



KEY FACTS: Line 5 & the Proposed Oil Tunnel

FLOW's Key Facts on Line 5 & the Proposed Oil Tunnel

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The State of Michigan has reached a **tipping point and moment of reckoning with the decaying Enbridge Line 5 oil pipelines** in the Straits of Mackinac and a proposed oil tunnel to replace them. For the first time in nine years, the State of Michigan is taking its responsibility seriously to bring this issue under the rule of law and protect the Great Lakes, drinking water, and the *Pure Michigan* economy.

Here's a quick list of facts you can use to help tip the balance in favor of shutting down Line 5 and turning back the proposed oil tunnel:

Risk to the Great Lakes and Drinking Water:

- **Nearly 23 million gallons of oil and natural gas liquids pass every day through "Line 5,"** a pair of aging pipelines piercing the heart of the Great Lakes just west of the Mackinac Bridge.
- **Built in 1953,** the 20-inch-diameter Line 5 pipelines owned by Canadian company Enbridge Energy Partners lie exposed in the water along the publicly owned lakebed of the Mackinac Straits.
- **The Straits of Mackinac are the "worst possible place"** for a Great Lakes oil spill, potentially impacting over 700 miles of Lakes Michigan and Huron coastline, according to the University of Michigan.
- **An anchor strike on April 1, 2018, damaged the Line 5 oil pipelines** in the Straits of Mackinac, including a gash across the east pipeline and several dents, exposed steel, and scrapes on the west pipeline. The longest dent was nearly two-feet long.

Line 5 is 66 years old and decaying:

- **Enbridge's data reveal that sections of Line 5 in the Straits are cracked, dented, and encrusted** with corrosion-causing mussels, and that a segment on land has lost 26 percent of its original wall thickness due to corrosion.
- **In 2017, Enbridge admitted misleading both Michigan and federal officials** on the condition of Line 5 for over three years, concealing dozens of bare metal spots and/or coating gaps near 128 anchor locations.

Benefits Canada, not Michigan:

- **No more than 5-10 percent of the light crude oil carried by Line 5** is destined for the Detroit and two Toledo refineries, with the remaining 90-95 percent reaching refineries in Sarnia, Ontario, FLOW technical experts concluded based on the available information,

Enbridge is operating illegally:

- **Enbridge is violating its 1953 easement** conditionally granted by the State of Michigan and allowing occupancy of public waters and bottomlands in the Straits of Mackinac, including not complying with standards related to prudent operation, adequate insurance, pipeline design and condition, cleanup planning, and risk of pollution, impairment, or destruction of the environment.
- **Enbridge's Line 5 violates the public's legally enforceable rights** to fish, boat, swim, navigate, and bathe in, and drink and draw sustenance from, the Great Lakes.

Note: This fact sheet was updated July 24, 2019; it's available online here: <https://flowforwater.org/line5/>.

Enbridge's failed track record:

- **Line 5 has failed at least 33 times since 1968**, spilling more than 1.1 million gallons of oil across Michigan and Wisconsin.
- **Enbridge caused one of the nation's largest inland oil spills in July 2010** when its Line 6B pipeline burst near Marshall, Michigan, and for 17 hours dumped nearly one million gallons of heavy tar sands oil into the Kalamazoo River watershed. It took four years and over \$1.2 billion to clean it up to the extent possible. Line 6B was 41 years old when it failed; Line 5 is 66 years old and counting.
- **Enbridge's pipeline network had 804 total failures** that spilled 6.8 million gallons of oil from 1999-2010.
- **Enbridge's Line 6B spill as "the single most expensive on-shore spill in U.S. history,"** according to the National Safety Transportation Board (NTSB). Moreover, the agency concluded that the Line 6B disaster was caused by corrosion fatigue cracks and the prolonged 17-hour spill, which "were made possible by pervasive organizational failures at Enbridge."

Cannot clean up an oil spill in water:

- **Enbridge lacks** a credible worst-case scenario emergency response plan to recover oil.
- **Enbridge lacks** a credible plan to recover spilled oil when ice tops the Mackinac Straits. U.S. Coast Guard officials cannot respond at night when it is windy, wavy (over three feet), icy, or dark.
- **Only 30% of an oil spill would be recovered under the best conditions**, according Enbridge's cleanup contractor.

Propane alternative:

- **Just 1-2 propane rail cars or 4-5 tanker trucks a day could replace the aging Line 5 pipeline's U.P. propane capacity** without risking a Great Lakes oil spill, FLOW's latest research shows. The rail cars or tanker trucks could deliver propane from Superior, Wisconsin, to the existing propane storage-and-distribution center in Rapid River, Michigan, north of Escanaba on U.S. 2.
- **Plains All American also could increase the capacity of its storage facility at Kincheloe**, in the eastern Upper Peninsula, which is served by rail and not Line 5. The energy distribution network is highly adaptable such that Enbridge does not have a monopoly on propane delivery to U.P. distributors.
- **Shutting down Line 5 would add five cents to the cost of a gallon of propane**, which has hovered around \$2 for the past year, according to a 2018 study by London Economics International LLC, a Boston-based consultancy, and commissioned by the National Wildlife Federation.
- **Gov. Whitmer has formed an Upper Peninsula Energy Task Force** to identify energy supply options, specifically including propane in the event that Line 5 is shut down. The system can adjust with smart planning.

Oil alternative:

- **Available capacity and flexibility to meet energy demand in the Great Lakes region already exists** in the North American pipeline system operated by Enbridge and its competitors without threatening our public waters and *Pure Michigan* economy, according to FLOW's experts.
- **A Line 5 shutdown could increase the cost of gasoline in metro Detroit by about 2 cents a gallon**, according to a 2017 study commissioned by the former Snyder administration.

Economic impact of an oil spill:

- **A Line 5 oil spill could deliver a blow of over \$6 billion in economic impacts and natural resource damages** to Michigan's economy and could trigger a domino effect of damage disrupting Great

Lakes commercial shipping and steel production, slashing jobs, and shrinking the nation's Gross Domestic Product by \$45 billion after just 15 days, according to a study commissioned by FLOW and conducted by nationally respected ecological economist Robert Richardson of Michigan State University.

Jobs:

- **Enbridge's workforce includes only 96 Michigan-based permanent and temporary employees and provisioned contractors, while about 800,000 Michigan jobs** are tied in some way to the clean water of the Great Lakes. In total, more than 1.5 million U.S. jobs are directly connected to the Great Lakes, generating \$62 billion in wages tied to up-north tourism, agriculture, fishing, shipping and related industries, according to Michigan Sea Grant.

An oil tunnel is not the best alternative for Michigan:

- **The Line 5 oil pipelines in the Straits would continue to decay** and threaten the Great Lakes and Pure Michigan economy, while Enbridge takes 5-10 years to study, seek permits, and build an oil tunnel.
- **A tunnel fails to address Line 5's immediate threat to the Great Lakes** and the risk posed by the pipeline's more than 400 stream and river crossings in the Upper and Lower Peninsulas.
- **Enbridge's proposal to allow electrical lines and other infrastructure to occupy the proposed oil pipeline tunnel** is a bad idea opposed by a U.P. electrical supplier and poses an explosion risk.
- **Climate change and related impacts to the Great Lakes would worsen** from an oil tunnel under the under the Straits transporting fossil fuels for the next 99 years.
- **An oil tunnel would not create long-term sustainable Michigan jobs.** Michigan is at full labor employment now. Michigan labor likely is not going to build this tunnel; it will require international trade skills, machinery, and materials. There's more labor work to be done in any given Michigan community in replacing lead pipes for drinking water than would materialize for a Line 5 tunnel.

Bottom line:

- **Line 5 is not vital to the people of Michigan.**
- **It is time for the state to evict Enbridge from the Mackinac Straits and shut down Line 5** due to the danger its decaying oil pipelines pose to the Great Lakes.



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