Draft Environmental Assessment

Lake Bronson Dam Rehabilitation

EMC-2024-GR-05006

Minnesota Department of Natural Resources

Kittson County, Minnesota

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FEMA

Federal Emergency Management Agency
Region 5
Department of Homeland Security
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Acronyms and Abbreviations

AA	action area
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
BWSR	Board of Water and Soil Resources
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
C.F.R.	Code of Federal Regulations
cfs	cubic feet per second
CWA	Clean Water Act
dBA	A-weighted decibels
DNL	day-night average sound level
EA	environmental assessment
EAW	Environmental Assessment Worksheet
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EQB	Environmental Quality Board
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FONSI	finding of no significant impact
HHPD	High Hazard Potential Dam
KCWRP	Klondike Clean Water Retention Project
LGU	Local Government Unit
MBTA	Migratory Bird Treaty Act
Minn. R.	Minnesota Rules
MnDOT	Minnesota Department of Transportation
MNDNR	Minnesota Department of Natural Resources
MOA	Memorandum of Agreement
MPCA	Minnesota Pollution Control Agency
mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollution Discharge Elimination System
NRCS	U.S. Natural Resources Conservation Service
NRHP	National Register of Historic Places

OHWL	Ordinary High-Water Level
PM	Particulate Matter
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
SDS	State Disposal System
SHPO	State Historic Preservation Office
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
WCA	Wetland Conservation Act
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WoUS	waters of the United States
WPA	Works Progress Administration

SECTION 1. Introduction

1.1. Project Authority

The Minnesota Department of Natural Resources (MNDNR) submitted a High Hazard Potential Dam (HHPD) grant application to the Federal Emergency Management Agency (FEMA). The grant application requested funding for the rehabilitation of the Lake Bronson Dam. This project would include the removal and replacement of the concrete spillway and associated bridge. The HHPD grant program is authorized by Section 5006 of the Water Infrastructure Improvements for the Nation Act of 2016, 33 United States Code (U.S.C.) § 467f.

This environmental assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. Sections 4321–4370h; the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 Code of Federal Regulations [C.F.R.] Parts 1500 to 1508)[1]; the U.S. Department of Homeland Security's Directive 023 01, Revision 1, Implementation of the National Environmental Policy Act (October 31, 2014); U.S. Department of Homeland Security's Instruction Manual 023-01-001-01, Revision 1, Implementation of the National Environmental Policy Act (November 6, 2014); FEMA Directive 108 01, Environmental Planning and Historic Preservation Responsibilities and Program Requirements (August 22, 2016); and FEMA Instruction 108-01-1, Instruction on Implementation of the Environmental and Historic Preservation Responsibilities and Program Requirements (August 22, 2016). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed project. FEMA will use the findings in this EA to determine whether to prepare an environmental impact statement for the proposed project or to issue a Finding of No Significant Impact (FONSI).

In accordance with federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of alternatives and a discussion of the potential environmental impacts. As part of this NEPA review, the requirements of other environmental laws and executive orders (EOs) are addressed.

1.2. Project Location and Background

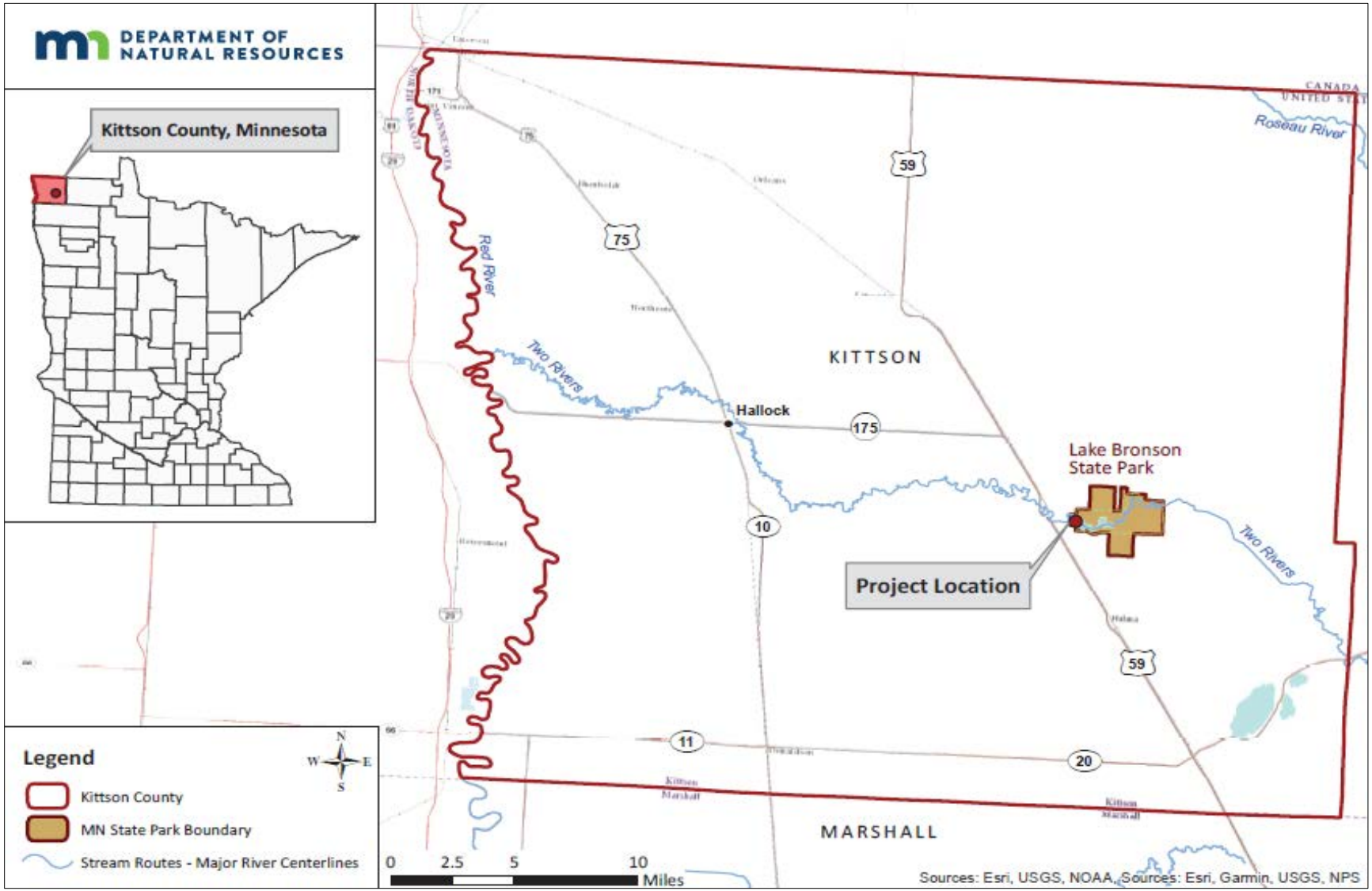
The proposed project area is located within Lake Bronson State Park (**Figure 1-1**), in Kittson County, Minnesota. The park is approximately one mile east of the City of Lake Bronson and twenty miles south of the Canadian border (**Figure 1-2**). Lake Bronson State Park consists of 4,300 acres in its

[1] Consistent with E.O. 14154, CEQ has rescinded the NEPA regulations, effective April 11, 2025, and is working with Federal agencies to revise or establish their own NEPA implementing procedures. Per CEQ Guidance, while revisions are ongoing, agencies should continue to follow their existing practices and procedures implementing NEPA and can voluntarily rely on the regulation in 40 C.F.R. 1500-1508 in completing ongoing NEPA reviews (Implementation of the National Environmental Policy Act, February 19, 2025).

statutory boundary and annually welcomes over 100,000 visitors and 10,000 overnight visitors. Lake Bronson was created by the Lake Bronson Dam located on the South Branch Two Rivers as it flows from east to west. County Highway 28 runs the length of the dam, bridging the spillway.

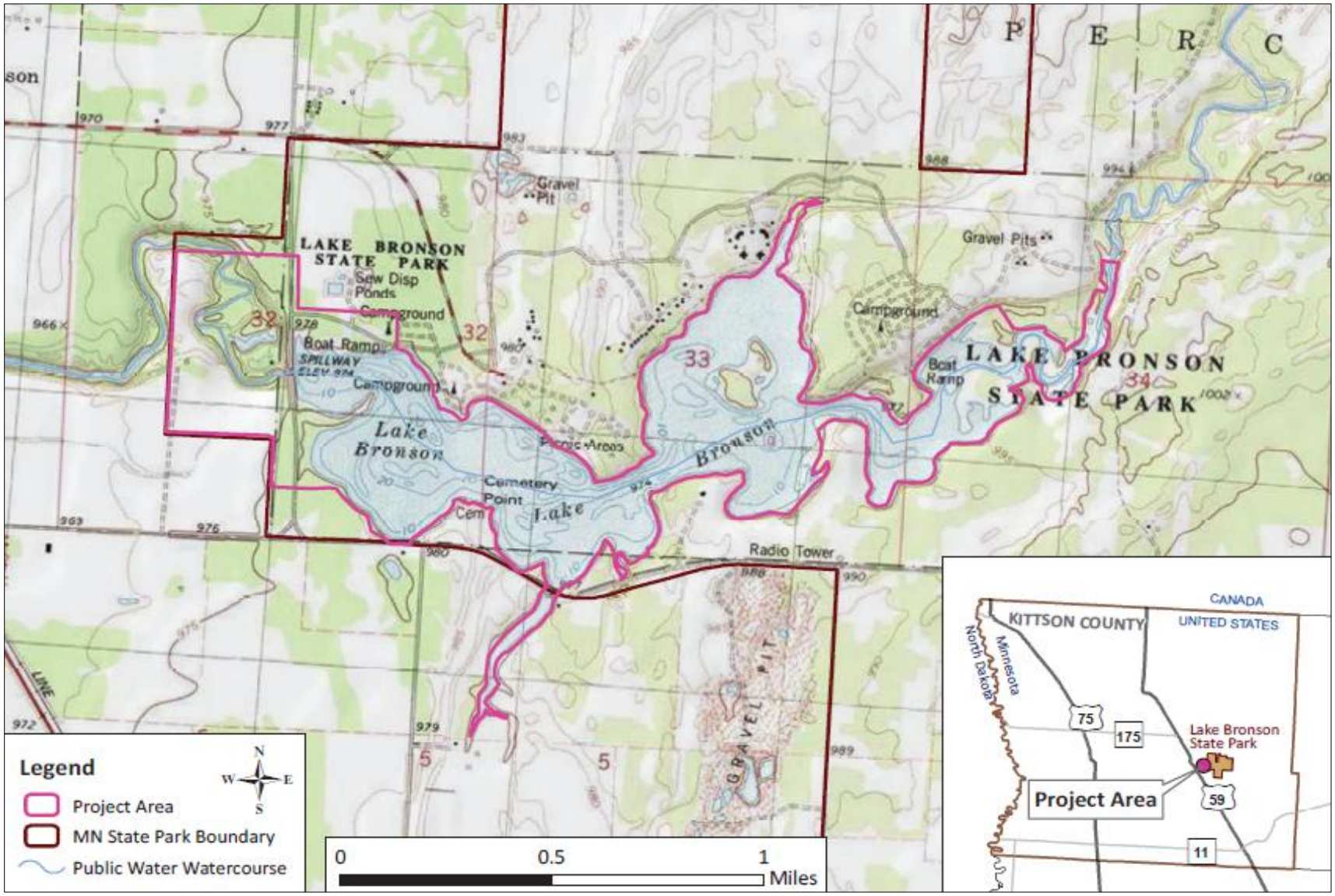
The project area is located within a National Register of Historic Places (NRHP) historic district. The dam has undergone several modifications over the past 80 years. These modifications include new gates, new gate operators, erosion protection crib walls on the downstream side of the spillway, a raise of dam embankment by construction of a bike trail on the upstream side, construction of emergency spillway diversion embankments, riprap scour protection, six relief wells on the downstream side, and the installation of instrumentation, including open pipe piezometers and vibrating wire piezometers, that monitor internal pore water pressure and groundwater levels.

Figure 1-1. Project Vicinity



Source: MNDNR 2023

Figure 1-2. Proposed Project Area



Source: MNDNR 2023

1.3. Purpose and Need

The purpose of the HHPD Grant program is to provide technical, planning, design, and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams. See Section 7 for references listed by author or agency and year of publication.

The purpose of the proposed project is to rehabilitate the Lake Bronson Dam, in Lake Bronson, Kittson County, Minnesota. A "High Hazard" classification is assigned to the Lake Bronson Dam by the MNDNR following FEMA's "Federal Guidelines for Dam Safety" (FEMA Publication 93), meaning that failure or mis-operation of the dam could lead to loss of life downstream. The dam is also listed as "poor" condition in the National Inventory of Dams, meaning dam safety deficiencies are recognized and need to be addressed. One deficiency is the inadequate hydraulic capacity of the spillway. The spillway at the Lake Bronson Dam spillway is not large enough to pass a major flood. Additionally, the 85-year-old concrete spillway is deteriorating as shown by numerous cracks, spalls, and exposure of steel reinforcement to the elements. High pore water pressures within the dam embankment could also lead to instability.

The rehabilitation of the Lake Bronson Dam would be managed by the MNDNR and its consultants and contractors. The purpose of the project is to improve the safety of the dam. The rehabilitation of the dam is necessary to mitigate the risks associated with a high hazard dam that is in poor condition. The project would make the dam safer and less likely to fail, benefitting the safety and welfare of individuals downstream of the dam.

The reservoir created by the dam (Lake Bronson) is a regional recreational attraction as it is the only lake suitable for motorized watercraft use in Kittson County, and it is the centerpiece of the state park. Lake Bronson is also one of the few tourist attractions in this part of the state as much of the surrounding land use is based in agricultural pursuits. Construction of the project would ensure the reservoir can be maintained at current levels into the future, without having to implement risk reduction measures such as lowering the reservoir to reduce the probability of dam failure. Business owners and the local economy in the City of Lake Bronson would benefit from having a stable lake level and safe dam with recreational tourists visiting the park and spending money for food, gas, and supplies in the City of Lake Bronson.

1.4. State Environmental Review

In Minnesota, certain projects must go through an environmental review, overseen by the state's Environmental Quality Board (EQB), before any required permits or approvals are issued. According to the rules of the EQB, Minnesota Rules (Minn. R.) 4410.4300, Subpart 27, public waters, public waters wetlands, and wetlands, and Subpart 31, historical places, the project required the preparation of a State Environmental Assessment Worksheet (EAW). The MNDNR prepared an EAW for the proposed project and a Record of Decision (ROD), concluding this environmental review, was signed on December 4, 2023. The MNDNR determined an Environmental Impact Statement would not be required for this project.

The project location, scope, purpose, and need all remain unchanged from the original state review. While FEMA is not able to adopt the state-level findings as a federal decision document, the information contained within the state review may be used to streamline the federal analysis. Therefore, this EA was prepared using information identified in the EAW and ROD.

SECTION 2. Alternatives

This section describes the No Action alternative, the Proposed Action, and alternatives that were considered but dismissed.

2.1. Alternative 1 – No Action

The No Action alternative is included to describe potential future conditions if no action is taken to repair the Lake Bronson Dam. Under the No Action alternative, there would be no federal funding for the construction and repair currently proposed to be funded by the HHPD grant program. Under this alternative, the downstream community of the City of Lake Bronson, as well as natural habitats, would be at risk for loss of life, significant infrastructure damage, and members may be forced to relocate.

2.2. Alternative 2 – Proposed Action

The Proposed Action includes removal of the concrete spillway and bridge and construction of a concrete labyrinth weir, a concrete spillway, a concrete bridge with bike lane, a seepage cutoff wall, and a new earthen embankment in place of the old concrete spillway. The total disturbed area from the Proposed Action is approximately 20 acres.

2.2.1. CONSTRUCTION OF NEW SEEPAGE CUTOFF WALL

Construction of the new seepage cutoff wall would occur in two phases. Phase 1 (south half) would occur prior to any excavation for the upper portion of the new spillway. The cutoff wall would be constructed by using special deep trenching equipment to excavate a trench up to 85 feet deep and several feet wide and mix the existing permeable material in the trench with a soil-cement-bentonite mixture that would stop any significant seepage from passing through or under the dam embankment. Phase 1 would start at the south end of the project up to the existing spillway. Phase 2 (north half) would occur once the old spillway and bridge is demolished and would tie into Phase 1.

2.2.2. CONSTRUCTION OF NEW SPILLWAY, BRIDGE WITH BIKE LANE, LABYRNTH WEIR, AND VEGETATED CHANNEL

The new concrete spillway would be constructed to the south of the existing spillway. While construction of the new spillway is occurring, the South Branch Two Rivers would continue to flow through the existing spillway.

Water would also be able to flow from the reservoir through a low-level outlet. The low-level outlet would consist of a three-foot diameter pipe whose inlet end would rest on the bottom of the reservoir. The pipe would outlet into a manhole with gates to control flow before the flow is discharged into the new spillway. The gates would be normally closed. The low-level would be used to lower the reservoir for maintenance or emergencies. It would also be used to release low oxygen water from the bottom of the reservoir to reduce the likelihood of fish kills in the winter and improve

water quality in the reservoir. The maximum flow out of the new low level would be approximately 100 cubic feet per second (cfs), matching the flow rate out of the existing low level.

The low-level outlet and operating control house would be constructed, followed by bridge construction. A new bridge with bike lane would be constructed to pass traffic on County Highway 28 over the new spillway. The new spillway would include a labyrinth weir control section, rather than gates, to pass flood flows. Water would pass over the concrete labyrinth weir and flow under the new bridge via a concrete channel, spilling over energy dissipation features, through a rock riprap lined channel, into a 90- to 125-foot-wide vegetated channel, and finally into the South Branch Two Rivers.

A new labyrinth weir, rather than gates, would be able to pass approximately twice as much flow as the current spillway for a given lake elevation. Normal lake levels should be unchanged by the project because the lake runout elevation of the labyrinth weir would be at the same elevation as the current runout. It is necessary for the new spillway to be wider than the existing spillway to be able to safely pass flood flows. Most of the new spillway would be constructed on natural ground, creating a need to excavate soils for the spillway. Excavated material would be used to fill in the old spillway channel and to construct temporary cofferdams on the upstream and downstream sides of the spillway excavation, to lessen the risk to the construction area. Dewatering wells would also likely be required to keep groundwater from impacting the construction.

The new 550-foot-long vegetated channel would be located downstream of the spillway and would consist of a 20-foot-wide pilot channel with a depth of 2 feet deep, within the main channel that is 90 to 125 feet wide. The main channel would have side slopes of 3 horizontal to 1 vertical. The elevation of the pilot channel bottom would vary from 944 feet at the end of the spillway to 941 feet 550 feet downstream where it would match the existing South Branch Two Rivers channel bottom. Approximately 400 feet of the existing channel would be backfilled with soil. A 25-foot wide and 1-foot-thick drainage blanket would be placed in the bed of the existing channel prior to backfill to allow seepage a safe path to exit.

2.2.3. DEMOLITION OF OLD SPILLWAY AND BRIDGE AND CONSTRUCTION OF EARTHEN EMBANKMENT

Once the new spillway is ready to accept water, the low-level gate would be fully opened to keep water drawn down to a safe level while the existing spillway, and bridge, is removed. Material would be disposed of offsite and no blasting would occur. Some piling in the excavation may remain in place to limit the amount of deep excavation, ensuring a competent earthen embankment can be constructed in place of the existing spillway. A 400-foot-wide by 100-foot-long buttress would be added to the north old oxbow to increase the stability of that section of the dam embankment.

2.2.4. RESERVOIR DRAWDOWN

DNR staff would start to lower the level of Lake Bronson approximately one month prior to the start of construction. The lake would be drawn down using the three, 20-foot-wide lift gates and a small two-foot square gate on the upstream side of the existing spillway. Drawdown would be controlled to

reduce potential impacts including flooding downstream, embankment stability, and amphibians. Initial drawdown from elevation 975 (normal pool level) to 971 would be accomplished by opening the three large lift gates. Drawdown below elevation 971 would be accomplished by opening the two-foot square gate that is located near the bottom of the reservoir. Fully opening the small square gate with the lake level at elevation 971 and assuming no inflow would draw the lake down approximately six feet in one month.

Figure 2-1. Rendering of Completed Lake Bronson Rehabilitation

Source: MNDNR 2023

2.3. Alternatives Considered but Eliminated from Further Consideration

Multiple alternatives were considered, including multiple variations of maintaining, replacing, or rehabilitating the spillway, utilizing a gated or weir structure, and the addition of new overflow structures. The Alternatives considered are detailed below.

Alternative 1 – Complete replacement of Existing Spillway with New Gated Spillway Structure

This alternative would demolish the existing spillway structure and replace it with five spillway bays each with 20-foot wide by 13-foot-tall gates. This alternative was eliminated due to a reliance on mechanical gates which would have increase operations and maintenance costs as well as risk and liability.

Alternative 2 – New Upstream Weir Structure/Maintain Portion of Existing Structure

Under this alternative, the existing 20-foot-wide by 4-foot-high roller gates would be removed. In addition, a portion of existing ogee spillway crest would be demolished, and the ogee crest would be lowered about 15 to 18 feet. The design would require the construction of a labyrinth weir upstream of the existing structure to control lake flows and pass flow through the modified existing spillway. This alternative was eliminated as maintaining portions of the existing structure has less predictable

performance and may not meet current design standards compared to alternatives that completely replace the existing structure.

Alternative 3 – Rehabilitate Existing Spillway and Add New (North) Overflow Structure

Under this alternative, the project would restore the existing spillway capacity to 4,600 cfs. A new spillway with a crest length of about 1,000 to 1,200 feet near the north dam abutment would function as an overtopping spillway (over County Highway 28) into the downstream drainage. An energy dissipation structure and scour protection would be added on the downstream side of the dam. The bridge over the existing spillway structure would be rebuilt along with a new bike path. However, this alternative was eliminated due to the increased costs, wetland impacts, and additional safety concerns that are not present in the other alternatives.

Alternative 3A – Rehabilitate Existing Spillway and Add New (South) Overflow Structure

This alternative while, like Alternative 3 would add a new overtopping spillway south of the existing structure and would require a long discharge channel back to the river, cut into natural soil along farm property that the Parks currently does not own. However, this alternative was eliminated due to the increased costs, wetland impacts, and additional safety concerns that are not present in the other alternatives.

SECTION 3. Affected Environment and Consequences

This section describes the environment potentially affected by the alternatives, evaluates potential environmental impacts, and recommends measures to avoid or reduce those impacts. Whenever possible, quantitative information is provided to establish potential impacts; the significance of potential impacts is based on the criteria listed in **Table 3-1**. The study area generally includes the project area and access and staging areas needed for the Proposed Action. If the study area for a particular resource category is different from the project area, the differences will be described in the appropriate subsection.

Table 3-1. Evaluation Criteria for Potential Impacts

Impact Scale	Criteria
Negligible	The resource area would not be affected, or changes or benefits would be either nondetectable or, if detected, would have impacts that would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, though the changes would be small and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse impacts.
Moderate	Changes to the resource would be measurable and have either localized or regional-scale impacts/benefits. Impacts would be within or below regulatory standards, but historic conditions would be altered on a short-term basis. Mitigation measures would be necessary to reduce any potential adverse impacts.
Major	Changes would be readily measurable and would have substantial consequences on a local or regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse impacts would be required to reduce impacts, though long-term changes to the resource would be expected.

3.1. Resources Considered and Dismissed

Based on a preliminary screening of resources and the project's geographic location, the following resources do not require a detailed assessment.

- Seismic Hazards: EO 13717, *Establishing a Federal Earthquake Risk Management Standard*, 81 Fed. Reg. 6407 (Feb. 2, 2016), does not apply because there is low seismic risk in the project area based on seismic hazard maps developed by the U.S. Geological Survey (USGS) (2018).

- Coastal Barrier Resources System: The Coastal Barrier Resources Act, 16 U.S.C. §§3501–3510, is not applicable because the project is not within or near a Coastal Barrier Resources System unit (U.S. Fish and Wildlife Service [USFWS] 2019).

- Coastal Zone Management: The Coastal Zone Management Act, 16 U.S.C. §§ 1451–1464, Chapter 33, enacted in 1972, is not applicable because the project is not within the coastal zone (MNDNR 1999).

- Sole Source Aquifers: There are no sole source aquifers regulated by the Safe Drinking Water Act of 1974, 42 U.S.C. §§ 300f *et seq.*, underlying the project area (U.S. Environmental Protection Agency [EPA] 2025).

- Essential Fish Habitat: The Magnuson–Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801 *et seq.*, does not apply because there are no Habitat Areas of Particular Concern and no essential fish habitat areas identified at the project site according to the National Oceanic and Atmospheric Administration's Essential Fish Habitat Mapper (National Marine Fisheries Service 2021).

- Wild and Scenic Rivers: The Wild and Scenic Rivers Act, 16 U.S.C. §§ 1271 *et seq.*, is not applicable because there are no federally designated wild and scenic rivers in or near the project areas, based on a review of the National Wild and Scenic Rivers System website maintained by the National Park Service (National Park Service 2021).

3.2. Physical Environment

3.2.1. SOILS, GEOLOGY, TOPOGRAPHY

The project area is on the edge of the Red River Valley. The region is flat with a gentle slope to the west. The project area is within the South Branch Two Rivers valley, where the river channel is approximately 20 to 30 feet below the surrounding topography. Bedrock is estimated to be 200 to 400 feet below the ground surface (MNDNR 2023).

Lake Bronson State Park lies at the juncture of western prairies and eastern tallgrass aspen parkland, on landforms formed by Glacial Lake Agassiz. West of Lake Bronson, deeper water in the glacial lake basin left behind the flat topography of the Red River Valley, characterized by poorly drained silty and clayey soils and is dominated by prairie today (MNDNR 2023).

About 8,000 years ago, a beach ridge (McCauleyville) formed on the east shore of the deep-water basin of Glacial Lake Agassiz. This beach ridge blocked glacial meltwater in a shallower glacial lake basin. Today, the South Branch Two Rivers crosses the McCauleyville beach ridge where the Lake Bronson Dam is located. Thus, Lake Bronson State Park lies almost entirely in the shallower glacial lake basin within the Tallgrass Aspen Parkland. The Tallgrass Aspen Parkland consists of mostly poorly drained soils, with a gradient change of 6-inches per mile. Glacial Lake Agassiz's retreat left

sandy deposits that characterize Lake Bronson's soils, along with some areas of loamy till deposited by glacial ice and then worked by wave action (MNDNR 2023).

The Farmland Protection Policy Act of 1981, 7 U.S.C. §§ 4201 *et seq.*, requires federal agencies to minimize the unnecessary conversion of farmland into nonagricultural uses (USDA 2022). Prime farmland is land with the best physical and chemical characteristics to produce food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion or water saturation for long periods of time. Prime farmland is either used for the growth of food or fiber crops, or it is available for those crops. Additionally, it is not urban, built-up land, or water areas (USDA 2015). The project area does not contain areas of prime farmland (NRCS 2019).

Alternative 1 – No Action

Under the No Action alternative, there would be no construction-related activity, which would have no short-term impacts on soils or topography. In the long term, of the risk of catastrophic dam failure would not be reduced. Downstream lands and communities would be inundated, causing significant erosion. Upstream, the effect of a catastrophic dam failure could result in uncontrolled drawdown of the reservoir, which could result significant erosion of exposed soils. Therefore, the No Action Alternative would have minor long-term adverse impacts to soils and topography in the project area. The No Action alternative is not expected to have short- or long-term adverse impacts on geology.

Alternative 2 – Proposed Action

The Proposed Action would have moderate short-term adverse impacts on soils and topography during the construction period. The project areas would require earthwork, vegetation removal, and grading over approximately 20 acres, as discussed in **Section 2.2**. Construction activities would have the potential to generate sediments, which could enter the South Branch Two Rivers River and Lake Bronson, as well as smaller bodies of water such as ponds and wetlands. Erosion and sediment control measures would be implemented in accordance with national, state, and county requirements. Specifically, per the Minnesota Pollution Control Agency (MPCA), any project that disturbs at least one acre of soil is required to apply for a Construction Stormwater Permit.

The Proposed Action includes the construction of a labyrinth weir overflow structure, a new concrete spillway measuring approximately 125 feet wide by 250 feet long, a new vegetated channel measuring between 90 and 125 feet wide by 550 feet long, a new concrete bridge measuring 45 feet wide by 125 feet long, a soil-bentonite seepage cutoff wall measuring 85 feet deep by 1,300 feet long, a buttress measuring 400 feet long by 100 feet wide, demolition of the existing concrete spillway and bridge, and construction of an earthen embankment in place of the existing spillway and bridge.

The new concrete spillway would be constructed to the south of the existing spillway. Most of the new spillway would be constructed on natural ground, creating a need to excavate soils for the spillway. Excavated material would be used to fill in the old spillway channel and to construct temporary cofferdams on the upstream and downstream sides of the spillway excavation to lessen

the risk to the construction area. Dewatering wells would also likely be required to keep groundwater from impacting the construction.

The Proposed Action would address high pore water pressures within the dam embankment. The silty sand embankment and foundation conditions, as well as a sand and gravel lens/layer in the foundation, could lead to instability through seepage and piping, so a cutoff wall would be installed through the dam embankment and into the foundation to reduce the pore water pressures. Thus, the Proposed Action would have moderate long-term benefits on soils and topography.

The maximum depths of disturbance would be approximately 80 feet at the cutoff wall. As bedrock in the area is at approximately 200 to 400 feet below ground surface, construction of the Proposed Action would have negligible impacts on geology in both the short and long term.

3.2.2. WATER RESOURCES AND WATER QUALITY

The Clean Water Act (CWA) of 1977, 33 U.S.C. §§ 1251 *et seq.*, regulates the discharge of pollutants into water, with sections falling under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and EPA or as delegated to the state. Section 404 of the CWA establishes the USACE permit requirements for discharging dredged or fill materials into waters of the United States. USACE administers Section 404 of the CWA. Activities that require a Section 404 permit also usually require a Section 401 certification. The MPCA administers Section 401 of the CWA and issues water quality certifications for federally permitted activities to ensure they will not violate state water quality standards.

Additionally, under Section 402 of the CWA, regulation of both point and nonpoint pollutant sources, including stormwater runoff, has been delegated to the state and is administered by MPCA. Under the National Pollutant Discharge Elimination System, activities that disturb one or more acres of ground are required to apply for a permit through MPCA.

Section 303(d) of the CWA requires states to identify waters where current pollution control technologies alone cannot meet the water quality standards set for that water body. Under Section 303(d), states must develop Total Maximum Daily Loads (TMDLs) for impaired waterbodies. A TMDL establishes the maximum amount of a pollutant or contaminant allowed in a water body and serves as a planning tool for restoring water quality.

The project area includes Lake Bronson which covers approximately 312 acres and has a maximum depth of 29 feet. Lake Bronson is listed as a Recreational Development Lake according to the MNDNR Shoreland Classification system. The South Branch of Two Rivers, a tributary of the Red River, is also present in the project area. The South Branch Two Rivers empties into the Red River downstream of Hallock, approximately 25 miles west of Lake Bronson State Park. Approximately five river-miles of the South Branch Two Rivers are within the boundary of Lake Bronson State Park. The Two Rivers River consists of three branches: North, Middle and South (MNDNR 2023).

The watershed upstream of the Lake Bronson Dam is approximately 547 square miles, consisting of primarily agricultural land and flat terrain. Nearly 71% of the Two Rivers Watershed has been hydrologically altered (channelized, ditched, or impounded). Hydrological alteration, coupled with significant agricultural land use (65% of the watershed is row crop agriculture), resulted in stream health monitors recording poor biotic integrity (MNDNR 2023).

The 2024 MPCA 303(d) Impaired Waters List designated the South Branch Two Rivers as impaired for Escherichia coli (E. coli) and fish bioassessments. Lake Bronson is listed as impaired for Mercury in fish tissue (MPCA 2024).

Alternative 1 – No Action

Under the No Action alternative, there would be no short-term impacts on water resources and water quality as no construction would occur. The No Action alternative would ultimately result in dam failure, which would lead to the inundation of downstream lands and communities, causing significant damage. Upstream, the effect of a catastrophic dam failure could result in uncontrolled drawdown of the reservoir, which could result in impacts to Lake Bronson and South Branch Two Rivers. Thus, the No Action alternative would have moderate long-term adverse impacts to water resources and water quality.

Alternative 2 – Proposed Action

Minor short-term adverse impacts to water quality are expected during construction activities, especially associated with the 18-month drawdown of the Lake Bronson Reservoir. Moderate to major long-term benefits are anticipated on water resources due to the mitigated risk of catastrophic dam failure.

The St. Paul District of the USACE issued permit number MVP-2021-00563-LSP pursuant to Section 404 of the CWA on December 10, 2024. The permit authorizes the discharge of fill in wetlands and other aquatic resources. The project requires both temporary and permanent fill within the South Branch Two Rivers and Lake Bronson and associated adjacent wetlands.

The associated 401 Water Quality Certification was issued by the MPCA on April 1, 2024, finding that the project has satisfied all State standards. In addition, the MPCA, issued the NPDES notice of coverage on October 9, 2024.

The MNDNR issued a Public Waters Permit on August 14, 2024.

Sandy soils in the area limit stormwater runoff. An erosion control plan will be prepared with final design plans. Current stormwater runoff at the site consists of runoff from the ditches of County Highway 28, the gravel parking area, the stream banks to the north and south, and the dam embankment into the South Branch Two Rivers and Lake Bronson. Post construction stormwater runoff will not change in quantity but may change in location due to the change in location of the spillway. The new spillway will be larger than the existing spillway so that the dam can safely pass extreme flood events without overtopping the earthen embankment and causing failure of the dam.

The total disturbed area from the Proposed Action is approximately 20 acres. The disturbed area includes the county highway, construction staging areas, lake, stream channel, wetlands, forest, and grasslands.

Removal of the existing spillway and construction of the new spillway could cause a short-term introduction of sediment-laden runoff into the South Branch Two Rivers below the project site prior to completion of the project. Also, construction of the seepage cutoff wall could cause sediment to enter the Lake Bronson reservoir. The water control plan will be submitted by the contractor and will likely include the drawdown of Lake Bronson during construction. Once the lake is lowered, cofferdams and erosion control measures will be implemented. The Proposed Action's Stormwater Pollution Prevention Plan, developed in accordance with the National Pollution Discharge Elimination System (NPDES) permit requirements, includes best management practices (BMPs) such as the use of erosion control blankets, silt fencing, silt curtain, sediment logs, and rock checks. Exposed areas of sediment will be stabilized immediately once construction activities have temporarily or permanently stopped and will not resume for seven days.

To prevent equipment from tracking sediment into Lake Bronson or the South Branch Two Rivers during construction, the work activity site would be protected from the flow with the use of a cofferdam. A silt curtain will trap any material from entering the reservoir and river.

Areas below the Ordinary High Water Level (OHWL) are subject to MNDNR's Public Water Permit conditions and those areas above the OHWL are subject to MPCA's NPDES/State Disposal System (SDS) General Construction Stormwater Permit (CSW Permit). The OHWL is the approximate normal summer pool, elevation 975 feet in North American Vertical Datum 1988. Work will be done both below and above the OHWL. No receiving waters have construction-related water impairments or are classified as special, as defined in the Construction Stormwater permit.

The Proposed Action may require an appropriation of water. This appropriation would be related to project dewatering so that construction can take place in dry conditions. The quantity of groundwater entering the excavation will depend on the drawdown level of the reservoir during construction, as well as climatic conditions. Pumping is anticipated to be less than 10,000 gallons per day, or 1 million gallons per year, but could exceed those thresholds if the reservoir is unable to be kept low during construction. Duration of groundwater pumping could be throughout the construction period. No surface water appropriation is expected as any bypass flow would not go beyond the bounds of the river channel. A water appropriations permit will be obtained, if required.

Pressure relief wells and observation wells exist in and near the embankment of the dam. These wells will either be extended vertically to match the elevated soil grade due to construction or they will be abandoned according to the Minnesota Department of Health requirements.

The contractor will install an earthen cofferdam on the upstream side of the new spillway location to approximate elevation 980 to keep water from Lake Bronson out of the excavated area should the reservoir rise due to a large flood event. An additional smaller cofferdam may be constructed on the

downstream side of the new spillway location if the channel is fully excavated to keep the South Branch Two Rivers from backing up into the excavated area of the new spillway channel.

The earthen cofferdams protecting the new spillway will be removed and used to construct new cofferdams to protect the demolition work on the existing spillway. The upstream cofferdam will be constructed to elevation 978 to protect the demolition area from a potentially rising lake level. Additionally, the downstream cofferdam will be much smaller as it only needs to protect the area from tailwater in the South Branch Two Rivers.

Prior to letting the lake rise to its normal pool elevation, all cofferdams will be removed, and material disposed of off-site.

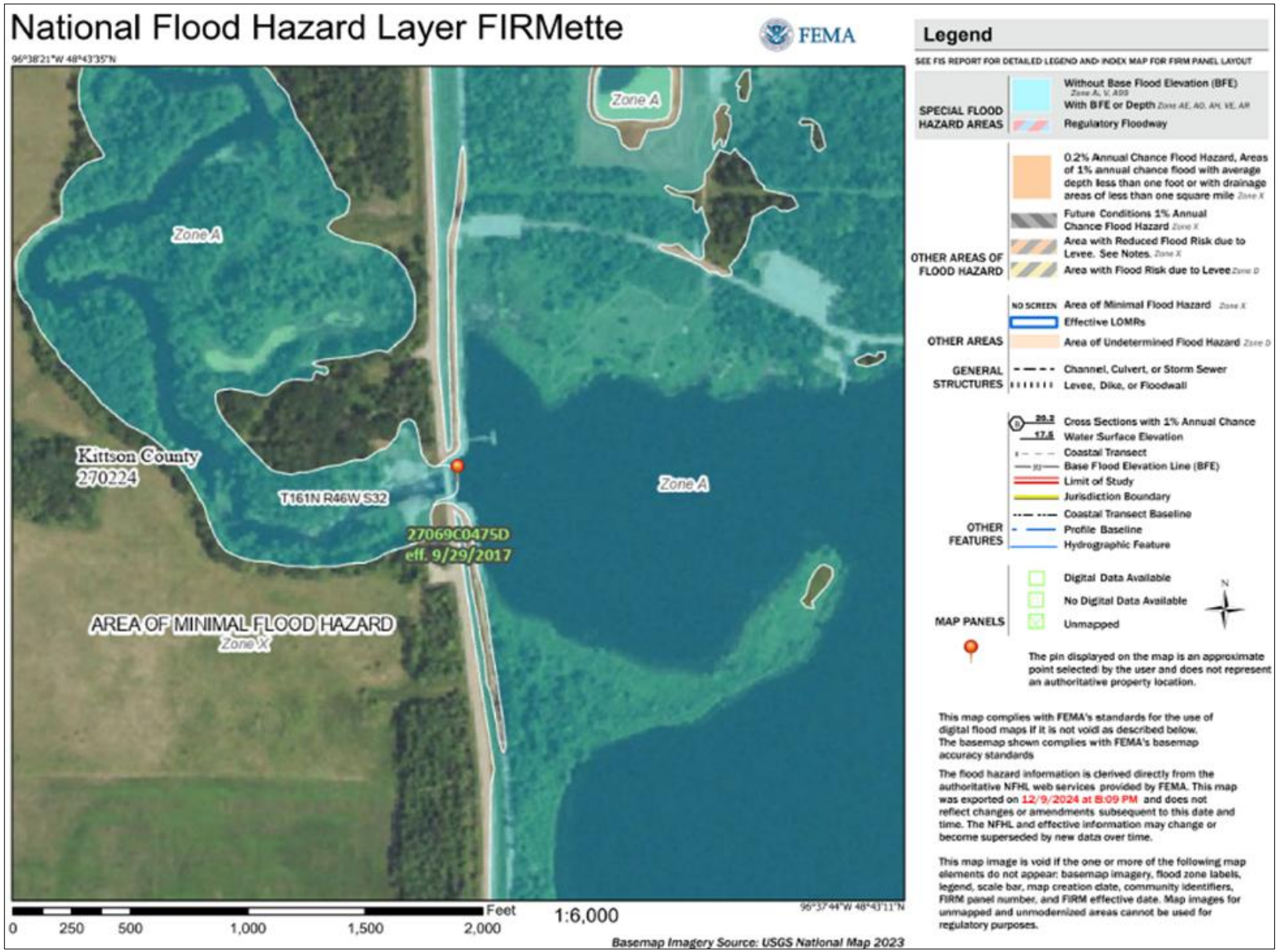
Requirements for the water control plan may include lowering the reservoir through use of the existing low-level gate, cofferdams, and passing flood flows through the existing spillway. The seepage cutoff wall is not anticipated to require any pumping of water. The contractor is required to submit a water control plan to the MNDNR Ecological and Water Resources regulatory staff for approval prior to the start of construction that must keep the work activity area dry under reasonably expected conditions to keep Lake Bronson and the South Branch Two Rivers from disturbing the work area.

3.2.3. FLOODPLAIN MANAGEMENT (EXECUTIVE ORDER 11988)

EO 11988, *Floodplain Management*, requires federal agencies to minimize occupancy and the modification of the floodplain. 42 Fed. Reg. 26951 (May 24, 1977) (as amended). Specifically, EO 11988 prohibits federal agencies from funding construction in the 100-year floodplain (1-percent annual chance of flood) unless there are no practicable alternatives. FEMA's regulations for complying with EO 11988 are found in 44 C.F.R. Part 9. FEMA follows an eight-step decision-making process to ensure compliance with EO 11988, which requires the evaluation of alternatives to the use of a floodplain prior to funding the action.

According to FEMA's flood insurance rate map 27069C0475D (effective September 29, 2017), the project area is in Zone A, Special Flood Hazard Area with a 1% annual risk of flooding (**Figure 3-1**). The 1% chance flood elevation is 979.9 feet above mean sea level on the upstream side of County Road 28 in the lake and 959.4 feet on the downstream side.

Figure 3-1. Project Area Floodplains



Alternative 1 – No Action

Under the No Action alternative, there would be no short-term impacts on floodplains as construction would not occur; however, the No Action alternative would have moderate to major long-term adverse impacts from the risk of catastrophic dam failure due to flooding. In the event of catastrophic dam failure, downstream lands would be inundated, causing significant damage and risk to human safety. The replacement of the dam is necessary to mitigate the risks associated with a high hazard dam that is in poor condition.

Alternative 2 – Proposed Action

The Proposed Action would result in minor short-term adverse impacts from construction in the floodplain. As shown in **Figure 3-2**, the entire project area is within Zone A. Construction activities such as excavation, grading, and other ground-disturbing activities could cause erosion and sediment to enter the floodplain, and there is potential for the accidental release of hazardous waste (e.g., fuels) from equipment use.

Long term, the Proposed Action will reduce the risk in floodplain areas downstream of the dam by allowing the dam to safely pass large floods, rather than overtopping and failing. The labyrinth weir of the Proposed Action will be able to pass approximately twice as much flow as the current spillway for a given lake elevation. With water at the top of the road, the current spillway can pass approximately 5,000 cfs and the proposed spillway can pass approximately 10,000 cfs. For a typical spring flood, water in the reservoir will not rise as much as it currently does with the proposed larger spillway. The reservoir level from the 1% chance flood event (often called the 100-year flood) is anticipated to be approximately two feet lower with the Proposed Action.

All activities within the floodplain would be conducted in accordance with County floodplain development regulations. The MNDNR would coordinate with the zoning administrator and obtain flood development permits for all Proposed Action activities; thus, the Proposed Action would have moderate to major long-term benefits to floodplains.

Appendix A provides the eight-step decision-making process for floodplains. The 8-step process found that the Proposed Action is the only practicable option.

3.2.4. AIR QUALITY

The Clean Air Act (CAA) of 1970, as amended, 42 U.S.C. §§ 7401 *et seq.*, requires EPA to establish National Ambient Air Quality Standards (NAAQS) for six pollutants harmful to human and environmental health, namely, ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter (PM), which includes coarse PM that is less than 10 micrometers in diameter and fine PM that is less than 2.5 micrometers in diameter (40 C.F.R. Part 50). Fugitive dust, which is considered a component of PM, can also affect air quality. Fugitive dust is released into the air by wind or human activities, such as construction, and it can have human and environmental health impacts. Federally funded actions in nonattainment and maintenance areas for these pollutants are subject to conformity regulations (40 C.F.R. Parts 51 and 93) to ensure that emissions of air

pollutants from planned federally funded activities would not cause any violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any interim milestone. Under the general conformity regulations, a determination for federal actions is required for each criteria pollutant or precursor in nonattainment or maintenance areas where the action's direct and indirect emissions have the potential to emit one or more of the six criteria pollutants at rates equal to or exceeding the prescribed de minimis rates for that pollutant.

EPA's Green Book provides detailed information about area NAAQS designations, classifications, and nonattainment statuses. According to the EPA Green Book (updated December 31, 2024), Kittson County is currently in attainment status for all criteria pollutants (EPA 2025b).

All roads leading to the construction site are paved. The reservoir and dam site are a several hundred feet from the nearest sensitive receptors located in park. The nearest resident is approximately 0.5 miles from the edge of the project site. Approximately 10 other residences are within 1 mile of the project site. No health care facilities or nursing homes are in the vicinity of the project.

Alternative 1 – No Action

Under the No Action alternative, temporary construction-related emissions would not occur because demolition of the existing spillway and bridge and construction of the new dam components would not occur. Therefore, there would be no short-term impacts on air quality.

In the long term, the risk of dam failure and subsequent flooding would not be reduced. Catastrophic flood events could result in road closures, causing traffic congestion and diversion of vehicles away from flooded areas. Emissions from equipment used for flood-related repairs and additional vehicle emissions generated by flood-related road detours could result in negligible emissions of criteria pollutants within this nonattainment area. These emissions would be temporary, localized, and unlikely to result in a NAAQS exceedance. Therefore, there would be a negligible long-term adverse impact on air quality from emissions resulting from equipment used for flood-related repairs and additional vehicle emissions generated by flood-related road detours.

Alternative 2 – Proposed Action

Construction of the Proposed Action would have minor short-term adverse impacts on air quality. Demolition and construction equipment to be used for this project includes on- and off-road vehicles. Mobile, on-road vehicles will include medium to heavy-duty trucks, delivery trucks, and haul trucks. Mobile, off-road equipment includes construction machines such as excavators, graders, loaders, compressors, drill rig, generator sets, pressure washers, pumps, cement and mortar mixers, other construction equipment, and off-highway trucks. Construction is expected to last 18 months. Fuel exhaust emissions contain pollutants including carbon monoxide, nitrogen oxides, reactive organic gases, sulfur dioxide, and suspended particulate matter, all of which carry some associated health risks. Emissions will be minor and temporary in nature, arising from the use of powered equipment during construction. Equipment used will include excavators, loaders, and trucks.

The Proposed Action may create some temporary dust during demolition and excavation activities. Fugitive dust could arise during hauling and grading of earthen materials and concrete debris. The primary entrance to the site will be from the south, farther away from sensitive receptors. No material hauling will be allowed through the park except for the staging areas. Effects associated with fugitive dust and offensive odors will be limited to the construction site.

Applicable BMPs from EPA's Construction Emission Control Checklist (included in **Appendix B**) would be implemented to mitigate air quality impacts. BMPs include, but are not limited to, the following:

- Keep vehicle and equipment idling times as short as possible.
- Maintain diesel engines regularly to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures.
- Cover or wet areas of exposed soils to reduce fugitive dust.
- Prevent spillage of soil and excavated material and limit speeds to 15 miles per hour (mph) when hauling material and operating non-earthmoving equipment on areas of exposed soil within the project area. Limit speed of earthmoving equipment to 10 mph.

Because of the short-term nature of air quality impacts and implementation of BMPs, the potential emissions from construction of the Proposed Action would be below the de minimis rates for the General Conformity Rule. Therefore, the Proposed Action would not require a conformity determination and would have a minor short-term adverse impact.

There would be no long-term impacts on air quality from implementation of the Proposed Action, as it would not include a source of long-term permanent emissions.

3.3. Biological Environment

3.3.1. TERRESTRIAL AND AQUATIC ENVIRONMENT

Fish and wildlife include the species that occupy, breed, forage, rear, rest, hibernate, or migrate through the project areas. Regulations relevant to fish and wildlife include the Migratory Bird Treaty Act (MBTA), 16 U.S.C. §§703 – 712, and the Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. §668 *et seq.* Threatened and endangered fish and wildlife species are evaluated separately in **Section 3.3.3**.

The Lake Bronson reservoir is a locally important recreational fishing resource, providing excellent opportunities to target walleye, black crappie, northern pike, largemouth bass, and sunfish in an area that has no other recreational fishing lakes. Ice fishing pressure on Lake Bronson is approximately 5,000 angling hours, while summer fishing accounts for approximately 6,600 angling hours. These fisheries resources are primarily supported by natural reproduction, both in Lake Bronson proper and upstream in the South Branch Two Rivers. Fry stocking of walleye also

contributes to this resource. Evidence of natural reproduction of walleyes contributing to the Lake Bronson walleye fisheries has been found during both MNDNR fisheries surveys on Lake Bronson and during a stream survey of the South Branch Two Rivers.

In addition to the habitat in Lake Bronson, multiple critical habitat types for the fish community residing in the South Branch Two Rivers exist (e.g., oxbows, riffle complexes, deep pools), both upstream (to Pelan) and downstream (to Hallock) of Lake Bronson. During MNDNR Fisheries stream surveys between Pelan and Lake Bronson, 21 fish species were observed upstream of Lake Bronson, including notable catches such at young-of-year walleye. During MNDNR fisheries stream survey between Hallock and Lake Bronson, 28 fish (individuals) were observed downstream of Lake Bronson, including notable species such as channel catfish and burbot. Additionally, a variety of macroinvertebrates were also observed in these reaches (MNDNR 2023).

Alternative 1 – No Action

Under the No Action alternative, there would be no short-term impacts to the terrestrial and aquatic environment. The No Action alternative would not reduce the risk of catastrophic dam failure which could cause downstream lands would be inundated, resulting in significant damage and displacement of native wildlife. Upstream, the effect of a catastrophic dam failure could result in uncontrolled drawdown of the reservoir, which could result in impacts to fish populations within Lake Bronson and South Branch Two Rivers River. Thus, the No Action alternative would have minor to moderate long-term adverse impacts to the terrestrial and aquatic environment.

Alternative 2 – Proposed Action

Under the Proposed Action, there will be a temporary impact to the recreational fishery resources. The proposed drawdown of the reservoir during construction would impact the fishery due to low water levels and potential reduced dissolved oxygen, both during the warmest parts of the summer and during the winter. The low water levels are anticipated to last for up to two years. The initial drawdown would be done in a slow, controlled manner to increase the chance for fish to out-migrate upstream. The extent to which fish will migrate upstream is unknown, but there is likely to be large mortality events due to stranding. Fish naturally migrate in a downstream direction in response to falling water levels, but this will not be possible due to the barrier created by the existing dam.

Construction activities could also negatively affect downstream fish communities if minimum flows are not maintained in the South Branch Two Rivers. For this reason, run-of-the-river flows will be allowed to pass during the construction phase to limit the potential for detrimental effects to the downstream fish community; however, the slow drawdown of the reservoir should limit damage to habitat that a sudden spike in flows could cause. Additionally, because the new dam will not be operational, there is a potential for channel drying during very dry years if the lake level falls below the crest of the new dam and there is no outflow. Thus, the Proposed Action would have moderate short-term adverse impacts on the aquatic and terrestrial environment.

Following construction, and upon refilling the reservoir, MNDNR Fisheries would commit to implementing an aggressive plan to rebuild the fishery in the reservoir, if necessary. The plan may

include stocking, natural migration from upstream, and monitoring to assess recovery objectives, with the possible inclusion of other management actions to further promote the recovery. Therefore, the Proposed Action would result in minor long-term beneficial impacts.

3.3.2. WETLANDS (EXECUTIVE ORDER 11990)

EO 11990, *Protection of Wetlands*, 42 Fed. Reg. 26961 (May 24, 1977) (as amended) requires federal agencies to consider alternatives to work in wetlands and limits potential impacts on wetlands if there are no practicable alternatives. FEMA regulation 44 C.F.R. Part 9, Floodplain Management and Protection of Wetlands, sets forth the policy, procedures, and responsibilities to implement and enforce EO 11990. It also prohibits FEMA from funding activities in a wetland unless no practicable alternatives are available. Activities that disturb wetlands may also require a permit from USACE under Section 404 of the CWA.

Within the state of Minnesota, wetlands are administered under the Wetland Conservation Act (WCA), Minn. Stat. §§103G.221 – 103G.2375 (2024), through the Board of Water and Soil Resources (BWSR), Minn. Stat. §§103B.101. BWSR delegates permitting authority of the WCA to local government units, and within the project area the designated authority is the Kittson County Soil and Water Conservation District.

Approximately 53.9 acres of wetlands are located within the defined project area, including emergent wetlands (36 acres; seasonally flooded or saturated emergent wetland, shallow marsh), forested wetlands (17.1 acres; hardwood wetland) and shrub wetlands (0.80 acre).

A wetland delineation has been completed for the currently proposed construction area surrounding the existing dam. The delineation identified 11 wetland areas, one tributary (Two Rivers) and one lake (Lake Bronson) for the project area surrounding the dam. Wetlands north of the reservoir and on the far west end of the project area are not anticipated to be directly impacted by the project.

Alternative 1 – No Action

Under the No Action alternative, there would be no effect in the short-term on wetlands within the project area as no construction would occur. In the long-term, risk of dam failure and subsequent flooding would not be mitigated. If downstream lands are inundated, the deposition of pollution and sediment in wetlands could reduce the wetlands' water quality, smother and kill existing plants, and continue to promote invasive species' establishment and growth in the degraded wetlands. Therefore, the No Action alternative would have minor to moderate long-term adverse impacts on wetlands.

Alternative 2 – Proposed Action

Construction of the Proposed Action would impact Lake Bronson and adjacent wetlands. Reservoir drawdown would directly temporarily impact Lake Bronson and wetlands adjacent to the lake. The lake would be temporarily drained and refilled upon completion of construction. The wetlands adjacent to the lake may have temporarily reduced water levels during the drawdown period.

Temporary impacts to Lake Bronson would also include construction of cofferdams. Therefore, the Proposed Action would have minor to moderate short-term adverse impacts to wetlands.

Long term, impacts would include grading of the lake bottom to accommodate construction of the low-level outlet and permanent inundation of parts of the wetland due to construction of the labyrinth weir. The new spillway outlet channel would create a new 0.2-acre tributary (channel) and approximately 0.9 acres of new wetlands. Filling of the existing tributary and adjacent wetlands would permanently affect those wetlands. In addition, adding a buttress in the oxbow on the north end of the dam would permanently affect some wetlands, as would the new spillway construction.

The MNDNR, acting as the Local Government Unit (LGU) for this project issued a Notice of Decision on December 11, 2024 to the BWSR approving the Wetland Replacement Plan for the loss of 2.74 acres of wetlands at a 2:1 replacement ratio. The LGU also approved No-Loss determinations for temporary construction impacts and temporary drawdown impacts.

The Proposed Action would permanently impact approximately three acres of wetlands. As a condition of the USACE, 5.48 acres of Sedge Meadow wetland credits must be debited from the Minnesota Wetland Bank serving the Lower Red River Basin. The BWSR issued a verification of the transaction on January 7, 2025.

The Proposed Action would follow the procedures and processes of state and federal wetlands laws, including permitting process according to the Section 404 of the CWA and the state WCA. The Proposed Action would have minor long-term benefits on wetlands by reducing the risk of flooding and erosion impacts on water quality and wetlands in and near the project area.

Appendix A provides the eight-step decision-making process for floodplains and wetlands, which identified that the Proposed Action is the only practicable option.

3.3.3. THREATENED AND ENDANGERED SPECIES

The Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 1531–1544, provides a framework for the conservation of endangered and threatened species and their habitats. USFWS and the National Marine Fisheries Service are the lead federal agencies for implementing the ESA. The ESA requires that federal agencies ensure that actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of any listed species (including plant species) or result in the destruction or adverse modification of designated critical habitats for such species. The ESA also prohibits any action that causes the take of any listed species. The term “take” means to harass, hunt, shoot, capture, trap, kill, collect, wound, harm, or pursue ESA-listed species, or attempt any of these activities. In addition, the Minnesota’s Endangered Species Statute (Minn. R., parts 6212.1800 to 6212.2300) requires the MNDNR to adopt rules designating species meeting the statutory definition of endangered, threatened, or species of special concern.

The ESA defines the action area (AA) as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action” (50 C.F.R. § 402.02). Therefore,

the AA may be larger than the project area where project activities would occur. The AA includes the construction area directly around the dam spillway on County Highway 28, as well as indirect impacts to all areas adjacent to Lake Bronson resulting from the reservoir drawdown. The AA extends beyond the project area to encompass potential effects of noise generated during construction from the use of heavy equipment, including excavator/bulldozers, backhoes, trenchers, dump trucks, road pavers and compactors, and generators. To account for potential noise impacts, the action area includes a 0.25-mile buffer extending from the project area.

Information on the presence of threatened and endangered species and critical habitat was obtained from a review of the USFWS Information for Planning and Consultation system on August 26, 2025 (USFWS 2025). Based on this review, three federally listed species, three species proposed for listing, and critical habitat for two listed species have the potential to be present in the AA, as presented in Table 3-2.

Table 3-2. Federally Listed Species with the Potential to Occur in the Project Area

Species	Federal Status
Mammals	
Gray Wolf (*Canis lupus*)	Threatened
Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered
Insects	
Monarch Butterfly (*Danaus plexippus*)	Proposed Threatened
Western Regal Fritillary (*Argynnis idalia occidentalis*)	Proposed Threatened
Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*)	Proposed Endangered
Flowering Plants	
Western Prairie Fringed Orchid (*Platanthera leucophaea*)	Threatened
Critical Habitat	
Dakota skipper (*Hesperia dacotae*)	Threatened
Poweshiek skipperling (*Oarisma Poweshiek*)	Endangered

Designated critical habitat for Dakota skipper and Poweshiek skipperling occurs within Lake Bronson State Park approximately 1 mile east of the proposed project area. ESA defines critical habitat as an "…area that contains habitat features essential for the survival and recovery of a listed species, which may require special management considerations or protections."

The Poweshiek skipperling was once Minnesota's most abundant prairie-obligate skipper, and Dakota skippers were also abundant prior to the 2000's. The Dakota skipper was last found at Lake Bronson in 2009 (USFWS) and the most recent Poweshiek skipperling record was prior to 2000. The

past two decades saw the virtual disappearance of both the Poweshiek skipperling and Dakota skipper across most of its range, including at Lake Bronson State Park.

In 2015, as part of the Minnesota Recovery Plan for these two prairie butterflies, 263 acres of critical habitat was designated at Lake Bronson State Park under the ESA. Because 263 acres of prairie habitat on the south side of the South Branch Two Rivers is protected as critical habitat, no activity that negatively impacts the resource value is allowed under federal law.

Alternative 1 – No Action

Under the No Action alternative, no construction would occur; therefore, there would be no short-term impacts on threatened and endangered species. However, in the event of catastrophic dam failure, downstream lands would be inundated, causing significant damage and displacing native wildlife. Upstream, the effect of a catastrophic dam failure could result in uncontrolled drawdown of the reservoir, which could result in negative impacts to federally listed species and critical habitat adjacent to Lake Bronson through hydrological changes. Therefore, the No Action alternative would have minor to moderate long-term adverse impacts on federally listed species would occur.

Alternative 2 – Proposed Action

The Proposed Action would be within the range of the gray wolf; however, is outside the species' critical habitat. Impacts associated with disturbance due to construction will be temporary and will not result in permanently increased human traffic in the project area. Impacts associated with tree removal and habitat disturbance will be insignificant due to the relatively small size of the AA. In the long term, impacts are also not anticipated as the Proposed Action would effectively rehabilitate a pre-existing structure.

Although the Proposed Action would require tree removal within approximately two acres of the project area, the implementation of a seasonal work restriction (i.e., tree removal would be performed during the Northern long-eared bat hibernation period) would reduce the adverse impacts of tree removal. Therefore, the Proposed Action would have a negligible short-term adverse impact on the Northern long-eared bat. The Proposed Action would have no impact on Northern long-eared bat in the long term, as no appreciable amount of habitat would be lost or gained.

Suitable habitat for the Monarch butterfly and Western Prairie Fringed Orchid does not occur within or near the project area; therefore, these species are not expected to occur in the AA and would not be impacted by the Proposed Action.

FEMA will rely on the Service's Technical Assistance letter for the Minnesota-Wisconsin Endangered Species Determination Key to fulfill its Section 7(a)(2) consultation obligation. Per the Technical Assistance letter, FEMA concurs with the USFWS determination of Not Likely to Adversely Affect for the gray wolf and Northern-long eared bat and determination of No Effect for the Monarch butterfly and Western Prairie Fringed Orchid.

At this time, the Western Regal Fritillary and Suckley's Cuckoo bumble bee are listed as proposed for listing. Proposed threatened and endangered species are not protected by the take prohibitions of section 9, consistent with any protective regulations finalized under section 4(d) of the ESA, until the rule to list is finalized. Under section 7(a)(4) of the ESA, Federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species. FEMA and the MNDNR will monitor any change in USFWS guidance for the Western Regal Fritillary and Suckley's Cuckoo bumble bee. If there are any changes of the status of these species, or scope of work, FEMA and the MNDNR will consult or conference with USFWS as needed.

The designated critical habitat, capable of supporting the Dakota skipper and Poweshiek skipperling, is upland. The basin created by damming the river has steep banks and lacked components of the prairie habitat essential to butterfly use. As water levels rose within the basin in the 1930's - 40's, steep banks in the areas of critical habitat filled with non-prairie species including reed canary, trees, and brush, none of which are beneficial to the butterflies. All areas of critical habitat are located on the south side of the reservoir and, in the short-term, these upland prairie areas would not be impacted by the de-watering; therefore, there would be no short-term impacts to critical habitat for the Dakota skipper and Poweshiek skipperling. Critical habitat is of higher quality now than when designated due to intense management to reduce woody stemmed species. Following construction, a monitoring plan in place to verify the wetlands that will re-establish once water returns to the basin are comparable to those present ahead of dewatering. Therefore, the Proposed Action would have long-term, beneficial impacts on critical habitat.

3.3.4. MIGRATORY BIRDS AND BALD AND GOLDEN EAGLES

A migratory bird is any species or family of birds native to the United States or its territories as a result of natural biological or ecological processes. The Migratory Bird Treaty Act (MBTA) of 1918, as amended, 16 U.S.C. §§ 703–712, protects migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions. The MBTA protects all native birds, including common species. Several migratory bird species could occur in the project area, including species such as bald eagle (*Haliaeetus leucocephalus*), Chimney swift (*Chaetura pelagica*), and Red-headed woodpecker (*Melanerpes erythrocephalus*) (USFWS 2025). The nesting season for migratory birds is generally March through August, depending on the species.

The Bald and Golden Eagle Protection Act (BGEPA) of 1940, 16 U.S.C. §§ 668 *et seq*., prohibits the take, possession, sale, or other harmful action of any bald eagle (*Haliaeetus* leucocephalus) or golden eagle (*Aquila chrysaetos*), alive or dead, including any part, nest, or egg (16 U.S.C. § 668[a]). The BGEPA requires any activities that may cause potential disturbance to be restricted within 660 feet of any identified active eagle nest. The activities must also occur outside the nesting season, from January 15 through July 31 (USFWS 2007). Bald eagles (*Haliaeetus leucoephalus*) use large trees in close proximity to waterbodies for nesting and roosting. Suitable habitat for nesting and roosting bald eagles occurs within the project area along the Lake Bronson shoreline and the South Branch Two Rivers. Golden eagles (*Aquila chrysaetos*) nest in large trees, or on cliff ledges,

rocky outcrops, or human-made structures, such as power poles and transmission towers. Suitable habitat for golden eagles does not occur within or adjacent to the proposed project area.

Alternative 1 – No Action

Under the No Action alternative, there would be no construction and no removal of vegetation during the breeding season; therefore, there would be no short-term impacts on migratory birds or bald eagles. Because there would be no direct activities that would result in the destruction of eggs, nests, or birds, there would be no impact under the MBTA. Additionally, because no habitat for eagles would be directly impacted, there would be no impact under the BGEPA. Dam failure and subsequent flooding generally would not impact large trees where species may dwell or nest in, nor would it impact food sources that currently exist in the area on which migratory birds or bald eagles subsist. Therefore, the No Action alternative would have no short- or long-term impacts on migratory birds or bald eagles within the project area.

Alternative 2 – Proposed Action

Under the Proposed Action, approximately two acres of old growth forest will be removed. This vegetation could support breeding migratory birds. If these activities occur during the migratory bird breeding season, they could result in the destruction of nests, eggs, or young birds in nests. Given the potential for project work to affect migratory birds, the Proposed Action would be subject to the prohibitions of the MBTA. Necessary permits must be obtained to comply with federal and state laws and adhere to permit conditions, which may include conducting pre-construction nesting bird surveys and avoiding work near active bird nests if vegetation disturbance were to occur during the nesting season. Given that these conditions would be met and adhered to, the Proposed Action would have minor short-term adverse impacts on species protected under the MBTA and BGEPA.

Although direct impacts on large trees caused by current levels of flooding are unlikely, mitigation of flooding in the area would benefit the growth and development of young trees, which would provide habitat and potentially prey for species once established. Thus, the Proposed Action would have negligible long-term benefits on migratory birds. The Proposed Action would have negligible long-term impact on bald eagles or golden eagles because the Proposed Action would not substantially increase or decrease the available bald or eagle habitat in the area.

3.4. Hazardous Materials

Hazardous materials and wastes are regulated under several federal laws, including EPA's regulations concerning 40 C.F.R. Part 260, Hazardous Waste Management System; the Resource Conservation and Recovery Act (RCRA) of 1976; the Solid Waste Act; the Toxic Substances Control Act; the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act; and the CAA of 1970. The RCRA, 42 U.S.C. §§ 6901 - 6987 (1982), administered by EPA, manages the generation, transportation, treatment, storage, and disposal of hazardous wastes. The Hazardous and Solid Waste Amendments of 1984, Public Law 98-616 (November 8, 1984), 98 Stat. 3221, amended the RCRA and provided additional requirements for the disposal of hazardous waste. CERCLA, 42 U.S.C. §§ 9601 – 9675

(1980), also called the Superfund Act, provides funds to remediate abandoned or uncontrolled hazardous waste sites, also called Superfund sites. CERCLA also grants EPA the authority to hold responsible parties accountable for hazardous waste releases at closed or abandoned waste sites. Further, Occupational Safety and Health Administration standards under the Occupational Safety and Health Act, 29 U.S.C. §§ 651–678, seek to minimize adverse impacts on worker health and safety (29 C.F.R. Part 1926). Evaluating hazardous substances and wastes includes consideration of whether any hazardous material would be generated by the proposed activity and/or already exists at or near the site (40 C.F.R. § 312.10).

To determine whether any hazardous waste facilities exist in the vicinity or upgradient of the proposed project area, or whether there is a known and documented environmental issue or concern that could affect the proposed project area, a search for Superfund sites, toxic release inventory sites, industrial water dischargers, hazardous facilities or sites, and multiactivity sites was conducted using EPA's NEPAssist website (EPA 2025c). According to the database, no hazardous waste facilities or hazardous waste sites are present within 1 mile of the project area.

Based on MPCA's What's in my Neighborhood database and MNDNR Lake Bronson State Park operations information, there are no known contaminations in close proximity to the project area.

Alternative 1 – No Action

No construction would occur under the No Action alternative; therefore, there would be no impacts related to hazardous materials either from the use of construction equipment or from the exposure of potentially contaminated materials through ground-disturbing activities. Thus, the No Action alternative would have no short-term impacts related to hazardous materials; however, this alternative would not reduce the risk of dam failure and flooding. During a flood event, floodwaters could pick up pollutants, such as oil and grease from roadways, and transfer them into waterways. The No Action alternative would have minor long-term adverse impacts related to hazardous materials.

Alternative 2 – Proposed Action

During project construction, fuels, oils, lubricants, and other materials typical for use by heavy equipment would be used on site. Preparation of a Spill Prevention and Response Plan would be required to address accidental spills or the release of any hazardous material or petroleum products. Any hazardous materials discovered, generated, or used during implementation of the Proposed Action would be disposed of and handled in accordance with applicable local, state, and federal regulations. Therefore, there would be a negligible short-term impact from the use of vehicles and equipment or from the potential for inadvertent exposure of previously unknown hazardous material.

The Proposed Action would generate waste from the removal of the dam structure. Project-generated solid wastes include concrete, steel sheet piling, steel gates with appurtenances, and other metal. Debris from the dam would be carried off-site by the contractor. All waste materials including garbage (such as plastic wrap and packaging) would be collected by the contractor in dumpsters and

disposed of offsite at an approved facility. During construction, use of a cofferdam would prevent solid wastes from entering the South Branch Two Rivers and a silt curtain would trap any material.

In the long term, the Proposed Action would reduce the risk of dam failure, which would reduce the risk of pollutants being transported via floodwaters and the risk of flood-associated damage to facilities that generate hazardous waste near the project area. Thus, the Proposed Action would result in a minor long-term benefit related to hazardous materials.

3.5. Socioeconomics

3.5.1. NOISE

The Noise Control Act of 1972 defines "noise" as an undesirable sound. Noise is regulated at the federal level by the Noise Control Act of 1972, 42 U.S.C. §§ 4901 *et seq.* Noise standards developed by EPA provide a basis for state and local governments' judgments in setting local noise standards (EPA 1974). The Noise Control Act of 1972 requires EPA to create a set of noise criteria. In response, EPA published Information on the Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety in 1974, which explains the impact of noise on humans. The EPA report found that keeping the maximum 24-hour equivalent day-night average sound level (DNL, a value below 70 decibels (dBA), would protect most people from hearing loss. The U.S. Department of Housing and Urban Development's noise standards describe exterior DNL less than 65 dBA as "Acceptable" and between 65 and 75 dBA as "normally unacceptable."

Sounds that disrupt normal activities or otherwise diminish the quality of the environment are considered noise. Noise events that occur during the night (10 p.m. to 7 a.m.) are more annoying than those that occur during normal waking hours (7 a.m. to 10 p.m.). Assessment of noise impacts includes the proximity of the Proposed Action to sensitive receptors, which are defined as an area of frequent human use that would benefit from a lowered noise level. Typical sensitive receptors include residences, schools, churches, hospitals, nursing homes, and libraries.

Existing noise levels in the project area are influenced by the waterfall created by the dam, along with traffic on nearby roads. Nearby sensitive receptors include the Lake Bronson State Park and residences that are approximately 0.5 miles away.

Alternative 1 – No Action

The No Action alternative would not include any construction or site preparation. Therefore, there would be no short-term noise impacts under the No Action alternative.

In the long-term, the No Action alternative would not provide substantive flood risk reduction. There would be continued risk of catastrophic dam failure that could damage infrastructure. Noise from subsequent flood-related repair equipment would be temporary and localized, consistent with the existing conditions of an urban area. Thus, negligible to minor long-term adverse noise impacts would occur.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would temporarily increase noise levels in the project vicinity (18 months). Activities associated with construction would be generally limited to daytime hours and in conformance with state and local noise standards; however, work on the cutoff wall may be 24 hours a day. The sensitive receptors near the project area would likely experience a temporary increase in noise levels from construction. Heavy machinery and equipment that would be used for the Proposed Action would be well maintained and have sound control devices no less effective than those provided on the original equipment.

Any heavy machinery and equipment used for the Proposed Action would be well maintained and have sound control devices no less effective than those provided on the original equipment. MNDNR will recommend that the specifications for project construction include requirements for muffler use on all trucks and applicable equipment. With the implementation of these BMPs, adherence to MNDNR's recommendations, and EPA standards (EPA 1974), the Proposed Action would have minor to moderate short-term adverse noise impacts in and near the project area.

Long term, the Proposed Action would not result in adverse noise impacts because it would not include an additional, permanent source of noise. Additionally, the Proposed Action would reduce the future risk of flooding, thereby reducing the need for repair and construction work and their associated noise impacts. As such, the Proposed Action would result in a negligible to minor long-term benefit on noise.

3.5.2. PUBLIC SERVICES AND UTILITIES

County Highway 28 and Lake Bronson State Park act as transportation and recreation public utilities within the project area, respectively. These resources are described in full in **Sections 3.5.3** and **3.5.5**. Public utilities such as the U.S. Post Office, a cemetery, and rail infrastructure are present in the downstream community of the City of Lake Bronson and may be impacted in the event of catastrophic dam failure.

Alternative 1 – No Action

Under the No Action alternative, no construction work would occur; therefore, there would be no short-term impact on public services and utilities. The No Action alternative would have minor long-term adverse impacts through the risk of catastrophic dam failure, which would impact the public services and utilities of Lake Bronson State Park and the downstream community of the City of Lake Bronson.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities would have the potential to damage utilities. Additionally, recreational facilities may be negatively impacted by the 18-month drawdown of the Lake Bronson reservoir which would affect fishing and other recreational activities, but these effects would be temporary. Therefore, there would be negligible to minor short-term adverse impacts on public utilities and services during construction.

Long term, the Proposed Action would reduce the risk of dam failure and flooding, reducing the likelihood of damage to utilities within Lake Bronson State Park and downstream community. Therefore, the Proposed Action would have minor to moderate long-term benefits on public services and utilities in and around the project area.

3.5.3. TRAFFIC AND CIRCULATION

County Highway 28 sits atop the dam embankment and has an average daily traffic volume of 170 vehicles per day, according to the Minnesota Traffic Mapping Application (MnDOT 2022). Other nearby roads include East Main Street leading into the City of Lake Bronson (200 vehicles per day) and County Road 10/220th Street running east-west on the south side of the reservoir (415 vehicles per day). Existing parking in the area consists of a small three car gravel space/pull-off along County Highway 28 near just south of the future spillway and a paved lot at the corner of the State Park Road and County Highway 28 that can accommodate approximately 20 vehicles.

Alternative 1 – No Action

Under the No Action alternative, no construction work would occur. Therefore, there would be no impact on traffic and circulation in the short term. The No Action alternative would have long-term minor to moderate adverse impacts through risk of catastrophic dam failure, which could impact County Highway 28. In the event of catastrophic dam failure, the road would become impassable and potentially irreparable.

Alternative 2 – Proposed Action

Under the Proposed Action, County Highway 28 Avenue would be closed during construction. The four-mile-long detour would route traffic through the City of Lake Bronson on US Highway 59. The primary entrance to the site will be from the north side of the project, from County Highway 28. Traffic would increase temporarily from workers and construction equipment. Construction equipment, specifically dump trucks, hauling materials to and from the construction site would increase traffic to County Highway 28; however, it is anticipated that fewer than 100 trucks per day would be added and no material hauling will be allowed through the park.

Availability of alternative transportation modes is limited due to the small size of the community but is not expected to create congestion within the community. Traffic control devices meeting the Minnesota Department of Transportation (MnDOT) requirements will be installed to guide traffic around the project and through the detour due to the closure of County Highway 28 during construction. In total, because of the anticipated construction activities, the Proposed Action is expected to have minor short-term adverse impacts on transportation.

In the long-term, the Proposed Action would reduce the risk of flooding in the project area, which would reduce the likelihood of temporary road closures caused by flooding, as well as longer-term road closures required for repair as a result of associated flood damage. Therefore, the Proposed Action would have moderate long-term benefits on transportation.

3.5.4. SAFETY AND SECURITY

The replacement of the dam is necessary to mitigate the risks associated with a high hazard dam in poor condition. The "High Hazard" classification assigned to the Lake Bronson Dam means that failure or mis-operation of the dam could lead to loss of life downstream. A "High Hazard" dam is also known as a Class I dam, according to the administrative rules of the MNDNR concerning classification of dams. Minn. R., part 6115.0340, item A (2008). The Lake Bronson Dam is listed as "Poor" condition in the National Inventory of Dams (USACE 2022), meaning the USACE recognizes dam safety deficiencies that need addressed. One deficiency is the inadequate hydraulic capacity of the outlet structure. The existing spillway is not large enough to pass a major flood, so a new spillway is needed. Additionally, the 85-year-old concrete spillway is deteriorating as shown by numerous cracks, spalls, and exposure of steel reinforcement to the elements. Finally, water pressures within the dam embankment could lead to instability.

Alternative 1 – No Action

The No Active alternative would have no short-term impacts as construction would not occur. Under the No Action alternative, the risk of catastrophic dam failure of the dam would go unmitigated, which would have long-term moderate to major adverse impacts. In the event of catastrophic dam failure, downstream lands would be inundated, causing significant damage and potential loss of life.

Alternative 2 – Proposed Action

Under the Proposed Action, construction activities have the potential to impact public health and safety from equipment use. All construction activities under the Proposed Action would be completed by qualified personnel trained in the proper use of equipment, including all safety precautions. Therefore, the Proposed Action would have negligible short-term adverse impacts on public health and safety.

Implementation of the Proposed Action would significantly mitigate the risk of catastrophic failure in the case of extreme precipitation and flooding events; therefore, the Proposed Action would have moderate to major long-term positive impacts.

The MNDNR issued a Dam Safety permit on August 14, 2024.

3.5.5. LAND USE AND ZONING

The proposed project area is primarily located within Lake Bronson State Park, which is owned by the state and managed by the MNDNR, Parks and Trails Division. The origin of Lake Bronson State Park can be attributed primarily to the decision to construct a dam on the South Branch Two Rivers. The towns of Hallock and Bronson advocated for creation of a reservoir to alleviate a water shortage in the 1930s. Work on the dam began in 1936 and construction of the combination observation and water tower, beach and bathhouse followed. These structures were completed by the Works Progress Administration (WPA), and they are part of the Lake Bronson State Park WPA/Rustic Style Historic District, listed on the National Register of Historic Places.

Lake Bronson offers visitors a number of water recreation activities, including fishing, swimming, boating, paddling, birding and wildlife viewing. Two public water accesses are located within the state park, one located near the Two Rivers Campground along South Branch Two Rivers on the east end of the lake, and the second public water access is located just west of the Lakeside and Lakeside Extension Campgrounds. Two fishing piers, hiking trails, restrooms, picnic areas and shelters are also available along the shoreline of Lake Bronson.

Lake Bronson State Park straddles the divide between the prairies to the west and the aspen-parkland to the east. Farming, the predominant prior land use before government acquisition, continues today on private land adjacent to the park. It was identified as a "core" prairie area in the 2014 Minnesota Prairie Conservation Plan (Chaplin, S.J.1 and H. Van Vleck2 2014.) This designation, reserved for important remnant prairies, spotlights the critical ecological role this state park holds.

No special districts or zones occur within the proposed project area. The WPA historic district is described in Section 3.6.

Lake Bronson is classified as Recreational Development in the MNDNR Shoreland Classification mapping application. The South Branch Two Rivers on the downstream side of County Highway 28 is classified as Agriculture, with a public waters category of Public Waters Natural.

Alternative 1 – No Action

Under the No Action alternative, construction would not occur which would not lead to changes in the underlying land use or zoning of the area; therefore, there would be no short-term impacts. The No Action alternative would not reduce the risk of catastrophic dam failure, which could cause downstream lands and communities to be inundated, causing significant disruption land use. Upstream, the effect of a catastrophic dam failure could result in uncontrolled drawdown of the reservoir, which could result in disruption to Lake Bronson State Park recreation usage, as well as other unforeseen disruptions. Therefore, the No Action alternative would have minor long-term adverse impact on land use. Increased risk of flooding would likely not change the current zoning designation within the impact area; therefore, the No Action alternative would have no long-term impact on zoning.

Alternative 2 – Proposed Action

During construction activities, water levels on Lake Bronson would be drawn down for 18 months. The lower lake level would temporarily impact recreational facilities within Lake Bronson State Park. The fishing pier near the dam would be unusable during project construction. The public water access near the dam (near Lakeside Campground) would be closed during project construction. Motor boating activity may not be available or accessible during the draw down and construction. However, paddling may be available during the lake draw down and accessible from the public access near the west end of the lake, near the Two Rivers Campground. Therefore, the Proposed Action would result in short-term minor adverse impacts land use.

In the long-term, implementation of the Proposed Action would reduce the risk of flooding. This would reduce the likelihood of property damage in the immediate area and surrounding communities. As such, the Proposed Action would have minor long-term benefits on land use. The Proposed Action would have no short- or long-term impacts on zoning as the project area would remain within the state park boundary.

3.6. Historic and Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. § 300101–307108), requires that federal agencies consider the potential effects of their undertakings on historic places and afford the Advisory Council of Historic Preservation a reasonable opportunity to comment on such undertakings (36 C.F.R. § 800). The NHPA (54 U.S.C. § 300308) defines a "historic place" (or "historic resource") as any "prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register of Historic Places (NRHP), including artifacts, records, and material remains related to such a property or resource." Following National Register Bulletin No. 36, an "archaeological site" is "a location that contains the physical evidence of past human behavior that allows for its interpretation." The term "archaeological site" refers to those sites that are eligible for or are listed on the NRHP and those that do not qualify for the NRHP. Cultural properties of historic or traditional significance—called Traditional Cultural Properties—may have religious or cultural significance to federally recognized Indian tribes, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons.

Historic places listed, eligible for listing, or potentially eligible for listing in the NRHP are subject to protection from adverse impacts resulting from a federally funded undertaking (36 C.F.R. § 800.5[a][1]).

In addition to the NHPA, FEMA must also comply with other federal laws that relate to historic and cultural resources:

- The Archaeological and Historic Preservation Act of 1974 (54 U.S.C. Chapter 3125) provides for the survey, recovery, and preservation of significant scientific, prehistoric, archaeological, or paleontological data when such data may be destroyed or irreparably lost because of a federal, federally licensed, or federally funded (in part or whole) project.

- The American Indian Religious Freedom Act of 1978 (42 U.S.C. § 1996) provides for the protection and preservation of American Indian sites, possessions, and ceremonial and traditional rites.

Pursuant to 36 C.F.R. § 800.16(d), the area of potential effects (APE) is "the geographic area(s) within which an undertaking may directly or indirectly cause alterations in the character or use of historic places." Within the APE, impacts on cultural resources are evaluated for both historic structures (aboveground cultural resources) and archaeology (belowground cultural resources).

Based upon the scope and nature of the Proposed Action and the federally regulated activities, and in consultation with the SHPO and USACE, the MNDNR defined the area of potential effects (APE) for the Undertaking as the area fully encompassing the requested modifications to the Lake Bronson Dam, including the discharge of fill material into WoUS and the adjacent uplands directly associated with the regulated activities as the USACE permit area.

3.6.1. CULTURAL RESOURCE COMPLIANCE

The project area is located within the boundary of the Lake Bronson State Park WPA/Rustic Style Historic Resources historic district. The 358-acre historic district was listed in the National Register of Historic Places (NRHP) in 1989 with areas of significance listed as architecture, landscape architecture, recreation, and government. The period of significance for the district is 1936-1940. The historic district includes five contributing buildings, four contributing structures, and three contributing objects for a total of 12 contributing resources (Table 3-3). The district boundary is generally defined by Lake Bronson Dam to the west, the entrance point of the South Branch Two River to the east, and the shoreline of Lake Bronson to the north and south, including the Group Camp Mess Hall and concentrated use areas.

Bridge 7498, which carries County Highway 28 over the Lake Bronson Dam, is considered eligible for listing in the NRHP.

Two previously known archaeological sites are within the proposed project area: 21KT0019, a CCC Camp, and 21KT0052, a Native American artifact scatter. Archaeological monitoring is planned during the partial drawdown of the Lake Bronson reservoir to identify, document, protect, and/or recover potential archaeological resources during construction.

As a result of the fifteen years of alternative analysis, and as part of the NEPA planning process, USACE evaluated an application submitted by the MNDNR requesting a U.S. Army Corps of Engineers (USACE) permit under the 404 of the Clean Water Act authorizing the discharge of dredged of fill material into Lake Bronson and South Branch Two Rivers and adjacent wetlands associated with the removal and replacement of the existing Works Progress Administration/Civilian Conservation Corps (WPA/CCC) dam in Kittson County, Minnesota. The issuance of a USACE permit to place fill in to waters of the United States (WoUS) is considered a federal undertaking and subject to review under Section 106 of the NRHP (54 U.S.C. 306108) and the Advisory Council on Historic Preservation's implementing regulations found at 36 C.F.R. Part 800. Under 36 C.F.R. Part 800.2(c)(4), USACE authorized the MNDNR to initiate consultation and coordinate directly with the State Historic Preservation Office (SHPO) for Section 106 compliance.

The MNDNR, in consultation with the SHPO and USACE, identified historic properties within the APE, including the Lake Bronson State Park WPA/Rustic Style Historic Resources Historic District (KTPCY-00001), which is listed on the National Register of Historic Places (NRHP). The MNDNR proposes to demolish the Lake Bronson Dam and Bridge 7498 (KT-PCY-00018), which is a listed as a contributing property of the Lake Bronson State Park WPA/Rustic Style Historic Resources Historic District. As a result of the consultation between the three agencies, the SHPO and USACE

determined that the Undertaking would adversely affect historic properties. The MNDNR, in consultation with the SHPO and USACE, determined that it is not feasible to redesign the Proposed Action to avoid the adverse effect to the Lake Bronson Dam and Bridge 7498. On November 13, 2024, USACE and the SHPO entered into a Memorandum of Agreement (MOA) regarding USACE authorizing a permit for the Lake Bronson Dam Replacement Project in Kittson County, Minnesota. The MOA outlines agreed upon stipulations for mitigation and takes into account the adverse effect caused by the Undertaking (**Appendix C**).

Pursuant to 36 C.F.R. 800.2(a)(2), FEMA designated USACE as the lead Federal Agency to fulfill the requirements for Section 106 compliance of NHPA. FEMA notified the SHPO, USACE and MNDNR of the designation on May 23, 2025. FEMA considers USACE the lead Federal Agency to fulfill the collective Section 106 responsibilities as stipulated in the MOA between USACE and the SHPO.

Table 3-3. Historic District Contributing Resources

Resource	Inventory Number	Date of Construction	NRHP Status
Lake Bronson State Park WPA/Rustic Style Historic Resources historic district	KT-PCY-001	1936-1940	NRHP-listed
Bath House	KT-PCY-012	1938	NRHP-listed, contributing
Latrine	KT-PCY-013	1938	NRHP-listed, contributing
Garage & Office	KT-PCY-014	1939	NRHP-listed, contributing
Drinking Fountains (3)	KT-PCY-015	1940	NRHP-listed, contributing
Stone Curbing in Parking Lots	KT-PCY-016	1939	NRHP-listed, contributing
Water Tower	KT-PCY-017	1939	NRHP-listed, contributing
Lake Bronson Dam	KT-PCY-018	1936-37	NRHP-listed, contributing
Group Camp Mess Hall	KT-PCY-019	1940	NRHP-listed, contributing
Kitchen/Picnic Shelter	KT-PCY-020	1940	NRHP-listed, contributing
Lake Bronson	KT-PCY-021	1936-37	NRHP-listed, contributing
Bridge 7498	KT-PCY-021	1936-37	NRHP eligible

Alternative 1 – No Action

Under the No Action alternative, there would be no FEMA action; therefore, there would be no short-term impact on cultural resources. However, the No Action alternative would have a negative long-term effect through risk of catastrophic dam failure, which could have moderate to major impacts on

these resources. In the case of catastrophic dam failure, the contributed feature of Lake Bronson Dam (KT-PCY-018) and the eligible feature of Bridge 7498 (KT-PCY-021) and potentially archaeological sites would be irreparably damaged.

Alternative 2 – Proposed Action

During the project, Lake Bronson will be at least partially drawn down to facilitate construction. The drawdown of the lake temporarily is not anticipated to result in an adverse effect to the lake itself or to any additional historic resources, but there is the potential for previously unidentified cultural resources to be revealed during the drawdown. The MOA outlines an archaeological monitoring plan for the lake drawdown and dam replacement.

The Proposed Action includes complete removal of the existing Lake Bronson Dam spillway and Bridge 7498. Removal of the NRHP-listed dam spillway and the NRHP-eligible bridge will result in an adverse effect. As a contributing resource to an historic district, the removal of the spillway will not only impact the individual property, but the district as a whole. The removal of the bridge, though not contributing to the historic district, is an integral component of the dam and was evaluated accordingly. Despite its eligible but not listed status, its removal will result in an adverse effect to an identified historic property.

The removal of the spillway and bridge are necessary because the dam is in poor condition. The dam is experiencing seepage and will therefore require a substantial structural component to prevent this from occurring with the new spillway. As a result, rehabilitating the current spillway is not feasible and complete avoidance of an adverse effect is not realistic. As an integral component of the dam, avoidance of removing Bridge 7498 is also not feasible.

Mitigation measures are outlined in the MOA after consultation between the MNDNR, USACE, and SHPO was complete. The first mitigation component is the archaeological monitoring plan and monitoring will be conducted during all project-related ground-disturbing activities. This includes shoreline assessment, lake drawdown and dam removal.

The second mitigation component includes complete documentation of the dam and bridge prior to removal to Level 1 Minnesota Historic Property record guidelines and standards. All work shall be completed by an architectural historian meeting the *Professional Qualification Standards* in the *Secretary of Interior's Standards and Guidelines*. The last component of mitigation includes interpretation. The MNDNR shall plan and create an interpretive medium that will include information of a) the history of the Lake Bronson Dam and Bridge 7498; b) information of the Works Progress Administration program and c) why the dam and bridge were replaced. One draft shall be submitted to USACE and the SHPO for review and comment within four (4) years of the Agreement execution. MNDNR will take comments from USACE and SHPO into account and provide a pdf of the final medium within one hundred and twenty (120) calendar days. The MNDNR shall assure that the medium can be available in person at the Lake Bronson State Park Visitor Center and/or the Kittson County Museum and submit notification to the USACE and SHPO to confirm fulfillment of the stipulation.

3.6.2. TRIBAL COORDINATION AND RELIGIOUS SITES

EO 13175, *Consultation and Coordination with Indian Tribal Governments*, directs federal agencies "to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes." 65 Fed. Reg. 67249 (Nov. 9, 2000).

Requests for information on the presence or absence of known archaeological and Native American religious sites within the Proposed Action project areas were submitted to federally recognized tribal nations with potential interests in the project. On February 27, 2025, FEMA initiated consultation with the following tribal nations:

- Lac Vieux Desert Band of Lake Superior Chippewa Indian Tribe
- Turtle Mountain Band of Chippewa Tribe
- Red Lake Band of Chippewa Indians of Minnesota

No responses were received from the FEMA notification. However, the Turtle Mountain Band of Chippewa Indians Tribal Historic Preservation Office (THPO) requested to be included as a Concurring Party to the USACE MOA. Additionally, MNDNR coordinated with the THPOs of the Turtle Mountain Band of Chippewa Indians and the Red Lake Nation during the preparation of the Archaeological Monitoring Plan. USACE therefore also included the Red Lake Nation as a Concurring Party to the USACE MOA.

Alternative 1 – No Action

Under the No Action alternative, there would be no FEMA action; therefore, there would be no short-term impact on historic and cultural resources. The No Action alternative would have a long-term moderate to major adverse impacts through risk of catastrophic dam failure, which could impact archaeological resources.

Alternative 2 – Proposed Action

The MOA contains the archaeological monitoring plan, and monitoring will be conducted during all project-related ground-disturbing activities. This includes shoreline assessment, lake drawdown and dam removal. Archaeological monitors will be on-site to monitor all demolition and construction activities, including soil disturbances within Site 21KT0052, i.e., the Native American artifact scatter site, and monitor avoidance of Site 21KT0119 Additionally, the archaeological monitoring plan outlines risk to other archaeological sites during the lake drawdown. The archaeological monitoring plan outlines a process by which the archaeological monitor will notify the Principal Investigator to evaluate whether or not the discovery qualifies as a historic property. Furthermore, the archaeological monitoring plan outlines a process for Unanticipated Discoveries. The Proposed Action could have moderate to major impacts on archaeological resources.

3.7. Comparison of Alternatives

Table 3-4 summarizes the potential environmental impacts from implementing the No Action alternative, Proposed Action, and any applicable proposed mitigation.

Table 3-4. Summary of Environmental Impacts and Mitigation

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Soils, Geology, and Topography	• No short-term impacts on soils or topography. • Risk of minor long-term adverse impacts on soils and topography from risk of catastrophic dam failure and subsequent flooding. • No short- or long-term impacts to geology.	• Moderate short-term adverse impacts on soils and topography from earthwork and grading. • Moderate long-term benefits on soils and topography from the reduced risk of flooding and erosion from catastrophic dam failure. • No short- or long-term impacts to geology.	• Implement Condition 3 in Section 6.2.
Water Resources and Water Quality	• No short-term impacts on water resources and water quality. • Risk of moderate long-term impacts on water resources and water quality from risk of catastrophic dam failure.	• Minor short-term adverse impact on water quality during construction from equipment use and in-water work, as well as the 18-month drawdown of the Lake Bronson Reservoir. • Moderate to major long-term benefits on water resources from the reduced risk of catastrophic dam failure.	• Implement Conditions 3, 4, and 5 in Section 6.2.
Floodplain Management	• No short-term impacts on the floodplain. • Moderate to major long-term impacts from continued risk of flooding from catastrophic dam failure.	• Minor short-term adverse impacts from construction in the floodplain. • Moderate to major long-term benefits on floodplains by increasing flood resilience of the Lake Bronson dam.	• Implement Conditions 5 and 6 in Section 6.2.
Air Quality	• No short-term impacts on air quality.	• Minor short-term adverse impacts from construction	• Implement Condition 7 in Section 6.2.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
	• Negligible long-term impacts on air quality in the event of dam failure and subsequent recovery activities.	equipment emissions and exposed soils. • No long-term impacts.	
Terrestrial and Aquatic Environment	• No short-term impacts on the terrestrial and aquatic environment. • Risk of minor to moderate long-term impacts on terrestrial and aquatic environment from risk of catastrophic dam failure.	• Moderate short-term impacts from vegetation clearing and other construction activities, as well as the 18-month Lake Bronson reservoir drawdown. • Minor long-term benefits from reduction of risk of dam failure and catastrophic flooding and promotion of recovery efforts.	• Implement Condition 3 through 6 in Section 6.2.
Wetlands	• No short-term impacts on wetlands. • Risk of minor to moderate long-term adverse impacts wetlands from risk of catastrophic dam failure and resulting flooding.	• Minor to moderate short-term impacts from construction activities within wetlands, as well as the 18-month Lake Bronson reservoir drawdown. • Moderate long-term benefits from reduction of risk of dam failure and catastrophic flooding.	• Implement Condition 1 and 3 through 6 in Section 6.2.
Threatened and Endangered Species	• No short-term impacts on listed threatened or endangered species. • Moderate to major long-term adverse impacts on listed threatened or endangered species from risk of catastrophic dam failure and resulting flooding.	• May affect but is not likely to adversely affect the gray wolf and the northern long-eared bat. • No effect on the Monarch Butterfly and Western Prairie Fringed Orchid. • No short-term effect on critical habitat for the Dakota skipper and Poweshiek skipperling; minor long-term beneficial	• Implement Condition 4 in Section 6.2.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
		impact on critical habitat.	
Migratory Birds and Bald and Golden Eagles	• No short- or long-term impacts to migratory birds and bald and golden eagles.	• Minor short-term adverse impacts to migratory birds and bald eagles from construction and the Lake Bronson Reservoir drawdown. • Negligible long-term benefits to migratory birds and bald eagles from the mitigation of flooding and encouragement of tree growth.	• Implement Conditions 5 and 6 in Section 6.2.
Hazardous Materials	• No short-term impacts to hazardous materials. • Minor long-term adverse impacts from in the event of dam failure which could allow hazardous material to enter waterways.	• Negligible short-term impacts from construction equipment use and the potential for inadvertent exposure of unknown hazardous materials. • Minor long-term benefits by reducing risk of pollutants being transported and generation of hazardous waste.	• Implement Conditions 7 and 8 in Section 6.2.
Noise	• No short-term impacts on noise. • Negligible to minor long-term impacts on noise in the event of dam failure and subsequent recovery activities.	• Minor to moderate short-term adverse impacts associated with construction. • Negligible to minor long-term benefit from the reduction of need to repair and reconstruct following dam failure.	• Implement Condition 9 in Section 6.2.
Public Services and Utilities	• No short-term impacts on public service and utilities. • Moderate to major long-term adverse impacts to public services and utilities from risk of catastrophic dam	• Negligible to minor short-term adverse impacts from construction. • Minor to moderate long-term benefits from reducing the risk of catastrophic dam failure.	• None required.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
	failure and resulting flooding.		
Traffic and Circulation	• No short-term impacts on traffic and circulation. • Minor to moderate long-term adverse impacts to traffic from risk of catastrophic dam failure and resulting flooding.	• Minor short-term adverse impact from construction traffic. • Moderate long-term benefits from reducing the risk of catastrophic dam failure.	• None required.
Safety and Security	• No short-term impacts on safety and security. • Risk of moderate to major long-term impacts to safety and security from risk of catastrophic dam failure and resulting flooding.	• Negligible short-term adverse impacts from construction. • Moderate to major long-term benefits from reducing the risk of dam failure and resulting flooding that would threaten life and property.	• Implement Conditions 10 and 11 in Section 6.2.
Land Use and Zoning	• No short-term impacts on land use. • Minor long-term adverse impacts on land use resulting from dam failure and subsequent flooding. • No short- or long-term impacts to zoning.	• Minor short-term adverse impacts to land use during construction activities and the 18-month Lake Bronson reservoir drawdown. • Minor long-term benefits to land use from reducing the risk of dam failure and resulting flooding. • No short- or long-term impacts to zoning.	• None required.
Historic Structures	• No short-term impacts on historic structures. • Moderate to major long-term impacts from risk of catastrophic dam failure.	• Minor short-term adverse impacts due to construction activities on the spillway and bridge structures. • Removal of the NHRP-listed dam spillway and NRHP-eligible bridge will result in a major long-term adverse impact.	• Implement Conditions 12 and 13 in Section 6.2.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Archaeological Resources	• No short-term impacts archaeological resources. • Moderate to major long-term impacts from risk of catastrophic dam failure.	• Minor to moderate short-term adverse impacts due to construction. • No long-term impacts to archaeological resources.	• Implement Conditions 12 and 13 in Section 6.2.
Tribal and Religious Sites	• No short-term impacts on tribal and religious sites. • Moderate to major long-term impacts from risk of catastrophic dam failure.	• Minor to moderate short-term adverse impacts due to construction. • No long-term impacts to tribal and religious sites.	• Implement Conditions 12 and 13 in Section 6.2.

SECTION 4. Cumulative Effects

This section addresses the potential cumulative effects associated with the implementation of the Proposed Action. Cumulative effects are effects on the environment that result from the incremental effects of a proposed action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or nonfederal) or person undertakes those other actions (40 C.F.R. § 1508.1(i)(3) (2022)). CEQ's regulations for implementing NEPA require an assessment of cumulative effects during the decision-making process for federal projects. The code also states that cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Other statutes require federal agencies to consider cumulative effects. These include the CWA Section 404(b)(1) guidelines, the regulations implementing the conformity provisions of the CAA, the regulations implementing Section 106 of the NHPA, and the regulations implementing Section 7 of the ESA.

Once the dam and bridge are reconstructed, there are no other future developments planned for the dam at this time. Potential future state park maintenance and development projects include improvements and updates for accessibility (meeting Americans with Disabilities Act (ADA) requirements) and potential updates to the public water access, as needed during and/or post construction, and subject to funding availability. Routine maintenance, management and operations of the state park will not require NEPA review. Environmental review needs will be assessed, as needed, when projects are proposed.

4.1. Traffic

County Highway 28 sits atop the dam embankment and has an average daily traffic volume of 140 vehicles per day, according to the Minnesota Traffic Mapping Application (MnDOT 2017). Other nearby roads include East Main Street, leading into the City of Lake Bronson (200 vehicles per day) and County Road 10/220th Street running east-west on the south side of the reservoir (415 vehicles per day). County Highway 28 will be closed during the construction. A four-mile-long detour will route traffic through the City of Lake Bronson on US Highway 59.

Several agencies and units of government were contacted to inquire about current or planned projects in the area that might have impacts that could contribute to cumulative potential effects from this project. These include the MNDNR Parks and Trails staff, the MnDOT, and the Two Rivers Watershed District. Based on information obtained, MNDNR Parks and Trails staff have stated that potential future state park projects may include improvements and updates for accessibility within the park in order to meet requirements of the ADA. Updates to the public water access may also occur during and/or post project construction as needed. Funding has not been made available for these potential projects. As no project timeframe or funding is identified, these potential projects are not included in the analysis.

MnDOT has identified one road project that will pass through the City of Lake Bronson and will stop at the junction of TH175 North of Lake Bronson. This project would be within the same geographic scale as the Proposed Action; however, it is expected to begin after the Proposed Action would be completed; therefore, was not included in the analysis.

Should the Proposed Action and the Klondike Clean Water Retention Project (KCWRP), described below) occur within the same timeframe, it is possible that construction vehicles coming and going from the KCWRP project could be impacted by the traffic reroute along County Highway 28 due to the Proposed Action. However, it is not expected that this would result in increased traffic to the area, or cause traffic congestion within the area.

4.2. Water quality

Removal of the existing spillway and construction of the new spillway could cause a short-term introduction of sediment-laden runoff into the South Branch Two Rivers below the project site prior to completion of the project. Also, construction of the seepage cutoff wall could cause sediment to enter the Lake Bronson reservoir.

The Two Rivers Watershed District has identified that the KCWRP would be located within the same geographic scale of the Proposed Action. The KCWRP would be located approximately 11 miles upstream of the Proposed Action, in Roseau and Kittson Counties, within the Two Rivers and Red River watersheds. Portions of the Proposed Action would drain into the South Branch Two Rivers, upriver of Lake Bronson. The KCWRP is a multi-purpose public project that aims to reduce flooding, improve water quality, improve aquatic habitat, protect and enhance a prairie rich fen, and provide an adequate drainage outlet primarily for lateral 1 of State Ditch 95 and secondarily for State Ditch 72. An EAW and record of decision were completed for this project in early 2023. Exact timeframe for this project is unknown, though it has potential to occur within the same timeframe as the Proposed Action.

Portions of the KCWRP would drain into the South Branch Two Rivers, and ultimately into Lake Bronson. It is possible that sediment may enter the river during construction of the KCWRP, and reach Lake Bronson, adding more sediment to the system downstream within Lake Bronson and behind the dam. Both the KCWRP and the Proposed Action would be required to have construction stormwater permits which should mitigate sedimentation impacts during construction. Long term, the KCWRP is expected to improve water quality while reducing sediment, nitrogen and phosphorus, while increasing dissolved oxygen within the system.

4.3. Wetlands

The geographic scale for wetlands includes impacts to those near the dam. Some impacts to wetlands are expected to be temporary and some are expected to be permanent. The wetlands adjacent to the lake may have temporarily reduced water levels during the drawdown period. Three acres of permanent wetland impact is expected due to construction. Construction of a new outlet channel will likely create new wetlands. Drawdown of Lake Bronson will temporarily impact Lake

Bronson. The lake will be temporarily drained during construction and will be refilled upon completion of construction.

Both the Proposed Action and the KCWRP would have permanent impacts on wetlands within the watershed and would require state and federal permits for wetland impacts and would require mitigation for these wetland impacts. No net loss to wetlands within the watershed district would be expected as a result of either of the projects. The KCWRP would likely result in an overall gain in wetland area and would also improve wetland quality.

SECTION 5. Agency Coordination and Public Involvement

5.1. Consultations

The following agencies were consulted during the preparation of this EA.

5.1.1. FEDERAL, STATE, AND LOCAL AGENCIES

- Kittson County
- Kittson County Museum
- Kittson County Engineering Department
- Kittson County Soil and Water Conservation District
- Minnesota Board of Water and Soil Resources
- Minnesota Department of Natural Resources
- Minnesota Department of Transportation
- Minnesota Office of the State Archaeologist
- Minnesota Pollution Control Agency
- Minnesota State Historic Preservation Office
- Natural Resources Conservation Service
- Two Rivers Watershed District
- U.S. Army Corps of Engineers
- U.S. Department of the Interior
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- U.S. National Park Service

5.1.2. TRIBAL NATIONS

- Lac Vieux Desert Band of Lake Superior Chippewa Indians Tribe
- Red Lake Band of Chippewa Indians of Minnesota Tribe
- Turtle Mountain Band of Chippewa Tribe

5.2. Record of Decision

A public record of decision was published on the MNDNR website on September 19, 2023, to notify and provide the public with a 30-day opportunity to comment on the Proposed Action, potential alternatives, and environmental impacts. Comments were received from the State Historic Preservation Office and the Two Rivers Watershed District. The MNDNR addressed the feedback and continued to work with the two organizations over the next few years on finalizing reviews, plans, and proposals.

5.3. Draft Environmental Assessment Public Comment

This draft EA will be made available for agency and public review and comment for a period of 30 days. The public engagement process will include a public notice with information about the Proposed Action on the MNDNR website at https://www.dnr.state.mn.us/input/environmentalreview/lake-bronson-dam-eaw.html. This draft EA will be available on FEMA's website at https://www.fema.gov/emergency-managers/practitioners/environmental-historic/region/5.

This draft EA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action; however, FEMA will consider any substantive comments received during the public review period to inform the final decision regarding grant approval and project implementation. The public is invited to submit written comments via email to fema-r5-environmental@fema.dhs.gov or via mail to the following:

Duane Castaldi
Regional Environmental Officer
FEMA Region 5
536 South Clark Street, 6th Floor
Chicago, IL 60605

FEMA will take into consideration any substantive comments received during the public review period to inform the final decision regarding grant approval and project implementation. If no substantive comments are received from the public and/or agency reviewers, this EA will be assumed to be final, and a FONSI will be issued by FEMA.

SECTION 6. Project Conditions and Permits

6.1. Permits

The Department of MNDNR will be responsible for obtaining any necessary local, state, or federal permits needed to conduct the proposed work.

Table 6-1 summarizes the necessary permits to implement the Proposed Action and their status.

Table 6-1 Permit Summary

Issuing Agency	Resource	Permit Title	Applicable Regulation/Law	Status
Kittson County	Floodplain Management	Local Floodplain Development Permit	National Flood Insurance Program	To be obtained, prior to construction
Kittson County	Land Use and Zoning	Right of Way Permit	Kittson County Zoning Ordinance	To be obtained, if required
MNDNR	Water Resources and Water Quality and Safety and Security	Dam Safety and Public Waters Permit	Clean Water Act	Permit 2024-0180 issued August 15, 2024
MNDNR	Water Resources and Water Quality	Water Appropriation Permit	Clean Water Act	To be obtained, if required
LGU (MNDNR)	Wetlands	Wetland Conservation Act (WCA) Permit	Executive Order 11990	December 11, 2024
MPCA	Water Resources and Water Quality	401 Water Quality Certification	Clean Water Act	April 1, 2024
MPCA	Water Resources and Water Quality	National Pollution Discharge Elimination System (NPDES) Construction Stormwater (CSW) Permit	Clean Water Act	October 9, 2024
MPCA	Water Resources	Notification to Manage Dredged	Clean Water Act	To be obtained, if required

Issuing Agency	Resource	Permit Title	Applicable Regulation/Law	Status
	and Water Quality	Material Without a Permit		
Two Rivers Watershed District	Water Resources and Water Quality	Public Improvement Project	Clean Water Act	Permit 2121 issued June 6, 2024.
USACE	Water Resources and Water Quality	Section 404 Permit	Clean Water Act	MVP-2021-00563-LSP; December 10, 2024
BWSR	Wetlands	Wetland Band Credit Withdrawal Verification	Wetland Executive Order	Transaction 21218; January 7, 2025

6.2. Project Conditions

MNDNR is responsible for compliance with federal, state, and local laws and regulations, including obtaining any necessary permits prior to beginning construction activities, and adhering to any conditions laid out in those permits. Any substantive change to the scope of work will require re-evaluation by FEMA for compliance with NEPA and any other laws or EOs. Failure to comply with FEMA grant conditions may jeopardize federal funding.

General Project Conditions

1. MNDNR is responsible for obtaining and complying with all required local, state, and federal permits and approvals.

2. If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or any other unanticipated changes to the physical environment, MNDNR must contact FEMA so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.

3. Air Quality Implement applicable BMPs from EPA's Construction Emission Control Checklist (included in Appendix B).

Threatened and Endangered Species

4. The timing of tree removal for trees greater than or equal to 3 inches diameter at breast height would be scheduled to comply with the seasonal restrictions for the northern long-eared bat (i.e., tree removal would be performed during the species' inactive season, between October 1 through March 31) to the maximum extent practicable.

Migratory Birds

5. Coordinate with USFWS to comply with federal (MBTA and BGEPA) and state laws for the protection of birds prior to initiating work and obtain any necessary permits.
6. Vegetation removal should be avoided during the migratory bird nesting season (approximately February 15 to August 15) to the extent practicable.

Hazardous Materials

7. If hazardous source materials are encountered during excavation, culvert removal, or construction activities for the Proposed Action, contingency plans will be prepared that detail the procedures that the contractors will follow to identify, manage, and dispose of source materials, or other heavily contaminated materials, in accordance with all local, state, and federal regulations. These specifications sections should include, but are not limited to, procedures that address Safety, Health, and Emergency Response Procedures; Environmental Protection Procedures; Contaminated Soil Excavation; Transportation and Disposal of Contaminated Material; and Contaminated Dewatering and Drainage.
8. MPCA will be notified if source material or other heavily contaminated material is encountered.

Noise

9. Construction activities to take place during the less noise-sensitive daylight hours.

Safety and Security

10. To minimize risks to safety and human health, construction activities will be performed using qualified personnel trained to use the required equipment properly.
11. All construction activities will be conducted in accordance with the standards specified in the Occupational Safety and Health Administration regulations.

Cultural and Archaeological Resources, Tribal, and Religious Sites

12. The subapplicant is required to carry out all outstanding cultural resource and archaeological mitigation requirements agreed upon in the NHPA Section 106 process outlined in the USACE and SHPO MOA. The subapplicant will provide such details and SHPO concurrences to FEMA at the time of completion of the mitigation requirements and at closeout of the FEMA grant.
13. Should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site shall cease and follow the Unanticipated Discoveries Plan as outlined in the MOA.

SECTION 7. References

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SECTION 8. List of Preparers

The following is a list of preparers who contributed to the development of the project EA for FEMA. The individuals listed herein had principal roles in the preparation of this document. Many others contributed, including senior managers, administrative support personnel, and technical staff, and their efforts in developing this EA are appreciated.

Federal Emergency Management Agency

- Eric Andrews, Lead Environmental Protection Specialist
- Duane Castaldi, Regional Environmental Officer
- Maureen Cunningham, Regional Counsel
- Karen Poulson, Senior Cultural Resources Specialist
- Leslie Schroeder, Senior NEPA Specialist

Copies of Appendices are available upon request from

fema-r5-environmental@fema.dhs.gov