Environmental Checklist

NAME OF PROJECT	Town of Twin Bridges Water Improvements – 2024 Update
PROPOSED ACTION	Construction of a new water tank on State of Montana Trust lands
LOCATION	Twin Bridges, Montana

Environmental Checklist Prepared by: On: April 3, 2024

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As the engineer that prepared the preliminary engineering report, I Jessica Salo, PE, have reviewed the information presented in this checklist and believe that it accurately identifies the environmental resources in the area and the potential impacts that the project could have on those resources. In addition, the required state and federal agencies were provided with the required information about the project and requested to provide comments on the proposed public facility project. Their comments have been incorporated into the attached to the Preliminary Engineering Report.

Engineers Signature: Jessica L. Salo

Date: 4/18/24

Physical Environmental			
Impact Code	**Impact Type**	**Permits/Mitigation Required?**	**Explanation of Impact to Resource**
1. Soil Suitability, Topographic and/or Geologic Constraints (example: soil slump, steep slopes, subsidence, seismic activity)			
☐ No Impact ☐ Beneficial ☒ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☒ Mitigation ☐ NA	Current Conditions: The current water tank is built on a gentle slope about 1.5 miles east of Town. The site is not considered prime land and does not have any known adverse soil conditions. Preferred Alternative Environmental Narrative: The proposed construction of a new water tank will require earthwork to excavate and grade soil at the proposed site. During construction the soil in the project area will be disturbed, but the selected Contractor will be responsible to rehabilitate the site before construction is completed to prevent erosion or any negative impacts to the land or soil.
2. Hazardous Facilities (example: power lines, hazardous waste sites, acceptable distance from explosive and flammable hazards including chemical/petrochemical storage tanks, underground fuel storage tanks, and related facilities such			

as natural gas storage facilities and propane storage tanks)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: There are no abandoned mines, hazardous waste handlers, superfund project boundaries, junk vehicle sites, or septic tank pumper disposal sites within the project area. There are four regulated underground storage tanks associated with gas stations along Main Street. There is also one solid waste site located to the east of Town. This site is the Madison County Class III Landfill. There is a small power line that provides power to the equipment at the existing storage tank. The line approaches from the west and ends at the existing tank. Preferred Alternative Environmental Narrative: No hazardous facilities will be impacted by the proposed project.

3. Surrounding Air Quality (example: dust, odors, emissions)			
☐ No Impact ☐ Beneficial ☒ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☒ Mitigation ☐ NA	Current Conditions: Currently, there are no known air quality issues in the area. The EPA's Greenbook does not list the area as a nonattainment area. Occasional droughts and wildfires can lead to particulate in the air and lower the local air quality. Preferred Alternative Environmental Narrative: Earthwork during construction will cause some dust to be introduced into the local atmosphere. As part of the project, the selected Contractor will be required to provide dust control. These methods may include surfactant application on haul routes and proper moisture control on site. These impacts will be temporary during construction only.
4. Groundwater Resources and Aquifers (example: quantity, quality, distribution, depth to groundwater, sole source aquifers)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Montana's Groundwater Information Center (GWIC) was used to collect information on groundwater in the Twin Bridges planning area and well information was acquired in spatial format through the Montana State Library. Depths to groundwater vary across the planning area and range from two feet to 52 feet with an average depth of approximately ten feet. Well depths range from eight to 240 feet with an average depth of approximately 48 feet. There are 43 GWIC wells located within the planning area and 17 of these wells have been abandoned. Most of the remaining active area wells are domestic wells. Twin Bridges obtains municipal water supply from two groundwater wells located in the center of Town. The municipal supply well log data indicates the Town wells are approximately 200 feet deep with yields in excess of 1,000 gpm. The project site is not close to the City's existing groundwater wells or other wells. Preferred Alternative Environmental Narrative: Groundwater will not be adversely impacted by construction activities.
5. Surface Water/Water Quality, Quantity and Distribution (example: streams, lakes, storm runoff, irrigation systems, canals)			
☐ No Impact	☒ Direct	☐ Permit	Current Conditions: There are no surface waters in the immediate area around

☐ Beneficial ☒ Adverse	☐ Indirect ☐ Cumulative	☒ Mitigation ☐ NA	the proposed project site. Preferred Alternative Environmental Narrative: Surface water will not be adversely impacted by construction activities. Appropriate storm water control will be implemented during construction to eliminate sediment transport to any nearby surface waters.
6. Floodplains and Floodplain Management (Identify any floodplains within one mile of the boundary of the project.)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: There are no floodplains within the area of impact. There are existing floodplains along the Beaverhead River along the west side of Twin Bridges. This floodplain, however, is over a mile away from the proposed project site. Preferred Alternative Environmental Narrative: No impacts to floodplains are expected.
7. Wetlands (Identify any wetlands with in one mile of the boundary of the project and state potential impacts.)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: There are no wetlands within the proposed project area. There are wetlands associated with the Beaverhead River near the Town of Twin Bridges. These wetlands are over a mile away, however. Preferred Alternative Environmental Narrative: Impacts to wetland are not anticipated as part of this project.
8. Agricultural Lands, Production, and Farmland Protection (example: grazing, forestry, cropland, prime or unique agricultural lands) Identity any prime or important farm ground or forest lands within one mile of the boundary of the project.			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The land owned by the State of Montana which surrounds the tank site is not currently being used for agricultural purposes. Preferred Alternative Environmental Narrative: The proposed improvements would not occur on agricultural land. Additionally, no prime farmland was identified within the project area.
9. Vegetation and Wildlife Species and Habitats, Including Fish (example: terrestrial, avian, and aquatic life and habitats)			
☐ No Impact ☐ Beneficial ☒ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☒ Mitigation ☐ NA	Current Conditions: The proposed project area is on undeveloped grassland owned by the State of Montana. Preferred Alternative Environmental Narrative: The proposed project will disturb a small area of land. This may displace some wildlife and vegetation. The selected Contractor will be required to follow relevant noxious weed programs and rehabilitate the site before ending construction.
10. Unique, Endangered, Fragile, or Limited Environmental Resources, Including Endangered Species (example: plants, fish or wildlife)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: No unique wildlife or vegetation was identified within the project area. The Montana Sage Grouse Conservation Program does not show the project area in Sage Grouse habitat. Preferred Alternative Environmental Narrative: No unique biological resources are anticipated to be impacted.

11. Unique Natural Features (example: geologic features)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: There are no known unique natural features in the project area such as scenic rivers, unique buttes or canyons, or mineral deposits. Preferred Alternative Environmental Narrative: No impact is anticipated.
12. Access to , and Quality of, Recreational and Wilderness Activities, Public Lands and Waterways (including Federally Designated Wild & Scenic Rivers), and Public Open Space)			
☐ No Impact ☐ Beneficial ☒ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☒ Mitigation ☒ NA	Current Conditions: The current water storage tank is built on land owned by the State of Montana. The land is freely accessible by the public except for the fenced area where the Town has an easement with the State. The State's land is not known to be utilized frequently for recreation and does not have any unique wilderness activities. Preferred Alternative Environmental Narrative: Construction of the new storage tank will require a new easement with the DNRC. The tank will be enclosed in a fence to prevent vandalism and protect the tank from damage by individuals. The easement will remove a small footprint of available State land where the public can recreate. The small footprint is not expected to have significant impact on the public's ability to utilize the land.
Human Environment			
Impact Code	**Impact Type**	**Permits/Mitigation Required?**	**Explanation of Impact to Resource**
1. Visual Quality – Coherence, Diversity, Compatibility of Use and Scale, Aesthetics			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The current land use surrounding the existing water tank includes the Madison County Landfill and the Madison County Airport. Additionally, there is a substation on the property for power line transmission. Most of the land is undeveloped between each of these sites. Preferred Alternative Environmental Narrative: The construction of a new water storage tank does not conflict aesthetically with the nearby facilities. The land in the area is mostly used for public infrastructure or commercial commerce.
2. Nuisances (example: glare, fumes)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The existing water storage facilities do not produce any known nuisances. Preferred Alternative Environmental Narrative: The construction of a new water tank is not expected to cause nuisances such as glare or fumes.
3. Noise – Suitable Separation Between Housing and Other Noise Sensitive Activities and Major Noise Sources (example: aircraft, highways and railroads.)			
☐ No Impact ☐ Beneficial ☒ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☒ Mitigation ☐ NA	Current Conditions: There is little traffic and few sources of noise around the existing water storage tank. The Madison County Airport, however, generates some noise through daily operation from planes taking off and landing.

			Preferred Alternative Environmental Narrative: Construction of the new water storage tank will require heavy equipment for earthwork and erection of the structure. Construction activities will generate some noise. This noise will be limited to only the construction of the tank, and the source is sufficiently away from Town to cause a major disturbance. Additionally, the selected Contractor will be required to operate between 7 AM to 7 PM to help mitigate any disturbances.
4. Historic Properties, Cultural and Archaeological Resources (Please see end of Environmental Checklist for details if Cultural Survey has not been performed per SHPO Section 106)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Previous resources inventories have been completed for the land in the project area according to SHPO and the State's archaeologist. No resources were identified within the area of impact. Preferred Alternative Environmental Narrative: Consultation with relevant agencies indicates that no damage or impact to cultural resources is anticipated. If any unknown resources are discovered while construction is ongoing, SHPO will be contacted.
5. Changes in Demographic (Populations Characteristics (example: quantity, distribution, density)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Twin Bridges is a small Town with a population of 369 according to the 2022 Census estimates. The land use within Town is primarily low density residential. The Town had experienced a decline in population since 1970 but is showing signs of slow growth based on recent estimates Preferred Alternative Environmental Narrative: The construction of the new water tank is not anticipated to affect the population in Town. Although the project is designed to accommodate some growth, a noteworthy change in population is not anticipated solely due to construction of a storage tank. The proposed project is designed to sustain the needs of the community
6. General Housing Conditions – Quality, Quantity, Affordability			
☐ No Impact ☒ Beneficial ☐ Adverse	☐ Direct ☒ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The housing in Twin Bridges is primarily single-family housing. There are 182 total housing units with 157 occupied and 25 vacant. Preferred Alternative Environmental Narrative: The proposed project will provide adequate water storage for future development within and outside of the Town. These improvements will allow the Town to provide fire suppression and daily demand for the future expansions of Town.

7. Businesses or Residents (example: loss of displacement, or relocation)			
☐ No Impact ☒ Beneficial ☐ Adverse	☐ Direct ☒ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The population of Town is currently 369. There are several small businesses throughout Town. Preferred Alternative Environmental Narrative: The expansion of the water storage facility allows for the Town to accept more residents to connect to the water

			system while maintaining service. Additionally, an increased population provides an increased customer base for local businesses.
8. Public Health and Safety			
☐ No Impact ☒ Beneficial ☐ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The Town of Twin Bridges currently has a public police department and a volunteer fire department. Preferred Alternative Environmental Narrative: The expansion of the water storage of the water system will allow the Town to meet fire flow and average daily demand. This additional storage will improve fire suppression capabilities and reduce the risk of discontinuation of water service during high demand.
9. Local Employment – Quantity or Distribution of Employment, Economic Impact			
☐ No Impact ☒ Beneficial ☐ Adverse	☐ Direct ☒ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The primary economic opportunities in Town include agriculture, local shops and stores, and the public school. Preferred Alternative Environmental Narrative: The selected Contractor will likely utilize resources and business in Town to complete the project. These include food and lodging services. Additionally, some of the local population may be employed in order to complete the construction of the proposed project.
10. Income Patterns – Economic Impact			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The median household income in Twin Bridges is $32,321. Preferred Alternative Environmental Narrative: The proposed project is not anticipated to change income patterns in the community.
11. Local and State Tax Base and Revenues			
☐ No Impact ☒ Beneficial ☐ Adverse	☐ Direct ☒ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The current population is 369 people. Preferred Alternative Environmental Narrative: The proposed construction of the additional storage provides improved fire protection and adequate storage for future development of the Town. This project would allow the Town to increase its population while maintaining the required service. This project would allow the Town to grow its tax base by increasing the community's population.
12. Community and Government Services and Facilities (example: educational facilities, health and medical services and facilities; police; emergency medical services; and parks, playgrounds and open space)			
☐ No Impact ☒ Beneficial ☐ Adverse	☐ Direct ☒ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Current government facilities in Town include Town Hall, the local fire hall, the local police department, and the local public schools. Preferred Alternative Environmental Narrative: The additional storage as part of the proposed project would allow the Town to provide fire flow while maintaining service to users. This ability provides improved safety and improves the condition of the existing public facilities.
13. Commercial and Industrials Facilities – Production and Activity, Growth or Decline			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Nearby commercial and industrial facilities include the Madison County Landfill and the Madison County Airport. Preferred Alternative Environmental Narrative:

			The proposed construction of the new water storage tank is not expected to impact the known commercial facilities.
14. Social Structures and Mores (example: standards of social conduct/social conventions)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The social structures of Twin Bridges are typical of a small, rural Town in southwestern Montana. Preferred Alternative Environmental Narrative: The new water tank is not expected to impact cultural standards or social conventions.
15. Land Use Compatibility (example: growth, land use change, development activity, adjacent land uses and potential conflicts)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The land use around the water storage tank is mostly undeveloped grassland and some commercial facilities: Madison County Landfill and the Madison County Airport. Preferred Alternative Environmental Narrative: The proposed water storage tank is not anticipated to impact the land use in the area.

16. Energy Resources – Consumption and Conservation			
☐ No Impact ☒ Beneficial ☐ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The existing water system utilizes groundwater well pumps to draw water from the source and pressurize the distribution system. Additionally, there are some controls and SCADA systems that require electricity. Preferred Alternative Environmental Narrative: The addition of a new water storage tank would allow the Town to reduce the number of cycles necessary to maintain pressure in the system. This reduction would save the Town electrical costs.
17. Solid Waste Management			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Solid waste is managed by the Madison County Health Department. They collect solid waste from residents and haul the waste to the Madison County Landfill. Preferred Alternative Environmental Narrative: The proposed construction of a new water storage tank is not anticipated to affect the solid waste facilities in the region.
18. Wastewater Treatment – Sewage System			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The Town of Twin Bridges operates a collection system and a treatment system. These systems collect wastewater from residents in Town, treat the wastewater through facultative lagoons, and irrigate a nearby field. Preferred Alternative Environmental Narrative: The finished water storage tank will be constructed away from the wastewater system. No impacts are expected.
19. Stormwater – Surface Drainage			
☐ No Impact ☐ Beneficial ☒ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☒ Permit ☒ Mitigation ☐ NA	Current Conditions: There is no stormwater infrastructure at the current storage tank or at the proposed site. The finished surface of the existing tank is sloped away from the water tank to divert stormwater away from the finished water.

			Preferred Alternative Environmental Narrative: Earthwork will likely disrupt and alter the stormwater runoff of the proposed site during construction. The selected contractor will be responsible for obtaining and maintaining a Stormwater Pollution Prevention Plan (SWPPP). At the completion of the project, the selected Contractor will be required to restore the site.
20. Community Water Supply			
☐ No Impact ☒ Beneficial ☐ Adverse	☐ Direct ☒ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The community is supplied with water through municipal groundwater wells. The water is pumped from the wells to the existing storage tank via a 12" PVC transmission main. Preferred Alternative Environmental Narrative: The construction of a new storage tank creates additional finished water storage for the community. The additional storage helps the Town improve its management of its water resources.
21. Fire Protection - Hazards			
☐ No Impact ☒ Beneficial ☐ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The Town currently maintains a volunteer fire department. The Town's water system has fire hydrants throughout the distribution system. Water for fire suppression is available through water stored at the existing water tank. Preferred Alternative Environmental Narrative: The increased capacity of finished water storage will allow the Town to follow design standards set forth by Montana DEQ. The Town will be able to provide water for the average daily demand while also maintaining system pressure during fire emergencies.
22. Cultural Facilities, Cultural Uniqueness and Diversity			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: Known cultural facilities near Twin Bridges include the Madison County Fairgrounds and the Doncaster Round Barn. Both of these facilities are located near Town and away from the proposed project area. Preferred Alternative Environmental Narrative: The proposed construction of a new water tank will not affect the known cultural resources. If some historically or culturally materials are uncovered, the Montana State Historic Preservation Office will be contacted immediately.
23. Transportation Networks and Traffic Flow Conflicts(example: rail, auto including local traffic, airport runway clear zones – avoidance of incompatible land use in airport runway clear zones)			
☐ No Impact ☐ Beneficial ☒ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☒ Permit ☐ Mitigation ☐ NA	Current Conditions: The existing storage tank is located over a mile east of Town along a dirt road called Bear Gulch Road. This road will not be impacted during construction because the site is adequately away from the travel lanes. The Madison County airport is located directly south of the proposed project area. The FAA has indicated that an airspace evaluation and a construction safety and phasing plan would be required. Preferred Alternative Environmental Narrative: The selected Contractor would be responsible for any permits directly related to construction, but the Town would obtain the necessary compliance documents required by FAA. The project is not anticipated to impact travel along the nearby road or the airport.

24. Consistency with Local Ordinances, Resolutions, or Plans (example: conformance with local comprehensive plans, zoning, or capital improvement plans)			
☐ No Impact ☒ Beneficial ☐ Adverse	☒ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The Town of Twin Bridges previously completed a *2022 Water PER* and a *2024 Growth Policy.* Both documents, which were adopted formally by the Town, list the expansion of the Town's finished water storage. Preferred Alternative Environmental Narrative: The proposed project directly follows planning documents developed and adopted by the Town.

25. Private Property Rights (example: a regulatory action or project activity that reduces, minimizes, or eliminates the use of private property)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The area of impact does not encompass any privately owned land. Preferred Alternative Environmental Narrative: The construction of the new water tank will be completed on wholly public land.
26. Environmental Justice (example: does the project avoid placing lower income households in areas where environmental degradation has occurred, such as adjacent to brownfield sites?)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: The current water storage tank is sited on land owned by the State of Montana which has an easement agreement with the Town of Twin Bridges. Preferred Alternative Environmental Narrative: The proposed placement of the new tank is also on State lands, and a representative from the DNRC has indicated that the agency is willing to grant the Town a new easement. The proposed project will benefit the entire community equally.
27. Lead Based Pain and/or Asbestos (example: does the project replace asbestos lined pipes? Do any structures qualify as containing lead-based paint?)			
☒ No Impact ☐ Beneficial ☐ Adverse	☐ Direct ☐ Indirect ☐ Cumulative	☐ Permit ☐ Mitigation ☒ NA	Current Conditions: No lead or asbestos is known in the project area. Preferred Alternative Environmental Narrative: The proposed alternative does not address any lead, asbestos, or hazardous materials.