

August 27, 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
Bozeman Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
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, 420 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
Arctic Grayling Recovery Program, P.O. Box 4089, Bozeman, MT 59772
Montana Department of Natural Resources and Conservation, ATTN: Mike Roberts, P.O. Box 201601,
Helena MT 59620-1601
Mr. Harold Peterson, 1801 Swamp Creek Road, 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 restoring an impaired reach of the South Fork Big Swamp Creek that currently runs through a confined animal feeding operation. The project calls for rebuilding a new channel within the existing floodplain and constructing a new riparian fence to prevent livestock access to the new channel. The intent of the project is to enhance overall aquatic and riparian habitat for the benefit of fluvial Arctic grayling and other species of fish. The proposed project is located approximately 4.0 miles north of the community of Jackson in Beaverhead County.

Please submit any comments that you have by 5:00 P.M., September 28, 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
South Fork Big Swamp Creek Aquatic Habitat Enhancement 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.

The Future Fisheries Improvement Program is proposing to provide partial funding for a project calling for the restoration of an impaired reach of the South Fork of Big Swamp Creek. This reach of stream currently flows through an active confined animal feeding operation and, as a result, is devoid of fisheries habitat and riparian vegetation. The existing stream reach also suffers from nutrient, sediment and thermal water quality impairments. The project calls for excavating a new meandering channel within the existing floodplain and constructing a riparian fence to exclude livestock away from the restored reach. The intent of the project is to enhance habitat for fluvial Arctic grayling and other native and sport fish species within this reach of the South Fork Big Swamp Creek. The project site is located on property owned by the Peterson Brothers Cattle Company approximately 4.0 miles north of the community of Jackson in Beaverhead County (Attachment 1).

I. Location of Project: This project will be conducted on a reach of the South Fork Big Swamp Creek, located approximately 4.0 miles north of the community of Jackson within Township 5 South, Range 15 West, Section 5 in Beaverhead County.

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.

The upper Big Hole River Basin, with the exception of a few attempts at re-founding fluvial grayling in several southwestern Montana waters, supports the last river dwelling Arctic grayling in the lower 48 states. These fish are classified as a “species of special concern” in Montana because of their low numbers and shrinking distribution. Tributaries to the upper Big Hole River provide for spawning and rearing habitat for a variety of fish species. Additionally, sampling efforts indicate that fluvial Arctic grayling heavily utilize pool habitat in these streams for thermal refugia during the summer months.

A reach of the South Fork Big Swamp Creek, as it currently flows through a winter livestock corral facility, is completely devoid of fish habitat and riparian vegetation. This over-widened reach of stream presently flows directly over a layer of livestock manure and experiences nutrient, sediment and water quality impairments. This proposed project would restore the aquatic and riparian habitat on a 1,070-foot impaired reach of the South Fork Big Swamp Creek by re-constructing the stream channel and by controlling livestock access to the newly restored site.

III. Scope of the Project:

The project calls for excavating a new channel within the existing floodplain in a manner that would closely replicate the historic meander pattern, with channel dimensions and profiles that would correspond

to an existing reference reach (Attachments 2 and 3). All accumulated livestock manure would be removed from within the floodway prior to new channel construction. Banks of the new channel would be lined with wetland sod mats obtained from an unrelated, but simultaneous wetland restoration project located about 8.5 road miles from the project site. The remaining floodplain would be re-vegetated with native seed mix; mature willow transplants and containerized willow obtained from the State Nursery. Material excavated from the new channel would be used to fill the old channel to a graded level. A small off-channel wetland would be constructed at the downstream end of the project site to help capture and settle overland flow from the corral system. A new riparian fence would be constructed to exclude livestock from the riparian corridor. A gated water gap would be provided to act as an emergency alternative to an existing off-channel stock water system.

The project is expected to cost \$51,450.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$24,843.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Restoring the aquatic and riparian habitat on this reach of the South Fork Big Swamp Creek is expected to benefit fluvial Arctic grayling, as well as other species of fish. Riparian fencing will help insure long-term recovery. Habitat for riparian dependent wildlife also would be improved by controlling livestock grazing within the riparian corridor and by planting riparian shrubs.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur in the dry and 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). Completion of the project would significantly reduce a major source of nutrient, sediment and thermal loading in the South Fork Big Swamp Creek.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during channel reconstruction. Soils disturbed by construction will be re-seeded with native vegetation and re-graded banks will be stabilized with the placement of dense sod mats and transplanted willow clumps. Overall, the project is expected to improve soil quality and stability.

4. Vegetation cover, quantity and quality.

An aggressive re-vegetation effort, coupled with the installation of fencing along the riparian corridor, is expected to significantly enhance the riparian vegetative community. Currently, this reach of stream is devoid of riparian vegetation.

5. Aesthetics.

Aesthetics would be negatively affected during project construction because of ground disturbance and the presence of heavy equipment. These negative effects would be relatively short term since the project is expected to be completed over an approximately one-month period. In the longer term, this project is expected to enhance aesthetics by restoring aquatic and riparian habitat on the significantly impaired reach of stream.

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

Fluvial Arctic grayling are native to Montana and are classified as a “species of special concern” because of their declining numbers and shrinking distribution. This project would create a more complex aquatic environment and remove a significant source of nutrient, sediment and thermal loading in the stream. A more complex and healthy aquatic environment is expected to enhance grayling and other species of fish residing in the Big Hole River.

9. 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.

4. Agricultural or industrial production.

The project calls for excluding livestock from the newly created riparian corridor for a minimum period of five years to allow for recovery of the vegetative community. Limited grazing will be allowed in the riparian corridor following this minimum five-year rest period to encourage plant vigor.

7. Access to & quality of recreational activities.

This proposed project is expected to enhance populations of fish residing in the upper Big Hole drainage and, as a result, the associated recreational fishery.

13. Locally adopted environmental plans & goals.

This project is part of a drainage-wide conservation effort being implemented through the Candidate Conservation Agreement with Assurances (CCAA) to improve habitat for fluvial Arctic grayling.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of the South Fork Big Swamp Creek will remain significantly degraded, with continued nutrient, sediment and thermal loading into the stream. Fisheries habitat will continue to be lacking and the riparian corridor will remain devoid of vegetation.

2. Move Corral System to a New Location and Re-build Degraded Channel

Under this alternative, the corral system would be moved to a new location completely away from the stream corridor and a new channel would be constructed. The lack of an alternative corral location makes this action untenable.

3. The Proposed Alternative

The proposed alternative would enhance aquatic and riparian habitat on an impaired reach of the South Fork Big Swamp Creek by reconstructing a new stream channel within the existing floodplain, restoring the riparian vegetative community and excluding livestock from the riparian corridor. This alternative would remove a significant source of nutrient, sediment and thermal loading into the stream and would create habitat for aquatic and riparian dependent wildlife.

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 PM on September 28, 2007.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue, Helena, MT 59620
Telephone: (406) 444-2432
e-mail: mlere@mt.gov

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 South Fork Big Swamp Creek Aquatic Habitat Enhancement 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 the restoration of an impaired reach of the South Fork Big Swamp Creek. This reach of stream currently flows through an active confined livestock feeding operation and, as a result, is nearly devoid of fisheries and riparian habitat. The work would involve re-constructing a new channel within the existing floodplain and installing a riparian fence to exclude livestock from the streamside corridor. The intent of the project is to enhance habitat for fluvial Arctic grayling and other species of fish. The project site is located approximately 4.0 miles north of the community of Jackson 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		

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production			X			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 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 Jeffrey Everette, U.S. Fish and Wildlife Service; Confluence Consulting, Inc.
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: August 7, 2007