

September 25, 2025

Ms. Sasha Bergman

Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: Vegetation Management Plan
Boswell Solar Project
PUC Docket No. E-015/GS-24-425; E-015/TL-24-426
OAH Docket No. 24-2500-40659

Ms. Bergman:

PUC EIP staff, on behalf of the interagency Vegetation Management Planning Working Group (VMPWG), respectfully submits comments on the Vegetation Management Plan (VMP) proposed by Minnesota Power.

The VMPWG has reviewed the draft VMP for the proposed Boswell Solar Project (project) included as Appendix F of the Joint Site Permit Application filed December 30, 2024.¹ The VMPWG does not recommend any action by the Minnesota Public Utilities Commission (Commission) at this time but is providing comments to facilitate transparency in the record as the VMPWG works with Minnesota Power to arrive at a VMP that is adequate to meet pre-construction compliance filing requirements.

Overall, the plan for site restoration and implementation appears to be achievable to meet the anticipated permit conditions and the applicant's objectives to establish regionally appropriate vegetation that:

- Provides large areas of native perennial vegetation with diverse selections of grasses and forbs compatible with project operations.
- Stabilizes soils and improves soil health while benefitting native pollinators by using plant species that provide habitat and nectar sources throughout the growing season.
- Minimizes invasive species, noxious weeds, and other undesirable species in the site.
- Reduces the need for long-term maintenance and invasive species management efforts.

The VMPWG is committed to working with applicants and permittees to ensure that site restoration is successful and meets the goals laid out in the management plan. The VMPWG provides these specific

¹ Minnesota Power, *Joint Site Permit Application: Boswell Solar Project. Appendix F: Vegetation Management Plan*. December 30, 2024, eDocket No. [202412-213417-09](#).

comments on the plan and recommends that Minnesota Power address these comments in its pre-construction VMP submittal:

Management Areas

- Clarify if the wetland vegetation management unit (VMU) will include constructed stormwater basins or stormwater wetlands.
- Include a description of how reed canary grass will be eradicated from soils to properly prepare the seedbeds. Establishing native seed mixes will hinge on eliminating this aggressive invasive species.
- The applicant is advised to coordinate the with the VMPWG to facilitate a review of the surrounding upland VMU seed mix when the design has been finalized.
- All vegetation management areas must be described throughout the VMP. The applicant has identified short- and long-term management objectives, described establishment, management, and monitoring procedures, and provided seed mixes for the array management area and the buffer management area. The applicant has indicated other VMUs that will not require seeding, but may require management, such as within wetlands. Additional information about vegetation management is also needed for the Gen-Tie line ROW area and stormwater basin areas.

Site Preparation

- The different vegetation management areas may require different site preparation methods due to characteristics such as soil properties or temporary saturation. The applicant should clarify specific site preparation techniques and/or equipment that may be required in some management areas or under certain circumstances. Site preparation methods for all management areas should be discussed, including the Gen-Tie line ROW and stormwater basins.
- The VMPWG recommends that the applicant conduct soil testing to assess the presence of herbicide residue. In addition to soil testing, the applicant is advised to verify the chemical application history of the site, using both assessments to determine if special methods will be necessary to allow for successful native vegetation establishment. A temporary cover mix may be helpful to help build soil structure and biology prior to seeding permanent native seed mixes. If chemical carryover is likely and native seeding cannot be delayed due to construction schedules, supplemental seeding may play an important role in subsequent years in areas with poor establishment.
- It is generally advised to avoid the use of mulch or erosion control materials that contain plastic netting, including within hydroseed mulch. Using straw mulch to cover topsoil is a wildlife friendly choice.

Seed Installation

- The applicant has summarized steps that will be taken and equipment that will be used to protect soil health during construction and site preparation, such as compaction prevention, soil and subsoil handling techniques, and the use of cover crops. Additional information is needed

about the potential use of cover crops. Cover crops are often used to stabilize soils and reduce weeds during site restoration. In addition to suppressing weeds, cover crops also can suppress and reduce germination of desired species. The applicant is advised to consult with the VMPWG when integrating cover crops with seed mixes.

- The VMP includes a table of vegetation management activities. The site prep section should also include a table of the schedule/sequence of planned construction, planting, and management activities. Each step of the sequence should be listed along with a summary of what the step entails, a description of when the step will occur in the sequence, and the appropriate month/season to implement the step.
- If hydroseeding is used, native seed should be applied in water first before a tackifier. Native seed should not be mixed in the tackifier, as this can inhibit seed to soil contact.

Seed Mixes

- Once design has been finalized, seed mixes should be provided to the working group for all management areas including the surrounding upland VMU.
- The applicant should describe the relevant characteristics of each seed mix regarding plant species composition, diversity, suitability, and characteristics.
- The project site contains large areas of soils classified as poorly drained or very poorly drained, creating a likelihood that these soils will retain moisture. The applicant is highly recommended to include a second seed mix to be used in the areas of moist soils in order to ensure successful establishment and growth of vegetation throughout the site. [BWSR's Solar Moist Soils](#) seed mix is an example that could be used in the site, or as a model to develop a seed mix.
- The applicant has indicated that it will approve any seed mix substitutions in order to remain consistent with the stated goals and objectives of the VMP. The applicant is advised to provide a list of seed mix substitutions that were selected to the VMPWG for review, in order to ensure that original vegetation management objectives will be met. This will allow for the VMP to continue as planned in the case that there are shortages of individual species. In the event that substitutions are to be used, EIP staff and partner agencies request that the applicant provide the list of final substitutions to the VMPWG to review prior to seeding. The goal is to ensure that the ecological niche and guild of a plant species is retained when substitutions are necessary.
- The VMPWG recommends the applicant use seed mixes that meet the DNR's high-diversity standards, as high diversity plantings have a better chance at long-term health and self-sustainability compared to mid-diversity plantings. In addition, high-diversity seed mixes provide maximal ecosystem benefits.

Visual Screening

- The applicant should clarify whether vegetative screening will be utilized for this project, as the use of vegetative screening will require the development of a visual screening plan. The visual screening plan should provide a complete list of the species to be planted and the size of plant material, summarize the planned planting methods for all trees and shrubs, and include guidance for ensuring that plants are installed using best practices. Native species should be used for vegetative screening. The visual screening plan can be referenced in the VMP or included as an appendix to the plan.

Mowing and Haying

- Ideally, mowing should be done in response to shading needs rather than on a consistent schedule. This allows plants to flower for pollinators and allows for the overwintering of some pollinators in plant stems. The applicant should consider leaving a percentage of dormant plants intact for overwintering pollinators.
- Mowing should be timed to avoid impacts to wildlife, such as ground-nesting birds and butterflies. The applicant should indicate any restrictions for mowing and haying in compliance with listed species requirements or special conditions. Measures can be taken to avoid destroying ground-nesting bird nests during the nesting season (May 15 – August 1). If haying is utilized, it should occur after the nesting season for grassland birds (May 15 – August 1) and should be done at a raised height.
- For mechanical mowing and haying, hayed/mowed vegetation should be bagged and removed off site to prevent smothering new growth.

Grazing

- The applicant indicated that if grazing is to be utilized, a grazing plan will be developed. The plan should summarize the goals of grazing, the type and number of animals to be used, plans for fencing, the time and duration of grazing, and the decision-making process for ensuring that vegetation is not over-grazed. The grazing plan should include adequate rest after defoliation of at least 30 calendar days and should influence refugia, so the entire site is not defoliated at one time. Drought contingency plans should be developed to avoid overgrazing during extreme conditions.

Herbicide Use and Weed Control

- The VMP includes a list of existing populations of vegetation, including invasive species or noxious weeds that are already known to be present on site. The plan should also describe how different species types will be removed from the various VMUs (i.e., the removal of reed canary grass in the wetland VMU).

- Mowing can increase the presence of noxious weeds, and the mower can spread these species throughout the site. The use of mowing to prevent the development of noxious, invasive, and woody plants should be approached with caution.
- The applicant must provide additional information about anticipated herbicide use, including herbicide type, surfactant rate, and frequency.
- Managing weeds is important in establishing native vegetation. Weed control through herbicide management should only include spot treatments, not broadcast spray, and it is recommended that spot treatments be required, not preferred, as a management technique. The applicant is advised that widespread application of herbicides may act as a pre-emergent and reduce germination of desired vegetation. In this VMP, extended use of temporary cover crop may be considered. This can reduce the potential for spray drift to impact neighboring plant communities.
- The applicant should provide additional information about control of trees and shrubs, including the use of both mechanical and chemical techniques and the conditions in which said techniques are appropriate. Include details on how woody materials, brush, and stumps will be removed from the site. Describe the disposal method of removed woody vegetation.

Management

- Management strategies are provided for the establishment and long-term management phases within the array and buffer management areas. Management information should also be provided for the Gen-Tie line ROW area and stormwater basin areas.
- Additional information about the removal of invasive species in all VMUs is necessary, including the removal of reed canary grass. An anticipated management schedule is provided that describes project phases and the related vegetation establishment and management tasks. This schedule can be updated to include specific management strategies for each VMU.

Monitoring and Reporting

- Information should be provided about the frequency of site monitoring to identify invasive species or other issues with vegetation establishment.
- The applicant indicates that an annual report will be created and submitted as required to relevant state and local agencies. The applicant is advised to submit their annual reports to the Commission. An annual monitoring report allows for VMP revisions based on any shortcomings or challenges faced during the reporting period. The annual report will be key to keeping the VMP “alive” and on track for successful implementation and long-term success. The applicant describes annual monitoring and reporting that will be conducted throughout the project lifetime. Annual monitoring reports for each growing season should be filed with the Commission on a yearly basis.

Habitat Friendly Solar Program

- The VMPWG recommends that the applicant enroll this project in the state's [Habitat Friendly Solar Program](#). Enrollment in the program will highlight the habitat establishment at the project and make the site eligible for MRETS credits.

Updates to the Vegetation Management Plan

- The VMPWG understands that Minnesota Power is still finalizing aspects of the VMP and requests that Minnesota Power continue to coordinate with EIP staff and other state agencies as the VMP is finalized prior to construction.

In summary, EIP staff recommend that the applicant continue to coordinate with the VMPWG as it finalizes the vegetation management plan, including the development of diverse, native seed mixes and substitutions suitable for the site, refinement of the installation, management, and monitoring plans, and clarification of project-specific details and management units. The VMPWG looks forward to the successful site restoration of the Boswell Solar Project. The VMPWG will provide additional review and recommendations to the Commission as part of EIP staff pre-construction compliance review.

The VMPWG appreciates the opportunity to comment on the proposed Boswell Solar Project.

Sincerely,



Lauren Agnew
PUC EIP Environmental Review Manager



Jessica Livingston
PUC EIP Environmental Review Manager

CC:

Vegetation Management Planning Working Group

Rich Davis, PUC EIP, Environmental Review Manager

Suzanne Steinhauer, PUC EIP, Environmental Review Manager

Emily Johnson, PUC EIP, Environmental Review Manager

Tina Markeson, DOT, Roadside Vegetation Management Unit Supervisor

Dan Shaw, BWSR, Senior Ecologist and Vegetation Specialist

Erin Loeffler, BWSR, Ecological Science Conservationist

Jason Beckler, BWSR, Ecological Science Conservationist

Becky Marty, DNR, Regional Ecologist – Northwest Region

Owen Baird, DNR, Regional Environmental Assessment Ecologist – Northwest Region

Megan Benage, DNR, Regional Ecologist – South Region

Genevieve Brand, DNR, Assistant Regional Ecologist – South Region

Haley Byron, DNR, Regional Environmental Assessment Ecologist – South Region

Melissa Collins, DNR, Regional Environmental Assessment Ecologist – Central Region

Jessica Parson, DNR, Regional Environmental Assessment Ecologist – Northeast Region

Martin Donovan, DNR, Energy Review Planner

Samantha Bump, DNR, Energy Review Planner

Todd Smith, MPCA, Stormwater Engineer

Stephan Roos, MDA, Environmental Planner

Sam Lobby, PUC, Public Advisor