

March 13, 2006
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
Bozeman Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Beaverhead Conservation District, 420 Barrett Street, Dillon, MT 59725
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
U.S. Fish and Wildlife Service, 240 Barrett Street, Dillon, MT 59725
State Historic Preservation Office, Helena
Big Hole Watershed Committee, P.O. Box 931, Butte, MT 59703
Montana Trout Unlimited, P.O. Box 7186, Missoula, MT 59807
Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624
John and Phillis Erb, Erb Livestock, 540 Skyline Drive, Dillon, MT 59725
Wisdom River Cattle Company, 1200 Twin Lakes Road, P.O. Box 235, Wisdom, MT 59761

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 restoration of a 2.3-mile altered reach of Rock Creek, a historic tributary to the Big Hole River. An irrigation ditch currently captures the flow of Rock Creek, thereby disconnecting the stream from the river and making it unavailable for species of fish with migratory life histories. The intent of the project is to enhance habitat for fluvial arctic grayling as part of a Candidate Conservation Agreement with Assurances among the U.S. Fish and Wildlife Service, Montana Fish, Wildlife and Parks and participating landowners. The proposed project site is located approximately four miles southwest of the town of Wisdom in Beaverhead County.

Please submit any comments that you have by 5 P.M., April 13, 2006 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.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Rock Creek Channel Restoration 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 purposes 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 restoring channel morphology and riparian function in Rock Creek and re-establishing its connectivity to the Big Hole River. Historically, the channel of Rock Creek was altered for agricultural purposes and presently is captured by an irrigation canal, disconnecting the stream from the river. The intent of the project is to restore migratory connectivity between Rock Creek and the Big Hole River to primarily benefit fluvial arctic grayling, a species of special concern in Montana and petitioned for listing under the Endangered Species Act. The project site is located approximately 4 miles southwest of the town of Wisdom in Beaverhead County (Attachment 1).

I. Location of Project: This project will be conducted on Rock Creek located approximately four miles southwest of the town of Wisdom within Township 2 South, Range 15 West, Section 31 in Beaverhead 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 the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposal would help achieve this goal.

Rock Creek historically was considered one of the most important upper Big Hole tributaries, providing spawning and rearing habitat for fluvial arctic grayling. However, recent monitoring has revealed a dramatic reduction in the number of grayling found in the stream. Declines in grayling densities apparently are related to habitat changes that historically have taken place on stream. Rock Creek has been disconnected from the Big Hole River and currently flows into an irrigation canal, blocking migratory use by arctic grayling. Additionally, physical alterations and the loss of riparian vegetation from past grazing practices have resulted in degradation to the aquatic habitat.

As part of a newly developed Candidate Conservation Agreement with Assurances (CCAA) for the upper Big Hole River, state biologists have identified the re-connection of Rock Creek to the Big Hole River as a high restoration priority and a critical component of a restoration plan to restore habitat for fluvial arctic grayling in the upper Big Hole River. The lower approximately 10 miles of Rock Creek flows through lands currently enrolled in the CCAA.

III. Scope of the Project:

The project proposes to re-establish connectivity and fish passage between Rock Creek and the Big Hole River and improve aquatic habitat in the lower 2.3 miles of Rock Creek. Reconnecting the stream to the

river would involve constructing a channel with proper dimensions, pattern and profile within an existing swale located east of the current active channel. The new channel, constructed within the floodplain of this existing swale, would flow into the Big Hole River just upstream of the Spokane Ditch diversion structure, thereby re-connecting the stream to the river (Attachment 2). The old channel would continue to function as a stream from which an existing irrigation diversion would continue to be used. A new fish friendly water control structure would be installed to allow the stream flow to be apportioned between the two channels to allow for existing irrigation diversion and to provide better distribution of stream flow during high water events. Excess fill material generated from excavating the new channel would be used to reclaim an existing gravel pit located adjacent to the project site. Upstream of the proposed new channel, approximately 2,000 feet of eroding stream bank would be stabilized by re-grading to a stable angle of repose and transplanting dense sod mats salvaged from on-site sources. Willow clumps would be transplanted on outside meander bends where woody vegetation is lacking. The project also proposes to enhance pool habitat throughout the project reach by increasing pool frequency and residual pool depths in reaches of the stream deemed appropriate. A majority of the work would be carried out using tracked excavator(s). The newly restored channel would be protected from over grazing by livestock through the installation of riparian fencing and the development of a grazing management plan. This project is expected to cost \$191,500.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$90,000.00 to complete the project.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Restoration of approximately 2.3 miles of Rock Creek is expected to create a healthier habitat for aquatic life by restoring connectivity for migratory fishes between the stream and the Big Hole River, stabilizing a series of actively eroding stream banks and enhancing the frequency and quality of pool habitat. Expected improvements in the aquatic habitat in the stream should enhance fish populations, particularly fluvial arctic grayling. Habitat for riparian dependent wildlife also would be improved by the restoration effort proposed for the riparian corridor.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction of the new channel will occur in the dry and activation will not occur until the new stream reach is completed. Operation of equipment in the active 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). 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). In the long term, stabilizing actively eroding stream banks and protecting the riparian vegetative community would reduce sediment contributions to downstream areas, thereby improving overall quality to downstream waters.

3. Geology and soil quality, stability and moisture.

Soils along the margin of the newly constructed and enhanced channel, as well as along construction haul roads and staging areas, would be disturbed during project construction, but would stabilize following proposed re-vegetation efforts and changes in grazing management within the riparian corridor.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. However, existing riparian shrubs would be protected to the extent possible and the new channel would be strategically located to take advantage of the bank stabilization qualities of this existing vegetation. Re-vegetation efforts and proposed grazing management changes would result in an overall improvement to the riparian vegetative community.

5. Aesthetics.

In the short term, aesthetics would be adversely affected due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would be enhanced by re-connecting Rock Creek to the Big Hole River, stabilizing a series of actively eroding stream banks and enhancing the frequency and quality of pool habitat found in the stream. The proposed project would restore the currently altered channel of Rock Creek to a healthier and more natural stream environment. Aesthetics would be further enhanced by proposed re-vegetation and grazing management efforts within the riparian corridor.

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

Rock Creek currently supports a dwindling population of fluvial arctic grayling. Fluvial arctic grayling are considered a species of special concern in Montana because of declining numbers and shrinking habitat. This proposed project has been identified as a priority under the newly developed Candidate Conservation Agreement with Assurances (CCAA) for the upper Big Hole River. Re-connecting Rock Creek with the Big Hole River and restoring aquatic habitat within a 2.3 mile reach of the stream is expected to improve habitat for fluvial arctic grayling and other species of fish residing in the upper Big Hole drainage.

7. Historic and archaeological sites

The proposed project likely will require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

1. Access to & quality of recreational activities.

This proposed project is expected to enhance the recruitment of juvenile fish to the upper Big Hole River. The Big Hole River supports a popular recreational fishery and this project is expected to enhance populations of fluvial arctic grayling, brook trout, burbot and mountain whitefish.

2. Locally adopted environmental plans & goals

Montana Fish, Wildlife and Parks recently initiated a CCAA for fluvial arctic grayling in the upper Big Hole River. Agreements between the U.S. Fish and Wildlife Service, Montana Fish, Wildlife and Parks and participating landowners will result in site-specific conservation plans designed to remove threats to the fluvial arctic grayling population. Landowners within the lower 10 miles of Rock Creek have enrolled in the CCAA plan and this proposed project has been identified as a priority for restoration.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of Rock Creek will remain disconnected from the Big Hole River, stream conditions will remain in a degraded condition and fish habitat will remain simplified. Migratory movement of fluvial arctic grayling from the river to the stream will continue to be blocked and, as a result, the grayling population in Rock Creek likely will continue to decline. Habitat for riparian dependent wildlife also will remain in a degraded condition.

2. The Proposed Alternative

The proposed alternative will restore migratory connectivity between Rock Creek and the Big Hole River and will improve overall fish habitat and create greater channel complexity. Fluvial arctic grayling will gain access to a significant amount of spawning and rearing habitat found in the stream. This alternative also will enhance the riparian vegetative community. This alternative is expected to enhance the population of fluvial arctic grayling occupying the upper Big Hole drainage.

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 also will be published on Montana Fish, Wildlife and Parks web page: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on April 13, 2006.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
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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 Rock Creek Channel Restoration 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 restoring channel morphology and riparian function in Rock Creek and re-establishing its connectivity to the Big Hole River. The proposed project is part of a CCAA agreement with local landowners and is intended to enhance the fluvial arctic grayling population. The project site is located approximately 4 miles southwest of the town of Wisdom in Beaverhead 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			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			X
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Beaverhead 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 Confluence, Inc.
 Recommendation concerning preparation of EIS No EIS required.
 EA prepared by: Mark Lere
 Date: March 9, 2006
