



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
Ken McDonald, Native Species Coordinator
Kalispell Office

Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Green Mountain Conservation District, P.O. Box 1329, Trout Creek, MT 59874
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Mr. Mike Miller, 548 Elk Creek Road, Heron, MT 59844
Watershed Consulting, 410 Wisconsin Avenue, Whitefish, MT 59937

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to restore a three mile reach of Prospect Creek to a more proper dimension, pattern and profile. This proposed project is located approximately four miles west of the town of Thompson Falls in Sanders 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
Prospect Creek Channel Restoration and Bank 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 purposes of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to restore a three mile reach of Prospect Creek to a proper dimension, pattern and profile. The intent is to provide for the efficient downstream transport of bedload and to improve fish habitat. The project site, involving multiple property owners, is located approximately four miles west of the town of Thompson Falls in Sanders County.

I. Location of Project: This project will be conducted on Prospect Creek located approximately 4 miles west of the town of Thompson Falls within Township 21 North, Range 30 West, Sections 13, 22, 23, and 24 in Sanders 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.

Prospect Creek has been straightened and channelized in the past by both highway and pipeline construction. Additionally, past clearing of the riparian corridor for logging and development has changed the characteristics of the floodplain and reduced the erosion resistance of the stream banks. Due to these past land use activities, Prospect Creek has become unstable upstream of the confluence with Clear Creek resulting in accelerated bank erosion, increased sediment loads, lost capacity to move bedload and channel aggradation. Recent flood events have partially re-established the proper pattern and profile of the altered channel. However, this project proposes to further restore the function of the floodplain, increase erosion resistance of the stream banks, rehabilitate vegetation in the riparian corridor and, ultimately, improve fish habitat. The headwaters of Prospect Creek contain bull trout and westslope cutthroat trout. Prospect Creek has been identified as a core area by the Montana Bull Trout Restoration Team. The stream also provides spawning habitat for rainbow trout and brown trout in it's lower reaches.

III. Scope of the Project:

The project proposes to restore 10 distinct sites within a three mile reach of Prospect Creek (Attachment 1). The proposal calls for restoring meander belt width and increasing sinuosity where practical and using natural material revetment to stabilize the flood-stripped floodplain and eroding cut-banks. Additionally, width to depth ratios will be reduced in portions of the channel that have been over-widened as a result of aggradation. Bank stabilization techniques

will vary between sites, ranging from planting live facines to the installation of a combination of rootwads and rock. The flood-stripped floodplain will be stabilized using a combination of rock or log grade controls, brush bars and the planting of riparian vegetation. The establishment of proper channel dimensions to insure efficient movement of bedload will be based on width to depth ratios as measured in a stable reference reach. Finally, the riparian corridor will be revegetated using a combination of seeding and planting techniques incorporating grasses, herbs, shrubs and trees. This project is expected to cost \$217,498.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$34,000.00.

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 existing channel is expected to create a more healthy habitat for aquatic life by reducing sediment input. Installation of rootwad revetments will provide for an increase in overhead cover and will create hydraulic conditions for pool scour. Expected improvements in the aquatic habitat should enhance resident trout populations in the stream. Habitat for riparian dependent wildlife would also be improved by enhancing the riparian vegetative community through seeding and planting a variety of grasses, herbs and woody shrubs along the stream margin.

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 will be obtained from the local Conservation District. In the long term, stabilizing the existing channel would reduce the sediment contribution 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 by the installation of root wads, but would stabilize quickly following proposed re-vegetation efforts. Overall, the project is expected to reduce bank erosion and improve channel stability.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be improved by creating a more stable stream

channel and by seeding and planting a variety of grasses, herbs and shrubs along the stream corridor.

5. Aesthetics.

Aesthetics would be enhanced by restoring an unstable reach of stream to a more healthy and natural stream environment. The riparian vegetative community would be enhanced by seeding and planting riparian grasses, herbs and shrubs along the margins of the channel.

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

Prospect Creek contains both westslope cutthroat trout and bull trout. Westslope cutthroat trout have been petitioned for listing under the Endangered Species Act and bull trout is a species listed as threatened under the Act. Because Prospect Creek supports bull trout, the project will be included in Montana Fish, wildlife and Park's Section 6 conservation plan with the U.S. Fish and Wildlife Service. Stabilization of three miles of stream should improve the habitat for both species by creating a stable channel dimension, pattern and profile and by increasing woody debris in the form of rootwads.

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.

7. Access to & quality of recreational activities.

It is anticipated that the stabilization of three miles of Prospect Creek would improve overall aquatic habitat and, as a result, would enhance resident trout populations, as well as migrant spawners from the Clark Fork River. Consequently, the recreational fishery in the stream and possibly the Clark Fork River would be expected to be improved. The public is allowed access to several locations on this reach of Prospect Creek.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this segment of the Prospect Creek will remain unstable, although over time, it will continue to slowly evolve into a stable form. At least for the foreseeable future, the instability associated with this channel evolution will result in continued bank erosion, excessive sediment loading and the loss of fish habitat. In addition, habitat for

riparian dependent wildlife will remain in a degraded condition. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative is designed to stabilize three miles of stream using root wads, rock, brush bars and re-vegetation. These activities will create a more stable dimension, pattern and profile of the stream channel. A more stable channel form will reduce sediment loading, resulting in a more healthy habitat for aquatic life. The seeding and planting of a variety of grasses, herbs and shrubs along the stream margin would create more diverse habitat for riparian dependent wildlife. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations in the stream and possibly the Clark Fork 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 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 Prospect Creek Channel Restoration and Bank Stabilization Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to restore a three mile reach of Prospect Creek to a proper channel dimension, pattern and profile. The proposal calls for restoring meander belt width and increasing sinuosity where practical and using natural material revetment to stabilize the flood-stripped floodplain and eroding cut-banks. The intent of the project is to provide for the efficient transport of bedload and improve fish habitat. The project site, involving multiple landowners, is located approximately four miles west of the town of Thompson Falls in Sanders 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 Green Mountain Conservation District, NRCS, 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 Mike Miller, Prospect
Creek Watershed Council; Watershed Consulting
Recommendation concerning preparation of EIS No EIS required.
EA prepared by : Mark Lere
Date: August 16, 1999

ATTACHMENT 1

SITE LOCATIONS



From:
Table Top Mt.
USGS Quad
1998