



Formal Natural Heritage Review - Cover Page

See next page for results of review. A draft watermark means the project details have not been finalized and the results are not official.

Project Name: Boswell Solar Project

Project Proposer: Minnesota Power

Project Type: Power, Solar

Project Type Activities: Tree Removal

TRS: T55 R26 S18, T55 R26 S5, T55 R26 S6, T55 R26 S7, T55 R26 S8, T55 R26 S9, T55 R27 S1, T55 R27 S12, T55 R27 S13, T55 R27 S2

County(s): Itasca

DNR Admin Region(s): Northeast

Reason Requested: PUC Site or Route Application

Project Description: The Project is an up to 85-megawatt alternating current (MWac) photovoltaic (PV) solar energy generating facility, a 230 kilovolt (kV) transmission line ...

Existing Land Uses: Based on the National Landcover Database, landcover within the Project consists predominantly of cultivated cropland/hay pastureland and forest, including ...

Landcover / Habitat Impacted: Land within the Site will convert from existing landcover types to solar energy infrastructure for the life of the Project.

Waterbodies Affected: Wetlands may experience temporary impacts during construction. The Gen-Tie Line will cross Blackwater Lake but no structures would be placed within the lake.

Groundwater Resources Affected: No impacts to groundwater are anticipated from the project.

Previous Natural Heritage Review: No

Previous Habitat Assessments / Surveys: No

SUMMARY OF AUTOMATED RESULTS

Category	Results	Response By Category
Project Details	Comments	Tree Removal - Recommendations
Ecologically Significant Area	Comments	MBS Sites - Recommendations Potential RNC - Will Require Consultation NPCs - Recommendations Lakes - Recommendations
State-Listed Endangered or Threatened Species	No Comments	No Further Review Required
State-Listed Species of Special Concern	Comments	Recommendations
Federally Listed Species	No Records	Visit IPaC For Federal Review



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

August 6, 2024

Project ID: MCE #2024-00660

Jessica Butler
Barr Engineering Company
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435

RE: Automated Natural Heritage Review of the proposed Boswell Solar Project
See Cover Page for location and project details.

Dear Jessica Butler,

As requested, the above project has been reviewed for potential effects to rare features. Based on this review, the following rare features may be adversely affected by the proposed project:

Project Type and/or Project Type Activity Comments

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed below, all of Minnesota's bats, including the federally endangered northern long-eared bat ([*Myotis septentrionalis*](#)), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, the DNR recommends that tree removal be avoided from June 1 through August 15.

Ecologically Significant Area

- The Minnesota Biological Survey (MBS) has identified one or more Sites of Biodiversity Significance within or adjacent to the project boundary. 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. Factors taken into account during the ranking process include the number of rare species documented within the site, the quality of the native plant communities in the site, the size of the site, and the context of the site within the landscape.

High or Moderate MBS Site - One or more MBS Sites of Biodiversity Significance ranked High or Moderate may be impacted by the proposed project. 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. 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. The DNR recommends that the project be designed to avoid impacts to these ecologically significant areas. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:

- Retain a buffer between proposed activities and the MBS Site,
 - Minimize project footprint within the MBS Site,
 - Operate within already-disturbed areas,
 - Minimize vehicular disturbance within the MBS Site,
 - Do not park equipment or stockpile supplies within the MBS Site,
 - Do not place spoil within the MBS Site,
 - Inspect and clean equipment prior to operating within the MBS Site, and follow other recommendations to [prevent the spread of invasive species](#),
 - Conduct the work under frozen ground conditions,
 - Use effective erosion prevention and sediment control measures,
 - Revegetate disturbed soil with native [seed mixes](#) suitable to the local habitat as soon after construction as possible,
 - Use only weed-free mulches, topsoils, and seed mixes.
- One or more DNR Native Plant Communities have been identified within or adjacent to the proposed project (for a list of all the native plant community types, please run a Conservation Planning Report; spatial data can be viewed on the Explore Page). DNR Native Plant Community types and subtypes are given a [Conservation Status Rank](#) that reflects the relative rarity and endangerment of the community type in Minnesota. Conservation Status Ranks range from S1 (critically imperiled) to S5 (secure, common, widespread, and abundant).

Rare Native Plant Communities - One or more rare native plant communities may be impacted by the proposed project. Native plant communities with a Conservation Status Rank of S1 through S3 are considered rare in the state, and the DNR recommends avoidance of these ecologically significant areas. In addition, please note that native plant communities with a Conservation Status Rank of S1 through S3 may qualify as Rare Natural Communities (RNC) under the Wetland Conservation Act (WCA). If the proposed project includes a wetland replacement plan under WCA, please contact your [DNR Regional Ecologist](#) for further evaluation. Please visit [WCA Program Guidance and Information](#) for additional information, including the [Rare Natural Communities Technical Guidance](#).

Not Rare - One or more native plant communities with Conservation Status Ranks of S4 to S5 may be impacted by the proposed project.

- One or more Lakes of Biological Significance may be impacted by the proposed project. [Lakes of Biological Significance](#) are high quality lakes based on the aquatic plant, fish, bird, or amphibian communities present within the lake. To be included in this layer, a lake only needs to meet the criteria for one of these four community types. The lake is assigned a biological significance of Outstanding, High, or Moderate based on the community with the highest quality. Given the ecological significance of these lakes, disturbance should be minimized during construction, operation, and maintenance activities. Actions to avoid or minimize disturbance include, but are not limited to, the following recommendations:
 - Avoid the removal of shoreline vegetation,
 - Implement stringent/redundant erosion prevention and sediment control practices,
 - Prevent the spread of invasive species,

- Use only herbicides approved for application within shoreline/riparian areas,
- Minimize use of fertilizer.

State-Listed Endangered or Threatened Species

No state-listed endangered or threatened species have been documented in the vicinity of the project.

State-Listed Species of Special Concern

Taxonomic Group	Common Name	Scientific Name	Water Regime	Habitat	Federal Status
Vascular Plant	Small Green Wood Orchid	Platanthera clavellata	wetland	Forested Rich Peatland, Forested Acid Peatland	
Vertebrate Animal	Peregrine Falcon	Falco peregrinus		Cliff	

- The above table identifies state-listed species of special concern that have been documented in the vicinity of your project. If suitable habitat for any of these species occurs within your project footprint or activity impact area, the project may negatively impact those species. To avoid impacting state-listed species of special concern, the DNR recommends modifying the location of project activities to avoid suitable habitat or modifying the timing of project activities to avoid the presence of the species. Please visit the [DNR Rare Species Guide](#) for more information on the habitat use of these species and recommended measures to avoid or minimize impacts. Species-specific comments, if any, appear below.

Federally Listed Species

The Natural Heritage Information System does not contain any records for federally listed species within one mile of the proposed project. Please note, however, that not all federally listed species are tracked within the NHIS. To ensure compliance with federal law, please conduct a federal regulatory review using the U.S. Fish and Wildlife Service's online [Information for Planning and Consultation \(IPaC\) tool](#).

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 and the project description provided on the cover page. If project details change or construction has not occurred within one year, please resubmit the project for review before initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. For information on the environmental review process or other natural resource concerns, you may contact your [DNR Regional Environmental Assessment Ecologist](#).

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

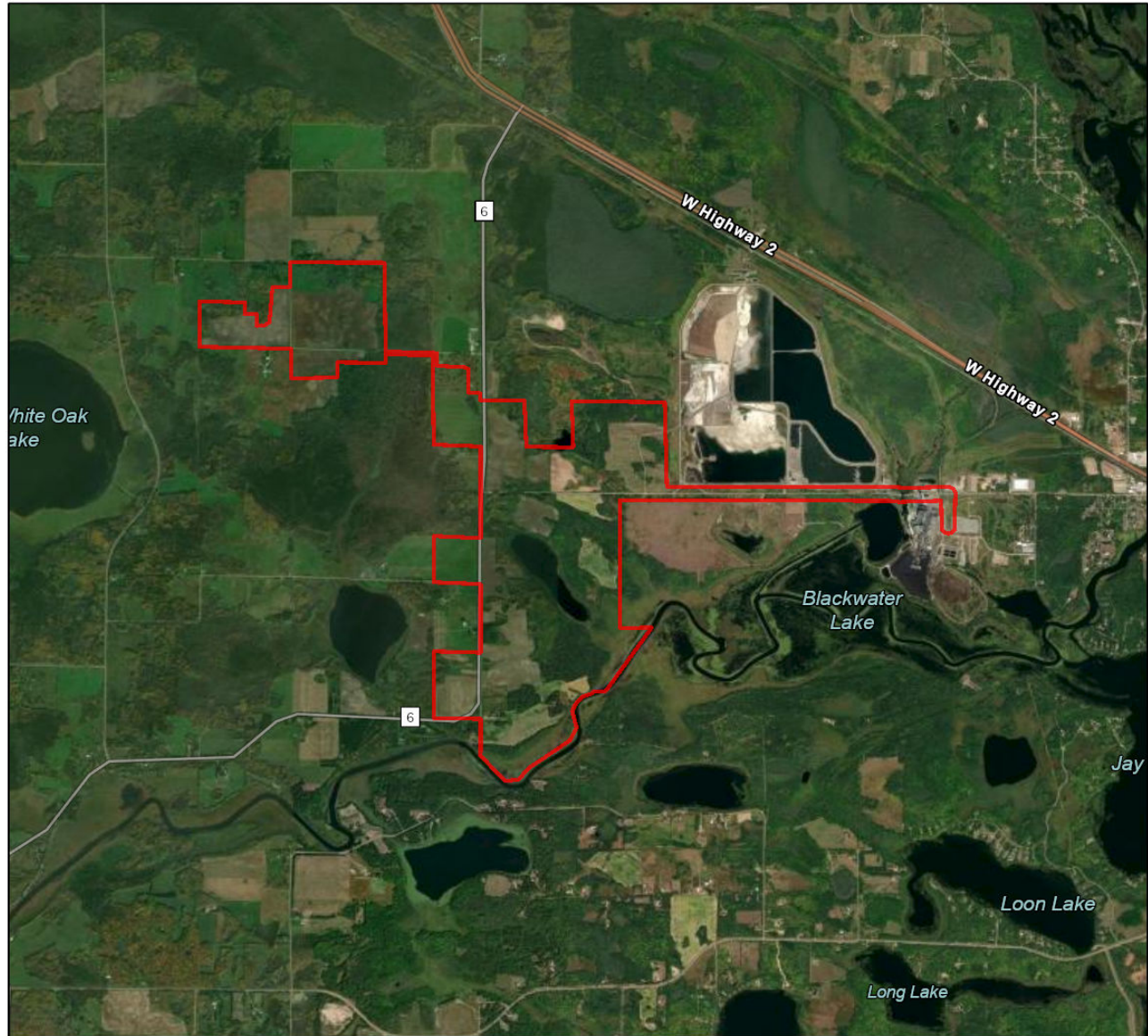
Sincerely,

Jim Drake Jim Drake
Natural Heritage Review Specialist
James.F.Drake@state.mn.us

Links: USFWS Information for Planning and Consultation (IPaC) tool
[Information for Planning and Consultation \(IPaC\) tool](#)
DNR Regional Environmental Assessment Ecologist Contact Info
https://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html

Boswell Solar Project

Aerial Imagery With Locator Map



0 0.35 0.7 1.4 2.1 2.8 Miles

Project_Boundary

Project Type: Power, Solar

Project Size (acres): 1,430.47

County(s): Itasca

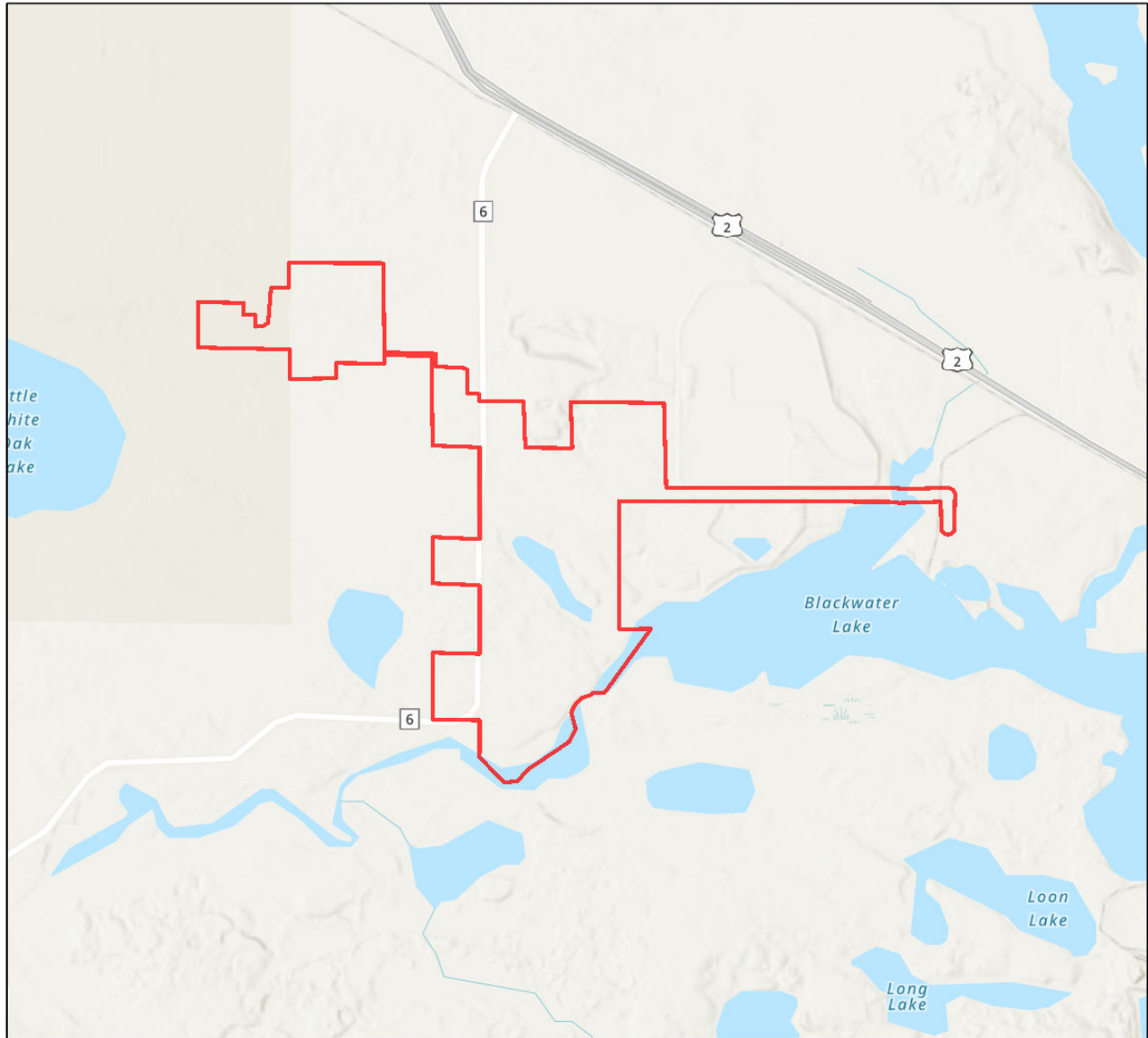
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Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Earthstar Geographics
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,



Boswell Solar Project

USA Topo Basemap With Locator Map



0 0.35 0.7 1.4 2.1 2.8 Miles

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