

July 12, 2011
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
 Missoula Office

Montana State Library, Helena

MT Environmental Information Center

Montana Audubon Council

Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624

Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722

Montana River Action Network, 304 N 18th Ave., Bozeman, MT 59715

Mineral County Conservation District, P.O. Box 730, Superior, MT 59872

U.S. Army Corp of Engineers, Helena

U.S. Fish and Wildlife Service, Helena

State Historic Preservation Office, Helena

Fold of the Messiah, 2823 South Fork Nemote Creek Road, Superior, MT 59872

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 installation of a cross-vane rock weir and an associated coanda-style fish screen at the head of an irrigation diversion located on South Fork Nemote Creek, a tributary to Nemote Creek and ultimately the Clark Fork River. The intent of the project is to prevent fish entrainment into the irrigation system. The project site is located on property owned by Montana Fish, Wildlife and Parks approximately 4 miles northeast of Tarkio in Mineral County.

Please submit any comments that you have by 5:00 P.M., August 12, 2011 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. If you have any questions, feel free to contact me at (406) 444-2432. Funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. 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
Email: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
South Fork Nemote Creek Diversion Fish Screen Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which 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.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for upgrading a diversion located on South Fork Nemote Creek by constructing a rock cross vane and installing a coanda style fish screen. The intent of the project is to prevent entrainment of fish into the ditch system. The project site is located on South Fork Nemote Creek, a tributary to Nemote Creek and ultimately the Clark Fork River, approximately 4 miles northeast of Tarkio in Mineral County.

I. Location of Project: This project will be conducted on an irrigation diversion located on South Fork Nemote Creek approximately 4 miles northeast of Tarkio within Township 15 North, Range 24 West, Section 19 in Mineral 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 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 meet this goal.

South Fork Nemote Creek is a second order tributary to the Clark Fork River that supports a population of genetically pure westslope cutthroat trout. Water users on South Fork Nemote Creek recently were approved to move their existing point of diversion to an old historic point of diversion located on property owned by Montana Fish, Wildlife and Parks. A fish screen became part of the easement conditions associated with the move in their point of diversion. Installation of a fish screen would prevent the entrainment of fish into the diversion.

III. Scope of the Project:

The project proposes to construct a rock cross vane and install a coanda style fish screen into the channel of the South Fork Nemote Creek (Attachment 2 shows a design example). This project is expected to cost \$4,134.00. Of this total, the Future Fisheries Improvement Program (FFIP)

would be contributing up to \$1,350.00. The remainder of the funding would come from the water users in the form of \$100 cash and \$2,684.00 in in-kind services.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Installing a rock cross vane and coanda-style fish screen would prevent entrainment of fish into the ditch system and would ensure continued upstream fish passage past the point of diversion.

2. Water quantity, quality and distribution.

Short term increases in turbidity would occur during project construction. To minimize turbidity, operation of equipment in the active stream channel would be minimized the extent practicable. A temporary diversion dike would be used to divert flow around the project site during construction. 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 (Montana 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 for requirements to meet the federal Clean Water Act (404 permit). An easement with Fish, Wildlife and Parks ensures that a minimum in-stream flow downstream from the point of diversion would be maintained.

3. Geology and soil quality, stability and moisture.

Soils adjacent to the diversion would be disturbed during the construction, but would be stabilized with re-seeding efforts.

4. Vegetation cover, quantity and quality.

Vegetation cover would be disturbed adjacent to the diversion during construction. Re-vegetation efforts (re-seeding) would act to mitigate these disturbances.

5. Aesthetics.

Aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment.

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

South Fork Nemote Creek supports a genetically pure population of westslope cutthroat trout, a species of special concern in Montana, The installation of the fish screen would prevent entrainment of fish into the irrigation system.

9. Historic and archaeological sites

The installation of the rock cross vane and coanda fish screen will not require excavation outside of the active stream channel. 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.

None

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no funding is provided, the applicant would have to either seek other sources of funding to complete the project or the irrigation diversion likely would entrain fish residing in South Fork Nemote Creek.

2. The Proposed Alternative

The proposed alternative is to provide partial funding through the Future Fisheries Improvement Program toward construction of a rock cross-vane and installation of a fish screen in South Fork Nemote Creek. This project would provide users the ability to obtain water needed for irrigation and, at the same time, would prevent entrainment of fish into the irrigation system and continue to allow for upstream fish passage.

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 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 August 12, 2011.

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

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 South Fork Nemote Creek Diversion Fish Screen 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 upgrading an irrigation diversion located on South Fork Nemote Creek by constructing a rock cross vane and installing a coanda-style fish screen. The intent of the project is to prevent the entrainment of fish into the irrigation system.

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		
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 Mineral County 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 Doug Austin, Vice President, Fold of the Messiah
Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: July 11, 2011



ATTACHMENT 1



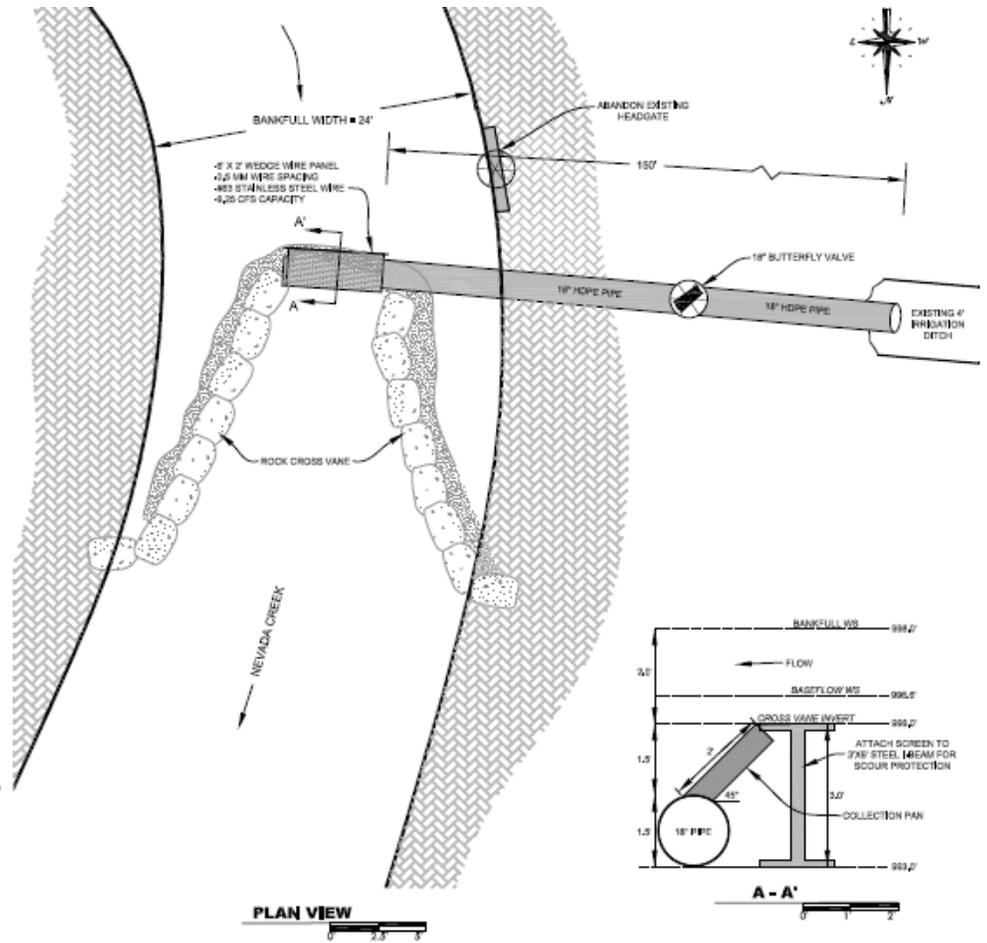
EXAMPLE OF A PIPE-MOUNTED WEDGE WIDE SCREEN



EXAMPLE INSTALLATION

SCREEN SPECIFICATIONS

- 1. The supplier of the wedge wire "Coanda effect" wedge wire screens shall have been in business for a period of a minimum of three years, and have completed at least three similar installations. A minimum of three references, including contact information, shall be furnished.
- 2. The screen shall be designed to provide fish protection, debris removal, and to operate in a maintenance free condition for extended periods of time. The screen shall be capable of diverting 4.25 cfs from the channel.
- 3. The screens shall be self-supporting and shall be suitably framed for mounting on the specified plastic pipe. A web crest acceleration plate shall be furnished to assure an even distribution of flow across the width of the screen without separation of flow from the screen face.
- 4. The screen material, all supporting framing, acceleration plate, and fasteners shall be type 304 Stainless Steel. The wedge shaped profile wire screen material shall be type # 43 having 0.5 mm wire spacing. The wires shall be tilted 5 degrees from a plane perpendicular to the supporting rods, all wires shall be welded in a uniform line manner. The screen material shall be free of weld spatter. The screen, pan and receptor pipe shall be as manufactured by Hydroscreen CO. LLC, 2390 Laurel Street, Denver Colorado 80207 (phone 303-332-6071) or approved equal. All screens shall be manufactured in a flat condition; screen that is out and straightened after a cylindrical manufacturing process is not acceptable.
- 5. The screen shall be flat and removable from the pan for replacement and/or maintenance.
- 6. The screen, pan and pipe will be shipped complete with all fasteners required for field installation.



Example of rock cross vane and coanda screen design

ATTACHMENT 2