DEPARTMENT OF NATURAL RESOURCES

Record of Decision

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Interstate Island Avian Habitat Restoration in the Cities of Duluth, in St. Louis County, Minnesota and in the City of Superior, in Douglas County, Wisconsin

FINDINGS OF FACT, CONCLUSIONS, AND ORDER

FINDINGS OF FACT

1. The framework for addressing degradation of Great Lakes aquatic resources has evolved over more than 25 years into a binational effort to remove impairments in specific areas of the Great Lakes where wildlife habitat had degraded or serious sediment contamination had occurred. The Minnesota Department of Natural Resources (DNR) is a partner in this effort, working along with federal, state, and local agencies and community partners to focus on the St. Louis River Estuary. As part of this process of remediation planning, the DNR and partners included in the scope of this framework the avian habitat restoration project at Interstate Island, which is one of few remaining nesting locations for the common tern.

2. Under the management of the Environmental Protection Agency and the Government of Canada, the U.S.-Canada Great Lakes Water Quality Agreement (Annex 2 of the 1987 Protocol) was established to identify Areas of Concern (AOCs). AOCs are locations that have experienced significant environmental degradation. Forty-three AOCs have been identified: 26 in the United States; 12 in Canada; and five that are shared between both countries.

3. Seven of the AOCs, including the St. Louis River AOC, are within the Lake Superior basin. The St. Louis River is the only AOC located in Minnesota and one of five AOCs in Wisconsin. The St. Louis River, the largest U.S. tributary to Lake Superior, enters the southwest corner of the lake between Duluth, Minnesota and Superior, Wisconsin. As it approaches Duluth and Superior, the river forms a 12,000 acre freshwater estuary.

4. The two federal governments are cooperating with state and provincial governments to develop and implement Remedial Action Plans (RAPs), which address one or more of 14 beneficial use impairments (BUIs) identified for the Great Lakes AOCs. Examples of BUIs associated with the St. Louis River AOC include fish consumption advisories, fish tumors and other deformities, excessive loading of sediment and nutrients, and loss of fish and wildlife habitat. The binational effort is meant to restore beneficial uses of the ecosystem by cleaning up severely contaminated and degraded locations around the Great Lakes.

5. Delisting the AOCs contributes to the sustainability of local communities and of the Great Lakes region. Delisting is achieved two ways: restoring fish and wildlife habitat and populations that are ecologically and economically significant at a local, lake and basin-wide scale; and removing major sources of

contaminants and other stressors that have been impairing water quality and restricting beach use and fish and wildlife consumption.

6. In 1992, the RAP for the St. Louis River AOC outlined future cleanup projects necessary for delisting. The RAP was updated in 1995 and 2013. Wisconsin and Minnesota have been working together since 2010 on restoration and remediation projects at the most critical sites in the St. Louis River.

7. The 2013 RAP update, referred to as the St. Louis River AOC Implementation Framework and completed by the Minnesota Pollution Control Agency (MPCA) and Wisconsin Department of Natural Resources (WDNR), outlined plans to be taken by federal, state, and local organizations to remove the nine BUIs identified for the St. Louis River AOC. The comprehensive strategic action plan provides the procedures necessary to delist this AOC by 2025.

8. Degraded Fish and Wildlife Habitat (BUI-2) was listed for the St. Louis River AOC because fish and wildlife habitats overall were threatened by water quality impairments and large losses of physical habitat had occurred. Physical habitat impairments include loss through dredging and filling activities.

9. The RAP identifies Common Tern and Piping Plover as indicator species associated with BUI 2: Degraded Fish and Wildlife Populations. These species were chosen because their populations were in decline at the time the SLRAOC was listed. The current BUI 2 removal objective for Common Tern requires support for both the numeric goals established by Wisconsin's Common Tern Recovery Plan and the efforts needed to maintain and enhance nesting habitat in the AOC. As of the 2018 RAP, these goals were not on track to be met without additional action being taken. Therefore, in early 2019, agencies managing the SLRAOC made restoring Common Tern habitat at Interstate Island a RAP management action required to address legacy habitat impairments and meet the BUI 2 removal target stating that native fish and wildlife populations are not limited by physical habitat.

10. The Project is proposed to restore and protect imperiled avian habitat on Interstate Island Wildlife Management Area (WMA). The WMA is the largest of two remaining Common Tern nesting areas in the Lake Superior watershed and is the only federally-listed critical habitat for Piping Plover in Minnesota. Recent high water levels have caused significant loss of critical habitat on the island.

11. Pursuant to *Minnesota Rules*, chapter 4410.4300, subpart 1, an Environmental Assessment Worksheet (EAW) must be prepared for projects that meet or exceed the threshold defined in any of the subparts 2-37. The proposed project exceeds the threshold defined under *Minnesota Rules,* chapter 4410.4300, Subp. 27, item A, regarding public waters and public water wetlands. The proposed project would change or diminish the course, current or cross-section of one acre or more of a public water and therefore required the completion of an EAW. Further, as a project included in the SLRAOC RAP, the Interstate Island Avian Habitat Restoration Project meets the definition of a phased action according to *Minnesota Rules*, chapter 4410.0200 subpart 60, with other AOC projects and must be reviewed by an EAW according to *Minnesota Rules*, chapter 4410.1000 subpart 4.

12. Pursuant to *Minnesota Rules*, part 4410.0500, subpart 1, for any project listed in part 4410.4300, the government unit specified in those rules is the responsible government unit (RGU) unless the project would be carried out by a state agency, in which case that state agency is the RGU. Therefore, as the proposer of the Interstate Island Avian Habitat Restoration project, the DNR is delegated the duties of the RGU for conducting the required environmental review.

13. The DNR prepared an EAW for the proposed project according to *Minnesota Rules*, parts 4410.1400 and 4410.1500.

14. The EAW was filed with the Minnesota Environmental Quality Board (EQB) and a notice of its availability was published in the EQB Monitor on November 25, 2019. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by the DNR to be interested in the proposed project, and to those persons requesting a copy. A press release announcing the availability of the EAW was sent to newspapers and radio and television stations statewide. Copies of the EAW were also made available for public review and inspection at the Minneapolis Public Library; the DNR Library (St. Paul); the Duluth, MN public library; the Superior, WI public library, and the DNR Northeast Regional Office (Grand Rapids). The EAW was also made available to the public via posting on the DNR's website.

15. The 30-day EAW public review and comment period began November 25, 2019, and ended December 26, 2019, pursuant to *Minnesota Rules*, chapter 4410.1600. The comment period was extended one day since the 30th day of the comment period occurred on a state holiday, pursuant to Minnesota Rules chapter 4410.0200, subpart 12. The comment period closed at 4:30 pm. The opportunity was provided to submit written comments on the EAW to the DNR by U.S. Mail, by facsimile, or electronically by email.

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

17. During the 30-day EAW public review and comment period, four written comments on the EAW were received. Comments are listed below and a summary of the comment and responses are included with this Record of Decision. The findings numbered 18 through 24 include further discussion on comments received and responses from the DNR. Copies of the comments received have been attached to this Record of Decision (Attachment 1).

    A. Constantine Koutsouvas (November 25, 2019)
    B. Christopher E. Smith (November 25, 2019)
    C. Brandon Rothauge (November 26, 2019)
    D. City of Duluth (December 19, 2019)

18. Commenter A. expressed support for the project as a goal of supporting habitat improvement for piping plovers and common terns.

    RESPONSE: The DNR appreciates this review and the comment. As RGU for the EAW, DNR is mandated to evaluate the environmental effects of the proposed project; therefore, comments regarding the merits of the proposed project are not addressed in this Record of Decision.

19. Commenter B. recommended limiting erosion control materials to plastic-free materials such as cotton and jute.

    RESPONSE: This recommendation is noted and will be forwarded to the project proposer for consideration for inclusion in construction requirements for potential contractors.

20. Commenter B. recommended filling riprap voids with sand or small aggregate to prevent entrapment of small animals in riprap voids.

RESPONSE: This recommendation is noted and will be forwarded to the project proposer for consideration for inclusion in construction requirements for potential contractors.

21. Commenter B. recommends using fine-grained sand, and avoiding the use of cobble gravel, within 15-20 feet of shoreline areas to better enhance habitat for the hairy-necked tiger beetle.

    RESPONSE: Although there are no records of the hairy-necked tiger beetle currently utilizing the site, the proposed project design has been developed with consideration of habitat known to be used by the hairy-necked tiger beetle. While development of habitat for this species is not required, the recommendation to incorporate this type of habitat characteristics within final project designs will be provided to the project proposer.

22. Commenter B. requested that the EAW language be updated to reflect that the Rhode Island Hairy-necked Tiger Beetle has been found recently in the Duluth area.

    RESPONSE: The comment is noted. The EAW states, "This species is found on sandy beaches along the Lake Superior shoreline in the Duluth area; it has since been surveyed for in the area of known record and was failed to be found." While the EAW text will not be modified at this point in the process, this information will be noted in this Record of Decision within Paragraph 27e below, and will be shared with the Natural Heritage program, which maintains the Natural Heritage Information System, a database that identifies incidences of rare resources in Minnesota.

    Increasing sandy beach habitat at Interstate Island has a secondary benefit for the tiger beetle and may help with the recovery of this species.

23. Commenter C. expressed support for the project as a goal of supporting habitat improvement for piping plovers and common terns.

    RESPONSE: The DNR appreciates this review and the comment. As RGU for the EAW, DNR is mandated to evaluate the environmental effects of the proposed project; therefore, comments regarding the merits of the proposed project would generally not be addressed in this Record of Decision.

24. Commenter D. provided a comment in support of the project and the restoration projects generally undertaken in the St Louis River Estuary.

    RESPONSE: The DNR appreciates this review and the comment. As RGU for the EAW, DNR is mandated to evaluate the environmental effects of the proposed project; therefore, comments regarding the merits of the proposed project are not addressed in this Record of Decision.

25. On January 15, 2020, the DNR requested a 15-day extension from the Minnesota Environmental Quality Board (EQB) for making a decision on the need for an EIS for the proposed project. On January 16, 2020 the DNR was granted the extension by EQB. See Minn. R. 4410.1700, subp. 2b.

26. The DNR has determined that the following issues reviewed for potential environmental effects in the EAW have no or very limited potential for environmental effects.

a. Land Use (EAW Item No. 9). Due to the nature of project activities, the construction and operation of this project would not have a negative effect on land use, as the existing land use of the area has historically been industrial, in addition to aquatic habitat and recreational uses. The proposed project is compatible with zoning ordinances and applicable land use plans. Anticipated positive outcomes of the project include improvements to existing recreational values and habitat.
b. Geology (EAW Item 10a). The project would not affect geology, nor does geology affect the project proposal, as the proposal would not involve excavation into the surrounding geology.
c. Hazardous Materials or Waste Generation (EAW Item 12). No potential environmental effects related to existing or generation of hazardous wastes on or near the project area were identified.
d. Groundwater (EAW Item 11.a.ii). No potential environmental effects related to groundwater were identified within or near the project area.
e. Historic Properties (EAW Item 14). No potential effects were identified as a result of a DNR Historic Property Assessment, an evaluation by the United States Fish and Wildlife Service Regional Historic Property Officer. Concurrence has been received from the State Historic Preservation Office.

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

    a. Physical Impacts to Public Waters and Wetlands
    b. Soils and Sediment Quality
    c. Water Quality During Construction
    d. Solid Waste during Construction
    e. Wildlife Impacts and Habitat
    f. Visual Impacts during Construction
    g. Noise, air emissions, odors, and dust during Construction
    h. Traffic during Construction
    i. Cumulative Potential Effects

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

    a. **Physical Impacts to Public Waters and Wetlands.** This topic was addressed in Items 6 and 11.

        This Project would provide 5.5 acres of stable upland habitat for the colony above a target elevation of 605.5' IGLD85, which was set as one foot higher than the record high water elevation in the long-term record for Lake Superior to provide climate resiliency. Phase II spring work would increase habitat above the target elevation from 1.7 to 3.0 acres (in MN and WI). Fall construction would be required to achieve the goal of at least 5.5 acres of habitat above the target elevation.

        Direct, permanent impacts of this work include shallow open water loss, increased critical habitat for threatened and endangered species, and increased natural shorelines. Direct impacts associated with the dredging and placement of fill material would be reduced by incorporating geotechnical analyses, hydrodynamic, and sediment transport modeling into the project design. Temporary impacts of dredging and placement would be reduced using BMPs as required by various state and federal permits. Considering the relative net benefit to public

resources created by improving critical habitat for threatened and endangered species, DNR considers this Project to be self-mitigating.

Fill placement required by this Project would reduce shallow open water fisheries habitat. USEPA/USFWS/1854 Authority have directly characterized fisheries use of the shallow waters surrounding the island. In general, shallow open waters are not limited in the SLRE and include shallow sheltered bays, flats, industrially influenced bays, and clay influenced bays. The Project Site is located within an approximately 2,400-acre area classified as Lower Estuary (Industrial Harbor) Flats. The condition and quantity of the flats in the lower estuary has been impacted heavily by industrial and commercial activity. Very little submergent and emergent vegetation is present in the industrial flats; however, vegetation was likely extensive prior to commercial and industrial development. The shallow waters surrounding Interstate Island may be more productive compared to others in the area if they receive increased nutrient inputs due to heavy avian use.

In general, fisheries habitats of mid-depth, open water (depths of 6-8 feet) and deep, open water (depths of 8-15 feet) are more limited in the estuary than shallow, open water because of historical habitat alternations. The exception to this is the extreme loss of shallow water habitat in the lower industrialized portion of the estuary. (Ultra- deep water present in the dredge navigational channels provides reduced habitat value for the fisheries.) Shallow and Mid-depth, open water habitat provides important nursery and foraging areas for Lake Sturgeon and game species such was walleye, muskellunge, and northern pike, while deep, open water habitat provides overwintering habitat for these species, as well as black crappie, bluegill, and bass. The Project avoids filling of the unique off-channel deep-water habitat located immediately adjacent to Interstate Island on the southwest in order to preserve this important habitat type for the fish community.

To help minimize temporary impacts to the fishery, state and federal agency permits require that restoration work would not occur during spawning periods (from April 1st to July 1st). For these reasons, the Project would not create long-term contaminant releases or adverse effects on the fishery. In addition, the Project would help reduce exposure of contaminants in the sediment to the food web. The United States Army Corps of Engineers (USACE) and United States Geological Service (USGS) monitoring at 21st Avenue West demonstrated that the use of appropriate in-water BMPs helped reduce the total amount of turbidity within the 21st Avenue West project area. Similar BMPs would be applied to Interstate Island Project Area.

b. Soils and Sediment Quality. This topic was addressed in the EAW under Items 10b, 11b and 12.

Interstate Island was created from dredge spoil when the navigational channel was dredged in the 1930s. The soil of the island is composed primarily of well-drained sand with some silt and gravel. The soil and sand were graded and shaped and the north side of the island and western tip were stabilized with rip-rap in 1989. The shoreline of the island ranges from sandy to cobblestone beach. In 2015, DNR placed approximately 3,300 CY of sandy substrate and gravel to protect the 30,000

square foot nesting area from flooding.

The island's upland footprint fluctuates significantly with changing lake levels due to its low profile. In recent years, this means that large portions of the island are low enough that the soil is wet, saturated, or completely flooded. The northern portion of the island is primarily between 602' and 604' IGLD85 elevation, meaning it is frequently inundated. For example, in the month of May 2019, the daily mean Lake Superior water elevation in Duluth (station no. 9099064) was above 603' IGLD85 elevation for 27 out of 31 days with the monthly mean elevation of 603.2' IGLD85 (NOAA, 2019). The Common Tern nesting area is between 605' and 607' IGLD85; elevation, flanked by a small dune area to the south, where elevations range from 607' to 610' IGLD85.

Most of the water immediately surrounding the island is shallow at three to four feet deep. There is one large hole on the south side of the island that is 10 to 40 feet deep (not included in 2019 survey). It was created sometime between 1967 and 1970 by sand and gravel dredging operations to provide fill for building docks in the harbor.

For the fall portion of the Project, DNR intends to work with the USACE to identify dredge materials for construction. USACE completes sediment sampling for physical characteristics and contaminants prior to dredging as part of its routine navigational dredging operations. The USACE identifies Federal navigational channel areas for potential dredging and separates them in to Dredged Materials Management Units (DMMU) for the purpose of estimating environmental impacts of the disposal of dredged materials. Samples are collected in each DMMU and analyzed for chemical, physical, and biological parameters.

Results are compared against reference samples and Sediment Quality Targets to identify the level of contamination present and the suitability for beneficial use of the dredged materials elsewhere. DNR, MPCA, and USACE would evaluate all dredged material proposed for use at the Project site to determine if it is suitable for in-water placement for habitat restoration. Existing Section 404 federal guidelines for placing dredged material in-water for the purpose of improving or creating aquatic habitat ensures adequate protection of an aquatic resource (USEPA and USACE, 1998a, 1998b), along with state guidance, SLRAOC Quality Assurance Program Plan (QAPP) for Minnesota Based Projects, Appendix 1, Managing In-Water Placement of Dredge Material for Habitat Restoration Sites (MPCA and MDNR, 2015b). Fundamental to the federal guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that such a discharge would not have an unacceptable adverse impact on the aquatic ecosystem. If a suitable source of dredge materials is not identified, imported fill materials would be used for construction.

DNR does not expect adverse effects on sediment quality as a result of dredged material placement in support of habitat restoration at the Project. Any dredged material that does not exceed the Sediment Quality Target contaminant standards detected under the methodologies and analysis documented in the QAPP would be documented as material that can be used for beneficial use as in-water placement.

c. Water Quality During Construction. This topic was addressed in the EAW under Item 11.b

USACE's normal dredging operations may result in short-term increases in turbidity in the water column due to sediment disturbance at the location where the material is dredged and downstream from where the disturbed sediment naturally flows. The USACE is exempt from Section 404 regulations for the purpose of de Minimis ('of minimal importance') soil movement and normal dredging operations under 57 FR 26894, 1992. DNR anticipates using USACE navigational dredged material suitable for in-water placement to provide stable upland island habitat. The placement of dredged material in the Project Site would result in short-term turbidity in the water column. The hydraulic placement of dredged material would result in increased concentrations of suspended solids during and immediately after placement operations, and although the water column oxygen concentration is temporarily reduced, the impact is limited to a short period of time at the construction site. Dredged materials with a finer texture may create higher concentrations of suspended sediments that require longer to settle. These impacts would occur both within the construction area, where the DNR would place the dredged material, and outside of the construction zone, depending on water flow velocity and direction.

Turbidity would be monitored on-site and adjustments would be made if suspended sediment levels are above permit requirements. DNR would use appropriate BMPs to minimize the amount of suspended solids in the water during construction. Silt curtains would be implemented as required by permitting authorities. Data and analysis from 2013, 2014, and 2015 by the USACE and USGS during the Pilot Project work at 21st Avenue West showed turbidity rapidly decreased with distance from the placement area, and approached background levels at approximately 1,000 feet (USGS, 2015). In addition, water quality returned to normal within the construction site within two days after placement of dredged material. Dredging and fill operations would be monitored to determine whether similar results occur in construction zones at Interstate Island.

To help minimize temporary impacts to the fishery, state and federal agency permits require that restoration work would not occur during spawning periods (from April 1st to July 1st). For these reasons, the Project would not create long-term contaminant releases or adverse effects on the fishery. In addition, the Project would help reduce exposure of contaminants in the sediment to the food web.

The CWA Section 401 Water Quality Certification, the Section 404 Clean Water Act permit, the Section 10 Rivers and Harbors Act Permit, and the Public Waters Work Permit require the applicant to install BMPs designed to prevent adverse effects on water quality due to dredging operations by minimizing the amount of sediment resulting from dredging. Any dredged material that does not show significant toxicity to test organisms under the methodologies and analysis of Section 404(b)(1) and Minnesota Rules 7050 would be documented for beneficial use as in-water placement.

The DNR would use BMPs to mitigate and reduce the Project's potential water quality impacts. The DNR, MPCA, and the USACE may deem it necessary to explore other methods to minimize short-term turbidity impacts or require the use of additional placement methods.

The in-water BMPs must be properly installed prior to conducting the authorized activities and must be maintained throughout the duration of the project's in-water disturbances. While conducting the work, the BMPs must also be visually monitored to ensure management of turbidity and/or sedimentation. If turbidity and/or sedimentation caused by the Project, is observed outside and downstream of the defined work area, then the authorized activities must cease immediately until alternative BMPs that would adequately control turbidity and sedimentation have been implemented. In-water BMPs must be included in the construction plan. Further information regarding the types of BMPs that may be suitable for this purpose can be found in "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001" manual provided on the DNR web site.

d. Solid Waste During Construction. This topic was addressed in EAW Items 6 and 12.b.

Minimal amounts of solid wastes are expected to be generated during construction. DNR would not store solid wastes during construction. On or before completion of all work, the Contractor would remove from the premises and recycle or legally dispose of all rubbish or debris, leaving the site in a clean and presentable condition.

A small amount of solid waste would be generated during Project operation and maintenance. To maintain desired habitat, resource managers actively manage plant communities. To protect critical nesting habitat, structures such as fencing and grids are installed. As resource managers remove undesirable plant matter and repair or replace structures, any generated wastes are disposed of promptly and legally.

e. Wildlife and Habitat. This topic was addressed in EAW Items 11b and 13.

The Project would result in increased and improved habitat for the following threatened or endangered species; common tern, piping plover, and the Rhode Island hairy-necked beetle. Ducks, Canada geese, and ring-billed gulls also use Interstate Island WMA for nesting, while a variety of shore and water birds use the island for feeding and loafing during the summer. Improving, increasing, and stabilizing sandy beach habitat at Interstate Island WMA would benefit these species as well.

In order to increase, improve, and stabilize this critical habitat, DNR must fill 0.9 acres in MN and 5.8 ac in WI (at the OHWL of 602.8' IGLD85) of shallow open water. Fill placement required by this Project would reduce shallow open water fisheries habitat. USEPA/USFWS/1854 Authority have directly characterized fisheries use of the shallow waters surrounding the island. Sampling with various gears over multiple years in this area captured 29 species of fish, including the following gamefish species: black crappie, bluegill, channel catfish, walleye, smallmouth bass, northern pike, white bass and muskellunge. The Project Site is located within an approximately 2,400-acre area classified as Lower Estuary (Industrial Harbor) Flats (SLRCAC, 2002). Some of this area would remain

available for fish use at long-term average water levels. Shallow waters suitable for foraging and spawning by a number of fish species are much more abundant throughout the estuary than island and/or sandy beach habitats suitable for the Project's target bird species.

Common tern and piping plover, as well as other shorebird species require sand and gravel substrate with limited vegetative cover. Woody vegetation present at the Project Site must be removed to eliminate possible perches for avian predators. Native dune plant communities would be established on limited locations within the Project Site to provide some protection from wind erosion. Wind erosion would be further reduced through the placement of rock vanes constructed of cobble on interior open areas of the site and the use of fencing in the tern nesting area.

The DNR requires preventing or limiting the introduction, establishment and spread of invasive species during activities on public waters and DNR-administered lands. Impacts from accidental introduction or harboring of invasive species, related to the removal, transport, and placement of imported or dredge materials are expected to be minimal.

Primary construction disturbances required to increase the island's elevation would occur over a two-year period. Periodic, short-term construction disturbances would be required in future years as the long-term monitoring and maintenance plan is implemented. These periodic disturbances are necessary to ensure continued stability and protection of restored habitat. DNR does not anticipate long-term adverse effects from these necessary construction disturbances. During all construction activity, DNR would employ measures to minimize temporary adverse effects to fish, wildlife, plant communities, and sensitive ecological resources, including:

- All restoration activities would take place outside the nesting season of March 1 to August 30.
- Construction will not occur during the fish spawning months of early spring;
- Turbidity-generating activities will be timed (in consultation with the state fishery managers) to avoid potential impacts during important fish migrations and spawning periods.
- Invasive species mitigation techniques described above will be implemented

f. Visual Impacts During Construction. This topic was addressed in EAW Item 15.

The Project site is situated in the St. Louis Bay near an interstate highway and navigational channel. Scenery at the Project areas includes views of the St. Louis Bay, including wetland ecosystems and related wildlife. Temporary impacts would occur during active construction, projected to occur over two seasons and last two to six weeks. Views would include manned barge spreads, excavators, and tug boats traveling between Interstate Island and the source of fill material (dock or navigational channel dredge area). Views of construction activity would not present undue aesthetic disruption in comparison with existing harbor industrial and shipping activities.

g. Noise, air emissions, odors, and dust during construction. These topics were addressed in EAW Items 16 and 17.

Noise: The Proposer expects periodic and temporary noise from operation of construction equipment near areas where fill and dredged material is placed. Equipment noise would not have adverse effects on recreation in the harbor as the placement area is within an industrial area and is subject to noise from two interstate highways that run near the Project site.

No sensitive receptors were identified near the island. People working in or around the nearest business are over 2,000 feet away from the Project site. The rail yards, WLSSD plant and other uses are over 1,000 feet from the equipment used to place the fill and dredge material.

The Project construction would temporarily generate noise within 100 feet, but all receivers are much farther away, and well below the 65 dB level. Therefore, no BMPs or project specifications have been developed to limit noise. Equipment used would include excavators, loaders, trucks, boats, tugs, and pumps. Typical sounds would include engine noise, sounds of metal on rock, and safety back-up alarms. Once complete the Project would not generate noise.

Air Emissions: Construction-related emissions would be exempt as de minimus and would 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. 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. Dredged material transport impacts would last approximately two months during each open-water dredge season. Emission levels also are lower as machines are modernized, and regulations become more stringent on new engines.

Dust and Odors: The proposed Project would create some temporary dust during open-water season construction activities. Fugitive dust could arise from light vehicle traffic at the Project Site in association with maintenance operations of equipment and stockpile locations. Activities with the potential to create dust include material removal, stockpiling, placement, grading, and compacting. Because the material being used consists of sand, gravel, and rip rap, dust generation is expected to be minimal. No short or long-term odor impacts are anticipated.

Best management practices to reduce dust during construction may include:

- Covering loads during transport during the open-water season.
- Watering exposed soils if fugitive dust becomes an issue.
- Using BMPs on exposed areas and stockpiles.
- Requiring any materials transported onto the Project Site to be clean and free of dirt and debris.

h. Traffic. This topic was addressed in EAW Item 18.

The WMA is accessible only by boat. Public use of the island is restricted to protect breeding waterbirds. All motorized vehicle use and horseback riding are prohibited on the WMA.

Contractors would access the site via boats and barges. While a specific contractor has not been identified for this Project, most area contractors either own or lease nearby docks for the storage and mobilization of equipment and employee parking. A crew size of ten or less would be required to implement the Project, resulting in minimal impact to daily traffic in the project's vicinity.

Sand used in the Common Tern nesting area and any fill beyond what is obtained through dredging must be sourced from an off-site location, to be determined by the contractor. Sand materials may be purchased from dock-based operations, in which case transportation would be via barge. Alternately, sand sourced from a mine would be hauled to the contractor's dock using dump trucks via state highway. Local road use may require haul route approval by local government units.

i. Cumulative Potential Effects. This topic was addressed in EAW Item 19. The potential environmental effects related to this project could combine with environmental effects from other past, present, or reasonably foreseeable future projects for which a basis of expectation has been laid. The environmental effects were considered in total in the EAW under Item 19. The EAW identified the potential for physical effects on surface waters, including the localized effects to wildlife habitat and vegetation, and water quality due to this project.

Project actions along with other SLRAOC actions are cumulative in nature. The specific outcomes identified above might result in some temporary negative environmental effects and in some instances may require special consideration in the permitting phase of the project. Over the long term, the Project's improvements to critical wildlife habitat should result in positive outcomes and beneficial effects to the environment of the St. Louis River Estuary.

Cumulatively, the projects completed or proposed in the SLRAOC are expected to improve the ecological function of the estuary and positively impact critical fish and wildlife resources. Positive impacts include: long-term reduction in sedimentation; removing contaminated sediments; removing legacy wood waste; improving condition of the benthos; increasing density and distribution of aquatic macrophytes; softening hardened shorelines; increasing acreage of shallow sheltered bay habitat; reducing abundance of non-native invasive species; and generally increasing quality of habitat for native fish and wildlife populations. These projects have similar habitat improvement goals with short-term impacts similar to those listed for the Project in this EAW.

Project actions when combined with reasonably foreseeable projects would result in limited and temporary water quality effects, including total suspended solids, and limited and temporary effects on localized impacts to wildlife and vegetation. Local impacts to fisheries are expected to be minor and limited to the immediate Project area, and not expected to accumulate. The cumulative potential effects on the water resources of the St. Louis Bay Estuary due to conversion of open water and changes in the floodplain would be minor and have a small contribution to cumulative potential effects. Cumulative potential effects on water quality in the generation of total suspended solids and other effects would be controlled by regulatory approvals required before commencing construction and effective monitoring during construction. The conditions for these permits require the use of BMPs to achieve a reduced environmental effect.

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

Unit of government	Type of application	Status
City of Duluth	Special Use Permit for Construction	Complete
City of Duluth	Shoreland Use	Complete
DNR	Public Waters Work Permit	Application submitted
DNR	Prohibited Invasive Species Permit	To be submitted
DNR	Lake Superior Coastal Zone federal consistency letter	To be submitted by USFWS
MN-SHPO	Section 106 Consultation - National Historic Preservation Act	Complete
WI-SHPO	Section 106 Consultation - National Historic Preservation Act	Complete
MPCA	401 Water Quality Certification	Included in USACE NWP 27 (spring work); To be submitted (fall work)
MPCA	National Pollutant Discharge Elimination System (NPDES)/Site Dredge Permit	Application submitted
MPCA	NPDES General Construction Stormwater Permit	To be submitted by contractor
USACE	Nation Wide Permit 27	Application submitted
USACE	CWA Section 404 Permit	To be submitted
USACE	Section 10 Permit - Rivers and Harbors Act	To be submitted (fall work only)
WDNR	Waterway Permit	Application submitted (spring work); To be submitted (fall work)
WDNR	401 Water Quality Certification	Included in USACE NWP 27 (spring work); To be submitted (fall work)

CONCLUSIONS

1. The Minnesota Environmental Review Program Rules, *Minnesota Rules*, chapter 4410.1700, subparts 6 and 7 set forth the following standards and criteria, to which the effects of a project are to be compared, 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 of related or anticipated future projects;
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.*

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 27, would be limited in extent, temporary, or reversible:

a. Physical Impacts to Public Waters and Wetlands
b. Soils and Sediment Quality
c. Water Quality During Construction
d. Solid Waste during Construction
e. Wildlife Impacts and Habitat
f. Visual Impacts during Construction
g. Noise, air emissions, odors, and dust during Construction
h. Traffic during Construction
i. Cumulative Potential Effects

Based on the Findings of Fact above, the DNR concludes the following potential environmental effects of the project, as described in Finding 27 would be beneficial:

a. Increased critical habitat for threatened and endangered species.
b. Increased natural shorelines.

The proposed project would yield several environmental benefits, as listed previously, and less tangible broad scale benefits to the public in general and individuals that directly use and depend on the St. Louis River because of the improvements to water quality, aquatic habitats, and biota.

3. *Cumulative potential effects of related or anticipated future projects.*

The effects of all past projects comprise the existing conditions of the project area. The cumulative environmental effects of the proposed project and future projects add to existing conditions. Cumulative environmental effects for future projects are assessed by evaluating the effect on the environment resulting from the incremental effects of the project under review plus similar effects from certain future projects that overlap spatially or temporally with the proposed project.

Based on the Findings of Fact above, the DNR concludes that cumulative potential effects from disturbance to wildlife and rare features, increase in sedimentation, and effects on surface waters and water quality of the St. Louis River environment are as described in Finding 27i. Other AOC projects near the proposed project have been recently completed, are currently being designed, or are in construction and have similar habitat improvement goals with temporary, minor, and reversible environmental effects similar to those listed for the

project in this EAW. Based on the Findings of Fact above, the DNR concludes that the cumulative potential environmental effects of this project are not significant when viewed in connection with the listed ongoing AOC projects being designed and implemented.

Positive impacts include: long-term reduction in sedimentation; removing or containing accumulated sediments; removing legacy wood waste; improving overall condition of the benthos; increasing density and distribution of aquatic macrophytes; softening hardened shorelines; increasing acreage of shallow sheltered bay habitat; reducing the diversity and abundance of non-native invasive species; and generally increasing quality of habitat for native fish and wildlife populations.

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

   Based on the information in the EAW and Findings of Fact above, the DNR has determined that the following environmental effects, as described in Findings 27a through 27i, are subject to mitigation by ongoing public regulatory authority:

   Physical Impacts to Public Waters and Wetlands: DNR Public Waters Work Permit requires mitigation, development of a least adverse alternatives analysis, and a natural hydrological condition improvement. USACE Section 404 permit authorizes stream and wetland restoration activities, including mitigation and sequencing, equipment restrictions, preventative measures, and spill contingency. USACE Section 10 authorities provide general conditions regarding equipment operation, and mitigation. MPCA Section 401 Water Quality Certification can require compensatory mitigation for wetland impacts.

   Soils and Sediment Quality: DNR Public Waters Work Permit, and the USACE Section 404 and USACE Section 10 permits include conditions for soil erosion and sediment controls, such as silt curtain, silt fence, and other measures). MPCA NPDES/SDS Construction Stormwater General Permit includes conditions such as the application of BMPs and preparation of SWPPP.

   Water Quality During Construction: USACE Section 404 permit, in coordination with the MPCA Section 401 Water Quality Certification can include protective conditions to ensure facility discharges meets state and federal water quality standards.

   Wildlife and Habitat: DNR Public Waters Work Permit requires plans that show the nature and degree of habitat to be benefited, that the project not exceed more than the minimum damage to the environment, and that the project must achieve the beneficial purpose of restoring fish and wildlife habitat.

   Solid Waste: MPCA Dredged Material Permit includes conditions for the management of solid waste according to specified contamination thresholds for beneficial reuse or disposal in landfill.

   Noise: *Minnesota Rules,* part 7030.0030 Noise Control Requirement is administered through MPCA which sets receiver-based standards, and construction site controls are set Occupational Safety and Health Administration (OSHA), which sets levels that protect against hearing loss in the workplace.

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.*

   Breneman, Dan, C. Richards, and S. Lozano. 2000. "Environmental influences on benthic community structure in a Great Lakes Embayment." Journal of Great Lakes Research 26(3):287-304.

Crane, J. L., and S. Hennes. 2007. "Guidance for the Use and Application of Sediment Quality Targets for the Protection of Sediment-dwelling Organisms in Minnesota."

Crane, J. L., D. D. McDonald, C. G. Ingersoll, D. E. Smorong, R. A. Lindskoog, C. G. Severn, and T. A. Berger. 2000. "Development of a framework for evaluating numerical sediment quality targets and sediment contamination in the St. Louis River Area of Concern."

Glick, P., J. Hoffman, M. Koslow, A. Kane, and D. Inkley. 2011. Restoring the Great Lakes' Coastal Future: Technical Guidance for the Design and Implementation of Climate-smart Restoration projects. Ann Arbor, MI: National Wildlife Federation.

DNR. Best Practices for Meeting DNR General Public Waters Work Permit (GP2004-0001).

DNR. 2014b. Permitting Policies for the Management of Narrow-leaved and Hybrid Cattail in a Range of Basin Types. Report to the 2015 Minnesota Legislature. Submitted December 15, 2014. Minnesota Department of Natural Resources.

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 Interstate Island Avian Habitat Restoration project.

7. Based on considerations of the criteria and factors specified in the Minnesota Environmental Review Program Rules (*Minnesota Rules*, chapter 4410.1700, subpart 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 Interstate Island Avian Habitat Restoration 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 Interstate Island Avian Habitat Restoration project in the City of Duluth, St. Louis County, Minnesota and the City of Superior, Douglas County, Wisconsin.

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

Dated this 10th day of February, 2020.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Jess Richards
Assistant Commissioner