Blackfoot Water Supply Report

June 10, 2024

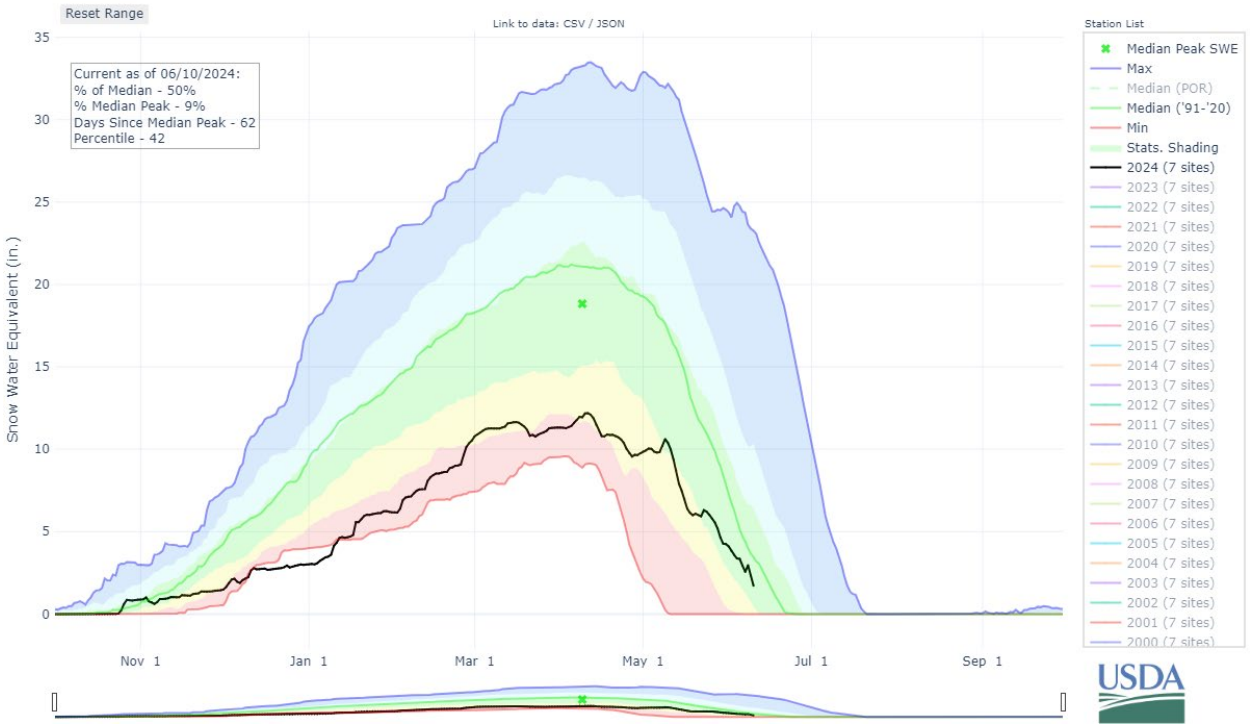
Montana Water Supply Report data as of June 1, 2024 (from NRCS):
https://www.nrcs.usda.gov/..../montana/montana-snow-survey/water-supply-outlook-reports-montana

Overview

The month of May brought variable weather conditions across Montana including much needed precipitation to many basins including the Blackfoot. The Blackfoot received above normal precipitation during May, delaying some snowmelt, but not adding significantly to the water year deficit. Snowpack peaked in the Blackfoot on April 11 at just 65% of normal. Five of the seven SNOTEL sites used in the Blackfoot recorded the lowest or second lowest snowpack peaks on record for those sites. Current streamflows are well below average throughout the basin. With the majority of snowpack already melted, streamflow in the Blackfoot likely peaked on May 17 at just 3,080 cfs. If a rain event doesn't produce a higher peak in the coming weeks, this would be the third lowest peak on record, behind 1941 (1940 cfs) and 1977 (2190 cfs).

The June streamflow forecasts for the Blackfoot is up slightly from last month to 67% of normal. Despite the precipitation deficit, soil moisture conditions have been relatively good thus far. We expect soil moisture to fall over the next several weeks as evapotranspiration rates pick up with the sustained high temperatures. The three-month climate outlook is calling for a higher probability of above average temperatures and below normal precipitation from June through August.

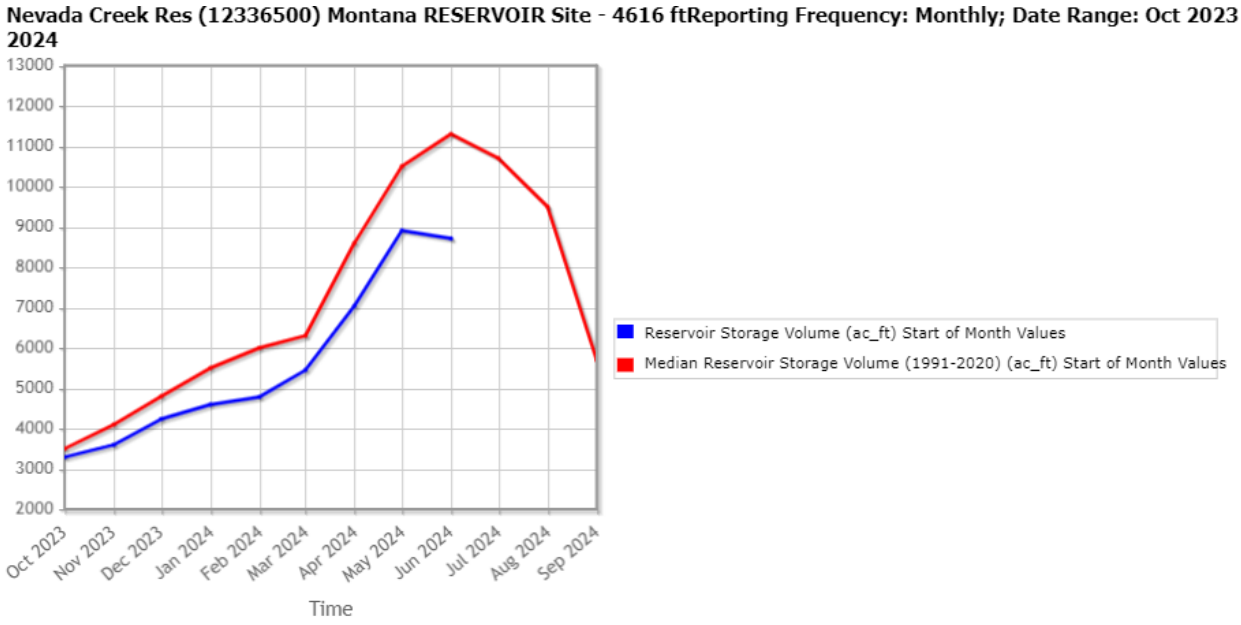
Blackfoot River Basin Snow Water Equivalent



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

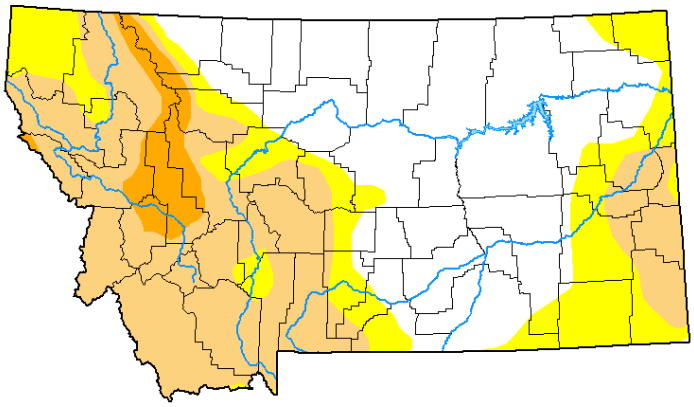
Reservoir Storage

At the beginning of June, Nevada Creek Reservoir was reported to be at 77% of median storage volume, down 7% from last month.



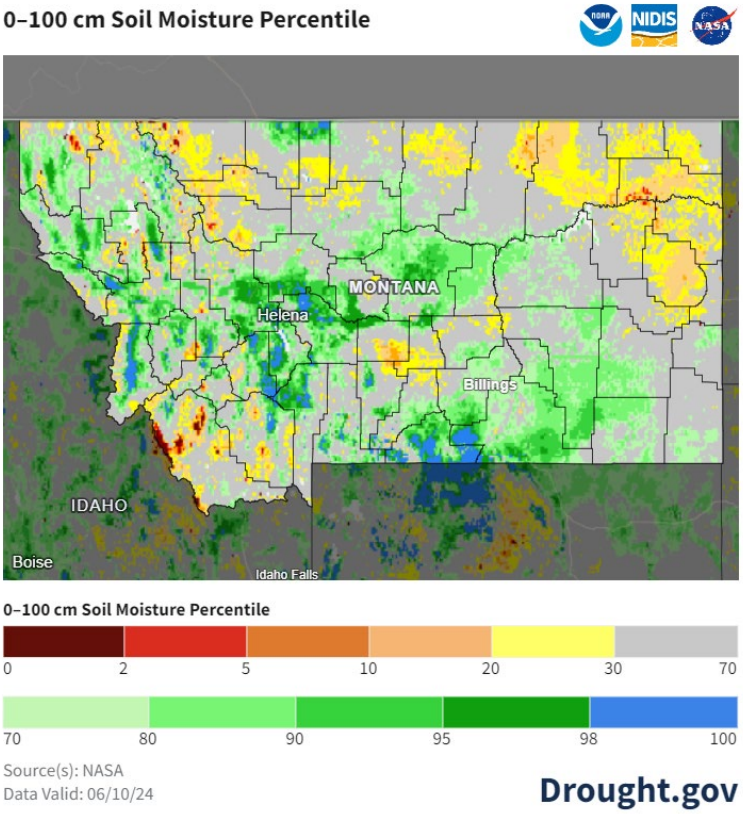
Montana Drought Monitor – June 6, 2024

Drought Intensities

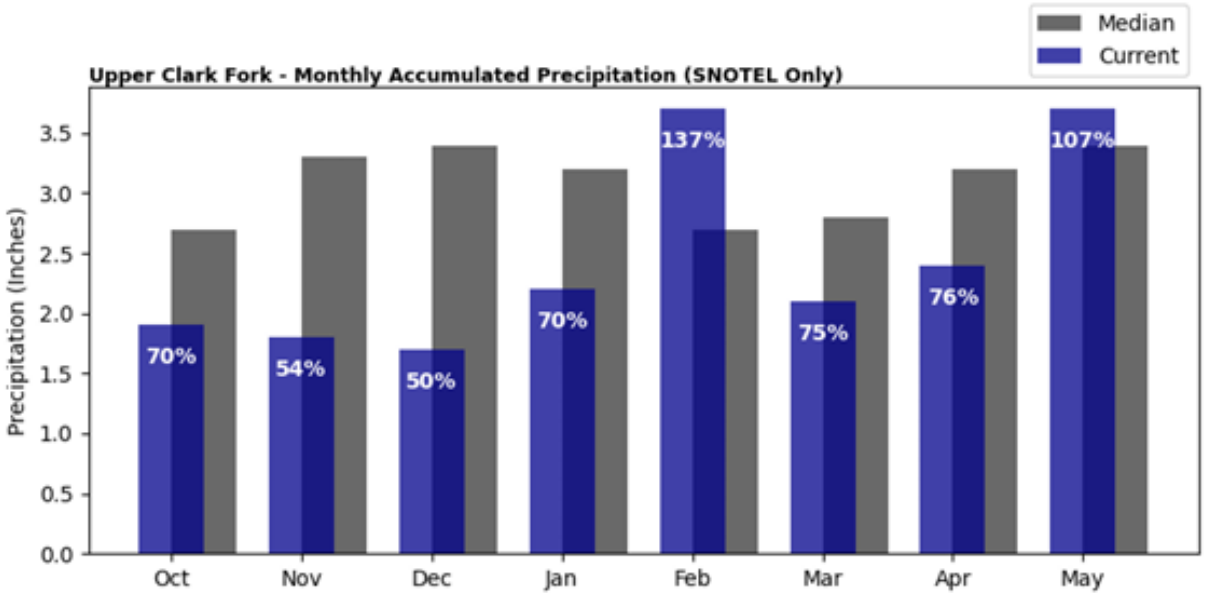


- None: No Drought
- D0: Abnormally Dry
- D1: Moderate Drought
- D2: Severe Drought
- D3: Extreme Drought
- D4: Exceptional Drought

Soil Moisture – June 10, 2024



Upper Clark Fork SNOTEL Precipitation: June 1, 2024



June 10, 2024 USGS Real Time Stream Flow Conditions

Nevada Creek above Reservoir

Discharge, cubic feet per second

Most recent instantaneous value: 29.3 cfs on 06/10/24 at 7:15am – **32% of normal**

Blackfoot River above Nevada Creek

Discharge, cubic feet per second

Most recent instantaneous value: 583 cfs on 06/10/24 at 7:45am – **54% of normal**

North Fork Blackfoot

Discharge, cubic feet per second

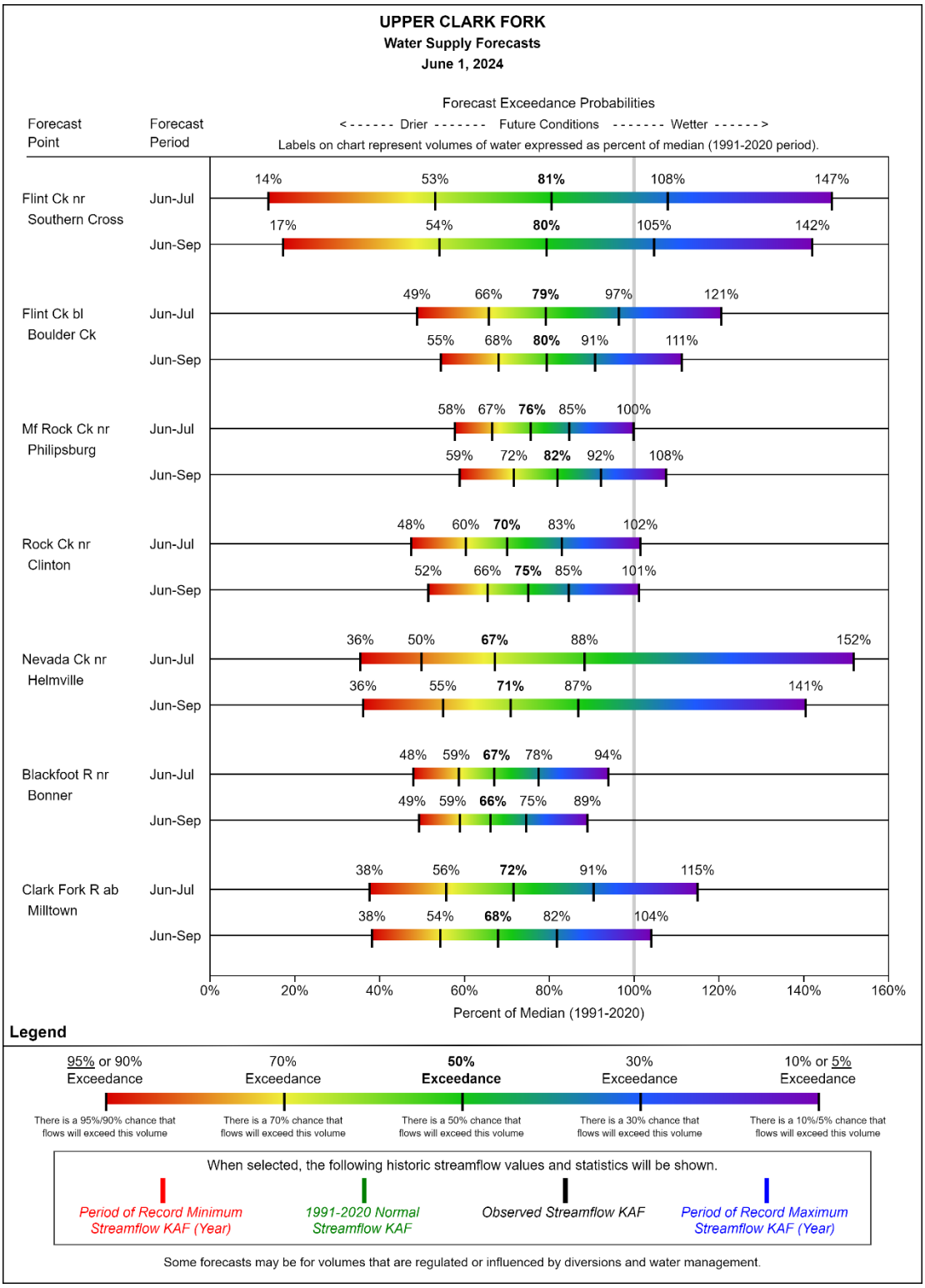
Most recent instantaneous value: 707 cfs on 06/10/24 at 7:00am – **54% of normal**

Blackfoot River at Bonner

Discharge, cubic feet per second

Most recent instantaneous value: 2140 cfs on 06/10/24 at 7:45am – **43% of normal**

Streamflow Forecast:

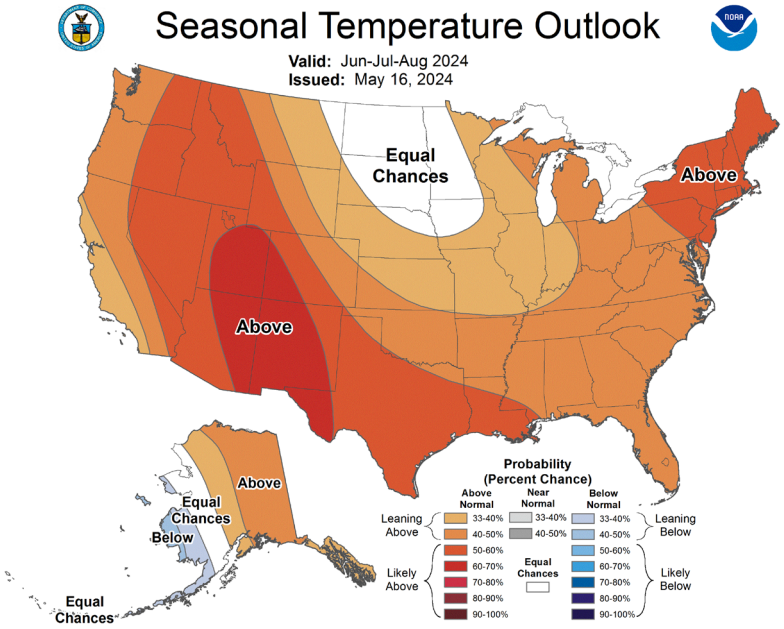


Three-Month Climate Outlook: June 2024

National Weather Service Climate Prediction Center

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

Above normal temperatures for June through August are favored.



Below normal precipitation is favored for June through August.