Blackfoot Water Supply Report
June 8, 2022

Montana Water Supply Report data as of June 6, 2022 (from NRCS):
https://www.nrcs.usda.gov/wps/portal/nrcs/mt/snow/

Overview

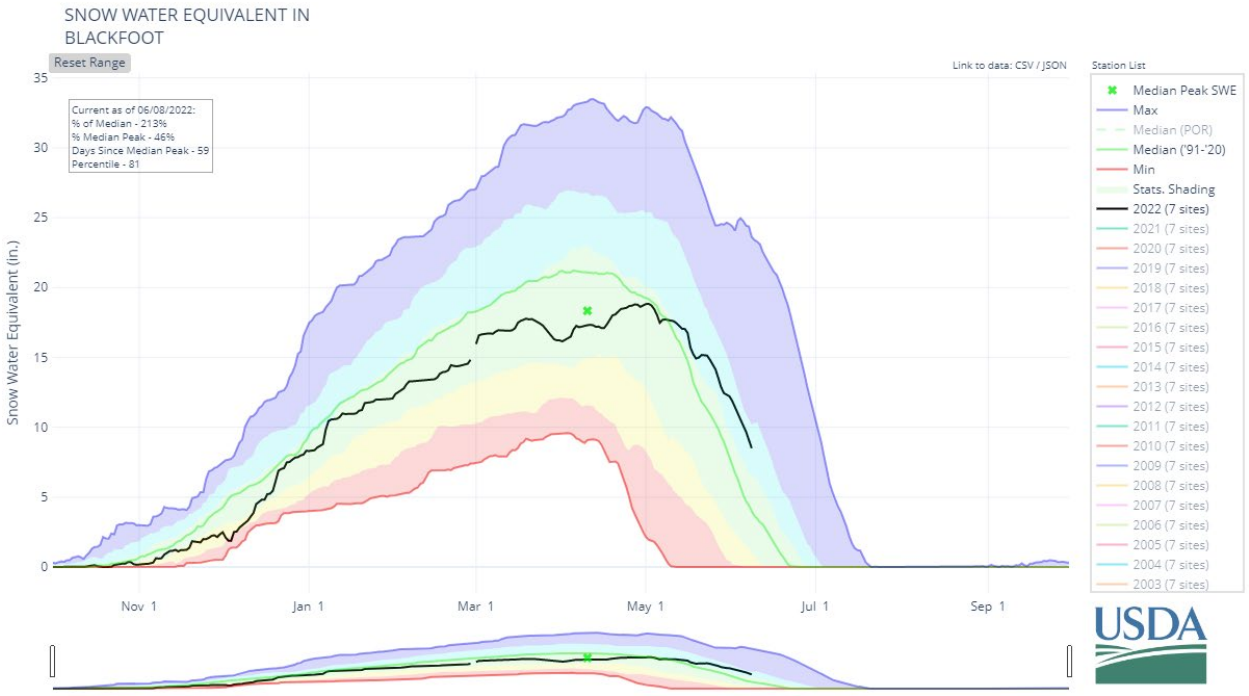
April marked the start of a major weather pattern change which brought much needed precipitation to Montana, and while April was a wet month, May was even wetter in certain areas. Some of the largest totals were in southwest Montana and northern Wyoming where precipitation ranged from 5 to 11 inches and set records for highest May precipitation in over 40 years at some SNOTEL sites. Mountain precipitation was lowest in parts of Central Montana, the Flathead Lake area, and the Upper Clark Fork region where totals ranged from about two to five inches in May, which compared to normal is about 70% to 100% for those regions.

April and May combined brought more precipitation than January through March at most SNOTEL sites in the region. Many sites, particularly in southwest Montana, have received over 10 inches in the last two months. High elevations in the Beartooths, Northern Gallatin Range, and Tobacco Root Mountains received over 15 inches in the last two months, which is double what they received in January through March. All of Montana's major river basins currently have had near normal water year precipitation, except for the Smith-Judith-Musselshell and Milk River basins, which have received about 80% of normal precipitation since October 1.

In northwest Montana, snowmelt that began in earnest at the end of April continued to progress in May at rates that were close to normal and most streams in the Kootenai, Flathead, Clark Fork, and Bitterroot basins observed flows in May that were normal for this time of year. Looking forward, the Kootenai, Flathead River, and northern Rocky Mountain Front have had consistent precipitation and snowfall this winter and are forecasted to have well above normal streamflows for the June through July period. "Conditions east of the Continental Divide have improved significantly since April 1 and streamflows are now forecasted to be above normal for June through July, but it is also important to consider timing," said Larson. The large snowpack deficit earlier this spring combined with cooler weather caused below normal flows in April and May east of the Continental Divide, which means that streams may be full in June and July but the overall volume of water for the spring runoff season might still be near to below normal.

A full report of conditions on June 1 can be found in the monthly Water Supply Outlook Report available on the Montana Snow Survey website. In addition, real-time snow survey data can be found at www.mt.nrcs.usda.gov under Snow Survey.

Blackfoot River Basin Snow Water Equivalent



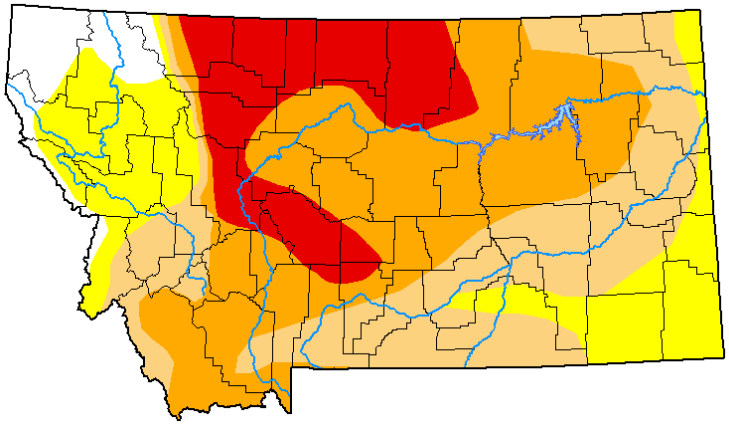
Black line: 2021/2022 Water Year **Green line: 30-year median**

Reservoir Storage

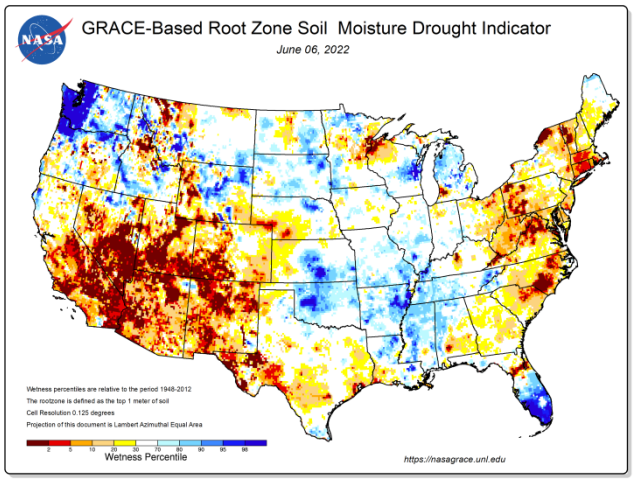
Reservoir storage is currently below average for this time of year in Western Montana reservoirs and below to the levels at this time last year.

Upper Clark Fork	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Lower Willow Creek Reservoir				4.9					
East Fork Rock Creek Res	10.2	11.2	12.4	16.0	63%	70%	77%	82%	90%
Nevada Creek Res	9.1	11.5	11.3	12.6	72%	91%	90%	80%	101%
Silver Lake				0.0					
Georgetown Lake	29.4	28.5	29.7	31.0	95%	92%	96%	99%	96%
Basin Index					**82%**	**86%**	**90%**	**91%**	**96%**
# of reservoirs					3	3	3	3	3

Montana Drought Monitor – June 2, 2022



National Root Zone Soil Moisture – June 6, 2022



Drought Intensities

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

Montana SNOTEL Snow Water Equivalent: June 08, 2022

Montana SNOTEL Snow/Precipitation Update Report

Based on Mountain Data from NRCS SNOTEL Sites
Provisional data, subject to revision
Data based on the first reading of the day (typically 00:00) for Wednesday, June 08, 2022

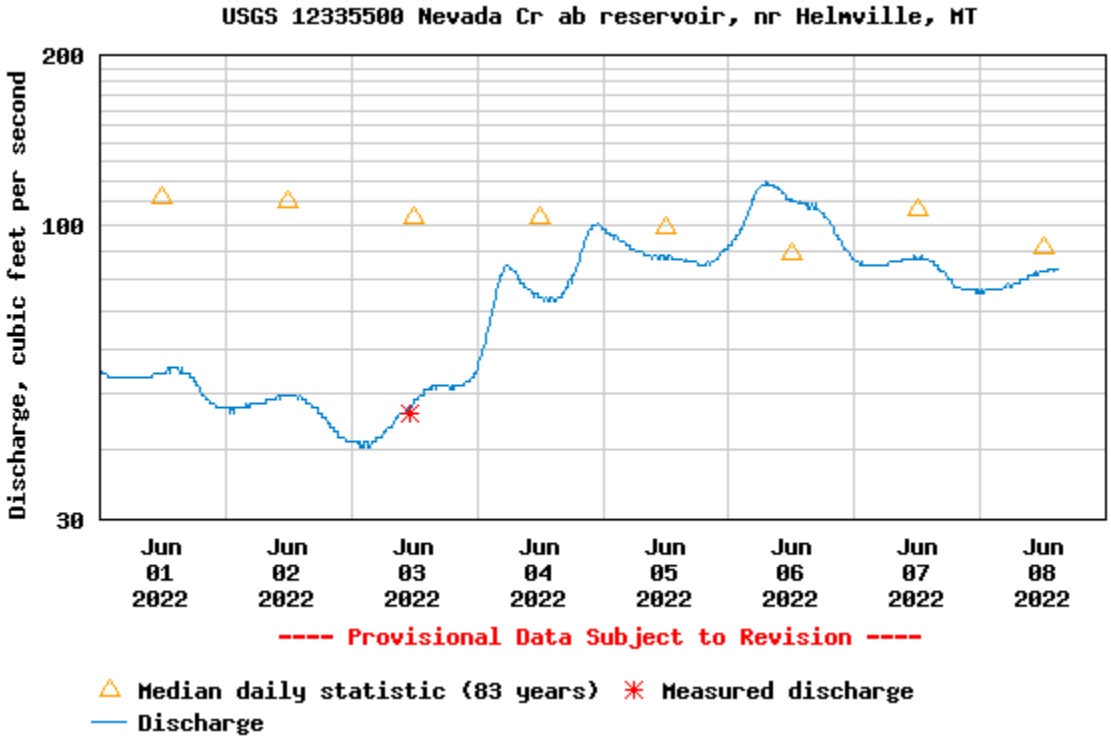
Basin Site Name	Elev (ft)	Snow Water Equivalent			Water Year-to-Date Precipitation		
		Current (in)	Median (in)	Pct of Median	Current (in)	Average (in)	Pct of Average
UPPER CLARK FORK RIVER BASIN							
Barker Lakes	8250	14.2	5.2	273	22.5	24.7	91
Basin Creek	7180	0.0	0.0	*	17.5	16.9	104
Black Pine	7210	0.0	0.0	*	-M	19.0	*
Combination	5600	0.0	0.0	*	-M	13.5	*
Copper Bottom	5200	0.0	0.0	*	19.7	19.4	102
Copper Camp	6950	2.5	0.0(17)	*	37.8	32.1(17)	118
Lubrecht Flume	4680	0.0	0.0	*	14.7	15.0	98
Nevada Ridge	7020	0.1	0.0(26)	*	19.7	22.3(26)	88
N Fk Elk Creek	6250	0.0	0.0	*	19.4	20.2	96
North Fork Jocko	6330	36.1	13.0	278	-M	58.2	*
Peterson Meadows	7200	0.0	0.0	*	19.2	19.4(22)	99
Skalkaho Summit	7250	6.4	1.2	533*	29.3	29.5	99
Stuart Mountain	7400	20.8	15.0(26)	139	36.4	39.7(26)	92
Warm Springs	7800	18.8	12.6	149	31.9	31.4	102
Basin Index (%)		210*			99		

June 8, 2022 USGS Real Time Flow Conditions

Nevada Creek above Reservoir

Discharge, cubic feet per second

Most recent instantaneous value: 83.5 06-08-2022 14:45 MDT

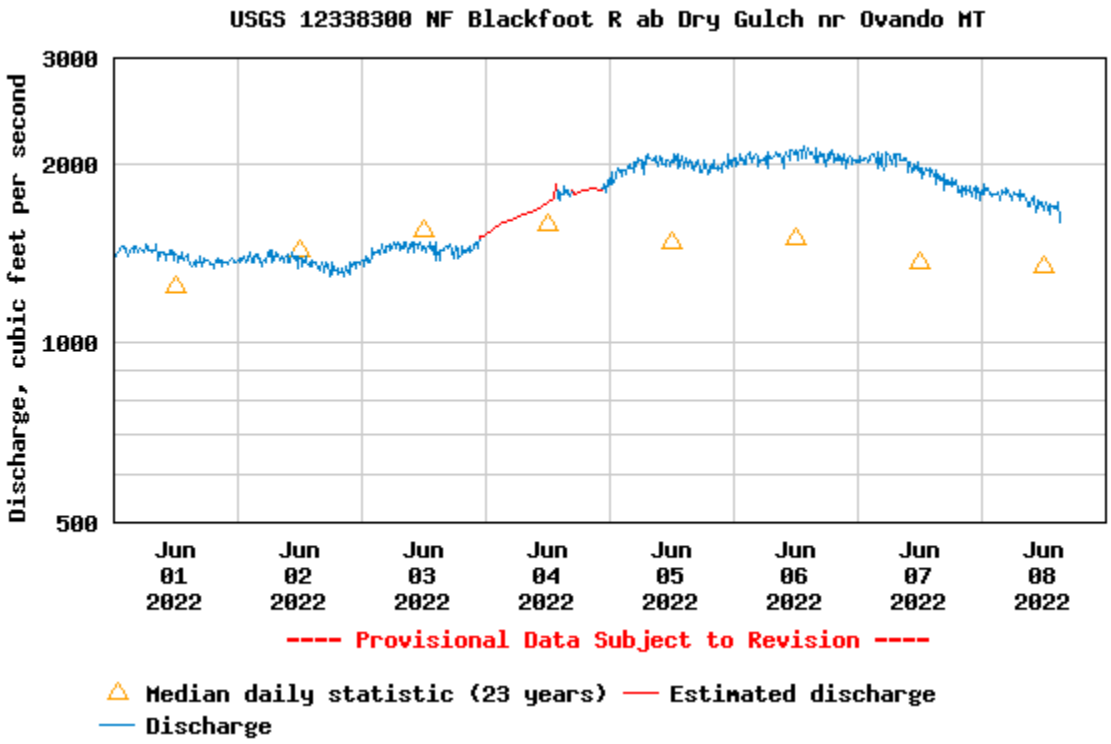


Daily discharge, cubic feet per second -- statistics for Jun 8 based on 83 water years of record more

Min (1973)	25th percen-tile	Most Recent Instantaneous Value Jun 8	Median	Mean	75th percen-tile	Max (2011)
12.0	46	83.5	91	118	140	655

North Fork Blackfoot

Discharge, cubic feet per second
Most recent instantaneous value: 1590 06-08-2022 15:00 MDT

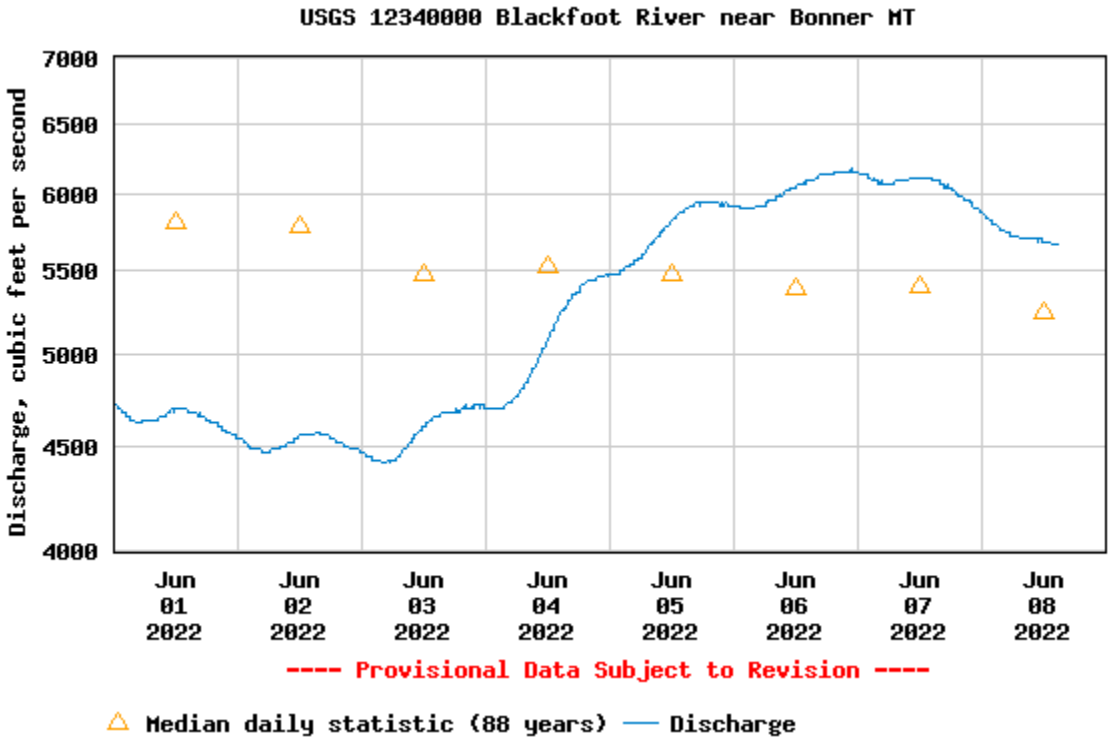


Daily discharge, cubic feet per second -- statistics for Jun 8 based on 23 water years of record more

Min (1998)	25th percen-tile	Median	Mean	Most Recent Instantaneous Value Jun 8	75th percen-tile	Max (2011)
679	1090	1340	1480	1590	1820	4360

Blackfoot River at Bonner

Discharge, cubic feet per second
Most recent instantaneous value: 5660 06-08-2022 14:45 MDT

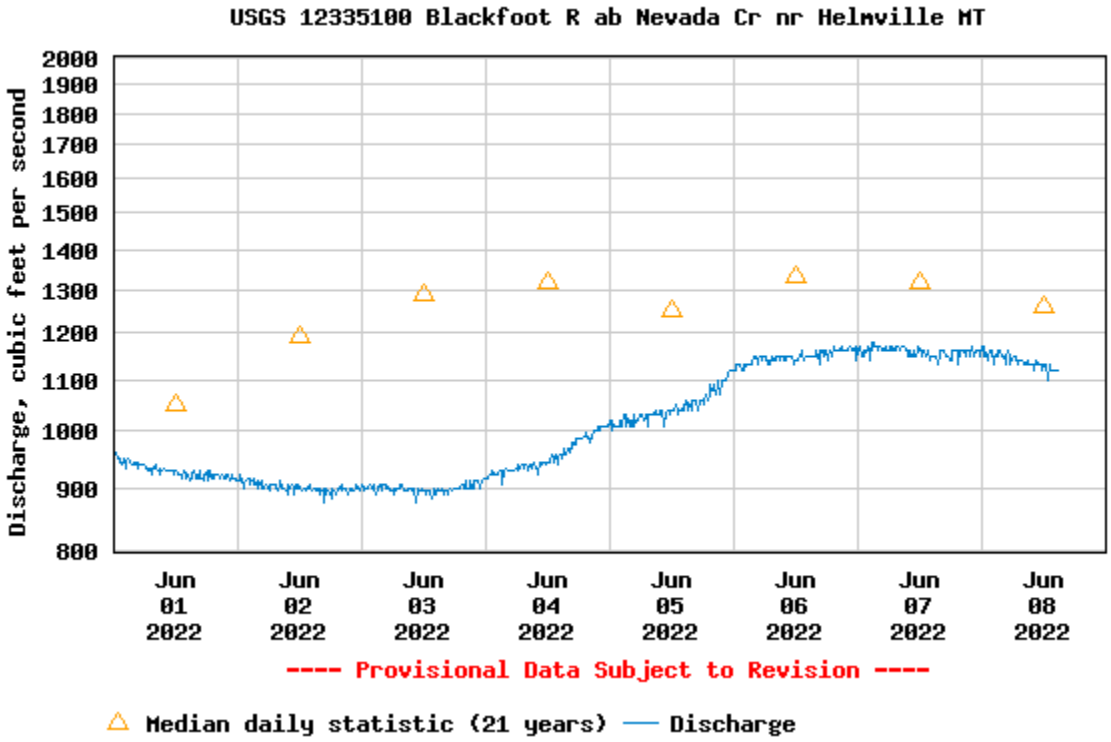


Daily discharge, cubic feet per second -- statistics for Jun 8 based on 88 water years of record more

Min (1987)	25th percen-tile	Median	Most Recent Instantaneous Value Jun 8	Mean	75th percen-tile	Max (2011)
1290	4150	5240	5660	5740	6730	16600

Blackfoot River above Nevada Creek

Discharge, cubic feet per second
Most recent instantaneous value: 1120 06-08-2022 14:45 MDT



Daily discharge, cubic feet per second -- statistics for Jun 8 based on 21 water years of record more						
Min (2001)	25th percen-tile	Most Recent Instantaneous Value Jun 8	Median	Mean	75th percen-tile	Max (2011)
543	898	1120	1260	1280	1500	3440

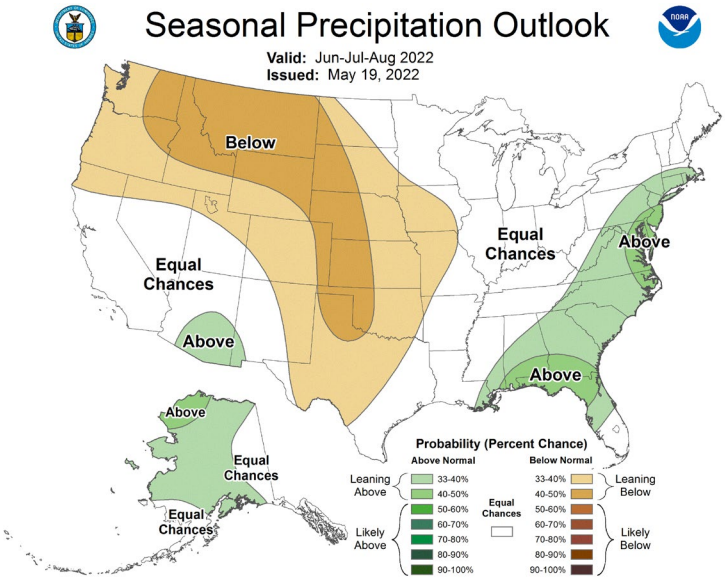
Three-Month Outlook: June 2022

From

National Weather Service Climate Prediction Center

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

Higher chance for below average precipitation for June through August.



Higher chance for above normal temperatures from June through August.