

July 13, 2015  
1420 East 6<sup>th</sup> Ave.  
P.O. Box 200701  
Helena, MT 59620-0701

Environmental Quality Council  
Montana Department of Environmental Quality  
Montana Department of Fish, Wildlife and Parks  
    Fisheries Division  
    Endangered Species Coordinator  
    Native Species Coordinator - Fisheries  
    Region 2 - Missoula  
Montana State Library, Helena  
MT Environmental Information Center  
Montana Audubon Council  
Montana Wildlife Federation  
Wayne Hadley, Deer Lodge  
Missoula Conservation District, Missoula  
Montana River Action, Bozeman  
U.S. Army Corps of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
State Historic Preservation Office, Helena  
Big Blackfoot Chapter of Trout Unlimited, Ovando  
Tom and Patt Donich, Seeley Lake

Ladies and Gentlemen:

Enclosed is an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program (FFIP). The Program tentatively plans to provide partial funding to a project that would upgrade an irrigation diversion on Trail Creek by adding a fish screen and replacing an existing pin and plank dam and denil fish ladder with an instream cross-vane to allow full fish passage, bedload movement, and reduced entrainment. The intent of the project is to reduce channel impairments, restore a migration corridor, eliminate fish losses to the irrigation ditch, and maintain instream flow levels. Trail Creek is a tributary to Morrell Creek near the town of Seeley Lake (Missoula County).

Please submit any comments by 5:00 P.M., August 12, 2015 to Montana Fish, Wildlife & Parks at the address listed above. The funding for this project through the FFIP is contingent upon approval being granted by the Fish & Wildlife Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,



Michelle McGree, Program Officer  
Habitat Bureau  
Fisheries Division  
e-mail: [mmcgree@mt.gov](mailto:mmcgree@mt.gov)

ENVIRONMENTAL ASSESSMENT  
Fisheries Division  
Montana Fish, Wildlife & Parks  
Trail Creek Fish Screen

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 streams 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 is proposing to provide partial funding to a project that would upgrade an irrigation diversion on Trail Creek by adding a fish screen and replacing an existing pin and plank dam and denil fish ladder with an instream cross-vane to allow complete fish passage, bedload movement, and reduced entrainment. The intent of the project is to reduce channel impairments, restore a migration corridor for all salmonids, eliminate fish losses to the irrigation ditch, and maintain instream flow levels.

I. Location of Project:

The project site is located on Trail Creek, a tributary to Morrell Creek in the Blackfoot River drainage, within Township 16 North, Range 15 West, Section 1 in Missoula County (Figure 1). It is located near the town of Seeley Lake.

II. Need for the Project:

One goal within FWP's Statewide Fisheries Management Plan for the fisheries management program is to "protect, maintain, and restore native fish populations, their habitats, life cycles, and genetic diversity to ensure stewardship of native species and to ensure angling opportunities whenever possible." By implementing habitat restoration projects through the FFIP, this critical goal can be achieved. This project addresses entrainment, passage, and survival of westslope cutthroat trout and bull trout, native species of concern.

III. Scope of the Project:

The specific project objective involves replacing the existing pin/plank dam used to divert water with a rock cross-vane set at an elevation to allow fish passage, stream channel function, and bedload movement (Figure 2). A flat plate, self-cleaning fish screen with a paddlewheel and bypass pipe would be installed within the ditch. Flow measuring devices would be installed within each ditch and downstream of the diversion.

The total estimated cost for this project is \$59,975. Of this total, the FFIP would be contributing up to \$21,175. The remaining funds would come from other sources and in-kind services:

Contributor	In-kind services	In-kind cash
Big Blackfoot Chapter Trout Unlimited	\$2,200	\$3,600
U.S. Fish and Wildlife Service	\$1,000	\$10,000
Montana Trout Unlimited		\$6,000
Resource Advisory Council (RAC)		\$15,000
Double Arrow Resort Land Owners Association		\$1,000
<b>TOTAL = \$38,800</b>		

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: Trail Creek Fish Screen

Division/Bureau: Fisheries Division / Habitat Bureau (FFIP)

Description of Project: The FFIP tentatively plans to provide partial funding to a project that would upgrade an irrigation diversion on Trail Creek by adding a fish screen and replacing an existing pin and plank dam and denil fish ladder with an instream cross-vane to allow complete fish passage, bedload movement, and reduced entrainment.

**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		
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			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 Potential Impacts on the Physical Environment.**

**3. Water quantity, quality, and distribution.**

No changes in stream flow would occur in Trail Creek as a result of the proposed project. Short-term increases in turbidity may occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization).

**5. Vegetation cover, quantity and quality.**

This project would affect vegetation during construction, due to mobilization and staging of material. The affected area would be revegetated with native seed and vegetation appropriate for the site. Short-term impacts are considered minor and long-term impacts are considered positive.

**7. Terrestrial and aquatic life habitats.**

Construction activities that will affect terrestrial and aquatic life habitats will be short term. Impacts would be primarily aquatic and confined to the project area, resulting from the construction of rock cross-vanes and installation of the fish screen. Work will be completed at time appropriate to avoid impacts to spawning or emerging westslope cutthroat trout, bull trout, and brook trout. Long term, this project should increase aquatic habitats through increased connectivity, survival, and overall stream health.

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

This project may affect westslope cutthroat trout and bull trout; species that are federally recognized and designated “Species of Concern” in Montana. The impacts on these species as a result of this project are predicted to be positive, potentially increasing recruitment and survival. Increased fish passage and reduced entrainment are key components of this project.

10. Changes to abundance or movement of species.

The installation of a fish screen should prevent the loss of salmonids down the ditch. The rock cross-vanes should improve upstream fish passage in Trail Creek. Denil-type ladders readily accumulate debris and may not function when blocked. Also, bull trout may avoid them, causing them to operate as a barrier. One goal of this project is to facilitate passage of bull trout, which could be better achieved with a rock cross-vane structure. Reduced fish losses and improved passage is expected to improve both population abundance and movement of all species utilizing the project area. This impact is considered positive.

VI. Explanation of Impacts on 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 this 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, the applicant would have to seek additional sources of funding to complete the project, or fish would continue to be entrained in the ditch and the existing denil fish ladder fish may continue to preclude passage for some fish, including bull trout.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to install a fish screen on an irrigation ditch connected to Trail Creek and an associated cross-vane to ensure water delivery and promote fish passage. These improvements could prevent entrainment of salmonids, improve habitat connectivity, and allow better control of

diverted water, potentially increasing survival and recruitment of fish in Trail Creek.

IX. Environmental Assessment Conclusion Section.

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

Missoula Conservation District, Montana Department of Natural Resources and Conservation, US Fish and Wildlife Service, US Army Corps of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

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](http://www.fwp.mt.gov)

5. Duration of comment period?

Public comment will be accepted through 5:00 PM on August 12, 2015.

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

Michelle McGree, Program Officer  
Montana Fish, Wildlife & Parks  
1420 East 6th Avenue  
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Helena, MT 59620  
Telephone: (406) 444-2432  
e-mail: [mmcgree@mt.gov](mailto:mmcgree@mt.gov)

Contributors: Ryen Neudecker, Big Blackfoot Chapter of Trout Unlimited; River Design Group, Inc.

FIGURE 1

**PROJECT VICINITY MAP**

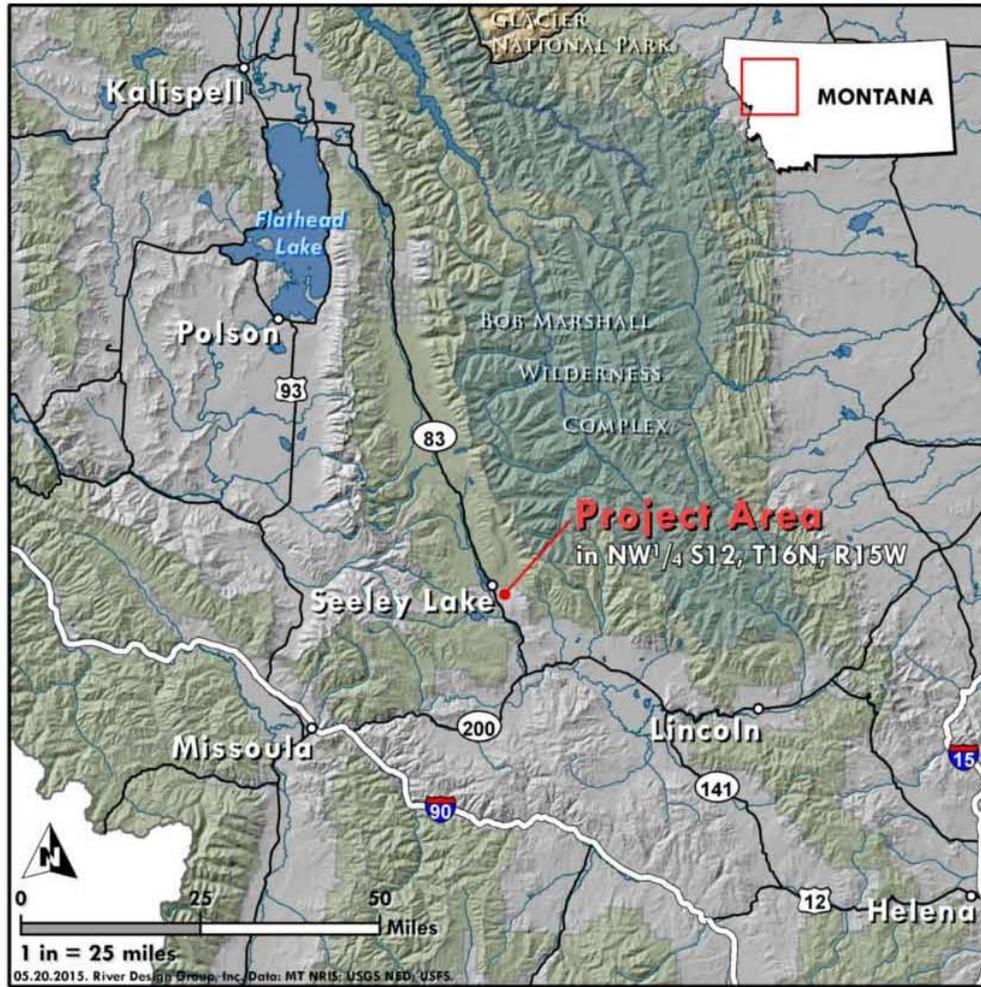
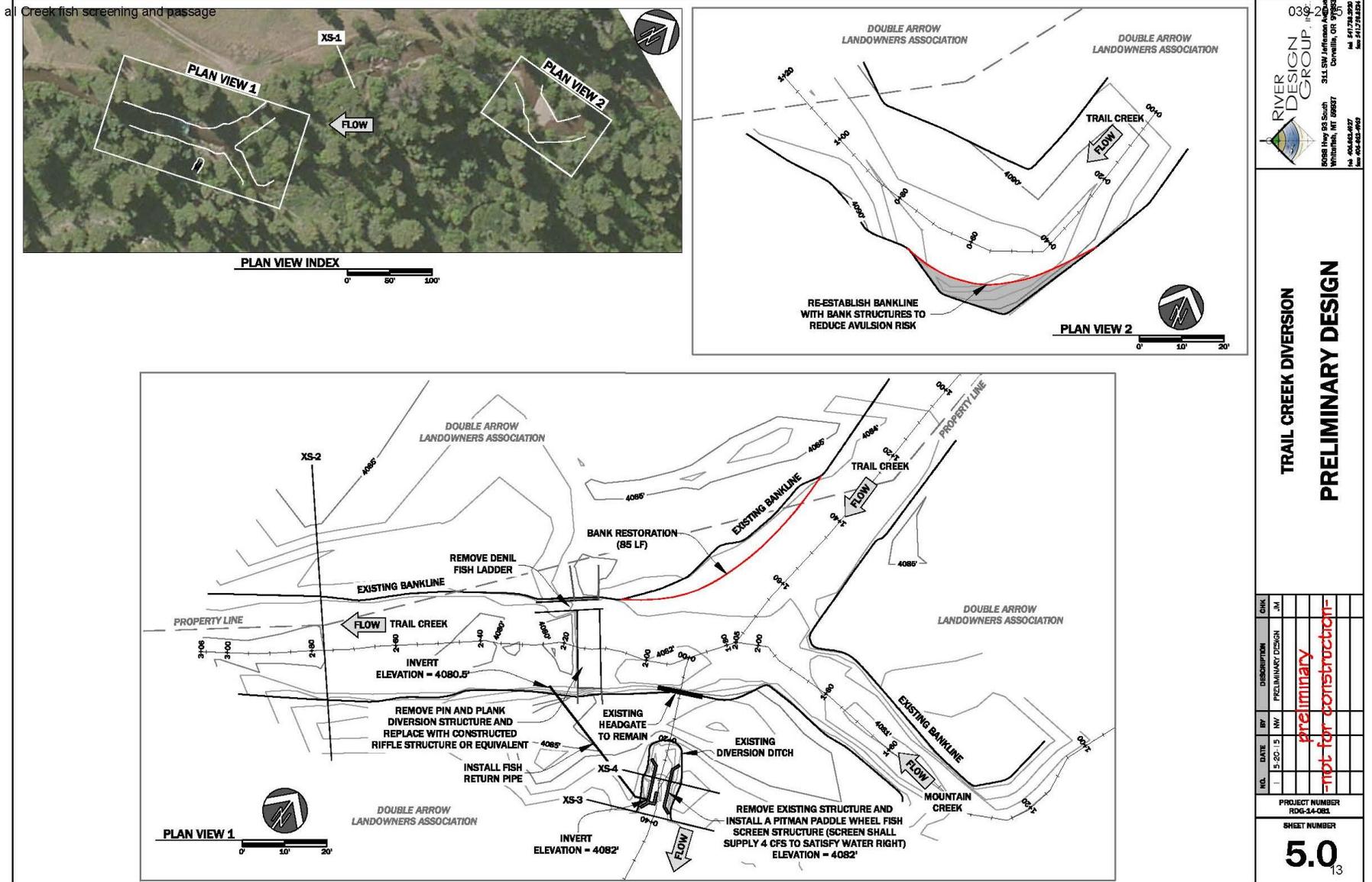


FIGURE 2



**RIVER DESIGN GROUP, INC.**  
 344 SW Jefferson Ave  
 Whitefish, MT 59907  
 Tel: 406.662.4237  
 Fax: 406.662.4969  
 039

**TRAIL CREEK DIVERSION  
 PRELIMINARY DESIGN**

NO.	DATE	BY	DISCUSSION	CHK
1	5-20-15	NW	PRELIMINARY DESIGN	JM
<i>preliminary</i>				
<i>not for construction</i>				

PROJECT NUMBER  
 RDG-14-081  
 SHEET NUMBER  
**5.0**  
 13