



March 11, 2021

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the proposed action below:

Project	Proposed Relocation of the Plains Wastewater Treatment Plant
Location	Plains, Montana
Project Number	C301291
Total Cost	\$6,800,447

The Town of Plains, through a 2017 Preliminary Engineering Report (PER) for its wastewater facilities and an Updated PER completed in March of 2020, analyzed the condition of its wastewater system components. It was determined that overall, the facilities appear to be in good working order. The main concern and primary reason for the PERs is the ongoing threat of the Clark Fork River's encroachment on the Plains wastewater treatment plant (WWTP). The WWTP includes a four-cell lagoon, which is located approximately 200 feet from the east bank of the Clark Fork River where it is impacted by erosion caused by repetitive flooding. The river channel has shifted approximately 10 to 15 feet per year towards the WWTP. Since 1995 the river channel has moved approximately 195 feet closer to the lagoon. A failure of the WWTP would significantly impact the public health and safety of Plains residents, as well as the Clark Fork River and other environmental resources.

The proposed Plains WWTP relocation project includes acquisition of private property and construction of a new three-cell lagoon on a 10-acre tract of land north of Helterline Lane, approximately $\frac{3}{4}$ -mile northeast of the existing Plains lagoon and outside of the 100-year floodplain. Primary access to the site will be from Helterline Lane within a 30-foot utility and access easement containing raw sewage and WWTP effluent force mains. Secondary access, if the primary access road is flooded, will be provided via Stonebrook Lane. The new WWTP will continue to use the Town's same outfall to the Clark Fork River. Construction activities at the existing lagoon will consist of piping modifications and decommissioning of the site.

The estimated project cost (including administration, engineering, and construction) is \$6,800,447. The project will be financed with a Federal Emergency Management Agency (FEMA) Grant in the amount of \$5,148,500; a \$500,000 Treasure State Endowment Program (TSEP) grant; a \$125,000 grant from DNRC's Renewable Resource Grant and Loan (RRGL) Program; a \$450,000 grant from the DOC's Community Development Block Grant (CDBG) Program; two grants from the US Army Corps of Engineers (USACE) for a total amount of \$575,000; and \$1,947 in local funds.

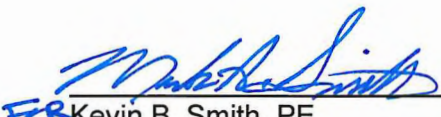
Environmentally sensitive resources such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted because of the proposed project. Environmental impacts related to land use, water quality, air quality, public health, energy, noise, growth, and sludge disposal were also assessed. Relocation of the WWTP will require acquisition of private property. The lagoon site should be located as far as practicable, with a recommended minimum of ¼ mile, from human habitation or from any area that may be built up within the foreseeable future. See DEQ Circular 2. Construction of the relocated WWTP will result in dust and noise. Construction impacts are expected to be localized and of short duration. Except for affecting property adjacent to and within the footprint of the relocated WWTP, no significant long-term environmental impacts were identified. Public participation during the planning process demonstrated support for the selected alternative. No significant long-term environmental impacts were identified. An environmental assessment (EA), which describes the project and analyzes the impacts in more detail, is available for public scrutiny on the DEQ web site <http://deq.mt.gov/Public/ea> and at the following locations:

Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901
mmarsh@mt.gov

Town of Plains
101 West Lynch
Plains, MT 59869

Comments on the EA may be submitted to the Department of Environmental Quality at the above address. After evaluating comments received, the department will revise the environmental assessment or determine if an environmental impact statement is necessary. If no substantive comments are received during the comment period, or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant, the agency will make a final decision. No administrative action will be taken on the project for at least 30 calendar days after release of the Finding of No Significant Impact.

Sincerely,



Kevin B. Smith, PE
Engineering Bureau
Water Quality Division
Montana Department of Environmental Quality

TOWN OF PLAINS
WASTEWATER TREATMENT PLANT RELOCATION
ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: Town of Plains

Address: 101 West Lynch
PO Box 567
Plains, MT 59869

Description of Project: Proposed Relocation of the Plains Wastewater Treatment Plant (SRF Project # C301291)

B. CONTACT PERSON

Name: Danny Rowan, Mayor

Address: 101 West Lynch
PO Box 567
Plains, MT 59869

Telephone: (406) 826-3411

C. ABSTRACT

The Town of Plains, through a 2017 Preliminary Engineering Report (PER) for its wastewater facilities and an Updated PER completed in March of 2020, analyzed the condition of its wastewater system components. It was determined that overall, the facilities appear to be in good working order. The main concern and primary reason for the PERs is the ongoing threat of the Clark Fork River's encroachment on the Plains wastewater treatment plant (WWTP). The WWTP includes a four-cell lagoon, which is located approximately 200 feet from the east bank of the Clark Fork River where it is impacted by erosion caused by repetitive flooding. The river channel has shifted approximately 10 to 15 feet per year towards the WWTP. Since 1995 the river channel has moved approximately 195 feet closer to the lagoon. A failure of the WWTP would significantly impact the public health and safety of Plains residents, as well as the Clark Fork River and other environmental resources.

The proposed Plains WWTP relocation project includes acquisition of private property and construction of a new three-cell lagoon on a 10-acre tract of land north of Helterline Lane, approximately ¾-mile northeast of the existing Plains

lagoon and outside of the 100-year floodplain. Primary access to the site will be from Helterline Lane within a 30-foot utility and access easement containing raw sewage and WWTP effluent force mains. Secondary access, if the primary access road is flooded, will be provided via Stonebrook Lane. The new WWTP will continue to use the Town's same outfall to the Clark Fork River. Construction activities at the existing lagoon will consist of piping modifications and decommissioning of the site.

The estimated project cost (including administration, engineering, and construction) is \$6,800,447. The project will be financed with a Federal Emergency Management Agency (FEMA) Grant in the amount of \$5,148,500; a \$500,000 Treasure State Endowment Program (TSEP) grant; a \$125,000 grant from DNRC's Renewable Resource Grant and Loan (RRGL) Program; a \$450,000 grant from the DOC's Community Development Block Grant (CDBG) Program; two grants from the US Army Corps of Engineers (USACE) for a total amount of \$575,000; and \$1,947 in local funds.

Environmentally sensitive resources such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted because of the proposed project. Environmental impacts related to land use, water quality, air quality, public health, energy, noise, growth, and sludge disposal were also assessed. Relocation of the WWTP will require acquisition of private property. The lagoon site should be located as far as practicable, with a recommended minimum of ¼ mile, from human habitation or from any area that may be built up within the foreseeable future. See DEQ Circular 2. Construction of the relocated WWTP will result in dust and noise. Construction impacts are expected to be localized and of short duration. Except for affecting property adjacent to and within the footprint of the relocated WWTP, no significant long-term environmental impacts were identified.

The Agency Action - Under Montana law, (75-6-112, MCA), no person may construct, extend, or use a public sewage system until DEQ has reviewed and approved the plans and specifications for the project. Under the Montana Water Pollution Control State Revolving Fund Act, DEQ may loan money to municipalities for construction of public sewage systems.

The DEQ, Engineering Bureau, has prepared this Draft Environmental Assessment to satisfy the requirements of the Montana Environmental Policy Act (MEPA) and the National Environmental Policy Act (NEPA).

D. COMMENT PERIOD

Thirty (30) calendar days.

II. PURPOSE OF AND NEED FOR ACTION

The Town of Plains wastewater system consists of 8-inch gravity sewer pipe, one lift station, 1.6 miles of sewer force main, and a four-cell lagoon with ultraviolet (UV) disinfection that discharges to the Clark Fork River under Montana Pollutant Discharge Elimination System permit MT0030465. The original Plains WWTP was installed in 1983

as a two-cell lagoon followed by infiltrative cells, but was converted to a discharging lagoon with ultraviolet (UV) disinfection in 2004. In 2012 the UV system was raised to a higher elevation after experiencing problems with flooding. Some wastewater improvements are needed within 5 to 10 years due to system age, e.g., removal and disposal of lagoon sludge, replacement of the main lift station's backup generator, lift station pump replacement, blower rehabilitation or replacement, and UV system improvements. The main concern, however, is protection of the WWTP itself, given the shifting of the Clark Fork River to the east more and more each year.

The Plains lagoon is in danger of failure due to erosion caused by repetitive flooding. Over the past 22 years, the Clark Fork River has been steadily encroaching on the border of land between the river and the WWTP. Since 1975 the eastern river channel has moved approximately 195 feet east and closer to the lagoon. During the 2018 flood season, an additional 47 feet of river bank was lost in a ten-day period. Prior to that flood season, the preferred alternative to protecting the WWTP, as identified in the 2017 PER, was the installation of sheet pile barriers between the river and the lagoon. After the 2018 flooding, the proposed sheet pile location was within the newly cut river channel, indicating that the 2017 chosen alternative was no longer viable. As a result, the planning process was restarted to look at other feasible alternatives and resulted in the 2020 PER and the selected alternative to relocate the WWTP.

The new WWTP will be located outside of the 100-year floodplain, and include influent screening, three lagoon cells with tapered aeration, and UV disinfection. Provisions will be included to allow for addition of a moving bed bioreactor (MBBR) in the future. Five thousand feet of new 10-inch force main will be required. The project scope includes removal and disposal of sludge from the existing lagoon cells in accordance with EPA 503 Rules, and demolition and reclamation of the existing lagoon site. The project is scheduled to be completed during the 2021 construction season.

Note: at time of publication of this Draft Environmental Assessment (EA), the site identified for the new WWTP has not yet been acquired by the Town of Plains. Final approval of this EA and plan and specification approval is dependent on the Town of Plains' acquisition of the site under consideration.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

Based on the assessment of Plains wastewater system components in the 2020 PER, it was determined that there are no significant deficiencies with the collection system or lift station that warrant correction now. Alternatives considered in the PER focus on the threat of the Clark Fork River encroachment on the existing WWTP.

A. ALTERNATIVES CONSIDERED

Six alternatives, including No Action, were considered for addressing the threat presented to the Plains WWTP by the shifting Clark Fork River and associated flooding.

- Alternative 1 – Construct a Protective Barrier Adjacent to the Lagoon
- Alternative 2 – Armor the Riverbank
- Alternative 3 – Implement Measures to Redirect the Clark Fork River

- Alternative 4 – Relocate WWTP to a Site Outside the Floodplain
- Alternative 5 – Construct a Mechanical Treatment Plant
- Alternative 6 – No Action

ALTERNATIVE 1 - CONSTRUCT A PROTECTIVE BARRIER ADJACENT TO THE LAGOON

- This option consists of the installation of sheet pile barriers between the lagoon cells and the Clark Fork River, with the goal of restraining the river and impeding its encroachment on the lagoon dikes. The existing WWTP would remain in the same location. It is expected that the sheet pile barrier would provide protection for at least 15 years, and a second installation in the future would extend the years of protection. Large cobbles, boulders, and possibly bedrock are anticipated at the proposed sheet pile location and may pose construction constraints. This alternative is not considered viable since the facilities and associated components will remain within the floodplain and susceptible to future hydrologic damage.

ALTERNATIVE 2 – ARMOR THE RIVERBANK - This alternative involves armoring of approximately 750 feet of riverbank with riprap, with the intent of eliminating or delaying bank erosion and encouraging the Clark Fork River to shift westward, away from the Plains lagoon. The existing WWTP would remain in its same location. It is likely not as effective as the sheet pile barrier due to the susceptibility of riprap to continued scour below the riprap key-in or buttress. The environmental permitting process could be complicated. This alternative is not considered viable since it leaves the town at risk of a lagoon breach during even a minor flood year, as witnessed in 2018.

ALTERNATIVE 3 - IMPLEMENT MEASURES TO REDIRECT THE CLARK FORK RIVER

- Three potential options for redirecting the Clark Fork River away from the Plains treatment facility have been identified – construction of a cut-off channel at an upstream meander, construction of an engineered log structure, and dredging of the west channel. All three of these options would require a detailed hydrologic study. This alternative is not considered viable since it leaves the town at risk of a lagoon breach during even a minor flood year, as witnessed in 2018. In addition there would be significant concerns about litigation from public and private landowners affected by a drastic change of the river's course in this stretch, even on the western bank.

ALTERNATIVE 4 – RELOCATE WWTP TO A SITE OUTSIDE OF THE FLOODPLAIN

- This alternative relocates the lagoon to a new location outside of the 100- and 500-year floodplains. Five potential options were considered for the relocated lagoon – aerated lagoon with continuous discharge under the existing MPDES permit (Alternative 4-Rev1), facultative lagoon with continuous discharge using the existing MPDES permit (Alternative 4-Rev2), and three different aerated lagoon locations (Alternatives 4A, 4B, and 4C), all with spray irrigation for effluent disposal. Decommissioning of the current facility, in conjunction with this alternative, will remove the threat to the Town not having wastewater treatment due to a lagoon breach and the threat to state water and environmental resources from the release of 5 million gallons of untreated or partially treated wastewater into the Clark Fork River during flood stage. Looking more closely, Alternative 4-Rev2 is not considered a viable alternative since it requires a larger footprint and does not allow for as much operational control as

Alternative 4-Rev 1. Alternatives 4A and 4B are not considered feasible because of the need for extensive easement negotiation and permitting to cross active railroad tracks, Montana Highway 200, County roads, and private land. Alternatives 4-Rev1 and 4A are considered viable alternatives to be considered further.

ALTERNATIVE 5 – MECHANICAL/PACKAGE TREATMENT PLANT – This alternative consists of construction of a mechanical or package treatment plant on approximately 5 acres of land located outside of the 100-year floodplain that would have a continuous discharge into the Clark Fork River with a modification to the existing MPDES permit. The PER determined that a non-package treatment plant would be cost-prohibitive for a town the size of Plains. For that reason, a mechanical package treatment plant will be considered.

ALTERNATIVE 6 – NO ACTION – With the No Action alternative, the lagoon would remain in its present location and continue to face risk of damage to its dikes during future flooding events on the Clark Fork River. A breach of a lagoon dike would result in release of partially treated and untreated sewage to the Clark Fork River, posing a major threat to human health and the environment. If the lagoon was damaged badly enough, the health of residents of Plains would be negatively impacted by the lack of an operational wastewater treatment plant. The No Action alternative is not considered viable since it leaves the town at risk of a lagoon breach.

B. COST COMPARISON - PRESENT WORTH ANALYSIS

Present worth analysis is a means of comparing alternatives in present day dollars and can be used to determine the most cost-effective alternative. An alternative with low initial capital cost may not be the most cost-efficient project if high monthly operation and maintenance costs occur over the life of the alternative. An interest rate of 2.5% over the 20-year planning period was used in the analysis. Salvage values were considered. Table 1 provides a summary of the present worth analysis of the three feasible alternatives.

TABLE 1 - ECONOMIC EVALUATION OF WWTP ALTERNATIVES

Alternative	Total Capital Cost *	Present Worth Annual O&M Cost	Present Worth Salvage Value	Net Present Worth
Alternative 4-Rev1 - Aerated Lagoon, with Surface Water Discharge	\$5,350,000	\$2,260,000	\$397,000	\$7,213,000
Alternative 4A - Aerated Lagoon Site A with Spray Irrigation	\$5,800,000	\$2,340,000	\$397,000	\$7,743,000
Alternative 5 – Package WWTP with Surface Water Discharge	\$7,800,000	\$4,700,000	\$95,000	\$12,405,000

*Capital costs include engineering, administration, and construction costs.

As seen in the above table, the lowest cost alternative is Alternative 4-Rev1, construction of an aerated lagoon with continuation of a surface water discharge.

Construction of an aerated lagoon with spray irrigation (Alternative 4A) is approximately \$500,000 more in cost and Alternative 5, the package WWTP alternative is significantly higher in cost.

C. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

Non-monetary factors were considered by the Town in its 2020 PER, in conjunction with project cost, in selecting the preferred alternative. Table 2 provides scores for a majority of the non-monetary factors evaluated by Plains. The factors scored for the three feasible alternatives are: protection from future flooding, land requirements, land availability, discharge and future regulations, winter storage, airport affected area, sludge removal requirements, operator certification requirement, and time to permit/construct. A score of 1 to 5 was assigned, with 1 considered to be low-risk and 5 considered to be high-risk. The scores were not tallied since the importance of each evaluation criteria are not equal and the factors were not weighted. Environmental factors were not scored in the table since they were under review and comment. Scores above 3 are highlighted to note the higher risk.

TABLE 2 – WASTEWATER TREATMENT ALTERNATIVES RANKING

Evaluation Category	Alt 4-Rev1 Aerated Lagoon w/ Surface Water Discharge	Alt 4A Aerated Lagoon Site A with Land Application	Alt 5 Package mechanical WWTP w/ Surface Water Discharge
Protection from Future Flooding	2 - Discharge pipe to river could still be subject to future floods	3 - Land availability for land application could require the use of property within the floodplain	1
Land Requirement	2 – 10 acres	4 – 20 acres treatment & 80 acres land application	1 – 5 acres
Land Availability	3 – purchase of private land expected	4 – purchase of private land expected; larger acreage more difficult to find and more costly	3 – purchase of private land expected
Discharge – Future Regulations	2 – No known future MPDES concerns in DEQ discussions; distant future is unknown	3 – Proximity of high groundwater could require monitoring; distant future is unknown	4 – Anti slip-back policy could become an issue
Winter Storage	1 – None required	5 – 18 acres of winter storage pond estimated	1 – None required
Airport Affected Area (AAA)	3 – Lagoon site is within AAA; open water is a concern and pond covers may be necessary	5 – Lagoon site is within AAA; open water is a concern and pond covers may be necessary; higher risk and higher associated mitigation expense than Alt 4 due to larger pond acreage	1 – No open water anticipated
Sludge Removal Requirements	1 – Sludge removal estimated every 20	1 – Sludge removal estimated every 20	2 – Ongoing sludge dewatering and

	years at \$320,000	years at \$320,000	disposal
Operator Certification Requirement	1 – Remains the same	1 – Remains the same	4 – Increase to Class 1C
Time to Permit/Construct	2 – Based on the funding agency environmental process	3 – Based on the funding agency environmental process	5 – The need for a pilot plant makes timing unpredictable

All three viable alternatives meet the Town's objective of removing the threat of breaching and flooding to the WWTP. The most significant differences between the alternatives were noted by the Town and affected their selection of Alternative 4-Rev as the recommended alternative, which is a relocated aerated lagoon utilizing the existing surface water outfall to the Clark Fork River. The project requires no changes to the collection system. Sizing of the lift station pumps will be verified. The force main downstream of the lift station will be diverted to the new lagoon site. A force main from the new lagoon will be directed to the existing outfall point on the Clark Fork River.

The estimated project cost (including administration, engineering, and construction) is \$6,800,447. The project will be financed with a Federal Emergency Management Agency (FEMA) Grant in the amount of \$5,148,500; a \$500,000 Treasure State Endowment Program (TSEP) grant; a \$125,000 grant from DNRC's Renewable Resource Grant and Loan (RRGL) Program; a \$450,000 grant from the DOC's Community Development Block Grant (CDBG) Program; two grants from the US Army Corps of Engineers (USACE) for a total amount of \$575,000; and \$1,947 in local funds.

The average residential sewer rate in Plains (for a home with a ¾" water service) is \$26.81. A sewer rate increase is not proposed now. The financial impact of this project on the system users is shown in Table 3. The proposed project will result in a monthly sewer cost per household that is 1.2% of the monthly median household income. Based on EPA guidance for project affordability, the increased sewer rate may pose a moderate economic hardship on households.

Table 3 - PROJECT AFFORDABILITY

Monthly sewer user cost	\$26.81
Monthly median household income (mMHI) ¹	\$2,202
User rate as a percentage of mMHI	1.2%

¹ Based on DOC American Communities Survey data set (2011-2015)

IV. DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. PLANNING AREA AND MAPS

The Town of Plains is in the south-central portion of Sanders County in western Montana (Figure 1), along the north bank of the Clark Fork River and Highway 200. It is located 25 miles southeast of the county seat of Thompson Falls and 39 miles west of US Highway 93. The Town of Plains planning area includes the area within the town limits of Plains, the existing wastewater treatment site, and the valley around Plains to incorporate subdivisions that may be annexed into

Plains (Figure 2). The existing and proposed lagoon locations are shown on Figure 3.

B. POPULATION AND FLOW PROJECTIONS

The 2020 PER presented the existing and projected populations and sanitary sewer flows for the Town of Plains. The 2020 population is 1,053. The 20-year design population is based on a population growth of 3%, which matches projected Sanders County growth, plus an annexed population of 76. Three areas adjacent to Town limits are proposed for annexation, with two persons allocated for each future residence. The resulting 2040 design population is 1,161.

Three sources of data were used to determine current average daily flow to the WWTP: lagoon effluent data (86,000 gallons per day (gpd)), lift station pump data (84,000 gpd), and water sales for December 2019 through March 2020 (73,000 gpd). It was decided to use a design flow of 100 gallons per capita day (gpcd) as a conservative measure to estimate the 20-year design flow. The average daily design flow is therefore 116,100 gpd, based on the 2040 design population of 1,161 and 100 gpcd.

C. NATURAL FEATURES

The Town of Plains is in a northwest-trending intermontane basin that was part of Glacial Lake Missoula and slopes gently from east to west towards the Clark Fork River. The Cabinet Mountains are located northwest of the valley; the lower-lying Salish Mountains are located to the north-northeast; and the Coeur d'Alene Mountains are to the south. The existing Plains WWTP is located west of town along the northern bank of the Clark Fork River, within the 100-year floodplain. The proposed new WWTP location is approximately ¾-mile northeast of the existing WWTP on a 10-acre tract of irrigated agricultural farmland located north of Helterline Lane and outside the 100-year floodplain. The acreage is relatively flat, with mild rolling slopes and is currently planted in alfalfa hay. The site is at an elevation of approximately 2,460 feet.

Plains' climate is described as a humid continental climate, typified by warm to hot summers and cold winters. Precipitation is usually well-distributed throughout the year.

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND SECONDARY ENVIRONMENTAL IMPACTS

1. Land Use/Prime Farmland – Soils at the proposed new lagoon site are identified as Quaternary alluvium by Montana Bureau of Mines and Geology mapping. Borings and test pits verified these soils, which generally consist of silt with varying proportions of sand. The USDA Natural Resources Conservation Service (NRCS) identifies these soils specifically as Gird silt loam on 0 to 4 percent slopes that is well-drained and more than 60 inches deep. According to the geotechnical evaluation,

silty clay soil in the upper portion of the natural soil profile (about 6 feet thick) at the proposed lagoon site will require substantial moisture conditioning during removal and replacement as engineered fill to achieve design subgrade support for structures and improvements.

Much of the land around Plains is designated as "Prime Farmland if Irrigated" or "Farmland of Importance." On federally funded projects, conversion of farmland, as defined in the Farmland Protection Policy Act (FPPA), to nonagricultural uses, requires submittal of Form AD-1006 to the NRCS. The form was submitted by the Federal Emergency Management Agency (FEMA) in coordination with the US Army Corps of Engineers (USACE), and subsequently reviewed by the NRCS Missoula Office. The overall area converted is 17.1 acres, which includes the access roads, and is consistent with the area of impact identified on the Farmland Classification Map. Since the site score of 135.5 points on Form AD-1006 was less than 160 points, the site need not be considered for further protection.

Within Town limits, land use is primarily residential and commercial. Moving outward from Town limits, land use becomes rural residential and agricultural land. There are several landscaping and produce nurseries, mint and wheat cropland, alfalfa fields, a pine tree seed nursery, US Forest Service tree nursery, cattle grazing, and undeveloped grassland.

The Plains airport is located northwest of Town, about ½ mile east of the proposed new lagoon site. Both the existing WWTP and the proposed new lagoon are within the Airport Affected Area (AAA). Erection of new structures within the AAA requires permitting by Sanders County Land Services and completion of an FAA 7460 Notice of Proposed Construction or Alteration. The proposed elevations of the new lagoon banks and building ridge line will meet height restrictions within the AAA. Because lagoons with open water surfaces have the potential to attract waterfowl, the Federal Aviation Administration (FAA) was contacted to determine potential impacts for restricting wildlife travel and reducing attraction of wildlife to the new WWTP. An assessment was completed in June of 2020 by the USDA Animal and Plant Health Inspection Services (APHIS) to evaluate the threat of wildlife striking an aircraft. APHIS noted that the location of the WWTP between the river and the airport may minimize wildlife traffic across the airport and recommended that reasonable precautions, e.g., secure fencing and regular mowing, should be taken to limit wildlife attraction near the airport. The FAA, in a letter dated July 14, 2020, deferred to the APHIS assessment and did not object to the project, but emphasized the need for habitat management and hazing as needed.

2. Floodplains – Per Floodplain Insurance Rate Map (FIRM) 300089C1750D (eff. June 12, 2012), the 10-acre lagoon site is located outside the special flood hazard area (SFHA) in Zone X. Approximately 3,000 feet of the access road and underground utilities will be in Zone A, but will not affect or be affected by the floodplain. The location of this access road and the utilities is the only practicable alternative due to the lack of available

easements in other locations. A local Floodplain Development Permit is required for the access road.

3. Wetlands – Most wetlands near Plains are along the fringes of the Clark Fork River, other drainages, and a slough north of Town. There are also potential wetlands around the existing lagoon site. According to the National Wetlands Inventory (NWI) mapper no wetlands have been identified within the project area.
4. Cultural Resources and Historical Sites – The State Historic Preservation Office (SHPO) concurred with FEMA's determination of no Historic Properties Affected by the proposed project. A Class III Cultural Resources (CR) survey and report was completed, and concluded that no cultural resources were identified in the study area and recommended that no additional cultural resources work was needed for the project. The CR report was provided to SHPO and interested tribes for review and comment on October 29, 2020.
5. Fish and Wildlife – Most of the wildlife habitat and vegetation in the valley surrounding Plains has already been impacted by agriculture and residential development. The US Fish and Wildlife Service (USFWS) information system indicates that the Canada Lynx, Grizzly Bear, North American Wolverine, Yellow-billed Cuckoo, Bull Trout, and Spalding's Catchfly were identified as having the potential to occur in the project area. FEMA conducted a habitat assessment in the project area and determined in coordination with the USFWS that no suitable habitat was present and therefore, there would be No Effect on the Canada Lynx, Grizzly Bear, North American Wolverine, Yellow-billed Cuckoo, and Spalding's Catchfly or their designated critical habitat because of the proposed project. FEMA, in coordination with the USFWS, has concluded that due to possible erosion and sedimentation during construction, and the risk of continued erosion and overtopping of the abandoned WWTP, the project may impact the Clark Fork River, which contains suitable habitat for the Bull Trout. With implementation of Best Management Practices (BMPs) and the closing plan required as a condition of the FEMA grant, FEMA has determined that the proposed project may affect, but is not likely to adversely affect the Bull Trout or its designated critical habitat.

Removal of vegetation will be limited to irrigated cropland and no intentional or incidental take of migratory birds is anticipated because of this project. The Montana Sage Grouse Habitat Conservation Program Map shows that the new lagoon location and the Town of Plains are not in an Executive Order habitat area. Montana Natural Heritage program data indicates that two active Bald Eagle nests and one pair of Golden Eagles have been identified within ½ mile of the proposed actions. Construction is subject to compliance with the Bald or Golden Eagle Protection Act.

6. Water Quality – The Plains WWTP discharges to the Clark Fork River, which is classified as B-1. Class B-1 waters are to be maintained suitable for drinking, culinary and food processing purposes, after conventional

treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. The Clark Fork River near Plains is located within the Lower Clark Fork River watershed, as identified by US Geological Survey (USGS) Hydrological Unit Code 17010213. The segment is listed as not fully supporting aquatic life. Probable causes are listed as fish passage barriers and dissolved gas supersaturation. Probable sources of impairment are listed as hydrostructure impacts on fish passage from dams or impoundments. A Total Maximum Daily Load has not been prepared for this segment of the Clark Fork River and the Plains WWTP discharge is not listed among the probable sources of impairment. The new lagoon system will be located approximately 2,800 feet east of the Clark Fork River and will maintain the same MPDES permit authorization and discharge point as the existing WWTP.

The primary source of drinking water at the proposed WWTP site is the unconfined sand and gravel aquifer associated with the alluvium of the Clark Fork River. Depth to the water table varies from 12 to 25 feet, with an average saturated thickness of 25 feet. Groundwater flow is generally parallel to the river. The required setback requirements between sewage lagoons and water wells are detailed in section 17.30.1702 of the Administrative Rules of Montana (ARM). In general, a setback of 1,000 feet is required between a water well and the design high-water mark of a sewage lagoon, unless the applicant demonstrates that the distance to achieve 4-log virus inactivation is less than the setback distance. There is currently only one well located within 1,000 feet of the proposed high-water mark of the new lagoon. It is a high-production irrigation well on property owned by the Lawyer Family, that is proposed to be abandoned in accordance with Montana Administrative Rules and replaced with a new well developed approximately 1,250 feet to the west and over 1,000 feet from the new lagoon.

7. Air Quality – Short-term negative impacts on air quality are expected to occur during construction from heavy equipment in the form of dust and exhaust fumes. Proper construction practices will minimize this problem. Project specifications will require dust control. The capacity of the existing WWTP will not change significantly and no permanent air quality impacts are anticipated. More efficient operation at the new WWTP may lower emissions.
8. Public Health – Failure of the WWTP has the potential for significant impacts to the public health and safety of Plains residents. If the existing lagoon dikes are breached during a flood event, the WWTP will no longer be able to accept wastewater generated by the community and emergency measures will need to be implemented. Untreated or partially treated wastewater would adversely impact water quality in the Clark Fork River and other water and environmental resources.
9. Energy – The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable. There

are short-term impacts associated with construction activities. The capacity of the WWTP will not change significantly and there may be more efficient operation. The addition of an influent screening operation and an effluent WWTP pump will add new energy costs.

10. Noise – Short-term impacts from increased noise levels may occur during construction activities. The construction period could be limited to normal daytime hours to avoid early morning or late evening construction disturbances. Equipment at the new WWTP is not expected to generate load noises; therefore, no significant long-term impacts from noise are expected to occur.
11. Environmental Justice – Environmental Justice Executive Order 12898: The proposed project will not result in disproportionately high or adverse human health or environmental effects on minority or low-income populations. According to the American Communities Survey (ACS) data set for 2011-2015, the Town of Plains has a low and moderate income (LMI) percentage of 52.08% and 26.9% below the poverty line. A sewer rate increase is not anticipated to fund the project. The proposed project is not anticipated to cause disproportionate impacts to low-income or minority populations and will benefit the entire community with an improved WWTP.
12. Wild and Scenic River Act – The proposed project will not impact any rivers designated as wild and scenic by Congress or the Secretary of the Interior.
13. Growth – There are three areas (South, Central Avenue, and Clayton Street) that the Town of Plains anticipates annexing within the 20-year design period. Within each area there are existing homes, churches, and apartments that would be connected to the Town's WWTP. According to the 2020 PER, the Town is not aware of any pending new commercial or non-residential development. Although Plains' population has been relatively stagnant since 1970, some growth is assumed for design purposes. According to the Montana Census and Economic Information Center, Sanders County's population is projected to increase by 3 percent over the next 20 years. This growth percentage was considered for Plains, outside of that resulting from the annexations.
14. Cumulative Effects – Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the proposed action when considered in conjunction with other past, present, and future actions related to the proposed action by location or generic type. See § 75-1-220(4), MCA. Under § 75-1-208(11), an agency shall, when appropriate, evaluate the cumulative impacts of a proposed project. However, related future actions may only be considered when these actions are under concurrent consideration by any agency through preimpact statement studies, separate impact statement evaluations, or permit processing procedures.

Relocation of the Plains WWTP away from the Clark Fork River will

proactively protect public health and safety. There may be secondary and/or cumulative impacts due to growth of the community and expansion of the service area. Secondary impacts associated with housing, commercial development, solid waste, transportation, utilities, air quality, water utilization, and possible loss of agricultural and rural lands may occur. These impacts will need to be managed and minimized as much as possible through proper community planning. There are existing city, county and state regulations already in place (i.e., zoning regulations, comprehensive planning, subdivision laws, etc.) that control the density and development of property with regards to water supply, sewage disposal, solid waste disposal, transportation, and storm drainage.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction-related impacts (i.e., noise, dust, light, etc.) will occur, but should be minimized through proper construction management. Energy consumption during construction cannot be avoided.

VI. PUBLIC PARTICIPATION

The first public meeting in the wastewater planning process was held on May 9, 2017 to present needs, alternatives considered, anticipated costs, and proposed recommendations in the PER written by KLJ engineers. That first meeting was noticed in a newsletter mailed to all residents. A second public meeting, advertised in the local Clark Fork Valley Press, was held on June 27, 2017.

After the 2018 flood season, additional public meetings were held to discuss the selection of a preferred alternative that would provide a permanent solution to protect the WWTP facilities from future flood events. The proposed project was discussed at approximately 15 public meetings, beginning with the 2017 meetings and continuing through July of 2020. Meetings included a Floodplain Public Hearing, Final PER Presentation, and Resolution of Acceptance of Project recommendation by the Town Council. Early Public Notice was published on June 17, 2020, and the Final Notice was published on August 26, 2020. All public comments received were in support of the preferred alternative to relocate the WWTP outside the 100-year floodplain.

This draft EA will undergo a 30-day public comment period in accordance with ARM 17.4.610.

VII. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES

All proposed improvements will be designed to meet state standards in accordance with Circular DEQ-2, and will be constructed using standard construction methods. Best management practices will be implemented to minimize or eliminate pollutants during construction. No additional permits will be required from the State Revolving Fund (SRF) section of DEQ for this project after the review of the submitted plans and specifications. However, coverage under the storm water general discharge permit and groundwater dewatering discharge permit, if necessary, must be obtained from the DEQ Water Protection Bureau prior to the beginning of construction. A 124 Permit from the

Department of Fish, Wildlife and Parks, a 404 Permit from the U.S. Corps of Engineers, and a 318 Authorization from the Department of Environment Quality will be obtained for any work that occurs in a streambed or (jurisdictional) wetlands, should it become necessary. A Floodplain Permit will be obtained from the local floodplain administrator if there are any modifications within a floodplain.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

☐ EIS ☐ More Detailed EA ☒ No Further Analysis

Rationale for Recommendation: Through this EA, DEQ has verified that none of the adverse impacts of the proposed Town of Plain's WWTP Relocation Project are significant. Therefore, an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609, and 17.4.610. The EA is the appropriate level of analysis because none of the adverse effects of the impacts are significant.

IX. REFERENCE DOCUMENTS

The following documents have been utilized in the environmental review of this project and are part of the project file:

1. Preliminary Engineering Report for Town of Plains Wastewater Facilities; prepared by KLJ; August 2017
2. Town of Plains Wastewater Facilities Updated Preliminary Engineering Report, March 2020 – Final; prepared by Shari Johnson & Associates Engineering.
3. Geotechnical Evaluation, Plains Wastewater Treatment Facility; prepared for Morrison-Maierle by ALLWEST; September 11, 2020.
4. Town of Plains – Resilient Infrastructure Project Record of Environmental Consideration (REC), Federal Emergency Management Agency, EA Final Date 11/23/2020.
5. A Class III Cultural Resource Inventory of the Town of Plains Proposed Wastewater Treatment Location, Sanders County, Montana; prepared for the Town of Plains Engineer and the USCOE and FEMA; prepared by GCM Services, Butte; October 28, 2020.

X. AGENCIES CONSULTED

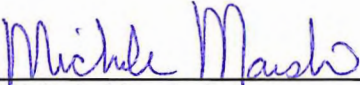
As part of the Preliminary Engineering Report (PER) process, the following agencies were contacted regarding the proposed construction of this project:

1. The U.S. Fish and Wildlife Service (Service) reviewed the map and project description that were sent to them in December of 2019 and determined that they have no comments or concerns regarding federally-listed or proposed threatened

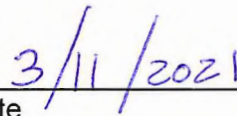
or endangered species.

2. The Montana Historical Society's State Historic Preservation Office (SHPO) was first contacted in December of 2019 and responded that a cultural resource inventory was unwarranted. However, they noted that if structures greater than 50 years old are to be altered or if cultural materials are inadvertently discovered, their office would need to be contacted. SHPO concurred with FEMA's determination of No Historic Properties Affected on September 28, 2020.
3. The U.S. Department of the Army Corps of Engineers (USCOE) was contacted in December of 2019. They responded that a Department of the Army 404 permit is not required if the project will not impact any wetland or stream. The USCOE is partially funding the proposed project and has been actively involved in joint funding agency meetings over the past year.
4. The Montana Department of Fish, Wildlife and Parks (FWP) was solicited for comments in December of 2019 and responded that they recognized the importance of the WWTP relocation project to Plains and the protection of the Clark Fork River. Their review of eagle nesting data found an active bald eagle nest approximately 2,300 feet west of the proposed WWTP site on an island in the Clark Fork River. If the chosen WWTP location is within ½ mile of the active nest, FWP must be contacted to discuss mitigation options.
5. The Montana Department of Natural Resources and Conservation (DNRC) was solicited for comments in December of 2019. They responded with a map showing the floodplain area overlaid on the proposed lagoon relocation area and noted that the mapped Approximate Zone A Special Flood Hazard Area (SFHA) associated with the Clark Fork River is found within the broad boundary depicted as a possible WWTP relocation area. (The proposed lagoon site is within this possible lagoon site boundary, but not within the Zone A floodplain.)
6. The Sanders County Land Service Department was solicited for comments in December of 2019. As administrator of both the FEMA and FAA programs at the county level, the department responded with a request for inclusion in any discussions regarding compliance with FEMA and FAA requirements.
7. The Federal Emergency Management Agency (FEMA) is contributing the largest share of funding to this project. They completed a Programmatic Environmental Assessment (PEA) and Finding of No Significant Impact (FONSI) for the proposed project. They oversaw public outreach and notice with respect to the 100-Year floodplain.
8. The Federal Aviation Administration (FAA) was solicited for comments by the Sanders County Land Service Department during the fall of 2019. They noted that they generally consider lagoons as an incompatible land use when located near a public-use airport, as they have been known to attract hazardous wildlife, particularly birds. The FAA Advisory Circular that addresses this issue recommends a separation distance of 5,000 feet. Given that the proposed lagoon site is within 5,000 feet of the Plains Airport, the recommendation was made for the community to contact US Department of Agriculture Wildlife Services to conduct a hazardous wildlife assessment or site visit.


EA Prepared by:

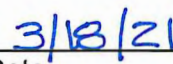


Michele Marsh, P.E.


Date

EA Reviewed by:


Kevin Smith, P.E.


Date

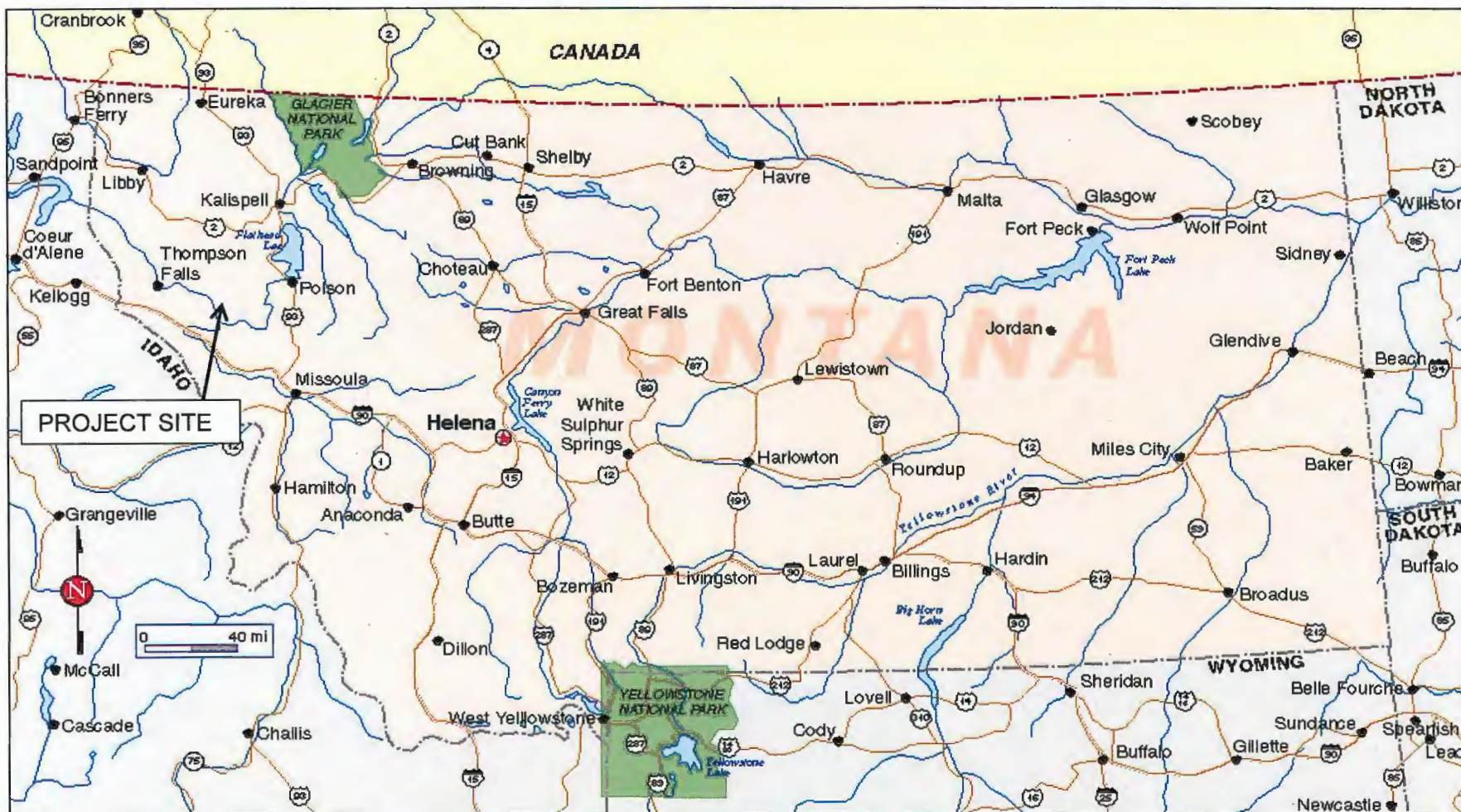


FIGURE 1
LOCATION MAP



TOWN OF PLAINS PRELIMINARY ENGINEERING REPORT
SANDERS COUNTY, MT

PLANNING AREA EXHIBIT

FIGURE

2

