

Enbridge's Line 5 in the Mackinac Straits Is Not Vital to Michigan's Energy Economy

Pipeline Company's Claim:

Michigan Can't Live Without the Line 5 Pipelines in the Mackinac Straits

Offering scant evidence, Canadian energy transport giant Enbridge claims that its aging Line 5 oil pipelines in the Mackinac Straits are a "vital piece of Michigan energy infrastructure" that Michiganders cannot live without.

FLOW's Finding:

Risky Straits Oil Pipelines Serve Enbridge's Interests, Not Michigan's Needs

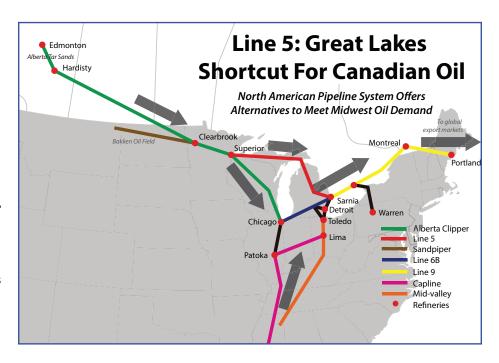
FLOW's December 2015 expert report demonstrates that decommissioning the 64-year-old "Line 5" oil pipelines to prevent a disastrous spill in the Mackinac Straits would not disrupt Michigan's or the Midwest's crude oil and propane supply because only 5-10 percent of the oil in Line 5 is used in Michigan. Moreover, available capacity and flexibility to meet energy demand in the Great Lakes region already exists in

According to a 2016 poll, 66 percent of Michiganders believe that Enbridge should not transport oil under the Straits.

the North American pipeline system operated by Enbridge and its competitors without threatening our public waters and Pure Michigan economy. The bottom line: Line 5 is not vital to the people and tribes of Michigan.

Background

In 1953, Canadian energy transport giant Enbridge brokered a deal with the State of Michigan to build an underwater oil pipeline using the public waters and bottomlands of the Mackinac Straits, just west of the Mackinac Bridge. The purpose was made clear to everyone: this Canadian pipeline would transport Canadian oil eastward to refineries in Sarnia, Ontario, taking a high-risk shortcut through the Great Lakes. Line 5 was never designed as vital infrastructure for Michigan, and more than 60 years later, it still isn't, with at least 90 percent of the oil refined in Canada or exported via the Atlantic Ocean.



Key Facts

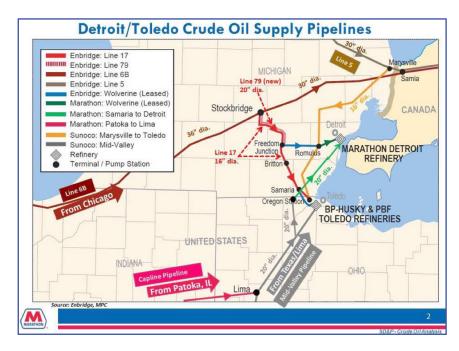


Oil: Nearly all of Line 5's oil serves refineries in Canada, not Michigan

Based on the available information, FLOW technical experts concluded that 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.

If Line 5 is shut down at the Mackinac Straits, the small percentage of Line 5's light crude coming to the United States could be supplied by other sources currently serving the region that do not risk the Great Lakes, including the Capline and Mid-Valley pipelines, along with crude from Northern Michigan oil wells.

In addition, Enbridge could transport additional crude oil from Alberta, Canada, and North Dakota to the region via its Line 6B (recently renamed Line 78), which was replaced and doubled in capacity after Enbridge's 2010 spill of a million gallons of heavy oil into the Kalamazoo River watershed near Marshall, Michigan.



FLOW research shows that the Marathon

refinery in Detroit uses primarily heavy crude from the Alberta Tar Sands via Enbridge Line 6B, and that one of the Toledo refineries plans to convert entirely to heavy crude feedstock. The State of Michigan in September 2015 reached an agreement with Enbridge prohibiting heavy oil transport via Line 5 in the Mackinac Straits.

Propane: Line 5 is not needed to supply propane to the Upper Peninsula

As part of decommissioning the Line 5 pipeline, a viable alternative is for propane supplier Plains All American to expand propane purification capacity at its existing plant in Superior, Wisconsin. The company then could use 4-5 tanker trucks a day to deliver the propane to its existing storage-and-distribution center in Rapid River, Michigan, north of Escanaba on U.S. 2. Or a 1-2 rail cars could deliver the propane from Superior to Escanaba, and then transport it via propane trucks to Rapid River.

This viable alternative eliminates the need to keep Line 5 in service in Michigan to supply propane to the Upper Peninsula. And it allows Rapid River to continue as a storage-and-distribution center, supplying customers currently served by this location.

In addition, Plains All American could increase the capacity of its storage facility at Kincheloe, in the eastern Upper Peninsula, which is not served by Line 5. The energy distribution network is highly adaptable such that Enbridge does not have a monopoly on propane delivery to U.P. distributors.

3 Economy and Jobs: 250 'Line 5' jobs vs. 800,000 Great Lakes jobs

Enbridge says the Line 5 pipeline provides 250 jobs in Michigan, 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, according to Michigan Sea Grant.

LEARN MORE AT:

- FLOW (For Love of Water) www.FLOWforWater.org, info@flowforwater.org or 231.944.1568
 - FLOW study on alternatives to Line 5: http://bit.ly/2jBQQbi
 - Oil & Water Don't Mix campaign: www.OilandWaterDontMix.org