

March 20, 2007
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
Great Falls Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Fergus Conservation District, 211 McKinley, Suite 3, Lewistown, MT 59457
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
Bureau of Land Management, Miles City Field Office, 111 Garrytown Road, Miles City, MT 59301
State Historic Preservation Office, Helena

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 stabilizing a stream channel head-cut located in upper Collar Gulch Creek. This head-cut has begun to develop due to the ongoing deterioration of an old wood/stone crib dam used for past mining activity. The intent of the project is to protect an important genetically pure population of westslope cutthroat trout. The proposed project is located in the Judith Mountains on property owned by the Bureau of Land Management approximately 15 miles northeast of the city of Lewistown in Fergus County.

Please submit any comments that you have by 5 P.M., April 20, 2007 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project through the Future Fisheries Improvement Program 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 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@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Collar Gulch Creek Channel Relocation 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. 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 Improvement Program.

The Future Fisheries Improvement Program is proposing to provide partial funding for a project calling for stabilizing a channel head-cut located in upper Collar Gulch Creek by re-locating the channel away from a deteriorating old crib dam. The newly relocated channel would rejoin the existing channel approximately 275 feet downstream of the failing structure by dropping through a series of six constructed step-pools. Without this proposed effort, further failure of the deteriorating dam structure could cause this channel head-cut to migrate upstream, resulting in the mobilization of a large amount of bedload and a potential extirpation of the westslope cutthroat trout population. The intent of the project is to protect a genetically pure population of westslope cutthroat trout that is at-risk for extinction due to very low densities and to isolation from other populations of westslope cutthroat trout. The project site is located on Bureau of Land Management property within the Judith Mountains (Attachment 1).

I. Location of Project: This project will be conducted on Collar Gulch Creek located approximately 15 miles northeast of the city of Lewistown within Township 17 North, Range 20 East, Section 32 in Fergus 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.

Collar Gulch Creek currently supports an at-risk population of genetically pure westslope cutthroat trout, a species of special concern in Montana. This population of cutthroat trout resides in only about two miles of stream and past estimates have revealed that only about 300 fish comprise the entire population. Further failure of an old, deteriorating log/stone crib dam could cause a significant channel head-cut to migrate upstream. This head-cut would mobilize a significant amount of channel bedload that would damage aquatic habitat and threaten the survival of this very small, isolated population of cutthroat trout. Relocating the stream channel around this deteriorating dam would protect the existing habitat and would improve upstream passage to approximately 0.75 miles of additional habitat.

III. Scope of the Project:

The project proposes to construct a new stream channel that will divert the existing stream starting at the bend immediately above the deteriorating wood crib dam, directing the new channel along a talus slope located to the south and then rejoin the current channel approximately 275 feet downstream (Attachments 2 and 3). Relocating the channel to the proposed configuration would result in a gradient of about 5.1%. Stream channels exceeding 4% in gradient typically are dominated by step-pool features. As a result, a series of six-step pools would be constructed in the new channel. Each step-pool would be 12 to 14 feet in length, 2.5 feet deep from the crest of the weir and have a maximum jump height of one foot to insure upstream fish passage. The proposed channel alignment would require the removal of some mature trees. This woody material would be used in three ways; including placement into the newly constructed channel to provide for additional pool habitat, placement across fill areas as exposed downed debris and placement across access routes as exposed downed debris. An estimated 360 cubic yards of material would be generated as a result of the new channel construction. This material would be used to fill the old channel, with care taken to preserve the historic relevance of the existing wood crib dam. Excess material would be placed in an existing gully located in the floodplain downstream of the dam. Each fill site, following placement of salvaged topsoil, would be re-vegetated using a mixture of birch and rocky mountain maple seedlings and a native seed mixture approved by the BLM. This project is expected to cost \$47,671.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$19,783.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

The intent of the project is to protect an at risk population of westslope cutthroat trout from extirpation. The project would prevent a large amount of bedload from mobilizing and depositing into the best habitat currently available to this isolated cutthroat trout population. Additionally, the project would enhance upstream fish passage to an additional 0.75 miles of stream as a result of the construction of six step-pools.

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. New channel construction will be conducted in the dry. 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).

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during project construction, but would stabilize quickly following proposed re-vegetation and channel restoration efforts. Overall, the project is expected to improve channel stability.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. However, re-vegetation efforts, in conjunction with channel restoration efforts, 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.

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

Collar Gulch Creek supports a genetically pure westslope cutthroat trout population that is considered to be at risk for extirpation. The population is considered at risk due to low densities occupying a very limited amount of habitat and to isolation from other populations of westslope cutthroat trout. Westslope cutthroat trout are classified as a species of special concern in Montana due to their limited numbers and shrinking habitat. This project would protect the best available habitat from degradation and would enhance upstream fish passage to approximately 0.75 miles of additional habitat.

7. Historic and archaeological sites

The proposed project will likely require an individual Army Corp of Engineers 404 permit and is located on federal lands. 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. To preserve the historic relevance of the wooden crib dam structure, the project proposes to maintain its visibility by grading material placed upstream of the structure only to the height of the top of the structure and avoid placing material within 20 feet downstream of the structure. These efforts would maintain visibility of the structure in a manner to reflect its former function as a dam used for past mining activity.

VI. Explanation of Impacts on the Human Environment.

1. Access to & quality of recreational activities.

It is anticipated that the relocation of this reach of Collar Gulch Creek would improve overall aquatic habitat and, as a result, would enhance resident trout populations. Consequently, the project is expected to improve the recreational fishery in a portion of the stream.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action were taken, the threat that a population of westslope cutthroat trout will be extirpated would remain relatively high. Failure of the deteriorating crib structure and the associated loss of the best available habitat for westslope cutthroat trout would threaten survival of this isolated population.

2. Shorter Channel Realignment Alternative

An alternative new channel alignment involving a shorter path (176 feet) was evaluated but rejected because it would have required the construction of nearly twice as many step-pools, significantly increasing construction costs and making it much more challenging to construct within the confines of the shorter stream reach.

3. The Proposed Alternative

The proposed alternative is designed to relocate approximately 275 feet of Collar Gulch Creek around a deteriorating crib dam structure by constructing a new channel and installing a series of step-pools. These efforts would reduce the extirpation threat toward an isolated population of westslope cutthroat trout and would open access to approximately 0.75 miles of additional habitat.

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 20, 2007.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
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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 Collar Gulch Creek Channel Relocation 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 stabilizing a channel head-cut located in upper Collar Gulch Creek by relocating the channel away from a deteriorating old crib dam. The intent of the project is to protect a genetically pure population of westslope cutthroat trout that currently is at risk for extinction. The proposed project is located in the Judith Mountains on Bureau of Land Management property approximately 15 miles northeast of the city of Lewistown in Fergus 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 Fergus Conservation District, US Bureau of Land Management, 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 George Liknes, MFWP; Confluence Inc.

Recommendation concerning preparation of EIS No EIS required. EA prepared by: Mark Lere Date: February 23, 2007