

# **Blackfoot Water Supply Report**

## **March 10, 2021**

### **Montana Water Supply Report data as of March 5, 2021 (from NRCS):**

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

After abundant snowfall in many of Montana's river basins during February, streamflow forecasts issued by the USDA Natural Resources Conservation Service (NRCS) on March 1 indicate an increased likelihood of near to slightly above average spring and summer stream flows across the state.

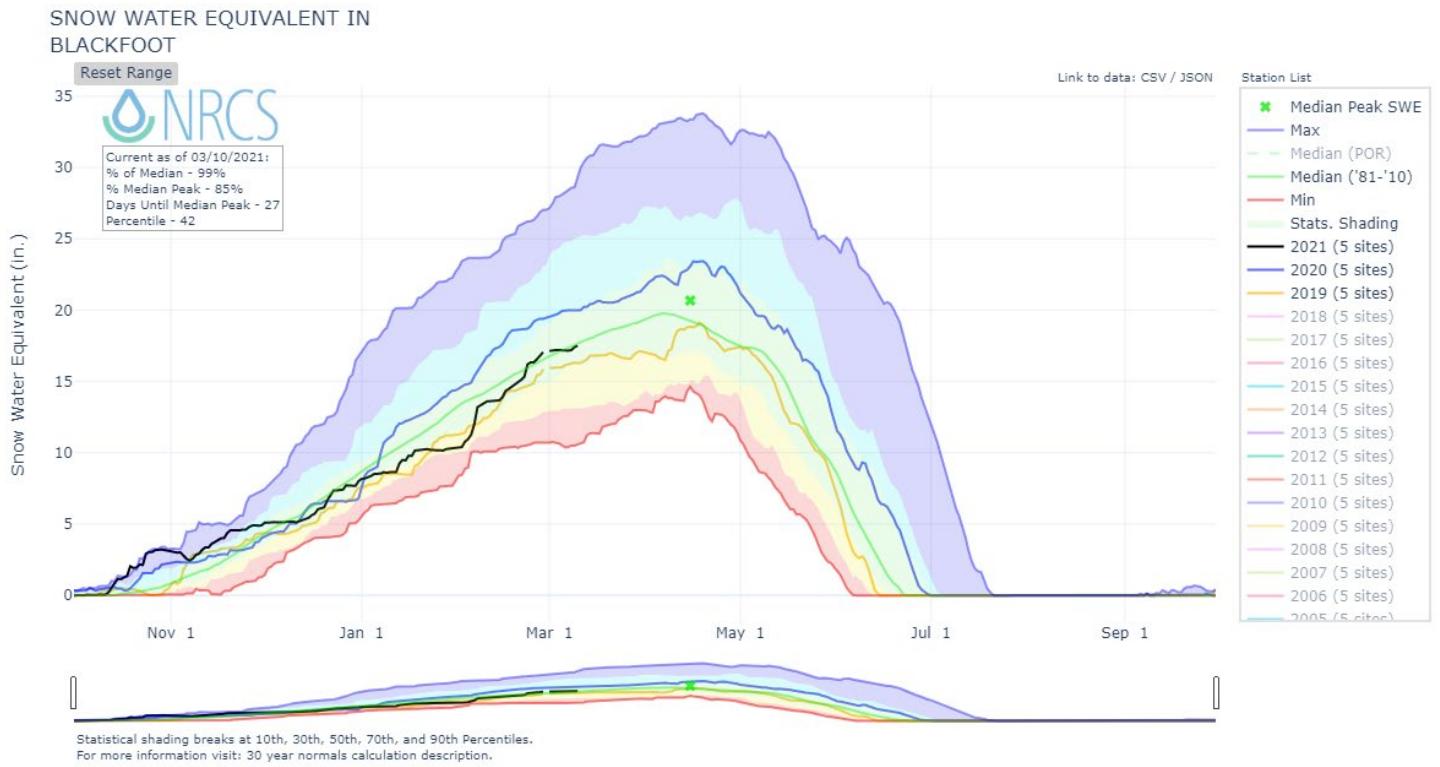
February snowfall totals were impressive at mountain and valley locations across Montana, some locations west of the Divide added up to sixteen inches of water to the snowpack during the month. "The Bitterroot, Upper Clark Fork, Lower Clark Fork, southern Flathead, Gallatin and Shields River basins had monthly snow totals which were record-setting, or near record-setting at some mountain locations," said Lucas Zukiewicz, NRCS water supply specialist. "While the other river basins didn't set new records for February snowfall, monthly totals were well above normal for almost all river basins in the state." This was enough for all river basins to experience an increase in snowpack percentages by March 1, though the increases weren't as dramatic in northwestern river basins along the Canadian border.

Although snowfall was above normal this month and helped river basins to improve upon February 1 totals, some regions of the state remain slightly below normal on March 1 due largely to the lack of early season snowfall in December and January. Snowpack in the Little Bitterroot, Kootenai Mainstem, and Stillwater River basins in northwest Montana remains slightly below normal on March 1. The Ruby River basin in southwest Montana is also slightly below normal for snowpack for this date.

On March 1, one to two months remain until the snowpack peaks before runoff occurs. Peak snowpack at lower elevations in the state typically occurs in late March to early April, while mid to high elevations peak during April or early May. "As such, April 1 snowpack totals will give us a clearer picture of what to expect with regards to our peak snowpack and how full the mountain snowpack "reservoir" is before it starts draining," said Zukiewicz.

A full report of conditions for March 1 can be found in the monthly Water Supply Outlook Report available on the Montana Snow Survey website on Friday, March 5. In addition, real-time snow survey data can be found at <https://www.nrcs.usda.gov/wps/portal/nrcs/mt/snow/>.

# **BLACKFOOT RIVER BASIN SNOW WATER EQUIVALENT**



**Black line: 2021 Water Year**

**Green line: 30-year median**

**Blue line: 2020 Water Year**

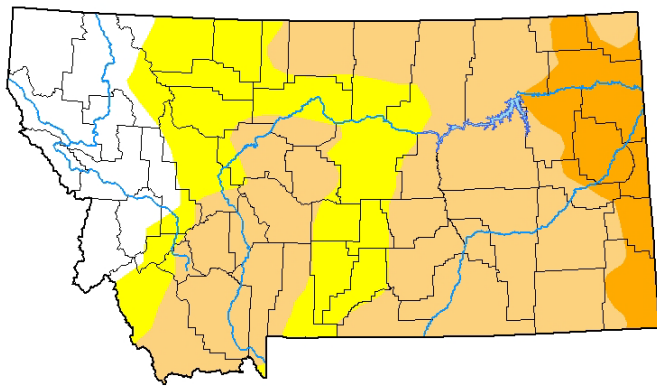
**Gold line: 2019 Water Year**

## Reservoir Storage

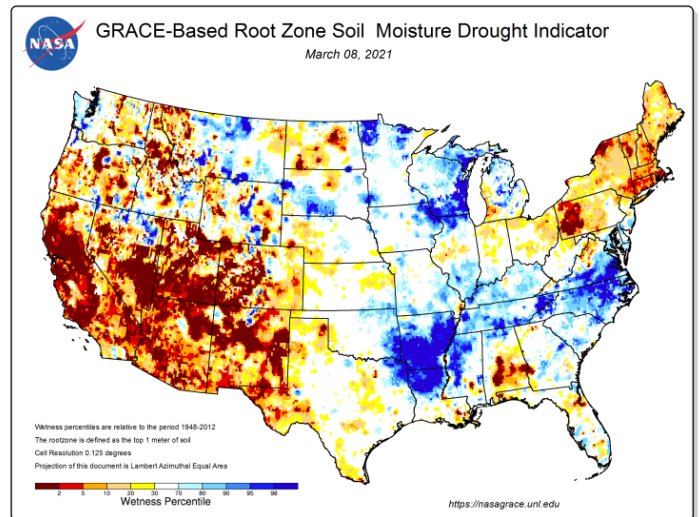
Reservoir storage is currently above average for this time of year in Western Montana reservoirs and about equal to the levels at this time last year.

UPPER CLARK FORK RIVER BASIN	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
East Fork Rock Creek Res	9.4	9.5	8.3	16.0	59%	59%	52%	113%	115%
Georgetown Lake	28.5	29.6	27.6	31.0	92%	95%	89%	103%	107%
Lower Willow Creek Reservoir			2.2	4.9			45%		
Nevada Creek Res	7.4	6.9	5.6	12.6	59%	55%	44%	133%	123%
<b>Basin-wide Total</b>	<b>45.3</b>	<b>46.0</b>	<b>41.5</b>	<b>59.6</b>	<b>76%</b>	<b>77%</b>	<b>70%</b>	<b>109%</b>	<b>111%</b>
<b># of reservoirs</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>







## Montana Drought Monitor – March. 4, 2021



## National Root Zone Soil Moisture – Mar. 8, 2021



## 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: March 10, 2021**

<b>Montana SNOTEL Snow/Precipitation Update Report</b>							
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, March 10, 2021							
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
<b>UPPER CLARK FORK RIVER BASIN</b>							
Barker Lakes	8250	11.6	11.2	104	12.4	12.9	96
Basin Creek	7180	5.5	5.9	93	4.8	7.4	65
Black Pine	7210	11.2	8.7	129	11.6	11.1	105
Combination	5600	5.6	4.3	130	8.1	7.8	104
Copper Bottom	5200	7.4	N/A	*	16.2	13.8	117
Copper Camp	6950	25.6	N/A	*	23.8	27.5	87
Lubrecht Flume	4680	6.1	4.8	127	11.6	8.7	133
Nevada Ridge	7020	13.0	12.2 <sub>c</sub>	107	14.0	13.6 <sub>c</sub>	103
N Fk Elk Creek	6250	10.0	9.5	105	15.0	11.5	130
North Fork Jocko	6330	32.6	35.4	92	40.1	41.5	97
Peterson Meadows	7200	8.4	7.7	109	9.7	9.4 <sub>c</sub>	103
Skalkaho Summit	7250	19.9	18.5	108	22.8	19.2	119
Stuart Mountain	7400	25.9	26.7 <sub>c</sub>	97	25.4	26.9 <sub>c</sub>	94
Warm Springs	7800	20.5	16.0	128	18.7	18.5	101
<b>Basin Index (%)</b>				<b>106</b>			<b>102</b>

## March 9, 2021, USGS Real Time Flow Conditions

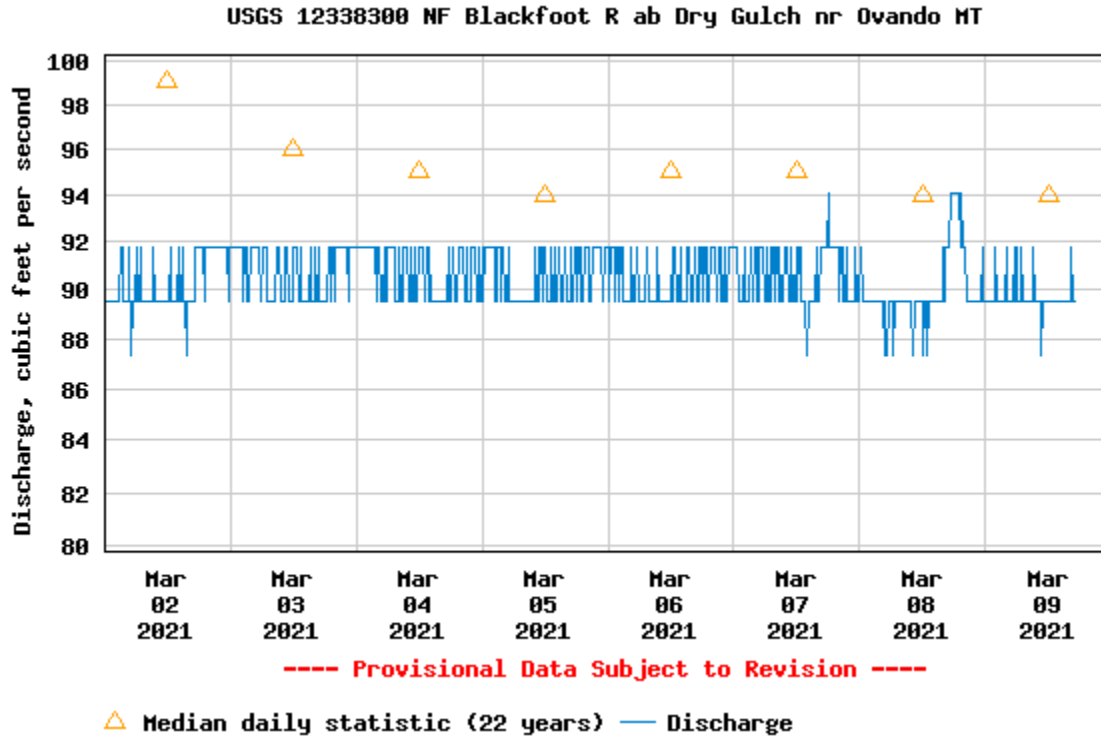
### Nevada Creek above Reservoir

NO READING DUE TO ICE

### North Fork Blackfoot

Discharge, cubic feet per second

Most recent instantaneous value: 89.5 cfs 03-09-2021

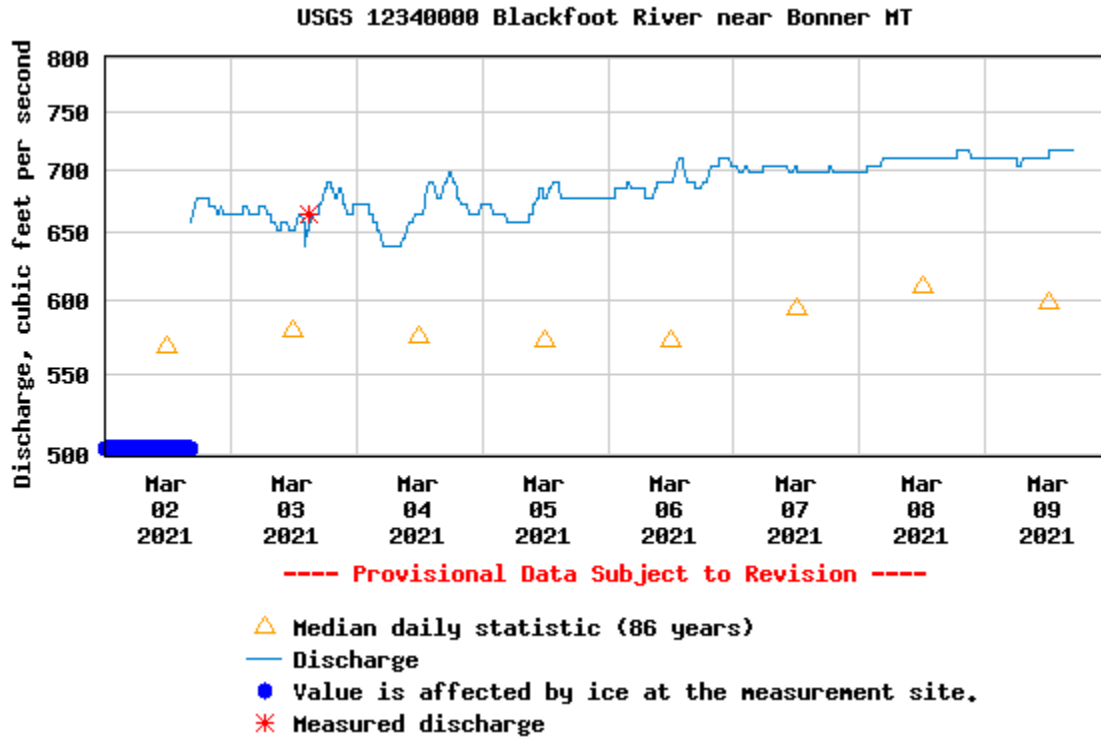


Daily discharge, cubic feet per second -- statistics for Mar 9 based on 22 water years of record [more](#)

Min (2001)	25th percentile	Most Recent Instantaneous Value Mar 9	Median	Mean	75th percentile	Max (2015)
73.0	83	89.5	94	99	111	161

## Blackfoot River at Bonner

Most recent instantaneous value: 718 cfs 03-09-2021

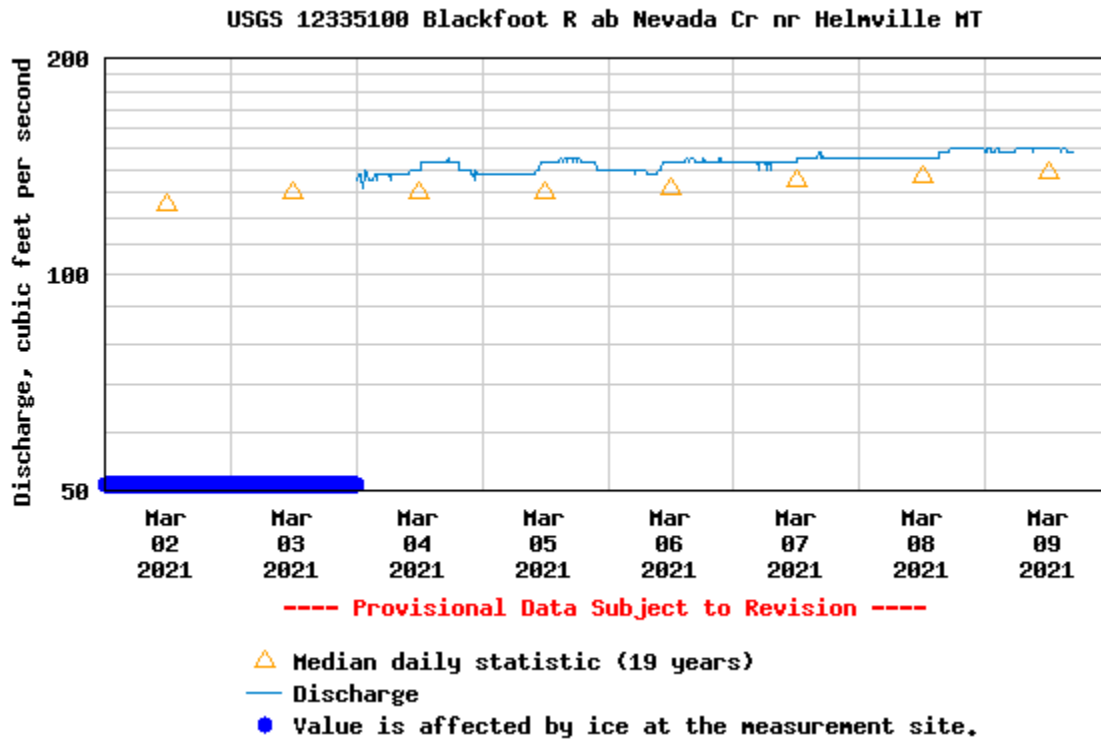


Daily discharge, cubic feet per second -- statistics for Mar 9 based on 86 water years of record

Min (2003)	25th percentile	Median	Mean	Most Recent Instantaneous Value Mar 9	75th percentile	Max (1986)
397	506	599	665	718	760	3060

## Blackfoot River above Nevada Creek

Most recent instantaneous value: 148 cfs 03-09-2021



### Daily discharge, cubic feet per second -- statistics for Mar 9 based on 19 water years of record [more](#)

Min (2019)	25th percentile	Mean	Median	Most Recent Instantaneous Value Mar 9	75th percentile	Max (2015)
84.1	120	138	139	148	158	194

# Three-Month Outlook March 2021

From  
National Weather Service Climate Prediction Center  
<http://www.cpc.ncep.noaa.gov/>

Equal chance for below, above or average precipitation for March through May.

Higher chance for normal to below normal temperatures from March through May.

