September 15, 2006
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
Montana Wildlife Federation
Park Conservation District, 5242 Highway 89 South, Livingston, MT 59047
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Ned Zimmerman, 541 Daisy Dean Road, Wilsall, MT 59086

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 for a stream stabilization project on approximately 1,500 feet of Elk Creek, a tributary to the Shields River. This proposed project is located on property owned by Ned Zimmerman approximately 2.5 miles northeast of the town of Wilsall in Park County.

Please submit any comments that you have by 5:00 P.M., October 16, 2006 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
Elk Creek Channel Stabilization 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. 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 stabilization of approximately 1,500-feet of Elk Creek to decrease excessive sediment loading and improve overall aquatic and riparian habitat. The project site is located on property owned by Ned Zimmerman approximately 2.5 miles northeast of the town of Wilsall in Park County (Attachment 1).

I. Location of Project: This project will be conducted on an approximately 1,500-foot reach of Elk Creek, located 2.5 miles northeast of the town of Wisall within Township 3 North, Range 9 East, Section 8 in Park 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 met this goal.

Elk Creek supports Yellowstone cutthroat trout, as species of special concern in Montana, as well as brown trout, mountain whitefish and mottled sculpin. The stream is deeply incised, with associated steep eroding stream banks within a mile of its confluence with the Shields River. These steep and unstable stream banks extend about 1,500 feet downstream of an existing unstable diversion and are contributing significant sediment into the lower reaches of the stream. This project proposes to stabilize the diversion, slope and re-vegetate the highly eroding stream banks and create a riparian pasture that would allow for better livestock management. The landowner is interested in restoring this degraded reach of stream and will rest the proposed riparian pasture from grazing for 3 to 5 years to allow for the re-establishment of the riparian vegetation.

III. Scope of the Project:

The project proposes to install approximately 1,925 feet of fencing to create a riparian pasture, providing an opportunity for better livestock management within the riparian corridor (Attachment 2). To provide for livestock water, the project would develop an existing spring and install a pipeline that would lead to a livestock tank placed into an adjacent pasture. Additionally, a series of rock grade control structures would be installed immediately downstream of the existing diversion to stabilize the structure and facilitate fish passage. Approximately 1,060 feet of eroding stream banks would be mechanically sloped to a stable angle

of repose, with approximately 400 cubic yards of excavated material graded into adjacent sites located outside of the floodplain. Two locations where high terrace stream banks are located adjacent to existing fences, the project calls for constructing a small floodplain bench at the toe using anchored cottonwood logs and backfilling with soil and gravel. Willow clumps and containerized willows would be placed on the toe of the newly sloped banks and all disturbed areas would be seeded with a native grass mix. This project is expected to cost $49,675.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $27,100.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing a 1,500-foot reach of Elk Creek is expected to locally reduce sediment input into the stream and create a healthier habitat for aquatic life by creating greater environmental complexity. Habitat for riparian dependent wildlife would be improved by enhancing the woody vegetation community and by controlling livestock grazing within the riparian corridor.

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 310 permit (Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted to determine the requirements needed to meet the federal Clean Water Act. In the long term, stabilizing eroding stream banks and an existing irrigation diversion within this reach of Elk Creek would reduce sediment contributions to downstream areas, thereby improving the overall quality of downstream waters.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during project construction, but would be stabilized following proposed re-vegetation efforts. Overall, the project is expected to reduce bank erosion by stabilizing a series of eroding cut-banks and an old diversion the acts as a channel grade control.

4. Vegetation cover, quantity and quality.

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

grazing within the riparian corridor would protect the vegetative community and encourage the recovery of woody shrubs along the stream margin.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. Project construction is expected to occur over a one to two week period. In the long term, aesthetics would be enhanced by stabilizing a series of eroding cut-banks on Elk Creek and by controlling livestock use within the riparian corridor.

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

Elk Creek supports Yellowstone cutthroat trout, a species of special concern in Montana. Proposed improvements made to a 1,500-foot reach of the stream are expected to benefit this Yellowstone cutthroat trout population.

7. Historic and archaeological sites

The proposed project may require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been 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.

Stabilizing a 1,500-foot reach of Elk Creek is expected to improve overall aquatic habitat, and consequently, would be expected to attract fish and improve fishing opportunities in a localized area.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of Elk Creek will continue to be relatively unstable, sloughing banks will continue to add sediment into the stream and habitat for fish and riparian dependent wildlife will remain in a degraded condition.

2. Bank stabilization using blanket rock rip-rap

Rock rip-rap would provide greater resistance to the existing shear stresses. However, blanket rip-rap would both eliminate riparian vegetation on this section of stream and diminish the over-all natural function of the stream channel.

3. Riparian Protection Alternative

Under this alternative, the stream corridor would be protected from livestock grazing for a sufficient period of time to allow for recovery of the riparian vegetation. Unstable stream banks would be allowed to continue to erode until such time they reached a stable angle of repose and re-vegetation occurred naturally. The time period required for recovery for this alternative is unknown, but certainly would be significantly longer than for the preferred alternative. Additionally, the threat that the active channel would by-pass the existing diversion would remain.

4. The Proposed Alternative

The proposed alternative is designed to stabilize a 1,500-foot reach of Elk Creek by creating a riparian pasture, installing rock grade control structures downstream of an existing diversion, and sloping and re-vegetating vertical eroding stream banks. Controlling livestock grazing within the riparian corridor with fencing is expected to encourage the recovery of woody shrubs along the stream margin and, over the long term, stabilize the active channel. The intent of the project is to decrease excessive sediment loading and improve overall aquatic and riparian 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 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 October 16, 2006.

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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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 Elk Creek Channel Stabilization 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 stabilization of approximately 1,500 feet of Elk Creek to decrease excessive sediment loading and improve overall aquatic and riparian habitat. The project site is located on property owned by Ned Zimmerman approximately 2.5 miles northeast of the town of Wilsall in Park 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 Park 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 Ned Zimmerman

Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: August 18, 2006