

**Line 5 Pipeline 101:
Facts about the Pipeline Threatening Our Great Lakes
Prepared by the Grand Traverse Band Natural Resources
Department**



The Great Lakes

1. The Great Lakes contain 6 quadrillion gallons of freshwater.
2. The Great Lakes contain 20% of the Earth's fresh surface water.
3. The Great Lakes contain 95% of the United States' fresh surface water.
4. 40 million people receive their drinking water from the Great Lakes.
5. A University of Michigan study has called the Straits the worst possible place for an oil spill in the entirety of the Great Lakes.
6. The Straits of Mackinac are the confluence of lakes Michigan and Huron.
7. The currents in the Straits are 10x's greater than the water quantity moved by the Niagara Falls.
8. The currents within the Straits of Mackinac change direction every few days.
9. A rupture of Line 5 would inundate over 700 miles of shoreline.

Line 5 Basics:

10. Line 5 is 64 years old.
11. Line 5 has already leaked more than 1 million gallons of oil inland.
12. Line 5 does not have a federally approved emergency response plan at the Straits.
13. Line 5 transports approximately 23.5 million gallons or 540,000 barrels of oil every 24 hours.
14. Current Enbridge data shows that Line 5 has lost 26% of its wall thickness due to corrosion.
15. The pipelines run about 1,000 feet apart at depths ranging from 100 - 270 feet along the bottom of the Straits.
16. There is not a clear understanding to the effects being caused by zebra and quagga mussels on pipeline integrity.
17. Line 5 is 645 miles long.
18. Line 5 originates in Superior, Wisconsin.
19. Line 5 terminates in Sarnia, Ontario.
20. Line 5 is a 30" diameter pipeline on inland portions.
21. Line 5 splits into 20" twin oil pipelines at the Straits of Mackinac.
22. Line 5 transports synthetic crude, natural gas liquids, sweet crude, and light sour crude.
23. Line 5 has as many as 12 pump stations and perhaps more.

Enbridge History in Michigan and Beyond

24. In 2010 Enbridge caused one of the Nation's largest inland oil spill in history.
25. Clean up of Enbridge Line 6B is still taking place.
26. Line 6B clean-up costs have exceeded \$1 billion.
27. It took Enbridge 17 hours to shut down Line 6B.
28. The spill was not detected by Enbridge, but by a local utility man who smelled oil.
29. Line 5 and Line 6B share the same leak detection technology.
30. There have been 1,068 Enbridge spills across the entire Enbridge pipeline system, that have dumped 7.4 million gallons of oil into the environment between 1999 and 2013 - an average of 71 spills and 500,000 gallons per year.
31. "Enbridge initially reported the pipeline break (in Marshall, MI) released 819,000 gallons of crude. As of May (2013), Enbridge estimates the company has recovered 1.15 million gallons of oil from the Kalamazoo River.
32. Enbridge has partial ownership in Energy Transfer Partners.
33. Energy Transfer Partners built the controversial Dakota Access Pipeline (DAPL).

The State of Michigan, the Federal Government, and Line 5

34. The State of Michigan holds the easement for Line 5, while the Federal Pipeline and Hazardous Materials Safety Administration oversees pipeline regulation.
35. Under the 1953 easement, support structures for Line 5 are to be placed every 75 feet.
36. Currently there are spans of nearly 200 feet that are unsupported.
37. Enbridge have violated the terms of the 1953 easement in 8 different ways.
38. The State of Michigan has a public trust obligation to protect the waters of the Great Lakes, as it is a public resource.
39. The Great Lakes Submerged Lands Act requires any use of Great Lakes bottomlands to first apply for a permit from the State to ensure that the proposed private use of such lands and waters will neither substantially affect the public use or public trust interests of the State.
40. The Line 5 pipeline has never gone through this process, so our State has never determined the risks to our public trust resources and whether this use has a public benefit.
41. US Senators Stabenow and Peters both agree that Line 5 should be decommissioned.
42. The Governor can shut down Line 5.
43. The Attorney General can shut down Line 5.
44. 68 local governments throughout the state have signed resolutions to shut down Line 5.
45. Republican Senator Rick Jones submitted Senate Bill 292 to shut down Line 5.
46. Democratic Representative Yousef Rabhi submitted House Resolution 51 calling on Governor Snyder and Attorney General Schuette to revoke the 1953 easement and shut down Line 5.
47. Due to public pressure after Line 6b's spill, the State of Michigan established the Michigan Petroleum Pipeline Task Force in 2014.
48. In 2015 the Task Force released its Report, and the Pipeline Safety Advisory Board was created to study Line 5 and commission two new reports: Risk Analysis and Alternatives Analysis.
49. Just weeks before the release of the Risk Analysis in late June 2017, the State scrapped their Independent Contractor, claiming a newfound conflict of interest.
50. 135 federal inspectors oversee 2.6 million miles of pipeline, which means each inspector is responsible for almost enough pipelines to circle the Earth.
51. Enbridge is not required by federal or Michigan regulators to communicate safety information with the public, including people living with these pipelines running through their personal property.

Tribal Perspectives and Actions on Line 5

52. The 12 Federally Recognized Tribes in Michigan have all committed resolutions calling on the shutdown of Line 5.
53. The Midwest Alliance of Sovereign Tribes passed a resolution to shut down Line 5.
54. The National Congress of American Indians has passed a resolution to shut down Line 5.
55. Five federally recognized tribes have court adjudicated Treaty Rights to harvest fish from the Great Lakes thanks to the 1836 Treaty of Washington.
56. Michigan Tribes consider the Straits to be the epicenter of our historic fishing areas.
57. Native Americans harvest in excess of 250,000 lbs. of fish in the Straits area annually.
58. Fish harvested commercially by Native Americans ends up in local communities as an important food source.
59. In 1979 a Federal Court reaffirmed the five tribes' Treaty Rights in the Great Lakes.
60. In 1985, the 1836 Tribes, the State of Michigan, and the Federal government signed a Consent Decree, which allocated resources and determined management authority.
61. The 2000 Consent Decree gave the 1836 Treaty Tribes co-management authority of the Great Lakes.
62. The State of Michigan did not consult Michigan Tribes prior to authorizing the 1953 easement.
63. Line 5 crosses numerous inland waterways that threatening inland tribal treaty rights.
64. In 2007, the 1836 Tribes, the State of Michigan, and the Federal government signed an Inland Consent Decree, which acknowledged tribes' right to inland harvests and also allocated Tribes with responsible resource management authority.
65. Native Americans view water as having a spirit.
66. Native Americans view water as the source of all life.
67. As humans we are born into water.
68. As humans we are made up of approximately 80% water.
69. A human cannot live without water for more than 4 days.
70. "Nibi Bimadiziwin Awan" means "Water is life" in Anishinabemowin.

The Economics of Line 5

71. Line 5 is not critical energy infrastructure.
72. Line 5 transports primarily Canadian oil back to Canada.
73. Michigan uses between 5-15% of the oil transported by Line 5, in the form of propane in the Upper Peninsula, a need which can easily be covered by truck transportation.
74. Over 800,000 jobs are directly tied to a healthy Great Lakes.
75. That's one in five jobs that are connected to our Great Lakes.
76. The Great Lakes tourism industry is valued at \$37 billion annually.
77. In 2014, visitors to Michigan spent \$22.8 billion throughout the State.
78. Line 5 is within five nautical miles of one of Michigan's most popular tourist destinations, Mackinaw Island.
79. The Great Lakes recreational and commercial fishing industry is valued at \$7 billion annually.
80. Line 5 creates approximately 250 full and part time jobs.

More Ecosystem Threats Posed by Line 5

81. Line 5 threatens the endangered Piping Plover's coastal nesting grounds in Wilderness State Park in Emmett County.
82. Line 5 crosses the entire Upper Peninsula of Michigan, which is home to a variety of unique and sensitive ecosystems.

83. Line 5 threatens Michigan's wildlife population, including a small and sensitive Upper Peninsula moose population.
84. Line 5 threatens wild rice, a sacred Anishinaabek food and medicine, at French Farm Lake near the Straits.
85. The Grand Traverse Band Natural Resources Department and other tribes are undertaking extensive efforts to restore wild rice populations in the 1836 Ceded Territory.
86. Birds fly in and out of the Great Lakes and would spread oil elsewhere.
87. An inland rupture of Line 5 would contaminate groundwater.

The Big Picture

88. Climate Change threatens to destroy the ability for humans to live on Earth.
89. The burning of fossil fuels is the primary driver of Climate Change.
90. Much of Line 5's crude oil is derived from the Alberta Tar Sands, which is the dirtiest fuel to process on earth. To clarify: tar sands/diluted bitumen is not currently moving through Line 5, but it does transport partially refined light crude from the Tar Sands.
91. For every gallon of gasoline made from tar sands, 5.9 gallons of fresh water are used for extraction and processing - that's 3 times more than traditional oil.
92. Every nation on Earth besides Syria and Nicaragua signed the Paris Agreement, which commits nations to lower their carbon emissions to avoid catastrophic Climate Change.
93. The United States burns the most fossil fuels per capita of any nation on Earth.
94. Renewable energy and electric vehicle technologies are ready to be deployed on a massive scale to lower our collective emissions.
95. This dinosaur of a pipeline is part of a dinosaur industry that moves energy from the time of the dinosaurs.

It's Time to Act!

96. Line 5 is an unacceptable risk to our collective health and wellbeing, and must be shut down.
97. You must get involved if you want to protect our waters.
98. Show up to Line 5 events.
99. Demand that your legislator advocate on your behalf to decommission Line 5.
100. Get a yard sign from Oil & Water Don't Mix.
101. Talk about this pipeline with your friends and family—most Michiganders still don't know that it exists, let alone the catastrophic threat it poses.