Appendix D

**Typical Structure Types** 





LOOKING AHEAD MONOPOLE DEAD END STRUCTURE STANDARD SPAN



LOOKING AHEAD SINGLE-CIRCUIT MONOPOLE TANGENT STRUCTURE STANDARD SPAN



Appendix E

**Open House Meeting Invitations** 

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## PLEASE JOIN US TO LEARN ABOUT THE ALEXANDRIA-BIG OAKS TRANSMISSION LINE PROPOSAL

Open houses scheduled to provide information and answer questions about transmission line expansion











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## PLEASE JOIN US TO LEARN ABOUT THE ALEXANDRIA-BIG OAKS TRANSMISSION LINE PROPOSAL

Open houses scheduled to provide information and answer questions about transmission line expansion

Xcel Energy, along with other utility partners, is proposing new transmission line infrastructure that will improve electric reliability in the region, reduce congestion on the transmission system, and increase access to new low-cost renewable energy in the coming years.

The Alexandria-Big Oaks transmission line proposal would add a second transmission circuit on the open side of the existing CapX2020 transmission line structures between Alexandria and Monticello, Minnesota, along with new structures to connect to the new Big Oaks substation, which will be built near Xcel Energy's Sherco power plant.

#### CAPX2020 HISTORY

When originally approved, regulators and utilities believed the transmission grid would eventually need expansion. Rather than build an entirely new transmission line, the MN Public Utilities Commission directed CapX2020 to build the Fargo-St. Cloud/Monticello line capable of adding a 'second circuit,' which would reduce the amount of future infrastructure. The utilities involved in this project include Great River Energy, Minnesota Power, Missouri River Energy Services, Otter Tail Power Company, and Xcel Energy.

#### **BIG STONE SOUTH-ALEXANDRIA**

The Big Stone South-Alexandria segment will connect a new 345-kV transmission line between the existing Big Stone South substation in northeast South Dakota and the Alexandria substation near Alexandria, Minnesota. Otter Tail Power Company and Missouri River Energy Services, the companies leading this portion of the project, will work closely with landowners, communities, and local officials to identify potential routes and develop a Route Permit application that will be overseen by the Minnesota Public Utilities Commission.

#### **OPEN HOUSE SCHEDULE** Tuesday, April 11 Alexandria 5637 Highway 29 South 4:00-7:00 p.m. Holiday Inn Alexandria, MN 56308 Wednesday, April 12 Becker Community 11500 Sherburne Ave. 4:00-7:00 p.m. Center Becker, MN 55308 Thursday, April 13 Link posted at Virtual open house 1:00 p.m. and 6:00 p.m. AlexandriatoBigOaks.com

#### **PROJECT SCHEDULE**

**Second Quarter 2023:** Open houses to discuss project and new route options to connect to the Big Oaks substation near the existing Sherco power plant

**Third Quarter 2023:** Certificate of Need and Route Permit filed with the Minnesota Public Utilities Commission (MN PUC)

**Third Quarter 2023-First Quarter 2024:** MN PUC reviews Certificate of Need and Route Permit; decision expected in Summer/Fall 2024

**2024-2025:** Engineering and design; easement negotiations with landowners

**2025-2030:** Add second circuit to transmission line; build new infrastructure, including Big Oaks substation and expand existing Alexandria substation

#### FOR MORE INFORMATION: AlexandriatoBigOaks.com or BigStoneSouthtoAlexandria.com

Phone: 888-231-7068

Email: AlexandriatoBigOaks@xcelenergy.com

Appendix F

Draft - Agricultural Impact Mitigation Plan

### DRAFT AGRICULTURAL IMPACT MITIGATION PLAN

ALEXANDRIA TO BIG OAKS 345KV TRANSMISSION LINE PROJECT

MPUC Docket No. E002/TL-23-159

#### DRAFT AGRICULTURAL IMPACT MITIGATION PLAN

#### ALEXANDRIA TO BIG OAKS 345KV TRANSMISSION LINE PROJECT

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#### DRAFT AGRICULTURAL IMPACT MITIGATION PLAN

#### ALEXANDRIA TO BIG OAKS 345KV TRANSMISSION LINE PROJECT

#### Purpose

This Agricultural Impact Mitigation Plan ("AIMP" or 'the plan') was developed by Northern States Power Company, doing business as Xcel Energy (Xcel Energy), along with Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail), and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota), together, referred to as "the Utilities". The overall objective of this AIMP is to identify measures the Utilities will take to avoid, mitigate, repair and/or provide compensation for impacts that may result from the construction of a 345 kV electric transmission line on Agricultural Land in Minnesota.

The Project will be jointly owned by Xcel Energy, Great River Energy, Minnesota Power, Otter Tail and Western Minnesota. The Alexandria to Big Oaks 345 kV Transmission Line Project is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.

The construction standards and policies in this plan apply only to construction activities occurring partially or wholly on privately owned Agricultural Land. The measures do not apply to construction activities occurring entirely on public rights-of-way, railroad rights-of-way, publicly owned land, or private land that is not Agricultural Land. The Utilities will, however, adhere to the same construction standards relating to the repair of agricultural tile (Item No. 3 in the AIMP) when tiles are encountered on public highway rights-of-way, railroad rights-of-way, or publicly or privately owned land.

Appendix B of this AIMP applies only to Organic Agricultural Land as described in the National Organic Program Rules, 7 CFR Parts 205.100, 205.202, and 205.101.

Unless the Easement or other agreement, regardless of nature, between the Utilities and the Landowner or Tenant specifically provides to the contrary, the mitigative actions specified in the construction standards and policies set forth in this AIMP will be implemented in accordance with the General Provisions.

#### **General Provisions**

The mitigative actions are subject to change by Landowners or Tenants, provided such changes are negotiated with and acceptable to the Utilities.

Certain provisions of this AIMP require the Utilities to consult with the Landowner and Tenant of a property. The Utilities will engage in a good faith effort to secure the agreement of both Landowner and Tenant in such cases.

Unless otherwise specified, the Utilities will retain qualified contractors to execute mitigative actions. However, the Utilities may negotiate with Landowners or Tenants to carry out the mitigative actions that Landowners or Tenants wish to perform themselves.

Mitigative actions employed by the Utilities pursuant to this AIMP, unless otherwise specified in this AIMP or in an Easement or other agreement negotiated with an individual Landowner or Tenant, will be implemented within 45 days following completion of Final Clean-up on an affected property, weather permitting, or unless otherwise delayed by mutual agreement between Landowner or Tenant and Utility. Temporary repairs will be made by the Utilities during construction as needed to minimize the risk of additional property damage or interference with the Landowner's or Tenant's access to or use of the property that may result from an extended time period to implement mitigative actions.

The Utilities will implement the mitigative actions contained in this AIMP to the extent that they do not conflict with the requirements of any applicable federal and/or state rules and regulations and other permits and approvals that are obtained by the Utilities for the project or they are not determined to be unenforceable by reason of other requirements of federal and state permits issued for the project. To the extent a mitigative action required by this agreement is determined to be unenforceable in the future due to requirements of other federal or state permits issued for the project, the Utilities will so inform the Landowner or Tenant and will work with them to develop a reasonable alternative mitigative action.

Prior to the construction of the transmission line, the Utilities will provide each Landowner and Tenant with a telephone number and address which can be used to contact the Utilities, both during and following the completion of construction, regarding the agricultural impact mitigation work which is performed on their property or other construction-related matter. If the contact information changes at any time before completion of Final Clean-up and/or after the completion of construction, the Utilities will provide the Landowner and Tenant with updated contact information. The Utilities will respond to Landowner and Tenant telephone calls and correspondence within a reasonable time.

The Utilities will use good faith efforts to obtain a written acknowledgement of completion from each Landowner and Tenant upon the completion of Final Clean-up on their respective property.

If any provision of this AIMP is held to be unenforceable, no other provision will be affected by that holding, and the remainder of the AIMP will be interpreted as if it did not contain the unenforceable provision.

#### **Mitigative Actions**

The Utilities will reasonably restore or compensate Landowners and/or Tenants, as appropriate, for damages caused by the Utilities as a result of transmission line construction, and as outlined in this plan. The decision to restore land or compensate Landowners will be made by the Utilities after discussion with the Landowner or Tenant.

#### 1. Pole Placement

During the design of the project, the Utilities' engineering, land rights and permitting staff will work together to address pole placement issues. Utilities' staff will work with Landowners on pole placement. When the preliminary design is complete, the land rights agents will review the staked pole locations with the Landowners.

#### 2. Soil and Rock Removal for Bored Holes

Any excess soil and rock will be removed from the site unless otherwise requested by the Landowner.

#### 3. Damaged and Adversely Affected Tile

The Utilities will contact affected Landowners or Tenants for their knowledge of Tile locations prior to the transmission line's installation. Utilities will make every attempt to probe for Tile if the Landowner does not know if Tile is located in the proposed pole location. Tile that is damaged, cut, or removed as a result of this probe will be immediately repaired. The repair will be reported to the Inspector.

If Tile is damaged by the transmission line installation, the Tile will be repaired in a manner that restores the Tile's operating condition at the point of repair. If Tiles on or adjacent to the transmission line's construction area are adversely affected by the construction of the transmission line, the Utilities will take such actions as are necessary to restore the functioning of the Tile, including the relocation, reconfiguration, and replacement of the existing Tile. The affected Landowner or Tenant may elect to negotiate a fair settlement with the Utilities for the Landowner or Tenant to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile. In the event the Landowner or Tenant chooses to undertake the responsibility for repair, relocation, reconfiguration, or replacement of the damaged Tile, the Utilities will not be responsible for correcting Tile repairs after completion of the transmission line, provided the repairs were made by the Utilities or their agents or designees).

Where the damaged Tile is repaired by the Utilities, the following standards and policies will apply to the Tile repair:

- A. Tiles will be repaired with materials of the same or better quality as that which was damaged. If water is flowing through a damaged Tile, temporary repairs will be promptly installed and maintained until such time that permanent repairs can be made.
- B. Before completing permanent Tile repairs, Tiles will be examined within the work area to check for Tile that might have been damaged by construction equipment. If Tiles are found to be damaged, they will be repaired so they operate as well after construction as before construction began.

- C. The Utilities will make efforts to complete permanent Tile repairs within a reasonable timeframe after Final Clean-up, taking into account weather and soil conditions.
- D. Following completion of the Final Clean-up and damage settlement, the Utilities will be responsible for correcting and repairing Tile breaks, or other damages to Tile systems that are discovered on the Right-of-Way to the extent that such breaks are the result of transmission line construction. These damages are usually- discovered after the first significant rain event. The Utilities will not be responsible for Tile repairs the Utilities have paid the Landowner or Tenant to perform.

#### 4. Installation of Additional Tiles

The Utilities will be responsible for installing such additional Tile and other drainage measures as are necessary to properly drain wet areas on the Right-of-Way caused by the construction of the transmission line.

#### 5. Construction Debris

Construction-related debris and material which are not an integral part of the transmission line, and which have been placed there by the Utilities, will be removed from the Landowner's property at the Utilities' cost. Such material to be removed would include excess construction materials or litter generated by the construction crews.

#### 6. Compaction, Rutting, Fertilization, Liming, and Soil Restoration

- A. Compaction will be alleviated as needed on Cropland traversed by construction equipment. Cropland that has been compacted will be plowed using appropriate deeptillage and draft equipment. Alleviation of compaction of the topsoil will be performed during suitable weather conditions, and must not be performed when weather conditions have caused the soil to become so wet that activity to alleviate compaction would damage the future production capacity of the land as determined by the Agricultural Monitor.
- B. The Utilities will restore rutted land to as near as practical to its pre-construction condition.
- C. If there is a dispute between the Landowner or Tenant and the Utilities as to what areas need to be ripped or chiseled, the depth at which compacted areas should beripped or chiseled, or the necessity or rates of lime, fertilizer, and organic material application, the Agricultural Monitor's opinion will be considered by the Utilities.

#### 7. Damaged Soil Conservation Practices

Soil conservation practices such as terraces and grassed waterways which are damaged by the transmission line's construction, will be restored to their pre-construction condition.

#### 8. Weed Control

On land which is owned by Utilities for substation facilities, the Utilities will work with Landowners if requested on weed control activities outside of the substations with the intent to not allow the spread of weeds onto adjacent Agricultural Land. Any weed control spraying will be in accordance with State of Minnesota regulations.

#### 9. Irrigation Systems

- A. If the transmission line and/or temporary work areas intersect an operational (or soon to be operational) spray irrigation system, the Utilities will establish with the Landowner or Tenant, an acceptable amount of time the irrigation system may be out of service.
- B. If, as a result of the transmission line construction activities, an irrigation system interruption results in crop damages, either on the Right-of-Way or off the Right- of-Way, compensation of Landowners and/or Tenants, as appropriate, will be determined as described in section 11 of this AIMP.
- C. If it is feasible and mutually acceptable to the Utilities and the Landowner or Tenant, temporary measures will be implemented to allow an irrigation system to continue to operate across land on which the transmission line is also being constructed. Utilities will work with the Landowner or Tenant to identify a preferable construction time.

#### 10. Temporary Roads

The location of temporary roads to be used for construction purposes will be discussed with the Landowner or Tenant.

- A. The temporary roads will be designed so as to not impede proper drainage and will be built to mitigate soil erosion on or near the temporary roads.
- B. Upon abandonment, temporary roads may be left intact through mutual agreement of the Landowner or Tenant and the Utilities unless otherwise restricted by federal, state or local regulations.
- C. If a temporary road is to be removed, the Agricultural Land upon which the temporary road is constructed will be returned to its previous use and restored to equivalent condition as existed prior to their construction.

#### 11. Construction in Wet Conditions

If it is necessary to construct during wet conditions, and if the Agricultural Monitor believes conditions are too wet for continued construction, damages which may result from such construction will be paid for by the Utilities and/or appropriate restoration will be conducted. Compensation for Landowners and/or Tenants, as appropriate, will be determined as described in section 12 of this AIMP.

# 12. Procedures for Determining Construction-Related Damages and Providing Compensation

- A. The Utilities will develop and put into place a procedure for the processing of anticipated Landowners' or Tenants' claims for construction-related damages. The procedure will be intended to standardize and minimize Landowner and Tenant concerns in the recovery of damages, to provide a degree of certainty and predictability for Landowners, Tenants and the Utilities, and to foster good relationships among the Utilities, Landowners and their Tenants over the long term.
- B. Negotiations between the Utilities and any affected Landowner or Tenant will be voluntary in nature and no party is obligated to follow any particular method for computing the amount of loss for which compensation is sought or paid. The compensation offered is only an offer to settle, and the offer shall not be introduced in any proceeding brought by the Landowner or Tenant to establish the amount of damages the Utilities must pay. In the event the Utilities and a Landowner or Tenant are unable to reach an agreement on the amount of damages, the Landowner or Tenant may seek recourse through mediation.

#### 13. Advance Notice of Access to Private Property

The Utilities will endeavor to provide the Landowner and/or Tenant advanced notice before beginning construction on the property. Prior notice will consist of a personal contact, email, letter or a telephone contact, whereby the Landowner and the Tenant are informed of the Utilities' intent to access the land.

#### 14. Role and Responsibilities of Agricultural Monitor

The Agricultural Monitor will be retained and funded by the Utilities, but will report directly to the MDA, The primary function of the Agricultural Monitor will be to audit the Utilities' compliance with this AIMP. The Agricultural Monitor will not have the authority to direct construction activities and will not have authority to stop construction. The Agricultural Monitor will notify the Utilities' Inspector if he/she believes a compliance issue has been identified. The Agricultural Monitor will have full access to Agricultural Land crossed by the Project and will have the option of attending meetings where construction on Agricultural Land is discussed. Specific duties of the Agricultural Monitor will include, but are not limited to the following:

- 1. Participate in preconstruction training activities sponsored by the Utilities.
- 2. Monitor construction and restoration activities on Agricultural Land for compliance with provisions of this AIMP.
- 3. Report instances of noncompliance to the Utilities Inspector.
- 4. Prepare regular compliance reports and submit to MDA, as requested by the MDA.

- 5. Act as liaison between Landowners and Tenants and MDA, if necessary.
- 6. Maintain a written log of communications from Landowners and/or Tenants regarding compliance with this AIMP. Report Landowner complaints to the Utilities Inspector and/or Right-of-Way representative.
- 7. In disputes between Utilities and a Landowner and/or Tenant over restoration, determine if agricultural restoration is reasonably adequate in consultation with the Utilities Inspector.

#### 15. Qualifications and Selection of Agricultural Monitor

The Agricultural Monitor will have a bachelor's degree in agronomy, soil science or equivalent work experience. The Agricultural Monitor will have demonstrated practical experience with pipeline or electric transmission line construction and restoration on Agricultural Land. Final selection of the Agricultural Monitor will be a joint decision between the MDA and the Utilities.

#### 16. Role of the Utilities Inspector

The Utilities Inspector will:

- 1. Be full-time member of the Utilities inspection team.
- 2. Be responsible for verifying the Utilities compliance with provisions of this AIMP during construction.
- 3. Work collaboratively with other Utilities Inspectors, Right-of-Way agents, and the Agricultural Monitor in achieving compliance with this AIMP.
- 4. Observe construction activities on Agricultural Land on a regular basis.
- 5. Have the authority to stop construction activities that are determined to be out of compliance with provisions of this AIMP.
- 6. Document instances of noncompliance and work with construction personnel to identify and implement appropriate corrective actions as needed.
- 7. Provide construction personnel with training on provisions of this AIMP before construction begins.
- 8. Provide construction personnel with field training on specific topics as needed.

### **Appendix A Definitions**

Agricultural Land	Land that is actively managed for cropland, hayland, or pasture, and land in government set-aside programs
Agricultural Monitor	Monitor retained and funded by the Utilities reporting directly to the
righteuturur iviolition	Minnesota Department of Agriculture ("MDA") and responsible for
	auditing the Utilities' compliance with provisions of this AIMP
Cronland	L and actively managed for growing row crops small grains or hav
Fasement	The agreement(s) and/or interest in privately owned Agricultural I and
Lasement	held by the Utilities by virtue of which it has the right to construct
	operate and maintain the transmission line together with such other rights
	and obligations as may be set forth in such agreement.
Final Clean-up	Transmission line activity that occurs after the power line has been
	constructed. Final Clean-up activities include but are not limited to:
	removal of construction debris, de-compaction of soil as required.
	installation of permanent erosion control structures, final grading, and
	restoration of fences and required reseeding. Once Final Clean-up is
	finished, Landowners will be contacted to settle all damage issues and
	will be provided a form to sign confirming final settlement.
Landowner	Person(s) holding legal title to Agricultural Land on the transmission line
	route from whom the Utilities is seeking, or has obtained, a temporary or
	permanent Easement, or their representatives.
Non-Agricultural Land	Any land that is not "Agricultural Land" as defined above.
Right-of-Way	The Agricultural Land included in permanent and temporary Easements
	which the Utilities acquires for the purpose of constructing, operating
	and maintaining the transmission line.
Tenant	Any Person lawfully renting or sharing land for agricultural production
	which makes up the "Right-of-Way" as defined in this AIMP.
Tile	Artificial subsurface drainage system.
Topsoil	The uppermost horizon (layer) of the soil, typically with the darkest color
	and highest content of organic matter.
Utilities Inspector	Full-time on-site inspector retained by the Utilities to verify compliance
	with requirements of this AIMP during construction of the transmission
	line. The Inspector will have demonstrated experience with transmission
	line construction on Agricultural Land.

#### Appendix B: Mitigative Actions for Organic Agricultural Land

#### Introduction

The Utilities recognize that Organic Agricultural Land is a unique feature of the landscape and will treat this land with the same level of care as other sensitive environmental features. This Appendix identifies mitigation measures that apply specifically to farms that are Organic Certified or farms that are in active transition to become Organic Certified, and is intended to address the unique management and certification requirements of these operations. All protections provided in the Agricultural Impact Mitigation Plan will also be provided to Organic Agricultural Land in addition to the provisions of this Appendix.

The provisions of this Appendix will apply to Organic Agricultural Land for which the Landowner or Tenant has provided to the Utilities a true, correct and current version of the Organic System Plan within 60 days after the signing of the Easement for such land or 60 days after the issuance of a Route Permit to the Utilities by the PUC, whichever is sooner, or, in the event the Easement is signed later than 60 days after the issuance of the Route Permit. The provisions of this Appendix are applicable when the Organic System Plan is provided to the Utilities at the time of the signing of the Easement.

#### **Organic System Plan**

The Utilities recognize the importance of the individualized Organic System Plan (OSP) to the Organic Certification process. The Utilities will work with the. Landowner or Tenant, the Landowner or Tenant's Certifying Agent, and/or a mutually acceptable third-party Organic consultant to identify site-specific construction practices that will minimize the potential for Decertification as a result of construction activities. Possible practices may include, but are not limited to: equipment cleaning, planting a deep0rooted cover crop in lieu of mechanical decompaction, applications of composted manure or rock phosphate, preventing the introduction of disease vectors from tobacco use, restoration and replacement of beneficial bird and insect habitat, maintenance of organic buffer zones, use of organic seeds for any cover crop, or similar measures. The Utilities recognizes that Organic System Plans are proprietary in nature and will respect the need for confidentiality.

#### **Prohibited Substances**

The Utilities will avoid the application of Prohibited Substances onto Organic Agricultural Land. No herbicides, pesticides, fertilizers or seed will be applied unless requested and approved by the Landowner. Likewise, no refueling, fuel or lubricant storage or routine equipment maintenance will be allowed on Organic Agricultural Land. Equipment will be checked prior to entry to make sure that fuel, hydraulic and lubrication systems are in good working order before working on Organic Agricultural Land, these substances will be used in such a way as to prevent them from entering Organic Agricultural Land.

#### **Temporary Road Impacts**

Topsoil and subsoil layers that are removed during construction on Organic Agricultural Land for temporary road impacts will be stored separately and replaced in the proper sequence after the transmission line is installed. Unless otherwise specified in the site-specific plan described above, the Utilities will not use this soil for other purposes, including creating access ramps at road crossings. No topsoil or subsoil (other than incidental amounts) may be removed from Organic Agricultural Land. Likewise, Organic Agricultural Land will not be used for storage of soil from non-Organic Agricultural Land.

#### **Erosion Control**

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement erosion control methods consistent with the Landowner or Tenant's Organic System Plan. On land adjacent to Organic Agricultural Land, the Utilities' erosion control procedures will be designed so that sediment from adjacent non-Organic Agricultural Land will not flow along the Right-of-Way and be deposited on Organic Agricultural Land. Treated lumber, non-organic hay bales, non- approved metal fence posts, etc. will not be used in erosion control on Organic Agricultural Land.

#### Weed Control

On Organic Agricultural Land, the Utilities will, to the extent feasible, implement weed control methods consistent with the Landowner's or Tenant's Organic System Plan. Prohibited Substances will not be used in weed control on Organic Agricultural Land. In addition, the Utilities will not use Prohibited Substances in weed control on land adjacent to Organic Agricultural Land in such a way as to allow these materials to drift onto Organic Agricultural Land.

#### Monitoring

In addition to the responsibilities of the Agricultural Monitor described m the AIMP, the following will apply:

- A. The Agricultural Monitor will monitor construction and restoration activities on Organic Agricultural Land for compliance with the provisions of this appendix and will document any activities that may result in Decertification.
- B. Instances of non-compliance will be documented according to Independent Organic Inspectors Association protocol consistent with the Landowner's Organic System Plan, and will be made available to the MDA, the Landowner, the Tenant, the Landowner's or Tenant's Certifying Agent, the Utilities Inspector and to the Utilities.

If the Agricultural Monitor is responsible for monitoring activities on Organic Agricultural Land, he/she will be trained, at the Utilities' expense, in organic inspection, by the Independent Organic Inspectors Association, unless the Agricultural Monitor received such training during the previous three years.

#### **Compensation for Construction Damages**

The settlement of damages will be based on crop yield and/or crop quality determination and the need for additional restoration measures. Unless the Landowner or Tenant of Organic Agricultural Land and Company agree otherwise, at the Utilities expense, a mutually agreed upon professional agronomist will make crop yield determinations, and the Minnesota Department of Agriculture Fruit and Vegetable Inspection Unit will make crop quality determinations. If the crop yield and/or crop quality determinations indicate the need for soil testing, the testing will be conducted by a commercial laboratory that is properly certified to conduct the necessary tests and is mutually agreeable to the Utilities and the Landowner or Tenant. Field work for soil testing will be conducted by a Professional Soil Scientist or Professional Engineer licensed by the State of Minnesota. The Utilities will be responsible for the cost of sampling, testing and additional restoration activities, if needed. Landowners or Tenants may elect to settle damages with the Utilities in advance of construction on a mutually acceptable basis or to settle after construction based on a mutually agreeable determination of actual damages.

#### **Compensation for-Damages Due to Decertification**

Should any portion of Organic Agricultural Land be Decertified as a result of construction activities, the settlement of damages will be based on the difference between revenue generated from the land affected' before Decertification. and after Decertification so long as a good faith effort is made by the Landowner or Tenant to regain Certification.

#### Definitions

Unless otherwise provided to the contrary in this Appendix, capitalized terms used in this Appendix shall have the meanings provided below and in the AIMP. In the event of a conflict between this Appendix and the AIMP with respect to definitions, the definition provided in this Appendix will prevail but only to the extent such conflicting terms are used in this Appendix. The definition provided for the defined words used herein shall apply to all forms of the words.

Apply	To intentionally or inadvertently spread or distribute any substance onto
	the exposed surface of the soil.
Certifying Agent	As defined by the National Organic Program Standards, Federal
	Regulations 7 CFR Part 205.2.
Decertified or Decertification	Loss of Organic Certification.
Organic Agricultural Land	Farms or portions thereof described in 7 CFR Parts 205.100, 205.202,
	and 205.101.
Organic Buffer Zone	As defined by the National Organic Program Standards, Federal
	Regulations 7 CFR Part 205.2.
Organic Certification or	As defined by the National Organic Program Standards, Federal
Organic Certified	Regulations 7 CFR Part 205.100 and 7 CFR Part 205.101.
Organic System Plan	As defined by the National Organic Program Standards, Federal
	Regulations 7 CFR Part 205.2.
Prohibited Substance	As defined by the National Organic Program Standards, Federal
	Regulations 7 CFR Part 205.600 through 7 CFR 205.605 using the
	criteria provided in 7 USC 6517 and 7 USC 6518

Appendix G

Draft - Vegetation Management Plan

## **Draft Vegetation Management Plan**

## Alexandria to Big Oaks 345 kV Transmission Line Project

Douglas, Stearns, and Todd Counties, Minnesota

August 2023

## **1** INTRODUCTION

The Alexandria to Big Oaks 345 kilovolt (kV) Transmission Line Project (Project) is needed to provide additional transmission capacity, to mitigate current capacity issues, and to improve electric system reliability throughout the region as more renewable energy resources are added to the electric system in and around the region.

The Project involves construction of an approximately 105 to 108-mile long, 345 kV transmission line from the existing Alexandria Substation located in Alexandria, Douglas County to the new Big Oaks Substation that will be constructed on the north side of the Mississippi River in Becker, Sherburne County. The majority of the new 345 kV transmission line from the Alexandria Substation to the Big Oaks Substation follows existing transmission line right-of-way as the Project involves placing this new 345 kV transmission line on existing CapX2020 transmission line structures that were previously permitted and constructed as double-circuit capable as part of the Monticello to St. Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-246) and the Fargo to St. Cloud 345 kV Transmission Line Project (E002, ET2/TL-09-1056).

The Project will be jointly owned by Xcel Energy, Great River Energy, Minnesota Power, Otter Tail Power Company (Otter Tail) and Missouri River Energy Services, on behalf of Western Minnesota Municipal Power Agency (Western Minnesota) (collectively referred to as the Permittees).

In accordance with previously approved Route Permits, the Permittees shall develop a Vegetation Management Plan and submit it to the Commission prior to submitting the Plan and Profile. The purpose of the Vegetation Management Plan is to minimize tree clearing, prevent the introduction of noxious weeds and invasive species, and revegetate disturbed non-cropland areas with appropriate native species in cooperation with landowners and appropriate state, federal and local resource agencies.

This Vegetation Management Plan (Plan) shall:

- Identify measures that will be taken to minimize tree removal and minimize ground disturbance.
- Identify a comprehensive re-vegetation plan for non-cropland areas.
- Identify areas, such as trail crossings, where vegetative screening would minimize aesthetic impacts to the extent that such actions do not violate sound engineering principles or system reliability criteria.
- Identify vegetation control methods to be used during the operation and maintenance of the high voltage transmission line (HVTL).
- Identify areas where landowners or resource agencies have specified no herbicide application.

• Identify measures to prevent the introduction of noxious weeds and invasive species on lands disturbed by construction activities.

## 2 GENERAL RIGHT-OF-WAY VEGETATION MANAGEMENT

The standard practice of Permittees is to clear all woody vegetation within the proposed rightof-way for the new high voltage transmission line that may interfere with or restrict safe and reliable operation of the line. Cleared rights-of-way also provide for ready access or observation for inspection and maintenance purposes. There are limited circumstances when this practice is modified and selective vegetation can remain within the right-of-way provided National Electric Safety Code (NESC) clearance requirements are met. However, there may be select locations within the right-of-way where the retention of some vegetation may be feasible.

In these areas, Permittees may vary their standard procedure and retain some vegetation within the right-of-way to the extent practicable. While some trees may still be removed when necessary for the construction and safe and reliable operation of the facility, unnecessary tree or vegetation removal or destruction in these specific areas within the right-of-way may otherwise be avoided.

#### 2.1 General

The following provides a list of general practices the Permittees will follow to minimize vegetation impacts related to Project construction.

- Use erosion control best management practices (BMPs) to intercept stormwater runoff from areas disturbed as part of clearing operations. Stormwater BMPs are addressed in the Stormwater Pollution Prevention Plan (SWPPP).
- Minimize rutting by using matting materials in wetland areas for all construction activities, including right-of-way clearing activities; or perform work on firm or frozen ground that can support the equipment used.
- Minimize soil disturbance in steeply sloped areas, to the extent possible and/or practicable.
- Limit construction activities, including vegetation removal, to the right-of-way and off right-of-way access.
- Selectively retain some vegetation within the right-of-way where feasible.
- Limit traffic in the right-of-way between transmission structure locations to a single access path to the extent practicable.
  - Use BMPs to minimize the potential for spills or leaks from equipment during construction, including frequent inspections of equipment, requiring portable spill containment kits for construction equipment, ensuring that equipment

operators are present at the nozzle at all times when fueling is in progress, and prohibiting the refueling of equipment in wetlands.

- Avoid placement of staging or laydown areas in wetlands, and immediately adjacent to wetlands to the extent practicable.
- Limit staging and lay-down areas to previously disturbed areas where practicable.
- Locate, design, construct, and maintain access paths to minimize rutting, maintain surface and subsurface water flows in the wetland, and reduce erosion and sedimentation.
- Where wetlands are to be crossed, create access through the shortest route within the wetland resulting in the least amount of physical impact to the wetland during construction.
- Assemble structures on upland areas before transporting into wetlands where practicable.
- Use construction mats to minimize impacts within wetlands when construction during winter (frozen) months is not possible.
- Slash or woody vegetation that originates from outside wetlands is not to be left in wetlands. Slash or woody vegetation that originates from outside the wetland is considered unauthorized fill and must be removed.
- To the extent practicable, complete construction in wet organic soils when the ground is frozen.

#### 2.2 Site Clean-Up and Restoration

As construction wastes are generated, respective materials will be properly disposed of in a manner which is suitable and appropriate for those wastes. Restoration of the natural landscape will begin as soon as construction or clearing activities cease. Restoration activities may include:

- Regrading areas disturbed by construction or clearing to reflect pre-construction topography.
- Return floodplain contours to their pre-construction profile if disturbed during construction.
- Plant or seed non-agricultural areas disturbed by transmission line structures to prevent erosion. Use native seed mixes from indigenous plants; ensure seeding and/or plantings are done at a time congruent with seeding and growth of the area, not during a time that would preclude germination or rooting.

• Restore the right-of-way, temporary work spaces, access paths, and other areas of ground disturbance affected by Project construction upon completion of work.

## **3 VEGETATION REMOVAL**

The Project will require the clearing of woody vegetation within the right-of-way, and clearing of brush along temporary construction access paths. Tall woody vegetation that may interfere with safe construction and safe and reliable operation of the transmission line will not be allowed to persist and will be controlled. In upland areas, woody vegetation will be removed within the right-of-way and managed through the operational life of the Project.

Clearing of vegetation within the right-of-way will occur prior to other construction activities as allowed by landowner agreements and permit conditions. Clearing of brush, trees, and herbaceous vegetation to facilitate access and to meet safety standards will occur. Clearing may be accomplished with the use of chainsaws, mowers, and hydraulic tree-cutting equipment. Vegetation will be cut at, or slightly above, the ground surface. Rootstock or stumps will be left in place unless transmission structure installation or construction access requires otherwise or at the request of the landowner.

Landowners will be notified to allow them to harvest trees within easement boundaries prior to the initiation of clearing. At the time of clearing, any merchantable trees will be cut to standard logging lengths and stacked in upland areas within the right-of-way. The landowner will retain the title to all timber material, if desired. Non-merchantable material, including trees, brush, and slash, will be either cut and scattered, placed in windrow piles, chipped, or burned within the right-of-way. Non-merchantable felled material may also be removed from the right-of-way in a fashion that does not cause erosion unless BMPs are installed.

The cut and scatter method may be used in areas where limited clearing will occur in either wetlands or uplands; however, no slash material may be deposited in wetlands. The purpose of this method is to limit the need for unnecessarily hauling and potentially disturbing existing ground or vegetation. Likely situations where this method will be used are in shrub and brush areas with a limited numbers of trees. No upland tree material is to be deposited within wetlands as this would constitute wetland fill, which is prohibited.

Woody vegetation may be chipped and scattered over the right-of-way to a maximum depth of one inch in non-agricultural upland areas. Chipping or scattering of chips will not occur in wetlands.

#### 3.1 Wetlands

The use of heavy equipment in wetlands will be kept to the minimum extent practicable. Permanent wetland fill has not been approved beyond the extent of structure installation. Temporary fill will not be permitted without prior written consent from the U.S. Army Corps of Engineers (USACE). Wetland impact minimization will be accomplished by: constructing in wetlands during frozen conditions to the extent feasible; the use of ice roads; working in dry conditions; using low ground-pressure tires or specialized tracked vehicles; and using of matting materials during non-frozen ground conditions. These BMPs are intended to minimize damage to wetland vegetation and soils. Forested wetlands may require the removal of woody vegetation within the right-of-way sufficient to provide access for stringing conductors and shield wires, for transmission structure installation, and for safe Project operation. The removal of woody vegetation within forested wetlands will be conducted in accordance with USACE permit conditions. Within these areas, all trees and large shrub species will be cleared to ground level. All woody material will be removed from temporary access paths. On either side of the access path within the right-of-way, small diameter trees and shrubs (<6" diameter) will be cut and debris scattered in place. Large diameter trees and shrubs (>6" diameter) will be hauled out of wetland areas to suitable upland locations and treated according to applicable procedures.

Stump removal may occur within wetlands only where stumps interfere with the placement of construction mats or pole locations, or pose a risk to construction tires and equipment. Where removal is required for access, stumps will be ground to a point at or slightly below the ground surface using low ground-pressure track-mounted equipment. Woody materials generated by stump grinding may be thin-spread in the wetland; but said material may not be mounded.

#### 3.2 State Lands

On state-owned lands, Permittees shall vary their standard practice of clearing all woody vegetation within the proposed right-of-way for a new high voltage transmission line. Where state-owned lands are crossed, Permittees will work with the Minnesota Department of Natural Resources (DNR) in planning for the right-of way preparation prior to any clearing activities commencing on those lands. Selective right-of way vegetation removal typically includes the following practices:

- Woody vegetation within 100 feet of a transmission line pole will be cleared for safe construction of the transmission line facilities.
- Woody vegetation whose mature height will not exceed the heights specified in Figure 1 below will be retained to the extent feasible.
- Within 75 feet of a DNR Public Water Inventory stream crossing, woody vegetation whose mature height will not exceed 10 feet will be retained to the extent feasible, so long as the woody vegetation is not within 100 feet of a transmission pole.
- DNR Operational Order #113, Invasive Species Prevention and Management, will be followed.



Figure 1 Woody Vegetation Removal for DNR Lands

This diagram assumes a typical span between poles of approximately 1,000 feet.

## 4 HERBICIDE USE

Herbicides will not be used at organic farms or other properties where landowners prohibit their use. Herbicides will be used in accordance with manufacturer's specifications and all applicable federal and state regulations. Herbicides may be used to control the re-sprout of the stumps of tall-growing tree species or to control listed invasive or noxious weed species. Herbicides may not be used for right-of-way clearing within 75 feet of the vegetative buffer zone of waterbody crossings. Herbicides used in or near wetlands and waterbodies must be designed for use in wet areas as designated by manufacture's specifications and federal and state regulations. Herbicides may not be used on public lands without permit.

### **5 NOXIOUS WEEDS AND INVASIVE SPECIES CONTROL**

Permittees have identified the following mitigation measures to be implemented that should prevent the introduction of noxious weeds and invasive species (NWIS) on lands disturbed by construction activities.

- To prevent the introduction and spread of NWIS into the Project area from offsite locations, equipment will be cleaned prior to arrival onsite. Visible dirt must be removed from all equipment using high pressure compressed air blowers or brushing.
- The contractor(s) must maintain record of cleaning for each piece of equipment used onsite. This information will be available to the Environmental Inspector (EI) upon request.
- Non-compliance with equipment cleaning requirements may warrant a stop work order to be issued. Construction activity could then recommence only after Project equipment has been removed from the site, and adequately cleaned.

Winter clearing within the right-of-way and for the purposes of access outside the right-of-way and will allow for spring regeneration of existing vegetation within the corridor. The EI will be

required to survey the project area for NWIS throughout the construction oversight period. Additionally, the construction contractor will report any observed or recognized NWIS infestations to the EI who will then provide further instructions for control. The EI will report any infestations of NWIS species to the Permittees and the appropriate agencies.

Major infestation areas identified during the first growing season will be treated with the use of herbicides or by mechanical methods. The contractor applying herbicide is required to obtain any necessary permits and/or certifications prior to herbicide placement. The contractor applying herbicide must keep proper documentation of location and timing of herbicide use and be prepared to provide such documentation to the Permittees or the EI upon request. Treatment shall conform to manufactures' specifications.

To prevent the spread of NWIS during clearing and construction, mulch used on the Project sites will consist of state-certified weed-free material or mulch derived from onsite locations. The contractor will be responsible for locating and documenting the source of certified weed-free mulch. Copies of the applicable certification documentation must be given to the EI and made available upon request to the appropriate agencies. Mulch derived from onsite locations may be spread up to six inches deep in upland areas to provide ground protection along access paths. Upon abandonment of access routes, woodchip mulch is to be spread evenly to a depth no greater than one inch. No mulch is to be spread in wetland locations.

## **6** SEEDING, EROSION CONTROL, REVEGETATION, AND RESTORATION

Revegetation and restoration of disturbed areas associated with construction activities are intended to protect wetland and water resources from issues associated with erosion and sedimentation, to protect wildlife habitat, and reduce the movement of NWIS species within the right-of-way. Oversight for the implementation of revegetation and restoration procedures will be provided by the EI.

Seed used will be purchased on a Pure Live Seed (PLS) basis for seeding revegetation areas. Seed tags will identify:

- Purity;
- Germination;
- Date tested;
- Total weight and PLS weight;
- Weed seed content; and
- Seed supplier's name and business information.

Seed will be used within 12 months of testing as required by applicable state rules and regulations. The seed tags on the seed sacks will also certify that the seed is "noxious weed free." Seed rates used on the project will be based on PLS rate, not actual weight. The species components of individual mixes are subject to availability at the time of purchase. Grass species

may be substituted with alternative native or non-invasive species that are included in Natural Resource Conservation Service guidelines and subject to approval by the Permittees.

Seed tags must be collected by the contractor and provided to the EI during seeding activities. The tags will be reviewed by the EI prior to use to ensure that the seed mix complies with specifications described herein. Legume seed (where specified) will be treated with inoculants specific to the species and in accordance with the manufacture's recommended rate, appropriate for the seeding method (broadcast, drill, or hydroseeding).

Seedbed preparation and seeding are to occur immediately following completion of construction activities and site cleanup in any given location. Where applicable, soil will be tilled to a minimum depth of four inches with a disc, field cultivator, or chisel plow to prepare the seedbed, breaking up large clumps and firming the soil surface. Prior to seeding, prepared beds should be sufficiently soft to allow for seed penetration and mulch anchoring, while sufficiently firm to provide surface soil stability. Seeding and mulching should occur parallel to ground contours as practicable.

In order to minimize ground disturbance along the entire right-of-way, forested areas are being cleared, but roots and stumps are being left in place where appropriate, but may be removed at the request of the landowner or in cases where access is needed for snowmobile, hiking, or maintenance crews. Within areas of cleared forest, it may not be practical to access large areas of ground with seeding and seedbed preparation equipment. In these areas, smaller vehicles may be required to perform tasks such as smoothing ruts, preparing seedbeds with small rakes, and surface packing after seeding. The contractor will work with the EI to develop strategies to work around stumps. Fertilizers and other soil amendments are not recommended and will only be applied as requested by and agreed to with landowners.

#### 6.1 Seeding Methods, Erosion Control and Timing

#### 6.1.1 Seeding Methods

Drilled seed will be sown at a depth of 0.25 inches. Seeding equipment will be able to accommodate and uniformly distribute different sizes of seed at the required depth. Feeding mechanisms will be able to evenly distribute different seed types at the rates specified. Seedbed soil is to be suitably firmed immediately following seed drilling. Within cleared areas, it is assumed that seed drilling will be limited by the presence of stumps and roots left in place to retain the soil surface.

Broadcast seeding will occur as specified in the seed mixes. Seed is to be uniformly distributed by a mechanical, hand-operated seeder; or in small seeding areas, by hand. Following seeding, the surface is to be raked with a cultipacker, harrow, or hand rake. The bed is to be firmed as appropriate to site conditions.

Hydroseeding will occur as specified in the seed mixes. Seed will be applied in a broadcast, hydromulch slurry. The hydromulch seed mix will allow the contractor to see where application has taken place, ensuring uniform coverage of the seeding area. The hydroseeder must provide for continuous agitation of slurry and provide for a uniform flow of slurry. Hydroseed slurry is not to be held in the tank for more than one hour prior to application.

#### 6.1.2 Erosion Control

Straw mulch will be applied to disturbed, non-cultivated upland areas if requested by landowners or land managers. If state certified weed-free straw mulch is not used, the project will manage any noxious weeds in the right-of-way. The contractor will be responsible for acquiring certified weed-free straw mulch from approved sources and copies of applicable documentation must be provided to the EI. Mulch will be required on disturbed, exposed soils on all slopes greater than five percent, and on dry, sandy soils prone to erosion by wind or rain.

Straw mulch will be applied at a rate of two tons per acre in upland areas unless otherwise specified in permit conditions. Mulch rate may also be changed based on landowner discussion. Mulch will be uniformly distributed by mechanical blower or by hand in areas where vehicular access is limited. Mulch will be crimped to a depth of two to three inches using a mulch anchoring device where accessible. In areas where stumps and slash limit access by vehicles, mulch may be applied by hand at a reduced rate or at the specified rate and anchored in place by a liquid trackifier approved by the EI. Should conditions prevent straw mulch to be anchored, it shall be applied at a rate to not cause the straw material to move in the wind.

Seeding periods for application of the native area vegetation seed mix and the wet meadow seed mix are limited to April 1 to June 30, during spring, or when soil temperatures have fallen below 55 degrees Fahrenheit in the fall. Outside of these time windows, temporary seed mixes, applied according to temporary cover-crop seed mix specifications are to be used. Prior to installation of native seed mixes, the seedbed should be mowed and prepared for final seeding.

Seeding of the right-of-way is to occur as indicated in the project SWPPP. Where seeding is not possible, temporary stabilization using erosion control matting or mulch is required. Dormant seeding may be used after soil temperatures have fallen below 55 degrees Fahrenheit. Lower temperatures prevent seed from germinating. If dormant seeding is performed, temporary erosion control measures will be installed as indicated in the project SWPPP. Erosion control measures may consist of anchored straw mulch, hydromulch, wood chip mulch, or erosion control blankets.

#### 6.2 Temporary Revegetation and Restoration

Temporary revegetation will be implemented to quickly establish vegetative cover with the primary purposes of minimizing soil erosion and reducing the potential for the establishment of noxious weeds. The temporary seed mix is considered a cover crop, has rapid germination, and provides a quick ground cover. This seed mix is not intended to provide multi-year cover.

Temporary seeding of cover crop will occur in locations where unfrozen, bare soil surface conditions and ruts will not be permanently restored within 30 days of completion of active work. Temporary restoration activities will include the repair of rutted surfaces and an even broadcast-seeding of the temporary cover-crop seed mix at a rate appropriate to the cover crop to provide erosion control of the soils. No mulch is to be applied in wetland areas.

Temporary vegetation will be placed in accordance to the SWPPP or as directed by the EI. Temporary vegetation establishment may be expected to be successful between April 1 and September 30. Temporary use of mulch to stabilize soils should be applied outside of the September 30 through April 1 window unless soil temperatures will support vegetation establishment.

Straw or wood chip mulch may be used to help stabilize areas or bare soils during the establishment of temporary vegetation or during the period between October 1 and April 1 (winter). The contractor will apply mulch during the establishment of temporary vegetation as requested by the landowner, specified in licenses or permits, or as requested by the Permittees.

Wood chip mulch may be used to protect areas where bare soils have been exposed due to tree clearing and construction activities. In winter situations, wood chips or other appropriate BMPs such as erosion control blankets may be used as indicated in the project SWPPP to provide protection for bare soils exposed due to construction activities where out of season seeding is not applicable.

Woodchip mulch derived from onsite locations may be spread up to 6 inches deep in upland areas to provide ground protection along access paths. Upon abandonment of access routes, woodchip mulch is to be spread evenly to a depth no greater than 2 inches. Wood chip mulch is not to be used within wetlands. Straw mulch may be used outside of the seeding window as a temporary erosion control measure, followed by temporary or permanent seeding after the April 1 seeding date. The contractor will be responsible for locating and documenting the source of certified weed-free mulch if used. Copies of the applicable documentation must be given to the EI and made available upon request to the applicable agencies. Straw mulch will be applied as previously described.

#### 6.3 Permanent Revegetation and Restoration

Appropriate vegetative cover of the right-of-way will be required along the entire length of the right-of-way. Because this project does not require major grading activities, in many cases natural revegetation by early successional native species following tree clearing is expected to occur. In areas where native species voluntarily revegetate the right-of-way, active restoration may not be required. Monthly monitoring during the first year, and adaptive management will be required to ensure that NWIS are controlled, that desirable native plant species become the dominant vegetation communities in natural areas, and that bare soils are quickly stabilized to reduce erosion. In areas of minimal disturbance, vegetation will be allowed to regenerate naturally.

Where standing water is not present, and where surrounding vegetation is dominated by abundant native species, the seeding of bare soils created by rutting, using the temporary covercrop seed mix may be sufficient for cover while native species revegetate the area. The EI will consult with the appropriate agencies during the construction period to assess application of techniques in specific locations. Permanent seed mixes will include native seed varieties commonly found and/or available from local seed distributors. The permanent seed mixes are designed to augment the natural colonization of the right-of-way by local, native seed sources.

On private agricultural lands, the Permittees' land agents will work with landowners to develop appropriate measures for reseeding of disturbed lands. Unless requested by the landowner, a native area vegetation seed mix will be used in non-farmed land. Pastures will be seeded with landowner-specified seed mix.

In accordance with the Route Permit, Permittees will advise the Commission, in writing, within 60 days after the completion of all restoration activities.

#### 6.4 Wetland Areas

In wetland areas, clean-up and temporary or final restoration will occur immediately following construction activities, in accordance with the SWPPP. Wetland clean-up and site restoration activities include the following:

- Fertilizers, pesticides, or herbicides are not to be used in or near water bodies, including wetlands unless approved by the wetland permit(s).
- All waste, construction materials, and debris from construction activities will be collected and hauled from wetlands immediately upon work being completed in each wetland basin to the extent practical.
- Permanent restoration within wetland areas will include the removal of all construction mats and restoration of all ruts and depressions left by mats that are greater than six inches deep. No fill from outside of a wetland area is allowed to be used for repair of ruts.
- In areas of minimal disturbance, vegetation will be allowed to regenerate naturally.
- Where bare soils are created due to construction activities, but are limited to areas where natural revegetation from native seed bank and rhizomes is likely, a temporary covercrop seed mix will be broadcast-seeded for temporary cover to reduce opportunities for noxious weed invasion as allowed by the wetland permit(s).
- Where standing water is not present and surrounding vegetation is dominated by abundant native species, the broadcast-seeding of bare soil using the temporary covercrop seed mix may be sufficient as allowed by the wetland permit(s).

The preferred method for revegetation of disturbed areas within wetland is reliance on revegetation by resident plant communities. The EI, in consultation with the appropriate agencies, will determine whether disturbed areas will require the use of the temporary cover crop only, seeding with a wetland-specific mix, or if no action is appropriate.

In areas where wetland plant species are dominated by native species with rhizomatous root systems that will likely recolonize areas of limited disturbance rapidly, bare soils are to be broadcast-seeded with the seasonally appropriate temporary cover-crop seed mix. In areas where disturbed and bare soils are sufficient to preclude revegetation from the local, native seed source, a native wetland seed mix will be applied as indicated in the wetland permit(s) or in consultation with wetland authority agencies.

## 7 MONITORING

The Permittees will be required to monitor and control NWIS within the right-of-way through the construction. The EI will inspect and provide information regarding infestations of NWIS along the right-of-way to the appropriate agencies. The Permittees will be required to meet easement and lease conditions and obligations and will continue to work with landowners and the appropriate agencies to achieve standards set forth in easement or lease agreements.

The Permittees will monitor areas where seeding and erosion control measures have been implemented and will follow-up with reseeding measures where vegetative cover by the specified seed mix, or revegetation by the local, native seed source is inadequate to provide long term stability and sustainable native plant communities.