April 13, 2005
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
Missoula Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
North Powell Conservation District, 1 Hollenback Road, Deer Lodge, MT 59722
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
John Bowe, 33 US Highway 10 South, Garrison, MT 59731

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 to a project planned to stabilize approximately 325 feet of eroding stream bank on the Little Blackfoot River with the placement of three log spur vanes and the restoration of the riparian vegetative community. This proposed project is located near the community of Garrison in Powell County.

Please submit any comments that you have by 5:00 P.M., May 16, 2005 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
Little Blackfoot River Bank Stabilization 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 to a project calling for the stabilization of a 325-foot section of eroding stream bank on the Little Blackfoot River using three log spur vanes. The project site is located on the Little Blackfoot River near the community of Garrison in Powell County (Attachment 1).

I. Location of Project: This project will be conducted on the Little Blackfoot River located near the community of Garrison within Township 9 North, Range 10 West, Section 24 in Powell 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 may help met this goal.

The lower Little Blackfoot River primarily supports populations of brown trout, mountain whitefish and sculpin. Historic overgrazing of the native riparian vegetation on the proposed project site allowed for the invasion of shallow rooted non-native vegetation, resulting in the loss of the native deep-rooted vegetation that provides erosion resistance along the stream bank. The loss of this native riparian vegetation has led to excessive bank erosion at the project site, contributing excessive sediment to downstream waters.

III. Scope of the Project:

The project proposes to stabilize approximately 325 feet of eroding bank on the Little Blackfoot River (Attachment 2). The proposal calls for installing three log spur vanes in an upstream configuration at a 25 to 30 degree angle. The vanes will be comprised of a combination of large rock and a log bole at least 20 feet in length. In addition, the stream bank will be sloped to a stable angle of repose and will be re-vegetated with salvaged sod mats, sowing native grass seed, planting red osier dogwood and service berry seedlings, and sprigging willow cuttings. The stream margin will be permanently fenced to encourage the recovery of the riparian vegetative community. This project is expected to cost $7,062.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $4,855.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing 325 feet of eroding stream bank is expected to locally reduce sediment input into the stream and may create some holding water for adult fish. Habitat for riparian dependent wildlife also would be locally improved by enhancing the vegetation within the riparian corridor.

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 needed to meet the federal Clean Water Act (404 permit). In the long term, stabilizing this eroding stream bank 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 channel construction, but would quickly stabilize following proposed re-vegetation efforts. Overall, the project is expected to reduce bank erosion by stabilizing an eroding cut-bank.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover, primarily non-native grasses, would be disturbed during the period of construction. However, proposed re-vegetation efforts would act to mitigate these disturbances.

5. Aesthetics.

Aesthetics would be negatively impacted during the estimated three days of project construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would not be impacted.

6. 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.

1. Access to & quality of recreational activities.

Stabilization of this eroding stream bank is expected to improve overall aquatic habitat within this short reach of the Little Blackfoot River and, consequently, would be expected to attract fish and improve fishing opportunities in a localized area.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of the Little Blackfoot River will continue to be relatively unstable, sloughing banks will continue to add sediment into the stream and lateral erosion will continue to threaten private property.

2. Bank stabilization using blanket rock rip-rap

Rock rip-rap would provide significant resistance to the existing shear stresses along this cut-bank. However, blanket rip-rap would both eliminate riparian vegetation on this section of stream and diminish the over-all natural function of the stream channel.

3. Bank stabilization by sloping and the use of re-vegetation

Shear stress on this stream bank, although not measured, likely has sufficient strength to continue to actively erode in spite of the addition of newly planted riparian vegetation. This erosive force likely would result on the loss of the newly planted vegetation.

4. The Proposed Alternative

The proposed alternative is designed to stabilize approximately 325 feet of eroding stream bank on the Little Blackfoot River with the installation of three log spur vanes. The vanes would act to resist erosion over a sufficient period of time to allow for the recovery of the riparian vegetative community. Over time, the establishment of woody shrubs along the stream margin will significantly contribute to the erosion resistance of the stream channel. While stabilization of this relatively short reach of stream likely will have little impact on overall fish populations, enhancement efforts are expected to attract fish and reduce sediment input in a localized area.

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 was 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 webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on May 16, 2005.

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
Email: 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 Little Blackfoot River Bank Stabilization Project

Division/Bureau Fisheries Division - Future Fisheries Improvement

Description of Project The Future Fisheries Improvement Program is proposing to provide funding to a project planned to stabilize approximately 325 feet of eroding stream bank on the Little Blackfoot River. The project calls for installing three log spur vanes and restoring the riparian vegetative community. The project site is located near the community of Garrison in Powell 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 |
|---|---|---|---|---|---|---|
| 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 North Powell 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 John Bowe, Landowner
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere

Date: April 13, 2005