



To: Bill Schenk, Trevor Watson

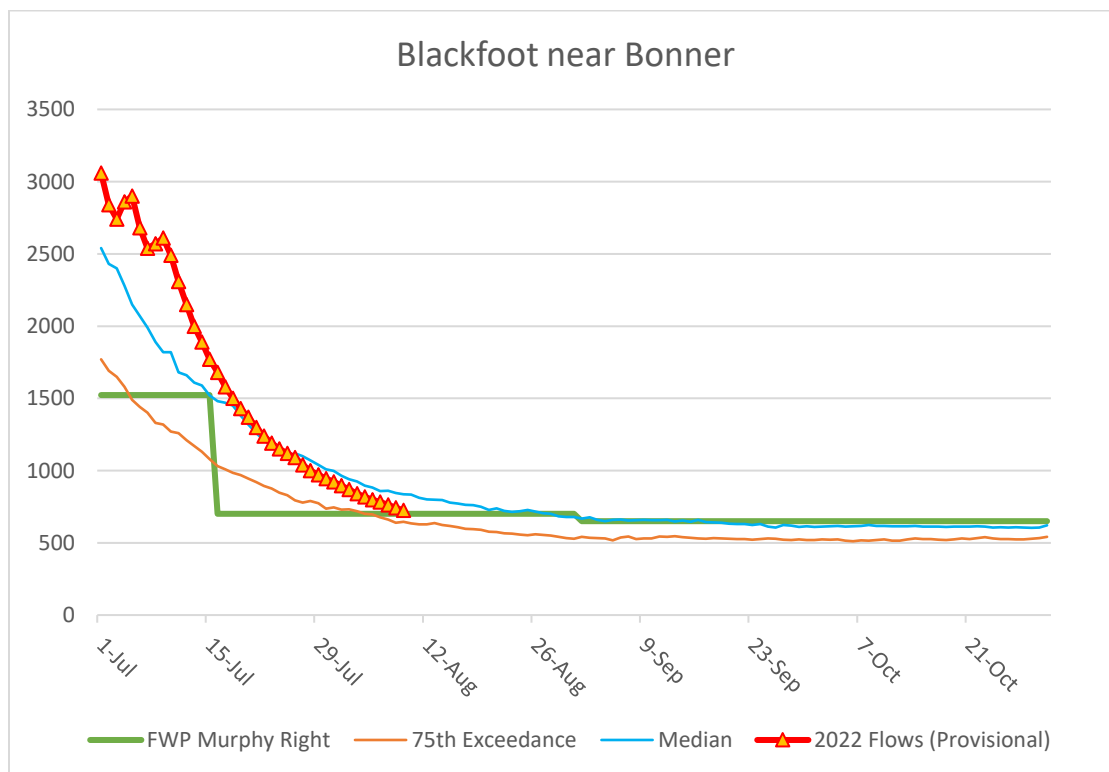
C: Randy Arnold, Pat Saffel, Amy Groen, Andy Brummond

From: Stephen Begley, FWP Water Program
Patrick Uthe, Blackfoot Area Fisheries Management Biologist

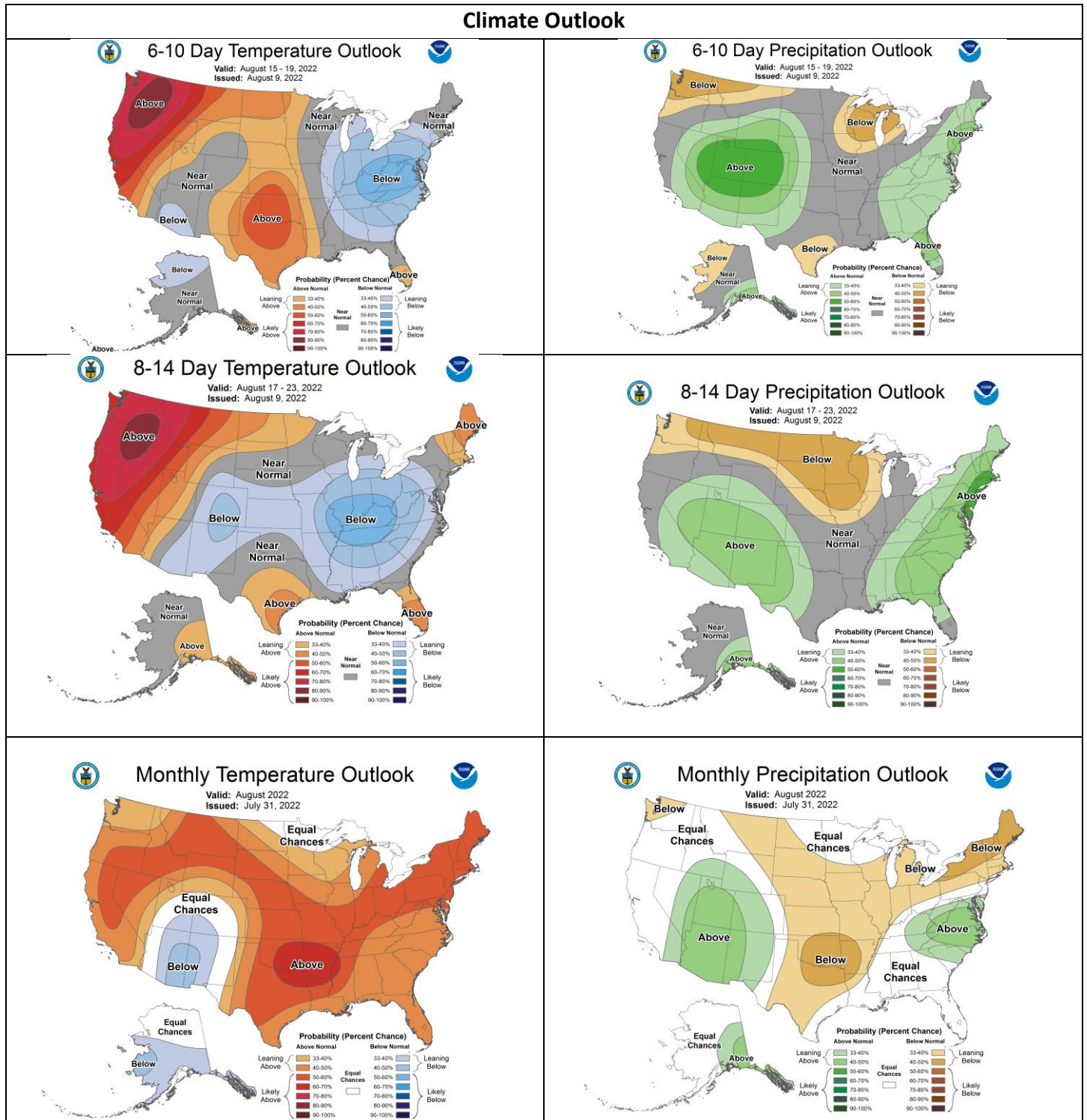
Date: August 10, 2022

Subject: Blackfoot River – Call on Non-Drought Plan Participants’ Junior Water Rights

Fisheries and Water Program staff have monitored flow and water temperature in the Blackfoot River and consulted on river conditions and potential merits of placing call on junior water uses. On Wednesday, August 10, the Blackfoot Challenge’s Drought Committee Recommended that the Blackfoot River Drought Plan be implemented. In accordance with the Blackfoot Drought Plan, we jointly recommend that FWP make call on the Blackfoot River for junior water users who are not currently participating in the Blackfoot Drought Plan. Stream flow in the Blackfoot River is at 711 cubic feet per second (cfs) and we expect it will fall below FWP’s instream Murphy Right of 700 cfs tomorrow. The hydrograph below shows current flow as compared to both the 75th percentile exceedance flow (level met or exceeded 3 out of 4 years) and median flows for the USGS gage near Bonner (124-year period of record).



All the 6-10, 8-14 and Monthly Precipitation Outlooks lean towards below normal precipitation (graphics attached). Temperatures for all three reporting periods point toward above normal temperatures. Given expected weather conditions and high demand for irrigation water, streamflow would not be expected to again meet FWP’s instream flow rights into the fall without some assistance from precipitation events.

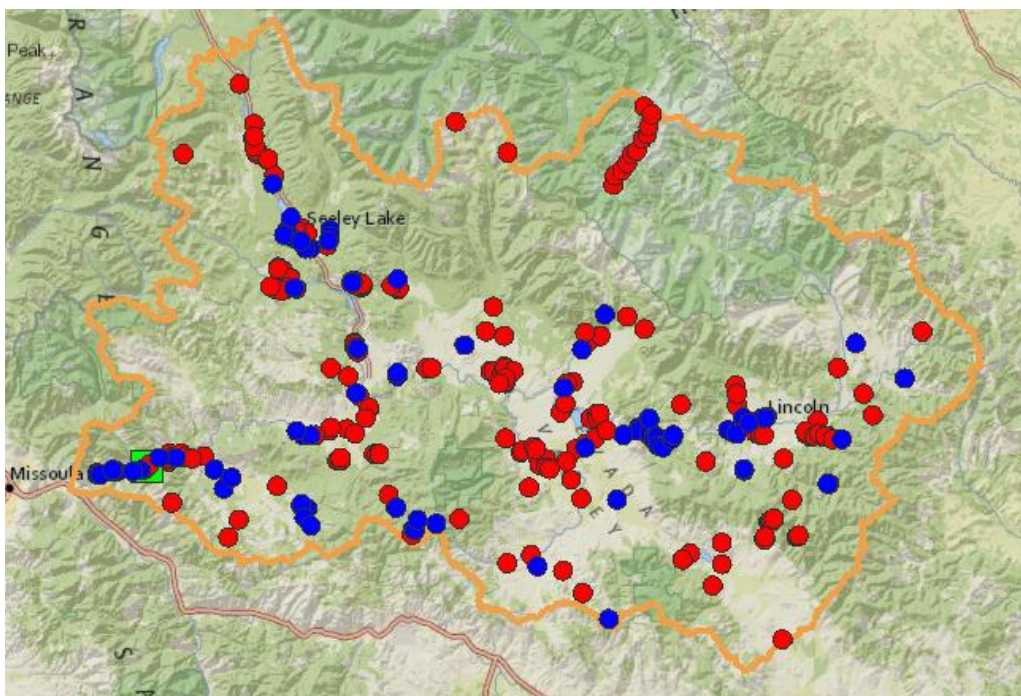


A review of DNRC’s water rights database includes a list of 73 junior water rights. Each of the water rights were reviewed to determine if cessation of water use would likely result in

additional flow reaching the Blackfoot River. The list was also reviewed to ensure drought plan participants who hold junior water rights are not called. The following table lists the water rights by purpose of use.

Purpose	Call	No Call	Total Called Flow Rate
Irrigation	46	34	55.63 cfs
Domestic Lawn and Garden	19	59	0.96 cfs
Fish and Wildlife/Recreation	3	6	0.41 cfs
Mining	5	2	1.36 cfs
Stock	0	14	--
Other	0	3	--
Total	73		58.36 cfs

The following map shows the location of all junior water rights. Those represented by blue dots would be called while those represented by red dots would not because of the low likelihood of improving flow in the river. The green square is the location of USGS Gage 12340000 on the Blackfoot near Bonner, MT.



The Blackfoot River and tributaries hold important habitat for bull trout and westslope cutthroat trout. Dewatering and associated warm water temperatures can negatively impact the fishery. High-water temperatures and fragmented habitat can also increase acute stress, disease development and induce mortality. During high temperature periods, higher streamflow can counteract the effects of high temperature and improve fish survival by moderating water temperature and providing more deep pool habitat where fish can avoid higher water temperatures. The chart below shows maximum daily water temperatures at the Bonner gage. Fortunately, temperatures have been holding below 73°F. However, with

decreasing stream flows and the hot and dry conditions that are forecasted, FWP will be closely monitoring temperatures in the Blackfoot River and will be assessing whether fishing restrictions are warranted in the coming days and weeks.

