Current Conditions and Forecasts

CRFS March 24, 2022

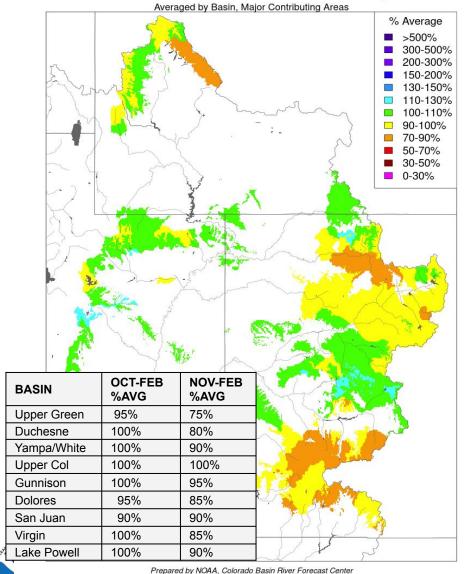




Water Year Precipitation: Oct-Feb

Upper Colorado

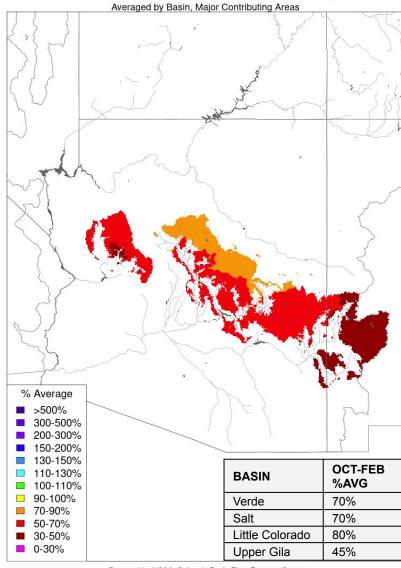
Water Year Precipitation, October 2021 - February 2022



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

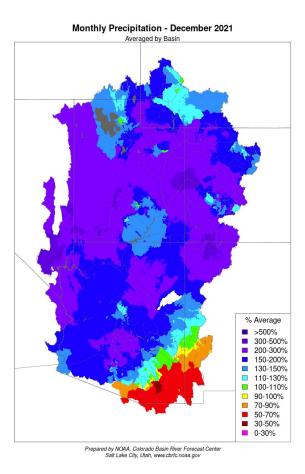
Lower Colorado

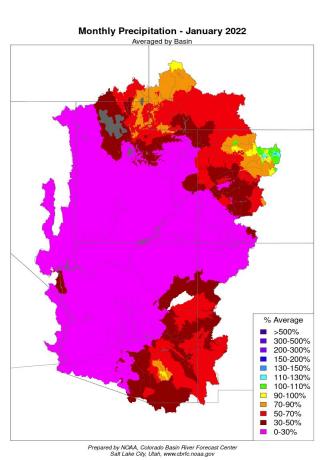
Water Year Precipitation, October 2021 - February 2022

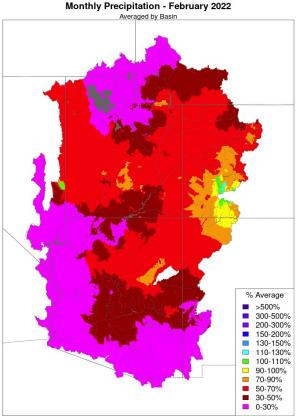


Prepared by NOAA, Colorado Basin River Forecast Center Salt Lake City, Utah, www.cbrfc.noaa.gov

Winter Precipitation: Dec-Feb







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

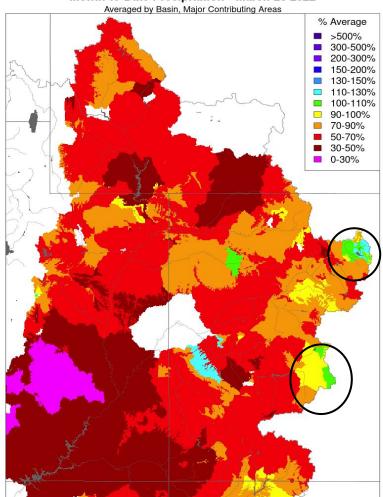




March 1-23 Precipitation

Upper Colorado

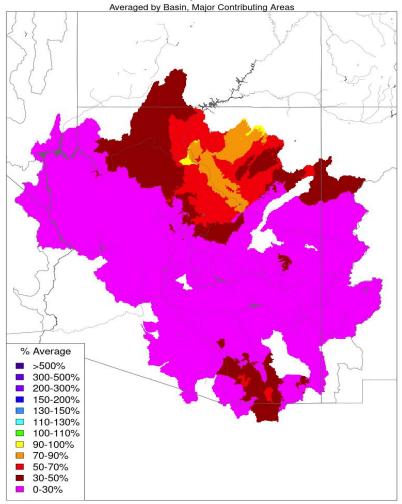
Month to Date Precipitation - March 23 2022



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

Lower Colorado

Month to Date Precipitation - March 23 2022



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

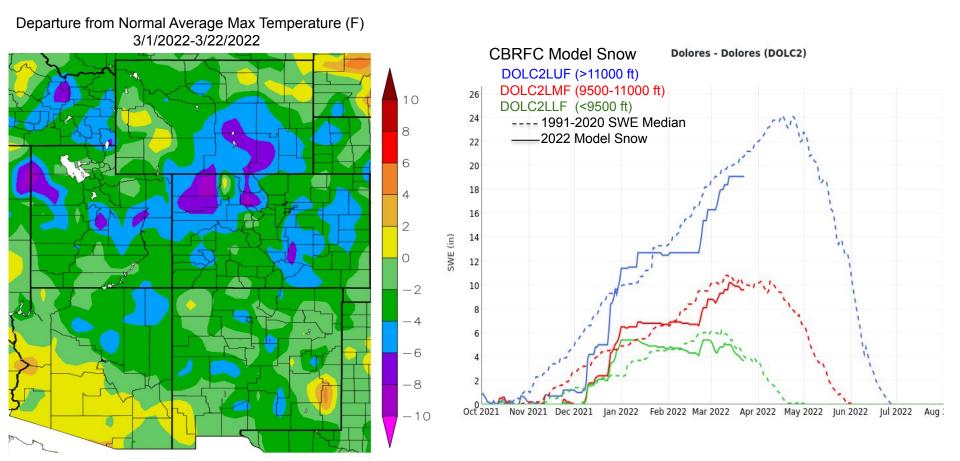




March Temperatures

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

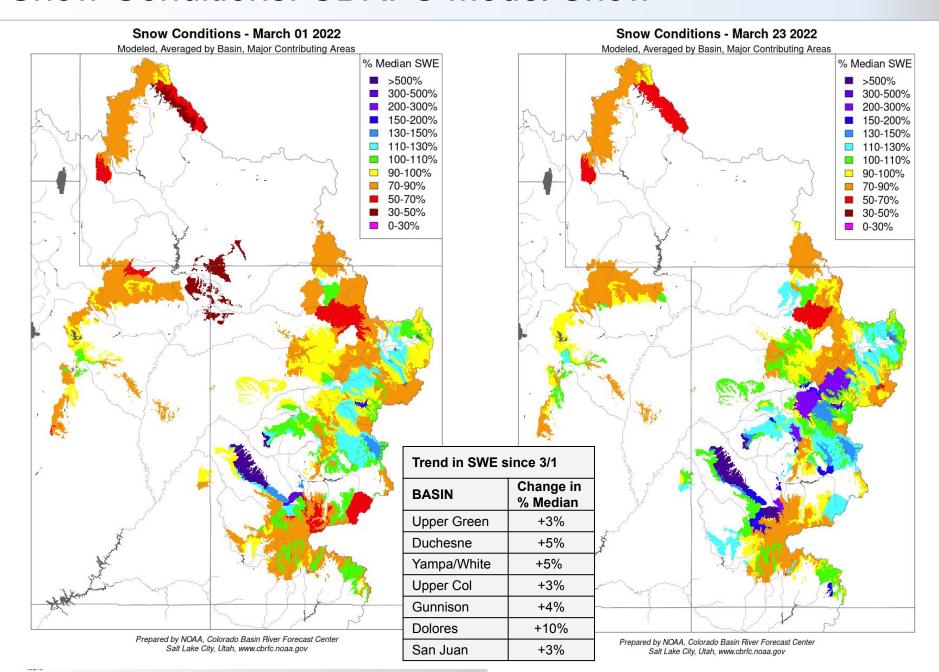
Have begun to see snowmelt in lower elevations, but not anything too extreme or out of the ordinary.





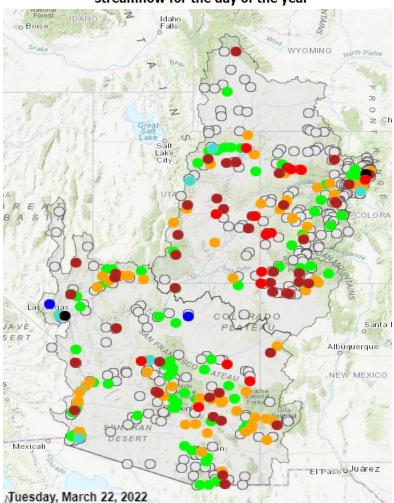


Snow Conditions: CBRFC Model Snow

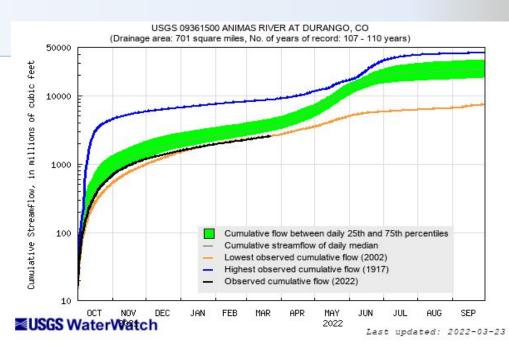


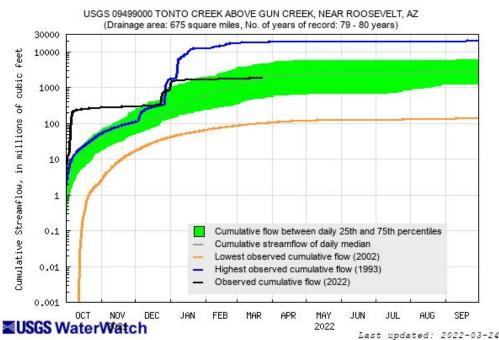
Streamflow Conditions

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

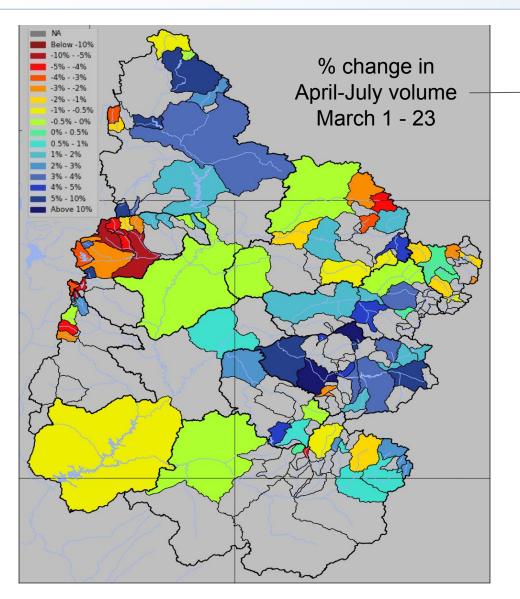


Explanation - Percentile classes							
•	•		•	•	•	•	0
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		





Trend in Raw Model Guidance: March 1-23

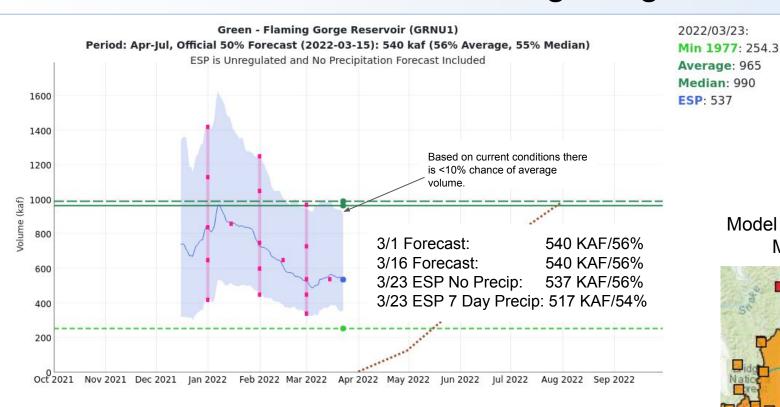


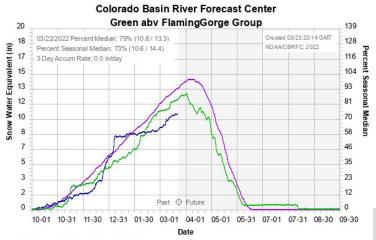
Does not mean official forecasts will increase/decrease this much. Official forecasts include basin forecaster discretion/knowledge.





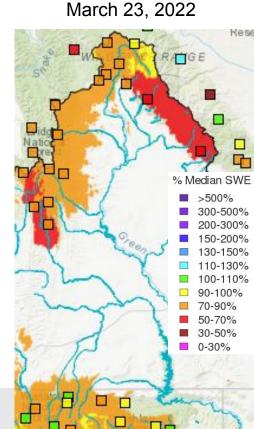
Forecast Evolution Plot - Flaming Gorge Inflow



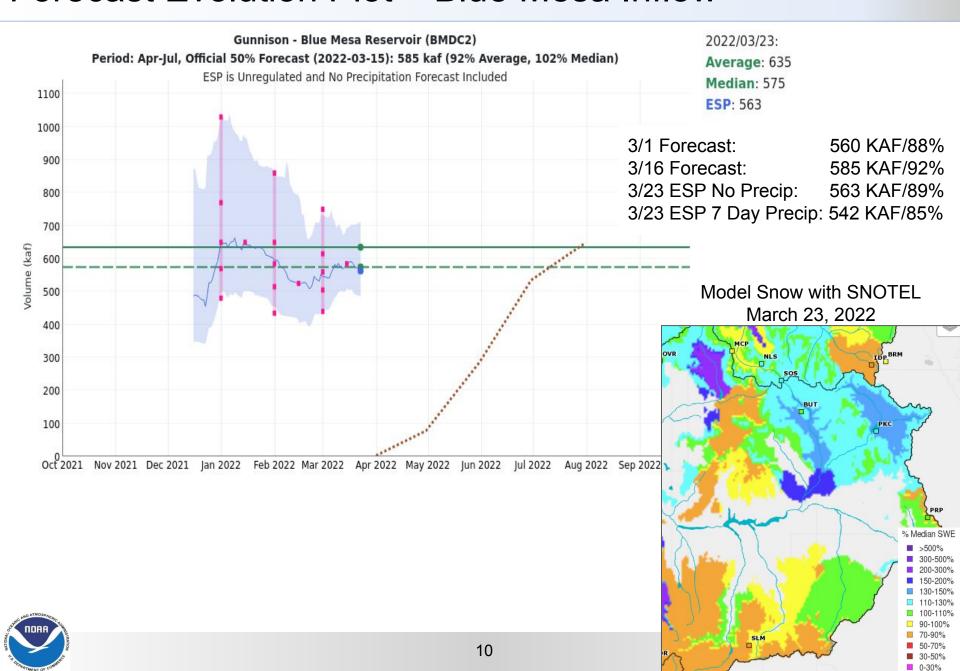


Current model guidance is near the March 1 forecast volume, but additional precipitation is needed during the last week of the month to maintain that level.

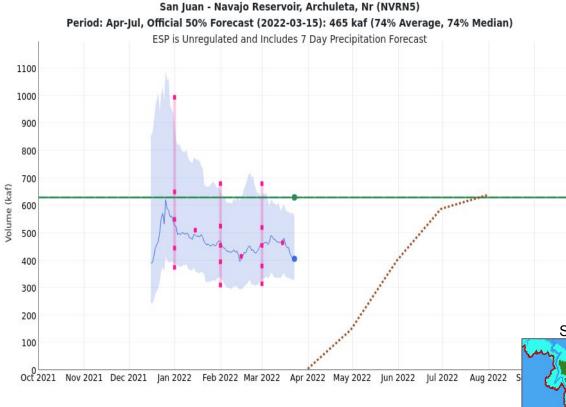
Model Snow with SNOTEL



Forecast Evolution Plot – Blue Mesa Inflow



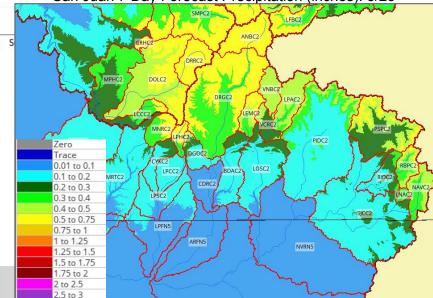
Forecast Evolution Plot - Navajo Inflow



2022/03/23: Average: 630 Median: 630 ESP: 406

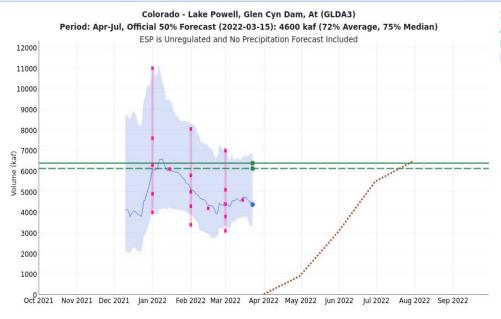
> 3/1 Forecast: 455 KAF/72% 3/15 Forecast: 465 KAF/74% 3/23 ESP No Precip: 450 KAF/71% 3/23 ESP 7 Day Precip: 406 KAF/64%

San Juan 7 Day Forecast Precipitation (inches): 3/23





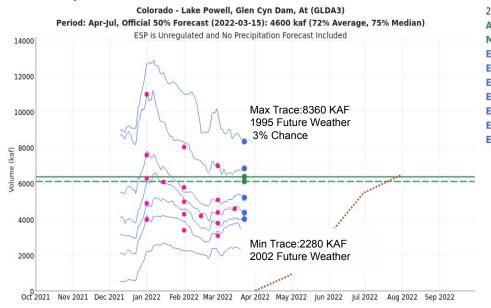
Forecast Evolution Plot - Lake Powell



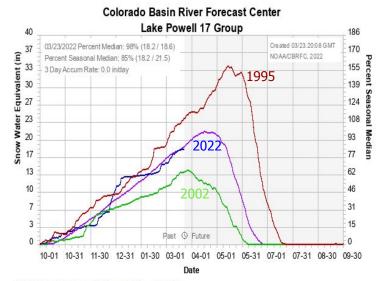
2022/03/23: Average: 6390 Median: 6130 ESP: 4380

> 3/1 Forecast: 4400 KAF/69% 3/16 Forecast: 4600 KAF/72% 3/23 ESP No Precip: 4380 KAF/69% 3/23 ESP 7 Day Precip: 4170 KAF/65%

Probability Traces



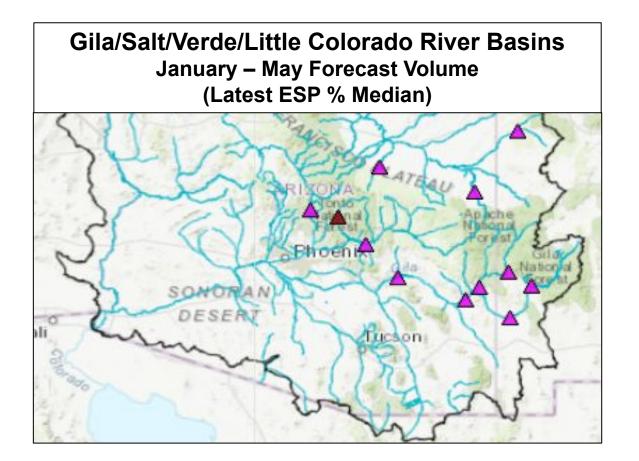
2022/03/23:
Average: 6390
Median: 6130
ESP max: 8360
ESP 10: 6860
ESP 30: 5220
ESP 50: 4380
ESP 70: 4030
ESP 90: 3290
ESP min: 2280

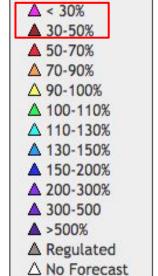


Median 1991-2020 — 2022 — 2002 — 1995 —



Lower Colorado River Water Supply



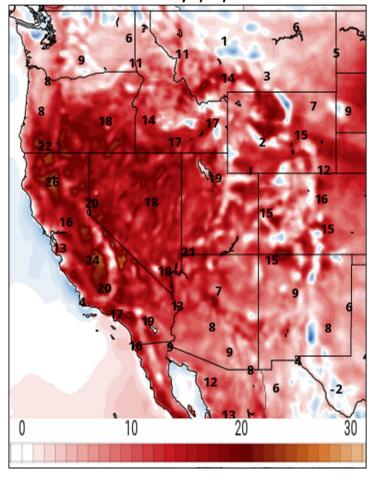




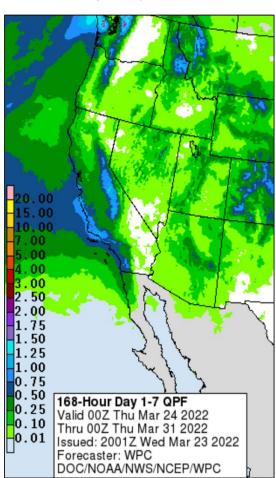


Upcoming Weather

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



WPC 7-Day Precipitation Forecast

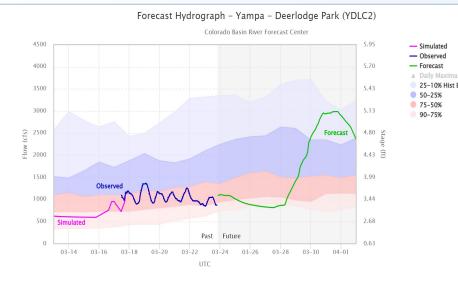


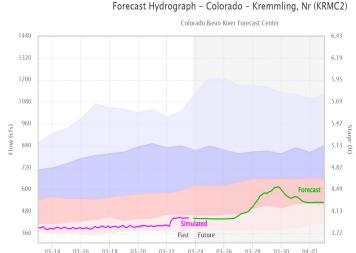
- High pressure will build over the region into this weekend initiating a warming trend that will bring record to near-record temperatures to much of the area.
- An upper low will move into the western US early next week. Widespread precipitation is expected through midweek next week. Precipitation totals are expected to be generally below ½ 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.

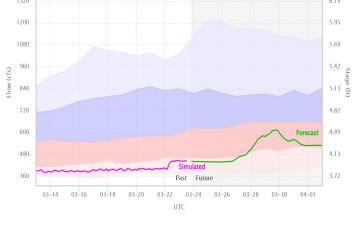


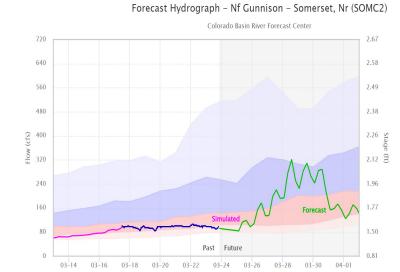


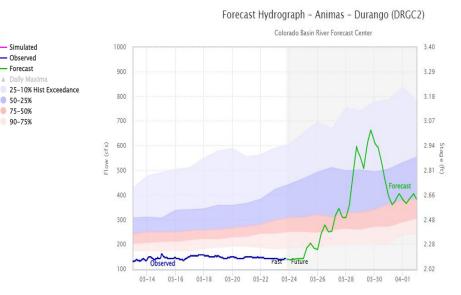
10-Day Streamflow Forecasts















— Simulated

Observed

— Forecast

0 50-25%

75-50%

90-75%

Observed

- Forecast

0 50-25%

9 75-50%

90-75%

A Daily Maxima

25-10% Hist Exceedance

▲ Daily Maxima

25-10% Hist Exceedance

25-10% Hist Exceedance

— Simulated

Observed

Forecast

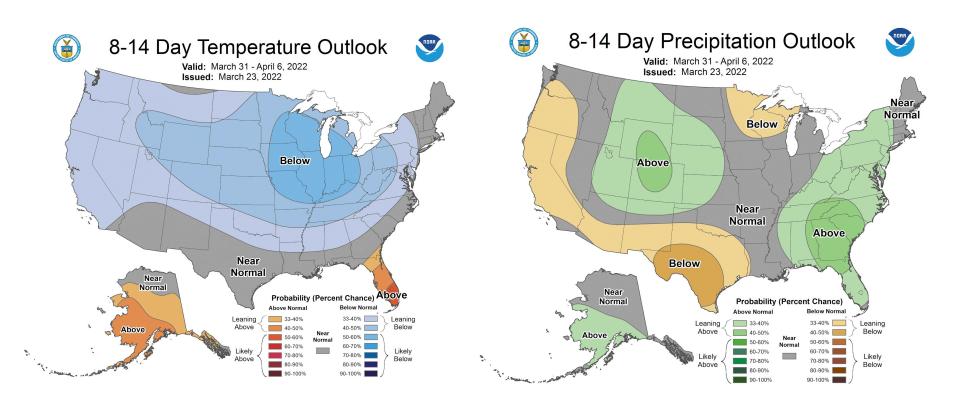
0 50-25%

75-50%

90-75%

▲ Daily Maxima

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

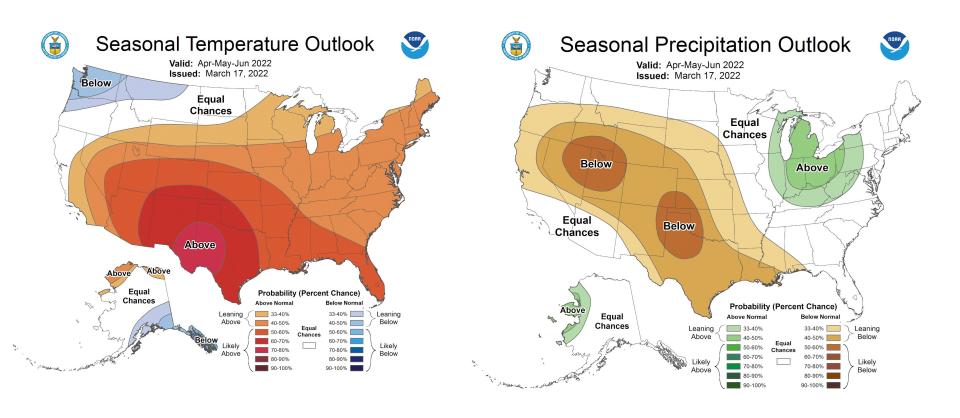


An active weather pattern is expected through the beginning of April. This will result in generally wetter and cooler weather than normal.





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



