

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE POLLUTION CONTROL AGENCY

In the Matter of the Draft 401 Certification for
the Line 3 Replacement Project

**FINDINGS OF FACT,
CONCLUSIONS OF LAW,
AND RECOMMENDATION**

This matter came before Administrative Law Judge James E. LaFave for a virtual evidentiary hearing on August 24, 2020. The Office of Administrative Hearings record closed on September 15, 2020, following receipt of the last post-hearing submission.

Peter Farrell and Oliver Larson, Assistant Attorneys General, appeared on behalf of the Minnesota Pollution Control Agency (MPCA).

Scott Strand, Attorney at Law, Environmental Law and Policy Center, appeared on behalf of the Friends of the Headwaters.

Moneen Nasmith, Sophia Jayanty, and Sharmeen E. Morrison, Attorneys at Law, Earthjustice, appeared on behalf of the Sierra Club.

Joseph Plumer, General Counsel, appeared on behalf of the Red Lake Band of Chippewa Indians.

Paul Blackburn, Attorney at Law, appeared on behalf of Honor the Earth.

Frank Bibeau, Attorney at Law, appeared on behalf of Honor the Earth and the White Earth Band of Ojibwe.

Friends of the Headwaters, Sierra Club, Honor the Earth, the White Earth Band of Ojibwe Indians, and the Red Lake Band of Chippewa Indians will be collectively referred to as the Joint Petitioners.

Christina J. Brusven and Haley Waller Pitts, Attorneys at Law, Fredrickson & Byron, P.A., appeared on behalf of Enbridge Energy, LP (Enbridge).

STATEMENT OF THE ISSUES

1. Does Enbridge's proposed use of trench methods for stream crossings have temporary or permanent impacts on water quality parameters of concern (POCs)?
2. Have Enbridge and the MPCA identified the least degrading crossing method that is prudent and feasible for each stream crossing?

3. Have Enbridge and the MPCA undercounted the full acreage of the Project's wetland impacts due to flaws in wetland delineation and survey methodologies related to the seasonality of delineation activities?

4. Have Enbridge and the MPCA undercounted the full acreage of wetlands that are physically altered by trenching?

5. Have Enbridge and the MPCA incorrectly determined that the impacts to wetlands that are physically altered by trenching are temporary?

SUMMARY OF RECOMMENDATION

The Administrative Law Judge recommends that the Commissioner of the MPCA (Commissioner) find the Joint Petitioners have failed to meet their burden of proof regarding the five issues presented.

Based on the submissions of the parties and the contents of the hearing record, the Administrative Law Judge makes the following:

FINDINGS OF FACT

I. Summary of the Project

1. The Line 3 Project involves construction of a new 36-inch diameter underground oil pipeline across North Dakota, Minnesota, and Wisconsin that will transport crude oil from Alberta, Canada.¹

2. The new pipeline will replace Enbridge's existing 34-inch diameter pipeline, which was built in the 1960s.² The existing pipeline is corroding and operating at only 51 percent capacity.³ The Minnesota Public Utilities Commission (PUC) approved the need for the new pipeline on May 1, 2020.⁴

3. The Line 3 Project follows a route through Minnesota that was approved by the PUC on May 1, 2020.⁵ The route extends from the Red River of the North near Mattson, Minnesota to the Minnesota-Wisconsin border near Wrenshall, Minnesota.⁶

4. The proposed pipeline and its ancillary facilities will cross 212 different streams and 818 protected wetlands in Minnesota.⁷ In addition, the Line 3 Project proposes to temporarily impact 730.10 acres of wetland, permanently convert

¹ Exhibit (Ex.) MPCA-1 (Administrative Record (AR) 218) at MPCA0041497-99 (Draft 401 Certification).

² *Id.*

³ *Id.*

⁴ AR-470 at MPCA0046293 ¶ 2 (granting certificate of need).

⁵ AR-470 at MPCA0046294 ¶ 4 (granting route permit).

⁶ AR-218 at MPCA0041497-99, Figure 1.

⁷ AR-193 at MPCA0038433, MPCA0038444; *see also* AR-198; AR-199; AR-200.

212.37 acres of wetland to a different wetland type, and permanently fill 5.52 acres of wetland.⁸

5. The proposed pipeline will travel through some of the highest exceptional quality wetlands and surface waters in the state.⁹

II. Section 401 Certification Process

6. The federal Clean Water Act (CWA) “is a comprehensive water quality statute designed to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹⁰

7. As the Minnesota Court of Appeals explained, “[t]he CWA establishes distinct roles for the Federal and State governments.”¹¹ “One of the states’ roles is to create water quality standards, which must consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses.”¹²

8. To ensure compliance with state-created water quality standards, section 401 of the CWA gives states a role in federal permitting and licensing schemes. Under section 401, no federal permit or license may issue for any activity that may result in a discharge to waters of the United States unless the state (or other certifying authority) where the discharge would originate: (1) certifies that the discharge will comply with state water quality standards; or (2) waives certification.¹³

9. A state waives its certification authority if it fails or refuses to act on a request for certification “within a reasonable period of time (which shall not exceed one year).”¹⁴

10. In Minnesota, the MPCA is responsible for responding to section 401 certification requests.¹⁵

11. By rule, the MPCA may take one of three principal actions in response to a request for a section 401 certification: (1) issue the certification; (2) deny the certification; or (3) waive the agency’s authority to issue the certification.¹⁶

⁸ AR-218 at MPCA0041499-500.

⁹ MPCA-8 at 22:475-77 (Gernes Direct).

¹⁰ *In re 401 Water Quality Certification*, 822 N.W.2d 676, 679 (Minn. Ct. App. 2012) (quotations omitted).

¹¹ *Id.* (quotation omitted).

¹² *Id.* (quotations omitted).

¹³ 33 U.S.C. § 1341(a)(1) (2018).

¹⁴ *Id.*

¹⁵ *In re 401 Water Quality Certification*, 822 N.W.2d at 682 (citing Minn. Stat. § 115.03, subd. 4a(1)(b)).

¹⁶ Minn. R. 7001.1450, subp. 1 (2019).

12. The MPCA has the option of including conditions in a certification, which then become conditions of any federal license or permit that is issued.¹⁷

13. If the MPCA issues the certification—with or without conditions—the certification must contain “[a] statement that there is reasonable assurance that the activity will be conducted in a manner that will not violate applicable water quality standards.”¹⁸

III. Procedural Background

14. In October 2018, Enbridge submitted a request to the MPCA for a section 401 certification.¹⁹

15. While Enbridge’s section 401 request was pending, the Minnesota Court of Appeals held that the Line 3 Project’s Environmental Impact Statement (EIS) was inadequate because it failed to address how an oil spill would impact the Lake Superior watershed.²⁰

16. In September 2019, the MPCA denied Enbridge’s request for a section 401 certification without prejudice,²¹ because state law “prohibits final government decisions to grant a permit or approve a project until any required EIS for the project is determined adequate.”²²

17. As part of the denial, the MPCA requested that Enbridge provide additional information concerning oil spill response modeling, pre- and post-construction monitoring, and compensatory wetland mitigation in any subsequent application.²³

18. In November 2019, Enbridge submitted its second request for a section 401 certification.²⁴

19. On March 2, 2020, the MPCA notified the public of its preliminary 401 certification and antidegradation determinations.²⁵

20. The MPCA made a preliminary decision to issue the section 401 certification to Enbridge.²⁶ The Draft 401 Certification included 28 specific conditions to ensure Enbridge’s compliance with state water quality standards.²⁷

¹⁷ See Minn. R. 7001.1470 (2019); 33 U.S.C. § 1341(d) (2018); *PUD No. 1 v. Wash. Dep’t of Ecology*, 511 U.S. 700, 708 (1994).

¹⁸ Minn. R. 7001.1470, subp. 1C.

¹⁹ See MPCA-6 at 9:193-95; AR-99 (Molloy Direct).

²⁰ *Id.*; see also *In re Applications of Enbridge Energy*, 930 N.W.2d 12, 17 (Minn. Ct. App. 2019).

²¹ AR-99.

²² *Id.* at MPCA0031562 (citing Minn. R. 4410.3100).

²³ *Id.*

²⁴ See *id.* at 11:226-27; AR-106; AR-107.

²⁵ AR-487 at MPCA0046961-64.

²⁶ See AR-218.

²⁷ *Id.*

21. The MPCA also preliminarily concluded that the Line 3 Project would satisfy the antidegradation standards in Minn. R. 7050.0265.²⁸

22. The public comment period on the Draft 401 Certification closed on April 10, 2020.²⁹ The comment period was initially scheduled to end on April 3, 2020, but the MPCA extended the deadline due to the COVID-19 pandemic.³⁰

23. During the comment period, the MPCA received over 9,723 written comments and 20 petitions for a contested case hearing from various environmental organizations, Tribal Nations, and individuals.³¹

24. The Joint Petitioners submitted a joint petition for a contested case.³²

25. The Commissioner evaluated the petitions to determine whether they satisfied the MPCA's criteria for a contested case hearing.³³ Under the criteria, the Commissioner must grant a contested case petition if she determines that: (1) there is a material issue of fact in dispute concerning the matter pending before the Commissioner; (2) the Commissioner has the jurisdiction to make a determination on the disputed material issue of fact; and (3) there is a reasonable basis underlying the disputed material fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the Commissioner in resolving the disputed facts in making a final decision on the matter.³⁴

26. On June 3, 2020, the MPCA issued its Findings of Fact, Conclusions of Law, and Order on the contested case petitions.³⁵ The MPCA granted the Joint Petitioners' request for a contested case, in part, concluding that a hearing was warranted on the following five fact questions:

Will Enbridge's proposed use of trench methods for stream crossings have temporary or permanent impacts on water quality parameters of concern?

Have Enbridge and the MPCA identified the least degrading crossing method that is prudent and feasible for each stream crossing?

Have Enbridge and the MPCA undercounted the full acreage of the Project's wetland impacts due to flaws in wetland delineation and survey methodologies related to the seasonality of delineation activities?

²⁸ AR-217; see also Minn. R. 7050.0285, subp. 4 (2019) (stating that the commissioner shall prepare a written preliminary antidegradation determination regarding section 401 certification).

²⁹ MPCA-2 at 3; AR-491.

³⁰ MPCA-2 at 3; AR-491.

³¹ MPCA-2 at 3-4.

³² *Id.* at 3; MPCA-3.

³³ See MPCA-2.

³⁴ Minn. R. 7000.1900, subp. 1 (2019).

³⁵ MPCA-2 at 21.

Have Enbridge and the MPCA undercounted the full acreage of wetlands that are physically altered by trenching?

Have Enbridge and the MPCA incorrectly determined that the impacts to wetlands that are physically altered by trenching are temporary?³⁶

27. The MPCA further determined that additional issues raised in the petitions did not satisfy the criteria for granting a contested case.³⁷ These issues included: (1) the MPCA's narrow definition of the scope of its authority under section 401 is arbitrary and capricious;³⁸ (2) the MPCA cannot abdicate consideration of routing alternatives and refuse to consider denying certification;³⁹ and (3) on behalf of the Red Lake Band of Chippewa Indians and the White Earth Band of Ojibwe, the Line 3 Project violates treaty rights and the MPCA does not have unilateral authority to grant water crossing permits without Chippewa consent.⁴⁰

28. To accommodate the contested case hearing, the United States Army Corps of Engineers (Corps) extended its deadline for the MPCA's decision on Enbridge's second request for a section 401 certification to November 14, 2020.⁴¹

29. On June 8, 2020, the MPCA issued a Notice and Order for Hearing that referred the five aforementioned fact issues to the Office of Administrative Hearings for a contested case hearing.⁴²

30. The Administrative Law Judge held an evidentiary hearing on August 24, 2020. At the hearing, the Administrative Law Judge received into evidence the pre-filed written direct and rebuttal testimony of six witnesses for Enbridge; five witnesses for the MPCA; four witnesses for the Joint Petitioners; and one witness for Friends of the Headwaters.⁴³

31. The Administrative Law Judge also received a total of 72 exhibits into evidence, including MPCA-1, which is comprised of the full administrative record that the MPCA certified to the court and all parties on June 30, 2020.⁴⁴

IV. Regulatory Background

A. Water Quality Standards

32. The water quality standards, codified in Minnesota Rules, chapter 7050, have three main elements. The first element involves the classification of waters into

³⁶ *Id.* at 20-21.

³⁷ *Id.* at 21.

³⁸ Joint Petitioner's Post-Hearing Brief at 20-22 (Sept. 15, 2020).

³⁹ *Id.* at 22-26.

⁴⁰ Tribal Supplement to Joint Petitioners' Post-Hearing Brief (Sept. 15, 2020).

⁴¹ AR-484.

⁴² See Tr. at 7-11.

⁴³ *Id.*

⁴⁴ See MPCA-1; Tr.at 4, 49-50, 180.

designated uses.⁴⁵ For example, the MPCA may designate a body of water for the “use” of aquatic life and recreation.⁴⁶ Designated uses are the “goal” or “target” uses for a water; “existing uses” are the uses that the water has actually attained.⁴⁷

33. The second element involves the adoption of narrative and numeric criteria to protect a water’s designated use.⁴⁸ An example is a numeric limitation on the presence of a contaminant in a water that is designated for drinking use.⁴⁹

34. The third element is composed of antidegradation standards.⁵⁰ They are designed to ensure that existing uses of waters are maintained and protected.⁵¹ They also provide increased protection for certain high-quality waters.⁵² While antidegradation standards “are just one component of water quality standards, they ultimately incorporate consideration of all three elements—designated beneficial uses, narrative and numeric criteria, and antidegradation requirements—in the framework.”⁵³ As a result, for project-specific review, “compliance with the antidegradation standards largely ensures compliance with water quality standards as a whole.”⁵⁴

B. Antidegradation Review

35. The MPCA must determine whether a project or activity satisfies antidegradation standards before the agency can issue a section 401 certification.⁵⁵

36. Under the antidegradation standards, the Commissioner can approve a proposed activity “only when existing uses and the level of water quality necessary to protect existing uses are maintained and protected.”⁵⁶ Likewise, the Commissioner cannot “approve a proposed activity that would permanently preclude attainment of water quality standards.”⁵⁷

37. “Parameters of concern” define the scope of antidegradation review. The term refers to pollutants that are reasonably expected in a discharge or as a result of a proposed activity; are anticipated to cause degradation (i.e., a measurable change to existing water quality made or induced by human activity resulting in diminished conditions of surface waters); have numeric or narrative standards; and present the greatest risk of degradation.⁵⁸

⁴⁵ MPCA-4 at 13:288-15:322 (Kuskie Direct).

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.* at 15:317-19.

⁵⁴ *Id.* at 15:319-21.

⁵⁵ See Minn. R. 7050.0285, subp. 3 (2019).

⁵⁶ Minn. R. 7050.0265, subp. 2 (2019).

⁵⁷ *Id.*, subp. 4.

⁵⁸ MPCA-4 at 19:408-15 (Kuskie Direct); MPCA-5 at 6:109-16 (Estabrooks Direct).

38. Under this regulatory framework, the MPCA’s antidegradation review focuses on whether the discharge of parameters of concern from a proposed project will result in the loss of an affected water’s existing use; the violation of an applicable narrative or numeric standard; or permanently preclude an affected water from attaining water quality standards.⁵⁹

39. The antidegradation standards contemplate that a project may result in water quality degradation—including degradation that may be permanent—so long as there are no losses of any existing uses, the violation of numeric or narrative water quality criteria, or permanent preclusion of attainment of water quality standards.⁶⁰

40. The antidegradation standards, however, also require that any degradation be prudently and feasibly minimized.⁶¹ A “prudent alternative” is “a pollution control alternative selected with care and sound judgment.”⁶² A “feasible alternative” is “a pollution control alternative that is consistent with sound engineering and environmental practices, affordable, and legal, and that has supportive governance that can be successfully put into practice to accomplish the task.”⁶³

C. Parameters of Concern

41. For the Line 3 Project, the MPCA required Enbridge to assess several parameters of concern: total suspended solids (TSS); parameters associated with river eutrophication, such as phosphorous, chlorophyll-a, and biological oxygen demand (BOD₅); dissolved oxygen; mercury; and parameters for which waters across the Line 3 route are listed as impaired under section 303(d) of the CWA.⁶⁴

42. These parameters are associated with “Class 2” waters, which are waters designated for the use of supporting aquatic life and recreation.⁶⁵ The only exception is mercury, which is also associated with “Class 1” domestic consumption uses.⁶⁶

43. The principal parameter of concern is TSS. TSS is “a measure of sediment and organic matter that can become suspended in water.”⁶⁷ Trenching in streams will likely result in TSS spikes because “[e]xcavating the trench for the pipeline will disturb the soil and sediments in and around those waterbodies being crossed by the project.”⁶⁸

⁵⁹ See Minn. R. 7050.0265, subps. 2, 4 (2019); MPCA-9 at 2:23-5:82 (Kuskie Rebuttal).

⁶⁰ See, e.g., Minn. R. 7050.0265, subps. 3, 5 (2019); MPCA-9 at 3:47-5:82 (Kuskie Rebuttal).

⁶¹ See Minn. R. 7050.0265, subp. 5 (2019) (stating that “a proposed activity shall be approved only when the commissioner makes a finding that degradation will be prudently and feasibly minimized”); MPCA-6 at 12:248-58 (Molloy Direct).

⁶² Minn. R. 7050.0255, subp. 34 (2019).

⁶³ *Id.*, subp. 17 (2019).

⁶⁴ AR-217 at MPCA0041489; MPCA-4 at 19:427-20:432 (Kuskie Direct); MPCA-5 at 6:118-12:255 (Estabrooks Direct). Section 303(d) of the CWA requires states to develop lists of “impaired waters” that do not meet water quality standards. 33 U.S.C. § 1313(d).

⁶⁵ See, e.g., MPCA-4 at 20:434-39 (Kuskie Direct).

⁶⁶ *Id.*

⁶⁷ MPCA-5 at 7:133-48 (Estabrooks Direct).

⁶⁸ *Id.* at 8:150-62; see also MPCA-4 at 20:441-22:477 (Kuskie Direct).

44. TSS is the principal parameter of concern because it is the root cause of the potential water quality impacts that are associated with the other parameters of concern.⁶⁹ “For example, if mercury is present in sediment prior to the Project’s in-stream construction activities, the resuspension of such mercury-containing sediment may result in a temporary increase in mercury concentrations in the affected waterbody.”⁷⁰

D. Wetlands

45. Minnesota Rule 7050.0186 governs the protection of wetlands under state water quality standards. Under the rule, “[i]t is the policy of the state to protect wetlands and prevent significant adverse impacts on wetland beneficial uses caused by chemical, physical, biological or radiological changes.”⁷¹

46. The rule further identifies the beneficial uses that wetlands provide to the public,⁷² including the propagation and maintenance of a healthy community of aquatic and terrestrial species indigenous to wetlands; the preservation of wildlife habitat; and supporting the biological diversity of the landscape.⁷³

47. The rule sets out a three-part sequence to protect the beneficial uses that wetlands provide: avoid, minimize, and replace.⁷⁴ Under this sequence, the goals are to: (1) avoid adverse impacts; (2) minimize impacts that cannot be avoided; and (3) mitigate unavoidable impacts by compensation.⁷⁵

48. “Physical alteration” impacts trigger the sequence.⁷⁶ “Physical alteration” means “the dredging, filling, draining, or permanent inundating of a wetland.”⁷⁷ The rule further specifies that “[r]estoring a degraded wetland by reestablishing its hydrology is not a physical alteration.”⁷⁸

49. The terms “dredging, filling, draining or permanent inundation” are not defined.⁷⁹ However, the MPCA guidance provides a useful framework, defining the relevant impacts as follows:

- a. dredging is “the excavation of the wetland bottom by any means”;
- b. filling is the introduction of “enough solid material into a wetland to alter its cross-section or hydrological characteristics, obstruct flow

⁶⁹ See MPCA-5 at 8:164-11:230 (Estabrooks Direct); AR-193 at MPCA0038453-56.

⁷⁰ MPCA-4 at 22:471-73 (Kuskie Direct).

⁷¹ Minn. R. 7050.0186, subp. 1.

⁷² *Id.*

⁷³ *Id.*; see also MPCA-8 at 9:179-10:209 (Gernes Direct).

⁷⁴ Minn. R. 7050.0186, subp. 2.

⁷⁵ *Id.*

⁷⁶ *Id.*, subp. 1a.A.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ See *id.*

patterns, change the wetland's boundary, or convert the wetland to a non-wetland area”;

- c. draining is “the permanent lowering of the water table by a method such as ditching, tiling, diverting water flow away from a wetland, or lowering a wetland’s outlet elevation”; and
- d. permanent inundation is “rais[ing] the ordinary elevation of wetland waters by a physical change, such as constructing a dam, weir, dike, berm or other structure for a period sufficient to change the aquatic community structure.”⁸⁰

50. Regulators must exercise judgment about the scope of physical alteration impacts. As MPCA wetlands expert Mark Gernes testified, each “physical alteration” impact is an activity which “can result in a loss of wetland beneficial uses.”⁸¹ But [i]t is difficult to quantify absolute thresholds that will lead to a loss of beneficial uses.”⁸² Accordingly, “[i]nterpretation of physical alteration thresholds is best based on prudent professional judgment that in practice is applied conservatively to be most protective of wetland beneficial uses.”⁸³

E. Wetland Delineations

51. “Wetland delineation” refers to “the identification and determination of the boundary of a wetland.”⁸⁴ The predominant methodology for wetland delineations is set forth in the Corps’ 1987 Wetlands Delineation Manual (1987 Manual) and associated Regional Supplements.⁸⁵

52. The delineation methodology focuses on three parameters: hydrology, soils, and vegetation.⁸⁶ In broad strokes, “all three parameters—sufficient hydrology, hydric soils and a predominance of hydrophytic vegetation—must be present for an area to be designated as wetland.”⁸⁷ The wetland’s boundary is “where one or more of three parameters drop out.”⁸⁸

53. Seasonal conditions can impact wetland delineations. Although the 1987 Manual and its Regional Supplements do not require delineations to take place at any particular time, the onus is on delineators to “evaluate whether all three parameters for designating a wetland have been met.”⁸⁹ Delineations are generally “best accomplished: (1) during the growing season when plants are actively growing and can

⁸⁰ ENB-5 at 3:58-4:81 n.3-6 (Arndt Direct).

⁸¹ MPCA-8 at 10:198-209 (Gernes Direct).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ MPCA-7 at 7:142-46 (Norris Direct).

⁸⁵ *Id.*; *see also* AR-362; AR-363; AR-389; AR-390.

⁸⁶ MPCA-7 at 8:148-62 (Norris Direct).

⁸⁷ *Id.*

⁸⁸ *Id.* at 8:164-69.

⁸⁹ *Id.* at 11:210-12:231.

be accurately identified; (2) when the expected hydrologic conditions are present (both seasonally and during a year with ‘normal’ precipitation); and (3) when the soil is not frozen, so soil pits can be dug.”⁹⁰

54. Delineations also involve identification of the type of wetland based on national, regional, and state-specific classification schemes.⁹¹

55. The Corps’ standard methodology provides guidance to delineators who must operate in less-than-ideal conditions or encounter difficult, seasonal wetland types. For example, the 1987 Manual and its Regional Supplements address “wetlands that may be difficult to identify, such as vernal pools that periodically lack indicators of wetland hydrology and may exhibit seasonal shifts in plant communities.”⁹²

V. Stream Crossing Methods

56. The Line 3 Project will cross 212 total streams.⁹³ The crossing methods fall into two main categories: open trench and trenchless.⁹⁴

57. Trench methods involve direct excavation on the bed of the stream.⁹⁵ Trenchless methods, by contrast, do not involve direct excavation.⁹⁶ Instead, trenchless methods involve tunneling beneath the stream.⁹⁷ Trenchless methods can be less degrading because they do not involve in-stream work, but they carry their own set of risks—principally, the risk of an inadvertent release of drilling mud and fluids, known as a hydraulic fracture or “frac out.”⁹⁸

58. For the Line 3 Project, Enbridge proposes to use five different types of trench methods for stream crossings: the open cut (non-isolated) method; the push-pull method; the dry (isolated) method—dam and pump; the dry (isolated) method—flume; and the modified dry crossing method.⁹⁹

59. Enbridge also proposes the use of two trenchless methods: the bore method and the Horizontal Directional Drilling (HDD) method.¹⁰⁰

60. Different types of crossing methods are suitable for different types of waterbodies, and each method has advantages and disadvantages.¹⁰¹

⁹⁰ *Id.*

⁹¹ *Id.* at 9:171-10:98; MPCA-19; MPCA-20; MPCA-21; MPCA-22.

⁹² *Id.* at 11:219-12:231 (citing AR-363; AR-389; AR-390).

⁹³ AR-218 at MPCA0041499; AR-193 at MPCA0038433.

⁹⁴ MPCA-6 at 13:267-14:296 (Molloy Direct).

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ AR-193 at MPCA0038433-35.

¹⁰⁰ *Id.* at MPCA0038435-41.

¹⁰¹ MPCA-6 at 13:275-76 (Molloy Direct).

61. The record provides specific information about each crossing method. Enbridge's engineering expert, Mr. Simonson, testified in detail about each type of crossing method, including duration, cost, and suitability for different stream types.¹⁰² Similarly, MPCA's lead on the Project, Mr. Molloy, and Enbridge's environmental permitting expert, Mr. Hahn, provided a high-level overview of the crossing methods that Enbridge will employ.¹⁰³ The Antidegradation Assessment and the Summary of Construction Methods and Procedures also contain comprehensive analyses of the proposed crossing methods.¹⁰⁴

VI. Wetland Delineations for Line 3

62. For the Line 3 Project, Enbridge conducted wetland delineations following "the standardized protocol as described in the Corps' 1987 Manual and associated Regional Supplements."¹⁰⁵

63. Enbridge's expert delineator, Daniel Tersteeg, described the delineation process.¹⁰⁶ In general, the company conducted "field surveys along the entirety of the Project's route where landowner permission was given."¹⁰⁷ The company also developed a delineation survey protocol with the Corps "to ensure consistency in delineation methods."¹⁰⁸ Among other things, the protocol required the entire environmental survey corridor to be walked; the collection of wetland observation data for each wetland community; and photo documentation of all surveyed wetlands.¹⁰⁹

64. Enbridge conducted the delineation surveys from 2013 to the present to identify all wetlands that may be affected by Project construction.¹¹⁰ Nearly all of the delineation surveys have been completed.¹¹¹ As of August 7, 2020, four properties along the route still need to be surveyed: three are pending legal resolution for access;¹¹² the remaining property is owned by the Department of Natural Resources (DNR). Enbridge is unable to access this tract because it is landlocked by a condemnation property.¹¹³ "All other pending tracts associated with construction workspace have been surveyed to date."¹¹⁴

65. Any finding of fact contained in the following Memorandum is hereby adopted as such.

¹⁰² See, e.g., ENB-2 at 5:107-30:752 (Simonson Direct).

¹⁰³ MPCA-6 at 13:267-21:433 (Molloy Direct); ENB-1 at 10:244-12:311 (Hahn Direct).

¹⁰⁴ AR-193 at MPCA0038432-43; AR-205 at MPCA0038919-58.

¹⁰⁵ AR-34.

¹⁰⁶ ENB-4 at 7:166-8:202 (Tersteeg Direct).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*; see also AR-34 at MPCA001718-26.

¹¹⁰ See ENB-4 at 9:228-10:252 (Tersteeg Direct).

¹¹¹ ENB-6 at 2:43-3:59 (Hahn Rebuttal).

¹¹² *Id.*

¹¹³ *Id.*

¹¹⁴ *Id.*

CONCLUSIONS OF LAW

1. The MPCA and the Administrative Law Judge have jurisdiction to consider the five issues presented pursuant to Minn. R. 7000.1750-.2200, 7001.0130 (2019); Minn. Stat. § 14.50 (2020).
2. The MPCA and Enbridge have complied with applicable procedural requirements of rule and law.
3. The Joint Petitioners bear the burden of proving that each of the five factual issues should be resolved against the MPCA.¹¹⁵

RECOMMENDATION

The Administrative Law Judge recommends that the Commissioner find:

1. The Joint Petitioners have failed to prove that the impacts on water quality parameters of concern from trenching in streams will be permanent.
2. The Joint Petitioners have failed to prove that the MPCA and Enbridge have not identified the least degrading crossing method that is prudent and feasible for each stream.
3. The Joint Petitioners have failed to prove that the MPCA and Enbridge undercounted the full acreage of wetland impacts due to seasonality-related flaws in the wetland delineation process.
4. The Joint Petitioners have failed to prove that the MPCA and Enbridge undercounted the full acreage of wetlands that will be physically altered by trenching.
5. The Joint Petitioners have failed to prove that the impacts to wetlands that are physically altered by trenching are permanent.

Dated: October 16, 2020


JAMES E. LAFAVE
Administrative Law Judge

¹¹⁵ Minn. R. 1400.7300, subp. 5 (2019); *see also* *Minn. Ctr. For Env'tl. Advocacy v. Minn. Pollution Control Agency*, 696 N.W.2d 398, 404 (Minn. Ct. App. 2005). ("Because it is the relator rather than the city or agency that is seeking to have the limit added to the permit, and because it is the imposition of that limit that is at issue in these proceedings, under Minn. R. 7300, subp. 5, relator is the party proposing the action and has the burden of proof.").

NOTICE

This Report is a recommendation, not a final decision. The Commissioner will make the final decision after a review of the record. Under Minn. Stat. § 14.61 (2020), the Commissioner shall not make a final decision until this Report has been made available to the parties for at least ten calendar days. The parties may file exceptions to this Report and the Commissioner must consider the exceptions in making a final decision. Exceptions must be filed by October 26, 2020.¹¹⁶ Parties should contact Adonis A. Neblett, General Counsel, Minnesota Pollution Control Agency, adonis.neblett@state.mn.us, 520 Lafayette Road, St. Paul, MN, 55155, to learn the procedure for filing exceptions or presenting argument.

MEMORANDUM

I. Introduction

On March 2, 2019, the MPCA issued public notice of its preliminary decision to issue the 401 certification and related permits.¹¹⁷ The MPCA received 20 petitions for a contested case hearing, including one from the Joint Petitioners.¹¹⁸ On June 3, 2020, the MPCA issued its Finding of Facts, Conclusions of Law and Order (Order) on the contested case hearing requests concerning the Draft 401 Certification.¹¹⁹ The Order granted a contested case hearing on five of the issues raised by the Joint Petitioners.¹²⁰

II. Scope of Contested Case Hearing

The scope of this contested case hearing is limited to the five issues identified by the MPCA. The ultimate question of whether the MPCA should grant the 401 certification is not before this tribunal.

The Joint Petitioners raised several issues beyond those presented to the Administrative Law Judge. They include: (1) that the MPCA improperly rejected any “legal” issues from consideration in the contested case hearing;¹²¹ (2) that the MPCA’s narrow definition of the scope of its authority under section 401 is arbitrary and capricious;¹²² (3) that the MPCA cannot abdicate consideration of routing alternative and refuse to consider denying certification;¹²³ and (4) on behalf of the Red Lake Band of Chippewa Indians and the White Earth Band of Ojibwe, that the Project violates treaty rights, and that the MPCA does not have unilateral authority to grant water crossing permits without Chippewa consent.¹²⁴

¹¹⁶ Scheduling Order (June 26, 2020).

¹¹⁷ Notice and Order for Prehearing Conference and Hearing at 4 (June 8, 2020).

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 5.

¹²⁰ *Id.* at Ex. 4 (Order).

¹²¹ Joint Petitioner’s Post-Hearing Brief at 18-20.

¹²² *Id.* at 20-22.

¹²³ *Id.* at 22-26.

¹²⁴ Tribal Supplement to Joint Petitioners’ Post -Hearing Brief (Sept. 15, 2020).

The Joint Petitioners vehemently disagree with the MPCA's decision to limit this contested case hearing to the five issues identified, arguing the MPCA improperly rejected consideration of "legal" issues. The Joint Petitioners suggest it is folly to believe one can scrupulously parse the difference between "factual" and legal" issues. They insist that the Minnesota Court of Appeals has recognized that mixed question of law and fact are properly within the scope of a contested case hearing.¹²⁵

But the Joint Petitioners concede that "the standard governing the MPCA's grant of contested cases is fairly broad."¹²⁶ Under the law, the Commissioner must grant a petition for a contested case hearing if she determines that:

- (1) there is a material issue of fact in dispute concerning the matter pending before the Commissioner;
- (2) the Commissioner has the jurisdiction to make a determination on the disputed material issue of fact; and
- (3) there is a reasonable basis underlying the disputed material fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the Commissioner in resolving the disputed facts in making a final decision on the matter.¹²⁷

The rule further provides that the Commissioner "may request the administrative law judge to identify the issues and determine the appropriate scope of the hearing."¹²⁸

Here, rather than delegating the responsibility to the Administrative Law Judge, the Commissioner opted to identify the issues and the scope of the contested case hearing herself. The Commissioner evaluated all the petitions that requested a contested case hearing.¹²⁹ In accordance with applicable law, due process, and fundamental fairness, the Commissioner then identified five issues for this contested case hearing.¹³⁰ Because the Commissioner elected to identify the issues and determine the scope of this contested case hearing, the Administrative Law Judge has no authority to second guess the Commissioner's decision or to consider issues other than those that she identified.

The issues raised by the Joint Petitioners, including those raised in the Tribal Supplement to the Joint Petitioner's Post-Hearing Brief, are very important and go to the ultimate question of whether the MPCA should grant the 401 certification. But, despite their import, those issues are not properly before this tribunal and will not be considered as part of this contested case hearing.

¹²⁵ Joint Petitioner's Post-Hearing Brief at 19 (Sept. 15, 2020).

¹²⁶ *Id.* at 18.

¹²⁷ Minn. R. 7000.1900, subp. 1 (2019).

¹²⁸ *Id.* at subp. 2.

¹²⁹ MPCA-2 at 7-20 (Findings of Fact, Conclusions of Law and Order).

¹³⁰ See Minn. R. 7000.1900, subp. 2.

III. Burden of Proof

When the MPCA refers a matter for a contested case hearing the purpose is to “allow the introduction of evidence that would aid the . . . commissioner in resolving the disputed facts in making a final decision on the matter.”¹³¹ There is no statute or rule that sets forth the burden of proof in a contested case involving a 401 certification. Absent substantive law that provides a different burden or standard, the “party proposing a certain action be taken must prove the facts a tissue by a preponderance of the evidence.”¹³²

Enbridge ultimately bears the burden of establishing it meets the standards for the issuance of the Draft 401 Certification. And, after careful review, the MPCA determined Enbridge met those standards and issued a Draft 401 Certification. The Joint Petitioners are challenging the MPCA’s issuance of the Draft 401 Certification. Because the Joint Petitioners are the party proposing the action, the burden is on the Joint Petitioners to establish by a preponderance of the evidence that the factual questions be resolved against the MPCA.¹³³

IV. Issue 1 (Parameters of Concern)

The Joint Petitioners argue that the “MPCA’s conclusion that all impacts from waterway crossing will be temporary is irrational,” because “MPCA’s conclusion is based on examination of only a single parameter of concern and ignores MPCA’s own regulations and science, as well as the record evidence presented here.”¹³⁴ The MPCA responds that “[t]he record overwhelmingly shows that the impacts from trenching in streams will be temporary, limited to the duration of in-stream construction, and will not result in long-term effects to streambed composition or aquatic life.”¹³⁵

The MPCA must determine whether a project or activity satisfies antidegradation standards before the agency can issue a section 401 certification.¹³⁶ The antidegradation standards establish certain lines that cannot be crossed. Principally, the Commissioner can approve a proposed activity “only when existing uses and the level of water quality necessary to protect existing uses are maintained and protected.”¹³⁷ Likewise, the Commissioner cannot “approve a proposed activity that would permanently preclude attainment of water quality standards.”¹³⁸

“Parameters of concern” define the scope of antidegradation review. The term refers to pollutants that are reasonably expected in a discharge or as a result of a

¹³¹ Minn. R. 7000.1900, subp. 1(c) (2019).

¹³² Minn. R. 1400.7300, subp. 5.

¹³³ *Minn. Ctr. For Env'tl. Advocacy*, 696 N.W.2d at 404 (“Because it is the relator rather than the city or agency that is seeking to have the limit added to the permit, and because it is the imposition of that limit that is at issue in these proceedings, under Minn. R. 7300, subp. 5, relator is the party proposing the action and has the burden of proof.”).

¹³⁴ Joint Petitioners’ Post-Hearing Brief at 26 (Sept. 25, 2020).

¹³⁵ MPCA’s Post-Hearing Brief at 9 (Sept. 15, 2020).

¹³⁶ See Minn. R. 7050.0285, subp. 3.

¹³⁷ Minn. R. 7050.0265, subp. 2.

¹³⁸ *Id.*, subp. 4.

proposed activity; are anticipated to cause degradation (i.e., a measurable change to existing water quality made or induced by human activity resulting in diminished conditions of surface waters); have numeric or narrative standards; and present the greatest risk of degradation.¹³⁹

Under this regulatory framework, the MPCA's antidegradation review focuses on whether the discharge of parameters of concern from a proposed project will result in the loss of an affected water's existing use; the violation of an applicable narrative or numeric standard; or permanently preclude an affected water from attaining water quality standards.¹⁴⁰ If a proposed project does not cross any of these regulatory red lines, then the antidegradation standards contemplate that a project may result in water quality degradation—including degradation that may be permanent.¹⁴¹ Such degradation is permissible as long as it has been prudently and feasibly minimized.¹⁴²

For the Line 3 Project, the MPCA required Enbridge to assess several parameters of concern: total suspended solids (TSS); parameters associated with river eutrophication, such as phosphorous, chlorophyll-a, and biological oxygen demand (BOD₅); dissolved oxygen; mercury; and parameters for which waters across the Line 3 route are listed as impaired under section 303(d) of the CWA.¹⁴³ These parameters are associated with "Class 2" waters, which are waters that designated for the use of supporting aquatic life and recreation.¹⁴⁴ The only exception is mercury, which is also associated with "Class 1" domestic consumption uses.¹⁴⁵

According to the MPCA, the principal parameter of concern is TSS. TSS is "a measure of sediment and organic matter that can become suspended in water."¹⁴⁶ Trenching in streams will likely result in TSS spikes because "[e]xcavating the trench for the pipeline will disturb the soil and sediments in and around those waterbodies being crossed by the project."¹⁴⁷ TSS is the principal parameter of concern because it is the root cause of the potential water quality impacts that are associated with the other parameters of concern.¹⁴⁸ "For example, if mercury is present in sediment prior to the Project's instream construction activities, the resuspension of such mercury-containing sediment may result in a temporary increase in mercury concentrations in the affected waterbody."¹⁴⁹

The record shows that the impacts from trenching in streams will not result in the loss of any existing uses, violate an applicable numeric or narrative water quality

¹³⁹ MPCA-4 at 19:408-15 (Kuskie Direct); MPCA-5 at 6:109-16 (Estabrooks Direct).

¹⁴⁰ See Minn. R. 7050.0265, subps. 2, 4; MPCA-9 at 2:23-5:82 (Kuskie Rebuttal).

¹⁴¹ See, e.g., Minn. R. 7050.0265, subps. 3, 5; MPCA-9 at 3:47-5:82 (Kuskie Rebuttal).

¹⁴² *Id.*

¹⁴³ AR-217 at MPCA0041489; MPCA-4 at 19:427-20:432 (Kuskie Direct); MPCA-5 at 6:118-12:255 (Estabrooks Direct).

¹⁴⁴ See, e.g., MPCA-4 at 20:434-39 (Kuskie Direct).

¹⁴⁵ *Id.*

¹⁴⁶ MPCA-5 at 7:133-48 (Estabrooks Direct).

¹⁴⁷ *Id.* at 8:150-62; see also MPCA-4 at 20:441-22:477 (Kuskie Direct).

¹⁴⁸ See MPCA-5 at 8:164-11:230 (Estabrooks Direct); AR-193 at MPCA0038453-56.

¹⁴⁹ MPCA-4 at 22:471-73 (Kuskie Direct).

standard, or permanently preclude attainment of water quality standards. The MPCA's expert witnesses, Melissa Kuskie and Tom Estabrooks, testified that the primary impact from trenching in streams will be temporary, acute spikes in TSS concentrations.¹⁵⁰ The magnitude and duration of TSS increases will vary depending on the trench method that is used, as well as the characteristics of the affected waterbody.¹⁵¹ None are expected to violate Minnesota's TSS standards.¹⁵² As Ms. Kuskie testified, the TSS standards have a time component; they may be exceeded up to 10 percent of the time between April 1 and September 30.¹⁵³

The duration of TSS increases from trenching are expected to last only a matter of hours or days, while a violation of the TSS standards would require exceedances over a period of at least 18 days.¹⁵⁴ Similarly, in-stream trenching will not result in increases of other parameters of concern—except to the extent that a parameter is already present in resuspended sediments.¹⁵⁵ These resuspension effects, however, are expected to be temporary due to the duration of in-stream construction.¹⁵⁶

The record supports the MPCA's analysis. The Antidegradation Assessment contains an extensive discussion of the potential water quality effects from trenching on parameters of concern.¹⁵⁷ The analysis is grounded in available, existing water quality data from the MPCA and includes a parameter-by-parameter breakdown for each stream that will be crossed by the Line 3 Project.¹⁵⁸ The Antidegradation Assessment also includes an analysis of supporting scientific literature, plus TSS data that Enbridge collected from a recent pipeline project in Wisconsin.¹⁵⁹

The record further shows that the MPCA conducted a thorough, comprehensive, and independent review of the Antidegradation Assessment. In particular, the agency drew on the technical and regional knowledge of its Watershed Division to vet the Antidegradation Assessment's conclusions.¹⁶⁰ The MPCA, in consultation with other regulators, has also required Enbridge to develop an extensive set of plans,

¹⁵⁰ *Id.* at 21:464-77; MPCA-5 at 14:284-15:306 (Estabrooks Direct).

¹⁵¹ See MPCA-4 at 21:464-77.

¹⁵² *Id.*; accord MPCA-9 at 6:110-22 (Kuskie Rebuttal).

¹⁵³ MPCA-4 at 21:464-77; see also Minn. R. 7050.0222.

¹⁵⁴ See MPCA-4 at 23:492-502 (Kuskie Direct). In Ms. Kuskie's written testimony, she stated that "[a]ny violation of TSS standards would require exceedances over a period of at least 12 to 18 days." *Id.* at 23:498-99. The correct number is 18 days. The TSS standards permit exceedances for a percentage of a defined season. See generally Minn. R. 7050.0222. Here, each of the streams that will be crossed by the Line 3 Project define the relevant season as April 1 to September 30—which is approximately 180 days—and permit exceedances up to ten percent of that time. *Id.* Accordingly, any violation of an applicable TSS standard would require an exceedance of a period of at least 18 days.

¹⁵⁵ MPCA-4 at 21:464-77 (Kuskie Direct).

¹⁵⁶ *Id.*

¹⁵⁷ See, e.g., AR-193 at MPCA0038453-56, MPCA0038462-64.

¹⁵⁸ See AR-204.

¹⁵⁹ AR-193 at MPCA0038462-63, Table 7.4.3-1.

¹⁶⁰ See, e.g., MPCA-5 at 12:258-14:282 (Estabrooks Direct).

specifications, procedures, and Best Management Practices (BMPs) to minimize the impacts associated with in-stream trenching.¹⁶¹

Expert testimony reinforces the MPCA's analysis. Barry Simonson, an engineering expert, provided an overview of the trench methods that will be used to cross streams. His testimony highlights the short-term, limited nature of in-stream construction work that will lead to temporary increases in TSS. For example, Enbridge proposes to use dry crossing methods to cross the vast majority of streams.¹⁶² Dry crossing methods typically take 10 to 48 hours to complete, depending on the size of the waterbody being crossed.¹⁶³ The in-stream work from the other trench methods that Enbridge proposes to use will be similarly limited in duration.¹⁶⁴

Likewise, Dr. Christine Essick, a water quality expert, concluded that the impacts from trenching in streams will be temporary. She testified that "increases in TSS concentrations associated with in-stream pipeline construction decrease rapidly once the in-stream work is completed, and water column TSS concentrations return to background levels shortly thereafter."¹⁶⁵ She based her opinion "on a detailed literature review," "TSS monitoring data collected by Enbridge," and the BMPs "and mitigation measures that Enbridge committed to implementing in order to prevent, minimize, or treat TSS loading and associated water quality effects."¹⁶⁶

The Joint Petitioners do not challenge the MPCA's or Enbridge's conclusion that the impacts on the following parameters of concern will be temporary: parameters associated with river eutrophication, such as phosphorous, chlorophyll-a, and BOD₅; dissolved oxygen; mercury; and parameters for which waters across the Line 3 route are listed as impaired under section 303(d) of the CWA.¹⁶⁷ Rather, the Joint Petitioners argue that the MPCA improperly "limited its review to considerations of *chemical* parameters of concern."¹⁶⁸ They primarily claim that the MPCA failed to consider "biological water quality standards" and the impacts that TSS will have on aquatic life.¹⁶⁹ They also argue that the MPCA failed to sufficiently consider a litany of indirect impacts from trenching.¹⁷⁰

The Administrative Law Judge does not find the Joint Petitioners' arguments persuasive. The "biological water quality standards" that the Joint Petitioners cite do not provide enhanced protection to the "General Use" streams that are crossed by the Line 3 Project. As Ms. Kuskie testified, in 2017, the MPCA adopted a Tiered Aquatic Life Use (TALU) framework for rivers and streams.¹⁷¹ The rule "further classified Class 2 streams

¹⁶¹ MPCA-4 at 21:464-22:477 (Kuskie Direct); MPCA-5 at 14:284-15:306 (Estabrooks Direct).

¹⁶² ENB-2 at 16:399-404 (Simonson Direct).

¹⁶³ *Id.* at 20:496-502, 21:541-22:545.

¹⁶⁴ *Id.* at 12:293-97, 15:373-76.

¹⁶⁵ ENB-3 at 13:343-50 (Essick Direct).

¹⁶⁶ *Id.* at 13:351-69.

¹⁶⁷ *See, e.g.*, JP-3 at 10:5-6 (Dolph Direct).

¹⁶⁸ *Id.* (emphasis in original).

¹⁶⁹ *Id.* at 4:14-17:6.

¹⁷⁰ *See, e.g., id.* at 17:9-18:16; JP-2 at 4:13-8:4 (Magner Direct); JP-4 at 25:11-18 (Triplett Direct).

¹⁷¹ *See* MPCA-23 at 13-15 (summarizing TALU framework).

(not lakes, wetlands, etc.) into three subcategories based on biological criteria: Exceptional Use, General Use, and Modified Use.”¹⁷² The rule’s purpose “was to improve MPCA’s framework for assessing the biological health of streams.”¹⁷³ The rule was not intended to change the regulatory framework that applies to General Use streams.¹⁷⁴

All of the streams that the Line 3 Project crosses are “General Use” streams.¹⁷⁵ As a result, the MPCA “appropriately focused on the parameters of concerns associated with the project to ensure compliance with the Class 2 water quality standards.”¹⁷⁶ No additional review under the TALU framework was necessary.

The Joint Petitioners also argue more generally that the MPCA failed to consider impacts to aquatic life. The Administrative Law Judge finds that the MPCA considered potential impacts to aquatic life by focusing on compliance with the TSS standard; the TSS standard is designed to protect aquatic life.¹⁷⁷ The MPCA recently revised the standard to set region-specific thresholds—grounded in a wide range of biological data—to enhance aquatic life protection.¹⁷⁸ Accordingly, the numeric water quality standards for TSS are designed to be protective of aquatic life. Thus, by ensuring there is no violation of these standards, the MPCA reasonably concluded that the discharges from the Line 3 Project will not result in long-term impacts to aquatic life.¹⁷⁹

The Joint Petitioners also claim that there will be other indirect impacts from trenching that will result in “permanent” impacts, such as removal of riparian vegetation and stream destabilization.¹⁸⁰ But the Joint Petitioners have not presented any evidence that these impacts will result in the loss of any existing uses, the violation of a narrative or numeric standard, or the permanent ability of any affected water to attain a designated beneficial use.¹⁸¹ Moreover, when pressed on cross examination, one of the Joint Petitioners’ primary experts, Dr. Dolph, confirmed that key passages from the existing scientific literature support the MPCA’s and Enbridge’s overarching conclusions.¹⁸²

The record reflects the MPCA’s recognition that there may be indirect impacts from trenching, such as low-level, longer-term erosion.¹⁸³ But the principal impact on streams

¹⁷² MPCA-9 at 9:168-70 (Kuskie Rebuttal).

¹⁷³ *Id.*

¹⁷⁴ *Id.* at 10:197-99; *see also* MPCA-24 at 13-14 n.5.

¹⁷⁵ MPCA-9 at 9:175-78 (Kuskie Rebuttal); AR-199 (showing that all streams in MPCA Classification column have been assigned the use subclass designation “g”).

¹⁷⁶ MPCA-9 at 10:206-08 (Kuskie Rebuttal).

¹⁷⁷ *Id.* at 11:212-13 (the TSS standard “serves specifically to protect the Class 2 aquatic life beneficial use classification”); *see also* MPCA-10 at 1:15-3:50 (Estabrooks Rebuttal).

¹⁷⁸ *See, e.g.*, MPCA-9 at 10:206-11:217 (Kuskie Rebuttal); MPCA-24 at 8 (“These draft TSS criteria are regional in scope and based on a combination of both biotic sensitivity to TSS concentrations and reference streams/least impacted streams as data allow”); ENB-3 at 7:171-84 (Essick Direct).

¹⁷⁹ *See* MPCA-10 at 2:24-26 (Estabrooks Rebuttal).

¹⁸⁰ *See, e.g.*, JP-2 at 4:13-8:4 (Magner Direct); JP-3 at 17:9-18:16 (Dolph Direct); JP-4 at 25:11-18 (Triplett Direct).

¹⁸¹ *See* MPCA-9 at 12:241-14:284 (Kuskie Rebuttal); Minn. R. 7050.0265, subps. 2, 4.

¹⁸² *See, e.g.*, Tr. at 148-51 (Dolph).

¹⁸³ MPCA-9 at 12:241-14:284 (Kuskie Rebuttal).

will stem from “the direct in-stream construction activities themselves (during and immediately after construction).”¹⁸⁴ Because the record shows that direct, in-stream construction activities will not violate water quality standards, the less acute, indirect impacts from pipeline construction will not violate water quality standards.¹⁸⁵

V. Issue 2 (Least Degrading Crossing Method)

The Joint Petitioners first argue that Enbridge’s proposed crossing methods do not meet antidegradation standards.¹⁸⁶ The MPCA and Enbridge contend that they have attempted to identify the least degrading crossing method for each stream that is prudent and feasible.

The antidegradation standards contemplate that a proposed project may cause degradation; but the standards require that any degradation be prudently and feasibly minimized.¹⁸⁷ A “prudent alternative” is “a pollution control alternative selected with care and sound judgment.”¹⁸⁸ A “feasible alternative” is “a pollution control alternative that is consistent with sound engineering and environmental practices, affordable, and legal and that has supportive governance that can be successfully put into practice to accomplish the task.”¹⁸⁹

Mr. Molloy described the process for selecting the method for crossing each stream in his testimony.¹⁹⁰ But, the Joint Petitioners argue that the record lacks a sufficient basis for concluding that each crossing method chosen at each location is the least degrading alternative that is prudent and feasible.

The Project will cross 212 streams. The crossing methods fall into two main categories: open trench and trenchless. For the Line 3 Project, Enbridge proposes to use five different types of trench methods for stream crossings: the open cut (non-isolated) method; the push-pull method; the dry (isolated) method—dam and pump; the dry (isolated) method—flume; and the modified dry crossing method.¹⁹¹ The company also plans to use two trenchless methods: the bore method and the Horizontal Directional Drilling (HDD) method.¹⁹² As MPCA witness Kevin Molloy summarized: “Different crossing methods are suitable for different types of waterbodies, and each method has pros and cons.”¹⁹³

Throughout 2019 and 2020, the MPCA had a cross-section of subject matter experts—including hydrogeologists, research scientists, and water quality specialists—

¹⁸⁴ *Id.* at 13:260-61.

¹⁸⁵ *Id.*

¹⁸⁶ Joint Petitioner’s Post-Hearing Brief at 34-35 (Sept. 15, 2020).

¹⁸⁷ See Minn. R. 7050.0265, subp. 5 (stating that “a proposed activity shall be approved only when the commissioner makes a finding that degradation will be prudently and feasibly managed”).

¹⁸⁸ Minn. R. 7050.0255, subp. 34.

¹⁸⁹ *Id.*, subp. 17.

¹⁹⁰ See MPCA-6 at 15:314-21:433 (Molloy Direct).

¹⁹¹ AR-193 at MPCA0038433-35.

¹⁹² *Id.* at MPCA0038435-41.

¹⁹³ MPCA-6 at 13:275-76 (Molloy Direct).

review the proposed crossing methods.¹⁹⁴ The agency evaluated Enbridge's proposed use of HDD methods at certain crossings and required the company to provide site-specific justifications for each proposed crossing.¹⁹⁵ The MPCA also coordinated with other environmental regulators who have overlapping jurisdiction over stream crossings, such as the DNR.¹⁹⁶

This process led to significant changes. Among other things, Enbridge reduced the number of open cut crossings (from 21 to 8); agreed to use a less-degrading, modified dry crossing method at 9 streams; added 2 HDD crossings; and adopted BMPs to further minimize impacts from the proposed crossings.¹⁹⁷

The results of MPCA's process are reflected in Condition 10 of the Draft 401 Certification and two attachments to the Antidegradation Assessment: the Receiving Waters Tables (Attachment C) and Anticipated Water Quality – Parameters of Concern and Waterbody Crossing Justifications (Attachment G).¹⁹⁸ Condition 10 specifies that Enbridge "must cross all streams . . . using the proposed crossing methods specified" in the Receiving Waters Tables, "final versions of which . . . must be approved by the MPCA before Enbridge is authorized to begin any of the Project's construction activities."¹⁹⁹ In

¹⁹⁴ See *id.* at 15:314-21:433.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* As Mr. Molloy explained, "[t]he Line 3 Project proposes to cross 56 streams that are designated as public waters, and the DNR is responsible for issuing a Utility Crossing License for those waters pursuant to Minn. Stat. § 84.15." *Id.* at 15:325-16:334. The Corps also has jurisdiction over three crossings under Section 10 of the Rivers and Harbors Act. *Id.* (citing 33 U.S.C. § 403).

¹⁹⁷ *Id.* at 18:386-19:407.

¹⁹⁸ AR-218 at MPCA0041504; AR-198; AR-204; MPCA-6 at 14:298-15:312, 18:376-80 (Molloy Direct).

¹⁹⁹ AR-218 at MPCA0041504.

addition, the use of any alternative crossing method that is identified in the Receiving Waters Tables “requires prior approval of MPCA.”²⁰⁰

The table²⁰¹ below summarizes the crossing methods that MPCA intends to authorize:

Category (Trench or Trenchless)	Crossing Method	Number of Proposed Crossings
Trench	Open Cut (Non-Isolated) Method	2
Trench	Push-Pull Method	6
Trench	Dry (Isolated) Methods: Dam and Pump or Flume	152
Trench	Modified Dry Crossing Method	9
Trenchless	Bore Method (non-pressurized)	22
Trenchless	HDD method (pressurized)	21

The MPCA’s process of evaluating crossing methods has continued after the Draft 401 Certification went on public notice in March 2020. The Draft 401 Certification identified certain “sensitive waters” for which the agency’s review was ongoing.²⁰² This review is “focused on potential response actions that will further minimize degradation for sensitive waters, not alternative crossing methods.”²⁰³

However, at the time the Draft 401 Certification was issued, there were also certain streams for which the proposed crossing method was under further evaluation: Big Swamp Creek (Milepost (MP) 996.1); Pine River (MP 1017.3); Spring Book (MP 1041.2); Unnamed Creek-Moose Lake (MP 1056.5); Willow River (MP 1066.4); and East Savana River (MP 1085.9).²⁰⁴

The MPCA and Enbridge have resolved the bulk of the outstanding crossing method selection issues.²⁰⁵ The table below summarizes the crossing methods that the

²⁰⁰ *Id.*

²⁰¹ The table is adapted from Mr. Molloy’s testimony and the Antidegradation Assessment. MPCA-6 at 14:298-15:312 (Molloy Direct); AR-193 at MPCA0038433.

²⁰² *See, e.g.*, MPCA-14.

²⁰³ MPCA-6 at 23:473-78 (Molloy Direct).

²⁰⁴ *Id.* at 21:435-24:509.

²⁰⁵ *Id.* at 23:480-509.

MPCA intends to authorize at the “sensitive waters” locations identified in the Draft 401 Certification.²⁰⁶

Name	Proposed Crossing Method
Pine River (MP 1017.3)	HDD
Spring Brook (MP 1041.2)	Dry Crossing
Willow River (MP 1066.4)	HDD
East Savana River (MP 1085.9)	HDD

The MPCA is still evaluating the proposed crossing method for Big Swamp Creek and Unnamed Creek-Moose Lake.²⁰⁷ The agency is also still evaluating the proposed crossing method at three additional locations: an Unnamed Stream (MP 1075.6-7); Moose River (MP 1048.0); and the Shell River (MPs 981.4 to 976.6).²⁰⁸ In addition, Enbridge proposed changes to two additional crossings during the course of the contested case: Unnamed Stream (MP 996.5) and Unnamed Stream (MP 1022.6).²⁰⁹

While the MPCA’s review is ongoing for these streams, Enbridge has proposed a crossing method for each one.²¹⁰ In contrast, the Joint Petitioners have failed to offer an alternative method for crossing any of these locations; rather they object to the route itself, not to any of the specific crossing methods that Enbridge and the MPCA have identified.

The Joint Petitioners discuss only one crossing in detail—LaSalle Creek—which Enbridge proposes to cross using a dry (isolated) crossing method. The Joint Petitioners maintain that LaSalle Creek “should not be crossed by any trench method.”²¹¹ But they also claim that LaSalle Creek is “a geologically high-risk location to conduct an HDD crossing, as demonstrated by the frac out spill at this site in 2007, just outside Itasca State Park.”²¹² They conclude that LaSalle Creek “must be avoided” altogether.²¹³ Dr. Triplett confirmed this position on cross examination.²¹⁴ But, as discussed in detail above,

²⁰⁶ *Id.* at 23:480-24:409; *see also* ENB-7 at 2:35-53, Schedule A (Simonson Rebuttal); Tr.at 107-08 (Molloy).

²⁰⁷ MPCA-6 at 24:497-509 (Molloy Direct).

²⁰⁸ *Id.* at 22:465-23:478.

²⁰⁹ ENB-2 at 30:753-31:756 (Simonson Direct).

²¹⁰ *See* AR-198; AR-204.

²¹¹ JP-4 at 22:10-11 (Triplett Direct); *see also* JP- 5 at 19:19-22, 26:10-15 (Stolen Direct).

²¹² JP-4 at 22:13-15 (Triplett Direct).

²¹³ *Id.* at 22:19-21; *accord* JP-2 at 18:5-9 (Magner Direct) (“The planned activity for the LaSalle area is a perfect example of where a planned activity must be avoided.”); JP-5 at 26:22-23 (Stolen Direct) (“Complete avoidance of impacts by moving the project to another location is the proper response to the high environmental risks of the LaSalle Valley crossing.”).

²¹⁴ Tr. at 171-72 (Triplett).

whether the MPCA properly deferred to the PUC-approved route is beyond the scope of this contested case.²¹⁵

The record supports the use of a dry (isolated) crossing method at LaSalle Creek. Mr. Molloy described the MPCA's evaluation.²¹⁶ Enbridge did not propose a trenchless method at LaSalle Creek due to the site's geology, hydrology, and history of prior frac outs.²¹⁷ Enbridge instead proposed a dry crossing method, and the company has worked extensively with the DNR—and more recently the MPCA—to confirm that the appropriate crossing method has been selected and the impacts associated with it will be minimized.²¹⁸

As recently as May 2020, for example, the company conducted an additional geotechnical evaluation, which was vetted by one of the MPCA's research scientists with engineering expertise.²¹⁹ Based on its review of the geotechnical report and related information, the MPCA agreed that a dry crossing method was appropriate given "the strong possibility of frac outs occurring during drilling and the degradation of streams and wetlands."²²⁰

Additional expert testimony buttresses that conclusion. Mr. Hahn and Mr. Simonson described the company's extensive analysis of the LaSalle Creek crossing. This analysis stretches back to 2013. It includes multiple subsurface investigations, a Rosgen geomorphic survey and conditions assessment, geotechnical analyses, and the recent submission of a site-specific construction and restoration plans to DNR.²²¹

Similarly, the record shows that the MPCA (and the DNR) are attuned to the risks connected to the LaSalle Creek crossing. LaSalle Creek is identified on the "sensitive waters" matrix that the MPCA and DNR are using "to guide discussions with Enbridge related to certain sensitive waters."²²² The focus of these discussions are construction BMPs and other actions—separate and apart from the proposed crossing method—that may minimize impacts.²²³

The Joint Petitioners also contend the MPCA has not approved the least degrading crossing method for each river and stream because they object to the route itself and argue the MPCA wrongly believes it cannot reroute the Line 3 Project.²²⁴ The MPCA found the PUC is the Minnesota agency with decision making authority over oil and gas pipeline

²¹⁵ See MPCA-2 at 7-8 (denying contested case hearing on the PUC route and need determinations).

²¹⁶ MPCA-11 at 2:36-6:110 (Molloy Rebuttal).

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ *Id.*; see also AR-247; AR-248.

²²⁰ MPCA-11 at 3:57-4:62 (Molloy Rebuttal).

²²¹ See, e.g., ENB-7 at 8:204-17:441 (Simonson Rebuttal); ENB-1 at 14:348-59 (Hahn Direct); ENB-2 at 35:862-71 (Simonson Direct).

²²² MPCA-11 at 4:63-71 (Molloy Rebuttal); MPCA-14.

²²³ MPCA-11 at 4:63-71 (Molloy Rebuttal); MPCA-14.

²²⁴ Joint Petitioner's Post-Hearing Brief at 34-38 (Sept. 15, 2020).

decisions.²²⁵ As discussed in the Scope of Contested Case Hearing above, the question of whether the MPCA has the legal authority to order a change in the Project's route is beyond the scope of this proceeding.

VI. Issue 3 (Delineation)

Accurate wetland delineations are critical to determine compliance with Minnesota's wetland standards and the Antidegradation Rule's compensatory mitigation requirements.²²⁶ "Wetland delineation" refers to "the identification and determination of the boundary of a wetland."²²⁷ The primary methodology for wetland delineation is set forth in the Corps' 1987 Manual and associated Regional Supplements.²²⁸

The record shows that Enbridge conducted a thorough set of wetland delineations according to the leading methodologies. There is no evidence in the record that shows any material flaws in the delineation process—including flaws that are tied to the delineation of seasonal wetlands.

Previously, a concern about the seasonality of certain wetland surveys was raised by the DNR. In February 2019, the DNR submitted written comments on Enbridge's section 404 permit application and expressed concern that some of the company's wetland delineations were conducted in the late summer and early fall.²²⁹ During those timeframes, certain seasonal wetlands, such as vernal pools, may be dry or without key plant species.²³⁰ The DNR relayed those concerns to the MPCA as it evaluated the section 401 certification.²³¹

The record establishes that the DNR's concerns were vetted and found to be unsubstantiated. One of MPCA's wetland experts, Doug Norris—who is also a retired DNR employee—explained the vetting process. Mr. Norris testified that the Corps, MPCA, and the DNR conducted "spot checks" of a representative sample of Enbridge's wetland delineations.²³² The Corps took the lead on the field verifications, with input from DNR and MPCA, over one week in August 2019.²³³ The spot checks showed that Enbridge's delineations were accurate.²³⁴ Based on the field verifications, there was "no reason to conclude that the acreage of wetlands was undercounted due to flaws in the [delineation] methodology."²³⁵

²²⁵ See MPCA-2 at 8 (Findings of Fact, Conclusions of Law and Order) (denying contested case hearing on the PUC route and need determinations).

²²⁶ See Ex. MPCA-7 at 10:202-05 (Norris Direct).

²²⁷ *Id.* at 7:142-46.

²²⁸ *Id.*; see also AR-362; AR-363; AR-389; AR-390.

²²⁹ AR-62 at MPCA0026575.

²³⁰ *Id.*

²³¹ MPCA-7 at 13:246-48 (Norris Direct).

²³² *Id.* at 13:258-15:309.

²³³ *Id.*

²³⁴ *Id.*

²³⁵ *Id.* at 19:386-90; see also MPCA-8 at 17:362-18:368 (Gernes Direct).

The Corps' summary of the spot checks reinforces that conclusion. The Corps memorialized the results in a memorandum for the record.²³⁶ The memorandum addresses "the potential underestimation of vernal pools" and explains that the Corps "looked specifically for wetlands and locations where vernal pools (aka: seasonal ponds) would likely be found, and chose some representative sites where seasonal wetlands were delineated."²³⁷ The Corps concluded: "It is our opinion that because the delineation accurately identified all of the wetlands in review areas we visited, and correctly typed them, there is no reason to believe that any were missed."²³⁸ The Corps further found that Enbridge's overall delineations were "well documented" and "liberal, with a number of delineated wetland polygons that could have been reduced in size."²³⁹

The Joint Petitioners have not introduced any evidence that shows flaws—much less seasonality-related flaws—in the delineation process that would cause wetlands to be undercounted. The Administrative Law Judge does not find the testimony of their expert on this issue, Dr. Marinus Otte, persuasive.

Dr. Otte is not, and has never been, a certified wetland delineator.²⁴⁰ More importantly, Dr. Otte's testimony does not establish any flaws in the delineation process. He suggests that delineations in Minnesota "must occur within the growing season," and that "conducting delineation before May and after snow cover returns (late October/early November) is not acceptable."²⁴¹ But as Mr. Norris convincingly explained, "[n]either the 1987 Manual nor any of the applicable Regional Supplements require that delineations be conducted during the growing season."²⁴² Moreover, the record shows that Enbridge's delineations were either conducted during the growing season or re-verified during the growing season.²⁴³

Dr. Otte also suggests that Enbridge's delineations have "expired" because an (unspecified) portion of them were conducted more than five years ago, and he points to a Wetland Conservation Act (WCA) guidance document as support. But, in all relevant aspects, the WCA does not apply to the Line 3 Project.²⁴⁴ And, regardless, "under the pertinent WCA regulations, the wetland delineation itself does not expire."²⁴⁵ This is also the case under sections 401 and 404 of the CWA.²⁴⁶

The Joint Petitioners failed to establish by a preponderance of the evidence that the MPCA and Enbridge under counted the full acreage of the Project's wetland impacts

²³⁶ ENB-1 at 20:520-22:606, Schedule D at 1-4 (Hahn Direct).

²³⁷ *Id.*

²³⁸ *Id.*

²³⁹ *Id.*

²⁴⁰ Tr. at 124-26 (Otte).

²⁴¹ JP-1 at 4:11-13 (Otte Direct).

²⁴² MPCA-12 at 3:51-52 (Norris Rebuttal); accord AR-362; AR-363; AR-389; AR-390.

²⁴³ MPCA-12 at 3:41-49 (Norris Rebuttal); ENB-4 at 9:247-50 (Tersteeg Direct).

²⁴⁴ MPCA-12 at 1:14-3:39 (Norris Rebuttal).

²⁴⁵ *Id.*

²⁴⁶ *Id.*

due to flaws in the wetland delineation and survey methodologies related to seasonality of delineation activities.

VII. Issue 4 (Physical Alteration) and Issue 5 (Permanency)²⁴⁷

“It is the policy of the state to protect wetlands and prevent significant adverse impacts on wetland beneficial uses caused by chemical, physical, biological, or radiological changes.”²⁴⁸ Physical alteration, defined as the “dredging, filing, draining, or permanent inundating of a wetland,” triggers a mitigation sequence set out in a rule designed to protect the beneficial uses that wetlands provide.²⁴⁹ The rule sets out a three-part sequence: (1) avoid adverse impacts; (2) minimize impacts that cannot be avoided; and (3) mitigate unavoidable impacts by compensation.²⁵⁰ Under the rule, “[r]estoring a degraded wetland by reestablishing its hydrology is not a physical alteration.”²⁵¹

According to Joint Petitioners, Enbridge and the MPCA followed a three-step process to calculate which wetlands would be impacted by the Line 3 Project: (1) they identified wetlands the proposed pipeline would cross from existing maps, such as the National Wetland Inventory; (2) they determined the boundaries of those wetlands through delineation studies; and (3) they calculated the acreage that would be “physically altered” by multiplying the length of each wetland crossing by a 95-foot right-of-way and added in the riparian areas that will be permanently affected.²⁵² The MPCA states that the acreage of wetland impacts was “calculated using GIS digital queries as the number of acres of delineated wetlands within the 95-foot-wide construction workspace, access roads, additional temporary workspace, and permanently filled areas.”²⁵³ Moreover, Enbridge “assumed that wetlands within *all* workspaces will be physically altered, even though the wetland acreage may not be affected.”²⁵⁴ Based on this approach, the MPCA and Enbridge currently estimate that approximately 947 total acres of wetlands under MPCA jurisdiction have the potential to be physically altered.²⁵⁵

The MPCA verified these calculations as part of the section 401 review process. Mr. Gernes testified that the MPCA received “raw wetland data” from Enbridge.²⁵⁶ The MPCA then used the data “to confirm wetland acreage totals reported by the company.”²⁵⁷ In addition, the MPCA used its professional judgment and expertise to check Enbridge’s calculations through a variety of independent methods, including analysis of the anticipated geographic distribution of impacts; a qualitative comparison of the field-delineated data against National Wetland Inventory data; a targeted review of wetland

²⁴⁷ The Administrative Law Judge combines these two issues, as did Joint Petitioners and the MPCA in their briefing.

²⁴⁸ Minn. R. 7050.0186, subp. 1.

²⁴⁹ *Id.*, subp. 1aA.

²⁵⁰ *Id.*, subp. 2.

²⁵¹ *Id.*

²⁵² AR-215.

²⁵³ ENB-5 at 5:116-6:125 (Ardnt Direct).

²⁵⁴ *Id.* (emphasis added); *see also* AR-215 at MPCA0041445-50.

²⁵⁵ *See, e.g.*, AR-215 at MPCA0041445-50.

²⁵⁶ MPCA-8 at 16:328-39 (Gernes Direct).

²⁵⁷ *Id.*

delineation forms; and participation in the on-the-ground delineation spots checks that were led by the Corps in August 2019.²⁵⁸ The MPCA concluded that there was “no reason to suspect that the acreage of wetland impacts had been undercounted.”²⁵⁹

A. Temporary and Permanent Impacts

As noted above, the MPCA and Enbridge estimate that approximately 947 total acres of wetlands under the MPCA jurisdiction have the potential to be physically altered.²⁶⁰ Of that total, the MPCA and Enbridge forecast that the impacts to 730.10 acres of wetlands will be temporary.²⁶¹ They also project that the Line 3 Project will result in the permanent conversion of 212.37 acres of wetlands, and the permanent fill of 5.52 acres of wetlands.²⁶²

The MPCA’s wetland experts testified about the difference between temporary and permanent physical alteration impacts. In general, “temporary impacts result from pipeline installation and associated trenching in wetlands having emergent, herbaceous vegetation, such as cattails, rushes sedges, and grasses.”²⁶³ For these types of wetlands, “the expectation is that if the trench is excavated, the pipe placed and the trench backfilled to pre-existing elevations and contours, then the pre-existing wetland plant community will re-establish and there will be no long-term effects on the wetlands.”²⁶⁴ Accordingly, as Mr. Gernes summarized, “there is a temporary loss of wetland use until the wetland has recovered.”²⁶⁵

Permanent impacts take two forms: permanent fill and permanent conversion. Permanent fill impacts will result from Enbridge’s placement of above-ground mechanical components and other structures associated with pipeline operation, such as access roads.²⁶⁶ Permanent fill impacts result in the total loss of a wetland use or conversion of wetland to non-wetland.²⁶⁷ Permanent conversion impacts “result from pipeline installation in forested or shrub-type wetlands.”²⁶⁸ These types of wetlands are expected to recover from pipeline installation and associated trenching.²⁶⁹ But “[f]ederal pipeline safety regulations require pipeline corridors to be maintained free of trees and shrubs to allow visual inspection, typically by aerial reconnaissance.”²⁷⁰ As a result, these areas will remain wetland but will be converted into a different wetland type, “likely fresh meadow” or other similar emergent-herbaceous type.²⁷¹

²⁵⁸ *Id.* at 16:342-18:377.

²⁵⁹ *Id.* at 18:370-73.

²⁶⁰ *See, e.g.*, AR-218 at MPCA0041499; AR-215 at MPCA0041445-50.

²⁶¹ *See, e.g.*, AR-218 at MPCA0041499; AR-215 at MPCA0041445-50.

²⁶² *See, e.g.*, AR-218 at MPCA0041499; AR-215 at MPCA0041445-50.

²⁶³ MPCA-7 at 16:317-22 (Norris Direct).

²⁶⁴ *Id.*

²⁶⁵ MPCA-8 at 18:386 (Gernes Direct).

²⁶⁶ *See* MPCA-7 at 16:333-17:336 (Norris Direct); MPCA-8 at 19:396-407 (Gernes Direct).

²⁶⁷ *See* MPCA-7 at 16:333-17:336 (Norris Direct); MPCA-8 at 19:396-407 (Gernes Direct).

²⁶⁸ MPCA-7 at 16:324-31 (Norris Direct).

²⁶⁹ *Id.*

²⁷⁰ MPCA-8 at 19:408-20:420 (Gernes Direct).

²⁷¹ *Id.*

The Joint Petitioners argue that the MPCA's conclusion that the impacts of the pipeline are temporary "has no basis in fact or the record." Joint Petitioners rely on their expert, Dr. Otte, who cited studies "concluding that, even if a wetland's hydrology could be completely restored to its original state, which is not the situation here because the pipe will remain in the ground indefinitely, wetland biodiversity and biogeochemistry returned to only about 80% of pre-disturbance levels, even after 100 years."²⁷² But, as noted above, Dr. Norris and Mr. Gernes testified that the majority of the Project's impact on wetlands would be temporary. Mr. Gernes stated that if the installation, backfilling, grading, and restoration goes well "within 1 years-time the wetland community is anticipated to return to a similar preconstruction type and integrity."²⁷³ Mr. Gernes noted that "there are likely to be instances where wetland recovery or restoration does not occur adequately and additional grading and/or restoration actions will be needed to recover the preconstruction beneficial uses attributable to the wetlands in question" but "[t]hese kinds of short term losses are considered to be temporary impacts."²⁷⁴ Mr. Gernes further testified that Joint Petitioners "conflate temporary and permanent impacts, failing to make any effort to distinguish where the impacts are likely to be temporary, and where they are likely to be permanent, and how the issue of mitigation should be approached to deal with these issues."²⁷⁵ The Joint Petitioners' apparent assumption that every impact should be presumed permanent, and mitigated as a permanent impact, is not consistent with applicable rules and the MPCA's experience.²⁷⁶

Addressing that fact, Enbridge concedes, "[t]here may be impacts that cannot be anticipated in advance with a degree of reasonable certainty." Therefore, MPCA has required compensatory mitigation for both temporary and permanent impacts. The amount of compensatory mitigation depends on the type of wetlands that are affected—more compensation is required for certain special wetland categories—and the type of impact.²⁷⁷ Mitigation preserves the existing uses of wetlands that are "lost" due to permanent physical alteration impacts.²⁷⁸ The MPCA does not typically require mitigation for temporary impacts under its section 401 authority. But here, the MPCA and other regulators have mandated that Enbridge provide such mitigation given "the high proportion of proposed temporary impacts."²⁷⁹

Similarly, the MPCA does not generally require compensation for non-physical alteration impacts.²⁸⁰ And the MPCA also recognizes that some physical alteration impacts cannot be anticipated in advance. Accordingly, the MPCA and other regulators

²⁷² Joint Petitioners' Post-Hearing Brief at 46 (Sept. 15, 2020).

²⁷³ MPCA-8 at 18:384-85 (Gernes Direct).

²⁷⁴ *Id.* at 18-19:387-90.

²⁷⁵ MPCA-13 at 11 (Gernes Rebuttal).

²⁷⁶ *Id.*

²⁷⁷ *See, e.g.*, AR-215 at MPCA0041443-44 (describing mitigation ratios and mitigation approach); MPCA-8 at 19:396-20:434 (Gernes Direct).

²⁷⁸ *See* Minn. R. 7050.0265, subp. 3 (the commissioner may allow compensatory mitigation as a means to preserve an existing use when there is a physical alteration); MPCA-9 at 4:70-78 (Kuskie Rebuttal).

²⁷⁹ MPCA-8 at 20:425-26 (Gernes Direct).

²⁸⁰ *See* Minn. R. 7050.0186 (defining the scope of MPCA's authority); MPCA-8 at 21:436-57 (Gernes Direct).

have worked with Enbridge to develop a Post-Construction Wetland and Waterbody Monitoring Plan (PCMP).²⁸¹ Compliance with the PCMP is a condition of the Draft 401 Certification.²⁸² Its purpose “is to monitor state waters in and near the area in which the Project has been constructed to determine if additional impacts to Minnesota’s aquatic resources have occurred as a result of the Project’s construction,” including wetlands.²⁸³

If additional impacts manifest, Enbridge must “conduct remedial action to restore the water to its preconstruction status, or provide additional compensatory mitigation.”²⁸⁴ The PCMP requires Enbridge to conduct monitoring for a minimum of five years—and possibly longer—and requires the company to provide financial assurance backing for the duration of the monitoring period.²⁸⁵

In sum, the Joint Petitioners have failed to meet their burden of demonstrating that the “MPCA cannot conclude that Enbridge’s impacts on wetlands will be temporary.” The record supports the MPCA’s and Enbridge’s determination that the impacts to 730.10 acres of wetlands will be temporary, and that the permanent conversion and fill impacts to approximately 212.37 acres of wetlands and 5.52 acres of wetlands, respectively, will not result in the loss of any existing uses due to compensatory mitigation. Moreover, to the extent that there are unanticipated, long-term impacts, the MPCA has appropriate remediation plans in place.

B. Enbridge and the MPCA have Properly Accounted for the Known, Predictable Physical Alteration Impacts

Enbridge argues that “[p]hysical alteration of wetlands is reasonably anticipated to be limited to the Project’s 95-foot-wide construction workspace” and “[m]ore specifically . . . physical alteration to wetlands from trenching will occur in an approximately 20-foot-wide area within the construction workspace/permanent right-of-way.”²⁸⁶ Therefore, Enbridge is “seeking authorization to temporarily impact 947.98 acres of wetlands.”²⁸⁷ This amount was calculated by “overlying the entire 95-foot-wide construction workspace, inclusive of additional temporary workspace, facility boundaries, and access roads, over the delineated wetlands using GIS.”²⁸⁸ Enbridge argues that “[b]y permitting the full 95-foot-wide construction workspace, [it] has fully and conservatively accounted for the impacts to wetlands that are physically altered by trenching, in addition to accounting for other construction activities.”²⁸⁹

²⁸¹ See AR-213; accord MPCA-7 at 18:369-19:381 (Norris Direct); MPCA-8 at 21:436-57, 23:489-28:599 (Gernes Direct).

²⁸² AR-218 at MPCA0041507-08.

²⁸³ *Id.*

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ Enbridge’s Post-Hearing Brief at 36 (Sept. 15, 2020).

²⁸⁷ *Id.* at 37.

²⁸⁸ *Id.*

²⁸⁹ *Id.*

The Joint Petitioners criticize the MPCA's and Enbridge's analysis of wetland impacts on three primary grounds. They allege that: (1) approximately 11,000 acres of wetlands that are hydrologically connected to wetlands within the construction right-of-way will be impacted; (2) Enbridge has not done sufficient pre-construction hydrological monitoring; and (3) trenching in wetlands will result in impacts that cannot be effectively addressed through restoration or mitigation.²⁹⁰ The record does not support the Joint Petitioners' claims.

In their rebuttal testimony and under cross examination, the Joint Petitioners acknowledged that "[s]ome of the approximately 11,000 wetland acres may not experience permanent physical alteration."²⁹¹ The Joint Petitioners maintain, however, that "it is reasonably foreseeable that any wetland that is part of the 11,000 acres will be impacted by the project."²⁹² "Impacted," however, is not the standard under Minn. R. 7050.0186; rather the rule requires physical alteration.

In addition, the calculations of at least one of Joint Petitioners' experts, Dr. Otte, appears to track the calculations of the MPCA and Enbridge. In written testimony, the Joint Petitioners' estimates of wetland impacts vary depending on the expert and the methodology; the estimates range from 11,000 to 27,000 to 54,000 acres.²⁹³ But under cross examination, Dr. Otte testified that if the width of the construction workspace was 100 feet, then there will be "760 acres" of physical alteration impacts.²⁹⁴ The construction workspace is 95 feet.²⁹⁵

In any event, the record does not support the broader claim that 11,000 acres of wetlands will be "impacted." The primary impacts that the Joint Petitioners identify are to groundwater flow and wetland hydrology. They compare the installation of a pipeline to a "dam,"²⁹⁶ and forecast impacts that extend "miles away from the trenching."²⁹⁷ These wide-ranging hydrological impacts are inconsistent with the MPCA's expertise and experience, including experience with existing pipelines.²⁹⁸ The Administrative Law Judge finds Mr. Gernes's testimony persuasive.

Moreover, a hydrogeology expert, Ray Wuolo, prepared a model that comprehensively refutes the Joint Petitioners' estimates.²⁹⁹ Using MODFLOW—a widely used standard for groundwater modeling in hydrogeology—Mr. Wuolo "found that the maximum change (increase or decrease) in groundwater levels on either side of the pipeline (upgradient or downgradient) was 0.00005 to 0.003 inches (smaller than the

²⁹⁰ JP-2 at 26:6-29:10 (Dolph Direct); JP-4 at 5:14-6:11, 9:21-14:15 (Triplett Direct); JP-1 at 16:1-24:8 (Otte Direct).

²⁹¹ JP-4 at 3:15-16 (Triplett Rebuttal); Tr. at 167-69 (Triplett).

²⁹² JP-4 at 3:16-18 (Triplett Rebuttal) (emphasis added).

²⁹³ Compare JP-2 at 26:6-27:15 (Dolph Direct) (estimating 11,000 acres of impacts), with JP-1 at 12:14-13:3 (Otte Direct) (estimating 27,000 acres of impacts to 54,000 acres of impacts over lifespan of Project).

²⁹⁴ Tr. at 129-130, 133-35.

²⁹⁵ ENB-5 at 5:116-6:125 (Ardnt Direct).

²⁹⁶ JP-4 at 7:2-4 (Triplett Direct).

²⁹⁷ MPCA-13 at 4:62 (Gernes Rebuttal).

²⁹⁸ *Id.* at 3:49-9:158.

²⁹⁹ ENB-10 at 2:44-3:57, 5:136-6:160, Schedule B (Wuolo Rebuttal).

width of three human hairs).”³⁰⁰ The Administrative Law Judge finds this testimony persuasive.

The record does not support the Joint Petitioners’ forecast of widespread hydrological impacts from trenching. Nor does the record support the Joint Petitioners’ repeated assertion that Enbridge needs to conduct at least one year of pre-construction hydrological monitoring.³⁰¹ As discussed above, the low likelihood of widespread hydrological impacts from trenching precludes the need for extensive hydrological monitoring. The Joint Petitioners’ demand for one year of pre-construction monitoring is impractical given the MPCA’s one-year deadline to act on a section 401 certification request.³⁰²

Finally, the record shows that Enbridge has, in fact, collected extensive pre-construction data that will allow for effective post-construction monitoring. The pre-construction baseline data is identified in the PCMP.³⁰³ Mr. Norris summarized the pre-construction baseline data in his rebuttal testimony:

It includes: aerial imagery of the Project route; color infrared imagery of the Project route; LIDAR [Light Detection and Ranging] of the Project route; field-delineated wetland boundaries; field-delineated wetland community types according to the Cowardin, Circular 39, and Eggers and Reed classification systems; field-delineated dominant plant species by stratum; field characterization of hydric soil types and wetland hydrology; and representative photos of wetland and associated plant communities.³⁰⁴

It also includes pre-construction peatland groundwater monitoring.³⁰⁵ According to the MPCA and other regulators, this baseline data—coupled with ecological performance standards—will enable effective post-construction monitoring.³⁰⁶ The Administrative Law Judge agrees that the record supports that conclusion.

The Joint Petitioners also challenge the general efficacy of wetland restoration and mitigation. They claim the Line 3 Project will have far-reaching impacts on wetland soils,

³⁰⁰ *Id.* at 5:136-6:153. At the hearing, Dr. Triplett claimed there was a contradiction between the testimony of Mr. Wuolo and Mr. Gernes, asserting that “Mr. Gernes says almost none of the wetlands are connected to the regional groundwater and that’s why the pipeline won’t impact them.” Tr. at 175-76 (Triplett). There is no contradiction. Nowhere in his testimony did Mr. Gernes opine on the connection between wetlands and groundwater. See MPCA-8 at 3:49-4:80 (Gernes Rebuttal). Dr. Triplett appears to have latched onto Mr. Gernes’ use of the word “subsurface.” *Id.* But a fair reading of his testimony shows that Mr. Gernes was simply discussing the typical surface water conditions of the wetlands crossed by the Line 3 Project based on NWI data. *Id.* He did not draw any connection between those conditions and groundwater, and Dr. Triplett’s assertions to the contrary are wrong.

³⁰¹ See, e.g., JP-4 at 8:3-12 (Triplett Direct); JP-9 at 11:16-12:8 (Triplett Rebuttal).

³⁰² See 33 U.S.C. § 1341(a).

³⁰³ AR-213 at MPCA0041418-19.

³⁰⁴ MPCA-8 at 6:105-7:115 (Norris Rebuttal); AR-213 at MPCA0041418-49.

³⁰⁵ AR-213 at MPCA0041422.

³⁰⁶ See MPCA-12 at 6:95-7:115 (Norris Rebuttal); MPCA-13 at 9:144-58, 11:194-12:226, Attachment 1 (Gernes Rebuttal).

hydrology, biological connectivity, biological diversity, and biogeochemistry.³⁰⁷ But these impacts are not in the nature of physical alterations.³⁰⁸ Moreover, the policy critiques made by the Joint Petitioners are beyond the scope of the contested case. The contested case only addresses whether MPCA and Enbridge have properly accounted for the Line 3 Project's likely wetland impacts within the bounds of the existing regulatory framework.³⁰⁹

In sum, the Joint Petitioners have failed to prove that the MPCA and Enbridge undercounted the full acreage of wetlands that will be physically altered by trenching. The record shows that the MPCA and Enbridge have accounted for the known, predictable physical alteration impacts that can reasonably be forecast prior to installation of the pipeline.

VIII. Conclusion

The Administrative Law Judge commends the Joint Petitioners for their zealous advocacy in support of Minnesota's clean waters. The citizens of this state benefit when government decisions are questioned and examined; this independent oversight holds governmental agencies accountable. The Joint Petitioners' challenge brought additional transparency and insight to this important process. At the same time, agencies charged with scrutinizing the plans and proposals submitted by Enbridge are experts in their fields. Furthermore, the Commissioner appropriately used her discretion to define and limit the issues for review in this contested case hearing. The Joint Petitioners bear the burden of proving, by a preponderance of the evidence, that the facts forming the basis for the MPCA's decisions in the five issue under consideration are erroneous. The Joint Petitioners have not met that burden.

J. E. L.

³⁰⁷ See, e.g., JP-1 at 16:1-24:8 (Otte Direct).

³⁰⁸ See, e.g., Tr. at 135 (Otte) (confirming the bulk of his testimony is about impacts that are not physical alterations).

³⁰⁹ See MPCA-2 at 20.