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 calling for improving aquatic habitat in Piney Creek, a small tributary to Sage Creek located in the Pryor Mountains. Piney Creek supports a disjunct population of genetically pure Yellowstone cutthroat trout. The project would involve the modification of an existing irrigation system to reduce the entrainment of these fish. This proposed project is located approximately three miles northeast of the community of Warren in Carbon County.

Please submit any comments that you have by 5:00 P.M., September 10, 2009 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding of 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 Section
Fisheries Bureau
e-mail: mlere@mt.gov
ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Piney Creek Yellowstone Cutthroat Trout 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 providing funding for 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.

Piney Creek is a small spring-fed stream emerging along the western flank of the Pryor Mountains. A 0.75 mile reach of the stream, from emergence to where an existing irrigation system diverts the entire stream, supports a non-introgressed Yellowstone cutthroat trout population. This project, one of several actions proposed to aid in securing the Yellowstone cutthroat trout population in Piney Creek, calls for the modification of an existing irrigation system to reduce entrainment losses of these fish. The project site is located on property owned by Paul and Jean Loyning approximately three miles northeast of the community of Warren in Carbon County.

I. Location of Project: This project will be conducted on Piney Creek, a tributary to Sage Creek, that emerges from the western flank of the Pryor Mountains. The project site is located approximately three miles northeast of the community of Warren within Township 8 South, Range 25 East, Section 36 and Township 8 South, Range 26 East, Sections 30 and 31 in Carbon County (Attachment 1).

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 fisheries habitats” by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Piney Creek supports an isolated, pure Yellowstone cutthroat trout population along the reach of stream from its origin to about 0.75 miles downstream, where an existing irrigation system diverts the entire stream during most times of the year. This is the only remaining population of cutthroat trout in the Shoshone hydrologic unit, a watershed encompassing portions of Wyoming and Montana. Due to low population density, the limited extent of the occupied habitat and the marginal quality of the existing habitat, this remnant cutthroat population faces numerous threats, including the risk of inbreeding and the potential for extirpation in the face of a catastrophic event. Fisheries investigations suggest the recent prolonged drought may have had a detrimental effect on the stream’s cutthroat trout population. A survey conducted in 1994 estimated densities of Yellowstone cutthroat trout at 32 fish per 400 feet of channel. A 2008 survey of eight pools on the stream collected only one cutthroat trout.

Entrainment of fish into the ditch system is a contributing threat to the cutthroat trout population in Piney Creek. The existing irrigation system commonly diverts the entire stream. Additionally, habitat quality is
variable along the length of Piney Creek; where long stretches of relatively uniform riffles dominate in the lower half of the stream. Livestock grazing also has negatively affected riparian cover and channel morphology in localized areas and livestock crossings, where spawning sized gravel has tended to accumulate, make trampling of redds an additional threat to the population.

III. Scope of the Project:

This proposed project calls for modifying an existing irrigation system to reduce the potential for entrainment and, at the same time, continues to allow for the delivery of water to the irrigator. The project proposes to modify the existing irrigation impoundment, forming a slightly larger 0.25-acre pond at the downstream end of the habitable portion of the stream (site of existing irrigation dike) (Attachment 2). A screened standpipe would be installed in the embankment to distribute irrigation water down canal to the main irrigation ditch (Attachment 3). Two screened culverts also would be installed into the embankment to distribute water to an existing secondary ditch and to the original stream channel (Attachment 4 and 5). The standpipe and screened culverts, in combination with the impounded water would act in concert to reduce the potential for fish entrainment into the irrigation system. The existing impoundment also would be deepened and slightly enlarged to enhance refugia for fish during lower periods of flow.

Although independent from this proposed project, several additional actions will be taken to help secure this isolated Yellowstone cutthroat trout population. The installation of riparian fencing and the establishment of off-stream stock water would be used to improve grazing management within the drainage. The Bureau of Land Management (BLM) will provide funding for materials and the landowners will install these features. Funds from a National Fish and Wildlife Foundation Grant will be used by the BLM and Custer National Forest to install up to twelve log/rock structures that would scour and maintain pool habitat in the stream. The pond and irrigation system portion of the project is expected to cost up to $59,600.00 and the Future Fisheries Improvement Program would be contributing the entire amount. The total project, incorporating all three proposed actions, is expected to cost up to $85,600.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

The proposed action on Piney Creek would restore, protect and enhance habitat for a disjunct population of non-introgressed Yellowstone cutthroat trout. Modification of the existing irrigation system would reduce entrainment and would create some additional refugia during periods of low flow. The companion action of placing large woody debris and rock into the channel would increase pool habitat, which is currently limited, and installation of riparian fencing would allow vegetation to recover and prevent trampling of redds by livestock.
2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, the operation of equipment in the active 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 (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.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during the modification of the existing irrigation impoundment, but would be stabilized through reseeding of native grasses.

4. Vegetation cover, quantity and quality.

Vegetation and cover in the vicinity of the existing irrigation dike and impoundment would be disturbed during the period of construction. However, proposed re-vegetation efforts, in conjunction with fencing the riparian corridor, would result in an overall improvement to the riparian vegetative community.

5. Aesthetics.

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

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

The Yellowstone cutthroat trout is classified as a “Species of Special Concern” in Montana due to their limited numbers and shrinking distribution. Piney Creek supports an isolated non-introgressed population of these fish. This project is expected to reduce entrainment losses of cutthroat trout into an existing irrigation system and would enhance the habitat utilized by these fish during low flow periods of the year.

9. Historic and archaeological sites

Construction activities on this project would primarily fall within the footprint of the existing irrigation dike and impoundment. The dike has been repaired a number of times in the past due to over-topping during higher flow events. As a result, there is a very low likelihood that cultural properties could be impacted. 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.

Piney Creek currently presents the only opportunity to fish for native Yellowstone cutthroat trout in the Shoshone hydrologic unit. Although angling opportunities are limited due to the stream's remote location and small size, this proposed project is expected to enhance the cutthroat population and may improve the opportunity for anglers to catch Yellowstone cutthroat trout in a unique setting.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

The likelihood of long-term persistence for this isolated Yellowstone cutthroat trout population remains reduced if no action is taken. Due to isolation, small population size and limited distribution, this cutthroat population remains under threat of extirpation. The existing irrigation system, marginal pool habitat and riparian over-grazing likely contribute to the limited population density of Yellowstone cutthroat trout in Piney Creek.

2. The Proposed Alternative

The proposed alternative is designed to reduce the potential for entrainment of fish into the irrigation system and enhance overall habitat conditions. These efforts are expected to increase the population density of Yellowstone cutthroat trout in Piney Creek. In turn, an increase in population density is expected to reduce the threat of population extirpation.

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 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 September 10, 2009.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Section
Fisheries Bureau
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone:  (406) 444-2432
e-mail:  mlere@mt.gov
ENVIRONMENTAL ASSESSMENT

Project Title Piney Creek Yellowstone Cutthroat Trout Enhancement 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 modification of an existing irrigation system on Piney Creek to reduce entrainment losses of a non-introgressed population of Yellowstone cutthroat trout. Piney Creek supports the only remaining population of Yellowstone cutthroat trout within the Shoshone hydrologic unit. The project site is located approximately three miles northeast of the community of Warren in Carbon County.

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Other groups or agencies contacted or which may have overlapping jurisdiction Carbon 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 Carol Endicott and Paul Valle, MFWP

Recommendation concerning preparation of EIS No EIS required.