of normal). In fact, many SNOTELs in these areas are below the 15th percentile for month to date precipitation. With a few days of heavier precip, much of the Yampa basin is near to slightly above normal (100-130%). For the Lower Basin, climatological precip amounts drop off in May, and much of Arizona and southern Utah has seen minimal precip.



May 1-17, 2020 percent of average precipitation.  
(Averaged by basins defined in the CBRFC hydrologic model)



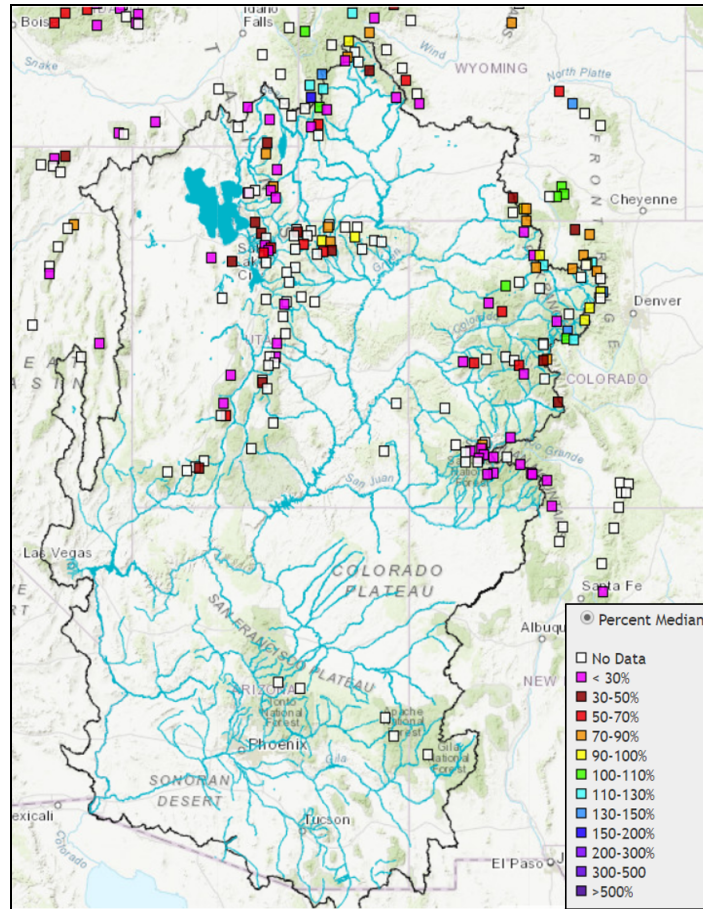
May 1-17, 2020 temperatures at Grand Junction, CO. Most days have been near to above normal.

### Snowpack

It's important to note that in the spring after the normal time of peak snowpack has passed, percent median SWE can be misleading and vary significantly from day to day, as well as site to site, depending on the rate of snowmelt, new snow accumulation, and the magnitude of the median value. With that said, observed snow water equivalent (SWE) conditions as of mid-May are generally below normal (median) across the Upper Colorado River Basin and Great Basin. Contributing factors to the decline in the seasonal snowpack conditions include much below average precipitation across the region during April and the first half of May, as well as rapid snowmelt during the past several weeks. The only exception to this is the Upper Colorado River mainstem above Kremmling, where basin average SWE conditions are near normal.

Upper Colorado River Basin snow conditions are below normal across the Upper Green, White/Yampa, Colorado River mainstem below Kremmling, Duchesne, and Virgin basins. Mid-May SWE conditions are much below normal in the Gunnison, Dolores, and San Juan basins. Snowpack conditions above Lake Powell are around 70% of the historical median. Snow has melted out across the mountainous areas of the Lower Colorado River Basin (Arizona).

Mid-May basin average SWE conditions across the Great Basin are below normal and range from 40-60% of the historical median. Observed (SNOTEL) conditions as a percent of the 1981-2010 historical median are shown in the image below.

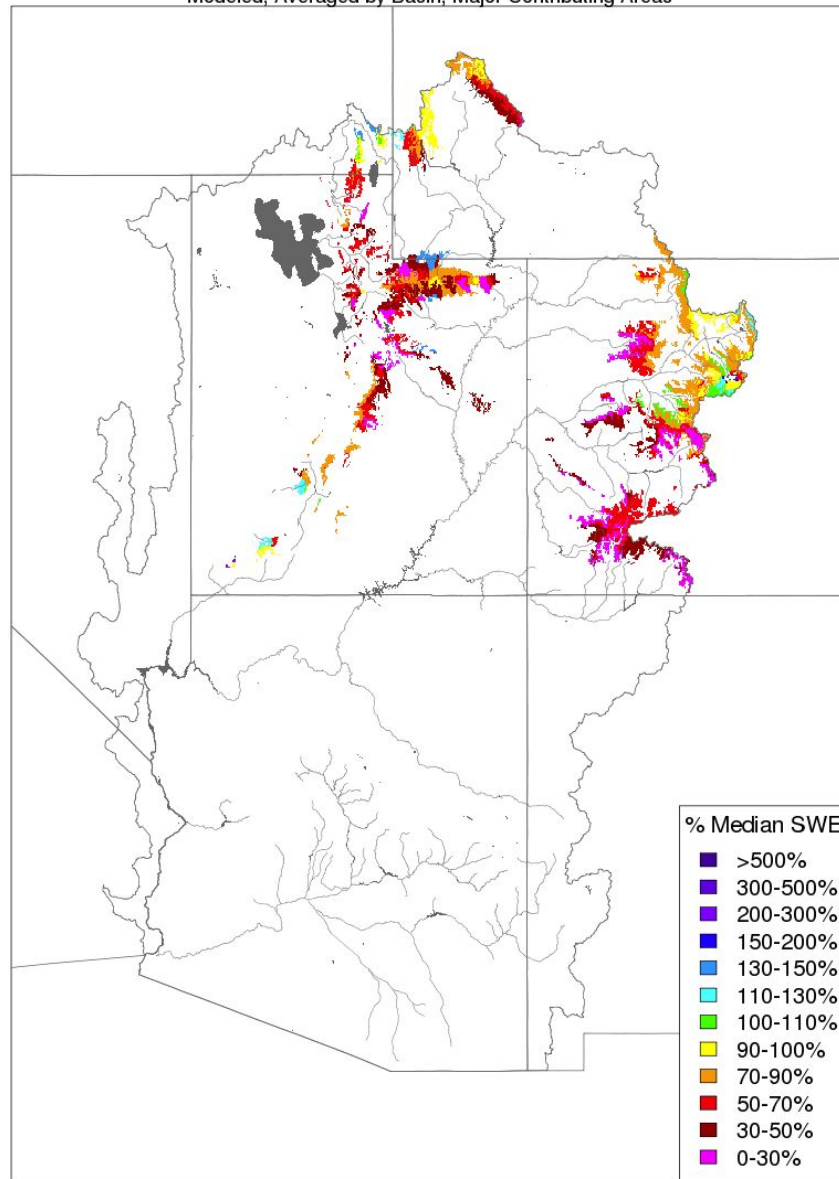


Observed (SNOTEL) percent median SWE conditions as of May 17, 2020.

The image below is the representation of mid-May CBRFC model snow conditions in areas that provide the greatest contribution of April-July runoff. Model snow conditions correlate well with SNOTEL conditions throughout the Colorado River and Great Basins. Even though many of the SNOTEL locations are melted out, the model has the ability to represent snow conditions at elevations above the SNOTEL network and is indicating that snow remains at the high elevations

## Snow Conditions - May 17 2020

Modeled, Averaged by Basin, Major Contributing Areas



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

CBRFC hydrologic model snow conditions in significant runoff areas as of May 17, 2020.

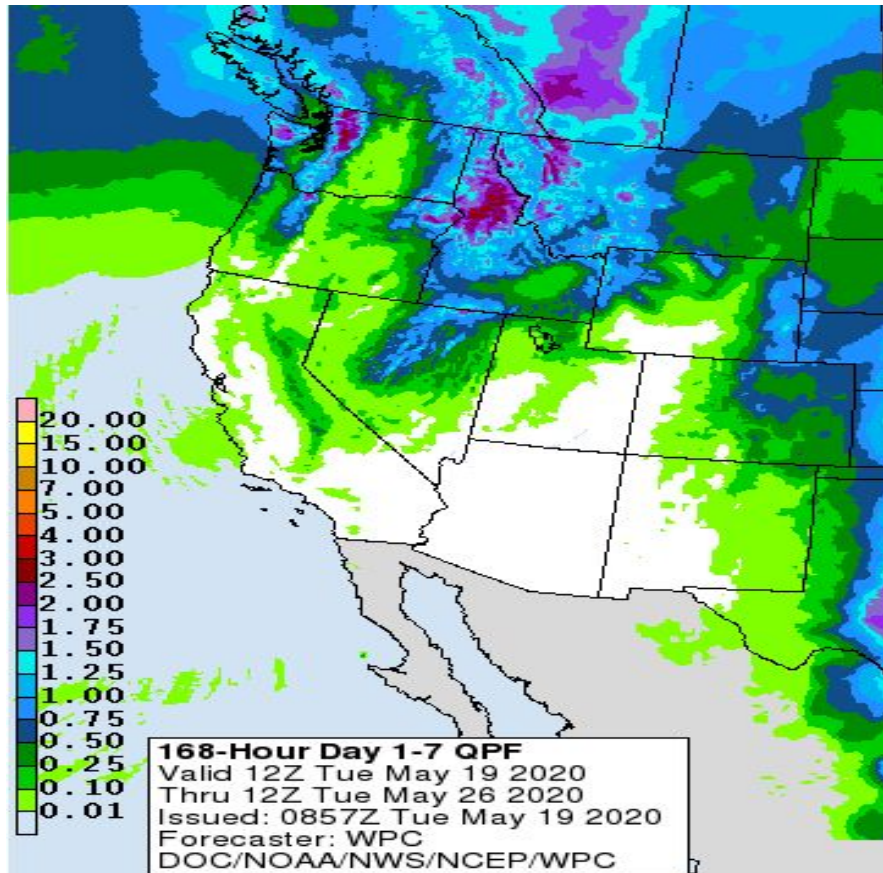
For updated SNOTEL information refer to click [here](#)

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

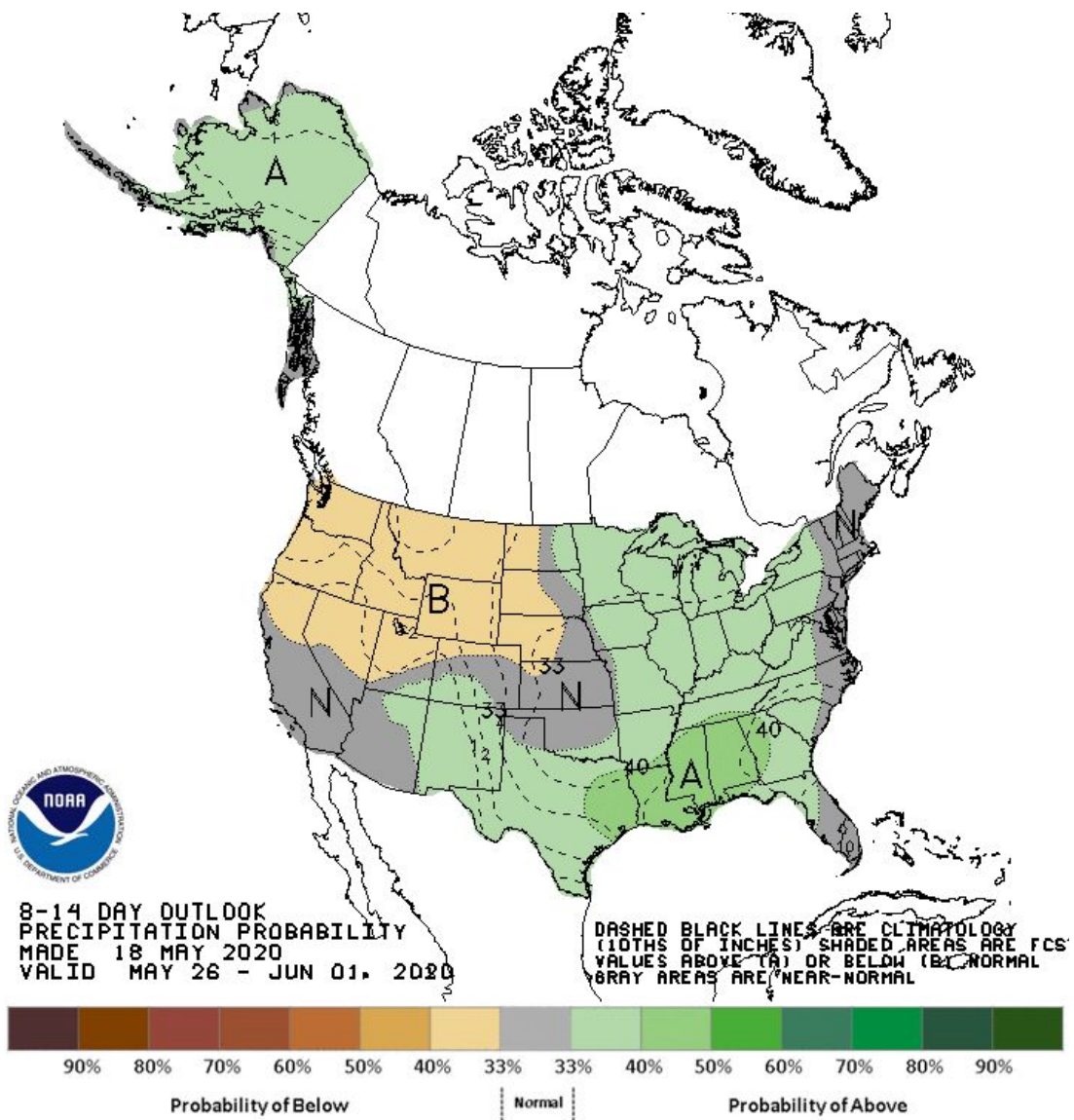
### Upcoming Weather

Southwesterly flow ahead of a trough off the California coast will bring very warm temps (10-15 degrees above normal) and breezy conditions to much of the Intermountain West through Tuesday. This weather pattern will result in accelerated snowmelt over much of the Upper Colorado Basin and Great Basin. The trough will swing across

northern Utah and Idaho/Wyoming by Wednesday. Temps will cool significantly behind a cold front, especially over the northern Great Basin and Upper Green. Unfortunately, the heaviest precipitation with this storm system will occur over Idaho/Montana, outside of our forecast area. Only modest precip amounts (generally less than 0.5 inches) and scattered showers are expected with this system. Another trough is forecast to move over the Upper Green on Friday/Saturday (May 22-23), bringing another cold front across the north along with modest precip amounts. Thus, after a very warm few days to start this week, expect temps to cool to near to slightly below average for the Wednesday-Sunday period. Uncertainty is somewhat greater by next week, however odds favor a return to warming temps and dry conditions under a developing ridge.

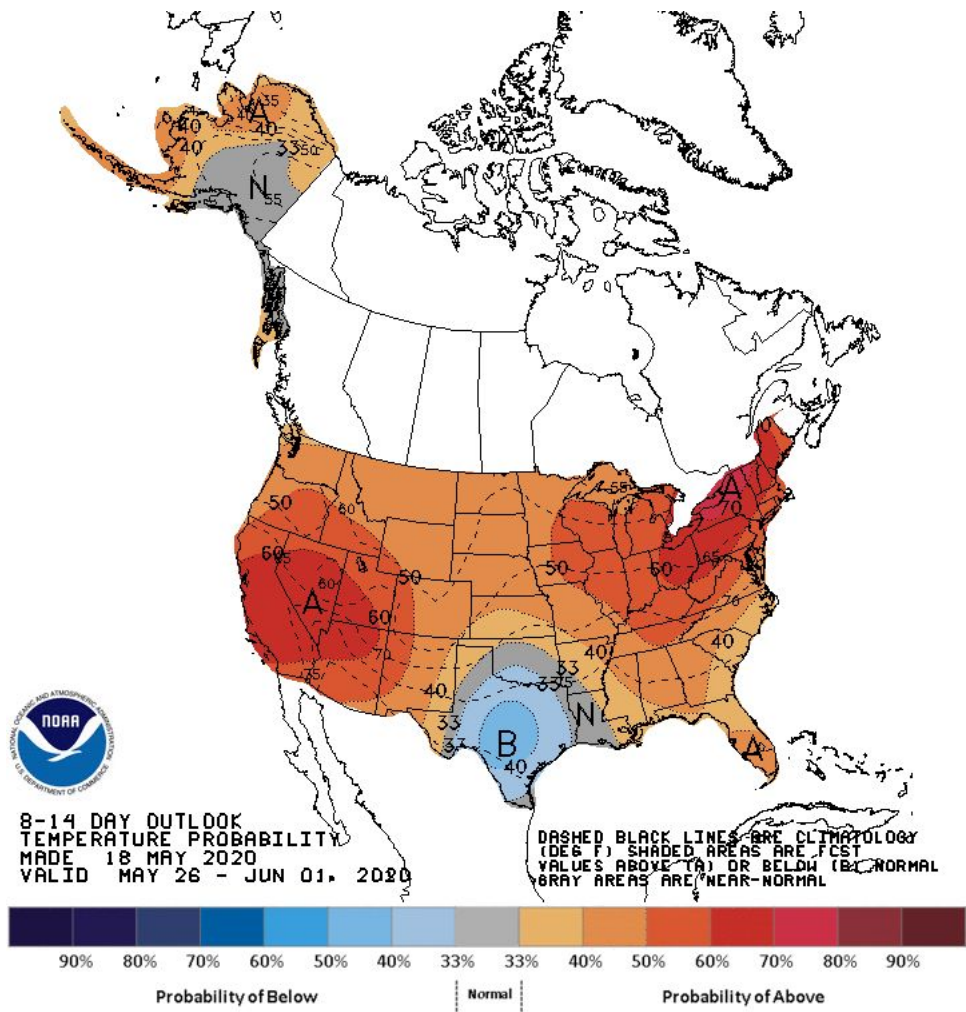


NWS Weather Prediction Center precipitation forecast for May 19-26, 2020.



NWS Climate Prediction Center precipitation probability forecast for May 26 - June 1, 2020.





NWS Climate Prediction Center temperature probability forecast for May 26 - June 1, 2020.

### 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](#)

### End Of Month Reservoir Content Tables

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