



To: Bill Schenk, Adam Strainer

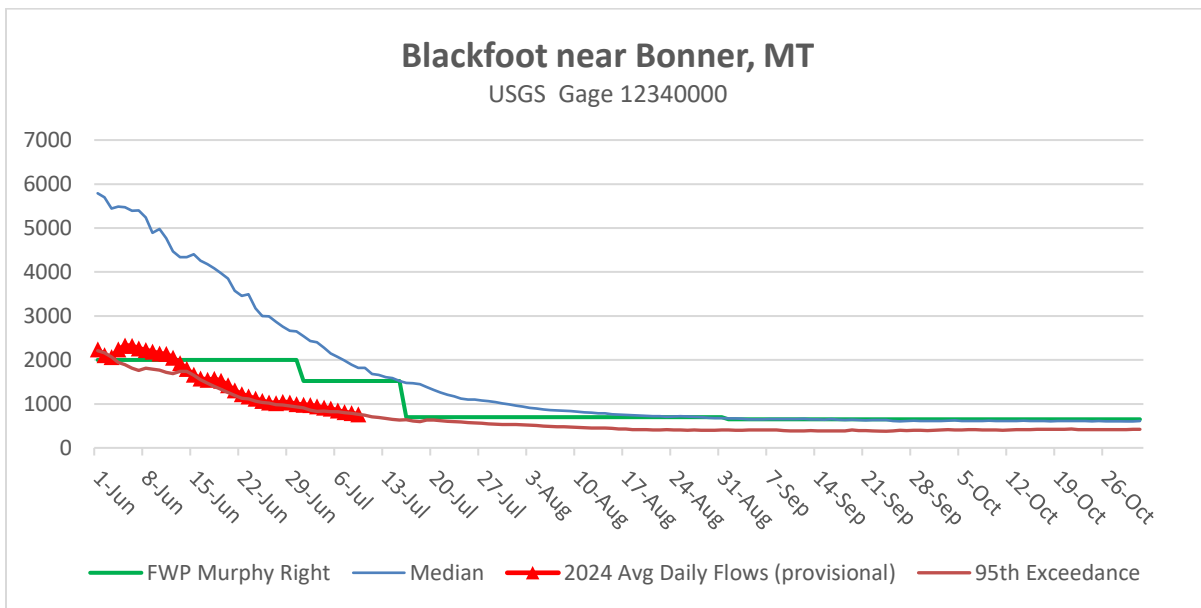
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From: Stephen Begley, FWP Water Program  
Patrick Uthe, Blackfoot Area Fisheries Management Biologist

Date: July 17, 2024

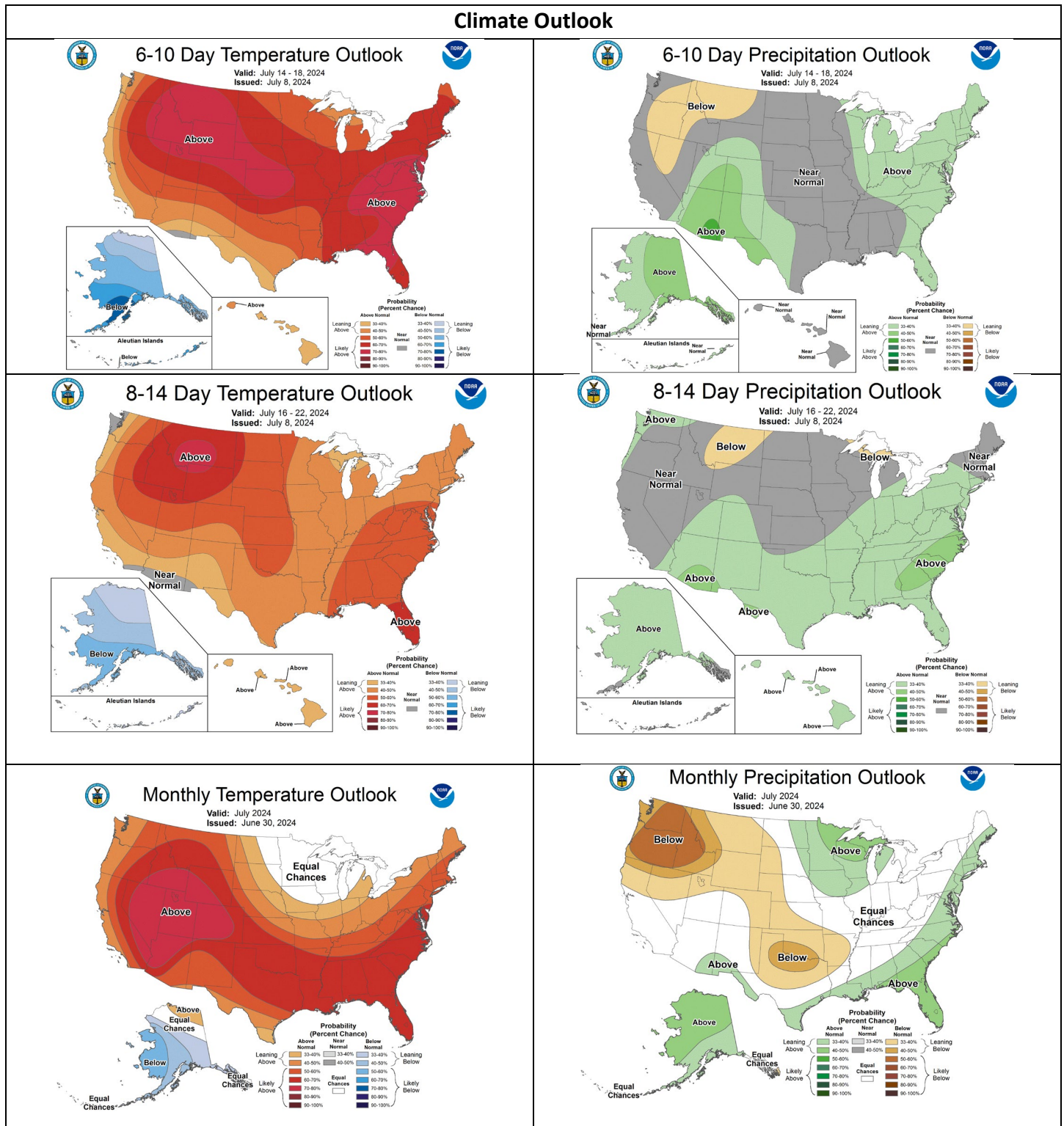
Subject: Blackfoot River – Call on Non-Drought Plan Participants’ Junior Water Rights

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. As a result of well below average snowpack over the winter months and a drier than average spring, flows in the Blackfoot River are well below average for this time of year. Flows are currently at 770 cubic feet per second (cfs) and are expected to fall below 700 cfs by the weekend as flows have been decreasing about 30 cfs per day. On Tuesday, July 9, the Blackfoot Challenge’s Drought Committee Recommended that the Blackfoot River Drought Plan be implemented once flows fall below the 700 cfs trigger. 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. The hydrograph below shows current flow as compared to both the 95th percentile exceedance flow (level met or exceeded 9 out of 10 years) and median flows for the USGS gage near Bonner (124-year period of record).



The short term and long-term forecasts for temperature and precipitation are consistent (graphics below). The climate forecast for the 6–14 Day periods indicate a 70-80 percent chance of being above normal temperature and a 30-40 percent chance of below average precipitation. The Monthly Temperature and Precipitation Outlooks for July show greater chances for above normal temperatures and below average

precipitation. July and August are two of the warmer and drier months in terms of climatological trends. FWP expects continued high demand for irrigation water will prevent stream flows from meeting FWP’s instream flow rights well into the fall without some substantial help from large and significant precipitation events.

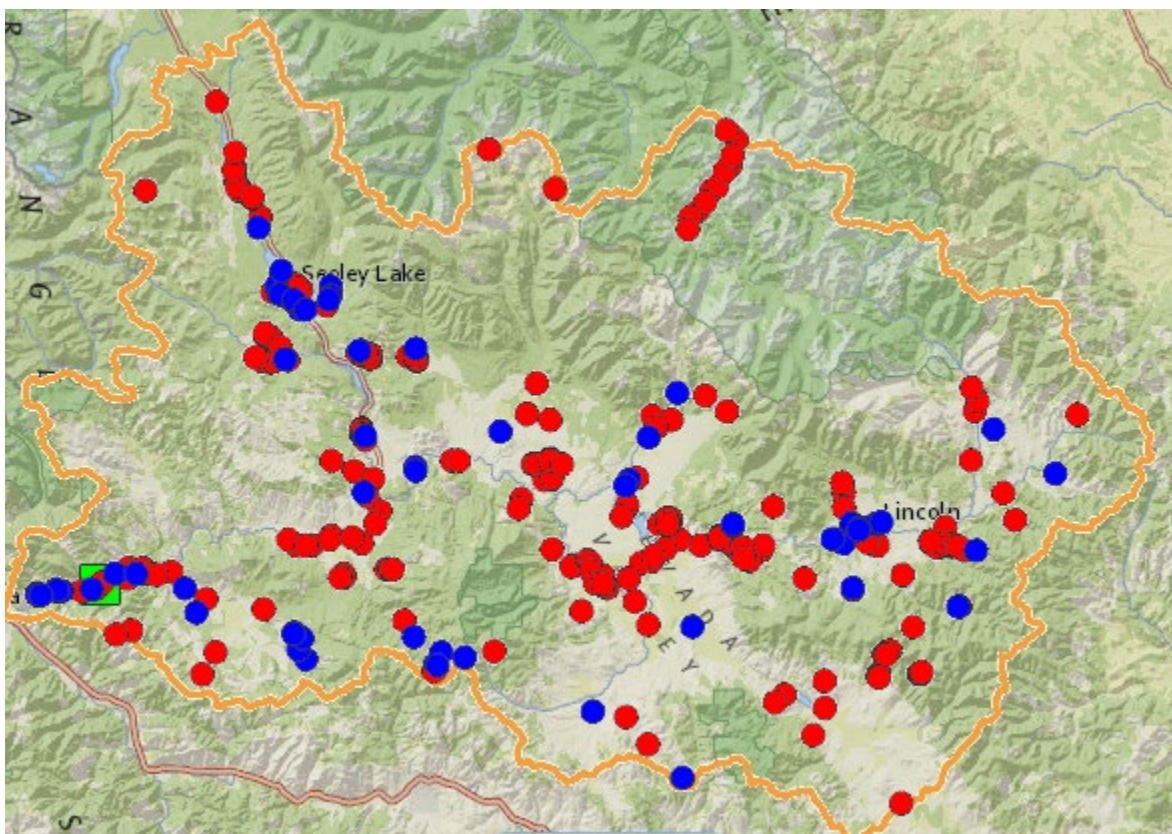


A review of DNRC’s water rights database includes a list of 191 junior water rights. Each of the water rights were reviewed to determine if cessation of water use would likely result in

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	38	42	26.38 cfs
Domestic Lawn and Garden	14	64	0.70 cfs
Fish and Wildlife/Recreation	3	6	0.41 cfs
Mining	5	2	1.36 cfs
Stock	0	14	--
Other	0	3	--
<b>Total</b>	<b>60</b>		<b>28.85 cfs</b>

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 an excellent trout fishery, including native 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, reducing competition, providing more deep pool habitat where fish can avoid higher water temperatures, and increasing connectivity to enable migrations to more suitable habitats. The chart below shows maximum daily water temperatures at the Bonner gage. Temperatures have increased rapidly over the last several days and exceeded 71°F (the fishing restriction temperature criteria in the Blackfoot Drought Plan) yesterday. The Drought Committee voted to recommend implementation of fishing restrictions after the temperature threshold has been exceeded for three consecutive days. Based on forecasted air temperatures, we expect criteria will be met by July 11<sup>th</sup>. **At this time, we do recommend making call on non-participating junior users as contemplated by the Blackfoot Drought Plan.**

