



# Supplemental Information for a Public Water Work Permit Application

Enbridge Energy, Limited Partnership • Line 3 Replacement Project

November 2020

ENBRIDGE®

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# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| April 2019 Wetland Mitigation Plan | April 2019 L3R Compensatory Wetland Mitigation Plan |
| ATWS | Additional temporary workspace |
| BMPs | Best Management Practices |
| BSA | Bank Service Area |
| BWSR | Minnesota Board of Water & Soil Resources |
| CFR | Code of Federal Regulations |
| Designated Route | the Project's Preferred Route inclusive of RSA-05 and RSA-22 |
| District Mitigation Policy | 2009 St. Paul District Mitigation Policy |
| DOC-EERA | Minnesota Department of Commerce, Energy Environmental Review and Analysis |
| EIS | Environmental Impact Statement |
| Enbridge | Enbridge Energy, Limited Partnership |
| EPP | Environmental Protection Plan |
| Existing Line 3 | Enbridge's existing Line 3 pipeline |
| FdL | Fond du Lac Band of Lake Superior Chippewa |
| FEIS | final EIS |
| HDD | horizontal directional drill |
| INS | Invasive and Noxious Species |
| Interagency Compensatory Wetland Mitigation Guidance | October 2019 guidance from the USACE, MPCA and MDNR |
| L3R or Project | Line 3 Replacement Project |
| LIDAR | Light Detection and Ranging |
| May 2020 Order | May 1, 2020 MPUC-issued Order Finding Environmental Impact Statement Adequate, Granting Certificate of Need as Modified, and Granting Routing Permit as Modified |
| MDNR | Minnesota Department of Natural Resources |
| Mitigation Plan | February 2020 L3R Compensatory Wetland Mitigation Plan (latest version) |
| Mitigation Rule | 2008 Final Rule regarding Compensatory Mitigation for Losses of Aquatic Resources |
| MP | milepost |
| MPARS | Minnesota Department of Natural Resources Permitting and Reporting System |
| MPCA | Minnesota Pollution Control Agency |
| MPUC | Minnesota Public Utilities Commission |
| MPUC Applications | certificate of need and a route permit |
| MPUC CN Order | September 5, 2018 MPUC-issued written order granting the certificate of need as modified and requiring filings |
| MPUC FEIS Order | May 1, 2018 MPUC-issued written order finding the revised FEIS adequate |
| MPUC RP Order | October 26, 2018 MPUC-issued written route permit order |
| NHIS | Natural Heritage Information System |
| NPDES | National Pollutant Discharge Elimination System |
| OHWL | Ordinary High Water Level |
| PCMP | Post-Construction Wetland and Waterbody Monitoring Plan |
| Procedures | Summary of Construction Methods and Procedures |
| PWW | Public Waters Work |

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|---|---|
| RAs | route permit alternatives |
| RSAs | Route Segment Alternatives |
| SDS | State Disposal System |
| SWPPP | Stormwater Pollution Prevention Plan |
| USACE | U.S. Army Corps of Engineers |
| VMP | Post-Construction Vegetation Management Plan for Public Lands and Waters |

# 1.0 INTRODUCTION

Enbridge Energy, Limited Partnership ("Enbridge") submits this revised Supplemental Information for a Public Waters Work ("PWW") Permit for the portions of its Line 3 Replacement Project ("L3R" or "Project") that cross public water[1] wetlands that are located on private land. Enbridge submitted an online application titled "*Enbridge Line 3 Replacement Public Waters Works Permit Application*" through the Minnesota Department of Natural Resources ("MDNR") Permitting and Reporting System ("MPARS") in September 2018. The MDNR determined the application complete on March 11, 2019. A public comment period was held between March 22, 2019 and May 8, 2019. This revision ("Revision 3") incorporates Project changes since the version submitted in December 2019 as a result of Enbridge's ongoing coordination with federal, Tribal, and state regulatory agencies as well as landowners and other stakeholders, and response to MDNR comments received in 2020. Information on the Project applicant is below.

Line 3 Replacement Project
Enbridge Energy, Limited Partnership
11 East Superior Street, Suite 125
Duluth, Minnesota 55802

Contact: Bobby Hahn
218-522-4751 (office)
Bobby.Hahn@enbridge.com

Barry Simonson
218-522-4825 (office)
Barry.Simonson@enbridge.com

Enbridge will serve as the "Lessee" for work contemplated in this application. Information on private landowners at each of the public water wetland features are presented in Section 5.0 of this document. Enbridge understands that MDNR will coordinate notification and review of all permit application materials with other affected agencies (e.g., the Minnesota Board of Water & Soil Resources ("BWSR"), local governmental units, and relevant watershed districts and soil and water conservation districts) prior to issuance of any permit for the Project.

# 2.0 PROJECT BACKGROUND

The Project is a pipeline integrity- and maintenance-driven program designed to address identified mechanical integrity deficiencies on the existing Line 3 pipeline and to return the pipeline to the operating capabilities for which it was designed. L3R consists of approximately 355 miles of new 36-inch-diameter pipeline traversing the states of North Dakota, Minnesota, and Wisconsin, and terminating at the existing Enbridge Superior terminal facility near Superior, Wisconsin. This Application includes activities in public waters resulting from replacement of the existing 34-inch-diameter Line 3 pipeline with 36-inch[2]-diameter pipeline and associated facilities in Minnesota. Enbridge's route generally follows the existing Line 3 pipeline along the Enbridge Mainline System right-of-way from the North Dakota/Minnesota border in Kittson County to the Clearbrook Terminal in Clearwater County. Next, L3R turns south from Clearbrook to generally follow an existing third-party crude oil pipeline right-of-way to Hubbard County. The route then turns east to generally

[1] Public water or public waters mean those waters of the state identified under Minnesota Statutes, section 103G.005, subdivision 15 or 15a, or 103G.201, as shown on the public water inventory maps.

[2] 36-inch-diameter steel pipeline is a more standard pipeline than 34-inch in the industry and among the Enbridge Mainline System. The decision to replace with 36-inch-diameter pipeline makes pipe, pipefitting, valves, and maintenance equipment more readily available. A 36-inch pipeline is more energy efficient than a 34-inch pipeline.

follow other existing electric transmission lines until it rejoins the Enbridge Mainline System right-of-way in St. Louis County, through the Fond du Lac Band of Lake Superior Chippewa ("FdL") Reservation to the Minnesota/Wisconsin border in Carlton County (see Figure 2.0-1).

## 2.1 Construction Activities and Related Plans

Enbridge will install the pipeline using industry-accepted construction methods. Pipeline construction will typically follow a sequential process, which includes: survey and staking, clearing and site preparation, pipe stringing, bending, welding, coating, trenching, lowering-in, backfilling, hydrostatic testing,[3] and cleanup and restoration. Additional information regarding the construction sequence is presented in Section 2.6 of the Summary of Construction Methods and Procedures (the "Procedures"), which is included as Appendix A to Enbridge's Environmental Protection Plan ("EPP") (see Attachment A).

The Project will cross waterbodies and wetlands using the crossing methods described in Sections 3.0 and 4.0 of the Procedures and Sections 2.0 and 3.0 of the EPP (see Attachment A). In wetland features, Enbridge will reduce the construction workspace from its standard 120-foot-wide workspace in uplands to a 95-foot-wide workspace. Figure 5 of the EPP and Section 2.3 of the Procedures presents the typical workspace dimensions for the Project.

Additional temporary workspace ("ATWS")[4] will be required outside of the typical construction workspace to facilitate specific aspects of construction. ATWS are planned in areas needed to stage equipment and materials, hold spoil material, and where construction methods will require additional workspace. Additional information regarding ATWS is presented in Section 2.5 of the Procedures (see Attachment A).

Should construction occur during winter conditions, Enbridge will follow the procedures and construction techniques outlined in its Winter Construction Plan (see Attachment B) which differ or are additive to those described in the EPP.

## 2.2 Operations Activities

Enbridge will maintain the Project's operational right-of-way for the life of the Project. Enbridge will generally maintain a 50-foot operational right-of-way centered over the pipeline following restoration. At trenched waterbodies, Enbridge will maintain a 10-foot-wide corridor centered on the pipeline free of woody shrubs, and a 30-foot-wide corridor free of trees within the riparian area of the waterbody crossing to maintain the integrity of the pipeline. At horizontal directional drill ("HDD") crossings, Enbridge will maintain a 30-foot-wide corridor centered on the pipeline free of all woody vegetation to maintain the integrity of the pipeline and to facilitate aerial inspection. This clearing is depicted in Figures 4.1-1 and 4.5-1 of the of the Procedures (see Appendix A of Attachment A).

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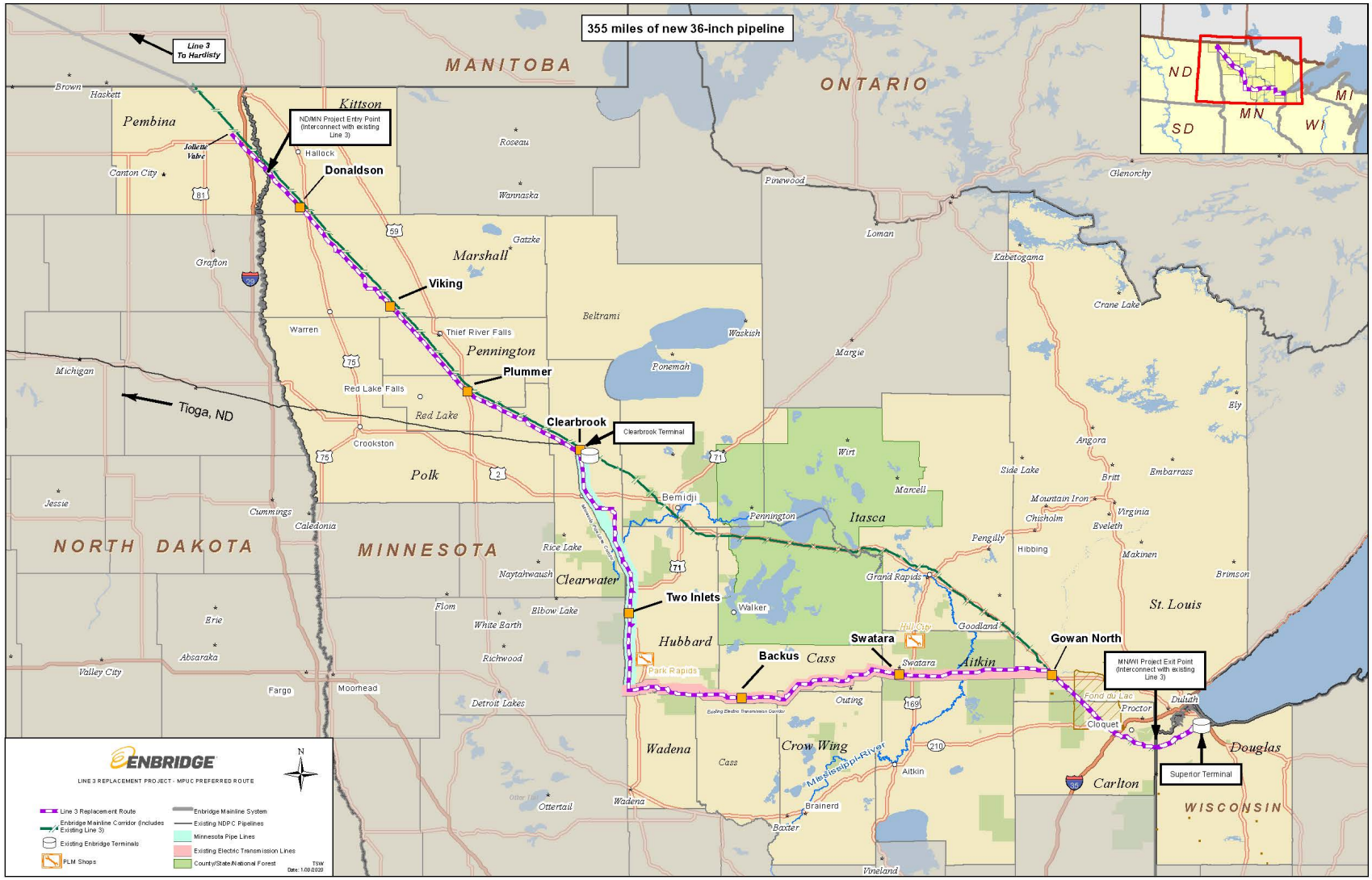
[3] Hydrostatic testing is a process of verifying the integrity of the pipeline before it is placed into service. Hydrostatic testing involves filling the pipeline with water to a designated pressure and holding it for a specified period of time.

[4] ATWS is temporary construction workspace needed when encountering environmental features that require special construction methods.

**Figure 2.0-1 General Project Location Map**



Enbridge will maintain the operational right-of-way by removing woody shrubs and trimming branches overhanging the right-of-way approximately every 5 years to preserve pipeline integrity and to facilitate inspection of the pipeline. Title 49 Code of Federal Regulations ("CFR") 195.412(a) states that "each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way." Enbridge's preferred method to perform these required inspections is by flying. To perform these inspections aerially, the right-of-way needs to be adequately cleared to be able to identify abnormal surface conditions. Other maintenance activities (e.g., maintenance digs) may occur as necessary over the life of the pipeline. Routine vegetation maintenance along the operational right-of-way may include mowing, grubbing, and treatment/ mitigation of undesirable species once identified, including herbicide treatment as approved by the appropriate agencies.

## 2.3 MPARS Updates

A number of the fields in the September 2018 MPARS application require updates to Enbridge's initial submittal that are not addressed elsewhere in this Supplemental Information Package.

Enbridge is required to provide applicant details. Enbridge now owns the property on which the Unnamed Public Water Wetland at milepost ("MP") 853.7 (see Section 3.2) is located. Enbridge has also provided proof of easements or affidavits for all properties considered in these application materials under separate cover.

Items 3 and 4 require entry of an anticipated start and expected completion date for the entire Project. Enbridge plans to commence construction of the new pipeline and associated facilities as soon as all construction related regulatory approvals have been obtained; the analyses in these materials assume a construction start date of early December 2020.

Item 15 requires description of mitigation plans for the portions of the Project that will impact public waters:

- Enbridge's EPP outlines construction-related environmental policies, procedures, and protection measures developed as a baseline for construction. Enbridge has updated the EPP to address comments received from regulatory agencies, including the MDNR, and other stakeholders. The EPP has been expanded to include an Invasive and Noxious Species ("INS") Management Plan that addresses how Enbridge will manage terrestrial and aquatic INS species. The INS Management Plan is included as Appendix B of the EPP in Attachment A.

- Enbridge's Procedures outline the various construction methods that Enbridge will utilize to install the pipeline, and the decision-making process that occurs during design and in the field when identifying the appropriate crossing techniques. This document provides a more complete description of the construction techniques outlined in the EPP and is included as Appendix A to the EPP in Attachment A.

- The Winter Construction Plan provides an overview of the procedures that will be employed should construction occur during winter conditions. This plan has been updated to address comments received from regulatory agencies, including the MDNR. The Winter Construction Plan is included as Attachment B.

- The Post-Construction Wetland and Waterbody Monitoring Plan ("PCMP") focuses on monitoring of aquatic resources affected by the Project after construction and restoration are complete. This plan has been developed with input from the U.S. Army Corps of Engineers ("USACE"), Minnesota Pollution Control Agency ("MPCA"), and MDNR. All public water crossings subject to this PWW permit application will be monitored in accordance with the PCMP. Enbridge understands that MDNR's expectation is that the public water wetlands will be restored to pre-construction conditions for both elevation and vegetation. The PCMP outlines the steps that Enbridge will take to ensure that both of these restoration activities occur. The PCMP is included as Attachment C.

  The PCMP: (i) requires pre-construction data collected to establish aquatic resources baseline conditions; (ii) establishes the data, analyses, and procedures required to monitor topography, hydrology and vegetation following completion of Project construction; (iii) establishes objective and verifiable ecological performance standards to evaluate the success of restoration of aquatic resources to pre-construction conditions; (iv) requires the submission of annual monitoring reports to the USACE, MPCA, and MDNR and an annual meeting with the agencies to review the results; and (v) includes an adaptive management approach which specifies types of corrective actions that may be employed in the event that monitoring identifies a problem in achieving the final goal of restoring the temporarily impacted wetlands to pre-construction conditions.

- Enbridge's Natural Heritage Information System ("NHIS") Review and Avoidance Plan contains a review of NHIS data and other MDNR data sources for rare or sensitive ecological resources along the Project; an assessment of the potential for impacts on those resources; and a description of measures for avoiding or minimizing impacts. The NHIS Review and Avoidance Plan is included in Attachment D.

- Enbridge has developed a Post-Construction Vegetation Management Plan for Public Lands and Waters ("VMP")[5] included as Attachment E. The Planting Plan, included as Appendix A of the VMP, identifies the permanent seed selection criteria for public lands and waters.

Item 17 summarized the status of the Minnesota Public Utilities Commission's ("MPUC") issued route permit and certificate of need. This information has been updated and moved to Section 6.1 of these materials.

# 3.0 WORK IN PUBLIC WATERS

Enbridge's PWW Permit application requests MDNR authorization to conduct work within the jurisdictional boundaries of five public water wetlands that are located on private lands. Enbridge updated Project wetland neckdowns surrounding one public water wetland following survey in 2020. All other public water features crossed by the Project are addressed in Enbridge's application for a License to Cross Public Waters; Enbridge has submitted an update to the License to Cross Public Waters application concurrent with this revised Supplemental Information Package.

[5] For purposes of this Application, the term "public land" includes all tracts or lots of real property belonging to the state and under the control and supervision of the Commissioner of Natural Resources.

Enbridge is proposing this work under two PWW activity types: "Roadway/Pathway Fill" (one crossing) and "Soil Removal" (four crossings). These activity types were confirmed by MDNR Area Hydrologists and Environmental Review staff. Table 3.0-1 provides a summary of the PWW crossing requests by type, using the site reference name as entered into MPARS.

**Table 3.0-1**
**Summary of MPARS PWW Requests**

| Site Reference Name | Activity Type | Description of Activity |
|---|---|---|
| Unnamed – Public Water Wetland at MP 912.1 | Road/Pathway Fill | Construction of an ATWS within the public water wetland to accomplish a road crossing using the bore method. |
| Unnamed – Public Water Wetland at MP 853.7 | Soil Removal | Crossing the public water wetland with conventional pipeline techniques, including trenching, spoil storage, placement of the pipe, and replacing soil over the installed pipeline. |
| Frandsen Slough – Public Water Wetland at MP 988.3 | Soil Removal | Crossing the public water wetland with conventional pipeline techniques, including trenching, spoil storage, placement of the pipe, and replacing soil over the installed pipeline. |
| Scout Camp Pond – Public Water Wetland at MP 1041.2 | Soil Removal | Crossing the public water wetland surrounding Spring Brook with conventional pipeline techniques, including trenching, spoil storage, placement of the pipe, and replacing soil over the installed pipeline. |
| Unnamed – Public Water Wetland at MP 1120.2 | Soil Removal | Crossing the public water wetland with conventional pipeline techniques, including trenching, spoil storage, placement of the pipe, and replacing soil over the installed pipeline. |

The following sections present information regarding each of these five crossings to supplement the information in the MPARS submittal and previous revisions of the Supplemental Information Package. For all crossings, the anticipated changes in water and related land resources are temporary and the areas will be restored following construction. Enbridge does not anticipate long-term impacts to the natural environment. The work proposed in the application materials is reasonable and practicable and Enbridge's proposed construction and restoration measures will adequately protect public safety and promote public welfare.

## 3.1 Unnamed – Public Water Wetland at MP 912.1: Road/Pathway Fill

### 3.1.1 Supplemental Information

Enbridge will construct an ATWS within this public water wetland as described in the MPARS submittal. Although it is Enbridge's preference to place ATWS outside of wetlands, the placement of this ATWS is unavoidable due to the location of the existing pipeline corridor to the east, and the need to have ATWS to accomplish the road bore.

MDNR has advised Enbridge that the placement of construction mats is considered temporary fill for purposes of the PWW application. Enbridge will place construction mats in the ATWS so that the area can be used for equipment storage. The use of construction mats in wetlands are described in Section 3.1 and Figures 30 – 34 of the EPP (Attachment A) and Section 3.0 of the Procedures (Appendix A of Attachment A). To calculate the cubic yards of construction mat fill proposed at this public water wetland, Enbridge assumed that construction mats will be installed over the entire 100-foot x 75-foot ATWS. Enbridge used a standard construction mat depth of 8 inches, or 0.67 foot, when calculating construction mat fill volumes.

- Construction Mat Fill Calculation: 100 feet long * 75 feet wide * 0.67 foot deep / 27 = 186.11 cubic yards of fill

Enbridge will then place excavated soil from the bore operations within the ATWS boundaries and on top of the construction mats. Enbridge estimates that it will temporarily store approximately 170 cubic yards of fill on mats within the ATWS from the bore operations.

- Total Fill Calculation: 170 cubic yards (bore pit excavation) + 186 cubic yards (construction mat fill) = 356 cubic yards of fill

Enbridge also assumed that the entire ATWS will be filled with construction mats when calculating the area of impact presented in MPARS (0.18 acre). The duration of temporary fill impact is 75 days. The timing of construction mat placement and removal is subject to receipt of all permits and regulatory approvals.

Placement of the excavated soil within the public water wetland is justified because ATWS is needed on either side of the road bore to be able to complete the crossing. The spoil must be temporarily stored adjacent to the bore pits so that it can be effectively replaced once the crossing is complete. The ATWS and the excavated soil cannot be moved to the other side of the construction workspace, as equipment would then need to operate over active, foreign pipelines. It also cannot be moved further to the south away from the road, as the ATWS must be adjacent to the bore operations and moving the ATWS to the south would merely transfer impacts to another portion of the same wetland complex. Enbridge has adopted the following MDNR-proposed alternative practices to reduce the likelihood for long-term impacts to this public water wetland:

- A description of Enbridge's proposed activities in wetlands, along with ATWS considerations and Best Management Practices ("BMPs") are presented in Section 3.0 of Enbridge's EPP and Procedures (Attachment A).

- In addition, based on Enbridge's understanding of the MDNR's concerns at this specific resource, Enbridge will commit to installing fabric barriers on top of the construction mats placed within this public water wetland prior to storing road bore materials within the public water wetland. Enbridge will remove the barrier after the bore segment is tied-in to the mainline pipe and the soil is able to be returned to the excavated area. The timing for fabric barrier removal will be subject to construction progress. This commitment should be documented in permits issued by the MDNR and will be communicated to Enbridge's pipeline contractor.

- Regarding the request for double erosion control measures, as described in Section 3.4 of the EPP, Enbridge will properly install and maintain redundant erosion and sediment control BMPs immediately after clearing and prior to or at the same time as initial ground disturbance at wetlands located within 50 feet of the Project and where stormwater flows to the wetland. Enbridge will comply with the conditions of the MPCA National Pollutant Discharge Elimination System ("NPDES")/State Disposal System ("SDS") Construction Stormwater General Permit and the Stormwater Pollution Prevention Plan ("SWPPP"), including the use of erosion and sediment control BMPs as outlined in Section 2.2 of the EPP.

Revegetation of affected areas is presented in Section 7.0 of the EPP (Attachment A). Wetland survey indicates this is a Shrub-Carr community with reed canary [not dominant species]. Enbridge will use the Wetland Rehabilitation (34-171) seed mix where INS treatment has

occurred. Seed mixes are shown on the Environmental Crossing Plan in Attachment F. Post-construction monitoring of wetlands is outlined in the PCMP (see Attachment C).

### 3.1.2 MPARS Updates

Attachment F contains an updated Environmental Crossing Plan, which contains pre-construction elevation (LIDAR), details on existing vegetation (including locations of INS), the specific seed mixes that will be used for restoration, as well as the location of spoil storage within the ATWS boundaries.

## 3.2 Unnamed – Public Water Wetland at MP 853.7: Soil Removal

### 3.2.1 Supplemental Information

Enbridge will cross this public water wetland using the standard wetland construction method. This method is described in Section 3.3 of the Procedures and Section 3.0 of the EPP (Attachment A). The typical crossing of wetlands with a 40-foot workspace offset are depicted on Figure 31 and 33 of the EPP.

Trench width excavation will vary depending on topography and soil conditions. At this location, Enbridge has planned for construction across the public water wetland to result in excavation of a pipeline trench of 14 feet wide at the top of the trench with sloped banks to a depth of 9 feet. To calculate the cubic yards of material excavated in the pipeline trench at this public water wetland, Enbridge considered the total public water feature centerline crossing of 810 feet. This calculation will therefore be conservative, as the trench side slopes were not factored into the calculation.

- Excavation Calculation: 810 feet long * 14 feet wide * 9 feet deep / 27 = 3,780 cubic yards of excavation

Enbridge anticipates that soil excavated from the trench will be placed on the non-working, or "spoil" side of the construction workspace, which is an approximate 40-foot-wide area adjacent to the trench. The spoil will be placed in large "spoil piles" that will be likely contained within this linear 40-foot area, pending site-specific conditions. If the soil is very saturated, there may be concerns regarding storing spoil over the existing pipelines on the spoil side and Enbridge may consider storing the soil on the working side (see Figures 31 and 33 of the EPP [Attachment A]). The excavated soil will temporarily "fill" the wetland while being stored. The excavated soil will typically be stored for up to 5 days. Following placement of the pipeline in the trench, the 3,780 cubic yards of excavated soil will eventually be backfilled in the trench over the pipeline.

Placement of the excavated soil within the public water wetland on the spoil side is justified because the most efficient manner to complete the crossing is to use the excavator to dig the trench through the wetland and place the excavated soil adjacent to the trench on the spoil side. Then, it may be easily pulled back into the trench in the vicinity of which it was removed once the pipe is installed.

Alternatives to this practice include storing spoil on the working side or transporting all of the excavated soil out of the wetland and into adjacent areas. The Project has not been designed to accommodate this soil storage and either alternative approach would present constructability concerns.

Storing spoil on the working side is not preferred as the storage will interfere with equipment and personnel travel needed to install the pipeline. It also would not avoid impacts on the public water wetland, as the working side is also within the public water wetland.

Transporting soil away from the wetland to adjacent non-wetland areas would likely require expansion of the existing easterly and westerly ATWS closer to the wetland crossing. Additional tree clearing would need to occur on the west side of the wetland to expand the existing ATWS, and additional wetland impacts cannot be avoided. Enbridge expects that these soils will be heavily saturated and will be more difficult to transport and return to the trench. Loading spoil into trucks to transport out of the wetland will result in soil mixing. There is also the possibility of upland and wetland soil mixing when the soil is moved back to the trench. Hauling spoil and material increased distances back and forth from the construction workspace to ATWS would significantly increase the duration of construction across the wetland due to the time it would take to haul the spoil back and forth along the construction workspace. This would also lead to longer periods of time of open trenches, increased spoil storage times, and would increase the amount of time between backfilling and restoration of the site, which could decrease soil productivity and reduce the effectiveness of restoration. It will also increase the number and weight of the equipment that must use the construction matting to transport soil to and from the trench, which will contribute to compaction. Currently, the application states that the excavation and replacement activities across this wetland complex will take no more than 5 days. This will need to be extended to approximately 7 to 10 days if all of the trench spoil must be removed from the wetland, stored outside of the wetland in ATWS, and then returned to the trench.

Enbridge finds that temporary storage of spoils adjacent to the trench line on the spoil side is prudent and feasible as compared to storing soil on the working side, or the alternative of moving the soils out of the wetland. It will allow Enbridge to quickly replace the soil in its native location following installation of the pipeline, and more quickly complete the wetland crossing. It will avoid the need for tree clearing and expanded ATWS to store the excavated soil. It will also lessen the possibility of long-term impacts on the public water wetland by encouraging timely and successful restoration by limiting the possibility of soil mixing, compaction, and seedbed disturbance.

Enbridge will also place construction mats of an approximate 0.67-foot depth on the 55-foot-wide working side of the construction workspace to allow for equipment travel. Construction mats will temporarily “fill” the wetland when placed for construction as presented below. Enbridge has assumed a conservative 40-foot-wide construction mat travel lane for purposes of this application.

- Construction Mat Fill Calculation: 810 feet long * 40 feet wide * 0.67 foot deep / 27 = <u>804 cubic yards of fill</u>

For the fill calculation, Enbridge proposes to use the amount of excavated soils calculated above and add it to the fill assumed for a conservative 40-foot-wide lane of mats.

- Total Fill Calculation: 3,780 cubic yards (excavation fill) + 804 cubic yards (construction mat fill) = <u>4,584 cubic yards of fill</u>

Enbridge’s December 2019 application materials committed to removing mats within 90 days in response to MDNR’s prior request at this location. This was based on a July or August excavation date, where restoration could occur immediately following construction.

However, Project construction details have evolved since that submittal. Enbridge's current construction schedule assumes a start date of early December 2020. Enbridge must also accommodate likely timing restrictions relative to this crossing and provide for treatment of INS. Therefore, Enbridge is proposing to install the mats as soon as January 15, 2021 and will remove the mats before October 1, 2021. Mats will therefore be in place for no more than 260 days. However, 76 of these days occur between January 15 and March 31 during winter conditions. It is Enbridge's intention to remove the mats as soon as possible following restoration. Note that the number of days are highly dependent on construction start date; this number estimates Enbridge's best estimate at the time of this permit application update.

There are two relevant timing restrictions related to this crossing that extend the amount of time in which mats are placed within the public water wetland. Enbridge has committed to prohibiting construction activities between MPs 853.4 and 854.1 (within this public water wetland) from May 1 to July 31 at the MDNR's request to avoid potential impacts on the Nelson's sparrow and yellow rail, both Minnesota species of concern, as outlined in Section 4.3.2.2 of the NHIS Review and Avoidance Plan in Attachment D. In addition, the MPCA has included a draft condition in its draft Section 401 Water Quality Certification that restricts Enbridge from constructing within wetlands between April 1 and July 1. Therefore, Enbridge will need to conduct work in this public water wetland before April 1 and after July 31. Should this not be a final condition to the Section 401 Water Quality Certification, this schedule could be modified.

Enbridge is planning to complete installation of the pipeline during the winter, before the April 1 timing restriction. Construction during winter conditions is an impact minimization technique that will result in fewer impacts on the public water wetland. However, Enbridge will need to revisit the public water wetland following July 31 to conduct final restoration, observe the trench contours, and restore the trench to final grade, as winter construction will have likely left crowning along the trench line. This work must occur from the construction mat travel lane. The construction mat travel lane will not be removed during the work restriction periods noted above so as to minimize disturbance to the wetland by limiting the number of times that equipment enters the wetland to place and retrieve mats. Wetland impacts related to travel and compaction would be essentially doubled should Enbridge need to place mats for the installation of the pipeline prior to April 1, retrieve them for the period between April 1 and July 31, re-install them on or near August 1 for the purposes of construction workspace shaping and restoration, and then remove them following restoration. Leaving mats in place throughout all phases of construction minimizes disturbance to the wetland by limiting the number of times that equipment enters the wetland to place mats and allows for safe passage of construction/restoration equipment along the construction workspace.

The presence of the construction mat travel lane will also benefit Enbridge's efforts to address INS. The portion of this wetland that would be crossed by the construction workspace is a shallow marsh wetland community dominated by reed canary grass (*Phalaris arundinacea*), sedges (*Carex pellita* and *C. sartwellii*), common reed (*Phragmites australis*), and hybrid cattails (*Typha x glauca*). There are also small inclusions of Shrub-Carr communities within the large marsh complex dominated by various willow shrub species (*Salix petiolaris, S. bebbiana,* and *S. discolor*). Reed canary grass, common reed, and hybrid cattails are INS; Enbridge will implement its INS Management Plan (see Appendix B to the EPP in Attachment A) to manage these species, which may include the use of herbicides. The use of construction matting may also be used to manage the spread of these species. These activities will occur from the construction mat travel lane.

During seed bed preparation and restoration efforts that will be required between August 1 and October 1, additional INS management may occur prior to scraping or scarifying the ground surface to remove the thatch layer,[6] followed by permanent seeding with the BWSR Wetland Rehabilitation (34-171) (depending on availability). These activities will also occur from the construction mat travel lane. Seed mixes used for revegetation are shown on the Environmental Crossing Plan in Attachment F.

Enbridge has committed to conducting wetland monitoring as described in the PCMP (see Attachment C). The PCMP outlines how the public water wetland will be restored to pre-construction conditions for both elevation and vegetation, regardless of the length of time that mats are left within the construction workspace.

MPARS prompts applicants to upload a grading plan, including information on soil thickness. Enbridge will follow the grading plan for wetlands as presented in Section 3.4 of the EPP (Attachment A). Based on past construction projects adjacent to this crossing, Enbridge anticipates that the soil at this location extends beyond the 9-foot estimated trench depth and that Enbridge will not encounter bedrock or other obstructions.

### 3.2.2 MPARS Updates

Attachment F contains an updated Environmental Crossing Plan, which contains pre-construction elevation (LIDAR), details on existing vegetation (including locations of INS), and the specific seed mixes that will be used for restoration.

## 3.3 Frandsen Slough – Public Water Wetland at MP 988.3: Soil Removal

### 3.3.1 Supplemental Information

Enbridge will cross this public water wetland using the standard wetland construction method. This method is described in Section 3.3 of Procedures and Section 3.0 of the EPP (Attachment A). The typical crossing of wetlands with a 40-foot workspace offset are depicted on Figures 31 and 33 of the EPP.

On June 24, 2020, MDNR advised Enbridge that the estimated Ordinary High Water Level ("OHWL") for Frandsen Slough is 1,382.0 feet (vertical datum NAVD 1988); that the public waters data layer did not accurately depict the boundary of the OHWL; and that Enbridge should update permitting materials to include all impacts below the OHWL of 1,382 feet. These updates have been incorporated into impact calculations, below.

Trench width excavation will vary depending on topography and soil conditions. At this location, Enbridge has planned for construction across the public water wetland to result in excavation of a pipeline trench of 14 feet wide at the top of the trench with sloped banks to a depth of 9 feet. The L3R centerline will cross western, middle, and eastern "lobes" of Frandsen Slough and will result in 217 feet of excavation. This total was determined by adding the centerline crossing lengths of the three separate lobes: the western lobe (128.1 feet), the middle lobe (59.1 feet),

[6] Refer to Section 5-3 of the BWSR Minnesota Wetland Restoration Guide (2019), available online: https://bwsr.state.mn.us/mn-wetland-restoration-guide.

and the eastern lobe (29.6 feet). This calculation will therefore be conservative, as the trench side slopes were not factored into the calculation.

- Excavation Calculation: 217 feet long * 14 feet wide * 9 feet deep / 27 = 1,013 cubic yards of excavation

Soil excavated from the trench will be placed on the non-working, or "spoil" side of the construction workspace, which is an approximate 40-foot-wide area adjacent to the trench. The spoil will be placed in large "spoil piles" that will be contained within this linear 40-foot area. The excavated soil will temporarily "fill" the wetland while being stored on the spoil side. The excavated soil will be stored for up to 5 days on the spoil side. Following placement of the pipeline in the trench, the 1,013 cubic yards of excavated soil will eventually be backfilled in the trench over the pipeline. This will only occur on the eastern lobe of Frandsen Slough.

Placement of the excavated soil within the public water wetland on the spoil side is justified because the most efficient manner to complete the crossing is to use the excavator to dig the trench through the wetland and place the excavated soil adjacent to the trench on the spoil side. Then, it may be easily pulled back into the trench in the vicinity of which it was removed once the pipe is installed.

Alternatives to this practice include storing spoil on the working side or transporting all of the excavated soil out of the wetland and into adjacent areas. The Project has not been designed to accommodate this soil storage and either alternative approach would present constructability concerns.

Storing spoil on the working side is not preferred as the storage will interfere with equipment and personnel travel needed to install the pipeline. It also would not avoid impacts on the public water wetland, as the working side is also within the public water wetland.

Transporting soil away from the wetland to adjacent non-wetland areas would likely require expansion of the existing easterly and westerly ATWS closer to the wetland crossing. Additional tree clearing may need to occur on either side of the wetland to expand the ATWS. Enbridge expects that these soils will be heavily saturated and will be more difficult to transport and return to the trench. Loading spoil into trucks to transport out of the wetland will result in soil mixing. There is also the possibility of upland and wetland soil mixing when the soil is moved back to the trench. Hauling spoil and material increased distances back and forth from the construction workspace to ATWS would significantly increase the duration of construction across the wetland due to the time it would take to haul the spoil back and forth along the construction workspace. This would also lead to longer periods of time of open trenches, increased spoil storage times, and would increase the amount of time between backfilling and restoration of the site, which could decrease soil productivity and reduce the effectiveness of restoration. It will also increase the number and weight of the equipment that must use the construction matting to transport soil to and from the trench, which will contribute to compaction. Currently, excavation and replacement activities across this wetland complex will take no more than 5 days. This will need to be extended to approximately 7 to 10 days if all of the trench spoil must be removed from the wetland, stored outside of the wetland in ATWS, and then returned to the trench.

Enbridge finds that temporary storage of spoils adjacent to the trench line on the spoil side is prudent and feasible as compared to storing soil on the working side, or the alternative of moving the soils out of the wetland. It will allow Enbridge to quickly replace the soil in its native location

following installation of the pipeline, and more quickly complete the wetland crossing. It will avoid the need for tree clearing and expanded ATWS to store the excavated soil. It will also lessen the possibility of long-term impacts on the public water wetland by encouraging timely and successful restoration by limiting the possibility of soil mixing, compaction, and seedbed disturbance.

Enbridge will also place construction mats of an approximate 0.67-foot depth on the 55-foot-wide working side of the construction workspace (both the western and eastern lobes) to allow for equipment travel. Construction mats will temporarily "fill" the wetland when placed for construction as presented below. Enbridge has assumed a conservative 40-foot-wide construction mat travel lane for purposes of this application. 265 feet of constriction mat fill was determined by adding the construction mat travel lane crossing lengths of two separate "lobes" of Frandsen Slough at their widest points: the western lobe (224 feet) and the eastern lobe (41 feet).

- Construction Mat Fill Calculation: 265 feet long * 40 feet wide * 0.67 foot deep / 27 = 263 cubic yards of fill

For the fill calculation, Enbridge proposes to use the amount of excavated soils calculated above and add it to the fill assumed for a conservative 40-foot-wide lane of mats.

- Total Fill Calculation: 1,013 cubic yards (excavation fill) + 263 cubic yards (construction mat fill) = 1,276 cubic yards of fill

In Enbridge's application materials, Enbridge proposed leaving construction mats in place for approximately 153 days, or approximately 5 months. This term encompassed the start of construction through restoration of the wetland crossing. This was based on a July or August excavation date, where restoration could occur immediately following construction.

However, Project construction details have evolved since that submittal. Enbridge's current construction schedule assumes a start date of early December 2020. Enbridge must also accommodate likely timing restrictions relative to this crossing and provide for treatment of INS. Therefore, Enbridge is proposing to install the mats as soon as December 15, 2020 and will remove the mats before September 1, 2021. Mats will therefore be in place for no more than 261 days. However, 107 of these days occur between December 15 and March 31 during winter conditions. It is Enbridge's intention to remove the mats as soon as possible following restoration. Note that the number of days are highly dependent on construction start date; this number estimates Enbridge's best estimate at the time of this permit application update.

There is one relevant timing restriction related to this crossing that extends the amount of time in which mats are placed within the public water wetland. The MPCA has included a draft condition in its draft Section 401 Water Quality Certification that restricts Enbridge from constructing within wetlands between April 1 and July 1. Therefore, Enbridge will need to conduct work in this public water wetland before April 1 and after July 1. Should this not be a final condition to the Section 401 Water Quality Certification, this schedule could be modified.

Enbridge is planning to complete installation of the pipeline at this public water wetland during non-frozen conditions. However, depending on construction start date, Enbridge could complete installation of the pipeline at this public water wetland during winter conditions. Construction during winter conditions is an impact minimization technique that will result in fewer impacts on the public water wetland. However, in this scenario Enbridge will need to revisit the public water wetland following July 1 to conduct final restoration and restore the trench to final grade, as winter

construction will have likely left crowning along the trench line. This work must occur from the construction mat travel lane. The construction mat travel lane will not be removed during the work restriction periods noted above so as to minimize disturbance to the wetland by limiting the number of times that equipment enters the wetland to place and retrieve mats. Wetland impacts related to travel and compaction would be essentially doubled should Enbridge need to place mats for the installation of the pipeline prior to April 1, retrieve them for the period between April 1 and July 1, re-install them on or near July 2 for the purposes of construction workspace shaping and restoration, and then remove them following restoration. Leaving mats in place throughout all phases of construction minimizes disturbance to the wetland by limiting the number of times that equipment enters the wetland to place mats and allows for safe passage of construction/restoration equipment along the construction workspace.

The presence of the construction mat travel lane will also benefit Enbridge's efforts to address INS. The majority of this wetland crossed by the construction workspace is a shallow marsh wetland community dominated by hybrid cattails (*Typha x glauca*), bluejoint (*Calamagrostis canadensis),* and meadow willow *(Salix petiolaris)*. Hybrid cattails are INS; Enbridge will implement its INS Management Plan (see Appendix B to the EPP in Attachment A) to manage this species, which may include the use of herbicides. The use of construction matting may also be used to manage the spread of this species. These activities will occur from the construction mat travel lane.

During seed bed preparation and restoration efforts that would be required between July 2 and September 1, additional INS management may occur prior to scraping or scarifying the ground surface to remove the thatch layer,[7] followed by permanent seeding with the BWSR Wetland Rehabilitation (34-171) seed mix (depending on availability) in the area where INS treatment occurred. These activities will also occur from the construction mat travel lane. Seed mixes used for revegetation are shown on the Environmental Crossing Plan in Attachment F.

Enbridge has committed to conducting wetland monitoring as described in the PCMP (see Attachment C). The PCMP outlines how the public water wetland will be restored to pre-construction conditions, regardless of the length of time that mats are left within the construction workspace.

MPARS prompts applicants to upload a grading plan, including information on soil thickness. Enbridge will follow the grading plan for wetlands as presented in Section 3.4 of the EPP (Attachment A). Enbridge anticipates that the soil at this location extends beyond the 9-foot estimated trench depth and that Enbridge will not encounter bedrock or other obstructions.

### 3.3.2 MPARS Updates

Enbridge received survey permission to access the property on which Frandsen Slough is located in August 2020. Attachment F contains an updated Environmental Crossing Plan to include the boundaries of the public water wetland at 1,382.0 feet of elevation and lower; 2020 wetland survey information; pre-construction elevation (LIDAR); details on existing vegetation (including locations of INS); and the specific seed mixes that will be used for restoration. Photos of the public water wetland are included in Attachment F.

[7] Refer to Section 5-3 of the BWSR Minnesota Wetland Restoration Guide (2019), available online: https://bwsr.state.mn.us/mn-wetland-restoration-guide.

## 3.4 Scout Camp Pond – Public Water Wetland at MP 1041.2: Soil Removal

### 3.4.1 Supplemental Information

Enbridge will cross this public water wetland using the standard wetland construction method. The Spring Brook public water watercourse is located within the public water wetland and will be crossed using the dry crossing technique, as presented in Enbridge's License to Cross Public Waters application.

Enbridge has developed the Spring Brook Construction and Restoration Plan in response to MDNR's concerns regarding Spring Brook, the surrounding wetlands, the Spire Valley Fish Hatchery, and nearby springs, seeps, and private water supply wells (see Attachment G). This plan presents detailed construction plans and mitigation measures to minimize impacts of construction on Spring Brook and the surrounding features, including the full extent of the public water wetland. Enbridge has used information from the Spring Brook Construction and Restoration Plan to inform these materials, when relevant, and has incorporated information from the plan as follows.

MDNR has requested that the pipeline be installed to ensure 4 feet depth of cover over the pipeline at the Spring Brook crossing, using the bottom elevation of the nearest upstream or downstream pool within the surveyed reach of the 2015 Rosgen survey. As described in Section 5.2.1 of Attachment G, considering the elevation of the nearest up/downstream pool, Enbridge will install the pipeline to a depth of cover of 5.4 feet to meet the MDNR's request. Enbridge will extend the depth of cover outside of the OHWL of the stream and into the public water wetland to Spring Brook's approximate meander belt width, which is shown in Appendix A to in Attachment G.

Trench width excavation will vary depending on topography and soil conditions. At this location, to accommodate the additional depth of cover excavation of the pipeline trench could be up to 22 feet wide. To calculate the cubic yards of material excavated in the pipeline trench at this public water wetland, Enbridge considered the total public water feature centerline crossing of 115 feet. This calculation will therefore be conservative, as the trench side slopes were not factored into the calculation.

- Excavation Calculation: 115 feet long * 22 feet wide * 9 feet deep / 27 = 843 cubic yards of excavation

In March 2020, Enbridge proposed to MDNR that to minimize the potential for intersecting groundwater features, Enbridge would install the pipeline to a depth of cover of 3 feet along the western hillslope instead of its standard 4 feet of cover. Enbridge concluded that excavation of a pipeline trench to this depth will not encounter artesian conditions or confining layers (see Figure 4.0-1 of Attachment G). Trenching will not affect the quality and quantity of groundwater available to the Hatchery or nearby residences or result in an inconvenience or disruption to the domestic water supply for residences in the local area. The MDNR approved this proposal in June 2020. This will result in a small decrease in excavations on the western hillside intersecting the public water wetlands, which have not been included in revised excavation calculations because the increased depth of cover at Spring Brook (as noted above) generally aligns with the public water wetland boundaries.

Spoil storage is described in Attachment G, Section 5.2.1. Spoil will be stored in ATWS outside of the public water wetland boundaries. MDNR has requested that Enbridge extract existing vegetative mats along with the removal of topsoil along the trench line. Enbridge proposes to remove 25 linear feet of vegetative mats on either side of the stream crossing. Enbridge will place the vegetative mats on timber mats located in the ATWS added for this purpose (see Appendix A in Attachment G). The vegetative mats will be covered with tarps if a precipitation event is forecasted. Following placement of the pipeline in the trench, the 843 cubic yards of excavated soil will eventually be backfilled in the trench over the pipeline. The vegetative mats will be replaced as soon as practical following backfilling of the trench, and the site will be stabilized in accordance in accordance with the timelines described in Section 1.9.1 of the EPP.

Enbridge will place construction mats of an approximate 0.67-foot depth on the 55-foot-wide working side of the construction workspace to allow for equipment travel. Construction mats will temporarily "fill" the wetland when placed for construction as presented below. Enbridge has assumed a conservative 40-foot-wide construction mat travel lane for purposes of this application.

- Construction Mat Fill Calculation: 115 feet long * 40 feet wide * 0.67 foot deep / 27 = 114 cubic yards of fill

For the fill calculation, Enbridge proposes to use the amount of excavated soils calculated above and add it to the fill assumed for a conservative 40-foot-wide lane of mats.

- Total Fill Calculation: 843 cubic yards (excavation fill) + 114 cubic yards (construction mat fill) = 957 cubic yards of fill

In Enbridge's application materials, Enbridge proposed leaving construction mats in place for approximately 153 days, or approximately 5 months. This term encompassed the start of construction through restoration of the wetland crossing. This was based on a July or August excavation date.

However, Project construction details have evolved since that submittal. Enbridge's current construction schedule assumes a start date of early December 2020. Enbridge must also accommodate likely timing restrictions relative to this crossing and provide for treatment of INS. Therefore, Enbridge is proposing to install the mats as soon as December 15, 2020 and will remove the mats before October 15, 2021. Mats will therefore be in place for no more than 305 days. However, 107 of these days occur between December 15 and March 31 during winter conditions. It is Enbridge's intention to remove the mats as soon as possible following restoration. Note that the number of days are highly dependent on construction start date; this number estimates Enbridge's best estimate at the time of this permit application update.

There are two relevant timing restrictions related to this crossing that extend the amount of time in which mats are placed within the public water wetland. The MPCA has included a draft condition in its draft Section 401 Water Quality Certification that restricts Enbridge from constructing within wetlands between April 1 and July 1. Should this not be a final condition to the Section 401 Water Quality Certification, this schedule could be modified. Spring Brook, which is within the public water wetland boundaries, is subject to a trout stream timing restriction between September 1 and June 30.

Enbridge will likely complete installation of the pipeline and permanent seeding at this public water wetland in the summer of 2021. However, the presence of the mats in the public water wetland

as soon as December 15, 2020 is critical in that it allows Enbridge to open a travel lane for winter clearing and pipeline construction in other nearby areas by bridging the Spring Brook crossing. Although Highway 6 is present immediately west of the crossing, the nearest road on the east side of the crossing is 2.25 miles away. The loss of a continuous travel lane across Spring Brook would require crews to use a significant spread move-around as well as require all equipment to back-track 2.25 miles along the construction workspace to reach land on the east side of the Spring Brook/Scout Camp Pond crossing.

A full construction spread move around is a significant undertaking. Spread moves result in impacts on local roadways, residents, and communities along the spread move travel path. Weight restrictions on bridges/roads and local road authority requirements determine the logistics of the move. For example, just because there are roads near the proposed pipeline alignment does not necessarily mean the road could be used for a spread move. In all cases, the first and foremost consideration associated with a spread move is safety. The bullets below illustrate the scope and scale of the spread move that could be required:

- Typically, a spread has 12 crews working at once. The number of crews will vary depending on variables such as the number of tie-in or cleanup crews each spread requires. Crew size varies between 10 to 40 people each. A spread move would involve 120 to 480 people.

- Spread moves usually require 45 to 55 truckloads on average consisting of pickup trucks, service/utility/mechanic trucks, and semis with float or lowboy trailers.

- Equipment moved is between 8,000 and 180,000 pounds, 8 to 14 feet wide, 8 to 14 feet tall, and 20 to 120 feet long.

- Spread moves take 8 to 10 days spread out over 4 to 6 weeks averaging one day per crew. Traffic control signage and flaggers must be set up at required distances, roads are temporarily closed when needed, and an escort vehicle may be used on certain loads.

Ideally, a construction spread move would take place on wide roads with shoulders on both sides. It is also ideal when the spread move can take place on a round-trip route. When trucks are required to turn around at one or both sides of the move, or back in long distances to load/unload it introduces safety risks. Other factors like high traffic volumes, narrow roads, limited capacity bridges, axle load limits on roads, blind corners, detours, available hours of daylight, and weather conditions all contribute to the difficulty of a move. The construction mat travel lane across this public water wetland is needed to allow for continued access for all construction crews throughout restoration activities and to avoid a spread move.

The construction mat travel lane will not be removed during the work restriction periods noted above so as to maintain the travel lane to access other upland construction areas and to minimize disturbance to the wetland by limiting the number of times that equipment enters the wetland to place and retrieve mats. Wetland impacts related to travel and compaction would be essentially doubled should Enbridge need to place mats for the installation of the pipeline prior to April 1, retrieve them for the period between April 1 and July 1, re-install them on or near July 2, and then remove them following restoration. Leaving mats in place throughout all phases of construction minimizes disturbance to the wetland by limiting the number of times that equipment enters the wetland to place mats and allows for safe passage of construction/restoration equipment along the construction workspace.

The presence of the construction mat travel lane will also benefit Enbridge's efforts to address INS. This wetland community consists of hardwood swamp along the eastern edge and Shrub-Carr community along the western portion dominated by black ash *(Fraxinus nigra*) and American elm (*Ulmus americana*) in the tree and scrub-shrub layer, and orange jewelweed (*Impatiens capensis*), marsh marigold (*Caltha palustris*), and reed canary in the herbaceous layer. Reed canary grass is an invasive species; Enbridge will implement its INS Management Plan (see Appendix B to the EPP in Attachment A) to manage this species, which may include the use of herbicides, and construction matting to manage the spread of these species depending on the time of year that construction proceeds in this area. These activities will occur from the construction mat travel lane.

Enbridge will seed the permanent right-of-way using the BWSR Wetland Rehabilitation (34-171) seed mix at this location in wet areas where native vegetation is expected to come back from the seedbank. Enbridge will allow natural reforestation of the temporary workspace within the forested and scrub-shrub wetlands, as described in Section 7.7.4 of the EPP. Enbridge has also developed a Site-Specific Restoration Plan for the crossing; see Appendix B of Attachment G. Restoration will be monitored as described in Enbridge's PCMP and Section 6.0 of Attachment G. Seed mixes used for revegetation are shown on the Environmental Crossing Plan in Attachment F and are reflected in Attachment G.

Enbridge has committed to conducting wetland monitoring as described in the PCMP (see Attachment C). The PCMP outlines how the public water wetlands will be restored to pre-construction conditions for both elevation and vegetation, regardless of the length of time that mats are left within the construction workspace. Enbridge will also complete spring and fall site visits with the MDNR for the first 3 years following construction to observe the success of the post-construction seep mitigation measures described in Attachment G.

MPARS prompts applicants to upload a grading plan, including information on soil thickness. Enbridge will follow the grading plan for wetlands as presented in Section 3.4 of the EPP (Attachment A) and Section 5.1 of Attachment G. Enbridge anticipates that the soil at this location extends beyond the 9-foot estimated trench depth and that Enbridge will not encounter bedrock or other obstructions.

Per instruction of MDNR Area Hydrologist staff, Enbridge has referred to the License to Cross Public Waters applications for MPARS questions related to Spring Brook.

### 3.4.2 MPARS Updates

Attachment F contains an updated Environmental Crossing Plan for this feature, which contains pre-construction elevation (LIDAR), details on existing vegetation (including locations of INS), the specific seed mixes that will be used for restoration, as well as the location of spoil storage within the ATWS boundaries outside of the public water wetland. Attachment F contains an updated Spring Brook Construction and Restoration Plan.

## 3.5 Unnamed – Public Water Wetland at MP 1120.2: Soil Removal

### 3.5.1 Supplemental Information

Enbridge will cross this public water wetland using the standard wetland construction method. This method is described in Section 3.3 of the Procedures and Section 3.0 of the EPP (Attachment

A). The typical crossing of wetlands with a 40-foot workspace offset are depicted on Figures 31 and 33 of the EPP.

Trench width excavation will vary depending on topography and soil conditions. At this location, Enbridge has planned for construction across the public water wetland to result in excavation of a pipeline trench up to 14 feet wide at the top of the trench with sloped banks to a depth of 9 feet. To calculate the cubic yards of material excavated in the pipeline trench at this public water wetland, Enbridge considered the total public water feature centerline crossing of approximately 91 feet. This calculation will therefore be conservative, as the trench side slopes were not factored into the calculation.

- Excavation Calculation: 91 feet long * 14 feet wide * 9 feet deep / 27 = 425 cubic yards of excavation

Soil excavated from the trench will be placed on the non-working, or "spoil" side of the construction workspace, which is an approximate 40-foot-wide area adjacent to the trench (see Figures 31 and 33 of the EPP). For this wetland, the Project will only impact the wetland through the trenchline and on the spoil side. There will be no wetland impacts on the working side, or the "travel lane," where construction mats are normally placed. The travel lane was delineated as uplands. Therefore, where other features presented in this application have presented fill impacts from the use of construction mats, this feature will have no impacts from construction mats.

Accordingly, to calculate the cubic yards of fill proposed at this public water wetland, Enbridge assumed that the only fill that will be placed in this wetland is the 425 cubic yards of soil excavated as described above. This fill will be placed on the spoil side, and within the public water wetland, for up to 5 days. Following placement of the pipeline in the trench, the excavated soil will be backfilled in the trench over the pipeline.

Placement of the excavated soil within the public water wetland on the spoil side is justified because the most efficient manner to complete the crossing is to use the excavator to dig the trench through the wetland and place the excavated soil adjacent to the trench on the spoil side. Then, it may be easily pulled back into the trench in the vicinity of which it was removed once the pipe is installed.

Alternatives to this practice include storing spoil on the working side or transporting all of the excavated soil out of the wetland and into adjacent areas. The Project has not been designed to accommodate this soil storage and either alternative approach would present constructability concerns.

Storing spoil on the travel side is not preferred as the storage will interfere with equipment and personnel travel needed to install the pipeline and will increase the possibility of mixing the wetland soils from the public water wetland with the upland soils on the travel side.

Transporting soil away from the wetland to adjacent non-wetland areas would likely require expansion of the existing ATWS closer to the wetland crossing. Additional tree clearing may need to occur to expand the ATWS to the north of the wetland crossing. Enbridge expects that these soils will be heavily saturated and will be more difficult to transport and return to the trench. Loading spoil into trucks to transport out of the wetland will result in soil mixing. There is also the possibility of upland and wetland soil mixing when the soil is moved back to the trench. Hauling spoil and material increased distances back and forth from the construction workspace to ATWS

would significantly increase the duration of construction across the wetland due to the time it would take to haul the spoil back and forth along the construction workspace. This would also lead to longer periods of time of open trenches, increased spoil storage times, and would increase the amount of time between backfilling and restoration of the site, which could decrease soil productivity and reduce the effectiveness of restoration. It will also increase the number and weight of the equipment that must use the construction matting to transport soil to and from the trench, which will contribute to compaction. Currently, excavation and replacement activities across this wetland complex will take no more than 5 days. This will need to be extended to approximately 7 to 10 days if all of the trench spoil must be removed from the wetland, stored outside of the wetland in ATWS, and then returned to the trench.

Enbridge finds that temporary storage of spoils adjacent to the trench line on the spoil side is prudent and feasible as compared to storing soil on the working side, or the alternative of moving the soils out of the wetland. It will allow Enbridge to quickly replace the soil in its native location following installation of the pipeline, and more quickly complete the wetland crossing. It will avoid the need for tree clearing and expanded ATWS to store the excavated soil. It will also lessen the possibility of long-term impacts on the public water wetland by encouraging timely and successful restoration by limiting the possibility of soil mixing, compaction, and seedbed disturbance.

MPARS prompts applicants to upload a grading plan, including information on soil thickness. Enbridge will follow the grading plan for wetlands as presented in Section 3.4 of the EPP (Attachment A). Based on past construction projects adjacent to this crossing, Enbridge anticipates that the soil at this location extends beyond the 9-foot estimated trench depth and that Enbridge will not encounter bedrock or other obstructions.

Revegetation of affected areas is presented in Section 7.0 of the EPP (Attachment A). This Shrub-Carr community is expected to naturally revegetate following construction and no seed mix is proposed. Enbridge has committed to conducting wetland monitoring as described in the PCMP (see Attachment C).

### 3.5.2 MPARS Updates

Attachment F contains an updated Environmental Crossing Plan, which contains pre-construction elevation (LIDAR) and details on existing vegetation (including locations of INS).

# 4.0 AQUATIC IMPACT SUMMARY

All wetland impacts due to construction of the Project, including the public water wetlands considered here, are included in Enbridge's application to the USACE for a Section 404 permit. As part of that permitting effort, Enbridge continues to work with the USACE regarding compensatory mitigation for temporary wetland impacts; additional information is included in Section 6.7. Therefore, Enbridge did not complete the Aquatic Resource Impact Summary and will not be forwarding this MPARS application to the USACE and/or the Local Government Units.

# 5.0 LANDOWNERS

Table 5.0-1 describes the current status of easement agreements with landowners on which the public water wetlands and the associated construction workspace considered in this application are located. These easements grant Enbridge the permission to conduct the activities

contemplated in this application and serve as landowner consent to the activities as proposed. All of the easements listed in Table 5.0-1 have no expiration date.

**Table 5.0-1**
**Summary of MPARS PWW Request Landowner Easement Status**

| Site Reference Name | Easement Status (Record Date, Record Number) |
|---|---|
| Unnamed – Public Water Wetland at MP 912.1 | [Redacted] |
| Unnamed – Public Water Wetland at MP 853.7 | [Redacted] |
| Frandsen Slough – Public Water Wetland at MP 988.3 | [Redacted] |
| Scout Camp Pond – Public Water Wetland at MP 1041.2 | [Redacted] |
| Unnamed – Public Water Wetland at MP 1120.2 | [Redacted] |

# 6.0 WETLAND SEQUENCING ANALYSIS

Enbridge has prepared the following description of public water impact sequencing using the Minnesota Administrative Rules 6115.0240 Subp. 3.C for an application for public waters work permits.

## 6.1 Subpart 3.C(3). Alternatives to the proposed action.

Enbridge applied for a certificate of need and a route permit ("MPUC Applications") from the MPUC to construct and operate L3R on April 24, 2015. The MPUC asked the Minnesota Department of Commerce, Energy Environmental Review and Analysis ("DOC-EERA") staff to prepare an Environmental Impact Statement ("EIS") in cooperation with the MDNR and MPCA to facilitate the review of Enbridge's certificate of need and route permit applications for L3R in accordance with Minnesota Rules Chapter 4410. DOC-EERA issued the draft EIS on May 15, 2017 and the final EIS ("FEIS") on August 17, 2017.[8] The FEIS considered numerous certificate of need alternatives to the Project, including, but not limited to, the no action alternative, System Alternative SA-04, transportation by rail, transportation by truck, and a smaller diameter pipeline. The FEIS also considered four route permit alternatives ("RAs") to the Project's Preferred Route between Clearbrook and Carlton, RA-03(AM), RA-06, RA-07 and RA-08, and 24 Route Segment Alternatives ("RSAs"). On December 7, 2017, the MPUC deemed the FEIS inadequate solely on the basis of four specific and narrow issues, and a revised FEIS was published on February 12, 2018. On May 1, 2018, the MPUC issued a written order finding the revised FEIS adequate ("MPUC FEIS Order").

At the conclusion of contested case proceedings on the MPUC Applications presided over by an administrative law judge, which included 16 public hearings resulting in over 2,600 pages of public hearing transcripts, the MPUC heard oral arguments and deliberated on the merits of the MPUC Applications on June 18, 19, 26, 27, and 28, 2018. On June 28, 2018, the MPUC voted to grant a certificate of need for the Project, subject to certificate of need modifications. On September 5, 2018, the MPUC issued a written order granting the certificate of need as modified and requiring filings ("MPUC CN Order").

On June 28, 2018, the MPUC also voted to grant a route permit for the Project's Preferred Route, including RSA-05 and RSA-22 through the FdL Reservation with permission of FdL. On August 31, 2018, Enbridge and FdL reached an agreement that allows Enbridge to construct the Project

[8] The L3R draft EIS and FEIS are available on the Minnesota Department of Commerce website at: https://mn.gov/commerce/energyfacilities/line3/.

along RSA-22 through the FdL Reservation in northern Minnesota. The MPUC issued a written route permit order on October 26, 2018 ("MPUC RP Order") identifying the Project's Preferred Route inclusive of RSA-05 and RSA-22 as the MPUC Designated Route (hereafter referred to as the "Designated Route" or "Project"). The Project is a 750-foot-wide corridor, which allows for minor adjustments to the pipeline alignment and permanent right-of-way within the Project.

On June 3, 2019, the Minnesota Court of Appeals reversed the MPUC FEIS Order upon determining that the failure to address the potential impacts of an oil spill into the Lake Superior Watershed constituted an inadequacy in the FEIS. On October 1, 2019, the MPUC met to consider the matter. On October 8, 2019, MPUC issued a written order finding the FEIS inadequate on remand and requesting DOC-EERA to revise the FEIS to include an analysis of the potential impact of an oil spill into the Lake Superior Watershed consistent with the Court of Appeals' June 3 decision, and to submit a revised FEIS to MPUC within 60 days.

On December 9, 2019, the DOC-EERA published the Second Revised FEIS, including an analysis of the impact of an oil spill into the Lake Superior Watershed. The MPUC accepted comments regarding the Second Revised FEIS and its certificate of need and route permit decisions through January 31, 2020.

On February 3, 2020, the MPUC found that the Second Revised FEIS was adequate and reaffirmed its previous certificate of need and route permit orders with a minor change related to the public safety escrow condition within the route permit. On May 1, 2020, the MPUC issued its Order Finding Environmental Impact Statement Adequate, Granting Certificate of Need as Modified, and Granting Routing Permit as Modified ("May 2020 Order"). In the May 2020 Order, the Commission found that the Second Revised FEIS is adequate under the applicable rules, approved a certificate of need for the Project by reissuing several prior orders with modifications, and reissued the routing permit for the Project by reissuing several prior orders with modifications.[9]

On May 21, 2020, several parties filed petitions for reconsideration of the May 2020 Order. On July 20, 2020, the MPUC issued its Order Denying Reconsideration.

The Designated Route approved by the MPUC in its May 2020 Order crosses all the public water wetlands. Enbridge must comply with the routing provisions of the May 2020 Order. Therefore, there are no feasible and prudent alternatives to the proposed action.

### 6.2 Subpart 3.C(4). that the proposed project is reasonable and practical and will adequately protect public safety and promote the public welfare.

Under Minnesota law, MPUC has the sole legal authority to grant certificates of need for large energy facilities. Minn. Stat. 216B.243, subp. 7 states, "[i]ssuance or denial of certificates of need shall be the sole and exclusive prerogative of the commission and these determinations and certificates shall be binding upon other state departments…"

In adopting its May 2020 Order (which reissued the September 5, 2018 MPUC CN Order), the MPUC found that the Project satisfies the following applicable criteria (Minn. Rules, part 7853.0130) for granting a certificate of need for a large petroleum pipeline: (1) the probable result

[9] The Commission's Order Accepting Tribal Economic Opportunity and Labor Education Plan as Modified was reissued through an Erratum Notice dated May 13, 2020.

of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering five enumerated sub-factors; (2) a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering four enumerated sub-factors, including the effects upon the natural and socioeconomic environments; (3) the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate, considering four enumerated sub-factors, also including the effects upon the natural and socioeconomic environments; and (4) it has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.

As the May 2020 Order and the reissued orders recognize:

- Enbridge's existing Line 3 pipeline ("Existing Line 3") has served Minnesota and neighboring states as part of the Enbridge Mainline System for more than 40 years, providing critical energy resources to Minnesota and the Midwest;[10]

- Existing Line 3 has a unique combination of characteristics that has made the pipeline particularly susceptible to integrity threats;[11]

- Although Enbridge has managed these threats through its integrity management program, absent replacement, Enbridge would be required to perform thousands of integrity digs across northern Minnesota, including on the Leech Lake and FdL Reservations and in the Chippewa National Forest, which are crossed by the Existing Line 3, and impacting the environment, local communities, and landowners;[12]

- Enbridge and the U.S. Department of Justice agree that the integrity issues of the Existing Line 3 are best addressed by replacing then retiring and decommissioning the Existing Line 3, and executed a Consent Decree to that effect;[13] and

- Replacement of Existing Line 3 brings numerous benefits to Minnesota, including helping to meet state energy needs, more safely transporting crude oil than the existing line or rail and truck alternatives, creating thousands of construction jobs, and bringing the associated economic stimulus to northern Minnesota.[14]

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[10] *See* September 2018 CN Order at 5; *see also, e.g.*, Ex. EN-24 at 6 (Eberth Direct); Ex. EN-19 at 4, 6 (Glanzer Direct); Ex. EN-38 at 4 (Glanzer Rebuttal).

[11] *See* September 2018 CN Order at 5; May 1 Order at 15; *see also, e.g.,* Ex. EN-12 at 4-5, 20-21 (Kennett Direct).

[12] *See* September 2018 CN Order at 5, 26; May 1 Order at 15; *see also, e.g.,* Ex. EN-12 at 4-5, 20-21 (Kennett Direct); Ex. EN 68 at 2-3 (Kennett Summary); Ex. EN-9 at 7 (Bergland Direct).

[13] *See* September 2018 CN Order at 5, 6; *see also* Ex. EN-30 at 15-18 (Eberth Rebuttal); Ex. EN-30, Sched. 1 at 28 (Eberth Rebuttal).

[14] *See* September 2018 CN at 26-32; May 1 Order at 15-16; *see also, e.g.,* Exs. LC-1 (Whiteford Direct); UA-1(Barnett Direct); EN-11 (Lichty Direct); EN-41 (Lichty Rebuttal).

### 6.3 Subpart 3.C(5)(a).A: avoids direct or indirect impacts to public waters that may destroy or diminish the public waters.

Avoidance of impacts on these public water wetlands is not reasonable and practical for the following reasons:

- At MPs 853.7 and 988.3, there is no feasible and prudent alternative to completely avoid the public water wetland features within the Designate Route (May 2020 Order). The necessary reroutes would require MPUC approval.

- At MP 912.1, the proposed pipeline is co-located to the west of an existing foreign pipeline right-of-way and public water wetland impacts are related to a 100-foot by 75-foot ATWS to facilitate the bore crossing of 460th St. The public water wetland crossing cannot be shifted to the east of the existing pipeline right-of-way due to steep hill on the eastern side. The ATWS would need to be moved approximately 270 feet south to completely avoid the public water wetland boundaries; however, the ATWS would still be located within wetland features likely associated with this public water wetland basin, and this distance would not allow for the implementation of the bore crossing of the road feature. The ATWS on the north side of the road has already been moved farther north to avoid the wetland features on the north side of 460th St.

- At MP 1041.2, the proposed pipeline is located in a greenfield location; however, it has been sited as proposed following the MPUC route permit process; extensive routing coordination with the MDNR to avoid impacts on the MDNR's Spire Valley Fish Hatchery that started in 2014 as part of the Sandpiper Pipeline Project; and 2014-2020 field studies as outlined in the Spring Brook Construction and Restoration Plan. An updated version of the Spring Brook Construction and Restoration Plan is included in Attachment G. Moving the Project to the north or the south using minor adjustments would not avoid the Scout Camp Pond or Roosevelt Lake public water wetland features and would result in impacts that do not reflect detailed efforts by the MDNR and Enbridge to study pipeline construction and operation impacts at the crossing location.

- At MP 1120.2, the proposed pipeline is co-located to the north of an existing transmission line right-of-way, which crosses the public water wetland to the south. The Project already avoids the public water wetland boundary. However, it does intersect delineated wetlands surrounding the public water wetland and was added to the application at the MDNR's request. Moving the Project south would result in a wider crossing of the public water wetland. Moving the Project to the north approximately 35 feet could result in avoidance of the delineated wetland; however, this would result in a non-co-located alignment and habitat fragmentation.

### 6.4 Subpart 3.C(5)(b): minimizes the impact to the public water by limiting the degree or magnitude of the public water activity and its implementation.

Enbridge has coordinated with the MDNR since its initial application submittal to respond to MDNR resource comments, make commitments, and revise application materials to address MDNR questions. Enbridge has revised these application materials to reflect all coordination to date.

Relative to workspace design, Enbridge has designed the Project to minimize impact on the public water wetlands:

- When the full construction workspace crosses these public water wetlands, Enbridge has reduced the width of the construction workspace from 120 feet wide to 95 feet wide.

- The size of the ATWS at MP 912.1 has been minimized to only what is needed to complete the road bore. These impacts are necessary to complete the road bore crossing (i.e., to complete a road bore and a trenchless crossing, there must be locations near the bore entry and exit to store soil removed to complete the bore).

- The crossing location and workspace design at MP 1041.2 reflect coordination with the MDNR between 2014 and present to study and minimize impacts within that area.

- The other public water wetland crossings do not contain ATWS within public water wetland boundaries.

Enbridge is also planning for the following timing restrictions to minimize impacts:

- Enbridge has consulted with the MDNR regarding NHIS resources impacted by the Project and has submitted a revised NHIS Review and Avoidance Plan in response to MDNR comments (see Attachment D). Relative to the public water wetland at MP 853.7, Enbridge has committed to prohibiting construction activities between MPs 853.4 and 854.1 from May 1 to July 31 at the MDNR's request to avoid potential impacts on the Nelson's sparrow and yellow rail, both Minnesota species of concern.

- Relative to the public water wetland at MP 1041.2, Enbridge must abide by the trout stream timing restriction associated within Spring Brook, which is within the public water wetland boundaries, which is between September 1 and June 30.

Enbridge has developed construction plans to describe the BMPs that will be implemented during the installation of the pipeline through wetland features. These BMPs, when applied in public water wetland features, serve to minimize the impact on the public water wetlands by limiting the degree or magnitude. These plans are attachments to Enbridge's application materials.

- Enbridge's EPP (see Attachment A) outlines construction-related environmental policies, procedures, and protection measures developed as a baseline for construction. Enbridge has updated the EPP to address comments received from regulatory agencies, including the MDNR, and other stakeholders.

  Enbridge's Procedures (Appendix A to the EPP) outlines the various construction methods that Enbridge will utilize to install the pipeline, and the decision-making process that occurs during design and in the field when identifying the appropriate crossing techniques. This document provides a more complete description of the construction techniques outlined in the EPP.

  Some relevant wetland BMPs within the EPP and Procedures include, but are not limited to:

- Prior to the commencement of clearing activities, survey crews will flag wetland boundaries and the boundaries of the construction workspace so they can be easily identified by Project personnel and managed as described in applicable plans and permit requirements (Section 1.1).

- Vegetation and trees within wetlands will be cut off at ground level, leaving existing root systems intact to allow for regrowth following construction (Section 3.2).

- Enbridge will implement temporary erosion and sediment control BMPs in accordance with MPCA NPDES/SDS Construction Stormwater General Permit requirements (Section 3.4). Enbridge is currently developing a SWPPP associated with the MPCA NPDES/SDS Construction Stormwater General Permit for the Project. The SWPPP identifies the types of materials that may be installed according to:

    - type of construction activity proposed;
    - topographic conditions;
    - hydrology and seasonality; and
    - proximity to sensitive resources.

- To access the construction workspace across wetlands, Enbridge will install construction mats along the travel lane, and at portions of access roads or improved haul routes that cross wetlands. Section 3.1 of the Procedures describes the different construction mat types that may be utilized, and their suitability based on construction activity and site conditions.

- The EPP has been expanded to include an INS Management Plan (Appendix B of Attachment A) that addresses how Enbridge will manage terrestrial and aquatic INS.

- The Winter Construction Plan (see Attachment B) provides an overview of the procedures that will be employed should construction occur during winter conditions. This plan has been updated to address comments received from regulatory agencies, including the MDNR. Section 3.0 of the Winter Construction Plan contains wetland crossing general requirements. During construction in frozen conditions, Enbridge may develop ice roads to access wetlands where conditions allow as described in Section 1.4 and employ other BMPs as presented in the Winter Construction Plan.

Enbridge will also conduct post-construction monitoring at wetland features in accordance with the PCMP (see Attachment C).

### 6.5 Subpart 3.C(5)(c): rectifies impacts by repairing, rehabilitating, or restoring the affected public water.

Final grading of wetlands is described in Section 3.9 of Enbridge's EPP. Seedbed preparation, seeding (as appropriate), stabilization, and restoration of the temporarily disturbed areas within the construction workspace will proceed in accordance with Section 7.0 of the EPP, and as described above. Enbridge will also implement its INS Management Plan (Appendix B of the EPP).

This application contains restoration drawings for the public water wetland crossings to show pre-construction elevation (LIDAR), details on existing vegetation (including locations of INS), and the specific seed mixes that will be used for restoration (see Attachment F).

In addition, all of the public water wetlands crossed by the Project are subject to Enbridge's PCMP. Section 2.4 of the PCMP outlines Enbridge's efforts to monitor both topography and hydrology following construction. Section 2.5 of the PCMP outlines Enbridge' efforts for vegetation monitoring. Section 2.6 addresses the activities that Enbridge will complete in each year of the monitoring schedule, including corrective actions. Monitoring efforts at these public water wetland features will continue until the performance standards for hydrology and vegetation described in Section 3.0 of the PCMP have been met. Section 4.0 outlines the schedule by which Enbridge will submit monitoring reports to the agencies, including the MDNR. Enbridge will hold annual meetings with the Agencies as defined in the PCMP (USACE, MDNR, and MPCA) to plan for the next monitoring year, review the results of monitoring reports, and to discuss corrective actions and adaptive management strategies that may require implementation during the forthcoming growing season (see Section 2.1 of the PCMP.)

### 6.6 Subpart 3.C(5)(d): reduces or eliminates impacts to the public water over time by preservation and maintenance operations.

Section 2.2 of these application materials outline activities that will occur over the Project's operational phase. Enbridge will maintain an operational right-of-way centered over the pipeline following restoration to maintain the integrity of the pipeline and to facilitate aerial inspection. Enbridge will maintain the operational right-of-way by removing woody shrubs and trimming branches overhanging the right-of-way approximately every 5 years to preserve pipeline integrity and to facilitate inspection of the pipeline. Mowing may also occur over portions of the pipeline; however, Enbridge will not typically mow wetland areas. Other maintenance activities (e.g., maintenance digs) may occur as necessary over the life of the pipeline. Prior to initiating any vegetation management, Enbridge Operations staff will prepare a vegetation management plan for the operational work, conduct necessary federal, state, Tribal, and local consultations, and obtain the appropriate authorizations and permits. This will include submitting reviewing NHIS element occurrences and consulting with the MDNR on the appropriate avoidance and minimization measures. Additional details on operational activities in public waters are described in Section 2.0 of the VMP.

### 6.7 Subpart 3.C(5)(e): for major change in the public waters, replaces unavoidable impacts by restoring degraded or impacted public waters having equal or greater public value or, if public water restoration opportunities are not reasonably available, creating replacement wetland areas having greater public value.

Enbridge will provide compensatory wetland mitigation for unavoidable Project permanent fill, permanent wetland type conversion of scrub-shrub and forested wetlands, as well as temporal loss and conversion, in accordance with the USACE and U.S. Environmental Protection Agency Final Rule regarding Compensatory Mitigation for Losses of Aquatic Resources, 33 CFR Parts 325 and 322 and 40 CFR Part 230, (2008) ("Mitigation Rule"), the 2009 St. Paul District Mitigation Policy ("District Mitigation Policy"), as well as MPCA antidegradation rule and compensatory wetland mitigation standards.[15] The fundamental objective of compensatory mitigation for

[15] Minn. Rules 7050.0265, subp. 3 and 7050.0186.

purposes of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act is to offset wetland functions unavoidably lost due to authorized impacts.

The Mitigation Rule and the District Mitigation Policy both specify a preference for mitigation banking using an approved mitigation banking instrument over project-specific compensation. An approved banking instrument must be in place before credits can be used to compensate for authorized impacts. Mitigation banks can reduce risk and uncertainty, as well as temporal losses of wetland functions. Mitigation banks typically involve larger tracts of wetlands/uplands/riparian areas that are more ecologically diverse and resilient than typical project-specific compensation (District Mitigation Policy, pp. 7-8). It is also important to note that for linear projects, such as pipelines, the Mitigation Rule gives district engineers flexibility to determine that consolidated compensatory mitigation projects, included but not limited to mitigation banks, are environmentally preferable to requiring numerous small permittee-responsible compensatory mitigation projects along a linear project corridor.[16]

In April 2019, Enbridge submitted a L3R Compensatory Wetland Mitigation Plan ("April 2019 Wetland Mitigation Plan") to the USACE and to the MPCA in connection with MPCA's antidegradation review of Enbridge's Clean Water Act Section 401 Water Quality Certification request. MPCA provided the April 2019 Wetland Mitigation Plan to MDNR for the purpose of soliciting agency input. Subsequently, the USACE, MPCA, and MDNR held several interagency meetings and conference calls to consider collaboratively this mitigation plan. In October 2019, the USACE, MPCA and MDNR provided guidance ("Interagency Compensatory Wetland Mitigation Guidance") to Enbridge recommending categories of "special" wetlands and differentiated baseline compensatory mitigation ratios for normal (non-special) and special wetlands, be they emergent, scrub-shrub, or forested communities. The Interagency Compensatory Wetland Mitigation Guidance also proposed mitigation ratio multipliers for replacement out of Bank Service Area ("BSA") and for replacement out of kind. Based on further direction from the USACE and MPCA, Enbridge agreed to revise the April 2019 Wetland Mitigation Plan consistent with the Interagency Compensatory Wetland Mitigation Guidance.

In February 2020, Enbridge prepared the L3R Compensatory Wetland Mitigation Plan (latest version) ("Mitigation Plan") consistent with the Interagency Compensatory Wetland Mitigation Guidance. Enbridge will restore all temporarily affected wetlands to pre-construction conditions, which is considered in-place compensation, but not in-kind for permanent conversions within the permanent right-of-way, and not in-advance. Consistent with the mitigation banking preference, Enbridge proposes to use mitigation banking credits to compensate for remaining unavoidable wetland functional losses applying the special wetland categories, differentiated baseline compensatory wetland mitigation ratios, and mitigation ratio multipliers recommended in the Interagency Compensatory Wetland Mitigation Guidance.

As noted in the Mitigation Plan, all public water wetlands will be restored to pre-construction conditions to be determined by objective, verifiable performance standards and post-construction monitoring (see, generally, the PCMP). Enbridge will provide compensatory wetland mitigation for temporal loss of public water wetlands during construction and for permanent conversion of some public water wetlands from a forested or scrub-shrub vegetation community to an herbaceous community. Permanently converted areas are within the 50-foot permanent easement where the pipeline corridor will be maintained by periodic mowing and clearing activities. Forested and scrub-shrub vegetation communities outside of the permanent easement will be allowed to

[16] Mitigation Rule, Federal Register, Vol. 73, No. 70, April 10, 2008, at 19605, 19629.

regenerate. As noted below, some of the public water wetlands include special wetlands (Table 3.0-1 of the Mitigation Plan) that require a higher compensatory wetland mitigation ratio than normal wetlands (Table 3.0-2 of the Mitigation Plan):

- MP 853.7 – Wetland ID: w-154n44w18-f
  - Special: Wetlands with S1, S2, or S3 Native Plan Communities; Wetlands with High or Outstanding Biodiversity Sites
  - Temporal Loss

- MP 912.1 – Wetland ID: CLC5004o1W
  - No special wetlands
  - Temporal Loss

- MP 988.3 – Wetland ID: NWI-133, NWI-134, and NWI-136 (updated Wetland ID: w-139n34w34-a)
  - No special wetlands
  - Temporal Loss

- MP 1041.2 – Wetland ID: CA147_525b1W
  - Special: Wetlands Hydrologically Connected to Trout Streams; Wetlands Hydrologically Connected to Lakes of High or Outstanding Biologic Significance
  - Temporal Loss
  - Permanent Conversion

- MP 1120.2 – Wetland ID: CR101a1W
  - No special wetland
  - Permanent Conversion