



February 5, 2016

## 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	City of White Sulphur Springs Wastewater Treatment Plant Improvements
Location	White Sulphur Springs, Montana
Project Number	C301272
Total Cost	\$3,699,770

The City of White Sulphur Springs, through preliminary engineering reports (PERs) written in 2012 and 2014, and a PER amendment in 2015, identified the need to upgrade its wastewater treatment facility (WWTF). The existing two-cell, 17-acre, facultative lagoon treatment system discharges to an unnamed drainage under a Montana Pollutant Discharge Elimination System (MPDES) permit. Lagoon dikes are severely eroded and excessive seepage from the clay-lined lagoon bottom has been documented. There have been frequent and significant violations for Biochemical Oxygen Demand (BOD<sub>5</sub>) and Total Suspended Solids (TSS).

Because of MPDES numeric permit limit exceedances, failures to monitor and report, and sanitary sewer overflows (SSOs) in the form of basement backups, the Montana Department of Environmental Quality (DEQ) issued the city an Administrative Order on Consent (AOC) in 2011. The order requires the city to achieve compliance with its MPDES permit by October 2016.

The currently proposed project addresses WWTF deficiencies and consists of construction of a three-cell facultative lagoon within the footprint of the existing two-cell lagoon, with the addition of ultraviolet (UV) disinfection. Sludge from the existing lagoon cells will be removed and land-applied on nearby farmland in accordance with Federal 40 CFR 503 sludge disposal regulations. The existing discharge to the unnamed drainage will be maintained. The project is proposed for construction during the summer of 2016.

Federal and State grant/loan programs will fund the project. Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted as a result of the proposed project. 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

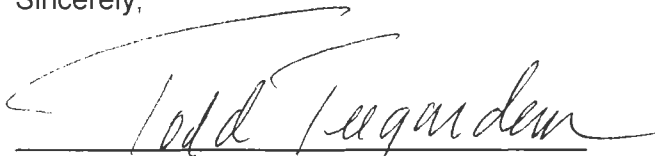
<http://deq.mt.gov/Public/ea> and at the following locations:

Department of Environmental Quality  
1520 East Sixth Avenue  
P.O. Box 200901  
Helena, MT 59620-0901  
[mmarsh@mt.gov](mailto:mmarsh@mt.gov)

City of White Sulphur Springs  
105 W. Hampton  
White Sulphur Springs, MT 59645

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,

A handwritten signature in cursive script that reads "Todd Teegarden". The signature is written in black ink and is positioned above a horizontal line.

Todd Teegarden, Bureau Chief  
Technical and Financial Assistance Bureau  
Planning, Prevention & Assistance Division

CITY OF WHITE SULPHUR SPRINGS  
WASTEWATER TREATMENT SYSTEM IMPROVEMENTS  
**ENVIRONMENTAL ASSESSMENT**

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: City of White Sulphur Springs  
Address: PO Box 442  
White Sulphur Springs, MT 59645  
Project Number: SRF Project # C301272

B. CONTACT PERSON

Name: Julian Theriault, Mayor  
Address: PO Box 442  
White Sulphur Springs, MT 59645  
Telephone: (406) 547-3911

C. ABSTRACT

The City of White Sulphur Springs, through preliminary engineering reports (PERs) written in 2012 and 2014, and a PER amendment in 2015, identified the need to upgrade its wastewater treatment facility (WWTF). The existing two-cell, 17-acre, facultative lagoon treatment system was constructed in 1959 and discharges to an unnamed drainage under a Montana Pollutant Discharge Elimination System (MPDES) permit. There have been no improvements to the WWTF, except for installation of an influent flow measurement flume and a multi-level draw-off and effluent flow measurement structure in 2009. Lagoon dikes are severely eroded and excessive seepage from the clay-lined lagoon bottom has been documented.

Over the years, manholes and sewer pipes throughout town have deteriorated, allowing excessive infiltration/inflow (I/I) into the collection system. This unwanted water adversely impacts wastewater treatment so that detention time in the lagoon is reduced, pollutants are not adequately removed, and MPDES permit violations result. Because of a series of MPDES numeric permit limit exceedances, failures to monitor and report, and sanitary sewer overflows (SSOs) in the form of basement backups, the Montana Department of Environmental Quality (DEQ) issued the city an Administrative Order on Consent (AOC) in 2011. The order requires the city to achieve compliance with its MPDES permit by October 2016. The current permit went into effect on September 1,

2015. The *E. coli* limits in that permit necessitate disinfection of the wastewater effluent.

The City of White Sulphur Springs rehabilitated 1.5 miles of their most deteriorated sewer mains in a 2014 Phase 1 project in order to reduce the amount of I/I into their collection system. The currently proposed project addresses WWTF deficiencies and consists of construction of a three-cell facultative lagoon within the footprint of the existing two-cell lagoon, with the addition of ultraviolet (UV) disinfection. Sludge from the existing lagoon cells will be removed and land-applied on nearby farmland in accordance with Federal 40 CFR 503 sludge disposal regulations. The existing discharge to the unnamed drainage will be maintained. The project is proposed for construction during the summer of 2016.

The estimated project cost (including administration, engineering, and construction) is \$3,699,770. The city will fund these project costs through a \$750,000 grant from the Treasure State Endowment Program (TSEP); a \$125,000 grant from the Department of Natural Resources and Conservation; two Water Resources Development Act (WRDA) grants totaling \$509,000; city funds in the amount of \$24,770; and a loan in the amount of \$2,291,000 from the Water Pollution Control State Revolving Fund (WPCSRF) Program, at an interest rate of 2.50% and a term of 20 years.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted as a result of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, growth, and sludge disposal were also assessed. No significant long-term environmental impacts were identified.

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, Technical and Financial Assistance Bureau, has prepared this 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 city's sewer collection system was originally constructed in 1916 and conveyed wastewater directly to the North Fork of the Smith River without treatment. In 1959 the City of White Sulphur Springs installed its 17-acre, two-cell facultative lagoon wastewater treatment facility (WWTF) to support a population of 1,800 people. No major

improvements have ever been made to the unlined lagoon cells and field measurements in 2011 indicate that the lagoon cells are leaking in excess of state standards. Other lagoon problems are eroded dikes, inadequate valves for operational flexibility, and inadequate size to hydraulically handle the historical high flows due to infiltration/inflow (I/I). In addition, current design standards require three facultative lagoon cells for improved treatment capability and the existing system only has two. The WWTF discharges to an unnamed ditch two miles upstream of the South Fork of the Smith River.

The Montana Department of Environmental Quality (DEQ) issued an Administrative Order on Consent (AOC) to the City of White Sulphur Springs on July 15, 2011. The AOC was issued due to a series of MPDES numeric permit limit exceedances during the period of March 2008 through January 2011 for Biochemical Oxygen Demand (BOD<sub>5</sub>), BOD<sub>5</sub> percent removal, Total Suspended Solids (TSS), TSS percent removal, *E. coli*, and pH; failure to monitor and report; and sanitary sewer overflows (SSOs) in the form of basement backups. Under the AOC, the City pursued solutions to its problems with a two-phase approach. Phase 1 consisted of rehabilitation of approximately 7,500 lineal feet of sewer mains with the intent of fully mitigating the majority of I/I problems in the collection system. By reducing I/I, wastewater flow from the City to the WWTF is lessened and the new WWTF can be sized accordingly. The collection system improvements project was completed in June of 2014. The current Phase 2 project focuses on correction of WWTF deficiencies needed to achieve compliance with MPDES permit requirements. The AOC requires the city to achieve compliance by October 2016.

The proposed wastewater treatment plant improvements will address long-standing MPDES permit compliance challenges. The proposed White Sulphur Springs wastewater treatment plant project entails:

- Removal and disposal of sludge from the existing lagoon.
- Construction of a three-cell lagoon within the footprint of the existing two cells.
- Installation of an inlet Parshall flume and discharge control structure.
- Connection of an ultraviolet disinfection (UV) process.

### III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

At the time the 2014 Preliminary Engineering Report (PER) was written, it was anticipated that the next MPDES permit would include limits for ammonia, and possibly nutrients and nitrite/nitrate. The wastewater treatment alternatives considered in the PER therefore utilized enhanced treatment, with effluent discharge or reuse.

The current MPDES permit was issued September 1, 2015, and did not contain the expected stricter MPDES permit limits. Therefore, the higher level of treatment considered in the PER was no longer necessary and many of the proposed treatment alternatives could be eliminated. As a result, the 2015 PER Amendment only considers the no-action alternative against (1) facultative lagoon treatment, ultraviolet (UV) disinfection, and surface water discharge; and (2) facultative lagoon treatment, storage, and land application.

#### A. TREATMENT ALTERNATIVES

Three wastewater treatment alternatives, including the No-Action option, were evaluated in the 2015 PER Amendment:

- Alternative 1 – No Action
- Alternative 2 – Facultative Lagoon, UV Disinfection, and Surface Water Discharge
- Alternative 3 – Facultative Lagoon with Spray Irrigation

ALTERNATIVE 1 - NO ACTION - The no-action alternative entails making no improvements to the city's lagoon, which has eroded dikes, appears to be leaking excessively, and lacks operational controls. The WWTF discharges poorly-treated, non-disinfected wastewater directly into an unnamed drainage and has been out of compliance with its MPDES discharge permit. The frequency and extent of violations led the DEQ to issue an Administrative Order on Consent (AOC) to the City of White Sulphur Springs in 2011. In order to avoid stipulated penalties in the AOC and meet the effluent standards in its permit, the City of White Sulphur Springs must complete WWTF improvements by October 2016. Therefore, the no-action alternative was not considered to be a viable option, and was not given further consideration.

ALTERNATIVE 2 - FACULTATIVE LAGOON, UV DISINFECTION, AND SURFACE WATER DISCHARGE – This alternative includes constructing a three-cell, facultative lagoon in the footprint of the existing two-cell lagoon, adding UV disinfection, and maintaining the surface water discharge. A backup generator would be provided for the UV disinfection system. An influent Parshall flume and a new discharge control structure would be installed. Within the project scope, sludge in the existing lagoon cells would be removed and land-applied. This alternative was determined to be a viable solution for the City of White Sulphur Springs and was given further consideration in the PER.

ALTERNATIVE 3 - FACULTATIVE LAGOON WITH SPRAY IRRIGATION – This alternative consists of construction of a three-cell, facultative lagoon like the one described in Alternative 2. However, UV disinfection would not be installed, presuming that a 200-foot buffer zone is maintained between perimeter fencing and the irrigated land. Approximately 14 acres of an additional lagoon cell would be added for storage of 180 days of wastewater flow during the winter and fringe months when irrigation cannot be implemented. This cell would be located north of the existing lagoon on 20 acres currently leased by the city from the Department of Natural Resources and Conservation. Other components of this alternative would be an irrigation pump station and center pivot system. Suitable agricultural land for spray irrigation of the lagoon effluent at an agronomic uptake rate, estimated at 26 acres, must be located. A 20-year lease or similar assurance would need to be negotiated in order to ensure control of the irrigated land.

## B. COST COMPARISON - PRESENT WORTH ANALYSIS

The 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 not considered. Table 1 provides a summary

of the present worth analysis of the two feasible alternatives.

TABLE 1 - ECONOMIC EVALUATION OF TREATMENT SYSTEM ALTERNATIVES

Alternative	Total Capital Cost *	Annual O&M Cost	Present Worth of O&M plus Capital
Alternative 2 - Facultative Lagoon, UV Disinfection, and Surface Water Discharge	\$3,699,770	\$7,850	\$3,822,145
Alternative 3 - Facultative Lagoon with Spray Irrigation	\$6,973,083	\$11,620	\$7,154,229

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

C. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

Construction of a facultative, 3-cell lagoon with ultraviolet (UV) disinfection and continued surface water discharge is the preferred alternative, based on the large construction cost difference and the lack of overwhelming benefit of utilizing a spray irrigation system.

The estimated project cost (including administration, engineering, and construction) is \$3,699,770. The city will fund these project costs through a \$750,000 grant from the Treasure State Endowment Program (TSEP); a \$125,000 grant from the Department of Natural Resources and Conservation; two Water Resources Development Act (WRDA) grants totaling \$509,000; city funds in the amount of \$24,770; and a loan in the amount of \$2,291,000 from the Water Pollution Control State Revolving Fund (WPCSRF) Program, at an interest rate of 2.50% and a term of 20 years.

Each sewer user in White Sulphur Springs pays a \$12.00 flat monthly fee plus \$1.928 per 1,000 gallons of metered water use. Based on approximately 5,000 gallons per month average winter water usage, the current average monthly sewer rate is approximately \$21.00. The average monthly sewer rate will increase \$26.91 per month as a result of the proposed project, resulting in a new average sewer rate of \$47.91 per month per user, which is an increase of 228%. 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 1.57% 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. While \$47.91 is the best estimate at this time, the end user rate will depend upon the final funding package and contractor's construction bid.

Table 3 - PROJECT AFFORDABILITY

Monthly sewer user cost	\$47.91
Monthly median household income (mMHI) <sup>1</sup>	\$3,057
User rate as a percentage of mMHI	1.57%

<sup>1</sup>Based on US Census Bureau data (in 2013 inflation-adjusted dollars)

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA AND MAPS

The City of White Sulphur Springs is located at the northern end of the merging of U.S. Routes 89 and 12 in central Montana (see Figure 1). It is the Meagher County seat, with local businesses supporting the agricultural and logging industries. The local Spa Motel has natural hot springs pools which are a popular tourist attraction. The planning area includes all land within the current city boundary. This area encompasses the wastewater lagoon in the southwest and the golf course to the south of the residential neighborhoods and businesses. The city boundary and planning area are shown in Figure 2. The existing wastewater treatment facility for the City of White Sulphur Springs is shown in Figure 3. The new three-cell lagoon will be constructed within the footprint of the two existing treatment ponds and will be followed by ultraviolet disinfection (see Figure 4). Figure 5 shows the location of potential farmland for application of biosolids removed from the existing lagoon system as a first stage of the construction project.

B. POPULATION AND FLOW PROJECTIONS

Of the 1,891 people (2010 Census data) currently living in Meagher County, approximately half of these live in White Sulphur Springs. Demographic data from the past 20 years show a decreasing population in Meagher County and White Sulphur Springs. Rather than design for negative growth, a modest 1% annual growth rate is assumed. There is the potential for a copper mining operation to develop sixteen miles north of White Sulphur Springs within the next year. If this Tintina Black Butte Copper Project does get underway, there may be a boost in the population in White Sulphur Springs. According to the 2014 Preliminary Engineering Report (PER), as many as 175 people may be employed by the mine. With a current population of 939 for the City of White Sulphur Springs and one percent growth, the population for the project's 2035 design year is projected to be 1,145.

Flow monitoring data from 2012 to 2015 was used to determine an average daily flow of approximately 126,400 gallons per day (gpd), which equates to 135 gallons per capita per day (gpcd). The PER Amendment estimated a 26.5 percent increase in wastewater flows over the next 20 years, resulting in a design flow of 160,000 gpd.

**Table 4 – EXISTING AND PROJECTED POPULATION AND WASTEWATER FLOWS**

Year	Population	Average Daily Flow
		(gal/day)
2015	939	126,400
2035	1,145	160,000

C. NATURAL FEATURES

The City of White Sulphur Springs is located in central Montana, approximately



60 miles directly east of the City of Helena. It is situated near the headwaters of the recreationally renowned Smith River. Surface soils are clay loam or cobbly loam, underlain by Quaternary alluvium with depths to 200 feet and then significant depths of Tertiary alluvium. Topography within the planning area is relatively flat with slopes trending to the west and northwest at 1 to 4 percent. The elevation of the town varies from 4,960 feet to 5,151 feet. Mountains surround three sides of town, with the Big Belt Mountains to the west, the Little Belt Mountains to the north, and the Castle Mountains to the southeast.

Average annual precipitation in White Sulphur Springs is 11.32 inches, with the wettest months typically being May and June. Historical records show that the average maximum temperature for July is 80.9 degrees Fahrenheit and the average minimum temperature in January is 10.5 degrees Fahrenheit.

## V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

### A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use/Prime Farmland – The wastewater treatment system improvements, including the ultraviolet (UV) disinfection building, will occur within the footprint of the existing lagoon system. The 20 acres on which the City of White Sulphur Springs lagoon is located is leased from the Montana Department of State Lands. The city also holds a lease on a 20-acre parcel located directly north of the existing lagoons.

Disposal of the sludge from the existing lagoon cells will occur on 100 to 360 acres of suitable agricultural land in the vicinity of White Sulphur Springs. The productivity of that land will be enhanced by the application of the biosolids.

2. Floodplains – The closest Federal Emergency Management Agency (FEMA) map to the proposed project site (existing lagoon cells) encompasses the corporate limits of the City of White Sulphur Springs. This map shows the floodplain of the North Fork of the Smith River passing within the northwest corner of the White Sulphur Springs planning area, encroaching onto some residential streets.

The area southwest of White Sulphur Springs in the vicinity of the existing wastewater treatment plant (WWTP) site has not been mapped. According to the mayor and WWTP operations staff, the existing lagoon has never been subject to flooding that would threaten its operability. See Section X: Agencies Consulted of this report for comments with respect to floodplain impacts.

3. Wetlands – The Montana Wetlands Information Clearinghouse identifies palustrine wetlands along the North Fork of the Smith River within the White Sulphur Springs planning boundary. Small delineated wetlands also exist along Hot Springs Creek and downstream of the City's wastewater lagoon. Construction work for this project will be concentrated within the footprint of the existing lagoon and would therefore not affect wetlands. Should the work area need to be expanded outside the lagoon

cells into possible wetland areas, an on-the-ground wetland delineation would be required, in accordance with the requirements of the Department of the Army's Corps of Engineers. See Section X: Agencies Consulted of this report for a summary of their comments.

4. Cultural Resources and Historical Sites – No impacts to cultural resources are anticipated. The proposed improvements should not impact historic or cultural resources since all new facilities will be constructed within the previously disturbed area of the existing lagoon. The State Historic Preservation Office (SHPO) reviewed the proposed project and their comments are summarized in Section X: Agencies Consulted of this report.
5. Fish and Wildlife – Area wildlife includes ducks, various reptiles and amphibians, deer, coyote, rabbit, mice, and other small mammals. According to the Montana Natural Heritage Program website, there are six species of concern (wolverine, sage sparrow, great blue heron, greater sage grouse, Clark's nutcracker, and westslope cutthroat trout) and one potential species of concern (ling cod fish (burbot)) in the vicinity of the project. Construction will occur in the footprint of the existing lagoon and should not adversely affect any fish or wildlife. Sage Grouse Habitat Conservation Program staff have determined that the project site is not within identified sage-grouse habitat and therefore the project is not subject to Montana Sage Grouse Executive Order 12-2015. Improvement in wastewater effluent quality will help protect downstream fish, wildlife, and their habitat. See Section X: Agencies Consulted of this report for a summary of wildlife agency comments.
6. Water Quality – Improvements to the wastewater treatment system will eliminate leakage from the existing lagoons which may be impacting surface water and groundwater, and therefore will have a positive effect on these waters. The ultraviolet light disinfection system will be operated at all times the system is discharging. The disinfection system will be designed to meet standards for *E. coli* bacteria stipulated in the city's MPDES permit.

The wastewater treatment plant discharges to an unnamed, ephemeral drainage at a point approximately two miles upstream of the South Fork of the Smith River. The Department has determined that there is essentially no likelihood of White Sulphur Spring's wastewater effluent ever reaching the South Fork. The unnamed drainage is not listed on the 2014 303(d) list as an impaired stream.

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.
8. Public Health – Public health will not be negatively affected by the proposed project. The improved wastewater treatment system will reduce the potential to pollute groundwater and surface water. Excess seepage from the unlined existing lagoons will be eliminated. The wastewater will

be treated to the limits required by the city's MPDES permit prior to disposal. Ultraviolet disinfection of the lagoon discharge will decrease the potential of human exposure to pathogenic organisms in the wastewater effluent.

9. Energy – The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable but will be a short-term commitment. An increase in energy consumption will occur after the new treatment plant is constructed due to the addition of ultraviolet (UV) disinfection equipment and building (lighting, heating, ventilation, effluent flow meter), but will be minimized as much as possible through the use of energy-efficient equipment.
10. Noise – Short-term impacts from excessive noise levels may occur during construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances. A new emergency generator for backup to the UV disinfection system is proposed, but would only operate during power outages and occasionally (30 minutes once a month) to insure it is operating correctly. The proposed treatment system is on the western edge of town and therefore should not disturb the town residents. No significant long-term impacts from noise should occur.
11. Sludge Disposal – All sludge (biosolids) will be dredged from the existing cells and land applied in accordance with Federal 40 CFR 503 sludge disposal regulations in a one-time application. The Part 503 regulations contain specific numerical limits and other requirements for heavy metals, pathogens, and vector attraction. The final sludge disposal plan must be submitted to the DEQ for review and approval. Chemical sampling shows that metals concentrations in the accumulated solids are well below EPA's required levels for land application.

The sludge will be removed as a liquid, transported to appropriate farm ground within a ten-mile radius, and land-applied with subsurface injection or by surface incorporation. With an estimated 17,000 cubic yards of "wet" sludge, approximately 100 to 360 acres of rangeland is required, depending on the crop. Five area landowners have shown some interest and have entered into some preliminary discussion on accepting the sludge. Four of the properties are located northwest of the city and would be accessed from Route 360 without hauling sludge through town. Landowner commitment will be part of the design phase of the WWTP project.

12. 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. All base sewer rates will be increased equally. No disproportionate effects among any portion of the community would be expected.

13. 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.
14. Growth – Although the population in Meagher County and White Sulphur Springs has decreased over the past twenty years, the 20-year design population is based on a modest growth rate of 1% per year, in order to be somewhat conservative. There may also be a modest influx of new residents if Tintina Resources' Black Butte Copper Project gets underway 16 miles north of town. The proposed wastewater improvements will be designed to serve the projected 2035 population of 1,145.
15. Cumulative Effects – The increased treatment capacity at the wastewater treatment plant may result in 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 secondary impacts are uncertain at this time, and therefore, cannot be directly addressed in the EA. However, these impacts will need to be managed and minimized as much as possible through proper community planning. There are several 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, etc.) will occur, but should be minimized through proper construction management. Energy consumption during construction cannot be avoided.

#### VI. PUBLIC PARTICIPATION

The city of White Sulphur Springs has insured that the public is an active participant in the planning process. Public meetings were held in White Sulphur Springs on March 20, 2012; January 6, 2014; and April 17, 2014, with notices sent to all city residents. At the time of these meetings, a stricter Montana Pollutant Discharge Elimination System (MPDES) permit with effluent standards for nutrients, ammonia, and nitrite/nitrate was anticipated. The 2012 Preliminary Engineering Report (PER) was presented at the March 20<sup>th</sup> meeting and discussed Phase 1 collection system improvements to address inflow/infiltration (I/I), as well as needed WWTP improvements. The 2014 PER was presented at the April 17<sup>th</sup> meeting, held just prior to construction of the Phase 1 construction project. This public meeting discussed Phase 2 wastewater treatment plant improvements and presented an aerated lagoon system with spray irrigation as the chosen alternative. The expected user rate increase to support the project was given as \$25.50 per month.

Several public meetings were held subsequent to the September 2015 renewal of the

Montana Pollutant Discharge Elimination System (MPDES) permit, which contained effluent standards less stringent than those anticipated in the 2014 PER. City Council meetings on September 8<sup>th</sup>, September 22<sup>nd</sup>, October 8<sup>th</sup>, November 2<sup>nd</sup>, and December 7<sup>th</sup> each included some discussion of the proposed wastewater improvements project and were open to the public. The public has expressed general support for the wastewater treatment plant improvements project, provided that the user rates are affordable.

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.

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 City of White Sulphur Springs wastewater improvements 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 considered to be part of the project file:

1. City of White Sulphur Springs Wastewater Improvements Preliminary Engineering Report, April 2014, Prepared by Anderson-Montgomery Consulting Engineers, Inc.
2. City of White Sulphur Springs Wastewater Improvements Preliminary Engineering Report 2015 Amendment; December 7, 2015; Prepared by Robert Peccia & Associates.
3. Department of Environmental Quality, Permitting and Compliance Division, Montana Pollutant Discharge Elimination System (MPDES) Fact Sheet; April, 2015; Prepared by James F. Brown.

## X. AGENCIES CONSULTED

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

1. The U.S. Fish and Wildlife Service (Service) reviewed the proposed project in 2012 and concluded that because most of the project-related construction will occur in a semi-urban setting, there are unlikely to be any significant adverse effects on fish, wildlife, and habitat resources under their purview. They acknowledge that any viable wastewater treatment options that improve the quality of effluent that reaches waters in the State of Montana are likely to prove beneficial to fish, wildlife, and their habitat. Comments were again solicited from FWP in 2014 and 2015 as part of subsequent PER documents and no additional comments were received.
2. The Montana Historical Society's State Historic Preservation Office (SHPO) reviewed the proposed project. They indicated that since the project is occurring on previously disturbed ground, there is low likelihood that cultural properties will be impacted. However, should structures need to be altered or cultural materials be inadvertently discovered during the project, SHPO must be contacted and the site investigated.
3. The U.S. Department of the Army Corps of Engineers (USCOE) reviewed the proposed project. They indicated that no USCOE permit is required for any work within an active sewage lagoon, provided that no fill material will be placed either temporarily or permanently in a water of the United States. If any work is proposed below the ordinary high water mark of stream channels, lakes, or wetlands adjacent to these waters, then a Section 404 permit would apply and authorization from USCOE would be needed.
4. The Montana Department of Fish, Wildlife and Parks (FWP) reviewed the proposed project in 2012 and indicated that they did not have any issues or concerns with the proposed project at that point in time. Comments were again solicited from FWP in 2014 and 2015 as part of subsequent PER documents and no additional comments were received.
5. The Montana Department of Natural Resources and Conservation (DNRC) was contacted in 2012 with respect to potential floodplain impacts from the proposed wastewater treatment plant project. The recommendation from the DNRC Water Resources Regional Office in Lewistown was that contact should be made with the local floodplain administrator for specific permit requirements, if any. The local floodplain administrator was contacted in 2015; however, no response was received.

EA Prepared by:

Michele Marsh  
Michele Marsh, P.E.

2-2-16  
Date

EA Reviewed by:

Mike Abrahamson  
Mike Abrahamson, P.E.

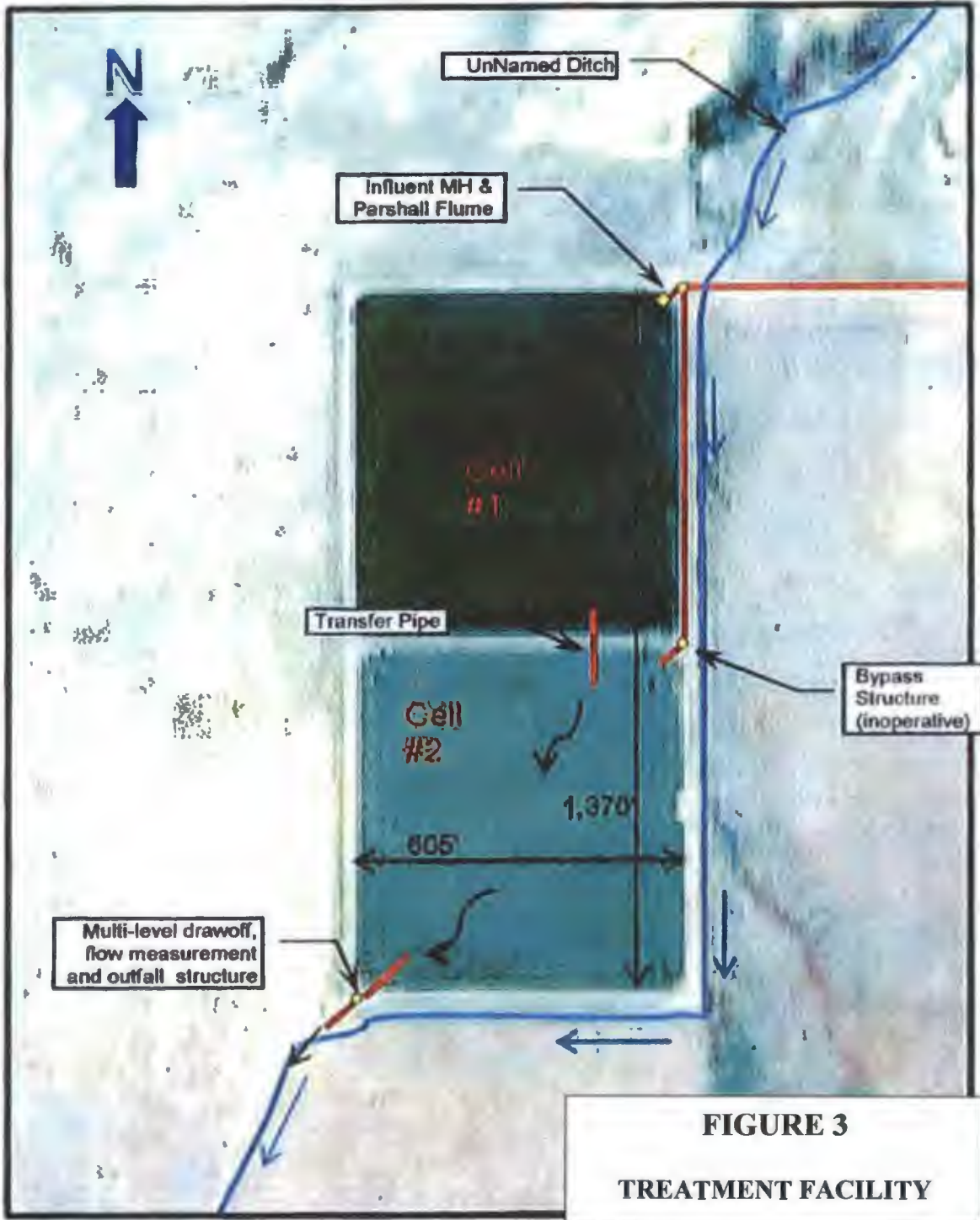
2/5/16  
Date



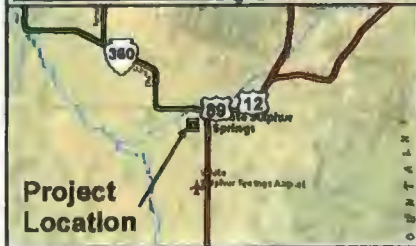
FIGURE 1  
LOCATION MAP









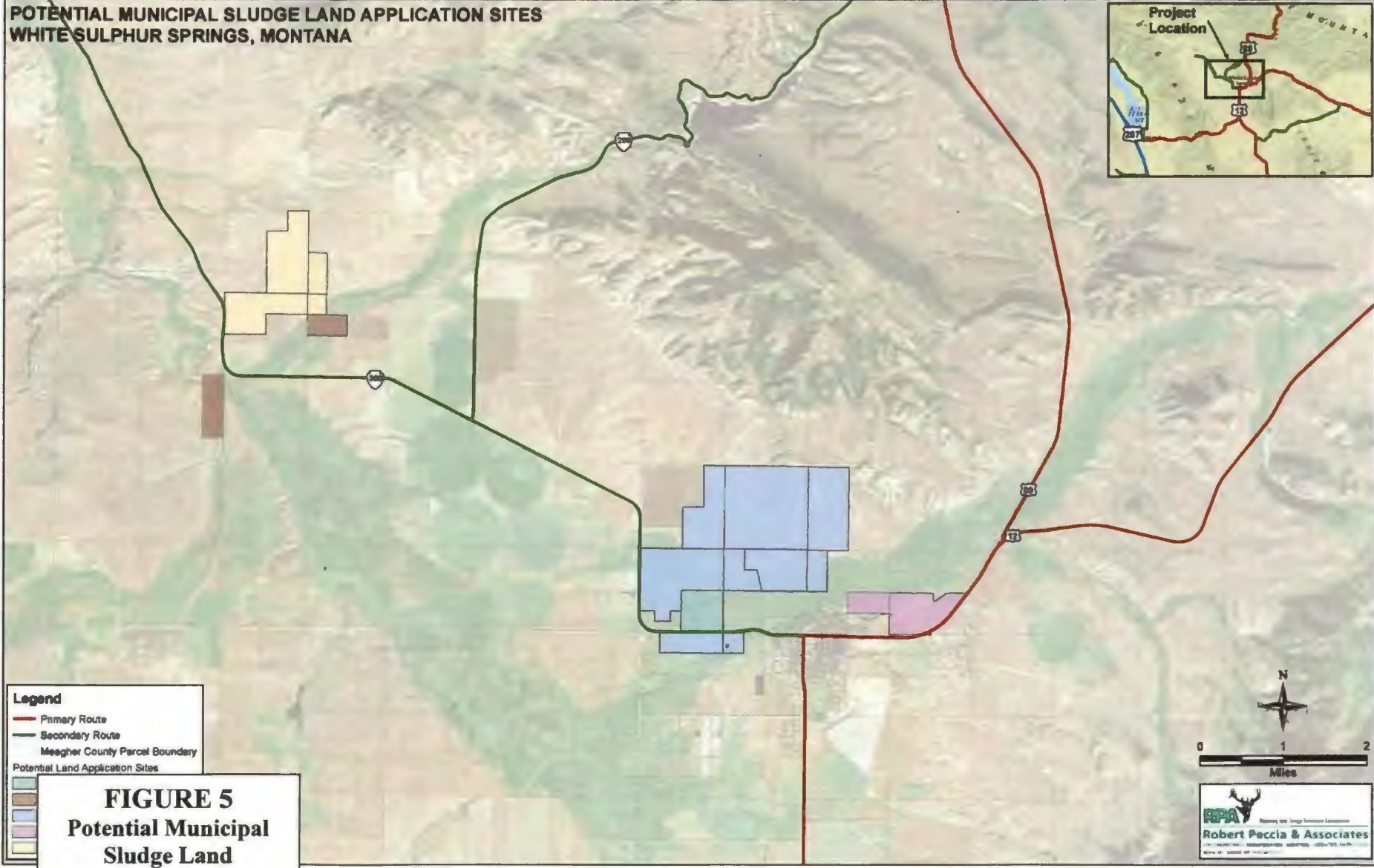


- Map Legend**
- UV Building
  - Manholes
  - Proposed Process Piping
  - Proposed Bypass Piping
  - Proposed Ponds

**WHITE SULPHUR SPRINGS  
WASTEWATER SYSTEM**

**FIGURE 4  
SCHEMATIC LAYOUT  
FACULTATIVE LAGOONS  
WITH UV DISINFECTION**

**POTENTIAL MUNICIPAL SLUDGE LAND APPLICATION SITES  
WHITE SULPHUR SPRINGS, MONTANA**



**FIGURE 5  
Potential Municipal  
Sludge Land  
Application Sites**