

Blackfoot Water Supply Report

May 8, 2023

Montana Water Supply Report data as of May 1, 2023 (from NRCS):

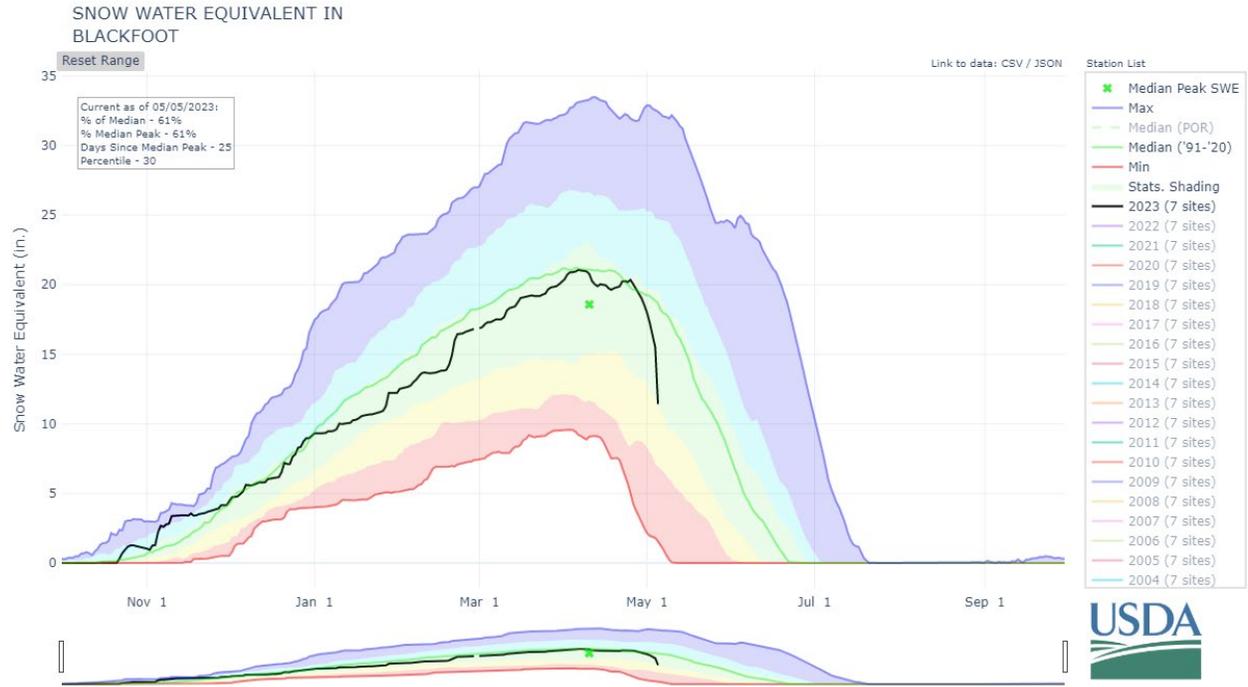
<https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/states/montana/waterSupply/>

Overview

Most of Montana, including the Blackfoot, has likely seen peak snowpack in April. In the Blackfoot, snowpack peaked on April 6 with 21.1 inches of snow-water equivalent (SWE). Normal peak snowpack for the basin is on April 10 with 18.6 SWE. Overall temperatures in April were below average across the State with some significant outliers early in the month and again late in the month. Coming into May, snowpack and river flows are beginning to change dramatically given the unseasonably warm temperatures we've seen in late April and early May. In just one-week (from April 25-May 3) snowpack has fallen from 100% to 82% of normal in the basin for this time of year. In one month's time, flow in the Blackfoot River has increased from less than 40% of normal in early April to around 250% of normal at the beginning of May. Cooler temperatures and precipitation in the few days has steadied the melt-off surge.

The slightly above average snowpack conditions for the basin continue to drive above average streamflow predictions for the basin. The timing of the flow is still something to watch. Runoff is off to an early and above average start; the Blackfoot has already surpassed maximum discharge from last year. We are hoping for more seasonable temperatures through this month to help keep snowpack for longer and prolong runoff later into spring. The 90-day forecast calls for above average temperatures and below normal precipitation. Soil moisture across the State and in the Blackfoot is generally in much better shape this year than last year.

Blackfoot River Basin Snow Water Equivalent



Black line: 2022/2023 Water Year

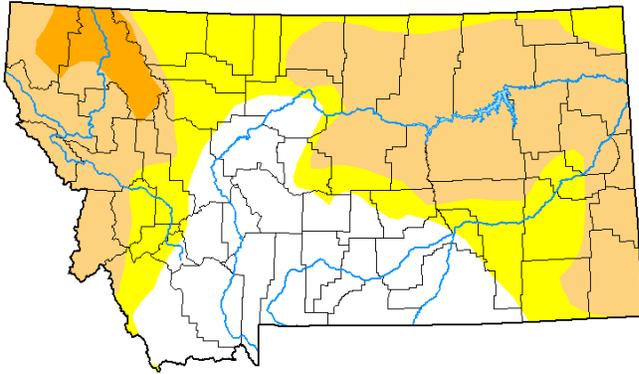
Green line: 30-year median

Reservoir Storage

Reservoir levels are generally near normal for this time of year. Nevada Creek Reservoir is currently 92% of normal which is significantly better than it was this time last year at 78%.

Upper Clark Fork	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Georgetown Lake	27.9	28.8	28.6	31.0	90%	93%	92%	98%	101%
Nevada Creek Res	9.7	8.2	10.5	12.6	77%	65%	83%	92%	78%
Lower Willow Creek Reservoir				4.9					
Silver Lake									
East Fork Rock Creek Res	9.1	9.4	10.0	16.0	57%	59%	62%	91%	94%
Basin Index					78%	78%	82%	95%	94%
# of reservoirs					3	3	3	3	3

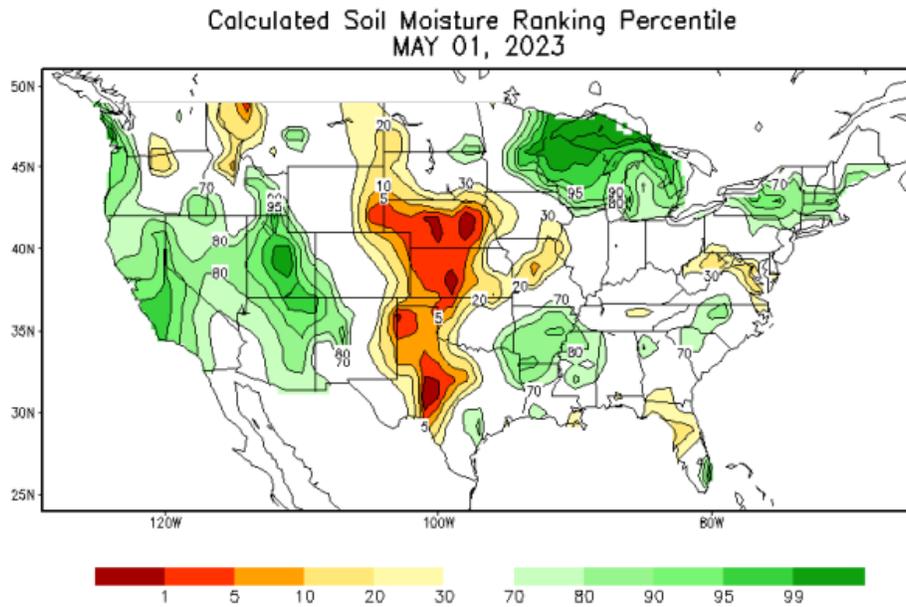
Montana Drought Monitor – May 4, 2023



Drought Intensities

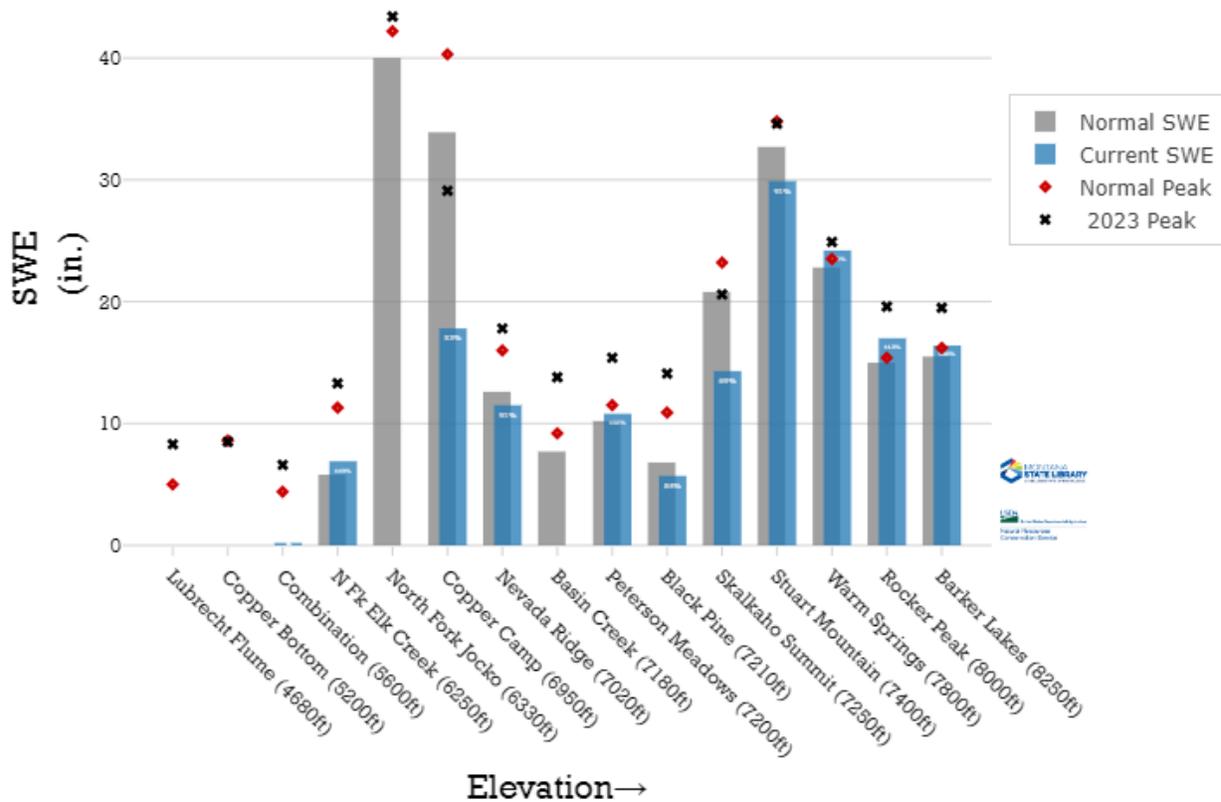
-  None: No Drought
-  D0: Abnormally Dry
-  D1: Moderate Drought
-  D2: Severe Drought
-  D3: Extreme Drought
-  D4: Exceptional Drought

Soil Moisture – May 1, 2023



Montana SNOTEL Snow Water Equivalent (SWE): May 8, 2023

UpperClark
Snow Water Equivalent
2023-05-08



April 7, 2023 USGS Real Time Stream Flow Conditions

Nevada Creek above Reservoir

Discharge, cubic feet per second

Most recent instantaneous value: 323 on 5/8/23 at 9:45 MST

Blackfoot River above Nevada Creek

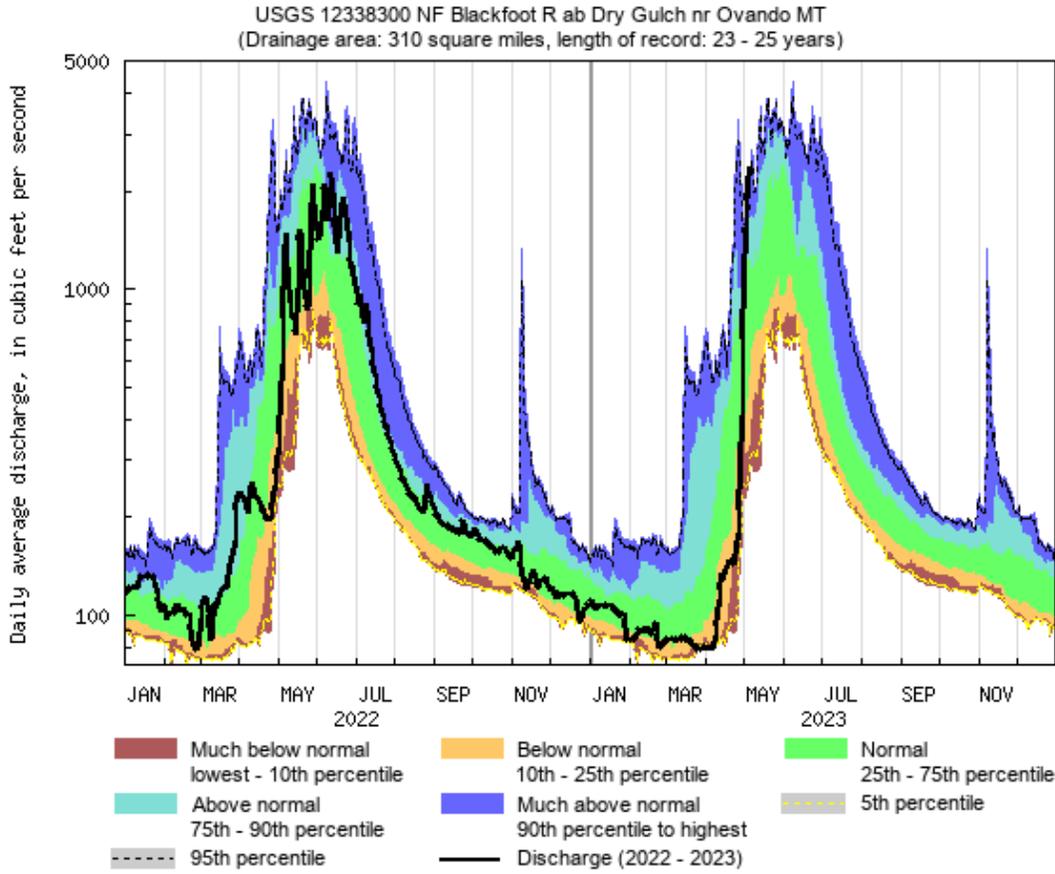
Discharge, cubic feet per second

Most recent instantaneous value: 2,030 on 5/8/2023 at 9:45 MST

North Fork Blackfoot

Discharge, cubic feet per second

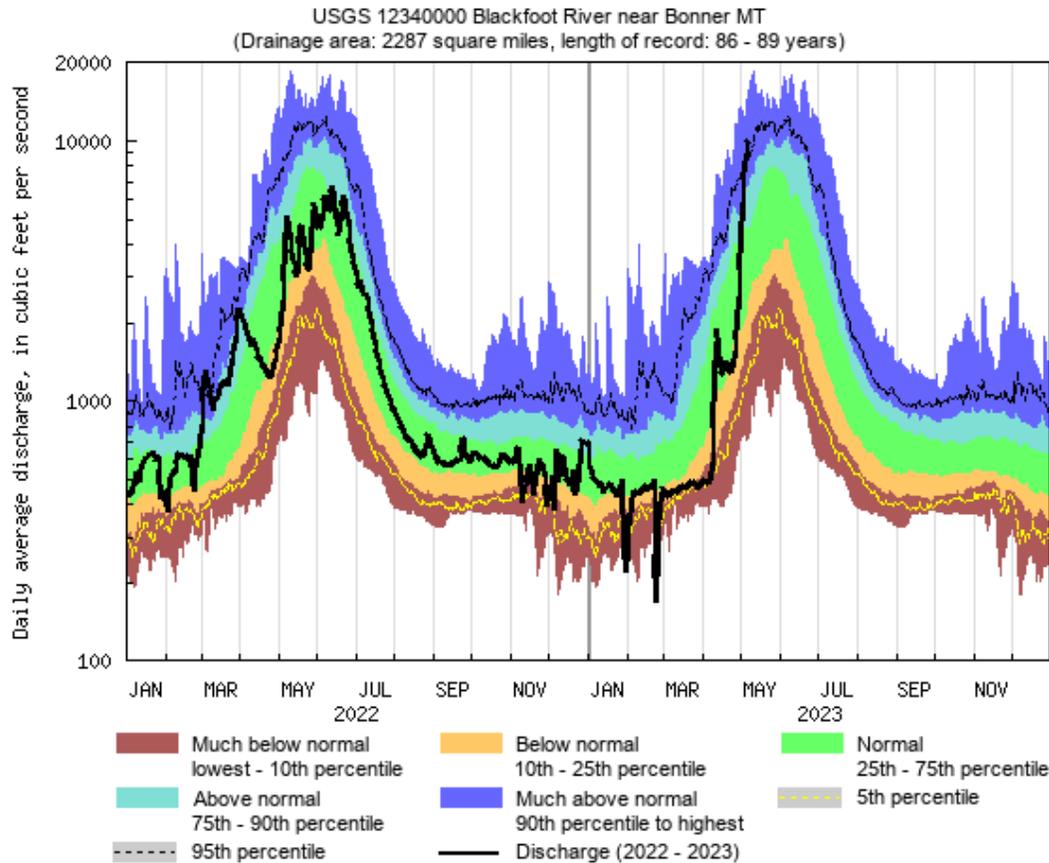
Most recent instantaneous value: 1,710 on 5/8/2023 at 9:00 MST



Last updated: 2023-05-08

Blackfoot River at Bonner Discharge, cubic feet per second

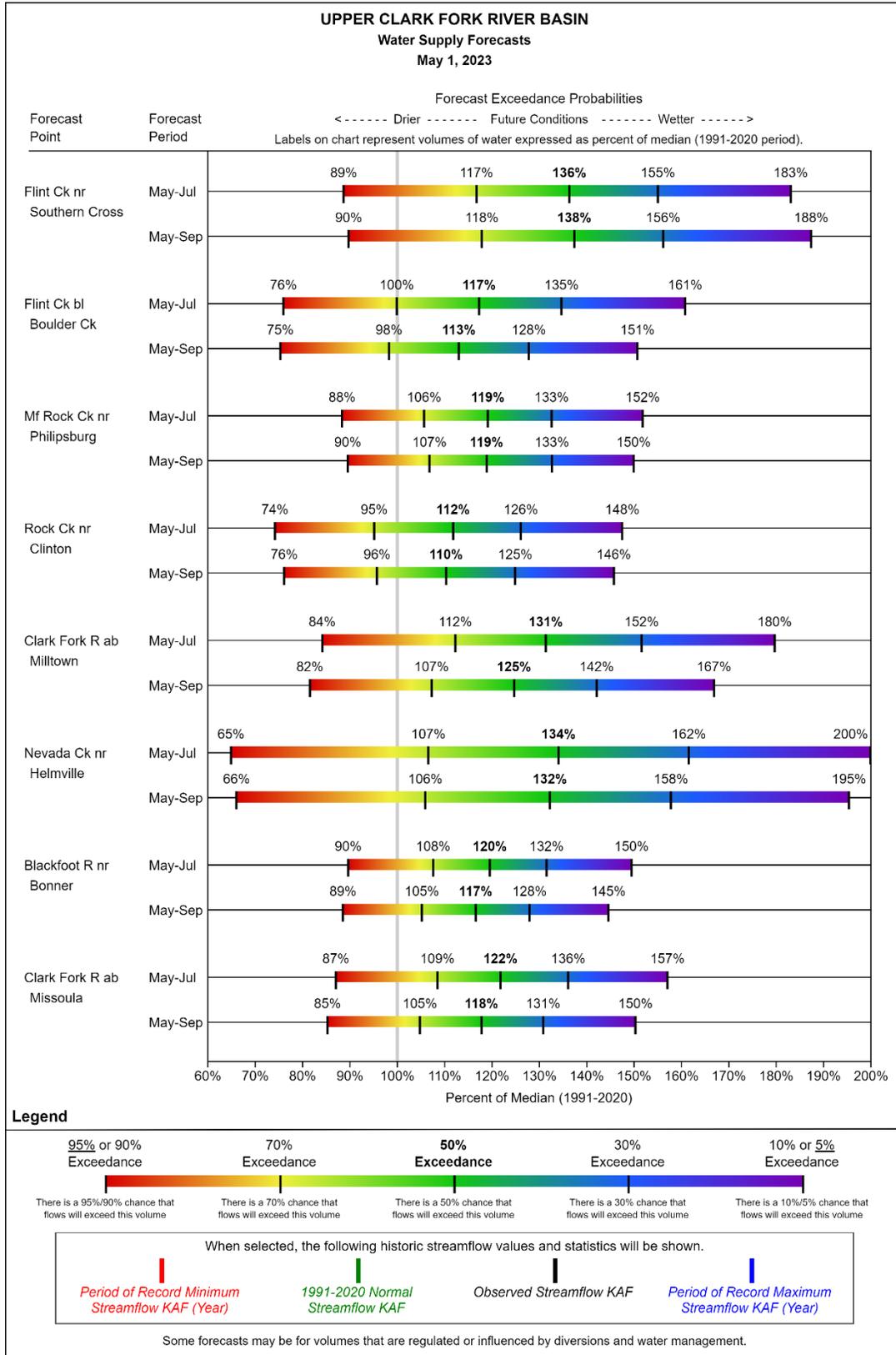
Most recent instantaneous value: 9,520 on 5/8/2023 at 9:45 MST



USGS WaterWatch

Last updated: 2023-05-08

Streamflow Forecast: May 2023



Three-Month Outlook: May 2023

From
National Weather Service Climate Prediction Center

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

Above normal temperatures for May through July are predicted.

Below normal precipitation predicted for May through July.

