



Brian Schweitzer, Governor

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March 24, 2009

Lan Nguyen
US Army Corps of Engineers
PO Box 3755
Seattle, WA 98124

RE: Seeley Lake Water System Improvements Project, Montana

Dear Lan:

This is in response to your March 23, 2009 request for Montana Department of Environmental Quality (DEQ) comments regarding the proposed water system improvements project located in and near Seeley Lake, Montana. The DEQ, through the State Revolving Fund (SRF) Loan Program, is coordinating with the community, their engineer and other state and federal agencies to ensure compliance with all applicable DEQ regulations and standards.

The SRF program has reviewed and approved the project preliminary engineering report. The project plans and specifications, design report and the draft USACE environmental assessment have been reviewed and comments provided. The final project plans and specifications will be reviewed in accordance with Circular DEQ-1 Standards for Water Works. This circular covers all aspects of Seeley's municipal system including the storage and handling of disinfection chemicals. The SRF program will also work with the Montana Department of Natural Resources and Conservation (DNRC) to ensure project funding meets all state and federal requirements.

Based on the draft USACE environmental assessment and finding of no significant impact (FONSI), the SRF program has drafted a state FONSI for the Seeley Lake water project. Once finalized, the state FONSI will be published by the community in a local paper and 30 days provided for public comment. We look forward to working with you on this project.

Sincerely,

Robert Ashton
State Revolving Fund Loan Program
Technical and Financial Assistance Bureau
rashton@mt.gov
406.444.5316

cc: Walter Hill, President Seeley Lake Water District, Montana
Dan Lozar, TD&H, Kalispell, Montana

**FINDING OF NO SIGNIFICANT IMPACT
FOR
SEELEY LAKE – MISSOULA COUNTY WATER DISTRICT
WATER SYSTEM IMPROVEMENTS PROJECT**

TO: ALL INTERESTED PERSONS

Date:	March 24, 2009
Action:	Seeley Lake Water District – Water System Improvements Project
Location of Project:	Seeley Lake, Montana
DWSRF Loan:	\$2,720,500
TSEP Grant:	\$ 750,000
WRDA Grant:	\$ 260,000
DNRC Grant:	\$ 100,000
District	<u>3,000</u>
Total Project Cost:	\$3,833,500

An environmental review has been conducted by the Montana Department of Environmental Quality (DEQ) for proposed funding of improvements to the Seeley Lake – Missoula County Water District's water system. The proposed project involves the installation of a new 500,000-gallon water storage tank, installation of approximately 12,500 lineal feet of water transmission main, installation of approximately 10,800 lineal feet of water distribution main, expansion of the existing water treatment plant and the addition of an ultra violet (UV) light disinfection system. The project also includes the installation of remote feed chlorine disinfection stations, backup power, and system pressure booster stations. The purpose of the project is to make improvements to the water systems that are needed to protect public health.

The affected environment will primarily be the area immediately in and surrounding the community of Seeley Lake, including the current water treatment plant site. The human environment affected will include the entire community of Seeley Lake since the water system improvements will provide a more reliable supply of higher quality water. Based on the environmental assessment, prepared by the US Army Corps of Engineers, 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, social quality, cultural or historical features.

This project will be funded in part with low interest loans 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 DEQ utilized the following references in completing its environmental review of this project:

- Preliminary Engineering Report – Seeley Lake Water System, April 2006, prepared by HKM Engineering, Bozeman, Montana.
- Uniform Application for Montana Public Facility Projects, March 2008, Prepared by TD&H Engineering, Kalispell, Montana.
- Draft Seeley Lake – Missoula County Water District, Design Report and Water System Improvements Project Plans and Specifications, February 2009, Prepared by TD&H Kalispell, Montana.
- Draft Environmental Assessment and Finding of No Significant Impact Statement, March 2009, prepared by the U.S. Army Corps of Engineers.

In addition to these references, letters were sent to Montana Department of Fish, Wildlife & Parks (FWP), Montana Department of Natural Resources & Conservation (DNRC), Montana Department of Transportation (MDOT), U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service, U.S. Army Corps of Engineers (USACE) and the Montana State Historic Preservation Office (SHPO). Responses have been received from each of these agencies. The USFWS submitted the only substantial comment noting the presence of the threatened bull trout and bull trout critical habitat within the project area. The proposed project includes mitigation measures to ensure no significant impact to bull trout or bull trout habitat will result from the project. All applicable permits will be obtained prior to the start of construction. These references are available for review upon request by contacting:

Robert Ashton
Department of Environmental Quality
Drinking Water SRF Program
P.O. Box 200901
Helena, MT 59620-0901
(406) 677-2559
Phone (406) 444-5316
Email: rashton@state.mt.us

or Walter E. Hill
Seeley Lake Water District
P.O. Box 503
Seeley Lake, MT 59868

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,

Todd Teegarden, Bureau Chief
Technical & Financial Assistance Bureau
Department of Environmental Quality

cc: file



**CORPS OF ENGINEERS
SEATTLE DISTRICT**

and the

SEELEY LAKE – MISSOULA COUNTY WATER DISTRICT

**Section 595 Seeley Lake Water System
Improvements Project**

**NEPA Review, Environmental Assessment &
Finding of No Significant Impact**

March 2009

Finding of No Significant Impact

SECTION 595 of WRDA 99 SEELEY LAKE WATER SYSTEM IMPROVEMENTS PROJECT MISSOULA COUNTY, MONTANA

Project Summary

The Seeley Lake – Missoula County Water District (sponsor) proposes to improve their District’s water system in the Seeley Lake community. The proposed improvements are located in the Seeley-Swan Valley, along State Highway 83, approximately 80 miles south of the town of Bigfork, Flathead County, Montana. The Corps of Engineers has signed a Project Cooperation Agreement with the sponsor to cost share in the design of the improvements. Under this agreement, the Corps is required to insure compliance with applicable Federal environmental laws, statutes, and Executive Orders as a basis for project implementation. This Finding of No Significant Impact has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969.

Alternatives

The Seeley Lake – Missoula County Water District is currently experiencing three main problems with their existing water system: accumulation of disinfection byproducts (DBP’s) resulting from the high Total Organic Carbon (TOC) in the raw water, an inadequate water distribution system capacity with resulting reduced fire protection, and inadequate water pressure. To solve the accumulation of DBP’s, the water district considered three alternatives: 1) modifying the direct filtration process by including flocculation and settling stages (i.e., enhanced coagulation), 2) modifying the primarily disinfection process by incorporating Ultra-violet (UV) disinfection, adding two or more remote feed chlorine booster stations, and including a backup chloramine (an organic chemical compound used as a disinfectant) system to address the DBP issue during periods when the primary system is not effectively mitigating the DBP’s (**RECOMMENDED PLAN**), and 3) utilizing chloramines and an ammonia gas injection system. To solve the problem of the inadequate water distribution capacity and reduced fire protection, the water district considered two alternatives. Alternative 1 included several different locations for an elevated water storage tank and replacement of the existing eight-inch asbestos cement transmission main with a new 10-inch transmission main. Alternative 2 included a partially buried 500,000-gallon concrete tank located at the existing water treatment plant and construction of two pressure booster stations: one at Black Bear Court and the other at Tamarack Lane (**RECOMMENDED PLAN**). To solve the problem with inadequate water pressure, the water district considered two alternatives to help boost water to a higher pressure zone. Alternative 1 considered replacing the existing transmission main with an 18-inch transmission main. Alternative 2 considered replacing the existing transmission main with a 16-inch PVC transmission main (**RECOMMENDED PLAN**). Also considered under all three problems was a No Action Alternative or maintaining existing conditions.

Recommended Plan

The Recommended Plan for DBP's reduction would modify the primarily disinfection process by incorporating Ultraviolet (UV) disinfection and two or more remote feed chlorine booster stations. This alternative was selected because it will significantly reduce the amount of chlorine that needs to be fed at the treatment plant thereby reducing potential DBP formation. The Recommended Plan to improve the distribution system capacity and fire protection would include construction of a new partially-buried 500,000-gallon concrete tank located near the water treatment plant, and construction of two pressure booster stations. In addition, various distribution system improvements would be required to provide service and fire protection to key areas within the District. The components of this alternative were selected because the overall costs of construction were essentially the same as the least cost elevated tank option, the estimated costs of operation and maintenance were significantly lower than the elevated tank options, the aesthetic impact was far less adverse than the elevated tank options, the central location of the major water system facilities forewent the need for a radio telemetry system, and the estimated useful life of the partially-buried concrete tank was highly favored by the District Board. The Recommended Plan to solve the problem with inadequate water pressure would include replacement of the existing 8-inch transmission main with a 16-inch PVC transmission main.

Summary of Environmental Impacts

The water system improvement project would provide clean water, adequate distribution, and increased fire protection to the Seeley Lake – Missoula County Water District and its customers. The recommended plan would result in no adverse impacts to any Federally-listed threatened or endangered species or their habitat. The recommended plan would result in no impacts to any properties listed, proposed for listing, eligible for listing, or potentially eligible for listing in the National Register of Historic Places. Areas near the existing water treatment plant and associated with the distribution system would be temporarily disturbed by proposed construction activities. The impacts associated with the proposed project are short term or minor associated with project construction. These minor impacts would be greatly offset by providing clean finished water, increased system distribution capabilities, and enhanced fire protection to the District and area residents. Of the various alternatives considered, the Recommended Plan is proposed because it can be reasonably implemented, meets the projects purpose and needs, and is consistent with protection of the nation's environment.

Mitigation Measures

The recommended plan will result in minor impacts (i.e., removal) to trees during construction but no riparian trees would be removed. For creek crossings, boring or directional drilling under the creek will be implemented to prevent impacts to the threatened bull trout and its critical habitat. Coloration of the storage tank to match the current tank color and to blend in with the natural site conditions would help to minimize aesthetic impacts. Measures under the National Pollutant Discharge Elimination System (NPDES), such as minimizing ground disturbance, washing off-road equipment prior to entering construction sites, and seeding,

mulching, and fertilization of disturbed areas to reduce weed establishment and prevent erosion will be implemented.

Coordination

Coordination with the general public was conducted from approximately June 17, 2004 through October 20, 2008. News articles, Public Hearings, Public Meetings, newsletters and mailings were published in area newspapers and/or sent directly to the public to inform them of the proposed project and allow public comment and participation. Numerous letters of support for the project were received as a result. Coordination with the resource agencies occurred as detailed in the Environmental Assessment. The proposed project would result in long-term social benefits and the adverse environmental effects are minor or short-term construction related. The minor impacts associated with this project would be well outweighed by the overall long-term benefits to water quality, water distribution, and fire protection.

Conclusion

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed Seeley Lake Water System Improvements Project does not constitute a major Federal action that would significantly affect the quality of the human environment. The proposed action has been coordinated with the appropriate resource agencies, and there are no significant unresolved issues. Therefore, preparation of an Environmental Impact Statement is not required.

Date

Anthony O. Wright
Colonel, Corps of Engineers
District Commander

EXECUTIVE SUMMARY

The Seeley Lake – Missoula County Water District proposes to improve their District's water system in the Seeley Lake community. The proposed project would involve improvements to their water system by reducing disinfection byproducts resulting from the high Total Organic Carbon in the raw water through the use of UV as a primary disinfectant, two or more remote feed chlorine booster stations, and a backup chloramine system; providing an adequate water distribution system capacity and increased fire protection through construction of a new 500,000-gallon ground-level tank with two associated booster stations; and increasing inadequate water pressure through the replacement of the old transmission line with a new 16-inch PVC transmission line.

The Seeley Lake – Missoula County Water District water improvement project is located in the Seeley-Swan Valley, along State Highway 83, approximately 80 miles south of the town of Bigfork, Flathead County, Montana. The Seeley Lake – Missoula County Water District provides water to the Seeley Lake community, the Seeley Lake Sewer District, and the Seeley Lake Rural Fire District.

Coordination

Coordination with the general public was conducted from approximately June 17, 2004 through October 20, 2008. News articles, Public Hearings, Public Meetings, newsletters and mailings were published in area newspapers and/or sent directly to the public to inform them of the proposed project and allow public comment and participation. Numerous letters of support for the project were received as a result. Coordination with the resource agencies occurred as detailed in the Environmental Assessment. The proposed project would result in long-term social benefits and the adverse environmental effects are minor/short-term construction related. The minor impacts associated with this project would be well outweighed by the overall long-term benefits to water quality, water distribution, and fire protection.

Additional information concerning this project may be obtained from Mr. Matthew D. Vandenberg, Environmental Resources Specialist, PM-AE, U.S. Army Corps of Engineers, Omaha District by email at matthew.d.vandenberg@usace.army.mil or by telephone at 402- 995-2694.

**ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT**

**SECTION 595 of WRDA 99
SEELEY LAKE
WATER SYSTEM IMPROVEMENTS PROJECT
MISSOULA COUNTY, MONTANA**

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FINDING OF NO SIGNIFICANT IMPACT

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**ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT**

**SECTION 595 of WRDA 99
SEELEY LAKE
WATER SYSTEM IMPROVEMENTS PROJECT
MISSOULA COUNTY, MONTANA**

Section 1: INTRODUCTION

This Environmental Assessment (EA) provides information that was developed during the National Environmental Policy Act (NEPA) public interest review of the proposed Section 595 water system improvement project.

Section 2: AUTHORITY

Section 595 of the 1999 Water Resources Development Act (WRDA), entitled the “Rural Nevada and Montana Environmental Infrastructure Resource Protection and Development Program”, provides authority to the U.S. Army Corps of Engineers (Corps) to participate in projects for wastewater treatment and water supply and related facilities in rural Montana. This authority provides for a Federal grant or reimbursement of up to 75% of the total project costs. The Corps of Engineers has signed a Project Cooperation Agreement with the sponsor to cost share in the design of the improvements. Under this agreement, the Corps is required to insure compliance with applicable Federal environmental laws, statutes, and Executive Orders.

Section 3: PROJECT LOCATION

The Seeley Lake – Missoula County Water District water system improvement project is located in the Seeley-Swan Valley, along State Highway 83, approximately 80 miles south of the town of Bigfork, Flathead County, Montana. The approximate latitude and longitude of the center of the district is 47.0 degrees North and 113 degrees West, respectively.

Section 4: EXISTING CONDITION

A preliminary engineering report was completed in 2003 to quantify the current systems limitations relative to meeting the required minimum distribution system pressures, accommodating growth, and providing a minimum level of fire protection. The following paragraphs summarize the current status of the system.

1. The water system is of excellent raw water quality and of adequate volume to meet current needs of the community. Based upon full build out within the current district boundary, additional water supply may eventually be needed as the existing surface water right on Seeley Lake could be exceeded.

2. The existing raw water intake system and direct filtration treatment facility are of adequate capacity and in good condition. The finished water quality of the water currently meets all regulatory requirements for treated surface water but in doing so, uses a high dose of chlorine. This high chlorine dose in combination with extended contact time and naturally occurring material in the water provides elements needed to form DBP's, which the treatment plant wishes to avoid.

3. The operations and maintenance of the system is excellent. The District has aggressively pursued recovery of unaccountable water loss and significantly reduced this volume from over 40% in 2002 to approximately 20% in year 2004. The District replaced 100% of all water meters, accurately mapped the entire system, and located and repaired a significant number of distribution system leaks.

4. The raw water of Seeley Lake is high in natural organics, measured as Total Organic Carbon (TOC). The use of free chlorine for disinfection is causing the system to fall out of compliance with the current Disinfectants/Disinfection Byproduct Rule (D/DBPR) for the Haloacetic Acids (HAA-5). During the warmer periods of the year, HAA-5 levels have been recorded at levels almost twice the Maximum Contaminant Level (MCL) for HAA-5. Levels of D/DBP's in excess of the MCL are considered a chronic health and safety risk and the District may soon be required by regulatory agencies to address this problem.

5. The district must implement modifications to the disinfection system to facilitate compliance with the current D/DBPR and pending changes to the rules.

6. During high demand periods, the system is not capable of maintaining minimum distribution system pressures at all locations within the system. During peak demands, some residents essentially lose pressure and the potential for backflow into the system is high.

7. The system is not capable of providing even minimal fire flows to all service areas. Fire flows are considered grossly inadequate throughout the system. The basic cause of this is the small diameter transmission main between the water treatment plant and the water distribution system. At projected peak daily demands, the estimated available fire flows are significantly less than 500 gallons per minute (gpm) everywhere in the system.

8. Based upon discussions with the Insurance Services Office and the local Seeley Fire District, the selected target fire flows for the system range from 750 gpm on the outskirts of the residential areas to 1,500 gpm for the commercial areas.

9. System storage is limited to the water treatment plant clearwell. The useable storage of approximately 139,000 gallons is inadequate for the current and projected system demands. During peak periods, the water treatment plant cannot maintain the level in the clearwell and the system does not maintain adequate fire protection storage.

10. The projected overall water storage need for operational, equalization and fire protection storage is approximately 540,000 gallons.

Section 5: PURPOSE & NEED FOR ACTION

The purpose of the Seeley Lake – Missoula County Water District water system improvement project is to address deficiencies in the current system.

The need of the Seeley Lake – Missoula County Water District water system improvement project is to reduce disinfection byproducts and maintain compliance with the Disinfectants/Disinfection Byproduct Rule to provide public health and safety; provide increased water supply for current and projected system demands; maintain necessary distribution system pressures throughout the system; and provide necessary fire flows to residential and commercial areas.

The existing conditions could expose the community to chronic health and safety risks resulting from the high HAA-5 levels in the finished water during the warmer months. Additionally, failure to improve the Seeley Lake – Missoula County Water District’s water system would keep area residents’ livelihood and social well-being in turmoil, subject to the continuous threat of reduced water pressures and insufficient storage which would limit water use when needed. Potential loss of life would occur as the system is currently not capable of providing even minimum fire flows to all areas of the system.

Section 6: ALTERNATIVES CONSIDERED BUT NOT SELECTED

Reduction of Disinfection Byproducts

Two alternatives for the reduction of disinfection byproducts were considered but not selected: 1) modification of the direct filtration process by including flocculation and settling stages (i.e., enhanced coagulation), and 2) primary utilization of chloramines and an ammonia gas injection system. These alternatives were not selected because in order to implement these types of disinfection, extensive modifications to the existing facilities would be required, resulting in increased costs. Additionally, bench-scale testing demonstrated a major reduction in DBP formation to levels well below the Maximum Contaminant Level for HAA-5 under the preferred alternative, thus rendering these other alternatives unnecessary.

Water Distribution System Capacity and Fire Protection Improvements

One alternative, with three variations, for water distribution system capacity and fire protection improvements was considered but not selected: an elevated tank with a 500,000-gallon spheroid located at three different potential locations closer to the center of the overall system, and inclusion of a 10-inch water transmission main. This alternative was not selected because the cost of two of the variations was higher than the recommended alternative (the cost of the third variation was essentially the same as the recommended alternative), the high seismic zone in the area would make the technical feasibility of the elevated alternatives significantly greater than the recommended alternative, the estimated cost of long-term operation and maintenance were significantly greater, and the aesthetic impact of this alternative was a disadvantage to the Seeley Lake community.

Water Pressure

One alternative to boost water pressure was considered but not selected: consideration of replacing the existing transmission main with an 18-inch transmission main. After additional hydraulic analysis conducted by the engineering firm, Thomas, Dean & Hoskins, Inc., it was found that 16-inch transmission would sufficient instead of the 18-inch transmission.

No Action” Alternative

The “No Action” Alternative would involve no improvements to the existing water distribution system. Disinfection byproducts would continue to accumulate creating a condition where the system would likely fall out of compliance with the Disinfectants/Disinfection Byproducts Rule, full build-out of the system could not be accomplished due to the existing inadequate water supply, and water pressure would remain low thereby putting the community at risk by not being able to provide necessary fire flows. Additionally, the No Action alternative would not meet the projects purpose and need.

Section 7: RECOMMENDED ALTERNATIVE

The proposed project consists of three parts. The Recommended Plan for DBP’s reduction would modify the primarily disinfection process by incorporating Ultraviolet (UV) disinfection, add two or more remote feed chorine booster stations, and include a backup chloramine system to address the DBP issue during periods when the primary system is not effectively mitigating the DBP’s. This alternative was selected because it will significantly reduce the amount of chlorine that needs to be fed at the treatment plant thereby reducing potential DBP formation. The Recommended Plan to improve the distribution system capacity and fire protection would include construction of a new partially-buried 500,000-gallon concrete tank located near the water treatment plant, and construction of two pressure booster stations. In addition, various distribution system improvements would be required to provide service and fire protection to key areas within the District. The components of this alternative were selected because the overall costs of construction were essentially the same as the least cost elevated tank option, the estimated costs of operation and maintenance were significantly lower than the elevated tank options, the aesthetic impact was far less adverse than the elevated tank options, the central location of the major water system facilities forewent the need for a radio telemetry system, and the estimated useful life of the partially-buried concrete tank was highly favored by the District Board. The Recommended Plan to solve the problem with inadequate water pressure would include replacement of the existing 8-inch transmission main with a 16-inch PVC transmission main.

Section 8: NATIONAL ENVIRONMENTAL POLICY ACT REVIEW

Coordination with the general public was conducted from approximately June 17, 2004 through October 20, 2008. News articles, Public Hearings, Public Meetings, newsletters and mailings were published in area newspapers and/or sent directly to the public to inform them of the proposed project and allow public comment and participation. Numerous letters of support for the project were received as a result. No letters of disapproval were received. Coordination

with the resource agencies occurred as detailed in this Environmental Assessment. The proposed project would result in long-term social benefits and the adverse environmental effects are minor/short-term construction related. The minor impacts associated with this project would be well outweighed by the overall long-term benefits to water quality, water distribution, and fire protection.

Section 9: AFFECTED ENVIRONMENT:

A wide variety of resources along with the related environmental, economic and social effects were considered during the development and evaluation of project alternatives. These include: noise levels; air quality; water quality; water supply; vegetation; fish and wildlife; wetlands; geological resources; growth patterns; archaeological and historical resources; esthetics; health and safety; and environmental justice.

Section 10: ENVIRONMENTAL CONSEQUENCES:

Primary resources of concern identified during the evaluation included: noise levels, air quality, water quality, fish and wildlife, vegetation, wetlands, geologic resources, archeological and historical resources, and esthetics. The proposed project is not expected to affect any other resources.

Noise levels

This resource is institutionally important because of the Noise Control Act of 1972. The act establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. A sound-level meter is used to measure noise and the outputs are “decibels.” For instance, a diesel truck at 50 feet produces a sound level of 85 decibels, a gas lawn mower at 3 feet produces a sound level of 95 decibels and normal speech at three feet is 65 decibels.

Recommended Plan

The recommended plan would result in minor short term construction related noise impacts. These impacts would result from the operation of heavy machinery during project construction. These noise levels would be in addition, but similar to, those produced by urban activity which routinely occurs around the project area. No residences, businesses, churches, park areas or other areas sensitive to increased noise levels were identified in the project area. There is a remote chance that the noise from project construction could disturb persons participating in outdoor recreation on land adjacent to the project area. Construction activities would be conducted during normal business hours and, therefore, would not be considered significant.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar noise related impacts as the recommended alternative. However, because components of the non-selected plans are not centrally located, noise related impacts would likely affect more of people in the community.

No Action

The “No Action” alternative would produce no increase in noise levels in the project area.

Air Quality

This resource is considered institutionally important because of the Clean Air Act (CAA) of 1963, as amended. Air quality is technically important because of the status of regional ambient air quality in relation to the National Ambient Air Quality Standards (NAAQS). It is publicly important because of the desire for clean air expressed by virtually all citizens.

In accordance with the CAA, the U.S. Environmental Protection Agency set National Ambient Air Quality Standards for pollutants considered harmful to the environment and public health. The six principal pollutants, also known as “criteria” pollutants, are: ozone, lead, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide. The proposed project is located in a non-attainment county for failing to meet the national ambient air quality standards for PM-10 (particulate matter less than 10 micrometers).

PM-10 includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO₂ and Volatile Organic Compounds are also considered particulate matter. PM exposure can affect breathing, aggravate existing respiratory and cardiovascular disease, alter the body's defense systems against foreign materials, and damage lung tissue, contributing to cancer and premature death. Individuals with chronic obstructive pulmonary or cardiovascular disease, asthmatics, the elderly and children are most sensitive to the effects of PM. Missoula County's non-attainment status is caused primarily from excessive wood-burning activity.

Recommended Plan

The recommended plan would result in minor short term construction related contributions to PM-10. These contributions would result from the operation of heavy machinery, increases in dust in the project area during construction operations, and wind-blown particles stemming from stock-piled construction materials. This increase in PM-10 levels would be in addition, but similar, to those produced by urban activity which routinely occurs in the project area. There is a remote chance that the increase in PM-10 from project construction could adversely affect individuals sensitive to air-borne particles or persons with breathing disabilities. Techniques to minimize PM-10 particles would be employed during construction activities. These techniques would include, but would not be limited to, wetting the construction area to minimize dust, avoiding idling of construction machinery when not performing needed tasks, and covering or mulching staging areas during or following construction activities. The recommended plan would also require the “off-gassing” of ammonia to the atmosphere. An ultimate release of ammonia gas to the atmosphere would be expected to quickly dissipate most likely without reaching any area residents. Thus, the temporary construction related impacts to air quality and the off-gassing of ammonia are not expected to be significant.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar air quality related impacts as the recommended alternative during construction. Similar minimization measures would be employed for this alternative.

No Action

The “No Action” alternative would produce no increase in adverse air quality levels in the project area over that of existing conditions.

Water quality

This resource is institutionally important because of the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act). The objective of this act is to restore and maintain the chemical, physical, and biological integrity of the nation’s waters by preventing point and non-point pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands. Water quality is technically important because of the need for a reliable drinking water supply, for swimming and recreating, for fish and shellfish consumption, for adequate agricultural supply, and for habitat for fish and wildlife. It is publicly important because of the desire for clean water expressed by virtually all citizens.

Groundwater

Groundwater is somewhat available across the Seeley Lake Sewer District in generally low quantities: yields are frequently less than 15 gallon per minute. A brief inventory of water quality data available indicated the water typically meets drinking water standards. Impacts to groundwater resources stem mainly from individual septic systems use throughout a large portion of the community.

Recommended Plan

The recommended plan would result in beneficial impacts to groundwater quality. With implementation of the water system improvement project, the Seeley Lake Sewer District would be able to pursue more vigorously its development of a community sewer collection and treatment system. With full development of the Seeley Lake Sewer District sewer collection and treatment facility, area residents would be allowed to receive public sewer connection and forego septic systems. Septic systems generally tend to introduce nitrogen into the ground water supply.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar groundwater quality related benefits as the recommended alternative.

No Action

The “No Action” alternative would not increase existing storage capabilities and would not allow the Seeley Lake Sewer District to pursue a common based community sewer system. Area residents would continue use of their private septic systems and ground water would continue to deteriorate overtime.

Surface Water

Seeley Lake and the Clearwater River are the main sources of surface water in the area. Seeley Lake provides the District’s drinking water supply and also is important as a popular recreation area for the community. Seeley Lake has an estimated total surface area of approximately 863 acres, a maximum depth of approximately 120 feet, and an estimated overall volume of approximately 52,000 acre feet. Additional surface waters within the vicinity of the District include the spring-fed perennial streams of Seeley Creek and Morrell Creek. Auggie Creek is a small ephemeral stream crossing the district at Rice Ridge Road and enters Seeley Lake on the east shore.

Recommended Plan

The recommended plan would have minor, temporary, construction related adverse impacts to water quality resulting from site runoff and increased turbidity. The minor impacts associated with the recommended plan would be avoided and/or minimized to the greatest extent possible through the implementation of Best Management Practices, measures required under the National Pollutant Discharge Elimination System (NPDES) permit, and through permitting requirements from other local and state authorities. Best management practices would minimize any incidental fallback of material into waterways during construction and would minimize the introduction of fuel, petroleum products, or other deleterious material from entering into the waterways. Such practices and measures would include, but not be limited to, the use of erosion control fences; storing equipment, solid waste, and petroleum products above the ordinary high water mark and away from areas prone to runoff; and requiring that all equipment be clean and free of leaks. To prevent fill from reaching water sources by wind or runoff, fill would be covered, stabilized or mulched, and silt fences used as required. The NPDES permit would be obtained prior to project construction. All appropriate measures would be taken to minimize erosion and storm water discharges during and after construction. As such, the impacts to surface water from construction of the proposed project would be considered not significant.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar surface water quality related impacts as the recommended alternative. Similar practices and measures would be incorporated to minimize adverse affects.

No Action

The “No Action” alternative would not cause any impacts to surface water quality as no construction would occur.

Terrestrial Vegetation, Fisheries, and wildlife

These resources are institutionally important because of Section 906 of the Water Resources Development Act of 1986, and the Fish and Wildlife Coordination Act of 1958, as amended. Forests are technically important because they provide necessary habitat for a wide variety of species, they often provide a variety of wetland functions and values, are an important source of lumber and other commercial forest products, and provide various consumptive and non-consumptive recreational opportunities. Forests also are important because the general public highly values them for aesthetic, recreational, and commercial uses. Wildlife and fisheries are technically important because they are a critical element of many valuable terrestrial and aquatic habitats; provide indicators of the health of various terrestrial and aquatic habitats; and many of the species are important commercial resources. Wildlife and fisheries are publicly important because of the high priority that the public places on their aesthetic, recreational, and commercial value.

Terrestrial Vegetation

The primary vegetation in the proposed project area consists of western red cedar, grand fir, western hemlock, western larch, Douglas fir, Engelmann spruce, ponderosa pine, and lodgepole pine: species typical of valley floors and higher, mountainous regions. Grassland consists of bunchgrass communities. Species include rough fescue, bluebunch, wheatgrass, Idaho fescue, prairie junegrass, and several species of needle grass. The area also supports a number of species of rare plants. There are fourteen vascular plants (ferns, forbs) and four nonvascular plants (mosses, liverworts) listed as Species of Concern within the area adjacent to the proposed project. Plants on the Species of Concern list are at risk due to their restricted distributions, overall species decline, and/or threats to their habitats. These rare plants utilize a variety of habitats; however, most are associated with wetlands and lakes.

Recommended Plan

The recommended plan would result in the removal of a few small caliper trees at the proposed tank site and near the Augie Creek crossing. The project would not impact any riparian trees adjacent to the creek. Minor impacts to grasses will occur throughout the proposed project site during construction activities. All other areas disturbed and not otherwise surfaced, will be top-soiled and seeded with a native seed mixture to prevent erosion. Thus, impacts to vegetation from the proposed project would not be considered significant.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar impacts to vegetation as the recommended alternative. Similar practices and measures would be incorporated to minimize adverse affects.

No Action

The “No Action” alternative would not cause any impacts to vegetation as no construction would occur.

Fisheries and Wildlife

Fisheries in the proposed project area (Clearwater River and Morrell Creek) consist of brown trout, mountain whitefish, rainbow trout, largescale sucker, longnose dace, longnose sucker, northern pike minnow, peamouth, pumpkinseed, redbside shiner, sculpin, kokanee, westslope cutthroat trout, largemouth bass, and yellow perch. Illegal fish introductions include northern pike, brook stickleback, and central mud minnow, all which pose threats to the native fish populations. The proposed project area has extensive biological resources including elk, mule deer, white-tailed deer, moose, and mountain goats. Small mammals include beaver, muskrat, otter, mink, skunk, porcupine, weasel, and raccoon. Rice Ridge, adjacent to the District, is thought to be the home of the greatest number of mountain lions in the region. Other predators include black bear, bobcat, lynx, coyote, wolf, fisher, pine marten, wolverine, and badger. Numerous passerines, waterfowl, and predatory birds (bald and golden eagle, red-tailed hawk, osprey, and several species of owl), and numerous amphibians also occur in the area. Areas within and adjacent to the District boundary provide habitat for up to 11 species of concern.

Bald Eagle. The bald eagle was de-listed by the USFWS on August 9, 2007. Even though the bald eagle was delisted, it is still protected by the Migratory Bird Treaty Act of 1918 and the Bald and Golden Eagle Protection Act of 1940. Bald eagles are yearlong residents in the project area, utilizing habitat along the Clearwater River and within the Blackfoot-Clearwater Wildlife Management Area. Active nesting sites are located along the Clearwater River. Bald eagles prefer nesting sites on the top of large, mature tress that are near lakes, rivers, and other water bodies. Bald eagle also prefers areas with limited human activity. Dead trees are strongly preferred as daytime perches, with the tallest trees being utilized most often. Bald eagles feed primarily on crippled waterfowl and fish, but will take upland game birds, other birds, rodents, and carrion. To avoid temporary and permanent nest abandonment, human activity near nests should be minimized from February through May.

Recommended Plan

The recommended plan would result in minor, temporary, construction related adverse impacts to fish and wildlife resources. The impacts to fishery resources would be related to site runoff and increased turbidity, which could make feeding, breeding, and sheltering difficult for species not accustomed to these conditions. The impacts to wildlife resources would be related to noise and visual disturbance during the construction activity. Because the construction would be temporary, impacts to fisheries and wildlife would not be considered significant. If construction is proposed to occur within the sensitive nesting period for bald eagle (February –

May), surveys for nesting bald eagles would occur each morning within a half-mile radius of where construction would take place. The construction site is 1.5 miles away from the only nesting bald eagle. If nesting bald eagles are sighted within a ½ mile radius, no construction activity would be performed on that day to avoid impacting the bald eagle. There are no known impacts to bald eagles in the area.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar impacts to fish and wildlife as the recommended alternative. Similar avoidance measures would be taken to limit impacts to bald eagles.

No Action

The “No Action” Alternative would have no impacts on fish and wildlife.

Threatened and Endangered Species

These resources are institutionally important because of the Endangered Species Act of 1973, as amended. Endangered or threatened species are technically important because the status of such species provides an indication of the overall health of an ecosystem. These species are publicly important because of the desire of the public to protect them and their habitats.

Missoula County contains several unique listed species. These species include the threatened grizzly bear (*Ursus arctos horribilis*), the threatened Canada lynx (*Lynx canadensis*), the endangered gray wolf (*Canis lupus*), the threatened bull trout (*Salvelinus confluentus*) and the threatened water howellia (*Howellia aquatilis*).

Grizzly Bear

The grizzly bear was listed as a threatened species in the lower 48 states under the Endangered Species Act on March 11, 1967. Grizzly bear populations have declined because of human-caused mortalities and habitat loss. Loss of habitat displaces bears to other areas, increasing their risks of encountering humans or human food attractants. Other impacts on grizzly bears are caused by open roads and an associated increase in poaching and accidental hunter harvests. Bears will use road areas, but their level of avoidance increases with higher levels of traffic.

The areas adjacent to the project area encompasses occupied grizzly bear habitat. The northern end of the Seeley Lake Valley serves as a movement corridor between higher elevation areas. The U.S. Fish and Wildlife Service (USFWS) designated this area as a Linkage Zone and continued protection would ensure connectivity between the Mission and Swan mountain ranges. Resident grizzlies have also been documented in and around Seeley Lake and the Blackfoot Clearwater Wildlife Management Area, specifically in the wetland complex of Placid Lake, near Boles Creek and Placid Creek, along the Clearwater River, and west and north of Seeley Lake.

Canada Lynx

Canada lynx was listed as a threatened species under the Endangered Species Act on March 24, 2000. Human alterations of forests, over-harvesting of the species, and increasing human numbers in previously untouched lynx habitat, has adversely affected its population. The population in the Clearwater Valley, though small, is among the highest in the lower 48 states and is relatively isolated. Lynx utilize a large portion of lands adjacent to the proposed project area. Preliminary data on lynx show primary use areas include Mount Henry, Richmond Ridge, Horseshoe Hills, and the area north of Mount Henry to the watershed divide (including Marshall Creek, Uhler Creek, Colt Creek and its sub-drainages). In addition, sub-drainages off Placid Creek including Finley, Buck, Grouse, Second, and First Creeks are particularly important as well.

Gray Wolf

The gray wolf was listed as an endangered species under the Endangered Species Act on March 11, 1967. The gray wolf is considered a transient species in and around the proposed project area.

Bull Trout

The USFWS listed the bull trout as a threatened species on November 1, 1999. Bull trout are close to extinction in Salmon Lake, and their populations have declined by more than 90 percent in Inez and Seeley Lakes. Morrell Creek has been designated as critical habitat for bull trout. Factors influencing the decline of bull trout include habitat degradation and fragmentation, the obstruction of their migratory corridors, poor water quality, the introduction of nonnative species, dams and other diversions, road construction and maintenance, and urban and rural development. Efforts to maintain and restore bull trout and westslope cutthroat trout populations currently are underway.

The Clearwater Valley is one of the primary population areas of the threatened bull trout, providing important habitat for both river and lake populations of this species. It also supports healthy populations of westslope cutthroat trout, a species of concern in Montana. Fish are an indicator species for the overall health and biological integrity of an ecosystem. In addition, fishing is a popular recreational activity on the eight major lakes, along the main stem of the Clearwater River, and in the drainages and sub-drainages of creeks within the valley. The spread of exotic species, especially the northern pike released in the Valley in the late 1980s and early 1990s, has profoundly impacted the sport fishery. Since the northern pike introduction, native fish species' populations have declined dramatically, by 70 percent to more than 90 percent.

Water Howellia

Water howellia was listed as a threatened species under the Endangered Species Act on July 14, 1994. Although water howellia is found within Missoula County and habitat conditions for this species exist in the action area, this federally listed threatened plant species is not known to occur in the proposed project area.

Recommended Plan

The recommended plan would have no significant adverse effects on any Federally-listed threatened or endangered species or their habitat but may affect these species during construction. The Corps determined that the proposed work is not likely to adversely affect grizzly bear, Canada lynx, gray wolf, or bull trout and the USFWS concurred with this determination in an e-mail sent December 17, 2008. The Corps determined that the work will have no effect on water howellia. The rationale for these effect determinations is summarized below.

Grizzly bears are found primarily, although not limited to, areas identified as Recovery Zones. Three Recovery Zones are found in the state of Montana. These Recovery Zones are known as the Yellowstone area in southwest Montana, the Northern Continental Divide Ecosystem in north central Montana, and the Cabinet Yaak area of northwest Montana. The recommended plan would likely cause minimal construction related effects to grizzly bear, which would likely cause bears to avoid the immediate vicinity of project during construction activities. Canada lynx use large portions of habitat adjacent to the area. The recommended plan would likely cause minimal construction related affects to Canada lynx, which would likely result in avoidance during construction activities. Gray wolves are transient in the project area. The recommended plan would likely cause minimal construction related affects to gray wolf, which would likely result in avoidance during construction activities. Bull trout are found in streams adjacent to the proposed project area and within Morrell Creek, which has been designated as critical habitat for bull trout. The proposed project would avoid impacts to bull trout and its designated critical habitat by avoiding impacts to the creeks during creek crossings. Avoiding stream crossing and riparian habitat removal is essential to avoiding affects to this species and its critical habitat. To this end, the U.S. Corps of Engineers has required that riparian areas not be disturbed and that boring and directional drilling under the creeks be conducted at Seeley Creek and Morrell Creek during creek crossings. Augie Creek is an ephemeral creek and, according to the project plan sheets, will be open cut during the installation of the 16-inch PVC transmission main. Assuming that the Augie Creek crossing is performed when the creek is dry and riparian habitat is avoided, no impacts to bull trout would occur at this site. Thus, the proposed project would not result any impacts to bull trout. Water howellia is not known to occur in the proposed project area, thus, no impacts to this species would be expected.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar impacts to endangered and threatened species as described for the recommended alternative. Similar measures for bull trout would be conducted under this alternative.

No Action

The “No Action” alternative would have no adverse effects on any Federally-listed threatened or endangered species or their habitat. No impacts to any state listed threatened or endangered species or their habitat were identified.

Wetlands, Riparian, and Aquatic Vegetation

These resources are institutionally important because of the Clean Water Act of 1977, as amended and Executive Order 11990 of 1977 (Protection of Wetlands). Wetlands and riparian areas are important because they provide habitat for various species of plants, fish, and wildlife, serve as ground water recharge areas, provide storage areas for storm and flood waters, serve as natural water filtration areas, provide protection from wave action, erosion, and storm damage, and provide various consumptive and non-consumptive recreational opportunities. Wetlands and riparian areas are publicly important because of the high value the public places on the functions and values that these habitats provide.

The Seeley Lake area is well known for its extensive and diverse wetlands, streams, and chain of lakes located in the valley bottom. Wetlands are lowlands that are covered with either shallow water or intermittent or temporary water. Wetlands in the area are generally categorized as fens, marshes, vernal pools, and shallow lakeshores and ponds.

In the Clearwater Valley, wetlands support a very wide diversity of species, and include important habitat for wildlife Species of Concern such as grizzly bear, lynx, bald eagle, and common loon. A variety of other vertebrates and invertebrates utilize this habitat for forage and cover. Properly functioning wetlands perform important ecosystem functions such as water quality improvement and floodwater storage.

Riparian communities along creeks and rivers also provides a variety of significant ecosystem functions that include water storage, aquifer recharging, streambank stabilization, dissipating wave energy, and filtering of nutrients, sediment and other pollutants. Some common trees species associated with riparian communities in the planning region include sub-alpine fir, Engelmann spruce, black cottonwood, and trembling aspen. A variety of willows, alders, and red-osier dogwood dominate the shrub layers. There are ongoing efforts to enhance and restore riparian areas along Swamp, Morrell, Trail, Mountain, and Drew creeks.

Aquatic plant communities exist in open water such as streams, rivers, ponds, and lakes and are characterized by sparse, submersed vegetation. Submersed aquatic plants, often called macrophytes, function ecologically to dissipate wave energy, stabilize sediment, ameliorate water quality, and provide cover, habitat and forage for lake fauna.

Recommended Plan

The recommended plan would have no impacts to wetlands as these habitats are not found within the construction footprint of the proposed project. Riparian vegetation would be avoided and not adversely impacted during stream crossings. Noxious weed treatments prior to and following ground disturbing activities would be performed to minimize weed establishment from entering any nearby wetland areas. Additionally, all equipment to be used off road would be washed prior to entering the project area to minimize the potential for weed distribution and establishment.

Elevated Tank Alternative

The Elevated Tank Alternative would have no impacts to wetlands or riparian areas. Riparian tree species also would be avoided under this alternative.

No Action

The “No Action” Alternative would result in no impacts to wetlands or riparian vegetation.

Geology

Seeley Lake resides in the valley between the Swan Mountain Range and the Mission Mountain Range. The region is heavily influenced by the effects of both continental and local mountain glacial activity. Significant layers of glacial till makeup the valley floor to depths up to 600 feet of poorly sorted sand, gravel, cobbles to boulders, collectively referred to as Quaternary Alluvium. Closer to the confining mountain ranges, the layers of alluvium thin and give way to meta-sedimentary rock, located higher up on the mountain sides. While the majority of the Water District spans relatively minor changes in elevation, the northeast side of the District and the water treatment plant location include areas that are significantly elevated.

Soil Types

The NRCS has performed soil surveys throughout the Seeley-Swan Valley and has mapped the results. The Town of Seeley Lake primarily sits on a gravelly silt loam. Soil surveys from the NRCS were available from the NRIS Website. The predominant soil types present within the district are described as follows:

“Glaciercreek Gravelly Silt Loam” (Mapping Unit Symbol - 42) on 0 to 4 percent slopes. Forestland is the predominant vegetation overlaying these soils consisting of an upper layer of gravelly silt loam 12” – 18” thick giving way to coarse gravelly sand to depths of five or more feet.

“Udorthents-Glaciercreek Complex” (112); on 0 to 4 percent slopes. Forestland is the predominant vegetation overlaying these soils. The layers formed in alluvial deposits leaving a top layer of gravelly silt loam followed by gravelly coarse sand, extremely loamy sand and extremely cobbly sand.

“Wildgen Gravelly Loam” (124) on 4 to 30 percent slopes. These soils are associated with timber production, watersheds, and wildlife habitat. The potential native vegetation is Douglas fir and ponderosa pine with an understory of common snowberry, mallow ninebark, pinegrass, rough fescue, and Idaho fescue. These soils are on mountain slopes and moraines in glaciated valleys. Limited areas within the District include this soil classification with the top 6-inches of gravelly loam followed by a deep layer of very gravelly loam.

Recommended Plan

The recommended plan would result in permanent construction related impacts to these soils as a result of the proposed project. Earth-moving equipment would be used to dig, grade, and shape the soils during construction activities as components of the project are built. Following construction activities, landscaped vegetation would be planted for easy maintenance of the grounds. This, over time, would likely change the characteristics of the soils. Ground disturbing activities would be kept to a minimum. Because significant amounts of these soils occur throughout and adjacent to the project area and because these soils have been disturbed in the past for construction of the existing facility, these impacts would be considered minor and not significant.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar impacts to native soils as the recommended plan. The impacts also would be considered minor and not significant.

No Action

The “No Action” Alternative would result in no impacts to native soils.

Growth Patterns

Using census data and District boundary maps, the current service area population for the Seeley Lake – Missoula County Water District was estimated. Based on this estimation, the maximum current population of the Water District is approximately 1,062 to 1,190 persons. Further growth in this same area is virtually restricted due to the lack of a community wastewater disposal system.

However, taking the proposed improvements to the Seeley Lake – Missoula County Water District into account, a much different growth scenario is possible. Based upon the approach used to estimate the maximum potential service area population over a 20-year interval, a total of 884 persons could be added to the District. Therefore, the estimated future population of the District would be approximately 2,074 persons.

Recommended Plan

The recommended plan would have long-term minor impacts on growth patterns in the District. These impacts, however, would occur over a long period of time and likely not be significant.

Elevated Tank Alternative

The Elevated Tank Alternative would have similar long-term minor impacts on growth patterns in the District.

No Action

The “No Action” Alternative would result in potentially no growth patterns in the District.

Archeological and Historical (Cultural) Resources

These resources are considered institutionally important as the National Historic Preservation Act of 1966, as amended requires Federally-funded actions to consider the effects of the actions on them. Cultural resources are technically important because they are irreplaceable parts of the common heritage of humanity; preserve our invaluable heritage for the benefit of the future generations, and provide a greater understanding of our past. They are publicly important because they belong to all citizens and enhance our shared sense of humanity that enriches our existence.

Recommended Plan

Based on the scope of the proposed project, some of the proposed project activities would occur in previously disturbed areas or within existing roadways. These proposed activities include modifications to the distribution system and transmission mains. However, other components, such as the tank location alternatives, would include placement of the facilities in undisturbed land.

The recommended plan would have no effect on historic properties. Mr. Justin Moschelle, Archaeologist with the Lolo National Forest, conducted a field survey and produced a negative inventory. No new sites were located in the project area, and no adverse effects will occur to already existing sites near the project area.

If in the unlikely event that archeological material is discovered during project construction, work in the area of discovery will cease, the discovery would be investigated by a qualified archeologist, and the find would be coordinated with the SHPO and the Tribes.

Elevated Tank Alternative

The Elevated Tank Alternative would have No Effect on Historic Properties per the assessment conducted by Mr. Justin Moschelle.

No Action

The “No Action” Alternative would result in no effects on archaeological or historical resources.

Esthetics

Recommended Plan

The recommended plan would result in minor and temporary adverse esthetic impacts associated with the construction activity. The human population that could potentially be affected by the activity would be expected to be very low and restricted to the occasional individual passing by the project area. To minimize esthetic impacts, the proposed project would color the new tank to match existing facility structures and to blend in with the natural

surroundings and site conditions. Plantings acceptable to the Forest Service would be used to help screen the partially buried tank. As such, the impacts on esthetics would not be considered significant.

Elevated Tank Alternative

Area residents stated that if the Elevated Tank alternative was constructed, the surrounding esthetics would be compromised. The residents stated that an elevated tank would constitute an “eye-sore” or a disadvantage to the scenic backdrop of the Seeley Lake community.

No Action

The “No Action” Alternative would result in no esthetic related impacts to the community.

Section 11: SUMMARY OF ENVIRONMENTAL EFFECTS OF THE NON-RECOMMENDED PLANS

The Elevated Tank Alternative has not been recommended because, although it would meet the project purpose and need of providing an improved water system facility for the town of Seeley Lake, the Elevated Tank Alternative was more expensive than the recommended plan and caused an esthetic disadvantage in the Seeley Lake community. Other impacts on the environment were similar to the recommended plan as described in the preceding sections of this assessment.

The “No Action” Alternative has not been recommended because it would not meet the project purpose and need of providing an improved water system facility for the town of Seeley Lake. The “No Action” alternative would have no permanent or temporary construction related impacts. The “No Action” alternative would continue to provide the Lake Seeley community with inadequate accumulation of disinfection byproducts, limited water storage, inadequate water pressures, and inadequate fire protection. This in turn would continue to expose all public and private infrastructures to a higher risk level of future water shortages, backflows into the system, and potential increases in insurance premiums due to the inadequate fire protection. People’s livelihood and social well-being would remain in turmoil; subject to these continuous threats until the water system facility was improved. Failure to improve the community water system facilities could adversely affect the tax base by limiting community growth. In addition, potential losses of life could also be incurred if fire flows are not remedied.

Section 12: CUMULATIVE IMPACTS

The combined incremental effects of human activity are referred to as cumulative impacts (40CFR 1508.7). While these incremental effects may be insignificant on their own, accumulated over time and from various sources, they can result in serious degradation to the environment. The cumulative impact analysis must consider past, present, and reasonably foreseeable actions in the study area. The analysis also must include consideration of actions outside of the Corps, to include other State and Federal agencies. As required by NEPA, the

Corps has prepared the following assessment of cumulative impacts related to the alternatives being considered in this EA.

Historically, the Seeley Swan area was altered by settlement as early as the 1870's. Ranching, livestock, farming, water diversion from the Clearwater River, timber harvest, and construction of roads and bridges were some of the activities that took place in and around the area. These activities substantially altered the terrestrial and aquatic ecosystem within the Clearwater River watershed.

Currently, the Seeley Lake Community is undertaking studies and reviewing planning documents concerning land use classifications, population expansion, land ownership, increasing tourism and recreation, forest fires, and maintenance of biological diversity. To this end, the Lake Seeley Regional Plan proposes a prioritization of development and classifies lands as Resource Protection Lands in order to help protect high value fish and wildlife habitat, forest production, wetlands, and other resources. The first order lands, designated as Resource Protection Lands 1, seek to limit development (1 dwelling per 160 acres) for the protection of critical lands and species of concern. The second order Resource Protection Lands include lands that could incorporate carefully designed development (1 dwelling per 80 acres) to limit impacting wildlife of importance but not considered "special concern". Floodway development is also limited under this designation to agricultural structures or other uses not subject to flood damage. No other development is recommended in the areas. Resource Protection Land 3 contain resource values, but of less critical concern than Resource Protection Lands 1 and 2. Recommended base development is proposed a 1 dwelling per 40 acres. These lands support productive forest lands, riparian areas, and wetlands. Other designations include: Rural Residential, Residential, Town Residential, General Commercial, Town Commercial, and Mixed Use. The Plan sets strict guidelines for development in these areas as well. Development typically result in minor short term construction related impacts to fish and wildlife and the habitats upon which they depend. Resources typically affected by these types of projects generally include, but are not limited to, wetlands, flood plain values, water quality, and fish and wildlife habitat.

Of the reasonably foreseeable projects and associated impacts that would be expected to occur, further urbanization of the area will probably have the greatest impact on the previously mentioned resources. The possibility of wetland conversion and the clearing of riparian habitat are ever present, and these activities tend to further impact valuable resources.

The adverse effects associated with the proposed project are short term/minor associated with project construction. These minor adverse effects would be greatly offset by improving the water system facilities for the Lake Seeley community, thereby providing social and economic benefits to the existing community. An underlying purpose of the proposed project is to provide improvements to the water system in order to provide for increased community development. As such, the proposed project would contribute to cumulative growth related impacts.

Compliance of Preferred Alternative with Environmental Protection Statutes and Other Environmental Requirements

Bald and Golden Eagle Protection Act, 16 U.S.C. Sec. 668, 668 note, 669a-668d. *In compliance.* This Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions for the scientific or exhibition purposes, for religious purposes of Indian tribes, or for the protection of wildlife, agriculture or preservation of the species. The Corps has, and will continue, to coordinate with the USFWS and the appropriate state agency to avoid taking the species during construction activities, and will follow the USFWS's guidelines regarding eagle nests.

Clean Air Act, as amended, 42 U.S.C. 185711-7. et seq. *In compliance.* The purpose of this Act is to protect public health and welfare by the control of air pollution at its source. Some temporary emission releases are expected during construction activities; however air quality is not expected to be impacted to any measurable degree.

Clean Water Act, as amended. (Federal Water Pollution Control Act) 33 U.S.C. 1251, et seq. *In compliance.* The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 U.S.C. 1251). The Corps regulates the discharges of dredge or fill material into waters of the United States pursuant to Section 404 of the Clean Water Act. This permitting authority applies to all waters of the U.S., including navigable waters and wetlands. The selection of disposal sites for dredged or fill material is done in accordance with Section 404(b)(1) guidelines, which were developed by the U.S. Environmental Protection Agency (EPA) (see 40 CFR Part 230). General permits are a type of authorization that is issued on a nationwide or regional basis for a category of activities. Activities that are authorized under general permits must be substantially similar in nature and cause only minimal individual or cumulative adverse affects on the aquatic environment. Nationwide permits are a type of general permit that authorize certain specified activities nationwide that have been authorized after meeting requirements of NEPA and extensive coordination with the EPA and other federal agencies. This project would require approval from the Montana Department of Environmental Quality with respect to the storage and handling of disinfection chemicals.

Endangered Species Act, as amended. 16 U.S.C. 1531, et seq. *In compliance.* Section 7 (16 U.S.C. 1536) states that all Federal agencies shall, in consultation with the Secretary of the Interior, ensure that any action authorized, funded, or otherwise carried out by them do not jeopardize the continued existence of any threatened or endangered species, or result in the destruction or adverse modification of critical habitat. The USFWS in Helena, Montana emailed the Corps on December 17, 2008, in response to a Corps email of December 5, 2008, with attached Biological Assessment. The purpose of the email exchange was to obtain concurrence from the Service with the Corps determination that the proposed project is not likely to adversely affect the threatened grizzly bear, the threatened Canada lynx, or the endangered gray wolf. The Service concurred with these determinations (Attached). Additionally, the Corps stated in the Biological Assessment that the proposed project would have no impacts on the threatened bull trout or the threatened water howellia. The Service does not provide concurrence with a "no

impact” determination but rather provides comments if affects are expected. No additional comments were received. This concludes consultation with the Service.

Environmental Justice (E.O. 12898). *In compliance*. Federal agencies shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States. The project does not disproportionately impact minority or low-income populations.

Farmland Protection Policy Act, 7 U.S.C. 4201. Et seq. *In Compliance*. Farmland would not be adversely impacted by the proposed project.

Federal Water Project Recreation Act, as amended, 16 U.S.C. 460-1(12), et.seq. *Not Applicable*. The Act establishes the policy that consideration be given to the opportunities for outdoor recreation and fish and wildlife enhancement in the investigating and planning of any Federal navigation, flood control, reclamation, hydroelectric, or multi-purpose water resource project, whenever any such project can reasonably serve either or both purposes consistently. No coordinated use with existing or planned Federal, state or local public recreation development was considered when this facility was originally constructed, and improvements will not increase or decrease any recreational use.

Fish and Wildlife Coordination Act. 16 U.S.C., 661 et seq. *In compliance*. The FWCA requires governmental agencies, including the Corps, to coordinate activities so that adverse affects of fish and wildlife will be minimized when water bodies are proposed for modification. No water bodies will be modified as part of this project.

Flood Plain Management (E.O. 11988) 42 CFR 26951. *In compliance*. The purpose of this Order is that each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. The proposed project area is not within the 100-year flood plain of the Clearwater River. No encroachment upon or construction within the flood plain downstream of Seeley Lake would occur.

Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712) as amended. *In compliance*. The Migratory Bird Treaty Act (MBTA) of 1918 is the domestic law that affirms, or implements, the United States’ commitment to four international conventions with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possessing, transporting, and importing of migratory birds, their eggs, parts, and nests. The take of all migratory birds is governed by the MBTA’s regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over-utilization. Executive Order 13186 (2001) directs executive agencies to take certain actions to implement the Act. Construction for this project will occur between May 2009

and August 2009. Because this is within the active nesting season for migratory birds, surveys of treed areas will be conducted prior to construction to determine if migratory birds are actively nesting. In the event they are, work will be halted and the appropriate agencies contacted.

National Historic Preservation Act, as amended, 16 U.S.C. 470a, et seq. *In compliance.*

Federal agencies having direct or indirect jurisdiction over a proposed Federal or Federally assisted undertaking shall take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places. During field explorations for the Seeley Lake Water Tank Expansion Project area, Mr. Justin Moschelle, Archaeologist and the Heritage Team with the Lolo National Forest produced a negative inventory of the site. No new sites were located in the project area, and no adverse effects will occur to already existing sites near the project area. Although the potential for encountering previously unrecorded cultural resources at the project is extremely low, if the contractor encounters materials of an archaeological nature during excavations, the contractor will cease work in the vicinity immediately and contact the Corps.

National Environmental Policy Act (NEPA), as amended, 42 U.S.C. 4321, et seq. *In compliance.* This Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) have been prepared for the proposed action. An Environmental Impact Statement (EIS) is not required.

Noise Control Act of 1972, 42 U.S.C. Sec. 4901 to 4918. *In compliance.* This Act establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. Federal agencies are required to limit noise emissions to within compliance levels. Noise emission levels at the project site will temporarily increase above current levels due to construction; however, appropriate measures will be taken to keep the noise level within compliance levels (e.g., performing construction during daylight hours, avoiding idling of machinery when not in use, etc.). No long-term noise over existing conditions will result following project construction.

Rivers and Harbors Act, 33 U.S.C. 401, et seq. *Not Applicable.* A Section 10 Permit is not required for Corps projects and no navigable waterbodies will be affected by the proposed work.

Wild and Scenic Rivers Act, as amended, 16 U.S.C. 1271, et seq. *Not applicable.* The area in which the proposed construction activity would occur is not designated as a wild or scenic river, nor is it on the National Inventory of Rivers potentially eligible for inclusion.

Section 13: MITIGATION MEASURES

The recommended plan will result in minor impacts (i.e., removal) to trees during construction but no riparian trees would be removed. For creek crossings, boring or directional drilling under the creek will be implemented to prevent impacts to the threatened bull trout and its critical habitat. Coloration of the storage tank to match the current tank color and to blend in with the natural sites conditions would help to minimize aesthetic impacts. Measures under the National Pollutant Discharge Elimination System (NPDES), such as minimizing ground disturbance, washing off-road equipment prior to entering construction sites, and seeding, mulching, and fertilization of disturbed areas to reduce weed establishment and prevent erosion will be implemented.

Section 14: COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES

Compliance with Designated Environmental Quality Statutes that have not been specifically addressed earlier in this report is covered in Section 12, Cumulative Impacts.

Section 15: CONCLUSION & RECOMMENDATION

Based on the analysis of the proposed alternatives, it is concluded that the recommended plan would best satisfy the projects purpose and need and result in the least amount of environmental impacts. The recommended plan would result in construction related impacts to Federally-listed threatened or endangered species or their habitat but these impacts would not be adverse or significant. The recommended plan would result in no impacts to any properties listed, proposed for listing, eligible for listing, or potentially eligible for listing in the National Register of Historic Places. Areas within the proposed project site would be temporarily disturbed by construction activity. The adverse effects associated with the proposed project are short term/minor, long term minor and associated with project construction and operation. These minor adverse effects would be greatly offset by improving the Seeley Lake – Missoula County Water District water system. Of all the alternatives considered, the recommended plan is recommended because it can be reasonably implemented and is consistent with protection of the nation's environment.

Based on coordination with the resource agencies (Montana Forest Service, National Resource Conservation Service, Department of the Interior Fish and Wildlife Service, Forest Service, Montana Fish Wildlife and Park), as documented in this EA, the Corps has made a preliminary determination that this project would have no significant impacts on the human environment including natural and cultural resources and Federally-listed threatened and endangered species; therefore, a Finding of No Significant Impact (FONSI) has been prepared.

Section 16: PREPARER

This EA and the associated FONSI were prepared by Mr. Matthew D. Vandenberg (Environmental Resource Specialist). The address of the preparer is: U.S. Army Corps of Engineers, Omaha District; PM-AE, 1616 Capitol Avenue, Omaha, NE 68102.

APPENDIX I – AREA MAPS

**SECTION 595 of WRDA 99
SEELEY LAKE
WATER SYSTEM IMPROVEMENTS PROJECT
MISSOULA COUNTY, MONTANA**

February 2009

LAKE SEELEY, MISSOULA COUNTY, MONTANA

