Blackfoot Water Supply Report

March 7, 2024

Montana Water Supply Report data as of March 1, 2024 (from NRCS):
https://www.nrcs.usda.gov/..../montana/montana-snow-survey/water-supply-outlook-reports-montana

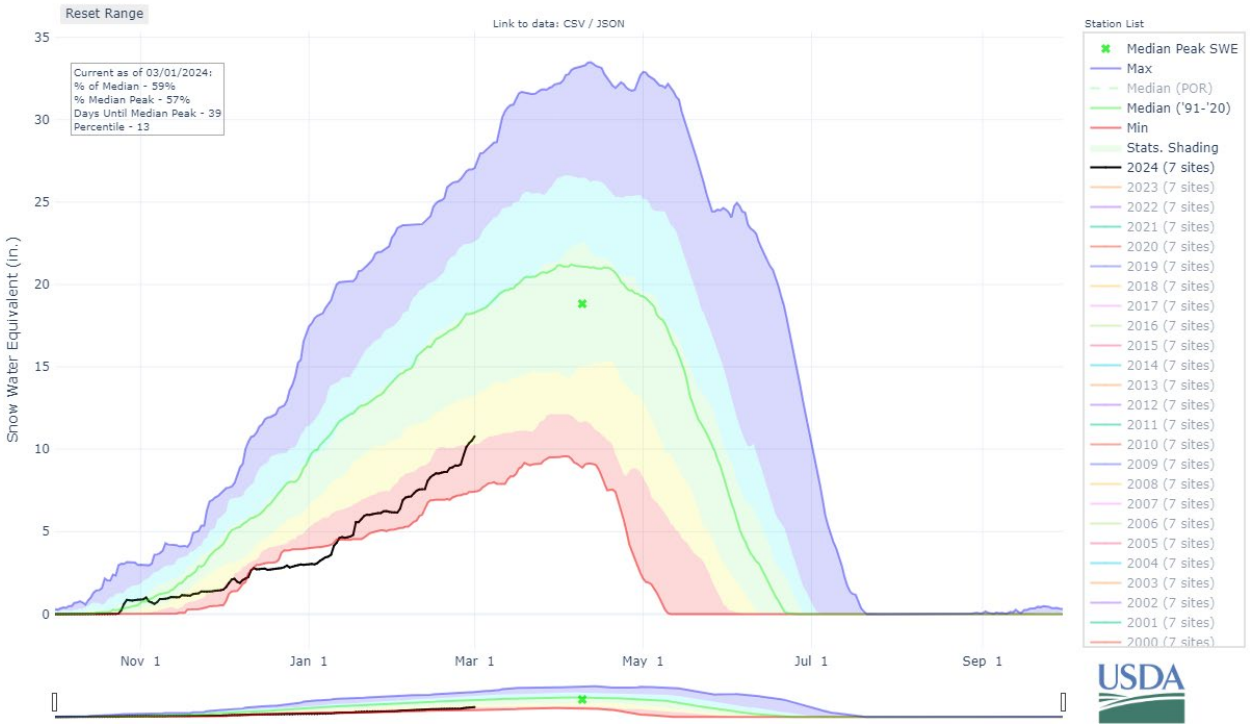
Overview

Above average precipitation across most of Montana during the month of February has improved snowpack conditions slightly going in March. In the Blackfoot, we received 134% of normal precipitation for the month and our snowpack currently sits at 60%, up about 10% from the beginning of the month. Despite these gains, drought conditions across the state and in the Blackfoot specifically have worsened over the past month. Most of the Blackfoot watershed is now considered in Extreme Drought. Nearly 95% of Montana is currently classified as experiencing drought, up from 80% in January and 56% in December.

Continued above average precipitation over the next three months will be needed to fully recover from snowpack and precipitation deficits from earlier in the year. The median peak snowpack date in the Blackfoot is April 9, but later peaks are also possible.

Initial streamflow forecasts for the Blackfoot reflect the low snowpack and indicate flows about 67% of normal for April through July; however, streamflow forecasts in April and May often provide a better indication of actual conditions once final snowpack conditions are known. The three-month climate outlook is calling for a higher probability of below average precipitation and above average temperatures from March through May. The Climate Prediction Office is also predicting that we will move out of El Niño conditions as early as April and may develop La Niña conditions by end of summer which could be positive for moisture this spring and next winter.

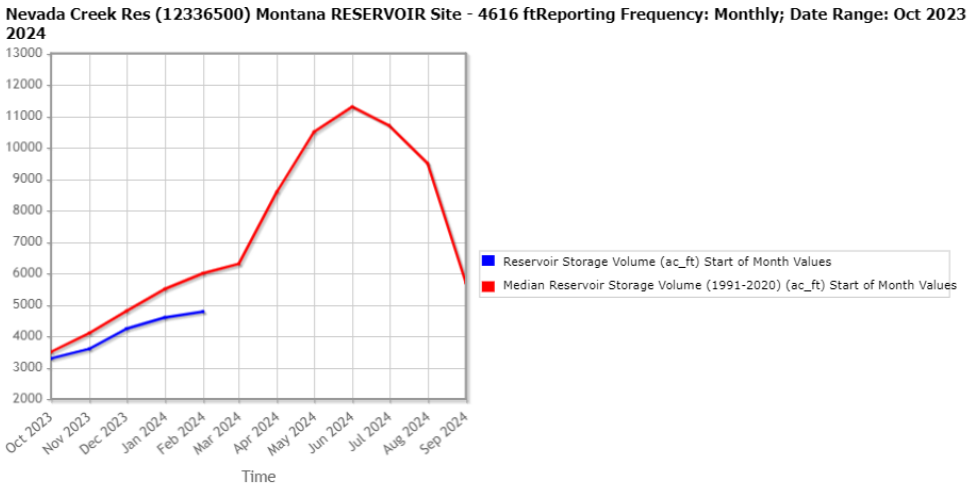
Blackfoot River Basin Snow Water Equivalent



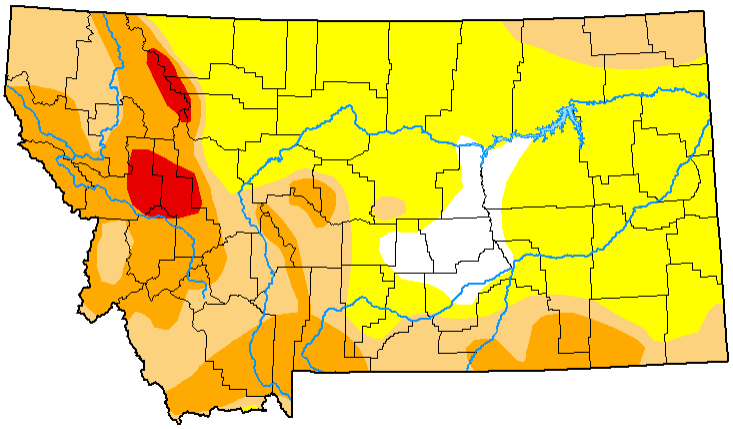
Black line: 2023/2024 Water Year **Green line: 30-year median**

Reservoir Storage

Storage values for Nevada Creek reservoir are currently not available; however, at the beginning of February, the reservoir was reported to be at 80% of medium storage volume, down 4% from last month.



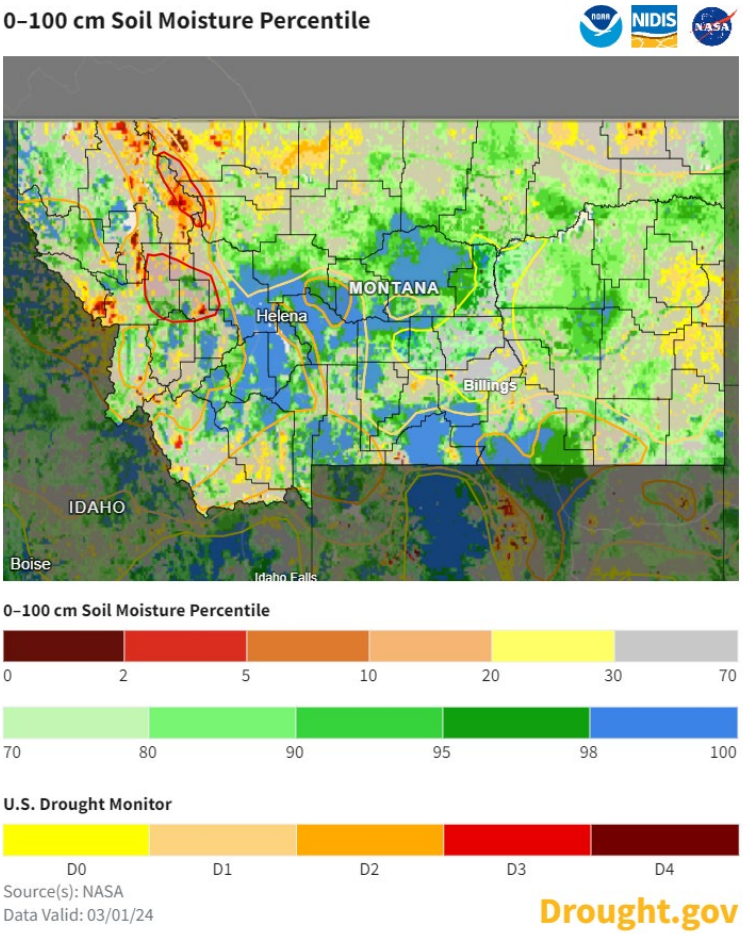
Montana Drought Monitor – February 29, 2024



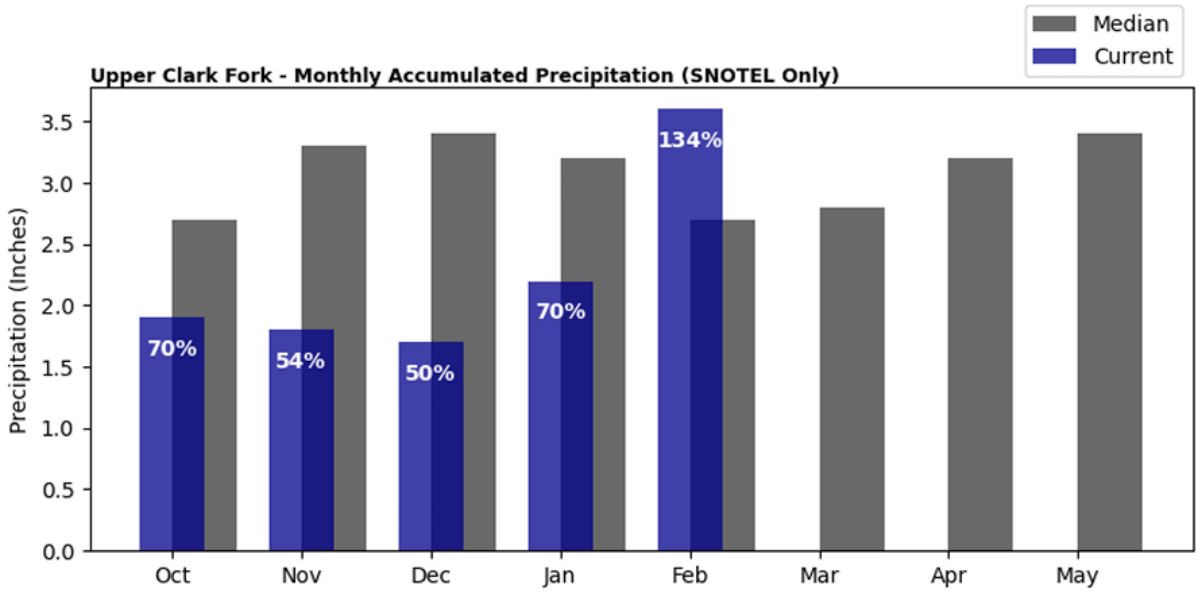
Drought Intensities

- None: No Drought
- D0: Abnormally Dry
- D1: Moderate Drought
- D2: Severe Drought
- D3: Extreme Drought
- D4: Exceptional Drought

Soil Moisture – March 1, 2024



Upper Clark Fork SNOTEL Precipitation: March 1, 2024



February 6, 2024 USGS Real Time Stream Flow Conditions

Nevada Creek above Reservoir

Discharge, cubic feet per second

Most recent instantaneous value: Ice affected

Blackfoot River above Nevada Creek

Discharge, cubic feet per second

Most recent instantaneous value: 144 cfs on 03/01/2024 at 8:45 MST -**115% of normal**

North Fork Blackfoot

Discharge, cubic feet per second

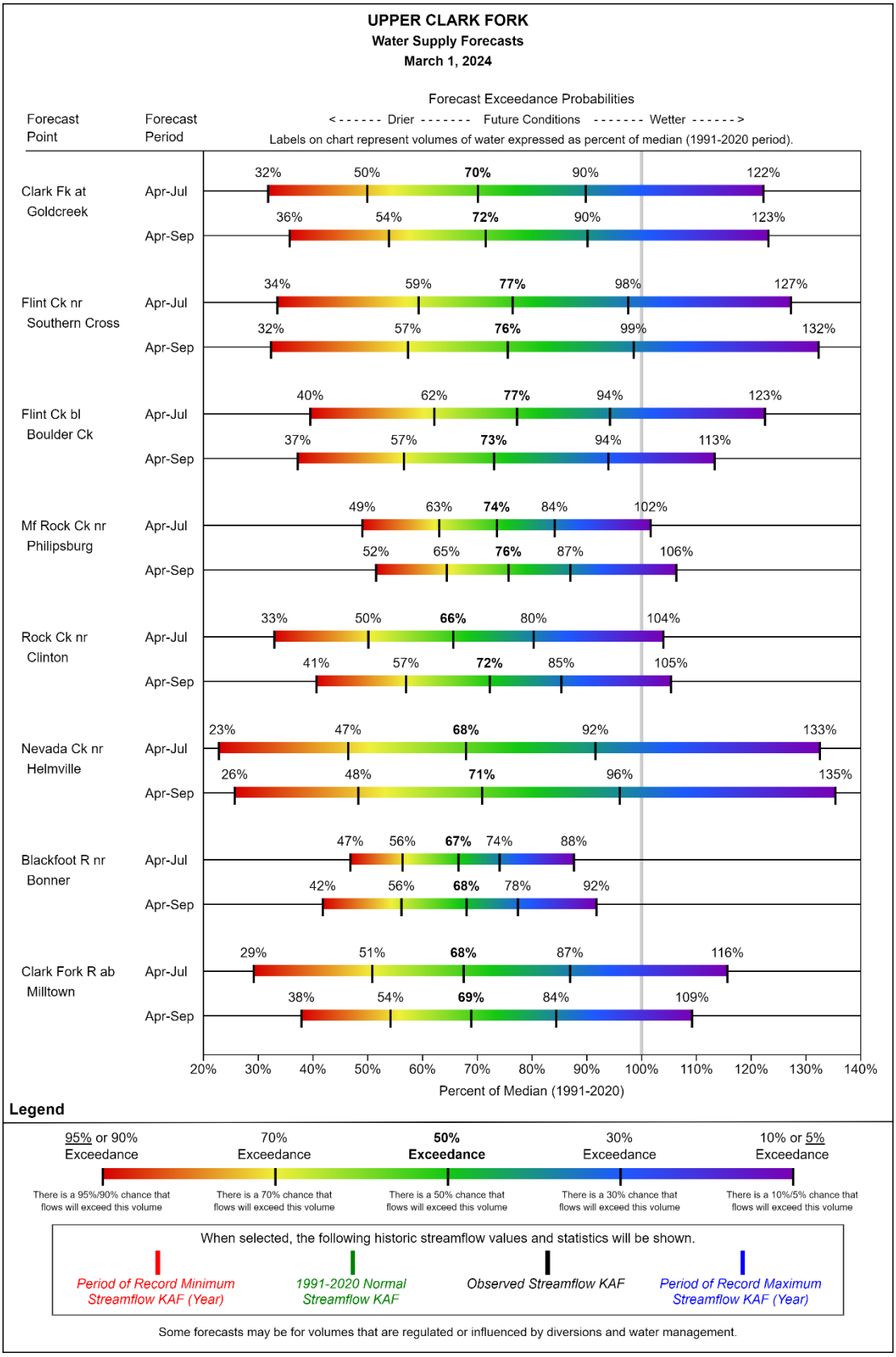
Most recent instantaneous value: 77 cfs on 03/01/2024 at 9:00 MST – **80% of normal**

Blackfoot River at Bonner

Discharge, cubic feet per second

Most recent instantaneous value: 569 cfs on 03/01/24 at 8:45 MST – **101% of normal**

Streamflow Forecast:

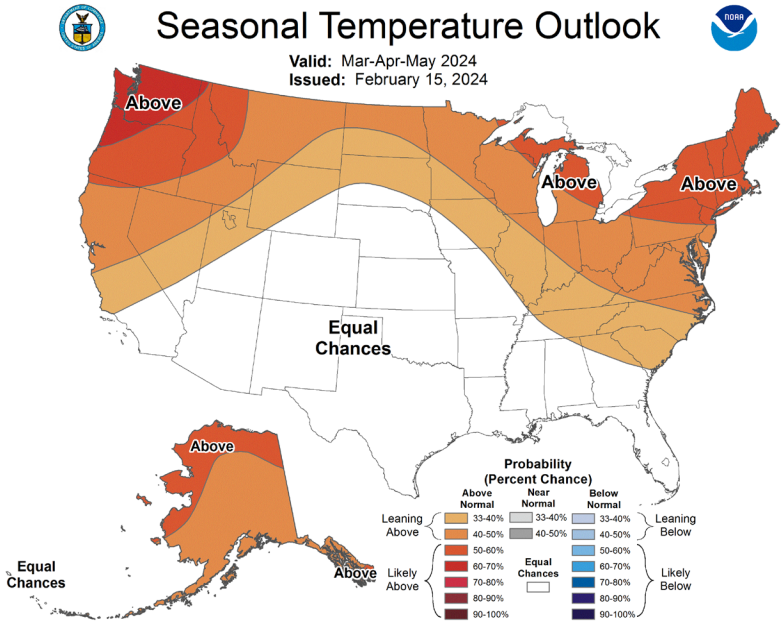


Three-Month Climate Outlook: March 2024

National Weather Service Climate Prediction Center

http://www.cpc.ncep.noaa.gov/

Above normal temperatures for March through May are predicted.



Below normal precipitation is predicted for March through May.