



**Comments of the Great Lakes Business Network and the National Wildlife Federation
to the Michigan Department of Environment, Great Lakes and Energy (EGLE) on
Enbridge's Line 5 tunnel permit application number HQ3-8BYB-N9DT1**

Submitted August 28, 2025

These comments are submitted by the Great Lakes Business Network, an unincorporated association of over 200 businesses and business leaders in the Great Lakes region, and the National Wildlife Federation, a national organization with thousands of members and supporters throughout Michigan and other Great Lakes states. Our comments provide new data and analysis from credible and authoritative experts—including Enbridge's own experts-- that require EGLE to deny Enbridge's application for permits to construct a tunnel beneath the Straits of Mackinac:

- Shockingly, Enbridge fails to apply for a permit under the Great Lakes Submerged Lands Act for the segment of the tunnel that underlies the Straits—the largest portion by far. Its application does not address the hazards of the tunnel itself: the risks of blowouts of pollution into the Great Lakes, of tunnel collapse, of explosion, of subsidence of the Great Lakes lakebed. For that reason alone, its permit must be denied.
- The tunnel project does not and could not possibly meet the standards under the GLSLA, which require Enbridge to demonstrate that (a) “the adverse effects to the environment, public trust, and riparian interests of adjacent owners are minimal,” and (b) “there is no feasible and prudent alternative” to the project. Mich. Admin Code, R 322.1015. The enormous risks the proposed tunnel poses for the Great Lakes are far more than “minimal;” they are potentially catastrophic. And there is a feasible and prudent alternative to the tunnel project: replacement of Line 5 with existing infrastructure that does not transit the Straits or the Great Lakes. All of Line 5's products can be supplied to refineries and consumers more safely than the proposed tunnel using other existing pipelines, resumption of waterborne transport through the St. Lawrence Seaway, existing rail, and existing propane storage facilities. The market is already adjusting to supply every barrel of oil and gallon of propane at similar (or lower) costs using these other transportation routes.
- Enbridge attempts to avoid this result by improperly narrowing the project purpose to maintaining the flow of petroleum products through the Straits; it refuses to consider other transportation routes for those products. Enbridge unreasonably assumes that without the tunnel, the dual lines in the Straits will continue operating indefinitely and so does not review other transportation options. But the Governor of the State of Michigan and the State's Department of Natural Resources have issued an order

revoking the easement authorizing Line 5 in the Straits, and so Line 5 is operating now in violation of state law. Despite being challenged by Enbridge, that order remains in effect and is the law and can be enforced at any time. As a sister agency, EGLE must comply with that order. Because Line 5 may be shut down, the project purpose must be broad enough to include the supply of petroleum products by methods other than Line 5. In that case, existing infrastructure outside the Straits is a feasible and prudent alternative to both Line 5 and the proposed tunnel, and a GLSLA permit must be denied.

- Enbridge must also obtain a Wetlands Protection Act permit for the project to proceed, and there too its application is insufficient. Under the Act, no permit may be issued unless EGLE determines that the issuance would be in the public interest. To determine whether a project is in the public interest, EGLE must include in its assessment whether the project is needed, whether there is a feasible and prudent alternative, and whether the project benefits exceed the project detriments. MCL 324.30311(2). The proposed tunnel fails all three criteria. It is not needed, because other transportation means can more safely carry to market the petroleum products carried by Line 5 and the tunnel; those other transportation methods are a feasible and prudent (and safer) alternative than the proposed tunnel; and the real benefits of the tunnel are minimal, while the detriments are enormous. In addition to the risks to the Great Lakes, the tunnel would facilitate the long-term operation of Line 5 throughout Michigan, substantially increasing the probability of pipeline leaks and ruptures throughout the state (Line 5 has averaged at least one leak or spill every two years for the past 50 years) and increasing greenhouse gas emissions that contribute to climate change. Its construction would destroy sacred native cultural sites. And during the construction period, local communities would suffer increased traffic, noise and pollution from the 282 truckloads a day (up to 162 on the north side and up to 120 on the south side) of fill that would be dumped in their wetlands.¹ Because the tunnel would be contrary to the public interest, EGLE must deny the project a Wetlands Protection Act permit.

These comments reference and include 23 attachments that we are submitting as accompanying documents and are part of the record. A list of those attachments is provided on pages 20-21. We are submitting the attachments as separate documents in groups because of their size. For convenience and where possible, the references in the text also include a digital link to the documents.

In addition, we support and incorporate by reference those sections of the comments of the Grand Traverse Band of Ottawa and Chippewa Indians, the Bay Mills Indian Community, For Love of Water/Sierra Club, and the Environmental Law and Policy Center that address the failure of the permit application to properly account for the negative impacts the proposed Tunnel will have on tribal communities, the Great Lakes, and local and regional economies.

¹ Draft Environmental Interest Statement (EIS) for the Enbridge Line 5 Tunnel Project, U.S. Army Corps of Engineers, (May 2025), 4-111, <https://www.line5tunneleis.com/draft-eis/>

As a threshold matter, we note the obvious: that this is one of many agency proceedings that have considered the proposed tunnel and Line 5 broadly-- the Michigan PSC permit and its appeal, the Army Corps of Engineers permitting process, the Michigan Straits Corridor Authority, and well before that, the Michigan Petroleum Pipeline Task Force, to name a few. It may be tempting for EGLE to simply adopt wholesale their data and conclusions, but that would be a mistake. While some of the materials they have developed are useful, many are flawed and outdated. Most significantly, all of them rely heavily on the alternatives analysis conducted in 2017 by Dynamic Risk, a consulting firm retained by the Task Force. That analysis was flawed at the time and now is seriously outdated. Since its publication in 2017, there has been much more thorough economics and technical research conducted; experts by both sides have developed reports, undergone cross-examination, and testified under oath at trial; and the industry thought leader on pipeline logistics (PLG Consulting) has issued an extensive report. Their collective conclusions are at odds with the Dynamic Risk analysis, and yet some of the agencies – the Michigan PSC particularly -- focused entirely on Dynamic Risk and would not even consider the more recent data.

The other reason not to adopt the conclusions of other agencies is that they are addressing a substantially a different project than the permits before EGLE. Although all the agencies are considering a proposed tunnel in the Straits, the project EGLE is considering is how to continue to supply petroleum products to the refineries and consumers who receive them now. In contrast, the Army Corps of Engineers has defined the project narrowly (too narrowly, we believe) as the being the best way to connect an oil pipeline from the north to the south shores of the Straits. The narrow project definition by the Corps means that it never considered the feasible and prudent alternatives to the tunnel project that do not transit the Straits described in these comments. EGLE must address these alternatives. This topic is discussed in more detail below.

Description of commenter Great Lakes Business Network

Our comments below provide extensive data and analysis on the flaws and gaps in the permit application. Before presenting them, we believe it is important to underline who the Great Lakes Business Network is and why their data and evaluation are especially credible in this matter. The Great Lakes Business Network is “dedicated to fostering a healthy and thriving environment and economy, supported by a passionate and diverse business community.” The Business Network works to “uplift the narrative that a clean and healthy Great Lakes is essential to economic prosperity of the Great Lakes region.”² They are profoundly concerned about Line 5, the proposed Tunnel, and the likelihood of damage to the Lakes and their communities from oil spills; discharges of pollution from the Tunnel into the Lake; explosions; and the noise, traffic and pollution in the Straits community from six years of massive construction. They are confident that the closure of Line 5 will not have any significant negative impacts on their businesses.

The Business Network has attracted member-businesses from a wide array of industries, all of which are significant to the Michigan economy. The Business Network has grown from its 11 founding businesses to over 200 member-businesses, including Lake Charlevoix Brewing

² *About GLBN*, Great Lakes Bus. Network, <https://glbusinessnetwork.com/about-us/>

Company, Short's Brewing Company, Lakefront Brewery, Patagonia, Bar Fly, Cherry Republic, Keweenaw Mountain Lodge, Sleeping Bear Surf & Kayak, Shepler's Ferry, and Beth Price Photography. Larger member-companies, such as Bell's Brewery, Patagonia, and Cherry Republic, have broad market reach in their respective industries across the region. However, each and every business in the Business Network contributes to the region's rich business economy and many depend on the Great Lakes for survival.

For example, Michigan's craft beer industries—including Business Network members Bell's Brewery, Lake Charlevoix Brewing Company, Barrel and Beam, Short's Brewing Company, and Lakefront Brewery—rely on the reputation, marketing, and branding associated with the clean, pure water of the Great Lakes. The Great Lakes also provide critical water resources for the brewing process itself. As Richard Bergmann, the owner of the hospitality firm Round Lake Group, Bridge Street Tap Room, and a Business Network member described:

We draw our water from the Charlevoix municipal system, sourced directly from Lake Michigan. Water of the highest quality is what makes it possible for us to succeed and employ 65 people, while helping to build the economic base for Charlevoix and the surrounding area.³

Bell's Brewery, too, depends on the health and vitality of the Great Lakes to drive the region's tourism economy which brings visitors to the brewery from near and far, and helps define the company's brand identity and sales in the marketplace. One of its more popular brews is Lager for the Lakes, which it says was "inspired" by the Great Lakes. "[F]resh water is vital in so many ways. The name is intentional: it's a reminder that great beers require clean water."⁴

The health of the Great Lakes is of particular concern to many other Business Network members whose businesses would be damaged by a rupture of Line 5 in the Straits and the resulting oil contamination of the Great Lakes. The contamination of the Great Lakes with crude oil when a Line 5 spill occurs will obliterate the business reputation and sales of these essential Michigan businesses, resulting in untold financial loss and the forfeiture of thousands of jobs.

The economic data and analyses provided by the Great Lakes Business Network are particularly credible as EGLE considers the project's purpose, need, economic impact, and energy impact

For these reasons, the Business Network has been closely following the multiple issues surrounding Line 5, including the tunnel proposal being considered by EGLE. The Business Network is not a political or advocacy organization. They are business realists, with responsibilities to the employees, investors, customers, and local and state governments that they support. As businesses who rely not only the Great Lakes but also on oil and propane for energy, the Business Network has repeatedly assessed whether its members would be able to obtain energy if Line 5 were to shut down. As detailed below, the Business Network is completely

³ *GLBN Members*, Great Lakes Bus. Network, <https://glbusinessnetwork.com/>

⁴ *Lager for the Lakes*, Bell's Brewery (June 22, 2023) <https://bellsbeer.com/news/lager-for-the-lakes-bells-new-beer-thats-crisp-refreshing-and-timeless/>.

confident that there are multiple alternatives to Line 5 that would provide comparably-priced oil and propane. Neither Line 5 nor the proposed tunnel are necessary for the energy security of their member businesses or others in the region and nationally. But the Great Lakes are essential for their survival, and Line 5 and the tunnel put them at needless risk.

Analysis and data from the Business Network, as well as the Federation, follow.

I. Enbridge's failure to request a permit for the 4-mile stretch of the tunnel under the Straits violates the GLSLA

Enbridge is proposing to build a massive, 21-foot diameter tunnel, carrying flammable hazardous liquids below the lakebed of a channel connecting two of the world's largest lakes holding 20 percent of the world's surface freshwater. One would think that Enbridge would be required to show that the nearly 4 miles of buried tunnel wouldn't harm the Great Lakes—that it wouldn't leak, or explode, or implode, or cause the lake bottom to subside. And one would think that Enbridge would need to justify why it is building a tunnel rather than exploring alternatives that don't go through the lakes at all.

It is not surprising that Michigan law—the Great Lakes Submerged Lands Act (GLSLA)—requires precisely those showings. What is surprising – what is shocking – is that Enbridge's tunnel permit application covers none of those topics because it completely ignores the actual tunnel. The application seeks a permit for a temporary construction water intake structure in the Great Lakes, but it does not address the vast majority of the tunnel itself—the portion underlying the Straits. That failing violates the GLSLA and requires that the permit be denied.

The GLSLA applies to the entire tunnel, not just the temporary water intake. The legal requirements of the GLSLA are discussed exhaustively in the comments by the Grand Traverse Band of Ottawa and Chippewa Indians, and we support those comments and incorporate them herein. As they demonstrate, the GLSA is clear: no person can “excavate[] or fill[] or in any manner alter[] or modif[y]” any lands covered by the Act without a permit. MCL 324.32512. EGLE's implementing rules are even clearer, defining dredging to mean the “removal of any mineral, organic or other material from or within the bottomlands or waters of the Great Lakes by any means.” MCL 324.22520(1).

Enbridge is planning to excavate millions of cubic yards from the lands under the lakebed, activities that are explicitly covered by the statute. But Enbridge claims that the lands under the lakebed are not “bottomlands” covered by the GLSLA. Enbridge is again flat-out wrong.

The Act does not explicitly define “bottomlands,” but it makes clear that it covers the lakebed and the land below it. The Act requires the department to “reserve to the state all mineral rights, including .. coal, oil, gas, sand, gravel, stone and other materials or products located or found” in those lands—all of which are found not on the lakebed but in the subsurface area beneath it. MCL 324.32503(1). EGLE's rules are even broader: they define “bottomlands” to

mean “all lands in the Great Lakes ... lying below and lakeward of the ordinary high-water mark.” Mich Admin Code, R 322.1001. That definition does not set a lower limit on lands below the high-water mark, and “lands” have been consistently defined to include subsurface lands (below the lakebed). Because the tunnel unquestionably lies in land below the ordinary high-water mark, it is covered by the GLSLA.

And as the agency charged with administering the GLSLA, EGLE is obligated to conduct their own independent review of Enbridge’s compliance with the statute. No other agency—not the Michigan PSC, the Michigan Straits Corridor Authority, or the Army Corps of Engineers—has the broad mandate that EGLE does under the GLSA.

A. Because of its substantial risks to the Great Lakes, the proposed tunnel could not meet the requirements of the GLSLA

To demonstrate that it can meet GLSLA permit requirements, Enbridge will face a high bar. It must demonstrate that (a) “the adverse effects to the environment, public trust, and riparian interests of adjacent owners are minimal,” and (b) “there is no feasible and prudent alternative” to the project. Mich Admin Code, R 322.1015. Enbridge has made no such demonstration about the Great Lakes impacts of the 4-mile stretch tunnel running underneath the Straits; its Summary of Potential Environmental Impacts (Attachment 18, 4-25-25) does not even mention the impacts of the 4-mile stretch of the tunnel beneath the Straits.

1. The adverse impacts from the tunnel are potentially catastrophic

If Enbridge were to assess that portion of the tunnel, it would have a hard time showing that the adverse impacts are “minimal.” The Grand Traverse Band comments document the harms and risks to the Great Lakes from the portion of the tunnel that would be bored through the bottomlands. In addition, the comments of FLOW submitted as part of this docket contain further analysis of the impacts to the environment and the public trust, and we support and incorporate herein those comments as well.

The comments document the extraordinary risks of the proposed tunnel to the Great Lakes:

- The design for the tunnel assumes that it will run through solid, stable bedrock beneath the Straits. But Enbridge gathered astonishingly little information about the actual state of the soil and rock along most of the tunnel’s path.⁵ In 2021, experts retained by the Michigan Department of Transportation reviewed Enbridge’s studies to find that Enbridge gathered only one test bore sample along the roughly 11,000 feet of the deepest,

⁵ See McMillan Jacobs Associates, Technical Memorandum, *DRAFT Geotechnical Exploration Level of Effort for the Line 5 Replacement Tunnel* (Jan. 13, 2021), at 2-3.

<https://www.michigan.gov/-/media/Project/Websites/egle/Documents/Multi-Division/Line-5/MDOT/2021-01-13-Memo-Geotechnical-Exploration-DRAFT.pdf?rev=8b564bb3c4614aaeaea4696b55c1a5ea> Attachment 1 to these Comments.

most critical section of the proposed tunnel route⁶ – meaning that Enbridge’s tunnel boring will be an untested experiment with the Great Lakes.

- What little data the Enbridge studies did produce is alarming. According to MDOT’s experts, the few core samples taken near and along the route of the tunnel reveal “poor” or “very poor” rock quality, with porous, highly fractured, and brecciated rock (rock composed of broken fragments cemented together by fine particles).⁷ Those core samples further show at least 10 voids in the soil and rock strata near the path of the tunnel.⁸ In other words, the bedrock along the proposed tunnel’s path is far from solid, and any oil leak in the tunnel could easily seep through the permeable rock into the water of the Great Lakes above.⁹
- Poor rock quality also means that the tunnel, already expected to take several years to build, would be enormously challenging to construct, if it can be built at all. Because of the high water pressures at the extreme depth of the tunnel and the ease with which that water will make its way through the porous and fractured rock, MDOT’s experts have concluded that the planned tunnel there would experience high groundwater inflows, with water inundating the borehole while it is being drilled.¹⁰ The voids encountered during boring will have to be filled with high-pressure cement, and MDOT’s experts have expressed significant concern that the grout needed to seal those voids would blow out, uncontrolled, through the rock during that process.¹¹
- The tunnel is an explosion hazard, according to independent experts. The tunnel would be a 21-foot wide concrete pipe filled with oxygen, housing a pipeline in the tunnel carrying oil and natural gas liquids. Even a tiny pinhole leak would fill the tunnel with flammable vapors that, when combined with the oxygen, would set off a “catastrophic” explosion, according to expert Richard Kuprewicz, a chemical engineer with over fifty years’ experience in the oil and gas industry.¹² In addition, according to Brian O’Mara, a geological engineer with over thirty years’ experience with tunnel projects, data submitted by Enbridge reveals the existence of dissolved methane in the groundwater

⁶ Id. at 9.

⁷ Id. at 8.

⁸ Id. at 9-10; also see McMillen Jacobs Associates, Technical Memorandum, *Collapse Potential for the Line 5 Replacement Tunnel* (Jan. 13, 2021), at 3-4. <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Multi-Division/Line-5/MDOT/2021-01-13-Memo-Collapse-Potential.pdf>, Attachment 2.

⁹ *Collapse Potential for the Line 5 Replacement Tunnel* at 3.

¹⁰ McMillen Jacobs Associates, Technical Memorandum, *FINAL Risk Mitigation for the Line 5 Replacement Tunnel* (Jan. 13, 2021), at 3-7. <https://www.michigan.gov/-/media/Project/Websites/egle/Documents/Multi-Division/Line-5/MDOT/2021-01-13-Memo-Risk-Mitigation.pdf?rev=532560ac752049b9a9817f42ca4a65b0> Attachment 3.

¹¹ *Collapse Potential for the Line 5 Replacement Tunnel* at 3.

¹² Testimony of Richard Kuprewicz on behalf of the Bay Mills Indian Community, In the Matter of Application of Enbridge Energy Company, Michigan Public Service Commission, U 20763 (February 3, 2023), at 1326-30. Attachment 4.

underneath the Straits.¹³ As groundwater infiltrates into the tunnel, methane will dissolve into the tunnel's air. A spark from a machine or other source would create the danger of an explosion, endangering construction and maintenance crews and the porous rock barrier between the tunnel and the Great Lakes. As O'Mara testified,

A methane explosion in a confined space like the tunnel project would be like a shotgun blast—a blast through a barrel that quickly explodes and burns the methane in the air.¹⁴

Other tunnels and pipelines have seen this type of explosion:

- Near Port Huron in 1971, 22 men died from a methane explosion while constructing a tunnel in similar limestone bedrock.¹⁵
- Three men were killed by a methane explosion in 1988 in a Milwaukee tunnel, despite carrying methane detectors.¹⁶

A major failure of the tunnel due to explosion or collapse could result in a massive release of oil and NGLs into the Great Lakes with devastating consequences to both the ecosystem and the economy. Such a release could result in at least \$1.878 billion in economic damages due to lost tourist income, harm to fisheries and fishing, other recreational damage and public health costs, according to a study conducted for the Michigan Petroleum Pipeline Safety Task Force by the Michigan Technical Institute.¹⁷ However, even that number dramatically underestimates the economic impact to the state's Pure Michigan brand and the tourism and recreation dollars that would be lost. A subsequent study from a Michigan State University expert puts the damage from a major spill much higher, at \$5.6 billion.¹⁸ The small number of jobs that tunnel construction would create pale in significance to this overwhelming economic loss.

These effects are far from minimal; they are catastrophic. On these grounds alone, Enbridge could not obtain a GLSLA permit.

¹³ Testimony of Brian O'Mara on behalf of the Bay Mills Indian Community, In the Matter of Application of Enbridge Energy Company, Michigan Public Service Commission, U 20763 (February 3, 2023), at 11-12. Attachment 5.

¹⁴ Id. at 12.

¹⁵ Id. at 13

¹⁶ Id. at 13-14

¹⁷ See Mich. Tech. Inst., *Independent Risk Analysis for Straits Pipelines Summary* (Sept. 15, 2018), at 31. https://www.michigan.gov/psab/-/media/Project/Websites/psab/archive/media/Straits_Independent_Risk_Analysis_Final_ExecSummary.pdf?rev=359e3d18ea414c3cac53a94231122b69&hash=3B85A1CE09F686D052F49A88DCD1AAC9

¹⁸ Robert B. Richardson & Nathan Brugnone, *Oil Spill Economics: Estimates of the Economic Damages of an Oil Spill in the Straits of Mackinac in Michigan*, 2, (May 2018), (available at https://forloveofwater.org/wp-content/uploads/2018/05/FLOW_Report_Line-5_Final-release-1.pdf).

2. There is a feasible and prudent (and safer) alternative to the tunnel: shutting down Line 5

The GLSLA also requires Enbridge to show there is no “feasible and prudent alternative” to the project, Mich. Admin. Code R 322.1015(b), which Enbridge also fails to do. Line 5 is not needed to supply oil to refineries or consumers or to provide NGLs for propane for residents and businesses. Without Line 5, existing infrastructure--via another pipeline, waterborne transport (not through the Great Lakes), existing rail and existing propane storage-- will enable the market to replace virtually every barrel of oil and gallon of propane from Line 5 at comparable costs. Shutting down Line 5 is a feasible and prudent (and safer) alternative to the tunnel.

a. Neither Line 5 nor the proposed Tunnel is needed to supply petroleum products to the U.S. or Canada

Enbridge purports to establish the need for the Tunnel by citing projections that demand for Line 5’s products will remain steady or slightly increase through 2050. Attachment 7, page 1340. While we believe those projections dramatically overstate the future demand for fossil fuels, taking them at face value, they do not establish the need for a particular transportation method for those petroleum products. Even if demand for petroleum products remains the same or increases, those products do not need to be transported by Line 5 and the tunnel; energy markets will respond by employing other cost-effective routes using existing infrastructure. The Army Corps of Engineers in its DEIS process thus far has declined to consider any of these alternatives because the Army Corps has focused its analysis entirely on connecting the north and south shores of the Straits. And the Michigan PSC expressly refused to accept evidence of those alternatives, saying they were not relevant to its proceeding. EGLE should not make the same mistake. Shutting down Line 5 is a feasible and prudent alternative to a tunnel that will cause environmental damage and enormous risks to the Great Lakes.

This conclusion is well supported by independent reports and Enbridge’s own experts. In a federal court trial in 2023, *Bad River Band v. Enbridge*, 3:19-cv-00602-wmc, the Bad River Band put on an extensive case demonstrating how the energy markets would respond to a Line 5 shutdown. Their evidence is from the Band’s experts, outside consultants, and Enbridge’s own experts. In addition, the industry thought-leader on pipeline logistics and economics, PLG Consulting, produced an independent report that confirms this analysis. The data and analysis we submit and discuss below addresses both oil and propane.

i. Alternative transport modes eliminate the need for Line 5 to transport oil.

Line 5 carries up to 450,000 barrels per day (bpd) of oil that supplies 10 refineries in the U.S. and Canada. The evidence and experts in the *Bad River Band* case—including Enbridge’s own experts—demonstrate that without Line 5, all of that oil would be transported to those refineries by other means at similar costs. The refineries would continue operating as they are now; refined products would be produced as they are now; and the consumer prices would remain at what they are now. The 450,000 bpd of oil would be transported as follows:

- 100,000 bpd would be transported via another Enbridge pipeline, Line 78, that does not cross the Straits. Line 78 has at least that much additional capacity now (and as discussed below, could be expanded). Experts from both the Band and Enbridge agreed that Line 78 could offset this volume of Line 5 oil.¹⁹
- 200,000 bpd would be shipped by waterborne transport to refineries in Quebec, where it would be routed to other refineries in the region. Ships would carry the oil via the St. Lawrence Seaway and Atlantic ports, not through the Great Lakes. Here again, the experts from the Band and Enbridge were in agreement.²⁰ In fact, according to *Enbridge's* lead expert, ships could carry an additional 200,000 bpd to refineries in Quebec via the St. Lawrence Seaway and Atlantic ports who already have unloading and storage capacity because those refineries were supplied with that quantity of oil prior to 2015.²¹ And the record shows that the Quebec refineries have already made contingency plans for waterborne transport of oil so that the shutdown of Line 5 would not affect them.²²
- 63,000 bpd would be shipped by reactivating existing rail facilities at the Michigan, Ohio and Ontario facilities (which already accept some oil by rail). The experts from the Band and Enbridge once more were in agreement.²³

Taken together, existing infrastructure replaces almost all of the oil presently transported by Line 5. Enbridge's expert Neil Earnest agreed that "[i]f the Quebec refineries were, in fact, to go back to waterborne sources of crude oil, then the shortfall in the Line 5 delivery area would

¹⁹ The Band's expert was Sarah Emerson; Enbridge's expert was Neil K. Earnest. See Neil K. Earnest Testimony Tr. 10/28/22 afternoon, at 99:11–20, *Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation v. Enbridge Energy Company, Inc.*, 626 F.Supp.3d 1030 (W.D. Wis. 2022) (No. 19-CV-602-WMC) [hereinafter "*Bad River Band*"], Attachment 6; Expert Report of Neil K. Earnest (hereinafter "Earnest Report") at 65, *Bad River Band*, Attachment 8; Expert Report of Sarah Emerson (hereinafter "Emerson Report") at 24–26, *Bad River Band*, Attachment 7.

²⁰ Testimony Tr. of Earnest Testimony at 91:17–92:2 (Attachment 6), 130:6–11, *Bad River Band*; Emerson Report at 27, 33, *Bad River Band* (Attachment 7).

²¹ Earnest Test. Tr. 91:17–92:2, 130:6–11, Attachment 6; see also Emerson Report 24 n.42, Attachment 7.

²² Emerson Report 24 (citing Valero spokeswoman in Virginie Ann, *Quebec's Location and Energy Alternatives Give It Options If Line 5 Closes: Expert*, Canadian Press (May 12, 2021), <https://www.bnnbloomberg.ca/quebec-s-location-and-energy-alternatives-give-it-options-if-line-5-closes-expert-1.1603019>) ("We have access to a deepwater port, allowing us to be supplied by ships."), Attachment 7; see also *id.* (quoting Pierre-Olivier Pineau, chair in energy sector management at HEC business school in Montreal, that Quebec refineries could return to their pre- 2015 oil supply chain and be fully supplied by waterborne, rail and other pipelines), Attachment 7.

²³ Emerson Report at 14 fig. 12, *Bad River Band*, Attachment 7; Expert Report of Neil Earnest at 54, 113–14, *Bad River Band*, Attachment 8; Earnest Test. Tr. at 99:21–100:3, *Bad River Band*, Attachment 6.

be reduced to 79,000 barrels a day[.]”²⁴ And that is using only existing infrastructure. Enbridge does not dispute that Line 78’s capacity could be further expanded with pumping stations (not requiring a new or expanded pipeline) to carry at least another 110,000 bpd. These market responses would replace virtually all of the Line 5 oil.²⁵

The evidence and testimony presented in the Bad River Band case is buttressed by a 2023 study published by PLG Consulting, an industry expert in the pipeline logistics field. In October, 2023, PLG released a 100-page report, *Likely Market Response to a Potential Shutdown of Line 5* (“*PLG Report*”), that was the result of many months of research.²⁶ The report concludes that existing pipelines, waterborne transport (not through the Great Lakes but using existing ocean-going routes), and existing rail facilities will enable the market to replace 87 percent of Line 5’s oil within 3 months and all of it within 18 months. *PLG Report* at 13.

Finally, recent experience confirms the conclusions by the experts in the PLG report and the Wisconsin trial. **Line 5 has already been shut down with no impact on gasoline prices in the U.S. or Canada.** In 2020, after the discovery that a cable from a passing ship had tangled with the dual lines in the Straits of Mackinac and yanked them and their supports out of alignment at dangerous angles, both lines of the pipeline were completely shut down for 19 days. In addition, one of the lines was shut down for 78 days, cutting Line 5’s capacity by 270,000 bpd during that period. Gasoline prices in Michigan and Toronto actually declined during that period—both in absolute terms and relative to their national averages.²⁷ In subsequent testimony, Enbridge’s expert Earnest confirmed this experience with his own analysis, concluding that an immediate Line 5 shut down would have less than a penny a gallon impact on gasoline prices.²⁸

ii. Alternative modes of transporting propane can quickly replace Line 5’s Natural Gas Liquids (NGLs).

Line 5 carries 86,000 bpd of NGLs to and from three fractionators in Superior, WI; Rapid River, MI; and Sarnia, Ontario which produce from it propane used in Wisconsin, Michigan and Ontario. Enbridge in its permit application repeatedly claims that no other pipeline can transport

²⁴ See Earnest Testimony Tr. at 103:3–8, *Bad River Band*, Attachment 6.

²⁵ Defs.’ Objs. and Resps. to Pls.’ Fourth Set of Interrogs., Dkt. 399-4, 5, *Bad River Band* (describing actions needed to expand each segment of Line 78), Attachment 11; Expert Rebuttal Report of Graham Brisben (hereinafter “Brisben Report”), Dkt. 255-1, 51-53, *Bad River Band* (“The Line 78 expansion would mostly involve increasing the pressure of the pipeline by adding compression (vs. replacing with bigger pipe or twinning the pipeline).”) (showing expansion of Line 78A from 570,000 bpd to 680,000 bpd of capacity would allow for full use of downstream pipelines Line 78B, Line 17, and Line 79). Attachment 12.

²⁶ *Likely Market Shutdown Responses to a Shutdown of Line 5*, PLG Consulting, October 2023 <https://plgconsulting.com/white-paper-likely-market-responses-to-a-line-5-shutdown/> . Attachment 13. PLG was an expert for the Band in the *Bad River Band* case.

²⁷ See Gary Street, *Column: Gas Price Hikes are Another Enbridge Scare Tactic*, Michigan Advance (June 3, 2023 4:05 PM) <https://michiganadvance.com/2023/06/03/column-gas-price-hikes-are-another-enbridge-scare-tactic/> , Attachment 14.

²⁸ Earnest Report at 72-73, Attachment 8.

NGLs to the same area without significant expense and delay. But Enbridge misses the point: it is propane, not NGLs, that are supplied to consumers and businesses. And there are multiple existing means of supplying propane directly to customers without Line 5; markets are already adjusting and would completely replace the NGL-refined propane with other sources when Line 5 is shut down. As with oil, all of that propane can be transported without Line 5 at similar costs.

The experts in *Bad River Band* testified that the markets served by Line 5 already obtain propane from rail delivery and other pipelines.²⁹ The market response to a Line 5 shutdown will be to transport more propane by those alternatives. And if existing infrastructure does not have enough excess capacity to offset Line 5, new propane infrastructure can quickly be constructed (and as discussed below, is already being constructed). In Wisconsin and Michigan's Upper Peninsula, all that would be required to replace the Line 5 supply are additional propane unloading facilities—either 4-6 mobile transloaders to enable the transfer of propane from rail cars to trucks or storage, or two small permanent facilities. Enbridge's experts testified that the mobile transloaders would cost less than \$1 million each, for a total of \$4-6 million;³⁰ or alternatively, the two permanent unloading terminals would cost \$5 million each, for a total of \$10 million.³¹

This switch from pipeline to rail will have little to no impact on prices, according to the expert testimony in the *Bad River Band* case. They point to the market's reaction to the Cochin Pipeline in Wisconsin. Before 2012, that pipeline, with a capacity of 76,000 bpd of propane (approximately the same amount of NGLs carried by Line 5), supplied propane to Wisconsin and other states. In 2012, the owner announced that it would reverse the pipeline and thereby completely stop the propane supply. Enbridge's expert acknowledged that by the time the reversal took place in 2014, several new rail facilities had been built and Wisconsin and the Midwest were fully supplied with propane.³² And there was no discernible impact on the price.³³

²⁹ Brisben Report 16–17, 40–41 48-49, *Bad River Band*, Attachment 12; Earnest Report 34 fig.8 (map showing propane-by-rail terminals in Wisconsin and Michigan), *Bad River Band*, Attachment 8.

³⁰ See William Rennicke Testimony Tr., Dkt. 604, at 95:21–24, *Bad River Band*, Attachment 15.

³¹ See Earnest Testimony, Tr. (Dkt. 610, at 122:23–123:1 (acknowledging that a \$5 million rail facility can enable receipt of enough propane to supply 35,000 homes), *Bad River Band*, Attachment 6; Dep't of Env't, Great Lakes, & Energy, Upper Peninsula Energy Task Force Committee Recommendations Part I – Propane Supply (2020), at 6 (admitted as Trial Ex. 265) (stating that 23,000 households in the Upper Peninsula use propane),

<https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Groups/UPETF/Report-UPETF-Part-1.pdf?rev=fcf2b8dfc8e64838b1195fd193405566>, Attachment 16.

³² Earnest Report at 37–38, *Bad River Band*, Attachment 8.

³³ See Earnest Testimony Tr. At 115:20–23, *Bad River Band*, Attachment 6; see also Corbett Grainger Testimony Tr. (10/31/22 a.m.), Dkt. 604, at 125:21–126:2, *Bad River Band*, Attachment 15; U.S. Energy Info. Admin., [Weekly Wisconsin Propane Residential Price](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPLLPA_PRS_SWI_DPG&) (admitted as Trial Ex. 241), https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=W_EPLLPA_PRS_SWI_DPG&

The *PLG Report* (Attachment 11) confirms this testimony. It outlines solutions for propane delivery to specific regions, including utilizing existing rail terminals in the short term, and longer-term options like expanding rail terminals. *PLG Report* at 15. It highlights the resiliency of Line 5 products and markets, with large energy firms having developed contingency plans since 2017. Some have already put those plans in place. *Id.* at 8. And it concludes that energy markets can be expected to adapt to a Line 5 shutdown without experiencing supply shortages or price spikes. In fact, the markets are already adjusting to the prospect of a Line 5 shutdown. *Id.*

The evidence shows that such adjustments have already begun. Here are a few examples:

- Four years ago, shortly after Michigan’s governor terminated the easement allowing Enbridge to run Line 5 through the Straits of Mackinac, Michigan propane suppliers like U.P. Propane (serving 14,000 U.P. customers in 14 of 15 U.P. counties) began switching from Line 5 to rail cars, citing the potential closure of Line 5 as the reason.³⁴
- Private funds and a grant from the state of Michigan also resulted in a multimillion-dollar investment to expand propane delivery and storage capacity at a rail terminal in Kincheloe, Michigan in the eastern UP, as part of the state of Michigan’s plan, “MI Propane Security: Ensuring Resilience Without Line 5.”³⁵
- In Wisconsin, Superior Fuel Company, citing a potential Line 5 closure as a reason for its investment, built a new propane by rail terminal.³⁶

f=W, *Bad River Band*, Attachment 17; see also *No Cochin, No Cry – Part 2 - New Infrastructure To Deliver Midwest Propane Supplies* (2014), <https://rbnenergy.com/no-cochin-no-cry-part-2-new-infrastructure-to-deliver-midwest-propane-supplies> (describing \$24 million investment in 5 small rail terminals for unloading propane, which allowed for full transition away from the Cochin Pipeline without impacting consumers), Attachment 18.

³⁴ Zara Ahmad, *Some Michigan Propane Suppliers Switching to Rail Cars in Anticipation of Line 5 Closure*, MLive (Mar. 12, 2021, 12:49 PM), <https://www.mlive.com/public-interest/2021/03/some-michigan-propane-suppliers-switching-to-rail-cars-in-anticipation-of-line-5-closure.html>, Attachment 19.

³⁵ State of Michigan, *MI Propane Security Plan: Ensuring Resilience Without Line 5* (2021), https://www.michigan.gov/-/media/Project/Websites/mpsc/consumer/propane/MI_Propane_Security_Plan_Overview.pdf?rev=9b0d4da17bbfb482a96fec64e2201b6c9, Attachment 20.

³⁶ Brian Richesson, *Superior Fuel Co. builds supply security with new rail terminal* LPGas (Nov. 9, 2021), available at: <https://www.lpgasmagazine.com/superior-fuel-co-builds-supply-security-with-new-rail-terminal/>, Attachment 21

- In 2022, another facility in Kalkasa, Michigan increased the capacity of rail to deliver propane, including 480,000 gallons of propane storage and associated rail and truck facilities.³⁷
- The Ambassador propane pipeline in Michigan has been upgraded, enabling it to carry propane in both directions to respond quickly to changes in market supply and demand.³⁸
- The oil markets also are adjusting. For example, in May, 2023, Canadian National Railway (CN) announced the opening of a new fuel terminal in its MacMillan Yard to serve the greater Toronto area which will be able to bring in 30,000-45,000 bpd of fuel.³⁹

Because there is no need for Line 5 to transport petroleum products to refineries and consumers, there is no need for a tunnel to maintain the transport of those products through Line 5. It may be that Enbridge needs Line 5 and the tunnel to maintain its current level of profit. But Enbridge's private need cannot justify the project—it is the public's need that counts, and the public does not need the tunnel or the pipeline it would support. Existing infrastructure is a feasible and prudent alternative to the tunnel.

b. Enbridge is not required to construct or operate the tunnel

Enbridge claims that it must construct the tunnel because it is required to so by the 3rd Tunnel Agreement between the state of Michigan and Enbridge. That claim is wrong as a matter of law. Although the agreement has a general requirement that Enbridge construct and operate the tunnel, the agreement also enables Enbridge to unilaterally terminate the agreement at its own discretion:

10.3. Termination by Enbridge. Enbridge may terminate this Agreement: (a) By written notice to the State if: ... (ii) Enbridge has voluntarily chosen to permanently cease operations on the existing Line 5 Dual Pipelines at any point during the design or construction of the tunnel.⁴⁰

³⁷ Brian Richesson, *NGL Supply Wholesale flows propane at new Michigan terminal*, LPGas (May 4, 2022), available at: <https://www.lpgasmagazine.com/ngl-supply-wholesale-flows-propane-at-new-michigan-terminal/> Attachment 22.

³⁸ Brisben Report 51-52, Attachment 12.

³⁹ Doug McDonald, *Sell the Plan: An Integrated Approach to Sustainable, Profitable Growth*, Canadian National Railway Company (2023), <https://www.cn.ca/-/media/Files/Investors/Investor-Day/20230503-Sell-the-plan-EN.pdf?la=en&hash=00B6063496CA85C7499B987C864AC24B96914E3C>, Attachment 23

⁴⁰ THIRD AGREEMENT BETWEEN THE STATE OF MICHIGAN, MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, AND MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENBRIDGE ENERGY, LIMITED PARTNERSHIP, ENBRIDGE ENERGY COMPANY, INC., AND ENBRIDGE ENERGY PARTNERS, L.P. (2018). <https://www.michigan.gov/-/media/Project/Websites/MDOT/About-Us/Commissions/MSCA/Documents/Third-Agreement-Michigan-Enbridge.pdf>

In addition, even if Enbridge does not choose to cease Line 5 operations, it is excused from performing under the contract due to the “inability to undertake activities required under this Third Agreement due to the need to obtain a Government Approval or other legal authorization required to undertake such activities.” Agreement, 8.2(a). So if EGLE were to deny Enbridge the permits it seeks, Enbridge would not be required to build the tunnel.

c. Using existing infrastructure outside the Straits is a safer alternative to the dual lines than the proposed tunnel and thus is a feasible and prudent alternative

Using the existing infrastructure discussed above is not only a feasible and prudent alternative to Line 5 and the tunnel; it is actually safer. These routes – the employment of different existing pipelines, the resumption of waterborne transportation through the St. Lawrence Seaway, the use of existing rail and existing storage facilities-- pose none of the risks to the Straits of the dual lines. And these alternative routes do not require the massive disturbance of the Great Lakes bottomlands and the risks of subsidence, explosion and pollutant discharge that the proposed tunnel poses. Nor do these routes trigger the extensive dislocation and damage to communities and tribal culture and artifacts near the Straits during the 6-year construction period for the tunnel.

Enbridge resists considering alternative routes to Line 5 because it mistakenly assumes that Line 5 would continue to operate indefinitely via the dual lines without the tunnel. But that assumption is incorrect. The status quo is this: Enbridge is operating Line 5 in the Straits illegally under an easement that has been invalidated under state law. The state of Michigan issued an order in 2020 terminating and revoking the easement that allows Line 5 to transit the Straits and set a shutdown deadline of May, 2021.⁴¹ That order, although challenged by Enbridge, is still in effect; it is the law and it is enforceable. Michigan initially sought to enforce the order in state court. After the state court matter was removed to federal court, the state voluntarily dismissed its judicial enforcement action without prejudice to move forward a parallel action to revoke the easement by the Michigan Attorney General, which is now being litigated in state court. But the Michigan termination/revocation order remains in effect, which means that the pipeline currently is operating without a valid easement and in violation of state law. Meanwhile, the state court action brought the Attorney General proceeds and if successful will independently shut down Line 5.

For these reasons, EGLE must consider a status quo where Line 5 does not operate. As a state agency, EGLE is bound by the orders of other state agencies and the Governor; it cannot simply ignore those orders unless they are overturned in court, which has not happened here. Because EGLE must assume Line 5 will shut down, the agency must assess the existing transportation infrastructure outside the Straits, which as shown above will supply all of the petroleum products now transported by Line 5 via routes that are safer than either Line 5 or the

⁴¹ *Notice of Termination and Revocation of Easement*, State of Michigan, Nov. 13, 2020, https://content.govdelivery.com/attachments/MIEOG/2020/11/13/file_attachments/1600920/Notice%20of%20Revocation%20and%20Termination%20of%20Easement%202811.13.20%29.pdf

tunnel. The tunnel is not needed; shutting down Line 5 is a feasible and prudent (and indeed, preferred) alternative.

II. Enbridge's tunnel project is contrary to the public interest and should not receive a wetlands permit

The Wetlands Protection Act prohibits the “deposit[ing] or permit[ing] the placing of fill material in a wetland” without a permit from EGLE. MCL 324.30304(b). EGLE is prohibited from issuing such a permit “unless the department determines that the issuance of a permit is in the public interest...” MCL 324.30311(1). The statute then lists nine mandatory criteria for determining the public interest of a project, the first three being:

- (a) The relative extent of the public and private need for the proposed activity.
- (b) The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity.
- (c) The extent and permanence of the beneficial or detrimental effects that the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetland provides.

MCL 324.30311(2).

Enbridge has applied for a wetlands permit and is required to obtain one because it is proposing to fill nine separate wetlands with fill from the construction of the tunnel. But based on those statutory criteria, Enbridge's permit application fails to demonstrate that the issuance of a wetlands permit would be in the public interest.

A. Public need and alternatives

Taking the first two criteria together, Enbridge's permit application does not (and cannot) show (a) that there is a public need for the project, and (b) that feasible and prudent alternatives are available.

As discussed in detail above, pages 9-16, there is no public need for the tunnel project because feasible and prudent alternatives are readily available. Every barrel of oil and gallon of propane can and will be supplied by other transportation routes at comparable costs without Line 5 or the tunnel; neither the tunnel nor Line 5 is necessary. Enbridge attempts to avoid this obvious result by artificially constraining the purpose of the tunnel project as connecting Line 5 between the north and south shores of the Straits. Enbridge's application expressly rules out alternatives, including existing infrastructure, that do not cross the Straits or the open waters of the Great Lakes, saying that they should not be considered because they do not meet the project purpose. App. B to Permit Attachment (Att.) 7, pages 1303-1311.

But Enbridge elsewhere in the application identifies a broader purpose and need: to supply petroleum products to refiners and consumers in the region and nationally. Att. 7 pp. 1325-1329; Application p. 12. In its application, Enbridge goes into great detail on how Line 5 and the tunnel have in the past been necessary to supply oil and NGLs to a broad range of

refineries and propane to consumers; it then claims that such supply needs will continue and expand in the future. Att. 7 pp. 1326-29. The record is replete with these statements by Enbridge; here is an example:

Now, nearly 70 years after Line 5 was first placed into service, the need for a petroleum pipeline extending from Superior, Wisconsin through Michigan and across the Straits to Sarnia, Ontario, to feed fractionators and refineries in Michigan, Ohio, Pennsylvania, Ontario and Quebec, remains unchanged. Line 5, and its integral crossing of the Straits, remains a critical part of the region's energy infrastructure, reliably transporting an annual average of approximately 540,000 bpd of petroleum products to meet the demands of shippers, propane fractionators, refineries, and/or other third-party pipelines throughout the region.

Att. p. 1326.

So Enbridge itself makes the case that the purpose and need for the project are much broader than connecting two points of land with a tunnel; they are to supply petroleum products to the region.

But once the purpose is broadened, then the alternative transportation modes outside the Straits must be considered. Do those alternatives deliver the same benefits as Line 5 and the tunnel but without the harms? Do they provide refineries with the same supply of oil, consumers the same supply of propane, at comparable costs? As demonstrated above, the answers unequivocally are yes. And for that reason, there are feasible and prudent alternatives to the project and no public need.

Note that the Wetlands Protection Act explicitly considers and approves of the types of alternatives discussed here. The statute says,

(5) If it is otherwise a feasible and prudent alternative, a property not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered.

Because the alternative transportation routes within and outside of Enbridge's control together meet the broader project need, they must be considered to be a feasible and prudent alternative.

B. Project benefits and detriments

The Enbridge application fares no better when addressing the third criterion in the statute, the beneficial and detrimental effects of the proposed project. The project detriments far outweigh the project benefits. Enbridge identifies three potential benefits from the tunnel, but none of them provide real benefits:

1. The tunnel would supply oil and propane to refineries and consumers throughout the region. As discussed in detail above, pages 9-16, neither Line 5 nor the tunnel are needed to supply oil and propane to the region. Existing infrastructure will replace all of the Line 5 supplies within three to 18 months of a Line 5 shutdown at comparable costs.
2. The tunnel would provide a safer alternative to the current location of the dual lines through the Straits. As documented above, pages 6-8, the tunnel poses its own significant risks to the Great Lakes and for at least six years will cause substantial harm to Straits communities. The feasible and prudent alternative of no Line 5 or tunnel is far safer and provides much larger benefits than the proposed project.
3. The tunnel would enable Enbridge to meet its contractual obligations to the state under the Third Agreement. As demonstrated above, pages 14-15, Enbridge is not obligated to continue operating Line 5 or to construct the tunnel; the company can voluntarily stop operating Line 5 and the tunnel at any time, and it is excused from the agreement if any permit for the tunnel is denied. So constructing the tunnel provides no legal benefit to Enbridge or the state.

In contrast, the detriments of the proposed project are massive and largely ignored in Enbridge's permit application. The application (like the original permit decision by EGLE in 2021) focuses primarily on the damage that would be done to wetlands from the fill from the tunnel excavation. While that damage is significant, it pales in comparison to the harm that the tunnel risks for the Great Lakes and that Line 5's continued operation poses for the lakes and the people of Michigan. These larger detriments must be documented and considered by EGLE. Enbridge cites the benefits of the project as being the continued operation of Line 5 and the supply of petroleum products throughout Michigan and the region. It does not and could not claim that the dredging of the bottomlands for the tunnel has any intrinsic benefit; its potential benefits only relate to the continued operation of Line 5. The detriments must be assessed at the same scale: What are the detriments to the Straits likely from the construction of the tunnel? What are the detriments to Michigan from Line 5's continued operation? What are the detriments to climate change from the installation of a 99-year piece of fossil fuel infrastructure? Enbridge ignores these existing and future harms in its application; EGLE cannot.

Detriments to the Straits: As discussed in pages 6-8 above and in the Grand Traverse Band comments, the project poses significant risks to the Straits, any of which could lead to massive damage to the Great Lakes and communities that rely on them. These include the collapse of the tunnel and subsidence of the Great Lakes lakebed; pollution discharges from the tunnel excavation on the Straits lakebed; and explosions that could rupture the bottom of the Great Lakes and endanger the communities at either end of the tunnel.

Detriments to Michigan: Line 5 runs through the Upper Peninsula above the Straits and in the Lower Peninsula below the Straits for hundreds of miles, and it has repeatedly leaked and ruptured in those locations. Over the past 50 years, Line 5 has had 33 leaks and ruptures in those areas, spilling 1.7 million gallons of oil.⁴² If Line 5 continues to operate, those types of ruptures

⁴² "The Edge of Disaster for the Great Lakes,": NWF Report, 2020, p. 2, <https://www.nwf.org/-/media/Documents/PDFs/Press-Releases/2020/11-20-20-Line-5-Report> Attachment 9; "'History of failure' highlights Line 5 risks outside Straits of Mackinac," Bridge Magazine July 11, 2018

are likely to continue. The feasible and prudent alternative is not to build a tunnel to continue such risky operations, but to shut down Line 5 entirely.

Detriments to the climate: Line 5 transports up to 23 million gallons a day of fossil fuels, all of which release greenhouse gases once burned. Although that supply is likely to continue in the short term after Line 5 shuts down, the construction of a tunnel designed to last 99 years will substantially increase the operational life of Line 5 and the long-term greenhouse gas emissions from the fuels it transports. These impacts are discussed in detail in the comments of the Environmental Law and Policy Center.

Other detriments: The project would cause other harms: traffic, noise and pollution for at least six years of construction in communities near the Straits; damage and destruction of native cultural sites; noise and light pollution; harm to wetlands from fill; and harm to species, to name a few. These harms are demonstrated in the comments of the Bay Mills Indian Community and we incorporate them here.

When EGLE weighs “the extent and permanence of the beneficial or detrimental effects,” as required by the Wetlands Protect Act, the results are clear: there are few real benefits from the project, but there are massive actual and potential detrimental effects.

To summarize application of the statutory public interest factors to the proposed project: the project is not needed; there are feasible and prudent alternatives; and the project’s potential detriments far outweigh its potential benefits. The tunnel project is not in the public interest and therefore the Wetlands Protection Act permit must be denied.

Conclusion

The proposed tunnel project suffers from multiple fatal defects that require EGLE to deny it permission to proceed. Enbridge has failed to seek a Great Lakes Submerged Lands Act permit for the nearly 4-mile portion of the tunnel that would underlie the lakebed in the Straits. Were it to apply for such a permit, the application would have to be denied because it would fail to meet the two mandatory criteria for permit issuance: the tunnel’s impacts on the Great Lakes and the surrounding communities and environment would be far more than the “minimal” standard in the statute, and a feasible and prudent alternative to the tunnel exists – the use of existing infrastructure (existing other pipelines, waterborne transport outside the Great Lakes, rail, and storage) to provide refineries with virtually every barrel of oil and gallon of propane they receive now at comparable costs.

EGLE must also deny the project a Wetlands Protection Act permit because the project is contrary to the public interest. It fails to meet three of the key standards in the statute: it is not needed (other transportation routes can supply the same petroleum products), there is a feasible and prudent alternative, and the project detriments far outweigh the project benefits.

<https://bridgemi.com/michigan-environment-watch/history-failure-highlights-line-5-risks-outside-straits-mackinac/> Attachment 10.

List of Attachments

- Attachment 1: McMillen Jacobs Associates, Technical Memorandum, *DRAFT Geotechnical Exploration Level of Effort for the Line 5 Replacement Tunnel* (Jan. 13, 2021)
- Attachment 2: McMillen Jacobs Associates, Technical Memorandum, *Collapse Potential for the Line 5 Replacement Tunnel* (Jan. 13, 2021)
- Attachment 3: McMillen Jacobs Associates, Technical Memorandum, *FINAL Risk Mitigation for the Line 5 Replacement Tunnel* (Jan. 13, 2021)
- Attachment 4: Testimony of Richard Kuprewicz, In the Matter of Application of Enbridge Energy Company, MPSC, U 20763 (February 3, 2023)
- Attachment 5: Testimony of Brian O'Mara, In the Matter of Application of Enbridge Energy Company, MPSC, U 20763 (February 3, 2023)
- Attachment 6: *Bad River v. Enbridge* Transcript, Neil Earnest Testimony (Oct. 22, 2022)
- Attachment 7: Expert Report of Sarah Emerson (Jan. 31, 2022)
- Attachment 8: Expert Report of Neil Earnest (Jan. 31, 2022)
- Attachment 9: "The Edge of Disaster for the Great Lakes,": NWF Report, 2020
- Attachment 10: "'History of failure' highlights Line 5 risks outside Straits of Mackinac," Bridge Magazine July 11, 2018
- Attachment 11: Enbridge Objections and Responses to BRB Fourth Set of Interrogatories
- Attachment 12: Expert Rebuttal Report of Graham Brisben (Apr. 8, 2022)
- Attachment 13: PLG Consulting – Potential Line 5 Shutdown
- Attachment 14: "Gas Price Hikes Are Another Enbridge Scare Tactic," Gary Street article
- Attachment 15: *Bad River Band v. Enbridge* Transcript, William Rennie and Corbett Granger Testimony (Oct. 31, 2022)
- Attachment 16: Upper Peninsula Energy Task Force Committee Recommendations, Part 1 Propane Supply, With Appendices
- Attachment 17: Weekly Wisconsin Propane Residential Price (Dollars per Gallon)

- Attachment 18: “No Cochin, No Cry–Part 2–New Infrastructure to Deliver Midwest Propane Supplies,” RBN article
- Attachment 19: “Some Michigan propane suppliers switching to rail cars in anticipation of Line 5 closure,” mlive article
- Attachment 20: MI Propane Security Plan Overview
- Attachment 21: “Superior Fuel Co. builds supply security with new rail terminal,” LP Gas article
- Attachment 22: “NGL Supply Wholesale flows propane at new Michigan terminal,” LP Gas article
- Attachment 23: Sell the Plan: An Integrated Approach to Sustainable, Profitable Growth, Canadian National Railway Company (2023)