NRDP Funding Recommendation for the Rock Creek Lease Renewal

April 2022

Background and Project Summary

The Natural Resource Damage Program (NRDP) is partnering with Montana Fish, Wildlife and Parks to renew a water right lease on Rock Creek,¹ a priority 3 stream (*Prioritization of Areas in the Upper Clark Fork River Basin for Fishery Enhancement*, 2018), near Garrison, Montana in the Upper Clark Fork River Basin (UCFRB). The project is in a Group 2 Priority Area for Flow Augmentation, which is defined as a second highest priority area for flow augmentation and would partially implement Section 3.2.1 of the *Upper Clark Fork River Basin Aquatic and Terrestrial Resources Restoration Plans* (Restoration Plans). See attached figure for project location.

In 2000, FWP and others contributed to a water conservation project on Rock Creek that involved a flood to pivot irrigation conversion including a fish screen, pipeline and two center pivots. The conversion project made available up to 27.22 cubic feet per second (cfs) of water to be leased for purposes of instream flow. The term of the original lease was for 20 years. During that time, Bighorn Cattle Ranch LLC purchased the irrigated ground and water rights from the original lessor. There are a total of six water rights in this lease, including the second and third priority rights on Rock Creek. Five of the six water rights associated with this lease are senior to the Milltown Water Right, which means that these flows will contribute to the mitigation efforts of the Milltown Water Right. The previous lease has effectively re-watered 1.5 miles of Rock Creek that were often dewatered due to historic irrigation practices. At the time the project was first considered, the value of the water leased was estimated to be \$3.00 per acre-foot per year. In the water rights change process, DNRC found a total volume of 6,831.76 acre-feet of water is available for in-stream flow purposes. As a result of negotiations with the owner, FWP is proposing to pay \$4.51 per acre foot. The annual cost would be \$30,827.50, payable in one lump-sum of \$308,275.00 for the term of the 10-year renewal. Bighorn Cattle Ranch has tentatively agreed to this amount. FWP has requested match funds from the Natural Resource Damage Program, aquatic flow allocation in the amount of \$154,138 (50% project funding from FWP and 50% project funding from NRDP).

The FWP commission unanimously approved the renewal of this lease in their February 4, 2022, commission meeting.

The Restoration Plan requires flow projects with water right changes to successfully go through the DNRC's change authorization process prior to NRDP's funding recommendation being considered by the public, the UCFRB Advisory Council and the Trustee Restoration Council, and final funding decision by the Governor. This project has already gone through DNRC's change authorization process and a total 6,831.76 acre-feet is approved for instream flow purposes. NRDP public comment for expenditure of UCFRB Restoration Funds for this project will start on March 11, 2022, and run through April 10, 2022. The two indicated councils will

¹ Note that this is a different creek from the Rock Creek outside of Missoula that is listed as a Priority 2 in the *Upper Clark Fork River Basin Aquatic and Terrestrial Resources Restoration Plans* (2019).

consider the NRDP's recommendation and public comment in making their final recommendation to the Governor, who will make the final funding decision.

DNRC will hold a separate 90-day notice period for the renewal of this lease, which allows other water uses to assert that their water rights would be adversely affected by the change to instream flow. If a viable objection is filed, FWP would work with the objector and DNRC to address the concern. NRDP proposes no UCFRB Restoration Funds will be expended until after the 90-day DNRC notice period and the lease renewal and extension is approved.

Wildlife and Fisheries Habitat Assessment:

By funding this project, a minimum of 5 cfs^2 up to a maximum of 27.22 cfs (i.e., the total volume of 6,831.76 acre-feet) of cold water would remain in lower Rock Creek throughout the irrigation season. This flow would provide a cold-water refuge to trout in a reach of the Clark Fork River that shows significant warm temperatures during late summer months and therefore would providing the best overall benefits to the restoration of the UCFRB.

Project Evaluation

Cost-Benefit, Cost-Effectiveness Relationship, and Technical Feasibility: This water lease has been a significant and successful instream flow project. The initial water saving project was funded by FWP and others in 2000 and provides a minimum of 5 cfs and up 27.22 cfs (a total volume of 6,831.76 acre-feet) of cold water and effectively re-watered the lower 1.5 miles of Rock Creek to the confluence with the Clark Fork River. FWP's monitoring of the previous lease indicated that in the previous 20 years, flows stayed above 5 cfs for all but two years. FWP's temperature data indicates that lower Rock Creek remains significantly cooler than the Clark Fork River and generally stays cool enough to be suitable for trout while temperature in the main stem approach the mid to uppers 70 degrees Fahrenheit³. Continuing this lease would provide the same resource benefits; the renewal of the lease includes 50% project funding from FWP and 50% project funding from NRDP. This project is also technically feasible as the water is already available through implemented irrigation projects and an approved DNRC instream flow change authorization. Monitoring of this project will occur in conjunction with NRDP's established flow monitoring program and include additional fishery response monitoring by FWP. See Project Performance and Effectiveness Monitoring below.

Public Benefit: This project will result in significant public benefit. The increased flows will benefit lower Rock Creek and the Clark Fork River, which will benefit fish populations in the main stem of the river. Therefore, these increased flows will result in increased recreational opportunities for angling and recreation in this area. Five of the six water rights associated with this lease are senior to the Milltown Water Right, which means that these flows will contribute to the mitigation efforts of the Milltown Water Right.

² The 5 cfs minimum is derived from monthly mean discharge analysis of Lower Rock Creek and is based on the minimum flows required to maintain a healthy fishery.

³ Brown trout's ideal feeding and development water temperatures are 44 to 67 degrees Fahrenheit. When the water temperature hits 68 degrees Fahrenheit brown trout will start to get distressed.

Public support: NRDP present the public comments received on this funding recommendation to the councils and the Governor for their consideration. DNRC will hold a separate 90-day notice period, which allows other water uses to assert that their water rights would be adversely affected by the change to instream flow. If a viable objection is filed, FWP would work with the objector and DNRC to address the concern.

Project Performance and Effectiveness Monitoring

NRDP, through its project partners, along with FWP will monitor the temperature, flow, and fishery benefits of this project. NRDP in conjunction with FWP will conduct this monitoring through its established flow monitoring program and will establish a continuous flow and temperature monitoring location in lower Rock Creek. In accordance with §85-2-436(3)(j), MCA, FWP shall be responsible for all costs of installing measuring devices and providing personnel to measure streamflow in accordance with the requirements of the Rock Creek Lease. FWP will coordinate with NRDP to determine how best to fulfill the measurement obligations under statute as well as its obligations under the terms of the lease. FWP will monitor fisheries response (specifically for refuge use) using snorkel surveys and electrofishing.

NRDP Funding Recommendations Summary

The NRDP recommends funding of this project for \$154,138.00.

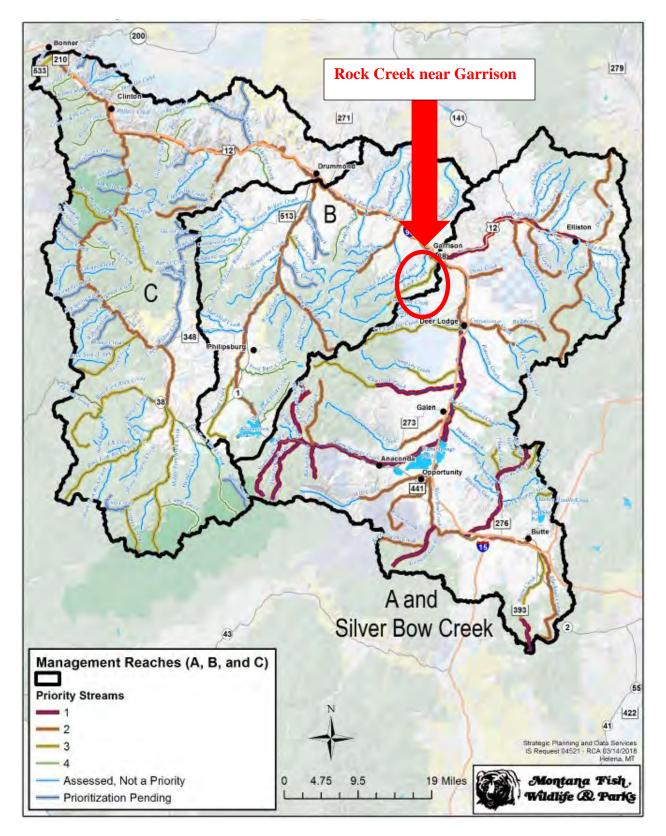


Figure 1 – Rock Creek near Garrison Project Location.