Blackfoot Water Supply Report

May 8, 2024

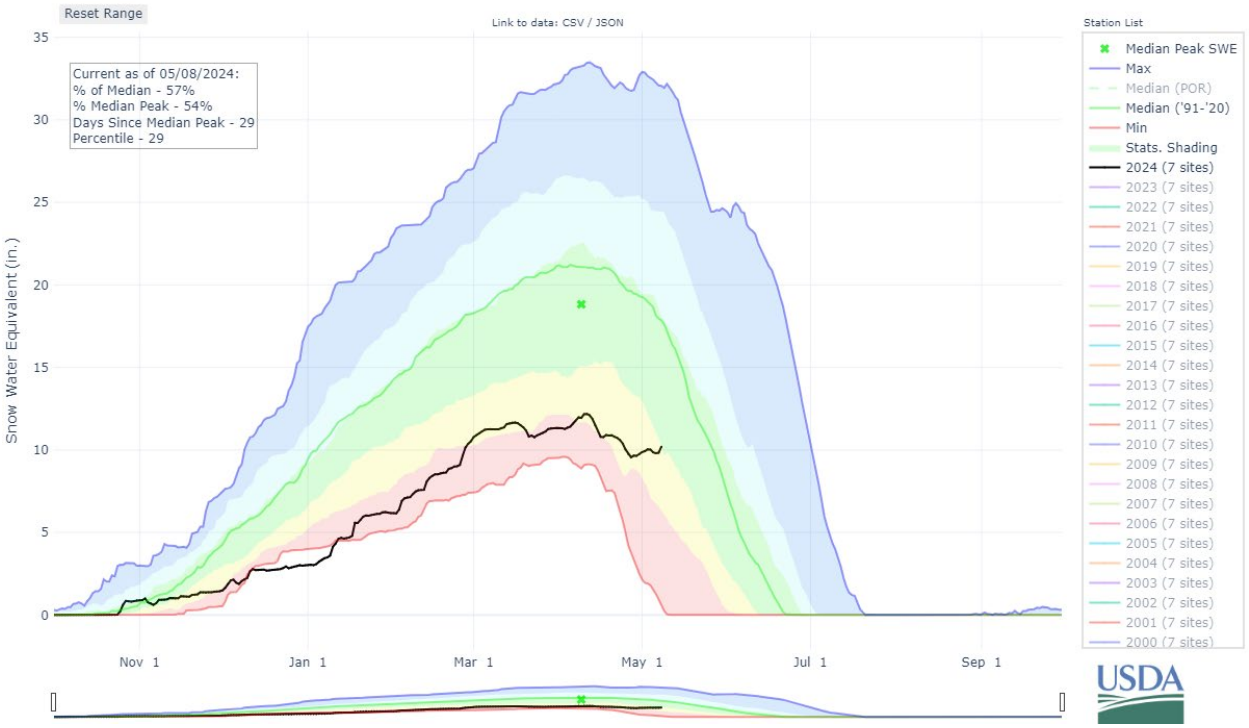
Montana Water Supply Report data as of May 1, 2024 (from NRCS):
https://www.nrcs.usda.gov/..../montana/montana-snow-survey/water-supply-outlook-reports-montana

Overview

The month of April brought below average precipitation to the Blackfoot and much of Montana. Snowpack in the Blackfoot has begun to decline, but with continued active weather in this early part of May, we have seen recent delays in melting at upper elevations and even gains in snow in some areas. While this is welcomed moisture, it is not expected to make up for the deficit in snow and precipitation that has built up over the water year. Without significant and widespread snow, we likely saw peak snowpack in the basin on April 11 at 12.2 inches of snow water equivalent (SWE). This is about 6.6 inches less than normal watershed-wide, and equates to more than 100 inches of missing snow depth in some high elevation areas.

The persistent below average precipitation and near historic low snowpack are driving below normal streamflow forecasts for much of the state, especially in western Montana. The May streamflow forecasts for the Blackfoot is down 6 percentage points from last month to 55% of normal. Though recent active weather and further precipitation this spring could improve streamflow conditions some, even under exceedingly favorable conditions, streamflow is expected to be below normal on the year. Current streamflows are well below average throughout the basin due to recent cool temperatures but are expected to rise with warming conditions in the forecast. The three-month climate outlook is calling for a higher probability of above average temperatures and below normal precipitation from May through July.

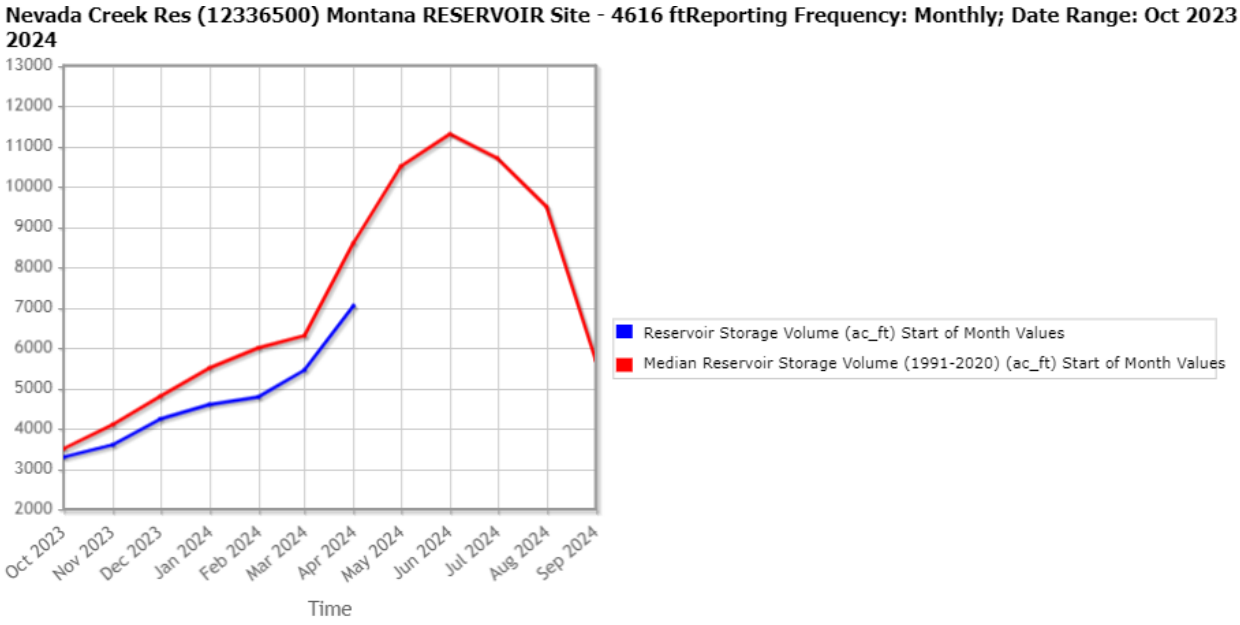
Blackfoot River Basin Snow Water Equivalent



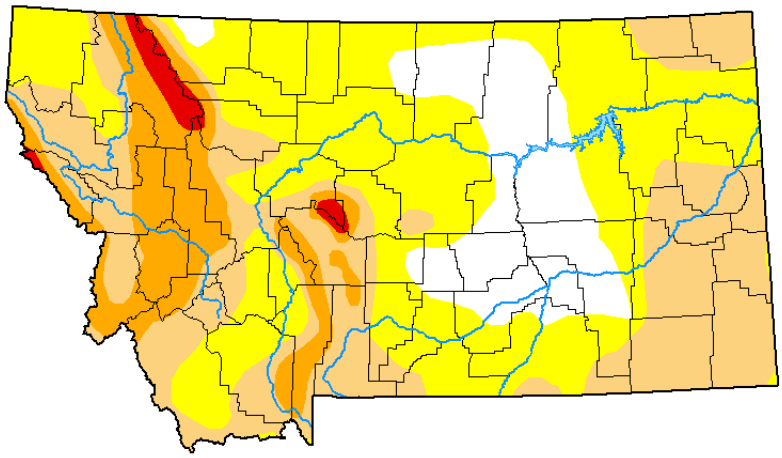
Black line: 2023/2024 Water Year **Green line: 30-year median**

Reservoir Storage

At the beginning of April, Nevada Creek Reservoir was reported to be at 82% of median storage volume, down 2% from the month before.



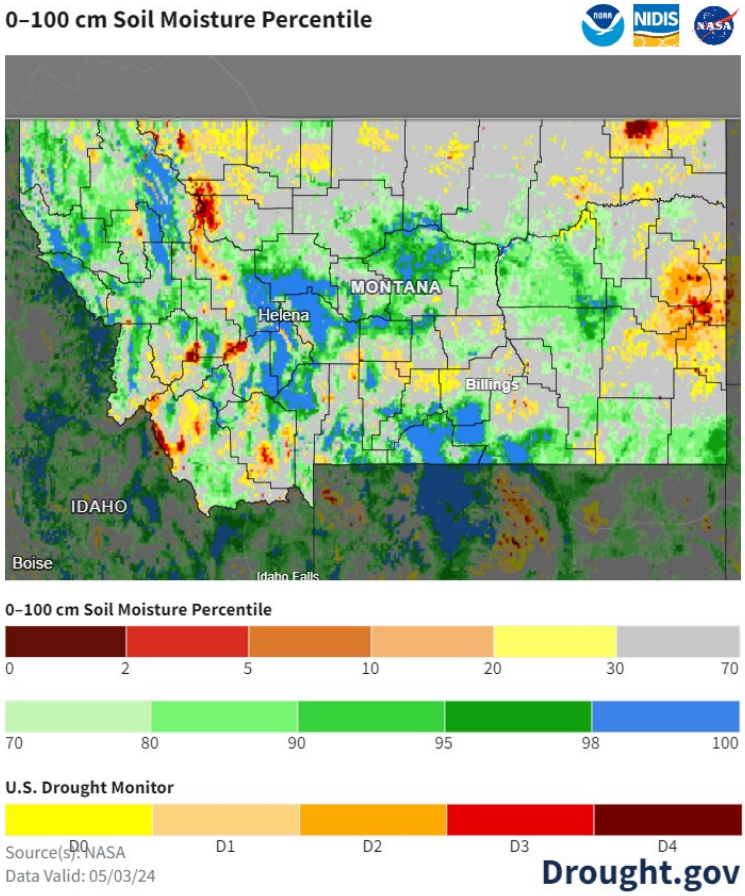
Montana Drought Monitor – May 2, 2024



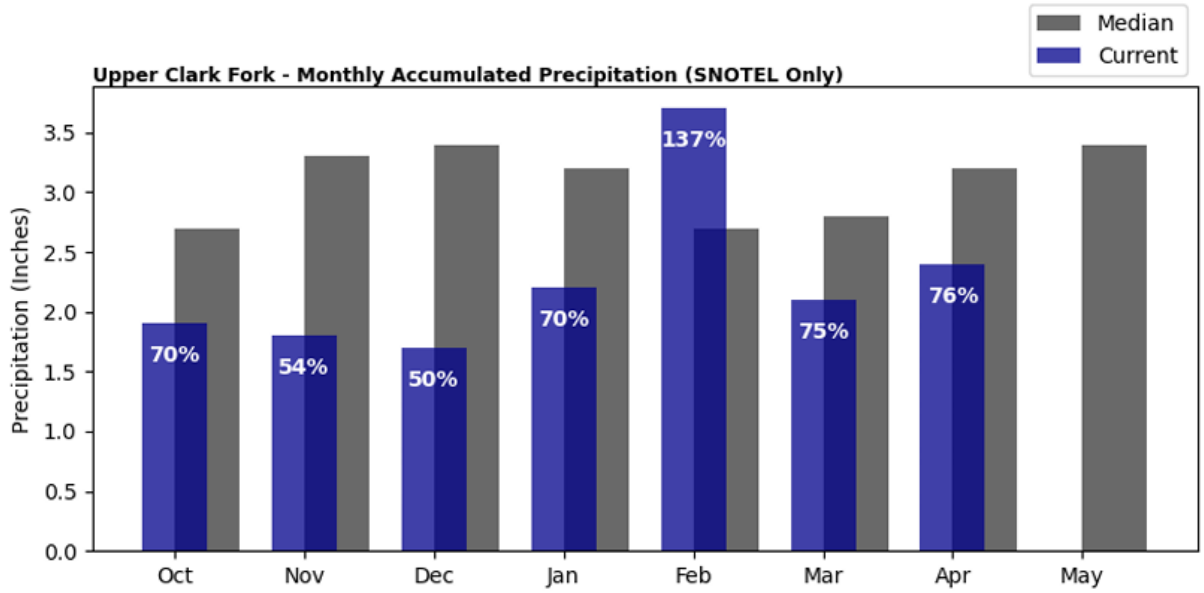
Drought Intensities

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

Soil Moisture – May 3, 2024



Upper Clark Fork SNOTEL Precipitation: May 1, 2024



May 8, 2024 USGS Real Time Stream Flow Conditions

Nevada Creek above Reservoir

Discharge, cubic feet per second

Most recent instantaneous value: 30.2 cfs on 05/8/24 at 12:45pm – **42% of normal**

Blackfoot River above Nevada Creek

Discharge, cubic feet per second

Most recent instantaneous value: 159 cfs on 05/8/24 at 12:45pm – **21% of normal**

North Fork Blackfoot

Discharge, cubic feet per second

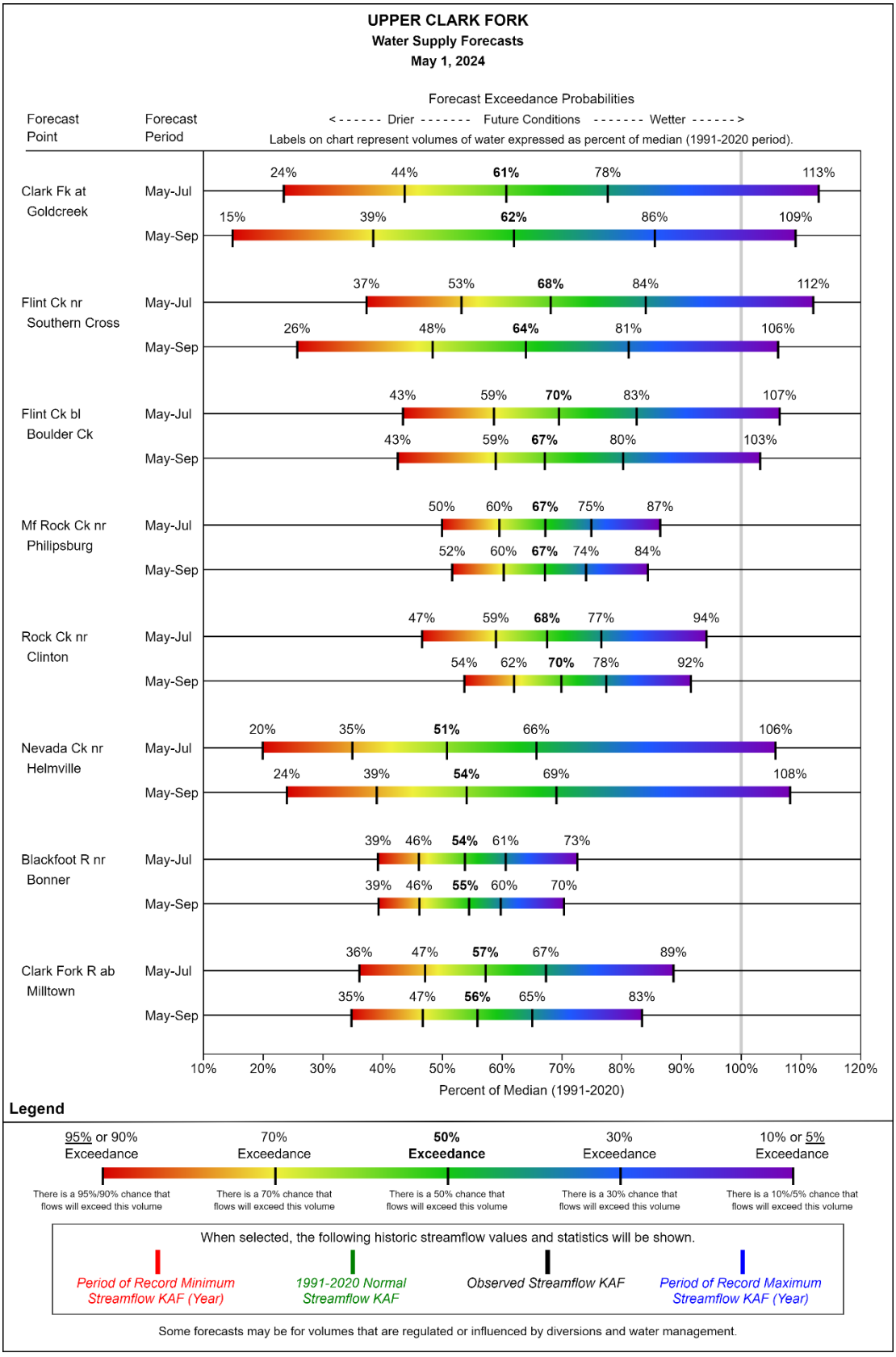
Most recent instantaneous value: 287 cfs on 05/8/24 at 12:00pm – **27% of normal**

Blackfoot River at Bonner

Discharge, cubic feet per second

Most recent instantaneous value: 1290 cfs on 05/8/24 at 12:45pm – **33% of normal**

Streamflow Forecast:

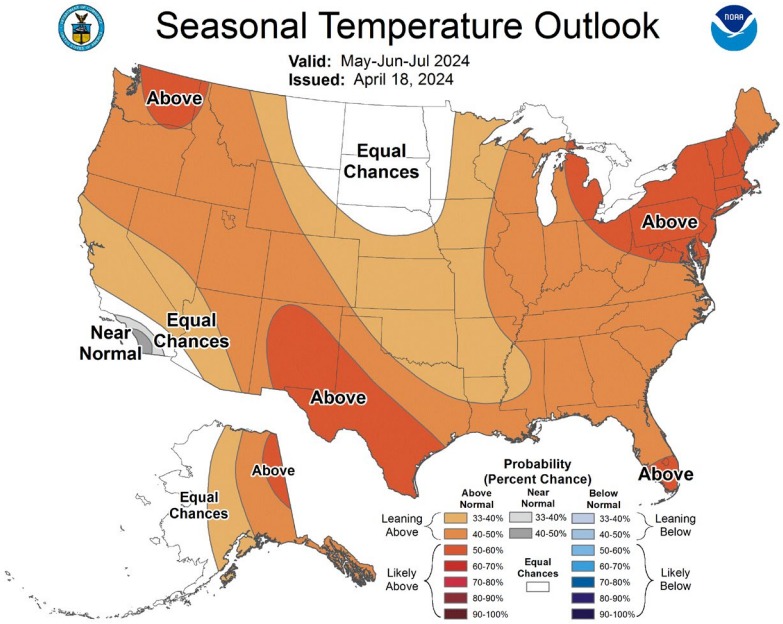


Three-Month Climate Outlook: May 2024

National Weather Service Climate Prediction Center

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

Above normal temperatures for May through July are favored.



Below normal precipitation is favored for May through July.