

March 3, 2008
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
Park Conservation District, 5242 Highway 89 South, Livingston, MT 59047
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Elise Donahue, P.O. Box 60, Clyde Park, MT 59018

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a stream bank stabilization and riparian enhancement project on upper reaches of the Brackett Creek watershed, a tributary drainage to the Shields River. This proposed project is located on property owned by the Double D Ranch approximately nine miles west of the community of Clyde Park in Park County.

Please submit any comments that you have by 5:00 P.M., March 31, 2008 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion 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
Upper Brackett Creek Drainage Channel Stabilization and Riparian 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. 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 the stabilization of approximately 70 feet of Brackett Creek and 600 feet of Miles Creek, a tributary to Brackett Creek, to decrease excessive sediment loading and improve overall aquatic and riparian habitat. These proposed stream bank stabilization efforts are a small part of a much larger and independent land management strategy directed toward promoting enhanced vigor, diversity and function of the existing vegetative community. The project site is located on property owned by the Double D Ranch approximately nine miles west of the community of Clyde Park in Park County (Attachment 1).

I. Location of Project: This project will be conducted on a 70-foot reach of Brackett Creek and a 600-foot reach of Miles Creek, located nine miles west of the town of Clyde Park within Township 1 North, Range 8 East, Section 6 and Township 2 North, Range 8 East, Section 31 in Park 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 met this goal.

The upper Brackett Creek drainage supports a mixed fishery, including genetically pure Yellowstone cutthroat trout, a species of special concern in Montana, as well as brown trout, brook trout, mountain whitefish and mottled sculpin. Past grazing management practices and the establishment of non-native pastureland grasses within this reach of the drainage have led to degradation of the riparian corridor and associated stream channel. Recently, the landowner has implemented a ranch-wide grazing management strategy to insure sufficient pasture rest that is needed to meet vegetative goals and avoid over-grazing by livestock. This change in land-use is expected to lead to recovery of the riparian and aquatic habitat in most areas. However, in some specific stream reaches, the presence of actively eroding stream banks, lack of riparian shrubs and the dominance of non-native pastureland grass point toward the need for some active channel stabilization effort to facilitate recovery. This proposed effort would include sloping vertical stream banks to a stable angle of repose, installing erosion control fabric, re-seeding and planting riparian shrubs.

III. Scope of the Project:

The project proposes to stabilize a 70-foot reach of eroding stream bank on Brackett Creek and 600 feet of eroding stream banks located within a 0.5-mile reach of Miles Creek. The eroding banks will be mechanically re-slope to between a 2:1 to 3:1 angle of repose. In some reaches, the establishment of a floodplain toe may be determined to be necessary to reduce channel entrenchment and create a suitable area for the establishment of sedges. The newly sloped banks will then be stabilized with the placement of erosion control fabric and seeded with a native grass mixture. The planting of riparian shrubs would follow reference conditions found on Miles Creek, using a mix of willows and alders. Willow stems will be harvested from local donor sites, rooted at the state nursery and planted as bare-root stock the following spring. Alder seedlings will be obtained from local nursery stock and would be planted following bank sloping and the placement of the erosion control fabric. This project is expected to cost \$15,120.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$14,160.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing a 70-foot reach of Brackett Creek and 600 feet of Miles Creek is expected to locally reduce sediment input into the two streams and create a healthier habitat for aquatic life by creating greater environmental complexity. Habitat for riparian dependent wildlife would be improved by enhancing the woody vegetation community and by controlling livestock grazing within the riparian corridor. Although not directly associated with this project, the newly implemented grazing management plan is expected to lead toward the recovery of degraded channel and riparian habitat in the upper Brackett Creek drainage.

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. 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 needed to meet the federal Clean Water Act. In the long term, stabilizing eroding stream banks on a short reach of Brackett Creek and on Miles Creek 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 be

stabilized following proposed re-vegetation efforts. Overall, the project is expected to reduce bank erosion by stabilizing a series of eroding cut-banks on Brackett and Miles creeks.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. However, disturbance primarily would be confined to stream banks dominated by smooth brome, a non-native pasture grass with a shallow and poor soil binding rooting structure. The proposed re-vegetation efforts would act to mitigate these disturbances and replace the brome with native grasses. Control of livestock grazing within the riparian corridor would protect the vegetative community and encourage the recovery of woody shrubs along the stream margin.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment during the short term. Mechanical bank sloping is expected to occur over a one to two week period. In the long term, aesthetics would be enhanced by stabilizing a series of eroding cut-banks on Brackett and Miles creeks and by improved livestock management over the entire ranch.

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

The upper Brackett Creek drainage supports genetically pure Yellowstone cutthroat trout, a species of special concern in Montana. Proposed improvements derived from this project, as well as the recent land management changes associated with the ranch, are expected to benefit Yellowstone cutthroat trout.

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.

None.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, these reaches of Brackett and Miles creeks, for the foreseeable future, will continue to be relatively unstable, sloughing banks will continue to add sediment into the stream and habitat for fish and riparian dependent wildlife will remain in a degraded condition. 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 under this alternative is unknown, but certainly would be significantly longer than for the preferred alternative.

2. Bank stabilization using blanket rock rip-rap

Rock rip-rap would provide greater resistance to the existing shear stresses created in the streams. However, blanket rip-rap would both eliminate riparian vegetation on these sections of stream and diminish the over-all natural function of the stream channels.

3. The Proposed Alternative

The proposed alternative is designed to stabilize a 70-foot reach of Brackett Creek and 600 feet of Miles Creek by re-sloping vertical stream banks, installing erosion control fabric, re-seeding with a native grass mixture and planting riparian shrubs. This proposed effort, combined with the recent changes in land use over the entire ranch, is expected to decrease excessive sediment loading and improve overall aquatic and riparian habitat.

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 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 webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on March 31, 2008.

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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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 Upper Brackett Creek Drainage Channel Stabilization and Riparian 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 stabilization of approximately 70 feet of Brackett Creek and 600 feet of Miles Creek to decrease excessive sediment loading and improve overall aquatic and riparian habitat. The project site is located on property owned by the Double D Ranch approximately 9 miles west of the town of Clyde Park in Park 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		
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 Park 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 Carol Endicott, Montana Fish, Wildlife and Parks
 Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere
Date: February 6, 2008