NRDP Funding Recommendation - Broken Circle Split Season Lease July 21, 2023

Background and Prior Valiton Ditch Restoration Actions

The Montana Natural Resource Damage Program (NRDP) is partnering with the Broken Circle Ranch to enter into an agreement to lease late season water for instream flow in the Clark Fork River. The project is in a Group 1 Priority Area for Flow Augmentation, which is defined as the 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). **Please see Figure 1 for project location.**

In 2019, the Clark Fork River Ranch was purchased to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources. The purchase included water right on the Valiton Ditch which is a significant irrigation canal in the Upper Clark Fork River. One of the resource benefits identified in the funding request for the purchase of the ranch and associated water rights was to "use water from Valiton Ditch more efficiently to benefit aquatic life in this critically dewatered section of the CFR."

Since 2019, NRDP has been working with the Grieco Family who also hold water rights on Valiton Ditch on a reduction in water use agreement. Under this Agreement, Grieco use the State's 240 irrigated acreage to produce hay in exchange for foregoing use of its own water rights on Grieco property from July 15 to September 6 each year, when the Clark Fork River is at 180 cfs or less. On average flows on the mainstem Clark Fork at Deer Lodge drop below 180 cfs 9 out of 10 years. The Grieco Split season lease agreement is being intensively monitored by NRDP. Monitoring focused on evaluating the production and sustainability of a split season lease on crop production as well as associated flow benefits. This project is intended to be used as a template for other split season leases in the Clark Fork Basin. NRDP and the Grieco family intend to continue this water use agreement for the next 20 years.

Project Summary

In 2023, the third and last water user on the Valiton Ditch approached NRDP regarding a similar agreement on their property.

This funding recommendation includes a one-time lump sum payment of \$404,000 to Broken Circle Ranch in exchange for the property owner (Broken Circle Ranch) forgoing their water rights on Valiton Ditch after July 15 until September 6 each year, when the Clark Fork River is at 180 cfs or less. On average, flows on the mainstem Clark Fork at Deer Lodge drop below 180 cfs 9 out of 10 years. The Broken Circle water reduction agreement will last for the next 20 years.

NRDP is proposing to pay the estimated ton per acre lost due to the split season lease of \$20,200 per year for twenty years or \$404,000. This funding recommendation is contingent on Broken

Circle entering into a Restoration Project Agreement with NRDP. The project agreement requires Broken Circle to file for a DNRC change authorization to convert the late season water to instream flow.

Wildlife and Fisheries Habitat Assessment:

By funding this project, a maximum of 13 additional cfs of diverted irrigation water would remain in the most dewatered section of the Clark Fork River during the most critical time of year. The 13 cfs is based on actual flow measurement from the Valiton Ditch. This flow would provide refuge for trout and other aquatic organisms in a reach of the Clark Fork River that shows significant warm temperatures and low flows during late summer months, partially meeting the goals of the Restoration Plans.

Project Evaluation

Cost-Benefit, Cost-Effectiveness Relationship, and Technical Feasibility: Split season leases are significant and successful instream flow projects in other states. Split season leases allow agricultural production to continue while balancing late season irrigation withdrawals and resource benefits. Monitoring conducted by our project partner, the Clark Fork Coalition, has shown that in 2022 flows in the mainstream Clark Fork River in this reach dropped below ~20 cfs in August and water temperature exceed thresholds for trout for more than sixty days.

Project partners (the Clark Fork Coalition and Trout Unlimited) have contributed funds from the Open River Fund to this project (approximately \$250,000). These funds provided needed upgrades to the diversion structures at Valiton Ditch and the Broken Circle Pump Station to allow fish and recreational passage at these diversions while maintaining irrigation withdrawals. The Clark Fork Coalition is seeking additional cost share from the Columbia Basin Water Transactions Program that would potentially reduce the NRDP cost of the Broken Circle Split Season lease by up to \$200,000. The cost-benefit of this project are commensurate to high at the current costs of \$404,000. If the additional matching funds are received the cost-benefit would be considered high.

This project is also technically feasible as the water is already available and the water user will be required to go through the through DNRC instream flow change authorization as required in the Restoration Project Agreement. Monitoring of this project will occur in conjunction with NRDP's established flow monitoring program.

Public Benefit: This project will result in significant public benefit. The increased flows will benefit the Clark Fork River, which will benefit fish populations in the main stem of the river. These increased flows will result in increased recreational opportunities for angling and recreation in this area. The 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. Additionally, this agreement will help support the continuation of agricultural open space, which provides natural resource benefits throughout the UCFRB.

Public support: NRDP will present the public comments received on this funding recommendation to the councils and the Governor for their consideration.

Project Performance and Effectiveness Monitoring

NRDP, through its project partners, will monitor the temperature, flow, and fishery benefits of this project. NRDP will conduct this monitoring through its established flow monitoring program and will establish continuous flow and temperature monitoring locations in the Clark Fork River and Valiton Ditch. Additional monitoring may be required as part of the DNRC change authorization and will be funded by NRDP. FWP will monitor the fisheries response using electrofishing. NRDP will continue to monitor the effect of the split season lease on crop production.

NRDP Funding Recommendations Summary

The NRDP recommends funding of this project for up to \$404,000.

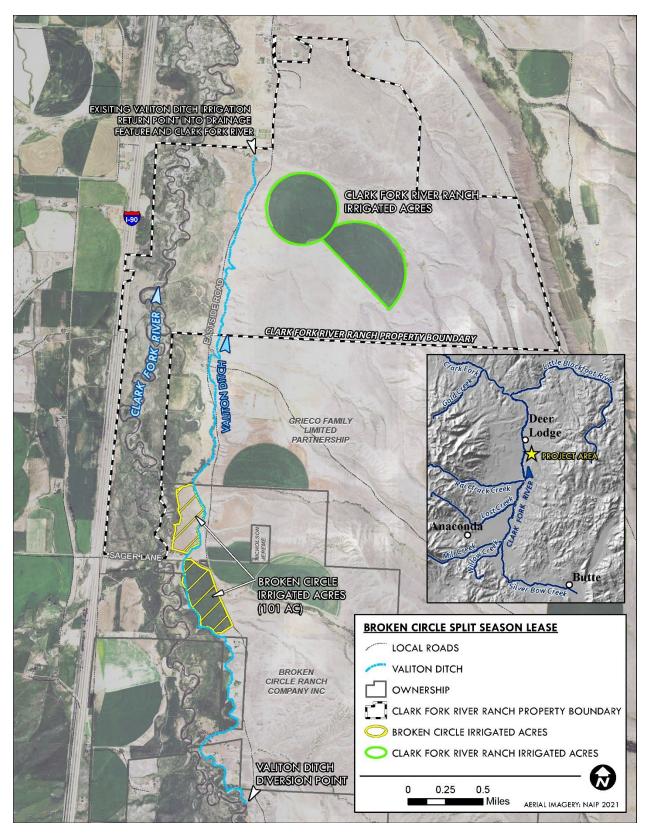


Figure 1. Broken Circle Split Season Lease Project Location