

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	City of Laurel Municipal Raw Water Intake
Proposed Implementation Date:	Fall 2015
Proponent:	City of Laurel
Location:	SW¼ of Section 29 and SE¼ of Section 30, Township 2 South, Range 24 East (Yellowstone River – Public Land Trust)
County:	Yellowstone and Carbon Counties

I. TYPE AND PURPOSE OF ACTION

The City of Laurel is requesting a 0.59 acre easement in the Yellowstone River for the installation of a new municipal raw water intake structure that is proposed to be located in Sections 29 and 30, T2S, R24E in Yellowstone & Carbon Counties. The easement is 100' in width and extends south/southeast from the north river bank. The easement and the entire transmission route are shown on attached Exhibits A and B.

The floods of 2011 caused the Yellowstone River to migrate to the south, as well as, scour adjacent to the City of Laurel's current municipal water intake structure which is located approximately 2.7 miles downstream of the current easement location. As a point of reference, the City's current water intake is located about 100 yards upstream of the ExxonMobil Silvertip pipeline crossing. The scouring from the food resulted in the City having water intake problems, especially during periods of low water flow. This required the City to take emergency actions including the construction of a weir and also removing sediment that had built up under the Highway 212 and railroad bridges. The City also dug a trench in a gravel bar to provide temporary flow to their previously abandoned intake, which been rendered unusable years ago due to the river migrating to the north and the build-up of a gravel bar.

FEMA, in coordination with the City, completed an EA that examined 23 different alternatives in categories that included: channel training/alteration, modify existing water intake, new water intake and alternative sources. Initially, the City was pursuing constructing a "W" weir across the entire river channel immediately downstream of their current water intake to raise the water level at low flow. This option ultimately was abandoned due to permitting difficulty with the US Army Corps of Engineers, along with other concerns raised by DEQ and FWP.

The current easement request is the best remaining alternative. It would construct a new intake at a stable river location that has been examined by their consulting engineer and has a low likelihood of river migration. The new water intake will have twin 30" parallel transmission mains exiting the intake, along with a hot water line (to prevent ice build-up in winter on the intake screens) and an air backwash line. Once reaching shore, the transmission lines will roughly parallel the Canyon Creek Ditch until it reaches the current water treatment plant.

Since the 2011 floods, the City has been diligently working to find a long term solution to their water intake problems that occur at low river flows. Water drawn from the intake not only serves the City but is also used by the Laurel Cenex Harvest States refinery. The City has had to get in the river at least once a year since 2011 to make some kind of modifications to raise the river level so that their intake pumps will function. The current easement request will provide a long term solution and will eliminate the need continually enter the river at the current intake location.

The 2011 floods were a Presidentially Declared Disaster and this has allowed the City of Laurel to access some funding and technical expertise from the Federal Emergency Management Agency (FEMA). FEMA, with assistance from Great West Engineering, released a draft EA on 28 July 2014 and a FONSI was signed on 24 November 2014. The easement request in this EA is the preferred alternative from the FEMA EA, which analyzed four alternatives. This EA will tier off of the FEMA document, a copy of which can be found at: <http://laurel.mt.gov/wtp-intake-ea/>

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. During the FEMA EA process, FEMA published notice in the Laurel Outlook for four consecutive weeks and a copy of the EA was available for review at the Laurel City Offices for 25 days. In addition, the FEMA EA was distributed to 12 federal, state and local agencies for their review and comment.

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 an easement to allow the construction of a new raw water intake in the Yellowstone River.

Proposed Alternative: Approve the request by the City of Laurel to issue an easement to allow the construction of a new raw water intake in the Yellowstone River.

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 project area lies in an unglaciated portion of the Missouri Plateau of the northern part of the Great Plains Province. Sedimentary rocks, consisting primarily of sandstone underlie the site. River gravel, with depths from two to more than ten feet, overlay the bedrock in the river channel, and on the terraces above the river channel. The Yellowstone River has cut into the bedrock more deeply on the south side of the river than on the north." (HKM, Inc., 2002). The proposed action will result in disruption to the riverbed during the construction and installation of the new intake and transmission lines through the use of temporary coffer dams and dewatering. No significant long term 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 during the construction and installation of the new intake and transmission lines through the use of temporary coffer dams and dewatering in the main channel of the Yellowstone River. 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 long term adverse 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 proposed action would allow the installation of a new raw water intake in the Yellowstone River along with installing transmission lines and hot water and air lines to the new intake. The portion of the project that is on state-owned land is entirely under the Yellowstone River. 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.

Excerpt from the FEMA EA: *“The proposed improvement alternatives may result in temporary sedimentation during installation of the cofferdam and associated dewatering, along with subsequent removal of the cofferdam. Efforts will be made to adhere to best management practices to minimize any disturbance to aquatic species. To the maximum extent practicable, construction activities will be scheduled so as not to disrupt nesting birds during the breeding season (approximately April-August). If work is proposed to take place during the breeding season or at any other time which may result in take of migratory birds, their eggs, or active nests, all practicable measures will be taken to avoid and minimize take, such as maintaining adequate buffers, to protect the birds until the young have fledged. Active nests may not be removed.”*

The installation of a new raw water intake in the Yellowstone River 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 six species of concern known to occur in the general project area and they were: Great Blue Heron, Bald Eagle, Yellow-billed Cuckoo, Bobolink, Sauger and Spiny Softshell.

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 proposed project would only disturb state-owned land under the Yellowstone River, therefore no cultural resources are expected to be discovered or impacted. 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 coffer dam to allow for the installation of the new raw water intake, transmission pipelines, hot water line and air backwash line in the main channel of the Yellowstone River. If the Proposed Alternative is implemented, there would be a short-term increase in sound due to the equipment utilized in construction. The only short term impact would be from the noise of the construction site and the intake itself will be underwater and not visible. Therefore, implementation of the proposed action 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
<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>

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The proposed action would provide for a consistent raw water supply for the City of Laurel and the Laurel CHS Refinery. 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. 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 easement fee of \$360. The Public Land Trust is the beneficiary of this payment since it involves a state-owned riverbed.

EA Checklist Prepared By:	Name: Jeff Bollman, AICP	Date: 19 June 2015
	Title: Area Planner, Southern Land Office	

V. FINDING

25. ALTERNATIVE SELECTED:

After review, the proposed alternative has been selected and it is recommended that the City of Laurel be granted a 0.59 acre easement in the Yellowstone River for the installation of a new municipal raw water intake structure that is proposed to be located in Sections 29 and 30, T2S, R24E in Yellowstone & Carbon Counties. The easement is 100' in width and extends south/southeast from the north river bank. 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:

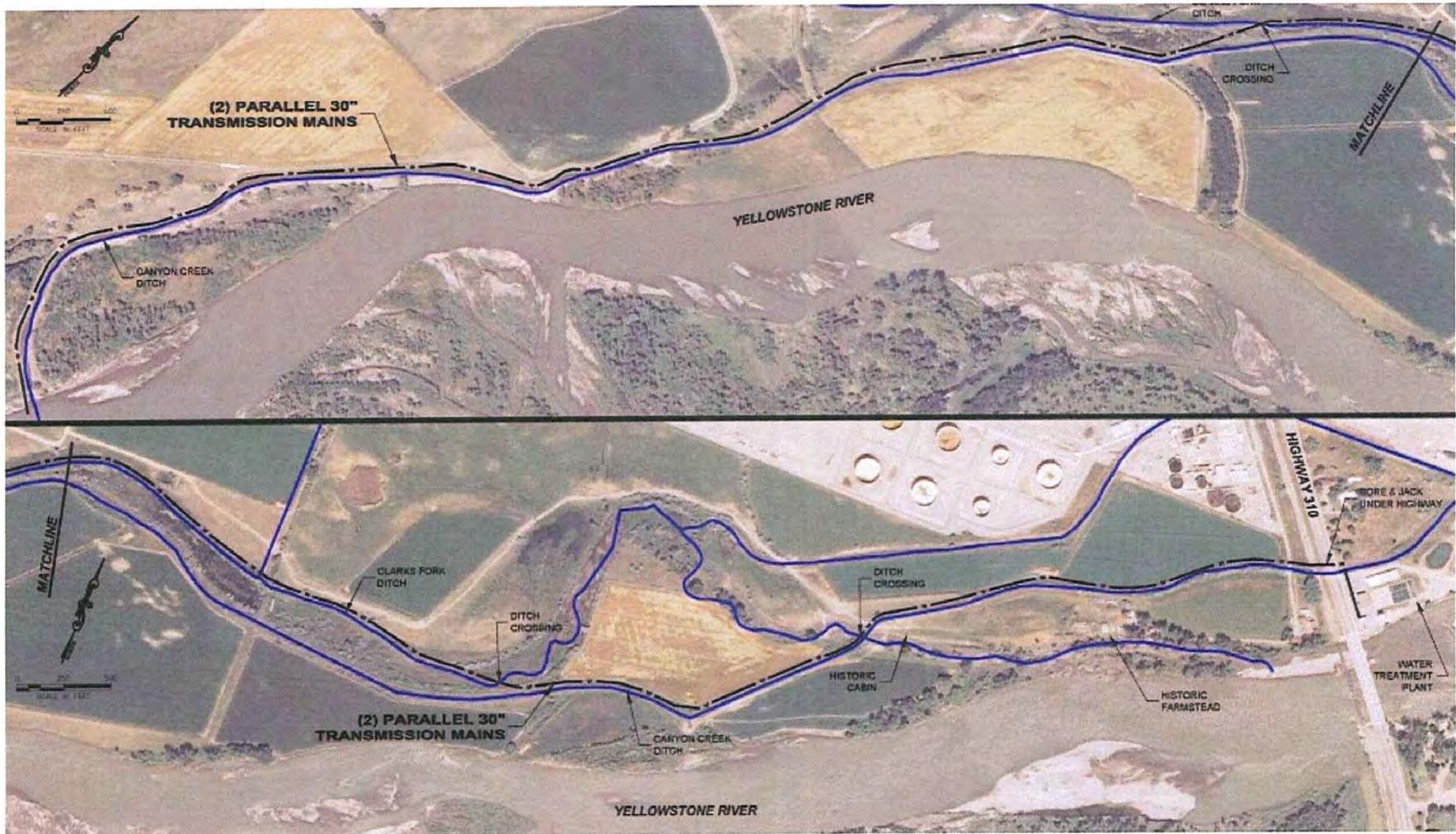
The potential for significant adverse impacts has been lessened as much as possible based on the requested scope of work for the proposed project with the recommended mitigation measures contained in the FEMA EA. There are no natural features that are expected to be impacted and produce significant adverse impacts if the proposed action is implemented.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: Matthew Wolcott
	Title: Area Manager, Southern Land Office
Signature: /s/ Matthew Wolcott	Date: June 22, 2015

Exhibit A – Proposed Water Intake Transmission Main Route



Source: 2014 FEMA EA

