



Montana Fish, Wildlife & Parks

September 9, 1999

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
Nongame Coordinator
Bozeman Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Beaverhead County Conservation District, 420 Barrett Street, Dillon, MT 59725
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Ms. Janis Requa, 503 Broadway Place, Salmon, ID 83467

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a **Future Fisheries Project** tentatively planned to stabilize an eroding streambank on a narrow isthmus between the **Beaverhead River and Poindexter Slough**. The intent of the proposed project is to prevent stream capture of Poindexter slough by the Beaverhead River. This proposed project is located approximately 5 miles south of the town of Dillon in **Beaverhead County**.

Please submit any comments that you have by 5 P.M., October 12, 1999 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.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Beaverhead River/Poindexter Slough Channel Stabilization 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 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. This project is being proposed to stabilize an eroding stream bank on a narrow isthmus between the Beaverhead River and Poindexter Slough. Stabilization work would involve installing 130 feet of rock rip-rap on the east bank of the Beaverhead River and keying a rock grade control into the bed and banks of a spring slough that enters the head of Poindexter. The purpose of this proposed project is to reduce the potential of capture of Poindexter Slough, an extremely valuable public fishery, by a channel avulsion from the Beaverhead River. The project site, involving a single property owner, is located approximately 5 miles south of the town of Dillon in Beaverhead County (Attachment 1).

I. Location of Project: This project will be conducted on the Beaverhead River located approximately 5 miles south of the town of Dillon within Township 8 South, Range 9 West, Section 3 in Beaverhead County.

II. Need for the Project: Department Goal C indicates that a Fisheries Division objective is to "provide and support programs to conserve and enhance high quality aquatic habitat and protect native aquatic species." The Future Fisheries Improvement Program is a tool to help achieve that objective.

A meander bend of the Beaverhead River has eroded to a point where, in high flow, water is spilling onto an actively eroding, narrow 20 foot isthmus of land separating the river from a small Poindexter Slough tributary. If left unchecked, the Beaverhead River could avulse and capture the Poindexter Slough channel, resulting in the loss of a very important public spring creek fishery, significant erosional damage to lands adjacent to the channel, and damage to the Dillon Canal system which diverts water out of Poindexter Slough and through the town of Dillon.

III. Scope of the Project:

The proposal calls for stabilizing approximately 195 feet of the east bank of the Beaverhead River by installing 130 feet of rock rip-rap according to Department of Natural Resources and Conservation standards. The remaining 65 feet of bank would be protected by installing a rock toe with a sloped and seeded geotextile encased upper bank. The stabilization work would incorporate willow shoot plantings protected with temporary fencing. The proposal also calls for placement of a rock apron on the backside of the isthmus to prevent headcutting and the installation of keyed rock grade controls within the small tributary to Poindexter Slough, as well as two rills that have developed from past high water events. This project is expected to cost

\$11,229.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$3,117.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Stabilizing the narrow band of land between the Beaverhead River and Poindexter Slough would reduce the likelihood that the river will capture the slough by channel avulsion. Although lateral migration of the Beaverhead River is part of the natural process, the recapture of a formerly abandoned river channel (presently constituting Poindexter Slough) would result in the loss of a valuable public spring creek fishery and significant erosion to the existing channel. Stabilizing the existing channel is expected to reduce the chances of a major channel avulsion of the Beaverhead River, thereby maintaining the existing healthy conditions for aquatic life.

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. Prior to 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. Additionally, a 310 permit will be obtained from the local Conservation District. In the long term, stabilizing the existing channel would reduce the chances of the Beaverhead River capturing Poindexter Slough. If an avulsion were to occur, the Poindexter channel would experience significant erosion, thereby contributing a large quantity of sediment to downstream areas.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed by the installation of rip-rap, but would quickly stabilize following proposed re-vegetation efforts. Overall, the project is expected to reduce the chances of a significant channel avulsion from occurring on the Beaverhead River.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be improved by incorporating the planting of willow shoots along the stream corridor. Riparian vegetation would be protected from livestock grazing with temporary barbed wire fencing. Presently, woody riparian shrubs are scarce

due to year long livestock grazing.

5. Aesthetics.

The placement of rock rip-rap along 130 feet of the Beaverhead River will not be aesthetically pleasing. However, the potential capture of Poindexter Slough by the river would have far greater adverse impacts on aesthetics than the placement of a relatively short length of rip-rap. This proposed project is intended to reduce the potential of stream capture.

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

Poindexter Slough is a large spring creek that provides for a valuable public fishery. Approximately 3.0 miles of this slough is open to public access via a Montana Fish, Wildlife and Parks fishing access site. Poindexter Slough contains the highest densities of brown trout observed in southwest Montana and averages about 1,680 angler-days of fishing use per year. The proposed project is intended to reduce the chance of stream capture by the Beaverhead River. If captured, the spring creek characteristics of Poindexter Slough would be destroyed.

9. Historic and archaeological sites

The proposed project will likely 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.

4. Agricultural or industrial production.

The proposed project would provide protection to the irrigation infrastructure of the Dillon Canal Company.

7. Access to & quality of recreational activities.

It is anticipated that the stabilization of 195 feet of the Beaverhead River would reduce the chances of channel avulsion and associated capture of Poindexter Slough. Poindexter Slough is a very popular spring creek fishery that receives about 1,680 angler-days of use per year. The Poindexter Fishing Access Site provides access to about 3.0 miles of the spring creek. The intent of this proposed project is to provide assurance that this spring creek fishery is maintained.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the probability that the Beaverhead River will avulse and capture Poindexter Slough would remain significant. Recreational opportunities associated with fish and wildlife resources on Poindexter Slough would be under continued threat of stream capture. The irrigation infrastructure of the Dillon Canal Company and private property within the town of Dillon also would remain under threat.

2. Stabilization of the narrow isthmus utilizing "soft techniques".

The utilization of "soft" stabilization techniques such as back sloping, soil lifts or vegetative techniques was rejected because the very narrow isthmus of remaining bank created a significant risk of failure. Rock barbs or vanes also were rejected because of the sharp radius of meander curvature on the Beaverhead River.

3. The Proposed Alternative

The proposed alternative is intended to reduce the threat of the Beaverhead River capturing Poindexter Slough. Rock rip-rap placed on the bank of the Beaverhead River, in conjunction with the installation of three grade controls in headwater tributaries to Poindexter Slough, would reduce the probability of channel avulsion and associated stream capture. If channel avulsion were to occur, the spring creek characteristics of Poindexter Slough would be destroyed, the infrastructure of the Dillon Canal Company would be threatened and private property within the town of Dillon would be jeopardized.

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 will be published on the Montana Electronic Bulletin Board.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on October 12, 1999.

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

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 Beaverhead River/Poindexter Slough Channel Stabilization Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to stabilize an eroding stream bank on a narrow isthmus of land between the Beaverhead River and Poindexter Slough. Stabilization work would involve installing 130 feet of rock rip-rap along the east bank of the Beaverhead River and keying rock grade controls into the bed and banks of three small headwater tributaries to Poindexter Slough. The intent of the project is to reduce the probability of channel avulsion and associated stream capture of Poindexter Slough by the Beaverhead River. The project site, involving one landowner, is located approximately 5 miles south of the town of Dillon 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			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				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		

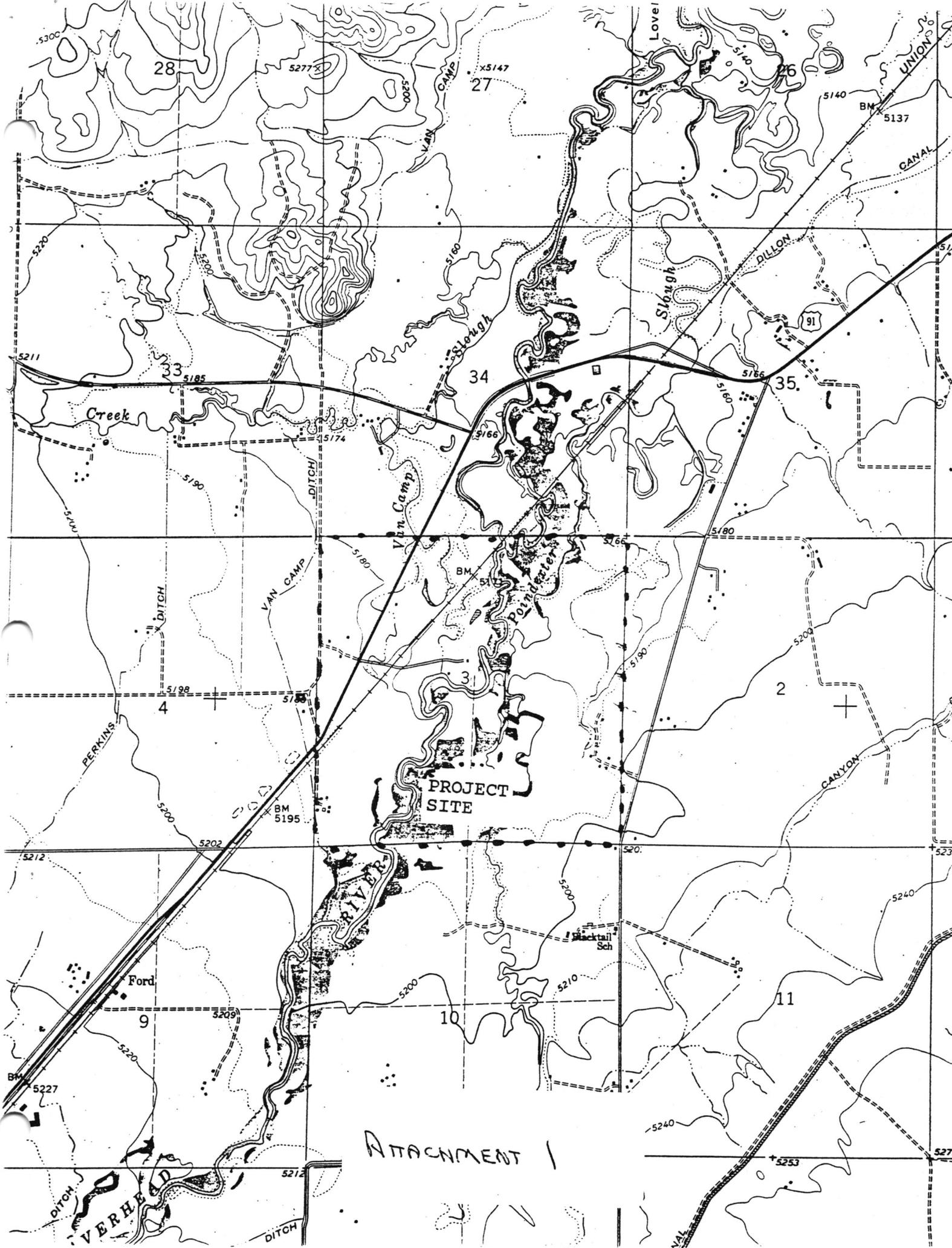
Other groups or agencies contacted or which may have overlapping jurisdiction Beaverhead County Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of

Environmental Quality, State Historic Preservation Office
Individuals or groups contributing to this EA Dick Oswald, Montana
Fish, Wildlife and Parks

Recommendation concerning preparation of EIS No EIS required.

EA prepared by : Mark Lere

Date: August 13, 1999



ATTACHMENT 1