

ENBRIDGE LINE 3 REPLACEMENT PROJECT

Permit to Take Endangered or Threatened Species Incidental to Development

No. 28565

(Carex formosa, Carex pallescens, Juglans cinerea, Botrychium lanceolatum ssp. angustisegmentum, Botrychium mormo, Poa paludigena, Carex sterilis, Eleocharis rostellata, and Rhynchospora capillacea)

FINDINGS OF FACT, CONCLUSIONS AND ORDER OF COMMISSIONER

Permit to Take Endangered or Threatened Species Incidental to
Development No. 28565

Enbridge Line 3 Replacement Project

November 12th, 2020

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER OF COMMISSIONER

After review of the application, due investigation of relevant information, and consideration of comments, and based on the information and statements contained in the permit application submitted by Enbridge Energy, Limited Partnership ("Enbridge"), the applicant's description of work proposed to be undertaken, and supplemental information in the administrative record available to the Minnesota Department of Natural Resources ("DNR"), the Commissioner of the Minnesota Department of Natural Resources makes the following:

FINDINGS OF FACT

I. EXECUTIVE SUMMARY

1. Pursuant to the requirements of Minn. Stat. § 84.0895 subd. 7(a)(2) & (4), Enbridge applied for a Permit to Take Endangered or Threatened Species Incidental to Development as part of its proposed Line 3 Replacement Pipeline Project ("Project"). The application seeks to take state-Threatened or state-Endangered vascular plant species *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum* ssp. *angustisegmentum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea*. These Findings of Fact only address Enbridge's application for a Permit to Take State-Endangered or State-Threatened Species Incidental to Development (the "Application").

2. The Project is intended to address mechanical integrity deficiencies on the existing Line 3 pipeline. The Project proposes to install approximately 337 miles of new 36-inch diameter pipe and associated facilities from the North Dakota-Minnesota border to the Minnesota-Wisconsin border. Enbridge's proposed pipeline route would generally follow the existing Line 3 pipeline from the North Dakota-Minnesota border in Kittson County to Enbridge's terminal facility in Clearbrook, Minnesota. From the terminal in Clearbrook, the pipeline would proceed south and generally follow the existing Minnesota Pipe Line Company's right-of-way to Hubbard, Minnesota. From Hubbard, the route would proceed east, following existing electric transmission line and railroad rights-of-way and traversing greenfield areas until crossing the Minnesota-Wisconsin border approximately five miles east-southeast of Wrenshall, Minnesota. The route would end at the existing Enbridge terminal in Superior, Wisconsin.

3. The Project has undergone significant review from the Public Utilities Commission ("PUC"). On April 24, 2015, Enbridge filed separate applications for a certificate of need ("CN") and routing permit ("RP") for the Project. The PUC authorized the Department of Commerce, Energy Environmental Review and Analysis Unit ("EERA") to prepare an

environmental impact statement (“EIS”). The PUC referred the CN, RP, and EIS adequacy to the Office of Administrative Hearings for contested-case proceedings. Following the contested-case proceedings, and following the submittal of a revised Final EIS (“FEIS”) by EERA, the PUC eventually found the revised FEIS to be adequate, and granted the CN and RP contingent on certain modifications and conditions. The Minnesota Court of Appeals reversed the FEIS order for its failure to address the potential impacts to the Lake Superior watershed and remanded to the PUC for further proceedings. On remand, the PUC requested that EERA submit a second revised FEIS that included an analysis of the potential impact to the Lake Superior watershed. On May 1, 2020, after receiving public comments and hosting public meetings, PUC issued an order finding the second revised FEIS adequate and granting the CN and RP subject to certain modifications and conditions.

4. The permit Enbridge seeks in this proceeding relates solely to the takings of the three state-Endangered species *Carex formosa* (handsome sedge), *Carex pallescens* (pale sedge), and *Juglans cinerea* (butternut), and six state-Threatened species *Botrychium lanceolatum* ssp. *angustisegmentum* (narrow triangle moonwort), *Botrychium mormo* (goblin fern), *Poa paludigena* (bog bluegrass), *Carex sterilis* (sterile sedge), *Eleocharis rostellata* (beaked spikerush), and *Rhynchospora capillacea* (hair-like beak rush). A number of other permits and regulatory requirements will also apply to the Project prior to construction. Required authorizations from DNR include the four separate water appropriation permits, two separate work in public waters permits, a utility license to cross public waters, a utility license to cross public lands, and an approved calcareous fen management plan (“CFMP”). The Project would also cross wetland and stream areas not covered by DNR licenses or permits. These wetland and stream crossings are regulated by the Army Corp of Engineers (“USACE”) Clean Water Act section 404 permit and the Minnesota Pollution Control Agency (“MPCA”) Clean Water Act section 401 Water Quality Certification. The Project will also require a MPCA General Construction Stormwater Permit and the associated Stormwater Pollution Prevention Plan (SWPPP).

II. ENVIRONMENTAL SETTING OF THE PROJECT

5. As shown below, the proposed Project transects thirteen Minnesota counties: Kittson, Marshall, Pennington, Red Lake, Polk, Clearwater, Hubbard, Wadena, Cass, Crow Wing, Aikin, St. Louis, and Carlton counties. Enbridge proposes to maintain a 50-foot wide permanent corridor along the pipeline route. During construction, Enbridge proposes to temporarily widen the corridor to 120-foot wide in uplands and 95-foot wide in wetlands. The pipeline route also includes additional temporary construction workspaces.



6. The Project proposes 72 public water crossings, including five basins, 61 watercourses, and six wetlands. Five of the public watercourses are trout stream tributaries. With the exception of the six public water crossings in public water wetlands located within private lands, all public water crossings will be addressed in the Utility License to Cross Public Waters. One wetland at mile post 963.7 in Hubbard County does not require a work in public waters permit as the activity is vegetation removal by cutting and no excavation or filling will be taking place. An Aquatic Plant Management (“APM”) permit is also not needed for this wetland crossing per Minn. R. 6280.0250, subp. 1(D). The five public water wetland crossings located on private lands are addressed in the Work in Public Waters permit application no. 2018-3419.

7. The Project would also cross wetlands and streams not covered by DNR licenses or permits. These wetland and stream crossings are regulated by the USACE Clean Water Act section 404 permit and the MPCA Clean Water Act section 401 Water Quality Certification.

8. As required by Minn. R. 4410.7055, DNR has reviewed the FEIS for the Project and it serves to inform these findings. In section 6.3.5.3 of the FEIS, entitled **Unique Natural Resources Impact Assessment**, the FEIS reviews State-listed Endangered and Threatened Species potentially impacted by the preferred and alternate routes. The preferred and alternate routes all have potential impacts to State-listed Endangered and Threatened Species from construction and operation. Potential impacts include injury or mortality to individuals; loss, alteration or fragmentation of habitat; and disturbance from noise and activity. The FEIS states that measures to avoid or reduce construction impacts on Minnesota-protected animals and plants would be developed in consultation with the DNR to ensure that any unavoidable impacts would not jeopardize the continued existence of state protected species.

9. As required by Minn. Stat. § 84.0895, subd. 3, a species is designated as Endangered if the species is threatened with extinction throughout all or a significant portion of its range, or Threatened if the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

10. *Carex formosa* (handsome sedge), *Carex pallescens* (pale sedge), and *Juglans cinerea* (butternut) are designated as state-Endangered species, and *Botrychium lanceolatum* (narrow triangle moonwort), *Botrychium mormo* (goblin fern), *Poa paludigena* (bog bluegrass), *Carex sterilis* (sterile sedge), *Eleocharis rostellata* (beaked spikerush), and *Rhynchospora capillacea* (hair-like beak rush) are designated as state-Threatened species. See Minn. R. 6134.0300.

11. *Carex formosa* (handsome sedge) is a perennial sedge that reproduces only by seeds. It has a very restricted and disjunct range and is considered rare across the state with very few known occurrences. The extant populations occur in wooded ravines and river valleys, which are fragile habitats that are vulnerable to disturbance. Given its extreme rarity and vulnerability, it was listed as an Endangered species in Minnesota in 1996.

12. *Carex pallescens* (pale sedge) is a knee-high sedge with narrow, hairy leaves. It occurs primarily on the margin of fire-dependent forests of pine, spruce, aspen, and birch, adjacent to the Lake Superior shore. It has always been rare in Minnesota, but to address declines due to habitat loss it was listed as Endangered in Minnesota in 1996.

13. *Juglans cinerea* (butternut) is a midsize to large tree that, in Minnesota, occurs in mesic hardwood forests. Until recently, it was a fairly common tree in southern Minnesota. The main issue facing butternut is the spread of the lethal fungal disease known as butternut canker, which has resulted in a massive die-off. There are no treatments for butternut canker and few trees are thought to be immune. The species was listed as Endangered in Minnesota in 2013.

14. *Botrychium lanceolatum* ssp. *angustisegmentum* (hereafter *Botrychium lanceolatum*, narrow triangle moonwort) is a small fern that does not emerge above ground every year. It prefers moist, shady, mature northern hardwood forests, particularly in low areas. It is very sensitive to disturbances within its forest habitat especially loss of the humus layer caused by non-native earthworms, damage caused by timber harvesting, the effects of road building, and land use changes that affect drainage. It was listed as Threatened in Minnesota in 1996.

15. *Botrychium mormo* (goblin fern) is a small fern, no more than 3.5 inches tall, with a single leaf, divided into two segments. It occurs in mature mesic hardwood forests with an intact canopy that maintains shaded and moist conditions, and loamy soils with large amounts of humus or organic matter on the surface. It is rare and becoming rarer due to habitat loss and degradation from timber management and non-native earthworms. It was listed as special concern in 1984 and elevated to Threatened in 2013.

16. *Poa paludigena* (bog bluegrass) is a small, inconspicuous grass species. Populations appear to be small and localized. Occurrences are restricted to wetland habitats that are maintained by groundwater seeps, such as swamps, sedge meadows, margins of small pools, or rivulets of water. Potential threats include drainage modifications that could alter water levels.

It was originally listed as an endangered species in Minnesota in 1984, but was reclassified as Threatened in 1996.

17. *Carex sterilis* (sterile sedge) is a conspicuous sedge that grows in dense clumps. It ranges over a relatively large portion of Minnesota but occurs almost exclusively in small, fragile, calcareous fen habitats. Fens can be indirectly affected by activities several kilometers away because of their dependence on delicate groundwater hydrology. The overall extent of *Carex sterilis* has declined with the loss of calcareous fens acres in Minnesota. It was listed as a Threatened species in Minnesota in 1984.

18. *Eleocharis rostellata* (beaked spikerush) is a distinctive species that forms dense tussocks. It is chiefly an inhabitant of salt marshes along the Atlantic Coast with rare inland occurrences in localized habitats, such as calcareous seepage fens and spring fens in acid peatlands in Minnesota. The conservation of *Eleocharis rostellata* in Minnesota is tied to the conservation of its specialized fen habitat. It was listed as a Threatened species in Minnesota in 1984.

19. *Rhynchospora capillacea* (hair-like beak rush) is a very small, inconspicuous plant and may be nearly undetectable when it grows among other sedges and grasses. It is predominantly restricted to calcareous fen habitat and was listed as a Threatened species in Minnesota in 1984.

20. Midwest Natural Resources, Inc. (MNR) on behalf of Enbridge conducted rare flora surveys in portions of a 250 to 450 foot wide survey area (“environmental survey corridor”) along the planned route corridor from 2013 to 2020. Portions of the environmental survey corridor were surveyed when the corridor was located in areas of potential habitat that were identified as being within a one-mile radius of Natural Heritage Information System (“NHIS”) Element Occurrences of state-Threatened or state-Endangered plant species, or the corridor overlapped with sites of Biodiversity Significance ranked as moderate, high, or outstanding, Native Plant Communities with high-quality habitat for target species, Calcareous Fens, or Minnesota County Biological Survey Railroad Rights-of-Way Prairies. Additional survey sites were identified based on review and interpretation of aerial photography to identify sites where potential fens could be located, sites with aquatic features, and sites with a unique aerial signature relative to the surrounding area, unless previous MNR surveys had determined that potential habitat for target species was not present. MNR conducted two types of surveys: occurrence surveys to document the presence or absence of state-listed and sensitive flora species within the environmental survey corridor, and population counts to estimate the population within the survey corridor through census counts and density estimation methods. Surveyor qualifications and survey plans were reviewed and approved by DNR. Annual protected flora survey reports were submitted to DNR for surveys in 2016, 2017, 2018, 2019 and 2020.

21. On November 1, 2019, Enbridge submitted a 2013-2019 Minnesota Protected Flora Field Survey Report, which synthesized all protected flora survey results from 2013-2019. The report indicated that from 2013 through 2019, MNR conducted occurrence surveys at 123 sites along the pipeline corridor. State-protected species were detected and their populations were quantified at 23 of these 123 sites. MNR identified four state-Endangered species within

the survey corridor: handsome sedge (*Carex formosa*), pale sedge (*Carex pallescens*), butternut (*Juglans cinerea*), and purple-flowered bladderwort (*Utricularia purpurea*). MNR also identified nine state-Threatened species within the survey corridor: narrow triangle moonwort (*Botrychium lanceolatum* ssp. *angustisegmentum*), goblin fern (*Botrychium mormo*), sterile sedge (*Carex sterilis*), beaked spikerush (*Eleocharis rostellata*), bog bluegrass (*Poa paludigena*), hair-like beak rush (*Rhynchospora capillacea*), red saltwort (*Salicornia rubra*), whorled nutrush (*Scleria verticillata*), and Clinton's bulrush (*Trichophorum clintonii*). Surveys also detected 15 species of special concern.

22. No newly documented occurrences of state-protected species were identified in the 2020 Protected Flora Surveys.

III. APPLICATION, NHIS REVIEW AND AVOIDANCE, AND COMMENT PROCESS

A. Enbridge Submits Application for a Permit to Take Endangered or Threatened Species Incidental to Development.

23. On September 13, 2018, Enbridge submitted an application for a Permit for the Take of Endangered or Threatened Species Incidental to a Development Project. The application included the Project purpose and need; a description of the Project; alternatives to the Project that have been considered and rejected; review of locations of state-Endangered and state-Threatened species in the Project area; overview of avoidance, minimization measures, specifications of the proposed taking, and proposed mitigation to offset the impact to the species.

24. Review of this application was placed on hold, pending DNR's review of Enbridge's Natural Heritage Information System (NHIS) Review and Avoidance Plan. After review of the NHIS Review and Avoidance Plan, significant revisions were needed to the application.

25. On January 29, 2019, after receiving DNR comments on its initial NHIS Review and Avoidance Plan, Enbridge submitted a revised Phase I Application for an Endangered or Threatened Species Take Permit. The revisions were made to address DNR comments, route changes, and additional data. The phase I application included state-Endangered and state-Threatened species found in the 2018 surveys with the intent to include, in a phase II application, any additional state-Endangered or state-Threatened species occurrences discovered in the planned 2019 surveys.

26. On June 4, 2019, DNR informed Enbridge that a single application incorporating all state-Endangered and state-Threatened species takings for the project would be required.

27. On September 14, 2020, Enbridge submitted a revised Application to the DNR for a Permit to Take Endangered or Threatened Species incidental to development of the Project. The Application was revised based on DNR recommendations and the final NHIS Review and Avoidance Plan. The Application proposed to take state-Endangered *Carex formosa* (handsome sedge), *Carex pallescens* (pale sedge), and *Juglans cinerea* (butternut), and state-Threatened *Botrychium lanceolatum* (narrow triangle moonwort), *Botrychium mormo* (goblin fern), *Poa*

paludigena (bog bluegrass), *Carex sterilis* (sterile sedge), *Eleocharis rostellata* (beaked spikerush), and *Rhynchospora capillacea* (hair-like beak rush).

28. Avoidance and minimization measures are described in the Application and in the NHIS Review and Avoidance Plan submitted on October 13, 2020. The Project avoids and minimizes impacts to state-protected species when possible by co-locating the pipeline with other pipelines and utilities to minimize disturbance; routing to avoid or minimize impacts to species occurrences to the extent possible within the route selected by the PUC in the RP; reducing workspace and right-of-ways in sensitive areas; using trenchless installation methods (horizontal directional drill and bore) to minimize disturbance to sensitive areas; using a temporary bridge to avoid impacts in a ditch; constructing specific portions of the pipeline in winter; and removing, storing, and replacing peat sod.

29. The avoidance measures described in paragraph 28 avoid all taking of state-Endangered purple-flowered bladderwort (*Utricularia purpurea*) and state-Threatened red saltwort (*Salicornia rubra*), whorled nutrush (*Scleria verticillata*), and Clinton's bulrush (*Trichophorum clintonii*) within the environmental survey corridor. The avoidance measures also reduce the taking by the following numbers of individuals of state-Endangered or state-Threatened species located within the environmental survey corridor: 691 *Carex formosa*, 163 *Carex pallescens*, 20 *Juglans cinerea*, 230 *Botrychium lanceolatum*, 15,190 *Poa paludigena* (estimated), 3,964 *Carex sterilis*, 12,975 *Eleocharis rostellata*, and 9 *Rhynchospora capillacea*. In total, an estimated 33,242 individual state-protected plants within the environmental survey corridor will be avoided.

30. There are 12 locations, as delineated by Enbridge survey site IDs, where known or potential impacts on some individuals of state-Endangered or state-Threatened species could not be avoided through workspace design, route changes, or construction BMPs.

31. The Application specifies that, with the implementation of avoidance measures, the impact of the Project will be limited to take a total of 25 *Carex formosa*, 40 *Carex pallescens*, 3 *Juglans cinerea*, 201 *Botrychium lanceolatum*, 3 *Botrychium mormo*, 679 *Poa paludigena*, 2,020 *Carex sterilis*, 6,013 *Eleocharis rostellata*, and 158 *Rhynchospora capillacea*. In total, Enbridge is applying for a permit to take 9,142 individual state-protected species.

32. These takings are proposed to occur in Township 155 Range 45, Section 20, Township 150 Range 39 Sections 19 and Sec. 30, Township 149 Range 38 Section 16, Township 149 Range 38 Section 16, Township 138 Range 31 Section 11, Township 139 Range 27 Sections 15, 20, and 21, Township 139 Range 25 Section 4, Township 51 Range 27 Section 36, Township 51 Range 26 Section 32, Township 51 Range 23 Section 24, Township 51 Range 22 Sections 16, 20, and 21, Township 49 Range 18 Section 22 in Marshall, Polk, Clearwater, Cass, Aitkin, St. Louis, and Carlton Counties, MN.

33. The Application proposes to provide compensatory mitigation in the amount of \$1,024,500 based on restitution values and the cost of acquisition of 80 acres of land.

B. The Application Relies Upon the Natural Heritage Information System (NHIS) Review and Avoidance Plan.

34. The Application relies upon the NHIS Review and Avoidance Plan to determine which species and impacts are likely to result in takings and need to be included in the Application. Compliance with provisions of the NHIS Review and Avoidance Plan relevant to state-Endangered and state-Threatened species is a requirement of this Permit.

35. On December 5, 2019, Enbridge submitted a NHIS Review and Avoidance Plan to DNR, detailing its review of NHIS and other data sources for potential impacts on state-Threatened or state-Endangered species, due to project construction and operation, based on NHIS data available under license agreement LA-885. It also included an assessment of the potential for impacts to rare or sensitive ecological resources and a description of measures for avoiding or minimizing impacts. The Plan included detailed maps showing state-Endangered and state-Threatened species survey results in relation to planned workspaces and detailed accounting of which individuals would be avoided and which individuals would be taken within workspaces or access roads.

36. On June 22, 2020, DNR provided recommended revisions on the NHIS Review and Avoidance Plan to Enbridge. DNR recommended that Enbridge consider takings that may occur of plants adjacent to workspace due to microhabitat changes, maintenance activities, or other inadvertent impacts that could occur, and suggested a 25 foot buffer be used for all state-Endangered and state-Threatened plant species, except *Botrychium mormo*, which would need a 250 foot buffer. This recommendation increases the number of plants that will be considered taken. DNR also recommended that Enbridge limit the width of the temporary construction workspace to 95 feet for upland areas in nine specific locations in the vicinity of known occurrences of state-listed Endangered and Threatened plants, and relocate three temporary workspaces to ensure a 25 foot buffer for endangered and threatened plant species. This recommendation increases the number of plants that will be outside the workspace and buffer and are therefore avoided.

37. Enbridge revised the NHIS Review and Avoidance Plan to address DNR comments and submitted a final NHIS Review and Avoidance Plan on October 13, 2020.

C. The Application Was Circulated for Public Comment and for Comment from Government Entities.

38. On March 18, 2019, the DNR posted all of Enbridge's permit applications and supplemental permit materials on the DNR Line 3 Permitting website <https://www.dnr.state.mn.us/line3/index.html> for a 60-day public comment period, which closed on May 17, 2019. The January 29, 2019 version of the application was among the application materials posted for public comment. The DNR published a GovDelivery (email newsletter) notice and press release notifying the public of the open comment period. Prior to the public comment period, the DNR issued GovDelivery notices informing recipients of the application and notifying them of its availability on the permitting website.

39. DNR held informational webinars on April 29, April 30, and May 6, 2019 to provide information to the public about the Project and receive public comment. The informational webinars were recorded and are available on the DNR Line 3 Permitting website: <https://www.dnr.state.mn.us/line3/index.html>.

40. The DNR received nearly 10,000 public comments on all of the draft applications combined. The vast majority of these comments were form letters. Form letters were identified when two or more unrelated individuals submitted identical or substantively identical submissions, or when a submission was determined to consist nearly entirely of text provided for the purpose of mass e-mailing. Within the form-letter submissions, there were numerous form-letter variants consisting of standard form-letter text that was altered through deletion or addition of sender-composed text.

41. Not all submissions contained substantive comments on the applications. For example, many commenters offered opinions as to whether the Project should or should not proceed, with minimal or no additional content relating to the draft applications.

42. Given the large number of submissions and individual comments received during the public-comment process, the DNR grouped similar comments into themes and considered those themes individually in lieu of responding to each individual comment. Comments relevant to special permit #28565 are addressed below.

43. DNR did not receive any comments from State, federal or local governments on the Application. DNR did receive comments from the Red Cliff Band of Lake Superior Chippewa on the Application, and those comments are addressed below with other comments received by the DNR.

D. Comments and DNR Responses.

44. Several comments were received expressing concern about potential impacts of the Project on rare species and plant communities, such as Blanding's turtle, rare native plant communities, ecosystems, old growth forests, salamanders, colonial waterbirds, boreal nesting birds, federally listed species, and wildflowers, and stated that take should not be permitted. **DNR response:** DNR's regulatory authority under Minn. Stat. § 84.0895, Minn. R. 6212.1800, and Minn. R. 6212.2100 is limited to species listed as state-Endangered or state-Threatened in Minn. R. 6134.0200-0400. DNR considers applications for permits to take state-Endangered or state-Threatened species to determine whether the application meets the criteria for issuance of the permit, that is, that the act will not be detrimental to the species as a whole. *See* Minn. R. 6212.1800, subp. 1. Takings permits can include mitigation requirements that include measures, such as land protection, conservation plan development and research that would allow DNR to manage these species in such a way that the species can persist. Any application that is determined to adversely affect the species in Minnesota as a whole, would be denied. In this instance, all impacts to state-Endangered or state-Threatened species were considered in the review of the Application, including indirect impacts.

45. Comments were received about the need to ensure the permit application is complete before a permit should be considered, especially noting that adequate surveys must be completed and all alternatives must be considered. **DNR response:** Enbridge conducted additional surveys along the pipeline route during the 2019 and 2020 field seasons, which were approved by DNR as complete. DNR reviews survey plans and determines suitability prior to surveys occurring. DNR also reviews the results of surveys to determine suitable results, and a plant surveyor must be approved by DNR as a qualified plant surveyor to complete plant surveys

for proposed application to take state-Endangered or state-Threatened species. In addition, DNR shared the location of sensitive resources in NHIS with Enbridge under license agreement LA-885 and ensured all relevant NHIS data were incorporated in their NHIS Review and Avoidance Plan. Enbridge submitted a final revised application including additional survey data, an evaluation of alternatives, and proposed compensatory mitigation on September 14, 2020. The Application evaluated alternatives within the RP as described in this Finding of Fact, paragraph 54. DNR considers the submitted survey information and application to be complete.

46. Comments were received expressing concern about Enbridge's ability to follow environmental protections. **DNR response:** Enbridge is required to comply with applicable federal, state, and local rules and regulations. Enbridge will have environmental inspectors on-site to assist in implementing regulatory requirements, and independent environmental monitors will verify compliance with permitting requirements as described in the Environmental Monitor Control Plan.

47. A comment was received that species in the genus *Botrychium* are not understood well enough to understand the impact of the Project on the species. **DNR response:** Decisions to issue take permits are based on the best available information. Survey plans and reports and specimens collected along the Line 3 corridor were reviewed and confirmed by DNR experts. NHIS data is continually updated with new information as it becomes available. Taxonomic revisions are incorporated as possible, but may require extensive statewide fieldwork to confirm the status of previously surveyed records.

IV. ANALYSIS OF STATUTORY AND REGULATORY REQUIREMENTS

A. Required Content of Application.

48. All applications for permits to take state-Endangered and state-Threatened species must provide the information identified in Minn. Stat. § 84.0895, subd. 7 and Minn. R. 6212.1800. Applications for permits from individuals or institutions must be made in writing and must be submitted as specified, Minn. R. 6212.1800.

49. The Application contains maps, plans, and specifications describing the proposed takings of *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea*.

50. The application contains a description of all alternatives that have been evaluated and rejected, as required Minn. Stat. § 84.0895, subd. 7(c) and Minn. R. 6212.2100. Alternate routes are evaluated in the referenced FEIS and site-specific design alternatives are described in the Application.

B. Consideration of Factors in Minn. Stat. § 84.0895, Minn. R. 6212.1800 and 6212.2100

51. Minn. Stat. § 84.0895, subd. 1 states that “a person may not take, import, transport, or sell any portion of an endangered species of wild animal or plant, ... except as provided in subdivisions 2 and 7.” Subdivision 7 authorizes the commissioner of natural resources to issue permits and prescribe conditions for the taking of state-Endangered and state-Threatened species of animals and plants under any of four conditions, including if “the act enhances the propagation or survival of the affected species” or “the social and economic benefits of the act outweigh the harm caused by it.” Minn. Stat. § 84.0895, subd. 7(a)(2), (4). A member of a state-Endangered species may not be destroyed under subdivision 7(a)(4) unless “all alternatives, including live trapping and transplantation, have been evaluated and rejected.” Minn. Stat. § 84.0895, subd. 7(c).

52. Minn. R. 6212.1800, subp. 1 states that “[a] person may not take ... a threatened or endangered species of plant or animal without a permit from the commissioner.” Subpart 2 states that “[a] permit may not be issued unless the commissioner has first determined that the permitted act will not be detrimental to the species.”

53. Minn. R. 6212.2100 states that a permit for the taking of a state-Threatened or state-Endangered species of plant, animal, or insect, may be issued on prescribed conditions when the commissioner has determined that “the permitted act enhances the propagation or survival of the affected species” or “the social and economic benefits of the permitted act outweigh the harm caused by it, provided that the killing of a specimen for these purposes will be permitted only after all other alternatives have been evaluated and rejected.”

54. DNR considered alternatives to the proposed take. Enbridge’s options for relocating the right-of-way are limited to the dimensions of the route set forth in the RP. The Application documents alternatives that were considered within the RP and why they were rejected, for each of the 12 locations where take of a state-Endangered or state-Threatened species is proposed. Alternatives considered include relocation of the right-of-way, reduction of the size or location of workspaces, and construction best management practices. The Application documents that Enbridge is able to avoid many state-Threatened and state-Endangered plants through relocation of the right-of-way within the route set in the RP, moving or reducing workspaces, and construction best management practices. For about 91 percent of the route, the proposed pipeline is co-located with other pipelines or utilities. Moving the right-of-way away from the co-located pipelines or utilities can increase environmental impacts. In some cases, moving the right-of-way is not feasible because the right-of-way would still be located in areas with similar habitat that may contain state-Threatened or state-Endangered plants or other sensitive areas such as high-quality wetlands or old-growth forests. In some cases, moving or reducing construction workspace is not feasible because it occurs in limited upland space needed to cross the extensive surrounding wetland areas.

55. Transplantation has been considered and rejected based on the sensitivity of the species to disturbance, the potential negative impacts to recipient populations and communities, the limited knowledge of unoccupied suitable recipient sites, the number of individuals necessary for establishing a viable population, and the increased disturbance transplantation would cause to individuals that are in buffer areas.

56. Based on the route selected by the PUC, it was not feasible for Enbridge to avoid all takings of state-listed threatened and endangered plants. DNR finds that Enbridge has considered and evaluated all other reasonable alternatives for the Project, resulting in modification to the Project to minimize the impact of the Project on nine state-Endangered or state-Threatened plant species.

57. A net benefit to a state-Endangered or state-Threatened species can be attained through compensatory mitigation. When properly imposed, mitigation can ensure that a take is not detrimental to a species and instead enhances the propagation or survival of the affected species. Consequently, when all other conditions found in statute and rule are met, a permit conditioned on such compensatory mitigation can be issued for the take of an endangered or threatened species.

58. DNR has determined that the harm caused to *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea* by the Project as currently proposed can be fully mitigated as set forth below.

59. With the implementation of compensatory mitigation as described below, DNR concludes that the Project as currently proposed will not be detrimental to Minnesota's populations of *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea* but will enhance the propagation or survival of the species in Minnesota.

60. DNR also concludes that the social and economic benefits of the taking outweigh the harm. The PUC issued a certificate of need for the Project, concluding that the "consequences to society of granting the modified certificate of need are more favorable than the consequences of denial." Order Finding Environmental Impact Statement Adequate, Granting Certificate of Need as Modified, and Granting Routing Permit as Modified (May 1, 2020) at 15. The PUC made this decision with understanding that the Project would result in the taking of state-Endangered and state-Threatened species, but that this activity would be regulated by the DNR. Pipeline Routing Permit (May 1, 2020) at 17. With compensatory mitigation as described below, the harm caused by the taking of the individual plants of a state-Endangered or state-Threatened species is outweighed by the overall benefit to the species in Minnesota.

C. Valuation of Compensatory Mitigation.

Carex formosa (handsome sedge, state-Endangered)

61. The Application described that in northern Minnesota, *Carex formosa* occurs only in Polk and Clearwater Counties and is thought to inhabit moist areas in deciduous woodlands. It also occurs in southeastern Minnesota. There are four known extant locations of the species in the state. There are no occurrences of the species protected by Scientific and Natural Area designation. The Project proposes to take 25 individuals from one occurrence location along the pipeline corridor in Clearwater County.

62. The DNR determines that the conservation of at least 200 acres is necessary to achieve the effective conservation of a *Carex formosa* location, and that funding the acquisition

of a 200-acre area supporting a currently-unprotected *Carex formosa* location would offset the Project's taking of *Carex formosa* and achieve a net benefit for the species.

63. The DNR concludes that the valuation of suitable mitigation for the taking of *Carex formosa* by the Project should be based upon the fee title acquisition of a site elsewhere in the state that supports a population of *Carex formosa*, and that is equal in size to the 200-acre area.

64. The University of Minnesota's Land Economics website (landeconomics.umn.edu) is the best available source of estimated land values for Minnesota and was used to estimate the value of the habitat that will be purchased to mitigate the Project's taking of *Carex formosa*. The DNR queried this website for value per acre of land classified as "Class 2b timber land (unmanaged)" under state property tax law. An analysis of the value of this land class in 2019 in Clearwater County yields an average value of \$1213 per acre.

65. The DNR estimates a fixed cost of land acquisition of \$12,500 for a land survey, title work and legal closing work.

66. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Carex formosa*, is $(200 \text{ acres} \times \$1213/\text{acre} + \$12,500 = \$255,100$. Compensatory mitigation in the amount of \$255,100 for protecting a currently unprotected population will achieve a net benefit for *Carex formosa*.

Carex pallescens (pale sedge, state-Endangered)

67. The Application describes the distribution of *Carex pallescens* in Minnesota as typically occurring on the margin of fire-dependent forests in Koochiching, Itasca, St. Louis, Lake, and Cook Counties in Minnesota. It may also occur at forest edges where it receives partial sunlight and in roadside ditches and artificial openings. There are nineteen known extant occurrences of the species in the state.

68. The Application proposes to take 40 *Carex pallescens* in two occurrences along the pipeline corridor. The Project will take 31 of the 31 known individuals in St. Louis County and nine of the 172 individuals in Carlton County along the pipeline corridor.

69. The DNR determines that *Carex pallescens* would benefit from the development of a species conservation plan focused on management at the meta-population level. Individual isolated populations may not be viable and planning at a landscape level will enhance the propagation and survival of the species. Funding the development of such a plan would mitigate the Project's taking of *Carex pallescens* and achieve a net benefit for the species.

70. The DNR estimates the cost of developing a conservation plan for *Carex pallescens* is \$90,000 to cover the cost of six months of salary for a biologist, equipment, supplies, travel, and contractual work needed to complete the plan.

71. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Carex pallescens* is \$90,000. Compensatory mitigation in

the amount of \$90,000 for developing a species conservation plan will achieve a net benefit for *Carex pallescens*.

Juglans cinerea (butternut, state-Endangered)

72. The Application describes *Juglans cinerea* as medium to large trees that grow in mesic hardwood forests throughout southeastern and east central Minnesota, with Cass and Aitkin Counties considered the northern limit of the species' range in the state. There are an unknown number of occurrences of the species in the state. The Application proposes to take three of the 23 *Juglans cinerea* along the pipeline corridor.

73. The DNR determines that *Juglans cinerea* would benefit from the development and implementation of a species conservation plan, including diseased tree assessment guidelines, management guidelines to promote natural regeneration, and strategies for seed collection, to guide DNR species conservation and management practices to best enhance the species propagation and survival. Funding the development of a species conservation plan would offset the Project's taking of *Juglans cinerea* and achieve a net benefit for the species.

74. The DNR estimates the cost of developing a species conservation plan for *Juglans cinerea* is \$100,000 to cover the cost of six months of salary for a biologist, equipment, supplies, travel, contractual work, and outreach needed to complete the plan.

75. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Juglans cinerea*, is \$100,000. Compensatory mitigation in the amount of \$100,000 for developing a species conservation plan will achieve a net benefit for *Juglans cinerea*.

Botrychium lanceolatum (narrow triangle moonwort, state-Threatened)

76. The Application describes the distribution of *Botrychium lanceolatum* as generally occurring in moist, shady, mature northern hardwood forests in northeastern Minnesota. There are 140 known extant occurrences of the species in the state. There are no occurrences of the species protected by Scientific and Natural Area designation. The Project proposes to take a total of 201 *Botrychium lanceolatum* in five occurrences, along the pipeline corridor. The Project will impact three occurrences in Cass County, taking four of four known plants in the first occurrence, 128 of 293 known plants in the second, and six of eight known plants in the third. The Project will impact two occurrences in Aitkin County, taking eight of eight known plants in the first occurrence and 55 of 118 known plants in the second.

77. The DNR determines that the conservation of at least 100 acres is necessary to achieve the effective conservation of a *Botrychium lanceolatum* occurrence, and that funding the acquisition of a 100-acre area supporting a currently-unprotected *Botrychium lanceolatum* occurrence would mitigate the Project's taking of *Botrychium lanceolatum* within a single occurrence. Acquisition of five 100-acre areas with currently-unprotected *Botrychium lanceolatum* occurrences would offset the Project's taking of *Botrychium lanceolatum* overall and achieve a net benefit for the species.

78. The DNR concludes that the valuation of suitable mitigation for the taking of *Botrychium lanceolatum* by the Project should be based upon the fee title acquisition of five sites elsewhere in the state that support populations of *Botrychium lanceolatum*, and that are each equal in size to the 100-acre area.

79. The University of Minnesota's Land Economics website (landeconomics.umn.edu) is the best available source of estimated land values for Minnesota and was used to estimate the value of the habitat that will be purchased to mitigate the Project's taking of *Botrychium lanceolatum*. The DNR queried this website for value per acre of land classified as "Class 2b timber land (unmanaged)" under state property tax law. An analysis of the value of this land class in 2019 in Cass and Aitkin Counties yields average values of \$1,866 and \$1,357 per acre for the two counties, respectively.

80. The DNR estimates a fixed cost of land acquisition of \$12,500 for a land survey, title work and legal closing work.

81. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Botrychium lanceolatum*, is $(3 \times (100 \text{ acres} \times \$1,866/\text{acre} + \$12,500)) + (2 \times (100 \text{ acres} \times \$1,357/\text{acre} + \$12,500)) = \$893,700$. Compensatory mitigation in the amount of \$893,700 for protecting five currently unprotected populations will achieve a net benefit for *Botrychium lanceolatum*.

Botrychium mormo (goblin fern, state-Threatened)

82. The distribution of *Botrychium mormo* occurs across northeastern Minnesota in mature mesic hardwood forests with an intact canopy that maintains shaded and moist conditions. There are 142 known extant occurrences of the species in the state. The Project proposes to take a total of three *Botrychium mormo* in three occurrences, along the pipeline corridor.

83. The DNR determines that *Botrychium mormo* would benefit from the development of a species distribution model and survey protocol. The species distribution model will allow the DNR to locate additional populations to protect them and the survey protocol will allow DNR to determine the status of known and potential populations. Funding the development of a model and survey protocol would offset the Project's taking of *Botrychium mormo* and achieve a net benefit for the species.

84. The DNR estimates the cost of developing a species distribution model and survey protocol is \$160,000 to cover the cost of one year of salary for a biologist, equipment, supplies, travel, and contractual work needed to develop the model and survey protocol.

85. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Botrychium mormo* is \$160,000. Compensatory mitigation in the amount of \$160,000 for developing species distribution model and survey protocol will achieve a net benefit for *Botrychium mormo*.

Poa paludigena (bog bluegrass, state-Threatened)

86. The Application describes the distribution of *Poa paludigena* as occurring in small, localized populations in wetland habitats in east-central Minnesota. There are 43 known extant occurrences of the species in the state. One occurrence of the species in Minnesota is protected by Scientific and Natural Area designation. The Project proposes to take a total of 679 *Poa paludigena* in three occurrences along the pipeline corridor. The Project will impact one occurrence in Cass County, taking two of 269 known plants. The Project will impact two occurrences in Aitkin County, taking 595 plants in the first occurrence estimated to contain 15,000 plants and 82 of 598 known plants in the second occurrence.

87. The DNR determines that the conservation of at least 100 acres is necessary to achieve the effective conservation of a *Poa paludigena* occurrence, and that funding the acquisition of a 100-acre area supporting a currently-unprotected *Poa paludigena* occurrence would mitigate the Project's taking of *Poa paludigena* within a single occurrence. Acquisition of three 100-acre areas with currently-unprotected *Poa paludigena* occurrences would mitigate the Project's taking of *Poa paludigena* overall and achieve a net benefit for the species.

88. The DNR concludes that the valuation of suitable mitigation for the taking of *Poa paludigena* by the Project should be based upon the fee title acquisition of three areas elsewhere in the state that support populations of *Poa paludigena*, and that are each equal in size to 100-acre areas.

89. The University of Minnesota's Land Economics website (landeconomics.umn.edu) is the best available source of estimated land values for Minnesota and was used to estimate the value of the habitat that will be purchased to mitigate the Project's taking of *Poa paludigena*. The DNR queried this website for value per acre of land classified as "Class 2b timber land (unmanaged)" under state property tax law. An analysis of the value of this land class in 2019 in Cass and Aitkin Counties yields average values of \$1,866 and \$1,357 per acre for the two counties, respectively.

90. The DNR estimates a fixed cost of land acquisition of \$12,500 for a land survey, title work and legal closing work.

91. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Poa paludigena*, is $(100 \text{ acres} \times \$1,866/\text{acre} + \$12,500) + (2 \times (100 \text{ acres} \times \$1,357/\text{acre} + \$12,500)) = \$495,500$. Compensatory mitigation in the amount of \$495,500 for protecting three currently unprotected populations will achieve a net benefit for *Poa paludigena*.

Carex sterilis (sterile sedge, state-Threatened)

92. The Application describes the distribution of *Carex sterilis* as ranging over a relatively large portion of the state but occurring almost exclusively in calcareous fen habitats. There are 107 known extant occurrences of the species in the state. The Project proposes to take a total of 2,020 *Carex sterilis* in two occurrences, along the pipeline corridor. The Project will impact one occurrence in Marshall County, taking 158 of 738 known plants, and one occurrence in Polk County, taking 1,862 of 5,246 known plants in the Gully 30 Fen.

93. The DNR determines that the conservation of a currently-unprotected *Carex sterilis* occurrence is necessary to achieve the effective conservation of a *Carex sterilis*, and that funding the acquisition of two areas supporting currently-unprotected *Carex sterilis* occurrences would mitigate the Project's taking of *Carex sterilis*.

94. The DNR concludes that the valuation of suitable mitigation for the taking of *Carex sterilis* by the Project should be based upon the fee title acquisition of sites elsewhere in the state that support a population of *Carex sterilis*.

95. As mitigation for the Alberta Clipper Pipeline (Permit #16096), which also impacted state-protected flora in Gully 30 Fen, including *Carex sterilis*, Enbridge conducted surveys to identify fen-associated ecological, botanical, pedological, hydrological, and historical land use features in the Gully 30 Fen area. The report on those surveys (Gully-Trail Fen Inventory Report) submitted January 30, 2012, identified parcels with fen features and listed species.

96. The DNR determines that the acquisition and protection of a 160-acre parcel adjacent to another DNR landholding, identified in the Gully-Trail Fen Inventory Report 2012 as containing *Carex sterilis*, would achieve the effective conservation of *Carex sterilis* and would mitigate the Project's taking of *Carex sterilis* within the Gully 30 Fen in Polk County.

97. The DNR determines that the conservation of currently-unprotected *Carex sterilis* occurrence at least 100 acres is necessary to achieve the effective conservation of a *Carex sterilis* occurrence, and that funding the acquisition of a 100-acre area supporting a currently-unprotected *Carex sterilis* occurrence would mitigate the Project's taking of *Carex sterilis* in Marshall County.

98. The University of Minnesota's Land Economics website (landeconomics.umn.edu) is the best available source of estimated land values for Minnesota and was used to estimate the value of the habitat that will be purchased to mitigate the Project's taking of *Carex sterilis*. The DNR queried this website for value per acre of land classified as "Class 2b rural land" under state property tax law. An analysis of the value of this land class in 2019 in Marshall and Polk Counties yields average values of \$749 and \$761 per acre for the two counties, respectively.

99. The DNR estimates a fixed cost of land acquisition of \$12,500 for a land survey, title work and legal closing work.

100. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Carex sterilis*, is $(160 \text{ acres} \times \$761/\text{acre} + \$12,500) + (100 \text{ acres} \times \$749/\text{acre} + \$12,500) = \$221,660$. Compensatory mitigation in the amount of \$221,660 for protecting two currently unprotected occurrences will achieve a net benefit for *Carex sterilis*.

Eleocharis rostellata (beaked spikerush, state-Threatened)

101. The Application describes the distribution of *Eleocharis rostellata* as occurring in the state only in the Minnesota River valley and in the Glacial Lake Agassiz beach ridges in the prairie region. This species occurs in calcareous seepage fens and spring fens in acid peatlands.

There are 18 known extant occurrences of *Eleocharis rostellata* in the state. The Project proposes to take 6,013 of the 18,988 known *Eleocharis rostellata* in the Gully 30 Fen, in Polk County.

102. The DNR determines that the protection of a currently-unprotected *Eleocharis rostellata* occurrence is necessary to achieve the effective conservation of *Eleocharis rostellata* and that funding the acquisition of an area supporting a currently-unprotected *Eleocharis rostellata* occurrence would mitigate the Project's taking of *Eleocharis rostellata*.

103. The DNR concludes that the valuation of suitable mitigation for the taking of *Eleocharis rostellata* by the Project should be based upon the fee title acquisition of sites elsewhere in the state that support a population of *Eleocharis rostellata*.

104. As mitigation for the Alberta Clipper Pipeline (Permit #16096), which also impacted state-protected flora in the Gully 30 Fen, including *Eleocharis rostellata*, Enbridge conducted surveys to identify fen-associated ecological, botanical, pedological, hydrological, and historical land use features in the Gully 30 Fen area. The report on those surveys (Gully-Trail Fen Inventory Report) submitted January 30, 2012, identified parcels with fen features and listed species.

105. The DNR determines that the acquisition and protection of a 400-acre parcel, identified in the Gully-Trail Fen Inventory Report 2012 as containing *Eleocharis rostellata* and *Rhynchospora capillacea*, that is adjacent to another DNR landholding, would achieve the effective conservation of *Eleocharis rostellata* and would mitigate the Project's taking of *Eleocharis rostellata* within Gully 30 Fen in Polk County.

106. The University of Minnesota's Land Economics website (landeconomics.umn.edu) is the best available source of estimated land values for Minnesota and was used to estimate the value of the habitat that will be purchased to mitigate the Project's taking of *Eleocharis rostellata*. The DNR queried this website for value per acre of land classified as "Class 2b rural land" under state property tax law. An analysis of the value of this land class in 2019 in Polk County yields an average value of \$761 per acre.

107. The DNR estimates a fixed cost of land acquisition of \$12,500 for a land survey, title work and legal closing work.

108. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Eleocharis rostellata* and *Rhynchospora capillacea*, is $(400 \text{ acres} \times \$761/\text{acre} + \$12,500) = \$316,900$. Compensatory mitigation in the amount of \$316,900 for protecting a currently unprotected occurrence will achieve a net benefit for *Eleocharis rostellata* and *Rhynchospora capillacea*.

Rhynchospora capillacea (hair-like beak rush, state-Threatened)

109. The Application describes the distribution of *Rhynchospora capillacea* as occurring more widely through northwestern, western, and southern Minnesota. This species occurs in calcareous fens and spring fens. There are 88 known extant occurrences of

Rhynchospora capillacea in the state. The Project proposes to take 158 of the 167 known *Rhynchospora capillacea* in the Gully 30 Fen, in Polk County.

110. The DNR determines that the protection of a currently-unprotected *Rhynchospora capillacea* occurrence is necessary to achieve the effective conservation of a *Rhynchospora capillacea* and that funding the acquisition of an area supporting a currently-unprotected *Rhynchospora capillacea* occurrence would mitigate the Project's taking of *Rhynchospora capillacea*.

111. The DNR holds that the valuation of suitable mitigation for the taking of *Rhynchospora capillacea* by the Project should be based upon the fee title acquisition of a site elsewhere in the state that supports a population of *Rhynchospora capillacea*.

112. The DNR determines that the acquisition and protection of the 400-acre parcel, identified in paragraph 105 would achieve the effective conservation of *Rhynchospora capillacea* and would mitigate the Project's taking of *Rhynchospora capillacea* within the Gully 30 Fen in Polk County.

113. Based upon the available information, the DNR concludes that a reasonable mitigation estimate for the taking of *Rhynchospora capillacea*, is included in paragraph 108.

D. The Proposed Permit with Compensatory Mitigation satisfies Minn. Stat. § 84.0895, Minn. R. 6212.1800 and Minn. R. 6212.2100.

114. Compensatory mitigation in the amount of \$2,532,860 would benefit *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea*, and outweigh the harm caused by the Project.

115. Takings under the permit, subject to the terms and conditions therein, will not be detrimental to *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea*.

116. As required by Minn. Stat. § 84.0895, the Project "enhances the propagation or survival of the affected species," and "the social and economic benefits of the act outweigh the harm caused by it."

E. The Proposed Permit Satisfies the Prohibition on State Action Affecting the Environment.

117. The Minnesota Environmental Policy Act ("MEPA") prohibits State actions that cause pollution, impairment or destruction:

No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or

destruction of air, water, land, or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, and destruction.

Minn. Stat. § 116D.04, subd. 6.

118. "Pollution, impairment or destruction" is defined by Minnesota law as:

conduct . . . which violates, or is likely to violate, any environmental quality standard, limitation, rule, order, license, stipulation agreement, or permit of the state or any instrumentality, agency, or political subdivision thereof which was issued prior to the date the alleged violation occurred or is likely to occur or any conduct which materially adversely affects or is likely to materially adversely affect the environment.

Minn. Stat. § 116B.02, subd. 5.

119. In reviewing the administrative record, including the FEIS, the Application, and the NHIS Review and Avoidance Plan, the DNR considered the quality and severity of any adverse effects of the project on state-Threatened and state-Endangered species, including any potential long-term adverse effects to those resources, the types of resources at issue, the potential significant consequential effects of the proposed takings on other natural resources, and the direct and consequential impacts of the proposed takings on the environment.

120. As detailed herein, the proposed takings under the Application, subject to the conditions of the permit will comply with all applicable state environmental protection standards, including the requirements of Minn. Stat. § 84.0895.

121. The potential effects on natural resources resulting from the Project and Project alternatives were comprehensively analyzed within the Application.

122. The Project will be also subject to other state and federal requirements and must comply with all applicable environmental protection standards, including the requirements of the water appropriation permit and the calcareous fen management plan for the Gully 30 Fen.

123. Compliance with these regulatory requirements serves to ensure that the proposed takings under the Permit will not result in pollution, impairment, or destruction of natural resources.

124. As outlined above, the DNR has considered the proposed takings under the permit in accordance with MEPA, and determines that the proposed takings satisfy the applicable statutory requirements.

Based upon the above Findings of Fact, the DNR makes the following:

CONCLUSIONS

1. DNR concludes that in order to attain a net benefit and avoid any detrimental effects to Minnesota's populations of *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea*, it is necessary to condition any takings permit issued under Minn. Stat. § 84.0895, subd. 7(a)(2) and (4) on mitigation for that taking. The DNR concludes that compensatory mitigation in the amount of \$2,532,860 is reasonable.

2. The DNR concludes that pursuant to Minn. Stat. § 84.0895, subds. 1 and 7(a)(2) and Minn. R. 6212.1800, subp. 2 and Minn. R. 6212.2100(A), the Project, as mitigated, will enhance the propagation or survival of *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea* as described herein.

3. The DNR concludes that pursuant to Minn. Stat. § 84.0895, subds. 1 and 7(a)(4) and Minn. R. 6212.1800, subp. 2 and Minn. R. 6212.2100(C), the social and economic benefits of the Project as mitigated outweigh the harm caused by the Project to *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea* as described herein.

4. Takings under the permit, subject to the terms and conditions therein, will not be detrimental to *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea*. See Minn. Stat. § 84.0895; Minn. R. 6212.1800, subp. 2.

5. DNR has properly evaluated all other alternatives to the takings proposed in the Application and rejected such alternatives as not practical or feasible. Minn. Stat. § 84.0895, subd. 7(c).

6. DNR will issue an Endangered and Threatened Species Taking Permit for the Project that requires a compensatory mitigation payment to the DNR of \$2,532,860 to be used by the DNR to fund research, conservation planning, surveys, land acquisition and protection, and/or land management activities contributing to the recovery and eventual delisting of *Carex formosa*, *Carex pallescens*, *Juglans cinerea*, *Botrychium lanceolatum*, *Botrychium mormo*, *Poa paludigena*, *Carex sterilis*, *Eleocharis rostellata*, and *Rhynchospora capillacea* in Minnesota, and so create a net benefit to the species in Minnesota.

7. DNR may immediately cancel any takings permit upon determination that cancellation is necessary for the conservation of natural resources or for the welfare of particular specimens or is in the public interest. Minn. R. 6212.1800, subp. 8.

8. Any Findings of Fact that might properly be termed Conclusions of Law, and any Conclusions of Law that might properly be termed Findings of Fact, are hereby adopted as such.

Based upon the above Findings of Fact and Conclusions, the DNR makes the following:

ORDER

1. Based upon all the files, records, and proceedings in this matter and upon the DNR's Findings of Fact and Conclusions, Permit to Take Endangered or Threatened Species Incidental to Development # 28565 is hereby issued to Enbridge subject to the conditions set forth in the permit.

DNR Authorized Signature (*wet or e-signature*):

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Approved and adopted this 12th day of November, 2020
Ecological and Water Resources Division Director Steve Colvin
STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES