

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Fish Creek Habitat Improvement
Proposed Implementation Date: August 2012
Proponent: Montana Dept. of Fish, Wildlife & Parks
Location: Sections 20 and 30 T14N R24W
County: Mineral

I. TYPE AND PURPOSE OF ACTION

Montana Fish, Wildlife & Parks (DFWP), and Trout Unlimited (TU), hereafter "project partners", propose to construct a series of logjams consisting of native green and aged woody debris along a portion of lower Fish Creek on DNRC and DFWP properties. The logjams are intended to increase native trout populations in project reaches and in Fish Creek overall by providing enhanced cover and channel complexity in a key trout rearing area and migratory corridor. The project would also likely improve the quality of angling in this reach.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

Legal Notices describing the proposed project were placed in the *Missoulian*, *Independent Record* and *Mineral Independent* newspapers.

DFWP did a statewide press release regarding the project.

Direct mailing or e-mail notifications were sent to adjacent landowners, adjacent DNRC cabinsite lessees and interested parties by DFWP.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

U.S. Army Corps of Engineers	404 Permit
Mineral County	Floodplain Permit
MT DFWP	124 Permit
MT DEQ	318 Authorization
US Fish & Wildlife Service	ESA Consultation-Bull Trout

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

Alternative A: No Action-If no action is undertaken, the project reaches would continue to function with limited complexity and limited habitat for fish.

Alternative B: Installation of Logjams to Increase River Complexity and Benefit Native Fish-Under this alternative, approximately 20 logjams (consisting of 80-140 trees total) would be installed using a tracked excavator to provide increased habitat complexity to stream reaches where habitat is limited. Logjams would be

passively anchored at each site. Ground disturbance and damage to existing riparian vegetation would be expected to be minimal based on similar operations on nearby streams.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain *POTENTIAL IMPACTS AND MITIGATIONS* following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Implementation of Alternative B would create instream structure without any change in the geologic substructure. There would be minor disruption or compaction of soils when using equipment to access the stream channel and in collecting trees for the project. No unique geological or physical features exist within the immediate project area.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

Implementation of Alternative B would create logjam structures in the stream channel, which would cause scour of the streambed and deposition of stream sediment, thereby improving spawning and rearing habitat for native fish. Some minor, short-term siltation is expected during placement of the logs within the stream channel. Short-term increases in turbidity would occur during project construction. To minimize turbidity, construction would occur during a low flow period and operation of equipment in the creek channel would be minimized to the extent practical. All required permits/authorizations would be obtained prior to construction. The construction of the logjams would redirect Fish Creek in the immediate location of the structures causing pool scour. These minor course changes would not be intended to affect the overall flow and direction of the creek's path in the area, but are likely to create non-uniform flow patterns and cover for fish as would naturally occur with large woody debris in streams.

6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

Some minor amounts of dust may be generated during the uprooting and transfer of trees to be used in the construction of the logjams should Alternative B be implemented. This would be expected to be minor and short-term.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

If Alternative B were to be implemented, approximately 80 -140 trees would be selectively removed from DNRC ownership and be used to construct logjams in Fish Creek. Removal of selected trees would benefit the productivity of these parcels by removing less desirable trees, i.e. Douglas-fir encroachment on large western larch and ponderosa pine, and those trees which are exhibiting poor phenotype. In addition, trees that have the potential to create a hazard to either the stability of the Fish Creek road or that may fall across the road would be selected for removal if possible. Any cottonwood trees adjacent to Fish Creek that would be selected for

removal would not have any commercial value; therefore, their removal would not have any monetary impact upon the Trust beneficiaries.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

DNRC does not expect terrestrial species or their habitats to be negatively affected by the implementation of Alternative B. Bull trout do inhabit Fish Creek and spawn during fall months of the year; however, spawning areas are located a considerable distance upstream of the project area, and this project would enhance the migration corridor or the ability of juvenile bull trout to rear in this stretch. The addition of large woody debris to the stream channel would enhance natural channel complexity and is viewed as a benefit to fish habitat conditions. The creek channel would remain passable by all fish species throughout the duration of the project, and any minor sediment releases in the creek as a result of the project are not expected to have a negative impact on fish habitat or passage. Current and potential nesting trees for raptors would be avoided in the selection of trees for the project.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

During the preparation of their EA for this project, Montana DFWP did a search of the MNHP database and found that 8 species of concern exist within or pass through the vicinity of the proposed action. Species of concern include gray wolf (endangered status), Canada lynx (threatened status), wolverine, fisher, bald eagle (threatened status), black-backed woodpecker, bull trout (threatened status) and westslope cutthroat trout. DFWP did not anticipate that the implementation of Alternative B would have any significant impacts upon any of these species.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

During the preparation of their EA for this project, Montana DFWP consulted with the Montana State Historic Preservation Office (SHPO), and found that there is a low likelihood that cultural properties would be impacted with the implementation of Alternative B. Should any cultural materials be found during this project, work would be halted and SHPO would be notified.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

Implementation of Alternative B would likely improve the quantity and/or quality of tourism and recreation activities within the Fish Creek drainage, as fishing in the project reach would likely see significant improvement. There would likely be some short-term visual impacts in those areas where trees would be removed, and equipment accesses the stream channel. There would be an increase in noise near the project site from equipment used to do the work. This would only occur during project construction. However, these impacts would be expected to be short-term in duration as grasses and riparian vegetation resprouts in the spring following construction.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

N/A

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Montana DFWP prepared an EA regarding the instream effects of the proposed project.

IV. IMPACTS ON THE HUMAN POPULATION
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| <ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i> |
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14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Should Alternative B be implemented, the contractor(s) would be required to provide traffic control along the Fish Creek road during the removal and transport of any trees to be used in the construction of the logjams. In addition, provisions would need to be put into place to prevent any fishing and/or watercraft use in areas of Fish Creek immediately adjacent to any areas of active construction.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

N/A

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

Implementation of Alternative B would provide 2-4 weeks of employment for excavating contractors involved in the construction of the logjams.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

N/A

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

N/A

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

N/A

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

Implementation of Alternative B would likely improve the quantity and/or quality of tourism and recreation activities within the Fish Creek drainage, as fishing in the project reach would likely see significant improvement.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

N/A

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

N/A

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

N/A

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

Implementation of Alternative B would likely improve the quantity and/or quality of tourism and recreation activities within the Fish Creek drainage, as fishing in the project reach would likely see significant improvement. The proposed project area begins just downstream of several existing DNRC cabinsites. Project work in this area would be completed as expeditiously as possible and would not occur on weekends to minimize disturbance to lessees.

EA Checklist Prepared By:	Name: Jonathan Hansen	Date: August 1, 2012
	Title: Missoula Unit Manager	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B: Issue a Land Use License to DFWP to allow the removal of trees and construction of logjams on DNRC ownership adjacent to and in Fish Creek.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Anthony Liane Title: SWLO Area Manager
Signature: /s/ Anthony L. Liane	Date: August 1, 2012