DEPARTMENT OF NATURAL RESOURCES
RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Lock and Dam 1 Scour Repair Project in Hennepin and Ramsey Counties, Minnesota

FINDINGS OF FACT, CONCLUSIONS AND ORDER

FINDINGS OF FACT

1. The U.S. Army Corps of Engineers (USACE) proposes to repair scouring immediately downstream of Lock and Dam (LD1) on the Upper Mississippi River (UMR). LD1 is at the head of UMR Pool 2 within the 9-foot Navigation Project and is located between Minneapolis (Hennepin County) and St. Paul (Ramsey County), Minnesota. LD1 is just north of the confluence of the Mississippi with the Minnesota River at Mississippi River mile 847.9.

2. To protect the dam structure from excessive scouring, the proposed project would place approximately 14,000 cubic yards of rock below the water surface along the width of the dam and up to 150 feet downstream. An estimated 3 acres south of the dam would be impacted by the project; 2 acres of rock fill and approximately 1 acre of temporary disturbance.

3. A unnamed island is located immediately downstream (south) of LD1. The northern portion of the island, which is not vegetated, would serve as a staging area.

4. The Department of Natural Resources (DNR) prepared an environmental assessment worksheet (EAW) for the proposed project according to Minnesota Administrative Rules (Minn. R.) 4410.1400 and 4410.1500 (2013). The EAW was filed with the Minnesota Environmental Quality Board (EQB) and a notice of its availability was published in the EQB Monitor on June 22, 2015. A copy of the EAW was sent to all persons on the EQB Distribution List and to those persons known by the DNR to be interested in the proposed project. A news release announcing the availability of the EAW was distributed statewide. Copies of the EAW were also made available for public review and inspection at the Minneapolis Central Library, DNR Library (500 Lafayette Road, St. Paul), and the DNR Central Region Office (1200 Warner Road, St. Paul). The EAW was also made available to the public via posting on the DNR's website.

5. Pursuant to Minn. R. 4410.1600 (2013), the 30-day EAW public review and comment period began June 22, 2015 and ended at 4:30 p.m. on July 22, 2015. The public was provided the opportunity to submit written comments to the DNR by the U.S. Postal Service, facsimile, or email.

6. The EAW is incorporated by reference into this Record of Decision on the determination of need for an environmental impact statement (EIS).

7. During the 30-day public review and comment period, the DNR received written correspondence from the individual and agencies listed below. The comment letters are included in the Record of Decision in Attachment A. Discussion on comments received and DNR responses are provided in Finding of Fact No. 8.

    1. Minnesota Department of Transportation (no comments)
    2. Hennepin County (no comments)
    3. Konrad Schmidt
    4. Minnesota Pollution Control Agency (no comments)
    5. Metropolitan Council

8. Each comment is summarized below with DNR's response following each comment.

    Comment 1: The commenter states that the approximate one mile reach downstream of LD1 has great species diversity and includes fish species listed as state-threatened, special concern, and species in the greatest conservation need. Although the EAW states that the scour repair project would cause minimal impacts to aquatic resources, the commenter recommends the area be surveyed for fish, mussels, and mudpuppies prior to project construction. *(Konrad Schmidt)*

    Response: The placement of the fill would temporarily disturb or displace the fish that currently inhabit or use the project area. Fish would be likely to avoid the scour repair area until construction activity ceases and are expected to return after the proposed project has been completed (three to four weeks).

    DNR and USACE mussel specialists agree that potential impacts resulting from the proposed scour repair project would be less than those generated by high flow events. Moreover, monitoring of the reintroduced Higgins' eye pearlymussel (*Lampsilis higginsi*) in 2012 along the southeast portion of the island indicates that the mussel bed appears stable despite multiple high water events that have occurred since their reintroduction in 2000 and 2001.[1] Because potential impacts resulting from the project are expected to be less than those generated by recent reoccurring high water events, risks to mussels and other aquatic species from the project are considered to be low.

    Comment 2: The commenter is concerned that resuspension of existing fine sediment below the dam, in addition to potentially 200 cubic yards of new fine sediment, could lead to burial of protected mussels in the wildlife exclusion area. The commenter proposes that a silt curtain be required parallel to river flow, tying it into the island shore at approximately mid-island and upstream of the wildlife exclusion area, extending into the river and below where sediment would impact the mussel beds. *(Metropolitan Council)*

[1] The Higgins' eye pearlymussel reintroduction is a multi-agency project involving the USACE, DNR, and United States Fish and Wildlife Service (USFWS).

Response: As stated above, potential mussel impacts due to the suspension or deposition of fine sediment is low. DNR and USACE mussel specialists have advised that placement of a silt fence along the island would potentially have greater detrimental effects compared to the absence of a silt fence because the silt fence could cut off flow along the southeast area of the island, causing other damage to the mussel beds.

The mussel bed within the wildlife exclusion area, along with other locations, has been monitored regularly (at three to five year intervals) for the past fifteen years. Monitoring is scheduled to occur in 2015 prior to the proposed scour repair project. Results will contribute to baseline data for comparisons with future mussel monitoring efforts.

Comment 3: The commenter recommends eliminating flow over the dam into the "work area" below the dam be considered for the duration of the project. The commenter believes that elimination of flow would minimize the resuspension of sediment while riprap is being transported and until the larger aggregate is fully placed. The commenter notes that lowering Pool 1 by diverting the majority of river flow through the Ford hydropower facility and/or LD1 facilities could possibly minimize resuspension of sediment. The commenter further states that directing the majority of flow along the eastern and western river banks would minimize sediment impacts along the southeast perimeter of the island from flow over the dam. *(Metropolitan Council)*

Response: The USACE's ability to regulate water levels within the LD1 scour repair area is limited compared to other dams. Furthermore, the ability to stop or reduce flow in the scour repair area is highly weather dependent. If late fall flow is low, there may be more control over how the water is directed than if the flow is high. The USACE is evaluating the possibility of controlling how the flow is directed and, if feasible, would implement measures to reduce or stop flow into the scour repair area. Total suspended solids (TSS) will be addressed through USACE compliance with the requirements of MPCA's Clean Water Act Section 401 Water Quality Certification.

9. Based upon the information contained in the EAW, the DNR has identified the following topics of potential environmental effects associated with the proposed project:

a. Project Construction
b. Land Use
c. Surface Waters
d. Water Quality
e. Effects on Soils and Geology
f. Stormwater
g. Wetlands
h. Hazardous Materials
i. Wildlife and Habitat
j. Traffic
k. Air
l. Noise
m. Visual Effects
n. Cumulative Potential Effects

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

a. Project Construction

This topic was addressed in the EAW under Item No. 6, Item No. 10, Item No. 11, and Item No. 12.

The proposed project requires permanent fill in a 2-acre area in the bottom of the Mississippi River. In an area extending 50 to 150 feet downstream of the dam's concrete apron, rock would be placed approximately 45 inches thick (30 inches of rip rap, 15 inches of bedding) to a top elevation matching the top elevation of the upstream rock placement top elevation of 688.0 feet and extending downstream varying from no slope near the lock chamber to an 8 percent slope near the Ford hydroelectric facility to a top elevation of 680.0 feet. Rock would be placed out another approximately 10 feet at a slope of 1 foot vertical to 3 feet horizontal and tie into the existing river bed.

The exact details for transport of equipment and materials to the project site would be unknown until a construction contract is awarded. However, it is likely that rock would be trucked to a barge loading site by road, then loaded directly onto barges and transported to a staging site within the project area by towboat. The rock would then be unloaded directly off the barge and placed with a front end loader in the upstream unvegetated portion of the island immediately downstream of LD1. The island would be used to stage both equipment and rock material. From the staging area, the rock would be hauled by front-end loader to the scour area. An excavator would likely be used to spread the rock where needed.

A temporary access road, built with rock rip rap material and extending approximately 50 feet long by 20 feet wide from the head of the island to the scour area, would be present during the scour repair project. The excavator would use the temporary road to access the scour area to be repaired and spread the rock to specifications. As part of demobilization, the rock rip rap material used for the temporary access road would be removed and placed into the scour area. The area would be graded to the previous slope at the conclusion of the project.

The rocky nature of the island would be a good base to drive on during construction of the project and disruption would be limited to the non-vegetated part of the island. It is not anticipated that any modifications (i.e. grading to smooth access route) to the island would be necessary to facilitate hauling on the island. If required, modifications would be minor, temporary, and following completion of the project, the island would be restored to its previous condition. No solid rock would be removed from the island and no added fill is expected to be required to provide access over the island to the site.

The proposed fill action would likely be done during mid to late summer 2015 and would be complete within three to four weeks thereafter. Work is anticipated to be completed by the end of fall 2015.

b. Land Use

This topic was addressed in the EAW under Item No. 9.

The proposed project is near two parks, Minnehaha Regional Park and Hidden Falls Regional Park. Portions of the Mississippi River Trail are present along both sides of the river, both

upstream and downstream of LD1. Nearby residential uses include the Minnesota Veterans Home campus and several apartment buildings.

The Ford Motor Company's former Twin Cities Assembly Plant site is located on two parcels east of LD1 along the Mississippi River and on the bluff above the river. The former assembly plant is currently being decommissioned under the *Master Site Plan for Ford Decommissioning*, approved by the Zoning Committee of the St. Paul Planning Commission in December 2012.

The proposed project is compatible with current land uses, zoning, and plans. No substantial land use alterations or impacts are anticipated.

c. Surface Waters

This topic was addressed in the EAW under Item No. 9a, Item No. 11a, and Item No 11b.

The proposed project would occur in the tailwater of LD1, which is the very head of Pool 2. LD1 is about 3.7 miles upstream of the confluence with the Minnesota River, and this reach from the dam to the Minnesota River is often referred to as the Gorge Area. The mouth of Minnehaha Creek (stream identification number 07010206-539), is about 2,000 feet downstream of the project area.

LD1, including Pool 2, is classified as a 2B, 3C, 4A, 4B, 5, 6 water, which means its uses are identified primarily for a warm water aquatic community, industrial and materials transport use. The LD1 Pool is not classified as a trout stream, and does not have any other special designations in this area. The Mississippi River at the project site is on Minnesota's Section 303(d) impaired waters list for impairments related to mercury, polychlorinated biphenyl (PCB), and perfluorooctane sulfonate (PFOS) in fish tissue.

Minnehaha Creek is a public water with the use classifications of 2B, 3C, 4A, 4B, 5, and 6, which means its uses are identified for a warm water aquatic community, industrial and materials transport use. Minnehaha Creek is on the state's 303(d) list for impairments related to chloride, fecal coliform, and dissolved oxygen.

The project is not anticipated to have any effect on flood elevations. Increases in water levels from the project could not move upstream past the dam because water levels upstream of the dam are much higher than below. Even during the 100- year flood event, water levels above the dam would be 15.7 feet higher than the water in the project area (immediately below the dam), ensuring no impact to flood levels would be caused by the project. The tailwater elevation at the dam is controlled by the channel conditions further downstream; therefore, the fill associated with the project would not impact the tailwater during a large flow event.

d. Water Quality

This topic was addressed in the EAW under Item No. 6b, Item No. 11b, and Item 13.

The proposed project requires permanent fill in a 2-acre area in the bottom of the Mississippi River extending from immediately downstream of the dam spillway to approximately 150 feet

downstream. The rock placed would contain minimal amounts of suspendible particulate matter and thus would have little impact on suspended solids and turbidity. The placement of rock might suspend some fine sediment, but effects would be minor and temporary. This resuspension of sediment would occur in a mixing zone within the area of rock placement. This mixing zone is expected to be confined to a small area within and just below the fill area, and would not extend below the downstream end of the island. This impact would be temporary during construction, which would take three to four weeks. Increases in suspended solids within the mixing zone would likely be within the range of levels normally experienced in Pool 2. By stabilizing the project area and preventing erosion after construction, the project would result in a long term reduction in suspended particulates and turbidity.

The rock fill to be used would be clean and thus the project would not be expected to alter water chemistry. Because of the clean nature of the fill material, the proposed action would not introduce toxic metals, pathogens, or oxygen consuming compounds. The resuspension of the material within the construction area would reduce light penetration and aesthetic qualities and negatively affect the plant and animal life in the immediate construction area, but the impacts would be temporary and localized.

e. Effects on Soils and Geology

This topic was addressed in the EAW under Item No. 10.

There are no susceptible geologic features that would be affected by the project and, therefore, no modifications to project designs or mitigation features are required.

The scour area to be repaired is located on the bed of the Mississippi River and does not contain soils. The river bed is comprised of a rocky substrate that has eroded over time. The island immediately downstream of the project site is approximately 5.5 acres. The island is not mapped for soils and, therefore, has no soils classification.

The estimated volume of material excavated during construction would be 3,800 cubic yards, and the total acreage where that excavated material and replacement of material would occur is approximately 1.1 acres. The excavated rock would be redistributed so that there is a flat surface for the new rock. The contractor would use existing excavated aggregate spoil to fill in holes and voids to level the area for new riprap and bedding.

Impacts to the island would be limited to the upstream unvegetated portion during construction for use as a staging area. The area of the island to be used for staging is composed of rock, sand, and gravel, with no permanent soils identified. Impacts to the sands and gravels on this area of the island are expected to be minor and are not expected to result in their erosion into the river. No measures are proposed to address these minor potential impacts to this substrate. However, if staging activities result in surface damage, it would be repaired by grading the damaged area to its pre-project construction condition. There would be no impacts from operational activities once construction is completed.

f. Stormwater

This topic was addressed in the EAW under Item No. 11b.

The project site, with the exception of the staging area, is in the water and therefore, stormwater runoff would not occur. Stormwater runoff from the staging area of the island would be minimal because of the high infiltration rates of the rocky/sandy substrate in this area and the receiving waterbody would be the Mississippi River.

A National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater permit would be obtained by the contractor for the project. Once identified, the contractor selected to construct the project would apply for the Construction Stormwater permit, and develop the required Stormwater Pollution Prevention Plan (SWPPP). This SWPPP would be reviewed by the USACE prior to submittal to the Minnesota Pollution Control Agency (MPCA), which would review and approve the SWPPP. The NPDES permit would be obtained by the contractor prior to beginning any work on-site.

g. Wetlands

This topic was addressed in the EAW under Item No. 11b.

The project would require work within the Mississippi River and would use the north end of the island for a staging area. Although the National Wetland Inventory identifies wetlands on the south end of the island, the north end of the island, where staging of equipment and fill material would occur, is not vegetated. Therefore, no wetlands are anticipated to be affected by the project.

h. Hazardous Materials

This topic was addressed in the EAW under Item No. 12.

MPCA's *What's in My Neighborhood* website identifies one petroleum brownfield, two leak sites, and two small to minimal quantity hazardous waste generators within 450 to 500 feet of the Mississippi River (east bank in St. Paul). The MPCA also lists multiple contamination and hazardous waste sites on the former Ford Motor Company assembly plant property and the Minnesota Veterans Home property. As previously stated, the former assembly plant is currently being decommissioned under the *Master Site Plan for Ford Decommissioning*. The plan addresses St. Paul's submittal requirements for site plan review for large site demolition. Given the location and nature of this proposed project, the potential for encountering contamination or hazardous materials is negligible.

The only expected hazardous materials to be used during construction would be fuels and oils for construction equipment. Fuel spills could occur during the refueling and maintenance of construction equipment. Prior to construction, the USACE would be required to prepare and submit a Spill Prevention Control and Countermeasure Plan (SPCC) to handle any potential fuel spills.

i. Wildlife and Habitat

This topic was addressed in the EAW under Item No. 13.

The Upper Mississippi River provides habitat for a wide diversity of fish and wildlife. The combination of aquatic area, floodplain forest, and terrestrial communities near the proposed project provide habitat for fish, mussels, and other aquatic invertebrates, amphibians, and mammals. The proposed fill area immediately downstream of the LD1 is within the 9-foot navigation main channel. Water depth at its deepest is 10 feet under normal pool elevation. Substrate within the scoured areas consists of existing rip rap rock, natural cobble, and boulders that has been scoured and interspersed with sand. The island downstream of the dam has been highly disturbed over time and is mostly exposed sand and rock. Vegetation on the island exists as scattered trees and shrubs among bare areas of exposed sand and gravel.

Construction activity would temporarily disturb wildlife in the immediate area. After placement of rock, wildlife is expected to return and the project would have no impact on the area's wildlife long term. The only vegetation in the project area exists on the higher portion of the south end of the island. However, only the unvegetated portion on the north end of the island would be used during project construction and no effects to vegetation would occur.

Federal Protected Species

The USFWS technical assistance website (June 2015) lists two federally endangered mussel species in Hennepin and Ramsey counties (Mississippi River): Higgins' eye pearlymussel and the snuffbox (*Epioblasma triquetra*). Communication with DNR mussels staff (June 12, 2015) acknowledged that the Higgins' eye pearlymussel, winged mapleleaf (*Quadrula fragosa*), and snuffbox could potentially occur downstream of the proposed project. The Higgins' eye pearlymussel has been reintroduced to an area near the downstream end of the island below the spillway. Recent mussel surveys within the proposed scour repair area and potential offloading area along the island have not detected Higgins' eye pearlymussel.

The USFWS listed the northern long-eared bat *(Myotis septentrionalis)* as federally-threatened, effective in May 2015. The bat roosts and forages in upland forests during spring and summer. The few trees on the southern portion of the island are unlikely to provide shelter for hibernating bats. Because the project would not require tree removal, it would not adversely affect the bat.

A peregrine falcon (*Falco peregrinus*), which is protected by the Migratory Bird Protection Act and is listed as a species of special concern in Minnesota, has a nest immediately adjacent to the site and frequents the area. Construction of the project would occur in late summer or fall after the young have fledged and therefore would not impact nesting species.

State Protected Species

A licensed review of the DNR Natural Heritage Information System (NHIS) database and the Statewide Mussel Survey was conducted by the proposer to obtain the records of any known

state endangered, threatened, or otherwise sensitive species or communities documented within one mile of the proposed project. In email correspondence of July 2012 and January 2015, the DNR concurred with the proposer's assessment that no impacts to state-listed species would occur from this project.

The NHIS database review documented the following state-listed species, all of which are associated with upland and/or wetland habitats: Blanding's turtle (*Emydoidea blandingii*, threatened); handsome sedge (*Carex Formosa*, endangered); plantain-leaved sedge (*Carex plantaginea*, endangered); rock clubmoss (*Huperzia porophila*, threatened); peregrine falcon (*Falco peregrinus*, special concern); Louisiana waterthrush (*Parkesia motacilla*, special concern); and prairie vole (*Microtus ochrogaster*, special concern). The proposed project would be constructed entirely within the channel of the Mississippi River, where these species are typically not found.

According to the NHIS database, the state-endangered Higgins' eye pearlymussel was documented a half mile upstream of LD1, upstream of one of the areas being used as a propagation site for the reintroduction and relocation of Higgins' eye pearlymussel within the Mississippi River. One of the wartyback (*Quadrula nodulata*) records was also documented a half mile upstream of LD1 in Pool 1. The state-threatened mucket (*Actinonaias ligamentina*), Elktoe (*Alasmidonta marginata*), and fawnsfoot (*Truncilla donaciformis*) mussels were documented just downstream of LD1. The DNR Statewide Mussel Survey indicates that two other state-listed mussel species, butterfly (*Ellipsaria lineolate*, threatened) and washboard (*Megalonaias nervosa*, endangered), have also been documented in Upper Pool 2.

The NHIS database review also documented the state-listed paddlefish (*Polyodon spathula*, threatened) and the blue sucker (*Truncilla donaciformis*, special concern). Both species were documented downstream of LD1 near the proposed project. The mudpuppy (*Necturus maculosus*), an amphibian of special concern, was documented downstream of LD1 in 2012 and 2013.

Aquatic Species – Potential Effects

The placement of the fill would temporarily disturb or displace the fish and benthic organisms (organisms in and on the bottom of the river) in the immediate fill area at the time of placement. The use of clean rock would minimize potential downstream impacts to aquatic species caused by suspended sediment and would reduce the potential for spreading invasive species After placement of rock, fish are expected to return and benthic organisms are expected to recolonize with no long-term impacts to populations of any aquatic organisms. To reduce fish impacts, work would not occur during the fish spawning season.

No federally or state protected mussel species are known to be present in the project footprint or within areas to be used to complete the work. The Higgins' eye pearlymussel has been reintroduced to an area near the downstream end of the island below the spillway outside the project area. The contractor would be excluded from working within the area where the Higgins' eye pearlymussel is known to exist.

LD1 is currently not listed as infested with any invasive species, but both zebra mussels and invasive carp have been documented in the area. The contractor conducting the work would be responsible for ensuring that all watercraft used in the construction of this project are free of invasive species including zebra mussels. Prior to bringing each watercraft on site for the first time, the contractor would provide documentation verifying that the watercraft has been inspected within the last 30 calendar days and is free of invasive species. Any watercraft brought to the project site that is found to be contaminated with invasive species would be immediately removed from the site by the contractor. Contaminated watercraft removed from the site would not be brought back on site until all invasive species have been removed, removal documentation has been provided to the contracting officer, and the watercraft has been inspected by the contracting officer.

j. Traffic

This topic was addressed in the EAW under Item No. 18.

No impacts to traffic are expected near LD1 because there would be no access for equipment from roadways at the site.

Away from the project area, there would be a localized increase in truck traffic for hauling rock. The rock for the project would be hauled from a commercial facility to barge-loading locations at an expected rate of approximately four truck trips per hour, (based on an estimated 10 to 12-hour work day with a placement rate of 70 tons per hour, and assuming a total daily production rate of 800 tons per day) during daylight hours. Rock would be delivered to a location to be loaded on barges with a 20 to 23 ton capacity. Rock would then be delivered to the LD1 site by barges. Based on these rates, it is assumed that 40 truck cycles would be required per day to keep up with the placement rate.

The project is not expected to affect the availability of transit or other alternative transportation modes.

k. Air

This topic was addressed in the EAW under Item No. 16.

Minor and temporary effects to air quality in the immediate project area from vehicle emissions would occur during construction, including emissions from on-site construction vehicles and trucks hauling rock. These effects would only occur during the construction period, and would be temporary (three to four weeks). Therefore, no special mitigation measures are proposed.

Sources of dust and odors from the project would primarily come from the construction process, specifically the construction equipment and its placement of rock within the scour repair area. This dust is expected to be minimal, localized to the immediate construction area, and would occur only during daylight hours during construction. Clean rock would be used in the scour repair to reduce any potential dust releases. Since dust generated as part of the project is anticipated to be minimal and localized, it is not anticipated to affect any nearby sensitive

receptors or the area quality of life. Therefore, no additional mitigation measures have been proposed. No sources of dust are expected during the operational phase of the project.

l. Noise

This topic was addressed in the EAW under Item No. 17.

Existing noise levels in the area are consistent with urban areas. The most significant producer of noise in the area is the existing LD1. Construction of the project may cause a temporary minor adverse increase in noise in the project vicinity. Construction would require heavy equipment to operate in the area, such as towboats, barges, and excavators, and these machines would generate noise during construction. This effect would occur during the estimated three to four week construction period, and is anticipated to be temporary and minor. Sensitive receptors in the immediate vicinity include residential areas, the Minnesota Veterans Home, and users of nearby park areas and trails. Effects of the increased noise from the proposed project are not anticipated to be greater than noise sources from water flowing over the dam and therefore would not impact quality of life in the surrounding area.

m. Visual Effects

This topic was addressed in the EAW under Item No. 15.

The scenic view of LD1 would be temporarily affected during the period of project construction due to the presence of construction equipment. This impact would be limited to the three to four week construction period.

No vapor plumes would result from the project, and because work is expected to take place primarily during daylight hours, no intense lights are proposed for use during the project, and no glare from lights would occur. Due to the minimal nature of impacts, no special minimization or mitigation for temporary impacts has been proposed during construction. There are no anticipated permanent visual impacts to the project area as the rock would be under the water surface during normal flow conditions.

n. Cumulative Potential Effects

This topic was addressed in the EAW under Item No. 19.

The geographic scale of the environmentally relevant area for all project related environmental effects is 100 feet upstream of LD1 and downstream to where Minnehaha Creek enters the Mississippi River. This stretch of the river is defined as the environmentally relevant area because the primary potential cumulative effects of the project would be on water quality, aquatic species within the river, and noise in the immediate vicinity.

Hennepin County, city of St. Paul, and city of Minneapolis planning staff identified three reasonably foreseeable projects within the environmentally relevant area:

- Continued decommissioning of the former Ford Motor Assembly Plant

- Reconstruction of approximately 1,200 feet of Minnehaha Ave. and Nawadaha Blvd.
- Reconstruction of Minnehaha Avenue between 46th St. and East Lake St.

Environmental effects from the proposed project that could combine with effects from these projects have been considered for surface water quantity, aquatic species, and noise. Consideration of each of these cumulative potential effects is discussed below.

Water Quality

The Ford Assembly Plant decommissioning is occurring on the main 122- acre parcel (Parcel 1) located on top of the bluff. However, decommissioning does not include the 24-acre parcel (Parcel 2) along the Mississippi River below the bluff. Mississippi River Boulevard South forms the western boundary of Parcel 1 and is situated between the former assembly plant and LD1. The *Master Site Plan for Ford Decommissioning* includes specific requirements for addressing temporary erosion and sediment control and the transition to a permanent storm water management system. Off-site discharge points will be monitored by a certified erosion control supervisor who will be responsible for overseeing implementation of the SWPPP. The inspections and maintenance plan for the construction site and erosion prevention and sediment control BMPs are contained within the SWPPP.

At their closest distance, the Minnehaha Avenue and Nawadaha Boulevard reconstruction projects are approximately 1,100 feet from the Mississippi River. Both projects would follow erosion and sediment control measurements in the SWPPP, which is a requirement of the projects' NPDES/SDS Construction Stormwater permits.

The proposed project would be subject to applicable construction stormwater standards. Furthermore, the other reasonably foreseeable projects in the environmentally relevant area would also be subject to applicable stormwater requirements. Any potential cumulative effects would occur within prescribed limits as a function of specific permit conditions for the future projects identified within the relevant geographic area. Therefore, no potential cumulative effects related to water quality are anticipated.

In addition to the decommissioning of the Ford Motor Assembly Plant and the nearby road reconstruction projects, projects within approximately a half mile of the environmentally relevant area were evaluated for the potential to contribute to cumulative potential effects. Although not specifically included in the potential cumulative effects evaluation, all future projects upstream of LD1 will need to comply with applicable regulatory requirements for water quality and stormwater, including SWPPPs required for NPDES/SDS Construction Stormwater permits.

Aquatic Species

The former Ford Assembly Plant decommissioning, as well as the reconstruction of Minnehaha Avenue and Nawadaha Boulevard, will not occur within the Mississippi River, nor will they contribute to conditions that would adversely affect aquatic species within the river. Therefore, no potential cumulative effects related to aquatic species are anticipated.

Noise

The proposed project has the potential to make a minor incremental contribution to cumulative noise effects in the environmentally relevant area. The proposed project's activities would be temporary (three to four weeks) and noise levels are not expected to exceed existing conditions, which include traffic noise from the adjacent Ford Parkway (East 46th Street) bridge and the dam itself. The distance between the proposed project and reconstruction of Minnehaha Avenue and Nawadaha Boulevard is great enough that no cumulative potential effects are expected. Although building demolition at the former Ford assembly plant has been completed, slab removal is ongoing and will be followed by grading and seeding. Noise from these activities may affect trail users along the east bank of the Mississippi River. Potential cumulative noise effects on trail users are expected to be negligible and temporary.

10. The following permits and approvals are needed for the project:

Unit of Government	Type of Application	Status
DNR	Public Waters Amended Permit #2012-1319	Applied for
MPCA	401 Water Quality Certification	Applied for
MPCA	NPDES Construction Stormwater Permit	To be applied for

CONCLUSIONS

1. The following standards and criteria are applied by the RGU to determine whether the proposed project has the potential for significant environmental effects and requires the preparation of an EIS.

   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;
   c. extent to which the environmental effects are subject to mitigation by on-going regulatory authority; and
   d. the extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by agencies or the project proposer, including other EISs.

   Minn. R. 4410.1700, subp. 6-7 (2013)

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

   Based on the Findings of Fact above, the DNR concludes that the following potential environmental effects, as described in Finding of Fact No. 9, will be limited in extent, temporary, or reversible:

   - Project Construction
   - Land Use
   - Surface Waters
   - Water Quality

- Effects on Soils and Geology
- Stormwater
- Wetlands
- Hazardous Materials
- Wildlife and Habitat
- Traffic
- Air
- Noise
- Visual Effects
- Cumulative Potential Effects

3. *Cumulative potential effects.*

   Based on the Finding of Fact above, the DNR concludes that the following cumulative potential effects do not have the potential to be significant environmental effects:

   - Water Quantity
   - Aquatic Species
   - Noise

   The proposed project's contribution to cumulative potential effects to water quality, aquatic species, and noise is limited when viewed in connection with other contributions. The project proposer has made efforts to minimize cumulative potential effects.

4. *Extent to which environmental effects are subject to mitigation by on-going public regulatory authority.*

   The following environmental effects are subject to mitigation by DNR regulatory authority:

   - Project Construction
   - Surface Waters
   - Water Quality
   - Effects on Soils and Geology
   - Wetlands
   - Wildlife and Habitat

   The following environmental effects are subject to mitigation by MPCA regulatory authority:

   - Stormwater
   - Water Quality
   - Wetlands
   - Air
   - Noise

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.*

   The following environmental studies assist in the anticipation and controlling of potential environmental effects:

   Monitoring Freshwater Mussels in the Mississippi National River and Recreation Area. Mussel Monitoring Report. Mike Davis. Minnesota Department of Natural Resources. 2003.

Final Report: Mussel (Bivalvia: Unionidae) survey of the Mississippi National River and Recreation Area Corridor, 2000-01. Contract report to the National Park Service Mississippi National River and Recreation Area and the Great Lakes Network Inventory and Monitoring Program. Dan Kelner and Mike Davis. Minnesota Department of Natural Resources. 2002.

Definite Project Report and Environmental Assessment for Relocation Plan for the Endangered Higgins' Eye Pearlymussel (*Lampsilis higginsii*). St. Paul District U.S. Army Corps of Engineers in cooperation with the Mussel Coordination Team. July 2002.

6. The DNR has fulfilled all the procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the proposed Lock and Dam 1 Scour Repair Project.

7. Based on considerations of the criteria and factors specified in Minn. R. 4410.170, subp. 6 and 7 (2013) 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 Lock and Dam 1 Scour Repair 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 Lock and Dam 1 Scour Repair Project in Hennepin and Ramsey counties, Minnesota.

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

Dated this 6th day of August 2015.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Barb Naramore

Barb Naramore
Assistant Commissioner