ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife & Parks
Theodore 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 that would replace an undersized culvert with a pre-stressed concrete bridge structure. The existing culvert impedes fish passage during high flows, and this project would create year-round connectivity and natural stream conditions.

I. Location of Project:

The project site is located on Theodore Creek, a tributary to Beaver Creek, within Township 15 North, Range 9 West, Section 33 in Lewis & Clark County (Attachment 1). It is located about six miles northwest of the town of Lincoln, where the stream intersects North Beaver Creek Road.

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 goal of this project is to improve fish habitat and stream connectivity, and would affect populations of bull trout and westslope cutthroat trout. These species are native to Montana and designated "Species of Concern." They are also listed as threatened and sensitive, respectively, under the Endangered Species Act.

III. Scope of the Project:

This project will address the existing stream crossing near stream-mile 0.12 on U.S. Forest Service land (Attachment 1). The crossing is currently undersized, impedes fish passage during high flow periods, and creates impairments to the channel (Attachment 2). The existing 64-inch diameter culvert would be replaced with a prestressed-concrete bridge that would enable unobstructed fish passage and restore the natural streambed. The design was created using Stream Simulation methods and principles, and the hydraulic capacity of the proposed structure

was analyzed to ensure that it satisfies a 100-year flood event. The bridge would have a width of 32 feet and could accommodate bankfull streamflow conditions and an appropriate floodplain.

The total estimated cost for this project is $160,394.50. Of this total, the FFIP would be contributing up to $20,000. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash
U.S. Forest Service		$135,594.50
Big Blackfoot Chapter of Trout Unlimited	$4,800	
TOTAL = $140,394.50		

This project will obtain the proper permits for construction. A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district, and the U.S. Army Corps of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit).

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: Theodore 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 bridge on Theodore Creek, allowing for year-round fish passage and natural stream function.

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 Theodore 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 an undersized culvert and replace it with a concrete bridge, which would disturb vegetation in the immediate area during construction. However, the area would be revegetated after the bridge is installed. Long-term impacts are considered positive and would return the stream and floodplain to a more natural, functional state.

7. Terrestrial and aquatic life habitats.

Construction activities that will affect terrestrial and aquatic life habitats will be short-term. Impacts would be confined to the stream crossing area and result from the removal of the culvert and subsequent bridge installation. Long-term, this project should increase aquatic and terrestrial habitats through increased stream and floodplain health.

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

This project will affect westslope cutthroat trout and bull trout; both species are federally recognized and designated "Species of Concern" in Montana. The impacts on these species as a result of this project are predicted to be positive, potentially increasing recruitment and survival of these species.

10. Changes to abundance or movement of species.

The culvert replacement should increase stream connectivity by removing an obstruction to fish passage. The bridge 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 fish and other aquatic organisms in Theodore 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, either the applicant would have to seek additional sources of funding to complete the project, or the existing undersized stream crossing would remain in Theodore Creek, negatively affecting stream and floodplain function.

2. The Proposed Alternative.

The proposed alternative intends to provide partial funding through the FFIP to replace an undersized culvert in Theodore Creek with a concrete bridge capable of allowing fish passage and natural stream and floodplain function.

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**.

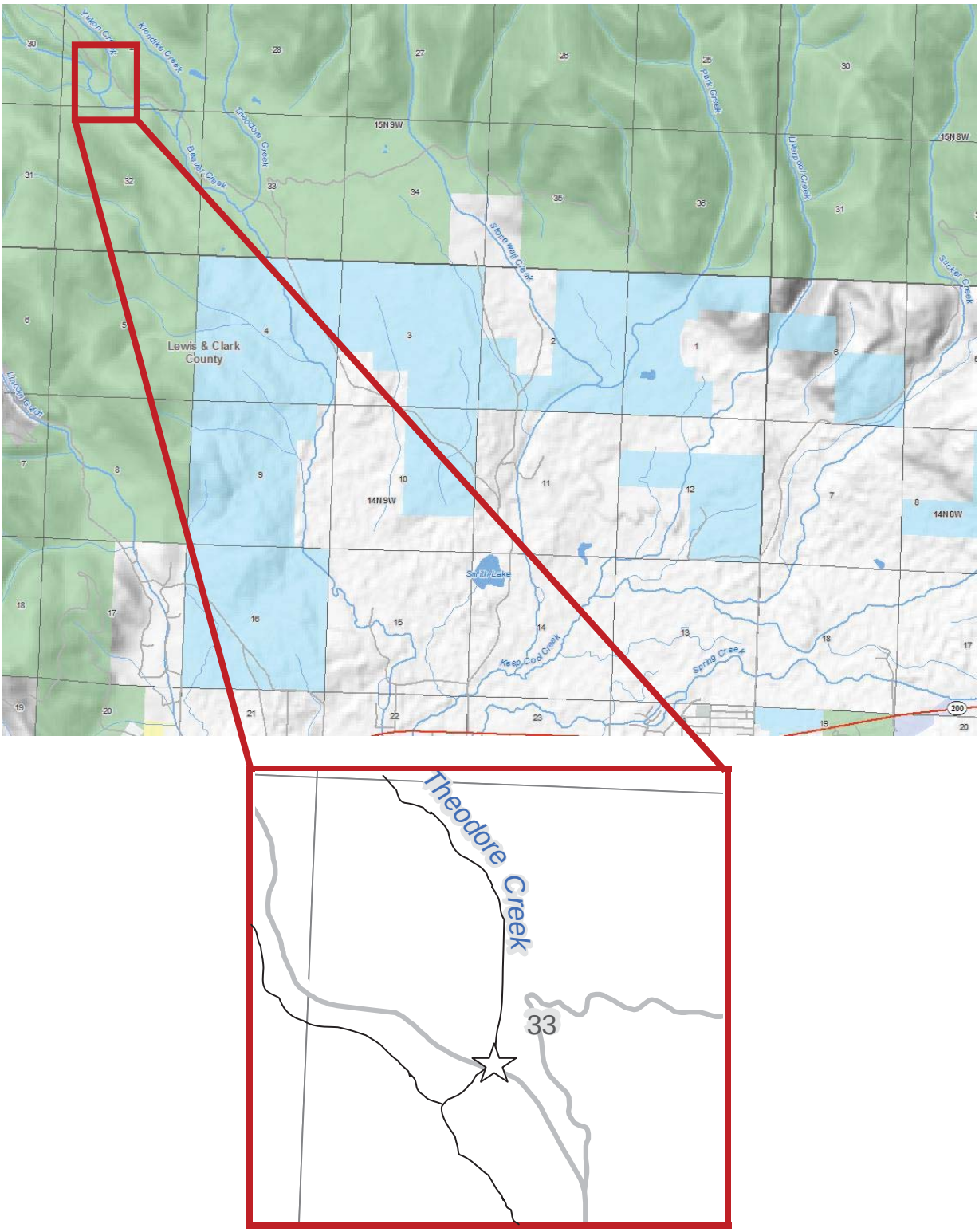
5. Duration of comment period?

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

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

Michelle McGree, Program Officer
Montana Fish, Wildlife & Parks
1420 East 6th Avenue
PO Box 200701
Helena, MT 59620
Telephone: (406) 444-2432
E-mail: mmcgree@mt.gov

ATTACHMENT 1



ATTACHMENT 2