September 23, 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
    Bozeman Office
    Great Falls Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Lewis and Clark Conservation District, 790 Colleen Street, Helena, MT 59601
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
U.S. Bureau of Reclamation, 7700 Canyon Ferry Road, Helena, MT 59602
State Historic Preservation Office, Helena

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 enhancement of upstream fish passage through a culvert located on Magpie Creek, a tributary to Canyon Ferry Reservoir. The intent of the project is to improve upstream fish passage for adfluvial rainbow trout residing in Canyon Ferry Reservoir. This proposed project is located near Joe Bonner campground approximately 16 miles east of the city of Helena in Lewis and Clark County.

Please submit any comments that you have by 5:00 P.M., October 25, 2005 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
Magpie Creek Fish Passage 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 the installation of a series of rock weirs at a culvert located on Magpie Creek, a tributary to Canyon Ferry Reservoir, to enhance upstream fish passage for adfluvial rainbow trout. The existing culvert, located near Joe Bonner campground, currently acts as a partial barrier to upstream fish passage due to the culvert's perched nature above the channel outlet. The perched nature of this culvert crossing has become exacerbated in the recent past due to channel changes following the fires of 2000. The intent of the rock weirs is to raise the elevation of the channel's tailwater control section to eliminate the elevation drop between the culvert outlet and the existing channel and to create some backwater to reduce water velocities inside the culvert pipe. This culvert is owned and maintained by the U.S. Bureau of Reclamation and is located approximately 16 miles east of the city of Helena in Lewis and Clark County (Attachment 1).

I. Location of Project: This project will be conducted on Magpie Creek at a culvert crossing located approximately 16 miles east of the city of Helena within Township 10 North, Range 1 West, Section 11 in Lewis and Clark 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 achieve this goal.

The fishery in Canyon Ferry Reservoir is very popular, supporting an estimated 91,000 angler days in 2003. Natural reproduction for rainbow trout in the reservoir is limited to the few tributaries to the reservoir and, as a result, the stocking of hatchery fish primarily supports the fishery. Rainbow trout residing in Canyon Ferry Reservoir have used Magpie Creek in the past for spawning and rearing. However, use by rainbow trout now appears to be significantly below potential because recent channel changes have exacerbated the perched nature of the culvert. This perched culvert acts a partial barrier to upstream migrating fish.

III. Scope of the Project:

The project proposes to install a series of rock weirs downstream of the culvert outlet with the intent of raising the elevation of the tailwater control to a level that will eliminate the elevation drop between the culvert outlet and the existing channel. This elevated tailwater control will also create some backwater to reduce velocities inside the culvert tube. This project is expected to cost approximately $17,400.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $12,400.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Enhancing fish passage through the Magpie Creek culvert potentially could increase recruitment of juvenile rainbow trout to Canyon Ferry Reservoir and may decrease the mortality of spawning fish attempting to pass through the road crossing. As a result, the project has the potential to enhance the rainbow trout population in Canyon Ferry Reservoir.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, the construction zone will be dewatered either by piping the stream flow or by passing the flow down a lined by-pass channel. 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 within the immediate project area would be disturbed during construction, but would be stabilized with re-vegetation efforts (sowing seed).

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed within the immediate project area during the period of construction. However, proposed re-vegetation efforts would act to mitigate these disturbances.

5. Aesthetics

Aesthetics of the site would be degraded during the short time frame of construction due to ground disturbance and the presence of heavy equipment. Long-term impacts to aesthetics would be negligible.

9. Historic and archaeological sites

This site has been previously disturbed by road construction. As a result, there is a very low likelihood that cultural properties will be impacted as result of the proposed project. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

Enhancing fish passage at the Magpie Creek culvert will allow fish from Canyon Ferry Reservoir to more readily access about 2 miles of spawning and rearing habitat. As a result, this proposed project has the potential to improve recreational fishing in Canyon Ferry Reservoir.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the culvert crossing on Magpie Creek will continue to act as a partial migration barrier for adfluvial rainbow trout. As such, the upstream passage of fish into Magpie Creek will continue to be hindered and the potential for recruitment will remain reduced.

2. Replace the culvert with a free-span bridge

A free-span bridge would enhance upstream fish passage. However, the cost of replacing the culvert with a free-span bridge would be very high. Additionally, installation of a bridge would require placement of grade controls, similar to those proposed, to prevent the existing channel from head cutting as a result of removing the culvert. Presently, the culvert controls the grade of the stream.

3. The Proposed Alternative

The proposed alternative is designed to enhance fish passage through the Magpie Creek culvert. Enhancing fish passage at this culvert crossing has the potential to increase recruitment of rainbow trout to Canyon Ferry Reservoir and could reduce mortality of spawning fish attempting to pass through the road crossing. The project has the potential to enhance the recreational fishery in Canyon Ferry Reservoir.

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 web page: fwp.mt.gov.

3. Duration of comment period?

   Public comment will be accepted through 5:00 PM on October 25, 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
   e-mail: 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 Magpie Creek Fish Passage 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 fish passage through a culvert located on Magpie Creek, a tributary to Canyon Ferry Reservoir. Fish passage will be enhanced by installing a series of rock weirs downstream of the culvert outlet to raise the elevation of the tailwater control. The project will be conducted at the road crossing located near Joe Bonner campground approximately 16 miles east of the city of Helena in Lewis and Clark 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 Lewis and Clark Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office, U.S. Bureau of Reclamation

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: September 15, 2005