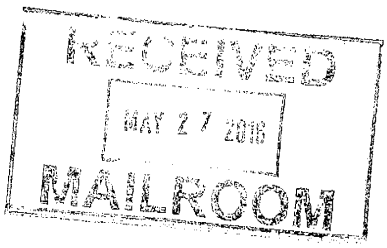
FRIENDS of the HEADWATERS



May 26, 2016

Ms. Jamie MacAlister
Environmental Review Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
Saint Paul, MN 55101

Re: PUC Docket Numbers (Sandpiper: PL-6668/CN-13-473 and PPL-13-474, Line 3: PL-9/CN-14-916 and PPL-15-137)

Dear Ms. MacAlister,

Please find enclosed copies of Friends of the Headwaters (FOH) previously submitted commentary for both the Sandpiper and Line 3 dockets. Also included is a full set of maps developed by FOH. These materials are to be included with the materials MCEA/FOH are jointly filing (via MCEA) and are to be entered into the record for the Sandpiper/Line 3R draft scoping decision per the PUC's and the Minnesota Appellate Court's ruling for a robust and comprehensive environmental impact study (EIS) on these two pipeline projects.

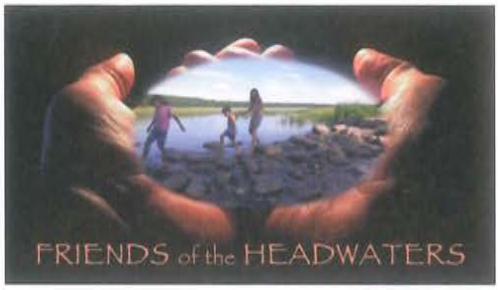
FOH has concerns that the Department of Commerce may intend to rely on NDPC's previously submitted work on the Route Permit, even though that material was not prepared as part of an EIS, and the Commissioners have ordered that the Route Permit scoping document be withdrawn. An EIS record on environmental impacts must be much broader and more robust than what NDPC has previously submitted.

The enclosed commentary and maps identify and illuminate the numerous environmental and socio-economic issues that all need to be included, analyzed and evaluated in this EIS process. In order to insure a full, robust and comprehensive EIS, we expect that to be the case.

Sincerely,

Richard Smith
President

Friends of the Headwaters
P.O. Box 583
Park Rapids, MN 56470
www.friendsoftheheadwaters.org



POSITION PAPER

ENBRIDGE/NORTH DAKOTA PIPELINE COMPANY (NDPC) LLC
SANDPIPER PIPELINE PROJECT

Public Utilities Commission (PUC) Docket Number: PL-6668/PPL-13-473
Public Utilities Commission (PUC) Docket Number: PL-6668/PPL-13-474

August 20,2014

Prepared by
Richard Smith
Friends of the Headwaters (FOH)
P.O. Box 583
Park Rapids, MN 56470

Friends of the Headwaters opposes the Enbridge/NDPC Sandpiper pipeline as currently projected to cross Minnesota's lake country from Grand Forks, ND to Superior, WI. We believe this proposed corridor will NOT protect the high quality waters only this route. Enbridge/NDPC could not have picked a worse route across Minnesota's critical and valuable water resources.

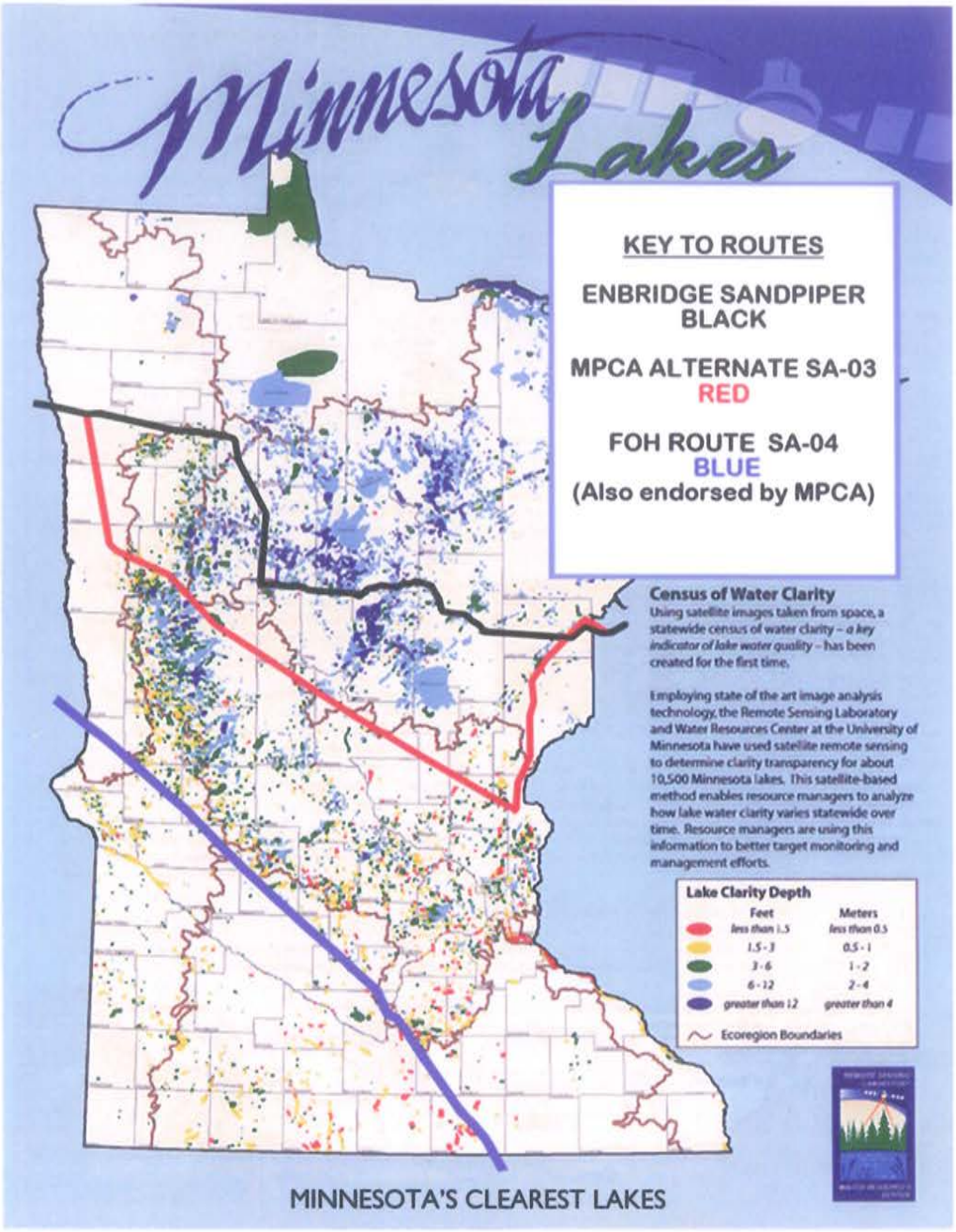
Therefore given the magnitude and scope of this project and the company's request to construct a large stretch of a totally new pipeline corridor with the already announced prospects of building an additional pipeline, the larger Line 3 Rebuild, in this new corridor, FOH is asking the Commissioners to give very serious consideration to the overall environmental and economic consequences of NDPC's proposed route through Minnesota's cherished water resources.

FOH believes there is a better way to accommodate the industry's demand for this new pipeline without exposing Minnesota's most sensitive waters to the potential risks inherent with pipeline facilities. Our suggested alternative route or routes would still provide construction jobs and dollars and retain the pipeline tax benefits for the state. These alternative routes would remove the risks to our lakes, rivers, wetlands, wild rice lakes and drinking water sources. These are issues that concern all Minnesotans who spend a great deal of money to be in, on and around water. This is also an issue about drinking water not only for Minnesota's northern communities and residents, but also the millions who reside in the Greater Minneapolis/St.Paul Metro area. For many that drinking water source is the Mississippi River.

Although FOH does not have remotely near the financial resources of Enbridge, through thoughtful, diligent research and many, many volunteer hours, FOH has produced viable testimony substantiating its proposed routes of which we are presenting below. Some of these maps were presented to you during my testimony at your August 7 hearing. (As an aside, thank you for your endurance and patience on what was a very long day for you all. The opportunity was most appreciated by many who spoke.) The maps have been altered to feature the two routes, NDPC's and SA-03, which you approved for inclusion in the CEA plus FOH's preferred route, SA-04.

Please note: these initial maps are to illustrate and compare the three routes to particular environmental features.

Friends of the Headwaters
ROUTE COMPARISON MAP



Clear lakes are the key to Minnesota's tourism business.

Fishing alone generates $342 million annually in tax revenue for the state. $4.3 billion in annual retail sales is earned from fishing, hunting and wildlife watching.*
*National Sportfishing Association

For Hubbard County tourism was $99M annually with 60% in June - Aug.
For Crow Wing County it was $150M with 49% in June - Aug.

A tourist dollar is spent by a person with a residence beyond 50 miles of the county.

Note that this study was completed during a recessionary economic period 2007-08. This is the latest study with local and county data.

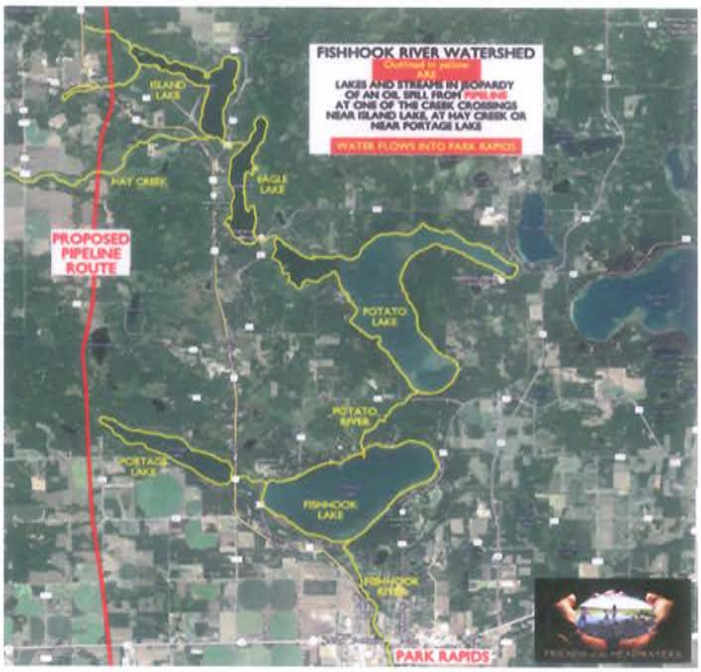
http://www.exploreminnesota.com/industry-minnesota/research-reports/researchdetails/download.aspx?id=811

Clear lakes mean high lake shore property values which is a key factor in available property taxes to their respective counties.

The Fishhook Watershed in Hubbard County is worth $2 billion alone.

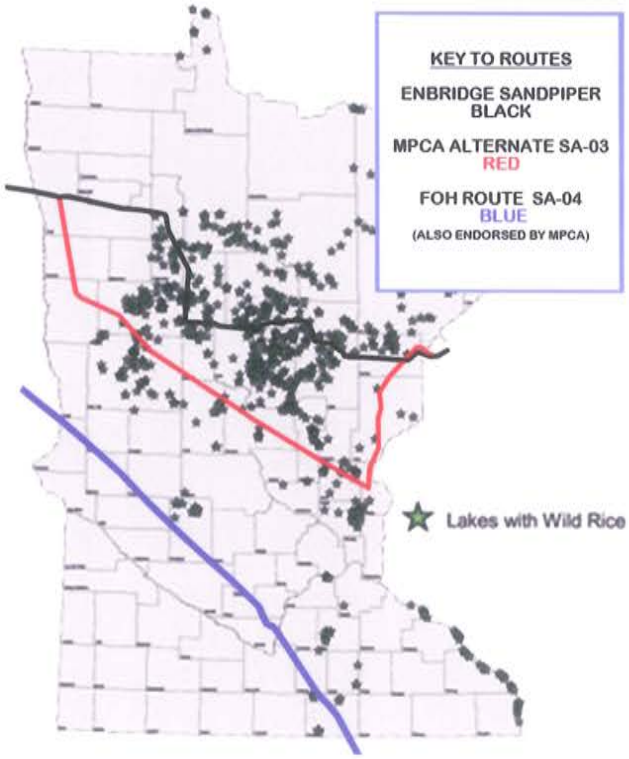
NDPC's proposed route crosses the largest tributary, Hay Creek, to the Fishhook Chain of Lakes, 4700 water acres.

If a large rupture on the order of the Enbridge 1991 Grand Rapids, MN spill (1.7 million gallons) occurs at Hay Creek near the top of that watershed, it would dramatically impact the property values on those lakes resulting in a significant loss of tax revenue to the county, state, Park Rapids and its school district. It will be years before the county recovers from the damage. Not only will it incur the loss of tax revenues, but also the loss of residents, small businesses, tourists, and property values.



Multiple those property values for the other lake chains along the proposed Sandpiper route. Whitefish, Pine River, Fifty Lakes, Big Sandy, Lake Superior, and others.

Friends of the Headwaters
ROUTE COMPARISON MAP

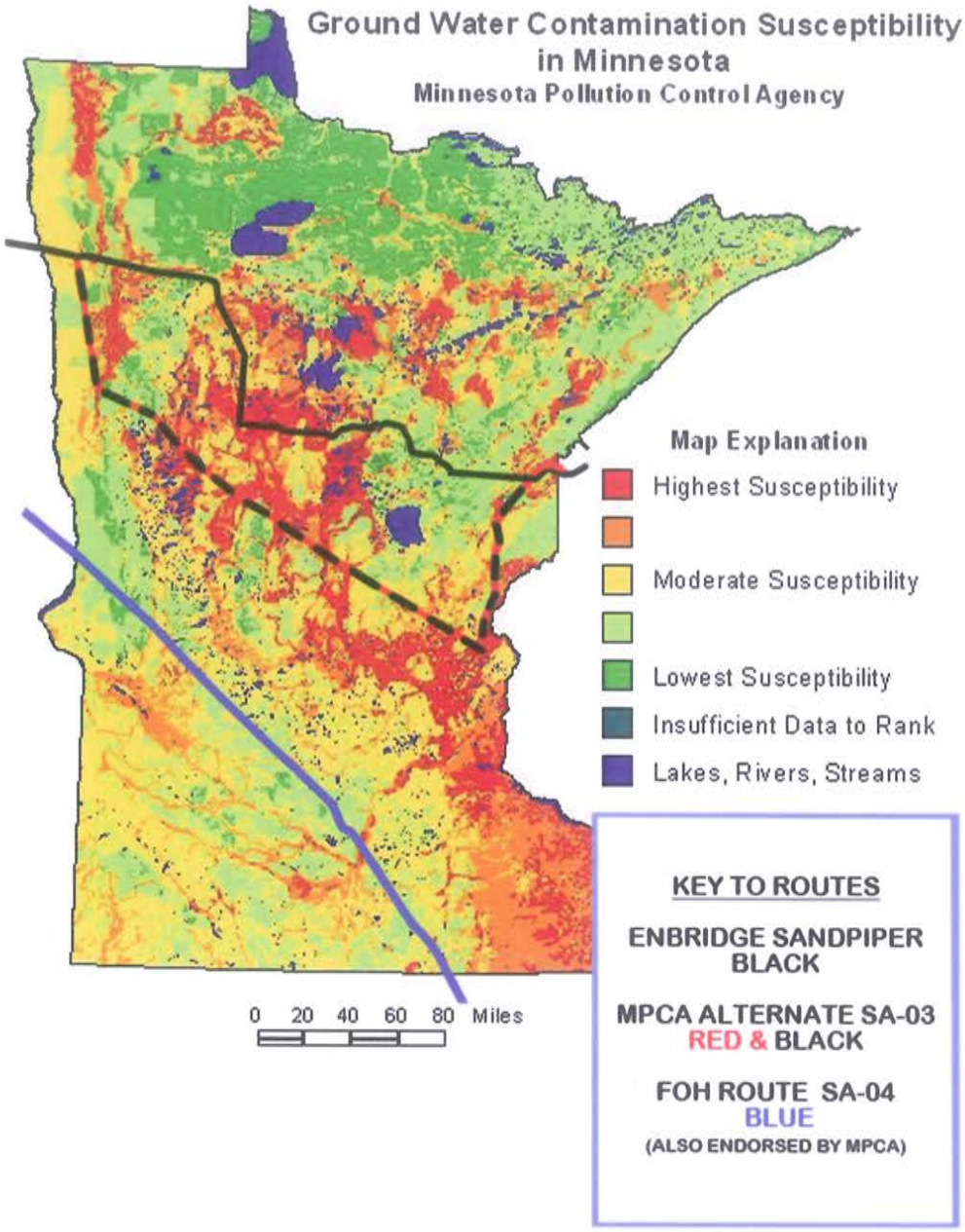


Could Enbridge have picked a worse route for jeopardizing the state's prime wild rice lakes and wetlands?

Wild rice is Minnesota's native grain and a part of our heritage and history. For the Ojibwe Nation it is their culture and identity. To them wild rice is priceless.

Research done during the Polymet Mine hearings showed wild rice to be extremely sensitive to sulfides and sulfates, which are found in most crude oils to varying degrees. Will a proper risk analysis be executed to determine the financial and social damage to the Ojibwe and all MInnesotans from a spill in these wild rice waters? Will that risk assessment also include the potential damage to Minnesota's waterfowl populations which depend on wild rice.

Friends of the Headwaters
ROUTE COMPARISON MAP



Nothing is more critical than our drinking water sources.

Those bright red areas on the above map, besides being extremely susceptible to contamination, also just happen to be critical aquifers. Besides providing drinking water these aquifers also irrigate thousands of acres of farmland for Minnesota's farmers and the state's agri-business economy.

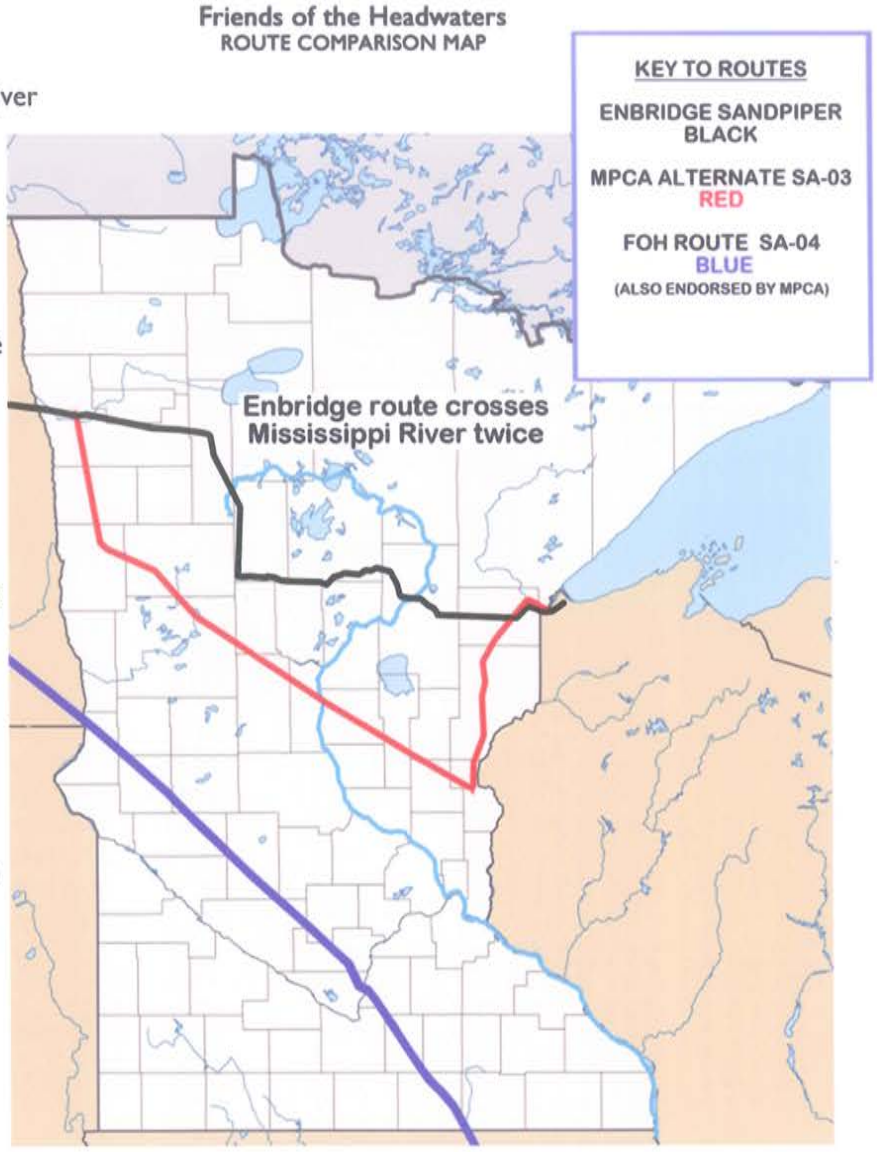
RDO/Lamb Weston Company in Park Rapids earns $500 million in annual revenue from potatoes. The Straight River aquifer not only grows great potatoes for MacDonald's french fries; it supports the county's largest employer; it supplies all the drinking water for the county seat, Park Rapids and provides clear, cold water for a nationally renowned brown trout stream. All that at that right turn elbow in the Enbridge/NDPC route.

Will the CEA evaluate the full environmental and economic consequences of a spill scenario in the Straight River aquifer? Will it include benzene, naphathalene, toluene in the analysis?

NDPC's proposed route will cross the Mississippi River twice. A spill on the river will expose downriver communities dependent on the river as a drinking water source to a toxic mix of carcinogenic chemicals.

Stan Sattinger, a registered mechanical engineer, provided this information on the risk to drinking water posed by the Alberta Clipper Line 67. Since the larger Line 3 Rebuild is planned to run parallel to the proposed Sandpiper corridor, the info herein on Line 67 should also apply here.

"A study by Professor John Stansbury of the Department of Civil Engineering of the University of Nebraska addressed worst-case spills from the proposed Keystone XL pipeline's crossings of the Missouri and Yellowstone Rivers. He predicted that benzene concentrations at either event would rise to 19 times the Safe Drinking Water Act Maximum Contaminant Level (MCL) for benzene at the spill location, and that concentrations in the plume would remain above the MCL for a distance of 450 miles downstream.



The benzene concentrations for a worst-case spill from the upgraded Line 67 at the town of Ball Club, Minnesota, crossing of the Mississippi River have been calculated using Prof. Stansbury's methods. At the spill location, the concentration would reach 32 times the MCL, and it would remain above the MCL over a distance of 280 miles as the plume travelled downstream. The drinking water intakes for the communities of Grand Rapids, Libby, Aitkin, Brainerd, Royalton, and St. Cloud would be affected. Serious health risks would be created for tens of thousands of Minnesota residents, and aquatic habitats and recreational activities would be compromised. Other chemical constituents from the spill would pose additional risks to humans and to aquatic species in the river.

This kind of analysis is not mandated by Section 7853.0620 Subpart 1, Point discharges to water, or any other section of Minnesota Rules, but I believe that it should be. This increased risk to drinking water supplies in Minnesota is a risk that should not be taken."

Note: his Mississippi River crossing point (Ball Club, west of Grand Rapids) is much farther upstream than the second proposed Sandpiper/Line 3 Rebuild/Mississippi River crossing point. A benzene spill on the river would pose a greater risk to drinking water supplies due to closer proximity to downstream communities including the Greater Minneapolis/St. Paul metropolitan region.

The first crossing point is a few miles downstream of our oldest state park, Itasca, home to the headwaters of the river. At that crossing the daily pipeline volume, 375,000 BPD or 15.750,000 gallons per day, will exceed the average daily volume of the young river by fourfold.

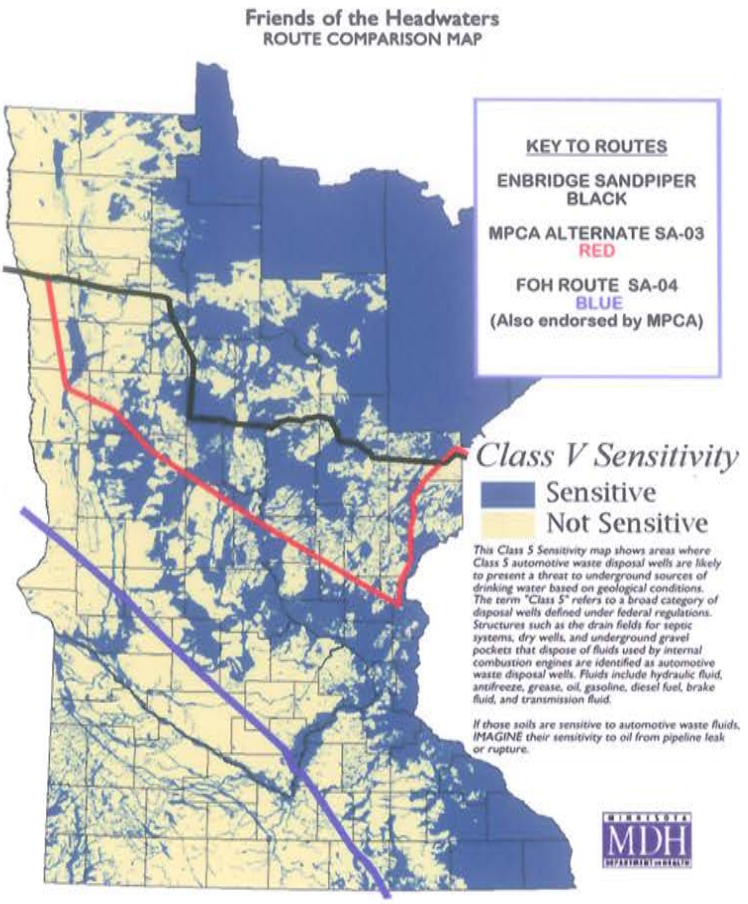
Enbridge proposed route has high risk potential for the headwaters of three major watersheds, Red River of the North, Lake Superior and the Mississippi plus exposure to the St. Croix National Wild and Scenic River watershed.

The MPCA listed 28 stream crossings along the Enbridge/NDPC Sandpiper route that if a spill or rupture were to occur, emergency response crews would not be able to access within 2000 ft of the crossing.

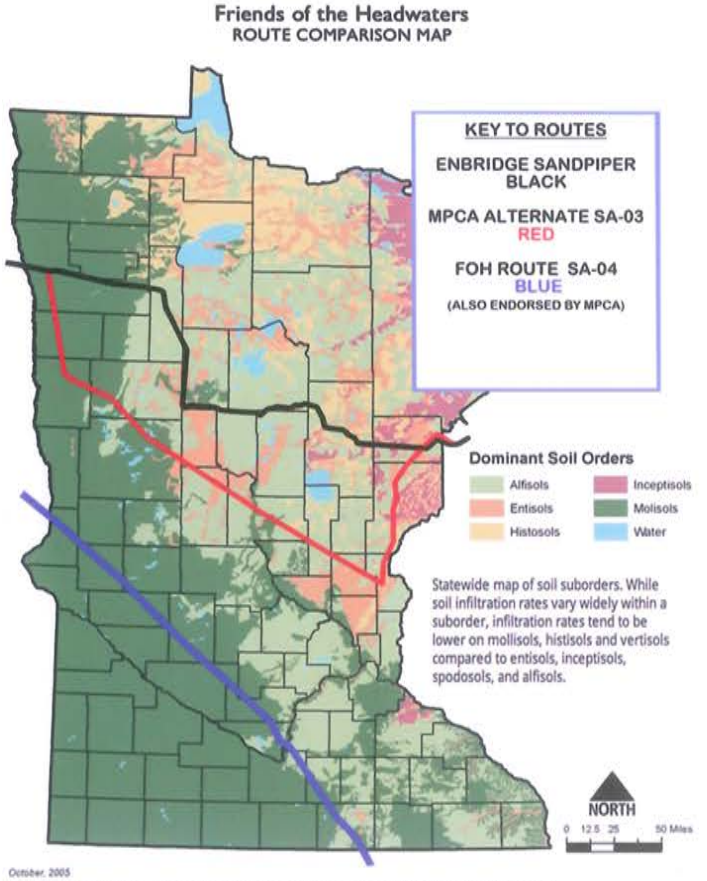
All pipelines leak eventually. While conducting a complete EIS for the Pebble Mine near Bristol Bay, Alaska, the EPA examined the history of pipeline spills relative to the age and mileage of all pipelines.They determined that every pipeline will leak at least once every 30 years over every 30 miles of length. Not surprising the history of Enbridge spills along their northern corridor in Minnesota fits that profile quite well. To quote from a 2003 MPCA report to the NTSB: "nearly three dozen non-third-party spills, leaks or ruptures on just one Enbridge 34 inch line between 1972 and 2003. About 87% of the petroleum gallons spilled from all Minnesota pipelines in the period 1991 to 2002 was from that Enbridge line. This is equal to about 48% of the reported gallons of petroleum spilled from all sources in Minnesota during that period. Included in the Enbridge 34 inch line spills are the 1.7 million gallon rupture in 1991 in Grand Rapids and the 250,000 gallon rupture on July 4, 2002 in Cohasset. 300,000 gallons of the Grand Rapids spilled flowed to a river. Luck with the timing of the spill and river ice conditions kept thousands of gallons of crude from entering the Mississippi River. Oil in the Mississippi would likely have fouled the St. Cloud, St. Paul, and Minneapolis drinking water intakes for months. Likewise the Cohasset spill could have easily entered the Mississippi River if it had happened in a different segment of that 34 inch pipeline."

How much higher are the construction costs of multiple bores under rivers and streams? What are the contingency plans and costs for controlling "frackouts" in stream beds during a bore. *Friends of the Headwaters* has learned a "frackout" occurred on nearly every stream or river bore during this area's last pipeline construction project in 2007. What are the costs and issues for winter construction of wetland areas along the route? How do the company and clean-up agencies access those wetlands areas in non-winter seasons if and when a leak/spill/rupture occurs? What are the economic consequences of summer construction and congestion issues with roads and traffic? How will availability of lodging not just for construction crews but also for tourists be affected. How will the compatibility of construction workers be with tourists, residents and local businesses. How trustworthy and reliable will these workers be with respect to property and paying for services. Some resort owners have informed *Friends of the Headwaters* they will not provide lodging for pipeline workers due to previous pipeline worker negative experiences. Will Enbridge/NDPC be financially responsible for covering damages or lost income from disreputable and irresponsible workers? *Friends of the Headwaters* believes only a properly executed EIS will provide the comprehensive assessment for the above scenarios.

The Class V Sensitivity map regards soils especially sensitive to the discharge of petroleum based materials. Compare those 'sensitive' areas along the Sandpiper route to the similar bright red areas indicated on the "Soils susceptible to ground water contamination" map.



The second soils map illustrates various soil types. The dark green area consists of mollisols, the soil order with lower infiltration rates. FOH's SA-04 traverses the lowest risk soils to infiltration, the migration and contamination of oil spill effluents.



Note: Enbridge's Mark Curwin, Senior Director for Strategic Coordination of Major Project Executions in the US, stated their construction preference is to build pipelines across farmland.

He made these remarks at a public meeting in Park Rapids on Jan. 29, 2014.

Mr. Curwin gave the reasons
of better soils,
easier construction,
easier access,
less natural habitat destruction,
cheaper and quicker.

After construction the farmland can be put back into crop production.

Access to leaks and spills is much easier.

Winter wetland construction would be at a minimum.

Should the state be sacrificing its natural resources to a new energy corridor when an existing corridor, the Enbridge/Alliance natural gas pipeline corridor, is already available and crosses the state at its lowest risk point to the environment and economy.

The MPCA conducted a comparative environmental analysis of the proposed routes (SA-01 to SA-08) listed on the DOC EERA's map . A high score was least damaging to the environment, a low score the most damaging.

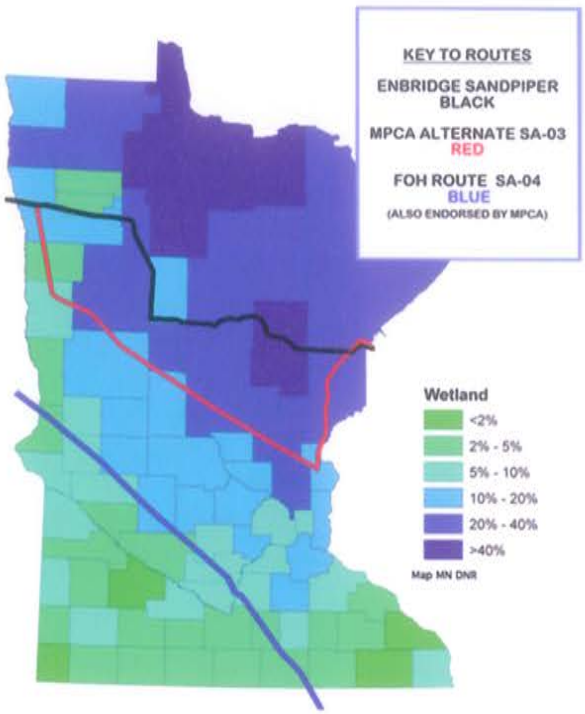
FOH's SA-04 scored the highest,

Enbridge Sandpiper - the lowest.

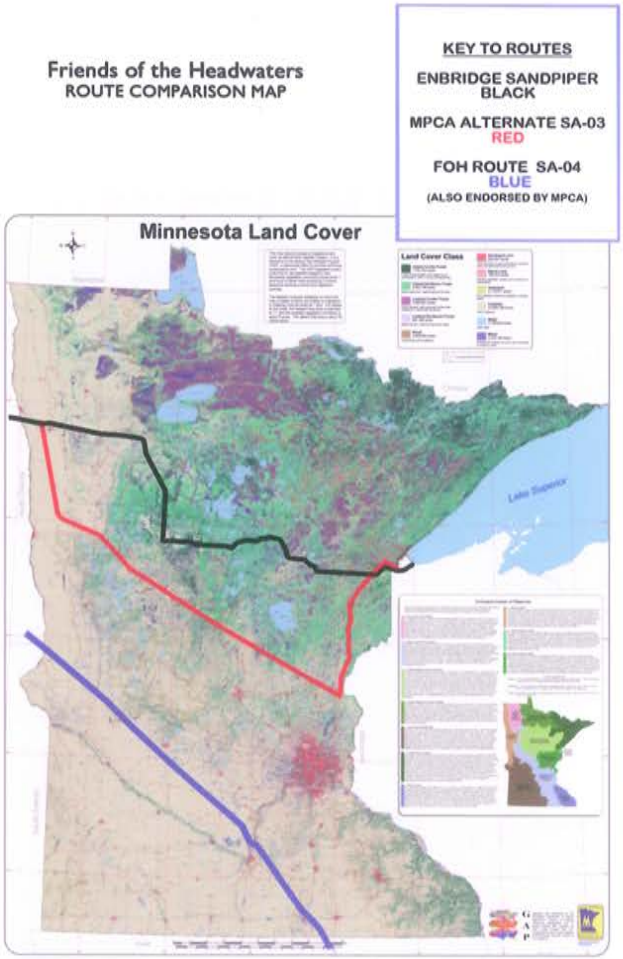
AT RISK: MINNESOTA'S

CLEAREST AND CLEANEST LAKES
GROUND WATER AQUIFERS
WILD RICE LAKES
WETLANDS
MOST SENSITIVE SOILS TO SPILLS
DIVERSITY OF VEGETATION
SENSITIVE ECOLOGICAL ZONES
THE LAKE SUPERIOR BASIN
HIGH VALUE RECREATIONAL AND RESIDENTIAL WATERS

Friends of the Headwaters
ROUTE COMPARISON MAP

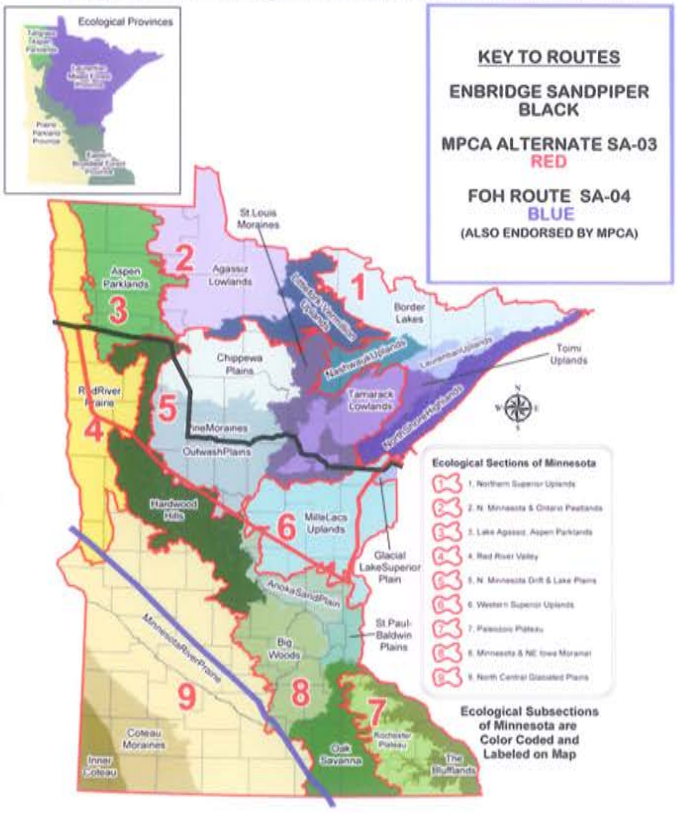


Friends of the Headwaters
ROUTE COMPARISON MAP



Friends of the Headwaters
ROUTE COMPARISON MAP

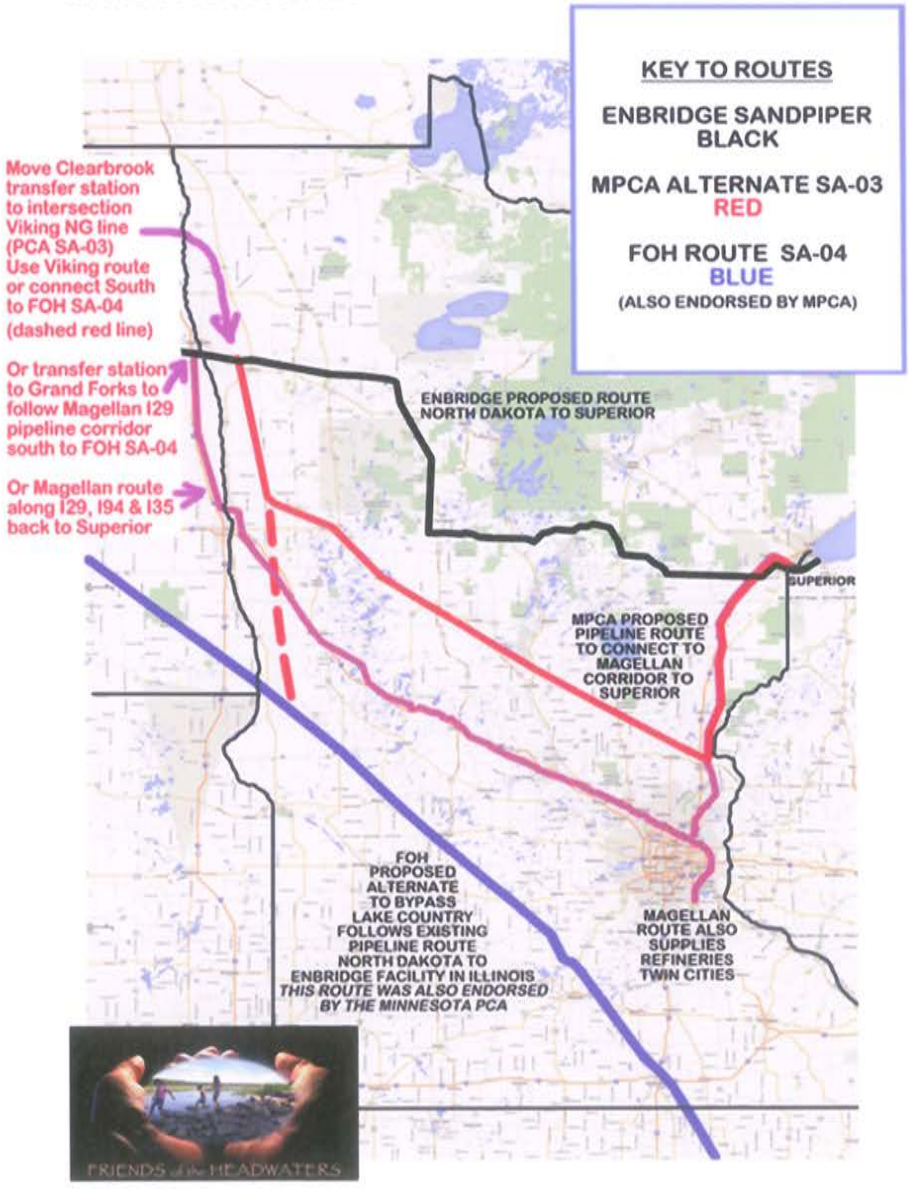
Minnesota Ecological Sections and Subsections



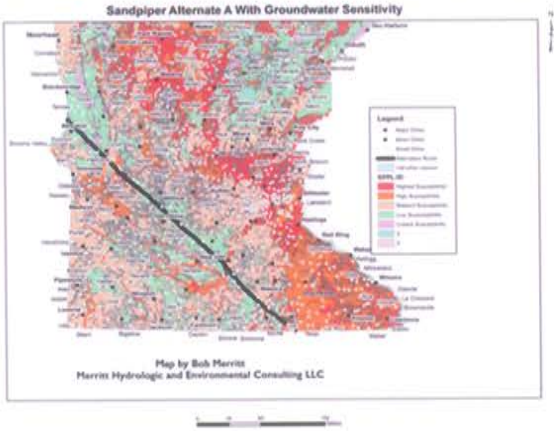
As illustrated above the risks to Minnesota's environment and especially its valuable and critical northern water resources and water-based economy are too great. Why is the state sacrificing these waters for so little gain when so much is at risk. Most of the oil traversing the state is traveling elsewhere. Now that a mostly new pipeline corridor is being proposed by Enbridge, a company with less than a stellar record, it is time for the state to slow down and strongly consider all the factors as to where this pipeline should be located. And as previously stated, the company's intention is to apply to the state for a permit next year to build another larger pipeline, the Line 3 Rebuild, next to the Sandpiper pipeline.

FOH proposes the state reject the company's requested route and consider the following option:
Move the Sandpiper proposed transfer station scheduled to be built near Clearbrook, but not at its current Clearbrook plant, west towards Crookston where the Sandpiper pipeline intersects the Viking natural gas pipeline corridor OR move the transfer station to North Dakota where the Sandpiper intersects the Magellan oil pipeline corridor. From either of those locations the Sandpiper can turn south along those existing corridors and connect to SA-04. SA-04 in its entirety connects to an existing Enbridge facility in Flanagon, IL. From Flanagon, oil can be moved on the Enbridge system either east to Canada or south to the Gulf, both of which are supply points Enbridge says they must meet. If it is necessary to meet an obligation to MinnCan and the Flint Hills Refinery in the south Metro, Enbridge can use the abandoned MinnCan Wood River pipeline to move oil north to Flint Hills. The Wood River line runs between Minneapolis and Missouri.

Friends of the Headwaters
ROUTE COMPARISON MAP

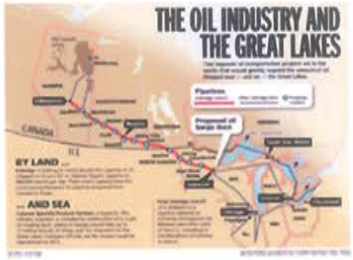


Two additional maps by Bob Merritt, hydrologist, showing FOH SA-04 in better detail.



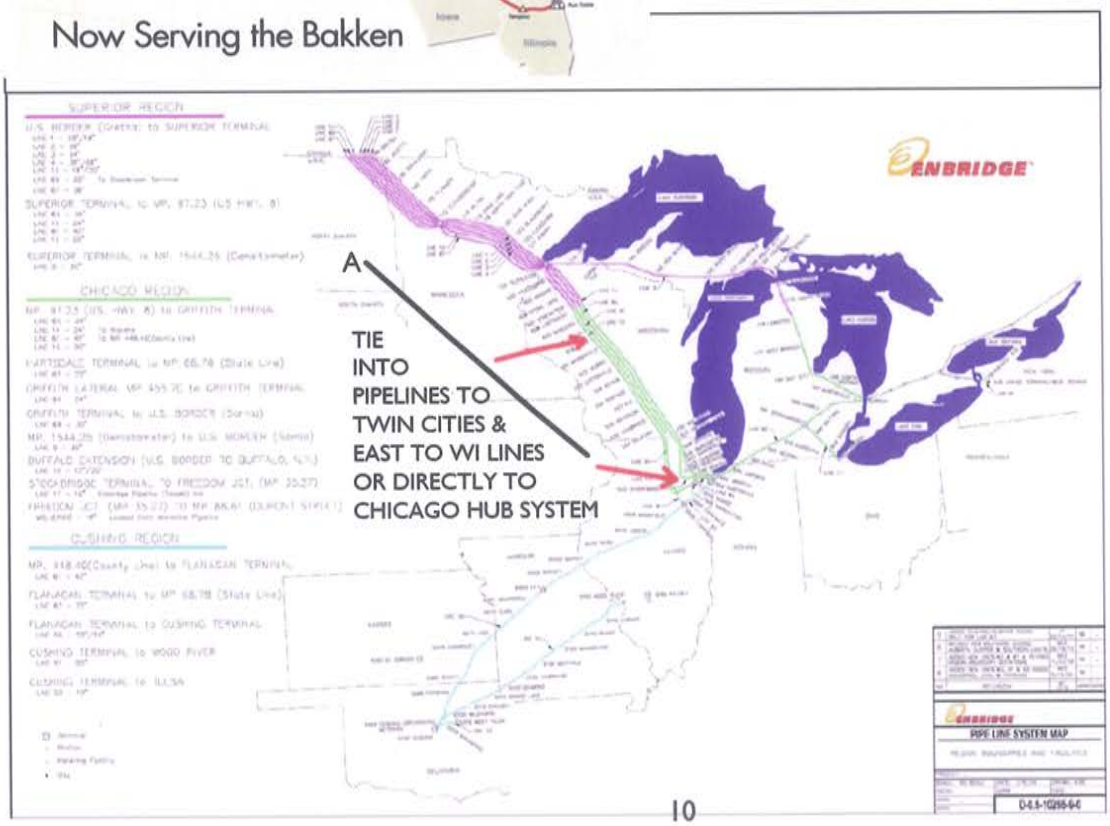
Minnesota still gets to keep jobs the construction will provide as well as North Dakota plus Iowa and Illinois.

Although the route does not end in Superior, it still ties into the existing Enbridge system in Illinois with routing options to Michigan and Ontario that avoid our greatest freshwater lakes of Lake Superior and the Mackinac Straits of Lakes Michigan and Huron.



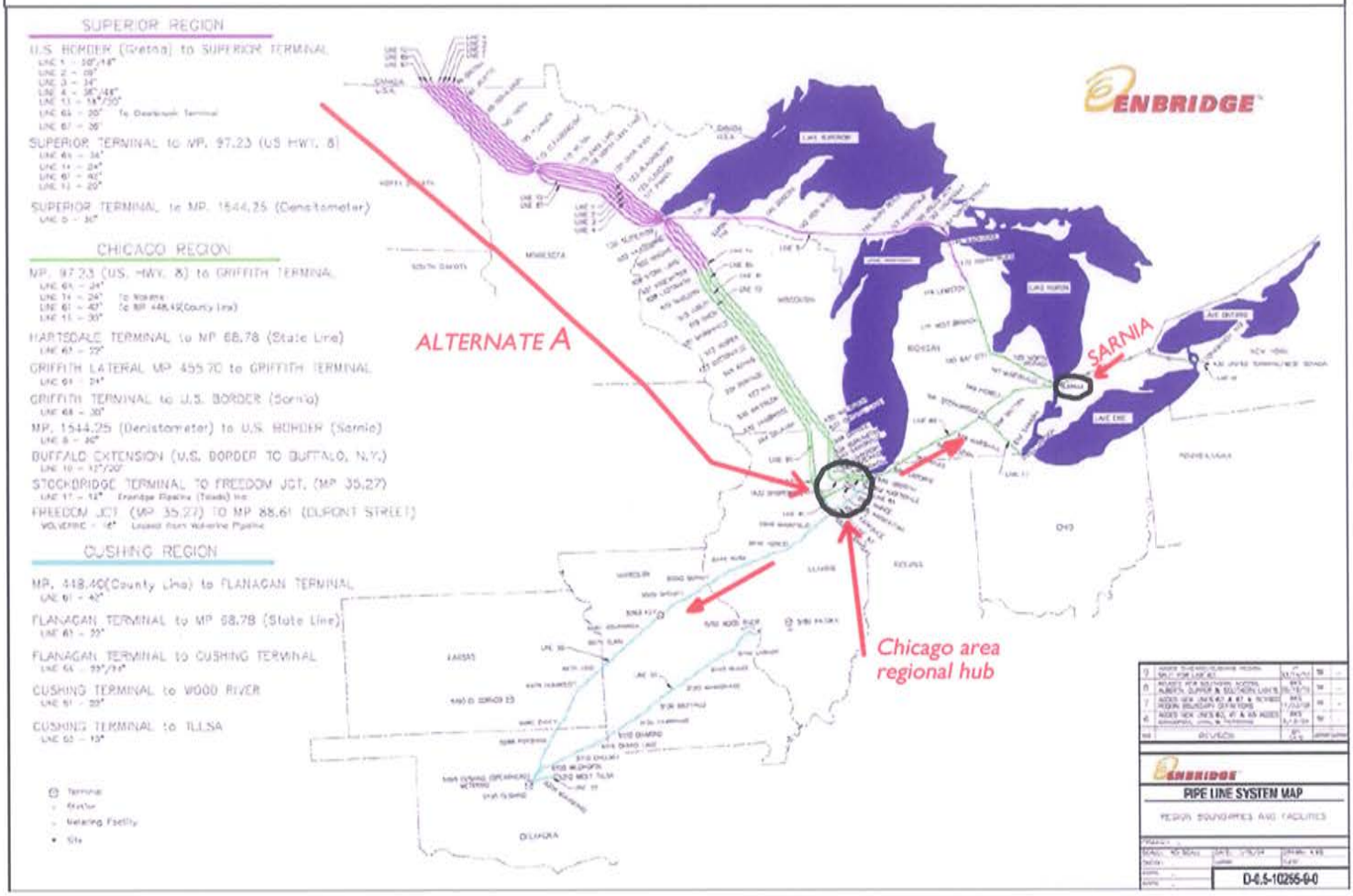
Since it's an existing corridor the company should have access to the mapping previously done for the pipeline already there. FOH SA-04 also intersects pipelines in southern Minnesota owned and operated by other companies which provide the option of re-routing Bakken crude to the refineries in Rosemont and Saint Paul Park in the south Twin Cities Metro.

The Illinois Hub also allows Enbridge access to its pipelines to Oklahoma and points south.

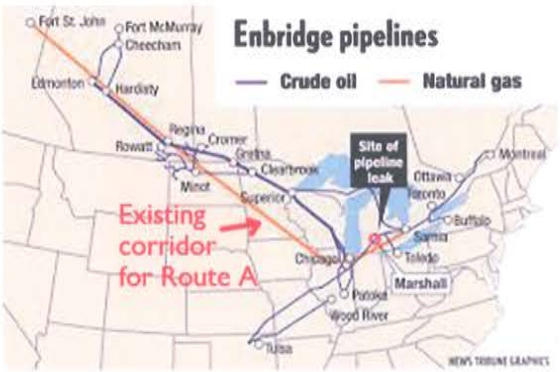


The *FRIENDS of the HEADWATERS* disputes Enbridge/NDPC's contention that the Sandpiper must end in Superior, Wisconsin. Enbridge has provided no rationale for the route ending in Superior other than "We want it. It connects to our existing system in Superior." The Alternate Route SA-04 proposed by *FRIENDS of the HEADWATERS* also connects to their existing system hub near Chicago, Illinois. It does not prevent Enbridge from then transporting the Bakken crude either south to Oklahoma and the Gulf Coast nor across Illinois, Indiana, Michigan and across the border to Sarnia, Ontario, Canada on their existing system.

Figure 7853.0510-2
Pipeline System Map



FOH SA-04 already fits into their existing pipeline corridor system as evidenced by the map at right. Alternate Route A also appears to be a more direct route from the North Dakota Bakken Oil Fields to the primary energy markets of the US Midwest.



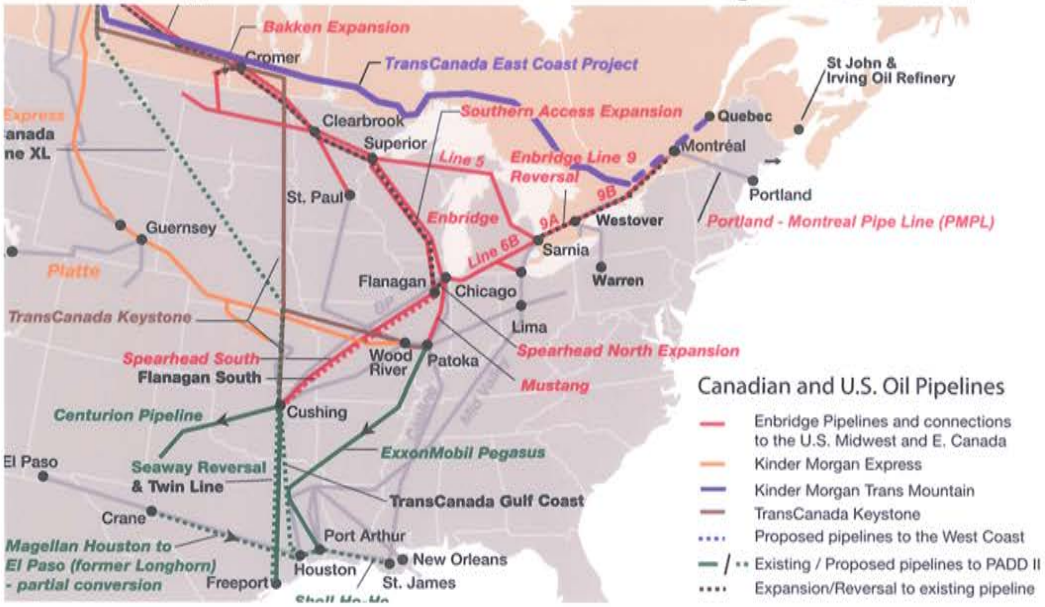
Friends of the Headwaters believes the citizens of Minnesota have the right to determine the route parameters of this pipeline corridor, not Enbridge/NDPC. The considerations of the Sandpiper pipeline and the Line 3 Rebuild proposed to run alongside the Sandpiper should not be dictated to the citizens of Minnesota by the company. The company already has too many pipelines crossing Minnesota's most valuable waters and lands.

The cumulative risk of adding additional lines to this region is too high to have the routing parameters set by what Enbridge 'wants'. They should not be allowed to frame the debate on this issue. The citizens of Minnesota and this state's governing and regulatory agencies need to reject this framing by Enbridge/NDPC

and reframe the discussion regarding the need and route of the proposed Sandpiper pipeline as what is beneficial to Minnesota, its people, its communities and its natural resources. Until Enbridge/NDPC adequately provides a detailed explanation for demanding why the Sandpiper pipeline must end in Superior, Wisconsin, *Friends of the Headwaters* believes all alternative routes must be given full consideration, even those proposing a system overhaul of how and where Enbridge wants to cross the state.

If Enbridge/NDPC were truly committed to protecting our lakes, rivers, wetlands, aquifers and lands as they publically state they are, then prove it by not just giving Minnesotans statistics about how safe their pipelines are (their history says otherwise), but by actually moving their proposed route to the lowest risk part of the state as portrayed on the previously presented illustrated maps.

Costs should not be a factor. After all, once the Sandpiper is constructed, 375,000 barrels of oil will pass through it daily. At the current world price for a barrel of oil that amounts to $40 million dollars per day or $14.6 billion dollars annually. Even though Enbridge is charging a fee to move the amount of oil, it should not take too many years to recoup their construction costs. Plus it appears from the map below the company has plans to expand the pipeline system through Wisconsin. The money allocated for that extension could easily be applied to the extra construction costs of building Alternate Route A.

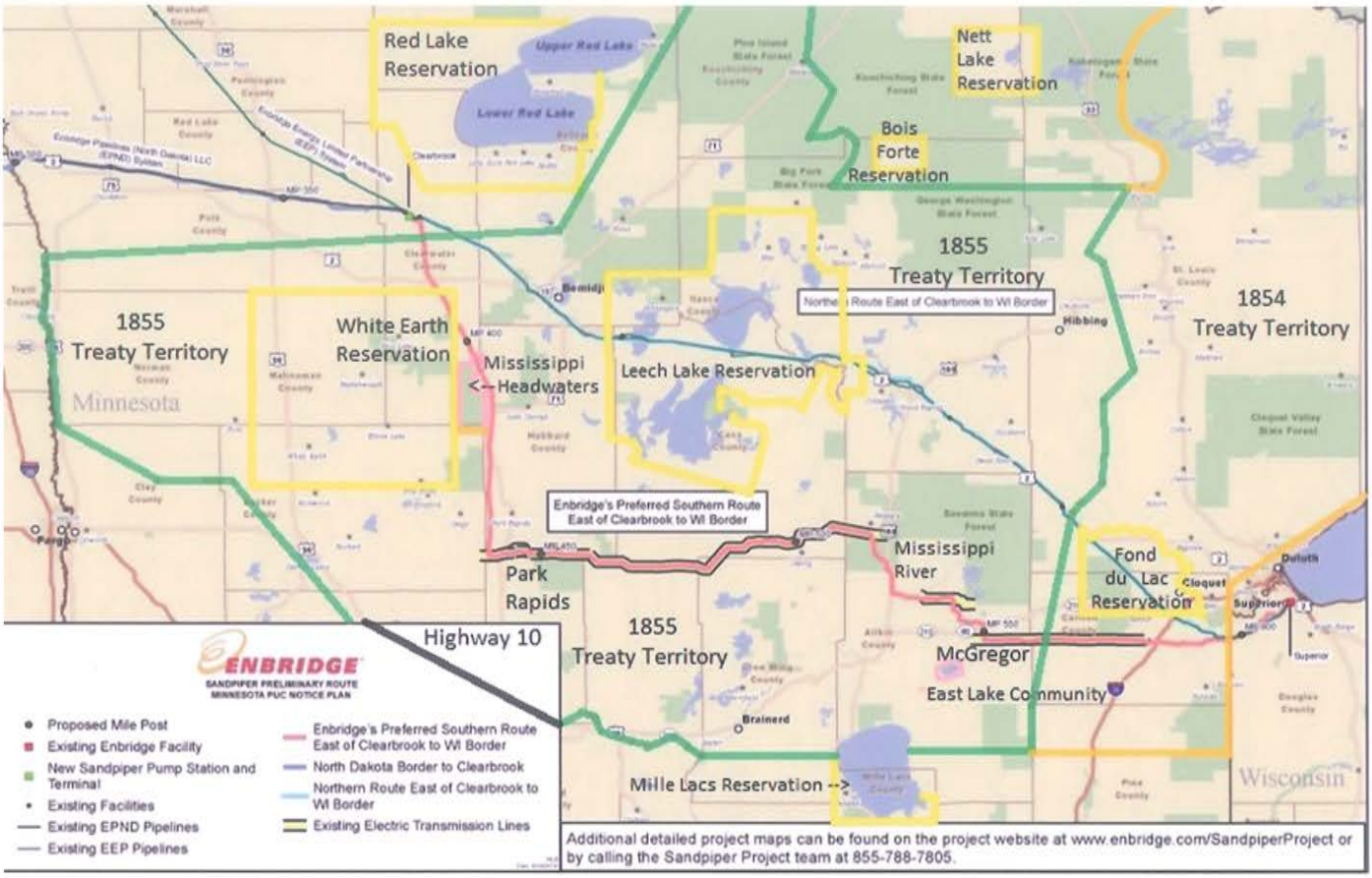


Since the company is adamant about Superior as a destination for the Bakken crude, perhaps this proposed extension in Wisconsin could be used to move the oil from the end of FOH SA-04 back north to Superior.

Enbridge has ambitious expansion plans not just in Minnesota but nationally it appears.

If their intensions are to expand rapidly towards the southern U.S. Alternative Route A would conform to those expansion plans more directly than their current proposed Sandpiper corridor.

In summary the *FRIENDS of the HEADWATERS* opposes the Enbridge/NDPC Sandpiper Pipeline route proposal as marked on the map below. What does it say about a company that would neglect to feature the state's most famous river, the Mississippi, on their proposed route map? Perhaps this is evidence of their true concern for Minnesota's valuable and cherished water resources.



Enbridge already has too large a footprint across Minnesota's Headwaters Country.

Too much is at risk, not only with the state's clearest lakes; ground water aquifers; fish and wildlife; wild rice; lake and riverfront homes, businesses, and communities; tourism industry; lands and forests; but there's also Lake Superior.

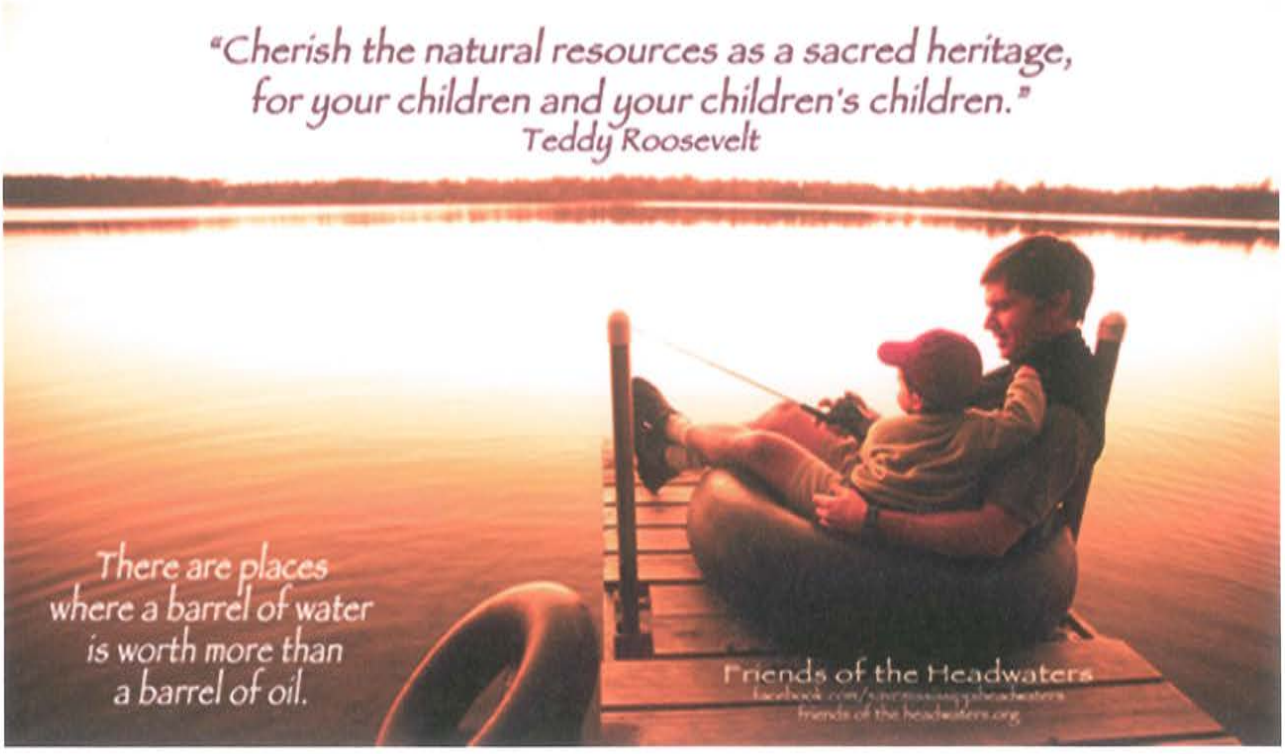
Does Enbridge's insistence on the pipeline ending at Superior portend a future of shipping oil on the Great Lakes? Ironic that a ship icon just happens to be on the adjacent map.

The people of Minnesota should not allow a Canadian corporation with its North Dakota Pipeline Company US subsidiary to dictate the terms of this project.

A project of this magnitude as planned through the heart of *"The Land of 10,000 Lakes"* must conform to the standards prescribed in MEPA.

"No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction. Economic considerations alone shall not justify such conduct."

Friends of the Headwaters does not believe this proposed multiple pipeline corridor with the Sandpiper and now Line 3 Rebuild can meet the high standards set above for quality, safety and sustainability of the lands and especially waters along the route.



Thank you for your attention and consideration.

Jamie MacAlister, Environmental Review Manger
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101

In the Matter of the Applications of Enbridge Energy, Limited Partnership for a Certificate of Need and a Pipeline Routing Permit for the Line 3 Pipeline Replacement Project in Minnesota from the North Dakota Border to the Wisconsin Border
Public Utilities Commission (PUC) Docket Numbers:
PL-9/CN-14-916 – Certificate of Need
PL-9/PPL-15-137 – Route Permit

Friends of the Headwaters (FOH) provides the following statement.

NO FURTHER ACTION ON LINE 3 NOR THE SANDPIPER ROUTE PERMIT PROCESS SHOULD OCCUR UNTIL THE APPEALS COURT ORDERED EIS ON THE SANDPIPER CERTIFICATE OF NEED IS EXECUTED AND COMPLETED. A FULL ENVIRONMENTAL IMPACT STATEMENT (EIS) MUST ALSO BE EXECUTED ON THE LINE 3 REPLACEMENT PROJECT BEFORE A CERTIFICATE OF NEED IS ISSUED BY THE MINNESOTA PUBLIC UTILITIES COMMISSION.

Comment 1. An EIS must address the Line 3 pipeline as well as the Sandpiper pipeline.

Minnesota's Public Utilities Commission (PUC) must make a decision to conduct an EIS on the Line 3 proposed pipeline for the following reasons. These include but are not limited to the following:

A. The Minnesota Court of Appeals has ordered an EIS on the Enbridge/North Dakota Pipeline Company Sandpiper pipeline project.

B. A good portion of Line 3 is proposed to share a new corridor with the Sandpiper pipeline. They may only be a few yards apart in this corridor. Both lines are proposed to be constructed at approximately the same time.

C. As proposed the Line 3 project is the placement of a larger pipeline mostly into a new location other than the existing Line 3 corridor. Therefore it is a new pipeline, not a "replacement". FOH strongly objects to Enbridge's continual mischaracterization of this project as a mere "replacement."

D. The Sandpiper administrative hearing record has established a high degree of concern for significant environmental impacts on much of the route proposed for Line 3. This concern was expressed by *all* the experts having natural resource and environmental expertise who participated in the Sandpiper administrative procedures *except for those employed by Enbridge*.

E. The PUC made a decision to address the cumulative impacts of Sandpiper and Line 3 taken together in their Sandpiper written order for the Certificate of Need. The CEA included in the written order has been vacated by the Appeals Court decision.

F. Line 3 will affect ten thousand acres or more of land when taken together with Sandpiper. It will also affect many bodies of water, wetlands, wild rice lakes and other natural resources.

G. No risk assessment and consequence analysis has been accomplished by any party on Sandpiper or Line 3.

Comment 2. The Appellate Court's order of an EIS has yet to be addressed by the PUC.

By ordering an EIS the Court's unanimous decision also voided the Certificate of Need for the Sandpiper pipeline. This casts doubt not only on the administrative process that was completed for Sandpiper but also on what remains to be done. Since a portion of Line 3 is proposed to co-locate with the Sandpiper, the court order has ramifications for Line 3.

The EIS is a more deliberate, comprehensive, administrative and scientific process. With more public input, more checks and balances and a full risk analysis the EIS is considerably more thorough than the CEA process planned for the Sandpiper route permit. There is no basis whatsoever for concluding that the same outcome will occur from a CEA. An EIS means a new look with respect to all alternatives. There will be new substantive findings. In fact, one can easily envision an entirely different outcome given the evidence, expertise and opinions of Minnesota's two environmental and natural resource agencies, the Department of Natural Resources and the Pollution Control Agency, and with oversight by the Minnesota Environmental Quality Board.

The PUC's Notice for Public Comments on Line 3 contains a good example of how the implications of the Appeals Court EIS order are not yet integrated into the PUC process.

In the Notice:

Item 3 asks if there are *"alternative routes or route segments that should be considered? (Related to the Route Permit)"*

Item 4 asks if there are *"alternatives to the project that should be considered? (Related to the Certificate of Need)"*

As described by Enbridge their "project" specifies a particular location with prescribed start and endpoints and few, if any, alternative routes for its suggested CEA. This is not how an EIS works. All alternative routes, source and endpoints must be studied from the very beginning of an EIS analysis with an emphasis on whether the project is needed at all.

Another example was the partial attempt to examine other end points for the Sandpiper project other than Superior. This resulted in the poorly done, and very shallow, look at "system alternatives" during the Sandpiper review. Obviously, the EIS on Sandpiper will be giving these and any other route and system alternatives a much more serious look in order to comply with EIS requirements.

Therefore, FOH recommends to the PUC a four-pronged approach to executing an EIS on Sandpiper:

1) Fully comprehend and accept that the outcome of preparing an EIS on Sandpiper will be quite different than the outcome of the administrative process previously conducted.

2) The PUC suspends any of its conclusions on Sandpiper including opinions on which alternative routes need to be analyzed as well as the merits of the CEA prepared by Commerce on the Sandpiper project,

3) Conducts a proper, comprehensive and honest EIS on BOTH projects together, and

4) Follows the reasoning on project purposes and resulting identification of alternatives described in Comment #4 below.

Comment 3. An EIS on a liquid pipeline is a new ball game for Minnesota.

The Minnesota government has never done an EIS on a large-diameter liquid pipeline. Ever. Therefore, it needs to take a very logical step and examine recent environmental impact statements and supporting studies on similar pipelines. We stress recent studies. As FOH pointed out during the unfinished Sandpiper administrative process, a number of recent and very damaging pipeline accidents and oil releases have heightened the review of such pipelines and necessitated a thorough look at risk and consequences.

The PUC notice specifically asks for input on these questions:

1. What human and environmental impacts should be studied in the environmental analysis?

2. Are there any specific methods to address these impacts that should be studied in the environmental analysis?

These are highly relevant questions for which we have a clear and compelling answer. Use the Keystone XL EIS and its accompanying studies. Their excellent results and methodologies will provide answers to these questions. This is especially important because there are no consulting companies in Minnesota who have experience preparing such studies. It is likely that Minnesota agencies will need to reach outside the state, something which also happened on the Keystone XL studies.

Comment 4. Overview of project alternatives.

Both federal and state regulations stress the need for the proper and serious examination of alternatives since this is the heart of environmental review. In other words, impacts to the human and natural environments can be reduced by finding better locations for a project. This kind of analysis is crucial for linear projects, since when end points change, alternative routes become more evident. Given this, pipeline projects are entirely different from other linear projects such as high voltage transmission line (HVTL) projects. It is a huge mistake to use HVTL projects as a model for pipelines. Service areas and electrical demands do a good job of determining end points for those projects. This is not true of pipelines, where refinery location, corporate priorities and secret contract information drive the end point locations. These define the corporate priorities - not public needs or benefits.

A. Project facts related to alternatives analysis.

There are four overriding factual statements about the purpose of the Line 3 proposal that must drive the alternatives analysis:

1. The physical aspect of the project is the physical pipeline, but the purpose of the project is to carry product. Therefore the project's purpose and its subsequent alternatives analysis must focus on the source and end points of the products the physical pipeline carries. There are multiple locations between these beginning and end points that would achieve the project's purpose.

2. Two of the three project purposes as stated by Enbridge refer to the entire Enbridge system:

"Second, the Project will reduce on-going and forecasted apportionment to the refining industry in PADD II, Eastern Canada, and the Gulf Coast, including Flint Hills and Northern Tier Energy in Minnesota.

"Third, the restored operational flexibility will allow Enbridge to more efficiently operate the Enbridge Mainline System, optimize its pipeline system and reduce power utilization on a per barrel basis."

3. Most of the Enbridge system is outside of Minnesota, as shown on the various maps included in the application. The vast majority of product

goes to the Chicago area; then east and south. Therefore the end point(s) of most of the product carried by the project are not in Superior but are much farther south.

4. The pipeline will be larger and of higher capacity than the existing Line 3.

B. Given these facts, Enbridge's analysis of project alternatives is completely deficient.

It is clearly to Enbridge's benefit to focus its "need" discussion on the big picture—the need and desires of refineries in general, use of its existing system, and such things as shortages making apportionment among users necessary. It also is clearly to Enbridge's benefit to focus on its desire to place the physical pipeline in the location it desires—along its existing pipelines and, when it deems this not feasible, the shortest alternative to reach Superior. It has done both of these things in its CN and Route Permit applications.

What are missing are alternative routes to reach and/or accomplish the two purposes listed above. More importantly, also missing is the information in its application to determine whether alternative end points and routes might actually be in the public interest, be beneficial to users, or to refineries, and eliminate or reduce apportionment.

This is not surprising: it is not the role of a private entity to provide objective information that another project might be more beneficial to the public interest or the private interest of other users.

This cherry-picking of data by Enbridge, and the resulting bias of analysis is plainly evident if one looks at how many pages in the route application Enbridge spends trying to demonstrate that its mainline corridor in Minnesota is congested and problematic. Meanwhile it is completely silent on discussing congestion and constraints along its proposed route from Clearbrook to Park Rapids. In fact, this corridor already has 3-4 pipelines which are forcing high impacts because of the clear environmental problems along this clearly inappropriate pipeline corridor.

For example, Enbridge talks about the number of "cross-overs" on its mainline corridor—accomplished by boring a line under existing lines to reach the other side because of obstacles to building the line along one side. In fact, there are numerous cross-overs on the existing corridor between Clearbrook and Park Rapids. (Source: Paul Stolen, retired DNR, experience with MinnCan corridor) Why isn't this discussed in the application?

C. "System alternatives" studied for the Sandpiper project.

There was a partial effort to study alternative endpoints for the Sandpiper project in the uncompleted Sandpiper review. The EIS will develop a more formal, deliberative and objective effort without allowing the Enbridge information to dominate as it did during the past administrative process. A similar, but more more comprehensive approach is needed for Line 3 with objective examination of other endpoints besides Superior.

D. Conclusion about an overview of project alternatives.

The project purpose as stated by Enbridge requires the need for a much more broadly defined alternatives analysis including a thorough, independent review of Enbridge's product apportionment, commitments to refiners, and alternative physical routes and physical structures to meet these commitments. Such a review would result in identification of other alternatives to meet the project purpose.

In summary, the following considerations yield a conclusion that significantly different routes other than expanding Enbridge's mainline corridor or following Enbridge's proposed southern route must be considered. This essentially means establishing another pipeline corridor in a safer location that also likely is a more direct route to Enbridge's customers.

1. As noted above, the approach to defining alternatives must be accomplished by addressing the project's purpose by integrating the proposed project into the entirety of the Enbridge system of supplying refineries, not the purpose of going to Superior, Wisconsin.

2. Enbridge's mainline corridor is described by Enbridge as being congested east of Clearbrook, and also having problems obtaining approval from Indian Tribes and the U.S. Forest Service.

3. The administrative record on the Sandpiper project, incomplete and inadequate because an EIS has not been accomplished, did nonetheless demonstrate major problems with the proposed Sandpiper corridor. This proposed corridor from Clearbrook to Park Rapids is congested in the same manner as Enbridge's mainline corridor.

4. Minnesota and federal law and regulations state that economic considerations alone are not given pre-eminence in reviews and permits, and that alternatives with less impact must be given a hard look.

Comment 5. Risk assessment and consequence analysis.

FOH received a report prepared by Paul Stolen concerning the need for a scientifically sound assessment of risk and consequences of oil releases for the Sandpiper and Line 3 projects. Based on information in the report we are deeply concerned with many aspects of this report, including the vulnerability of highly complex centralized and satellite operated control systems such as used by Enbridge, and by the recent evidence of new pipelines rapidly corroding or rupturing. We agree with his conclusions

Comment 6. Specific alternative routes

The following routes should be examined for the Line #3 Replacement project. These alternative routes reflect FOH's position that no new pipelines should be constructed through Minnesota's northern water landscape. Rather this new energy corridor should be placed in a location that has the lowest risk environmentally for the state and is the easiest to mitigate should a spill occur. These routes also provide jobs and tax revenues for the state while preserving the high water quality of Minnesota's lakes, streams, and aquifers and insuring the future of these waters for generations to come.

Alternate Route A (This is designated as SA-04 in the Sandpiper docket)

Alliance pipeline corridor from Alberta, Canada to Illinois

Alternate Route B

Viking and Alliance pipeline corridors with short link of new corridor

Alternate Route C

Keystone 1 and Alliance pipeline corridors

See attached maps for description and illustration of route alternatives A, B & C.

There is one other alternative replacement proposal for Line 3 which deserves serious consideration and study by Minnesota's governing agencies and the public. Enbridge's stated reasons for replacing Line 3 are its age, 50 years old, and its numerous integrity anomalies (corrosion, cracks, holes, leaks, spills) along the line due to its age. FOH is aware there are two older pipelines, over 60 years old, also sharing the Enbridge Mainline northern corridor with Line 3. Is this a situation wherein it is advisable to replace all three old pipelines with one large pipeline with the equivalent capacity of the three old lines.

It is evident to FOH that Enbridge will be coming back to the state in the near future with an application to replace one of those 60 year old pipes. Do the Minnesota government, the Company and the public want to expend the time, money and resources to re-fight, re-litigate, and potentially incur long and expensive delays again?

The Appeals Court order for an EIS before any further pipeline proceedings can occur has provided Minnesota with the perfect opportunity to address this matter with a more deliberative and comprehensive process. A properly conducted EIS that encompasses and examines all of the state's features will greatly inform the decision of how and where a new hazardous liquids energy corridor, if necessary, should cross the state.

PART 2

In the Matter of the Applications of Enbridge Energy Ltd Partnership for a Certificate of Need and a Pipeline Routing Permit for the Line 3 Pipeline Replacement Project in Minnesota
Public Utilities Commission (PUC) Docket Numbers: PL-9/CN-14-916 (Certificate of Need), PL-9/PPL-15-137 (Route Permit)

September 28, 2015

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Friends of the Headwaters ("FOH") opposes the Enbridge Energy Line 3 pipeline as currently projected to cross Minnesota's lake country from North Dakota to Superior, Wisconsin.

The Line 3 Pipeline Replacement project is proposed to co-locate alongside the, as yet approved, Enbridge dba NDPC Sandpiper pipeline "southern corridor" from Clearbrook, MN to Superior.

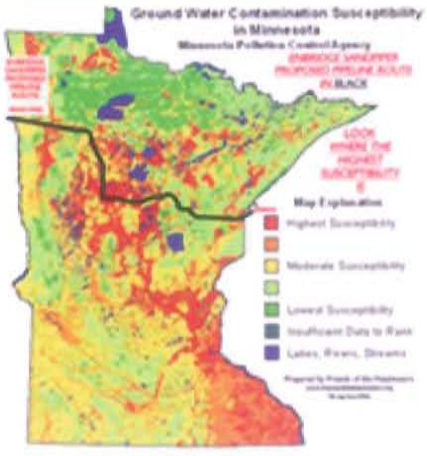
We believe Enbridge's proposed Sandpiper/Line 3 "southern corridor" will NOT protect the high quality waters along this route.

Friends of the Headwaters also believes Enbridge intends to proliferate other pipelines into this corridor with their southern route proposal.

Enbridge is proposing to replace Line 3 because it is an aging 50 year old line with numerous "integrity anomalies", corporate speak for corrosion, leaks, ruptures and spills. Line 3 currently resides alongside two older pipelines (in their 60s) yet. Does Enbridge propose to relocate those into this southern corridor?

Besides our important residential and recreational lakes Minnesota's best wild rice lakes are also extremely vulnerable to this proposed pipeline. Those lakes are culturally and economically significant to Minnesota's Ojibwa tribes as well as being important food sources for our migratory waterfowl populations.

The "southern corridor" will severely jeopardize the Straight River aquifer in southern Hubbard County. The aquifer is critical as the sole drinking water source for the county seat, Park Rapids. as well as supporting the county's primary agricultural crop, potatoes. Annual revenue from the potato crop approaches $500 million. A leak/rupture in the aquifer would severely impact this agricultural revenue, damage Park Rapids' potable water source, and despoil a renowned brown trout stream, as well.



Hubbard County natural resources support a vibrant tourism community with nearby Itasca State Park, America's second oldest state park after Niagara Falls and home to the headwaters of America's most famous river, the Mississippi, and with its family-owned lake country resort businesses. The Minnesota Tourism Office estimates $100 million dollars per year are spent in the county, 60% of that during vacation season. A catastrophic oil spill on the level of Enbridge's Kalamazoo River spill would devastate the county's tourism business.

Given the high risks to the county, state and private lands and waters along the proposed southern route, *FOH* strongly disagrees with the PUC/DOC's position that a full environmental impact study (EIS) is not necessary for the confirmation of Enbridge Line 3 route proposal. A PUC/DOC conducted CEA (comparative environmental analysis) will fail to meet MEPA standards. *FOH* believes a complete EIS with the requisite and cumulative leak/spill scenarios and assessments for the lakes and rivers, trout streams, wild rice beds, lake homes and resorts, ground water sources, farmlands, wetlands, wildlife, local communities and their economies will validate *FOH*'s position of moving this joint Line 3/Sandpiper route to a lower risk part of the state.

On September 14, 2015 the Minnesota Appellate Court agreed with Friends of the Headwaters and by unanimous decision ordered the PUC to conduct an EIS for the Sandpiper Certificate of Need docket. The Court's order also voided the PUC's written order previously granting Enbridge/NDPC its Certificate of Need. Since Line 3 is proposed to be co-located in the Sandpiper Corridor, FOH believes all Line 3 proceedings must be stayed until the proper EIS is executed and completed on Sandpiper and a final resolution on all permits is determined.

Therefore, *FOH* is proposing some alternate routes for the Enbridge Energy Line 3 Replacement pipeline and Sandpiper pipeline that do not traverse any of Minnesota's clearest and cleanest lakes, rivers, trout streams, and fragile aquifers. Details and maps to follow.

Before preparing these alternate routes *Friends of the Headwaters* first used the document
7852.1900 "Criteria for Pipeline Route Selection"
made available at the August 18, 2015 PUC/Enbridge Line 3 Public Hearing in Park Rapids, MN to determine the fallibility of Enbridge Energy's proposed southern corridor route. *Friends of the Headwaters'* comparative economic and environmental analysis of the impact of Enbridge Energy's Line 3 pipeline upon the listed "Criteria for Pipeline Route Selection" fell short of meeting the requirements to maintain, sustain and protect the lands, waters and people along the proposed corridor.

Under Subp. 3. Criteria:
A. human settlement, existence and density of populated areas, existing and planned future land use, and management plans.

Hubbard County realizes $34 million dollars annually in tax revenue(2012 data). 59% of its properties are water-influenced, meaning either on or have a view of a lake or river. Those parcels yield a $20 million dollar figure. The Fishhook Chain of Lakes watershed is principally affected by the Line 3 pipeline. The value of the water-influenced properties on the Fishhook Watershed is about $2 billion.

If a large rupture on the order of the Enbridge 2010 Kalamazoo River, Michigan spill (1 million gallons) occurred at Hay Creek near the top of that watershed, it would dramatically impact the property values on those lakes resulting in a significant loss of tax revenue to the county, state, Park Rapids and its school district. It will be years before the county recovers from the damage. Not only will it incur the loss of tax revenues, but also the loss of residents, small businesses, tourists, and property values.

B. the natural environment, public and designated lands, including but no limited to natural areas, wildlife habitat, water, and recreational lands.

Any pipeline leak/spill/rupture will severely impact the sustainable, environmental quality of life in Hubbard County. Itasca State Park, Mississippi River headwaters, LaSalle Scientific and Natural Area, Straight River brown trout fishery, Hay Creek, the Fishhook Chain of Lakes watershed, Straight River aquifer, Shell River, the Crow Wing River, and the many other nearby lakes all support and provide numerous recreational opportunities - swimming, fishing, hunting, hiking, biking, bird watching, boating, and others. $100 million tourism dollars/yr are at risk for Hubbard Cty alone. $600 million annually for the northern counties on the proposed route.

C. lands of historical, archaeological and cultural significance

The history of Native Americans and the early explorers in and around Itasca State Park is an asset to drawing tourists to the park (500,000 annually). The wild rice waters in Hubbard and Clearwater Counties are culturally and economically significant. The proposed Line 3 & Sandpiper route is dangerously close to Upper Rice Lake, the Anishinaabeg's best wild ricing lake in Clearwater County. The wild rice harvested there is commercially and domestically important to the White Earth Ojibwe.

D. economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations.

All future business, residential, retirement and agricultural growth will be impacted by any pipeline leak/spill/rupture. Over 500 jobs and $500 million dollars in revenue/year are generated by the potato crop alone. Besides potatoes and the commodity crops of corn and beans, fresh fruit and vegetables are also grown and marketed locally to residents and tourists by smaller farms operating within the Straight River aquifer. Farm incomes and tourists dollars drive the local small business economy.

Although some small businesses may see a short term gain from pipeline construction, the long term economic vitality of the community, its businesses and people may not recover from a spill.

Enbridge touts the tax payments it will be making annually to Hubbard County. The public has heard the figure of $5 million for the Sandpiper, but relative to the value of the Bakken and Alberta tar sands oils proposed to pass through the county each year, that tax revenue seems woefully short for the risks assumed. What costs will the county incur for infrastructure repair after construction? What will be the costs of training police, fire, paramedic and medical personnel in the special hazards of oil spills and fires? We haven't heard anything about the PUC requiring a significant Escrow account to ensure funds are available when a pipeline fails. Does the PUC know Enbridge has sued these same northern counties for a refund on previously paid property tax dollars?

The state and its northern counties derive income from their forest lands. Those forest taken out of production along "Greenland" portions of the proposed route will mean a loss of timber jobs and income, as well as a loss of habitat for wildlife, especially birds.

E. pipeline cost and accessibility

How much higher are the construction costs of multiple bores under rivers and streams? What are the contingency plans and costs for controlling "frackouts" in stream beds during a bore. *FOH* has learned a "frackout" occurred on nearly every stream or river bore during this area's last pipeline construction project. What are the costs and issues for winter construction of wetlands along the route? How do the company and clean-up agencies access those wetlands in non-winter seasons if a leak/spill/rupture occurs? What are the economic consequences of summer construction and congestion issues with roads and traffic? How will lodging, not just for construction crews, but also for tourists be affected. How will the compatibility of construction workers be with tourists, residents and local businesses. How trustworthy and reliable will these workers be with respect to property and paying for services. FOH knows some resort owners have will not provide lodging for pipeline workers due to previous pipeline worker negative experiences. Will Enbridge be financially responsible for covering damages or lost income from disreputable and irresponsible workers? Only a full EIS will provide the public and governing agencies this information.

F. use of existing rights-of-way and right-of-way sharing and paralleling.

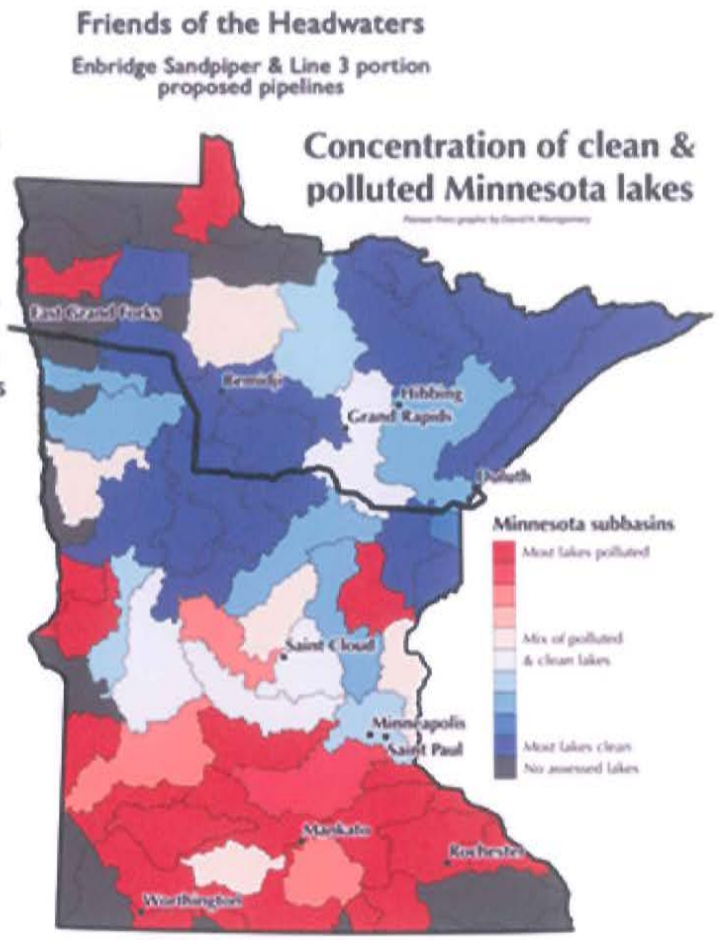
Although Enbridge is proposing to use existing energy corridors in Hubbard County numerous landowners along the route have complained of poor easement usage, property damage, poor restoration or reclamation efforts, and generally bad relations with other pipeline companies. They are skeptical of Enbridge claims to treat them better given accounts they have seen or heard from landowners on the Enbridge northern

pipeline corridor. Landowners along the proposed route are also concerned of the liability issues regarding detection and reporting of any leaks or spills. Attorneys have warned landowners to be wary of the language within the Enbridge easement contract.

G. natural resources and features

FOH has no faith in Enbridge word they can safely protect the lands and waters of Minnesota's lake country.

All pipelines leak eventually. While conducting a complete EIS for the Pebble Mine near Bristol Bay, Alaska, the EPA examined the history of pipeline spills relative to the age and mileage of all pipelines. They determined that every pipeline will leak at least once every 30 years over every 30 miles of length. Not surprisingly the history of Enbridge spills along their northern corridor in Minnesota fits that profile quite well. To quote from a 2003 MPCA report to the NTSB: "nearly three dozen non-third-party spills, leaks or ruptures on just one Enbridge 34 inch line occurred between 1972 and 2003. About 87% of the petroleum gallons spilled from all Minnesota pipelines in the period 1991 to 2002 was from that Enbridge line. This is equal to about 48% of the reported gallons of petroleum spilled from all sources in Minnesota during that period. Included in the Enbridge 34 inch line spills are the 1.7 million gallon rupture in 1991 in Grand Rapids and the 250,000 gallon rupture on July 4, 2002 in Cohasset. 300,000 gallons of the Grand Rapids spilled flowed to a river. Luck with the timing of the spill and river ice conditions kept thousands of gallons of crude from entering the Mississippi River. Oil in the Mississippi would likely have fouled the St. Cloud, St. Paul, and Minneapolis drinking water intakes for months. Likewise the Cohasset spill could have easily entered the Mississippi River if it had happened in a different segment of that 34 inch pipeline."



The Mississippi River Headwaters, Itasca State Park, the Straight River aquifer and brown trout stream, the Shell and Crow Wing Rivers, the Fishhook Chain of Lakes, Upper Rice Lake and other wild rice lakes, the Pine River and Whitefish Lake Watershed, the Big Sandy region, and some of the clearest lakes in the state are all at risk from this proposed Enbridge "southern corridor" and their stated plans to make it a multiple pipeline corridor.

H. the extent to which human or environmental effects are subject to mitigation by regulatory control and by application of the permit conditions contained in Minn. Rule, part 7852.3600 for pipeline right-of-way preparation, construction, cleanup, and restoration practices.

Enbridge's history with the Alberta Clipper line, Line 3 and other lines in the northern corridor is well known as stated above. The PUC completely ignored the numerous landowner complaints of Enbridge's poor behavior, cleanup, follow-up, and restoration efforts or lack thereof on the Certificate of Route and Need Applications for the Alberta Clipper line. *FOH* has learned some landowners are losing buildings, well houses, wood lots, and in some cases homes to Enbridge's easement demands. Eminent domain actions are especially disliked.

I. cumulative potential effects of related or anticipated future pipeline construction

Enbridge has stated the Line 3 Replacement will occur in the proposed Sandpiper "southern corridor". FOH has advocated for a full, comprehensive EIS (environmental impact study) to be conducted by the proper state and federal regulatory authorities as absolutely essential. And the Minnesota Appellate Court agreed. An EIS must be conducted. All leak/spill/rupture risk scenarios must be assessed and fully described for high value resources. The EIS must also compare all reasonable and prudent alternative routes.

J. *"the relevant applicable policies, rules, and regulations of other state and federal agencies, and local governmental 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."*

A project of this magnitude as planned through the heart of *"The Land of 10,000 Lakes"* must conform to the standards prescribed in MEPA.

"No state action significantly affecting the quality of the environment shall be allowed, nor shall any permit for natural resources management and development be granted, where such action or permit has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state, so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state's paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction. Economic considerations alone shall not justify such conduct."

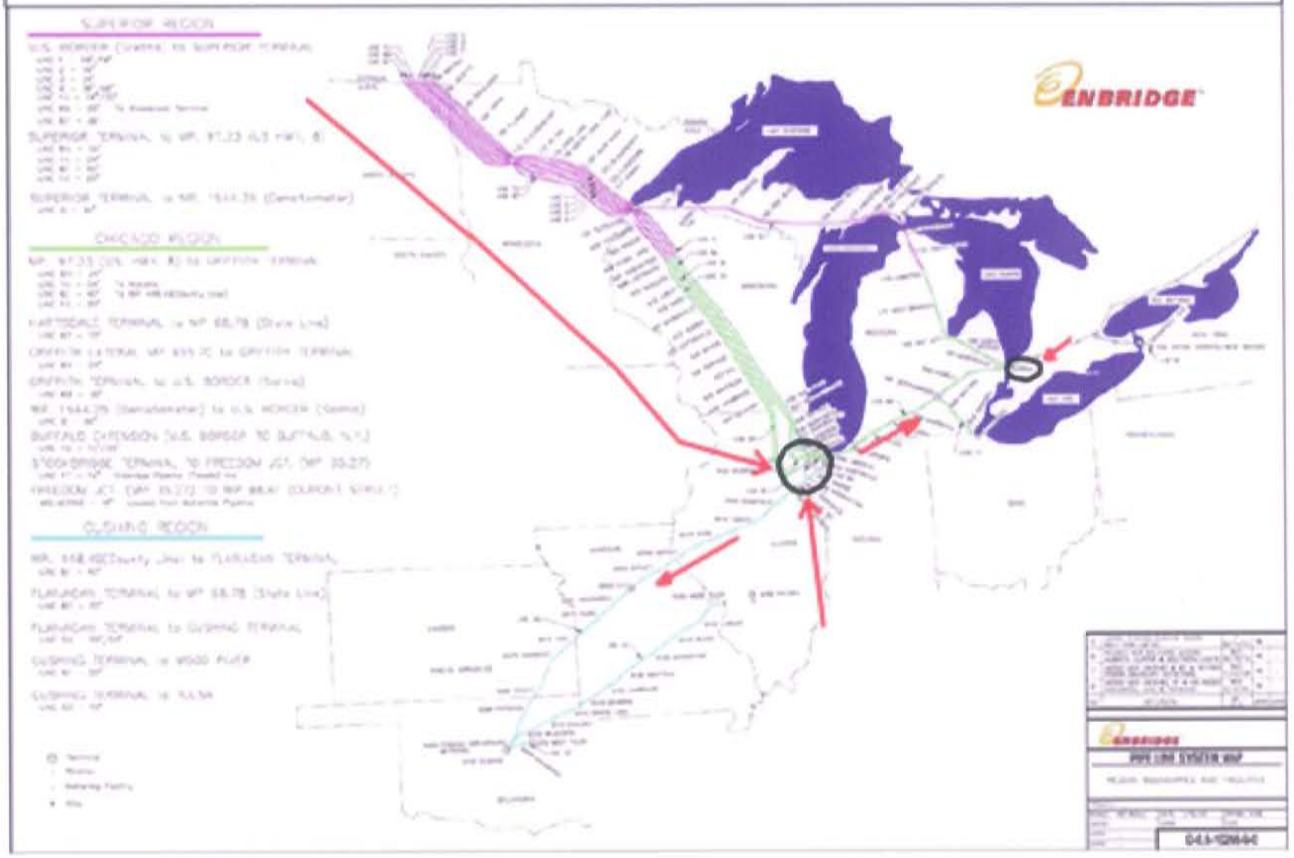
Since *Friends of the Headwaters* does not believe this proposed multiple pipeline "southern" corridor with the Sandpiper and Line 3 Replacement can meet the high standards set above for quality, safety and sustainability of the lands and especially waters along the route, *FOH* is proposing a "real" southern corridor for Sandpiper and the Line 3 Replacement project. Map below previously produced for Sandpiper proceedings. The suggested corridor is the same for Line 3 Replacement only extending from Alberta.

ALTERNATE ROUTE "A" (Designated SA-04 in Sandpiper docket)

ALTERNATE ROUTE A utilizes an existing energy corridor of which Enbridge is a 50% shareholder with Alliance Company of Canada. This corridor shares crossing points with Enbridge's Line 3 corridor in Alberta, Canada and links to the Enbridge system near Flanagan, Illinois. At this point it is connected to the remainder of Enbridge's pipeline system. The Line 3 Replacement project can follow this corridor.

FOH believes another pipeline replacement option should be considered utilizing this corridor. Given Enbridge's stated reason for replacing Line 3, its age (over 50) and serious integrity anomaly issues, and given Enbridge has two other aging pipelines, both 60+, perhaps the option of replacing all three aging pipelines with one very large diameter pipeline with equivalent capacity should be considered and studied. In light of the Appeals Court order for an EIS it makes sense to execute that EIS on a large scale in Minnesota and regionally to determine the ideal and environmentally lowest risk location for a new energy corridor that will take into account the longevity and future use and transport of hazardous liquid materials. That location is not through Minnesota's pristine northern lake country region as well as that of Wisconsin and Lake Superior.

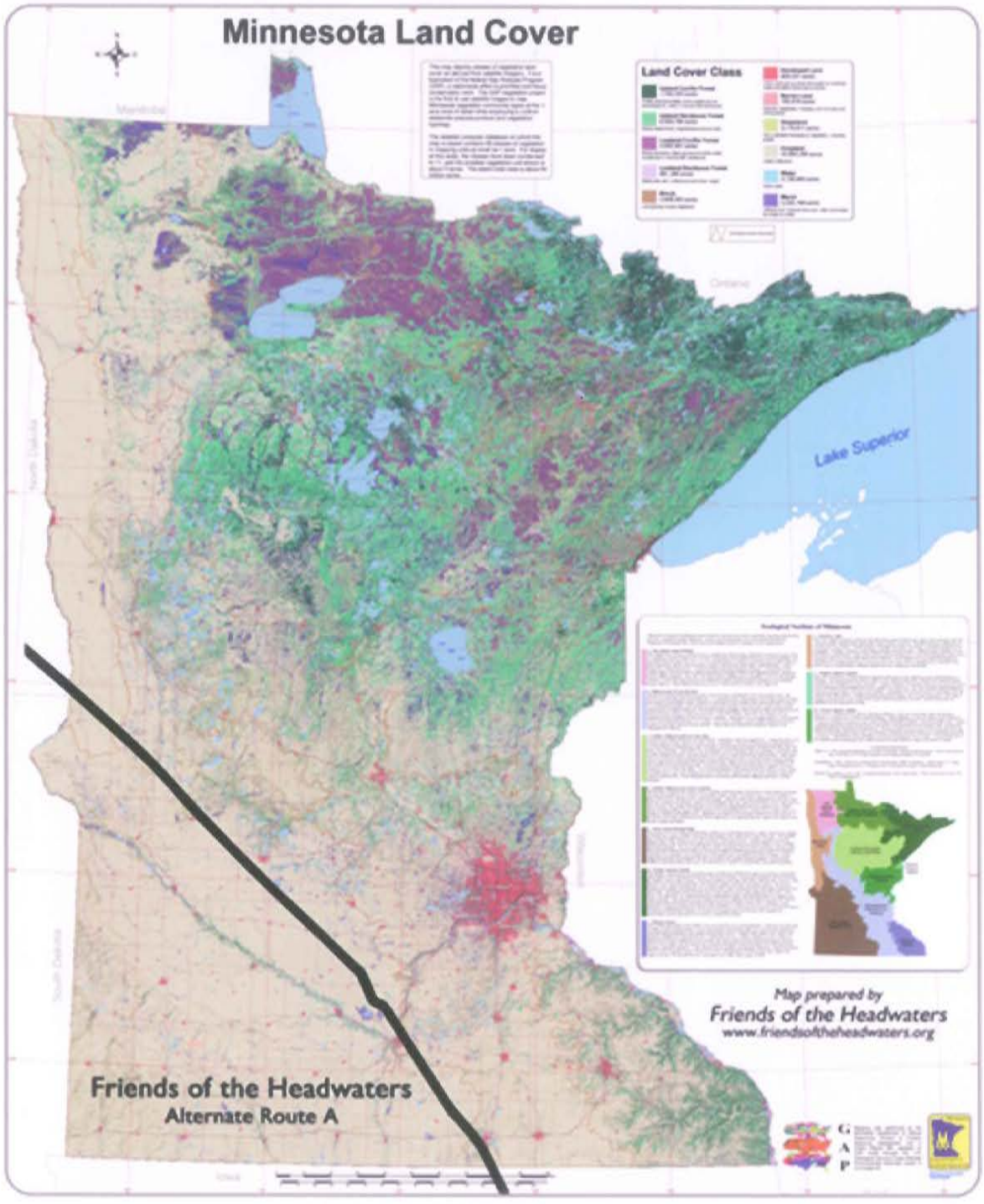
Figure 7853.0510-2
Pipeline System Map



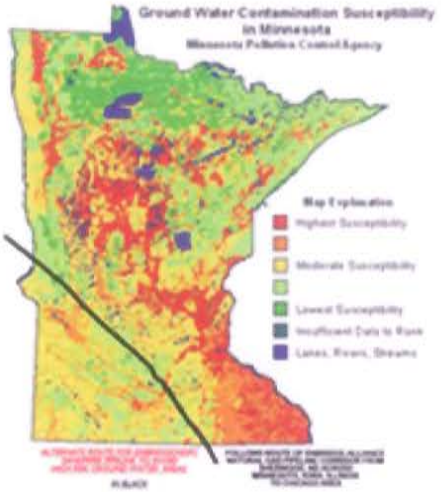
ALT ROUTE A traverses almost exclusively agricultural lands below Minnesota's primary lake country. This area is sparsely populated with mostly small towns among the farmlands.

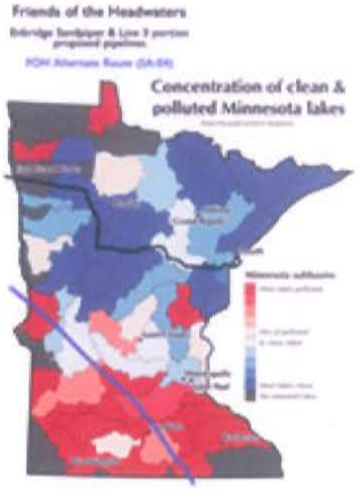
ALTERNATE ROUTE "A" (Designated SA-04 in Sandpiper docket)

Note: Enbridge's Mark Curwin, Senior Director for Strategic Coordination of Major Project Executions in the US, stated their construction preference is to build pipelines across farmland. He made these remarks at a public meeting in Park Rapids on Jan. 29, 2014. In attendance were two Minnesota legislators, Roger Erickson and Rod Skoe, as well as local Hubbard County government, agency and business officials. Mr. Curwin gave the reasons of better soils, easier construction, easier access, less natural habitat destruction, cheaper and quicker. After construction the farmland can be put back into crop production. Access to leaks and spills is much easier. Winter wetland construction would be at a minimum.



ALT ROUTE A avoids all the major risk areas of the lake country: high quality lakes and streams, sensitive aquifers, culturally significant wild ricing waters, and valuable lakeshore and vacationland assets.





Minnesota still gets to keep jobs the construction will provide as well as North Dakota plus Iowa and Illinois. Jobs for Americans.

Although the route does not end in Superior, it still ties into the existing Enbridge system in Illinois with routing options to Michigan and Ontario that avoid our greatest freshwater lakes of Lake Superior and the Mackinac Straits of Lakes Michigan and Huron, including the northern lake country of Wisconsin and the St. Croix Nat'l Wild and Scenic River. The Illinois Hub also allows Enbridge access to its pipelines to Oklahoma and points south.

Since it's an existing corridor the company should have access to the mapping previously done for the pipeline already there. ALT ROUTE A also intersects in southern Minnesota pipelines owned and operated by other companies which provide the option of re-routing Bakken or tar sands oil to the refineries in Rosemont and St Paul Park in the south Twin Cities Metro.

As currently planned with the exception of a few tax dollars and short term construction monies Minnesotans derive no long term benefits from these pipelines and assume all the risks from leaks/spills/ruptures. And eventually these pipelines will leak or break. THE EPA Pebble Mine statistics said so and Enbridge's spill history in Minnesota proves it true.

Friends of the Headwaters therefore recommends to the PUC, DOC and other state agencies that they enforce our MEPA statutes and deny the Certificate of Route permit for the Enbridge proposed Line 3 pipeline corridor through Minnesota's prime lake country. A perfectly viable, low risk alternative is available south of our best waters.

Friends of the Headwaters believes a barrel of water IS worth more than a barrel of oil.

"Cherish the natural resources as a sacred heritage, for your children and your children's children."
Teddy Roosevelt

ALTERNATE ROUTE "A" (Designated SA-04 in Sandpiper docket)

ALTERNATE ROUTE A utilizes an existing energy corridor of which Enbridge is a 50% shareholder with Alliance Company of Canada. This corridor shares crossing points with Enbridge's Line 3 corridor in Alberta, Canada and links to the Enbridge system near Flanagan, Illinois. At this point it is connected to the remainder of Enbridge's pipeline system. The Line 3 Replacement project can follow this corridor.

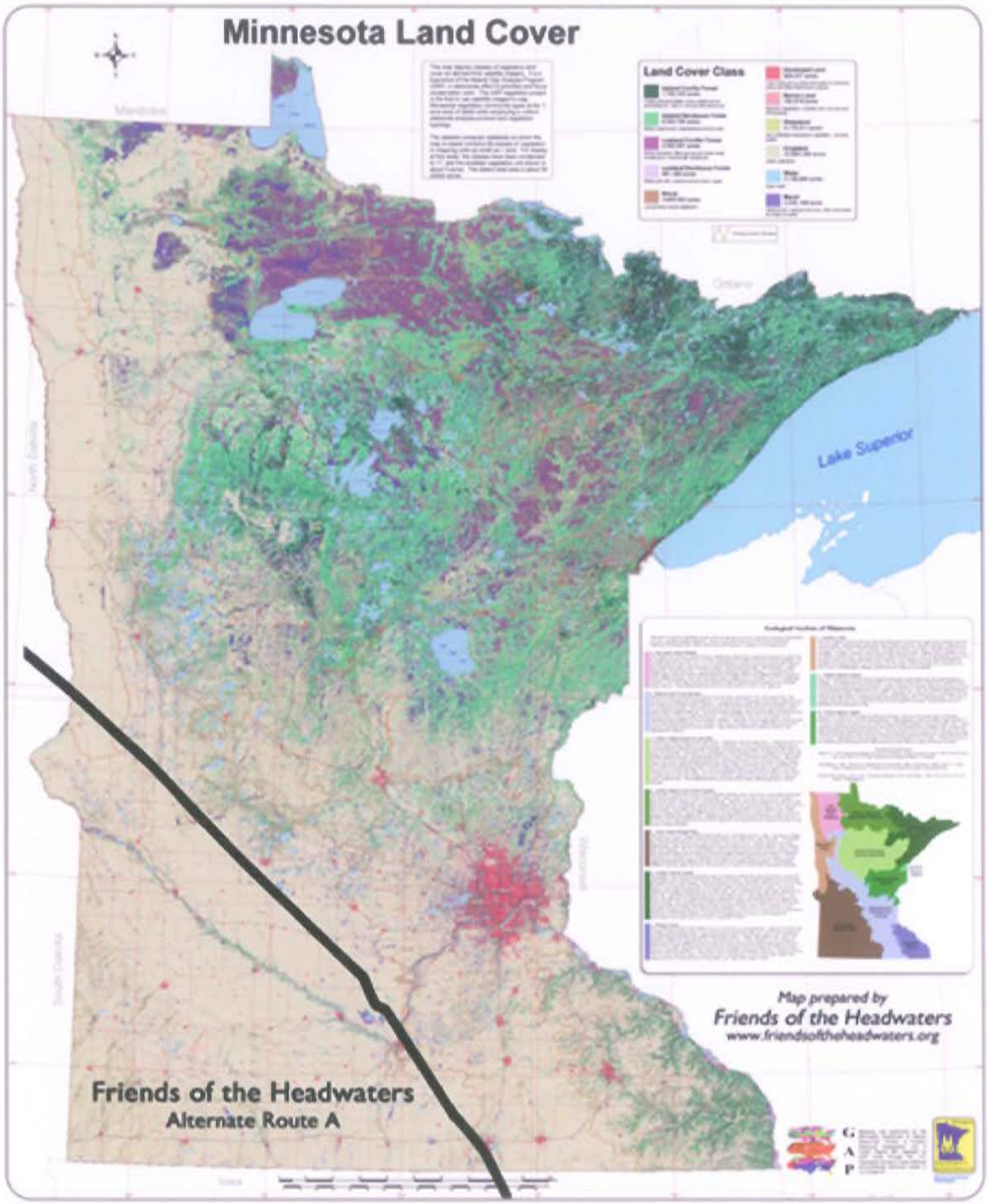
FOH believes another pipeline replacement option should be considered utilizing this corridor. Given Enbridge's stated reason for replacing Line 3, its age (over 50) and serious integrity anomaly issues, and given Enbridge has two other aging pipelines, both 60+, perhaps the option of replacing all three aging pipelines with one very large diameter pipeline with equivalent capacity should be considered and studied. In light of the Appeals Court order for an EIS it makes sense to execute that EIS on a large scale in Minnesota and regionally to determine the ideal and environmentally lowest risk location for a new energy corridor that will take into account the longevity and future use and transport of hazardous liquid materials. That location is not through Minnesota's pristine northern lake country region as well as that of Wisconsin and Lake Superior.

Figure 7853.0510-2
Pipeline System Map

ALT ROUTE A traverses almost exclusively agricultural lands below Minnesota's primary lake country. This area is sparsely populated with mostly small towns among the farmlands.

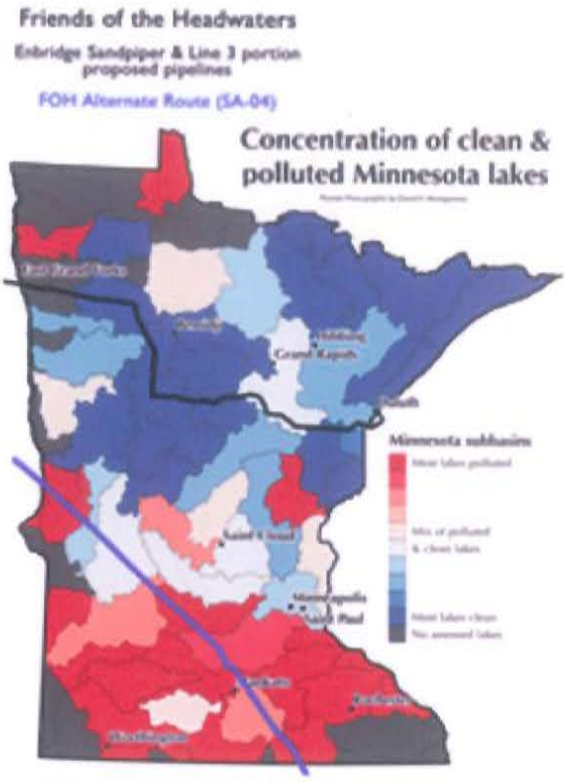
ALTERNATE ROUTE "A" (Designated SA-04 in Sandpiper docket)

Note: Enbridge's Mark Curwin, Senior Director for Strategic Coordination of Major Project Executions in the US, stated their construction preference is to build pipelines across farmland. He made these remarks at a public meeting in Park Rapids on Jan. 29, 2014. In attendance were two Minnesota legislators, Roger Erickson and Rod Skoe, as well as local Hubbard County government, agency and business officials. Mr. Curwin gave the reasons of better soils, easier construction, easier access, less natural habitat destruction, cheaper and quicker. After construction the farmland can be put back into crop production. Access to leaks and spills is much easier. Winter wetland construction would be at a minimum.



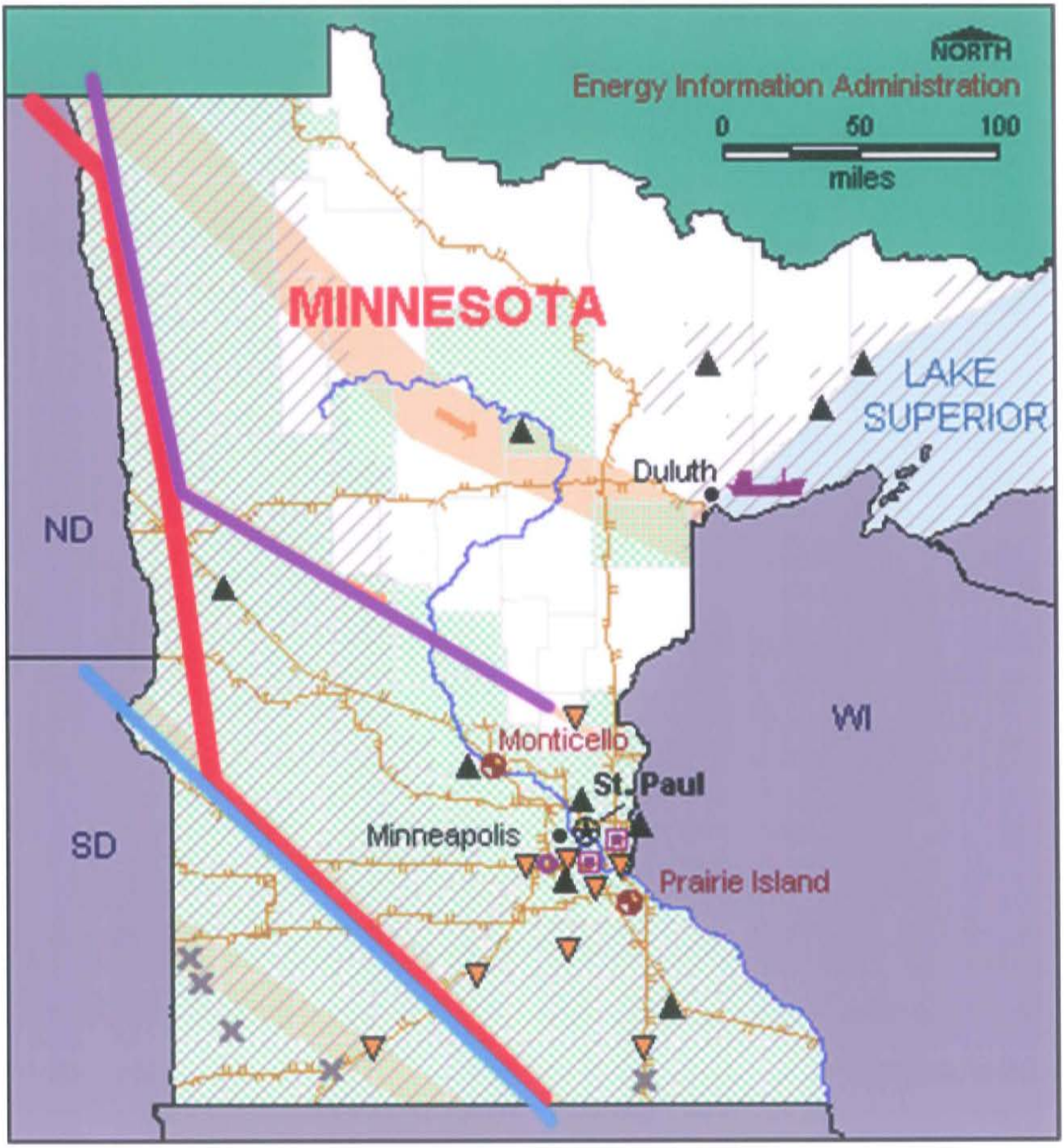
ALTERNATE ROUTE A
(Designated SA-04, Sandpiper docket)

It is plainly clear from these maps the differences between Enbridge's proposed Line 3 and Sandpiper "southern" corridor and FOH's proposed alternate energy corridor for Minnesota. During the Sandpiper proceedings the PCA rated these routes. FOH's scored lowest risk to environment. Enbridge's the highest risk.



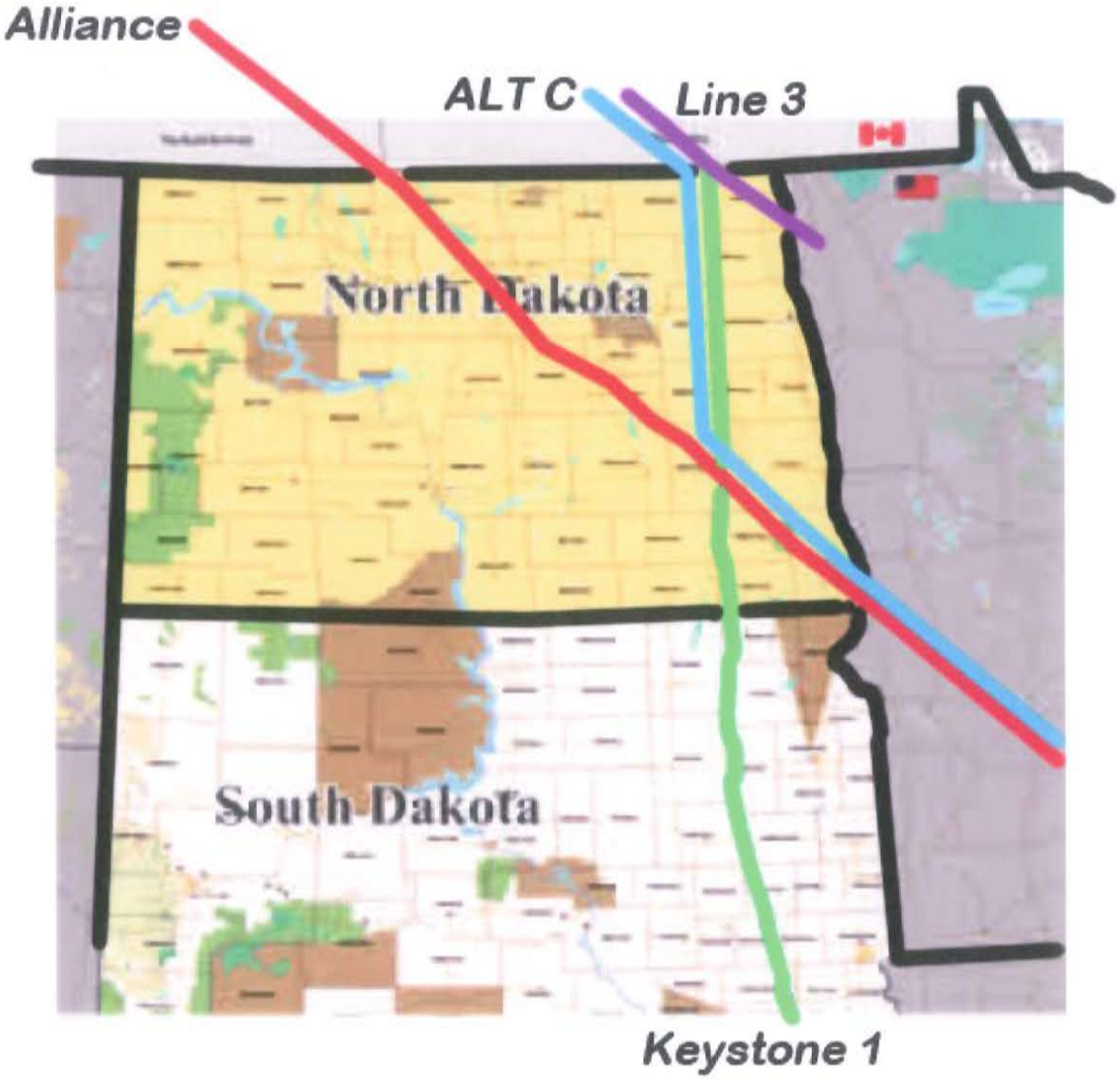
ALTERNATE ROUTE B

Alternate route B (red) uses Viking & Alliance (SA-04)(Sandpiper docket) pipeline corridors. It will require short link of new corridor from Viking to Alliance corridor. At intersection point of Enbridge "mainline" corridor and Viking corridor (purple), Line 3 Replacement follows Viking south. Where Viking turns southeast, Line 3 continues south (new corridor) until meeting Alliance corridor (blue). Line 3 joins Alliance and continues onto the Enbridge facilities in Flanagan, Illinois and Enbridge pipeline system.



ALTERNATE ROUTE C

Alternate C (blue) uses the Keystone 1 corridor (green) and Alliance (SA-04)(Sandpiper docket) pipeline corridor (red). Enbridge's Line 3 Replacement (ourple) at its junction with Keystone would turn south and join that corridor in North Dakota until intersecting the Alliance corridor. At which point Line 3 would follow the Alliance corridor and continue onto to Enbridge facilities in Flanagan, Illinois. As previously noted, it is now connected to Enbridge's pipeline network servicing the Midwest, eastern Canada and Gulf Coast.



As previously suggested this route could also be used for the option of building a large new pipeline to replace the three aging lines currently in the Enbridge Mainline "northern" corridor.