

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
 Bozeman Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624
Montana River Action, 304 N 18th Avenue, Bozeman, MT 59715
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Beaverhead Conservation District, 420 Barrett Street, Dillon, MT 59725
Beaverhead Watershed Committee, 201 North Parkview Court, Dillon, MT 59725
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
John Osborne, 726 East Bench Road, Twin Bridges, MT 59754

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 stream restoration project on Darnutzer Slough, a tributary to the Beaverhead River. The intent of the project is to further restore and improve spawning and rearing habitat for the fisheries found in the lower Beaverhead River watershed. This project would narrow and deepen portions of a 4,500-foot stream reach to improve sediment transport and maintain spawning substrate. Additionally, 160 mature willow clumps would be transplanted along the margins of the channel to provide for shading and riparian habitat. This proposed project is located approximately eleven miles south of the town of Twin Bridges in Madison County.

Please submit any comments that you have by 5:00 P.M., August 12 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
Darnutzer Slough Spawning Habitat 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.

The Future Fisheries Improvement Program is proposing to provide partial funding for a project calling for the enhancement of a 4,500-foot reach of Darnutzer Slough, a tributary to the lower Beaverhead River. Restoration would involve narrowing riffle sections to effectively transport fine sediment and maintain clean spawning substrate. Spawning gravel, if found not present, would be added to these modified riffles. Additionally, 160 mature willows would be transplanted along the stream margin to provide for shading and enhance the riparian vegetative community. The intent of this proposed project is to expand on a past restoration effort completed on Darnutzer Slough to improve spawning and rearing habitat and enhance recruitment of fish to the lower Beaverhead River. The project site is located on property owned by John Osborne approximately eleven miles south of the town of Twin Bridges in Madison County (Attachment 1).

I. Location of Project: This project will be conducted on Darnutzer Slough located approximately eleven miles south of the town of Twin Bridges within Township 5 South, Range 6 West, Section 6 in Madison 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 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.

Based on the low numbers of juvenile fish found in the lower Beaverhead River, FWP biologists have surmised that recruitment may be limiting the fishery. A past restoration effort on lower Darnutzer Slough was found to have successfully enhanced spawning and rearing habitat for brown trout and brook trout in the system. However, the lower portion of the stream channel did not effectively convey fine sediment, resulting in the fouling of spawning gravel. At the time, a flood irrigation system was thought to be a major contributor of sediment to the stream. This irrigation system recently was converted to sprinklers and, as a result, the input of sediment appears to have been reduced. The current project proposes to further narrow riffle sections in the lower reach of the stream to more effectively convey sediment and maintain clean spawning gravel.

III. Scope of the Project:

This proposed project calls for restoring spawning habitat conditions within a 4,500-foot reach of lower

Darnutzer Slough (Attachment 2). The project calls for narrowing the channel within 27 riffle sections to an average of a 3.5-foot top width and importing clean gravel using a mix of 60% 1.5 inch minus and 40% 0.75 inch minus (Attachment 3). Additionally 160 mature willow clumps, obtained off channel on the landowner's property, would be transplanted along the margins of the stream during late fall dormancy. This project is expected to cost \$18,350.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$9,175.00. The landowner would contribute the remainder of the funding.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Enhancing spawning habitat conditions within a reach of lower Darnutzer Slough is expected to provide for additional recruitment of brown trout to the lower Beaverhead River. Trout populations in the lower Beaverhead River appear to be recruitment limited and restoration of spring creek tributaries, such a Darnutzer Slough, appears the most readily available and cost effective action to potentially enhance suppressed trout populations. This proposed project would act to expand on a past restoration effort on Darnutzer Slough that successfully enhanced brown trout spawning and rearing habitat. Habitat for riparian dependent wildlife also would be improved by enhancing the riparian vegetative community along the stream margin.

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 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 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 adjacent to the project and within borrow sites for willow clump transplants would be disturbed during construction.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. However, proposed re-vegetation efforts in the form of willow clump transplants 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. The project is expected to be completed in one week.

9. Historic and archaeological sites

The proposed project, located on private property, will not adversely affect any properties listed, or eligible for listing, in the National Register of Historic Places. As a result of previous disturbance along approximately 18,000 feet of Darnutzer Slough from channel restoration work that was completed in 2007, there is a low likelihood that cultural properties will be adversely impacted as a result of this proposed project. Should cultural material 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.

The Beaverhead River supports a very popular recreational fishery. The intent of this project is to enhance spawning habitat for salmonids, especially brown trout, in a spring creek tributary and increase recruitment of juvenile fish to the recreational fisheries found in downstream waters.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the applicant would need to seek other sources of funding to complete the project or portions of Darnutzer Slough will continue to be covered with fine sediment, providing little or no recruitment of juvenile fish to the Beaverhead River.

2. The Proposed Alternative

The proposed alternative is designed to enhance spawning habitat within a 4,500-foot reach of Darnutzer Slough. The intent of the project is to improve recruitment of fish, primarily brown trout, to the lower Beaverhead River. The project would modify a past restoration effort conducted on the lower reaches of the stream to improve sediment transport. This alternative is expected to improve fish and wildlife habitat within the project area and has the potential to enhance the recreational fisheries in the Beaverhead River.

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 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 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 Darnutzer Slough spawning Habitat Enhancement Project

Division/Bureau Fisheries Bureau -Future Fisheries Improvement

Description of Project: The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the enhancement of spawning habitat within a 4,500-foot reach of Darnutzer Slough, a tributary to the lower Beaverhead River. The intent of the project is to improve spawning habitat for salmonids, primarily brown trout, and enhance the recruitment of juvenile fish to the Beaverhead River. The project site is located approximately eleven miles south of the town of Twin Bridges in Madison 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		
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: Beaverhead Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

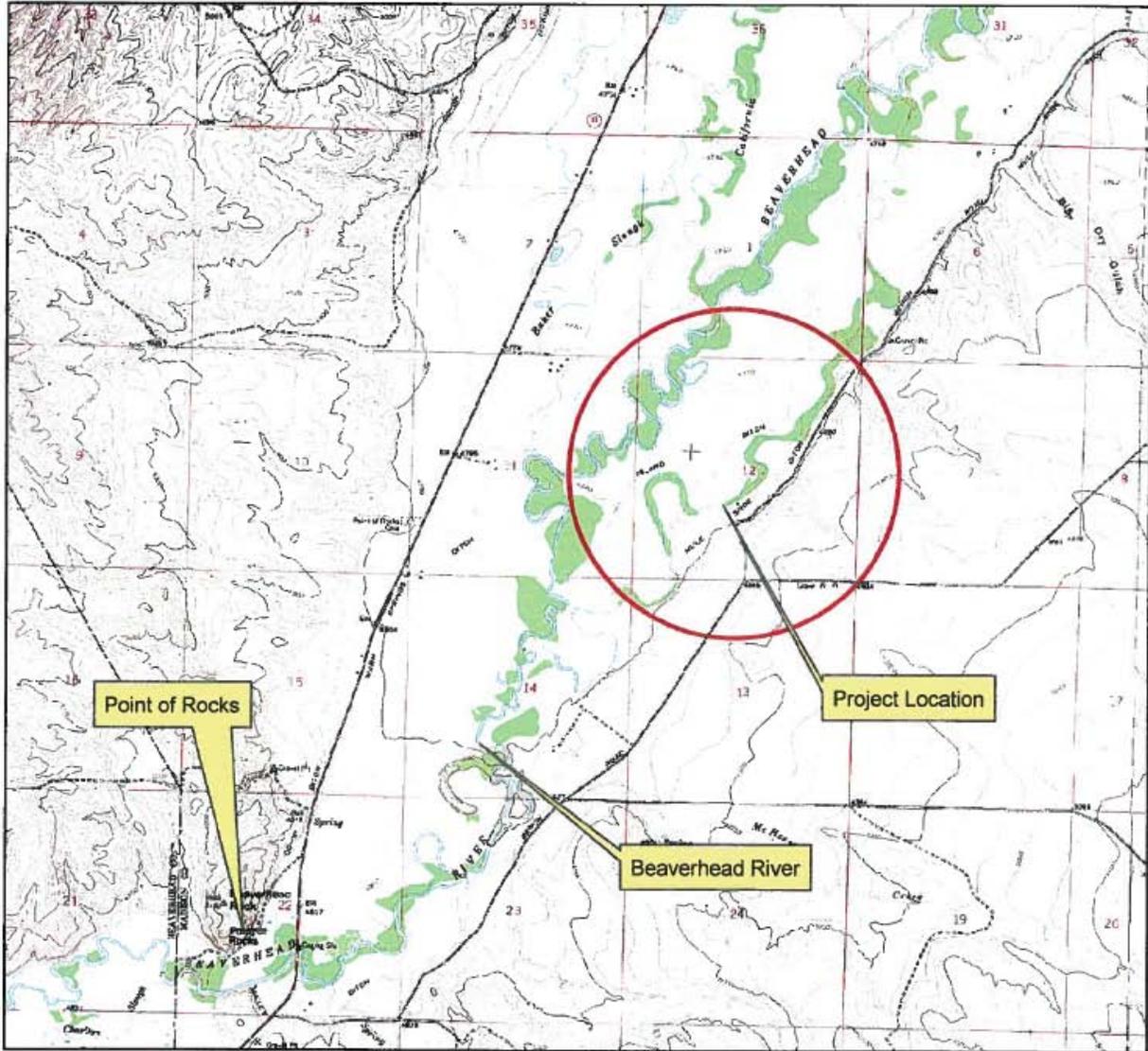
Individuals or groups contributing to this EA: John Osborne, Landowner

Recommendation concerning preparation of EIS No EIS required.

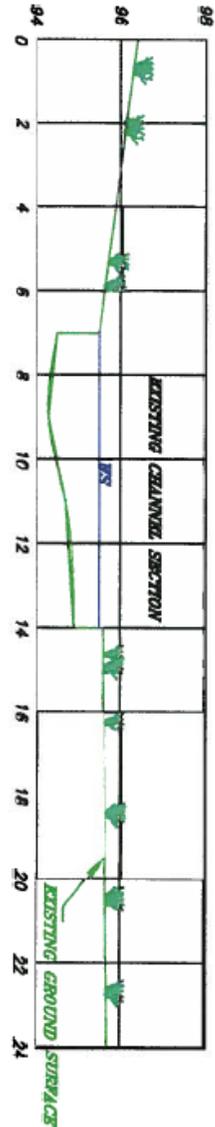
EA prepared by: Mark Lere

Date: July 6, 2011

Darnutzer Slough Project Location

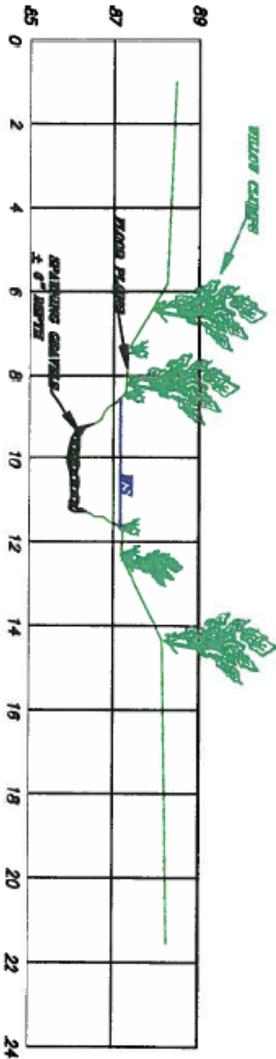






X-SECTION 37+69
NOT TO SCALE

AVERAGE TOP WIDTH = ± 2'
 AVERAGE DEPTH = ± 0.6'
 AVERAGE VELOCITY = ± 1.608
 AVERAGE FLOW = 6.84 CFS



PLANNED DESIGN
SPANNING CHANNEL SECTION

FULL FLOW CONDITIONS

AVERAGE TOP WIDTH = ± 3'
 AVERAGE DEPTH = ± 0.82'
 AVERAGE AREA = ± 2.6 SQ. FT.
 AVERAGE FLOW = ± 3.0 CFS
 AVERAGE VELOCITY = 1.48 FPS

CHANNEL SECTIONS
DARNUTZER SLOUGH
JOHN OSBORNE

MADISON COUNTY

MONTANA

RE MILLER & SONS CONTRACTING - BELLON, MONTANA 59705

RE MILLER & SONS
 15 RAMS HORN
 BELLON, MT. 59705
 1-406-653-2175

DESIGNED	DATE
DRAWN	
APPROVED	
CHECKED	