

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
Kalispell Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Green Mountain Conservation District, P.O. Box 1329, Trout Creek, MT 59874
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Lower Clark Fork Watershed Group, 548 Elk Creek Road, Heron, MT 59844
Joe DosSantos, Avista Corp., P.O. Box 1469, Noxon, MT 59853
Bill and Shirley Newby, 22 Graves Creek, Thompson Falls, MT 59873
Ben Cox, 204 Lincoln, Thompson Falls, MT 59873

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 fish habitat on a reach of Graves Creek, a tributary to the Clark Fork River. The proposed project is located approximately 0.5 miles south of the community of Noxon in Sanders 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 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@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Graves 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. 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 stabilizing an eroding terrace and installing a series of woody debris jams on a reach of Graves Creek to increase pool habitat, habitat diversity and channel complexity. The intent of the project is to increase native fish densities, including bull trout and westslope cutthroat trout, by enhancing aquatic habitat and riparian function. The project site is located approximately 0.5 miles south of the community of Noxon in Sanders County (Attachment 1).

I. Location of Project: This project will be conducted on Graves Creek, a tributary to the Clark Fork River, located approximately 0.5 miles south of the community of Noxon within Township 22 North, Range 30 West, Sections 2 and 11 in Sanders 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.

Graves Creek is considered as one of the four most important bull trout streams found in the lower Clark Fork River system and also supports a population of westslope cutthroat trout. Bull trout are listed as threatened under the Endangered Species Act and westslope cutthroat trout are considered a species of special concern in Montana. Past logging in the upper watershed and in riparian areas of Graves Creek has altered the duration and magnitude of run-off events and has degraded channel and floodplain conditions. These changes have resulted in the loss of fish habitat, especially the quantity and quality of pool habitat. As a result of past land use activities in the basin, Graves Creek is on Montana’s Clean Water Act Section 303(d) list of impaired water bodies. The stream reaches involved in this proposed restoration effort were ranked as high priorities under a recently completed habitat assessment of the drainage. This project proposes to stabilize an eroding terrace and install a series of woody debris jams to improve overall channel function and enhance pool habitat.

III. Scope of the Project:

The project proposes to stabilize 400 feet of eroding terrace by excavating to the bankfull elevation to create a floodplain surface, constructing three large woody debris jams, re-shaping the channel to an

appropriate dimension, pattern and profile and vegetating the constructed floodplain bench (Attachment 2). The most upstream structure would be a straight log vane with a cobble throat. The second structure would be a large woody debris jam placed at the apex of the outside meander bend and the third structure would be a large woody debris jam modified with a straight log vane and cobble throat. A cobble tail-out also would be installed at the downstream-end of the project to reduce the risk of riffle degradation. Additional large woody debris jams will be installed at three sites within a 2,000-foot reach of stream on the outside of meanders where pool habitat features are currently absent (Attachment 3). Each structure would be comprised of rootwads, logs and habitat logs. The rootwads would be installed at the toe of the stream bank and additional logs would be placed throughout the bank profile and would extend into the active channel. These structures would be anchored with the use of large rock buried primarily below finished grade. This project is expected to cost \$47,400.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$20,000.00. The project also is intended to provide landowners an example of healthy fish habitat and to demonstrate a properly functioning channel and how conditions can be improved with the use of proper restoration techniques.

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 the existing channel is expected to create a healthier habitat for aquatic life by reducing sediment input and increasing aquatic diversity. The installation of woody debris jams and log grade control structures will provide for an increase in overhead cover and will create hydraulic conditions for pool scour. Expected improvements in the aquatic habitat should enhance resident trout populations in the stream. Habitat for riparian dependent wildlife also would be improved by re-vegetation efforts proposed 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 will be obtained from the local conservation district 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 an actively eroding terrace and restoring 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 stabilize quickly following proposed re-vegetation and stream bank stabilization efforts. Overall, the project

is expected to reduce bank erosion and 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 stream bank stabilization 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

Graves Creek supports both bull trout and westslope cutthroat trout. Because Graves Creek supports bull trout, the project will be included in Montana Fish, Wildlife and Park's Section 6 conservation plan with the U.S. Fish and Wildlife Service. Restoration of this reach of the stream should improve habitat for both species by creating a more stable channel morphology, restoring floodplain function, and increasing pool habitat.

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. Funding will not be released until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

1. Access to & quality of recreational activities.

It is anticipated that the restoration of Graves 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 the stream.

2. Locally adopted environmental plans and goals.

A local watershed group, called the Lower Clark Fork Watershed Group, serves as an umbrella organization for seven watershed councils formed to improve the water resources on the lower Clark Fork River and associated tributaries. Restoration work proposed in this project was reviewed and approved by this organization.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, fish habitat within this reach of Graves Creek will remain limited due to excessive sediment loading, low pool frequency and the associated lack of stable woody debris jams. Bull trout and westslope cutthroat trout populations in this reach of Graves Creek will remain below potential.

2. The Proposed Alternative

The proposed alternative is designed to reduce sediment loading by stabilizing an actively eroding terrace and enhance fish habitat with the installation of large woody debris jams. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations in the stream and possibly the Clark Fork River. Additionally, the project would be used to demonstrate effective methods used for stream restoration to local landowners.

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 Graves 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 stabilizing an actively eroding terrace and installing a series of large woody debris jams into a reach of Graves Creek to increase pool habitat, habitat diversity and channel complexity. The intent of the project is to increase native fish densities, including bull trout and westslope cutthroat trout. The project site is located on Graves Creek, a tributary to the Clark Fork River, approximately 0.5 miles south of the community of Noxon in Sanders 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 Green Mountain Conservation District, AVISTA, 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 Mike Miller, Lower Clark Fork Watershed Group; River Design Group, Inc.

Recommendation concerning preparation of EIS No EIS required. EA prepared by: Mark Lere

Date: February 27, 2007