

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife & Parks
North Boulder Fish Passage

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

The FFIP tentatively plans to provide partial funding toward a project that would remove a diversion on the North Boulder River that is restricting fish passage (Shaw Diversion) and restore the project site (Figures 1-3). Other, related projects would address the remaining diversions and water rights. The overall goal is to attain unobstructed movement for aquatic organisms in the North Boulder River and to improve natural stream function. This is expected to translate to improved brown trout populations.

I. Location of Project:

This project will be conducted on the North Boulder River, a tributary to the Boulder River, located near Whitehall within Township 2N, Range 3W, Section 36 in Jefferson County (Figure 1). The project site is located slightly north of I-90.

II. Need for the Project:

One goal within FWP's Statewide Fisheries Management Plan for the fisheries management program is to "restore and enhance degraded fisheries habitats." By implementing an improvement project and restoring important habitat, this proposed project would help meet this goal. Restoring fish passage at a diversion is a very efficient way to enhance populations through connectivity and access to important habitats. The project area has an important brown trout fishery that is expected to improve from this projects and other related activities outside the scope of this EA.

III. Scope of the Project:

The project proposes to remove a diversion on the North Boulder River that is restricting fish passage (Shaw Diversion) and restore the project site. The overall goal is to attain unobstructed movement of aquatic organisms and improve natural stream function. This project is expected to cost \$224,200. Of this total, the FFIP would be contributing up to \$41,000 to complete the project.

Contributor	In-kind services	In-kind cash
MT Trout Unlimited		\$15,000
Barrick (Golden Sunlight Mine)		\$50,000
American Rescue Plan Act (ARPA)		\$118,200
Total: \$183,200		

A related project, not reviewed under this EA, would address the remaining diversions and water rights that made this diversion removal project possible. Specific activities of this project include excavation and removal of the Shaw Diversion and restoration of the site. In place of the diversion, the stream will be reconstructed and restored using brush matrices, grade controls, and channel plugs (Figure 2). Vegetation will be planted onsite to encourage recovery of the disturbed areas. The project will require dewatering and use of heavy equipment during construction. An off-stream water system will be installed to provide a reliable stockwater source and also protect riparian vegetation.

IV. Environmental Impact Review Checklist:

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment

Project Title: North Boulder Fish Passage

Division/Bureau: Fisheries Division / Fish Management Bureau (FFIP)

Description of Project: The FFIP tentatively plans to provide partial funding toward a project that would remove a diversion on the North Boulder River that is restricting fish passage (Shaw Diversion) and restore the project site.

A. POTENTIAL IMPACTS TO THE PHYSICAL ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Geology and soil quality, stability and moisture			X		X	SEE BELOW
2. Air quality or objectionable odors				X		
3. Water quality, quantity and distribution (surface or groundwater)				X		
4. Existing water right or reservation				X		
5. Vegetation cover, quantity and quality				X		
6. Unique, endangered, or fragile vegetative species				X		
7. Terrestrial or aquatic life and/or habitats			X		X	SEE BELOW

8. Unique, endangered, or fragile wildlife or fisheries species				X		
9. Introduction of new species into an area				X		
10. Changes to abundance or movement of species			X		X	SEE BELOW

B. POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Noise and/or electrical effects			X		X	SEE BELOW
2. Land use				X		
3. Risk and/or health hazards				X		
4. Community impact				X		
5. Public services/taxes/utilities				X		
6. Potential revenue and/or project maintenance costs				X		
7. Aesthetics and recreation			X		X	SEE BELOW
8. Cultural and historic resources				X		
9. Evaluation of significance				X		
10. Generate public controversy				X		

V. Explanation of Impacts to the Physical Environment

1. Geology and soil quality, stability and moisture

This project would remove a diversion and restore the project site, which is likely to impact soil stability short term. However, any potential impacts are minor and short term. The project will be restored and revegetated, providing long term soil stability.

7. Terrestrial or aquatic life and/or habitats

This project will increase the potential for fish movement and connectivity, which is a positive benefit to aquatic life and habitats. Unobstructed movement means access to additional habitats and the ability to move between areas throughout a season or life of a fish species.

10. Changes to abundance or movement of species

Unobstructed movement is expected to translate to increased opportunities for fish species to migrate between habitats. This strengthens populations and is expected to translate to both

increased movement and increased abundance, which are beneficial.

VI. Explanation of Impacts to the Human Environment

1. Noise and/or electrical effects

The heavy equipment used in this project may cause some short term increases in noise. However, these potential impacts are expected to be minor and temporary. Overall, the benefits of the project far outweigh any potential noise.

7. Aesthetics and recreation

This project is expected to support and enhance fish populations, especially for brown trout. This area is popular for brown trout angling and has considerable public access. This project is expected to increase fish populations and the corresponding recreational opportunities.

VII. Narrative Evaluation and Comment.

There are no anticipated cumulative effects.

VIII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative.

If no funding is provided through the FFIP, either the applicant would have to seek additional sources of funding to complete the project, or the affected area of the North Boulder River would remain a fish passage obstruction.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to restore the North Boulder and remove the Shaw Diversion.

IX. Environmental Assessment Conclusion Section.

1. Other groups or agencies contacted, or which may have overlapping jurisdiction:

Jefferson Valley Conservation District, US Army Corps of Engineers, Montana Trout Unlimited

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

None.

3. Is an EIS required?

No. We conclude, from this review, that the proposed activities will have an overall positive impact on the physical and human environment, and will therefore not require the extensive analysis associated with an EIS.

4. Level of public involvement.

The project application to the FFIP has been posted on the FWP webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the FFIP and approved by the Fish and Wildlife Commission. The EA will be distributed to relevant individuals and groups and will be published on the FWP webpage: www.fwp.mt.gov.

5. Duration of comment period?

Public comment will be accepted from October 11 to November 11, 2022. If no substantive comments are received within the comment period, this EA will become final.

6. Person(s) responsible for preparing the EA.

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Figure 1: Project Location



Figure 2. Conceptual Design. The diversion is currently on the left center of the image. The design includes several grade controls, plugs, and brush matrices.



Figure 3. Shaw Diversion

