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Little Oversight for Enbridge Pipeline Route that Skirts Lake Michigan

Despite calls for extra protection for the vital watershed, Enbridge expects to have its final permits from Indiana to begin construction in May or June.

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A map of Northwestern Indiana, where the new 6B pipeline will cross four rivers at points within 20 miles of Lake Michigan. The Lake Michigan watershed is shown in green. Credit: Paul Horn for InsideClimate News

In the northwestern corner of Indiana a major pipeline project is planned that will carry vast quantities of heavy Canadian crude oil across four rivers that flow into Lake Michigan, where 10 million people get their drinking water. The pipeline will cross one river just 11 miles from the lake. It crosses the other three rivers less than 20 miles from the lake.

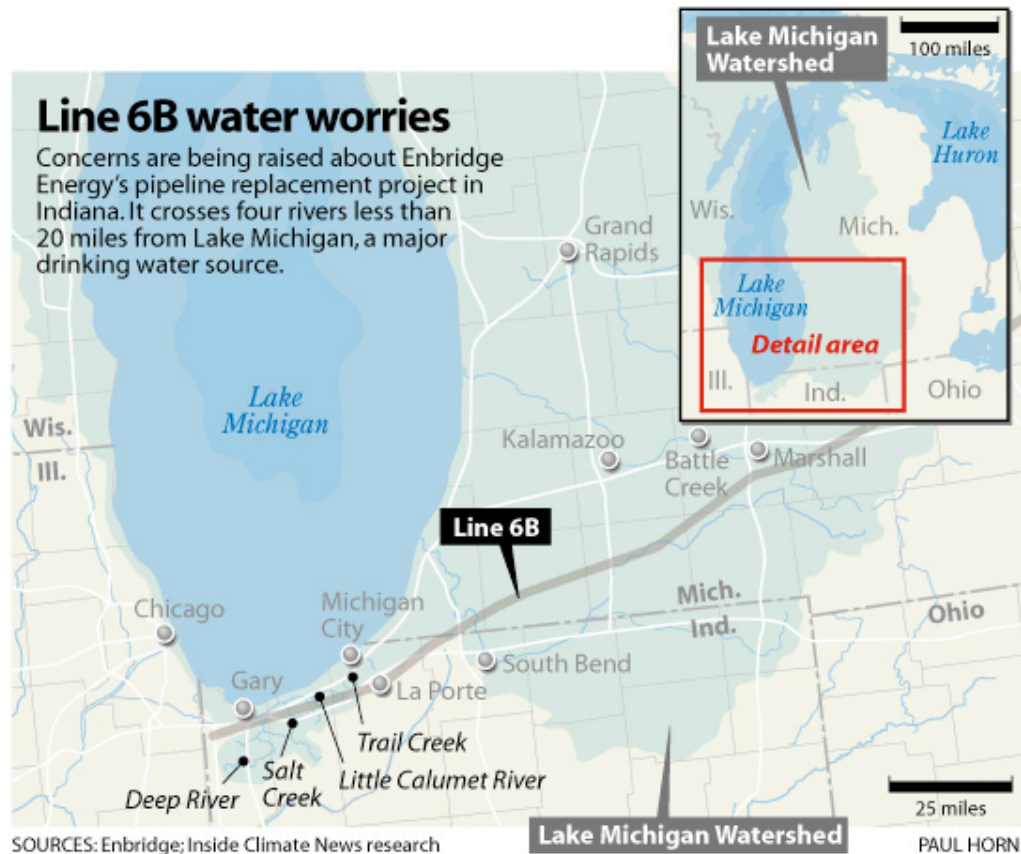
Because the pipeline runs so close to Lake Michigan—and because it is being built by a company with a history of pipeline spills in the region—a growing coalition of environmental groups is demanding that it be given extraordinary oversight and protection.

But getting those protections will be almost impossible.

No federal or Indiana agency has authority to require the pipeline's Canadian operator, [Enbridge, Inc.](#) [2], to move the line out of the Lake Michigan watershed—or to add extra safeguards, including sophisticated technology that can detect even minor spills.

Enbridge was responsible for the most expensive oil pipeline spill in U.S. history, [a 2010 rupture](#) [3] near Marshall, Mich. that dumped more than a million gallons of Canadian crude into the Kalamazoo River, a Lake Michigan tributary. Oil from Line 6B contaminated about 36 miles of the river before cleanup workers managed to stop it roughly 70 miles from the lake. Enbridge was fined [\\$3.7 million](#) [4] for breaking more

than 20 federal rules, and the National Transportation Safety Board [reprimanded the company](#) [5] for "a complete breakdown of safety."



Enbridge's new project will replace Line 6B with a larger pipe that can carry as much as 21 million gallons per day, more than double its capacity when it fouled the Kalamazoo. Like the existing 6B, it will carry a thick oil from Canada's tar sands called bitumen that has been thinned with liquid chemicals to form [diluted bitumen](#) [6], or dilbit. During the 2010 spill, the light chemicals evaporated while the bitumen slowly sank, leaving a mess that is still being cleaned up today. The U.S. Environmental Protection Agency [told Enbridge in October](#) [7] that submerged oil needs to be dredged from 100 acres of the river.

"There have got to be lessons learned from the Kalamazoo spill," said Steve Hamilton, a Michigan State University professor of ecology and environment who served on the EPA team that recommended the dredging. "There are legitimate issues to be concerned about in Indiana."

A major spill into one of the Indiana rivers would be even more disastrous than the Michigan spill, the environmental groups say, because the pipeline's crossing points are so much closer to Lake Michigan.

"If the Marshall spill would have happened here, it would have been in Lake Michigan," said Nathan Pavlovic, a land and advocacy specialist with [Save the Dunes](#) [8], a 60-year-old nonprofit dedicated to protecting the Indiana Dunes and the Lake Michigan watershed. "There are just too many unanswered questions at this point to consider this a safe project when you consider the devastating consequences of a spill."

In addition to serving as one of the nation's most important drinking water supplies, Lake Michigan supports recreational activities that are vital to the regional economy and an ecosystem that is home to rare plants and animals.

Erin Argyilan, a geoscientist who has lived near the lake for most of her life, wants Enbridge to disclose how it would respond to spills in various parts of the lake's watershed. An oil spill in a wetland, for instance, would behave very differently from oil spilled into a fast-moving tributary.

"Where would it be after two hours? After four hours? After six hours?" asked Argyilan, who sits on the Save the Dunes board and chairs the geosciences department at Indiana University Northwest. "This type of modeling [would] put a realistic face on what could happen.

"It's unfortunate to always go to the worst case scenario, but in this case it's necessary when one of the world's largest fresh water resources is at stake."

Argyilan questioned Enbridge about its plans at a public meeting in September, but she said she got only general assurances that response teams were in place and that shut-off valves would quickly close the pipeline if a spill occurred.

Pipeline operators aren't required to file their emergency response plans with federal regulators until their projects are built. And they're not required to share them with the public. Local emergency officials in Indiana told InsideClimate News they trust that Enbridge's emergency plans for the existing 6B are sufficient—even though some said they hadn't reviewed those plans.

Save the Dunes isn't trying to stop the 6B replacement project. The 43-year-old line is an essential part of Enbridge's Lakehead System, which transports as much as 75 percent of the crude oil consumed by refineries in the Upper Midwest. Without the pipeline, many would have trouble getting the large quantities of crude they need to produce jet fuel, gasoline, heating oil and other products critical to the region's economy.

What the group is demanding, however, is that state and federal agencies use whatever authority they have over the project to require additional safeguards.

[In a statement](#) [9] last week signed by the National Wildlife Federation and several other groups, Save the Dunes urged the Indiana Department of Environmental Management "to ensure that Enbridge implements every possible precaution to protect the people and natural resources of Northwest Indiana and Lake Michigan."

"We are questioning the wisdom of permitting a pipe that will dramatically increase the quantity of tar sands flowing through our region without quite a bit more due diligence," Pavlovic said.

In email responses to questions from InsideClimate News, Enbridge said the 6B project meets all the standards set by the federal Pipeline and Hazardous Materials Safety Administration ([PHMSA](#) [10]), which regulates the nation's pipelines. Spokesman Larry Springer said the company will exceed some of those standards, including conducting internal inspections along the [entire 285-mile project](#) [11], which runs from Griffith, Ind. to Sarnia, Ontario.

"All valves installed on Line 6B will have remote control capability, which is not a PHMSA requirement," Springer said. "In addition, we X-ray or ultrasonic test 100 percent of the welds during pipeline construction, which exceeds the current PHMSA requirement of 10 percent."

Lack of Additional Safeguards

Enbridge's plans for the new 6B do not include installing some safeguards that are readily available but are not required by federal law.

InsideClimate News reported [earlier this month](#) [12] that pipeline operators can improve leak prevention and detection by capping their lines with concrete or by adding more aerial or foot patrols.

They can also install external sensors that are far more sensitive than the leak detection systems found on most of the nation's pipelines. Those systems rarely find leaks until several thousand gallons of oil a day have been spilled. The more expensive external sensors can detect leaks as small as three gallons a day.

Enbridge doesn't use external sensors on any of its pipelines. Spokesman Graham White said the company is studying the technology and may use it on future projects. But the study won't be done in time for the 6B replacement.

Enbridge is Canada's largest transporter of crude oil, with a 2011 operating income of more than \$1 billion. The company plans to spend \$8.8 billion on pipeline projects in the United States over the next several years, including \$1.3 billion on the 6B replacement project.

Line 6B begins in Griffith, Ind., where Canadian oil is held in a large Enbridge facility. It then travels east across 60 miles of Northern Indiana, crosses into Michigan and finally into eastern Canada.

Work has already begun on the Michigan leg of the project, despite protests and [court challenges](#) [13] from landowners.

Springer, the company spokesman, said Enbridge expects to have its final state permits from Indiana in time to begin construction in May or June 2013.

Indiana Doesn't Control Pipeline Route

Control of 6B's route through Indiana rests almost entirely with Enbridge.

The U.S. Environmental Protection Agency, the Fish and Wildlife Service and the Army Corps of Engineers ensure that wildlife, waterways and wetlands are protected during construction. And PHMSA makes sure pipelines are built and operated according to government safety standards.

But regulating the location of pipelines is left to the states, and no state agency in Indiana has been charged with that responsibility. This means Enbridge can decide where to run its pipeline with little oversight.

Carl Weimer is executive director of the [Pipeline Safety Trust](#) [14], a nonprofit, nonpartisan watchdog organization based in Bellingham, Wash. He said Indiana's situation isn't unusual, because many states don't control pipeline routes within their borders.

"There is a disconnect between the siting of a pipeline and pipeline safety issues," Weimer said. "It's common for state and local agencies to defer to PHMSA. So when PHMSA kind of nods its head that is taken as validation the siting matter has been addressed."

The state of Nebraska found itself in a similar predicament when TransCanada, Canada's largest pipeline operator, proposed building the Keystone XL pipeline through the Ogallala aquifer, which provides drinking water for eight states and 83 percent of Nebraska's irrigation water.

Despite a public outcry over the route, state regulators had no authority to change it. Finally, TransCanada moved the route out of the most fragile area, known as the Sandhills, but residents [are still fighting](#) [15] the project, which is still waiting for approval from the U.S. State Department. In 2011, Nebraska passed a law allowing the state's Public Service Commission to evaluate pipeline routes, [but the new law](#) [16] applies only to pipelines built after the Keystone XL.

In Indiana, the Utility Regulatory Commission regulates intrastate natural gas pipelines, but not oil lines. The Indiana Division of Natural Resources focuses on minimizing the impact of construction projects on water, plants and animals and the navigability of the state's rivers.

Two of the last state permits Enbridge needs to start work on 6B are from the Indiana Department of Environmental Management ([IDEM](#) [17]), which has authority to make limited routing changes when construction affects wetlands and water

crossings. Agency spokesman Robert Elstro said IDEM can place conditions on the permits to ensure compliance with state water pollution laws and regulations.

Save the Dunes is pressuring IDEM to use that authority. In the statement it released last week, the group made two specific requests: That IDEM require Enbridge to pay for independent monitors during the line's construction, and that it force the company to reroute the line around sensitive wetlands.

Enbridge is already familiar with independent monitors. The state of Wisconsin required the company to hire them when Enbridge built an oil pipeline across Wisconsin several years ago. Between 2007 and 2008, the monitors [documented](#) [18] more than 500 violations of state environmental rules, and Wisconsin fined Enbridge [\\$1.1 million](#) [19].

"It speaks to the critical nature of these independent monitors," Pavlovic said. "Without [them], those violations probably would have gone undocumented and undetected."

Rerouting the pipeline around sensitive wetlands also makes sense, Pavlovic said, particularly near Hudson Lake in LaPorte County.

The line is currently routed north of the lake. But Pavlovic said it should be moved south of the lake, where there are far fewer wetlands and where a natural gas pipeline owned by an Enbridge subsidiary is already in the ground. The gas pipeline was built there about a decade ago, after a federally mandated environmental study concluded that the land south of the lake was less vulnerable than the land in the north.

The change would add about a half mile to the line's 285-mile route.

"This is a variation that has been assessed in the past, and [the southern route] was clearly shown to be preferable," Pavlovic said.

Springer, the Enbridge spokesman, told InsideClimate News that the company will "follow any route alternatives" IDEM proposes and "would consider hiring independent monitors."

Emergency Managers Trust Enbridge Response Plans

Since its 2010 Kalamazoo pipeline spill, Enbridge has taken steps to make its pipelines safer, most of them in response to a [Corrective Action Order](#) [20] issued by PHMSA.

The company has developed better tools and technology for worst case waterborne spills, increased spending on pipeline integrity management, added new emergency training programs for employees and will spend \$50 million between 2012 and 2013 to improve "equipment, training and overall response capabilities," Springer said. This year Enbridge held a company-wide emergency response drill in Houston, where it simulated an oil spill into a large body of water.

Emergency managers in three of the Indiana counties the pipeline will cross told InsideClimate News they are satisfied with the company's emergency response plans

for the current 6B and believe the new pipeline will be safe. Although they haven't been provided response plans tailored specifically for the unique conditions a dilbit spill would create, they said they have universal procedures that can cover a multitude of scenarios.

"You have to ask yourself the question: 'Is it [a spill] going to happen?'" said Russell Shirley, director of the Department of Emergency Management in Porter County. "Anything is possible, but it is probable?"

"I don't think it's probable."

The emergency managers said they get most of their information from an annual meeting held by about two-dozen pipeline companies, including Enbridge. The meeting satisfies a federal requirement that pipeline operators make representatives available to local officials.

Shirley said he hasn't seen Enbridge's response plan, hasn't met with an Enbridge representative and has never engaged in any drills with Enbridge. But he said his 20-member hazmat team could quickly confront a spill and that he could call 40 additional hazmat responders from adjoining counties.

Jeff Hamilton, director of LaPorte County's hazmat department, said that outside of the annual meeting, he has only sporadic contact with Enbridge, although a company liaison is always available for calls.

Hamilton said Enbridge has assured him that it can quickly marshal a force of contractors to go to work on a spill.

"We know what kind of support we can get from them and how quickly we can get it," he said.

On one point he is supremely confident: "We can keep it held out of Lake Michigan."

In Lake County, Elijah Cole Jr., deputy director of the Emergency Management Agency, said he has never seen Enbridge's response plans. He thinks they are filed away in the director's office somewhere.

"I'm sure we have them," he said. "The pipeline companies are supposed to give them to us every year."

Cole said his agency depends on Enbridge and other pipeline operators to react to any spills their companies may cause.

"Each one of the pipelines has their own plan," he said. "They know what's in them. The pressure. They know the circumstances of what's going on."

"So they would have all of that information. It would be their responsibility."

Links:

- [1] <http://insideclimatenews.org/sites/default/files/indianamap.jpg>
- [2] <http://www.enbridge.com/>
- [3] <http://insideclimatenews.org/news/20120626/dilbit-diluted-bitumen-enbridge-kalamazoo-river-marshall-michigan-oil-spill-6b-pipeline-epa>
- [4] <http://insideclimatenews.org/news/20120702/phmsa-civil-penalty-enbridge-2010-michigan-oil-pipeline-spill-6b-dilbit-kalamazoo>
- [5] <http://insideclimatenews.org/news/20120710/national-transportation-safety-board-ntsb-kalamazoo-enbridge-6B-pipeline-marshall-michigan>
- [6] <http://insideclimatenews.org/news/20120626/dilbit-primer-diluted-bitumen-conventional-oil-tar-sands-Alberta-Kalamazoo-Keystone-XL-Enbridge>
- [7] <http://insideclimatenews.org/news/20121011/epa-dilbit-enbridge-6b-pipeline-kalamazoo-river-cleanup-tar-sands-oil-sands-keystone-xl-landowners-environment>
- [8] <http://www.savedunes.org/>
- [9] <http://www.documentcloud.org/documents/549857-save-the-dunes-and-partners-joint-statement-on.html>
- [10] <http://phmsa.dot.gov>
- [11] <http://insideclimatenews.org/sites/default/files/assets/2012-09/map.png>
- [12] <http://insideclimatenews.org/news/20121217/keystone-xl-longhorn-pipeline-safety-ogallala-edwards-aquifer-nebraska-texas-austin-tar-sands%20>
- [13] <http://insideclimatenews.org/news/20121002/enbridge-6b-pipeline-michigan-grassroots-landowners- eminent-domain>
- [14] <http://pstrust.org/>
- [15] <http://insideclimatenews.org/news/20121015/nebraska-keystone-xl-pipeline-route-transcanada-ogallala-aquifer-holt-county-groundwater-oil-sands-dilbit>
- [16] <http://insideclimatenews.org/news/20120926/nebraska-keystone-xl-lawsuit-landowners- eminent-domain-heineman>
- [17] <http://www.in.gov/idem/>
- [18] <http://www.wisconsinwetlands.org/Enbridge/EnbridgeListofViolations.pdf>
- [19] <http://www.wisconsinwetlands.org/enbridge.htm#200901>
- [20] http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/CAO_07282010.pdf