



Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

May 31, 2019

Correspondence # ERDB 20150180-0003

Ms. Courtney Pacelli
EA Engineering, Science, & Technology, Inc.
225 Schilling Circle, Suite 400
Hunt Valley, MD 21031

RE: Natural Heritage Review of the proposed Spirit Lake Sediment Remediation,

County	Township (N)	Range (W)	Section(s)
St. Louis	49	15	26 & 34-36
St. Louis	48	15	1-3

Dear Ms. Pacelli,

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, please visit the [Rare Species Guide Website](#) 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

- St. Louis River Estuary in this area has been identified as a Lake of *Outstanding* Biological Significance. Lakes of Biological Significance were ranked as *Outstanding*, *High* or *Moderate* based on unique plant and animal presence. This particular area was ranked based on its bird population. The St. Louis River Estuary is also a designated Wild Rice Lake. As such, it is important that deterioration of water quality is minimized and effective erosion prevention and sediment control practices are implemented and maintained throughout the duration of the project.
- The proposed project is within an area the Minnesota Biological Survey (MBS) has identified as a Site of *High* 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 *High* contain very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes. (GIS shapefiles of MBS Sites of Biodiversity

Significance and DNR Native Plant Communities can be downloaded from the [MN Geospatial Commons](#). Please contact me if you do not have access to the appropriate mapping services.) This particular Site contains several native plant communities including the following in the direct vicinity of the project:

- Estuary Marsh (Lake Superior) – *critically imperiled*
- Aspen – Birch – Red Maple Forest – *uncommon but not rare*
- Willow – Dogwood Shrub Swamp – *common and abundant*

We encourage you to consider project alternatives that would avoid or minimize disturbance to this ecologically significant site. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- Minimize vehicular disturbance in the MBS Site (allow only vehicles/equipment necessary for construction activities);
- Do not park equipment or stockpile supplies in the Site;
- Do not place spoil within the Site or other sensitive areas;
- If possible, conduct the work under frozen ground conditions;
- Use effective erosion prevention and sediment control measures;
- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- As much as possible, operate within already-disturbed areas;
- Revegetate disturbed soil with [native species suitable to the local habitat](#) as soon after construction as possible; and
- Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas.

State-listed Species

- Common terns (*Sterna hirundo*), a state-listed threatened bird, were documented in the vicinity of the proposed project during the 2012 breeding season (a nesting site was not identified). This species nests on the ground on sparsely vegetated islands in large lakes. They have also been known to nest on open sandy or gravelly beaches. If there is suitable habitat, then it is possible these birds may breed in the area. Noise or other disturbances during the breeding season may negatively affect these colonial waterbirds.
- Creek heelsplitter (*Lasmigona compressa*), black sandshell (*Ligumia recta*), and lake sturgeon (*Acipenser fulvescens*), all state-listed species of special concern, have been documented in the St. Louis River in the vicinity of the project. These species 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. It is important effective erosion prevention and sediment control practices be implemented and maintained throughout the duration of the project. If feasible, avoid or minimize work within the water from April 1 to June 30 to protect spawning fish.
- Soapberry (*Shepherdia canadensis*), a state-listed species of special concern, has been documented in the direct vicinity of the project along the spur that juts into the Saint Louis River in 2004. This species is a

flowering shrub with greenish, yellow flowers that develop into bright red berries in July. A survey could be conducted to better determine the location of this species and possible impacts. Indirect impacts from surface runoff or the spread of invasive species should also be considered during project design and implementation.

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. Sufficient information should be provided so the DNR can determine whether a takings permit will be needed for any of the above protected species.
- Please include a copy of this letter in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

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.

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. If needed, please contact your [DNR Regional Environmental Assessment Ecologist](#) to determine whether there are other natural resource concerns associated with the proposed project. 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. An invoice will be mailed to you under separate cover.

Sincerely,

A handwritten signature in black ink that reads "Samantha Bump". The signature is written in a cursive, flowing style.

Samantha Bump
Natural Heritage Review Specialist
Samantha.Bump@state.mn.us

Links: Rare Species Guide

<http://www.dnr.state.mn.us/rsg/index.html>

DNR Regional Environmental Assessment Ecologist Contact Info

http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html

MBS Sites of Biodiversity Significance

http://www.dnr.state.mn.us/eco/mcbs/biodiversity_guidelines.html

DNR Native Plant Communities

<http://www.dnr.state.mn.us/npc/index.html>

MN Geospatial Commons

<https://gisdata.mn.gov/>

BWSR Native Vegetation/Seed Mixes

http://www.bwsr.state.mn.us/native_vegetation/

Cc: Margi Coyle