

September 4, 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
Bozeman Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Jefferson Valley Conservation District
Lewis and Clark Chapter Trout Unlimited, P.O. Box 475, Twin Bridges, MT 59754
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Bruce Rehwinkel, Trout Unlimited, 101 Manor Drive, Townsend, MT 59644
James Klos, 2953 Star Ridge Road, Bozeman, MT 59715

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 project calling for the restoration of aquatic habitat in lower Fish Creek, a tributary to the Jefferson River. The intent of the project is to create spawning habitat and enhance the recruitment of trout to the Jefferson River. The project site is located approximately 4 miles north of the community of Waterloo in Jefferson County.

Please submit any comments that you have by 5:00 P.M., October 5, 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
Lower Fish Creek - Klos Section - Channel 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 Program is proposing to provide partial funding for a project designed to restore aquatic habitat in approximately 3,620 feet of lower Fish Creek, a tributary to the Jefferson River. The intent of this project is to enhance recruitment of salmonids into the Jefferson River by creating additional spawning and rearing habitat. The project would compliment a previous channel restoration project that was recently completed on an upstream reach of the channel. The project site is located approximately 4 miles north of the town of Waterloo in Jefferson County (Attachment 1).

I. Location of Project: This project will be conducted on lower Fish Creek, a tributary to the Jefferson River, located within Township 1 South, Range 5 West, Section 1 and Township 1 North, Range 4 West, Section 31 in Jefferson 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.

A significant limitation to the recreational fishery in the Jefferson River is inadequate recruitment of young trout. Currently, the Jefferson drainage has only a handful of tributaries that contribute recruitment of young fish to main-stem populations. Lower Fish Creek has the potential to be developed into another spawning tributary within the Jefferson River system. Recruiting young trout from lower Fish Creek would provide additional fish to a reach of the Jefferson River that is lacking viable tributaries. Presently, there are no functional spawning tributaries for nearly 19 miles between the confluence of Willows Springs Creek and the Boulder River.

Currently, Fish Creek is in a very degraded condition, with the exception of a 7,500-foot recently restored reach located upstream of this proposed project site. Upstream of State Highway 55, Fish Creek is commonly dry primarily due to a trans-basin diversion providing domestic water to the city of Butte. Downstream of State Highway 55, Fish Creek becomes re-charged with water from groundwater influences and the conveyance of river water for irrigation. Summer flow typically varies between 45 and 55 cubic feet per second (cfs), while winter flow varies between 5 and 11 cfs. The higher flow experienced during the summer is due to the addition of irrigation water diverted from the Jefferson River. Within the reach proposed for restoration, aquatic habitat conditions are degraded due to heavy loads of fine silt smothering the existing streambed gravel. This silt was created over the years by uncontrolled riparian grazing by livestock. This project calls for restoring a reach of Fish Creek by excavating excessive streambed sediment, adjusting channel morphology, replacing an irrigation diversion structure and fencing the riparian corridor. The project would complement recently completed restoration effort located on and

upstream reach.

III. Scope of the Project:

This project calls for enhancing aquatic and riparian habitat on a 3,620-foot reach of lower Fish Creek (Attachment 2). This reach, divided into two separate sections as a result of ownership boundaries, is located about 4 miles upstream from the confluence with the Jefferson River. Channel restoration calls for excavating the excess in-channel sediment that varies between 6 inches and 24 inches in depth and narrowing over-widened reaches of channel from the present range of 25 to 35 feet to channel widths ranging between 18 and 25 feet. Additionally, the project calls for installing a pin and plank structure on an existing diversion to improve sediment transport and to continue to provide for needed irrigation water. Construction of two, free span, four wheeler bridges would provide access to isolated portions of the property. The project also will install 2,026 feet of jackleg fencing to prevent concentrated livestock use within the riparian corridor. Future plans call for channel restoration work to be continued downstream to the confluence with the Jefferson River as funds become available and as other landowners agree to participate.

This project is expected to cost \$76,607.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$35,471.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Restoring a portion of this degraded stream is expected to create new spawning and rearing habitat for migratory trout that reside in the Jefferson River. This newly created spawning habitat should enhance recruitment of fish into the Jefferson River. Proposed streamside fencing is expected to enhance habitat for riparian dependent wildlife.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, 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 the requirements to meet the federal Clean Water Act (404 permit).

3. Geology, soil quality and moisture.

Soils within the footprint of the restored channel would be disturbed during construction, but would be stabilized with the placement of salvaged sod. In the long-term, the elimination of concentrated

livestock use within the riparian corridor would allow vegetation to further stabilize the site.

4. Vegetation cover, quantity and quality.

Vegetation within the footprint of the restored channel would be disturbed during construction. Re-vegetation efforts associated with the new channel construction and the installation of riparian fencing should mitigate for this disturbance.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would be enhanced by restoring a degraded reach of stream to a healthier and more natural stream environment.

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 activities.

The intent of the project is to improve recruitment of salmonids to the Jefferson River. As a result, the recreational fishery on the Jefferson River is expected to improve. The project does not intend to provide a recreational fishery on Fish Creek proper.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of lower Fish Creek will remain degraded, providing poor habitat for the reproduction of salmonids. As a result, this reach of stream will continue to provide only minimal recruitment of salmonids to the Jefferson River. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

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. Over an unknown period of time, the channel would tend to narrow as riparian vegetation recovered, providing for greater energy to scour the fine stream bottom sediment. 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 spawning habitat within a degraded tributary to the Jefferson River by excavating stream bottom sediment, adjusting channel dimensions and fencing the riparian corridor to provide for improve livestock grazing management. This alternative would improve trout spawning habitat and would be expected to increase trout populations both in the creek and in the Jefferson River. Additionally, controlling concentrated livestock use in the riparian corridor is expected to enhance 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 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 October 5, 2007.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
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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 Lower Fish Creek - Klos section - 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 designed to restore salmonid spawning habitat in approximately 3,620 feet of lower Fish Creek, a tributary to the Jefferson River. The intent of the project is to enhance recruitment of rainbow trout and brown trout to the Jefferson River. The project site is located approximately 4 miles north of the community of Waterloo in Jefferson 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		
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

	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 Jefferson Valley 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 Bruce Rehwinkel, Trout Unlimited, NRCS.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: August 16, 2007