

Best proposed pipeline route for Minnesota

Enbridge's Preferred Route for the Line 3 Replacement and Sandpiper Projects provides the best balance for Minnesota, taking into account impacts to both people and the environment.

- Enbridge has operated pipelines in northern Minnesota for 65 years through the same ecosystems and environments Sandpiper and the Line 3 Replacement are proposing to cross.
- Through landowner consultation, state agency and public input, Enbridge continues to make refinements to the Preferred Route.
- In deviating from Enbridge's Mainline Corridor east of Clearbrook, the Preferred Route helps avoid construction in a congested right-of-way, and a more populated area.
- More than 75 percent of the Preferred Route follows pipelines or electric transmission lines already in operation.
- Of those most directly impacted, more than 95 percent of landowners along the Preferred Route whose private property is crossed have granted easements for construction of Sandpiper and the Line 3 Replacement.

Preferred Route survey work

511

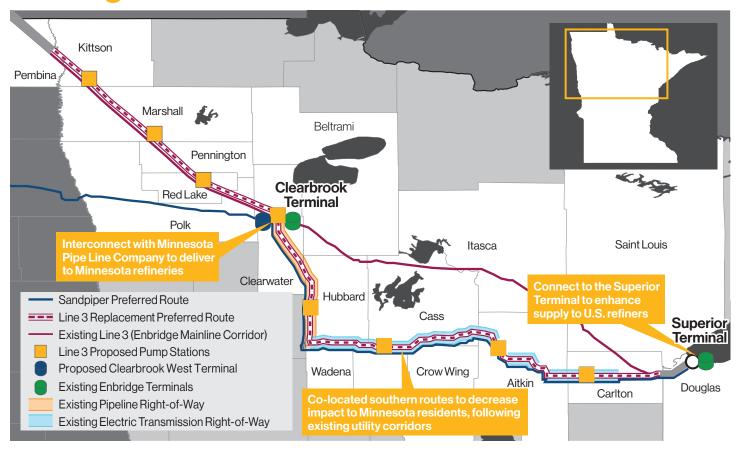
field staff conducted surveys between 2013-2015

242,125

field hours spent between 2013-2015 surveying wetland and waterbodies, cultural resources, and threatened and endangered species



Enbridge's Preferred Route



Any route that does not meet the initial requirements (as identified above) would not meet the purpose of the Projects; such routes were not considered by Enbridge in its development of the Projects' Preferred Route.

Minnesota Administrative Rule 7852.1900 criteria for pipeline route selection:

In selecting a route for designation and issuance of a pipeline routing permit, the commission shall consider the impact on the pipeline of the following:

- human settlement, existence and density of populated areas, existing and planned future land use, and management plans;
- the natural environment, public and designated lands, including but not limited to natural areas, wildlife habitat, water, and recreational lands;
- c lands of historical, archaeological, and cultural significance;

- economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;
- E pipeline cost and accessibility;
- wise of existing rights-of-way and right-of-way sharing or paralleling;
- **G** natural resources and features;
- the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;

- cumulative potential effects of related or anticipated future pipeline construction; and
- the relevant applicable policies, rules, and regulations of other state and federal agencies, and local government land use laws including ordinances adopted under Minnesota Statutes, section 299J.05, relating to the location, design, construction, or operation of the proposed pipeline and associated facilities.



Route Selection Process

Enbridge developed the Projects'
Preferred Route based on its
extensive pipeline routing experience,
knowledge of applicable federal
and state regulations, as well as
input from agencies, landowners
and local governments.

Enbridge identified and analyzed routing constraints, human and environmental impacts, opportunities, and potential route alternatives. Enbridge also considered where the Projects must enter, deliver within, and exit Minnesota in order to meet the needs of shippers served by Line 3 and Sandpiper.

Once a general route location was identified, Enbridge conducted detailed environmental and engineering survey work to further refine the route in order to avoid or minimize human and environmental impacts, as well as identify appropriate mitigation measures to limit potential impacts during Project construction and operation.

The resulting Preferred Route meets the Project's purpose, maximizes opportunities for co-locating within a utility corridor, and minimizes potential impacts resulting in strong support from both public and private sectors.

Enbridge's Projects have broad and deep support throughout Minnesota. State legislators, county commissions along the route, chambers of commerce, farm bureaus and citizens have adopted resolutions or written letters of support. Additionally, Enbridge has secured easement agreements with more than 95 percent of the landowners along the Preferred Route.

Line 3 Replacement - North Dakota border into Clearbrook

- The replacement pipeline will be co-located with the existing Line 3 and Enbridge's Mainline Corridor from the Minnesota, North Dakota border.
- The replacement pipeline will also follow existing utility corridors for more than 98 percent of the route west of Clearbrook.

Sandpiper - North Dakota border into Clearbrook

- Sandpiper must originate at Enbridge's Beaver Lodge Station near Tioga, North Dakota and connect to Enbridge's Clearbook Terminal.
- Sandpiper will follow Enbridge's existing Line 81 (in service since 1962) to Clearbook.

Line 3 Replacement and Sandpiper - East of Clearbrook into Superior

- Line 3 and Sandpiper both connect in Clearbook, this intersection with Minnesota Pipe Line Company is necessary to deliver both Canadian and Bakken crude oil to Minnesota refiners.
- Line 3 and Sandpiper follow existing pipeline and electric utility corridors for more than 75 percent of the route east of Clearbrook.
- Both pipelines will connect with Enbridge's existing Superior Terminal in order to bring growing supplies of North Dakota and Canadian crude oil to refineries in the United States and eastern Canada.

Potential environmental impacts of the Preferred Route

The Project route, facility design, and construction procedures have been designed to minimize impacts on the environment. Environmental impacts related to pipeline construction will primarily be temporary disturbance to land, wetlands, and waterbodies. Environmental impacts related to pipeline operations will primarily be limited to routine maintenance and mowing activities.

In 2014, Enbridge started working with federal, state, and local regulatory agencies to design Project plans and permit conditions to minimize impacts to the environment. Enbridge has already committed to a variety of resource-specific mitigation measures.

Enbridge will retain environmental inspectors (Els) during project construction. Els will be responsible for understanding all regulatory requirements and permit conditions, and ensuring that contractors abide by these conditions. The Project will also be supervised by third-party environmental monitors who will report directly to appropriate agencies.

Due to risks during construction within a congested right-of-way and working within close proximity to high-density population centers, Enbridge needed to develop another route, which is the Preferred Route.

