

March 15, 2004
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
Billings Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Carbon Conservation District, P.O. Box 510, Joliet, MT 59041
Carbon County Commission, P.O. Box 887, Red Lodge, MT 59068
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Roly Devries, Roberts, MT 59070
Confluence Consulting Inc., P.O. Box 1133, Bozeman, MT 59771

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 the facilitation of upstream fish passage in Clear Creek at the county culvert located neat the confluence with Rock Creek. The intent of the project is to improve upstream fish passage for fish residing in Rock Creek. This proposed project is located approximately 15 miles north of the town of Red Lodge in Carbon County.

Please submit any comments that you have by 5:00 P.M., April 15, 2004 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of 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
e-mail: mlere@state.mt.us

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Clear Creek Fish Passage Enhancement Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves 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.

The Future Fisheries Improvement Program is proposing to provide partial funding for a project calling for facilitating fish passage at a perched box culvert on Clear Creek, a tributary to Rock Creek in the Clarks Fork of the Yellowstone drainage. The intent of the project is to enhance upstream fish passage for rainbow trout, brown trout and mountain whitefish. This culvert, located about 400 yards upstream from the confluence with Rock Creek, currently acts as a barrier to fish passage due to the culvert's perched nature above the channel outlet. A series of rock weirs would be installed downstream of the culvert outlet to raise the elevation of the channel's tailwater control section and eliminate the elevation drop between the culvert outlet and the existing channel. This culvert is owned and maintained by Carbon County and is located approximately 15 miles north of the town of Red Lodge in Carbon County (Attachment 1).

I. Location of Project: This project will be conducted on Clear Creek located approximately 15 miles north of the town of Red Lodge within Township 5 South, Range 21 East, Section 28 in Carbon 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 achieve this goal.

Fish residing in Rock Creek commonly seek refuge in tributaries to avoid elevated water temperatures and dewatered habitat that chronically occur during the irrigation season. Clear Creek is somewhat unique in that it is a mostly spring fed tributary to Rock Creek that maintains adequate flow throughout the irrigation season. However, a perched boxed culvert at a county road crossing located about 400 yards upstream from the confluence with Rock Creek acts as a barrier to upstream migrating fish. As a result, nearly 10 miles of spawning, rearing and adult fish habitat remains inaccessible to fish residing in Rock Creek.

III. Scope of the Project:

The project proposes to install a series of six rock weirs downstream of the culvert outlet with the intent of raising the elevation of the tailwater control to a level that will eliminate the elevation drop between the culvert outlet and the existing channel (Attachment 2). Each rock weir will be placed at 15 to 18-foot intervals and each step will lower to channel grade by approximately one foot. The active channel at these grade control structures will be trapezoidal shaped with a bottom width of 10 feet and a top width of 18 feet. Pool depths below each weir will be about 3 feet to account for scour. The constructed channel will tie into the existing bed surface 105 feet downstream of the culvert. A geo-synthetic filter will be installed below constructed pools to prevent finer particles from filtering through the large rock forming the weirs. Disturbed stream banks would be stabilized with coir fabric and re-vegetated with native grass seed and

willow sprigs. This project is expected to cost approximately \$42,212.00. 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.

Enhancing fish passage at the county culvert on Clear Creek is expected to open access to about 10 miles of important habitat. As a result, the project is expected to enhance rainbow trout, brown trout and mountain whitefish populations in both Clear Creek and Rock Creek.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, the construction zone may be dewatered either by piping the stream flow or by passing the flow down a lined by-pass channel. 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 124 permit (Stream Protection Act) will be obtained from Montana Fish, Wildlife and Parks and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils within the immediate project area would be disturbed during construction, but would be stabilized with re-vegetation efforts.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed within the immediate project area during the period of construction. However, proposed re-vegetation efforts would act to mitigate these disturbances.

5. Aesthetics

Aesthetics of the site would be degraded during the short time frame of construction due to ground disturbance and the presence of heavy equipment. Long-term impacts to aesthetics would be negligible.

6. Historic and archaeological sites

This site has been previously disturbed by the construction of the county road and by previous efforts to shore-up the undermined culvert. As a result, there is a very low likelihood that cultural

properties will be impacted as result of the proposed project. 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.

1. Access to & quality of recreational activities.

Clear Creek has the potential for being an important tributary to Rock Creek because of adequate flows and cooler water temperatures. Enhancing fish passage at the county road culvert will allow fish from Rock Creek to access about 10 miles of habitat. As a result, this proposed project is expected to improve recreational fishing in both Rock and Clear creeks.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the county culvert on Clear Creek will continue to act as a migration barrier for fish residing in Rock Creek. As such, nearly 10 miles of Clear Creek will remain unavailable for spawning and rearing habitat for migratory fish. Additionally, fish in Rock Creek will remain unable to use Clear Creek as a refuge from dewatering and warm water temperatures that chronically occur during the irrigation season.

2. The Proposed Alternative

The proposed alternative is designed to enhance fish passage in Clear Creek, providing access to spawning, rearing and adult habitat to fish residing in Rock Creek. Enhancing fish passage at this culvert crossing is expected to increase recruitment of fish to Rock Creek and improve recreational fishing in both Clear and Rock creeks.

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 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 web page: fwp.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on April 15, 2004.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
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Helena, MT 59620

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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 Clear Creek Fish Passage Enhancement 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 facilitating fish passage through a perch box culvert located at a county road crossing on Clear Creek, a tributary to Rock Creek in the Clarks Fork of the Yellowstone drainage. Fish passage will be enhanced by installing a series of rock weirs downstream of the culvert outlet to raise the elevation of the tailwater control. The project will be conducted at the county road culvert on Clear Creek located approximately 15 miles north of the town of Red Lodge in Carbon County.

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		
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 Carbon County, Carbon 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 Jim Olsen, MFWP; Confluence Consulting, Inc.
 Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere
Date: March 1, 2004
