



Montana Fish, Wildlife & Parks

January 29, 2010
P.O. Box 200701
1420 East 6th Ave.
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
Fisheries Bureau
Endangered Species Coordinator
Bozeman Office

Montana State Library, Helena

MT Environmental Information Center

Montana Audubon Council

Montana Wildlife Federation

Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722

Montana River Action Network, 304 N 18th Ave., Bozeman, MT 59715

Beaverhead Conservation District

U.S. Army Corp of Engineers, Helena

U.S. Fish and Wildlife Service, Helena

State Historic Preservation Office, Helena

The Nature Conservancy, 32 S Ewing, Helena, MT 59601

Elisabeth Grazing Association, LLC, 2500 One Liberty Place, 1650 Market Street, Philadelphia, PA 19103

Huntsman Ranch, P.O. Box 240086, Dell, MT 59724

Tony and Donna Demetriades, 147 Hitching Post Road, Bozeman, MT 59715

Beaverhead County Commissioners, 2 South Pacific Street, Suite #4, Dillon, MT 59725

Artic Grayling Recovery Program, P.O. Box 4089, Bozeman, MT 59772

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a channel stabilization and riparian enhancement project on Hellroaring Creek, a tributary to Red Rock Creek. This proposed project is located on property owned by the Elisabeth Grazing Association approximately 38 miles east of the community of Monida in Beaverhead County.

Please submit any comments that you have by 5:00 P.M., March 3, 2010 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 Section
Fisheries Bureau
e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Hellroaring Creek 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 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 for a project calling for the stabilization of approximately 3,000 feet of actively eroding stream banks found on the outside meander bends of the main fork of Hellroaring Creek by re-sloping, adding a gravel toe and extensively planting with native on-site vegetation. Additionally, the project would partially restore flow patterns by activating several distributary channels and enhance flow routing through several road crossings. The intent of the project is to reduce sedimentation into Red Rock Creek and the associated Red Rock lakes, water bodies that support an adfluvial Arctic grayling population. The project site is located on property owned by the Elizabeth Grazing Association approximately 38 miles east of the community of Monida in Beaverhead County (Attachment 1).

I. Location of Project: This project will be conducted on a 3,000-foot reach of the main stem of Hellroaring Creek, a tributary to Red Rock Creek, located about 38 miles west of the community of Monida within Township 14 South, Range 1 East, Sections 13, 14, 23 and 24 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 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.

Hellroaring Creek flows from the headwaters located in the Centennial Mountains onto an active alluvial fan with numerous distributary channels. The stream has been degraded in the past from overgrazing by livestock, active removal of riparian shrubs, removal of beaver, alterations of flow paths on the alluvial fan and flow blockages created by a road passing perpendicular across the fan. These activities have de-stabilized the channel and have resulted in excessive sedimentation on critical spawning and rearing habitat for adfluvial Arctic grayling found in downstream waters. This proposed effort would restore riparian vegetation, bank integrity and flow patterns on the stream to reduce flow energy downstream through an undersized channel of Red Rock Creek, resulting in enhanced spawning and rearing habitat for adfluvial Arctic

grayling. This project would be a second phase in restoring aquatic habitat in Hellroaring Creek. The first phase has been completed and involved reducing livestock grazing pressure within the riparian corridor with fencing and improved grazing management (Attachment 2). Additionally, the first phase implemented a series of experimental treatments on actively eroding banks and experimented with establishing native willow along low stream banks to ascertain effectiveness.

III. Scope of the Project:

The project proposes to restore flow patterns at the apex of the alluvial fan by carefully managing flows at the canyon mouth using the existing low impact rock weirs and re-constructing existing diversion headgates to make them more functional. This work would result in an increase in flow in the West Fork of Hellroaring Creek (historically the dominant channel on the fan) and, at the same time, reduce discharge in the main fork. Additionally, routing of stream flow through the county road running perpendicular to the fan would be improved by installing a larger open-arched culvert (57" X 38" X 33') and by working with county officials to further address flow routing by pursuing additional culverts and/or bridges. The project also calls for treating about 3,000 feet of actively eroding stream banks by re-sloping over-steepened banks and placing native cobble at the toe. Excavated banks will be stabilized with salvaged wetland and upland sods and would be extensively planted with native willow. Approximately 1,000 containerized native willows would be planted, as well as the placement of numerous willow sprigs obtain from local sources using a hydro-jet stinger (Attachment 3). Bank treatments and willow plantings are being patterned on efforts that were proven successful in the demonstration project completed during phase 1. This project is expected to cost \$137,445.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$59,733.00. The remainder of the funding would come from other sources and in-kind services.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing portions of Hellroaring Creek and improving flow distribution across an active alluvial fan is expected to reduce sedimentation on existing spawning and rearing habitat for adfluvial Arctic grayling located in downstream waters (Red Rock Creek). Habitat for riparian dependent wildlife would be improved by enhancing the woody vegetation community and by controlling livestock grazing within the riparian corridor.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and 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). A 310 permit (Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted to determine the requirements needed to meet the federal Clean Water Act. In the long term, restoring flow distribution patterns, stabilizing eroding stream banks and enhancing the riparian vegetative community would reduce sediment contributions to downstream areas, thereby improving the overall quality of downstream waters.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during project construction, but would be stabilized following proposed re-vegetation efforts. Overall, the project is expected to reduce bank erosion by stabilizing actively eroding cut-banks on Hellroaring Creek.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. However, disturbance primarily would be confined to stream banks dominated by pasture grass with shallow and poor soil binding rooting structures. The proposed re-vegetation efforts would act to mitigate these disturbances and restore willow to the riparian community. Control of livestock grazing within the riparian corridor would protect the vegetative community and encourage the recovery of woody shrubs along the stream margin.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment during the short term. Mechanical bank sloping is expected to occur over a two to three week period. In the long term, aesthetics would be enhanced by stabilizing actively eroding cut-banks on Hellroaring Creek and enhancing the riparian vegetative community.

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

The Red Rock Lakes/Red Rock Creek drainage supports a native adfluvial population of Arctic grayling. Arctic grayling have been designated as a species of special concern in Montana. Proposed improvements derived from this project are expected to benefit this grayling population.

9. Historic and archaeological sites

The proposed project may 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.

7. Access to & quality of recreational and wilderness activities.

The project is expected to enhance the quantity and quality of fish habitat in both Hellroaring and Red Rock creeks. Improvements in habitat are expected to enhance fish populations residing in Hellroaring Creek, as well as the grayling population in Red Rock Creek and Red Rock Lakes. Red Rocks Creek provides public fish opportunities and the landowner on Hellroaring Creek allows public access to anglers.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, bank erosion and some channel enlargement will continue to occur. As a result, excessive sedimentation would continue to be delivered to downstream waters where an adfluvial population of Arctic grayling would continue to be adversely affected. The condition of the riparian vegetative community would remain under potential for the foreseeable future.

2. The Proposed Alternative

The proposed alternative calls for replacing an undersized culvert under the Red Rock Pass road to help restore natural runoff patterns, reactivating natural flow paths on the West Fork located north of the road, stabilizing actively eroding stream banks within the mid-fan area patterned on a past successful demonstration project and continuing to plant willow along stream reaches identified as suitable. These efforts would help stabilize the channel(s) and would reduce sediment delivery to sensitive spawning and rearing habitat for adfluvial Arctic grayling located in downstream waters.

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

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on March 3, 2010.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Section
Fisheries Bureau
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 Hellroaring Creek Restoration Project

Division/Bureau Fisheries Bureau -Future Fisheries Improvement

Description of Project The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the stabilization of approximately 3,000 feet of Hellroaring Creek, a tributary to Red Rock Creek and ultimately to Red Rock Lakes. The intent of the project is to reduce sediment delivery to downstream waters that support an adfluvial Arctic grayling population. The project site is located on property owned by the Elizabeth Grazing Association approximately 38 miles east of the community of Monida 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		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Beaverhead 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 Nathan Korb, The Nature Conservancy; Scott Gillilan et. al., *Feasibility and Restoration Alternatives Plan for Hellroaring and Red Rock Creeks*, October 30, 2009; 90 pp.

Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: January 15, 2010