

## April 18, 2022 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

The first half of April was generally cooler/wetter across northernmost basins and warmer/drier elsewhere across the region. Areas benefiting the most from April precipitation include the Bear and Weber basins in northern Utah and the Upper Green River Basin in southwest Wyoming. April-to-date precipitation ranks in the wettest three of the historical gage record at a number of SNOTEL sites across the headwaters of the Upper Green River Basin. April precipitation across western Colorado has been variable and mostly below normal with northwest Colorado (White/Yampa/Upper Colorado River headwaters) receiving more precipitation than southwest Colorado (Gunnison/Dolores/San Juan). Southern Utah and Arizona received little to no precipitation during the first half of April.

April-July water supply volume forecasts are near to much below average across the Upper Colorado River Basin and Great Basin. Mid-April Upper Colorado River Basin water supply guidance generally ranges between 45-100% of the 1991-2020 historical average. Great Basin water supply volume guidance is 35-85% of average. Lower Colorado River Basin January-May water supply guidance has decreased during the first half of April with seasonal volumes across Arizona forecasted to trend drier than normal given the current La Niña conditions.

April 18 water supply guidance (% of normal) by basin:

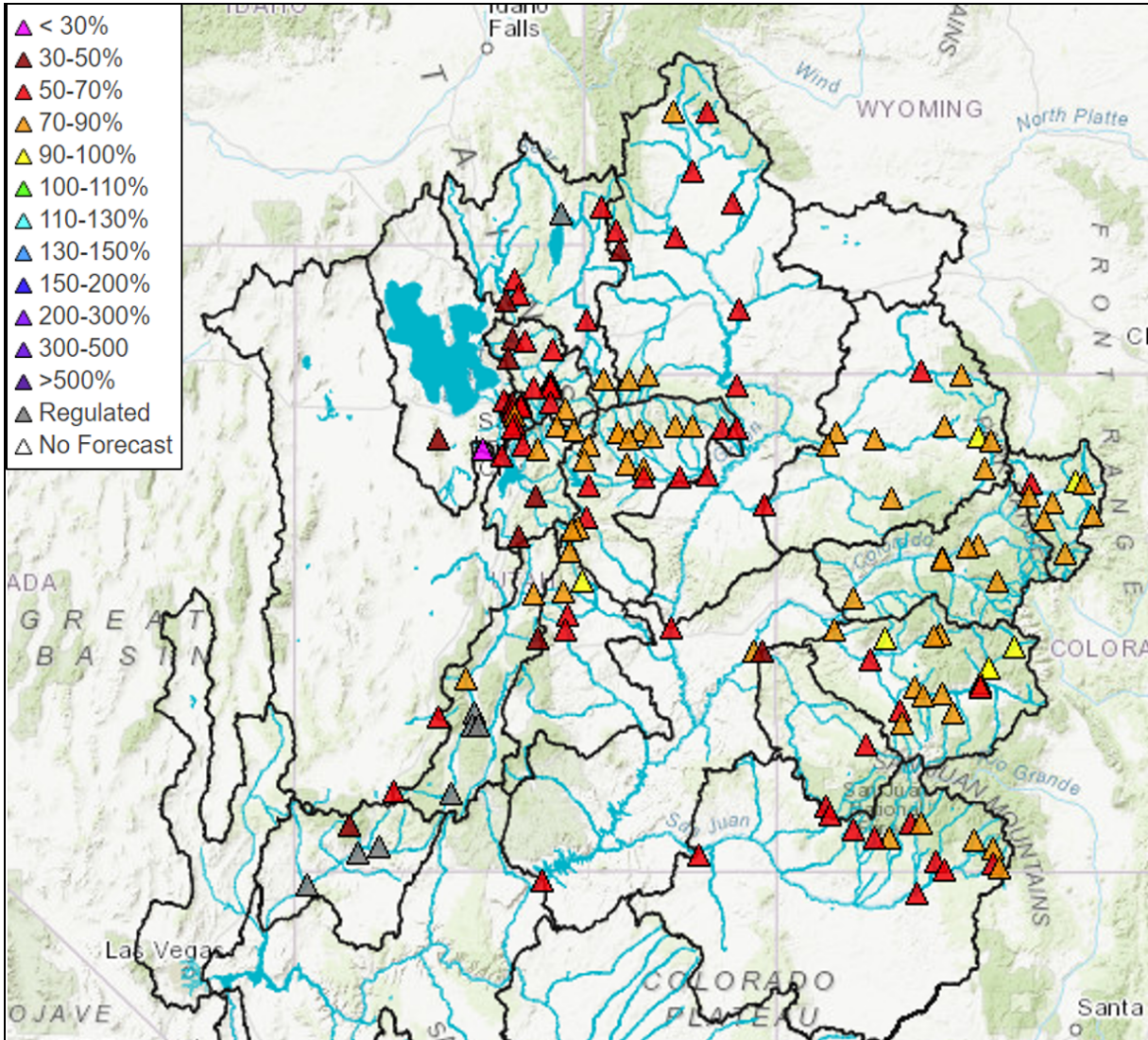
<b>Basin</b>	<b>Water Supply Guidance Range</b>
Upper Green	45-75%
Duchesne	55-90%
White/Yampa	70-90%
Upper Colorado Mainstem	60-100%
Gunnison	65-95%
Dolores	50-65%
San Juan	55-75%
Bear	40-85%
Weber	45-75%
Six Creeks	40-75%
Provo/Utah Lake	40-80%
Sevier	35-75%

Snow water equivalent (SWE) conditions as a percent of normal have trended with April-to-date precipitation, with snow conditions generally improving in northern basins and declining in basins further south. Mid-April SWE conditions generally range between 75-110% of normal across the Upper Colorado River Basin and 65-90% of normal across the Great Basin. Snow across the Lower Colorado River Basin has mostly melted out with the majority of SNOTEL stations across southwest Utah and Arizona reporting less than an inch of SWE.

April-July unregulated inflow forecasts for some of the major reservoirs in the Upper Colorado River Basin include Fontenelle Reservoir 485 KAF (66% average), Flaming Gorge 570 KAF (59%), Blue Mesa Reservoir 505 KAF (80%), McPhee Reservoir 136 KAF (53%), and Navajo Reservoir 380 KAF (60%). The Lake Powell inflow forecast is 4.1 MAF (64% of average) and did not change from the early April forecast.

Warm and mostly dry weather is expected this week, with scattered showers and light precipitation (<0.10") expected across southwest Wyoming and northern Utah/Colorado Tuesday through Wednesday. More active weather is expected this weekend across Utah, Wyoming, and Colorado, with forecast precipitation totals across higher elevations approaching 0.75"-1.0" by the end of the weekend. Next week, weather model ensembles favor ridging over the Western US, bringing a likely return to above average temperatures and below average precipitation across the region.

### Seasonal Water Supply Forecasts



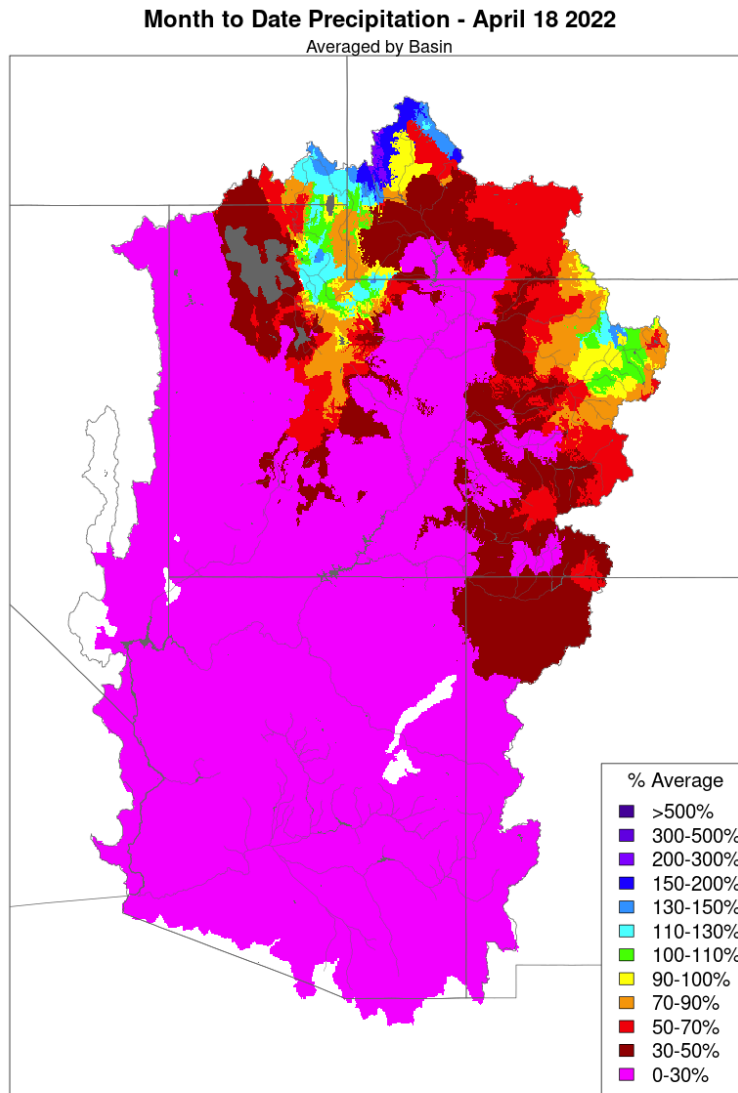
April-July runoff volume guidance as of April 18, 2022.  
(percent of 1991-2020 average)

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

## Water Supply Discussion

### April Weather/Precipitation

The first half of April was generally cooler/wetter across northernmost basins and warmer/drier elsewhere across the region. April-to-date precipitation (image below) is above to much above average across northern Utah (Weber/Bear basins) and the headwaters of the Upper Green River Basin in southwest Wyoming. April 1-17 precipitation ranks in the wettest three of the historical gage record at a number of SNOTEL sites across the headwaters of the Upper Green River Basin. April precipitation across western Colorado has been variable, with northwest Colorado (White/Yampa/Upper Colorado headwaters) receiving near to slightly below average precipitation and southwest Colorado (Gunnison/Dolores/San Juan basins) receiving below to much below average precipitation. Central Utah received modest, but below average precipitation during the first half of April, while southern Utah and Arizona received little to no precipitation.



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

Percent of average precipitation - April 1-17, 2022.

## Snowpack

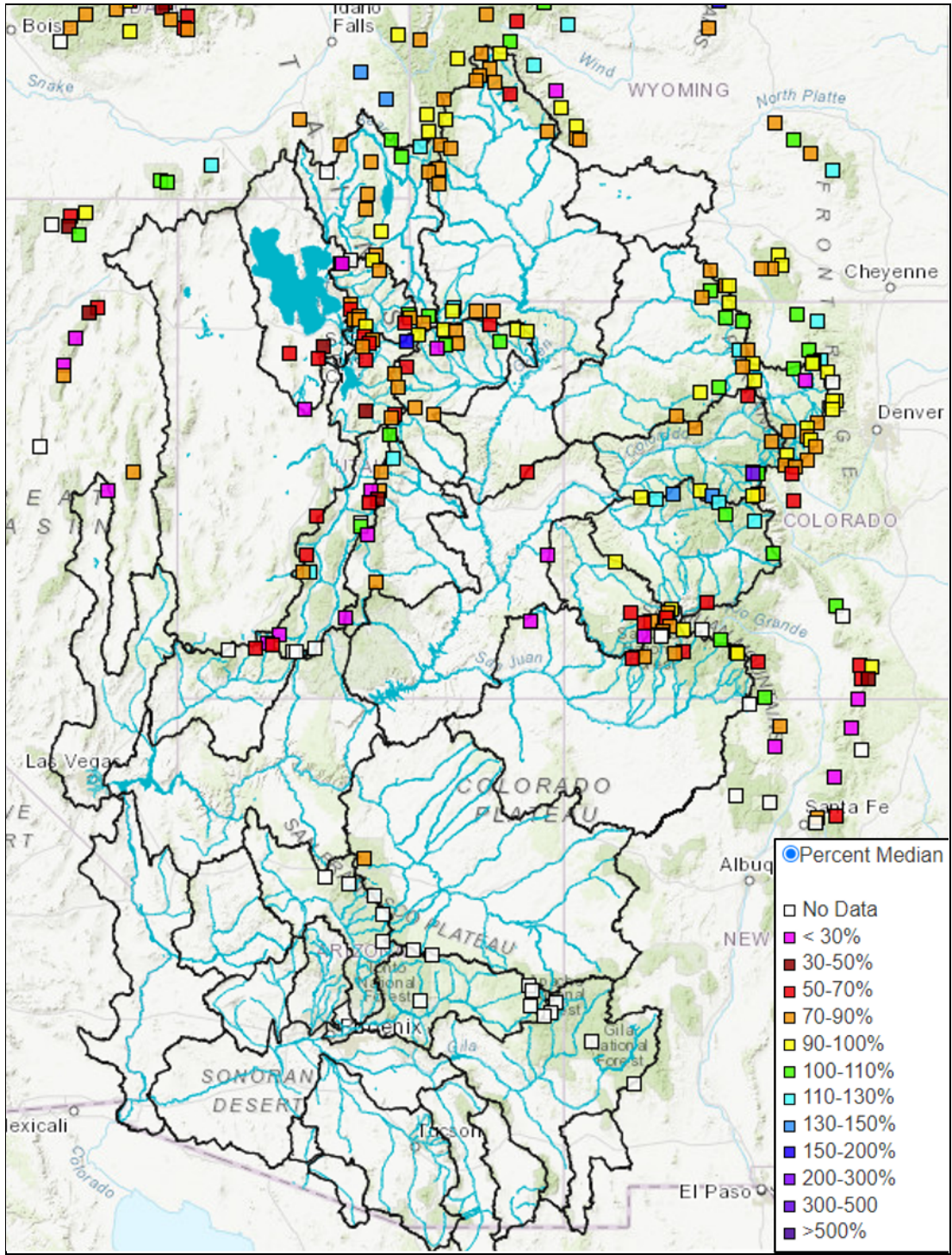
Regional snow water equivalent (SWE) conditions as a percent of normal have trended with April-to-date precipitation and are summarized in the below table. Mid-April SWE conditions across the Upper Colorado River Basin generally range between 75-110% of normal. Precipitation during the first half of April has favored northern basins and led to improvements in SWE conditions across southwest Wyoming and northwest Colorado. Within the Upper Colorado River Basin, the Upper Green had the largest improvement in percent median SWE since the beginning of April. Snowmelt and below average April-to-date precipitation has led to declines in percent median SWE conditions across the Dolores and San Juan basins in southwest Colorado.

Mid-April SWE conditions across the Great Basin are below normal (65-90%), with the Bear River Basin in northern Utah faring the best. Great Basin SWE conditions since the beginning of April have improved in the Bear and Weber basins, remained relatively steady in the Provo/Utah Lake drainage, and declined in the Sevier River Basin.

Snowpack conditions across the Lower Colorado River Basin are more variable and tend to fluctuate more frequently over time, with April SWE conditions often based on just a few SNOTEL stations that haven't melted out. Snow across the Lower Colorado River Basin has mostly melted out with the majority of SNOTEL stations across southwest Utah and Arizona reporting less than an inch of SWE. There are a few higher elevation (>9,000 feet) SNOTEL stations on northern facing slopes along the divide of the Sevier/Virgin basins in southwest Utah and along the Verde/Little Colorado basin divide in central Arizona reporting greater than five inches of SWE.

April 1 - April 18 basin SWE summary (NRCS SNOTEL):

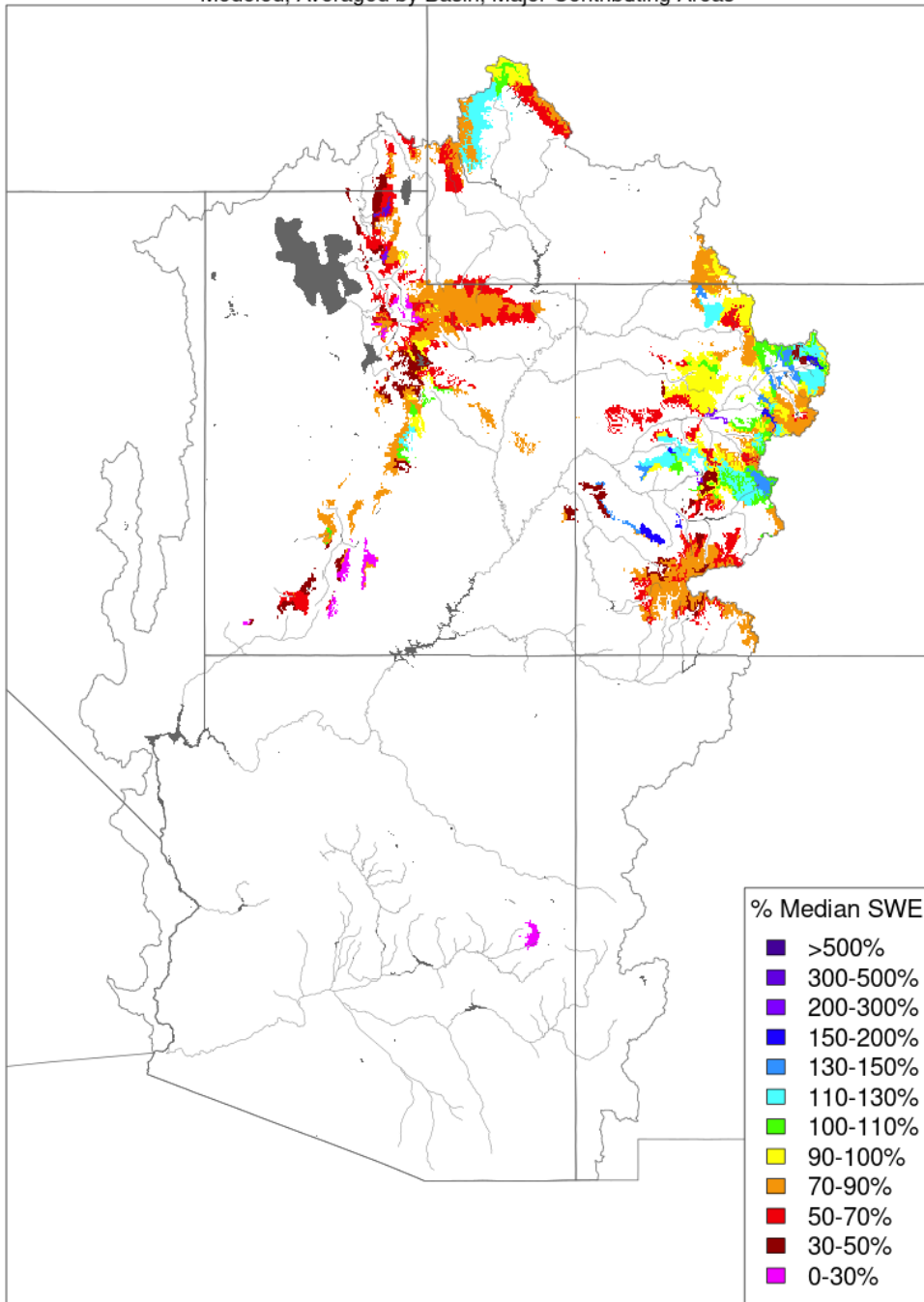
<b>Basin</b>	<b>Apr1 %Median SWE</b>	<b>Apr18 %Median SWE</b>
Upper Green	75	86
Duchesne	89	85
White/Yampa	84	92
UC Headwaters	89	94
Roaring Fork	106	112
Gunnison	103	101
Dolores	89	75
San Juan	103	84
Bear	68	89
Weber	66	78
Provo/UT Lake	71	75
Sevier	87	65



SNOTEL percent median SWE - April 18, 2022.

## Snow Conditions - April 18 2022

Modeled, Averaged by Basin, Major Contributing Areas



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Salt Lake City, Utah, [www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)

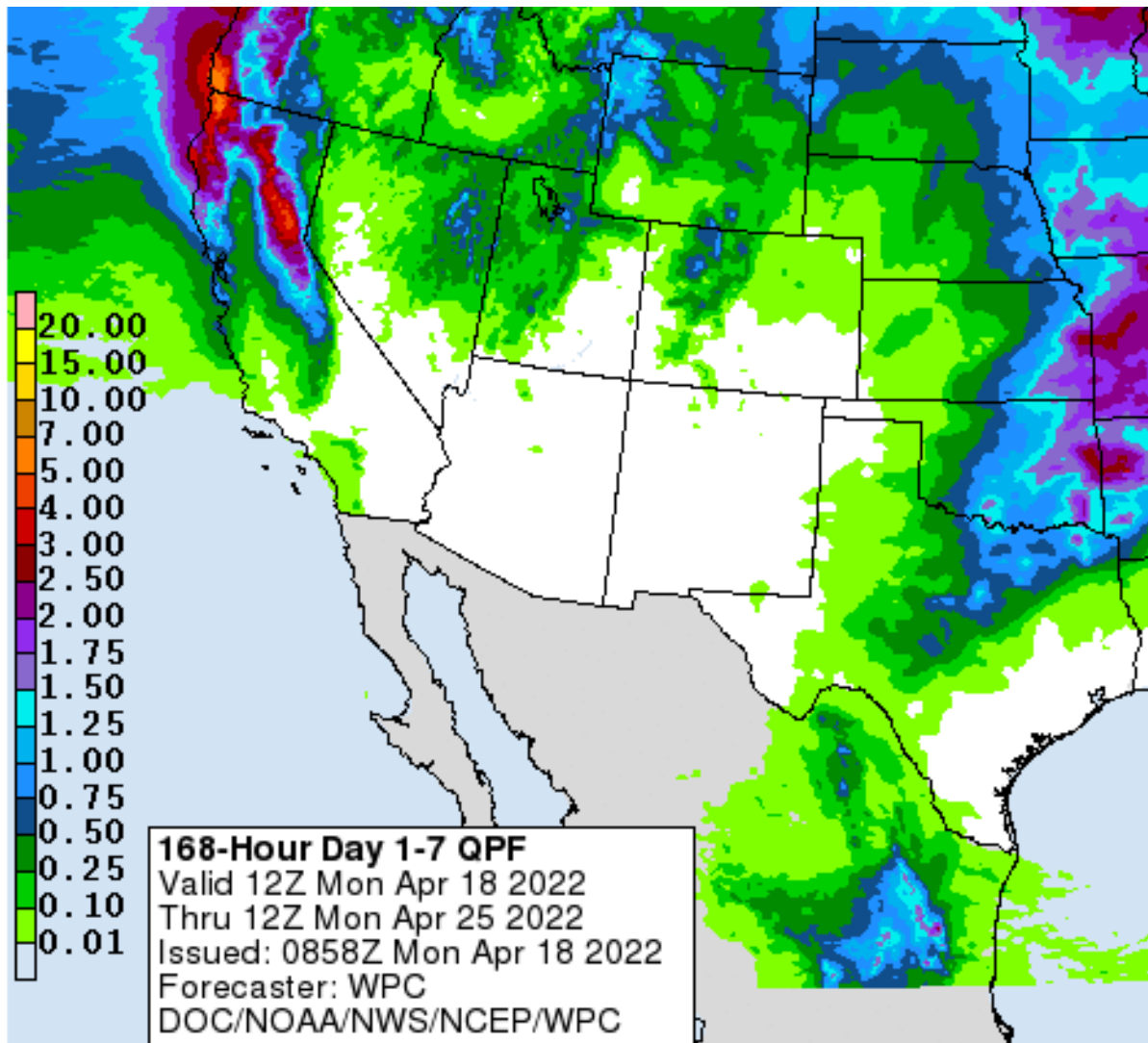
CBRFC hydrologic model percent median SWE - April 18, 2022.

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

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

## Upcoming Weather

Sunny and warm conditions will start off the week, with the region experiencing above average temperatures today. Beginning Tuesday evening and lingering into Wednesday, scattered showers and light precipitation (<0.10") are expected across southwest Wyoming and northern Utah/Colorado associated with a quick moving shortwave trough. A period of active weather is expected this weekend for Utah, Wyoming, and Colorado. This period of active weather will bring more substantial precipitation to the region, with maximum precipitation totals for the higher terrain approaching 0.75"-1.0" by the end of the weekend. Moving ahead into next week, weather model ensembles favor ridging over the Western US, which will bring a likely return to above average temperatures and below average precipitation across the region.



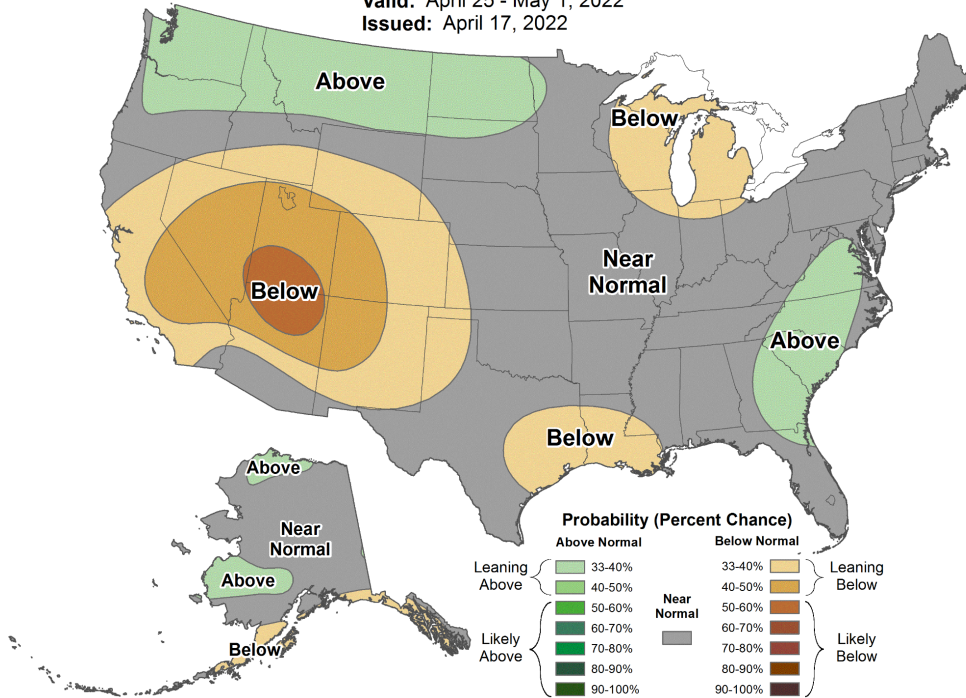
Weather Prediction Center precipitation forecast for April 18-25, 2022.



# 8-14 Day Precipitation Outlook



Valid: April 25 - May 1, 2022  
Issued: April 17, 2022



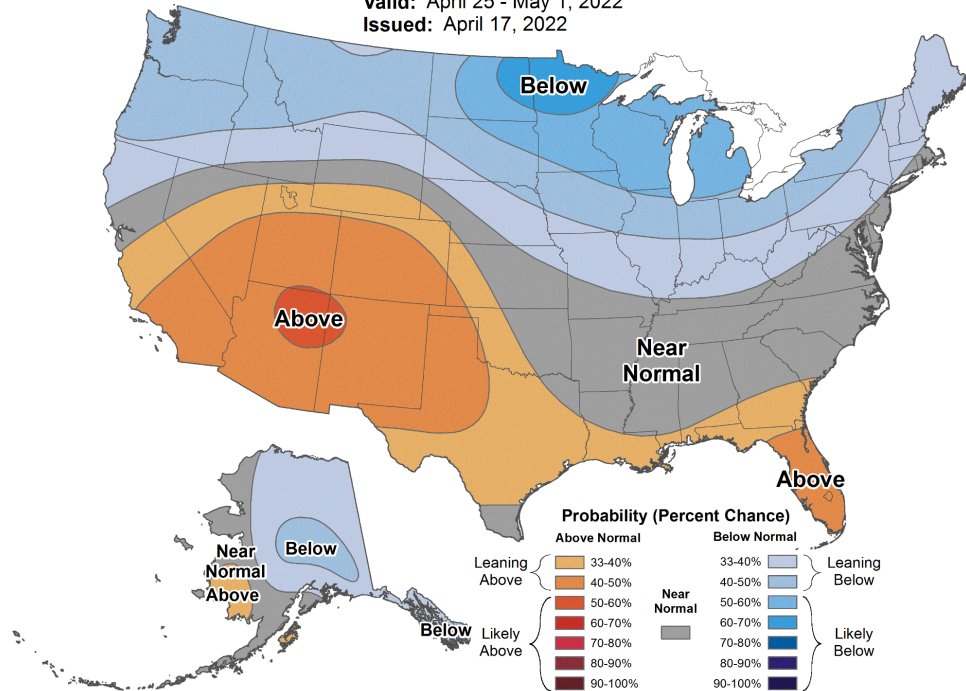
NWS Climate Prediction Center precipitation probability forecast for April 25- May 01, 2022.



# 8-14 Day Temperature Outlook



Valid: April 25 - May 1, 2022  
Issued: April 17, 2022



NWS Climate Prediction Center Temperature Outlook for April 25- May 01, 2022.



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.

**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](#)