## Current Conditions and Forecasts

CRFS March 24, 2022

## Water Year Precipitation: Oct-Feb

## Upper Colorado

Water Year Precipitation, October 2021-February 2022
$\square$ Averaged by Basin, Major Contributing Areas
\% Average

- $>500 \%$
- 300-500\%

200-300\%

- 150-200\%
- 130-150\%
- 110-130\%
- 100-110\%
$\square$ 90-100\%
- 70-90\%
- $50-70 \%$
- $30-50 \%$
- 0-30\%

| BASIN | OCT-FEB <br> \%AVG | NOV-FEB <br> \%AVG |
| :--- | :--- | :--- |
| Upper Green | $95 \%$ | $75 \%$ |
| Duchesne | $100 \%$ | $80 \%$ |
| Yampa/White | $100 \%$ | $90 \%$ |
| Upper Col | $100 \%$ | $100 \%$ |
| Gunnison | $100 \%$ | $95 \%$ |
| Dolores | $95 \%$ | $85 \%$ |
| San Juan | $90 \%$ | $90 \%$ |
| Virgin | $100 \%$ | $85 \%$ |

## Lower Colorado

Water Year Precipitation, October 2021 - February 2022


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

## Winter Precipitation: Dec-Feb

Monthly Precipitation - December 2021


Prepared by NOAA, Colorado Basin River Foreceast Center

Monthly Precipitation - January 2022


Prepared by NOAA, Colorado Basin River Forecast Center

Monthly Precipitation - February 2022


Prepared by NOAA, Colorado Basin River Forecast Center

## March 1-23 Precipitation

## Upper Colorado

Month to Date Precipitation - March 232022


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

## Lower Colorado

Month to Date Precipitation - March 232022


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

## March Temperatures

Below normal temperatures for the Upper Colorado so far this month.

Departure from Normal Average Max Temperature (F) 3/1/2022-3/22/2022


Have begun to see snowmelt in lower elevations, but not anything too extreme or out of the ordinary.


## Snow Conditions: CBRFC Model Snow

Snow Conditions - March 012022


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

Snow Conditions - March 232022


Salt Lake City, Utah, www.cbrfc.noaa.gov

## Streamflow Conditions

Map of 7-day average streamflow compared to historical streamflow for the day of the year




## Trend in Raw Model Guidance: March 1-23



Does not mean official forecasts will increase/decrease this much. Official forecasts include basin forecaster discretion/knowledge.

## Forecast Evolution Plot - Flaming Gorge Inflow



## Forecast Evolution Plot - Blue Mesa Inflow



## Forecast Evolution Plot - Navajo Inflow



## Forecast Evolution Plot - Lake Powell



## Lower Colorado River Water Supply



```
| < 30%
A 30-50%
\triangle 50-70%
\triangle70-90%
\triangle90-100%
\triangle100-110%
\triangle110-130%
\triangle130-150%
A 150-200%
A 200-300%
A 300-500
A >500%
Regulated
No Forecast
```


## Upcoming Weather

Max Temperature Departure From Normal for
Saturday 3/26/22


WPC 7-Day Precipitation Forecast


- High pressure will build over the region into this weekend initiating a warming trend that will bring record to near-record temperatures to much of the area.
- An upper low will move into the western US early next week. Widespread precipitation is expected through midweek next week. Precipitation totals are expected to be generally below $1 / 2$ of an inch, with the exception of the higher terrain of Colorado which could see up to an inch of precipitation in the 7 day period. There is quite a bit of uncertainty in terms of precipitation amounts. However, in most scenarios, the higher terrain of Colorado will see the highest precipitation totals.


## 10-Day Streamflow Forecasts

Forecast Hydrograph - Yampa - Deerlodge Park (YDLC2)
Colorado Basin River Forecast Center


Forecast Hydrograph - Nf Gunnison - Somerset, Nr (SOMC2)
Colorado Basin River Forecast Center


Forecast Hydrograph - Colorado - Kremmling, Nr (KRMC2)

- Simulated
- Observed
- Forecast
$\triangle$ Daily Maxima
25-10\% Hist Exceedance
50-25\%
75-50\%
90-75\%


Forecast Hydrograph - Animas - Durango (DRGC2)
Colorado Basin River Forecast Center


- Simulated
- Observed
- Observed
- Forecast

25-10\% Hist Exceedance 25-10\%
$-50-25 \%$

- $75-250 \%$
$75-50 \%$
$\quad 90-75 \%$


## - Simulated

- Forecast
- Forecast

25-10\% Hist Exceedance - $50-25 \%$

50-25\%
75-50\%
90-75\%

## Upcoming Weather: 8-14 day outlook (March 31- April 6)

(2)

8-14 Day Temperature Outlook
Valid: March 31 - April 6, 2022 Issued: March 23, 2022
(8) 8-14 Day Precipitation Outlook

Valid: March 31 - April 6, 2022 Issued: March 23, 2022


An active weather pattern is expected through the beginning of April. This will result in generally wetter and cooler weather than normal.

## CPC Seasonal Outlook for April-June



CPC seasonal outlook for the rest of spring (April-June) shows above normal temperatures for the entire area with below normal precipitation for the northern two-thirds of the area.

## Summary

- April 1 forecasts will likely be similar to the March 1 forecasts or decrease depending on how next week's weather materializes.
- Soil moisture deficits do exist. Forecasts are accounting for this deficit.
- Deficits must be fulfilled before runoff can occur.
- Next two months weather are critical to water supply and runoff outcomes.
- Much above average temperature expected through early next week
- Expecting rises in streamflow from melt and rain
- Active weather is expected starting early next week into the first week of April
- Uncertainty is high in precipitation amounts

