

March 15, 2004

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  
Jefferson Valley Conservation District, P.O. Box 890, Whitehall, MT 59759  
U.S. Army Corp of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
State Historic Preservation Office, Helena  
Beaverhead-Deer Lodge National Forest, 1820 Meadowlark Lane, Butte, MT 59703

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 construction of a ditch to intercept metal laden discharge carried by Jill Creek prior to the confluence with Jack Creek. The intent of the project is to eliminate a chemical barrier between Jack Creek and an unnamed tributary entering from the north resulting in the restoration of connectivity between two isolated genetically pure westslope cutthroat trout populations. The project site is located within the Beaverhead-Deer Lodge National Forest approximately 8 miles north of the town of Basin in Jefferson County.

Please submit any comments that you have by 5:00 P.M., April 15, 2004 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@state.mt.us](mailto:mlere@state.mt.us)

ENVIRONMENTAL ASSESSMENT  
Fisheries Division  
Montana Fish, Wildlife and Parks  
Jack Creek Westslope Cutthroat Trout Re-connection 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 calling for the construction of a ditch that would intercept metal laden discharge being carried by Jill Creek prior to its confluence with Jack Creek. This toxic discharge creates a chemical barrier, preventing connectivity between westslope cutthroat trout populations in Jack Creek and an unnamed tributary entering from the north. Restoring migratory connectivity between the two streams will reduce the chance of extirpation of these isolated westslope cutthroat trout populations. Jack Creek is a tributary to Basin Creek within the Boulder River drainage. The project site is located within the Beaverhead-Deer Lodge National Forest approximately 8 miles north of the town of Basin in Jefferson County (Attachment 1).

I. Location of Project: This project will be conducted on Jack and Jill creeks located approximately 8 miles north of the town of Basin within Township 7 North, Range 6 West, Sections 13 and 14 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.

As a result of past mining activities, Jill Creek currently carries toxic, metal laden water as it joins with Jack Creek, rendering Jack Creek fishless downstream of the junction of the two tributaries. This toxic water creates a chemical barrier approximately 1,000 feet in length between Jack Creek and an unnamed tributary entering from the north. Genetically pure westslope cutthroat trout occupy about 1.0 to 1.5 miles of stream in each of these tributaries. Reconnection of these two populations would provide for increased genetic diversity and would allow migratory movement from one stream to the other, reducing the likelihood of extirpation in the event of some form of catastrophe.

III. Scope of the Project:

This project calls for excavating about 1,050 feet of ditch between Jill and Jack creeks to shunt toxic water away from a reach of Jack Creek where an unnamed tributary enters from the north. The ditch will be designed to withstand the 500-year storm event from Jill Creek (approximately 79 cfs). The U.S. Forest Service is currently working toward remediation of acid mine drainage in the Jill Creek basin under

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act). However, remediation in the Jill Creek drainage likely will be a number of years away before such efforts are developed and implemented. Should these remediation efforts successfully eliminate acid mine drainage in the Jill Creek basin, the ditch constructed under this proposal would then be reclaimed by the U.S. Forest Service. This project is expected to cost \$37,000.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$10,000.00.

#### IV. Environmental Impact Checklist:

Please see attached checklist.

#### V. Explanation of Impacts to the Physical Environment

##### 1. Terrestrial and aquatic life and habitats.

The removal of chemical barrier between Jack Creek and an unnamed tributary entering from the north will reduce the potential for extirpation of isolated, genetically pure westslope cutthroat trout populations. Restoring connectivity between these two streams will provide for increased genetic diversity and will allow for migratory movement from one stream to the other.

##### 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 124 permit (Montana Stream Protection Act) will be obtained from Montana Fish, Wildlife and Parks and the U.S. Army Corp of Engineers will be contacted to determine the need to meet 404 provisions of the Clean Water Act. This ditch work will improve water quality within a 1,000-foot reach of Jack Creek.

##### 3. Geology and soil quality, stability and moisture.

Soils along the ditch line would be disturbed during excavation, but would be stabilize following re-vegetation efforts.

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

Vegetation and cover would be disturbed as a result of excavating the ditch. However, re-vegetation efforts would act to mitigate these disturbances.

##### 5. Aesthetics.

Aesthetics would be adversely impacted due to on-site construction activities and the presence of heavy equipment. However, the construction period is estimated to be less than two weeks in duration.

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

The headwaters of Jack Creek support isolated, genetically pure westslope cutthroat trout populations. The westslope cutthroat trout is classified as a species of special concern in Montana due to their limited numbers and shrinking distribution. This project will reduce the potential for extirpation of two cutthroat populations by restoring migratory connectivity between the two tributaries.

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. 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.

The intent of the project is to enhance long-term survival of westslope cutthroat trout populations in the headwaters of Jack Creek.

## VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, two westslope cutthroat trout populations located in the headwaters of Jack Creek will remain isolated. As a result, these populations will remain more vulnerable to extirpation from potential catastrophic events. Over time, proposed remediation efforts under CERCLA may successfully eliminate acid mine drainage in the Jill Creek basin, allowing for the return of migratory connectivity between these cutthroat trout populations. However, the risk of extirpation would remain until this remediation work can be successfully completed.

2. The Proposed Alternative

The proposed alternative would remove a chemical barrier that currently exists between Jack Creek and an unnamed tributary entering from the north, allowing for migratory connectivity between westslope cutthroat trout populations. The restoration of migratory connectivity would reduce the likelihood of extirpation for these populations should a catastrophic event potentially occur.

## 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 will be published on Montana Fish, Wildlife and Parks webpage: [fwp.state.mt.us](http://fwp.state.mt.us)

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on April 15, 2004.

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

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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 Jack Creek Westslope Cutthroat Trout Re-connection 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 calling for the construction of a ditch to intercept metal laden discharge carried by Jill Creek prior to the confluence with Jack Creek. The intent of the project is to eliminate a chemical barrier between Jack Creek and an unnamed tributary entering from the north resulting in the restoration of connectivity between two isolated genetically pure westslope cutthroat trout populations. The project site is located within the Beaverhead-Deer Lodge National Forest approximately 8 miles north of the town of Basin 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     |      |         | 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 Jefferson Valley Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office, Deer Lodge National Forest

Individuals or groups contributing to this EA Ron Spoon, Montana Fish, Wildlife and Parks

Recommendation concerning preparation of EIS No EIS required.  
EA prepared by: Mark Lere  
Date: February 23, 2004