ATTACHMENT A
Tax Parcel Numbers

Kingsbury Bay Tax Parcel Number:
500 010-2400-03300;
501 010-2420-04350;
502 010-2420-04030
503 010-2420-03870;
504 010-2400-02960;
505 010-2400-03380
506 010-1783-00260;
507 010-2420-05370;
508 010-2420-05090
509 010-2420-05490;
510 010-2420-05810;
511 010-2400-04140
512 010-2400-03970
513 Dedicated ROW
514 010-2400-04290
515 Dedicated ROW
516 Dedicated ROW
517 010-2380-00340
518 010-2390-00330
519 010-2420-06660
520 010-2420-06570
521 010-2420-06620
522 010-2420-06580
523 010-2420-06590
524 Dedicated ROW
525 010-2420-06130
526 010-2420-08310
527 010-2420-08110
528 010-2420-08430
529 010-2420-08770
530 010-2400-04720
531 Dedicated ROW
532 010-2420-08900
533 Dedicated ROW
534 010-2420-09330
535 010-2420-08750
536 010-2420-08760
537 010-2420-05960
538 010-2420-06540

Grassy Point Tax Parcel Number:
101-0130-00230,
010-0130-00340,
010-0130-00380,
010-0130-00420,
010-0130-00430,
010-0130-00330,
010-0130-00180,
010-0130-00370,
010-0130-00210,
010-0130-00220,
010-0130-00350,
010-0130-00360,
010-0130-00390,
010-0130-00256,
010-0130-00270,
010-0130-00420,
010-0130-00410,
010-0130-00060,
010-0130-00200,
010-0130-00140,
010-0130-00150,
010-0130-00100, and
010-0130-00082.

ATTACHMENT B
St. Louis River Area of Concern Background

The St. Louis River Area of Concern (SLRAOC) Remedial Action Plan (RAP) is a comprehensive plan for delisting the SLRAOC through a series of action steps that address the Beneficial Use Impairments (BUIs) designated for the harbor. The RAP (MPCA and WDNR 2015) collectively describes projects that are implemented by a consortium of partners and stakeholders listed below.

- Minnesota Pollution Control Agency
- Harbor Technical Advisory Committee
- Douglas County, WI
- Wisconsin Department of Natural Resources
- Port Authority
- West Wisconsin Land Trust
- Minnesota Department of Natural Resources
- Duluth-Superior Metropolitan Interstate Council
- University of Wisconsin- Superior (UWS)
- Fond du Lac Band of Lake Superior Chippewa
- City of Duluth, MN
- University of Wisconsin- Superior Extension
- St. Louis River Alliance
- City of Superior, WI
- Wisconsin Sea Grant
- U.S. Army Corps of Engineers Detroit District (USACE)
- Western Lake Superior Sanitary District
- Audubon Minnesota
- U.S. EPA Mid-Continent Ecology Division (U.S. EPA MED)
- Minnesota Land Trust
- Marine Tech
- U.S. Fish and Wildlife Service
- Minnesota Department of Health
- Barr Engineering
- National Oceanic and Atmospheric Administration
- Douglas County Health Department
- LimnoTech
- University of Minnesota Natural Resources Research Institute (NRRI)
- U.S. Department of Agriculture
- Short, Elliot, Hendrickson
- Lake Superior National Estuarine Research Reserve
- Wisconsin Sea Grant
- AMI Consultants
- University of Minnesota–Duluth (UMD)

The RAP details the actions necessary to remove each of the BUIs identified for the SLRAOC. The SLRAOC partners and stakeholders worked together in a concerted effort to complete the RAP (2013 and updated annually since) aimed at removing BUIs and delisting the Area of Concern (AOC) by 2025. The SLRAOC is located on the western arm of Lake Superior and includes the twin port cities of Duluth, Minnesota, and Superior, Wisconsin. The SLRAOC was listed as one of 43 Great Lakes AOCs in 1987 by the International Joint Commission under the Great Lakes Water Quality Agreement between the U.S. and Canada. Historical actions such as improper municipal and industrial waste disposal and unchecked land use practices (including dredging and filling of aquatic habitat and damaging logging practices), contributed to the complex set of issues facing the SLRAOC at the time it was listed. The Stage I RAP (RAP; MPCA and WDNR, 1992) determined that nine of 14 possible BUIs existed in the SLRAOC including:

- BUI 1: Fish Consumption Advisories
- BUI 2: Degraded Fish and Wildlife Populations
- BUI 3: Fish Tumors and Other Deformities
- BUI 4: Degradation of Benthos

- BUI 5: Restrictions on Dredging
- BUI 6: Excessive Loading of Sediment and Nutrients
- BUI 7: Beach Closings and Body Contact Restrictions
- BUI 8: Degradation of Aesthetics
- BUI 9: Loss of Fish and Wildlife Habitat

In addition to its long list of BUIs, the SLRAOC is spatially large and geographically complex, spanning the Minnesota and Wisconsin state line and including tribal interests. The SLRAOC boundary includes the lower 39 miles of the St. Louis River, from upstream of Cloquet, Minnesota, to its mouth at the Duluth/Superior Harbor and Lake Superior, and the Nemadji River watershed (Figure 1). However, most of the actions included in the RAP focus on the St. Louis River below the Fond du Lac Dam, Crawford Creek, and the Nemadji River watershed, as they represent those portions of the SLRAOC most impacted by historical actions.

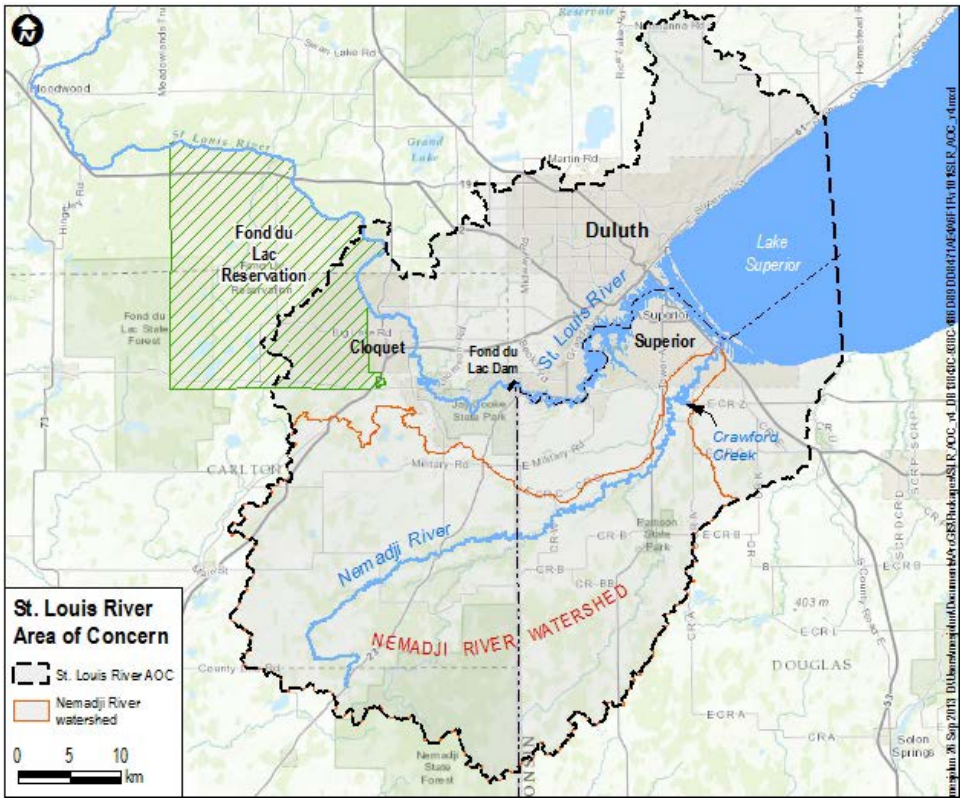

Figure 1: St. Louis River AOC Boundary

Since the Stage I RAP was written in 1992, the Partners have conducted significant work to restore the SLRAOC with well over $420 million invested since 1978 on infrastructure upgrades, remediation, and habitat restoration and protection in the AOC. Improved municipal wastewater treatment and significant progress on control of wet weather overflows have contributed to water quality improvement, and returning fish and wildlife populations. The Partners have remediated and/or restored some contaminated sites, including Hog Island/Newton Creek in Wisconsin and the St. Louis River Interlake/Duluth Tar Superfund site in Minnesota. In addition, the Partners have completed numerous habitat protection and restoration projects across the SLRAOC.

The St. Louis River AOC Stage I RAP (SLRCAC, 1992) was developed as a collaborative effort between the MPCA and the WDNR. At that time, these agencies supported an extensive public participation process that resulted in the development of the Stage 1 RAP and the Stage 2 RAP Progress Report (MPCA and WDNR, 1995). Many efforts in association with the RAP have taken place since this time including the Lower St. Louis River Habitat Plan (2002) which was used extensively to identify the critical habitat restoration projects necessary to remove BUIs.

The primary focus of the majority of "on the ground" management actions represented in the RAP are remediation of contaminated sediments and habitat restoration. Sediment contamination in the SLRAOC contributes directly or indirectly to eight of the nine BUIs (BUI 6: Excess Loading of Sediment and Nutrients is the exception). Cleanup of contaminated sediments is an obvious focus of SLRAOC restoration efforts, not only from an ecological standpoint, but also from the standpoint of stakeholder concern. On the habitat front, recent estimates confirm that approximately 3,400 acres of aquatic habitat has been lost over time in the St. Louis River (Hollenhorst et al., 2013). A goal for SLRAOC delisting is restoration of 50% of this lost habitat (1,700 acres).

Sites identified for remediation of contaminated sediments in the SLRAOC RAP are shown in Figure 2. Planned habitat restoration projects are shown in Figure 3, and include both aquatic habitat restoration sites and additional projects in important hydrologically connected habitats.

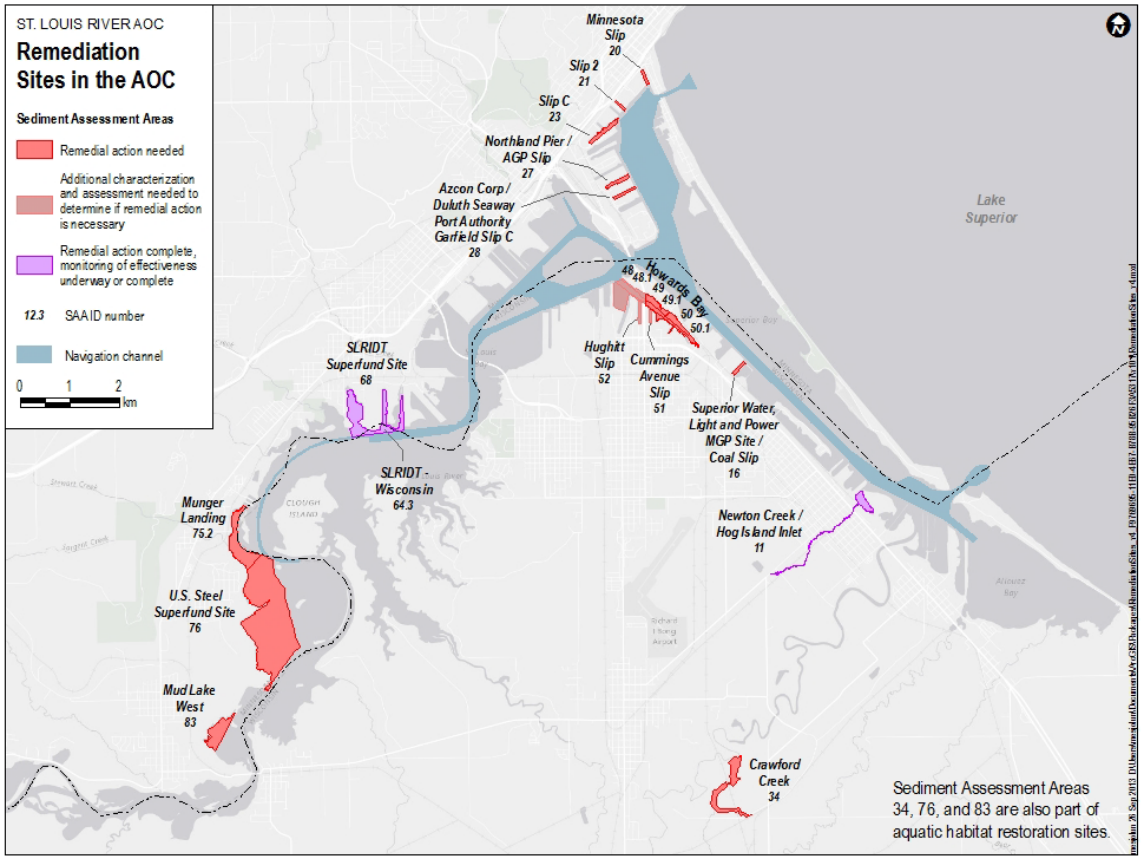

Figure 2: Remediation Sites in the SLRAOC

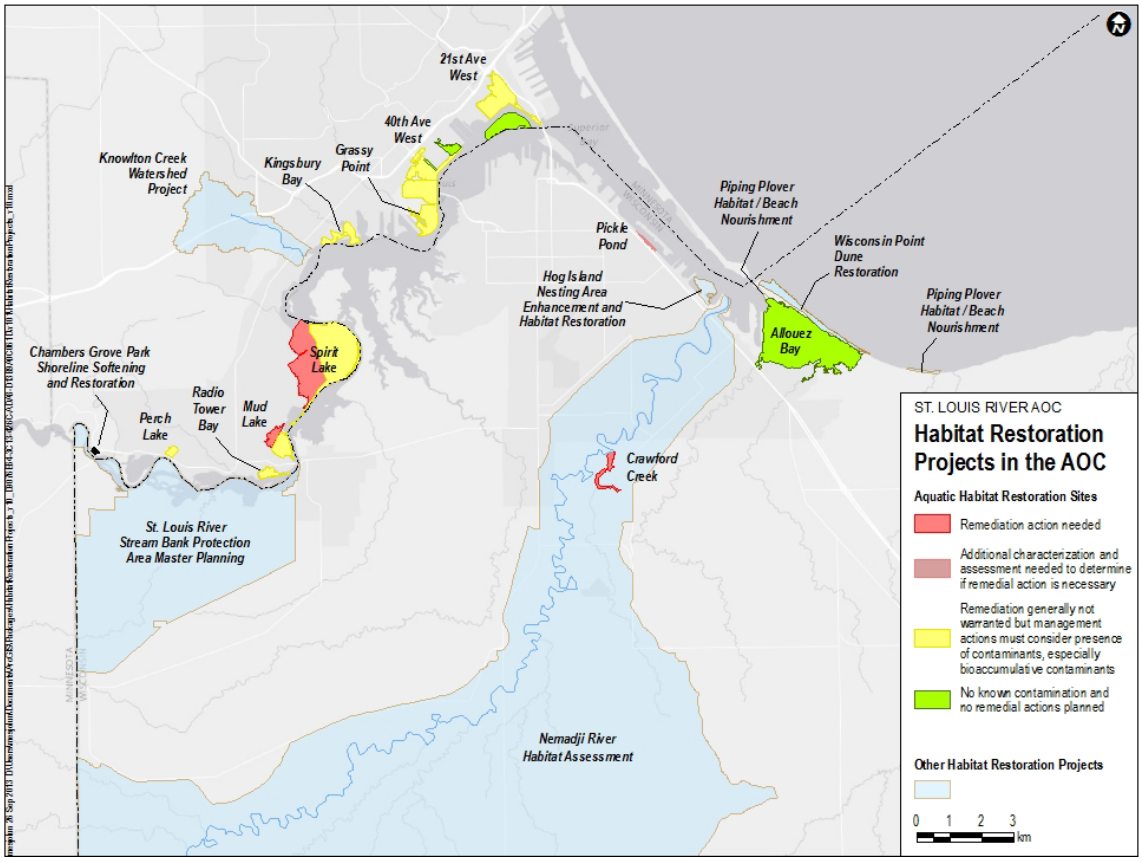

Figure 3: Habitat Restoration Projects Planned in the SLRAOC

The RAP has 69 action items the Partners are addressing in relation to removing the designated BUIs related to these legacy issues. Most of these actions are underway in one form or another and each action has a timeframe for completion in keeping with the goal to delist the SLRAOC by 2025. Of the action items, both Kingsbury Bay and Grassy Point Projects are RAP action items and considered necessary for removal of the following BUIs and SLRAOC delisting:

- BUI 2: Degradation of Fish and Wildlife Populations
- BUI 4: Degradation of Benthos
- BUI 9: Loss of Fish and Wildlife Habitat

The Partners have identified all the SLRAOC actions to remediate environmental impacts related to legacy related pollutants and habitat impacts, and provide for a more restored estuary in relation to the health and sustainability of the aquatic habitat.

ATTACHMENT C

NHIS Reports

From: Doperalski, Melissa (DNR)
To: MacGregor, Molly (DNR)
Cc: Coyle, Margi (Anne) (DNR); Sjolund, Melissa (DNR)
Subject: RE: Kingsbury Grassy NHIS Data Request
Date: Thursday, May 11, 2017 2:56:51 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png

Molly,

Re: Kingsbury Creek Restoration (ERDB# 20160091)

I have reviewed the NHIS regarding the Kingsbury Creek Restoration Project. There are no new records within 1-mile of the project boundary. As such, the Natural Heritage letter dated November 18, 2015 remains valid until May 10, 2018.

Re: Grassy Point Restoration (ERDB#20150369)

I have reviewed the NHIS regarding the Grassy Point Restoration Project. The records as listed and discussed in the July 9, 2015 Natural Heritage Letter remain valid until May 10, 2018. In addition there are two additional rare features that ***may* be adversely affected** by the proposed project: (I have attached an updated index and detail report for your records – **PLEASE NOTE THAT THE DETAILED REPORT IS FOR YOUR PERSONAL USE ONLY AS IT MAY CONTAIN SPECIFIC LOCATION INFORMATION THAT IS CONSIDERED NONPUBLIC UNDER MINNESOTA STATUTES, SECTION 84.0872, SUBD.2**)

- *Anguilla rostrata* (American Eel) and *Couesius plumbeus* (Lake Chub), both state-listed species of special concern, have been documented within the St. Louis River estuary in the vicinity of the proposed project. Similar to lake sturgeon, these species can be adversely impacted by actions that alter hydrology or decrease water quality including sedimentation, dredging and filling, stream dewatering, impoundment, eutrophication, channelization, and pollution/contamination. Please contact DNR fisheries to discuss any concerns they may have with this project and for recommended measures to avoid/minimize disturbance to these species.

In addition, both of these project areas are located within the St. Louis River Estuary, a waterbody that has been designated a Lake of Outstanding Biological Significance (updated map attached). Lakes of Biological Significance exhibit the highest quality features of aquatic plant, fish, bird, or amphibian communities. Given the ecological significance of the St. Louis River Estuary, disturbance should be minimized to the extent feasible during construction, operation, and maintenance activities. Actions to minimize disturbance include, but are not limited to, the following (note that not all of these actions may be applicable to proposed project activities):

- Confine construction activities to winter months,
- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- Minimize/divert surface runoff;
- Implement stringent/redundant erosion prevention and sediment control practices;

- Use sediment control barriers (e.g., compost logs, geotextile bags, biorolls) per MnDOT Best Management Practices;
- Revegetate disturbed soil with BWSR/MnDOT native seed mix appropriate for the shoreline conditions (see http://www.bwsr.state.mn.us/native_vegetation/ and http://www.dot.state.mn.us/environment/erosion/seedmixes.html;
- Establish permanent vegetation in the right-of-way;
- Use only herbicides approved for application within shoreline/riparian areas;
- Avoid bringing in topsoil to this site, as this introduces invasive species, or be sure that materials brought onsite are certified weed free.

It was noted in the NHIS update review request these projects have been combined into one. I have retained usage of the original ERDB numbers for the purpose of this updated review. However, please note in future correspondence you can refer to these under ERDB# 20160091. I have made a note of this in our record database.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist who has been cc'd on this communication.

Please let me know if you have any questions or need further information. Due to the sensitivity of information provided in the attached documents, please do not share externally or with internal staff that are not working directly with the project.

Thank you,

Melissa

Melissa Doperalski
NHIS Review Specialist | Ecological & Water Resources

Minnesota Department of Natural Resources
500 Layfayette Road
St. Paul, MN 55155
Cell: 603-479-1129
Email: melissa.doperalski@state.mn.us
mndnr.gov

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological and Water Resources, Box 25
500 Lafayette Road
St. Paul, Minnesota 55155-4025
Phone: 651-259-5109 E-mail: lisa.joyal@state.mn.us

November 18, 2015 **Correspondence # ERDB 20160091**

Ms. Molly MacGregor
MN DNR, Division of Ecologial and Water Resources
525 Lake Ave S, Suite 400
Duluth, MN 55802

RE: Natural Heritage Review of the proposed Kingsbury Creek Restoration,
T49N R15W Sections 13 & 24, St. Louis County

Dear Ms. MacGregor,

As requested, the Minnesota Natural Heritage Information System (NHIS) has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, see the enclosed database reports; please visit the Rare Species Guide at http://www.dnr.state.mn.us/rsg/index.html for more information on the biology, habitat use, and conservation measures of these rare species). Please note that the following **rare features *may* be adversely affected** by the proposed project:

Ecologically Significant Areas

- The proposed project is within an area that the Minnesota Biological Survey (MBS) has identified as a Site of Moderate Biodiversity Significance. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as Moderate contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. This particular Site is a collection of six vegetation patches connected by the St. Louis River. The moderate ranking is based on the small size, isolation, landscape context, and overall lower vegetation quality of the individual patches. Restoration activities are compatible with the moderate designation.

State-listed Species

- The lake sturgeon (*Acipenser fulvescens*), a state-listed special concern species, has been documented in the St. Louis River estuary in the vicinity of the proposed project. Lake sturgeon can be adversely impacted by actions which alter stream hydrology or decrease water quality, including sedimentation, dredging and filling, stream dewatering, impoundment, eutrophication, channelization, and pollution/contamination. Spawning occurs April – June in shallow water near shorelines. Please contact DNR Fisheries to discuss any concerns they may have with this project and for recommended measures to avoid/minimize disturbance to this rare fish.

Federally Listed Species

- If this project includes any tree removal, please be aware that the northern long-eared bat (*Myotis septentrionalis*), a state-listed species of special concern, can be found throughout Minnesota. During the winter this species hibernates in caves and mines, and during the active season (approximately April-October) it roosts underneath bark, in cavities, or in crevices of both live and dead trees. Activities that may impact this species include, but are not limited to, wind farm operation, any disturbance to hibernacula, and destruction/degradation of habitat (including tree removal).

  Effective May 4, 2015, the U.S. Fish and Wildlife Service (USFWS) listed the northern long-eared bat as threatened under the Endangered Species Act (ESA) and implemented an interim 4(d) rule. The ESA prohibits take of this species without a permit unless the take is exempt under the interim 4(d) rule. If you believe that your project may adversely affect ("take") the northern long-eared bat, you should determine whether the "take" is exempt under the interim 4(d) rule or whether you need a Federal permit. To make this determination, please refer to the USFWS Key to the Interim 4(d) Rule available at http://www.fws.gov/midwest/endangered/mammals/nleb/Interim4dRuleKeyNLEB.html. Please note that the NHIS does not contain any known occurrences of northern long-eared bat roosts or hibernacula within an approximate one-mile radius of the proposed project.

Environmental Review and Permitting

- The Environmental Assessment Worksheet should address whether the proposed project has the potential to adversely affect the above rare features and, if so, it should identify specific measures that will be taken to avoid or minimize disturbance.

- Please include a copy of this letter in any DNR license or permit application.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. **If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.**

The enclosed results include an Index Report and a Detailed Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location information, which might result in the destruction of a rare feature, both reports are copyrighted.

The Index Report provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index report for any other purpose, please contact me to request written permission. **The Detailed Report is for your personal use only as it may include specific location information that is considered nonpublic data under *Minnesota Statutes*, section 84.0872, subd. 2. If you wish to reprint or publish the Detailed Report for any purpose, please contact me to request written permission.**

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

Lisa Joyal

Lisa Joyal
Endangered Species Review Coordinator

enc. Rare Features Database: Index Report
Rare Features Database: Detailed Report
Rare Features Database Reports: An Explanation of Fields

cc: Rian Reed
Patricia Fowler

Printed November 2015
Data valid for one year

Minnesota Natural Heritage Information System Index Report of records within 1 mile radius of: ERDB# 20160091 - Kingsbury Creek Restoration T49N R15W Section 13 & 24
St. Louis County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
Acipenser fulvescens (Lake Sturgeon) #118 T49N R14W S18, T49N R14W S19; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23175
Acipenser fulvescens (Lake Sturgeon) #119 T49N R15W S24, T49N R15W S13, T49N R14W S18, T49N R14W S19; St. Louis County		SPC		SGCN	S3	G3G4	1986	23176
Acipenser fulvescens (Lake Sturgeon) #120 T49N R15W S24, T49N R15W S23; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23177
Acipenser fulvescens (Lake Sturgeon) #214 T49N R14W S18, T49N R14W S19, T49N R14W S17, T49N R14W S20; St. Louis County		SPC		SGCN	S3	G3G4	2000-07-10	10657
Sterna hirundo (Common Tern) #2 T49N R14W S18, T49N R14W S19, T49N R14W S17, T49N R14W S20; St. Louis County		THR		SGCN	S2B	G5	1983	25196
Sterna hirundo (Common Tern) #25 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1974	25206
Vascular Plant								
Bidens discoidea (Bur-marigold) #4 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17, T [...]; St. Louis County		SPC			S3	G5	1940-09-14	3794
Hudsonia tomentosa (Beach-heather) #29 T49N R14W S19; St. Louis, Douglas County		THR			S2	G5	1936-07-04	27706

Records Printed = 8

Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. For plants, taking includes digging or destroying. For animals, taking includes pursuing, capturing, or killing.

An Explanation of Fields:

Element Name and Occurrence Number: The Element is the name of the rare feature. For plant and animal species records, this field holds the scientific name followed by the common name in parentheses; for all other elements it is solely the element name. Native plant community names correspond to Minnesota's Native Plant Community Classification (Version 2.0). The Occurrence Number, in combination with the Element Name, uniquely identifies each record.

Printed November 2015
Data valid for one year

Minnesota Natural Heritage Information System Index Report of records within 1 mile radius of: ERDB# 20160091 - Kingsbury Creek Restoration T49N R15W Section 13 & 24 St. Louis County

Federal Status: The status of the species under the U.S. Endangered Species Act: LE = endangered; LT = threatened; LE,LT = listed endangered in part of its range, listed threatened in another part of its range; LT,PDL = listed threatened, proposed for delisting; C = candidate for listing. If null or 'No Status,' the species has no federal status.

MN Status: The legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; NON = tracked, but no legal status. Native plant communities, geological features, and colonial waterbird nesting sites do not have any legal status under the Endangered Species Law and are represented by a N/A.

Draft Status: Proposed change to the legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; Watchlist = tracked, but no legal status.

SGCN Status: SGCN = The species is a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan (http://www.dnr.state.mn.us/cwcs/index.html). This designation applies to animals only.

State Rank: Rank that best characterizes the relative rarity or endangerment of the taxon or plant community in Minnesota. The ranks do not represent a legal status. They are used by the Minnesota Department of Natural Resources to set priorities for research, inventory and conservation planning. The state ranks are updated as inventory information becomes available. S1 = Critically imperiled in Minnesota because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. S2 = Imperiled in Minnesota because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. S3 = Vulnerable in Minnesota either because rare or uncommon, or found in a restricted range, or because of other factors making it vulnerable to extirpation. S4 = Apparently secure in Minnesota, usually widespread. S5 = Demonstrably secure in Minnesota, essentially ineradicable under present conditions. SH = Of historical occurrence in the state, perhaps having not been verified in the past 20 years, but suspected to be still extant. An element would become SH without the 20-year delay if the only known occurrences in the state were destroyed or if it had been extensively and unsuccessfully looked for. SNR = Rank not yet assessed. SU = Unable to rank. SX = Presumed extinct in Minnesota. SNA = Rank not applicable. S#S# = Range Rank: a numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the element. S#B, S#N = Used only for migratory animals, whereby B refers to the breeding population of the element in Minnesota and N refers to the non-breeding population of the element in Minnesota.

Global Rank: The global (i.e., range-wide) assessment of the relative rarity or imperilment of the species or community. Ranges from G1 (critically imperiled due to extreme rarity on a world-wide basis) to G5 (demonstrably secure, though perhaps rare in parts of its range). Global ranks are determined by NatureServe, an international network of natural heritage programs and conservation data centers.

Last Observed Date: Date that the Element Occurrence was last observed to be extant at the site in format YYY-MM-DD.

EO ID #: Unique identifier for each Element Occurrence record.

Element Occurrence: An area of land and/or water in which an Element (i.e., a rare species or community) is, or was, present, and which has practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location. Specifications for each species determine whether multiple observations should be considered 1 Element Occurrence or 2, based on minimum separation distance and barriers to movement.

ERDB# 20150369 - Grassy Point (T49N R14W Section 18)
ERDB# 20160091 - Kingsbury Creek Restoration (T49N R14W Section 18 & 24)
St. Louis County

GIS shapefiles of MBS Sites of Biodiversity Significance & DNR Native Plant Communities can be downloaded from the MN Geospatial Commons at https://gisdata.mn.gov/

Legend

- Kingsbury Creek Restoration Project Boundary
- Grassy Point Restoration Project Boundary
- Corridor Complex
- Core Area
- Corridor (6mi)

MBS Sites of Biodiversity Significance

- Outstanding
- High
- Moderate
- Below

Lakes of Biological Significance

- Outstanding
- High
- Moderate

PLS Section

0 0.5 1 Miles

N

DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Division of Ecological and Water Resources, Box 25
500 Lafayette Road
St. Paul, Minnesota 55155-4025
Phone: (651) 259-5109 E-mail: lisa.joyal@state.mn.us

July 9, 2015 **Correspondence # ERDB 20150369**

Ms. Molly MacGregor
MNDNR
525 Lake Ave S, Suite 400
Duluth, MN 55802

RE: Natural Heritage Review of the proposed Grassy Point Aquatic Habitat Restoration,
T49N R14W Section 18, St. Louis County

Dear Ms. MacGregor,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, see the enclosed database reports; please visit the Rare Species Guide at http://www.dnr.state.mn.us/rsg/index.html for more information on the biology, habitat use, and conservation measures of these rare species). Please note that the following **rare features *may* be adversely affected** by the proposed project:

- The Minnesota Biological Survey (MBS) has identified a Site of Moderate Biodiversity Significance within the proposed project area (see attached map). Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as Moderate contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. There are no identified native plant communities within the project area.

- Lake sturgeon (*Acipenser fulvescens*), a state-listed special concern species, has been documented in St. Louis Bay in the vicinity of the proposed project. Lake sturgeon can be adversely impacted by actions which alter stream hydrology or decrease water quality, including sedimentation, dredging and filling, stream dewatering, impoundment, eutrophication, channelization, and pollution/contamination. If you have not done so already, please coordinate with DNR Fisheries regarding potential impacts to this species and recommended measures to minimize disturbance.

- The eastern elliptio (*Elliptio complanata*) and the creek heelsplitter (*Lasmigona compressa*), both state listed mussels of special concern, have been documented in the St. Louis Bay in the vicinity of the proposed project (see attached mussel report). The placement of the dredged material has the potential to bury these and other mussel species. As the distribution, diversity, and abundance of mussels within the project area are unknown, an undetermined number of mussels will be impacted. Given that there are no known

occurrences of state-listed threatened or endangered mussels in the area, a permit to take mussels will not be needed.

- The Environmental Assessment Worksheet (EAW) should address whether the proposed project has the potential to adversely affect the above rare features and, if so, it should identify specific measures that will be taken to avoid or minimize disturbance. The results of any additional survey work conducted within the proposed project area should be summarized in the EAW.

- Please include a copy of this letter in any DNR license or permit application.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. **If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.**

The enclosed results include an Index Report and a Detailed Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location information, which might result in the destruction of a rare feature, both reports are copyrighted.

The Index Report provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index report for any other purpose, please contact me to request written permission. **The Detailed Report is for your personal use only as it may include specific location information that is considered nonpublic data under *Minnesota Statutes*, section 84.0872, subd. 2. If you wish to reprint or publish the Detailed Report for any purpose, please contact me to request written permission.**

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

Lisa Joyal

Lisa Joyal
Endangered Species Review Coordinator

enc: Rare Features Database: Index Report
Rare Features Database: Detailed Report
Rare Features Database Reports: An Explanation of Fields
MBS Site Map
Mussel Survey Site Report and Map

Links: MBS Sites of Biodiversity Significance
http://www.dnr.state.mn.us/eco/mcbs/biodiversity_guidelines.html

cc: Rian Reed
Maya Hamady
Patricia Fowler

Printed July 2015
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB# 20150369 - Grassy Point
T49N R14W Section 18
St. Louis County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
Acipenser fulvescens (Lake Sturgeon) #115 T49N R14W S8; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23172
Acipenser fulvescens (Lake Sturgeon) #116 T49N R14W S18, T49N R14W S17; St. Louis County		SPC		SGCN	S3	G3G4	1994	23173
Acipenser fulvescens (Lake Sturgeon) #117 T49N R14W S17, T49N R14W S20; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23174
Acipenser fulvescens (Lake Sturgeon) #118 T49N R14W S18, T49N R14W S19; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23175
Acipenser fulvescens (Lake Sturgeon) #119 T49N R15W S24, T49N R15W S13, T49N R14W S18, T49N R14W S19; St. Louis County		SPC		SGCN	S3	G3G4	1986	23176
Acipenser fulvescens (Lake Sturgeon) #214 T49N R14W S18, T49N R14W S19, T49N R14W S17, T49N R14W S20; St. Louis County		SPC		SGCN	S3	G3G4	2000-07-10	10657
Charadrius melodus (Piping Plover) #1 T49N R13W S19, T49N R14W S4, T49N R13W S18, T49N R14W S13, T [...]; St. Louis County	LE,LT	END		SGCN	S1B	G3	2000	1467
Falco peregrinus (Peregrine Falcon) #52 T49N R14W S7, T49N R14W S8, T49N R14W S17; St. Louis County		SPC		SGCN	S3B	G4	2006	12583
Falco peregrinus (Peregrine Falcon) #96 T49N R14W S8; St. Louis County		SPC		SGCN	S3B	G4	2009-06-11	34729
Sterna hirundo (Common Tern) #2 T49N R14W S18, T49N R14W S19, T49N R14W S17, T49N R14W S20; St. Louis County		THR		SGCN	S2B	G5	1983	25196
Sterna hirundo (Common Tern) #3 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1985	25191
Sterna hirundo (Common Tern) #24 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1979	25204
Sterna hirundo (Common Tern) #25 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1974	25206

Printed July 2015
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB# 20150369 - Grassy Point
T49N R14W Section 18
St. Louis County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Invertebrate Animal								
Lasmigona compressa (Creek Heelsplitter) #156 T49N R14W S17, T49N R14W S20; St. Louis County		SPC		SGCN	S3	G5	1991-07	30544
Animal Assemblage								
Colonial Waterbird Nesting Area (Colonial Waterbird Nesting Site) #130 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		N/A			SNR	GNR	1983	558
Colonial Waterbird Nesting Area (Colonial Waterbird Nesting Site) #131 T49N R14W S7, T49N R14W S18, T49N R14W S17; St. Louis County		N/A			SNR	GNR	1983	559
Vascular Plant								
Bidens discoidea (Bur-marigold) #4 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17, T [...]; St. Louis County		SPC			S3	G5	1940-09-14	3794
Hudsonia tomentosa (Beach-heather) #29 T49N R14W S19; St. Louis, Douglas County		THR			S2	G5	1936-07-04	27706

Records Printed = 18

Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. For plants, taking includes digging or destroying. For animals, taking includes pursuing, capturing, or killing.

An Explanation of Fields:

Element Name and Occurrence Number: The Element is the name of the rare feature. For plant and animal species records, this field holds the scientific name followed by the common name in parentheses; for all other elements it is solely the element name. Native plant community names correspond to Minnesota's Native Plant Community Classification (Version 2.0). The Occurrence Number, in combination with the Element Name, uniquely identifies each record.

Federal Status: The status of the species under the U.S. Endangered Species Act: LE = endangered; LT = threatened; LE,LT = listed endangered in part of its range, listed threatened in another part of its range; LT,PDL = listed threatened, proposed for delisting; C = candidate for listing. If null or 'No Status,' the species has no federal status.

MN Status: The legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; NON = tracked, but no legal status. Native plant communities, geological features, and colonial waterbird nesting sites do not have any legal status under the Endangered Species Law and are represented by a N/A.

Printed July 2015
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB# 20150369 - Grassy Point
T49N R14W Section 18
St. Louis County

Draft Status: Proposed change to the legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; Watchlist = tracked, but no legal status.

SGCN Status: SGCN = The species is a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan (http://www.dnr.state.mn.us/cwcs/index.html). This designation applies to animals only.

State Rank: Rank that best characterizes the relative rarity or endangerment of the taxon or plant community in Minnesota. The ranks do not represent a legal status. They are used by the Minnesota Department of Natural Resources to set priorities for research, inventory and conservation planning. The state ranks are updated as inventory information becomes available. S1 = Critically imperiled in Minnesota because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. S2 = Imperiled in Minnesota because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. S3 = Vulnerable in Minnesota either because rare or uncommon, or found in a restricted range, or because of other factors making it vulnerable to extirpation. S4 = Apparently secure in Minnesota, usually widespread. S5 = Demonstrably secure in Minnesota, essentially ineradicable under present conditions. SH = Of historical occurrence in the state, perhaps having not been verified in the past 20 years, but suspected to be still extant. An element would become SH without the 20-year delay if the only known occurrences in the state were destroyed or if it had been extensively and unsuccessfully looked for. SNR = Rank not yet assessed. SU = Unable to rank. SX = Presumed extinct in Minnesota. SNA = Rank not applicable. S#S# = Range Rank: a numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the element. S#B, S#N = Used only for migratory animals, whereby B refers to the breeding population of the element in Minnesota and N refers to the non-breeding population of the element in Minnesota.

Global Rank: The global (i.e., range-wide) assessment of the relative rarity or imperilment of the species or community. Ranges from G1 (critically imperiled due to extreme rarity on a world-wide basis) to G5 (demonstrably secure, though perhaps rare in parts of its range). Global ranks are determined by NatureServe, an international network of natural heritage programs and conservation data centers.

Last Observed Date: Date that the Element Occurrence was last observed to be extant at the site in format YYY-MM-DD.

EO ID #: Unique identifier for each Element Occurrence record.

Element Occurrence: An area of land and/or water in which an Element (i.e., a rare species or community) is, or was, present, and which has practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location. Specifications for each species determine whether multiple observations should be considered 1 Element Occurrence or 2, based on minimum separation distance and barriers to movement.

Printed May 2017
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB#20150369-Grassy Point
T49N R14W Section 18
St. Louis County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
Acipenser fulvescens (Lake Sturgeon) #115 T49N R14W S8; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23172
Acipenser fulvescens (Lake Sturgeon) #116 T49N R14W S18, T49N R14W S17; St. Louis County		SPC		SGCN	S3	G3G4	1994	23173
Acipenser fulvescens (Lake Sturgeon) #117 T49N R14W S17, T49N R14W S20; St. Louis, Douglas County		SPC		SGCN	S3	G3G4	2002-07-08	23174
Acipenser fulvescens (Lake Sturgeon) #118 T49N R14W S18, T49N R14W S19; St. Louis, Douglas County		SPC		SGCN	S3	G3G4	2002-07-08	23175
Acipenser fulvescens (Lake Sturgeon) #119 T49N R15W S24, T49N R15W S13, T49N R14W S18, T49N R14W S19; St. Louis County		SPC		SGCN	S3	G3G4	1986	23176
Acipenser fulvescens (Lake Sturgeon) #214 T49N R14W S18, T49N R14W S19, T49N R14W S17, T49N R14W S20; St. Louis County		SPC		SGCN	S3	G3G4	2000-07-10	10657
Anguilla rostrata (American Eel) #15 T49N R14W S7, T49N R14W S18, T49N R14W S10, T49N R14W S5, T [...]; St. Louis, Douglas County		SPC		SGCN	S3	G4	2010-04-16	39846
Charadrius melodus (Piping Plover) #1 T49N R13W S19, T49N R14W S4, T49N R13W S18, T49N R14W S13, T [...]; St. Louis County	LE,LT	END		SGCN	S1B	G3	2000	1467
Couesius plumbeus (Lake Chub) #5 T49N R14W S7, T49N R13W S19, T49N R14W S18, T50N R14W S27, T [...]; St. Louis, Douglas County		SPC		SGCN	S3	G5	1992-06-24	39871
Falco peregrinus (Peregrine Falcon) #52 T49N R14W S7, T49N R14W S8, T49N R14W S17; St. Louis County		SPC		SGCN	S3B	G4	2006	12583
Falco peregrinus (Peregrine Falcon) #96 T49N R14W S8; St. Louis County		SPC		SGCN	S3B	G4	2009-06-11	34729
Sterna hirundo (Common Tern) #2 T49N R14W S18, T49N R14W S19, T49N R14W S17, T49N R14W S20; St. Louis County		THR		SGCN	S2B	G5	1983	25196
Sterna hirundo (Common Tern) #3 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1985	25191

Printed May 2017
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB#20150369-Grassy Point
T49N R14W Section 18
St. Louis County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
Sterna hirundo (Common Tern) #24 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1979	25204
Sterna hirundo (Common Tern) #25 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		THR		SGCN	S2B	G5	1974	25206
Invertebrate Animal								
Lasmigona compressa (Creek Heelsplitter) #156 T49N R14W S17, T49N R14W S20; St. Louis, Douglas County		SPC		SGCN	S3	G5	1991-07	30544
Animal Assemblage								
Colonial Waterbird Nesting Area (Colonial Waterbird Nesting Site) #130 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17; St. Louis County		N/A			SNR	GNR	1983	558
Colonial Waterbird Nesting Area (Colonial Waterbird Nesting Site) #131 T49N R14W S7, T49N R14W S18, T49N R14W S17; St. Louis County		N/A			SNR	GNR	1983	559
Vascular Plant								
Bidens discoidea (Discoid Beggarticks) #4 T49N R14W S7, T49N R14W S18, T49N R14W S8, T49N R14W S17, T [...]; St. Louis County		SPC			S3	G5	1940-09-14	3794
Hudsonia tomentosa (Beach Heather) #29 T49N R14W S19; St. Louis, Douglas County		THR			S2	G5	1936-07-04	27706

Records Printed = 20

Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. For plants, taking includes digging or destroying. For animals, taking includes pursuing, capturing, or killing.

An Explanation of Fields:

Element Name and Occurrence Number: The Element is the name of the rare feature. For plant and animal species records, this field holds the scientific name followed by the common name in parentheses; for all other elements it is solely the element name. Native plant community names correspond to Minnesota's Native Plant Community Classification (Version 2.0). The Occurrence Number, in combination with the Element Name, uniquely identifies each record.

Printed May 2017
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB#20150369-Grassy Point
T49N R14W Section 18
St. Louis County

Federal Status: The status of the species under the U.S. Endangered Species Act: LE = endangered; LT = threatened; LE,LT = listed endangered in part of its range, listed threatened in another part of its range; LT,PDL = listed threatened, proposed for delisting; C = candidate for listing. If null or 'No Status,' the species has no federal status.

MN Status: The legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; NON = tracked, but no legal status. Native plant communities, geological features, and colonial waterbird nesting sites do not have any legal status under the Endangered Species Law and are represented by a N/A.

Draft Status: Proposed change to the legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; Watchlist = tracked, but no legal status.

SGCN Status: SGCN = The species is a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan (http://www.dnr.state.mn.us/cwcs/index.html). This designation applies to animals only.

State Rank: Rank that best characterizes the relative rarity or endangerment of the taxon or plant community in Minnesota. The ranks do not represent a legal status. They are used by the Minnesota Department of Natural Resources to set priorities for research, inventory and conservation planning. The state ranks are updated as inventory information becomes available. S1 = Critically imperiled in Minnesota because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. S2 = Imperiled in Minnesota because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. S3 = Vulnerable in Minnesota either because rare or uncommon, or found in a restricted range, or because of other factors making it vulnerable to extirpation. S4 = Apparently secure in Minnesota, usually widespread. S5 = Demonstrably secure in Minnesota, essentially ineradicable under present conditions. SH = Of historical occurrence in the state, perhaps having not been verified in the past 20 years, but suspected to be still extant. An element would become SH without the 20-year delay if the only known occurrences in the state were destroyed or if it had been extensively and unsuccessfully looked for. SNR = Rank not yet assessed. SU = Unable to rank. SX = Presumed extinct in Minnesota. SNA = Rank not applicable. S#S# = Range Rank: a numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the element. S#B, S#N = Used only for migratory animals, whereby B refers to the breeding population of the element in Minnesota and N refers to the non-breeding population of the element in Minnesota.

Global Rank: The global (i.e., range-wide) assessment of the relative rarity or imperilment of the species or community. Ranges from G1 (critically imperiled due to extreme rarity on a world-wide basis) to G5 (demonstrably secure, though perhaps rare in parts of its range). Global ranks are determined by NatureServe, an international network of natural heritage programs and conservation data centers.

Last Observed Date: Date that the Element Occurrence was last observed to be extant at the site in format YYY-MM-DD.

EO ID #: Unique identifier for each Element Occurrence record.

Element Occurrence: An area of land and/or water in which an Element (i.e., a rare species or community) is, or was, present, and which has practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location. Specifications for each species determine whether multiple observations should be considered 1 Element Occurrence or 2, based on minimum separation distance and barriers to movement.

ATTACHMENT D.

Archaeological Survey Report Abstracts

UNDERWATER SURVEY AT GRASSY POINT, DULUTH, MINNESOTA

Susan C. Mulholland

Duluth Archaeology Center
5910 Fremont Street, Suite 1
Duluth MN 55807

and

Randolph G. Beebe

WolfsHead Research Logistics
2945 Acquire Lane
Duluth, MN 55804

Final Technical Report

Duluth Archaeology Center Report Number 13-36

October 2013

ABSTRACT

Phase I archaeological survey was conducted in the underwater portion of the Grassy Point parcel in Duluth, St. Louis County, Minnesota. Survey was conducted to identify historic properties, particularly sawmill components and shipwrecks, which may receive impacts from a proposed aquatic habitat restoration project. Two sawmills were known to have operated in the project area; remnants of the sawmill buildings are present as man-made islands but no remnants of the docks or railroad tracks were identified. Ten shipwrecks from the Cloquet Fire of 1918 were possibly in the project area; three shipwrecks (two scows and a more elaborate vessel) were located. The sawmill remnants are proposed to be covered by sediment fill to create a larger island; it is recommended that the sawmill areas be documented prior to placement of the fill. The two scows are considered to have little to no significance; the other vessel is more likely to have greater significance. Avoidance is the preferred alternative; if avoidance is not possible, formal evaluation may be required by SHPO.

COPIES SENT TO:
Jeremy Walgrave, LimnoTech, 2217 Vine St,. Suite 205, Hudson WI 54016

Scott Anfinson, State Archaeologist, Ft. Snelling History Center, St. Paul, MN 55111

PERSONNEL:
Susan C. Mulholland: Principal Investigator (Duluth Archaeology Center)
Randolph Beebe: co-Principal Investigator (WolfsHead Research Logistics)
Jennifer Hamilton: crew and graphics (Duluth Archaeology Center)
Kevin Schneider: crew and graphics (Duluth Archaeology Center)

ACKNOWLEDGEMENTS
Jeremy Walgrave provided information on specific impacts for the proposed project. Thomas Cinadr conducted a search of SHPO records for previously recorded sites. The state archaeology license was provided by Scott Anfinson, State Archaeologist. Todd Lindahl researched his files for information on the lumbering industry.

PHASE II ARCHAEOLOGICAL SURVEY OF GRASSY POINT, DULUTH-SUPERIOR HARBOR, ST. LOUIS COUNTY, MINNESOTA

PREPARED FOR:
DETROIT DISTRICT
U.S. ARMY CORPS OF ENGINEERS
477 MICHIGAN AVENUE
DETROIT, MI 48226

PREPARED BY:
SCOTT SEIBEL, MSC
BRAD KRUEGER, MA
JAMES PRUITT, MA
J.B. PELLETIER, MA
PETER REGAN, MA
RALPH KOZIARSKI, PHD
BRIDGET JOHNSON, MA
DOUGLAS INGLIS, MA
VERONICA MORRISS, MA

PRINCIPAL INVESTIGATOR:
VARNA BOYD, MA

AECOM
12420 MILESTONE CENTER DRIVE, SUITE 150
GERMANTOWN, MD 20876

SEPTEMBER 2015

AECOM

ABSTRACT

AECOM, under the Baird/URS Joint Venture, conducted a Phase II underwater archaeological evaluation of two previously recorded archaeological sites (21SL1206 and 21SL1207) and three potential archaeological sites (Shipwrecks A, B, and C [now 21SL1233]) in the Grassy Point survey area in St. Louis County, Minnesota. The project area is located near the southern end of the City of Duluth, in St. Louis County. The location is in Minnesota SHPO Archaeological Region 9n, a thin strip of land extending along the west coast of Lake Superior from the Canadian border south to Carlton County, southwest of Duluth This work was conducted under contract to the Detroit District of the U.S. Army Corps of Engineers pursuant to Section 106 of the National Historic Preservation Act in support of the Remedial Action Plan for the St. Louis River Area of Concern, which is being led by the Minnesota Pollution Control Agency.

The Principal Investigator for the project was Varna Boyd, MA. J.B. Pelletier, MA, served as the underwater Field Director, and Scott Seibel, MSc, served as the Task Manager. The underwater investigations were conducted from May 14 through May 16, May 21 through May 23, June 2, June 8, and June 10 through June 18, 2015.

The Phase II evaluations involved an analysis of cartography and aerial photography, an underwater remote sensing survey using side-scan sonar and an echo sounder over an approximately 20-acre area around the mapped locations, and diver investigation. The remote sensing survey was designed to aid in planning the diver investigations and in delineation of site boundaries. Archaeological divers were able to delineate the boundaries and conduct a more thorough recordation of sites 21SL1206 and 21SL1207 as well as determining the nature and extent of Shipwrecks A, B, and C.

Site 21SL1206 is the remains of the St. Louis Lumber Company sawmill and ancillary dock structure, and site 21SL1207 is the remains of the Lesure Lumber Company sawmill and ancillary dock structure. Shipwrecks A, B, and C were originally identified as possible shipwrecks during a 2013 Phase I underwater archaeological survey (Mulholland and Beene 2013).

The remains of sites 21SL1206 and 21SL1207 were reacquired in the remote sensing survey. The acoustic data clearly shows that both sites had all of the piers and pilings cut off at the mud line and were substantially dredged to remove all but the stone and masonry footings for what appears to be the boilers, steam engine (or engines), and the ancillary machinery needed to power a sawmill. Site 21SL1206 has an additional feature of what appears to be the footings for what may be a burn silo. Neither mill site retains any building elements that are sufficiently intact to understand the internal layout of the machinery and work spaces, nor are there structural elements beyond cut off pilings that would indicate particular methods of pile-supported building construction. There is no potential for additional significant data at either site beyond what has been collected as a result of the current and former investigations, and sites 21SL1206 and 21SL1207 are both recommended as not eligible for listing in the NRHP.

The previously identified Shipwreck A and Shipwreck B were both determined to not represent the remains of sunken vessels. Shipwreck A was identified as a large debris pile with the wood framing and metal components likely representing the remains of a wall or roof, consisting of sheet metal riveted to a gridwork of angle iron. This material is interpreted as out-of-context debris from the demolition of the adjacent 21SL1206, the St. Louis Lumber Company.

Shipwreck B was identified as a series of pilings that had been cut off at or near the mud line. Given their location, the pilings are related to the dock structure that formerly surrounded the St. Louis Lumber Company sawmill.

Diver investigation of Shipwreck C, now site 21SL1233, documented the remains of wooden flat top barge with a molded bow and stern, a type commonly used in port and harbor construction and general cargo lightering. The vessel remains lack most of the hull structure and the remaining portions are fragmentary. The shipwreck was abandoned sometime between 1924 and 1939, based on historic maps and aerial photograph. Given the fragmentary condition of the hull and the overall lack of site integrity, site 21SL1233 is recommended not eligible for the NRHP.

PHASE I ARCHAEOLOGICAL SURVEY OF KINGSBURY BAY, ST. LOUIS COUNTY, MINNESOTA

PREPARED FOR:
DETROIT DISTRICT
U.S. ARMY CORPS OF ENGINEERS
477 MICHIGAN AVENUE
DETROIT, MI 48226

PREPARED BY:
RALPH KOZIARSKI, PHD
PETER REGAN, MA
J.B. PELLETIER, MA
BRIDGET JOHNSON, MA
SCOTT SEIBEL, MSC

PRINCIPAL INVESTIGATOR:
VARNA BOYD, MA, AECOM

AECOM
12420 MILESTONE CENTER DRIVE, SUITE 150
GERMANTOWN, MD 20876

SEPTEMBER 2015

AECOM

ABSTRACT

AECOM, under the Baird/URS Joint Venture, conducted a Phase I terrestrial and underwater remote sensing archaeological survey of the Kingsbury Bay survey area in St. Louis County, Minnesota. This work was conducted under contract to the Detroit District of the U.S. Army Corps of Engineers pursuant to Section 106 of the National Historic Preservation Act in support of the Remedial Action Plan for the St. Louis River Area of Concern, which is being led by the Minnesota Pollution Control Agency. The Area of Potential Effects (APE) for the project is an approximately 116.23-acre area contained within the south half of the southeast quarter of Section 13, T49N, R15W, and the north half of the northwest quarter of Section 19, T49N, R14W; the APE is in Archaeological Region 9n. It consists of a terrestrial area approximately 51.44 acres in size and an underwater area approximately 64.79 acres in size.

The Principal Investigator for the project was Varna Boyd, MA. Ralph Koziarski, PhD, served as the terrestrial survey Field Director, J.B. Pelletier, MA, served as the underwater remote sensing survey Field Director, and Scott Seibel, MSc, served as the Task Manager. The terrestrial investigations were conducted on May 29 and May 31, 2015, and the underwater remote sensing investigations were conducted on May 16 and May 17, 2015.

AECOM was able to access approximately 44.06 acres of the terrestrial survey area for approximately 85.7 percent coverage. While 0.95 acres of the inaccessible survey area consists of residential lots, over 6.4 acres of the 7.38 acres of terrestrial survey area for which access could not be obtained consists of the southeastern peninsula, which is owned by Midwest Communications, Inc. Based on historic mapping, this area has a high potential to contain intact, significant historic archaeological resources dating to the mid-nineteenth century. It is recommended that this area be avoided, but if project plans call for ground disturbing activities or fill placement on this peninsula, additional archaeological survey is recommended.

The terrestrial survey consisted of pedestrian inspection and shovel testing and resulted in the identification of three archaeological sites (21SLaee, 21SLaef, and 21SLaeg). Site 21SLaee represents a trash dump that dates to the mid- or late-twentieth century. Site 21SLaee is recommended not eligible for inclusion in the NRHP, and no additional work is recommended. Sites 21SLaef and 21SLaeg represent the remains of late nineteenth or twentieth century domestic discard activities expressed as subsurface deposits in landscaped lawns. Landscaping and house construction appears to have vertically truncated and otherwise disturbed some of the landforms, and thus the sites are not likely intact. No vertical or horizontal artifact patterning is apparent at either site 21SLaef or 21SLaeg, and no archaeological features were identified. Sites 21SLaef or 21SLaeg are recommended not eligible for inclusion in the NRHP, and no additional work is recommended.

AECOM was able to collect remote sensing data for approximately 54.7 acres of the underwater survey area for approximately 84.4 percent coverage; data could not be collected for sections with a depth of less than 2 ft (0.6 m) as the boat could not navigate in such shallow waters. In total, six targets were identified in the underwater survey area, the majority of which consisted of isolated debris and timber scatters. Other objects encountered include old pier stanchion pipes and adjacent boat moorings. None of the other identified targets represent significant cultural resources. No further work relating to the identification of submerged cultural resources is recommended for the Kingsbury Bay underwater survey area.