November 4, 2019

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:

<table>
<thead>
<tr>
<th>Project</th>
<th>RAE Water and Sewer District #313 - Wastewater System Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Bozeman, Montana</td>
</tr>
<tr>
<td>Project Number</td>
<td>C301286</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$3,062,664</td>
</tr>
</tbody>
</table>

The RAE Water & Sewer District #313 (District), through its 2009 & 2019 Wastewater System Preliminary Engineering Report (PER), prepared by Great West Engineering and Allied Engineering respectively, has identified the need to construct a new wastewater effluent disposal facility. The District's existing wastewater treatment system uses existing groundwater infiltrators with a rated capacity of 200,000 gallons per day (gpd). While the plant is performing well, the existing infiltrators are nearing the end of their useful life. Major maintenance is needed and in order to perform that maintenance, new infiltrators are needed. These additional infiltrators will allow for future growth once the existing infiltration area is rehabilitated.

Expansion of the District's wastewater treatment capacity is expected in the future to achieve the goals of the County developed Gooch Hill West Neighborhood plan. Future construction of increased treatment plant capacity is needed before this expansion can occur. This effluent force main and infiltration area will allow for much needed maintenance and set the District up for future capacity to dispose of effluent as well as allow for proper disposal of existing treated effluent flow under the discharge permit (MGWPCS permit no. MTX000117).

The proposed facility will be a new effluent force main to deliver effluent to an agricultural area just south of the Woodland Park Phase II development. At that location, the effluent would discharge to an underground infiltration basin using drain field like infiltrators.

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

Terry Campbell, P.E.
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-09011
tcampbell@mt.gov

David King, District Manager
RAE Water & Sewer District
10 RAE Water Lane
Bozeman, MT 59718

Comments on the EA may be submitted to the Department of Environmental Quality at
the above address. After evaluating substantive 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, P.E.
Engineering Bureau
Water Quality Division
Montana Department of Environmental Quality
RAE WATER & SEWER DISTRICT #313
WASTEWATER SYSTEM IMPROVEMENTS
ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: RAE Water & Sewer District #313
Address: 10 RAE Water Lane
Bozeman, MT 59718
Project Number: C301286

B. CONTACT PERSON

Name: David King, District Manager
Address: 10 RAE Water Lane
Bozeman, MT 59718
Telephone: (406) 586-3930

C. ABSTRACT

The RAE Water & Sewer District #313 (District), through its 2009 Wastewater System Preliminary Engineering Report (PER) prepared by Great West Engineering, and 2019 PER Update prepared by Allied Engineering, has identified the need to construct a new treated wastewater infiltration disposal gallery. The District's current wastewater treatment system, located at the RAE Subdivision, was constructed in 2001 with an overall rated average day flow capacity of 200,000 gallons per day (gpd). Current average day flows are approximately 130,000 gallons per day. While the plant is performing well, the existing infiltration gallery discharge structure needs significant maintenance.

Expansion of the District's wastewater discharge capacity is needed to allow for repair of the existing infiltration gallery and to allow for planned growth within the Gooch Hill West Neighborhood, which is the District's larger service area comprised of several subdivisions. This project will help protect water resources and public health by creating redundancy in groundwater discharge alternatives for the District. The District considered expansion of the wastewater treatment facility in the 2009 PER, but has determined this project would be the best, most affordable alternative for the District at this time and would provide needed flexibility in operation of the facility.

The proposed project will include a new effluent force main and infiltration gallery. The effluent will be discharged to groundwater, via subsurface rapid infiltration chambers, in accordance with the District's Montana Ground Water
Pollution Control Systems (MGWPCS) permit No. MTX000117.

The Montana Water Pollution Control State Revolving Fund program will help finance the project. The improvements, including administration, engineering, and construction for the needed force main and infiltration gallery are estimated to cost $3,062,664. It is anticipated the project will be funded via a $2,357,664 low interest loan (2.5%) obtained from the Water Pollution Control State Revolving Fund (WPCSRF) loan program, matched with $400,000 in principal forgiveness from the WPCSRF; a DNRC planning grant for $5,000; and $300,000 in District funds.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted because of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, and growth, 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 the DEQ has reviewed and approved the plans and specifications for the project. Under the Montana Water Pollution Control State Revolving Fund Act, the DEQ may loan money to municipalities for construction of public sewage systems.

The DEQ, Water Pollution Control State Revolving Fund Program 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 District was originally developed as the King Arthur Trailer Court in 1971, which included 210 trailer spaces. The RAE subdivision, adjacent to the trailer court was developed in 1979 with 43 single family lots. The original wastewater treatment facility serving the two developments was a clay-lined lagoon facility. At the time the RAE subdivision development occurred, the RAE Water & Sewer District was formed to operate and maintain the facility. In about 1993 the facility was assessed by MDEQ and it was determined the lagoons were leaking to groundwater excessively. The District was notified by MDEQ that corrective action was needed. In 1996, MDEQ issued an Administrative Order on Consent (AOC) to the District to take corrective action.

In response to the AOC, the District hired Allied Engineering and the current Sequencing Batch Reactor (SBR) treatment facility was selected, designed and constructed in 2003. In 2005 an additional 56 sewer services from the Meadow Brook Subdivision were connected to the District system. The District wastewater treatment plant (WWTP) is an
SBR process with UV disinfection, and groundwater infiltrators. Treated effluent is discharged to groundwater via subsurface rapid infiltration chambers in accordance with Montana Ground Water Pollution Control Systems (MGWPCS) permit No. MTX000117. Treated sludge is hauled off-site in dry form and landfilled under EPA 40 CFR, Part 258 rules.

Development in the RAE subdivision and Gooch Hill West Neighborhood planning area consists of residential and commercial properties that historically have relied on a combination of on-site wells and septic systems and the RAE Water & Sewer District services for water and sewer needs. Due to its affordability and central location, the area continues to be a popular area for development. With the realization that the installation of numerous additional septic systems could be problematic to groundwater quality in the area, the expansion of District facilities has become a focus of planning for the area.

The current average daily flow is approximately 120,000 gallons per day. While the plant is performing well, annual wastewater flow rates are increasing due to aging pipes allowing infiltration and residential growth. The WWTP is approaching the design capacity and demand for development in the area is significant. Based on a 2007 county implemented Neighborhood Plan and discussions with various proposed developers, it is anticipated the District could grow receive flows of approximately 600,000 gallons per day within the 20-year planning period.

To fulfill existing service commitments and planned growth throughout the District, expansion of the District's wastewater treatment capacity is needed, but the decision was reached to first address this discharge capacity need. The construction of an enlarged treatment facility may occur in a future phase of construction, depending on impacts to user rates. The District decided not to award a contract in 2017 to expand the treatment plant because bids were much higher than engineering estimates and the impact on user rates was a significant factor in making that decision.

The existing infiltration gallery is more than 25-years old and beginning to show signs of needing cleaning and rehabilitation. This project will construct an alternate groundwater disposal area for existing flows and allow the District to take the existing infiltration area out of service for repairs.

The proposed project consists of construction of an additional infiltration gallery and a new effluent force main. The new infiltration gallery will be located south of the Woodland Park Phase II development depicted in Figures 2 and 3.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

The disposal site alternatives were evaluated in the 2009 PER and within a 2019 PER update. Two disposal site alternatives and a "no action" alternative were evaluated. In addition, three effluent force main alignment alternatives and a "no action" alternative were considered to get treated effluent to the disposal site. These alternatives are further defined and discussed here.

A. DISPOSAL SITE ALTERNATIVES
Three alternatives for addressing the District's effluent disposal needs were evaluated. These included:

D-1. No Action
D-2. Woodland Park Groundwater Disposal Site
D-3. Norton Farm Groundwater Disposal Site

D-1. NO ACTION - The no-action alternative would result in continued use of the District's aging disposal system. The District has continued to perform extensive maintenance on the existing infiltration area and is concerned the disposal site has a limited future without extensive re-construction efforts. Therefore, the no-action alternative was not considered to be a viable option, and was not given further consideration.

D-2. Woodland Park Groundwater Disposal Site – This site is located in the center of the alluvial fan described in the 2009 PER. Several test pits showed silty sandy loams with groundwater approximately 20 feet below the surface. The distance to the nearest surface water in the direction of groundwater flow is 2,500 feet. No downgradient wells are close to the site. For these reasons this site is viable and further considered. Two distinct infiltrator options were considered for this site:
   a. Traditional-style Rapid Infiltration Gallery – constructed within native soil conditions (approximately 2.98 acres).
   b. Over-excavated and backfilled Rapid Infiltration Gallery – involving replacement of existing site soils with better infiltrating materials hauled in and used to replace subsoil under the rapid infiltration drains (approximately 0.71 acres).

D-3. Norton Farm Groundwater Disposal Site – The Norton Farm site is located to the north of the RAE subdivision across Huffine Lane. Test pits at this site found groundwater at an average depth of approximately 15 feet below the surface. There were no flooded basin tests performed at this location, but the soils were similar to those found at the Woodland Park site. It is assumed these soils are suitable for infiltration, but with the added cost of a boring operation to bring effluent under Huffine Lane. It was determined this site could be considered in the future, but was not viable for this project.

B. FORCE MAIN ALIGNMENT ALTERNATIVES

Four force main alignment alternatives to deliver effluent to the proposed infiltration area identified above as the Woodland Park Groundwater Disposal Site were evaluated. These included:

F-1. No Action
F-2. Merlin Drive Alignment
F-3. King Arthur Park Property Line Alignment
F-4. Hyalite Fire District Alignment
F-1. NO ACTION - The no-action alternative would result in continued use of the District's existing force main and aging disposal system. The District has continued to perform extensive maintenance on the existing infiltration area and are concerned the disposal site has a limited future without extensive re-construction efforts. Therefore, the no-action alternative was not considered to be a viable option, and was not given further consideration.

F-2. Merlin Drive – This proposed 1,130-foot force main alignment alternative would follow the fence line directly north of the treatment facility, passing north of the RAE Lift Station. The force main alignment would follow Merlin Drive west through King Arthur Park to Lancelot Lane. From there, a directional drill between two lots would install the force main from Lancelot Lane to the west side of Gooch Hill Road near the east end of the previously installed 8-inch force main north of Ramshorn Peak Lane. Because this alternative was not favorable to the landowners and would involve approximately 650 feet of asphalt cut and replacement and a longer directional drill from Lancelot Lane to the west side of Gooch Hill Road, it was decided this alternative was viable but impractical in comparison with F-2 and F-3 described below. It is not further considered.

F-3. King Arthur Park Property Line – This 1,350-foot force main alignment alternative would head north from the UV building on the WWTF grounds to a point along an easterly extension of the north boundary of the King Arthur Park. From there the alignment would run to the west through the Kapinos Property along said boundary line toward the Hyalite (RAE) Fire District installed between the Fire District building and the King Arthur Park. After crossing Gooch Hill Road through the east edge of property owned by the Kelley Lawrence J Trust (Kelley Property), to the end of the previously installed 8-inch force main north of Ramshorn Peak Lane. The landowner along this alignment has been approached and is willing to allow the necessary easements. Therefore, this alternative is viable and was further evaluated.

F-4. Hyalite Fire District Alignment – This 1,450-foot force main alignment would follow the beginning of the alignment for alternative F-3, however, the portion of the alignment running to the west would be installed through the Kapinos Property and north of the existing Fire District building. After crossing Gooch Hill Road, the alignment would turn to the south paralleling Gooch Hill Road within the Kelley Property to the east end of the previously installed 8-inch force main north of Ramshorn Peak Lane. This alignment alternative would also require an easement from the Kapinos property owners. In discussions this landowner indicated a preference for F-3 as the proposed alignment and is willing to consider an easement for that alignment. For these reasons, this alternative is not further considered.
C. 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 operation and maintenance costs occur over the life of the alternative. An interest rate of 1.5% over the 20-year planning period was used in the analysis. Table 1 provides a summary of the present worth analysis of the feasible alternatives considered.

<table>
<thead>
<tr>
<th>Alternative Number (From Above)</th>
<th>Alternative</th>
<th>Total Present Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-2.a.</td>
<td>Woodland Park Site – Traditional RI System</td>
<td>$1,296,000</td>
</tr>
<tr>
<td>D-2.b.</td>
<td>Woodland Park Site – Over excavation and soil replacement RI System</td>
<td>$1,182,319</td>
</tr>
<tr>
<td>F-3</td>
<td>King Arthur Park – Force Main Alignment *</td>
<td>$1,880,345</td>
</tr>
</tbody>
</table>

* This estimated cost includes all construction mobilization, engineering and project contingency amounts for the complete project.

D. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

Selection of the preferred alternative was based upon several criteria, both monetary and non-monetary. The Woodland Park infiltration gallery area, which is within the District boundary, was selected due to site availability and proximity to the existing treatment plant. The over-excavation and soil replacement alternative defined as D-2.b. was chosen to be used at the Woodland Park site due to the unsuitable fine grained sandy-silt soil that exist at the site now. The percolation rate of these soils was assessed and very slow percolation rates of approximately 55 minutes per inch were measured in some areas using flooded basin testing. The variability of the soil percolation rates within the existing soil interface could result in uneven distribution across the infiltration gallery. These soil conditions would lead to an overly large infiltration bed. By over-excavating thru the fine-grained soils and placing a uniformly graded material in place of the sand-silt material it was determined infiltration rates of approximately 7.6 minutes per inch could be achieved. Flooded basin test pits were constructed on the site during the planning stage to make these percolation estimates.

The estimated administration, engineering, and construction cost for the recommended alternatives (Alternative D-2.b. and F-3) is $3,062,664. The District will fund the project with a $2,357,664 low-interest loan (2.50%; 20-year term) obtained from the Water Pollution Control State Revolving Fund (WPCSRF) loan program, a $5,000 planning grant from DNRC, $400,000 in Principal Forgiveness from the WPCSRF program and $300,000 in District funds.

Sewer rates within the District are currently $16 per month plus $2.16 per thousand gallons of water used. To secure the debt for the project, sewer rates will increase by an estimated $16.88 per month. The financial impact of this...
project on the system users is shown in Table 3. After the rate increases are imposed, the residential base user rates will increase from $18.16 per month to approximately $33 per month. Based on the EPA guidance for project affordability, the proposed project will result in a monthly cost per household that is less than 1% of the monthly median household income, and therefore, is not expected to impose a substantial economic hardship on most households.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>PROJECT AFFORDABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly user cost(^1)</td>
<td>$33 + $2.16 /thousand gallons</td>
</tr>
<tr>
<td>Monthly median household income (mMHI)(^2)</td>
<td>$5,100</td>
</tr>
<tr>
<td>User rate as a percentage of mMHI</td>
<td>0.65 %</td>
</tr>
</tbody>
</table>

\(^1\) Uniform Application  
\(^2\) Based on 2016 census data

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA / MAPS

The RAE Water & Sewer District area is located approximately 4 miles west of Bozeman in Gallatin County approximately 2.5 miles east of the intersection of US 191 and Highways 84 & 85, known locally as Four Corners (see Figure 1). The District is currently serving properties from portions of the RAE Subdivision, King Arthur Trailer Park, Falcon Phase I Development, Ressler Commercial Development, Woodland Park Subdivision and the Meadow Brook Addition. Figure 2 depicts the location of these subdivisions within the district boundary and the surrounding planning areas that may eventually be developed or request services from the District. Figure 3 shows the locations of the RAE WWTP and the location of the proposed infiltration gallery.

Construction is scheduled to begin in the spring of 2020 and will be completed late-summer of 2020. Expansion of the wastewater treatment plant may occur in a future project, but is not further addressed at this time.

B. FLOW PROJECTIONS

The District is comprised of both residential and commercial properties. The wastewater collection system serving these properties is a mix of older piping and modern materials. Infiltration and inflow are issues the District has worked to improve via adoption of recent ordinances and policies addressing sumps and storm drainage inlets. Flow monitoring from 2013 through 2019 reflects that some flow reduction was accomplished beginning in mid-2017 via these efforts. Generally, flows to the District wastewater facility continue to increase. Wastewater generated in the service area is average domestic strength, without any commercial sources of concern in the District's collection system. Census data specific to the District is not available, but for Gallatin County growth rates are in the 3 to 4 % range. Based on historic flow data at the RAE WWTP and
known platted properties anticipated to connect to the system, it is likely that the District will experience a higher growth rate than the surrounding communities initially, but that the growth rate will eventually trend down and be like that of Gallatin County. Based on flows from existing services, and discussions with various proposed developments in the area, increases in the annual flow rate are expected to remain high for the next several years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Average Daily Flow (gal/day)</th>
<th>Max Daily Flow (gal/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>819</td>
<td>68,000</td>
<td>150,000</td>
</tr>
<tr>
<td>2019</td>
<td>1,963</td>
<td>120,000</td>
<td>200,000</td>
</tr>
<tr>
<td>2029</td>
<td>2,501</td>
<td>250,000</td>
<td>400,000</td>
</tr>
</tbody>
</table>

C. NATURAL FEATURES

The Woodland Park infiltration site topography is flat to gently sloped (less than 2%) to the northwest and lies to the south of developed subdivision lots. The site is located approximately 1,500 feet south of the western end of Talon Way in existing grass land (See Figure 3). The site is not prime farmland, but is currently used for agriculture (hay grass). The project site sits at an elevation of 4,875 feet above sea level, which is high enough that flooding will not occur. Based on the Natural Resource Conservation Service mapping, the soils in this area are classified as Hyalite-Beaverton Complex soils and consist primarily of cobbly loams. The local soils have developed on the valley fill stream and alluvial fan deposits of the Gallatin River. These deposits are approximately 200 feet thick and were derived from the Gallatin Range to the south.

Excavation is not expected to encounter groundwater in the Woodland Park location. Test borings in the area of the infiltrators determined groundwater at greater than 20 feet below the soil surface. The District wastewater treatment plant discharges to groundwater which is classified as Class I. Class I waters are those ground waters with a natural specific conductance less than or equal to 1,000 microSiemens/cm at 25°C. The quality of Class I ground water must be maintained so that these waters are suitable for the following beneficial uses with little or no treatment: public and private water supplies; culinary and food processing purposes; irrigation; drinking water for livestock and wildlife; and commercial and industrial purposes.

The average high temperature in the District area is 79°F, but can occasionally top 100°F during the summer months. The average low temperature is approximately 24°F, with periods of sub-zero temperatures at times during the winter months. The average annual precipitation rate is 16.45 inches per year with over a third of that falling during the months of May and June. The average
evaporation rate in the area is approximately 34 inches per year.

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use/Prime Farmland – The infiltrator disposal area will be located on property owned by the Gooch Hill West LLC. The property is currently vacant and used to grow hay grass. The lot is approximately 36 acres in size, but only about 10 acres will be disturbed by construction. The site is not currently considered “prime farmland” under the USDA classification system. Easements for this location are being negotiated with respect to the effluent sewer main alignment and the infiltration site.

2. Floodplains – The project area is 2.5 miles east of Gallatin River, so is well outside of the floodplain from this river. Several small streams and the Farmer’s Canal occur within approximately 2,500 feet, but none of these pose a floodplain risk or result in a mapped floodplain at the site. The Department of Natural Resources and the Gallatin County Department of Planning and Community Development have been notified of this project and asked to reply with any concerns. See Section X Agencies Consulted of this report for a summary of their comments.

3. Wetlands – Based on a search of the National Wetland Inventory database, no wetlands will be impacted by the proposed project. There are some temporary construction impacts to wetlands within the pipeline alignment. The Army Corps of Engineers was contacted regarding the proposed improvements and their comments are summarized in Section X of this report.

4. Cultural Resources – Due to previously disturbed conditions, no impacts to cultural resources are anticipated. All construction activity will occur on previously disturbed ground. No structures will be impacted. The State Historical Preservation Office was contacted regarding the proposed improvements and their comments are summarized in Section X of this report.

5. Fish and Wildlife – The property is a vacant lot with grasses and is surrounded by a variety of development. The U.S. Fish & Wildlife Service’s Information for Planning and Consultation report identified the Bald Eagle and the Golden Eagle as animal species of concern. However, the report also indicated that there are no critical habitats at the proposed project location. The project will not affect any critical wildlife habitats, nor will any known endangered species be affected. The project is not located within any designated Sage Grouse habitat or BLM Priority areas. The US Fish and Wildlife Services and Montana Fish Wildlife and Parks were contacted regarding the proposed improvements and their comments are summarized in Section X of this report.
6. **Water Quality** – The new disposal pipeline and infiltration system will be constructed under a discharge permit to ensure the discharge and mixing area meet Water Quality standards. The proposed project will also help protect groundwater quality by increasing the aquifer mixing area used thus resulting in reduced loading rates.

Treated wastewater from the existing RAE WWTP will be discharged to groundwater via the District’s existing Montana Ground Water Pollution Control Systems (MGWPCS) permit MTX000117. The District’s permit lists one outfall location currently but is being modified to contain this second outfall location. This outfall (002) consists of subsurface infiltration chambers with a permitted capacity of 200,000 gpd. The first outfall (001) is located near the existing treatment plant and is approved for a rated capacity of 200,000 gpd. At this time the existing RAE WWTP has a design maximum day capacity of 200,000 gpd. These improvements will not increase this rated capacity.

The DEQ has the statutory authority to develop effluent limits and issue discharge permits consistent with the Montana Water Quality Act and rules adopted under the Act. The DEQ has set effluent limits in the District’s discharge permit that are protective of water quality and beneficial uses by ensuring there will be no increase of a parameter to a level that renders the waters harmful, detrimental or injurious to users. As part of the permitting process DEQ is required to perform a significance determination to assess whether an activity (i.e., discharge) will cause degradation of the receiving waters or not. The DEQ determined that the discharges (outfall 001 and 002) will not result in the degradation of the receiving waters provided the limits established in the permit are maintained. Recent discharge data has shown that the existing facility is currently discharging approximately 60% of the allotted total nitrogen load and 35% of the allotted total phosphorous load and therefore well within their allotted load allocation for those parameters. Furthermore, effluent monitoring has shown the discharges are in compliance with all applicable groundwater quality standards including *Escherichia coli* bacteria (<1 CFU/100mL), nitrates (<10 mg/L), total nitrogen (<10 mg/L), and total phosphorus (surface water breakthrough time > 50 years).

Best management practices will be implemented, and maintained throughout construction, to minimize or eliminate pollutants from leaving the construction site and impacting any nearby surface waters.

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 with the project specifications requiring dust control. The new pipeline and infiltration facility is not expected to result in new odors due to being subgrade.

8. **Public Health** - Public health will not be negatively affected by the
proposed project. Expansion of discharge capacity to serve the RAE District area will provide opportunities to steer new growth away from the use of on-site wastewater systems. The new treatment system will operate under a DEQ issued discharge permit and will produce a higher quality effluent in comparison to individual on-site treatment systems. The highly treated effluent will also be disinfected which will be protective of groundwater quality and public health.

9. **Energy** -- An increase in energy consumption will occur after the new discharge pipeline and gallery are constructed. Energy consumption will be minimized as much as possible using energy efficient equipment (pumps). Some additional energy will be used to pump effluent to the new infiltration gallery, but the elevation difference is minimal, so this increase is expected to be minimal.

The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable, but will be a short-term commitment.

10. **Noise** - Short-term impacts from excessive noise levels may occur during the construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances. There will be no long-term noise impacts from the new pipeline and infiltration gallery discharge facilities.

11. **Sludge Disposal** – The existing wastewater treatment facility solids handling and sludge disposal practices (hauling to a landfill) will not change as a result of this 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. 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** – The RAE District area has grown steadily since the early 1900’s, but has experienced some of its fastest growth in the last 10 years when major subdivisions in the area were platted. The dynamic nature of development in the Gooch Hill Neighborhood area requires that the District continually plan for growth. In 2007 the county adopted the Gooch Hill West Neighborhood plan. This plan establishes a procedure to annex newly developed property within the plan boundary. The District is undertaking this infiltration capacity project to correct deficiencies with the existing infiltration system and to provide future discharge capacity.
increase to be able to handle annexed development. The proposed improvements will be a positive feature for the area providing additional treatment capacity that will allow the District to manage its growth in a proactive manner and promote higher density development within its service area.

15. **Cumulative Effects** - 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 system. The Gallatin County Department of Planning and Community Development reviewed the proposed project and stated that this project is within the boundaries of the RAE District and therefore the design and construction of the facility would be subject to the permitting and development standards of the Zoning Regulations.

**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**

Expansion of the discharge capacity was discussed at several 2006 meetings on the Gooch Hill West Neighborhood planning with respect to increases to the RAE District water and sewer capacity and service area. On February 25, 2019 a District Public Meeting was held to allow for input from interested parties. Only the District manager and the engineer attended that meeting, so no presentation was made, and no input was received. The meeting was legally noticed in the Bozeman Chronical on 2/8/19 and 2/15/19.

**VII. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES**

All proposed improvements will be designed to meet state standards in accordance with Design Standards for Public Sewage Systems (Circular DEQ-2), and will be constructed using standard construction methods. No additional permits will be required from the State Revolving Fund (SRF) section of the DEQ for this project after the review and approval of the submitted plans and specifications. However, coverage under the storm water general discharge permit and groundwater dewatering discharge permit, are required from the DEQ Water Protection Bureau prior to the beginning of construction. A Section 404 permit from the U.S. Army Corp of Engineers, a 124 Permit from the
Department of Fish, Wildlife and Parks, and a 318 Authorization from the Department of Environment Quality will be required for any work that impacts surface water and will be obtained if necessary.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

[ ] EIS [ ] More Detailed EA [ X ] No Further Analysis

Rationale for Recommendation: Through this EA, the DEQ has verified that none of the adverse impacts of the proposed RAE Water & Sewer District #313 wastewater 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. RAE Subdivision County Water & Sewer District #313, 2019 PER Update, September 2019, prepared by Allied Engineering Services, Inc.
2. RAE Subdivision County Water & Sewer District #313, 2009 PER, December 2009, prepared by Great West Engineering Inc.
3. RAE Water & Sewer District Groundwater Discharge Permit MTX000117. July 1, 2016, prepared by Montana Department of Environmental Quality.
4. Uniform Application Form for Montana Public Facility Projects, May 2019, prepared by RAE Subdivision County Water and Sewer District #313.

X. AGENCIES CONSULTED

The following agencies have been contacted regarding the proposed construction of this project:

1. The U.S. Fish and Wildlife Service reviewed the proposed project and determined that based on the location of the proposed project the likelihood of a federally-listed species being encountered within the project area is low.

2. The Gallatin County Planning Department reviewed the proposed project and stated that this project is located outside of the FEMA mapped 100-year floodplain.

3. The Montana Historical Society's State Historic Preservation Office (SHPO) reviewed the proposed project. According to their records, there have been a few previously recorded sites and a few cultural resource inventories done within the designated search locales. SHPO stated that if any structure over 50 years old is to be altered, it is recommended that they be recorded and a determination of their eligibility for listing on the National Register of Historic Places be made. "As long as there will be no disturbance or alteration to structures over fifty years of
age, we feel that there is a low likelihood cultural properties will be impacted.

4. The U.S. Department of the Army Corps of Engineers (USCOE) reviewed the proposed project. The USCOE is responsible for administering Section 404 of the Clean Water Act, which regulates the excavation or placement of dredged or fill material below the ordinary high-water mark of our nation's rivers, streams, lakes or in wetlands. The USCOE stated that based on the information provided, it is unclear if the project might involve work in waters of the U.S. under the authority of Section 404 of the Clean Water Act. They further stated that the project may require a Delineation and Assessment (DA) permit if fill material will be placed within waters of the US.

5. The Montana Department of Fish, Wildlife and Parks (FWP) Bozeman Regional Office were contacted on 2/7/19 regarding impacts to fish and wildlife resources from the proposed project. A follow-up phone call resulted in the Regional office stating that MFW&P did not anticipate any impact to wildlife and fisheries.

6. The Department of Environmental Quality's Source Water Protection staff and Waste Management and Remediation Division staff have assessed the proposed project site for potential contaminant sources. No PCSs were identified in the project area.

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11/4/19  

Date

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11/4/19  

Date
Figure 2.
GOOCH HILL WEST
NEIGHBORHOOD PLAN
RAE WATER AND SEWER DISTRICT
WASTEWATER TREATMENT PLANT EXPANSION
PRELIMINARY ENGINEERING REPORT