

March 7, 2008  
1420 East 6th 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 Office  
    Missoula Office  
Montana State Library, Helena  
MT Environmental Information Center  
Montana Audubon Council  
Montana Wildlife Federation  
Missoula County Conservation District, 3550 Mullan Road, Suite 106, Missoula, MT 59808  
U.S. Army Corp of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
State Historic Preservation Office, Helena  
James Cowan, 128 Wagon Wheel Way, Seeley Lake, MT 59868  
Bill Bartlett, P.O. Box 513, Seeley Lake, MT 59868  
Wayne Cahoon, P.O. Box 226, Seeley Lake, MT 59868

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding to a project calling for modification of two diversion structures to enhance upstream fish passage and the installation of two self-cleaning fish screens into two ditches to eliminate entrainment of fish. These two diversions are located on Morrell Creek, a tributary to the Clearwater River. The intent of the project is to enhance connectivity between Morrell Creek and the Clearwater River for migratory westslope cutthroat trout and bull trout and to eliminate entrainment mortality into the ditch systems. The project site is located on Morrell Creek approximately 1 mile south of the community of Seeley Lake in Missoula County.

Please submit any comments that you have by 5:00 P.M., April 8, 2008 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project is contingent upon approval being granted by the Fish, Wildlife and Parks 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,

Mark Lere, Program Officer  
Habitat Protection Bureau  
Fisheries Division  
Email: [mlere@mt.gov](mailto:mlere@mt.gov)

ENVIRONMENTAL ASSESSMENT  
Fisheries Division  
Montana Fish, Wildlife and Parks  
Morrell Creek Diversions Fish Screen and Passage Enhancement Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. 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. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the installation of self-cleaning fish screens in two irrigation ditches located on Morrell Creek, a tributary to the Clearwater River. The project also calls for modifying the existing diversion structures to enhance upstream fish passage. The intent of this project is to enhance migratory populations of westslope cutthroat trout and bull trout. The diversions are located approximately one mile south of the community of Seeley Lake in Missoula County (Attachment 1).

I. Location of Project: This project will be conducted at two diversions on Morrell Creek, a tributary to the Clearwater River, located approximately one mile south of the community of Seeley Lake within Township 16 North, Range 15 West, Section 11 in Missoula County.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six year operations plan for the fisheries program is to “restore and enhance degraded habitats” by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help meet this goal.

The Clearwater River drainage supports a regionally unique population of adfluvial bull trout that inhabits the interconnected lake/river system. Morrell Creek is one of three core-spawning tributaries that support this population of bull trout and represents one of the two most productive adfluvial bull trout spawning tributaries in the entire Clark Fork Basin. Currently, irrigators rely on antiquated headgate structures that require continual annual maintenance and channel disturbance for acquiring water due to natural channel migrations. As a result, these two diversions create upstream barriers for fish migration, entrain fish into the ditch systems and chronically disturb natural channel processes.

III. Scope of the Project:

The project proposes to remove the existing dilapidated wood diversions and pin and plank weirs and replace them with more fish-friendly rock step-pool designs, appropriately sized headgates, flow measuring devices and self-cleaning style fish screens (Attachment 2). The screens will be designed to deliver up to 15 cubic feet per second of flow and a small overflow channel/pipe will be necessary to return entrained fish and debris back to the main channel. This project is expected to cost \$74,465.00. Of this

total, the Future Fisheries Improvement Program would be contributing up to \$10,000.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

The project is expected to save numerous fish from being lost into these two Morrell Creek diversions. Additionally, the installation of fish friendly diversion structures will allow for year round upstream fish passage, enhancing approximately 7 miles of upper Morrell Creek. Eliminating entrainment of fish from these irrigation diversions and improving upstream fish passage is expected to enhance fish populations in Morrell Creek and the Clearwater River drainage.

2. Water quantity, quality and distribution.

The fish screens and new diversion structures will be installed during the non-irrigation season when the ditches are shut down. Short-term increases in turbidity may occur during installation of the by-pass pipe for the fish screen and the installation of the new diversion structures. 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. A 310 permit (Natural Streambed and Land Preservation Act) will be obtained from the local county conservation district and the U.S. Army Corp of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils along the ditch and stream bank would be disturbed during the construction, but would quickly stabilize following proposed re-vegetation efforts. Re-vegetation efforts call for re-seeding disturbed areas with native grasses.

4. Vegetation cover, quantity and quality.

Vegetation cover would be disturbed along the ditch and stream bank during the period of construction. Proposed re-vegetation efforts would act to mitigate these disturbances.

5. Aesthetics.

Aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would not be adversely affected.

7. Unique, endangered, fragile, or limited environmental resources.

This project would eliminate entrainment of fish from two diversions on Morrell Creek and enhance upstream fish passage, providing migratory fish access to approximately seven miles of the upper drainage. The creek currently supports migratory adfluvial bull trout, as well as westslope cutthroat trout, and the project area has been classified as a bull trout core area. Bull trout are listed as threatened under the Endangered Species Act. Because Morrell Creek and the Clearwater drainage support bull trout, the project will be included in Montana Fish, Wildlife and Parks Section 6 conservation plan with the U.S. Fish and Wildlife Service.

9. Historic and archaeological sites

The fish screens would be installed within the existing ditches and installation would cause only minimal ground disturbance. Modification of the existing diversions also would only cause minimal ground disturbance. As a result, there is a very low likelihood that cultural properties could be impacted. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

This project is expected to enhance fish populations in Morrell Creek and the remainder of the Clearwater River drainage. As a result, this project is expected to improve the recreational fishery that these water bodies provide.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, diversions on Morrell Creek will continue to entrain downstream migrating fish and migratory connectivity to the Clearwater River system will continue to be diminished.

2. The Proposed Alternative

The proposed alternative calls for installing self-cleaning fish screens into two irrigation diversions located on Morrell Creek and replacing the existing pin and plank structures with more fish-friendly rock step-pool designs. The intent of the project is to decrease entrainment of downstream migrating fish into the canal systems and enhance upstream passage for migratory fish. The project is expected to enhance the fluvial life history component for both westslope cutthroat trout and bull trout populations. This project also is expected to enhance the recreational fishery found in both Morrell Creek and the Clearwater drainage system.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the

physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and funding will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on Montana Fish, Wildlife and Parks webpage: [fwp.mt.gov](http://fwp.mt.gov).

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on April 8, 2008.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer  
Habitat Protection Bureau  
Fisheries Division  
Montana Department of Fish, Wildlife and Parks  
1420 East 6th Avenue  
Helena, MT 59620  
Telephone: (406) 444-2432  
e-mail: [mlere@mt.gov](mailto:mlere@mt.gov)

**MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS**  
 1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701  
 (406) 444-2535

**ENVIRONMENTAL ASSESSMENT**

Project Title Morrell Creek Diversion Fish Screen and Passage Project

Division/Bureau Fisheries Division -Future Fisheries Improvement  
 Description of Project The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the installation of two self-cleaning fish screens and for modifying the associated existing diversion structures to enhance upstream fish passage at two diversions located on Morrell Creek, a tributary to the Clearwater River. The intent of the project is to enhance populations of westslope cutthroat trout and bull trout by restoring connectivity between Morrell Creek and the Clearwater drainage for migratory fish.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Missoula County Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office  
 Individuals or groups contributing to this EA Ryen Aasheim, Big Blackfoot Chapter Trout Unlimited and River Design Group, Inc.  
 Recommendation concerning preparation of EIS No EIS required.  
 EA prepared by: Mark Lere

Date: February 20, 2008