

BROADWATER COUNTY DROUGHT RESILIENCY INDEX REPORT

May 2020

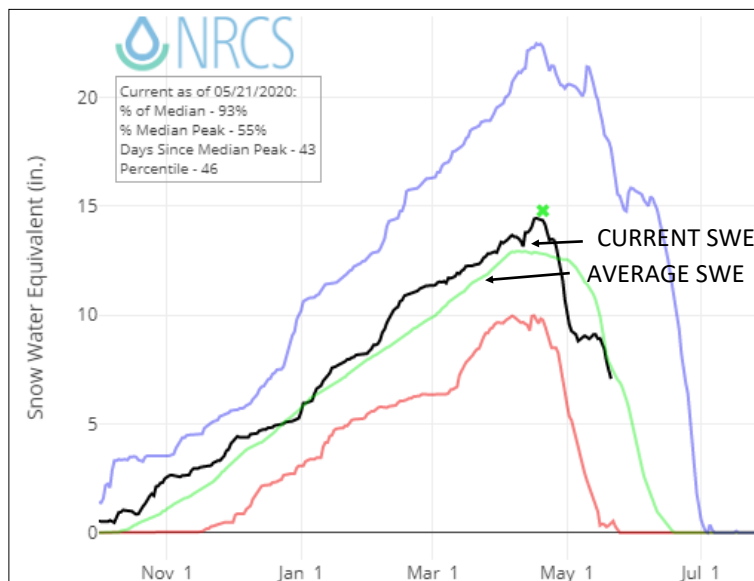
SNOWPACK DATA

Upper Missouri Headwaters (Data current as of May 1)

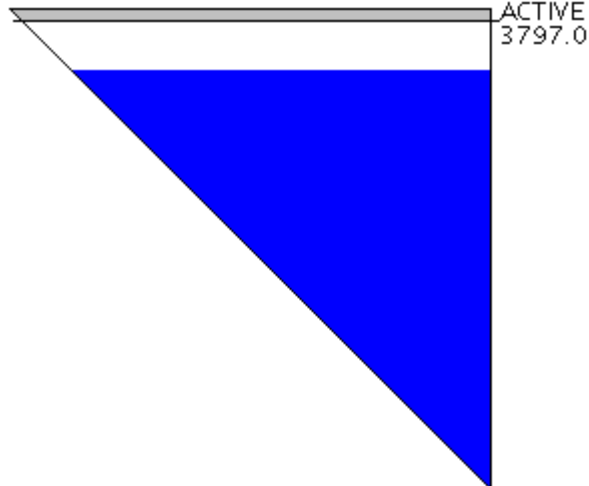
April did not yield the precip we were hoping for in the basin below Toston.

Snowmelt began in earnest during April, and SnoTel sites began melting mid-month and at an accelerated rate this year.

Station	Collection Date	Snow Depth (in)	SWE (in)	SWE % Avg.	Avg. SWE (in)
Boulder	May 1 2020	56	19	88	21.6
Boulder	May 1 2019	62	21.5	100	
Tizer	May 1 2020	1	0.2	75	9.5
Tizer	May 1 2019	23	7.1	75	



FLOOD
3800.0



WATER STORAGE DATA

Broadwater County (Data current as of May 21)

Canyon Ferry Reservoir is currently at 80% capacity which is considered normal for this time of year. Elevation has risen 4.7 feet since April. Inflow has increased 6,387 CFS from April and is at 103% of average inflow. Outflow has increased 2,343 CFS from April.

Date	% Capacity	Elevation (ft)	Reservoir In-flow (CFS)	Reservoir Outflow (CFS)
May 21 2020	80	3,785	10,492	4623
May 21 2019	82	3,787	13,636	6,737

CLIMATE DATA

Townsend, MT (Data current as of May 22)

Broadwater Conservation District installed 10 precipitation gauges throughout Broadwater County this month. Data is currently being collected from 15 gauges throughout the county. Townsend received 0.72 inches of rain this month.

Radersburg—Toston received an average of 0.97. The silos area is dry with an average of 0.26 inches.

Broadwater County Average precipitation is 0.55 inches. The Average Townsend temperature is currently 51 degrees Fahrenheit.

MAY 2020	Crow Creek Valley	Deep Creek Valley	Confederate—Gurnett Creek Valley	Townsend	Silos	Missouri River (River Road)	Winston
Precipitation Avg (in)	0.97	0.44	0.40	0.72	0.26	0.46	0.60
Max (in)	0.87	0.25	0.50	0.26	0.48	0.50	0.38
Min (in)	0.01	0.19	0.30	0.02	0.03	0.17	0.02

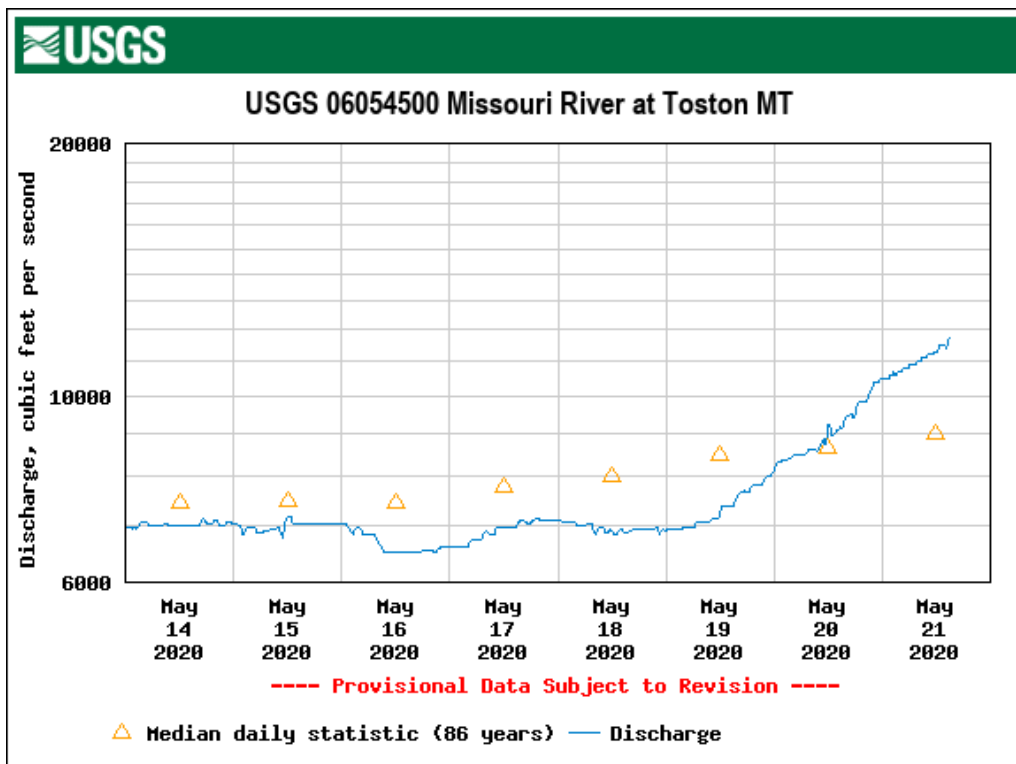
BROADWATER COUNTY DROUGHT RESILIENCY INDEX REPORT

May 2020

STREAMFLOW DATA

Broadwater County (Data current as of May 21)

Streamflow is currently normal. Discharge has increased by 6,690 CFS from April 22nd. The logger at Deep Creek read 109.1 CFS at 12:45 on May 22nd. The average Deep Creek discharge for the month of April was 29.20 CFS.



May 21, 2:00pm—Discharge is classified as normal (11,400 cfs | 118% normal)

SOIL MOISTURE DATA

Broadwater County (Data current as of May 22)

Broadwater Conservation District started collecting soil moisture data from real-time loggers in the Crow Creek Valley and East of Canyon Ferry Reservoir earlier this month.

Soil temperatures have increased on average near 10 degrees since last month. Soil Water Content has increased on average 10%

SOIL WATER CONTENT (%)	4" - Surface	8" - Shallow rooting	20" - deep rooting
MT Mesonet (Toston)	29	23	18
BCD Crow Crk (Radersburg)	12	10	8
BCD CFR East (Gurnett Crk)	15	14	11

SOIL TEMP (%)	4" - Surface	8" - Shallow rooting	20" - deep rooting
MT Mesonet (Toston)	60	54	54
BCD Crow Crk (Radersburg)	66	58	58
BCD CFR East (Gurnett Crk)	54	52	54