

Blackfoot Water Supply Report

February 7, 2022

Montana Water Supply Report data as of February 4, 2022 (from NRCS):

<https://www.nrcs.usda.gov/wps/portal/nrcs/mt/snow/>

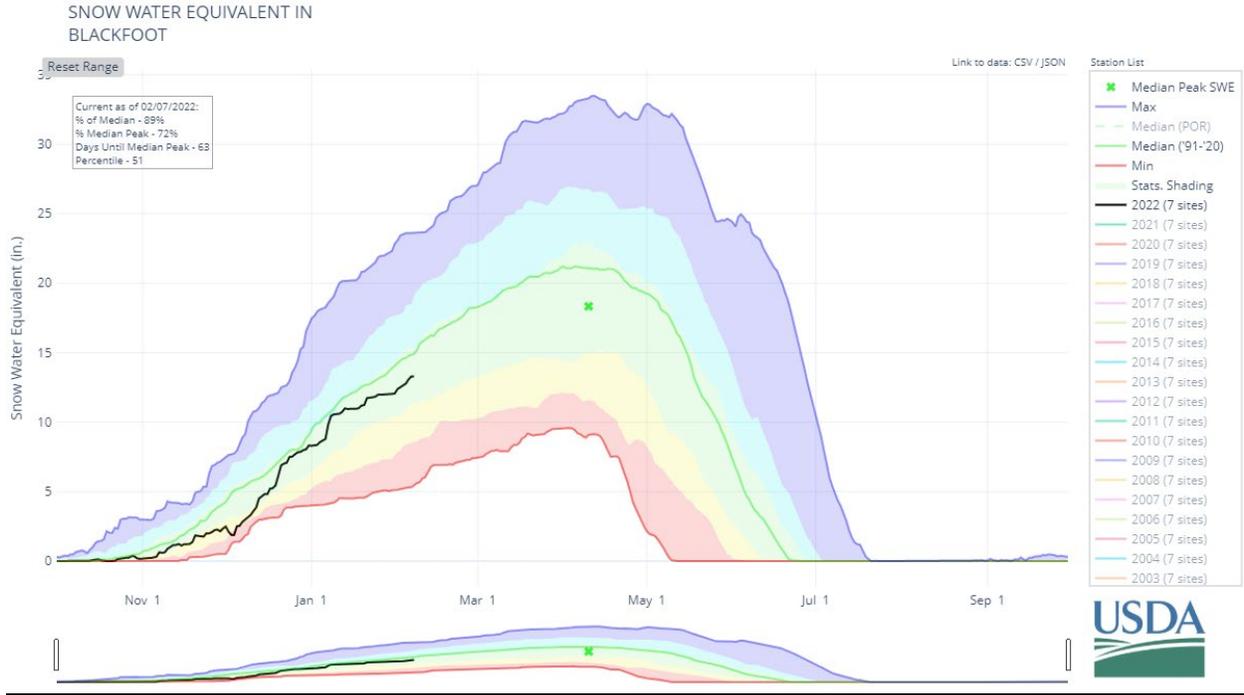
Overview

On the heels of a December which brought exceptional moisture to the Treasure State, January largely lacked needed precipitation. Monthly Natural Resources Conservation Service (NRCS) SNOTEL site totals across Montana show that January precipitation was below to near normal. “The first week of the month looked promising. The mountains received at least one to two feet of snow, but westerly flow brought high pressure during the last three weeks in January,” said NRCS Hydrologist Eric Larson. This made for clear skies, warmer than normal temperatures, and below normal precipitation in most river basins. Exceptions were the northern Whitefish Range and Little Belt Mountains, which received snow near the end of January.

“The good news is, the snow we received during the first week of January really cushioned the snowpack for the later portion of the month,” said Larson. Overall, the current snowpack as a percent of normal is down slightly since Jan. 1, but significantly better than it was on Dec. 1. Several river basins did see small increases in percentages, but it was mostly due to the snow received early in the month. In general, the snowpack west of the continental divide is better than it is east of the divide. As of Feb. 1, all major basins have a below normal snowpack except for the Lower Clark Fork, Kootenai, and St. Mary’s River basins.

Even though the La Niña weather pattern circulation is likely to continue for a few more months, the National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center outlooks are not particularly promising for Montana. The one-month outlook gives an elevated chance of above normal precipitation across most of the state, but as we found out in January that is not a guarantee. With two-three months remaining in the typical snow accumulation season there is still time to make up for deficits. “Most locations are still only one large storm short of a normal snowpack,” said Larson. Normal to above normal snowfall over the next several months will be necessary to reach normal snowpack peak levels in April and May.

Blackfoot River Basin Snow Water Equivalent



Black line: 2021/2022 Water Year

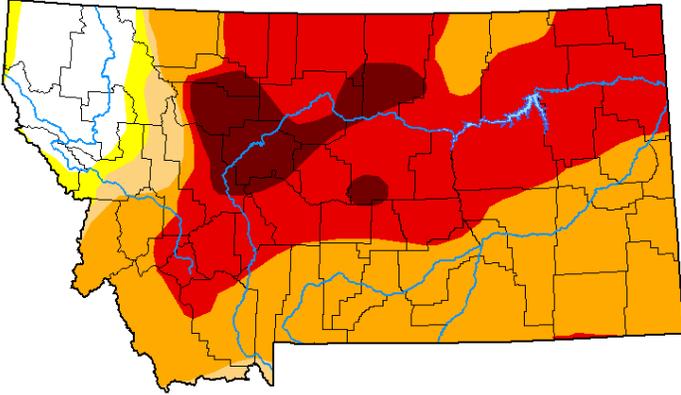
Green line: 30-year median

Reservoir Storage

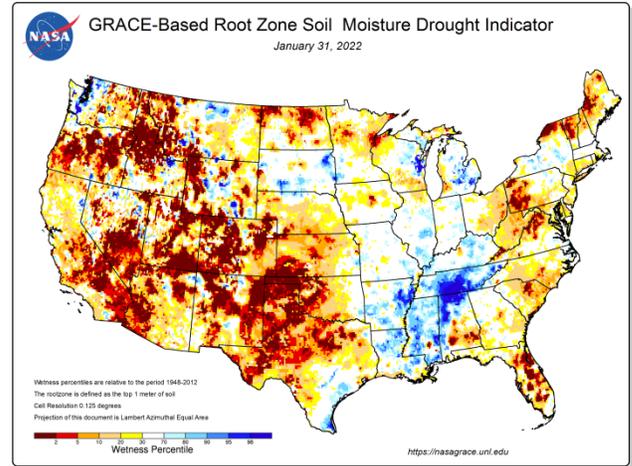
Reservoir storage is currently below average for this time of year in Western Montana reservoirs and below to the levels at this time last year.

Upper Clark Fork	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
East Fork Rock Creek Res	8.0	9.0	8.0	16.0	50%	56%	50%	100%	112%
Silver Lake				0.0					
Lower Willow Creek Reservoir				4.9					
Georgetown Lake	26.6	28.2	28.3	31.0	86%	91%	91%	94%	100%
Nevada Creek Res	5.1	7.0	6.0	12.6	40%	55%	48%	85%	116%
Basin Index					66%	74%	71%	94%	104%
# of reservoirs					3	3	3	3	3

Montana Drought Monitor – Feb. 3, 2022



National Root Zone Soil Moisture – Jan. 31, 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: February 7, 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 Monday, February 7, 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	9.2	8.6	107	10.4	10.0	104
Basin Creek	7180	3.5	4.8	73	5.4	5.8	93
Black Pine	7210	7.9	7.2	110	8.1	8.9	91
Combination	5600	4.1	3.6	114	5.8	6.8	85
Copper Bottom	5200	5.1	6.3	81	12.5	11.2	112
Copper Camp	6950	17.5	28.3 ₍₁₇₎	62	23.2	20.6 ₍₁₇₎	113
Lubrecht Flume	4680	4.9	4.0	122	8.7	7.4	118
Nevada Ridge	7020	8.5	9.9 ₍₂₆₎	86	10.4	11.2 ₍₂₆₎	93
N Fk Elk Creek	6250	7.2	7.4	97	11.2	9.3	120
North Fork Jocko	6330	29.8	26.8	111	24.9	35.4	70
Peterson Meadows	7200	5.6	6.3	89	7.8	8.0 ₍₂₂₎	98
Rocker Peak	8000	9.3	9.0	103	7.4	8.6	86
Skalkaho Summit	7250	13.6	14.7	93	15.8	15.4	103
Stuart Mountain	7400	20.0	21.7 ₍₂₆₎	92	21.2	22.7 ₍₂₆₎	93
Warm Springs	7800	14.1	13.7	103	15.4	14.4	107
Basin Index (%)				93	96		

February 7, 2022 USGS Real Time Flow Conditions

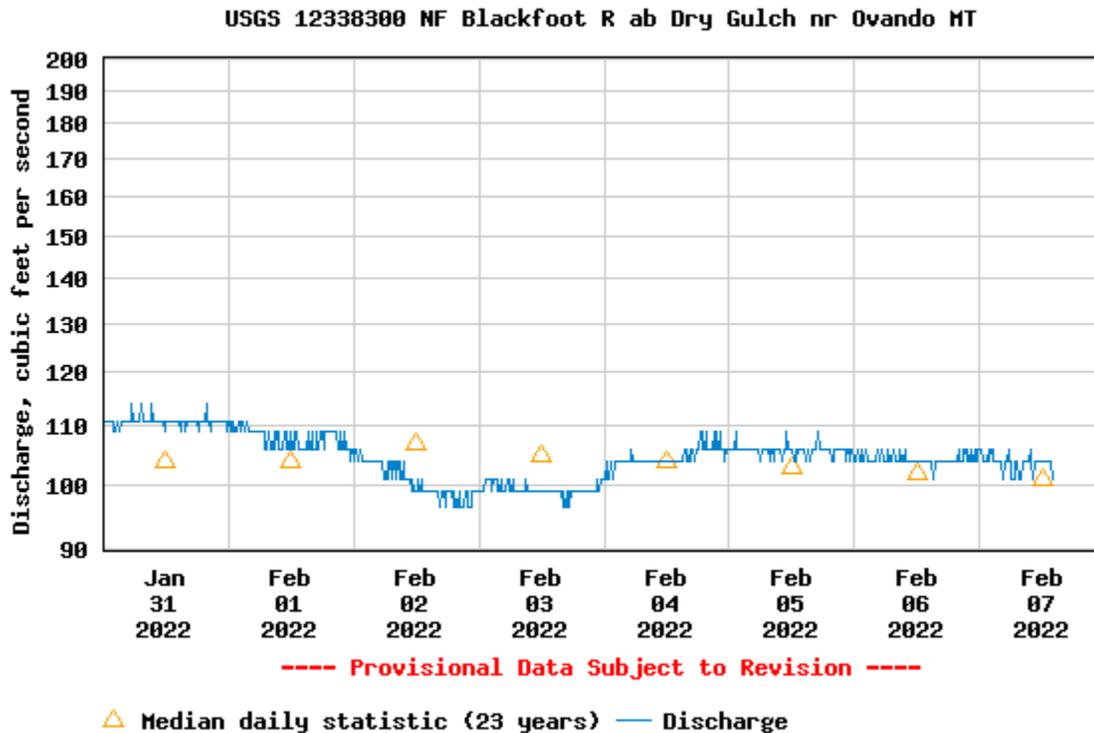
Nevada Creek above Reservoir

NO READING DUE TO ICE

North Fork Blackfoot

Discharge, cubic feet per second

Most recent instantaneous value: 101 on 2/7/2022 at 14:00 MST



Daily discharge, cubic feet per second -- statistics for Feb 7 based on 23 water years of record [more](#)

Min (2014)	25th percentile	Most Recent Instantaneous Value Feb 7	Median	Mean	75th percentile	Max (2005)
72.0	86	101	101	102	114	154

Blackfoot River at Bonner

NO READING DUE TO ICE

Blackfoot River above Nevada Creek

NO READING DUE TO ICE

Three-Month Outlook: February 2022

From
National Weather Service Climate Prediction Center

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

Slightly higher chance for above average precipitation for February through April.

Higher chance for normal to below normal temperatures from February through April.

