



January 26, 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	East Clark Street Sewer District Improvements Project
Location	East Helena, Montana
Project Number	WPCSRF Project # C303216 Total Cost - \$1,073,700

East Clark Street Water and Sewer District, through a Preliminary Engineering Report (PER), prepared by Anderson Montgomery Engineers and a supplement by Robert Peccia and Associates Engineering, has identified the need to make improvements to the District wastewater system.

The purpose of the project is to connect the East Clark Street Sewer District into the City of East Helena wastewater collection system via gravity collection sewers. The District is currently served by individual on-site septic tank and drainfield systems. An inter-local agreement is being negotiated between the District and the City of East Helena for the connection and maintenance of the District owned mains. The City of East Helena WWTF has adequate capacity to serve the District. By connecting to the City of East Helena collection and treatment facility, East Clark Street District board members ensure the District will correct water quality and public health violations issued by Lewis & Clark County beginning in 2009.

The DEQ and DNRC are proposing to fund the project with State Revolving Fund low interest loan funds at the city's request. Environmentally sensitive characteristics such as wetlands, floodplains, historical sites, and threatened or endangered species are not expected to be adversely impacted as a result of the proposed project. No significant long-term environmental impacts were identified.

The East Clark Street District is within the identified superfund site related to the ASARCO lead smelter. A permit will need to be secured to excavate surface soils within the project site as a result of the potential for lead contamination. The District is outside of the arsenic plume associated with the superfund designation, so no impacts associated with that portion of the superfund project are anticipated.

An environmental assessment (EA), which describes the project and analyzes the environmental impacts in more detail, is available for public scrutiny on the DEQ web site (<http://www.deq.mt.gov/ea.mcp>) 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

Dan Hill, District President
East Clark Street District
PO Box 573
East Helena, MT 59635

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 the date of this notice of the Finding of No Significant Impact.

Sincerely,

A handwritten signature in blue ink that reads "Todd Teegarden". The signature is written in a cursive style with a large, sweeping initial "T".

Todd Teegarden, Bureau Chief
Technical and Financial Assistance Bureau

EAST CLARK STREET WATER AND SEWER DISTRICT
LEWIS AND CLARK COUNTY
WASTEWATER COLLECTION AND CONNECTION TO CITY OF EAST HELENA
ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: East Clark Street Water and Sewer District (District)
Address: P.O. Box 2244
East Helena, MT 59635

Project Number: WPCSRF Project # C303216

B. CONTACT PERSON

Name: Dan Hill, District President
Address: P.O. Box 573
Helena, MT 59635

C. ABSTRACT

The East Clark Street Water and Sewer District (District), through its August 2013 Preliminary Engineering Report (PER), prepared by Anderson-Montgomery Consulting Engineers and an April 2014 Preliminary Engineering Report Supplement (PER Supplement), prepared by Robert Peccia and Associates, has identified the need for wastewater collection system improvements to correct failing septic systems and groundwater conditions within the District. The District's existing wastewater treatment occurs via individual septic systems that serve residences, trailer courts and light commercial businesses. The East Clark Street residents have been plagued by aging onsite septic systems that are of questionable quality. In August 2010 residents within the area held a ballot election to form a water and sewer district. Although the results of that election reflected the majority of voters, who voted, were in favor of forming the District, there were less than the required 40% of eligible voters who responded. Therefore the County Commission had to be petitioned to pass a resolution to form the District. That resolution was passed by the County Commissioners in January 2012 and directed a new ballot election. The second ballot election took place on May 22, 2012 and passed with the required percentage of voters supporting the measure. The District was subsequently formed and held its first Board meeting on July 9, 2012.

In June 2010, the County initiated procurement processes to secure the services of an engineer to prepare a Preliminary Engineering Report for wastewater improvements for the District. After the delay in District formation, the District Board hired Robert Peccia and Associates in 2014 to update the Anderson-Montgomery 2010 PER and submit applications for funding on the District's behalf.

The PER and PER Supplement evaluated alternatives and concluded the most appropriate course of action would be to install new collector sewers and service

lines and connect the District into the City of East Helena wastewater treatment system. All proposed improvements would be owned by the District and designed to meet state design standards in accordance with MDEQ Circular DEQ 2.

Federal and State grant/loan programs will help fund the project. The proposed improvements are estimated to cost approximately \$1,073,700. Grants in the amounts of \$125,000 from the Department of Natural Resources and Conservation (DNRC) and \$536,850 from the Treasure State Endowment Program (TSEP) have been secured to help offset the cost. The balance of approximately \$411,850 will be funded through a low interest loan (2.5 % interest rate) obtained from DEQ's, Water Pollution Control State Revolving Fund (WPCSRF) loan program. The project is estimated to result in a tax assessment of approximately \$35.47 per month, per dwelling unit and the City of East Helena will charge an additional \$66.40 per month for a combined user rate of \$101.87 per month based on a 1-acre lot size. This amount will increase or decrease depending on the lot size and number of services on a lot.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites were evaluated. Where adverse impacts are identified, appropriate mitigation efforts will be required and implemented. 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, 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

Many of the existing onsite septic systems in the East Clark Street Water and Sewer District are of questionable quality and not functioning properly. Lewis and Clark County issued a Notice of Violation (NOV) for a trailer court septic system and there have been nine septic systems replaced in the District. The county is currently allowing Elkhorn View Trailer Court (formerly McDonald Trailer Court) to pump the septic tank as needed and use their drainfield under an Administrative Order, with the understanding that the District move forward with plans to build a centralized wastewater system. If that does not happen, the trailer court would be required to replace the onsite septic system and meet current regulations. The District has high density developments including three trailer courts and some duplexes. Many home sites are too small for a replacement drainfield if the primary drainfield fails. Existing systems are in close proximity to public and private drinking water

wells with high potential for groundwater degradation and well contamination. One property owner drilled a new well onsite that did not meet the setback requirement from existing drainfields and was forced to abandon the well. This resulted in a business closing. Another property owner had to install a drainfield in their driveway and create another access to the home because there was no other space for the replacement system. See Figure 2 for a Planning Area Map showing lot numbers, type of property and lots with public water supply systems.

There are three public water supply systems within the District and all other residences are served by private wells. Average nitrate levels found in the three public water supply systems range from 2.32 to 3.87 mg/l. These nitrogen concentrations are elevated due to the influence of septic systems on groundwater. Reduction in nutrients by removing septic systems will improve groundwater quality and support local goals to maintain safe and clean drinking water.

City of East Helena water is not provided in the District.

Soils in the District have moderate to high conductivity and permeability, indicating strong susceptibility of the aquifer to potential pollution from septic drainfield leachate. A community drainfield option to serve the district could not meet current (nitrogen or phosphorus) nondegradation criteria. Lewis and Clark County public health officials have difficulty allowing further development and fill-in within the boundaries of the District due to this wastewater treatment dilemma.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. Seven alternatives for treatment of the District wastewater were evaluated. These included:

- 1T. NO ACTION
- 2T. LAGOONS AND SPRAY IRRIGATION
- 3T. TOTAL RETENTION LAGOONS
- 4T. RECIRCULATING SAND FILTER WITH SUBSURFACE DISPOSAL
- 5T. MEMBRANE BIOREACTOR TREATMENT WITH DISCHARGE TO PRICKLY PEAR CREEK
- 6T. CONNECTION TO CITY OF EAST HELENA
- 7T. INDIVIDUAL ADVANCED ON-SITE SEPTIC SYSTEMS

1T. NO ACTION – The no-action alternative would involve making no improvements to the existing wastewater systems within the District. This alternative would result in continued problems achieving proper wastewater treatment and could result in further compliance issues for the District. Therefore, the no-action alternative was not considered to be a viable option and was not further considered.

2T. LAGOONS AND SPRAY IRRIGATION – This alternative would include construction of a lined lagoon treatment facility with winter storage and seasonal irrigation of a hay grass crop to beneficially utilize the effluent. The District does not currently own enough property to accommodate the area needed for either the lagoons or the land application area. Purchase or leasing of the needed property would need to occur, but is possible. Therefore, this alternative is further considered.

- 3T. **TOTAL RETENTION LAGOONS** - This alternative would include construction of a lined lagoon treatment facility with year-round storage and evaporation pond, which would hold and evaporate off all accumulated wastewater effluent. The District does not currently own enough property to accommodate the area needed for either the lagoons or the evaporation pond. Purchase or leasing of the needed property would need to occur, but is possible. Therefore, this alternative is further considered.
- 4T. **RECIRCULATING SAND FILTER WITH SUBSURFACE DISPOSAL - SMALL DIAMETER GRAVITY SEWER** - This alternative would utilize existing septic tanks and a small pump station installed to convey the clear portion of the septic tank effluent at each property to a centralized lift station and recirculating sand filter treatment system. The existing individual drainfields would be removed from service upon completion. Septic tanks would still need to be pumped to remove solids as needed. This type of on-site treatment facility can result in much improved treatment of effluent before discharge to the soil profile. Nitrogen, ammonia and fecal coliform removal rates are enhanced when compared to typical drainfields. Purchase or leasing of the community drainfield property would need to occur, but is possible. Therefore, this alternative is further considered.
- 5T. **MEMBRANE BIOREACTOR TREATMENT WITH DISCHARGE TO PRICKLY PEAR CREEK** - This alternative was chosen as a representative mechanical treatment plant option. A small membrane bioreactor (MBR) plant would result in abandonment of all septic and drainfields and installation of new collection services and mains to a location where the MBR package plant would be constructed. MBR technology can result in greatly enhanced treatment performance and effluent would need to be discharged to either groundwater or surface water via a discharge permit. Purchase or leasing of the needed property would need to occur, but is possible. Therefore, this alternative is further considered.
- 6T. **CONVENTIONAL GRAVITY COLLECTION AND CONNECTION TO THE CITY OF EAST HELENA** - This alternative would result in abandoning all septic and drainfields and installation of new collection services and mains to a location where the main can be metered and tied into the City of East Helena WWTF collection system. The new sewer main would connect to the existing East Helena sewage collection system main at a manhole located approximately 200 feet east of the Roselak / East Clark Street intersection. East Helena utilizes a modified, partially-mixed aerated lagoon treatment process known as *Biofac*® technology with a metals removal facility to provide tertiary treatment prior to discharge to Prickly Pear Creek under an MPDES permit. This alternative is considered viable, so is further considered.
- 7T. **INDIVIDUAL ADVANCED ON-SITE SEPTIC SYSTEMS** – This alternative would result in replacing each existing septic system with individual on-site septic systems of an advanced nature to better filter and remove pollutants prior to discharge to groundwater via a drainfield. This alternative was presented in the PER Supplement for comparison purposes only. This alternative would not qualify for grant or loan assistance and would result in

each lot having to own and maintain the individual treatment system. This alternative is not considered viable, but is ranked to show relative comparison with other alternatives. It is not further considered beyond the ranking shown in Tables 1 & 2 below.

C. BASIS OF SELECTION OF PREFERRED ALTERNATIVE

Evaluation Criteria

Project cost, while very important is not the sole determining factor in selecting and alternative for implementation. The following additional evaluation criteria were considered in order to implement the most reasonable, practical and cost-effective solutions for the District:

Affordability – Lower upfront capital and O&M costs would yield lower overall user costs and thus, a more favorable project from a socio-economic perspective.

Effectiveness – Alternatives that completely address the need, while resulting in few negative side-effects are considered more favorable and would receive a higher score for effectiveness.

O&M Complexity – Alternatives that are simple to maintain and operate are more attractive in terms of dependability and usability. Higher scores indicate comparative simplicity and a more favorable alternative.

Longevity/Durability – Alternatives that provide a long-term fix of the problem and withstand adverse environmental/climatic conditions are considered more favorable and would receive a higher score for longevity/durability.

Helena Area Wastewater Treatment (HAWT) Study Goals – Alternatives that align with the recommendations of the City of Helena's 1998 HAWT Study are considered more favorable and would receive a higher score. The HAWT Study provided an evaluation of all the sewer and un-sewered area in the Helena Valley, including the area around East Helena and the District. The goal was to determine the alternatives, practicality, costs and impacts of providing long-term, compliant sewer service to the un-sewered areas. General recommendations included: regionalization of high-density areas; upgrades to existing regional WWTP's, onsite wastewater systems in low-density areas, and; formation of a maintenance district to assure proper care for on-site systems.

Environmental Impacts – Alternatives that minimize the negative long-term and short-term environmental impacts are more favorable and would receive higher scores.

Public Health and Safety – These criteria assess the benefits of an option in regard to improving public health or safety, or elimination of hazards to public health or safety. If an alternative results in a higher degree of public health or safety benefit, a higher comparative score is assigned.

Flexibility – Alternatives that offer a higher degree of flexibility in terms of treatment and disposal options or dependability are more favorable and were assigned higher scores. Alternatives that easily lend themselves to future expansion with a minimum

of lost infrastructure and could expand to adjacent, unimproved property are more favorable and were assigned higher scores.

Ease of Implementation – Alternatives that fit well with existing infrastructure result in minimal disruption to existing systems and occupy smaller land areas and are more favorable and were assigned higher scores.

Table 1 considers each of the alternatives with respect to the evaluation criteria defined above and a score between 1 (being the lowest) and 6 (being the highest) is entered and then tallied for each alternative giving a relative ranking of alternatives.

Collection/Treatment/ Disposal Alternative	Affordability	Effectiveness	O&M Complexity	Longevity	HAWT Goals	Environmental Impacts	Public Health & Safety	Ease of Implementation	Flexibility	Total Score
2T - Conventional Gravity; Aerated Lagoons; Spray Irrigation	3	5	2	2	4	5	2	3	4	30
3T - Conventional Gravity; Facultative Lagoon; Total Retention	1	4	4	5	5	4	3	2	2	30
4T - Small Diameter Gravity; Re-circulating Sand Filter; Groundwater Disposal	4	3	3	4	3	3	5	4	5	34
5T - Conventional Gravity; Membrane Bioreactor; Surface Water Disposal	2	2	1	3	2	2	4	1	3	20
6T - Conventional Gravity Connect to East Helena WWTP	5	6	6	6	6	6	6	5	6	52
7T – All New Advanced Onsite*	5	4	3	4	3	3	4	3	5	34
Considerations	Alternative with the lowest overall user rate impact is most favorable	Alternative that has the capability to completely address the project need is most favorable.	Alternative with the simplest and most forgiving technology is most favorable.	Alternative that represents the most effective Long Term correction of need.	Alternative that follows the goals of the HAWT plan is the most favorable.	Low disturbance, wetlands, noise, dust groundwater, habitat and energy consumption most favorable.	Water source contamination, air quality, traffic, construction hazards minimization most favorable.	Ease of implementation, simplicity, public acceptance and available infrastructure most favorable.	Operational flexibility and expandability without the loss of existing infrastructure most favorable.	

* Alternative included for comparison purposes only, would include individual advanced on-site septic systems for each property – not recommended.

D. PROJECT COST

Costs for each alternative were presented in the 2013 PER and then updated in the 2014 PER Supplement. The costs presented in Table 2 below were used to determine the affordability ranking presented for each alternative in Table 1 above.

Alternative	Need Category Project Description	Capital Costs ¹	Net Present Worth Salvage Value	Net Present Worth of O&M Costs	Total Net Present Worth Cost
2T	Conventional Gravity Collection, Aerated Lagoons & Spray Irrigation	\$3,360,846	\$431,751	\$101,050	\$3,030,100
3T	Conventional Gravity Collection, Total Retention Lagoons	\$4,223,452	\$502,843	\$28,675	\$3,749,300
4T	Small Diameter Collection, Recirculating Sand Filter w/ Subsurface Disposal	\$2,738,401	\$320,539	\$211,230	\$2,629,100
5T	Conventional Gravity Collection, MBR & Discharge to Prickly Pear	\$4,465,506	\$432,739	\$337,330	\$4,370,100
6T	Connection to E. Helena	\$1,073,700	\$301,729	\$0	\$716,000
7T	New Advanced Onsite Systems for Each Property	\$533,310	\$55,125	\$231,256	\$747,400

¹ Capital Costs include purchase of land as needed to site lagoons and spray irrigation equipment within each alternative as appropriate. Additional land costs included are based on purchase of lot #8 in the East Fields (59 acre land area) at \$15,000 per acre (estimate).

Alternative 6T – Conventional Gravity Collection and Connection to the City of East Helena ranked consistently high in all categories and was chosen as the preferred alternative within the PER and PER Supplement.

The estimated design, construction and administration cost for the recommended alternative is \$1,073,700. The District has received a \$536,850 TSEP grant, a \$125,000 DNRC grant and will borrow the balance of \$411,850 from the State Revolving Fund (SRF) loan program at 2.50% interest rate for 30 years to complete the project.

The financial impact to users projected within the PER Supplement would be in the form of a tax assessment (\$35.47 monthly) plus City of East Helena Sewer Service fee (\$66.40 monthly) for a combined monthly fee of \$101.87 per month based on a 1 acre lot size. This amount will increase or decrease depending on the lot size and number of services on a lot.

Based on the EPA guidance for project affordability, the proposed project will result in a monthly cost per household that is 2.71% of the monthly median household income and therefore is expected to impose a significant economic hardship on household income. To keep user rates as low as possible, the District applied for and received the maximum amount of grant funds they could secure from available

funding agencies. This sewer rate is 301% of the Montana Department of Commerce's target rate for the East Clark Street Water and Sewer District.

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA / MAPS

The East Clark Street Water and Sewer District is located along the eastern boundary of the East Helena City limits, to the north of US Highway 12 (See Figure 2).

The wastewater systems currently serving the community are septic tank and drainfields serving individual lots. The gravity collection system and tie-in to the City of East Helena Sewer system is aligned along East Clark Street starting near its intersection with Lake Helena Drive and progressing west until almost reaching the intersection with Roselak Road. At that location the gravity sewer would tie-in to an existing City of East Helena manhole within East Clark Street. (see Figure 3). The project will take approximately three months to construct following system design. Construction is scheduled to begin in May 2016.

B. FLOW PROJECTIONS

The average flow the East Clark Street District will contribute to the City of East Helena wastewater treatment facility is estimated to be 23,543 gallons per day. This flow rate was established from a net wastewater flow of 100 gallons per capita per day (gpcd) for residential properties, 100 gallons per day per trailer, plus 200 gallons per day for shower/laundry facilities and 65 gallons per day from restrooms within the trailer parks. This per capita flow rate was estimated based on the number of homes and services at full build-out. There are only two vacant lots remaining within the service area. Because groundwater is greater than 20 feet below the surface within the service area and the construction will be new, infiltration from groundwater and storm water is not expected to be significant. The City of East Helena WWTF was designed to treat an average day flow of 0.434 million gallons per day. Currently the city processes approximately 0.175 million gallons per day and has the capacity to accept and treat the East Clark Street District contribution.

The East Clark Street Water and Sewer District is a nearly fully developed area with only two vacant lots remaining. Population within the District boundary has remained very steady and is not projected to grow beyond development of the two remaining lots within the planning life of the project. Flow monitoring from each individual septic system was not performed prior to planning, so flow rates were projected based on average per capita and facility flow rates from DEQ design standards.

C. NATURAL FEATURES

Within the District, land use is predominantly residential, with some light commercial businesses (primarily trailer parks and implement businesses). The District is surrounded by residential areas and US Highway 12. Some agricultural land borders the District across US Highway 12 to the south. Land topography consists of relatively flat terrain with slopes trending to the north-northwest at 1 to 2%. There is

approximately 16 feet of elevation drop between the far southeast corner and far northwest corner of the District.

The District lies on Quaternary alluvium deposits to 100 feet in depth. Those are underlain by significant depths of Tertiary alluvium that both constitute the Helena Valley aquifer. The area surface soils primarily consist of cobbly loam and gravelly loam complexes. The NRCS Soil survey of the area rates the soils as somewhat to very limited with respect to absorption field suitability.

The City of East Helena wastewater treatment plant discharges to Prickly Pear Creek. The segment of Prickly Pear Creek to which the plant discharges is classified an "I" class stream. Waters classified as "I" are impaired and are not suitable for any of the beneficial uses until a time when the impairments can be corrected and beneficial uses restored. For this reason, the discharge permit for the City of East Helena is very restrictive with respect to all stream impairments such as metals, nutrients and *E.coli* bacteria. A state-of-the-art metals and phosphorus removal facility has been recently added to the biological nutrient removal facility that the City of East Helena had previously constructed.

Groundwater is located in the tertiary alluvium at depths greater than 40 feet below the ground surface with some seasonal variation with static water levels in some wells rebounding to approximately 20 feet below the ground surface. Monitoring of area wells, performed by Lewis and Clark County, within the District and surrounding areas reflect influence of septic systems.

The climate in East Helena is characterized as semi-arid. Temperatures reach average daily highs of 90°F in late July and August with average daily lows reaching 10°F in December and January. Snowfall accumulation average is approximately 9" in January through February. The elevation within the District is approximately 3880 feet above sea level. East Helena's average annual precipitation rate is 11.32 inches per year. May and June are the wettest months with average precipitation of 1.78" and 1.82" respectively.

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use – The new sewer lines will be installed within existing right-of-way along East Clark Street. Service lines across private property to hook up individual lots will be performed by the contractor, but those service line costs will not be eligible for use of SRF funding. The District will use other grant or funding sources for completion of that work. Excavated areas will be restored to original or better condition upon completion of the work. No Prime Farmland impacts are anticipated with the proposed project.
2. Soils - Geology in the East Clark Street area consists of Quaternary alluvium with depths to 100 feet, underlain by significant depths of Tertiary alluvium that both constitute the Helena Valley aquifer. Area surface soils primarily consist of cobbly loam/loam and loam/gravelly loam complexes and loams (with a minor amount of sandy loam/clay loam complex) including; Mippt-Attewan complex, Attewan-Nippt complex, Yamacall-Attewan loams, Sappington-Amesha loams, Georock-Crago very cobbly loams and

Crittenden-Tolman complex. Based on the project location in proximity to the former ASARCO lead smelter site, a federal superfund site, lead levels in the surface soils within the East Clark Street District are a concern. A surface soil ordinance is in effect and a permit must be obtained to excavate within this area, which may require removal of lead contaminated soils. Deeper soils are not a concern.

3. Floodplains – Based on floodplain maps, the nearest floodplain is across US Highway 12 and approximately 0.4 miles to the west of the project location. Therefore based on a response from the county floodplain coordinator, no floodplain permit is needed.
4. Wetlands – There are no wetlands within the project area, therefore no wetland permit appears to be needed.
5. Cultural Resources – No impacts to cultural resources are anticipated. All construction activity will occur on previously disturbed ground. The State Historical Preservation Office was contacted regarding the proposed improvements and their comments are summarized in Section X of this report.
6. Fish and Wildlife – The US Fish and Wildlife Service listed the Bull Trout, Canadian Lynx, Grizzly Bear, Black-footed Ferret, Red Knot, Wolverine, Spague's Pipit and Whitebark Pine as threatened and endangered species that exist within Lewis and Clark County. The US Fish and Wildlife Service was contacted regarding the proposed improvements and their comments are summarized in Section X of this report..
7. Water Quality – Installation of the sewer collection improvements and abandonment of the on-site wastewater treatment facilities will not result in surface water discharge violations for the City of East Helena and groundwater quality near the District will benefit. The City of East Helena wastewater treatment facility has the capacity to accept this additional flow and load. The East Helena WWTF is currently permitted to discharge up to 109 pounds per day of BOD₅ and TSS respectively. The facility is also permitted to discharge up to 53.5 and 11.2 pounds per day of total nitrogen and total phosphorus respectively. Metals limits within the permit require the facility to remove copper, lead and zinc to very low permit concentration limits. The WWTF was designed for a flow rate of 0.43 million gallons per day. Currently the East Helena facility treats an average daily flow of 0.175 million gallons per day. East Helena typically removes greater than 95% of BOD₅ and TSS through the plant prior to discharge and has adequate capacity to accept this small additional flow and load contribution of approximately 0.023 million gallons from the District. The District contribution at design loading would be 51.7 pounds of BOD₅, 7.8 pounds of nitrogen and 2.1 pounds of phosphorus per day contributed to the East Helena WWTF based on the population served within the District. Because the East Helena WWTF is an advanced biological and chemical nutrient removal facility, greater than 85% removal of BOD₅ and suspended solids can be achieved at the treatment facility and even greater percentage removal of nutrients. So the resulting discharge contribution is expected to be approximately 7.8 pounds of BOD₅ and almost negligible nitrogen and phosphorus loading on a

daily basis into Prickly Pear Creek. Copper, lead and zinc contribution from the District should be negligible and are not expected to have a negative impact on East Helena's WWTF.

Septic Tank sludge will be removed from existing tanks via licensed septic tank haulers to an approved receiving facility prior to removal or abandonment of septic tanks during construction to prevent groundwater impacts.

8. 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 associated with trenching, roadwork and hauling. Proper construction practices will minimize this problem. Project specifications will require dust control. No long term air quality effects would result from any of this work.
9. Public Health - Public health protection will be improved by the proposed project. Reducing the infiltration of sewage to groundwater within the District boundaries will help reduce the risk of well contamination. Because the East Helena WWTF uses advanced treatment and disinfection prior to discharge, the public health risk associated with discharge to Prickly Pear Creek is improved over other alternatives.
10. Energy – The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable but will be a short-term commitment.
11. 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. No significant long-term impacts from noise will occur.
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. The economic impact will ultimately affect all of the users of the system proportionately to the taxable value of the system if a general obligation bond were used to secure a loan for the cost of the project. Users would all pay based upon the size of the respective property. No disproportionate effects among any portion of the community would be expected.
13. Wild & Scenic Rivers – There are no Wild & Scenic River sections within the Helena Valley, nor does this proposed project impact any downstream Wild & Scenic River sections. No impact is anticipated.
14. Growth - Improvements to the District wastewater system will be a positive feature for the District and are necessary to protect groundwater wells within the District. The proposed improvements are not designed to increase District density or flow capacity.
15. Cumulative Effects - No significant adverse impacts are anticipated with the proposed improvements.

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

Problems associated with the individual on-site wastewater systems have been identified via the Lewis and Clark County Water Quality Protection District and the Montana Department of Environmental Quality in violation notices and Administrative Orders associated primarily with McDonald Trailer Court over the past ten years. Lewis and Clark County Water Quality Protection District have sampled area wells and concluded septic impacts could be the primary cause of public water supply well violations within the District. Representatives of the District initiated a ballot election to establish a County District to address these water quality issues. The ballot election passed in 2012 and the District was formed. Since that time the county and District have hired two separate engineering firms to study alternatives and presentations were given to the public on 2/9/2010, 3/24/2014 and 4/17/2014. The engineer discussed the need for the project (i.e., failing septic systems with no replacement areas, water quality impacts and violations impacting public water systems within the District), presented alternatives for improvements, associated costs, funding sources, and the impact to user rates. Public input for the project is well documented within the PER and has been entirely supportive. The City of East Helena, in a letter dated 8/15/2008 supported the District wastewater connection and stated they had adequate treatment capacity to serve the District at that time.

VII. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES

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 plans and specifications. However, coverage under the storm water general discharge permit may be required from the DEQ Water Protection Bureau prior to the beginning of construction.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

EIS More Detailed EA No Further Analysis

Rationale for Recommendation: Through this EA, the DEQ has verified that none of the adverse impacts of the proposed East Clark Street Water and Sewer District wastewater system improvements result in a significant impact. 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. East Clark Street Water & Sewer District, Lewis & Clark County, Wastewater Improvements Preliminary Engineering Report, August 2013, prepared by Anderson-

- Montgomery Engineering, Inc.
2. Preliminary Engineering Report, Supplemental Information – PER Update, April 2014, prepared by Robert Peccia and Associates.
 3. MDEQ Circular DEQ 2, 2012 edition, Montana Department of Environmental Quality, Design Standards for Public Sewage Systems.

X. AGENCIES CONSULTED

The following agencies have been contacted in regard to the proposed construction of this project:

1. The U.S. Fish and Wildlife Service reviewed the proposed project and determined that the proposed changes are unlikely to adversely affect fish and wildlife resources under the purview of the U.S. Fish and Wildlife Service.
2. The Montana Department of Natural Resources and Conservation (DNRC) reviewed the proposed project and concluded the proposed project is not within a special flood hazard area and is not likely to require a permit, but recommended coordination with the local floodplain coordinator for the County.
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 buildings within the East Helena area that are on the Register of Historic Places, but there is a low likelihood the proposed project would impact any of those structures. Because of previous ground disturbances, SHPO stated that there was a low likelihood that cultural properties would be impacted and, as such, felt a cultural resource inventory is unwarranted at this time. However if cultural materials are inadvertently discovered during this project, their office must be contacted and the site investigated. 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.
4. The U.S. Department of the Army (DA) 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 "If no waters of the U.S. will be impacted by the project, no DA permit is required.
5. The Montana Department of Fish, Wildlife and Parks reviewed the proposed project. They had no concerns or comments related to potential negative impacts on wildlife or wildlife habitat.

EA Prepared by:



Terry Campbell, P.E.

1/26/16

Date

EA Reviewed by:

Mike Abrahamson
Mike Abrahamson, P.E.

1/26/16
Date

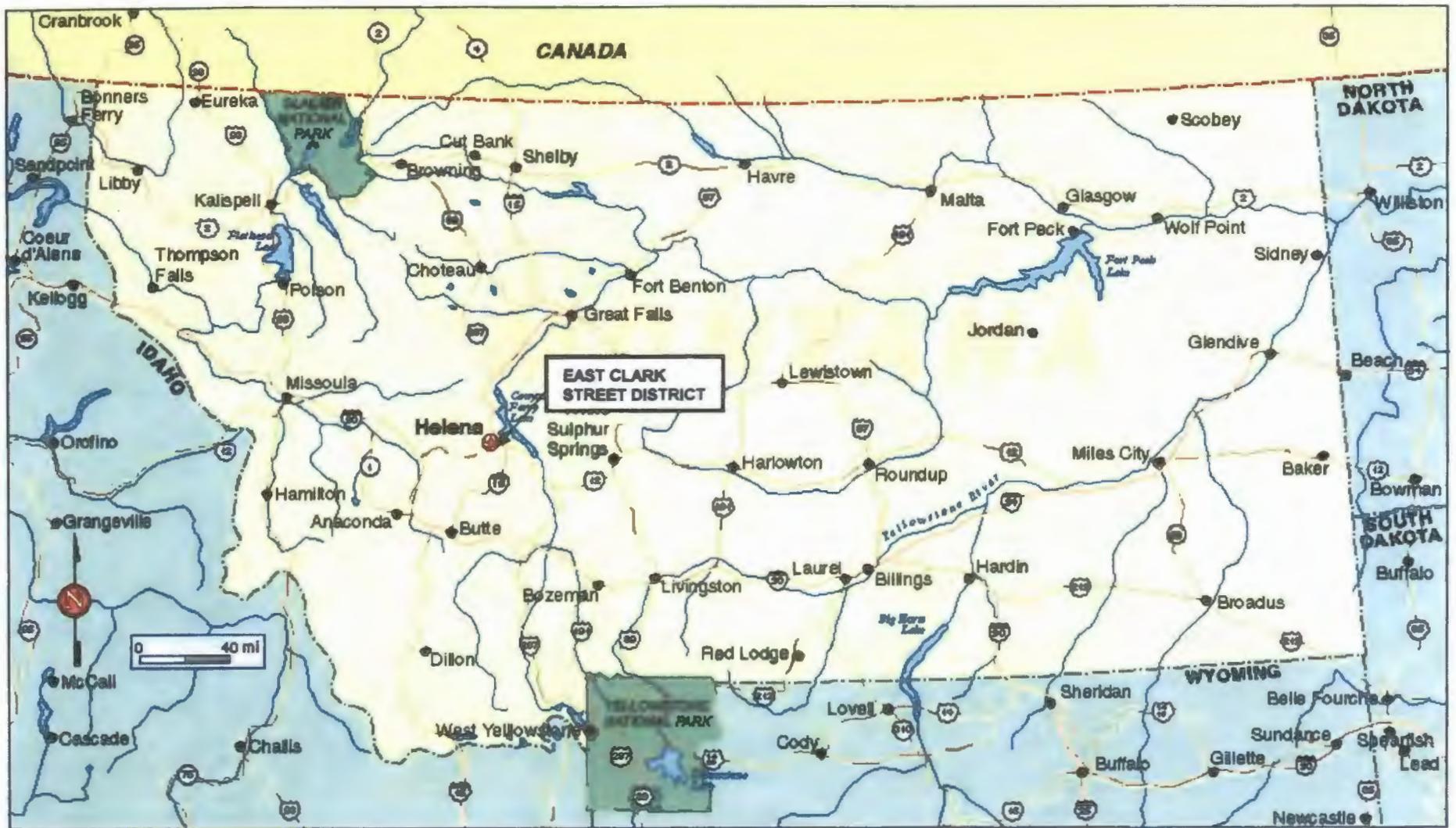
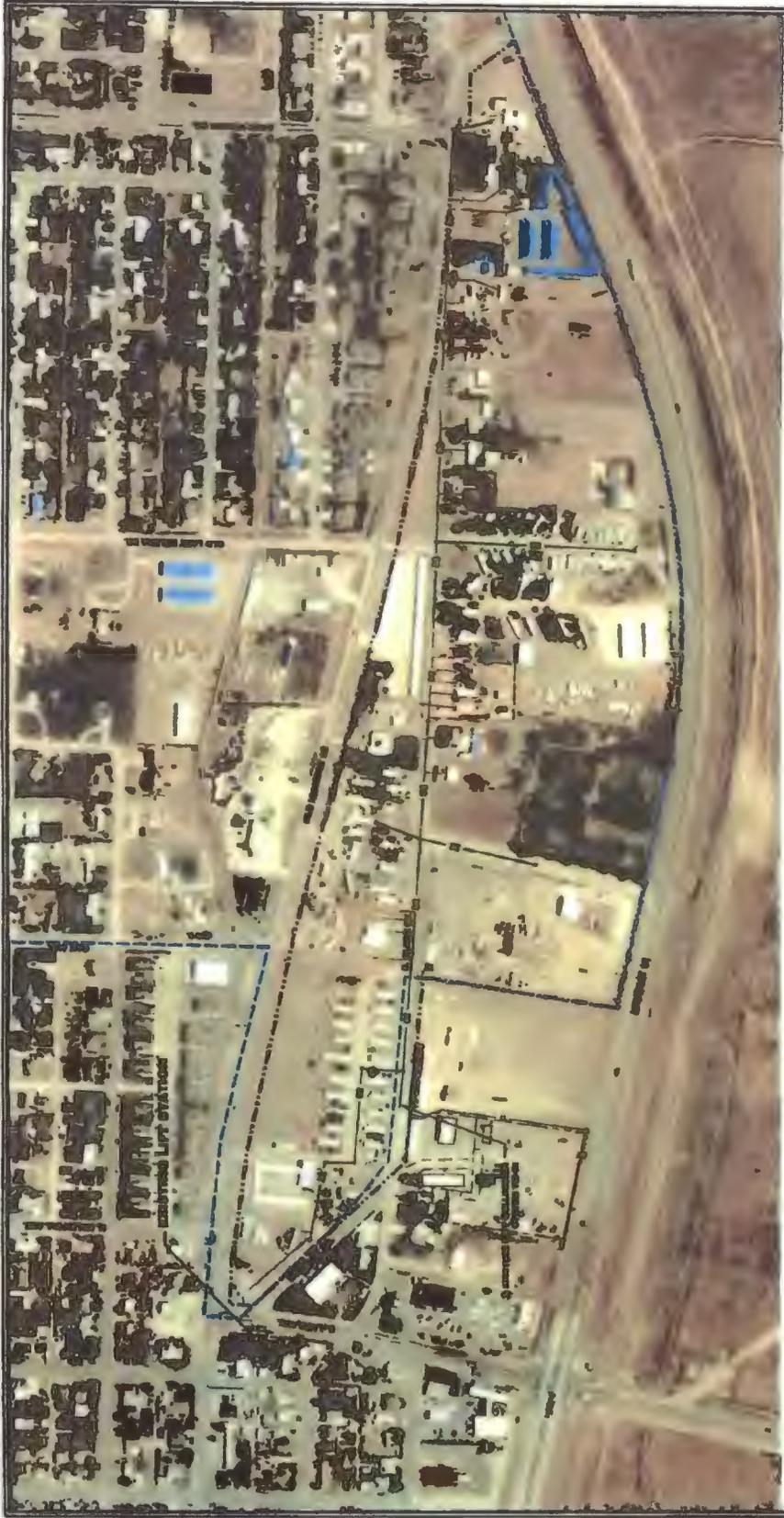


FIGURE 1 - LOCATION MAP



LEGEND

- EXISTING POWER LINES
- EXISTING ROADS
- 12" WATER LINES
- 18" WATER LINES
- 18" SEWER LINES
- 24" SEWER LINES

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East Clark Street Water & Sewer District
FIGURE 3 – PREFERRED ALTERNATIVE