

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	City of Great Falls Force Main Installation
Proposed Implementation Date:	Spring/Summer 2024
Proponent:	City of Great Falls
Location:	Section 1, Township 20 North, Range 3 East (Missouri River Bed – Public Land Trusts)
County:	Cascade County

I. TYPE AND PURPOSE OF ACTION

The City of Great Falls is proposing to install a 24-inch diameter water pipeline underneath the navigable riverbed of the Missouri River. The river crossing site is in T20N-R3E-Section 1, in the city limits of Great Falls. The State of Montana owns the riverbed of navigable waterways, low watermark to low watermark. The City of Great Falls has applied to Department of Natural Resources and Conservation (DNRC) for a Right of Way Easement for these pipelines.

The 24-inch pipeline would go under the Missouri River riverbed for 1632.46 feet between Sacajawea Island and the 9th street bridge. The proposed pipeline is intended to provide reliable sewage water treatment and improve overall system operation and maintenance abilities to the City of Great Falls. The pipeline would be installed using horizontal directional drilling methods with depths ranging from 30 to 80 feet below the riverbed. The pipeline would be installed to the west of existing infrastructure to aid in additional wastewater treatment. No disturbance to the state-owned Missouri River riverbed during the installation is anticipated. The depths of these pipelines will limit the ability for repairs, in the event of problems the pipes would either be re-lined from the point of connection to existing water lines or abandoned. Therefore, the proposed DNRC easements for these pipelines would be the lengths of the pipelines under the riverbeds (given above) with a 20-foot width on a per acre basis.

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 did not perform any formal, public scoping for this project. The following were informed of the project as regulatory agencies, landowners, lessees via the Joint Application for Work in Montana's Streams, Wetlands, Floodplains, and Other Water Bodies and/or the DNRC Right of Way Easement process. It is the proponent's responsibility to retain all applicable permitting within the joint application before beginning on the project.

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

Cascade Conservation District: 310 Permit – Not required as the applicant is a public entity.
City of Great Falls: Floodplain Permit
US Army Corps of Engineers: Section 404 Permit
Montana Department of Environmental Quality: 318 Permit and 401 Certification
Montana Fish Wildlife & Parks: SPA 124 Permit

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action): Deny the request to issue an easement to permit the installation of a new sewer treatment line under the beds of the Missouri River. This alternative would require that City of Great Falls to find an alternate delivery methods of sewage water.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri 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 area of the proposed project is urban, within the Great Falls city limits. Pipelines would be installed using horizontal directional drilling, burying the pipes between 30 and 80 feet below the riverbeds. The horizontal directional drilling equipment would be used on City of Great Falls Right of Way surface. The excavation sites would include the use of silt fence to reduce soil erosion by water, and watering of dry soils to reduce wind erosion. No State of Montana Trust Land surface would be impacted. Minimal impacts to geology or soils of the Missouri River beds are anticipated with this drilling method.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues will continue. No direct impacts to geology and soils would be anticipated.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. Installation depths would be 30 to 80 feet below the riverbeds, minimal impacts to geology and soil quality, stability and moisture are expected.

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 project would occur under the Missouri River bed. As noted in 4. Geology and Soil Quality, Stability and Moisture, the use of silt fence and watering during construction will reduce soil erosion into the waterways. The distance of the excavation sites and staging areas are far enough away from the banks to minimize any water quality impacts. The pipelines would be transporting raw sewage water to the treatment plant. This supplemental pipeline would aid the City of Great Falls in addressing their facility deficiencies. The existing infrastructure can't keep up with the current demand. The pipelines would be installed at 30 to 80 feet below the river beds, impacts to water quality, quantity and distribution of the Sun and Missouri Rivers are anticipated to be minimal.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. Direct impacts to water quality, quantity or distribution are anticipated with increased amounts of raw sewage being released into the Missouri river.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. Installation depths would be 30 to 80 feet below the riverbeds, minimal affects to water quality, quantity, and distribution are anticipated during the installation phase. This infrastructure was proposed to address an ongoing issue with sewage water treatment. Storm events coupled with the growing population in the area has led to increased sewage treatment needs. This easement would provide a higher capacity for sewage treatment.

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.

The proponent plans to use watering of dry soil at the excavation and staging areas to decrease wind erosion and reduce risk of negatively impacting air quality. The short construction time would have minimal cumulative effects to air quality in the immediate vicinity of the project.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to air quality.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. Due to the temporary duration – significant, long-term, adverse impacts to air quality are not anticipated. Dust mitigation may be required.

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 State of Montana claims ownership of navigable waterways, low watermark to low watermark, including those of the Missouri River. Vegetation of these areas is limited to aquatic species. The pipelines would be installed 30 to 80 feet below the river beds. Aquatic vegetation cover, quantity and quality would not be impacted.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to vegetation cover, quantity and quality.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. No impact would occur to vegetation on state owned riverbeds.

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.

Montana Fish, Wildlife and Parks, issued a 124 Permit for these pipelines on December 8, 2023. A stipulation of this permit includes, "Install water mains a minimum of 21 feet under the Missouri River streambed and a minimum of 30 feet under the Sun River streambed, based on the hydraulic analysis completed by TDH engineering." Mullen states, "The projects should not have any impacts to aquatic life given the pipelines will be installed below the anticipated scour depth and excavation for the directional drilling will be at least 80 feet from the Missouri River bank."

State owned riverbeds are not habitat to terrestrial or avian wildlife; therefore, this document only addresses aquatic species and habitat.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to terrestrial, avian and aquatic life and habitats.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. This project should have no impacts aquatic life and habitats of state owned riverbeds.

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 10 species of concern known to occur in Township 20 North, Range 3 East Section 1: Common Tern, Forster's Tern, Great Blue

Herron, Spiny Softshell, Many-headed Sedge, Chaffweed, Pale-yellow Jewel-weed, foxtail muhly, Heim's Henediella Moss, and Hooker's Physcomitrium Moss. Due to the scope of this environmental analysis being completely under the riverbed within state ownership, no Unique, Endangered, Fragile, or Limited Environmental Resources are expected to be affected.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to unique, endangered, fragile or limited environmental resources.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. The depth of the pipelines (30-foot minimum) from the state-owned riverbeds would have minimal impacts to unique, endangered, fragile or limited environmental resources.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because the APE on state land is the active riverbed, no additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

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 is located under the Missouri River, between the 9th Street bridge and Sacajawea Island. The surface area above where the easement are proposed is visible from River Road the 9th Street Bridge area. The new water pipelines are proposed to be placed 30 to 80 feet below the bed of both the rivers, so it will not be visible, except for any above ground warning/safety markers on City of Great Falls Right of Way surfaces.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to aesthetics.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. Short term impacts to aesthetics of the area.

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.

The area does not contain limited resources. Nearby activities consist mostly of residential and season residential, and recreational activities.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to demands on environmental resources of land, water, air or energy. City of Great Falls would have difficulty with limited options for operation and maintenance of waterlines, residents water supply pressure and quantity may be limited.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. City of Great Falls would have more options for operation and maintenance of force mains and lift stations.

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.

Other permits that are required by other local, state or federal agencies or departments for the proposed project are listed above in Section 2 of this document.

There are no other definite known future government actions planned for this Public Land Trust property. However, there is a potential future action of removing portions of these pipelines due to system failure from beneath the navigable riverbed of the Missouri River. If this action is pursued, it would likely go through the Joint Application process and each agency would then issue the appropriate permits.

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.

The proposed project could create human health and/or safety risks associated with the horizontal directional drilling process of installing these pipelines. However, excavation and staging sites are not located on State of Montana Trust Lands.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to human health and safety.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. Human health and safety risks could occur during installation. After installation, increased sewage treatment capacity would increase, and raw sewage overflows into the Missouri river would decrease which may improve human health.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to industrial, commercial and agriculture activities and production.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. Positive impacts to industrial and commercial operations supplied by City of Great Falls force mains. No impacts to agriculture 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.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to quantity and distribution of employment.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. No lasting impacts to quantity and distribution of employment.

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.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No direct impacts to local and state tax base and revenues.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. No lasting impacts to 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

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. Demand from residents for safe, quality water with pressure would increase to the City of Great Falls.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. City of Great Falls could meet the demands of a growing population with an increased capacity for sewage treatment.

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 No Action Alternative or either Action Alternatives 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.

Alternative A (No Action): No work would occur. Existing conditions would persist, and on-going maintenance and delivery issues would continue. No impact to access to and quality of recreational and wilderness activities.

Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. No impact to access to and quality of recreational and wilderness activities over state owned riverbeds.

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 No Action Alternative or either Action Alternative is not expected to have significant adverse impacts to 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 No Action Alternative or either Action Alternative.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

Implementation of the No Action Alternative or either Action 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 of Montana would benefit by receiving a one-time fee for the easement. The fee for the easement is based on surrounding land values (surface land values are divided in half for riverbed values) on a per acres basis and was determined by the Real Estate Management Bureau. The cost of the Right of Way Easements to the City of Great Falls would be \$8,048.66 for the Missouri River. The Public Lands Trust is the beneficiary of this payment since it involves a navigable river.

EA Checklist Prepared By:	Name: Dylan Craft	Date: March 27, 2024
	Title: Land Use Specialist, Helena Unit	

V. FINDING

25. ALTERNATIVE SELECTED:

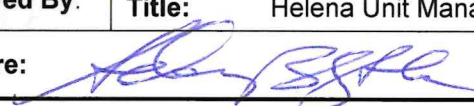
Alternative B (Proposed Action): Approve the request to issue an easement for installing the force main using horizontal directional drilling. Allow the proponent to apply for an easement to install a new 1632 foot 24-inch diameter pipeline under the Missouri River. The pipelines will be installed 30 to 80 feet below the riverbeds using horizontal directional drilling. This Alternative also allows for the pipeline to be installed in a manner that does not cause any disturbance to the riverbed surface.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The potential for significant adverse impacts to Public Trust Lands (the navigable riverbed) are reduced by the nature of the Horizontal Directional Drilling technique that will be utilized and the depth (30' minimum) beneath the existing riverbed that will be achieved. Many potential impacts listed above are short term and correspond with the construction project. There are no natural features or nearby species of concern noted that could produce adverse impacts from the proposed alternative.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS
 More Detailed EA
 No Further Analysis

EA Checklist Approved By:	Name: Adam Blythe	
	Title: Helena Unit Manager	
Signature:		Date: 4/12/24

