

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Bighorn River Side Channel Restoration Project (LUL #6192)
Proposed Implementation Date:	March 2011
Proponent:	Bighorn River Alliance, P.O. Box 7882, 28792 South G Street, Fort Smith, MT 59035 Ph: 406-666-9175
Location:	Section 35-T5S-R31E, Section 19-T5S-R32E
County:	Big Horn
Trust:	Common Schools - Navigable River (Big Horn)

I. TYPE AND PURPOSE OF ACTION

The Bighorn River Alliance is applying for a Land Use License for the purpose of excavating approximately 250 cubic yards of river sediment deposits and remove invasive Russian olive and salt cedar from two separate areas. The purpose of the excavation is to improve water flow to and re-establish historic side channels to enhance fish habitat. A large tracked backhoe and front end loader would be used to transport material away from the excavation sites. The proposed project would take approximately seven days to complete and would occur below the low water marks of the Bighorn River in the Section 35-T5S-R31E (Picture Channel) and Section 19-T5S-R32E (Cline's Channel). The State land involved is the Bighorn riverbed below the low water marks and the proposed project would impact less than 0.2 acres.

II. PROJECT DEVELOPMENT

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

Provide a brief chronology of the scoping and ongoing involvement for this project.

Agencies involved include the Montana Fish, Wildlife & Parks, Army Corp of Engineers, Big Horn County Conservation District, Big Horn County Weed Supervisor, and the Montana Natural Heritage program. No formal public scoping was performed for this License request.

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

The Big Horn County Conservation District (310 Permit), U.S. Army Corps of Engineers (Section 404 Permit), Big Horn County (Floodplain Permit), and the Montana Department of Environmental Quality (318 Authorization). The Big Horn County Weed Board administers the State weed laws in Big Horn County.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: A Land Use License would not be granted.

Action Alternative: A Land Use License would be granted to excavate approximately 250 cubic yards of river sediment deposits and remove Russian olive and salt cedar from two separate areas below the low water mark in the Bighorn River in Section 35-T5S-R31E and Section 19-T5S-R32E in Big Horn County.

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 any cumulative impacts to soils.

Disturbance to the riverbed would occur during excavation of the 250 cubic yards of river sediment. Excavation activities would take less than one week to complete. All activities would occur during low water flow conditions in March and all necessary permits would be secured (310 permit, 404 permit, and 318 authorization). Expected impacts would be minimal and of short duration.

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 cumulative effects to water resources.

Disturbance to the riverbed would occur during excavation of the 250 cubic yards of river sediment. All excavation activities would take less than one week to complete. All activities would occur during low water flow conditions in March and all necessary permits would be secured (310 permit, 404 permit, and 318 authorization). Expected impacts would be minimal and of short duration.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

A short duration increase in pollutants and particulates would occur from heavy machinery during proposed activities. Minimal impacts to air quality are expected.

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 cumulative effects to vegetation.

The proposed project would physically remove only Russian olive and salt cedar and treat the stumps with herbicide to minimize re-sprouting. Removal of the non-native plant species would reduce competition and promote native plant species growth. An appropriate herbicide recommended by the Big Horn County Weed Supervisor would be utilized on the project. Minimal impacts are expected.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

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

Due to the short duration of the proposed excavating activities, the activities occurring in March before bird breeding seasons and before non-native rainbow trout spawning season, and the minimal area of impact, no significant impacts are anticipated.

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 cumulative effects to these species and their habitat.

A proposed project area search of the Montana Natural Heritage Program database identified two vertebrate animals that are listed as sensitive, a species of concern, threatened species, or endangered species: Sauger and spotted bat.

Sauger is native to Montana and exists year-round within the proposed project area. The proposed project would be completed in March, before the mid-April to May sauger spawning season. No significant impacts are expected.

Spotted bats exist year-round within the proposed project area. The Spotted bat appears to be active from early April to late October and roost in caves and in cracks and crevices in cliffs and canyons. Due to the month of March timing of the proposed project activities and the lack of suitable roosting habitat in the proposed project area, minimal impacts are anticipated.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

The proposed project area is the riverbed below the low water mark of the Bighorn River. No impacts are expected.

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 cumulative effects to aesthetics.

Excavation equipment and activities would be visible during the project. Expected impacts would be minimal and of short duration.

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 cumulative effects to environmental resources.

None.

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.

None.

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

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

None.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

None.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

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

None.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

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

None.

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 cumulative effects of this and other projects on government services

None.

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.

Bureau of Reclamation Bighorn River Side Channel Investigation: Geomorphic Analysis
Technical Report No. SRH-2010-1

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 cumulative effects to recreational and wilderness activities.

Access to the river would not be affected. No significant impacts are anticipated.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

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

None.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

None.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

None.

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 cumulative economic and social effects likely to occur as a result of the proposed action.

The proposed action has provided \$25 via a Land use License application fee. A rental fee of \$150 for the License would generate revenue for the Common School Trust.

EA Checklist Prepared By:	Name: Richard A. Moore	Date: November 23, 2010
	Title: SLO Area Manager	

V. FINDING

25. ALTERNATIVE SELECTED:

After review, I have selected the proposed Action Alternative, to approve the issuance of a Land Use License. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area and generating revenue for the trust.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude all identified potential impacts will be avoided or mitigated by the small project size, short duration, timing, and no significant impacts will occur as a result of implementing the selected alternative.

Mitigation measures:

1. All in-river work shall be completed in an expeditious manner during low water flow. All excavation activities performed in the river shall be conducted in a manner to reduce in-river turbidity along with minimizing disturbances.
2. All necessary permits are secured.
3. An appropriate herbicide recommended by the Big Horn County Weed Supervisor is utilized for the project.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: Jeff Bollman
	Title: SLO Area Planner
Signature: /s/ Jeff Bollman	Date: 11/29/2010