

ENVIRONMENTAL ASSESSMENT  
Fisheries Division  
Montana Fish, Wildlife & Parks  
Yukon Creek Fish Passage Improvement

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in streams 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. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

The FFIP is proposing to provide partial funding to a project calling for the replacement of an undersized culvert with a bottomless arch culvert capable of passing a 100-year flood event, which would create year-round connectivity and restore natural stream conditions. The existing culvert impedes fish passage during high flows.

I. Location of Project:

The project site is located on Yukon Creek, a tributary to Beaver Creek in the Blackfoot River drainage, within Township 15 North, Range 9 West, Section 29 in Lewis & Clark County (Attachment 1). It is located on U.S. Forest Service Road 4106 approximately 5 miles northwest of the town of Lincoln.

II. Need for the Project:

One goal within FWP's Statewide Fisheries Management Plan for the fisheries management program is to "protect, maintain, and restore native fish populations, their habitats, life cycles, and genetic diversity to ensure stewardship of native species and to ensure angling opportunities whenever possible." By implementing habitat restoration projects through the FFIP, this critical goal can be achieved. The proposed project would help meet this goal by improving passage for westslope cutthroat trout, potentially increasing its survival and recruitment.

III. Scope of the Project:

This project would address the existing, undersized stream crossing on Yukon Creek that impedes fish passage during high streamflow periods and creates channel impairments. The existing 60-inch culvert would be replaced with a bottomless arch structure that would allow uninhibited fish passage. This project would result in a stable stream crossing that should correct the current road drainage problems, eliminate delivery of excessive sediment, provide for fish passage, and restore natural channel morphology. The hydraulic capacity of the structure was analyzed to ensure that it satisfies a 100-year flood event. The new structure width would be 16

feet long to accommodate bankfull streamflow conditions and an appropriate floodplain.

The total estimated cost for this project is \$162,577.50. Of this total, the FFIP would be contributing up to \$23,400. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash
U.S. Forest Service		\$134,377.50
Big Blackfoot Chapter of Trout Unlimited	\$4,800.00	
TOTAL = \$139,177.50		

IV. Environmental Impact Review Checklist:

**Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment**

Project Title: Yukon Creek Fish Passage Improvement

Division/Bureau: Fisheries Division / Habitat Bureau (FFIP)

Description of Project: The FFIP tentatively plans to provide partial funding to a project calling for the replacement of an undersized culvert with a bottomless arch culvert capable of passing a 100-year flood event, which would create year-round connectivity and restore natural stream conditions.

**A. POTENTIAL IMPACTS TO THE PHYSICAL ENVIRONMENT**

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Geology and soil quality, stability and moisture				X		
2. Air quality or objectionable odors				X		
3. Water quality, quantity and distribution (surface or groundwater)			X			X
4. Existing water right or reservation				X		
5. Vegetation cover, quantity and quality			X			X
6. Unique, endangered, or fragile vegetative species				X		
7. Terrestrial or aquatic life and/or habitats			X			X
8. Unique, endangered, or fragile wildlife or fisheries species			X			X
9. Introduction of new species into an area				X		
10. Changes to abundance or movement of species			X			X

**B. POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT**

Will the proposed action result in potential impacts to:	Unknown	Potentially Significant	Minor	None	Can Be Mitigated	Comments Provided
1. Noise and/or electrical effects				X		
2. Land use				X		
3. Risk and/or health hazards				X		
4. Community impact				X		
5. Public services/taxes/utilities				X		
6. Potential revenue and/or project maintenance costs				X		
7. Aesthetics and recreation				X		
8. Cultural and historic resources				X		X
9. Evaluation of significance				X		
10. Generate public controversy				X		

**V. Explanation of Potential Impacts on the Physical Environment.**

**3. Water quantity, quality, and distribution.**

No changes in streamflow would occur in Yukon Creek as a result of the proposed project. Short-term increases in turbidity may occur during project construction. To minimize turbidity, 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 (318 authorization).

**5. Vegetation cover, quantity and quality.**

This project would remove the existing culvert and replace it with a larger culvert, which would disturb vegetation in the immediate area during construction. However, the area would be revegetated appropriately. The net amount of vegetation may be relatively similar pre- and post-project, but long-term impacts are considered positive because the project would reduce sediment inputs, correct road drainage issues, and allow the stream to function naturally.

**7. Terrestrial and aquatic life habitats.**

Construction activities that affect terrestrial and aquatic life habitats would be temporary. Impacts would be confined to the stream crossing area and result from the replacement of the undersized culvert. Long term, this project should enhance aquatic and terrestrial habitats through improved fish passage and increased stream function.

8. Unique, endangered, or fragile wildlife or fisheries species.

This project will affect westslope cutthroat trout, federally recognized as a sensitive species, and designated a “Species of Concern” in Montana. The impacts on westslope cutthroat trout as a result of this project are predicted to be positive, potentially increasing recruitment and survival of the species.

10. Changes to abundance or movement of species.

The culvert replacement should increase stream connectivity by removing an obstruction to fish passage. The bottomless arch culvert will be large enough to accommodate natural stream and floodplain function and provide unobstructed movement of aquatic species. This impact is considered positive and could increase the abundance of aquatic species in Yukon Creek.

## VI. Explanation of Impacts on the Human Environment.

8. Cultural and historic resources.

No cultural or historical resource impacts are anticipated. However, the State Historical Preservation Office will be notified of this project, and any potential concerns will be addressed.

## VII. Narrative Evaluation and Comment.

There are no anticipated cumulative effects.

## VIII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative.

If no funding is provided through the FFIP, the applicant would have to seek additional sources of funding to complete the project or the existing undersized culvert would remain in Yukon Creek, obstructing fish passage at high streamflow.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to replace an undersized culvert on Yukon Creek with a bottomless arch culvert capable of passing a 100-year flood event.

## IX. Environmental Assessment Conclusion Section.

1. Other groups or agencies contacted or which may have overlapping jurisdiction:

Lewis & Clark Conservation District, Montana Department of Natural Resources and Conservation, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

None.

3. Is an EIS required?

No. We conclude, from this review, that the proposed activities will have an overall positive impact on the physical and human environment, and will therefore not require the extensive analysis associated with an EIS.

4. Level of public involvement.

The project application to the FFIP has been posted on the FWP webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the FFIP. The proposed project also will be reviewed by the Fish and Wildlife Commission, and funding will be contingent upon their approval. The EA will be distributed to all individuals and groups listed on the cover letter and will be published on the FWP webpage: [www.fwp.mt.gov](http://www.fwp.mt.gov).

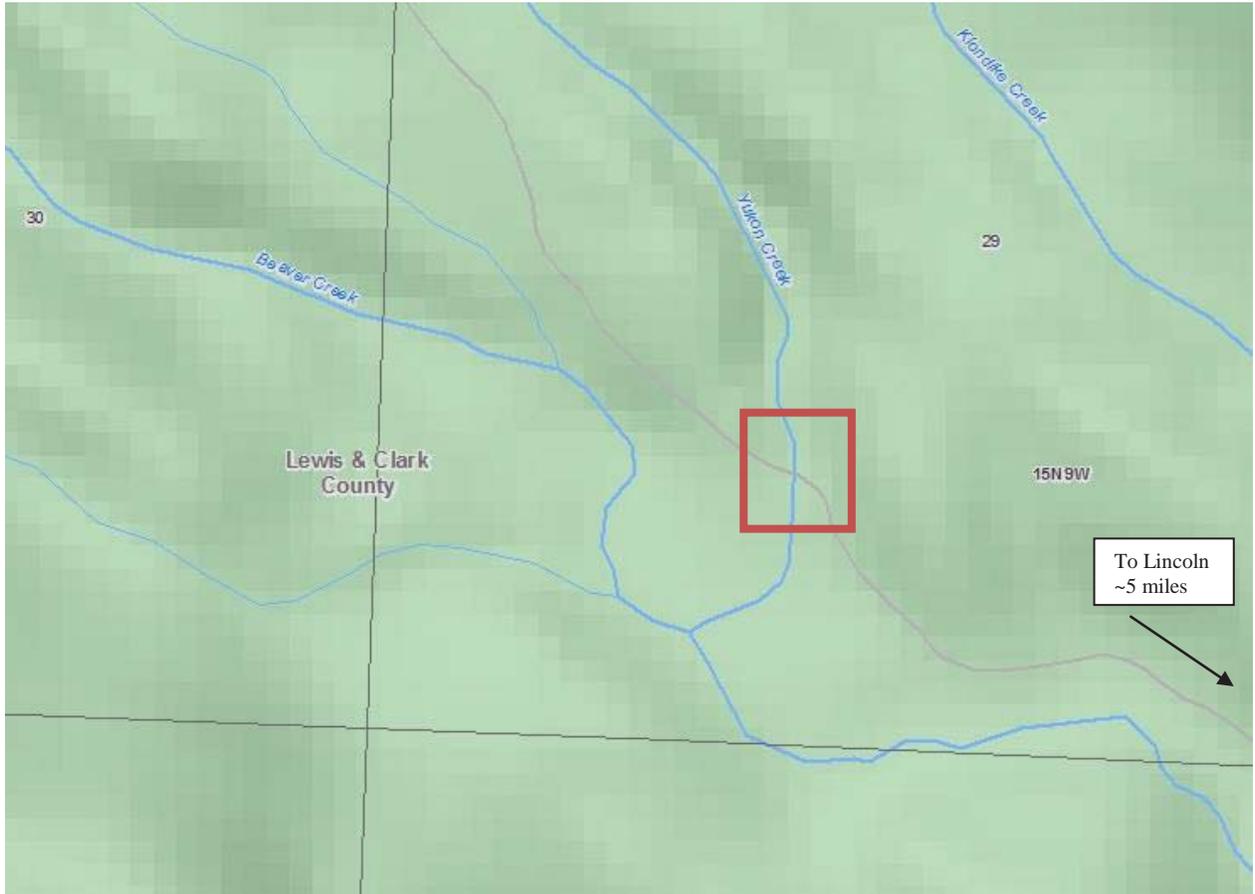
5. Duration of comment period?

Public comment will be accepted through 5:00 PM on February 16, 2015.

6. Person(s) responsible for preparing the EA.

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ATTACHMENT 1



ATTACHMENT 2

