

# Enbridge Downplaying the Potential Size of Catastrophic “Line 5” Straits Oil Spill

## *Canadian Oil Transporter Repeatedly Downsized Its Estimate of Potential Mackinac Straits Oil Spill While an Independent Review of Its Data Suggests a Much Larger Risk*

In the last two years, Enbridge has cut nearly in half its estimate of the likely size of an oil spill from a pair of aging pipelines that move nearly 23 million gallons of oil a day through the Mackinac Straits, while independent studies suggest the risk is much greater and growing.

In June 2014, Enbridge estimated in a letter to the State of Michigan that a spill could dump up to 360,000 gallons of oil in the Mackinac Straits and would cost as much as \$900 million to clean up, not including any damages to people, property, or natural resources for which Enbridge is also liable.

By September 2015, however, Enbridge had incrementally reduced its Straits oil spill estimate by 48 percent to 189,000 gallons, a figure the Canadian company relied upon when conducting a simulated oil spill cleanup exercise with the U.S. Coast Guard and several other federal, state, and local agencies. (See chart below).

A close review this month by an engineer working with For Love of Water (FLOW), a Traverse City-based Great Lakes law and policy center, of Enbridge’s correspondence with the State of Michigan, however, reveals that a Line 5 spill could be far worse, and amount to 1.27 million gallons of oil pouring into the Great Lakes. Such a disaster would result if Line 5’s automatic shutoff valves near the Mackinac Straits failed to close and required Enbridge personnel to arrive and manually shut off the oil flow, which could take up to two hours, according to Enbridge.<sup>1</sup> And the oil spill could double to an astounding 2.53 million gallons if, for instance, an anchor were dragged by a freighter and tore into both of Line 5’s Straits crossings.<sup>2</sup>

In March 2016, the University of Michigan released the results of 840 computer-modeling simulations, including a one million gallon crude oil spill in the Mackinac Straits that resulted in more than 700 miles of shoreline and islands in Lakes Michigan and Huron potentially vulnerable to an oil spill in the Straits that would result in accumulation requiring cleanup. More than 15 percent of Lake Michigan’s open water (3,528 square miles), and nearly 60 percent of Lake Huron’s open water (13,611 square miles) could be polluted by visible oil from a spill in the Mackinac Straits, according to University of Michigan’s Dr. David Schwab, the world’s foremost authority on Mackinac Straits currents, which can reach 10 times the flow over Niagara Falls.

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<sup>1</sup> Correspondence from Brad Shamla, vice president of U.S. operations at Enbridge, to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 14.

<sup>2</sup> Extrapolation by FLOW of a two-hour release of oil from both Line 5 pipelines crossing in the Mackinac Straits, based on correspondence from Enbridge (Brad Shamla) to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 14.

Enbridge vice president of U.S. operations, Brad Shamla, criticized the University of Michigan study as “flawed,”<sup>3</sup> claiming that it, “assumed a volume that is up to five times higher than the maximum possible under the current configuration of Line 5,” even though Shamla’s letter to the state a year earlier conceded the possibility of such a massive oil spill. Moreover, a one million gallon crude oil spill is certainly realistic and plausible given Enbridge’s Line 6B pipeline rupture of a similar volume into the Kalamazoo River in 2010.

Here is the history of Enbridge downplaying the potential size of a “Line 5” oil spill in the Mackinac Straits:

<b>Enbridge Downplaying the Potential Spill Size of a Catastrophic “Line 5” Straits Oil Spill</b>			
<b>Date</b>	<b>Estimated Size of a Straits of Mackinac Oil Spill</b>		<b>Source</b>
	<b>Barrels</b>	<b>Gallons</b> (1 barrel = 42 gallons)	
June 27, 2014	8,583 <sup>4</sup>	360,000	Enbridge
June 27, 2014	5,793 <sup>5</sup>	243,000	Enbridge
Feb 27, 2015	4,950 <sup>6</sup>	208,000	Enbridge
Sep 24, 2015	4,500 <sup>7</sup>	189,000	Enbridge
Mar 2016	25,000 <sup>8</sup>	1.05 million	University of Michigan
Apr 2016	30,126 <sup>9</sup>	1.27 million	FLOW extrapolation of Enbridge data
Apr 2016	60,252 <sup>10</sup>	2.53 million	FLOW extrapolation of Enbridge data

\*\* Numbers are rounded.

<sup>3</sup> Brad Shamla, vice president of U.S. operations at Enbridge, “Oil spill study misses the mark,” Detroit News, April 10, 2016. <http://www.detroitnews.com/story/opinion/2016/04/10/oil-spill-study-misses-mark/82871062/>

<sup>4</sup> Correspondence from Enbridge (Brad Shamla) to Attorney General Bill Schuette and DEQ Director Dan Wyant, June 27, 2014, entitled: Enbridge Lakehead Systems Line 5 Pipelines at the Straits of Mackinac, p. 19.

[http://www.michigan.gov/documents/deq/Appendix\\_B.2\\_493988\\_7.pdf](http://www.michigan.gov/documents/deq/Appendix_B.2_493988_7.pdf)

<sup>5</sup> *Id.*

<sup>6</sup> Correspondence from Brad Shamla, vice president of U.S. operations at Enbridge, to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 12. [http://www.michigan.gov/documents/deq/Appendix\\_B.6\\_493994\\_7.pdf](http://www.michigan.gov/documents/deq/Appendix_B.6_493994_7.pdf)

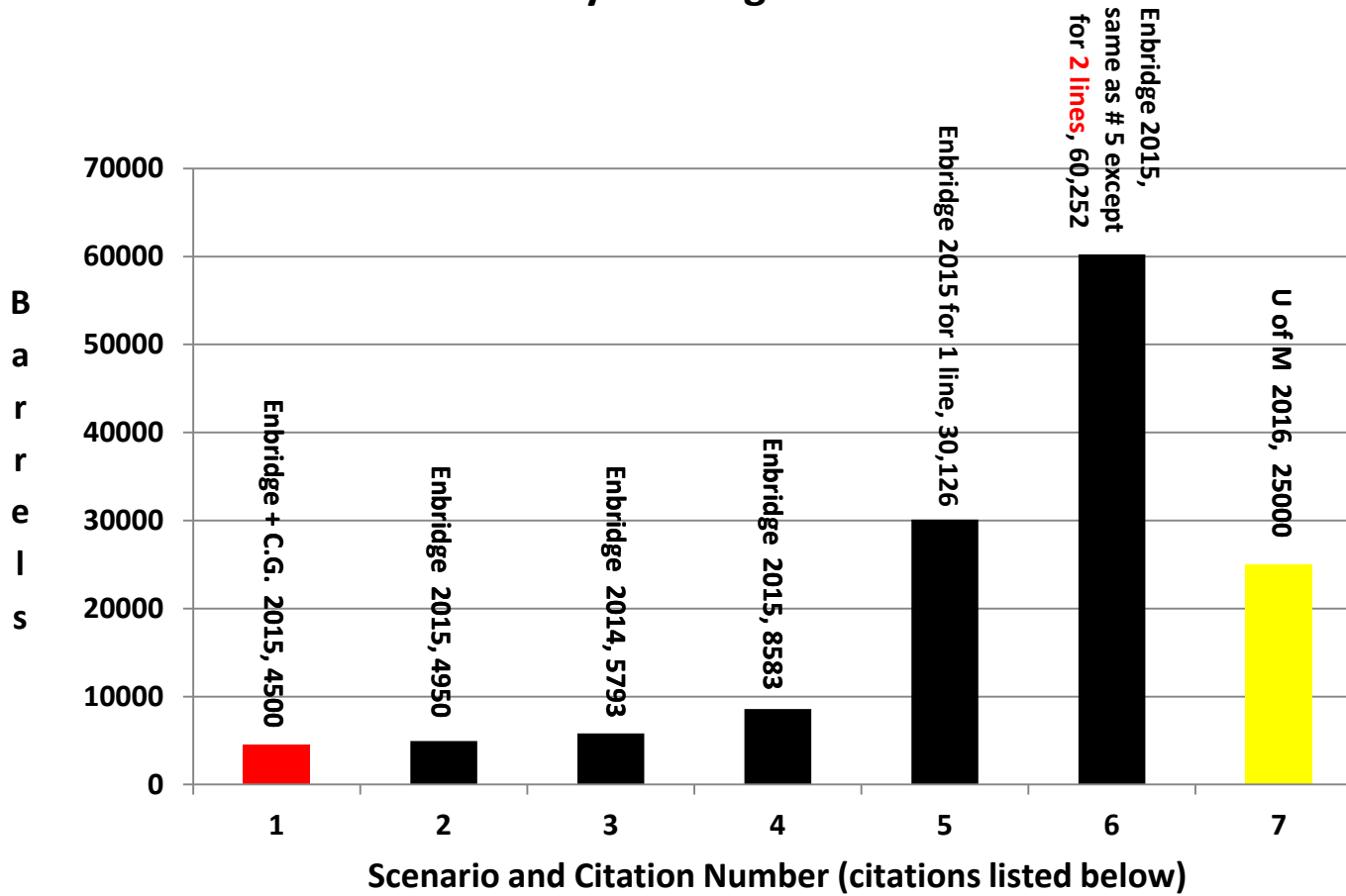
<sup>7</sup> The figure that Enbridge relied upon when conducting a simulated oil spill cleanup exercise with the U.S. Coast Guard and several other federal, state, and local agencies in September 2015. See also: U.S. Coast Guard, Sector SSM PREP 2015 FE (FOUU) After Action Report, 24 Sep 2015 – 24 Sep 2015, date released 20 Jan 2016, p. 3, under General Description.

<sup>8</sup> Schwab, David, “Statistical analysis of Straits of Mackinac Line 5 worst case spill scenarios,” University of Michigan Water Center, Graham Sustainability Institute, March 2016. <http://graham.umich.edu/media/pubs/Mackinac-Line-5-Worst-Case-Spill-Scenarios.pdf>

<sup>9</sup> Extrapolation by For Love for Water of a two-hour release of oil from one Line 5 pipeline crossing in the Mackinac Straits, based on correspondence from Enbridge (Brad Shamla) to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 14.

<sup>10</sup> Extrapolation by FLOW of a two-hour release of oil from both Line 5 pipelines crossing in the Mackinac Straits, based on correspondence from Enbridge (Brad Shamla) to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 14.

## Line 5 Spill Scenarios at the Straits (in barrels) as Defined by Enbridge and U of M



## Chart Citations

1. U.S. Coast Guard, Sector SSM PREP 2015 FE (FOUU) After Action Report, 24 Sep 2015 – 24 Sep 2015, 20 Jan 2016, at p. 3.
2. Correspondence from Enbridge (Brad Shamlala) to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 12. [http://www.michigan.gov/documents/deq/Appendix\\_B.6\\_493994\\_7.pdf](http://www.michigan.gov/documents/deq/Appendix_B.6_493994_7.pdf)
3. Correspondence from Enbridge (Brad Shamlala) to Attorney General Bill Schuette and DEQ Director Dan Wyant, June 27, 2014, entitled: Enbridge Lakehead Systems Line 5 Pipelines at the Straits of Mackinac, p. 19. [http://www.michigan.gov/documents/deq/Appendix\\_B.2\\_493988\\_7.pdf](http://www.michigan.gov/documents/deq/Appendix_B.2_493988_7.pdf)
4. *Id. at*, p. 22.
5. Correspondence from Enbridge (Brad Shamlala) to Attorney General Bill Schuette and DEQ Director Dan Wyant, February 27, 2015, Item 14. [http://www.michigan.gov/documents/deq/Appendix\\_B.6\\_493994\\_7.pdf](http://www.michigan.gov/documents/deq/Appendix_B.6_493994_7.pdf)
6. Same as citation # 5, except for the rupture of both lines, not just one.
7. Schwab, David, "Statistical analysis of Straits of Mackinac Line 5 Worst Case Spill Scenarios," University of Michigan Water Center, Graham Sustainability Institute, March 2016. <http://graham.umich.edu/media/pubs/Mackinac-Line-5-Worst-Case-Spill-Scenarios.pdf>