

February 20, 2009
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
Billings Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Ave., Bozeman, MT 59715
Sweet Grass County Conservation District, P.O. Box 749, Big Timber, MT 59011
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Chuck Roloff, NRCS, P.O. Box 749, Big Timber, MT 59011
Joe Brooks Chapter of Trout Unlimited, P.O. Box 1378, Livingston, MT 59047
Montana Trout Foundation, P.O. Box 3165, Bozeman, MT 59772
Robert Zaideman, 518 Romona Road, Wilmette, IL 60091
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 spawning channel enhancement project on Kickabuck Spring Creek, a small tributary to the Yellowstone River located near the town of Big Timber. The intent of the project is to create high quality spawning habitat for Yellowstone cutthroat trout. This proposed project is located approximately two miles east of Big Timber in Sweet Grass County.

Please submit any comments that you have by 5:00 P.M., March 23, 2009 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding of this project 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
Kickabuck Spring Creek Spawning Habitat Enhancement 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. 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 designed to enhance spawning habitat on a 1,400-foot reach of Kickabuck Spring Creek, a small tributary to the Yellowstone River. The intent of the project is to create spawning habitat for fluvial Yellowstone cutthroat trout and to enhance the recruitment of this species of special concern to the Yellowstone River. The project site is located approximately 2 miles east of the town of Big Timber in Sweet Grass County (Attachment 1).

I. Location of Project: This project will be conducted on Kickabuck Spring Creek, an unmapped tributary to the Yellowstone River, located approximately 2 miles east of Big Timber within Township 1 North, Range 15 East, Section 7 in Sweet Grass 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.

Yellowstone cutthroat trout residing in the reach of the Yellowstone River located near Big Timber have markedly declined over the last decade and this decline has been attributed to limited tributary spawning habitat. Kickabuck Spring Creek is an unmapped tributary to the Yellowstone River that maintains ample flow of cool water throughout the summer months, but spawning habitat currently ranges from marginal to poor due to the lack of channel integrity. Past livestock grazing appears to have contributed to this degraded state. Because Kickabuck Spring Creek maintains a substantial flow of cool water during the descending limb of the spring hydrograph and maintains ample flow during the summer months, this proposed project presents a good opportunity to create additional spawning habitat for Yellowstone cutthroat trout. This proposed project calls for creating approximately 1,400 feet of spawning habitat in the spring creek. Additionally, the landowner, with assistance from the Natural Resource and Conservation Service, will be developing a grazing management plan that is compatible with maintaining the restored channel and the riparian vegetative community.

III. Scope of the Project:

The project proposes to superimpose a new channel over and adjacent to the existing channel in a manner that would increase sinuosity, reduce channel width, increase channel depth and flatten channel gradient (Attachment 2). The project would create approximately 1,400 feet of channel with a gravel bed that would provide high quality spawning habitat for fluvial Yellowstone cutthroat trout. Construction would be undertaken outside of the irrigation season to minimize saturated soil conditions. The existing site is a fen wetland, where, when saturated, the area consists of a floating sod mat underlain by a fluidized bed of fine-grained material. Immediately adjacent to the existing channel, however, the stream banks are solidly anchored to a stable sub-layer of soil and gravel. New channel construction would involve tying construction materials into this stable sub-layer, while allowing adjacent fen wetlands to continue to float as groundwater levels fluctuate. A tracked excavator would be used to over-excavate the new channel to the depth of the stable sub-layer. Imported gravel with diameters ranging between 0.5 to 2 inches would then be placed on this stable base to a depth where finished grade would be achieved (Attachment 3). Borrowed sod mats would be stacked in layers to meet design elevations for bank height. All disturbed areas would be re-vegetated with a mix of native wetland forbs and wetland graminoids. A grazing management plan and associated temporary electric fencing, in conjunction with livestock behaviors that naturally avoid the fen wetland, will be used to control livestock within the restored stream channel. This project is expected to cost \$61,071.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$38,857.00 to complete 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.

Creating 1,400 feet of spawning habitat in Kickabuck Spring Creek is expected to enhance Yellowstone cutthroat trout residing in the river reach located near Big Timber. Additionally, re-vegetation efforts on disturbed sites are expected to enhance the plant community and increase structural diversity.

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 (Natural Streambed and Land Preservation Act) 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 and soil quality, stability and moisture.

Soils within the footprint of the restored stream would be disturbed during construction of the new channel. The newly constructed stream would be stabilized by placing layers of imported gravel on top of the existing stable sub-layer of material. Stream banks would be stabilized using stacked sod mats obtained from a borrow site. The proposed design includes preserving the existing fen wetland. All areas disturbed during the construction phase will be re-vegetated with native forbs and wetland graminoids. Additionally, implementation of a grazing management plan is expected to enhance overall health of the stream-wetland complex.

4. Vegetation cover, quantity and quality.

Riparian vegetation would be disturbed during the period of construction. However, proposed re-vegetation efforts and the implementation of a grazing management 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 to three week period.

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

Yellowstone cutthroat trout is a species of special concern in Montana due to declining numbers and limited distribution. Creation of new spawning habitat on Kickabuck Spring Creek is expected to benefit fluvial Yellowstone cutthroat trout residing in the Yellowstone River near Big Timber. The project site is located within a fen wetland, consisting of a floating sod mat underlain by a fluidized bed of fine grain material, when saturated. This wetland type is fragile and proposed construction methods are designed to insure its preservation.

7. 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. 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.

This project intends to create new spawning habitat for fluvial Yellowstone cutthroat trout residing in the Yellowstone River. As a result, the recreational fisheries within this reach of river are expected to improve.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the potential for enhancing spawning habitat for Yellowstone cutthroat trout in Kickabuck Spring Creek will remain unrealized. Recruitment of additional Yellowstone cutthroat trout to the Yellowstone River would not occur and recreational fishing opportunities will remain reduced.

2. The Proposed Alternative

The proposed alternative is designed to create approximately 1,400 feet of high quality spawning habitat in Kickabuck Creek. This new spawning habitat would be expected to increase recruitment of Yellowstone cutthroat trout to the Yellowstone River and ultimately enhance recreational fishing opportunities.

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 Fish, Wildlife and Parks Commission also will review the proposed project 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 March 23, 2009.

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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Helena, MT 59620
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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 Kickabuck Spring Creek Spawning Habitat Enhancement 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 designed to enhance spawning habitat on a 1,400-foot reach of Kickabuck Spring Creek, an unmapped tributary to the Yellowstone River. The intent of the project is to increase the recruitment of Yellowstone cutthroat trout to the Yellowstone River. The project site is located approximately two miles east of the town of Big Timber in Sweet Grass 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 Sweet Grass County Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office, Natural Resources and Conservation Service Individuals or groups contributing to this EA Carol Endicott, Montana Fish, Wildlife and Parks; Oasis Environmental

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere
Date: February 2, 2009