March 20, 2007
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
Montana Department of Natural Resources and Conservation
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Beaverhead Conservation District, 420 Barrett Street, Dillon, MT 59725
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
State Historic Preservation Office, Helena
Big Hole Watershed Committee, P.O. Box 931, Butte, MT 59703
Montana Trout Unlimited, P.O. Box 7186, Missoula, MT 59807
Dooling Livestock, P.O. Box 842, Jackson, MT 59736
Ralston Ranch, 54200 MT Hwy 43, Wise River, MT 59762
Fishtrap Ranch, 515 Fishtrap Creek Road, Wise River, MT 59762
Ernest K. Bacon Ranch, 2215 Fishtrap Creek Road, Wise River, MT 59762

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 development of four off-stream stock-water systems. The intent of the project is to decrease late-season open ditch stock-water diversions and increase flows in tributaries and the main stem Big Hole River for the benefit of fluvial Arctic grayling and other species of fish. Two of the proposed stock-water sites would be located in the Fishtrap Creek drainage. Stock-water sites also would be located in the Deep Creek and Berry Creek drainages.

Please submit any comments that you have by April 20, 2007 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
Upper Big Hole River Stock-Water Wells

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 development of four stock-water systems to help decrease late season open-ditch stock-water diversions, thereby helping to increase in-stream flow in selected tributaries and the main-stem Big Hole River. Each of the four projects would include installing a pump and associated power, multiple stock tanks and protective fencing. Four groundwater wells were drilled in late fall of 2006. The intent of the project is to enhance habitat for fluvial Arctic grayling and other native and sport fish species within affected reaches of Fishtrap, Deep and Berry creeks, as well as within the main-stem Big Hole River.

I. Location of Project: This project will be conducted within the Fishtrap, Deep and Berry creek drainages. Stock-water sites in the Fishtrap Creek drainage would be located within Township 2N; Range 13 West; Sections 31 and 33 in Deer Lodge County (Attachment 1). The stock-water site in the Deep Creek drainage would be located within Township 2 North; Range 12 West, Section 32 in Beaverhead County. The stock-water site in the Berry Creek drainage would be located within Township 6 South, Range 15 West, Section 29 in Beaverhead County (Attachment 2).

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.

Currently, open ditches divert water out of several tributaries to the Big Hole River during the late season to provide for stock water. These water diversions occur at a time when in-stream flows are critically low and stream temperatures are high, conditions that contribute to fishing closures and stressful conditions for many of the fish species residing in the upper Big Hole drainage. Developing off channel stock-water sites would help improve late season in-stream flow and reduce thermal loading.

III. Scope of the Project:

This project calls for installing pumps and associated power, multiple stock tanks and protective fencing for four stock water sites located on three tributaries to the Big Hole River. Three of the four stock-water sites would be winterized and all would be located within one-quarter mile of existing power lines. The pump systems and stock tanks would be unique to each location and would be based on the depth of each

well and the operational needs of each livestock producer. The wells for these four sites were drilled under a separate non-Future Fisheries project in 2006. The proposed project is expected to enhance in-stream flow in approximately 5 miles of Fishtrap Creek, 1.2 miles of Deep Creek and 2.5 miles of Berry Creek. This proposed project would be part of a larger effort associated the Candidate Conservation Agreement with Assurances (CCAA) for fluvial Arctic grayling. The project is expected to cost $40,000.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $16,000.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Enhancing in-stream flow on three tributaries and the main stem Big Hole River is expected to benefit fluvial Arctic grayling, as well as other species of fish.

2. Water quantity, quality and distribution.

The project is expected to enhance in-stream flow and reduce water temperatures in the upper Big Hole drainage. Development of these stock-water systems would not require a water use permit because each system is not expected to use more than 35 gallons per minute or 10 acre-feet of ground water per year.

3. Vegetation cover, quantity and quality.

Riparian vegetation and cover may benefit from enhanced in-stream flow during late summer when stream flow is commonly critically low.

4. Aesthetics.

Aesthetics would be negatively affected during project construction because of ground disturbance and the presence of heavy equipment. These negative effects would be relatively short term since the project is expected to be completed over an approximately one-month period.

5. 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. Enhancement of in-stream flow is expected to improve riparian health and habitat conditions on three tributaries to the Big Hole River. Greater in-stream flow during the critical low flow period is expected to enhance grayling and other species of fish residing in the Big Hole River. This proposed project is part of a larger watershed-wide effort, under the CCAA, to improve habitat for fluvial Arctic grayling, a candidate species under the Endangered Species Act.

6. Demands on environmental resources of land, water, air and energy.

Currently, stock-water is provided through a system of gravity fed ditches requiring no use of energy. Converting to the use of groundwater wells during the late summer season will result in the need for electrical energy to run the pumps.

7. Historic and archaeological sites

This proposed project is contained entirely on private property and therefore is not covered under the State Antiquities Act. However, the project is receiving federal funds from the U.S. Fish and Wildlife Service (USFWS) and, as a result, the USFWS will be responsible to meet all pertinent requirements associated with the National Historic Preservation Act.

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 three tributaries and the main stem Big Hole River. As a result, the project is expected to improve the associated recreational fishery.

2. Demands for energy.

Currently, stock-water is provided through a system of gravity fed ditches requiring no use of energy. Converting to the use of groundwater wells during the late summer season will result in the need for electrical energy to run the pumps. Each of these proposed stock-water sites are located within one-quarter mile of existing power lines.

3. Locally adopted environmental plans and goals.

This proposed project is part of the CCAA that has been adopted for fluvial Arctic grayling in the Big Hole drainage.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, reaches of three Big Hole tributaries will continue to be dewatered during the late summer to provide for needed livestock water. This late season dewatering will continue to degrade habitat conditions for fluvial Arctic grayling and other species of resident fish. Additionally, these lower stream flows will contribute toward poorer health of the riparian community.

2. The Proposed Alternative

The proposed alternative is designed to supplement late summer in-stream flows within reaches of Fishtrap, Deep and Berry creeks and, at the same time, provide for needed livestock water. Fluvial

Arctic grayling, as well as other species of fish residing in the river, would benefit by these enhanced in-stream flows due to improved habitat conditions and overall lower water temperatures. Streamside vegetation also would benefit from these enhanced in-stream flows.

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.

3. Duration of comment period?

   Public comment will be accepted through 5 PM on April 20, 2007.

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
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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 Upper Big Hole River Stock-Water wells

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 development of four stock-water systems to help decrease late summer open-ditch stock-water diversions and thereby supplementing in-stream flow for the benefit of fluvial Arctic grayling and other resident species of fish. Two project sites are located within the Fishtrap Creek drainage in Deer Lodge County. Two additional sites are located in the Deep Creek and Berry Creek drainages in Beaverhead 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		
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			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			X
13. Locally adopted environmental plans & goals			X			X
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Beaverhead Conservation District, Deer Lodge Valley Conservation District, US Fish and Wildlife Service, Montana Department of Natural Resources and Conservation, State Historic Preservation Office

Individuals or groups contributing to this EA Jeff Everett, USFWS.
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere Date: February 22, 2007