ATTACHMENT B

Minnesota Department of Natural Resources

Marsh Lake Ecosystem Restoration Project

Natural Heritage Information System Review and Rare Features Database Index Report

MNDNR

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

February 18, 2016

Correspondence # ERDB 20160266

Mr. Josh Kavanagh MN DNR 398 Sibley Park Road NE New London, MN 56273

RE: Natural Heritage Review of the proposed Marsh Lake Ecosystem Restoration, T120N R43W Sections 29 & 30, Swift County

Dear Mr. Kavanagh,

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

A portion of the project (along 100th Street SW) is within a Minnesota Biological Survey (MBS) 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. In particular, it appears that the parking lot and staging areas along 100th Street SW may impact (to a limited extent) Dry Hill Prairie and/or Mesic Prairie, two rare native plant communities. Although there are no known occurrences of state-listed species in this area, many of the species listed on the database reports are associated with native prairie. Given the rareness of native prairie and the potential for state-listed species to occur within it, avoidance of native prairie is recommended.

State-listed Species

The DNR conducted pre-project mussel surveys in the Pomme de Terre River in 2007 and 2010 (see enclosed mussel survey site database report). The black sandshell (*Ligumia recta*), a state-listed mussel of special concern, and the elktoe (*Alasmidonta marginata*), state-listed as threatened, were documented during these surveys. Although the elktoe was documented outside of the project footprint in 2010, the current distribution of the elktoe within the river is unknown as it has been more than five years since the last mussel survey. Prior to any dewatering or work in the riverbed, potential impacts to mussels will need to be resolved to the satisfaction of the DNR's Endangered Species Coordinator (Richard Baker at 651-259-5073 or richard.baker@state.mn.us). 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.

Federally Protected Species

It is my understanding that potential impacts to federally protected species have been addressed; they are included here in the interest of providing a complete Natural Heritage Review.

- As you are aware, a bald eagle (*Haliaeetus leucocephalus*) nest has been documented in the vicinity
 of the proposed realignment. Given that eagles will often build several nests in a territory and use
 different nests in different years, this nest may become active again in the future or there may be
 additional nest sites in the area. Bald eagles are federally protected under the Migratory Bird
 Treaty Act and under the Bald and Golden Eagle Protection Act. If there will be any tree removal
 associated with this project, the trees should be inspected for nests prior to being cut down. Please
 visit the USFWS website at http://www.fws.gov/midwest/eagle/ for more information regarding
 conservation measures, management guidelines, and permitting.
- The northern long-eared bat (*Myotis septentrionalis*), federally listed as threatened and state-listed as 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. Pup rearing is during June and July. 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).

The U.S. Fish and Wildlife Service (USFWS) has published a final 4(d) rule that identifies prohibited take. To determine whether you need to contact the USFWS, please refer to the USFWS Key to the Northern Long-Eared Bat 4(d) Rule (see links below). 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.

• The Poweshiek skipperling (*Oarisma Poweshiek*), federally listed as endangered, was documented in the vicinity of the project in 1988 and 1997. If there will be any impacts to native prairie, I recommend that you contact the U.S. Fish and Wildlife Service Twin Cities Field Office.

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. Impacts to mussels
 will need to be resolved to the satisfaction of the DNR's Endangered Species Coordinator (Richard
 Baker at 651-259-5073 or richard.baker@state.mn.us).

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 <u>Index Report</u> 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 <u>Detailed Report</u> 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,

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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 Mussel Survey Site Report and Map
- Links: USFWS Key to the Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities <u>http://www.fws.gov/midwest/endangered/mammals/nleb/KeyFinal4dNLEB.html</u> USFWS Key to the Northern Long-Eared Bat 4(d) Rule for Federal Actions <u>http://www.fws.gov/midwest/endangered/mammals/nleb/KeyFinal4dNLEBFedProjects.html</u> USFWS Northern Long-eared Bat Website <u>http://www.fws.gov/midwest/endangered/mammals/nleb/index.html</u> USFWS Northern Long-eared Bat Fact Sheet <u>http://www.fws.gov/midwest/endangered/mammals/nleb/index.html</u>
- cc: Kevin Mixon Mike Davis Rich Baker Ryan Bjerke

Rare Features Database:	E. I		D 64	SCON	64 - 4 -	Clabal	Lest Obs	
Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
<u>Bartramia longicauda</u> (Upland Sandpiper) #463 T119N R42W S8, T121N R44W S34, T120N R43W S34, T119N R43W S9, T []; Lac Qui Parle, Big Stone, Chippewa, Swift County		Watchlist		SGCN	S4B	G5	2013-06-11	25435
Botaurus lentiginosus (American Bittern) #319 T120N R43W S34, T120N R43W S27, T120N R43W S17, T119N R43W S2, T []; Chippewa, Swift County		Watchlist		SGCN	S4B	G4	2013-06-11	37398
Haliaeetus leucocephalus (Bald Eagle) #1363 T120N R43W S30; Swift County		Watchlist		SGCN	S3B,S3N	G5	2001	18995
<u>Heterodon nasicus</u> (Plains Hog-nosed Snake) #36 T120N R43W S19, T120N R43W S18; Swift County		SPC		SGCN	S 3	G5	1999-06-16	30583
Limosa fedoa (Marbled Godwit) #265 T120N R43W S34, T119N R43W S25, T121N R44W S34, T120N R45W S13, T []; Lac Qui Parle, Big Stone, Chippewa, Swift County		SPC		SGCN	S3B	G5	1999-06-17	25400
Onychomys leucogaster (Northern Grasshopper Mouse) #36 T120N R43W S18; Swift County		SPC		SGCN	S 3	G5	1999-07-15	31951
<u>Sterna forsteri</u> (Forster's Tern) #49 T120N R43W S30; Lac Qui Parle, Swift County		SPC		SGCN	S3B	G5	1977	25287
<u>Tympanuchus cupido</u> (Greater Prairie-chicken) #696 T120N R44W S13; Big Stone County		SPC		SGCN	S 3	G4	2003	31997
<u>Tympanuchus cupido</u> (Greater Prairie-chicken) #704 T119N R43W S6, T120N R43W S30, T120N R43W S31, T120N R44W S36; Lac Qui Parle, Swift County		SPC		SGCN	S 3	G4	2003	32005
Invertebrate Animal								
Actinonaias ligamentina (Mucket) #68 T120N R43W S30, T120N R43W S31; Lac Qui Parle, Swift County		THR		SGCN	S2	G5	1989-06-20	17032
Actinonaias ligamentina (Mucket) #136 T120N R43W S16 T120N R43W S20: Swift County		THR		SGCN	S2	G5	2007-08-21	24153

T120N R43W S16, T120N R43W S20; Swift County

Rare Features Database:				GGGN	<u> </u>			
Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Invertebrate Animal								
<u>Alasmidonta marginata (Elktoe)</u> #45 T120N R43W S15, T120N R43W S16, T120N R43W S20; Swift County		THR		SGCN	S2	G4	2007-08-16	24779
Elliptio dilatata (Spike) #233 T120N R43W S30; Swift County		THR		SGCN	S2	G5	1997-09-PRE	34855
Lasmigona compressa (Creek Heelsplitter) #33 T120N R43W S12, T120N R43W S1, T120N R43W S16; Swift County		SPC		SGCN	S 3	G5	2007-08-21	24774
Ligumia recta (Black Sandshell) #77 T120N R43W S30, T120N R43W S31; Lac Qui Parle, Swift County		SPC		SGCN	S 3	G4G5	1989-06-20	17071
Ligumia recta (Black Sandshell) #161 T120N R43W S30, T120N R43W S15, T120N R43W S16, T120N R43W S29, T []; Swift County		SPC		SGCN	S 3	G4G5	2007-08-21	24782
<u>Oarisma poweshiek</u> (Poweshiek Skipperling) _{#74} T119N R43W S6, T119N R43W S5, T120N R43W S31, T120N R43W S32; Lac Qui Parle County	LE	END		SGCN	S 1	G1	1988-06-25	9258
<u>Oarisma poweshiek</u> (Poweshiek Skipperling) #133 T120N R43W S17, T120N R43W S19, T120N R43W S20, T120N R43W S18; Swift County	LE	END		SGCN	S 1	G1	1997-07-01	22467
<u>Pleurobema sintoxia</u> (Round Pigtoe) #104 T120N R43W S12, T120N R43W S1, T121N R42W S4, T120N R43W S16, T []; Swift County		SPC		SGCN	S 3	G4G5	2007-08-21	29616
<u>Speyeria idalia</u> (Regal Fritillary) #118 T119N R43W S15, T119N R43W S14, T119N R43W S5, T119N R43W S10, T []; Lac Qui Parle Count	у	SPC		SGCN	S 3	G3	1988-06-25	23629
<u>Speyeria idalia</u> (Regal Fritillary) #195 T120N R43W S20; Swift County		SPC		SGCN	S 3	G3	2000-07-10	26769
<u>Truncilla donaciformis</u> (Fawnsfoot) #7 T120N R43W S30; Swift County		THR		SGCN	S2	G5	1997-09-PRE	34854
Animal Assemblage								
Colonial Waterbird Nesting Area (Colonial Waterbird Nesting Site) #998 T120N R43W S30; Lac Qui Parle, Swift County		N/A			SNR	GNR	1977	25422

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 #
Animal Assemblage		Status	,	,	Status			Date	
<u>Freshwater Mussel Concentration Area</u> (Mussel Sampling Site) #94 T120N R43W S30; Lac Qui Parle, Swift County			N/A			SNR	G3	1989-06-20	13792
Vascular Plant									
<u>Astragalus flexuosus var. flexuosus</u> (Slender Milk-vetch) #27 T120N R43W S27, T120N R43W S28; Swift County			SPC			S 3	G5T5	1985-07-23	3618
Bacopa rotundifolia (Waterhyssop) #12 T120N R44W S36, T120N R44W S25; Lac Qui Parle County			THR			S2	G5	1985-06-26	3711
Elatine triandra (Three Stamened Waterwort) #10 T119N R43W S6, T120N R43W S31, T120N R43W S32; Lac Qui Parle Coun	ty		SPC			S 3	G5	1985-06-15	4578
Native Plant Community (This may not represent a complete list. Also see MCBS Native Plant Communities at http://deli.dnr.state.mn.us.)									
Dry Hill Prairie (Southern) Type #12 T120N R43W S32; Lac Qui Parle County	(NPC Code: UPs13d)		N/A			S2	GNR	1986	6708
Dry Hill Prairie (Southern) Type #124 T120N R43W S30, T120N R44W S36, T120N R43W S31, T120N R44W S25 County	(NPC Code: UPs13d) ; Lac Qui Parle, Swift		N/A			S2	GNR	1985-06-24	9589
<u>Dry Hill Prairie (Southern) Type</u> #257 T120N R43W S21, T120N R43W S29, T120N R43W S28, T120N R43W S20	(NPC Code: UPs13d) ; Swift County		N/A			S2	GNR	1999-09-16	27141
Dry Hill Prairie (Southern) Type #309 T120N R43W S31, T120N R43W S32; Lac Qui Parle County	(NPC Code: UPs13d)		N/A			S2	GNR	1985-06-15	6707
Mesic Prairie (Southern) Type #14 T120N R43W S31; Lac Qui Parle County	(NPC Code: UPs23a)		N/A			S2	GNR	1985-06-24	6705
Mesic Prairie (Southern) Type #62 T120N R44W S13; Big Stone County	(NPC Code: UPs23a)		N/A			S2	GNR	1985-07-27	8342
Mesic Prairie (Southern) Type #105 T120N R43W S18; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1974-09	1307

Rare Features Database:		F. J	MAT	D., 6	GOON	64-4-	Clabal	LastOba	
Element Name and Occurrence Number		Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Native Plant Community (This may not represent a complete list. Also	see MCBS Native Plant Co	ommunities a	t http://d	eli.dnr.sta	ate.mn.us.))			
Mesic Prairie (Southern) Type #328 T120N R44W S13, T120N R43W S18; Big Stone, Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-16	27095
Mesic Prairie (Southern) Type #330 T120N R43W S28; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-15	27093
Mesic Prairie (Southern) Type #331 T120N R43W S21, T120N R43W S28; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-15	27092
<u>Mesic Prairie (Southern) Type</u> #332 T120N R43W S17, T120N R43W S21, T120N R43W S16, T120N R43W S2	(NPC Code: UPs23a) 20; Swift County		N/A			S2	GNR	1999-09-16	27094
Mesic Prairie (Southern) Type #333 T120N R43W S17; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	2000-07-10	27102
Mesic Prairie (Southern) Type #334 T120N R43W S21; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-15	27089
<u>Mesic Prairie (Southern) Type</u> #335 T120N R43W S27, T120N R43W S21, T120N R43W S22, T120N R43W S2	(NPC Code: UPs23a) 28; Swift County		N/A			S2	GNR	1999-09-15	27090
Mesic Prairie (Southern) Type #337 T120N R43W S21, T120N R43W S22; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	2000-05-23	27088
Mesic Prairie (Southern) Type #346 T120N R43W S17, T120N R43W S20; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	2000-07-10	27137
Mesic Prairie (Southern) Type #347 T120N R43W S17; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-08	27139
Mesic Prairie (Southern) Type #348 T120N R43W S21, T120N R43W S20; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	2000-07-10	27136
<u>Mesic Prairie (Southern) Type</u> #349 T120N R43W S21, T120N R43W S29, T120N R43W S28, T120N R43W S2	(NPC Code: UPs23a) 20; Swift County		N/A			S2	GNR	1999-09-16	27138
Mesic Prairie (Southern) Type #350 T120N R43W S17, T120N R43W S20; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	2000-07-10	27135

Rare Features Database:						G	~		
Element Name and Occurrence Number		Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Native Plant Community (This may not represent a complete list. Also see MCBS Native Plant Communities at http://deli.dnr.state.mn.us.)									
<u>Mesic Prairie (Southern) Type</u> #351 T120N R43W S20; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-08	27140
<u>Mesic Prairie (Southern) Type</u> #353 T120N R43W S19, T120N R43W S18; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-16	27096
<u>Mesic Prairie (Southern) Type</u> #355 T120N R43W S17, T120N R43W S19, T120N R43W S20, T120N R43W S18	(NPC Code: UPs23a) ; Swift County		N/A			S2	GNR	1999-09-16	27123
<u>Mesic Prairie (Southern) Type</u> #356 T120N R43W S17, T120N R43W S18; Swift County	(NPC Code: UPs23a)		N/A			S2	GNR	1999-09-15	27122
<u>Mesic Prairie (Southern) Type</u> #357 T120N R43W S17, T120N R43W S19, T120N R43W S20, T120N R43W S18	(NPC Code: UPs23a) ; Swift County		N/A			S2	GNR	1999-09-15	27121
Mesic Prairie (Southern) Type #359 T120N R43W S21; Swift County	(NPC Code: UPs23a)		N/A			S 2	GNR	2000-09-20	27091
<u>Mesic Prairie (Southern) Type</u> #383 T120N R44W S36, T120N R44W S25; Lac Qui Parle County	(NPC Code: UPs23a)		N/A			S2	GNR	1985-06-26	6699
<u>Mesic Prairie (Southern) Type</u> #384 T120N R44W S36, T120N R44W S25; Lac Qui Parle County	(NPC Code: UPs23a)		N/A			S2	GNR	1985-06-26	6703
<u>Mesic Prairie (Southern) Type</u> #387 T120N R43W S30, T120N R44W S36, T120N R43W S31, T120N R44W S25	(NPC Code: UPs23a) ; Lac Qui Parle County		N/A			S2	GNR	1985-06-26	6704
<u>Mesic Prairie (Southern) Type</u> #395 T120N R43W S31; Lac Qui Parle County	(NPC Code: UPs23a)		N/A			S2	GNR	1987-09-14	6706
Mesic Prairie (Southern) Type #397 T119N R43W S6, T120N R43W S31; Lac Qui Parle County	(NPC Code: UPs23a)		N/A			S2	GNR	1985-06-15	6702
<u>Mesic Prairie (Southern) Type</u> #398 T119N R43W S6, T119N R43W S5, T120N R43W S31, T120N R43W S32; L	(NPC Code: UPs23a) ac Qui Parle County		N/A			S2	GNR	1985-07-24	6700

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.

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

1 Element Occurrence or 2, based on minimum separation distance and barriers to movement.