CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	City of Laurel Yellowstone River Diversion Ditch
Proposed Implementation Date:	December 2012
Proponent:	City of Laurel
Location:	SW¼SW¼ of Section 15, SE¼SE¼ of Section 16, NE¼NE¼ of Section 21 and NW¼NW¼ of Section 22 Township 2 South, Range 24 East (Common Schools – Island in the Yellowstone River)
County:	Yellowstone County

I. TYPE AND PURPOSE OF ACTION

The City of Laurel is proposing to construct an 8' wide temporary diversion ditch on a state-owned island/gravel bar on the north side of the Yellowstone River. This ±700' long ditch will connect to an old municipal water intake that is no longer in the main river channel. The City constructed a new water intake approximately 9 years ago in what is now the active channel but it has experienced scouring around it and is functioning poorly during low water flows. The City constructed an emergency diversion dike this fall to increase the water level so the newer intake would remain functional, however some of this will be removed so that it does not increase the potential for ice jams this winter. The proposed diversion ditch will bring water to the old water intake which may be used if the new intake is unable to function due to low water levels.

The diversion ditch proposed will only be used for this season as an alternative means to draw water into the Laurel water treatment plant and is anticipated to fill back in during high water flows in the spring. The project will be completed in December 2012 with equipment that mostly be located on the island, but will travel into the main channel to form the intake portion of the diversion ditch.

This reach of the Yellowstone River has seen much activity with pipeline borings and extrications along with newer proposals for modifications to the south shoreline after the floods of 2011. The scouring of the river bottom and migration of the main channel of the Yellowstone to the south has caused the current problems with the Laurel water intake. The City is currently investigating alternatives in this area to allow water transmission during low flows to the treatment plant. These alternatives will look at variations around a new water intake or modifications to improve the functionality of one of the existing intakes during low water.

II. PROJECT DEVELOPMENT

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

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

The DNRC Southern Land Office (SLO) did not perform any specific scoping or public involvement for this requested action.

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

Yellowstone Conservation District: 310 Permit
Yellowstone County: Floodplain Permit
US Army Corps of Engineers: Section 404 Permit
Montana Department of Environmental Quality: 318 Permit and 401 Certification

3. ALTERNATIVES CONSIDERED:

No Action Alternative: Deny the request by the City of Laurel to issue a Land Use License to construct a temporary diversion ditch across a state-owned island/gravel bar.

Proposed Alternative: Approve the request by the City of Laurel to issue a Land Use License to construct a temporary diversion ditch across a state-owned island/gravel bar.

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.

The proposed action will result in the construction of temporary diversion ditch through a state-owned island/gravel bar that will be 8' wide and ±700' long. The island is located on the north side of the Yellowstone River under the BNSF and US Highway 301/212 bridges. The diversion ditch would remove the material and place it alongside the ditch and so no material would be removed from the river. It is anticipated that the material removed from the ditch will be washed away during spring runoff and that the ditch will fill with material deposited by the river during runoff. The island currently consists of gravel and other debris deposited by the Yellowstone. No significant adverse impacts to geology and soil quality, stability are expected as a result of implementing the proposed alternative.

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.

The proposed action may cause a short term increase in turbidity as there will be some activity in the main channel of the Yellowstone to create the intake for the diversion and place a gate at the intake to screen large debris from traveling down the ditch. The proposed action is not expected to have a significant adverse impact on water quality, quantity or distribution.

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.

Implementation of the proposed action will result in a temporary increase in emissions from heavy equipment that will be used in the project. No significant impacts to air quality are expected by implementing the proposed action.

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 project would entail constructing an 8' wide by ±700' long diversion ditch through a state-owned gravel bar/island that consists of rock, cobble and other debris deposited by the river. There is currently no vegetation on this formation. No significant impacts to vegetative cover, quantity and quality are expected by implementing the proposed action.

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.

The placement of a ±700' long by 8' wide temporary diversion ditch on a state-owned gravel bar/island is not expected to cause any habitat disturbance except during construction. No significant long term adverse impacts to terrestrial, avian and aquatic life and habitats are expected by implementing the proposed action.

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 search of the Montana Natural Heritage Program database indicated that there were eight species of concern known to occur in Township 2 South, Range 24 East and they are listed in the table below.

Scientific Name	Common Name	Status[1]	Habitat Description	Potentially Occurs in Project Area?
Birds				
Ammodramus bairdii	Baird's Sparrow	S3B	Grasslands	No – no suitable grassland habitats are present
Ardea herodias	Great Blue Heron	S3	Riparian forest	Yes – there is suitable habitat present. Great blue herons are found in the area year-round and may breed and winter in the riparian habitats along the Yellowstone River.
Coccyzus americanus	Yellow-billed Cuckoo	S3B	Prairie riparian forest	Yes – there is suitable habitat present. Yellow-billed cuckoos breed in Montana and winter in South America. This species may nest in the riparian habitats along the Yellowstone River.
Gymnorhinus cyanocephalus	Pinyon Jay	S3	Open conifer forest	No – there is no suitable coniferous forest habitat present
Haliaeetus leucocephalus	Bald Eagle	S3	Riparian forest	Yes – there is suitable habitat present. Bald eagles are year-round residents of the area. In spring and summer, they may nest in large cottonwood trees along the Yellowstone River. In fall and winter, they may roost in riparian habitats within and near the project area and forage along the Yellowstone River.
Fish				
Oncorhynchus clarkii bouvieri	Yellowstone Cutthroat Trout	S2	Streams, rivers, lakes	No – there is suitable habitat present, but Yellowstone cutthroat trout are not currently known to occur in the segment of the Yellowstone River near the project area.
Mammals				
Cynomys ludovicianus	Black-tailed Prairie Dog	S3	Grasslands	No – there are no prairie dog colonies in the project area, and there is no suitable grassland habitat present.
Reptiles				
Apalone spinifera	Spiny Softshell	S3	Prairie rivers and streams	Yes – there is suitable habitat present. Spiny softshells occur year-round in the Yellowstone River drainage. In summer, spiny softshells forage in the water, often in vegetated shallows. They overwinter in burrows dug into the bottoms of permanent water bodies.

Source: Table 3-3 (pages 57-58) Arcadis Environmental Assessment of ExxonMobil Pipeline, Yellowstone HDD Project (August 1, 2011)

Implementation of the proposed alternative may cause short term impacts to species of concern for the duration of the project construction. The noise from heavy equipment could disperse or cause wildlife to temporarily avoid the area. Once the project construction is complete, there are not expected to be any significant long term adverse impacts.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

The subject island/gravel bar contains relatively new material that has been deposited over the last 5-20 years as the Yellowstone River has migrated to the south. The SLO Area Planner conducted a field review of the island on 13 September 2012 and did not find any cultural resources. No significant adverse impacts to historic or archaeological sites on state-owned land are expected as a result of implementing the proposed alternative.

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.

The proposed action would result in heavy equipment constructing a temporary diversion ditch through an island that is not easily visible from the US Highway 310/212 Bridge. It is anticipated that the ditch will be filled with material deposited by the river during spring runoff. If the Proposed Alternative is implemented, there would be a short-term increase in sound due to the equipment utilized in construction. The proposed action would add to the existing noise levels from the highway, railroad, water treatment plant and Cenex Refinery. However, this short term addition is not expected to cause a significant adverse impact.

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.

Implementing the Proposed Alternative is not expected to result in a significant adverse impact on environmental resources.

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.

The permits that are required by other local, state and federal agencies or departments for the proposed project are listed above in Section 2 of this EA. No other projects are known at this time.

IV. IMPACTS ON THE HUMAN POPULATION

- *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.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

Implementation of the Proposed Alternative is not expected to have a significant impact on human health and safety.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Implementation of the Proposed Alternative is not expected to have a significant impact on industrial, commercial and agricultural activities and production.

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.

Implementation of the Proposed Alternative is not expected to have a significant impact on employment in Yellowstone County. The project will be of a relatively short duration and it is unknown at this time how many workers will be utilized.

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.

Due to the nature of the project, implementation of the Proposed Alternative is not expected to have a significant impact on local and state tax base and revenues.

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

Implementation of the Proposed Alternative is not expected to have a significant impact on the demand for governmental services.

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.

Implementation of the Proposed Alternative is not expected to conflict with any locally adopted plans.

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.

The proposed action is not expected to cause any significant adverse long term impacts to access and quality of recreation and wilderness activities.

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.

Implementation of the Proposed Alternative is not expected to have significant adverse impacts on density and distribution of population and housing.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by implementation of the Proposed Alternative.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Implementation of the Proposed Alternative is not expected to have a significant adverse impact on cultural uniqueness or diversity.

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 State will benefit by getting a one-time rental fee of $150 for the 1year term of the Land Use License. The Common Schools Trust is the beneficiary of this payment since it involves a state-owned island.

EA Checklist Prepared By:	**Name:**	Jeff Bollman, AICP	**Date:**	5 December 2012
	Title:	Area Planner, Southern Land Office		

V. FINDING

25. ALTERNATIVE SELECTED:

After review, the proposed alternative has been selected and it is recommended that a Land Use License be issued for the purpose of constructing an 8' wide temporary diversion ditch on a state-owned island/gravel bar on the north side of the Yellowstone River. This ±700' long ditch will connect to the old city of Laurel municipal water intake that is no longer in the main river channel. This alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The potential for significant adverse impacts has been lessened as much as possible based on the requested scope of work for the proposed project with the recommended mitigation measures. There are no natural features that are expected to be impacted and produce significant adverse impacts if the proposed action is implemented. Potential adverse impacts will be avoided or mitigated by the project through the implementation of the following conditions of the Land Use License:

Mitigation measures:

1. Licensee shall contact the DNRC Southern Land Office at least 48 hours prior to commencement of work on the project at any time during the term of the License. The contact at the SLO is: Jeff Bollman, Area Planner, jbollman@mt.gov or 406-247-4404 (office) or 406-670-4642 (cell).
2. All in-river work shall be completed in an expeditious manner to avoid unnecessary impacts to the river.
3. All activities performed in the river and immediate vicinity shall be conducted in a manner to reduce turbidity along with minimizing disturbances to the riverbed and riverbank.
4. To prevent leaks of petroleum products into the river, no defective equipment shall be operated in the river or adjacent areas.
5. All necessary permits shall be secured before any activities begin.
6. Licensee is responsible for any additional permits or requirements from any other affected regulatory agency.
7. The Licensee shall comply with all public laws, statutes, ordinances, and administrative rules which are applicable to its operations upon the above-described lands. In no event shall the Licensee conduct any activity, or allow any activity to be conducted, upon the above-described lands or within the Project which is: a nuisance; violative of public health, safety, welfare; or is offensive to prevailing community

standards concerning morality or obscenity. The Licensee shall be fully and completely liable to, and indemnify, defend, and hold harmless, the Licensor for any and all damages and clean up costs and penalties imposed by any governmental authority with respect to Licensee's use, disposal, transportation, generation, or sale of Hazardous Substances, in or about the above-described lands.

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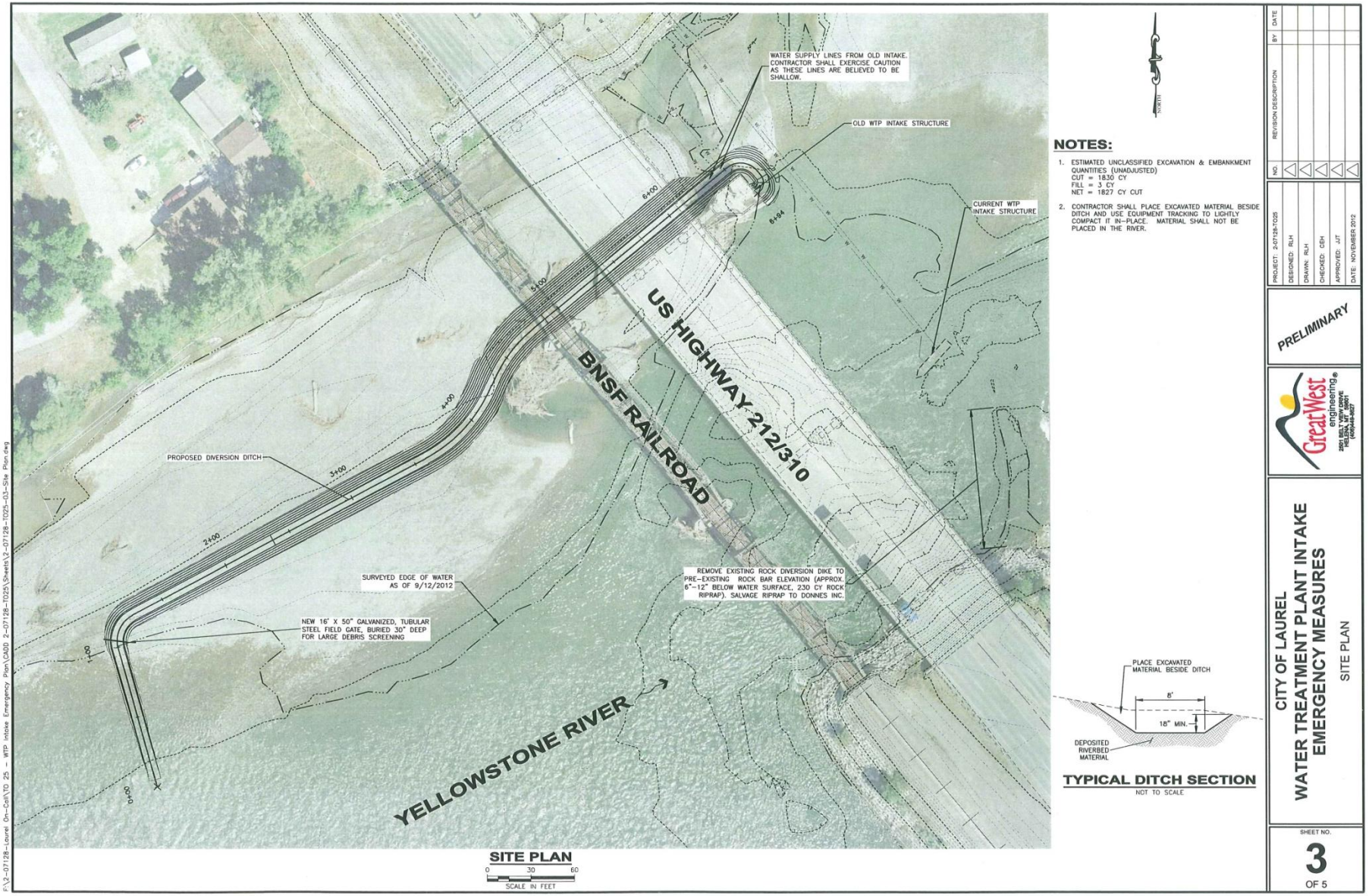
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

	EIS		More Detailed EA	X	No Further Analysis

EA Checklist Approved By:	**Name:**	Matthew Wolcott
	Title:	Area Manager, Southern Land Office
Signature: /s/ Matthew Wolcott	**Date**:	December 7, 2012

Attachment A – Proposed Water Intake Diversion Ditch