FINDING OF NO SIGNIFICANT IMPACT FOR THE LOCKWOOD WATER AND SEWER DISTRICT MID ZONE WATER STORAGE TANK

TO: ALL INTERESTED PERSONS

Date:	March 13, 2025
Action:	Funding Drinking Water System Improvements
Location of Project:	Lockwood Water and Sewer District, Yellowstone County, Lockwood, Montana
DEQ DWSRF Loan:	To be Determined
Total Project Cost:	Approximately $3,063,000

An environmental assessment (EA) has been prepared by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Lockwood Water and Sewer District. The proposed improvements include the construction of a new 330,000-gallon AWWA D110 Type III concrete storage tank with a water mixing system; the installation of approximately 482 linear feet (LF) of 12-inch PVC transmission pipe; 136 LF of 12-inch ductile iron water pipe; 64 LF of 12-inch PVC drainpipe; 33 LF of 12-inch dual wall HDPE stormwater pipe; and 68 LF of 6-inch dual wall HDPE pipe. The project will also include shorter sections of pipe, necessary valves, hydrants, and appurtenances. The purpose of this project is to make improvements to District's water storage capacity necessary to protect public health in the District's Mid Zone pressure zone.

The affected environment will be an area located on District property or where the District has obtained proper easements, approximately 130 feet south of Trailmaster Drive and approximately 530 feet east of Sanctuary Canyon Road in the Lockwood Mid Zone service area. The environment affected will include residents, businesses, and visitors in the Lockwood area. The project is not expected to have any significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality.

As indicated above, this project will be funded in part with a low interest loan through the Montana Drinking Water State Revolving Fund Program, administered by the Montana Department of Environmental Quality and the Montana Department of Natural Resources and Conservation. The loan will be repaid by a Revenue Bond.

The DEQ utilized the following references in completing its EA for this project: a Uniform Application Form and Uniform Environmental Checklist for Montana Public Facility Projects; the Lockwood Master Plan Amendment (May 2022); Preliminary Engineering Report Amendment—Lockwood W&S District (2018); and the DEQ Design Report—Lockwood W&S District (January 21, 2025). The Uniform Application Form for Montana Public Facility Projects was submitted by Carl Peters, District President. The remainder of the documents were prepared by Morrison Maierle.

In addition to these references, letters were sent to; Montana Department of Environmental Quality (MDEQ); Montana Department of Fish, Wildlife, and Parks (FWP); Montana Department of Natural Resources & Conservation (DNRC), United States Fish and Wildlife Service (USFWS); Montana State Historic Preservation Office (SHPO), and the US Montana Army Corps of Engineers. Response letters or emails that were received are noted and discussed in the EA. These references, letters, and emails are available for review upon request by contacting:

Denver Fraser, P.E.
Montana DEQ
State Revolving Fund Program
P.O. Box 200901
Helena, MT 59620-0901
Phone (406) 444-5318
Email: dfraser@mt.gov

or

Mike Ariztia, District Manager
Lockwood W&S District
1644 Old Hardin Road
Billings, MT 59101
(406) 259-4120
Email: mikea@lockwoodwater.com

Comments on this finding or on the EA may be submitted to DEQ at the above address. After evaluating substantive comments, DEQ may revise the EA or determine if an EIS is necessary. This finding will stand if no substantive comments are received during the 30-day comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed,

Rachel Clark, P.E., SRF Supervisor/Bureau Chief
Engineering Bureau

LOCKWOOD WATER AND SEWER DISTRICT MID ZONE WATER STORAGE TANK

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant:	Lockwood Water and Sewer District
Address:	1644 Old Hardin Road
	Billings, MT 59101
Project Number:	EQ No. 25-1530

B. CONTACT PERSON

Name:	Mike Ariztia, District Manager
	Lockwood Water and Sewer District
Address:	1644 Old Hardin Road
	Billings, MT 59101
Telephone:	(406) 259-4120

C. ABSTRACT

The Lockwood Water and Sewer District (LWSD) provides potable water to a population of approximately 8,066 people through 3,117 service connections. Raw water is obtained from the Yellowstone River through submerged intake screens, which go to surface water treatment plant.

Morrison Maierle developed a 2016 Master Plan/Preliminary Engineering Report (PER), a 2018, Preliminary Engineering Report Amendment, and a 2022 Master Plan Amendment for the LWSD. The LWSD has continued to work diligently to make major improvements to its water system based on these documents. The subsequent documents to the 2016 PER describe the work that has been undertaken and completed since the previously dated documents and provides updates to the proposed projects that have yet to begin.

The above-mentioned documents discuss the need for storage in the Mid Zone for the LWSD. The Mid Zone is presently a closed-loop pressure zone with water provided by the Noblewood Mid Zone booster pumps. If the booster pumps go down, there is currently no water storage in the Mid Zone pressure zone and system pressure will be lost. Adding gravity storage to the Mid Zone will provide increased resiliency to the system by ensuring system pressure is maintained if the booster pumps are down temporarily. With that, this proposed project will consist of construction of a 330,000-gallon gravity storage tank along with all necessary site work, transmission piping, and electrical components.

The project will be partially funded by a DEQ Drinking Water State Revolving Fund loan. Environmentally sensitive characteristics such as wetlands, floodplains, and threatened or endangered species are not expected to be adversely impacted as a consequence of the proposed project. No significant long-term environmental impacts were identified during the preparation of this document.

Under Montana law (75-6-112, MCA), no person, including a municipality or county, may construct, extend, or use a public water system until the DEQ has reviewed and approved the plans and specifications for the project.

D. COMMENT PERIOD

Thirty calendar days.

II. PURPOSE AND NEED FOR ACTION

Water distribution and storage was analyzed in Chapter 9 of the 2016 LWSD Water Master Plan, and this analysis was updated multiple times in the years since. The original analysis proposed a single 0.45 MG Mid Zone Reservoir. Based on discussions with the LWSD, current development trends, and fire flow capacity in the Mid Zone area, LWSD wishes to pursue alternatives for building a smaller storage reservoir in the area and potentially adding additional capacity in the future.

A 330,000-gallon Mid Zone reservoir is proposed to be added to the Mid Zone pressure zone, which is currently a closed-loop pressure zone served by the Noblewood Booster Station. If the Mid Zone booster pumps go down, there is currently no water storage in the zone and system pressure will be lost. Adding gravity storage to the pressure zone will provide increased resiliency to the system by ensuring system pressure is maintained if the booster pumps are down.

After completion of the project, the Noblewood Booster Station will be controlled by the water level in the new reservoir. There is enough space provided in the new proposed buried vault to install an altitude valve, if one is needed for a future second reservoir in the Mid Zone pressure zone.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

A. CONSIDERED ALTERNATIVES

Alternative plans for multiple projects have been considered in several planning documents since 2016. The 2016 Master Plan provided a recommendation of a larger storage tank in the Low Zone pressure zone. Subsequent planning documents, including the LWSD Mid Zone Reservoir Pre-Design Hydraulic Analysis technical memorandum (March 3, 2020), provided additional analysis and recommended two Mid Zone reservoirs instead of one and includes a trigger analysis that identifies when other Mid Zone improvements should be considered by the District. That analysis indicates that

planning for a second Mid Zone reservoir should occur when average day demand exceeds 107 gpm, versus planning for a specific year for the tank installation. With the decision to install a storage reservoir in the Mid Zone, the alternatives analysis then became an analysis of types of tank materials, construction, and maintenance. Alternatives included:

No Action:
Under the no action alternative, the LWSD Mid Zone would continue to operate as a closed-loop pressure zone with pressure and capacity provided only by the Noblewood Pump Station booster pumps. Presently, if the Noblewood Pump Station goes down, the Mid Zone will lose pressure. Loss of pressure in a water distribution system is a public health threat; additionally, the addition of a storage tank in the Mid Zone pressure zone will provide resiliency to the area and provide storage volume for firefighting and other emergencies.

Steel Water Storage Tank:
This alternative consists of installing a glass fused to steel water storage tank. This type of steel tank requires the following additional maintenance:

- Cathodic protection replacement at ten-year intervals;
- Re-sealing the tank at 20-year intervals; and
- Tank replacement at 40 years.

Concrete Water Storage Tank:
This alternative consists of installing an AWWA D110 Type III concrete water storage tank. Maintenance required for a concrete tank is anticipated to include only mixer maintenance. No additional maintenance on the tank itself is expected over a 40-year planning period. Following an annualized and present worth cost analysis for the Mid Zone storage tank alternatives, the LWSD concluded that the concrete water storage tank the best alternative for their water system.

B. TOTAL ESTIMATED COSTS

The estimated total costs of the project are $3,063,000. These costs were updated March 2024, from the $3,010,000 figure shown on the May 11, 2022, Uniform Application. The latest budget anticipates receiving $2,223,000 from a Drinking Water State Revolving Fund Loan. The budget also shows $750,000 from the Montana Coal Endowment Program (MCEP) and $125,000 from the Renewable Resource Grant and Loan Program (RRGL). The Uniform Application notes that the average monthly water rate is expected to increase from $41.86 to $43.82. The total average combined water and sewer residential rate is expected to increase from $163.17 to $166.77.

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA

The community of Lockwood is located in an urban setting just northeast of the greater Billings area in Yellowstone County. The community is situated on the banks of the Yellowstone River southwest of the intersection of Interstate 90 and Interstate 94. The LWSD boundary and water and sewer service boundary maps can be found in the 2016 PER and 2018 PER Amendment prepared by Morrison Maierle. Additional maps and information are shown on the LWSD 2022 Water Master Plan Amendment. These maps are available from the LWSD, MDEQ, or Morrison Maierle.

The new partially buried pre-stressed concrete storage tank will be constructed in 2025 on property situated on the east side of the LWSD, just south of Trailmaster Drive and east of the recently built Sanctuary Canyon Road. The transmission main piping for the new tank will connect from an existing main in Sanctuary Canyon Road. Service line will be installed for a future booster station. Maps of the full LWSD boundary are included in the 2022 LWSD Master Plan Amendment, which is available if requested. Figure 1 below shows the 12-inch transmission main, the proposed Mid Zone water storage tank, and the future service line and booster station and service line location:

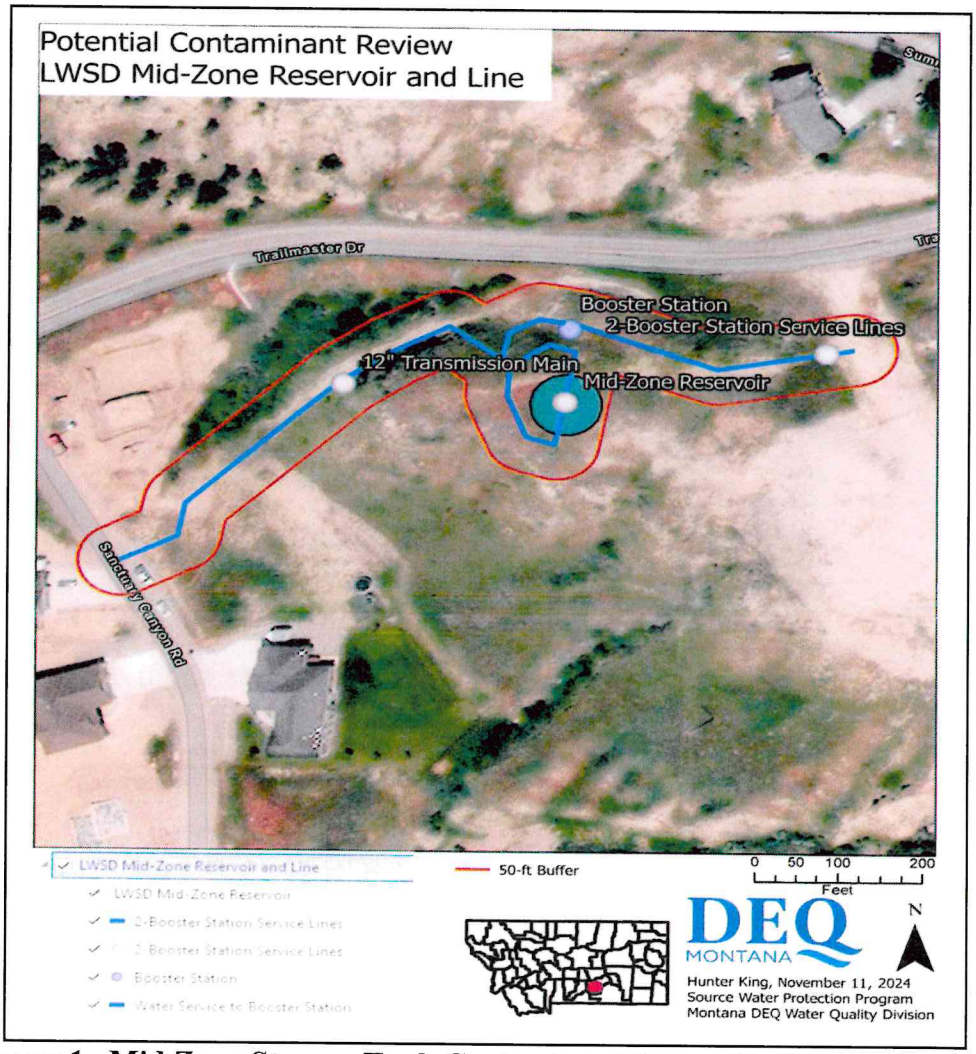

Figure 1. Mid Zone Storage Tank Contaminant Source Review Map

B. POPULATION AND FLOW PROJECTIONS

The characteristics of the designated planning area, as well as current and future service population and water demands are discussed in Chapter 4 of the 2016 PER and Section 1.8 of the 2018 PER Amendment. The planning period extends to 2035 as in the 2016 PER. The water distribution system hydraulics were not re-modeled or re- analyzed with a new planning year end date of 2042 because expected long term residential growth has not substantially changed for the LWSD's three regions.

For this proposed project, the population and flow projections for the Mid Zone were provided separately in the January 21, 2025, Lockwood Water and Sewer District Mid Zone Water Storage Tank DEQ Design report (Engineering Report). The population trends of the Mid Zone service area are copied from that report in the following table:

TABLE 1.1.5.a POPULATION TRENDS (1.5% GROWTH RATE)

Year	Population
2020	517
2030	600
2040	697

The Engineering Report also states that present water consumption and projected average/peak demands for the Mid Zone pressure zone were estimated in the Mid Zone Pre-Design Hydraulic Analysis technical memo. The present and projected water demands for the Mid Zone are copied from the Engineering Report in the following table:

TABLE 1.1.5.b PRESENT/PROJECTED WATER DEMANDS

	2020	2040
Average Day (GPM)	80	107
Maximum Day (GPM)	210	283
Peak Hour (GPM)	280	375

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Soil Suitability, Topographic, and/or Geologic Restraints – The Mid-Zone storage tank will be located on a subdivision lot already proposed for development in the second phase of the Sanctuary Canyon Subdivision. A geotechnical investigation has been completed for the tank site. The site consists of a veneer of sandy soils underlain a sequence of sedimentary bedrock of the Judith River Formation with the bedrock consisting of sandstone with some shale and siltstone layers. If topographic constraints

at the site make it difficult to maintain a 30-foot setback between foundations and slope, deep foundations such as concrete piers or micropiles may be required. In general, the site is buildable with appropriate engineering design.

2. Land Use – Land use within the area for the Mid-Zone Water Storage Tank area is surrounded by primarily residential lands. No adverse effects are expected from this project.

3. Floodplains and Wetlands – No adverse impacts to floodplains or wetlands are expected from this project. Unnamed Creek, Dry Creek, the Yellowstone River, and their associated floodplains are located more than one mile from the project area. Based on correspondence with Yellowstone County, no floodplain permitting will be required for the project area.

   There are several wetlands within one mile of the project area, but none within the Mid Zone project area itself. No wetlands are anticipated to be impacted by the water system improvements.

4. Historical/Cultural Resources – The Montana State Historic Preservation Office was contacted and indicated there was a low likelihood of cultural properties being impacted; therefore, they felt a recommendation for a cultural resource inventory was unwarranted. The water main replacement area will occur in local subdivision streets. The Mid-Zone reservoir site has also been disturbed with the developer already building roads in the second phase of the Sanctuary Canyon Subdivision. No significant impacts to historic properties, cultural, and archaeological resources are anticipated to occur with the implementation of the proposed water system improvements.

5. Fish and Wildlife – The Mid Zone reservoir site and water main extension would be located within the 1st and 2nd filings of the Sanctuary Canyon Subdivision area. The USFWS species list notes that Red Knot bird is a threatened species, and the Monarch Butterly is a candidate species. There are no endangered species or endangered species critical habitat in or adjacent to the project areas. USFWS correspondence provides a probability of presence summary for Bald Eagles, Golden Eagles, and Lark Buntings, which are migratory and are listed on the USFWS Birds of Conservation Concern list. The eagle species are not a Bird of Conservation Concern the project area. Neither Bald Eagles or Golden Eagles are anticipated to use the Mid-Zone Reservoir site for breeding habitat due to the lack of trees and surface water. However, the Lark Bunting, which breeds in open grasslands, usually with some element of sagebrush, could possibly be found in the reservoir area. The probability of presence for this bird during breeding season in the project area is greatest at the end of June. Construction of the reservoir should start

before June 15 or after July 1. The reservoir and water main extension disturbed areas would be restored to native grass vegetation following construction.

According to the Montana Sage Grouse Habitat Conservation Program website, the project areas are not within or near a Sage Grouse Executive Order Core Area. No surface water bodies are bodies are nearby to the project area; therefore, fish will not be impacted.

6. Surface Water and Groundwater – No streams, rivers, or lakes will be encountered in the project improvement areas. The Lockwood Irrigation District's 60' Lift Canal bisects the Lockwood Subdivision. Therefore, a canal encroachment permit would be required from the Lockwood Irrigation District for water main replacements in the Lockwood Subdivision.

   During construction, best management practices will be installed by the contractor to control erosion and sedimentation due to project related earth disturbance. The contractor will also have to submit a Stormwater Pollution Prevention Plan and Notice of Intent to MDEQ for coverage under the General Permit for Storm Water Discharges Associated with Construction Activity.

   Groundwater is not anticipated at the Mid-Zone Reservoir site. The contractor may have to apply for a Groundwater Dewatering permit for construction, as necessary, and will be responsible for best management practice to protect groundwater resources.

7. Social and Economic Resources – This project will benefit all community members regardless of socio-economic status. The goal of environmental justice is to ensure that all people, regardless of race, national origin, or income are protected from disproportionate impacts of environmental hazards. The construction of this new storage tank will be a benefit for all people in the Mid Zone project area.

8. Air Quality - Short-term negative impacts on air quality may occur from heavy equipment and exhaust fumes during project construction. Emissions would occur over a single construction season and all equipment used and transport vehicles would meet emission control requirements. Emissions from this low level, short-term activity would be minimal and would not create a noticeable or measurable increase in pollutants. Air quality impacts would be negligible and short-term.

9. Energy – During construction of the proposed project, additional energy will be consumed resulting in a direct short-term increased demand on this resource. No increased long-term energy consumption is anticipated.

10. Noise - Short-term impacts from increased noise levels may occur during construction activities. Construction will be limited to normal day-time hours to avoid early morning or late evening construction disturbances. In the long-term, noise levels will not be impacted.

B. UNAVOIDABLE ADVERSE IMPACTS

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

VI. AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES

All water storage and conveyance infrastructure will be designed to meet DEQ requirements. Proper state regulatory review and approval of the project plans and specifications will be provided. All applicable local, federal, and state permits will be obtained.

All appropriate easements and access will be addressed with regards to the proposed water system infrastructure. If required, land acquisition or long-term agreements will be established for the land requirements associated with the new water storage tank and transmission piping.

VII. PUBLIC PARTICIPATION

Two public meetings were held in 2016 to provide information on the existing water system to offer recommendations for system improvements to discuss any environmental concerns and to receive public input. This was documented in the 2016 PER. There was widespread support to improve the LWSD's water treatment and distribution system.

At the LWSD's regularly scheduled Board meeting on April 13, 2016, Resolution 133 was adopted, which accepted the 2016 PER and declared the District's intent to provide the resources necessary to construct the necessary improvements.

Additionally, a third public hearing was conducted on April 19, 2018, to discuss the 2018 PER Amendment. This hearing covered the same topics as were covered in 2016 and updated the public on completed projects. The need for expansion of the treatment plant and the proposed 2020 treatment plant project timeline and cost were discussed.

A public hearing was held at the Lockwood Water and Sewer District on May 11, 2022, to gather input from citizens regarding the proposed water distribution and storage tank recommendations and the 2022 Water Master Plan Amendment. The LWSD used several methods to notify the public of the meeting:

- The meeting was advertised April 29th and May 6th, 2022, in the Yellowstone County News;
- LWSD noticed the meeting on the LWSD website and posted the notice at the LWSD office; and
- Public notices were posted from April 29th through May 11th, 2022, at six major community businesses in Lockwood. The notices were at the Lockwood IGA, S-Bar-S Building Center, Lockwood Ace Hardware, First Interstate Bank, Western Security Bank, and the 3G's Convenience Store.

The LWSD passed Resolution No. 173 at their Board meeting on May 11, 2022, accepting the 2022 Water Master Plan Amendment and the recommendations included therein. The District also passed Resolution No. 175 to submit a grant application the Montana Coal Endowment Program.

VIII. REFERENCE DOCUMENTS

The following documents were used in the environmental review of this project and are considered part of the project file:

A. Morrison Maierle. (January 8, 2016). Lockwood Water and Sewer District 2016 Water Master Plan.
B. Morrison Maierle. (2018). Preliminary Engineering Report Amendment – Lockwood Water & Sewer District.
C. Morrison Maierle. (May 2022). Water Master Plan Amendment – Lockwood Water and Sewer District.
D. Morrison Maierle. (January 21, 2025). DEQ Design Report—Lockwood Water and Sewer District Mid Zone Water Storage Tank—Lockwood Water and Sewer District
E. Montana Department of Environmental Quality—Water Quality Division. (November 20, 2024). LWSD Mid-Zone Reservoir Potential Contaminant Source Review.
F. Lockwood W&S District. May 11, 2022. Uniform Application Form for Montana Public Facility Projects.

IX. AGENCIES CONSULTED

Various state and federal agencies were sent letters and exhibits depicting the LWSD planning and the waterline improvement areas for review and comment. The letters are included in Appendix N of the 2022 LWSD Master Plan Amendment. These documents and the response letters are available if requested. The following entities provided written correspondence regarding this project:

A. Department of the Army Corps of Engineers (DA); letter dated May 10, 2022. This letter states, "Note that this letter is not a DA authorization to proceed. It only informs you of your need to obtain a DA permit if waters of the U.S. will be

affected. If waters of the U.S. will not be affected by a jurisdictional activity a DA permit will not be required for the project."

B. The Montana Historical Society's Historic Preservation Office reviewed the project and provided an email response dated April 16, 2022. The email states, "As long as the proposed projects will be kept with previously disturbed right-of-way and there will be no disturbance or alteration to structures over fifty years of age, we feel that there is low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time."

C. The United States Department of Interior, Fish and Wildlife Service reviewed the projects and provided a letter April 26, 2022. The letter provides a list that identifies threatened, endangered, proposed candidate species, as well as proposed and final designated critical habitat. The attachments with the letter include the Official Species List, USFWS National Wildlife Refuges and Fish Hatcheries, Migratory Birds, and Wetlands. As stated above, the full letter and attachments are available if requested.

D. The Yellowstone County Public Works Department provided an email response April 25, 2022. The mail states that none of the areas are within FEMA floodplains, so no floodplain permit will be required. All of the streets within the chosen areas are public rights-of-way and will require right-of-way permits from Yellowstone County Public Works before construction begins. The email also discusses roadway restoration.

X. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

❑ EIS ❑ More Detailed EA X No Further Analysis

Rationale for Recommendation: Through this EA, the Montana DEQ has verified that none of the adverse impacts of the Lockwood Water and Sewer District Mid Zone Water Storage Tank project are significant. Therefore, an environmental impact statement is not required. Based on this EA, a Finding of No Significant Impact (FONSI) will be issued and legally advertised in the local newspaper and distributed to a list of interested government agencies. Comments regarding the project will be received for 30 days before final approval of the EA is granted. This environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607 thru 17.4.610.

EA prepared by:

Denver Fraser, P.E. — Date: 03/13/2025

Approved By:

Rachel Clark, P.E. — Date: 3.13.25