

March 18, 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
Native Species Coordinator, Fisheries
Bozeman Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Deer Lodge Valley Conservation District, 1 Hollenback Road, Deer Lodge, MT 59722
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
U.S. Fish and Wildlife Service, 420 Barrett Street, Dillon, MT 59725
Bureau of Land Management, Butte Field Office, 106 North Parkmont, Butte, MT 59701
State Historic Preservation Office, Helena
Big Hole Watershed Committee, 10281 Kelly Canyon Road, Bozeman, MT 59715
LaMarche Creek Ranch, 72471 Scotch Pine Road, Finlayson, MN 55735

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 enhancing habitat complexity along a 1.25-mile reach of LaMarche Creek, a tributary to the Big Hole River. The work would involve excavating a series pools, stabilizing about 200 feet of eroding stream bank and installing fencing along 1.25 miles of riparian corridor. The intent of the project is to enhance habitat for fluvial Arctic grayling. The proposed project is located approximately 14 miles northwest of the community of Wise River in Deer Lodge County.

Please submit any comments that you have by 5:00 P.M., April 18, 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
LaMarche Creek Instream Habitat 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.

The Future Fisheries Improvement Program is proposing to provide partial funding for a project calling for enhancing habitat complexity along a 1.25-mile reach of LaMarche Creek, a tributary to the Big Hole River. The proposed project calls for excavating a series of pools, stabilizing 200 feet of eroding bank and installing riparian fencing along both sides of the stream reach. The intent of the project is to enhance habitat for fluvial Arctic grayling and other native and sport fish species within a reach of LaMarche Creek that had been altered in the past by highway construction. The project site is located on properties owned by the Dave and June Guckenberg and the Bureau of Land Management approximately 14 miles northwest of the community of Wise River in Deer Lodge County (Attachment 1).

I. Location of Project: This project will be conducted on LaMarche Creek located approximately 14 miles northwest of the community of Wise River within Township 2 North, Range 13 West, Sections 27 and 34 in Deer Lodge 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.

The upper Big Hole River Basin, with the exception of a few attempts at re-founding fluvial grayling in several southwestern Montana waters, supports the last river dwelling Arctic grayling in the lower 48 states. These fish are classified as a “species of special concern” in Montana because of their low numbers and shrinking distribution. Sampling efforts in tributary streams to the upper Big Hole River indicate that fluvial Arctic grayling heavily utilize pool habitat for thermal refugia during the summer months. As a result, enhancing pool habitat in these tributaries is expected to benefit the grayling population in the upper Big Hole drainage. A 500-foot reach of LaMarche Creek immediately upstream of State Highway 43 appears to have been channelized in the mid-1940s as a result of highway construction. Presently, this straightened reach of stream lacks pool habitat and exhibits poor habitat complexity for fluvial grayling. Downstream of State Highway 43, LaMarche Creek flows over the ancient floodplain of the Big Hole River where bed materials are too large for the creek to scour, resulting in a further lack of pool habitat.

III. Scope of the Project:

This project calls for excavating a series of sixteen pools scattered within a one-half mile reach of lower LaMarche Creek (Attachment 2). The location of these pools will be tied to existing mature willows along the stream margin to take advantage of overhanging cover and the bed form will mirror an upstream reference reach. Excavated streambed material will be placed adjacent to each pool to create lateral bar

formations. These point bars will establish scour and depositional processes designed to maintain the constructed pool features. Additionally, two actively eroding stream banks located downstream of State Highway 43 will be stabilized by re-grading to a proper angle of repose, covering with dense sod mats and planting willow transplants and sprigs. A tracked excavator will be used for the construction and work is expected to take approximately two to three days. Construction is scheduled for June or late July to avoid disrupting spawning activity of grayling and rainbow trout. Following construction, 1.25 miles of the stream corridor will be fenced to provide flexibility in livestock management and to protect the riparian vegetation. The project is expected to cost \$31,103.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$8,109.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Fluvial Arctic grayling densities in the tributaries to the upper Big Hole River appear to be related to complex aquatic habitat, especially pool habitat. This pool habitat appears to provide a thermal refuge for grayling during the summer. The creation of additional pools in LaMarche Creek is expected to increase the complexity of habitat found in the stream, leading to a greater carrying capacity for resident and fluvial fish. This project is expected to improve habitat for fluvial grayling, as well as for mountain whitefish, longnose suckers, mottled sculpin, burbot, brook trout, rainbow trout and brown trout. Habitat for riparian dependent wildlife also would be improved by fencing the riparian corridor to provide more flexibility in livestock grazing management.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a high 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 124 permit (Stream Protection Act) will be obtained from Montana Fish, Wildlife and Parks and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit).

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during pool construction and bank stabilization. Soils disturbed by construction will be re-seeded with native vegetation and re-graded banks will be stabilized with the placement of dense sod mats.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be minimally disturbed during the period of construction. The tracked excavator will actively avoid disturbance of woody shrubs within the construction site. Re-seeding, the placement of sod mats and the planting of native willow would mitigate any disturbance of vegetation that occurred during construction. Installation of fencing along the riparian corridor would act to protect the riparian vegetative community from over-grazing by livestock over the long-term.

5. Aesthetics.

Aesthetics would be negatively affected during project construction because of ground disturbance and the presence of heavy equipment. These negative effects would be short term since the project is expected to be completed in approximately two to three days.

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

Fluvial Arctic grayling are native to Montana and are classified as a “species of special concern” because of their declining numbers and shrinking distribution. Recent fisheries surveys have indicated that grayling utilize habitat in lower LaMarche Creek more extensively than most other reaches sampled in the basin. This project is expected to enhance habitat diversity in an altered reach of LaMarche Creek by constructing a series of pools. Grayling appear to select for pool habitat during the heat of the summer for thermal refuge. Although the scale of this project is relatively small, increases in pool habitat are expected to benefit the fluvial grayling population in the upper Big Hole drainage. Similar work conducted in 2004 on Fishtrap Creek, an adjacent Big Hole tributary, resulted in an increase in fluvial arctic grayling use within the enhanced portion of the stream.

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. 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.

This proposed project is expected to enhance populations of fish residing in lower LaMarche Creek. The proposed project site is publicly accessible via State Highway 43 and through lands managed by the Bureau of Land Management at the confluence with the Big Hole River. The project also is expected to enhance the recreational fishery in the upper Big Hole River.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, an altered reach of LaMarche Creek will continue to provide very limited habitat complexity and, as a result, the carrying capacity for fluvial arctic grayling and other species of fish will remain below potential.

2. The Proposed Alternative

The proposed alternative is designed to increase habitat complexity by excavating a series of pools within an altered reach of LaMarche Creek. An increase in pool habitat is expected to benefit fluvial Arctic grayling, as well as other species of fish residing in the stream. Additionally, protecting the riparian corridor with fencing and stabilizing eroding stream banks will maintain and enhance the riparian vegetative community, leading to healthier aquatic 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 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.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5 PM on April 18, 2005.

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 LaMarche Creek Instream Habitat 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 enhancing habitat complexity along a 1.25-mile reach of LaMarche Creek, a tributary to the Big Hole River. The work would involve excavating a series of pools, stabilizing 200 feet of eroding stream bank and installing riparian fencing along the riparian corridor. The intent of the project is to enhance habitat for fluvial Arctic grayling. The project site is located approximately 14 miles northwest of the community of Wise River in Deer Lodge 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 Deer Lodge Valley Conservation District, US Fish and Wildlife Service, Bureau of Land Management, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office
 Individuals or groups contributing to this EA Jim Magee, Montana Fish,

Wildlife and Parks; Confluence Consulting, Inc.
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: March 18, 2005
