MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Record of Decision

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Lake Bronson Dam Rehabilitation Project, in Kittson County, Minnesota

FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

1. The Minnesota Department of Natural Resources (DNR) proposes the Lake Bronson Dam Rehabilitation Project (project). The purpose of the project is to improve the safety of the Lake Bronson Dam, which is in poor condition. The project includes the removal and replacement of the 85-year-old concrete spillway and associated Kittson County Highway 28 Bridge.

2. The project is located within Lake Bronson State Park, located in Kittson County, Minnesota. The project is also located within areas of valuable natural and cultural resources, including a Works Progress Administration historic district.

3. The proposed project requires preparation of a State Environmental Assessment Worksheet (EAW) according to the rules of the Minnesota Environmental Quality Board (EQB), Minnesota Rules (Minn. R.) 4410.4300, Subp. 27, Public waters, public waters wetlands, and wetlands, and Subp. 31. Historical places.

4. The DNR is the Responsible Governmental Unit (RGU) in the preparation and review of environmental documents related to the Lake Bronson Dam Rehabilitation Project. *See* Minn. R. 4410.0500, subp. 1.

5. The DNR prepared an EAW for the proposed project. *See* Minn. R. 4410.1400 and 4410.4300, subp. 27 and subp. 31.

6. The DNR filed the EAW with the EQB and a notice of its availability was published in the EQB *Monitor* on September 19, 2023. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by DNR to be interested in the proposed project, and to those persons requesting a copy. A statewide press release announcing the availability of the EAW was sent to newspapers, radio, and television stations. A copy of the EAW was distributed to the following locations: the Hallock Public Library, Lake Bronson State Park, the Crookston Public Library, the Northwest Regional Development Commission,

and the Hennepin County Library. The EAW was also made available to the public via posting on the DNR's website. *See* Minn. R. 4410.1500.

Public Comment Period and Response to Comments

7. The 30-day EAW public review and comment period began September 19, 2023, and ended October 19, 2023. Written comments on the EAW could be submitted to the DNR by U.S. mail, or via email. *See* Minn. R. 4410.1600.

8. During the 30-day EAW public review and comment period, the DNR received 2 written comment letters on the EAW. The agencies and individuals who submitted comments are listed below. Comment letters are included in Attachment A of this Record of Decision.
    - State Historic Preservation Office (SHPO), Sarah Biemers
    - Two Rivers Watershed District (TRWD), Dan Money

9. Comment letters are summarized below (*See* ¶¶ 10 and 11) with DNR's response following. Copies of these comments will be provided to the project proposer and to permitting and/or approval entities and/or authorities for their consideration as part of the permitting, approval, and/or implementation processes.

10. The SHPO comment letter stated that SHPO is consulting with the DNR and other interested parties regarding the proposed project and its effects on historic properties under Section 106 of the National Historic Preservation Act. They agreed that the summary provided in EAW Item 15 accurately reflects the current status of the review and summarizes the known historic properties that may be adversely affected by the proposed project.

    RESPONSE: The DNR appreciates the time SHPO staff spent reviewing the EAW.

11. The TRWD letter contained eight separate comments, which are listed below.

    Comment 1: A project of this magnitude obviously will affect a large area and numerous downstream landowners. We suggest that when drawdown is occurring that landowners adjacent to the South Branch Two Rivers be notified, including local government entities. These include the City of Lake Bronson, City of Hallock, Kittson County, the Two Rivers Watershed District, and the Townships of Percy, Hazelton, Thompson, Hallock, North Red River, and Hill. This notification will allow these entities to be aware of the situation and prepare properly and respond to rainfall events that may occur during the drawdown periods.

    RESPONSE: Drawdown will be controlled to reduce potential impacts and is discussed in EAW Item 6. The DNR has a contact list that is used to provide email notifications of gate changes during flood events and other pertinent information related to the Lake Bronson Dam and water flow. The government entities listed in the comment will be included in the list.

Comment 2: During the drawdown of the lake, if there are times when there is downstream flooding occurring, outflows from the lake must be regulated to prevent or limit impacts to public and private land, public and private infrastructure, and to prevent erosion. Coordination with the Two Rivers Watershed should occur when releasing water. The TRWD has two impoundments located upstream of Lake Bronson, which are utilized to regulate flood flows on the Two Rivers. The TRWD also has numerous stream gaging stations. Trigger points at key locations should be monitored to ensure releases from the dam do not contribute to excessive flooding.

> RESPONSE: Drawdown will be controlled to reduce potential impacts. DNR has a contact list that is used to provide email notifications of gate changes during flood events, including any pertinent gaging station readings. Contacts/Representatives for the Two Rivers Watershed District are included in the contact list.

Comment 3, Permits: While it has been generally established that the DNR is not required to apply for or obtain a permit from a watershed district, the DNR has in the past provided information to the Two Rivers Watershed District if it is undertaking an activity that would be regulated by the rules of the Two Rivers Watershed District. One of the criteria under these rules, is "any construction or alteration of any bridge, dike, culvert or drain across any drainageway, lake, wetland or other water body". The TRWD is intricately involved in water management activities within its jurisdiction, and it should be noted that although the DNR is not required to obtain a permit, coordination with the TRWD should be done.

> RESPONSE: Comment noted. DNR will coordinate with Two Rivers Watershed District and will send TRWD a copy of the dam safety/public waters permit application.

Comment 4, Plans: The "Overall Plan of the Two Rivers Watershed District" should be mentioned here. This plan specifically states: "There is evidence of and potential for future sedimentation of the upper reaches of the lake. It has been noted that this issue needs to be studied and that the influence of the dam should be considered". A copy of this section of the plan can be found at http://tworiverswd.com/pdf/Overall%20Plan%202004%20FINAL.pdf#page=81

> RESPONSE: Comment noted. DNR acknowledges and recognizes the importance of *The Overall Plan of the Two Rivers Watershed District* (Revised July 6, 2004), for inclusion as an applicable plan for watershed management in Items 10.a.ii. and 10.b. The proposed project appears to be compatible with *The Overall Plan of the Two Rivers Watershed District*. DNR staff will continue to be in communication with the TRWD throughout the project and ongoing management and operation of Lake Bronson and the dam.

Comment 5, compatibility with plans: While sediment has been noted as a concern in the watershed district plan, it probably has been an existing issue since the construction of the original dam. It should be noted that DNR [Division of Parks and Trails Staff] is meeting with local landowners and the TRWD to consider the influence of the dam on the sediment issue, address the impacts to navigation on the lake, and potential opportunities to address the issue.

> RESPONSE: The project is not anticipated to change sediment deposition volumes or patterns at the upstream end of the reservoir. Dredging of sediment at the upstream end of the reservoir is

not part of this project. DNR will continue to communicate with landowners and TRWD on this issue.

Comment 6, physical effects/alterations: It would be helpful to see a hydrograph or other type of information that shows what the difference will be in flows that currently occur downstream of the dam with what the proposed flows will be with the new dam in place for a 10 year, 25 year, 50 year and 100 year runoff event. Will the timing of flows in the river be affected, and if so, how/to what extent (volumes and durations)?

RESPONSE: The DNR does not anticipate significant changes to the volume and duration of flows due to the new spillway. The DNR has a rating curve of the current dam and the proposed dam that assumes steady state conditions. Gate operations dictate the volumes and durations of flow with the existing dam up to a flow of approximately 1700 cubic feet per second (cfs). The proposed dam will produce a more natural hydrograph for flows below 1700 cfs. Flows above 1700 cfs, which include the 10 year, 25 year, 50 year, and 100 year events, will have similar hydrographs when comparing existing against the proposed project. The reservoir does not provide a lot of storage for these large events and the events tend to be long in duration, so the peak flow into the reservoir is similar to the peak flow out of the reservoir.

Comment 7, effects on habitat: Lake Bronson dam currently is a fish barrier on the South Branch Two Rivers. A recent project removed the dam at Hallock, allowing fish to access more than 25 miles upstream to the Lake Bronson dam. Was any fish passage considered as a part of this project to greatly enhance and restore fish passage to areas upstream of the dam?

RESPONSE: Fish passage was considered at the very early stages of the project planning and design phase and was deemed to be not feasible, including potentially incorporating a rock arch rapids. The large difference in water elevations from upstream of the dam to downstream of the dam is the major hindrance to a constructed fish passageway.

Comment 8, water quality: It is mentioned earlier in the document that de-oxygenated water will be removed from the bottom of the lake and discharged through a pipe. It could be stated that a project benefit would be that this oxygen-depleted water will be re-oxygenated when it spills through the dam and enters rock riffle sections of the river immediately downstream. It is anticipated there will be a similar effect upstream at the proposed KCWRP as low oxygen water exiting wetlands within the impoundment will be re-oxygenated.

RESPONSE: Comment noted. DNR/Proposer agrees that the oxygen depleted water will be re-oxygenated when it spills through the dam, over the spillway, and into the rock channel at the downstream end of the stilling basin.

Environmental Effects

12. Based upon the information contained in the EAW and received as public comments, the DNR has identified the following potential environmental effects associated with the project:

a. Project Construction and Design
b. Cover Type Conversion
c. Geology
d. Water Resources
e. Contamination/Hazardous Materials/Waste
f. Wildlife Resources and Habitat
g. Historic places
h. Visual
i. Air
j. Greenhouse gas emissions
k. Noise
l. Transportation
m. Cumulative Potential Effects

Each of these environmental effects is discussed in more detail below.

a. Project Construction and Design: This topic was addressed in EAW Items 6, 11, and 12.

Due to the aging condition of the Lake Bronson Dam, and to ensure safety, the dam will be removed, with a new one built. Construction of the proposed project includes a new concrete spillway, and a new bridge to pass on County Highway 28 over the spillway. An overall summary of project construction is outlined below:

- Lower lake level using the existing spillway and low-level gate.
- Install cofferdams upstream.
- Construct phase 1 of seepage cutoff wall.
- Construct new spillway, new low-level drawdown structure, and bridge.
- Route water through new low-level drawdown structure.
- Remove cofferdam for the new spillway and construct cofferdams upstream and downstream of old spillway.
- Demolish old spillway and bridge and construct embankment.
- Construct phase 2 of seepage cutoff wall.
- Remove cofferdam.

Construction impacts are expected to be temporary, lasting 18 to 24 months, starting as early as spring of 2024. These actions are subject to the authority of permits and approvals listed in ¶ 13, below.

b. Cover Type Conversion: This topic was addressed in EAW Items 8 and 12b.iv.a.

The proposed project impact area is approximately 495 acres and includes wetlands and shallow lakes, deep lakes, wooded forest, rivers/streams, brush/grassland, as well as previously disturbed areas (old field and restored areas such as savanna, prairie, and young forest restoration areas), and facilities systems use areas (buildings and structures, landscaped areas, campground, etc.). About four acres of land use cover types will be converted to a new type. About two acres of old growth forest would be converted from woods to the new dam and emergency spillway areas; removal of this area was deemed unavoidable by the project engineers. An additional two acres of land is expected to be converted from wetland to grassland. The proposed project will follow the

procedures and processes of state and federal wetlands laws, including permitting processes according to Section 404 of the Clean Water Act and the Minnesota Wetlands Conservation Act (WCA). Permitting authorities are listed in ¶ 13, below.

c. Geology: This topic was addressed in EAW Item 11.

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, which is dominated by prairie today.

The project will 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 will be installed through the dam embankment and into the foundation to reduce the pore water pressures.

A National Pollution Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater (CSW) Permit would be required as part of the permitting process, which is described more in the water resources section below.

d. Water Resources: This topic was addressed in EAW Item 11.

Surface waters: Surface waters designated as public waters within the project area include Lake Bronson and the South Branch Two Rivers. A wetland delineation has been completed for the 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. 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). 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. Direct impacts will occur to wetland areas identified near the dam, tributary, and the lake. Some of the impacts from the project will be temporary, while other impacts will be permanent, including changes to the wetland type. Construction of a new outlet channel will create new wetlands.

Reservoir drawdown will directly temporarily impact Lake Bronson and wetlands adjacent to the lake. The lake will be temporarily drained during construction and will be refilled upon completion of construction. The wetlands adjacent to the lake may have temporarily reduced water levels during the drawdown period. Maintaining a full reservoir with no drawdown during construction is a safety risk. The drawdown is intended to reduce the risk.

Construction activities in the lake will impact the lake and a wetland area adjacent to the new labyrinth weir. Permanent impacts 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. Temporary impacts in the lake include construction of cofferdams. A DNR Public Water Work Permit would be required.

The new spillway outlet channel will create a new 0.2 acre tributary (channel) and approximately 0.9 acres of new wetlands. Filling of the existing tributary and adjacent wetlands will permanently affect those wetlands. In addition, adding a buttress in the oxbow on the north end of the dam will permanently affect some wetlands, as will the new spillway construction.

The project will permanently impact approximately three acres of wetlands. Overall, the wetlands created are expected to help offset the wetlands impacted for a potential total loss of approximately 2 acres. However, the project proposer will either seek credit for recently created wetlands in the Two Rivers watershed completed by DNR, or purchase wetland credits to reach no net loss of wetlands, if necessary. The proposed project will follow the procedures and processes of state and federal wetlands laws, including permitting processes according to Section 404 of the Clean Water Act and the Minnesota Wetlands Conservation Act (WCA).

Stormwater impacts: Sandy soils in the area limit the amount of stormwater runoff produced. An erosion control plan would 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 would not change in quantity but may change in location due to the change in location of the spillway. The new spillway would 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 project 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 stormwater control plan would be submitted by the contractor and would likely include the drawdown of Lake Bronson during construction. Once the lake is lowered, cofferdams and erosion control measures would be implemented. The project Stormwater Pollution Prevention Plan (SWPPP) developed in accordance with the NPDES/SDS permit requirements would include 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 would be stabilized immediately once construction activities have temporarily or permanently stopped and would 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 would trap any material from entering the reservoir and river. In addition to NPDES/SDS permits, a DNR Public Water Work Permit would be required for work in areas below the Ordinary High Water Level (OHWL).

e. **Contamination/Hazardous Materials/Waste:** This topic was addressed in EAW Item 13. The project 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 will be carried off-site by the contractor for proper recycling and/or disposal. All waste materials

including garbage (such as plastic wrap and packaging) would be collected by the contractor in dumpsters and disposed of off-site at an approved facility.

To prevent solid wastes from entering the South Branch Two Rivers during construction, the work activity site would be protected from the South Branch Two Rivers flow with the use of a cofferdam. A silt curtain would trap any material from entering the river.

During project construction, fuels, oils, lubricants, and other materials typical for use by heavy equipment will be used on site. The contractor would be required to prepare a Spill Prevention and Response Plan to address accidental spills or the release of any hazardous material or petroleum products. In the event of a significant spill or release of a hazardous material or a petroleum product, the project site supervisor would immediately deploy on-site supplies and equipment to contain the spill and contact the DNR, MPCA and the Minnesota Duty Officer, according to emergency procedures identified in Minnesota Rules, part 7045.0574.

f. **Wildlife Resources and Habitat:** This topic was addressed in EAW Items 13 and 19.

Fish: The project has the potential to negatively affect the recreational fishery resources, at least temporarily. 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. These impacts on the fishery would be temporary, as the proposed project would maintain the same water level in the reservoir as the existing dam, when completed.

Following reconstruction (rehabilitation), DNR Division of Fisheries staff would sample the fishery to determine the extent of the impacts from the project. Upon refilling of the reservoir, if impacts from the project were detrimental to the fishery, DNR Division of Fisheries staff is committed to implementing an aggressive plan to rebuild the fishery in the reservoir.

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 would be allowed to pass during the construction phase to limit the potential for detrimental effects to the downstream fish community. Additionally, the slow drawdown of the reservoir should limit damage to habitat that a sudden spike in flows could cause.

Rare species or features: The following rare species or features may be impacted from the proposed project:

- Small white lady slipper (*Cypripedium candidum*), (state-listed as special concern): The Small white lady slipper prefers habitat that includes deep-soil mesic prairies, wet prairies, sedge meadows, or calcareous fens. Due to the possible presence of small white lady's slipper within the project area, the area was surveyed in 2022 and a population was located. Impacts to the plant population (based on draft design plans) are proposed to be avoided by minimizing the

square footage of construction limits within the habitat, however, some suitable habitat may be lost during construction. As engineering and design plans are developed, potential impacts to habitat for this species will continue to be reviewed and additional surveys will be conducted, as needed.

- Forster's Tern (*Sterna forsteri*), (state-listed as special concern): In 2001, a nesting colony for the Forster's tern was documented greater than one mile from the project area, however, the nesting site could be affected by lower than normal water levels during the drawdown period. In 2022, surveys were conducted, and Forster's terns were not found. The area will be surveyed prior to project construction, and avoidance recommendations provided by DNR nongame staff and/or DNR Natural Heritage staff would be followed in order to minimize impacts.
- Creek heelsplitter (*Lasmigona compressa*), (state-listed as special concern): A weathered shell of a creek heelsplitter was documented in the South Branch Two Rivers in 2000. It is unknown whether this species is currently present in the project area. Native mussels may be stranded by the reservoir drawdown. State Park staff will attend the drawdown, walking the newly exposed shallow water areas looking for mussels. If found, they will be re-located into deeper water, adjacent to the newly exposed lake bottom, to limit mortality caused by the dam construction.
- Northern long-eared bat (*Myotis septentrionalis*), (state-listed as special concern, federally listed as endangered): Northern long-eared bat can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or crevices of both live and dead trees, as well as crevices under bridges and in culverts. A bat survey will be conducted by DNR Division of Parks and Trails resource staff prior to construction activities to comply with the bat habitat conservation plan and the Endangered Species Act rules related to northern long-eared bats. To minimize potential impacts to roosting bats, DNR will follow guidance from the US Fish and Wildlife Service, and would avoid tree removal from June 1 through August 15.
- Old Growth Hardwoods (DNR native plant community, S3 status): Old growth forests are the later stages of forest succession in forested ecosystems. They are home to trees reaching their oldest growth stages and contain many biological features that have developed over hundreds of years. Old growth forests serve an ecologically important role in Minnesota's forested landscapes. Old growth forests are protected from harvest and represent new values in modern forest management. About two acres of old growth forest would be lost as a result of the project emergency spillway areas; removal of this area was deemed unavoidable by the project engineers.

g. Historic properties: This topic was addressed in EAW Item 15.

The proposed project is located within the boundary of the Lake Bronson State Park Works Project Administration (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 12 contributing resources shown in the table below. Bridge 7498, which carries County State Aid Highway (CSAH) 28 over the Lake Bronson Dam, is considered eligible for listing in the NRHP. 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.

Mitigation measures would be determined when the scope of work is finalized and with consultation between the DNR, U.S. Army Corps of Engineers, and SHPO. One mitigation component will likely include archival level documentation of the dam and bridge prior to removal. Another component of mitigation will likely include minimization of impacts caused by a new structure. In this case, the new spillway and bridge will be designed to be compatible with, but not matching, the character-defining features of the resources within the historic district.

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

Resource	Inventory Number	Date of Construction	NRHP Status
Lake Bronson	KT-PCY-021	1936-37	NRHP-listed, contributing
Bridge 7498	KT-PCY-021	1936-37	NRHP eligible

Table 1. Historic resources located within the Lake Bronson State Park (WPA) / Rustic Style Historic Resources historic district.

h. **Visual:** This topic was addressed in EAW Item 16.

During construction, equipment would be present within staging areas and in areas that are actively being worked on. Once the proposed project is complete, equipment would be removed. The proposed drawdown of the lake during construction would temporarily alter the view of the reservoir. The view of the spillway will change from that of a gated concrete structure to an ungated labyrinth weir. These visual impacts would be experienced by a handful of residences in the surrounding area, to the traffic along County Road 10 and from recreational traffic on the trails near the reservoir.

i. **Air:** This topic was addressed in EAW Item 17**.**

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. Construction-related emissions will be exempt as *de minimis* and will meet the conformity requirements under Section 176 (c) of the Clean Air Act, and 40 CFR 93.153. Emissions would be minor and temporary in nature, arising from the use of powered equipment during construction. Equipment used will include excavators, loaders, and trucks. A standard DNR specification would be included, titled “Protection and Safety of the Public.” During the preconstruction meeting for any project, this section is highlighted and discussed.

The proposed project may create some temporary dust during demolition and excavation activities. Construction is expected to last for approximately 18 months. Fugitive dust could arise during hauling and grading of earthen materials and concrete debris. The primary entrance to the site would be from the south, farther away from sensitive receptors. No material hauling would be allowed through the park except for the staging areas. Effects associated with fugitive dust and offensive odors would be limited to the construction site.

All roads leading to the construction site are paved. The reservoir and dam site are several hundred feet from the nearest sensitive receptors located in the park. The nearest resident is approximately 0.5 miles from the edge of the project site. Approximately 10 other residences are within one mile of the project site. No health care facilities or nursing homes are in the vicinity of the project. Dust should be minimal and should not have an impact on quality of life at this distance.

j. Greenhouse gas emissions: This topic was addressed in EAW Item 18.

Greenhouse gas emissions are expected during the removal and replacement of the concrete dam and associated bridge from mobile equipment, land use conversion, and off-site waste management. Greenhouse gas emissions from this phase of the project is estimated to be 16,529 tons of CO_2e. Greenhouse gas emissions from operations would occur from on-road equipment (used by staff monitoring the area), off-road equipment (from maintenance equipment such as lawnmowers), and lighting. More efficient lighting would be used on the replacement bridge, so a slight decrease in operations emissions is expected to occur from this source. Greenhouse gas emissions from this operation is estimated to be 30 tons of CO_2e. The project's predicted net lifetime greenhouse gas emissions are negligible at 361 tons of CO_2e emissions/50 years of dam operation. This accounts for 0.0003% of the state of Minnesota's 2020 emissions and the Next Generation Act (NGA) goals.

k. Noise: This topic was addressed in EAW Item 19.

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. During demolition of the spillway and construction, noise levels would temporarily increase due to construction equipment engines, pounding on concrete and rock, and loading/hauling of concrete and metal debris.

Activity associated with this project would be generally limited to daytime hours and would be in conformance with state and local noise standards. Work on the cutoff wall may be 24 hours a day. A standard DNR specification would be included titled, "Protection and Safety of the Public". During the preconstruction meeting for any project, this section is highlighted and discussed. Specifically given the close proximity to the state park, suggestions for noise mitigation such as functioning mufflers and limited work hours will be recommended. Following construction, noise levels in the project area are expected to be less than or equal to pre-construction levels.

l. **Transportation:** This topic was discussed in EAW Item 20.

County Highway 28/375th Avenue sits atop the dam embankment and would be closed during the project construction. A four-mile-long detour would route traffic through the City of Lake Bronson on US Highway 59. Traffic control devices meeting Minnesota Department of Transportation requirements would be installed to guide traffic around the project and through the detour.

Construction equipment, specifically dump trucks hauling materials to and from the construction site, would increase traffic to County Highway 28, however, it is believed that fewer than 100 trucks per day will be added. It is believed that the additional traffic would not create traffic congestion in the community.

m. Cumulative Potential Effects: This topic was addressed in EAW Item 19.

Cumulative potential environmental effects are the combined effects of the proposed project and past, present, and reasonably foreseeable future projects within the same geographic area. *See*

Minn. R. 4410.0200, subp. 11a. The Two Rivers Watershed District has identified that the Klondike Clean Water Retention Project (KCWRP) would be located within the same geographic scale of the proposed project. The KCWRP would be located approximately 11 miles upstream of the proposed project, in Roseau and Kittson Counties, within the Two Rivers and Red River watersheds. Portions of the project would drain into the South Branch Two Rivers, up river 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. The exact timeframe for this project is unknown, though it has potential to occur within the same timeframe as the proposed project. Environmental effects of the proposed project that have the potential to contribute to cumulative potential effects were identified as: wetlands, water quality, rare species/features, and traffic.

Wetlands: Both the proposed project 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.

Water quality: 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 project would be required to have NPDES/SDS CSW permits which should mitigate sedimentation impacts during construction. Water quality impacts form the proposed project would be expected to be temporary. Long term, the KCWRP is expected to improve water quality while reducing sediment, nitrogen and phosphorus, while increasing dissolved oxygen within the system.

Rare species/features: Both projects contain potential habitat for state-listed bat species, such as the northern long-eared bat. The proposed project is expected to require tree clearing. To minimize potential impacts to roosting bats, the project proposer would follow guidance from US Fish and Wildlife Service (USFWS) and the Federal Endangered Species Act, avoiding tree removal from June 1 through August 15. It is unknown if the KCWRP would require tree clearing. If tree clearing is required and the KCWRP follows tree clearing guidelines from the USFWS, impacts would be minimized, and cumulative impacts to bats would not be expected.

Traffic: Should the proposed project and the KCWRP 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 Highway 28/375th Avenue due to the proposed project. However, it is not expected that this would result in increased traffic to the area, or cause traffic congestion within the area.

13. The following permits and approvals are, or may be needed, for the project:

Unit of Government	Type of Application	Status
US Army Corps of Engineers (USACE)	Section 10 Permit	To be obtained
USACE	Section 404 Permit	To be obtained
DNR	Public Waters Work Permit	To be obtained
DNR	Water Appropriation Permit	To be obtained, if required
DNR	Wetland Conservation Act (WCA) Permit	To be obtained, if required
DNR	Dam safety permit	To be obtained
DNR	Endangered Species Taking Permit	To be obtained, if required
Minnesota Pollution Control Agency (MPCA)	National Pollution Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater (CSW) Permit	To be obtained
MPCA	401 Water Quality Certification Anti-degradation assessment	To be obtained
MPCA	Notification to Manage Dredged Material Without a Permit	To be obtained, if required
Kittson County	Right of Way Permit	To be obtained if necessary
Federal Emergency Management Agency	Floodplain mapping revisions	To be obtained if necessary

CONCLUSIONS

1. The Minnesota Environmental Review Program Rules, *Minnesota Rules* part 4410.1700, subparts 6 and 7, set forth the following standards and criteria to compare the impacts that may be reasonably expected to occur from the project in order to determine whether it has the potential for significant environmental effects.

   In deciding whether a project has the potential for significant environmental effects, the following factors shall be considered:

   A. *type, extent, and reversibility of environmental effects;*

   B. *cumulative potential effects. The RGU shall consider the following factors: whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential*

effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the Proposer to minimize the contributions from the project;

C. *the extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely only on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the project; and*

D. *the extent to which environmental effects can be anticipated and controlled as result of other available environmental studies undertaken by public agencies or the project proposer, including other EISs.*

2. *Type, extent, and reversibility of environmental effects*.

Based on Findings of Fact above in ¶ 12, the DNR concludes that the following types of potential environmental effects, as described in the Findings of Fact, will be limited in extent, temporary, or reversible:

- Project Construction and Design
- Cover Type Conversion
- Geology
- Water Resources
- Contamination/Hazardous Materials/Waste
- Wildlife Resources and Habitat
- Historic places
- Visual
- Air
- Greenhouse gas emissions
- Noise
- Transportation
- Cumulative Potential Effects

3. *Cumulative potential effects. The RGU shall consider the following factors: whether the cumulative potential effect is significant; whether the contribution from the project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the Proposer to minimize the contributions from the project.*

Based on the Findings of Fact above, the DNR concludes that the cumulative potential environmental effects associated with wetlands, water quality, and rare species/resources, are not significant when viewed in connection with: the limited past, present and future projects identified within the geographic scale and timeframe of the proposed project that would have overlapping environmental effects; the degree to which the project complies with approved mitigation measures specifically designed to address cumulative potential effects; and the efforts the proposer has made to minimize contributions from the project. The project would contribute minimal environmental effects and would not materially contribute to the cumulative potential effect.

4. *Extent to which environmental effects are subject to mitigation by ongoing public regulatory authority*. Based on the Findings of Fact set forth in ¶¶12 and 13 above and the information contained in the EAW, DNR concludes that there is sufficient ongoing public regulatory authority and specific measures identified that can be expected to effectively address the following environmental impacts:

    - Physical impacts on water resources are subject to regulatory authority by the DNR Public Waters Work Permit, the DNR Dam Safety permit, and the U.S. Army Corps of Engineers Section 404 and Section 10 permits, Wetland Conservation Act, and the Two Rivers Watershed District. Effects related to water use are subject to regulatory authority by the DNR Dewatering Permit, if required.
    - Erosion, sedimentation, and water quality from construction-related activity are subject to regulatory authority by the Minnesota Pollution Control Agency NPDES/SDS CSW Permit and Clean Water Act 401 Water Quality Certification.
    - Environmental effects due to construction, operation and maintenance-related noise are subject to mitigation by ongoing public regulatory authority under the MPCA-administered State Noise Standards. See Minn. R. 7030.

    Permits and Approvals: Prior to initiation of this project, the permits and approvals identified in Finding ¶13 would be required. When applying the standards and criteria used in the determination of the need for an environmental impact statement, DNR finds that the project is subject to these regulatory authorities to an extent sufficient to mitigate potential environmental effects through measures identified in the EAW and Record of Decision.

5. *Extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies or the project proposer, or other EISs*.

    Environmental Studies undertaken by the proposer include the following:

    - Basis of Design Report, Lake Bronson Dam Reconstruction, May 2022 (draft)
    - Geological Data Report, Lake Bronson Dam Reconstruction Project, August 2022 by Barr Engineering
    - Wetland Investigation, Lake Bronson Dam Rehabilitation, September 8, 2023, and October 14, 2022 prepared by Anderson Engineering
    - Determination of Design Flow of Lake Bronson Spillway Technical Memo, March 17, 2023 by Barr Engineering
    - Design Report (90% -DRAFT), Lake Bronson Dam Reconstruction, May 2023 by Barr Engineering

6. As set forth in ¶¶1 – 13, DNR has fulfilled all the procedural requirements of law and rule applicable to determining the need for an EIS on the proposed Lake Bronson Dam Rehabilitation Project in the city of Lake Bronson, Kittson County, Minnesota.

7. Based on consideration of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules* part 4410.1700, subparts 6 and 7) to determine whether a project has the potential for significant environmental effects, and on the Findings and Record in this matter, the DNR determines that the proposed Lake Bronson Dam Rehabilitation Project does not have the potential for significant environmental effects.

ORDER

Based on the above Findings of Fact and Conclusions:

The Minnesota Department of Natural Resources determines that an Environmental Impact Statement **is not** required for the Lake Bronson Dam Rehabilitation Project in the City of Lake Bronson, Kittson County, Minnesota.

Any Findings that might be properly termed Conclusions and any Conclusions that might be properly termed Findings are hereby adopted as such.

Dated this **4th** day of **December 2023**

DEPARTMENT OF NATURAL RESOURCES

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Jess Richards
Assistant Commissioner