July 14, 2010
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 Bureau
    Endangered Species Coordinator
    Native Species Coordinator, Fisheries
    Missoula Office
Montana State Library, Helena
Montana Department of Natural Resources and Conservation
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Avenue, Bozeman, MT 59715
North Powell County Conservation District
Big Blackfoot Chapter Trout Unlimited
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Wade Stitt, 1664 Lower Braziel Creek Road, Helmville, MT 59843

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a project calling for the restoration of approximately 4,400 feet of Nevada Creek, a tributary to the Blackfoot River. The project calls for restoring a reach of Nevada Creek to a proper dimension, pattern and profile; installing a fish screen on an irrigation diversion; enhancing the riparian vegetative community with woody shrub transplants and cuttings; and installing riparian fencing. The intent of the project is to create a fully functioning stream channel that is capable of supporting coldwater fish. The project site is located immediately downstream of Nevada Creek Reservoir in Powell County.

Please submit any comments that you have by 5:00 P.M., August 15, 2010 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 Section
Fisheries Bureau
e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Nevada Creek Channel Restoration 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.

The Future Fisheries Program is proposing to provide partial funding to a project designed to restore a 4,400-foot reach of Nevada Creek, a tributary to the Blackfoot River. The intent of this project is to construct a functional stream channel that is capable of supporting coldwater fish. The project site is located immediately downstream of Nevada Creek Reservoir in Powell County.

I. Location of Project: This project will be conducted on a 4,400-foot reach of Nevada Creek located immediately downstream of Nevada Creek Reservoir within Township 12 North, Range 10 West, Section 11 in Powell County (Attachment 1). The project site is located on properties owned by Montana Department of Natural Resources and Conservation and by Wade Stitt (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.

Nevada Creek is a third order tributary to the Blackfoot River that supports low densities of brown trout, rainbow trout and westslope cutthroat trout, as well a number of nongame species of fish. The reach of Nevada Creek proposed for restoration supports the lowest densities of trout in the drainage and these low densities are primarily attributable to very poor existing habitat conditions. Nevada Creek is listed on the total daily maximum load 303 (d) list for nutrients, siltation, suspended solids and thermal modifications. This reach of stream is very over-widened, suffers from extensive bank erosion, lacks habitat complexity and has a scarce woody shrub riparian community (Attachment 2). The goal of the project is to restore this degraded reach of stream to improve fish habitat. The restoration would provide for very publically visible demonstration site that potentially could act as a catalyst for broader restoration efforts in the Nevada Creek drainage

III. Scope of the Project:

This project calls for restoring a 4,400-foot reach of Nevada Creek by re-constructing the channel to low width to depth ratio (from up to 56 feet existing to an average of 24 feet in the design) meandering form with well defined pools runs and riffles (Attachment 3). Newly constructed stream banks would be stabilized with the installation of wood at the toe of the bank and a series of log vanes, as well as transplants of willow, alder and cottonwood. Additionally, an existing irrigation diversion would be retrofitted with a rock cross vane and a coanda style fish screen. A grazing management plan has been

developed to manage livestock in a manner consistent with the protection in restoration investment.

This project is expected to cost $176,900.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $35,800.00. The remaining funding would come from other sources and from in-kind services:

Contributor	In-kind service	In-kind cash
USFWS		$10,000.00
Chutney Foundation		$25,000.00
Big Blackfoot Chapter TU	$7,600.00	$1,500.00
Landowner	$1,500.00	
Blackfoot Challenge	$14,500.00	
John and Irene Weaver	$5,000.00	
Blue Water Foundation		$25,000.00
DNRC	$2,000.00	
DNRC 223 grant		$6,000.00
Wildland Hydrology	$43,000.00	

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

This reach of Nevada Creek currently supports the lowest known densities of trout in the drainage. Restoring a 4,400-foot reach of channel and enhancing the associated riparian corridor is expected to improve aquatic habitat diversity and increase existing fish populations. The proposed streamside fencing and the planting of native riparian shrubs and trees are expected to enhance habitat for riparian dependent wildlife.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the active channel will 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 requirements to meet the federal Clean Water Act (404 permit).

3. Geology, soil quality and moisture.

Soils within the footprint of the re-constructed channel would be disturbed during construction (approximately 4 acres), but would be stabilized using coir fabric, the seeding and the planting of riparian shrubs and trees, and the installation of riparian fencing.

4. Vegetation cover, quantity and quality.

Vegetation within the footprint of the re-constructed channel would be disturbed during construction, primarily involving non-native grasses. Re-vegetation efforts associated with the new channel construction and the installation of riparian fencing would mitigate for this disturbance.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would be enhanced by restoring a degraded reach of stream to a healthier and more natural stream environment.

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

Low densities of bull trout are known to reside in the headwaters of the Nevada Creek drainage. Although the presence of bull trout within the vicinity of the project site is likely extremely limited, the proposed restoration efforts could potentially provide some benefits to the species, especially if this project would catalyze other restoration projects in the drainage.

9. Historic and archaeological sites

The proposed project likely will require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office will be 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.

The intent of the project is to improve aquatic habitat diversity within a 4,400-foot reach of Nevada Creek to enhance populations of coldwater fish. A portion of the project site, located on property owned by the Montana Department of Natural Resources and Conservation, is fully open to public access. The project site is located adjacent to State Highway 141 and is readily accessible. As a result, the recreational fishing on this reach of Nevada Creek is expected to exhibit some improvement.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no funding was provided, the applicant would have to either seek additional sources of funding to complete the project or this 4,400-foot reach Nevada Creek would remain degraded. The opportunity to create a restoration demonstration site would be lost. Water quality will continue to be impaired from excessive sedimentation and associated higher water temperatures. Vegetation within the riparian corridor also would remain degraded.

2. The Proposed Alternative

The proposed alternative is designed to provide partial funding to a project calling to restore a 4,400-foot degraded reach of Nevada Creek in an effort to create environmental conditions conducive to coldwater fish. This alternative would increase habitat diversity for fish populations residing in the stream, improve upstream fish passage eliminate the loss of fish into an existing irrigation diversion and enhance the riparian vegetative community. This alternative also would provide a public demonstration of stream restoration that potential could be used as a catalyst for undertaking broader restoration efforts in the Nevada Creek drainage.

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 15, 2010.

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
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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 Nevada Creek Channel Restoration 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 designed to restore 4,400-foot reach of Nevada Creek, a tributary to the Blackfoot River. The intent of the project is to construct a functional stream channel that is capable of supporting coldwater fish. The project site is located immediately downstream of Nevada Creek Reservoir in Powell 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

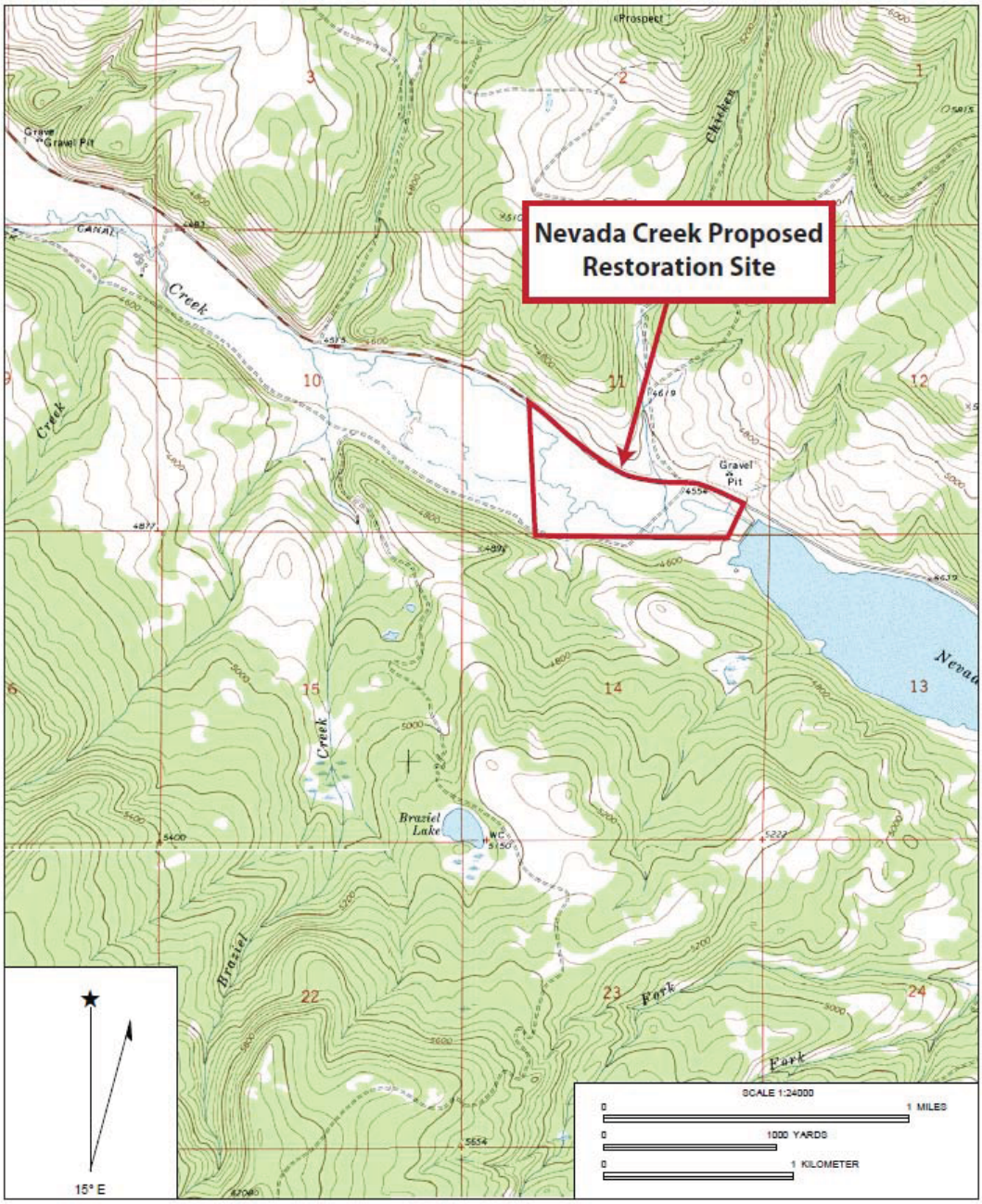
POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	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 North Powell 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 Ryen Aasheim, Big Blackfoot Chapter Trout Unlimited.

Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: July 9, 2010



Map showing location of project site on Nevada Creek

ATTACHMENT 1

Photo of project site on Nevada Creek

ATTACHMENT 2

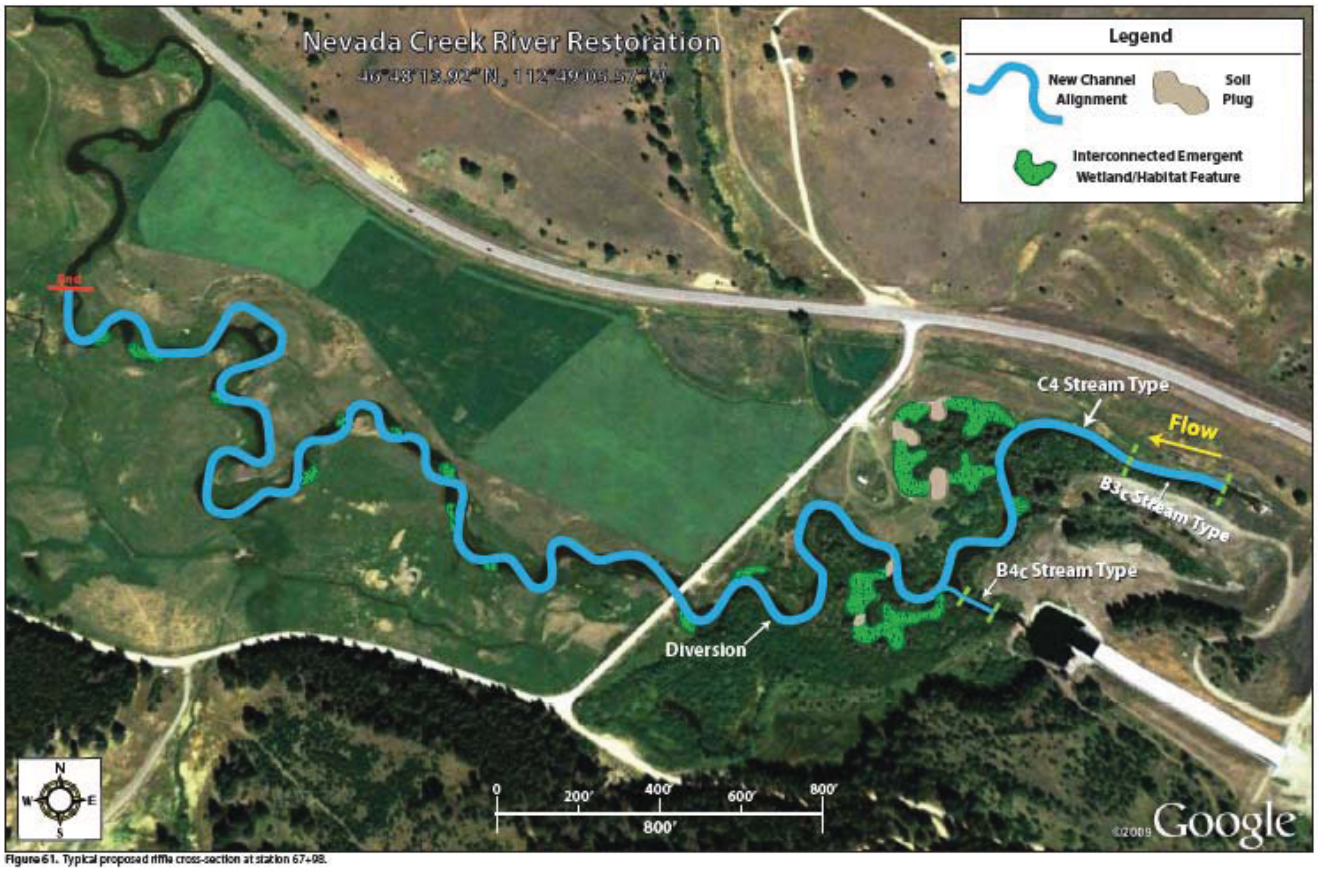


Figure 61. Typical proposed riffle cross-section at station 67+98.

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Plan view of the proposed restoration design on Nevada Creek

ATTACHMENT 3