

August 30, 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
Missoula Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Bitterroot Conservation District, 1709 North First Street, Hamilton, MT 59840
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Will McDowell, 4660 Spurgin Road, Missoula, MT 59804
Tri-State Water Quality Council, 101 N. Fourth Avenue, Suite 105, Sandpoint, ID 83864
MT Department of Natural Resources and Conservation, P.O. Box 713, Hamilton, MT 59840
Wheelbarrow Creek Ranch, 1506 Wheelbarrow Creek Road, Stevensville, MT 50870

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a channel and riparian restoration project on a degraded reach of Wheelbarrow Creek, a tributary to Grayhorse Creek and ultimately the Bitterroot River. This proposed project is located approximately nine miles northeast of the town of Stevensville in Ravalli County.

Please submit any comments that you have by 5:00 P.M., October 2, 2006 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
Wheelbarrow Creek Channel Stabilization and Riparian Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which 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 channel stabilization and riparian restoration within a 3,500-foot reach of Wheelbarrow Creek, a tributary to Grayhorse Creek and ultimately the Bitterroot River. The intent of this project is to improve channel stability, enhance aquatic habitat for native fish and wildlife, and reduce sediment loading into downstream waters. The project site is located on Wheelbarrow Creek approximately nine miles northeast of the town of Stevensville in Ravalli County (Attachment 1).

I. Location of Project: This project will be conducted on Wheelbarrow Creek located approximately nine miles northeast of the town of Stevensville within Township 10 North, Range 19 West, Section 36 in Ravalli County. The project site is located on a school trust section owned by the State of Montana.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year plan of operation for the fisheries program is to “restore and enhance degraded habitat” 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.

Although fish populations have not been formally surveyed, Wheelbarrow Creek likely supports westslope cutthroat trout, longnose sucker, and slimy sculpin. Historic land use activities, including a railroad embankment placed in the floodplain, the removal of riparian shrubs and overgrazing by livestock, have contributed to the degraded stream channel and riparian conditions. The proposed project would focus on a critical 3,500-foot reach of stream identified in a comprehensive watershed assessment as one of the most degraded areas and largest sources of sediment in the entire 71 square-mile watershed. Currently, this reach of stream suffers from excessive stream bank erosion, erosive gullies, degraded riparian conditions and overall poor aquatic habitat for fish and riparian dependent wildlife. The new lessee of the school trust section, where this reach of stream is located, currently is improving their pasture management and is committed to maintaining the proposed improvements into the future.

III. Scope of the Project:

The project proposes to install 6,500 feet of new riparian fencing, harden and improve an existing water gap for livestock water, reconstruct 625 feet of unstable channel, place bio-engineered vegetation treatments (soil lifts and coir logs) along 350 feet of stream channel, construct four log grade control structures and plant 363 shrubs over 11,000 square-feet of the riparian corridor. Channel construction will involve moving the stream away from high eroding stream banks created by an old railroad embankment, re-sloping and seeding newly constructed stream banks and constructing a more narrow and deeper

channel cross section with a stable pool-riffle frequency (Attachment 2). The treated riparian corridor would be excluded from livestock grazing for a minimum period of five years, followed by the potential of allowing short-term grazing within the riparian pasture based upon ongoing evaluation of project recovery. Proposed riparian fencing would be designed to accommodate the movement of elk, with fence wire not exceeding 42 inches on total height, spacing between top wires set at 12 inches and the bottom wire spaced at least 16 inches above the ground. This project is expected to cost \$47,912.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$30,992.00 to complete the project. Geum Environmental Consulting, Inc. and WestWater Consultants, Inc., two stream and riparian restoration companies, prepared the restoration plan for 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.

The aquatic and riparian habitat on a 3,500-foot reach of Wheelbarrow Creek would be improved by stabilizing a series of eroding stream banks, re-shaping some over-widened channel sections, and restoring the riparian vegetative community. This work is expected to create healthier habitat for aquatic life by reducing sediment loading, creating greater environmental complexity and restoring migratory connectivity. Expected improvements in the aquatic habitat should enhance westslope cutthroat trout and other resident species of fish. Habitat for riparian wildlife also would be improved by enhancing the riparian vegetative community.

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 to determine requirements to meet the federal Clean Water Act (404 permit). In the long term, restoring the existing channel 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 construction, but would be stabilized with re-vegetation efforts. Overall, the project is expected to reduce bank erosion and improve channel stability.

4. Vegetation cover, quantity and quality.

Riparian vegetation would be disturbed during the period of construction. However, proposed re-vegetation efforts and improved management of livestock grazing within the stream corridor would result in an overall improvement to the riparian vegetation.

5. Aesthetics.

During the period of construction, aesthetics would be adversely impacted due to on-site construction activities and the presence of heavy equipment. Construction is expected to occur over a two-week period. In the long term, aesthetics would be enhanced by restoring a degraded reach of Wheelbarrow Creek to a healthier and more complex stream environment.

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

Wheelbarrow Creek likely supports resident westslope cutthroat trout, a species of special concern in Montana. Proposed improvements made to a 3,500-foot reach of Wheelbarrow Creek are expected to benefit this westslope cutthroat trout population.

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 project intends to improve the diversity of fish habitat and riparian condition within a degraded reach of Wheelbarrow Creek. The project is located on a section of school trust land owned by the State of Montana and borders Montana Fish, Wildlife and Parks Threemile Wildlife Management Area. Although not considered to be much of a recreational fishery, public use on Wheelbarrow Creek may benefit from this proposed work.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of Wheelbarrow Creek will remain degraded, aquatic and riparian habitat will remain in poor condition and excessive sediment loads will continue to be introduced into the watershed.

2. Riparian Protection Alternative

Under this alternative, the stream corridor would be protected from livestock grazing for a sufficient period of time to allow for recovery of the riparian vegetation. Unstable stream banks would be allowed to continue to erode until such time they reached a stable angle of repose and re-vegetation occurred naturally. The time period required for recovery for this alternative is unknown, but certainly would be significantly longer than for the preferred alternative.

3. The Proposed Alternative

The proposed alternative is designed to restore a 3,500-foot reach of degraded channel on Wheelbarrow Creek. This restoration work would remove a chronic source of sediment, provide for more diverse aquatic habitat and improve the riparian vegetative community. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to enhance the westslope cutthroat trout population in the Wheelbarrow/Threemile Creek 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 will be published on Montana Fish, Wildlife and Park's web page: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on October 2, 2006.

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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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 Wheelbarrow Creek Channel Stabilization and Riparian Restoration Project
 Division/Bureau Fisheries Division -Future Fisheries Improvement
 Description of Project The Future Fisheries Improvement Program is proposing to provide partial funding for a project calling for the restoration of a degraded 3,500-foot reach of Wheelbarrow Creek, a tributary to Grayhorse Creek and ultimately the Bitterroot River. This reach of stream was degraded historically as a result of railroad building, removal of riparian vegetation and overgrazing by livestock. The intent of this project is to improve channel stability and enhance habitat conditions for fish and riparian dependent wildlife. The project site is located approximately nine miles northeast of the town of Stevensville in Ravalli 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 Bitterroot Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office, Montana Department of Natural Resources and Conservation

Individuals or groups contributing to this EA Tri-State Water Quality Council, WestWater Consultants, Inc.; Geum Environmental Consulting, Inc.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: August 17, 2005
