EPA Comments on the "Invasive and Noxious Species Management Plan, Attachment 5 to the Enbridge Reponses to DNR Information Request Dated March 10, 2023" (Plan)

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In general, the Plan emphasizes decontamination of equipment, but not shoes or clothing. Seeds and plant material can easily be transferred via clothing or shoes. These items should be decontaminated or changed daily, between sites, or when going from infested areas within the same wetland to higher quality/less contaminated areas. This may be especially necessary when staff are delineating invasive species populations with stakes or flags and have a greater risk of encountering invasive/undesirable plant material.

If changing or cleaning clothing/shoes and decontamination are not feasible, EPA recommends Enbridge consider using disposable coverall suits and booties (such as Tyvek something similar). As Enbridge knows, working during the coolest time of the day, staying hydrated, and taking regular breaks can help prevent potential heat-related illness.

Enbridge Response:

Enbridge understands invasive and noxious species are a concern of commenters on the L5 Wisconsin Segment Relocation Project (Project). The intent of the "Invasive and Noxious Species Management Plan" is to address the concern and meet Wisconsin Administrative Code NR 40 requirements. EPA comments pertain to transfer of seeds and plant material by clothing or shoes.

The primary invasive and noxious species concern on linear projects is the transfer of seed, soil containing seeds, or plant material capable of establishing additional colonies to a new area. It's agreed that equipment with soil containing seeds or seeds themselves is a concern and Enbridge's Invasive and Noxious Species Management Plan (INS Plan) addresses this concern accordingly. Additionally, plant material, though not a concern in most cases, is also addressed by the INS Plan.

The EPA's concern that staff delineating invasive species populations with stakes or flags have a greater risk of encountering invasive/undesirable plant material is not the case in Enbridge's opinion. The rational is as follows:

- Soil has not been disturbed when the staking and flagging activities occur as these are the
 first activities during construction. As a result, the opportunity for the staff to transfer soil
 with seeds is very limited.
- Transfer of plant material itself without the portion of the plant with seeds is extremely limited. Plants typically have seeds only during a limited time of the year (July- October).
- The limited duration and number of staff completing the tasks is much lower than animal, birds, and other people (such as landowners, hunters, public land/trail users, ATV/UTV trail users) activities occurring throughout the counties crossed by the Project.
- As EPA notes, having personnel walking the right-of-way in Tyvek or similar suites creates a safety hazard for heat-related illnesses. Working only in the cooler part of the day will

lengthen the construction duration, thereby lengthening the duration of disturbance, which provides more opportunity for invasive species to become established through seed natural dispersal (wind, runoff, animals). Additionally, wearing boot coverings, such as those that may be worn in an industrial hygiene laboratory with finished, level flooring, is not practical for use in field applications where safety considerations for potential slips, trips and falls must be applied, as well as materials (e.g., branches) that can easily tear such foot covering.

In summary, the recommendation would not provide practicable improved benefits compared to the level of effort, expense, and time impacts of implementing the measures. Enbridge could agree to implement additional protective measures during the July-October timeframe for these specific activities when seeds would be most potentially transferred. Depending on when authorizations are received and construction can then proceed, staking and flagging could occur outside these timeframes.

EPA comments on *Appendix B-Seed Mixes*, of the Environmental Protection Plan Line 5 Wisconsin Segment: Relocation Project, dated December 2019

Submitted by: Melissa Blankenship and Kathryn Quesnell, EPA

Submitted on: December 14, 2023

Responses or discussion to EPA's comments pertaining to Invasive species and Wetland seed mixes:

Upland Buffer Seed Mix

1.) The "Standard Upland Seed Mix" in Table B-1 lacks diversity. Only four species are proposed, all proposed species are grasses, and two species (timothy grass and perennial ryegrass) are non-native. While this mix may be appropriate for disturbed, roadside areas, this is not a suitable mix for less-disturbed, high-quality and/or unique wetland communities that are proposed to be impacted. EPA recommends that the seed mixes be revised to include more diversity and to include native forbs and native graminoids.

Enbridge Response:

As described in the EPP, Section 21.0, Enbridge developed the upland seed mixture in conjunction with NRCS guidelines. It is important to note that Enbridge's seed mixes (upland, wetland, and waterbody) are not intended to displace native species, but to augment existing seedbank material with species that will also provide quick soil stabilization (cover crop) to minimize erosion and sediment transport potential and to provide long-term growth within area disturbed by construction activities. Overall site revegetation will occur through establishment of Enbridge's seed mixes as well as natural recruitment from the existing seed in the soil. Enbridge does not intend to use the Standard Upland Seed Mix in wetlands.

Waterbody Banks Seed Mix

2.) Scientific names are not provided in the "Waterbody Banks Seed Mix" Table B-4. The applicant only notes that the "common" variety of each species is to be planted. This can create confusion. For example, "March Milkweed" is not a species known to the EPA. EPA recommends the scientific name of each plant be provided in the table to avoid confusion. EPA further recommends all mixes be revised to include the most recent, accurate scientific name. For example, species listed as Aster should be Sympotrichum or Doellingeria, Verbena hastate and Veronia fasciculate should be Verbena hastata and Vernonia fasciculata, respectively.

Enbridge Response:

All seed mix tables within Appendix B will be updated to include scientific name. "March" is a typographical error. This is intended to be Marsh Milkweed (*Asclepias incarnata*).

3.) 10.9% of the "Waterbody Banks Seed Mix" is non-native annual ryegrass. Slender wheatgrass is proposed as the companion/cover crops for the seed mix, but it is unclear if annual ryegrass is also intended as a cover crop, especially at such a high seeding rate. EPA recommends that annual ryegrass be replaced in the seeding mix with native species.

Enbridge Response:

As stated above, Enbridge's seed mixes are meant to (1) temporarily stabilize disturbed construction areas and (2) augment existing growth of species within the native seedbed. The inclusion of short-lived species such as annual ryegrass is important to provide quick vegetation growth to stabilize the streambank and minimize the potential for erosion. As described by UW-Extension Annual Ryegrass is not cold tolerant and typically dies out during Wisconsin winters but does exhibit rapid growth with good biomass during the summer on most soil types. Annual Rye grasses fibrous root system provides erosion control.

General Comments on Seed Mixes

4.) The composition of the seed mixes proposed does not appear to reflect the wetland communities represented by the project. While conversion from forested wetlands to emergent communities is expected as part of the project, even non-forested communities appear to have very few species in common with the proposed planting lists. For example, wetland "wasc074" is listed as a Sedge Meadow, and only four species found in the Native Sedge/Wet Meadow Mixture and the Native Wet Prairie Mixture were also found within the wetland. EPA recommends that Enbridge revise their seed mixes to better reflect the wetland communities found in far northern Wisconsin. Due to the quality of the wetlands, preservation of local genotypes is paramount. EPA reiterates that Enbridge should provide seed source location and prioritize sources closest to the impact area. EPA further recommends that any seed substitutions be approved by the regulatory agencies.

Enbridge Response:

The goal of Enbridge's restoration seeding is not to replace the existing species already present within the specific wetlands, but to stabilize and augment growth during the restoration phase. The seed mixes proposed for wetland areas along the Project corridor were derived from seed mixes developed by the Minnesota Board of Water and Soil Resources ("BWSR") and have been shown to be effective in stabilizing wetland disturbed by construction activities. The use of specialty seed mixes to match specific species and/or communities along the Project corridor is not a practicable approach to revegetation. Enbridge has attempted this approach on past projects at great expense and very limited success, typically requiring additional wetland disturbance after construction to reseed with a more suitable seed mix that helps provide the cover and stabilization while the native seedbed material reestablishes. Enbridge has had the best restoration success with the re-establishment of plants present within the native seedbed.

Enbridge's contractor will be responsible for acquiring seeds from suppliers. Enbridge will encourage the contractor to use local seed suppliers capable of providing the seed types and qualities needed for the Project. Where an individual seed is not available in the quantity needed, Enbridge will work with the seed supplier(s) to determine an appropriate substitution that will successfully germinate in the Project area. Enbridge would encourage the respective agencies provide a list of acceptable substitutions known to be present in the Project area and known to successfully germinate in the Project region.

5.) There is a large diversity of wetlands that will be impacted by this project. If conversion of high-quality and/or unique community types is anticipated for the project, Enbridge should provide further details on the proposed final wetland community types as part of a wetland restoration plan. Enbridge should consider planting an emergent community that compliments the original wetland community when converting wetlands to facilitate ROWs. For example, a coniferous bog should be converted into an open bog instead of a sedge meadow, as would result from the use of the proposed seed mixes. Species in the seed mixes should not drastically change the wetland community in high-quality and/or unique quality wetland community types.

Enbridge Response:

As previously described, the natural seed bank present within the Project areas will over time overtake seeded areas and will provide the most influence on community composition in that area.