DEPARTMENT OF NATURAL RESOURCES

RECORD OF DECISION

In the Matter of the Determination of the Need for an Environmental Impact Statement for the Chambers' Grove Aquatic Habitat Enhancement Project in St. Louis County, Minnesota

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 a quarter century 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 (MDNR) became a partner in this effort, working along with other federal, state, and local agencies and community partners to focus on one specific area of the Great Lakes, the St. Louis River. As part of this process of remediation planning, the MDNR and partners identified the need to restore and enhance aquatic habitat in the Chambers' Grove area within the Lower St. Louis River Area of Concern.

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) as "geographic areas that fail to meet the general or specific objectives of the agreement where such failure has caused or is likely to cause impairment of beneficial use (BUIs) of the area's ability to support aquatic life." More simply put, an AOC is a location that has experienced significant environmental degradation. Forty-three AOCs have been identified: 26 located entirely within the United States; 12 located wholly within Canada; and five that are shared by both countries.

3. Seven of the AOCs selected, including the St. Louis River AOC, are located 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 takes on the characteristics of 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 14BUIs 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. Sediment contamination is a serious problem in many AOCs. 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. Remediating the AOCs contributes to the sustainability of local communities and of the Great Lakes region. Remediation is achieved by essentially two processes: 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 area of concern. 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), 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. Loss of Fish and Wildlife Habitat (BUI-9) was listed for the St. Louis River AOC because fish and wildlife habitats were threatened by water quality impairments and losses of physical habitat. Water quality impairments included inadequately treated municipal and industrial wastes, contaminated sediments, degraded benthic communities, and high sedimentation rates resulting in turbidity. Physical habitat impairments included loss due to dredging and filling activities and decline in the quality of wetlands due to an increase in presence of non-native vegetation.

9. Given the amount of physical habitat that was lost or degraded during the last century, fish and wildlife habitat impairments are targeted for restoration and protection. The RAP indicates that the removal of the Loss of Fish and Wildlife Habitat BUI would be justified upon completion of several key tasks, including the rehabilitation of at least 1,700 aquatic habitat acres, 50% of the aquatic areas known to be degraded. The Chambers' Grove Aquatic Enhancement Project was defined in the RAP as a project needed to achieve the removal of the Fish and Wildlife Habitat BUI listed for the St. Louis River. Completion of the Chambers' Grove Aquatic Habitat Enhancement project would contribute towards meeting the acreage goal.

10. Chambers' Grove is a reach of the St. Louis River near the Fond du Lac neighborhood, located in Chambers' Grove Park in the City of Duluth, Minnesota, approximately 20 river miles upstream from Lake Superior. Chambers' Grove Park is under public ownership by the City of Duluth.

11. The MDNR intends to use natural channel design techniques to enhance spawning habitat for Lake Superior migratory fish species, particularly lake sturgeon, by constructing three riffle features about 1.4 miles below the Fond du Lac Dam on the St. Louis River in Duluth, Minnesota. The project would include removing an engineered retaining wall along the shoreline and naturalizing the bank with vegetation. The design includes access features planned by the City of Duluth. The construction to improve spawning habitat and stabilize the shoreline would affect more than one acre of public water. Projects affecting more than one acre of public waters require the completion of an Environmental Assessment Worksheet (EAW) (*Minnesota Rules*, part 4410.4300, subpart 27, item A).

12. The MDNR prepared an EAW for the proposed project according to guidance under *Minnesota Rules*, parts 4410.1400 and 4410.1500.

13. The EAW was filed with the Minnesota Environmental Quality Board (EQB) and a notice of its availability was published in the EQB Monitor on May 25, 2015. A copy of the EAW was sent to all persons on the EQB Distribution List, to those persons known by the Department 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 MDNR Library (St. Paul); the Duluth Library; and the MDNR Northeast Regional Office (Grand Rapids). The EAW was also made available to the public via posting on the MDNR's website.

14. The 30-day EAW public review and comment period began May 25, 2015 and ended June 24, 2015, pursuant to *Minnesota Rules*, part 4410.1600. The comment period closed at 4:30 pm. The opportunity was provided to submit written comments on the EAW to the MDNR by U.S. Mail, by facsimile, or electronically by email.

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

16. During the 30-day EAW public review and comment period, three 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. Copies of the comments received have been attached to this Record of Decision (Attachment 1).

    1. Mike Schrage (May 25, 2015)
    2. Patrice Jensen on behalf of Minnesota Pollution Control Agency (June 24, 2015)
    3. Sarah J. Beimers on behalf of the State Historic Preservation Office (June 24, 2015)

17. One commenter expressed support or approval of the project.

    RESPONSE: The MDNR appreciates this review and the comment. As RGU for the EAW, MDNR is mandated to evaluate the environmental effects of the proposed Project; therefore, comments regarding the merits of the proposed Project will generally not be addressed in this Record of Decision. These comments will be provided to the Proposer and to permitting and/or approval entities for their consideration about whether to permit, approve and/or implement the Project.

18. The MPCA commented that in addition to the MPCA water quality (WQ) standards identified in the EAW, more restrictive WQ standards listed at Minnesota Rules 7052.0100 subp. 5 also apply to the waterbody.

    RESPONSE: Comment noted.

19. The SHPO commented that they look forward to reviewing project documents pursuant to Section 106 of the National Historic Preservation Act of 1966.

    RESPONSE: Comment noted.

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

    a. **Groundwater (EAW Item No. 11).** Due to the nature of project activities, the construction and operation of this project would not have an effect on groundwater supply or quality.

    b. **Hazardous Waste Historical Presence (EAW Item No. 12a).** During investigations to complete the EAW, no potential environmental effects related to existing hazardous wastes on or near the project area were identified.

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

    a. Project Magnitude, Scheduling, and Construction
    b. Compatibility with Plans, Ordinances, and Land Uses
    c. Compatibility with Transportation
    d. Surface Waters
    e. Invasive Species Management and Control
    f. Wildlife and Habitat
    g. Rare Features & Native Plant Communities
    h. Hazardous Materials Used
    i. Construction and Municipal Wastes
    j. Vehicle Emissions
    k. Dust and Odors
    l. Noise
    m. Visual Impacts
    n. Archaeological, Historical, and Architectural Resources
    o. Cumulative Potential Effects

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

a. **Project Magnitude, Scheduling, and Construction (EAW Item No. 6b, 11, 13, and 18)**. The project is located in the uppermost section of the St. Louis River estuary. Construction is proposed on the shoreland and within a side-channel of the St. Louis River at the waterfront of Chambers' Grove Park. Construction would entail removing derelict structures (sheet piling, gabion rock baskets, and boardwalk) over 900 feet long; naturalizing and stabilizing the shore with buried toe wood (root wads and log pilings), sod mats, and native plantings; excavating and filling portions of the channel and installing amenities to improve river access (fishing platforms, sidewalks, and canoe access area). In-water construction would entail excavation and placement of gravel substrates and boulder alignments in a weir formation at the channel entrance and along the two proposed j-hook corridors. Some gravel and cobble would be removed and used off site as construction material or stored in a gravel pit for later use. Large boulders would be placed in the river to create a riffle-pool sequence, while other boulders would be scattered between the middle and lower riffles.

   Project designs are based on modeling of the river's hydrology, potential effects of the project on the river's hydrology, alternatives analysis, and Rosgen's Natural Channel Design approach. Studies were also conducted to assess the Chambers' Grove park riverfront structures and determine condition of the side-channel,

   The project's designated area is 10.5 acres, with the construction zone making up 3.6 acres: 2.2 acres of shoreland above the ordinary high water level (OHWL) and 1.4 acres of riverbed below the OHWL. Presently 0.5 acres of riverfront structures and parking area are classified as impervious surfaces and 3.2 acres are delineated as wet meadow within mowed parklands. About 1000 feet of shoreline would be affected by project construction. The 0.3 acre area of riverfront structures would be converted to a natural river bank and stabilized with layered placement of root wads and other organic material. With the creation of park amenities for river access, including six fishing access platforms, sidewalk, and the canoe access area, about 0.2 acres of impervious surfaces would be created. A 25-foot wide riparian zone (1.9 ac) would be prepared and planted in native vegetation. Construction machinery would include hydraulic excavators (track hoe), bulldozers, cranes, front-end loaders, skid-steer loaders, landscaping tractors, dump trucks, and other implements.

Construction is scheduled for the period extending from mid-summer through the fall of 2015. The project is scheduled, sequenced, and phased to minimize environmental effects to surface waters. Construction would be monitored under the authority of a licensed engineer. The DNR Stream Habitat Program would monitor the condition and trend of the channel and shoreline structures over time. Adaptive management would be pursued if deterioration occurs.

Previously, Natural Channel Design techniques have been successfully applied on the St. Louis River channel by MDNR in an area directly below the Fond du Lac Dam, where approximately 5.5 acres of the channel were enhanced to mimic quality spawning habitat for lake sturgeon. The proposed in-water structures would enhance spawning habitat for lake sturgeon and other migratory fish species, locally increasing the spawning habitat from 0.1 acres to approximately 1.5 acres, which is a 20 percent increase in total spawning habitat available to lake sturgeon in the St. Louis River. After completion, all reasonably available spawning habitat for lake sturgeon below the Fond du Lac Dam would be restored.

Beneficial effects would include channel structure and shore stability, enhanced fish spawning habitat, and improved river access and increased recreational opportunities. Shear stress along the protected and naturalized shore would be reduced by the concentrating high flows at the center of the channel. The side-channel's entrance would be opened to allow sufficient flow through after being closed by the massive 2012 flood. The location of the bank and elevation of the floodplain would not be affected. Naturalizing the shore with toe wood would increase habitat that supports small fish and protect the bank from erosion stresses during high water. Native vegetation plantings would be beneficial to wildlife and provide further protection from erosion caused by overland flow. A reduction of 0.3 acres of impervious surfaces from pre-project levels would occur. The project design includes features compliant with Americans with Disabilities Act (ADA) requirements to provide anglers with disabilities additional opportunities for outdoor recreation. The sidewalk, canoe access, and fishing platforms would meet ADA compliance specifications.

The design, construction, and scheduling of the project would have temporary, local, and minor environmental effects on the project area as described in the following Findings 22a through 22o. Beneficial effects related to improved river hydrology, enhanced aquatic habitats, improved shoreland stability and aesthetics, and improved opportunities for recreation are anticipated.

b. **Compatibility with Plans, Ordinances, and Land Uses (EAW Item No. 9)**

This environmental effect identifies potential conflicts that could occur with nearby land uses from proposed project developments. Project actions were evaluated for compatibility with plans, ordinances, and nearby land uses through document reviews and coordination with local, federal, and state agencies, including the City of Duluth, St. Louis County, the US Army Corps of Engineers (USACE), MPCA, and various MDNR resource specialists and administrative staffs.

The project area is part of the Western Planning Area for the City of Duluth. The land surrounding the project area is currently designated as City Park. The City proposes to redevelop and repair the park facilities damaged during a flood in June 2012. The park is part of a Sensitive Lands Overlay due to the area's severe development limitations relating to, for example, soils, wetlands, or steep landscape.

A small neighborhood commercial zone is located east of Highway 23 and south of Highway 210, across from Chambers' Grove Park. A nearby area is occupied by a private campground. Further eastward, the area is zoned as low density residential area. A majority of the land extending from Chambers' Grove Park for considerable distance to the north and west, past the city boundary and

into Midway Township, is designated as Preservation with a Sensitive Lands Overlay (lands with high natural resource and scenic value and substantial restrictions to development due to limitations). Carlton and St. Louis County comprehensive plans or long-range resource management plans do not directly address aspects related to fisheries habitat improvements.

The project area lies within the following special districts or overlays: 1) the FEMA 100 year floodplain of the St. Louis River (Zone A, not mapped floodway); and City of Duluth zoning rural residential class 1 (RR-1), "natural environment" shoreland management zone and stormwater rate control, zone A. The project meets the no increase in flood height provisions of FEMA for new developments within the 100 year floodplain.

The project is within the Lake Superior Coastal Zone under the jurisdiction of the Minnesota Lake Superior Coastal Program (MLSCP). The project is subject to federal consistency review. The MDNR and federal agencies must follow the requirements of 15 Code of Federal Regulations (CFR) 930, Subpart C. which requires the determination of whether projects are consistent, to the maximum extent practicable, with the enforceable policies of MLSCP.

The project is included as a component of the Lower St. Louis River Area of Concern (AOC) Remedial Action Plan (RAP) and is funded through National Oceanic and Atmospheric Administration under the Great Lakes Restoration Initiative (GLRI), and the Minnesota Clean Water, Land & Legacy Amendment, Outdoor Heritage Fund. The GLRI was launched in 2010 to accelerate efforts to protect and restore the largest system of fresh surface water in the world. In addition, the project supports objectives identified by the MDNR, Section of Fisheries, St. Louis River Estuary Fisheries Management Plan (2007).

Public safety would be improved by closing the park during construction and maintaining construction perimeter fencing and other deterrents to alert pedestrians and restrict access.

Compatibility with Adjacent and Nearby Land Uses: Noise, visual effects, and other potential environmental effects of project actions on nearby land uses are discussed under the specific environmental effect as organized in the topics below.

The project is compatible with plans, ordinances, and land uses in the project locale and in St. Louis County in general.

c. C**ompatibility with Transportation (EAW Item Nos. 6b and 18)**

Highway 23 Fond du Lac to Duluth is categorized by Minnesota Department of Transportation (MNDOT) Access Management as a Principal Arterial rural road (Category 4A) and is a separated four lane surface road through Fond du Lac. Fond du Lac is a rural residential neighborhood with scattered commercial businesses and no industrial uses. The current access to the adjacent Chambers' Grove Park is for recreational use of a small rural park and estimated to be less than 100 trips/day, with peak use occurring on summer weekends. The City of Duluth has closed the adjacent Chambers' Grove Park as of July 15, 2015. The Park is scheduled to remain closed until December 2016.

During the late summer and early fall of 2015, construction related transportation of the Chambers' Grove project would be expected to generate less than 100 trips per day for a short duration, i.e., equivalent to trips generated by a small business Construction activities would be restricted to weekdays. Contractors would use the park's parking area for construction staging and equipment storage during project construction.

No traffic congestion is expected on Highway 23 as a result of project construction or operation. The 100 trips/day estimate of traffic levels during construction is expected to be offset by the closing of the park to visitors, resulting in no net change during the park's closure. The construction contractor would be required to place and maintain Truck Hauling and Construction Entrance warning signage during construction.

By improving fishing and boat launch facilities, the project operation would be expected to moderately increase recreation related traffic above existing Park use levels. Once the project activities are completed and the Chambers' Grove Park is reopened, an additional 50 trips per day, equivalent to a 2.5% increase in traffic on this section of Highway 23, is projected.

The project is subject to regulations under Section 10 of the Rivers and Harbors Appropriation Act of 1899 that prohibits any action that obstructs, excavates or fills, or in any manner alters or modifies the course, location, condition, or capacity of the channel of any navigable water of the United States, except as has been approved through this Act by the USACE.

The project is compatible with the use and management of the navigable waters in the bay and the local public transportation infrastructure.

d. **Surface Waters (EAW Item Nos. 6b and 11)**

Environmental effects from project development on the St. Louis River bay and adjacent wetland are summarized under this topic. The project area is located about 1.4 miles below the Fond du Lac Dam and just upstream of the MN State Highway 23 Bridge on the Minnesota side of the St. Louis River, a designated public water (PWI #975W). The river reaches Lake Superior about 20 miles downstream from the Chambers' Grove project area. Lake Superior is an Outstanding Resource Value Water (ORVW).

This reach of the St. Louis River is classified by the MPCA as a Class 2B, 3C, 4A, 4B, 5, and 6 waterbody (Minnesota Rules, part 7050.0470) and protected by numeric and narrative water quality (WQ) standards (Minnesota Rules, parts 7050.0220 through 7050.0226, and part 7050.0210). The narrative standards described under Minnesota Rules, part 7050.0210 apply to all waterbodies, regardless of their designated use classification. More restrictive WQ standards listed at Minnesota Rules 7052.0100, subp. 5 also apply to the waterbody. Wetlands are protected under the Wetland Conservation Act.

The St. Louis River is Minnesota's largest tributary to Lake Superior and sections are listed as impaired waterways on the MPCA's Clean Water Act 303d Impaired Waters List. Specifically, the MPCA has identified that the following contaminants exceed the applicable state water quality standards for this reach of the St. Louis River: concentrations of DDT, dieldrin, PCBs, and mercury in fish tissue and PCBs and mercury in the water column.

Because surface waters that would be affected by the proposed project are listed impaired by MPCA, additional requirements of the National Pollution Discharge Elimination System / State Disposal System (NPDES/SDS) Construction Stormwater General Permit [MPCA Construction SW] listed in Appendix A are applicable. Applicability depends on the type of potential pollutants released by the proposed construction. The project would not exacerbate pollutant levels that have caused the listed impairments for this reach of St. Louis Bay.

In the 10.5 acre project area, 0.3 acre area of riverfront structures would be converted to a natural river bank and stabilized with layered placement of root wads and other organic material. The road access and parking loop would be removed. Park amenities for improving river access for recreation include six fishing access platforms, sidewalk connections, and a canoe access area

would be installed. A total of 0.2 acres of impervious surfaces would be created. A 25-foot wide riparian zone (1.9 ac) would be prepared and planted in native vegetation. The project's construction zone would be 3.6 acres in size, 2.2 acres of shoreland above the OHWL and 1.4 acres of riverbed below the OHWL.

Soil erosion, sedimentation, and the potential to generate pollutants that could affect surface waters are typical for the minimally developed urban parkland that includes lawn, some park amenities, road access, vehicular traffic, and soil compaction from frequent use. Preconstruction quantity of runoff is low to moderate and some pollutants, such as oil from engine leaks, originate from the road and parking areas.

In-water and shoreline construction would be phased to enable incremental soil stabilization as the project proceeds and best management practices (BMPs) would be applied to meet construction permitting standards. Following project construction there would be 0.1 acres of natural-surface walkways and 0.1 acres of fishing piers and canoe access, which represents a decrease of 0.3 acres of impervious surface.

The contractor would be required to obtain an NPDES/SDS Construction Stormwater General Permit. A stormwater pollution prevention plan (SWPPP) would also be prepared. The SWPPP would ensure that project layout, construction activities, and installed erosion control best management practices (BMPs) would prevent untreated stormwater from discharging from the project area to the St. Louis River. The City of Duluth may also require an Erosion & Sediment Control Permit. The BMPs include implementing: reduction in impervious surfaces, initial preparation of runoff control structures, construction phased and conducted during low flow periods, restriction of equipment movements, phased and immediate application of seeding/mulching and erosion control practices, and emergency spill response protocol.

The project would not result in any measurable change to the stormwater drainage patterns, discharge rates or locations because no structures or features would be built that change land surface elevations and drainage patterns. However, during and for a period following construction, there is a higher risk of erosion occurrences. Approximately one or two growing seasons would be necessary to fully stabilize the area, after which erosion and sedimentation rates are anticipated to be lower than pre-project levels.

Once fully stabilized, the quality of stormwater runoff reaching the river would improve insofar as the herbaceous and woody plant mats and native vegetation plantings would be better able to filter stormwater runoff than the existing hard surface and lawn features of the riverfront. In addition, the project's stormwater management would be complementary to the City of Duluth's intent to develop "green" stormwater management, adopting the principals of low impact development (LID), during their park rehabilitation. The green stormwater management will greatly reduce the amount of untreated stormwater discharged into the St. Louis River from Chambers' Grove Park.

A preliminary wetland assessment determined that the project area has 3.2 acres of wet meadow, with potentially 2.2 acres affected by construction. The City of Duluth owns the riverfront lot on which the Chambers' Grove Park is located and would be the local governmental unit representative that administers compliance with state wetland statutes and regulations pertaining to the Wetland Conservation Act. Mitigation for losses of wetlands due to the impervious surface developments has not been determined. The site's existing condition as mowed parkland, the proposed reduction in amount of impervious surfaces by 60 percent, and the beneficial aspects of naturalizing the river bank and riparian area with native vegetation plantings would be factors that are included in the consideration of mitigation requirements for wetland losses.

Construction activities would also occur in-water (1.4 acres), i.e., below the OHWL, generally referred to as the bankfull level of the river. The channel substrate is largely composed of cobble and course gravel, which when disturbed is unlikely to produce large amounts of suspended sediment. The work is scheduled when monthly average flow rates are generally lowest. River volume at the bankfull level of the river (OHWL) is approximately 5,000 cubic feet per second. There is a low probability that flow rates would exceed bankfull levels on any given day during the scheduled construction season.

The project would include approximately equivalent cut and fill areas and the in-water placement of approximately 126 cubic yards of boulders, 160 cubic yards of cobble, and 400 large diameter boulders. A small portion of the shoreline toe wood placement would also occur in water, if river level is elevated. The cobble-debris shoal at the entrance of the side-channel would be reworked to open the channel to pre-2012 flood flow levels. No contaminants would be introduced during in-water construction. In-water BMPs used to avoid or minimize turbidity/sedimentation during construction include: using only clean rock materials brought from off-site; maintaining river flow monitoring; managing the timing and phasing of construction; minimizing days of in-water construction and equipment movement; setting work limitations if river flows exceed bankfull levels; and using in-water turbidity curtains or diversions. The project would shift the thalweg of the river and change the cross section profile to reduce stress on the park's shorelands, but would not change channel capacity, floodplain elevation, or bank location.

Short-term turbidity impacts would be mitigated to the extent practicable, cognizant of the applicable state water quality standards. The same BMPs would also serve to help avoid and/or minimize the project's potential to exacerbate the existing MPCA CWA 303(d) listed impairments that are identified above. The proposed project would not result in further degradation of the referenced water quality standards for uses specified.

The project would likely to increase the usage of this side channel by canoes and kayaks. The carry-down access would enable a safer launch and the weir feature would re-establish an upper passage to the main stem of the river. The project area is rarely used by motorized watercraft because of shallow depths encountered in the channel.

To be permitted under the MDNR public waters work permit as a wildlife restoration project, the project plans need to show: the nature and degree of habitat to be benefited, the project would not exceed more than the minimum damage to the environment; and the project would achieve the beneficial purpose of restoring fish and wildlife habitat. A USACE Section 404 CWA (RHA Section 10) permit, which contains conditions that reduce the potential for environmental effects due to project developments, is also required.

The proposed project's more natural river channel would provide improved spawning habitat suitability for various fish species over a wider range of flows and is not anticipated to adversely affect the water resources, shoreland or floodplain in the area.

The environmental effects on surface waters from in-water construction and other soil disturbances to the shoreland and floodplain would be local, minor, and temporary. Substantial beneficial effects would result from the proposed enhancement to shoreline stability, aquatic ecosystem, and river access.

e. **Invasive Species Management and Control (EAW Item No. 13d).**

No invasive species were identified to occur in the river channel and shoreland of the project's construction zone.

MDNR Operational Order 113, which describes the protocol to use in the inventory and management of invasive species, would be followed. The contamination of surface waters by the introduction of invasive species is unlikely because machinery would be cleaned before entering the site and materials introduced to the site would be free of organic debris. Construction plans were not available at the time the EAW was completed, but they will be consistent with the Operational Order and require that all rock, soil, organic materials, plants, and seeds not contain invasive species. The requirement to use native species and monitor and control weedy and exotic species would be followed.

The project would have temporary, minor, and local environmental effects on the presence of invasive species in the project area.

f. **Wildlife and Habitat (EAW Item Nos. 6b, 11, and 13).**

The St. Louis River within Jay Cooke State Park and below the Fond du Lac Dam runs through a narrow and deeply incised valley. Between the dam and Lake Superior, the river gradient becomes lower and the valley becomes much wider, beginning about the location of the project area. The St. Louis River between the Fond du Lac Dam and the State Highway 23 Bridge is a critical spawning area for riffle migratory fish species of western Lake Superior and species resident to the estuary.

All flow rates that were modeled showed no substantial change in water surface elevation, flow vectors or velocity in the main river channel. The project is not expected to change the suitability of the main channel for use by aquatic species. Proposed work would not impede passage of aquatic organisms along the main channel. Construction would be scheduled so it does not affect spring spawning runs. Naturalizing the shoreline would improve aquatic habitat for young fish. Native plantings would be beneficial to terrestrial wildlife and aquatic species would benefit from the channel work. Native vegetation plantings would be monitored to ensure establishment would be achieved.

Wildlife impacts would be local, minor, and temporary, i.e. limited to construction and establishment phases of project. Long-term beneficial effects for wildlife are anticipated, especially related to the improved spawning habitat for lake sturgeon and other migratory fish, as describe under the following section.

g. **Rare Features & Native Plant Communities (EAW Item No. 13).**

The MDNR's Natural Heritage Information System (NHIS) was consulted in 2015 to determine if any rare plant or animal species or significant natural features are known to occur within an approximate one mile radius of the proposed project area. The project would have the potential to affect four state-listed species of special concern: the eastern elliptio (*Elliptio complanata*), black sandshell (*Ligumia recta*), creek heelsplitter (*Lasmigona compressa*), and lake sturgeon (*Acipenser fulvescens*).

Several rare native plant communities are found on Bayliss Island located along the south shore of the side channel. Survey maps indicated that the Gravel/Cobble Beach (River) community could be affected by proposed activities. The project area is within an area that the Minnesota Biological Survey (MBS) has identified as a Site of High Biodiversity Significance.

Instream construction would cause temporary physical disturbance of habitat resulting in a potential loss of some benthic species (including mussels) due to burial and a limited number of mobile species unable to escape during the movements of materials and construction equipment.

The predominant substrate within the project vicinity is cobble and rubble which is not preferred habitat for the creek heelsplitter or the black sandshell and is not tolerated by the eastern elliptio. The rare mussel species are unlikely to be directly affected by project activities as substrate within the project area is generally too coarse for their presence and the flow currently entering the side channel is limited. The Gravel/Cobble Beach (River) community would not be affected because work in the vicinity of the community would occur below the OHWL. Naturalizing the shoreline and improving spawning habitat would enhance the quality of the Site of Biodiversity Significance.

The channel bed is composed mostly of gravel, cobble, and stones that characterize spawning habitat. However, the current condition of the aquatic habitat in the project area is minimally suitable for lake sturgeon spawning. The project area lacks hydraulic complexity created by boulder pour-overs, a key element of spawning habitat for lake sturgeon. While foraging habitat for lake sturgeon would remain largely unchanged, proper habitat structure and hydraulics that support lake sturgeon spawning habitat would increase from 0.1 acres of marginal habitat to approximately 1.5 acres. About 0.3 acres of improved littoral zone for young fish would also be created along the shoreland. The project may result in an increase of 20 percent in the availability of high quality lake sturgeon spawning habitat in the St. Louis River below Fond du Lac Dam.

Timing of construction to occur from mid-summer through late fall would avoid impact to lake sturgeon and other fish species migrating upstream to spawn. Foraging lake sturgeon and other fish species would not be directly impacted since they are not generally present in the area of in-water activity during the anticipated construction period. Although some juvenile lake sturgeon might be present, they could avoid the project area by moving into the adjacent channel. The large spawning population would not return to the project area until the spring following project construction.

The Quality Assurance Project Plan (QAPrP) for AOC projects indicates that successful BUI removal must be based on a premise that biological indicators would respond positively to aquatic habitat improvements completed at a restoration site. In order to evaluate progress and ultimately determine success, habitat improvement targets and appropriate biological response variables must be quantified. After project completion, the newly created spawning areas would be monitored to determine their use by migratory fish species. Successful recruitment of lake sturgeon and other migratory fish would be one of the parameters used to indicate project success.

The environmental effects on rare features in the project area and vicinity would be temporary, local, and minor. The main benefit of the project would be the enhancement of aquatic habitat and spawning areas for the lake sturgeon, a species of special concern.

h. **Hazardous Materials Used (EAW Item No. 12c).**

Equipment fuels, oils, lubricants and other materials typically necessary for operating earthmoving equipment would be used during project construction. No other chemicals or hazardous materials are needed for this project.

The Contractor would be required to prepare a Spill Prevention and Response Plan to address accidental spillage or leakage. Measures to avoid or minimize spills during construction would include: refueling away from surface waters, maintaining a spill containment kit and trained personnel onsite, and understanding and following procedures for reporting spills.

The environmental effects of the increase in hazardous material use onsite would be of low risk, temporary, local, and minor.

i. **Construction and Municipal Wastes (EAW Item No. 12b)**.

Development of the site during excavation and grading would require the removal of approximately 200 cubic yards of coarse sediments and woody debris from the river channel. The river bed materials would be stored at an off-site borrow pit for later use or hauled away and used concurrently at other construction sites.

An NPDES/SDS Dredge Materials Management Permit would not be required by MPCA as excavated volumes would not reach the threshold requiring a permit. When limited volumes of materials are excavated, the MPCA requests, as a precaution, a few sediment samples be taken. A Notification to Manage Dredged Materials without a Permit form is also requested. The Notification form would be completed and submitted to the MPCA and materials would be tested for contamination according to MPCA protocols. If the material has a component of fine sands, silts, clays, or organic material, two samples would be collected and tested according to the AOC Quality Assurance Program Plan (QAPrP) recommendations established for assessing chemical contaminants in sediment.

Additionally, removal of the retaining wall along the river front would yield approximately 165 tons of waste steel sheet pilings and rock-filled gabion baskets. One-hundred cubic yards of mixed debris would be generated from the demolition of the boardwalk, obsolete asphalt path, and electric street light units. Other general construction wastes would also be generated.

The waste materials from the demolition of the riverfront structures would be separated out and mostly recycled, with some materials such as clean stone, reused onsite. The risk of contamination from excavating in the river channel and removing of riverfront structures would be very low.

The increases in solid wastes from construction would be temporary, local, and minor, and most of the waste materials generated would be recycled.

j. **Vehicle Emissions (EAW Item No. 16b).**

Gasoline and diesel powered vehicles would generate air emissions during the construction and operation of the aquatic habitat enhancement project. The exhaust emissions contain pollutants such as carbon monoxide, nitrogen oxides, reactive organic gasses, sulfur dioxide, and suspended particulate matter, all of which may carry associated health risks. Project construction activities would temporarily increase these airborne pollutant levels. Park associated traffic is anticipated to increase by 50 trips per day from pre project levels.

Construction-related emissions would be minor and temporary in nature, arising from the use of gasoline and diesel powered equipment used during construction. With the additional trips anticipated after the park reopens, operation-related emissions would likely show a minor increase. All equipment is required to meet state and federal emission standards and meet the Conformity Requirements under Section 176(c) of the Clean Air Act, as amended and 40 C.F.R. 93.153.

The increases in air emissions from construction would be temporary, local, and minor. The increase in air emissions during operations would be local and minor.

k. **Dust and Odors (EAW Item No. 16)**.

Construction activities would create dust and some odors during daytime operations. Fugitive dust could arise from soil disturbances on the shorelands and during hauling and stockpiling of

rock, soils, and large woody materials. During periods of heavy traffic and windy conditions, the dust might become airborne and create an annoyance to nearby residents. Offensive odors are unlikely as the site has limited areas containing organic soils that could be disturbed and construction materials do not contain volatile compounds.

When necessary, the BMPS that would be employed on exposed soils and during transport include: watering access routes and exposed soil; placing mulch, temporary cover and/or erosion control mats on exposed areas and stockpiles; and covering loads during transport.

The increases in odors and dust from construction would be temporary, local, and minor.

l. **Noise (EAW Item No. 17).**

Chambers' Grove construction would temporarily generate noise above current park noise levels. Construction would use equipment classified as "mobile equipment" that is operated in a cyclic fashion in which a period of full power is followed by a period of reduced power. Typical sounds would include engine noise, sounds of metal on rock, and safety back-up alarms. The Highway 23 embankment and Bayless Island would partly shield most of the populated areas from construction related noises. Once complete the project would not generate noise.

According to the Federal Highway Administration, the average noise level at a distance of 50 feet from typical diesel-powered mobile construction equipment is 87 decibels (dB). Sound decreases from a point source at a rate of 6 dB for every doubling of distance from the source. Construction noise would be below rural residential class 1 (RR-1) noise standards for the nearest sensitive receptor.

Minnesota Rules, part 7030.0040 establishes two noise levels, L_{10} and L_{50}, based on the percent of time noise levels exceed the standard over a one-hour time period. The rules also establish daytime and nighttime noise level standards based on Noise Activity Classification (NAC) levels. Minnesota Rules, part 7030.0050 defines NAC levels based on land uses classified as 1, 2, 3, or 4. NAC Level 1 includes residential areas.

The nearest receptors (residential areas) are located approximately 600-1200 feet east of the Highway 23 and south of the project area, across the St. Louis River in Wisconsin. The minimum distance to the nearest sensitive receptor is 600 feet. The NAC Level 1 daytime standards are 65 dB (L_{10}) and 60 dB (L_{50}) and nighttime standards are 55 dB (L_{10}) and 50 dB (L_{50}).

The contractor would minimize noise effects by: notifying adjacent landowners and business of the project's construction schedule and complaint procedures; coordinating with the managers of the nearby campground; operating equipment with approved and functioning muffler systems; restricting idling time for inactive equipment; limiting equipment operation to daytime hours and weekdays, and reserving potentially loud construction events to mid-day periods.

Noise from construction activities would be temporary, limited to normal daily work periods, and manageable.

m. **Visual Impacts (EAW Item No. 15).**

Chambers' Grove Park is a scenic public space that provides the general public access to and a naturalistic view of the St. Louis River. The river shoreline can be seen from the Highway 23 Bridge. Construction would temporarily restrict public access and reduce the scenic qualities of the adjacent park.

Minimizing visual impacts during construction would include: maintaining site in a neat and orderly condition and managing waste and trash in accordance with disposal laws and regulations. The contractor would be required to clean trucks leaving the site to prevent tracking and spillage of mud and other debris onto public streets. If hazardous or annoying materials are dropped from the transport trucks, the affected areas would be cleaned. The proposed naturalized shoreline would improve the scenic qualities along the riverfront of Chambers' Grove Park.

Project developments would have minor and temporary effects on scenic views, and aesthetics of the project area should improve after project construction is completed.

n. **Archaeological, Historical, and Architectural Resources (EAW Item No. 14)**.

Cultural resource investigations were conducted in the vicinity of the project, including Chambers' Grove Park and Bayliss Island. Literature research identified four historic (post-European Contact) properties that may contain additional physical remnants: a railroad line, a post-Contact stone quarry, and two post-Contact habitations. Duluth Archaeology Center and Wolfshead Research Logistics completed a Phase I archeological investigation for the City and the MDNR (Duluth Archaeology Center Report No. 14-48, December 2014). The Phase I field survey included pedestrian walkover of the terrestrial part of the area of potential effect (APE), with shovel testing focused on the island, which is outside of the project area. In addition, underwater surveys (remote sensing and visual searches) were conducted in the side channel of the river.

Physical remnants of several historic properties were located in the vicinity of the project area: the Chambers Quarry (21SL1162), abandoned in 1895, the Lake Superior and Mississippi Railroad-Fond du Lac to Thomson Segment (XX-RRD-026), and on Bayliss Island, the remains of a cabin or residence, named the Bayless Cabin (21SL1218). A fourth historic residence recorded in the area, the Chambers House, could not be field verified.

The project would not disturb the quarry site and the other historic properties. During the electro-magnetic underwater survey a total of 24 metallic anomalies were detected in two main areas. All of the ferrous objects were buried in the tightly knit cobble of the river bottom located in areas outside of the proposed construction zone. No potentially vulnerable cultural items are known to be present within the underwater and shoreland of the project area.

Section 106 of the National Historic Preservation Act (NHPA) compliance is being processed through the National Oceanic and Atmospheric Administration (NOAA), Great Lakes Environmental Research Laboratory, Ann Arbor, MI. The Phase I report has been made available to the Minnesota Historical Society, State Historic Preservation Office (SHPO) for review. SHPO would make a determination on findings and would issue a concurrence letter, if the review is accepted.

No effects on archaeological, historical, and architectural properties are anticipated.

o. **Cumulative Potential Effects (EAW Item No. 19).**

Construction is slated to occur during the period beginning in August and ending about mid-October, 2015. Developments would be largely confined to the project area and adjacent Chambers' Grove Park. Water quality was evaluated in greater detail to determine the potential for cumulative effects. Water quality of the Lower St. Louis River could be affected by sedimentation originating from project construction, up to several hundred feet downstream.

Several projects recently completed or planned in the foreseeable future within the same geographic area (upper reaches of the lower St. Louis River) and timeframe (approximately three years before to three years after project's completion) were evaluated for determining the potential interaction of environmental effects: MDNR Sturgeon Habitat Restoration at Fond du Lac Dam; Chambers' Grove Park improvements; MNDOT Repair of Highway 210 at Jay Cooke State Park; MDNR Mission Creek Flood Damage Response; and several Lower St. Louis River AOC Remedial Action Plan projects. Additional current or future AOC projects include: Radio Tower Bay (3 miles downstream); Mud and Spirit Lakes (6 miles downstream); Knowlton Creek (9 miles east); St. Louis Bay sites at Grassy Point, 40th Ave W, and 21st Ave W (approximately 10-14 miles downstream) and Kingsbury Bay (approximately 10 miles downstream).

The MDNR has examined whether the proposed project could have a significant effect on water quality due to sedimentation when considered along with other projects that: (1) are already in existence, are actually planned for, or for which a basis of expectation has been laid; (2) are located in the surrounding area; and/or (3) might reasonably be expected to affect the same natural resources.

Potential cumulative effect on water quality is distributed widely in a spatial context and without substantial temporal overlap. The potential for cumulative sedimentation effects on surface waters is anticipated to be minor for a variety of reasons relative to the individual projects: channel substrates are too coarse to contribute substantial sedimentation; sediments would be largely contained on-site because surface waters could be isolated from the river; the scale of the environmental effect would be minor in extent; and location and timing of projects are dispersed enough to prevent cumulative effects.

The potential cumulative environmental effect on water quality due to sedimentation was considered a minor potential. The contribution from the Chambers' Grove project would be minor in comparison to contributions from other projects occurring in the area.

The AOC restoration projects are expected to have temporary negative effects on water quality due to sedimentation. However, potential beneficial effects of the projects would include additional aquatic habitat restoration projects at locations throughout the estuary including 21st Ave West, 40th Ave West, Grassy Point, Radio Tower Bay, Perch Lake, Spirit Lake, Kingsbury Bay and Knowlton Creek. The cumulative potential effects of these projects is anticipated to increase fish and wildlife habitat, increase fish and wildlife populations, and decrease anthropogenic impacts to St. Louis River Estuary. All these cumulative potential effects would be beneficial to the St. Louis River Estuary and lead to its delisting as a Great Lakes AOC. The Chambers' Grove Aquatic Habitat Enhancement project would have a positive effect on the environment. The quality and area of suitable habitat for species of concern (lake sturgeon) would be improved and higher quality recreational access to the river would be provided.

The cumulative potential effects on water quality of the St. Louis River due to sedimentation would be temporary and minor in comparison to other contributions in the watershed.

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

Government	Type of Application	Status
City of Duluth	Temporary access agreement/license	To be obtained
	Floodplains, Shorelands, and Wetlands	To be obtained
	Erosion and Sediment Control Permit	May be required
MDNR	Public Waters Work (PWW)	To be obtained

	Prohibited Invasive Species Permit	To be obtained
	Lake Superior Coastal Zone Federal Consistency review	To be obtained
MPCA	NPDES/SDS Construction Stormwater General Permit (CWS)	To be obtained
	Section 401 Water Quality Certification	If needed
MHS/SHPO	Section 106 (§ 106) NHPA concurrence letter	Application pending
USACE	Section 404 (§ 404), Clean Water Act (CWA)	Application pending
	Section 10 (§ 10), Rivers and Harbors Act (RHA)	Application pending
NOAA	Section 7 review/coordination	Application Pending

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*

   23. Based on the Findings of Fact above, the MDNR concludes that the following potential environmental effects, as described in Findings 22a through 22o, would be limited in extent, temporary, or reversible:

   a. Project Magnitude, Scheduling, and Construction
   b. Compatibility with Plans, Ordinances, and Land Uses
   c. Compatibility with Transportation
   d. Surface Waters
   e. Invasive Species Management and Control
   f. Wildlife and Habitat
   g. Rare Features & Native Plant Communities
   h. Hazardous Materials Used
   i. Construction and Municipal Wastes
   j. Vehicle Emissions
   k. Dust and Odors
   l. Noise
   m. Visual Impacts
   n. Archaeological, Historical, and Architectural Resources
   o. Cumulative Potential Effects

   Based on the Findings of Fact above, the MDNR concludes the following potential environmental effects of the project, as described in Findings No. 22a through 22o would be beneficial:

Remove artificial riverfront structures that provide limited value to aquatic species and are in derelict condition for recreational use;

Restore and enhance the limited and finite potential spawning habitat available for resident and migratory fish species, including the lake sturgeon, a species of special concern;

Increase the hydraulic complexity of flows through the side channel, necessary for spawning habitat;

Remove the shoal at the entrance of the side channel and thereby increase channel capacity and direct flow toward the thalweg using a weir; this would direct flow away from the north shore, which is presently subject to increased erosion levels;

Restore and stabilize the riverbank using toe wood and native plantings that provide structure for young fish and improve aesthetics; and

Improve recreational access to this part of the river to meet ADA standards

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

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 effect 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 MDNR concludes that cumulative potential effects on water quality due to sedimentation, as described in Finding 22o, would not be significant in terms of:

The limited and minor potential for sedimentation during project developments as compared to other projects affecting the St. Louis River estuary;

Planned AOC remediation projects and other projects affecting the St. Louis River are anticipated to have negative effects that would be temporary and manageable, as well as long term beneficial effects contributing to the restoration of the St. Louis River and to delisting of the area from its AOC status.

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 MDNR has determined that the following environmental effects, as described in Findings 22a through 22o, are subject to mitigation by ongoing public regulatory authority:

The effects on Wildlife and Habitat: MDNR PWW permit (plans need to show the nature and degree of habitat to be benefited; requires that the project not exceed more than the minimum damage to the environment; project must achieve beneficial purpose of restoring fish and wildlife habitat).

The physical impacts on Water Resources (public waters): MDNR PWW permit (subject project designs to evaluate mitigation, least adverse alternatives analysis, the potential for natural hydrological condition improvement); USACE CWA Section 404 permit (stream and wetland restoration provisions, standard conditions for mitigation/sequencing, equipment restrictions, preventative measures, spill contingency, etc.); USACE RHA Section 10 (general conditions – equipment operation, mitigation, etc.).

The physical effects on Water Resources (wetlands): USACE Section 404 (contains federal wetland regulations); Wetland Conservation Act (WCA) and City of Duluth (LGU) ordinances (avoidance, minimization, and mitigation for wetland losses);

The effects on Water Surface Use: MDNR PWW, USACE CWA § 404 and RHA § 10 permits (conditions – project needs to demonstrate project would not obstruct navigation or create a water safety hazard, etc.); MDNR PWW permit (purpose – show improvements, including recreational uses).

The effects of Erosion and Sedimentation on Water Quality: *In-water construction* - MDNR PWW, USACE CWA § 404 and USACE RHA § 10 permits (conditions - sediment controls, i.e., silt curtain, silt fence, and other measures); *Above OHWL* – USACE CWA § 404, MPCA CSW permit for work in shorelands and City of Duluth shoreland ordinances (conditions – and application of BMPs for soil erosion controls and preparation of SWPPP).

The effects of Solid Waste: MPCA protocol (sampling to determine potential contaminants in excavated materials disposed off-site).

The effects of hazardous wastes on Water Quality: USACE CWA § 404 permit (conditions – preventative measures and spill contingency plan).

The effects of Noise: *Minnesota Rules,* part 7030.0030 Noise Control Requirement administered through MPCA (conditions – sets receiver-based standards); Occupational Safety and Health Administration (OSHA) (protects against hearing loss in the workplace).

The effects on Archaeological, Historical, or Architectural Resources: Minnesota Historic Sites Act and § 106 NHPA (projects funded by National Oceanic and Atmospheric Administration (NOAA) must comply with § 106 NHPA, through which the SHPO has review and concurrence responsibilities); USACE CWA § 404 and USACE RHA § 10 permits (conditions – requires compliance with § 106 NHPA).

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.*

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

   MDNR. 2008. St. Louis River Sturgeon Spawning Habitat Enhancement Project at Fond du Lac Dam EAW.

6. The MDNR has fulfilled all the procedural requirements of law and rule applicable to determining the need for an environmental impact statement on the proposed Chambers' Grove Aquatic Habitat Enhancement 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 MDNR determines that the proposed Chambers' Grove Aquatic Enhancement 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 Chambers' Grove Aquatic Enhancement Project in St. Louis County, 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 27th day of July, 2015.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

Barb Naramore

Barb Naramore
Assistant Commissioner