

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife & Parks
EAST FORK BITTERROOT RIVER RIPARIAN REVEGETATION

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 streambank restoration on the East Fork Bitterroot River. The overall goal is to improve aquatic habitat and water quality in the East Fork by restoring two eroding streambanks, installing vegetation, and replacing a bridge. This Environmental Assessment (EA) covers only one eroding streambank; other project components are covered by categorical exclusions or other environmental compliance processes.

I. Location of Project:

This project will be conducted on East Fork Bitterroot River, a tributary to the Bitterroot River, located near Sula within Township 1N, Range 19W, Section 16 in Ravalli County (Figure 1). The project site is located near Edwards Road (Figure 1).

II. Need for the Project:

One goal within FWP's six-year operations plan for the fisheries program is to "protect, maintain, and restore native fish populations, their habitats, life cycles, and genetic diversity to ensure stewardship of native species." The proposed project is within important habitat for native ESA-listed bull trout and westslope cutthroat trout. The project site currently provides poor habitat due to a lack of physical habitat and poor water quality. In addition to native fish populations, nonnative rainbow trout and brown trout are present in the reach and will benefit from improved habitat. Anglers are expected to enjoy increased fish presence at this popular publicly-accessible fishing site.

Additionally, one goal within FWP's Statewide Fisheries Management Plan for the fisheries management program is to "restore and enhance degraded fisheries habitats." By implementing this improvement project and restoring important habitat through sediment reduction and water quality improvement, the proposed project would help meet this goal.

III. Scope of the Project:

The overall restoration project proposes to stabilize two eroding streambanks, install vegetation, and replace a bridge on the East Fork Bitterroot River, with the goal of improving aquatic habitat and water quality. This EA covers only one eroding streambank, not covered by external environmental assessment processes.

The Bitter Root Water Forum will be leading the restoration of an eroded bank on the East Fork Bitterroot River (Figure 2). The bank treatment will be 450 feet in length and will be completed using ecologically friendly methods. In the past, rock was used to stabilize areas of concern. For this project, soil lifts, woody debris, and vegetation will be used (Figure 3). This will more effectively filter runoff from the road and provide more aquatic habitat than other bank stabilization methods. It will also reduce sediment loads from the banks by acting as a filter strip and by keeping soils together with reestablished woody riparian vegetation. Outside the scope of this EA, but to ensure the success of these treatments, the ranch managers will construct and repair riparian fencing and implement grazing best management practices (BMPs) on the roughly 7 acres surrounding the bank work, in conjunction with a grazing management plan (Figure 2).

The entire project is expected to cost \$767,384.40. Of this total, the FFIP would be contributing up to \$9,000 to complete the project. The applicant is including matching contributions of \$65,907.40 (Table 1) and other contributions (not matched to the FFIP application) of \$692,477.

Table 1. Project contributions matched to the Future Fisheries Improvement Program application.

Contributor	In-kind services	In-kind cash
Ravalli County Roads Department		\$55,000
Volunteers	\$5,678.40	
Montana Watershed Coordination Council		\$4,310.30
\$65,907.40		

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: EAST FORK BITTERROOT RIVER RIPARIAN REVEGETATION

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

Description of Project: The project proposes to restore one eroding streambank on the East Fork Bitterroot River. The goal is to improve aquatic habitat and water quality in the East Fork Bitterroot River. This EA assesses the left bank eroding streambank component.

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
2. Air quality or objectionable odors				X		
3. Water quality, quantity and distribution (surface or groundwater)			X			X
4. Existing water right or reservation				X		
5. Vegetation cover, quantity and quality			X			X
6. Unique, endangered, or fragile vegetative species				X		
7. Terrestrial or aquatic life and/or habitats			X			X
8. Unique, endangered, or fragile wildlife or fisheries species			X			X
9. Introduction of new species into an area				X		
10. Changes to abundance or movement of species				X		

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		
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		
8. Cultural and historic resources				X		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 is expected to improve soil stability through reduced streambank erosion. The bank treatment is intended to encourage root growth and hold banks together. As a result of this project, significantly more soil would be contained within the streambanks and would not erode into the stream. The overall impact is expected to be positive.

3. Water quantity, quality, and distribution.

No changes in streamflow would occur in the East Fork Bitterroot River as a result of the proposed project. However, work would be completed in-channel and along the banks, which may affect turbidity. To address turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. A permit (318 Authorization) will be obtained, if necessary, to meet short-term water quality standards. Long term, the project is expected to improve water quality through reduced sediment inputs.

5. Vegetation cover, quantity and quality

This project would improve vegetation cover, quantity, and quality by revegetation of the stream banks and riparian area. Vegetative communities will be actively created through planting and native seeding, and riparian fencing. Increased overhead and in-stream vegetative cover should provide additional habitat for aquatic species. This project will result in a more functional and diverse stream and riparian corridor, which will greatly improve the vegetative cover, quantity, and quality.

7. Terrestrial or aquatic life and/or habitats.

This project would restore and revegetate 450 feet of streambank on the East Fork Bitterroot River, which is expected to reduce erosion to improve aquatic habitat. This project is intended to benefit overall stream and riparian health and function, which supports both terrestrial and aquatic life.

8. Unique, endangered, or fragile wildlife or fisheries species.

This project may affect bull trout, which is federally recognized as Threatened and a Species of Concern in Montana. It is also expected to affect westslope cutthroat trout, a Species of Concern in Montana. The impacts on this species due to this project are predicted to be positive, potentially increasing survival and recruitment.

VI. Explanation of Impacts to the Human Environment

8. Cultural and historic resources.

No cultural or historical resource impacts are anticipated. However, the State Historical Preservation Office will be notified of the project, and any potential concerns will be addressed.

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 East Fork Bitterroot River would remain impaired.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to complete the proposed restoration project on the East Fork Bitterroot River.

IX. Environmental Assessment Conclusion Section.

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

Ravalli County Conservation District
Ravalli County Road and Bridge Department
Montana Department of Environmental Quality
Montana Department of Natural Resources
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service

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. The proposed project also will be reviewed by the Fish & Wildlife Commission, and funding will be contingent upon their approval. The EA will be distributed to all individuals and groups listed on the cover letter and will be published on the FWP webpage: www.fwp.mt.gov.

5. Duration of comment period?

Public comment will be accepted through May 1, 2021.

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

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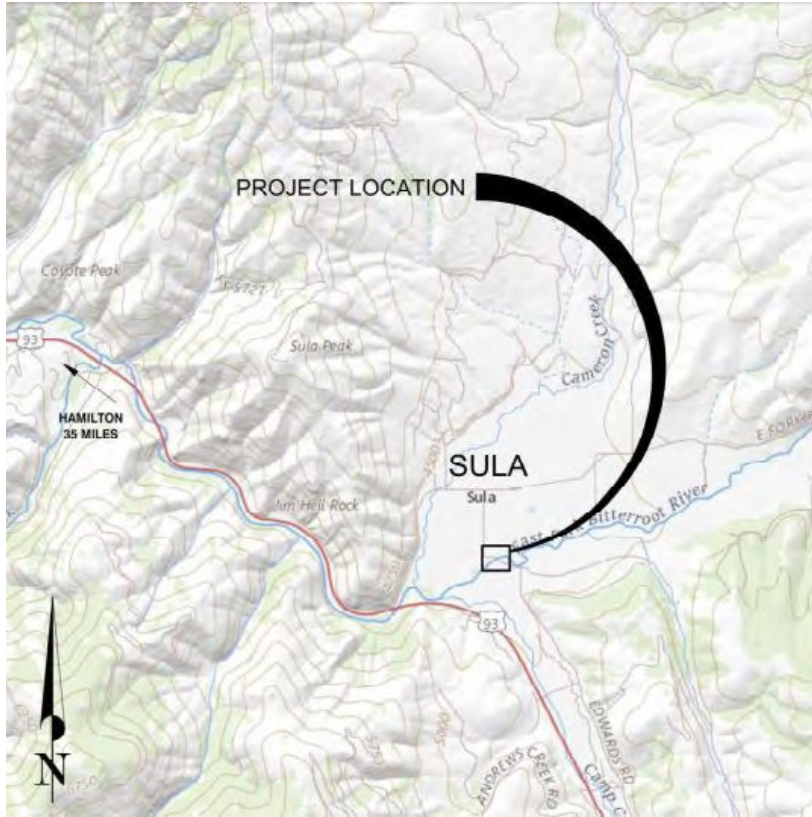


Figure 1: Project Location (courtesy Jeff Standaert, Professional Consultants Inc. and the Bitter Root Water Forum)

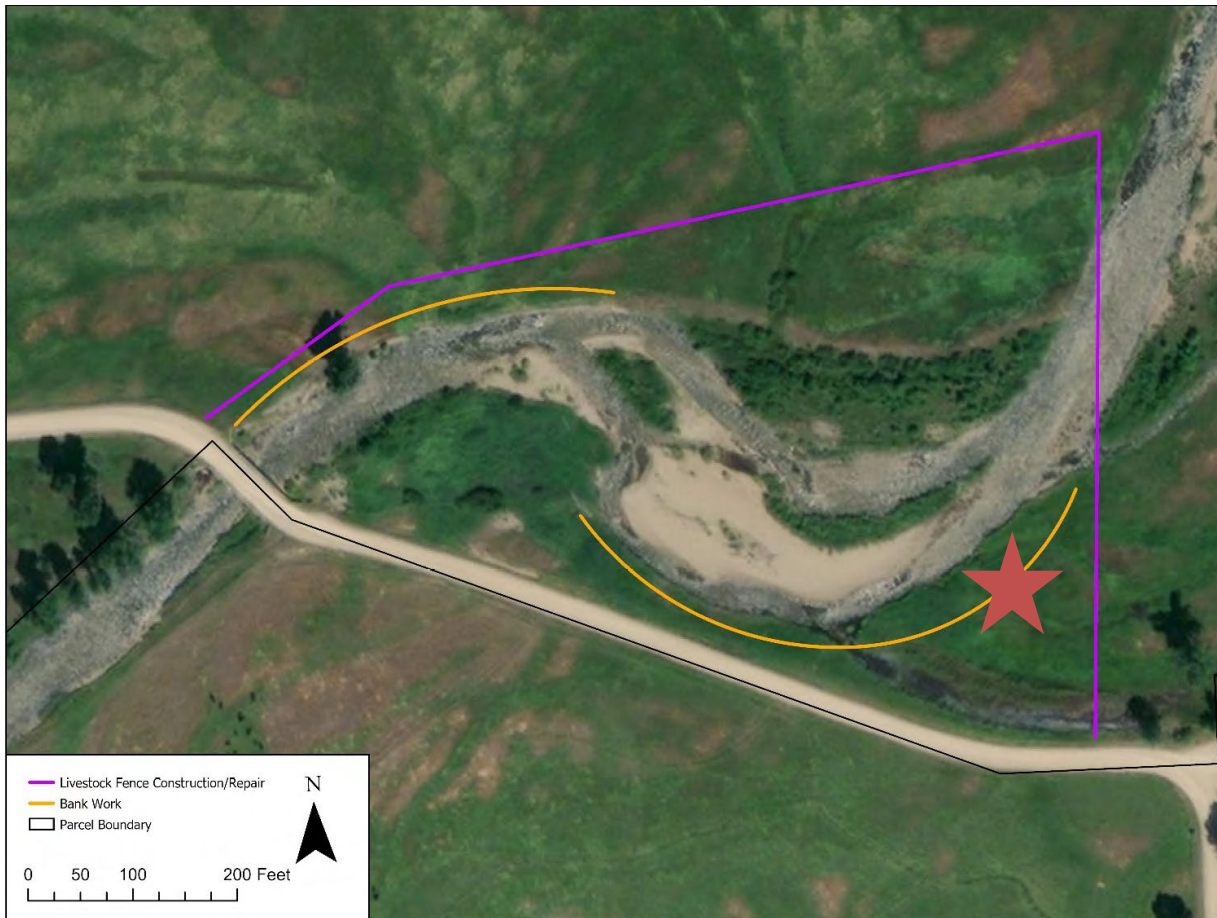


Figure 2. Bank reconstruction areas proposed for repair (yellow); only one is discussed under this environmental assessment (red star). Part of the project, but under an environmental assessment categorical exclusion, is an adjacent fence (purple) that will be used to manage livestock access. Bank reconstruction will consist of fabric encapsulated soil lifts (Figure 3).

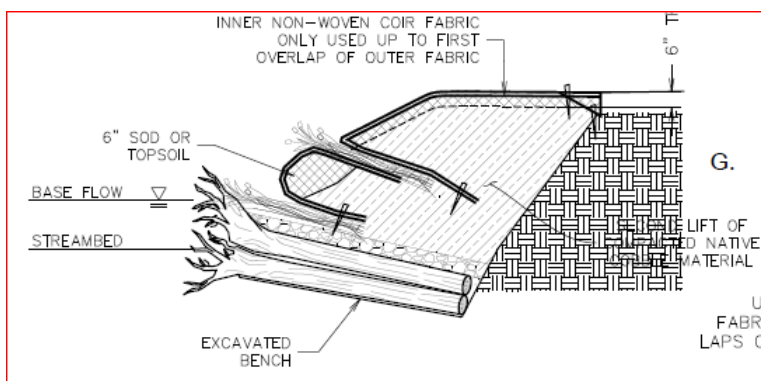


Figure 3. Schematic example of a fabric encapsulated soil lift. Design courtesy of WGM Group and Bitter Root Water Forum.