

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  
    Missoula Office  
Montana State Library, Helena  
MT Environmental Information Center  
Montana Audubon Council  
Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624  
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722  
Montana River Action, 304 N 18<sup>th</sup> Ave., Bozeman, MT 59715  
Bitterroot Conservation District, 1709 North First Street, Hamilton, MT 59840  
U.S. Army Corp of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
State Historic Preservation Office, Helena  
Bitterroot Chapter Trout Unlimited, 701 N 7<sup>th</sup> Street, Hamilton, MT 59840  
Gregory Chester, 864 Legacy Loop, Hamilton, MT 59840  
Steven Sheahan, 858 Legacy Loop, Hamilton, MT 59840

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 the stabilization of an actively eroding stream bank on Skalkaho Creek, a tributary to the Bitterroot River. The proposed project is located approximately 4 miles southeast of the town of Hamilton in Ravalli County.

Please submit any comments that you have by 5 P.M., March 23, 2009 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  
Skalkaho Creek 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 purposes 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 an actively eroding 150-foot stream bank on Skalkaho Creek, a tributary to the Bitterroot River. The intent of the project is to protect private property on the Chester and Sheahan residences in a manner that would enhance the riparian and aquatic habitat on a short segment of Skalkaho Creek. The project site is located approximately 4 miles southeast of the town of Hamilton in Ravalli County (Attachment 1).

I. Location of Project: This project will be conducted on Skalkaho Creek, a tributary to the Bitterroot River, located approximately 4 miles southeast of the town of Hamilton within Township 5 North, Range 20 West, Section 16 in Ravalli 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 the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposal would help achieve this goal.

Skalkaho Creek supports a mixed salmonid assemblage, including westslope cutthroat trout and bull trout. In the recent past, this creek has been subject to a series of successfully completed habitat enhancement projects involving the restoration of migratory connectivity between the stream and the Bitterroot River. A 150-foot reach of Skalkaho Creek currently exhibits accelerated bank erosion and is threatening private property on the Chester and Sheahan residences (Attachment 2). The eroding stream bank is approximately 9 feet in height from the thalweg to the top of the terrace and has migrated toward residence infrastructure to the west approximately 10 feet during the 2008 spring runoff. This project proposes to stabilize this actively eroding stream bank in a manner that would allow flood flows to access a bank full bench, reduce shear stress, create overhead cover and pool scour for fish habitat and replace lost woody riparian vegetation.

III. Scope of the Project:

The project proposes to install four logjams along the 150-foot reach of the actively eroding stream bank (Attachment 3). A vegetated soil lift incorporated into a log matrix would be constructed at 0.5 feet above bank full elevation and would be approximately 15 feet in width (Attachment 4). This bank full bench

would extend about 10 feet into the currently active channel, replacing the 10 feet of lost bank that occurred during the spring of 2008. The wood used to construct the soil lifts and jams would be ballasted using boulders buried into the newly formed stream bank. The new stream bank would be faced with large river cobble to provide a stable streambed and add further protection from bank scour. Willow, red-osier dogwood and other riparian vegetation will be planted, irrigated and maintained by the landowners. Erosion control fabric would be used to help stabilize the terrace slope while woody riparian vegetation becomes established. This project is expected to cost \$18,350.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$3,500.00.

#### 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 short segment of actively eroding stream bank on Skalkaho Creek may provide some increased overhead cover and pool habitat for the fish species that reside there. Enhancing the woody riparian vegetative community along this segment of stream may 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, 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 will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit). In the long term, stabilizing an actively eroding 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 and improve channel stability.

##### 4. Vegetation cover, quantity and quality.

Riparian vegetation and cover, primarily consisting of non-native grasses, would be disturbed during the period of construction. However, re-vegetation efforts, in conjunction with stream bank stabilization efforts, would result in an overall improvement to the riparian vegetative community.

5. Aesthetics.

In the short term, aesthetics would be adversely affected due to ground disturbance and the presence of heavy equipment.

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

Skalkaho Creek supports both bull trout and westslope cutthroat trout. Because the river supports bull trout, listed as threatened under the Endangered Species Act, the project will be included in Montana Fish, Wildlife and Park's Section 6 conservation plan with the U.S. Fish and Wildlife Service. Stabilizing an actively eroding stream bank may provide for a more stable environment and decrease sediment delivery to the active channel, providing benefits to bull trout.

7. 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. 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.

It is anticipated that this proposed project would improve overall aquatic habitat and, as a result, would enhance resident trout populations. Consequently, the project potentially could improve the recreational fishery in the stream.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, two private residences will continue to be threatened by bank erosion and a point source of sediment will continue to be delivered into a portion of Skalkaho Creek, adversely affecting downstream fisheries and fish habitat.

2. Rock rip-rap alternative

This alternative would involve the use of blanket rock riprap to stabilize and armor the actively eroding stream bank. This alternative may prove effective in protecting the private property from further erosion but it would not fit with the natural environment and would not readily allow for the recovery of woody riparian vegetation. Additionally, the local conservation district likely would not permit the use of blanket rock riprap through the Natural Streambed and Land Preservation Act.

3. The Proposed Alternative

The proposed alternative is designed to stabilize a 150-foot actively eroding stream bank on Skalkaho Creek to protect infrastructure located on private property and reduce some sediment loading to downstream waters. Additionally, this alternative would create overhead cover and pool scour for fish habitat and enhance the woody riparian vegetative community.

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](http://fwp.mt.gov).

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on March 23, 2009.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer  
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Fisheries Division  
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 Skalkaho Creek Bank Stabilization 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 an actively eroding 150-foot stream bank on Skalkaho Creek, a tributary to the Bitterroot River. The intent of the project is to protect private property on the Chester and Sheahan residences in a manner that would enhance both the riparian and aquatic habitat on a short segment of the stream. The project site is located on the Skalkaho Creek approximately 4 miles southeast of the town of Hamilton in Ravalli 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 Bitterroot 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 Gregory Chester; Stream Basics, LLC.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: February 6, 2009