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
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
Mark Sinnard, 18 N. Fork Horse Creek, 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 0.5 miles of North Fork Horse Creek, a tributary to Horse Creek and ultimately the Shields River. This proposed project is located on property owned by Mark Sinnard approximately 7 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
North Fork Horse 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 800 feet of eroding stream banks over a 0.5 mile reach of the North Fork Horse Creek to decrease excessive sediment loading and improve overall aquatic and riparian habitat. The project site is located on property owned by Mark Sinnard approximately 7 miles northeast of the town of Wilsall in Park County (Attachment 1).

I. Location of Project: This project will be conducted on an approximately 0.5 mile reach of the North Fork Horse Creek, located approximately 7 miles northeast of the town of Wilsall within Township 3 North, Range 10 East, Sections 7 and 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.

North Fork Horse Creek supports a genetically pure population of Yellowstone cutthroat trout, a species of special concern in Montana. Due to historic grazing practices and the associated loss of woody riparian vegetation, portions of North Fork Horse Creek have been degraded. The channel has incised in some areas, resulting in vertical eroding banks that contribute significant sediment into the lower reaches of the stream. This project proposes to stabilize these eroding banks by sloping to a stable angle of repose and re-vegetating with native grass seed and planting woody riparian shrubs. The landowner is interested in restoring this degraded reach of stream and will rest the riparian corridor from grazing for a minimum of 5 years to allow for the re-establishment of the streamside vegetation.

III. Scope of the Project:

The project proposes to stabilize approximately 800 feet of eroding stream banks within a 0.5-mile reach of North Fork Horse Creek (Attachment 2). The project calls for sloping the lower cut-banks to a stable angle of repose (2:1 to 3:1 slope), followed by seeding and planting with rooted willow, cottonwood and dogwood. On higher banks that are eroding into the terrace, 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 constructed banks and all

disturbed areas would be seeded with a native grass mix. The riparian corridor would be excluded from grazing for a minimum of 5 years to allow for the streamside vegetation to recover. To provide for livestock water, the project would develop a hardened water gap to allow controlled access to the stream. This project is expected to cost $7,500.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $3,750.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing 800 feet of eroding stream banks over a 0.5-mile reach of North Fork Horse Creek is expected to reduce sediment input into the stream and provide 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 within this reach of North Fork Horse 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 resting the riparian corridor from livestock grazing.

4. Vegetation cover, quantity and quality.

Riparian vegetation, 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 two to three day period. In the long term, aesthetics would be enhanced by stabilizing a series of eroding cut-banks on North Fork Horse Creek and by controlling livestock use within the riparian corridor.

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

North Fork Horse Creek supports a genetically pure Yellowstone cutthroat trout population, a species of special concern in Montana. Proposed improvements made to a 0.5-mile 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 800 feet of cut-bank on North Fork Horse 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 North Fork Horse 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. 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.

3. 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.

4. The Proposed Alternative

The proposed alternative is designed to stabilize 800 feet of cut-bank within a 0.5-mile reach of North Fork Horse Creek by sloping vertical eroding stream banks to a stable angle of repose and re-vegetating with native grasses and woody riparian shrubs. The riparian corridor would be rested from livestock grazing for a minimum of 5 years to insure recovery of the streamside vegetation. 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 North Fork Horse 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 800 feet of eroding cut-bank over a 0.5-mile reach of North Fork Horse Creek to decrease excessive sediment loading and improve overall aquatic and riparian habitat. The project site is located on property owned by Mark Sinnard approximately 7 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 Mark Sinnard
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: August 22, 2006