



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:  
**WW-15J**

March 16, 2022

Col. Karl Jansen  
District Commander  
U.S. Army Corps of Engineers  
St. Paul District, Regulatory Branch  
180 Fifth Street East, Suite 700  
Saint Paul, Minnesota 55101-1678

Re: Public Notice MVP-2020-00260-WMS / Enbridge Line 5 Wisconsin Segment Relocation

Dear Colonel Jansen:

The U.S. Environmental Protection Agency appreciates the opportunity to provide comments in response to the subject Clean Water Act (CWA) Section 404 public notice issued on January 6, 2022, for an application (Application) submitted by Enbridge Energy, Limited Partnership (Enbridge). An overview of EPA's recommendations is included below, and our detailed comments and recommendations are enclosed (Enclosure 1).

Enbridge proposes the permanent discharge of fill material into 0.02 acres of waters of the United States (WOTUS), and temporary discharges of dredged or fill material into 101.08 acres of wetlands and 0.20 acres of non-wetland WOTUS associated with the construction of the Enbridge Line 5 Wisconsin segment relocation (WI L5R) project. Enbridge plans to construct 72 pipeline crossings through federally jurisdictional waterbodies (rivers, streams, ditches, etc.) and impact 534 wetlands along the proposed route. The proposed WI L5R project would begin near the intersection of State Highway 137 and State Highway 112 in Ashland County, Wisconsin and extend to approximately the intersection of US Highway 2 and State Highway 169 in Iron County, Wisconsin. A project overview map is enclosed (Enclosure 2). The project would include impacts to the following 8-digit HUC watersheds:

- Bad-Montreal (HUC 04010302)
- Beartrap-Nemadji (HUC 04010301)

Consistent with the provisions of the 1992 CWA Section 404(q) Memorandum of Agreement between the EPA and Department of the Army<sup>1</sup>, Part IV paragraph 3(a), and based on the

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<sup>1</sup> CWA Section 404(q): Memorandum of Agreement between EPA and Department of the Army, August 11, 1992, <https://www.epa.gov/cwa-404/cwa-section-404q-memorandum-agreement-between-epa-and-department-army-text#2>, last visited March 10, 2022.

Application and related information that EPA reviewed, we believe that the proposed project “may result in substantial and unacceptable adverse impacts” to the Bad River and the Kakagon-Bad River Sloughs wetland complex, which EPA has identified as aquatic resources of national importance (ARNIs) and that are located within both the Bad-Montreal (HUC 04010302) and Beartrap-Nemadji (HUC 04010301) watersheds.

At present, EPA does not believe there is sufficient information to enable a conclusion that the proposed project is the least environmentally damaging practicable alternative (LEDPA), that the project would not result in violation of water quality standards or significant degradation of aquatic resources, or that the project would appropriately mitigate for unavoidable impacts to waters of the United States (WOTUS). EPA’s comments address avoidance and minimization of pipeline installation related discharges to WOTUS; recommendations to address water quality and significant degradation concerns; and options for improving mitigation for any unavoidable impacts.

### **Impacts to Aquatic Resources of National Importance**

An ARNI is a resource-based threshold used to determine whether a dispute between EPA and the Corps regarding individual permit cases are eligible for elevation under the 1992 MOA. Factors used to identify ARNIs include economic importance of the aquatic resource, rarity or uniqueness, and/or importance of the aquatic resource to the protection, maintenance, or enhancement of the quality of the Nation’s waters.<sup>2</sup> The Bad River and the Kakagon-Bad River Sloughs are ARNIs because they are economically significant; their unique characteristics have been identified and designated for protection under international, national, state, and tribal law; and these waterbodies are integral to maintaining and enhancing the quality of the Nation’s waters. The Kakagon-Bad River Sloughs wetland complex is designated as a Ramsar International Treaty Convention Wetland of International Importance.<sup>3</sup>

### ***Economic Factors***

EPA recognizes wetlands as important economic assets for the Nation. EPA notes that there is

a wealth of natural products from wetlands, including fish and shellfish, blueberries, cranberries, timber and wild rice. Some medicines are derived from wetland soils and plants. Many of the nation's fishing and shellfishing industries harvest wetland-dependent species. In the Southeast, for example, nearly all the commercial catch and over half of the recreational harvest are fish and shellfish that depend on the estuary-coastal wetland system.<sup>4</sup>

The Ramsar Treaty Convention designation for the Kakagon-Bad River Sloughs as a Wetland of International Importance notes that this area includes a “largely undeveloped wetland complex

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<sup>2</sup> EPA, Clean Water Act Section 404(q) Dispute Resolution Process, <https://www.epa.gov/sites/default/files/2021-01/documents/404q.pdf>, last visited March 10, 2022.

<sup>3</sup> Bad River and Kakagon Sloughs, <https://rsis Ramsar.org/rsis/2001>, last visited March 10, 2022.

<sup>4</sup> EPA, Why are Wetlands Important? <https://www.epa.gov/wetlands/why-are-wetlands-important>, last visited March 10, 2022.

composed of sloughs, bogs, and coastal lagoons that harbor the largest natural wild rice bed on the Great Lakes.” The designation further notes that these wild rice beds

are becoming increasingly fragmented on Lake Superior - as the only remaining extensive coastal wild rice bed in the Great Lakes region, it is critical to ensuring the genetic diversity of Lake Superior wild rice. Tribal members frequent the area primarily for subsistence trapping, hunting, fishing, and to retain historic harvesting techniques; access to the area is strictly limited to Bad River tribal members and Bad River Natural Resources staff.<sup>5</sup>

In addition to the economic and cultural value of wild rice to the Bad River Band, the sloughs provide important habitat supporting many fish species integral to Lake Superior recreational and commercial fishing.<sup>6</sup> Bad River Band noted in 2019: “Comprising a significant portion of the remaining Lake Superior coastal wetlands, the Kakagon and Bad River Sloughs is critical to supporting the biodiversity of Lake Superior fisheries.”<sup>7</sup>

### ***Recognition of waterbodies as rare or unique***

The Kakagon-Bad River Sloughs wetland complex is a Ramsar International Wetlands Convention site of International Importance.<sup>8</sup> According to the U.S. Fish and Wildlife Service, the Kakagon Slough is also a Nature Conservancy Priority Conservation area, a Wisconsin Legacy Place, a Wisconsin Bird Conservation Initiative Important Bird Area, a Wisconsin Wetlands Association Wetland GEM, and a Wisconsin Coastal Wetland Primary Inventory Site.<sup>9</sup> The Bad River Band has designated waters potentially impacted by this proposed project as having significant ecological and cultural significance. These waters upstream of and transecting the reservation have been designated as “Outstanding Tribal Resource Waters.”<sup>10</sup>

### ***Role of Kakagon-Bad River Sloughs as Integral to Nation’s Waters***

The Kakagon-Bad River Sloughs wetland complex has been recognized as performing important and irreplaceable functions within the Lake Superior Watershed. According to the Wisconsin Department of Natural Resources (WDNR), “The Bad River originates in Caroline Lake in east-central Ashland County and runs a meandering course northward to empty into Lake Superior.”<sup>11</sup> The WDNR further notes, “The stream is considered a warm water sport fishery important for spawning walleye and lake sturgeon, as well as supporting migratory runs of trout and salmon

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<sup>5</sup> <https://rsis Ramsar.org/ris/2001>.

<sup>6</sup> WDNR, Kakagon Slough, <https://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=2891700>, last visited March 10, 2022.

<sup>7</sup> Bad River Band, “Kakagon and Bad River Sloughs Recognized as a Wetland of International Importance,” August 22, 2019, <http://www.badriver-nsn.gov/kakagon-and-bad-river-sloughs-recognized-as-a-wetland-of-international-importance/>, last visited March 10, 2022.

<sup>8</sup> <https://rsis Ramsar.org/ris/2001>, last visited March 10, 2022

<sup>9</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 99. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_voll-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_voll-deis), last visited March 10, 2022.

<sup>10</sup> Bad River Band, “Kakagon and Bad River Sloughs Recognized as a Wetland of International Importance”; Bad River Band, Water Quality Standards, Table 1, Specific Designated Uses of the Tribe’s Water Resources, [https://www.epa.gov/sites/default/files/2014-12/documents/bad\\_river\\_band\\_wqs.pdf](https://www.epa.gov/sites/default/files/2014-12/documents/bad_river_band_wqs.pdf), last visited March 10, 2022.

<sup>11</sup> WDNR, Copper Falls State Park, Geology, <https://dnr.wisconsin.gov/topic/parks/copperfalls/geology>, last visited March 10, 2022.

species. Other fish found in the lower portion of the river include muskellunge, northern pike, rock bass, pumpkinseeds, bullheads, black crappies, smallmouth bass and yellow perch.”<sup>12</sup> Based on information contained in the Application and the WDNR draft Environmental Impact Statement (DEIS), conducted in compliance with the Wisconsin Environmental Policy Act (WEPA)<sup>13</sup>, EPA has concerns that the introduction of excess sediment, fuels, lubricants, and drilling fluids associated with the 72 federally jurisdictional waterbody crossings, as currently proposed in the WI LR5 project, could enter the Bad River and Kakagon-Bad River Sloughs through the connected tributary streams, and may permanently and negatively impact water quality, aquatic life, and native habitat.<sup>14</sup>

Marengo River, a tributary to the Bad River, along with Trout Brook Creek are listed on the 303(d) list in Wisconsin as impaired for fecal coliform.<sup>15</sup> The Bad River Watershed Association’s management plan for the Marengo River employs a management strategy, called “slow the flow” that recognizes that “reducing the volume and velocity of runoff to streams is critical to improving watershed health.”<sup>16</sup> Bay City Creek (which flows directly to Lake Superior) is listed on the Wisconsin CWA section 303(d) list as impaired for phosphorus.<sup>17</sup>

EPA believes that the Kakagon-Bad River Sloughs and the Bad River are especially vulnerable to adverse impacts from the proposed project because several waters with a nexus to this watershed are already impaired and/or are susceptible to receiving high loads of sediment. Consistent with the provisions of the 1992 CWA Section 404(q) Memorandum of Agreement between the EPA and Department of the Army, Part IV paragraph 3(a), and for the reasons provided below, EPA believes the proposed project may have “substantial and unacceptable adverse impacts” on the Kakagon-Bad River Sloughs wetland complex and the Bad River, as ARNIs.

### **CWA 404 (b)(1) Guidelines, 40 C.F.R. § 230.10 (a)**

Fundamental to the CWA Section 404(b)(1) Guidelines (Guidelines), 40 C.F.R. § 230.10(a), is that no discharge of dredged or fill material may be permitted if a practicable alternative to the proposed discharge exists that would have a less adverse impact on the aquatic environment. Based on our review of the Application, EPA believes there may be practicable alternatives to avoid and minimize impacts through revisions to the proposed pipeline installation plans that have not been fully evaluated. Such alternatives would include for all waterbodies, the use of trenchless

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<sup>12</sup> WDNR, Water Detail, Bad River, Lower Bad River, Upper Bad River, <https://dnr.wi.gov/water/waterDetail.aspx?WBIC=2891900>, last visited March 10, 2022.

<sup>13</sup> This WDNR DEIS was prepared under the Wisconsin Environmental Policy Act; see Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at [https://widnr.widen.net/s/pmjd16pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjd16pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022

<sup>14</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 199. [https://widnr.widen.net/s/pmjd16pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjd16pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

<sup>15</sup> See U.S. EPA, How’s My Waterway, Marengo River <https://mywaterway.epa.gov/waterbody-report/WIDNR/WI10008273/2020>; Trout Brook, <https://mywaterway.epa.gov/waterbody-report/WIDNR/WI10005887/2020>), last visited March 10, 2022.

<sup>16</sup> See WDNR, Nonpoint Pollution Webpage, Bad River Watershed Association, Marengo River Watershed Partnership Project, Watershed Action Plan, [https://dnr.wi.gov/topic/nonpoint/documents/9kep/Marengo\\_Watershed-Plan.pdf](https://dnr.wi.gov/topic/nonpoint/documents/9kep/Marengo_Watershed-Plan.pdf), last visited March 10, 2022.

<sup>17</sup> See U.S. EPA, How’s My Waterway, Bay City Creek, <https://mywaterway.epa.gov/waterbody-report/WIDNR/WI6936105/2020>), last visited March 10, 2022

waterbody crossings which do not require disturbing streambeds; this alternative would be especially important to evaluate for waterbodies that provide important ecological functions to the watersheds (e.g., trout streams, cold water streams). Waterbodies with ecologically important functions include: Beartrap Creek, Camp Four Creek, Feldcher Creek, tributaries of the Marengo River, Brunswweiler River, Trout Brook, Silver Creek, Krause Creek, Bad River, Gehrman Creek, and Vaughn Creek, all of which contribute to Kakagon-Bad River Sloughs. Additional geotechnical investigation on expanding the use of Horizontal Directional Drilling (HDD) should be explored to further reduce the potential of sedimentation impacts. We also recommend consideration of additional measures to reduce crossing-related impacts to project area waterbodies and wetlands, including, but not limited to: further minimizing the width of the Right of Way (ROW) in wetland and waterbody areas; using bio-engineering techniques, such as living-shoreline type features instead of riprap along with constructed features instead of riprap, at all waterbody crossing restorations; and water-inflated cofferdams where damming may be necessary to divert flow.

We request that the Corps evaluate the recommendations provided in the enclosure to determine whether modifications to the proposed pipeline installation plan can be made to avoid and minimize aquatic resource impacts to the maximum extent practicable. We look forward to continuing to work with you in identifying practical alternatives to reduce the environmental impacts of the project as currently proposed.

**CWA 404 (b)(1) Guidelines, 40 C.F.R. §§ 230.10 (b) and 230.10 (c)**

The Guidelines state that a discharge of dredged or fill material may not be permitted if it causes or contributes to violations of applicable water quality standards and no discharge should be allowed if it will cause or contribute to significant degradation of WOTUS. EPA believes that the proposed impact of the project to 101.08 acres of 534 wetlands along the proposed route and the construction of 72 federally jurisdictional waterbody crossings may have “substantial and unacceptable adverse effects” through the permanent and temporary diminishment of wetland and waterbody functions.

The Marengo River (a tributary to the Bad River) along with Trout Brook Creek are listed on the 303(d) list in Wisconsin as impaired for fecal coliform. Bay City Creek (which flows directly to Lake Superior) is listed on the 303(d) list in Wisconsin as impaired for Phosphorus. Lake Superior is listed on the CWA 303(d) list in Wisconsin as impaired for mercury and PCBs. EPA has concerns that proposed additional impacts to these aquatic resources and contributing waterbodies within the project area would exacerbate their already stressed condition and lead to further degradation. Bay City Creek is considered a Coldwater, Cool-Cold Headwater, Macroinvertebrate stream per the State of Wisconsin’s Natural Community Determinations.<sup>18</sup> If the excess sediment causes a rise in water temperature, it could have an adverse impact through changes to the macroinvertebrate population that can thrive in the stream. Excess sedimentation can affect Lake Superior Basin streams by potentially smothering important fish spawning areas for species such as brook trout and lake sturgeon and by altering stream hydrologic function that

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<sup>18</sup> WDNR, Water Detail, Bay City Creek, Fish Creek Watershed, <https://dnr.wi.gov/water/waterDetail.aspx?key=17627>, last visited 3/11/22.

contributes to habitat degradation and can reduce a stream's ability to buffer effects from extreme flood events.

During pipeline installation, sediment concentrations and load rates can increase significantly compared to the baseline condition. Increased erosion and transport of sediments and other pollutants associated with pipeline installation can alter the flow rate of stream channels downstream, transport chemicals downstream, and adversely affect downstream aquatic ecosystems. Therefore, we recommend that the Corps require a monitoring plan to conduct biological and water quality sampling before construction, during construction and after construction until the site stabilizes, as part of a revised Application. Compliance with the monitoring plan should be included as a condition of CWA section 404 permit for this project. We also recommend that a condition be included that requires the permittee to develop a corrective action plan as part of their monitoring program, to address potential local and downstream impacts to aquatic communities from the pipeline installation and maintenance. We would like to continue working with you on these and other effective measures to better ensure protection of water quality, consistent with the Guidelines.

#### **CWA 404 (b)(1) Guidelines 40 C.F.R. § 230.10(d)**

Based on the information included with the Application, EPA is concerned that the mitigation proposed in the Application may not adequately compensate for the direct, cumulative, and temporal impacts to aquatic resources. EPA recommends the Applicant revise the proposed wetland mitigation plan to include a scientifically-based rationale for the mitigation ratios proposed. Further, we recommend that the Corps require a formal compensatory mitigation/waterbody restoration plan for impacts at all 72 federally jurisdictional waterbody crossings. Requiring this specificity in plans for compensatory mitigation/waterbody restoration will ensure adequate mitigation for all impacts to waterbodies to offset any potential functional losses and ensure consistency with the Guidelines. Additional detailed comments and recommendations on proposed mitigation are provided in Enclosure 1.

#### **Next Steps**

EPA appreciates the opportunity to comment on this Application and remains committed to continuing to work collaboratively with the Corps and the Applicant to address identified concerns. The intent of this letter is to continue coordination and communication between the St. Paul Corps District (Corps) and EPA Region 5 and provide a means to resolve any concerns about the project's ability to demonstrate compliance with the CWA Section 404(b)(1) Guidelines. EPA understands that the Corps will continue to analyze this project under the National Environmental Policy Act (NEPA). EPA would welcome the opportunity to serve as a cooperating agency as the Corps prepares their NEPA document.

I appreciate the attention that you and your staff have provided to this project. We welcome the opportunity to arrange a discussion of our comments. Should you have any questions, please do not hesitate to contact me directly by phone at (312) 886-6735 or by email at [fong.tera@epa.gov](mailto:fong.tera@epa.gov) or your staff contact Melissa Blankenship of my staff by phone at (312) 886- 9641 or by email at [blankenship.melissa@epa.gov](mailto:blankenship.melissa@epa.gov) with any questions.

Sincerely,

Tera L. Fong  
Division Director, Water Division

Enclosures

e-cc: Chad Konickson, Regulatory Branch Chief-St. Paul District  
Rebecca Graser, Deputy Division Chief-St. Paul District  
Bill Sande, Project Manager-St. Paul District  
Ben Callan, Chief-Integration Services Section, Wisconsin DNR  
Catherine Chavers, Chairwoman-Bois Forte Band of Chippewa  
Kevin Dupuis, Chairman-Fond du Lac Band of Chippewa  
Robert Deschampe, Chairman-Grand Portage Band of Chippewa  
Faron Jackson, Sr., Chairman-Leech Lake Band of Ojibwe  
Robert L. Larsen, President-Lower Sioux Indian Community  
Melanie Benjamin, Chief Executive Officer-Mille Lacs Band of Ojibwe  
Catherine Chavers, President-Minnesota Chippewa Tribe  
Johnny Johnson, President-Prairie Island Indian Community  
Darrell Seki, Sr., Chairman-Red Lake Band of Chippewa  
Keith B. Anderson, Chairman-Shakopee Mdewakanton Sioux Community  
Sara Dobesh, Coordinator- Shakopee Mdewakanton Sioux Community  
Kevin Jensvold, Chairman-Upper Sioux Indian Community  
Michael Fairbanks, Chairman-White Earth Band of Chippewa  
Michael Wiggins, Chairman-Bad Rive Band of Lake Superior Cheippewa  
Ned Daniels, Jr., Chairman-Forest County Potawatomi Community  
Marlon WhiteEagle, President-Ho-Chunk Nation  
Louis Taylor, Sr., Chairman-Lac Courte Oreilles Band of Lake Superior Chippewa  
John Johnson, President-Lac du Flambeau Band of Lake Superior Chippewa  
Ronald Corn, Sr., Chairman-Menominee Indian Tribe of Wisconsin  
Tehassi Hill, Jr., Chairman-Oneida Nation of Wisconsin  
Christopher Boyd, Chairman-Red Cliff Band of Lake Superior Chippewa  
Robert VanZile, Chairman-Sokaogon Chippewa Community  
William Reynolds, Chairman-St. Croix Chippewa Indians of Wisconsin  
Shannon Holsey, President-Stockbridge-Munsee Community  
Whitney Gravelle, Chairwoman-Bay Mills Indian Community  
David M. Arroyo, Chairman-Grand Traverse Band of Ottawa and Chippewa Indians  
Kenneth Meshigaud, Chairman-Hannahville Indian Community  
John L. Lufkins, Executive Director-Inter-Tribal Council of Michigan

James Williams, Chairman-Lac Vieux Desert Band of Lake Superior Chippewa  
Larry Romanelli, Ogema-Little River Band of Ottawa Indians  
Regina Gasco-Bentley, Chairwoman-Little Traverse Bay Bands of Odawa Indians  
Bob Peters, Chairman-Match-E-Be-Nash-She-Wish (Gun Lake) Band of Pottawatomi  
Jamie Stuck, Chairman-Nottawaseppi Huron Band of the Potawatomi  
Rebecca Richards, Chairwoman-Pokagon Band of Potawatomi  
Theresa Jackson, Chief-Saginaw Chippewa Indian Tribe  
Aaron A. Payment, Chairman-Sault Ste. Marie Tribe of Chippewa Indians

**Enclosure 1-Detailed EPA comments on the Section 404 Permit Application for the  
Enbridge Line 5 Wisconsin Relocation Project**

**1. Project Background and Summary**

The Applicant, Enbridge, is proposing the permanent discharge of fill material into 0.02 acres of Waters of the United States (WOTUS), and temporary discharges of fill material into 101.08 acres of wetlands and 0.2 acres of non-wetland WOTUS associated with the construction of the Enbridge Line 5 Wisconsin segment relocation project (WI LR5). Enbridge plans to construct 72 pipeline crossings through federally jurisdictional waterbodies and impact 534 wetlands along the proposed route. The project would replace 20 miles of existing pipeline, including 12 miles of existing pipeline within the Bad River Indian Reservation (reservation), with approximately 41 miles of new pipeline routed around the exterior of the Reservation. In addition, the Applicant proposes horizontal directional drilling (HDD) under the White River, a navigable WOTUS. Enbridge proposes to cease pipeline operation within the reservation once the proposed WI L5R pipe is in service.

The project would include impacts to the following 8-digit HUC watersheds:

- Bad-Montreal (HUC 04010302)
- Beartrap-Nemadji (HUC 04010301)

The following 12-digit HUC subwatersheds fall within the project area and are upstream of and transect the Bad River Reservation:

- Fish Creek – Frontal Chequamegon Bay (HUC 040103011105)
- Beartrap Creek – Frontal Chequamegon Bay (HUC 040103011101)
- Deer Creek – White River (HUC 040103020611)
- Meadow Creek (HUC 040103020610)
- Troutmere Creek-Marengo River (HUC 040103020404)
- Lower Brunsweler River (HUC 040103020403)
- Marengo River (HUC 040103020405)
- Hardscrabble Creek – Bad River (HUC 040103020305)
- Lower Tyler Forks (HUC 040103020203)
- Potato River (HUC 040103020506)
- Vaughn Creek (HUC 040103020505)
- Devils Creeks – Bad River (HUC 040103020304)

EPA’s longstanding position regarding the importance of tributary streams has been that

Scientific literature unequivocally demonstrates that streams, individually or cumulatively, exert a strong influence on the integrity of downstream waters. All tributary streams, including perennial, intermittent, and ephemeral streams, are physically, chemically, and biologically connected to downstream rivers via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported.<sup>19</sup>

Wetlands provide numerous functions that benefit downstream water quality. These functions include storage of floodwater, recharge of ground water that sustains baseflow, retention and transformation of nutrients, metals, and pesticides, and export of organisms or reproductive propagules to downstream waters. Wetlands can be connected to downstream waters through surface-water, shallow subsurface-water, and groundwater flows and through biological and chemical connections.<sup>20</sup>

## **2. The Proposed Project will Impact Aquatic Resources of National Importance**

EPA believes the WI LR5 may have “substantial and unacceptable adverse impacts” on the Kakagon-Bad River Sloughs and the Bad River, aquatic resources of national importance (ARNIs). In addition to the discussion in our cover letter, EPA notes that watersheds impacted by this proposed project include international, national, tribal, and state-designated areas of importance.

The proposed project route would cross the White River, Billy Creek, and the Bad River. These waters enter Lake Superior through the Bad River Slough. Specifically, the White River enters the Bad River Slough approximately 26.3 river miles from the project site. The proposed route also crosses Beartrap Creek which enters Lake Superior through the Kakagon Slough, approximately 19 river miles downstream from the project site. The Kakagon-Bad River Sloughs wetland complex is a Ramsar International Wetlands Convention site of international importance and a National Landmark.<sup>21</sup> According to the U.S. Fish and Wildlife Service, the Kakagon Slough is also a Nature Conservancy Priority Conservation area, a Wisconsin Legacy Place, a Wisconsin Bird Conservation Initiative Important Bird Area, a Wisconsin Wetlands Association Wetland GEM, and a Wisconsin Coastal Wetland Primary Inventory Site.<sup>22</sup>

Wetlands that may be indirectly impacted by WI LR5 are habitat for several rare plants and animals. The project is situated upstream of a wetland complex that comprises more than 16,000 acres of diverse wetland habitats that support numerous species of rare plants and animals.<sup>23</sup>

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<sup>19</sup> U.S. Environmental Protection Agency, “Connectivity of Streams and Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence.” EPA/600/R-14/475F (2015).

<sup>20</sup> EPA, “Connectivity of Streams and Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence.”

<sup>21</sup> <https://rsis.ramsar.org/ris/2001>, last visited March 10, 2022

<sup>22</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 99. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

<sup>23</sup> <https://www.wisconsinwetlands.org/wp-content/uploads/2015/06/Kakagon-Bad-River-Sloughs.pdf>, last visited March 10, 2022

According to the Ramsar International Convention on Wetlands webpage outlining the designation of the Kakagon and Bad River Sloughs as Wetlands of International Importance:

The endangered Gray Wolf (*Canis lupus*) and threatened Canada Lynx (*Lynx Canadensis*) are two rare and elusive species known to inhabit the site. It provides necessary and rare feeding, resting, and nesting habitat for both migrating and local populations of birds, and one of the two remaining sites for the endangered Piping Plover (*Charadrius melodus*) is located immediately to the north at Long Island. The site also protects wild rice beds that are becoming increasingly fragmented on Lake Superior - as the only remaining extensive coastal wild rice bed in the Great Lakes region, it is critical to ensuring the genetic diversity of Lake Superior wild rice.<sup>24</sup>

Based on the Application and the Wisconsin Environmental Policy Act (WEPA) Draft Environmental Impact Statement (DEIS) prepared by the Wisconsin Department of Natural Resources (WDNR), EPA believes that sediment laden runoff from the WI LR5 project could enter the sloughs through the connected tributary streams, and may permanently and negatively impact water quality, aquatic life, and native habitat.<sup>25</sup>

According to the WDNR, “The Bad River originates in Caroline Lake in east-central Ashland County and runs a meandering course northward to empty into Lake Superior.”<sup>26</sup> The WDNR further notes, “The stream is considered a warm water sport fishery important for spawning walleye and lake sturgeon, as well as supporting migratory runs of trout and salmon species. Other fish found in the lower portion of the river include muskellunge, northern pike, rock bass, pumpkinseeds, bullheads, black crappies, smallmouth bass and yellow perch.”<sup>27</sup>

Copper Falls State Park (Copper Falls) is owned by the WDNR and was designated a State Natural Area in 2003.<sup>28</sup> Bad River enters the park approximately one river mile downstream of the closest proposed pipeline crossing of Bad River. According to the WDNR, Copper Falls landscape includes northern dry and dry-mesic forest along the shores of the Bad River. On the low terraces of the river are two oxbows, that support dry-mesic forest dominated by large white pine, sugar maple, red maple, and white ash. Other trees include hemlock, white cedar, paper birch, red oak, balsam fir, and white spruce. The understory is diverse because of the variation in topography. The steep slope along the west side of the river supports a sugar maple-hemlock forest, which has not been disturbed since at least 1916.<sup>29</sup> “There are 8.5 miles of river in the

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<sup>24</sup> <https://rsis Ramsar.org/ris/2001>, last visited March 10, 2022.

<sup>25</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 199. [https://widnr.widen.net/s/pmjd16pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjd16pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

<sup>26</sup> WDNR, Copper Falls State Park, Geology, <https://dnr.wisconsin.gov/topic/parks/copperfalls/geology>, last visited March 10, 2022.

<sup>27</sup> WDNR, Water Detail, Bad River, Lower Bad River, Upper Bad River, <https://dnr.wi.gov/water/waterDetail.aspx?WBIC=2891900>, last visited March 10, 2022.

<sup>28</sup> WDNR, Wisconsin State Natural Areas Program, Copper Falls, <https://dnr.wi.gov/topic/Lands/naturalareas/index.asp?SNA=399>, last visited March 10, 2022 (hereafter WDRN, Copper Falls Website).

<sup>29</sup> See WDRN, Copper Falls Website, <https://dnr.wi.gov/topic/Lands/naturalareas/index.asp?SNA=399>, last visited March 10, 2022.

park. One-half mile of river is closed to public access due to its high erosion potential and its value as a unique scenic resource for future generations.”<sup>30</sup>

***Bad River Band Outstanding Tribal Resource Waters and Outstanding Resource Waters***

The Bad River Band has designated waters potentially impacted by this proposed project as having significant ecological and cultural significance. These waters upstream of and transecting the reservation have been designated as “Outstanding Tribal Resource Waters.”<sup>31</sup> They would be crossed using the wet trench or dry crossing pipeline installation methods and include the Potato River and the Bad River.

Surface waters of the reservation that are identified as high quality and constitute a significantly important cultural and ecological resource are designated as Outstanding Tribal Resource Waters (Chi minosingbii) and are roughly equivalent to EPA's regulatory definition of Tier 3 waters under the Agency's antidegradation policy. These waters are recognized as being largely pristine and important for the cultivation of wild rice or the spawning of lake sturgeon, or have other special resource values, and, therefore, that water quality shall be maintained and protected in all cases without degradation. New or increased discharges will not be permitted.<sup>32</sup>

The Bad River Band has designated waters potentially impacted by this proposed project as being culturally important to the Tribe for the fisheries and ecosystems they support. Waters designated as “Outstanding Resource Waters” that would be crossed using the wet trench or dry crossing pipeline installation method include tributaries of the Marengo River, Bear Trap Creek, Tyler Forks Creek, Brunsweler River, and Vaughn Creek. The Band’s federally approved water quality standards provide:

Surface waters of the Reservation that are identified as high quality and culturally important to the Tribe for the fisheries and ecosystems they support are Outstanding Resource Waters (Chi minosibii) and could be described as roughly equivalent to EPA's regulatory definition of Tier 2.5 waters under the Agency's antidegradation policy. New or increased discharges may be permitted provided that the new or increased discharge does not result in a change in background conditions or negatively impact designated uses or existing uses; however, no new or increased discharges of Bioaccumulative Chemicals of Concern will be permitted. Where the quality of the water exceeds that necessary to support the designated use, that quality shall be maintained and protected, or improved, unless the Tribe finds, after full satisfaction of inter-governmental coordination and public participation provisions of the Tribe's continuing planning process that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing

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<sup>30</sup> See WDNR, Copper Falls Website, <https://dnr.wisconsin.gov/topic/parks/copperfalls/geology>, last visited March 10, 2022.

<sup>31</sup> U.S. EPA, Bad River Band of Lake Superior Chippewa, Water Quality Standards, [https://www.epa.gov/sites/default/files/2014-12/documents/bad\\_river\\_band\\_wqs.pdf](https://www.epa.gov/sites/default/files/2014-12/documents/bad_river_band_wqs.pdf), Table 1, Specific Designated Uses of the Tribe’s Water Resources, last visited March 10, 2022.

<sup>32</sup> U.S. EPA, Bad River Band of Lake Superior Chippewa, Water Quality Standards, E.2.ii, [https://www.epa.gov/sites/default/files/2014-12/documents/bad\\_river\\_band\\_wqs.pdf](https://www.epa.gov/sites/default/files/2014-12/documents/bad_river_band_wqs.pdf), last visited March 10, 2022.

such degradation or lower water quality, the Tribe shall assure water quality adequate to protect existing uses fully.<sup>33</sup>

### ***Wisconsin Outstanding Resource Waters and Exceptional Resource Waters***

Waters Wisconsin designated as “Outstanding Resource Waters” that would be crossed using the wet trench or dry crossing pipeline installation method include tributaries of the Brunsweler River, Marengo River, Tyler Forks Creek, and the Potato River. According to Wisconsin’s Water Quality Standards, waters designated as Outstanding Resource Waters may not be lowered in water quality.<sup>34</sup>

Surface waters which provide valuable fisheries, hydrologically or geologically unique features, outstanding recreational opportunities, unique environmental settings, and which are not significantly impacted by human activities may be classified in Wisconsin as “Exceptional Resource Waters.”<sup>35</sup> Waters designated as Exceptional Resource Waters that will be crossed using the wet trench or dry crossing pipeline installation method include tributaries of the Bad River and Vaughn Creek. Waters designated as Exceptional Resource Waters that will be crossed using the HDD pipeline installation method include the White River.

### **3. Proposed Project Impacts and EPA Recommendations (40 C.F.R. §§ 230.10(c), 230.11)**

Based on our review of the Application, it does not currently include adequate characterization of the project’s secondary effects. This has resulted in significant underestimation of the scope of proposed project impacts.

#### ***Direct Wetland Impacts (40 C.F.R. §§ 230.10(c), 230.11(a) and (b))***

According to the Application, once activities resulting in temporary discharges are completed, the Applicant proposes to allow 67.13 acres of wetlands (28.06 emergent, 32.76 forested, 6.30 scrub shrub) to revert to the original cover type. The remaining 33.95 acres of wetlands (originally forested (30.06) and scrub-shrub (3.89)) are proposed to be maintained as emergent wetland within the permanently maintained right-of-way:

Following construction, Enbridge would maintain the permanent 50-foot-wide [Right of Way] ROW clear of woody vegetation to conduct aerial inspections and facilitate access for maintenance. In areas where the pipeline was installed via HDD and direct bore methods, the permanent operational ROW would be reduced from 50 feet to 30 feet.<sup>36</sup>

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<sup>33</sup> U.S. EPA, Bad River Band of Lake Superior Chippewa, Water Quality Standards, [https://www.epa.gov/sites/default/files/2014-12/documents/bad\\_river\\_band\\_wqs.pdf](https://www.epa.gov/sites/default/files/2014-12/documents/bad_river_band_wqs.pdf), last visited March 10, 2022.

<sup>34</sup> Chapter 102: Water Quality Standards for Wisconsin Surface Waters, <https://www.epa.gov/sites/default/files/2014-12/documents/wiwqs-nr102.pdf>, last visited March 10, 2022.

<sup>35</sup> U.S. EPA, State of Wisconsin Water Quality Standards, <https://www.epa.gov/sites/default/files/2014-12/documents/wiwqs-nr102.pdf>, last visited March 10, 2022.

<sup>36</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 22. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_voll-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_voll-deis), last visited March 10, 2022.

**Recommendation:** Impacts to 33.95 acres of wetlands resulting in permanent conversion of forested and scrub-shrub wetlands to emergent wetlands should be considered as a permanent, not temporary impact, especially if the wetlands will be **permanently** maintained by the Applicant as emergent wetland within the right-of-way. We note additional comments below related to mitigation.

***Direct Waterbody Impacts (40 C.F.R. §§ 230.10(c), 230.11(a) and (b))***

The open cut (wet trench) and dry crossing methods of pipeline crossings result in temporary discharges of fill material into waters of the United States (WOTUS) pursuant to Section 404 of the Clean Water Act. According to the Application, the regulated activities include temporary discharges into approximately 0.20 acres below the plane of the ordinary high-water mark as part of pipeline construction activities, including trench backfill and the placement of temporary dams. The Applicant estimated the anticipated volume impact for each waterbody crossing based on a standard trench width of 18 feet wide at the top, 6 feet wide at the bottom, and 7 feet deep. This estimation does not account for crossings that will be more or less than exactly perpendicular to the waterbody. EPA notes that the actual volume will be dependent on site-specific conditions.

**Recommendation:** The Application should more accurately quantify and characterize the impacts for each of the specific 72 federally jurisdictional waterbody crossings. We also recommend the Application present an alternative for each crossing or certain groups of crossings where arriving at the proposed method is determined to not be feasible in the field. While the determination of the use of the alternative crossing method will not be determined until construction, the use of such alternative methods could result in significant changes to waterbody impacts as proposed in the Application. A summation of potential impacts that could result from these alternative crossing methods would be an important addition to the Application because high impact crossing methods have the potential to result in permanent waterbody functional loss. This information is necessary in determining adequate compensatory mitigation for impacts under the Clean Water Act Section 404 (b)(1) Guidelines.

***Impacts to Impaired waters (40 C.F.R. §§ 230.10(c), 230.11(c) and (d))***

Based on the Application and the WEPA DEIS prepared by WDNR, EPA believes that sediment laden runoff from the WI LR5 project could enter the Kakagon-Bad River sloughs through connected tributaries, and may negatively impact water quality, aquatic life, and native habitat. This sedimentation may impact and permanently degrade the watershed surrounding the proposed project. EPA believes that the Kakagon-Bad River Sloughs wetland complex and the Bad River are especially vulnerable because several waters with a nexus to this watershed are already impaired and/or susceptible to receiving high loads of sediment.

Pipeline installation can cause substantial erosion and sedimentation, which may increase instream turbidity and alter hydrology at the project site and downstream, negatively impacting aquatic life and habitat. Wetland conversion resulting from pipeline installation can often cause the loss of vital wetland functions and values.

The proposed project does not account for increased sedimentation and other discharges of pollutants that will occur in waters already impaired. For example, the Marengo River, a

tributary to the Bad River, along with Trout Brook Creek are listed on the 303(d) list in Wisconsin as impaired for fecal coliform.<sup>37</sup> The Marengo River Watershed is a significant focus area for highlighting important management strategies to reduce sedimentation in Wisconsin's Lake Superior Basin. The Bad River Watershed Association's management plan employs a management strategy, called "slow the flow" that recognizes that "reducing the volume and velocity of runoff to streams is critical to improving watershed health."<sup>38</sup> The Bad River Watershed's geologic characteristics, particularly the combination of steep topography and highly erodible soils, make the watershed more susceptible to receiving and transporting high loads of sediment.<sup>39</sup> Additionally, Bay City Creek (which flows directly to Lake Superior) is listed as impaired for Phosphorus on the Wisconsin CWA section 303(d) list.<sup>40</sup> EPA notes that the Application does not account for increased sedimentation and potential increased nutrient loading to Bay City Creek.

**Recommendation:** The Application should be revised to include more specific characterization of expected discharges of sediment to those waterbodies already impaired.

### ***Secondary Impacts (40 C.F.R. § 230.10(c), 230.11(h))***

The Application does not adequately discuss or account for secondary impacts as specified by the Guidelines. 40 C.F.R. § 230.11(h). Secondary impacts on an aquatic ecosystem are associated with the discharge of dredged or fill material, but do not result from the actual placement of the dredged or fill material. As proposed, the project would require the filling or converting of portions of wetlands that extend outside of the project footprint. In situations where a wetland would be partially filled or converted, EPA remains concerned that the remaining wetland acreage may experience declines in functions, values, and habitat quality; including but not limited to changes in hydrology and natural flow within the wetlands and spread of invasive species. Wetlands that are to be restored to "pre-existing conditions" will also face the challenges of the introduction of invasive species in their disturbed area, potentially spreading beyond the work area into the entire wetland complex. During the restoration process, native seed mixes or planted vegetation may exhibit genetic differences from vegetation onsite that could jeopardize the natives that have evolved to this site's specific microclimate, making the wetlands more vulnerable to degradation. Two plants that are the same technical species can originate thousands of miles apart and are adapted to exhibit different traits (*e.g.*, key phenotypic and phenological differences). These impacts would be multiplied every time planned, preventative, and emergency maintenance would occur. Additionally, the impacts to waterbodies resulting from proposed crossings will likely affect downstream resources. The Application does

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<sup>37</sup> See U.S. EPA, How's My Waterway, Marengo River <https://mywaterway.epa.gov/waterbody-report/WIDNR/WI10008273/2020>; Trout Brook, <https://mywaterway.epa.gov/waterbody-report/WIDNR/WI10005887/2020>, last visited March 10, 2022.

<sup>38</sup> See WDNR, Nonpoint Pollution Webpage, Bad River Watershed Association, Marengo River Watershed Partnership Project, Watershed Action Plan, [https://dnr.wi.gov/topic/nonpoint/documents/9kep/Marengo\\_Watershed-Plan.pdf](https://dnr.wi.gov/topic/nonpoint/documents/9kep/Marengo_Watershed-Plan.pdf), last visited March 10, 2022.

<sup>39</sup> Bad River Watershed Association, Marengo River Watershed Partnership Project, Watershed Action Plan, [https://dnr.wi.gov/topic/nonpoint/documents/9kep/Marengo\\_Watershed-Plan.pdf](https://dnr.wi.gov/topic/nonpoint/documents/9kep/Marengo_Watershed-Plan.pdf), last visited March 10, 2022.

<sup>40</sup> See U.S. EPA, How's My Waterway, Bay City Creek, <https://mywaterway.epa.gov/waterbody-report/WIDNR/WI6936105/2020>, last visited March 10, 2022.

not clearly consider, describe, or analyze such indirect wetland or waterbody impacts, as required under the Guidelines.

**Recommendation:** The Application should be revised to include all of these indirect wetland and waterbody impacts. Additionally, we recommend that the Corps require monitoring of adjacent wetlands as a condition of the permit to determine the extent of secondary impacts and require additional mitigation if the analysis reveals adverse impacts to adjacent resources by the proposed activities.

The Application should be revised to specifically analyze the potential for effects to downstream waterbodies, such as, but not limited to, changes to the hydrogeomorphology and impacts of sedimentation and compaction from construction activities, to better determine if secondary impacts will occur to the remaining resources. Secondary effects to these downstream resources should be avoided and minimized to the maximum extent practicable. Should unavoidable secondary impacts remain, whether temporary or permanent, then EPA recommends additional compensatory mitigation be provided to offset those effects.

### *Secondary Impacts from Blasting (40 C.F.R. §§ 230.10(c), 230.11(h))*

The draft Enbridge Blasting Plan (Blasting Plan) identifies 139 potential blasting areas, some of which may be required in-water. The Blasting Plan is general in nature. It currently does not address specific best management practices that would be employed at each blasting location to prevent irreversible damage to stream ecology and prevent migration of contaminants downstream that may result from the blasting. According to Enbridge, this is because “blasting for excavation or grading purposes is to be used only when deemed necessary by a construction expert after examination of the site and other reasonable means of excavation have been attempted and are unsuccessful in achieving the required results”<sup>41</sup> Any site-specific blasting plan would be submitted by the blasting contractors for Enbridge review. It does not appear that the Corps would have an opportunity to review each site-specific plan prior to blasting within federally jurisdictional wetlands and waterbodies. The Blasting plan states that:

preliminary desktop reviews have been completed to identify subsurface conditions along the proposed route including soil types, rock outcrops, and bedrock formations. Upon review of these subsurface conditions, there have been locations identified where conventional trenching techniques will likely be inadequate, and blasting would potentially be required to install the pipeline...approximately 10 miles of blasting is assumed to be required for the Project, occurring mostly between construction mileposts 17 and 41.<sup>42</sup>

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<sup>41</sup> Enbridge Line 5 Wisconsin Segment Relocation Project- Blasting Plan-Preliminary [https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR\\_Att%20E\\_Blasting%20Plan.pdf?ver=SjZXYLC9eIeqjGkAsiNGbg%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR_Att%20E_Blasting%20Plan.pdf?ver=SjZXYLC9eIeqjGkAsiNGbg%3d%3d), last visited March 10, 2022.

<sup>42</sup> Enbridge Line 5 Wisconsin Segment Relocation Project- Blasting Plan-Preliminary [https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR\\_Att%20E\\_Blasting%20Plan.pdf?ver=SjZXYLC9eIeqjGkAsiNGbg%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR_Att%20E_Blasting%20Plan.pdf?ver=SjZXYLC9eIeqjGkAsiNGbg%3d%3d), last visited March 10, 2022.

The Blasting Plan goes on to state that a “more accurate prediction of potential blasting locations will be available closer to the time of construction and when on-site geotechnical data is gathered and analyzed.”<sup>43</sup>

EPA notes that a common blasting agent, ANFO, is a mixture of ammonium nitrate (AN) and fuel oil (FO). Nitrates and ammonium are readily soluble in water. Release of nitrogen compounds to surface and groundwater can contribute to spread of invasive species and harmful algal blooms. Elevated levels of nitrates can be toxic to aquatic freshwater fauna. Furthermore, in areas where wetlands occur in thin soils over impermeable bedrock, blasting can generate new preferential soil moisture movement and/or groundwater flow paths that can result in changes to wetland hydrology or even dewatering of wetland.<sup>44</sup>

**Recommendation:** The Application should be revised to discuss and account for potential secondary wetland and waterbody impacts from all of the proposed work. This includes the impacts from use of blasting. We also recommend that the Corps should condition the permit to require the Applicant to submit site-specific blasting plans where blasting would occur within federally jurisdictional wetlands and waterbodies.

#### **4. Cumulative Impacts and EPA Recommendations (40 C.F.R. §§ 230.10(c), 230.11(e) and (g))**

The Application does not adequately discuss cumulative impacts as specified in 40 C.F.R. § 230.11(g), which provides:

Cumulative impacts are the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems. Cumulative effects attributable to the discharge of dredged or fill material in WOTUS should be predicted to the extent reasonable and practical.

Section 7.3.3 *Water Resources*, of the Enbridge Line 5 Wisconsin Segment Relocation Project Environmental Impact Report (EIR) concluded that:

the greatest potential for cumulative impacts would be with concurrent construction projects. Current other projects that may result in temporary water resource impacts that temporally overlap with the Line 5 Project include culvert replacement and resurfacing transportation projects, and trail expansion project and a broadband initiative project. Based on the temporary nature of the majority of the Line 5 Project impacts, the compensatory mitigation required for permanent Project impacts, and the limited

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<sup>43</sup> Enbridge Line 5 Wisconsin Segment Relocation Project-Blasting Plan-Preliminary [https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR\\_Att%20E\\_Blasting%20Plan.pdf?ver=SjZXyLC9eIeqjGkAsiNGbg%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR_Att%20E_Blasting%20Plan.pdf?ver=SjZXyLC9eIeqjGkAsiNGbg%3d%3d), last visited March 10, 2022.

<sup>44</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 166. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

temporary impacts anticipated associated with concurrent projects in the region, construction and operation of the Project, when combined with other past, present, and foreseeable future projects, is not expected to result in significant cumulative impacts on water resources.<sup>45</sup>

The cumulative impacts analysis associated with water resources in the Application does not adequately address cumulative impacts, in part because it appears to mischaracterize many impacts as only being temporary in nature. The Application should be revised to provide a complete and thorough cumulative impacts analysis. Such an analysis will allow the Corps and EPA to make fully informed factual determinations about the project's compliance with the Guidelines. Included in the cumulative impact analysis should be the anticipated impact from the continuous disturbance of wetlands and waterbodies from construction and from planned, preventative, and emergency maintenance. The cumulative impacts analysis should include information about modifications to hydrology and degradation of water quality during and following construction and the associated consequences.

**Recommendation:** The Application should be revised to include a comprehensive evaluation of cumulative effects that will fully characterize the proposed watershed impacts, in addition to an inventory of specific measures that will be undertaken to avoid and minimize cumulative impacts resulting from this project.

#### **5. Alternatives Analysis and EPA Recommendations (40 C.F.R. §§ 230.10(a) and 230.10(d))**

Pipeline construction and installation does not require access to or siting within WOTUS to fulfill its basic purpose. Therefore, these activities are considered to be non-water dependent. The Guidelines provide that for non-water dependent activities, practicable alternatives which do not involve fill in WOTUS are presumed to be available unless clearly demonstrated otherwise in the application. Therefore, EPA looks to the Application to present a reasonable range of alternatives that avoid and minimize impacts to aquatic resources on-site. The amount of effort and detail in the analysis must be commensurate with the level of aquatic resources impacted. The Application presents several alternatives to the proposed reroute:

- No Action Alternative (no project alternative), including
  - continued transport of oil and gas through Line 5, and
  - discontinued transport of oil and gas through Line 5.
- System alternatives including switching to another existing pipeline, construct a new pipeline, and alternatives modes of transport including trucks, rail cars, and barges.
- Route Alternatives RA-01, RA-02, and RA-03.

The Guidelines provide the Corps and EPA with discretion for determining the necessary level of analysis to support a conclusion as to whether an alternative is practicable. Practicable alternatives are those alternatives that are "available and capable of being done after taking into

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<sup>45</sup>Enbridge Line 5 Wisconsin Relocation Project-Environmental Impact Report  
[https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/L5R\\_EIR\\_Clean\\_2020-0316\\_Rev1.pdf?ver=I6YlkytZzDTVcc0IVdAumA%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/L5R_EIR_Clean_2020-0316_Rev1.pdf?ver=I6YlkytZzDTVcc0IVdAumA%3d%3d), last visited March 10, 2022.

consideration cost, existing technology, and logistics in light of overall project purpose." 40 C.F.R. § 230.10(a)(2).

According to the public notice, the Environmental Protection Plan (EPP) describes planning, prevention, and control measures to minimize impacts resulting from spills of fuels, petroleum products, or other substances as a result of construction. Construction of the pipeline as proposed would use trenchless methods known as the HDD and guided bore methods, both collectively referred to as "drilling." Other than the proposed crossing of the White River, these methods do not require authorization from the Corps to cross wetlands or waterways.

The Applicant proposes to minimize wetland disturbance by reducing the construction right-of-way from 120 feet to 95-foot-wide in wetlands, where practicable, based on site-specific conditions. Additionally, the Applicant proposes to employ various protection measures to protect water quality during construction. Temporary erosion and sediment controls include but are not limited to, silt fence, straw bales, biologs, erosion control blankets, and slope breakers at site specific crossings. The Applicant also proposes to limit the duration of construction equipment operation within waterbodies to the area necessary to complete the crossing. Disturbed areas at waterway and wetland crossing would be restored and stabilized as soon as practical after pipeline installation. The EPP further outlines construction-related environmental policies, procedures, and protection measures to protect water quality.

**Recommendation:** First, as referenced in Section 3 above, the Application should be revised to more accurately quantify and characterize the impacts for each of the specific 72 federally jurisdictional waterbody crossings and present an alternative for each crossing or certain groups of crossings where arriving at the proposed method is determined to not be feasible in the field. While the determination of the use of the alternative crossing method will not be determined until construction, the use of such alternative methods could result in significant changes to waterbody impacts as proposed in the Application. This information is vital to evaluating compliance with the Guidelines.

Second, EPA recommends additional efforts, such as trenchless crossings, be employed to avoid and minimize impacts to the 14 streams that are either designated trout streams, tributaries to designated trout streams, and/or designated Area of Special National Resource Interest (ASNRI) streams by the WDNR, that are proposed to be crossed by the pipeline installation activities. These include:<sup>46</sup>

1. Beartrap Creek-sasb007i
2. UNT of Marengo River- sasd011p
3. UNT of Brunsweler River- sasc1006p
4. UNT of Trout Brook- sasc1003p\_x1
5. UNT of Silver Creek- sasd1015p
6. UNT of Silver Creek- sase005p\_x2

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<sup>46</sup> USACE Waterbody Crossing Table, <https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/USACE%20Waterbody%20Crossing%20Table%2020220222.pdf?ver=hnPBLFvuRp6ZHvfdU9G8Fw%3d%3d>, last visited March 10, 2020.

7. UNT of Silver Creek- sasv004p
8. UNT of Krause Creek- sasv020p
9. UNT of Bad River- sasa008p
10. UNT of Gehrman Creek- sasa004p
11. Camp Four Creek- sasw005
12. UNT of Feldcher Creek- sirb010p
13. Feldcher Creek- WDH-103
14. UNT of Vaughn Creek- sird009p

EPA believes that using the HDD or other trenchless method for an expanded set of waterbody crossings may reduce sedimentation. Where the Application proposes HDD for waterbody crossings, the Application should also provide for thorough site analyses, including complete geotechnical analyses (ex. ground penetrating radar), boring tests, and fracture trace analyses to help prevent inadvertent returns of bentonite materials. EPA recognizes that sub-surface conditions are not entirely predictable, so it is imperative that the Applicant have a robust contingency plan in place to deal with inadvertent returns should they occur.

Finally, EPA recommends that the Applicant consider additional avoidance and minimization measures including further minimizing the width of the ROW in wetland and waterbody areas, consideration of bio-engineering techniques along with constructed features instead of riprap at all waterbody crossing restorations, and water-inflated cofferdams where damming may be necessary to divert flow.

## **6. Potential Significant Degradation of WOTUS and EPA Recommendations (40 C.F.R. § 230.10(c))**

The Guidelines provide that no discharge of dredged or fill material shall be permitted if it will cause or contribute to significant degradation of WOTUS. 40 C.F.R. § 230.10(c). The Applicant proposes the permanent discharge of fill material into 0.02 acres of wetlands, temporary discharges of dredged or fill material into 101.08 acres of wetlands and 0.20 acres of non-wetland WOTUS. The proposed project includes plans to construct 72 crossings through federally jurisdictional waterbodies and impacts to 534 wetlands along the proposed route.

As noted in Section 1, wetlands provide numerous functions that benefit downstream water quality. These functions include storage of floodwater, recharge of ground water that sustains baseflow, retention and transformation of nutrients, metals, and pesticides, and export of organisms or reproductive propagules to downstream waters. Wetlands can be connected to downstream waters through surface-water, shallow subsurface-water, and groundwater flows and through biological and chemical connections.<sup>47</sup>

According to the WEPA DEIS prepared by WDNR, construction of a pipeline and associated clearing of vegetation would increase the risk of erosion and sedimentation in stream crossings.<sup>48</sup>

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<sup>47</sup> U.S. Environmental Protection Agency. 2015. "Connectivity of Streams and Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence." EPA/600/R-14/475F.

<sup>48</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 196. [https://widnr.widen.net/s/pmjd16pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjd16pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

“Impacts to fish and other aquatic species during construction and operation of the pipelines may include direct mortality from construction, habitat loss and alteration including increased sedimentation and turbidity, barriers to movement, and entrainment in construction water intakes.”<sup>49</sup> Furthermore, “streambank erosion during construction has the potential to be a large contributor to downstream sedimentation and siltation.”<sup>50</sup> EPA is concerned that the proposed activities may cause significant degradation by disrupting life stages of aquatic life, fish spawning, and wildlife dependent on these systems. Downstream, the Kakagon-Bad River Sloughs are home to many threatened and endangered species such as the piping plover, trumpeter swan, yellow rail, bald eagle, wood turtle, and ram’s-head lady-slipper orchid.<sup>51</sup>

**Recommendation:** Robust site-specific pollution prevention plans, including best management practices for preserving aquatic resource integrity should be required for all waterbody and wetland crossings. These plans would ensure that the proper level of consideration is given to distinctively sensitive resources. We recommend these plans be provided prior to construction as a condition of the CWA section 404 permit.

#### **7. Potential Violations of Federally Approved State and Tribal Water Quality Standards and EPA Recommendations (40 C.F.R. §§ 230.10(b)(1), 230.11(a) and (d))**

The Guidelines state that “no discharge of dredged or fill material may be permitted if it causes or contributes, after disposal site dilution and dispersion, to violations of any applicable State water quality standards.” 40 C.F.R. § 230.10(b)(1). Under the CWA, tribes who have been approved for Treatment in a Similar Manner as a State (TAS) under CWA section 303, 401, and 518, are treated in a similar manner as states for purposes of implementing the CWA section 303(c) program. Bad River Band has TAS for CWA sections 303, 401, and 518, and has federally approved WQS under section 303(c). Based on our review of the Application, we find that the Application does not adequately consider, mitigate, and address potential impacts to downstream State and Tribal federally approved WQS. Please reference Section 2 above for a discussion of the Bad River Band’s Outstanding Tribal Resource Waters and Outstanding Resource Waters, and Wisconsin’s Outstanding Resource Waters and Exceptional Resource Waters.

The Applicant proposes that the project cross non-wetland waterways using open cut (wet-trench), dry crossing (flume or dam-and-pump), and HDD methods of pipeline installation. The open cut and dry crossing methods result in temporary discharges of fill material into WOTUS. The White River, a navigable water of the United States and considered a unique and scenic high-quality trout stream and watershed<sup>52</sup>, will be crossed via HDD. As mentioned above, blasting also may be necessary in areas with bedrock close to the surface.

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<sup>49</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 221. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

<sup>50</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 197. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

<sup>51</sup> <http://www.badriver-nsn.gov/natural-resources/threats/#::~:~:text=The%20Kakagon%2DBad%20River%20Sloughs.%2Dhead%20lady%2Dslipper%20orchid>, last visited March 10, 2022.

<sup>52</sup> <https://dnr.wisconsin.gov/topic/Lands/FisheriesAreas/2850whiteriverbayfield.html>, last visited March 10, 2022.

### *Horizontal Directional Drilling*

It is anticipated that fuels, oils, lubricants, and hydraulic fluids typically used for construction equipment, as well as drilling fluids could be introduced throughout the project site. The HDD drilling method includes the use of drilling fluid to lubricate the tunnel created by this method under a river. According to the public notice, drilling fluid consists primarily of water mixed with bentonite clay, and possibly also an additive. While normally this drilling fluid remains in the tunnel after installation, there is a potential for unexpected release of drilling fluid (drilling mud) into the soil during construction, which may migrate to the stream bed, exists.<sup>53</sup> Enbridge requires their contractors to implement a contingency plan should there be an inadvertent release, however they only list what the plan should include in their EPP, without any specific information about whether the Corps would have an opportunity to review the plans prior to pipeline construction:

- Procedure for notification of site, office, and Enbridge personnel
- Monitoring procedure for loss of circulation indicators
- Procedures for monitoring fluid pressure and ranges for acceptable annular pressure
- Decision points and procedures for suspending drilling operations
- Detailed descriptions of all monitoring (e.g., the annular pressure tool)
- An inventory of equipment and materials to be on-site for containment
- Containment methods in upland and wetland/waterbody locations<sup>54</sup>

The White River is the only federally jurisdictional waterway in which the HDD method is proposed to be used. Violations of state water quality standards for the White River may result if this method is permitted and not executed properly.

### *Blasting*

As mentioned in Section 3 above, blasting may take place in approximately 139 areas along the pipeline route. Of the 22 WOTUS where blasting may be implemented in-water, five are listed as perennial tributaries to trout streams and two were listed as Class II trout streams. Nitrates and ammonium from the ANFO blasting agent are readily soluble in water. Release of nitrogen compounds to surface and groundwater can contribute to spread of invasive species and harmful algal blooms.<sup>55</sup> In areas where wetlands occur in thin soils over impermeable bedrock, blasting can generate new preferential soil moisture movement and/or groundwater flow paths that can result in changes to wetland hydrology or even dewatering of a wetland.<sup>56</sup>

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<sup>53</sup>[https://www.researchgate.net/publication/30481881\\_Review\\_of\\_environmental\\_issues\\_associated\\_with\\_horizontal\\_directional\\_drilling\\_at\\_water\\_crossings](https://www.researchgate.net/publication/30481881_Review_of_environmental_issues_associated_with_horizontal_directional_drilling_at_water_crossings), last visited March 10, 2022.

<sup>54</sup> Enbridge Environmental Protection Plan [https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR\\_Att%20D\\_Env%20Prot%20Plan.pdf?ver=RisLLyPzhZ7BubIEZzNEEA%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/EIR_Att%20D_Env%20Prot%20Plan.pdf?ver=RisLLyPzhZ7BubIEZzNEEA%3d%3d), last visited March 10, 2022.

<sup>55</sup> EPA, Harmful Algal Blooms, <https://www.epa.gov/nutrientpollution/harmful-algal-blooms#cause>, last visited March 10, 2022; EPA, Nutrient Pollution, <https://www.epa.gov/nutrientpollution>, last visited March 10, 2022.

<sup>56</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 166. [https://widnr.widen.net/s/pmjdl6pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjdl6pbpd/el5_drafteis_dec2021_vol1-deis), March 10, 2022.

### *Conversion of forested wetlands to emergent wetlands*

The conversion of 27.6 acres of forested wetlands to emergent wetlands may increase water temperatures. Removal of riparian vegetation could lead to increased light penetration into the waterbody, causing increased water temperature which could potentially impact fisheries.<sup>57</sup>

#### *Cold Water Fishery stream crossings*

The Potato River, Vaughn Creek, Billy Creek, and Tyler Forks Creek are designated as Cold Water Fishery (CWF) streams by the Bad River Band. These waterways support or have the potential to support the existence of CWF communities and/or spawning areas. For those waters designated as a CWF, no measurable increase in temperature from other than natural causes is allowed.<sup>58</sup> It is unclear whether water temperature monitoring is proposed in the application or would be required by the Corps as a permit condition.

Wisconsin's minimum limit for Dissolved Oxygen content in classified trout streams is listed as 7mg/L during the fish spawning season,<sup>59</sup> while Bad River Band has a more stringent Dissolved Oxygen minimum of 8mg/L for waters designated as a CWF during the early life stages of CWF. It is currently unknown whether the Corps will require monitoring for Dissolved Oxygen as a permit condition.

According to the draft EIS, construction could change the stream bottom profile, resulting in increased sedimentation or erosion at the site or further downstream. Additionally, wetland loss can lead to increased runoff, which in turn increases flooding and streambank erosion and may ultimately lead to habitat degradation from sedimentation. Removal of riparian vegetation could lead to increased light penetration into the stream, causing increased water temperature which could potentially impact fisheries.

**Recommendation:** The Application should be revised to include a monitoring plan with a network of real-time water quality monitoring stations to be installed upstream and downstream of river, stream, and wetland crossings, including on both State lands and, with the Bad River Band's approval, within the Bad River reservation, as a condition of a Corps permit. These monitoring stations ideally should be installed prior to construction to capture baseline data. Real-time water quality monitoring data should be made available to the public and accessible via a public website. At minimum, monitoring should continue until reestablishment of vegetation, or the wetlands have reverted to the original cover type. Monitoring stations should measure temperature, turbidity, specific conductance, pH, and dissolved oxygen, at a minimum. EPA also recommends that the Application be revised to include a plan for biological (fish and macroinvertebrate) sampling before, during and after pipeline installation activities at important waterbody crossings to monitor potential impacts to stream communities as a condition of a Corps permit. Furthermore, EPA recommends that a corrective action plan be developed as a condition of permit approval to address potential excursions of water quality standards or negative impacts to aquatic communities. EPA also recommends that any structures used in

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<sup>57</sup>[https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/WI%20Permit%20App\\_02062020\\_Final\\_Redacted.pdf?ver=EW9ONJxUT69quLJzPx2Saw%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/WI%20Permit%20App_02062020_Final_Redacted.pdf?ver=EW9ONJxUT69quLJzPx2Saw%3d%3d), last visited March 10, 2022.

<sup>58</sup> U.S. EPA, Bad River Band of Lake Superior Chippewa, Water Quality Standards, [https://www.epa.gov/sites/default/files/2014-12/documents/bad\\_river\\_band\\_wqs.pdf](https://www.epa.gov/sites/default/files/2014-12/documents/bad_river_band_wqs.pdf), last visited March 10, 2022.

<sup>59</sup> Chapter 102: Water Quality Standards for Wisconsin Surface Waters <https://www.epa.gov/sites/default/files/2014-12/documents/wiwqs-nr102.pdf>, last visited March 10, 2022

constructing waterbody crossings should not impede/prevent the movement of aquatic life upstream or downstream and should be removed as soon as possible after construction is complete and after the area is restored. This should be included as a condition of the Corps permit.

Additionally, EPA recommends that the Corps include a condition in the permit that allows for review of the detailed HDD contingency plan prior to any HDD work.

Please see Section 3 above for recommendations regarding blasting activities.

## **8. Mitigation and EPA Recommendations (40 C.F.R. Part 230, 33 C.F.R. Part 332)**

The Guidelines provide that an applicant must demonstrate that a sequence of steps will be followed to avoid and minimize impacts to the maximum extent possible and to compensate for any unavoidable losses. 40 C.F.R. § 230.10(d). Based on EPA's review of the Application, we believe the project as proposed does not adequately demonstrate all practicable avoidance measures were considered in accordance with 40 C.F.R. Part 230. As such, it is difficult to determine adequate compensatory mitigation at this time. While EPA has reviewed the proposed compensatory mitigation plan, we note that the plan does not provide any scientific evidence or rationale for use of the proposed mitigation ratios, nor does the mitigation plan explain how those ratios were developed or determined.

**Recommendation:** EPA recommends that a more comprehensive avoidance and minimization analysis be completed as part of the Application. Once this analysis is completed, EPA recommends that a more detailed and complete compensatory mitigation plan be developed as part of the Application. EPA requests review of the updated mitigation plan when it is provided to the Corps. Additionally, EPA has the following comments on the compensatory mitigation plan.

### ***Lack of Pre- and Post- Work Condition Assessments***

The Corps' public notice states that wetland areas temporarily impacted during construction would be restored to pre-construction contours and elevations. The Applicant proposes to provide compensatory wetland mitigation for project related permanent wetland fill, permanent conversion of scrub-shrub and forested wetlands to emergent wetlands, and temporal loss of wetland functions. Enbridge evaluated wetlands using the Wisconsin Wetland Rapid Assessment Method ("WRAM") value rating but opted out of the Floristic Quality Inventory (FQI) component of WRAM for each wetland.

While EPA understands that the Applicant attempted to provide conservative evaluations of resources that they propose to impact, omission of the FQI in the WRAM impedes assessment of pre- and post- work conditions. Assumption of quality is not a substitute for thorough assessment of the wetlands, and without an accurate assessment, the wetlands cannot be returned to pre-impact conditions. Open trenches are proposed for some high-quality wetlands that appear to be in a nearly unaltered state, free from invasive species. Based on the information in the Application, EPA was unable to identify a basis for assurance that the proposed work process will be able to return these high-quality wetlands to their original condition.

**Recommendation:** An FQI should be conducted for each wetland so that the diversity, quality, and community can be recreated and appropriately mitigated if they cannot be restored to pre-impact conditions.

### ***Lack of Adequate Identification of High-Quality Wetlands***

As stated in the WEPA DEIS prepared by WDNR, “detailed species composition on individual wetlands has not been reviewed for the proposed route or route alternatives. Therefore, a direct determination of high-quality based on species composition is not available.”<sup>60</sup> Only dominant species were described. However, not every species that may be conservative, rare, or unique to these wetland systems will be a dominant species. Additionally, if only the dominant species are assessed in pre-impact conditions, restoration after impacts will only focus on those species and potentially decrease the diversity of those areas. As noted in the Bad River’s Band’s 2020 comment letter,<sup>61</sup> many species of plants are difficult to identify outside of a specific season (such as spring ephemerals) and outside of their blooming period (such as orchids).

**Recommendation:** The Applicant should ensure that the FQI is complete by making supplemental site visits during periods when difficult to identify species are most visible.

### ***Lack of Secondary and Cumulative Impact Assessments***

Additionally, FQIs are important to anticipate potential secondary and cumulative impacts as some wetland areas are expected to be continuously disturbed as maintenance and repair activities are anticipated to occur on the line and pose a threat of continued wetland degradation. The Guidelines require an accurate assessment of impacts to aquatic resources in order for the Corp and EPA to determine adequate compensatory mitigation.

**Recommendation:** EPA recommends that complete FQIs be taken to ensure that the effect of secondary cumulative impacts can be properly mitigated.

### ***Wetlands Bank Credits***

The Applicant proposes to compensate for the loss of wetland functions by purchasing wetland credits from the Poplar River Wetland Mitigation Bank and the Bluff Creek Wetland Mitigation Bank, both located in the Lake Superior Bank Service Area (BSA). The Applicant proposes purchasing a total of 33.35 mitigation credits, apportioned as 0.94 Palustrine Emergent (PEM) wetland credit, 2.39 credits Palustrine Scrub-Shrub (PSS) wetland credit, and 30.02 Palustrine Forested (PFO) wetland credit.

Applicant is proposing to purchase:

- 2.39 wetland bank credits for the 6.85 acres of temporary impact and 3.9 acres of permanent conversion of scrub-shrub wetlands

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<sup>60</sup> Draft Environmental Impact Statement: Proposed Enbridge Line 5 Relocation Project, December 2021, Vol. 1 at 204. [https://widnr.widen.net/s/pmjd16pbpd/el5\\_drafteis\\_dec2021\\_vol1-deis](https://widnr.widen.net/s/pmjd16pbpd/el5_drafteis_dec2021_vol1-deis), last visited March 10, 2022.

<sup>61</sup>Letter from Naomi Tillison, Natural Resources Director, Bad River Band, to Ben Callan, WDNR, July 11, 2020.

- 30.02 wetland bank credits for the 32.71 acres of temporary impact and 30.03 acres of permanent conversion of forested wetlands
- 0.94 wetland bank credits for 0.02 acres of permanent impacts to fresh wet meadow and 28.06 acres of temporary impacts to fresh wet meadow (24.65), sedge meadow (2.82), shallow marsh (0.28) and seasonally flooded basin (0.23).

The Guidelines require adequate compensatory mitigation to offset environmental losses resulting from unavoidable impacts to WOTUS and mitigation requirements must be commensurate with the amount and type of impacts associated with a particular permit. 40 C.F.R. § 230.93(a). The Mitigation Plan<sup>62</sup> does not provide any scientific evidence or rationale for use of the proposed mitigation ratios or how those ratios were developed or determined. The Mitigation Plan states that:

the Line 5 Project will take place largely within new temporary workspace, which will be allowed to revert back to the preconstruction wetland type, and new permanent right-of-way, which Enbridge will maintain and convert from one wetland type to another in order to operate the proposed facilities. Only a small amount of permanent wetland loss will result from the Project. Based on this, and the mitigation ratio requirements from past projects, Enbridge has calculated proposed mitigation ratios for the Line 5 Project.

**Recommendation:** The Mitigation Plan should be revised to include a discussion of why the mitigation proposed, using the ratios identified, is considered a commensurate amount of compensation to offset the loss of function and quality of the impacted wetlands.

### ***Lack of Compensation and Mitigation for each Proposed Waterbody Crossing***

While the Application provided Stream Restoration Drawings and general channel remediation methods, no formal compensatory mitigation/waterbody restoration plans are being proposed for each of the 72 proposed federally jurisdictional waterbody crossings as part of the Application, despite anticipated functional losses that may occur during and post-construction. Considering physical, chemical, and biological functions will be lost during and post-construction (i.e. disrupted floodplain connectivity, disturbed groundwater and surface water interactions and waterbody flow dynamics, changes in water quality, temperature, nutrients, and disturbance to fish and macroinvertebrate communities due to waterbody changes and elimination of riparian buffer), compensatory mitigation for temporary impacts to waterbodies are necessary to offset any unavoidable adverse impacts to waterbodies and anticipated functional losses.

**Recommendation:** EPA recommends the Mitigation Plan include a scientifically based rationale for using the ratios proposed. An FQI should be calculated for each impacted wetland so that the diversity, quality, and community can be recreated and appropriately mitigated if they cannot be restored to pre-impact conditions. At minimum, the Mitigation Plan should include a discussion of why the mitigation proposed using the ratios identified is considered a commensurate amount of compensation to offset the loss of function and quality of the impacted wetlands. EPA also

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<sup>62</sup> Enbridge Compensatory Wetland Mitigation Strategy, [https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/L5R\\_Mitigation\\_Plan\\_20211130.pdf?ver=ICqiMkh86AOT8Lx7Fi2aw%3d%3d](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Enbridge/EnbridgeLine5/L5R_Mitigation_Plan_20211130.pdf?ver=ICqiMkh86AOT8Lx7Fi2aw%3d%3d), last visited March 10, 2022.

recommends the Corps require formal compensatory mitigation/waterbody restoration plans for impacts at all 72 federally jurisdictional waterbody crossings to ensure compliance with the Guidelines and consider mitigation for temporary impacts to waterbodies to offset any potential functional losses.

## **9. General Comments**

### ***Line 5 Pipeline Disposition within the Bad River Reservation***

The WEPA DEIS prepared by WDNR, suggests removal of pipeline from the Bad River Band's Reservation will occur at the direction of Bad River pending the outcome of ongoing litigation between Bad River and Enbridge.<sup>63</sup> We believe removal, decommissioning in place, or a combination thereof, of the existing pipeline is connected to the rerouting of the pipeline.

**Recommendation:** EPA recommends that pipeline removal, decommissioning in place, or a combination thereof, be considered together with the proposed reroute and that these activities should be discussed with the rerouting as connected actions and part of a single project in the Corps' NEPA evaluation. Based on an initial scoping review and analysis in the WEPA DEIS prepared by WDNR, it appears the proposed action is likely to have significant direct, secondary, and cumulative aquatic resource impacts resulting from the pipeline removal and/or decommissioning. If the Corps is unable to identify measures to mitigate the impacts of the removal to less than significant, an EIS under NEPA may be required.

### ***Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Tribal Treaty Rights and Reserved Rights***

Bad River Band, Red Cliff Band, and Keweenaw Bay Indian Community have expressed concerns about the Enbridge Line 5 project in response to the WEPA DEIS prepared by WDNR,

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<sup>63</sup>We note that the WEPA DEIS prepared by WDNR states:

According to Enbridge, removal of the pipeline is outside the scope of their project and given the numerous considerations affecting the cost of removal, Enbridge was unable to provide a cost estimate for this hypothetical scope of work. Industry standard and Enbridge's past practice have been to leave decommissioned pipe undisturbed unless environmental circumstances require otherwise. Enbridge is obligated to remove certain segments of Line 5 on BIA trust parcels after easement expiration or two years of non-use. This would occur in consultation with interested landholders, and Enbridge anticipates leaving much of the pipeline in place after it is decommissioned. The remaining tracts have a perpetual easement and would remain in place after a reroute is constructed and operational. Enbridge has completed a desktop analysis of the environmental features that are crossed by the existing Line 5 pipeline within the Bad River Tribe's Reservation based from publicly available information. The results are provided below in Table 3.1-1. These features would be disturbed if the existing pipeline is physically removed from the Reservation. Some parcels that overlap segments of Line 5 within the Bad River Reservation are believed to hold a perpetual conservation encumbrance under the North American Wetlands Conservation Act (NAWCA), as these lands were acquired with grant funding or used as match during the early 2000's. Should the pipeline be removed within these parcels, the proposed land disturbance (wetlands and uplands) would need to be properly vetted through the U.S. Fish and Wildlife Service – Division of Bird Habitat Conservation to determine proper mitigation measures.

public notice. EPA has had discussions with the Bad River Band regarding water quality concerns they have raised to WDNR and the Corps regarding this potential project.<sup>64</sup> We note that the Great Lakes Indian Fish and Wildlife Commission has also commented on the WEPA DEIS scoping document prepared by WDNR.<sup>65</sup> We note also that the Brothertown Indian Nation, a Native American people's group, has also commented.

**Recommendation:** EPA recommends that the proposed environmental impacts from this project on tribal nations and tribal treaty rights should be considered in the context of the 2021 *Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Tribal Treaty Rights and Reserved Rights* (2021 MOU). Since the Department of Defense is a signatory to the MOU, we urge the Corps to "integrate consideration of tribal and reserved rights early into Parties' decision-making and regulatory processes to ensure that agency actions are consistent with constitutional, treaty, reserved, and statutory rights". We recommend that the Corps describe what actions it is taking to ensure that the permitting process for this project is consistent with the 2021 MOU. Specifically, the Corps should continue to engage in tribal consultation and perform a robust evaluation of potential impacts from this proposed project on reservation resources and reserved treaty rights in the 1837 and 1842 Treaty areas.<sup>66</sup>

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<sup>64</sup> <https://widnr.widen.net/s/8gwlndcpb/enbridge15badriverbandcommentsjuly2020>, last visited March 10, 2022.

<sup>65</sup> <https://widnr.widen.net/s/6jgp2nrqxv/enbridge15glifwccommentsjuly2020>, last visited March 10, 2022.

<sup>66</sup> <https://glifwc.org/TreatyRights/TreatyChippewa07291837Web.pdf>, and <https://glifwc.org/TreatyRights/TreatyChippewa10041842Web.pdf>, last visited March 10, 2022.

Enclosure 2-Overview of Line 5 Wisconsin Segment Relocation Project map courtesy of Carl Sack-GIS Faculty and Program Coordinator-Fond du Lac Tribal and Community College

