520 Lafayette Road
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MINNESOTA ENVIRONMENTAL QUALITY BOARD

April 20, 2016

Meeting Location: MPCA Board Room
St. Paul, Minnesota
1:00 p.m. – 4:00 p.m.

AGENDA

General
This month's meeting will take place in the Minnesota Pollution Control Agency board room at 520 Lafayette Road in St. Paul. The Environmental Quality Board ("EQB" or "Board") meeting will be available via live webcast on April 20 from 1:00 p.m. to 4:00 p.m. You will be able to access the webcast on our website: www.eqb.state.mn.us

The Jupiter Parking Lot is for all day visitors and is located across from the Law Enforcement Center on Grove Street. The Blue Parking Lot is also available for all day visitors and is located off of University and Olive Streets.

I. *Adoption of Consent Agenda
Proposed Agenda for April 20, 2016 Board Meeting
February Meeting Minutes

II. Introductions

III. Chair's Report

IV. Executive Director's Report

V. Title: Additional Opportunity for Public Comment on the Request for EQB's Designation of a Different Responsible Governmental Unit for the Environmental Review of the North Dakota Pipeline Company LLC's proposed Sandpiper Pipeline and Enbridge Energy, Limited Partnership's proposed Line 3 Replacement Pipeline.

VI. Public Comment

VII. Adjourn

---

* *Items requiring discussion may be removed from the Consent Agenda*

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MINNESOTA ENVIRONMENTAL QUALITY BOARD

April 20, 2016

Meeting Location: MPCA Board Room
St. Paul, Minnesota
1:00 p.m. – 4:00 p.m.

ANNOTATED AGENDA

General

This month's meeting will take place in the Minnesota Pollution Control Agency board room at 520 Lafayette Road in St. Paul. The Environmental Quality Board ("EQB" or "Board") meeting will be available via live webcast on April 20 from 1:00 p.m. to 4:00 p.m. You will be able to access the webcast on our website: www.eqb.state.mn.us

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II. Introductions

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V. Title: Additional Opportunity for Public Comment on the Request for EQB's Designation of a Different Responsible Governmental Unit for the Environmental Review of the North Dakota Pipeline Company LLC's proposed Sandpiper Pipeline and Enbridge Energy, Limited Partnership's proposed Line 3 Replacement Pipeline.

Presenter: Courtney Ahlers-Nelson
Planning Director, Environmental Review, Environmental Quality Board (651-757-2183)

Materials enclosed:

- Request for EQB's Designation of a Different Responsible Governmental Unit and Supporting Documents

* *Items requiring discussion may be removed from the Consent Agenda*

- Letters from the Minnesota Public Utilities Commission, the Department of Commerce, the Pollution Control Agency and the Department of Natural Resources
- Letter from the Proposers – North Dakota Pipeline Company LLC and Enbridge Energy, Limited Partnership
- Letters of Support for the Request for a Different Responsible Governmental Unit

Issue before the Board:

The EQB is providing an additional opportunity for public comment on the request for EQB's designation of a different responsible governmental unit ("RGU") for the environmental review of the North Dakota Pipeline Company ("NDPC") LLC's proposed Sandpiper Pipeline and Enbridge Energy, Limited Partnership's ("Enbridge") proposed Line 3 Replacement Pipeline. More specifically, the requests is for the EQB to relieve the Minnesota Public Utilities Commission ("Commission") of its current RGU status for the above-entitled projects and replace it with a joint RGU consisting of the Minnesota Pollution Control Agency ("PCA") and the Minnesota Department of Natural Resources ("DNR").

However, the decision on whether to designate a different RGU for the above-entitled projects will come before the Board at its regular meeting on May 18, 2016.

A 30-day public comment period, starting on Friday, April 1, 2016 through 4:30 pm on Monday, May 2, has been initiated to gather input on whether to designate a different RGU for the above-entitled projects. Commenters may address the EQB at the April 20, 2016 Board meeting or submit written comment to Pipelines.EQB@state.mn.us.

Commenters are asked to provide information relevant to Minnesota Rules 4410.0500 Subp. 5 and 6 which provide criteria for the selection of the RGU in making their comments.

Minnesota Rules 4410.0500 provides for selection of the RGU for environmental reviews. Subp. 5 reads:

> **RGU selection generally.** For any project where the RGU is not listed in part 4410.4300 or 4410.4400 or which falls into more than one category in part 4410.4300 or 4410.4400, or for which the RGU is in question, the RGU shall be determined as follows:
>
> A. When a single governmental unit proposes to carry out or has sole jurisdiction to approve a project, it shall be the RGU.
>
> B. When two or more governmental units propose to carry out or have jurisdiction to approve the project, the RGU shall be the governmental unit with the greatest responsibility for supervising or approving the project as a whole. Where it is not clear which governmental unit has the greatest responsibility for supervising or approving the project or where there is a dispute about which governmental unit has the greatest responsibility for supervising or approving the project, the governmental units shall either:
>
> (1) by agreement, designate which unit shall be the RGU within five days of receipt of the completed data portion of the EAW; or
>
> (2) submit the question to the EQB chairperson, who shall within five days of receipt of the completed data portions of the EAW designate the RGU based

> on a consideration of which governmental unit has the greatest responsibility for supervising or approving the project or has expertise that is relevant for the environmental review.

Minnesota Rules 4410.0500, Subp. 6 also provides for selection of the RGU for environmental reviews and it reads:

> **Exception.** Notwithstanding subparts 1 to 5, the EQB may designate, within five days of receipt of the completed data portion of the EAW, a different RGU for the project if the EQB determines the designee has greater expertise in analyzing the potential impacts of the project.

Background:

On November 8, 2013, the NDPC applied to the Commission for a certificate of need ("CN") and pipeline route permit to construct the proposed Sandpiper Pipeline. NDPC is proposing to construct and operate a new 616-mile oil pipeline that would extend from Beaver Lodge Station, south of Tioga, North Dakota through a new terminal at Clearbrook, Minnesota and then on to an Enbridge affiliate's terminal and tank farm in Superior, Wisconsin. The proposed project would traverse Polk, Red Lake, Clearwater, Hubbard, Wadena, Cass, Crow Wing, Aitkin, and Carlton counties.

The proposed project includes approximately 303 miles of new pipeline in Minnesota with a 24-inch diameter pipeline from the North Dakota border to Clearbrook and a 30-inch diameter pipeline from Clearbrook to the Wisconsin border. The project also includes construction of a new oil terminal at Clearbrook and upgrades to the existing Pine River facility.

Minnesota Rules 4410.4400, Subp. 24, Pipelines designates the Commission as the responsible governmental unit ("RGU") for the proposed Sandpiper Pipeline.

On April 24, 2015, Enbridge applied to the Commission for a CN and route permit for the proposed Line 3 Replacement Pipeline in order to address safety and integrity issues associated with the existing Line 3 Pipeline. The pipeline replacement is proposed to follow existing Line 3 from the Minnesota-North Dakota border to Clearbrook and then follow the same route proposed for the Sandpiper pipeline from Clearbrook to the Minnesota-Wisconsin border.

The Line 3 route is approximately 337 miles long in Minnesota and would travers Kittson, Marshall, Pennington, Red Lake, Polk, Clearwater, Hubbard, Wadena, Cass, Crow Wing, Aitkin, and Carlton counties. The project also includes upgrades to existing pump stations at Clearbrook, Donaldson, Plummer, and Viking, and construction of new pump stations at Backus, Cromwell, Palisade, and Two Inlets.

Minnesota Rules 4410.4400, Subp. 24, Pipelines designates the Commission as the responsible governmental unit ("RGU") for the proposed Line 3 Replacement Pipeline.

Currently, the Commission and its agent, the Minnesota Department of Commerce ("COMM"), are carrying out the role as the RGU for both of the proposed pipeline projects.

On March 10, 2016, the EQB received a request for the EQB to designate a different RGU for

the environmental review of the NDPC's proposed Sandpiper Pipeline and Enbridge's proposed Line 3 Replacement Pipeline. More specifically, the request is for the EQB to relieve the Commission of its current RGU status for the above-entitled projects and replace it with a joint RGU consisting of the PCA and the DNR.

Pursuant to Minnesota Statutes chapter 116D and Minnesota Rules 4410, EQB has jurisdiction over RGU selection. Consequently, since receiving the request, EQB has been gathering information from the project proposers (NDPC and Enbridge), the current RGU and its agent (the Commission and COMM) and the proposed new RGUs (the PCA and the DNR). Each party was asked to submit information to EQB on whether to designate a different RGU. They were also asked to closely consider Minnesota Rules 4410.0500, Subp. 5 and 6 in making their recommendation.

At this time EQB staff are gathering additional information on the request to designate a different RGU for the proposed projects. Consequently, a 30-day public comment period, starting on Friday, April 1, 2016 through 4:30 pm on Monday, May 2, has been initiated to gather input on whether to designate a different RGU for the above-entitled projects.

Comments may be provided to EQB in writing via email at Pipelines.EQB@state.mn.us or verbally at the regularly scheduled EQB Meeting on Wednesday, April 20, 2016 from 1:00pm – 4:00pm. Additional information can be found on the EQB website: https://www.eqb.state.mn.us/content/environmental-quality-board-seeks-public-comment-request-different-responsible-governmental

A Findings of Fact, Conclusions and Order will come before the Board at its regular meeting on May 18, 2016.

VI. Public Comment

VII. Adjourn

MINNESOTA ENVIRONMENTAL QUALITY BOARD
MEETING MINUTES

Wednesday, February 17, 2016
MPCA Room Board Room
520 Lafayette Road North, St. Paul

EQB Members Present: Dave Frederickson, Brian Napstad, Mike Rothman, John Saxhaug, Dr. Ed Ehlinger, Tom Landwehr, Matt Massman, Julie Goehring, Kate Knuth, John Linc Stine, Erik Tomlinson, Kristin Eide-Tollefson, Kevin McKinnon, Deputy Commissioner of DEED, Dave Schad Deputy Commissioner of the DNR

EQB Members Absent: Charlie Zelle, Adam Duininck, Tom Landwehr, Katie Clark-Sieben

Staff Present: Will Seuffert, Courtney Ahlers-Nelson, Erik Dahl, Mark Riegel, Anna Henderson

I. Adoption of Consent Agenda and Minutes

II. Introductions

III. Chair's Report

Agency updates: BWSR, Dept. of Health, and Dept. of Commerce gave brief updates on the work of their agencies.

John Saxhaug, spokesman for the Citizen Members, shared some thoughts on the role and priorities of a citizen member.

IV. Executive Director's Report

The Governor's Water Summit will be held on Feb 27th.

Unless there is a pending decision item for March, the Board meeting will be cancelled.

On April 1st the EQB is hosting a work session to apply results based accountability framework to produce an update to our Environment and Energy Report Card by the end of the year.

We are completing interviews this week for the communications position. A decision will be made in the next week or two.

Recreation Trails Rule Amendment: the Office of Administrative Hearings rejected the re-submission of the Recreation Trails category amendments under the Good Cause Exemption which means that there is an interpretation of law that is required to implement the change. We will move forward under traditional rulemaking which is a lengthier process that will enable us to clarify some definitions. We are not setting new policies, but incorporating them into our rules.

V. Clean Power Plan Update

Presenter: Frank Kohlasch, Minnesota Pollution Control Agency

Mr. Kohlasch gave an update on the status of MPCA implementation of the Clean Power Plan and the implications of the Court decision.

VI. EQB Work Planning Retreat and Draft 2016 EQB Work Plan
Presenter: Will Seuffert, Environmental Quality Board

The Environmental Quality Board's mission is as follows:
Our mission is to lead Minnesota environmental policy by responding to key issues, providing appropriate review and coordination, serving as a public forum and developing long-range strategies to enhance Minnesota's environmental quality.

Mr. Seuffert led the discussion on the 2016 EQB Work Plan; is it best aligned with citizen member priorities and member agency goals?

VII. Environmental Review Data – A Year in Review
Presenters: Courtney Ahlers-Nelson and Mark Riegel, Environmental Quality Board

Ms. Ahlers-Nelson and Mr. Riegel shared a PowerPoint presentation on the Environmental Review (ER) Program and the data it collected. This data provides an important baseline from which EQB can use to continue to develop the ER Program and assist Responsible Governmental Units, citizens, and project proposers over time.

Questions and discussion followed.

VIII. Mandatory Categories Rulemaking
Presenter: Courtney Ahlers-Nelson

Ms. Ahlers-Nelson's presentation focused on the projected timeline for rulemaking and the possible EAW and EIS categories under revision. The rulemaking project sponsor and Board member, Pollution Control Agency Commissioner John Linc Stine, also presented on the necessity of rulemaking.

IX. Adjourn

The audio recording of the meeting is the official record and can be found at this link:
ftp://files.pca.state.mn.us/pub/EQB_Board/

Webcast is also available on the EQB website: https://www.eqb.state.mn.us/

Request for EQB's Designation of a Different Responsible Governmental Unit and Supporting Documents

March 10, 2016 (Delivered by Electronic Email Service)

Mr. David Fredrickson, Chairman
Minnesota Environmental Quality Board
520 Lafayette Rd
St. Paul, Minnesota 55155

Re: Request for Change in RGU Designation for Environmental Review of North Dakota Pipeline Company's Proposed Sandpiper Pipeline and Enbridge Energy's Line 3 Pipeline Replacement Projects from the PUC and DOC to MDNR and MPCA.

Dear Chairman Fredrickson,

The Minnesota Appeals Court recently agreed with citizen's and Tribe's long-held contention that a full environmental impact statement (EIS) was needed before any final decisions could be made on the Sandpiper pipeline project. The circumstance that made this lawsuit necessary was the serious miscarriage of the environmental review process on the part of two state agencies currently conducting environmental review for pipelines.

The single most powerful tool for protection of our state's human and natural environment is the Minnesota Environmental Policy Act (MEPA). Under EQB's rules and guidance for performing MEPA reviews government agencies are required to take a hard look at the environmental consequences of their actions and possible alternatives to those actions **before** taking "any major government action" (116D.04 Subd. 2a.). The procedures require agencies to effectively consult with the public, efficiently collaborate with other agencies (116D.02 Subd 1 Policy) and (116D.03Subd. 2 Duties #2) and Tribes, use credible peer reviewed science in a transparent, objective and rational process to produce a concise "truth-telling" report.

Through adherence to the highest levels of professional principles and standards in performing these duties many government agencies have successfully demonstrated that their work can withstand the most ardent of critics and serve the public's demand for transparent rational decision-making while meeting the needs of project proposers for due process as well. But there is no provision of MEPA or EQB rules that can ensure this professional integrity by agencies when exercising the considerable discretionary latitudes inherent in the process. In unskilled hands or under control of the otherwise motivated practitioners environmental review can be uselessly uninformative or even dangerously misleading to policy-making bodies and to the public.

The process as practiced by state agencies in pipeline cases thus far has lost the public trust, has lead to endless controversy and delay, and has already produced one lawsuit. And in so-doing the responsible agencies have served neither the greater public good nor the project proposer's need for a fair, efficient and consistent government process for permit review.

For example (and as the supporting documentation will demonstrate) the scoping process intended to focus a broad clear bright light on all important issues and alternatives of a project has been shrunk to near "peep-hole" size by a series of prejudicial judgments performed by the current RGU agencies. In spite of a court order to perform a more robust EIS that could expand that "peep-hole" the same agencies are once again imposing prejudicial constraints on the new process. Such unprofessional or unskilled environmental review will only lead to more controversy, delay and lawsuits. And it will further undermine citizen, business and legislator support for the entire institution of environmental review.

In the attachments to this letter, the requested change in RGU is supported using criterion stated in EQB rule. Specifically it can be demonstrated that both the DNR and PCA have greater responsibility and capacity for supervising any environmental protection limitations placed on pipeline projects than either the PUC or the DOC. And both DNR and PCA have demonstrably greater expertise relevant for environmental review and have greater expertise in analyzing the potential impacts of pipeline projects.

But more importantly the attached criteria and evaluation provide detailed information to clearly demonstrate DOC and PUC staff's functional short-comings in past and present environmental review activities for pipelines. In the current process:

- Staff failed to satisfy even the lowest standard for satisfactory public information or involvement and failed to provide public access to unbiased factual information;
- Staff failed to respond to substantive public and peer agency criticisms on scope of study, alternatives considered, data sources used and analytical methods applied;
- Staff abrogated its authority to objectively define the public purpose to be served by this project, a purpose essential to the applicant's qualification for powers of eminent domain;
- Staff instead allowed the applicant to substitute a private rather than public purpose definition for the project that significantly limited alternative pipeline routes to be reviewed;
- Staff arbitrarily and inappropriately segmented the overall project narrowing the scope of the review to just that portion of the pipeline lying within the state thus excluding certain alternative routes and isolating that portion from the remaining portions of the project essential to its function.
- Staff allowed the applicant to use certain provisions of prior contractual commitments to shippers and prior approval of federal tariffs to further eliminate alternative routes from review;
- Staff failed to effectively collaborate with neighboring states and federal agencies to leverage expertise and facilitate consideration of broader system alternatives;
- Staff inappropriately limited the geographic scope of the project to jurisdictional boundaries rather than natural boundaries thus excluding some potential alternative routes from review;

- Staff utilized limited data and highly objectionable methods of analysis to exclude alternative routes from further consideration ignoring public objection and peer agency advice;
- Staffs presently propose to use existing record of decisions developed prior to Court order for the EIS to continue prejudicing or limiting the slate of alternative routes to be considered.

Citizens request relief from this misconduct of environmental review by PUC and DOC staff through the EQB's granting of the requested change in RGU designation to the DNR and PCA.

And, even though the integrity of PCA and DNR are held in higher regard than their sister agencies it is strongly suggested they employ independent panels of qualified peer review experts to perform this work. This extra measure is needed to further insulate the process from undue political influence, preclude even the appearance of bias and to restore the public's confidence. From the public's perspective, state government's ability to prepare high quality environmental review documents is now in need of some serious rehabilitation.

Therefore, on behalf of Minnesota citizen's right to a clean and healthy environment and to defend the functional integrity of the Minnesota Environmental Policy Act (MEPA) as administered under Environmental Quality Board (EQB) rules designed to protect them you are hereby requested to make a change in responsible government unit (RGU) designated for the subject pipeline projects. The request for this change is made under provisions in Minnesota Rules 4410.500 Subpart 5 for General RGU Selection and/or under the RGU exceptions clause in Subpart 6 of that rule.

Sincerely,

Willis Mattison
42516 State Highway #34
Osage Minnesota, 56570
Phone: 218-841-2733

Cc: Will Seuffert, Executive Director, Minnesota Environmental Quality Board
Dan Wolf, Executive Secretary, Minnesota Public Utilities Commission
Mike Rothman, Commissioner, Minnesota Department of Commerce
Bill Grant, Deputy Commissioner, Division of Energy Resources,
Minnesota Department of Commerce
John Linc-Stine, Commissioner, Minnesota Pollution Control Agency
Tom Landwehr, Commissioner, Minnesota Department of Natural Resources

EVALUATION CRITERIA FOR DETERMINING PROPER RGU
For
Preparation of Sandpiper/Line 3 EIS
By
Willis Mattison, citizen advocate/advisor
Osage, Minnesota

I. INTRODUCTION

Sandpiper and Line 3 are complex inter-state pipeline projects proposed to serve an ever increasingly complex global energy economy within a complex political and environmental arena and a rapidly changing global climate. These pipelines, that would carry more crude oil than the Keystone XL are claimed to be sorely needed but come with enormous and yet to be fully described potential for doing great harm to the human and natural environment. Environmental review of these projects simply must be done properly by highly qualified practitioners to produce the high quality information necessary to guide final decisions.

EQB rules for designating or changing the unit of government responsible for conducting environmental review favor the unit with greater permit and project supervisory authority, the unit that has expertise relevant for the environmental review and/or the unit that has greater expertise in analyzing the potential impacts of the project. Comparisons between the candidate RGU agencies based on these criteria are presented in Attachment B.

But, expertise for conducting environmental review requires more than the ability to comply with minimum procedural requirements of statutes and rules to meet these tests for designation. The process requires adherence to well established standards of transparency, collaboration, and public involvement. And there are long-standing principles for professional applications of science that must be observed. And, above all a process that builds early consensus between the project proposers, the reviewing agencies and the public is a significant measure of expertise in environmental review.

RGU designation rules do not present criteria on which to judge levels of environmental review expertise. Therefore, to support this request it was necessary to present criterion for that purpose. To do that some background information is provided.

There may be greater background detail here than is necessary for state agency administrators or employees but this analysis is also written for a broader public audience that may not be as familiar with the inner government workings of environmental review and permitting.

II. BACKGROUN FOR EVALUATION OF EXPERTISE

Veteran environmental review practitioners studying the effectiveness of the National Environmental Policy Act (NEPA) for the President's Council on Environmental Quality (CEQ) concluded that the most enduring legacy of the environmental review process is for forming the framework for collaboration between government agencies and the public who will bear the environmental, social, and economic impacts of agency decisions.[1] By extension it is then fair to say that the (NEPA) and the various state environmental policy statutes fashioned after the Federal Act have formed the foundation of and the actual mechanism for modern American environmental protection. These Federal and State laws have established the comprehensive policies and procedures for integrating environmental, economic, and social concerns.

With the passage of these acts, agencies were required to take a hard look at the environmental consequences of their actions and possible alternatives to those actions **before** they made final decisions. They required agencies to effectively consult with the public on what they were proposing to do, accept public views on their proposals, and respond to public views. To ensure this was done comprehensively, both the federal and state acts call for agencies to consult with all other agencies, at all levels of governments including Tribal governments, and provided mechanisms to coordinate overlapping jurisdictional responsibilities.

In Minnesota, as it was on the national level, the concept of environmental review was spawned in the late 1960s with the developing environmental conciseness. The explicit purpose of the Minnesota Environmental Policy Act (MEPA) was to emulate NEPA on the state level in order to implement environmental protection as a matter of public policy and to utilize the Environmental Impact Statement (EIS) as a planning tool in the decision-making process.

Environmental review does not of itself make decisions; rather it provides necessary information to governmental units which they can utilize to make environmentally sensitive decisions in the best interests of the public. It has a further purpose in allowing the public to participate in decisions that affect them. The intent is to prevent environmental degradation by wise and informed decisions.

Based on review of statute and rule, Environmental Quality Board staff in a 2012 evaluation of Minnesota's environmental review program under MEPA[2] developed the following definition of the intent of environmental review that closely mirrors NEPA's intent:

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[1] THE NATIONAL ENVIRONMENTAL POLICY ACT, A Study of Its Effectiveness After Twenty-five Years, Council on Environmental Quality, Executive Office of the President, January 1997

[2] Evaluation and Recommendations for Improving Environmental Review, Approved by EQB November 14, 2012

> *'To understand the environmental effects of proposed projects in order to promote harmony between human activities and the environment, with consideration of both short and long term social and economic needs of the state."*

EQB staff found that this primary goal of MEPA was best achieved by adherence to similar principals as were found by the CEQ when evaluating NEPA. These principles were:

- *Providing information for decision makers and project proposers*
- *Coordination with federal, state and local agencies*
- *Public involvement in decision making*
- *Efficiency in process*

As it was with NEPA on the national level, implementing MEPA in Minnesota means all departments and agencies of the state government are required to strengthen relationships between state, regional, local and federal-state environmental planning, development and management programs and to utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment. And Tribal governments are to be afforded early and on-going consultations throughout the process not just treated as other citizens or unit of government but rather as the sovereign nations that they are.

In examination of NEPA's 25-year performance the CEQ identified five essential factors or characteristics critical to ensuring effectiveness and success in the environmental review process.

- **Strategic planning** —success depends on the extent to which agencies integrate NEPA's goals for **public involvement** and **interagency collaboration** into their internal planning and permitting processes at an early stage. NEPA study participants found that when environmental review was least effective it was because it was initiated too late in the project development process. However agency managers who have learned how to use environmental review have discovered it helps them do their jobs better and easier. NEPA's requirements to **consider alternatives** and **involve the public and other agencies with expertise** early in the process can make it easier to discourage poor proposals, reduce the amount of documentation down the road, and support innovation.

- **Public information and input** — Environmental review success depends to a large degree on the **extent to which an agency provides information to and takes into account the views of the surrounding community and other interested members of the public** during its planning and decision-making process; NEPA directs federal agencies to open their doors, bring the public in, and offer genuine opportunities for participation and collaboration in decision-making. NEPA helps managers make better decisions, produce better results, and build trust in surrounding communities.

• **Interagency coordination** — Successful environmental review depends on **how well and how early agencies share information and integrate planning responsibilities with other agencies**. Studies find that agencies sometimes engage in consultation only after critical decisions have — for all practical purposes — been made. In such instances, other agencies and the public at large rightly conclude that concerns have not been heard. As a result, agencies may find the public and other agencies opposing even worthy proposed actions.

• **Interdisciplinary place-based and science-based approach to decision-making** that focuses the knowledge and values from a variety of sources on a specific place. Some agencies seek "litigation-proof" documents, increasing costs and time but not necessarily quality. **In such cases, potential cost savings are also lost because a full range of alternatives has not adequately been examined.** Successful environmental review should not be encyclopedic striving for a robust volume of public record but instead should be properly scoped and peer reviewed in order to be rigorously concise.

From the CEQ's NEPA evaluation we can summarize the five categories of expertise needed for high quality environmental review:

1. Public Information and Involvement
2. Science and Place-based Analysis
3. Interagency Cooperation and Collaboration
4. Alternatives Identification and Evaluation
5. Building Early Consensus Outcome

III. CATEGORICAL CRITERIA FOR EVALUATING EXPERTISE

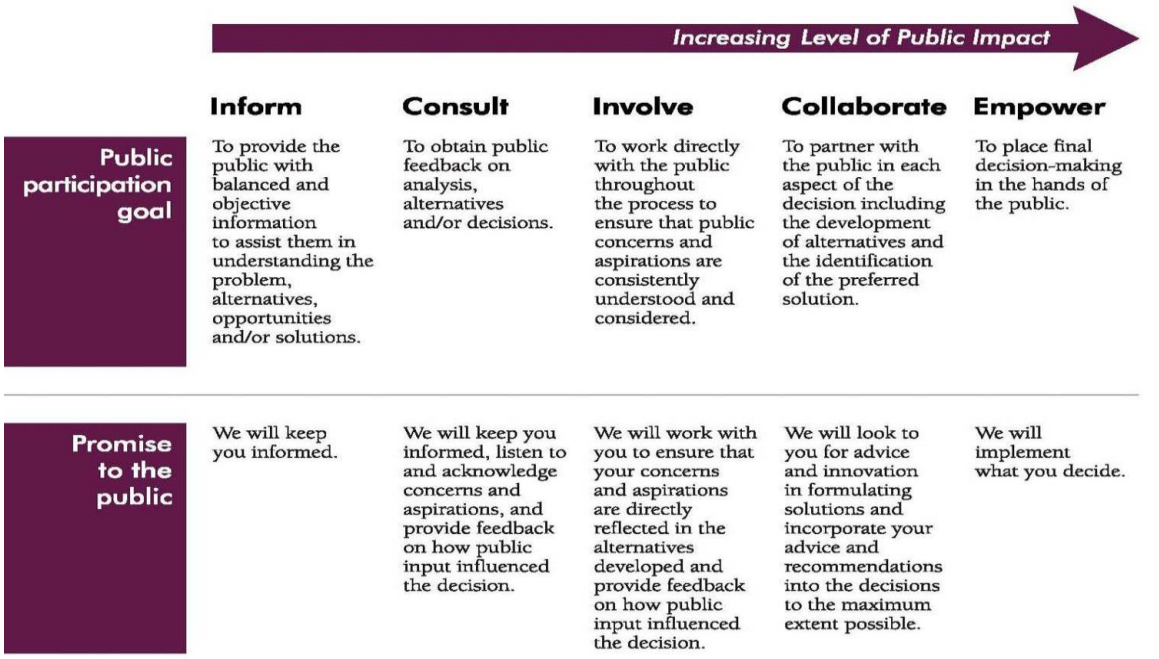
In this section, the five categories of high quality environmental review listed above are each explained in greater detail followed by criteria for evaluating expertise in that category.

1. PUBLIC INFORMATION AND INVOLVMENT

Here we rely on metrics which have been established and used internationally to gauge the effectiveness of various levels public information participation in the kinds of decision-making contemplated in both NEPA and MEPA. The International Association for Public Participation (IAP2)[3] has published criteria that can be used to differentiate minimal citizen involvement from maximum involvement. Those criteria are summarized on the spectrum chart on the next page.

[3] See website for the International Association for Public Participation at: http://www.iap2.org/

IAP2 Spectrum of Public Participation



Using IAP2 spectrum an agency's expertise for gaining high quality public information and involvement while conducting environmental review can be objectively evaluated.

To summarize the IAP2 chart, the criterion would, in ascending order of quality range from simply to ***inform*** on the low end through to ***consult***, ***involve***, ***collaborate*** and ***enable*** on the high end

Public Information and Involvement (ranked from lowest to highest in quality):

1. Simply **Inform** Citizens
2. **Consult** with Citizens for input on identifying issues
3. **Involve** citizens in making final decisions
4. **Collaborate** with citizens in developing alternatives and building toward consensus before making final decision;
5. **Enable** citizens to identify issues, alternatives and make all decisions.

Since it would be impractical for citizens themselves to actually make final decision in these matters the "enable" level of involvement is unrealistic in this exercise but it does reflect the common practice of having citizen boards as standing committees for government policy-making. In Minnesota, the PUC Board of Commissioners itself, the MPCA Citizen's Board and the Board of Water and Soil Resources are examples of

"enabled" citizen decision-making. Therefore, level #4 "Collaboration" on this ranking reflects the highest practical level of citizen participation in environmental review for purposes of this analysis.

2. PEER REVIEWED SCIENCE AND PLACE-BASED ANALYSIS

The use of good scientific methods in successful environmental review is ensured and safeguarded by principles of **peer review**, a concept that is so fundamental to the practice of pure and applied science as to be indispensible to all progress in any scientific endeavor. But the proper functioning of peer review in the MEPA process is often poorly understood and therefore under appreciated by unskilled practitioners, project proposers, policy makers and the general public alike.

Simply put, peer review is the evaluation of work by one or more people of similar competence to the producers of the work (peers). It constitutes a form of self-regulation by qualified members of a profession within the relevant field. Peer review methods are employed to maintain high standards of quality, improve performance, and provide credibility. In academia, scholarly peer review is often used to determine an academic paper's suitability for publication. Peer review can be categorized by the type of activity and by the field or profession in which the activity occurs, e.g., medical peer review or in the current case, environmental peer review.[4]

According to the US Department of Energy Office of Science and Technology[5] the principles and standards for peer review to be valid it must be:

1. Performed by **experts**,
2. **Independent**,
3. **External** (impartial), and
4. **Technical**.

These four requirements can then be used as the primary principle and standards for peer reviewed science in environmental review.

The U.S. Department of Energy's Office of Science and Technology report goes on to point out the benefits of peer review by stating: "… peer review, if conducted effectively, can enhance both program quality and the credibility of decision making. These include the following:

1. Independent experts who are newly exposed to a project often can recognize technical strengths, weaknesses, and ways to improve the project that may have been overlooked by those close to the project (Bozeman, 1993).
2. Drawing from a large pool of independent, external experts can provide more breadth and depth of expertise to the analysis than that available within the internal reviewer pool, resulting in a more effective and meaningful review.

[4] Definition adapted from Wikipedia

[5] See "Definition of Peer Review" based on the U.S. Department of Energy's Office of Science and Technology (USOST) at: http://www.nap.edu/read/5939/chapter/4 .

For example, such experts may be more effective than internal reviewers in evaluating a project in the context of other comparable or alternative technologies available in the private sector, other government agencies, or other countries.

3. Independent experts often can be more open, frank, and challenging to the status quo in their comments than internal reviewers, who may feel constrained by organizational (or political) concerns. *(parenthetical phrase added to apply where government agencies are performing science)*
4. External review can enhance the credibility of the review process by avoiding both the reality and the appearance of conflict of interest."[6]

NEPA as administered by the U.S. Environmental Protection Agency (EPA) and MEPA procedures as developed and administered by the Minnesota Environmental Quality Board (MEQB) provides several layers of peer review to help ensure high standards of quality and credibility.

In conventional environmental review (as opposed to "alternative review"[7]) peer review is first introduced in the make up of the group of individuals charged the actual drafting of environmental review documents. This group or team may be entirely made up of agency staff or maybe augmented by contractual services of special outside consultants. This largely "internal" method is the weakest and least credible form of peer review.[8] Sometimes, to further ensure greater objectivity in the original drafting an EIS team may assemble a panel of impartial outside experts to either review their work or actually prepare the draft documents.

A more legitimate and robust form of "external" peer review takes place during several rounds the public review of draft scoping and draft EIS documents. Here, outside experts (as well as lay citizens, the applicant, opponents and supporters alike) are all allowed to identify flaws, omissions and errors in the draft document in writing. The criticisms are all officially received during prescribed comment periods and all "substantive" comments must be responded to by either making the corrections or additions warranted or providing defensible arguments as to why the requested changes were not made.

A final round of peer review is added after the "final" EIS is published and before the document can be officially declared adequate. If the final EIS is found to be "inadequate" it must be revised to address the deficiencies identified and once again reviewed for adequacy. For obvious reasons, this final determination of EIS adequacy has increased

[6] From USOST "Benefits of Peer Review at: http://www.nap.edu/read/5939/chapter/5.

[7] There is a notable exception to these peer review integrity safeguards in Minnesota's system of alternative environmental review since peer review is largely absent from that procedure.

[8] "It is important to note that internal reviews, although useful for program management, should not be confused with peer review. The independence of peer reviewers distinguishes them from internal reviewers; and thus, the term "internal peer review" is an oxymoron." Bozeman, B. 1993. Peer review and evaluation of R&D impacts. Chapter 5 in Evaluating R&D Impacts: Methods and Practice, B. Bozeman and J. Melkers, eds. Boston: Kluwer Publishing as referenced in "Definition of Peer Review" based on the U.S. Department of Energy's Office of Science and Technology (USOST).

credibility when performed by an independent entity rather than by the RGU that prepared it (see reference in footnote 8 on previous page re: internal peer review).

3. Interagency Cooperation and Collaboration

Interagency cooperation and collaboration adds value and efficiency to environmental review because it brings the collective resources of multiple agencies into the permitting and review process early. Each agency at every level brings valuable perspective, greater access to data, more technical expertise, expanded constituencies and cross-boundary authority to the exercise. Each permitting agency can make sure the project details they need are available in useable form and degree of completeness for their permitting process. Permit procedures and public notices can be coordinated and joint meetings and hearings can be scheduled. Key agency individuals responsible for various aspects of air, water soil, wildlife, fish, forest, wetland management can be made available for team writing of subsections of or appendices to environmental review documents.

Sufficient funding for extra burdens on the several agencies collaborating with the lead agencies is often procured from the project applicant to ensure full participation is possible during the early phases of review. Public information meetings are more successful if technical staffs are present at public meetings to describe the roles and authorities of their respective agencies, to present pertinent information and answer the public's questions.

Review of projects whose component features or impacts cross jurisdictional or political boundaries can be more appropriately and efficiently coordinated. One of the most frequent benefits (and inter-jurisdictional courtesies) of cross-boundary coordination is the assurance that alternatives selected or final decisions made by one entity do not unknowingly restrict or complicate any alternatives that may have been more desirable to a sister agency or neighboring government unit.

Essential Elements of Interagency collaboration/coordination (all must be met for highest quality):

1. State Agencies, especially those with permitting authority over the project;
2. Other state agencies with technical expertise in project or resource impact categories;
3. Neighboring state agencies when interstate projects are reviewed or impacts extend beyond state lines;
4. Federal agencies especially when project requires federal permits, federally owned/managed resources are impacted, project impacts several states, and when federal agencies have expertise and data sources useful for review and multi-state jurisdiction;
5. All Tribal governments in project area or zone of impacts;
6. Initiated early and exercised throughout, usually by forming interagency teams.

4. **Alternatives Identification and Evaluation**

These principles and standards are based on EQB scoping rules and guidance documents.[9] Pipeline projects fit into a category of public projects that require special application of scoping alternatives, alternative selection and exclusion criteria. In these guidelines public project proposers are further cautioned against taking any actions regarding site or route acquisitions or project commitments that could prejudice alternative selection or prematurely eliminate any alternatives prior to completing the EIS.

Both NEPA and MEPA guidance caution against scoping geographic boundaries of alternatives or impacts (especially cumulative impacts) along administrative or jurisdictional lines. Natural boundaries of air sheds, watersheds, river basins, view sheds, regional aquifers ecosystems and landscapes are the appropriate boundaries for scoping project and each alternative's impacts because air, water and visional impacts are not constrained by artificial government boundaries.

See NEPA guidance on using natural boundaries especially when assessing cumulative impacts of a project as an example:

> *"Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries. Resources typically are demarcated according to agency responsibility, county lines, grazing allotments or other administrative boundaries. Because natural and sociocultural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem. Cumulative effects analysis on natural systems must use natural ecological boundaries and analysis of human communities must use actual sociocultural boundaries to insure including all effects."*[10]

EQB rules state that RGU's must always consider alternative sites when scoping the EIS and evaluate site alternatives in the EIS unless they can be excluded based on one or more of three exclusion criteria.

a) Underlying need for or purpose of the project is not met;

b) Significant environmental benefit over the proposed project is not provided; or

c) Another alternative is likely to be similar in environmental benefits but will have less socioeconomic impact.

The following paragraphs are pertinent quotes from EQB Guidance on selection or exclusion of alternatives:

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[9] May 2010 Guide to Minnesota Environmental Review Rules, Minnesota Environmental Quality Board

[10] Consideration of Cumulative Effects Under NEPA, CEQ 1997

"In applying exclusion criteria, the RGU must not be overly restrictive in defining the project's purpose and need. Occasionally, an RGU will claim desirable but nonessential elements as part of the project's purpose or need, thus eliminating alternatives that should be included. In many cases, these are cost-related factors and, while important, they cannot overrule environmental considerations.[11]

"For proposed projects such as highways, streets, **pipelines**, utility lines, or systems where the proposed project is related to a large existing or planned network, for which a governmental unit has determined environmental review is needed, the RGU shall treat the present proposal as the total proposal or select only some of the future elements for present consideration in the threshold determination and EIS. These selections must be logical in relation to the design of the total system or network and must not be made merely to divide a large system into exempted segments.

"Public project proposers are further cautioned against taking any actions regarding site or route acquisitions or project commitments prior to completing the EIS unless it is clear that such action is not prohibited by part 4410.3100, subpart 2 or other laws; consult Chapter 2 for further information.

"If RGU's are too hasty in scoping the EIS, they almost inevitably will face delays later on and may damage their credibility and that of the EIS in the process. Topics and alternatives that need to be in the EIS are generally more extensive than the issues raised by public comments.

"The intent of the requirements about alternatives is to ensure that the RGU takes a serious look at whether significant environmental impacts can be avoided or minimized by carrying out the project in another way.

"The RGU should keep a written record of alternatives examined and its rationale for any alternatives excluded, providing a summary in the EIS scoping document and complete documentation in the EIS." (End of EQB Guidance quotes).

Discussion: It is important to note that EQB rules for exclusion of alternatives do not make special allowance for the "burden of proof" requirements for alternative pipeline routes proposed by parties other than the applicant to be used to prematurely screen alternatives for purposes of environmental review. However significant differences exist that can be troublesome. The PUC has recognized the extraordinary burden these criterion present and expressed intent to review these rules for fairness and consistency with MEPA.

Principles and Standards for selection or elimination of alternatives: (all must be met for highest quality):

[11] It is important to note here that it is the RGU that has the authority and responsibility to "define the purpose and need" for the project not the project developer. EQB guidance warns RGU's that project sponsors often abuse this purpose definition in attempts to environmentally superior alternatives that may cost more than the preferred alternative.

a. Addressing and resolving "burden of proof" limitations for identification of alternatives routes by parties other than applicant.[12]
b. A well defined statement of project purpose (developed by the RUG rather than project proposer) is used to screen project alternatives that is not overly restrictive thus eliminating alternatives;
c. Alternative exclusion criterion in EQB rules are observed;
d. Segment of larger project for review must be logical in relation to the design of the total system or network and must not be made merely to divide a large system into exempted segments.
e. Written statement is prepared why any alternatives were excluded from further consideration;
f. Geographic scope based on potential project impacts on natural rather than jurisdictional or administrative boundaries;
g. Broad agreement among peer groups on data sets and methodologies used to analyze potential impacts;
h. Avoid segmenting larger projects into smaller subparts that may eliminates alternatives or narrow geographic scope of impacts assessed;
i. Economic considerations are not the sole reason for eliminating an alternative;
j. Prior land acquisition or contractual obligations not used to prejudice selection of alternatives, especially in public projects.[13]

5. CONSENSUS OUTCOMES

Ultimately to be useable for all interested parties the final environmental review document needs to be both comprehensive in scope, concise in findings and comprehendible in length, language and logic. This is essential because the document will be used by technical experts for the permitting process, policy makers for final decisions, by project proposers to understand they were treated fairly and to convince the public that their questions were answered and their needs were met.

When agencies embrace both the spirit and intent of environmental review they have found their jobs much easier because, as with successful strategic planning, it is designed to build early consensus between the project proposers, the reviewing agencies and the public. It produces concise and comprehendible documents appropriately scoped and based on sound interdisciplinary science. When presenting a fair accounting and analysis of alternatives environmental review documents can be relied upon to make good decisions unlikely to be controversial or legally contested.

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[12] See Minnesota Rule 7852.1400 ROUTE PROPOSAL ACCEPTANCE Subp. 3 "*Requirements for Other Route Sources"* These rules for qualifying alternative routes proposed by parties other than the applicant are far more restrictive than MEPA or EQB rules

[13] Crude oil pipelines qualifying for government powers of eminent domain must be considered "public sponsored" projects. Powers of eminent domain grant project proposers much wider flexibility of choice and access to land they do not own. This government power opens a far greater range of alternative routes for pipelines that other private projects have without these powers.

The major weakness most often identified in implementing NEPA (and by inference in MEPA) identified by the CEQ study were not based so much in weaknesses in the legislation so much as they were rooted in the actual execution of environmental reviews performed under these laws. Since these laws are more broad policy than detailed prescription there is much latitude for discretionary choices by the individual practitioners. As stated above, agencies that demonstrated buy-in to the principles of interagency collaboration, transparent fact-based decision-making and that fully embraced public input were most successful. On the other hand, agencies that resisted workings collaboratively with other government agencies were unskilled in the applied natural or social sciences and exhibited distaste or even hostility toward public involvement were much less successful. As the CEQ study warned, environmental review performed by unskilled agencies may result in the public and other agencies opposing even worthy proposed actions or projects.

To summarize some key characteristics indicating that broad consensus outcomes were not achieved in the execution of the environmental review process as identified by the CEQ studies were:

1. Review was initiated too late after major project decisions had already be made;
2. Lengthy unfocused documents that did not aid in good decision-making,
3. Lack of collaboration that caused loss of support from sister agencies and the public,
4. Greater public controversy when citizens were convinced they were not being heard often leading to a more protracted process,
5. Extensive, time consuming revisions to draft documents;
6. Citizen or applicant lawsuits, and
7. Complaints that process takes too much time.

And to this list we might add a seventh indicator; growing discontent by law-makers who react to lengthy review by suggesting measures to short-circuit the NEPA or MEPA process.

This concludes the supporting rationale for the methods proposed for appraising the expertise of potential RGU's for pipeline projects. The results from application of these methods to the recent performance of the PUC and DOC staff are presented in Attachment B - Evaluation Findings.

ATTACHMENT B

EVALUATION OF EXPERTISE FOR ENVIRONMENTAL REVIEW
For
Minnesota Public Utilities Commission Staff
&
Minnesota Department of Commerce Staff

By
Willis Mattison

I. INTRODUCTION

The subjective critique presented here and the more objective analysis in the section below is submitted in support of a citizen's request to the EQB for change in RGU for the Sandpiper pipeline. The intention for making this request for change in RGU was originally announced at the December 16th 2015 EQB board meeting in the form of an oral and Power Point presentation by the author. The content of that presentation is intended to be incorporated by reference into this more detailed analysis.

These combined documents (and the presentation) are intended to support citizen's contention that the environmental review process administered by the Minnesota Public Utilities Commission (PUC) staff and the Minnesota Department of Commerce (DOC) is inconsistent with established principles and standards of professional and scientific performance for such reviews and are inconsistent with relevant state policy and rules.[1] The argument and analysis provided here is not just that the Department of Natural Resources and Pollution Control Agency have the greater expertise for this RGU assignment; the analysis will demonstrate that the PUC staff and DOC are actually ill-suited and unskilled for practicing the elements and do not adhere to the rigorous professional principles and standards required for high quality environmental review.

Criteria in EQB Rules for RGU selection give preference to the government unit that has greatest responsibility for supervising or approving the project OR to the unit that has the greater relevant expertise for the environmental review. And in exceptional situations the EQB can reassign an RGU to a project when it can be shown that another government unit "has greater expertise in analyzing the potential impacts of the project." This analysis will show that the current circumstances justify the requested change in RGU under each of these criteria in rule.

[1] We make a clear distinction here between the PUC's staff and the citizens that sit on the Commission itself. It is our contention that the Commissioners have not been well served by either their own or the DOC staff. The PUC, as a quasi-judicial and policy-making body is inhibited in its ability to make good decisions by the quality of environmental review information presented to the Commission by the staff of these two departments.

II. A SUBJECTIVE COMPARISON OF RGU'S

While the PUC may have greater responsibility for "approving" the projects then either the MDNR or the MPCA they have little or no responsibility or capacity for "supervising" them. And the Department of Commerce has neither approval nor supervisory responsibility for pipeline projects. The PUC and possibly the DOC certainly have the greater expertise and experience for assessing the energy related aspects of pipeline projects but they simply do not have the experience or expertise in the natural resource or surface and groundwater pollution impact issues associated with pipelines necessary for environmental review. The PUC and DOC certainly have prepared greater numbers of Comparative Environmental Analyses (CEA's), but it is clear that CEA's are a significantly less rigorous form of environmental review than an EIS. Furthermore, the quantity of CEA experience is not a measure of quality nor should it imply expertise in preparing the more rigorous environmental impact statements (EIS's).

There are significant differences between the CEA's that were used for all past pipeline projects and the court-ordered EIS for Sandpiper.[2] These differences stand to have deleterious consequences for the efficacy of the EIS if the poorly executed CEA process utilized thus far forms the pretext for the EIS. While advocates may argue that the CEA procedure was designed to be MEPA compliant and even equivalent to an EIS a closer examination will show that this alternative review procedure has not performed as well as was anticipated and has produced sub-standard results.[3]

The PUC staff and DOC may have prepared some environmental reviews that they believe are EIS equivalents for electrical power line projects. Power lines are also linear energy transportation projects but the similarities to pipelines pretty much ends there. The potential for human and natural resource impacts from crude oil pipelines, especially from leaks and spills as well as end-of-project-life issues are significantly different in type, scope, scale and duration. For example, a cursory review of CEA's prepared for previous pipeline projects in the past suggest that only construction related impacts were examined. The major operational risks of crude pipelines including frac-outs during construction, impacts from leaks and oil spills and end-of-life pipeline abandonment were not identified as issues and thus not evaluated. Risks assessments were not prepared and worst case scenarios for spills along alternative route options were not a part of these reviews. Impacts from potential leaks and spills from pipelines were only recently added to the scope of review for the Sandpiper pipeline and that was only at the adamant insistence of outside parties, not at the initiative of the DOC or PUC staff.

Neither the PUC nor DOC staff have been accessible to citizens in outstate regions potentially impacted by the proposed pipeline projects. While the PUC has appointed a "citizen advisor" this person is located in the St. Paul offices and has been accessible outstate only at public meetings and hearings where they have performed largely clerical or hosting functions rather than sources of information and facilitating input.

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[2] See enclosed "*CEA vs. EIS – A Comparison"* – prepared for EQB by Willis Mattison 10/7/15

[3] While this analysis not prepared for that purpose it could in fact, serve equally well as an objective tool for assessing the performance of CEA's in achieving the goals of environmental review in the EQB's current rule-making process.

By contrast, both the MPCA and MDNR have large numbers of technical and public information personnel stationed at dozens of outstate locations. These outstate staffs are purposely placed to be accessible by, are regularly engaged with citizens as well as being strategically situated in close proximity to the resources they protect or manage. In addition to oversight of permits issued for various activities regulated by these agencies the staffs are intimately involved with local units of government in watershed planning, local water planning, shoreland planning and zoning programs, and they work closely with Watershed Districts, Soil and Water Conservation Districts, lake associations and Coalitions of Lake Associations (COLA's). MPCA staffs have responsibility for leaks and spills of all kinds of pollutants and have extensive experience with petroleum releases from both surface and underground storage facilities and they have oversight and enforcement responsibility for pipeline spill responses and cleanup. For example the MPCA has been intimately involved in the multi-decade groundwater contamination study of the Enbridge (then Lakehead) pipeline rupture site near Pinewood that occurred in 1979 and major Enbridge pipeline spills in Cohasset, Grand Rapids and hundreds more. They are far more experienced and well positioned to better understand and predict the long term fate and transport of crude oil contaminants in both surface and groundwater.

The fact is that while no Minnesota state agency has experience preparing a full EIS on crude oil pipeline projects the case can be made that for large scale projects that have potential for broad landscape level impacts with major surface and groundwater implications the MDNR and MPCA have far greater expertise and experience.

MDNR staffs are much better able to describe, from research, training and experience, the predictable consequences of habitat fragmentation by linear transportation infrastructure such as highways and pipelines. They have the expertise to assess past and future impacts of pipeline construction, impact of crude oil leaks and spills on fish, wildlife, forest, wetland and wild rice lake resources. They are better informed and capable to describe both the short and long term impacts of these projects on the overall landscape at the ecosystem level.

The evidence in the record already developed for these pipelines show that the Minnesota Pollution Control Agency and Department of Natural Resources each have consistently exhibited superior environmental review acumen and superior expertise for identify pertinent data and for both developing and applying methods for the analysis of the data.[4] Both the MPCA and the MDNR have repeatedly pointed out serious shortcomings and flaws in the DOC's application of MEPA, misjudgments in their selection of data and errors in the methodologies used for analysis of these data on pipeline projects. A number of MPCA and MDNR comments will be referenced in this analysis to demonstrate clear differences from PUC and DOC in their fundamental understanding for the overall execution of environmental review for pipelines. The analysis will also point out the respective superior capacities of these two agencies for supervising pipeline projects as required for RGU assignment.

[4] See collection of MPCA and MDNR comment letters enclosed.

The MPCA and MDNR have carried out numerous collaborative, multi-agency and multi-state environmental reviews many of which were joint state-federal EIS's. Such projects include reviews of the Polymet Mine, a generic forestry EIS, flood control impoundments in the Red River Basin and Mississippi navigation channel maintenance to name a few. We are not aware of any multi-agency, multi-state or state-federal environmental review experience by either PUC or DOC staffs.

The MPCA, in keeping with Governor Dayton's Executive Order 15-02 and provisions of the agency's Environmental Justice Framework[5] has embarked on a special program to help ensure coordination and collaboration with a diverse range of Minnesota residents including those from lower income communities, communities of color and American Indians. This declaration of policy positions the agency favorably for dealing with Indian Tribe's concerns during environmental review of pipeline projects. It is not clear whether the PUC or the DOC have prepared any similar policy documents.

III. OBJECTIVE EVALUATION OF EXPERTISE THROUGH APPLICATION OF PERFORMANCE EVALUATION CRITERIA

The analysis that follows attempts to demonstrate in more objective terms how the combined actions of the PUC and DOC staffs have failed to meet either the spirit or the intent of the Minnesota Environmental Policy Act (MEPA) in addressing the important pipeline issues. This section of the request will present selected snapshots of citizen's experience with the PUC/DOC's execution of the environmental review process coupled with an outcome expressed as "result" as perceived by the public. Then the evaluation compares that outcome to the sets of criteria developed for each of the five evaluation of expertise categories in Attachment A "Evaluation Criteria for Determining Proper RGU".[6]

A. Observations in Public Information and Involvement Category

1. PUC/DOC assumed neutral (non-advocacy) posture at public meetings choosing to present only procedural information and answer general questions. -**Result: Raised questions who would serve role of advocate for citizens and the public interests?**
2. DOC deferred to project proposer to present both facts and merits of project; questions – **Result: Most information presented at public meetings was generally not considered objective by project skeptics;**

[5] MPCA's Environmental Justice Plan at: http://www.pca.state.mn.us/index.php/about-mpca/assistance/mpca-and-environmental-justice.html

[6] A number of observations will appear in several categories because the actions evaluated bridged across the artificial boundaries established between them.

3. Independent experts from resource agencies or other sources were not available at public meetings to respond to citizen's questions or fact check project proposer's representations – **Result: Missed opportunity to educate citizens who were skeptical of information they were getting.**
4. Public meeting and hearing venues used by applicant using multi-media and poster board displays manned by project advocates and presenting project aspects in favorable light generally maximizing benefits and minimizing risks. –**Result: Citizens seeking balanced information were increasingly disappointed with DOC public meetings/hearings. Public meetings devolved into "public relations" tools for the applicant**
5. DOC did not respond to citizen's requests that more balanced, objective project information be presented at public meetings. **Result: Growing skepticism for DOC neutrality.**
6. Citizen's attempts to provide some balanced information at public meetings w/ media similar to project proponents were disallowed by DOC; **Result: Citizen's concerns for bias in process grew begin to surface.**
7. News media carried story of Enbridge's investor announcement of company's plans to replace their Line3 in same corridor as Sandpiper. Neither DOC nor NDPC had divulged these plans in Sandpiper hearings. **Results: Loss of public trust for integrity of applicant and DOC that withheld this information. Citizens felt they had to force company and DOC to admit they had plans for more than one pipeline in proposed new pipeline corridor. Undisclosed potential for cumulative impact concerns.**
8. Public only allowed to submit minor route "deviations" for pipelines rather than entirely different sites for consideration in CEA. All other significantly different routes suggested were summarily dubbed "system alternatives" and rejected by DOC staff as not meeting defined project purpose. **Result: Public frustration and suspicions growing that deck was stacked in favor of applicant's preferred route by DOC's narrow definition of project purpose.**
9. Public was not involved nor informed in advance of prior scoping decisions such as defining the project purpose in terms that severely limited range of alternative routes deemed acceptable; **Result: Citizens could not understand why significance of project's purpose statement was never publically disclosed or debated to build consensus.**
10. Citizens were not advised until eleventh hour of prior scoping decision by DOC that all route alternatives proposed had to pass through three pre-determined geographic points to meet project purpose. **Result: Options for submitting alternative routes severely limited. Citizens had to make last minute revisions consequently producing some wildly circuitous route proposals. Process lost credibility.**
11. PUC/DOC advised public that proposed route alternatives must meet technical burden of proof criteria in Rule 7853.0130 . **Results: Citizen's conclude that only another pipeline company could have met the supporting data requirements of these rules and that no citizen nominated routes would be considered. Citizens became convinced the deck had been stacked by DOC and that MEPA was being ignored.**

12. PUC Commissioners realize extraordinary burden of proof criteria in rules are unfair and open separate docket to begin review of rule. **Result: This review has not yet begun and will not have relieved this burden in time to benefit current public process. Conclusions based on this rule continue to restrict alternatives being carried forward into the EIS.**
13. ALJ imposes even more rigorous test for viable alternatives advising public that they must demonstrate capability to actually construct pipeline on proposed route in same timeframe as proposed by applicant. **Result: Complete public exasperation and belief that process is fatally flawed, citizens conclude they have no legitimate role in process. EIS may be based on improper prior scoping decisions.**
14. NDPC began to secure pipeline right-of-way easements and store pipe along preferred route before public meetings were held. **Results: This activity made applicant's preferred route appear to be foregone conclusion for permitting and that no alternative routes would be seriously considered in environmental review whether by CEA or EIS.**
15. Public comments suggested a number of data sets and analytical methods that might be utilized to describe pipeline impacts in CEA but all are summarily rejected by DOC. **Results: Citizens began to believe that DOC's solicitation of data and methodologies for analysis at public meetings were disingenuous.**
16. Citizen groups hire professional scientists and recruit volunteer environmental review professionals to critique CEA methods but criticisms are ignored. **Results: Citizens began to believe that DOC was intractable and unresponsive to peer review, even from external, disinterested experts.**
17. Out of frustration for narrowly scoped CEA and rejection of route alternatives citizens begin calling for full EIS rather than CEA. DOC counters requests for CEA with assertion that CEA is equivalent to EIS. **Citizens began to believe DOC either did not understand the purpose and functions of environmental review or had become prejudiced in favor of applicant's project as proposed.**
18. Citizen groups convinced that public meetings and hearings are not effective means of input and hire attorneys to represent them in contested case evidentiary hearings at enormous expense; **DOC began to treat citizens as opponents or even adversaries. Costs of citizen voices being heard effectively becomes prohibitive.**
19. Citizens appeal staff rejection of system alternatives to full PUC Commissioners. **Results: PUC Commissioners seem to understand issues and grants special high level review and round of public hearings on system alternatives;**
20. DOC produces highly controversial report on system alternatives that is promptly discredited by independent and agency reviewers. DOC defies critics and defends report **Result: Report is not available in timely fashion before hearings and its content is at least useless to citizens and at worst is misleading. Loss of public trust for DOC's scientific integrity, confirms belief that DOC is not responsive to public or capable of producing objective science-based review.**
21. Subsequent round of public hearings did not feature information about or invite comment on system alternatives as PUC ordered but instead simply requested prospective witnesses to testify for or against preferred route. **Result:-Public**

witnessed DOC and ALJ apparently defy (with impunity) the PUC Commissioner's order to hold hearings on system alternatives further confounding citizens.

22. Public realizes that all information whether factual, false or mere opinion coming from supporters and opposition alike would be serially challenged by all parties in contested case hearings, then compiled into a mountainous of transcript of conflicting testimony called the public record from which a law judge is asked to produce "findings and recommendations". PUC staff defends this "public record" as satisfying environmental review requirements in CON.[7] **Result: Citizen and professional reviewers alike are bewildered with process so dissimilar to the environmental review process they had become accustomed to for other projects.**
23. Citizens file lawsuit out of shear frustration and loss of faith with PUC/DOC environmental review process. **Results: Appeals Court orders and Supreme Court affirms need for EIS.**
24. Even after Appeals Court ruling PUC/DOC resume attempts to limit scope of EIS based on flawed "high level" environmental review report in CON and CEA routing record and previous narrow scoping decisions including narrow project purpose definition. **Result: Citizens lose faith and confidence in DOC and PUC staff for conducting fair review in EIS and some begin to plan appeal to EQB for change in RGU.**
25. When challenged on decision to continue narrow scope of alternatives DOC appeals to the PUC Commissioners, a policy body rather than using technical experts to affirm narrowing of system alternatives. **Result – Citizens witness further demonstration of DOC's lack of understanding of MPEA and agency's inability to properly administer environmental review process.**

Applying the criteria for expertise developed for this analysis to this sampling of citizen's experience it is fair to conclude that the PUC/DOC staff's record falls somewhere below the lowest ranking in the rating scale to merely "inform" the public. The agencies failed to effectively consult, involve or collaborate with interested citizens. The also failed to fully inform citizens of prior scoping decisions and the reasons for them. DOC also was reluctant to provide citizens access to certain GIS data they needed to being performing their own reviews of possible alternative routes. Again the criteria for expertise in this category were:

Citizen Information/Involvement (ranked from lowest to highest in quality):

1. Simply **Inform** Citizens
2. **Consult** with Citizens for input on identifying issues
3. **Involve** citizens in making final decisions
4. **Collaborate** with citizens in developing alternatives and building toward consensus before making final decision;

[7] See enclosed May 12, 2014 email from PUC's Scott Ek to Willis Mattison

B. Observations on Peer Reviewed Science and Place-based Analysis

1. DOC relies heavily on applicant's Environmental Report for scope, data, methods of analysis and selection of alternatives for CEA and CON impact analysis. **Results: Citizens and reviewing agencies point out flaws and deficiencies in applicant's report suggesting better science was likely to show existence of better alternative routes.**
2. PCA develops sophisticated science-based methodology for comparing spill response feasibility based on accessibility, applies method to routes and comes to conclusion that preferred route may rank worst of all evaluated. **Results: DOC rejects PCA's method, analysis and conclusion. DOC looses scientific peer review credibility with citizens because DOC insists on relying on their own "clerical" method analysis instead.**
3. MDNR submits suggested science-based methodology for assessing and comparing broad landscape level impacts along system alternative routes through less sensitive areas of three-state impact zones and suggests there may be lower impact regions of state for pipelines. **Results: DOC largely ignores or rejects MDNR's science and place-based methodology for exploring alternative regions of the state for possible alternative routes.**
4. DOC/PUC utilizes internal and hired consultants for peer review rather than more objective, external and independent review by sister agencies or comments from the public for CEA's. No public comment period is allowed outside of contested case hearings. **Results: Citizens, agencies and professional reviewers understand such internal review is not peer review. CEA lacks scientific credibility**
5. Contested case hearing exhibits wide range of conflicting expert testimony from supporting and opposing parties, again a great expense to citizens. **Results:- Professional reviews and citizens recognize that contested case hearing process is inappropriate for legitimate peer review of science since all "parties" are partisan and ALJ is not expert in science.**
6. MPCA and MDNR apparently invited to consult with DOC staff on CEA but major disagreements are apparent from comment letters in record; **Results: DOC appears to exercises arbitrary control over environmental review process. Peer review does not appear to be valued or desired by DOC.**
7. MPCA and MDNR suggestions that larger landscape level analysis of alternative energy corridors before project specific alternatives are identified for analysis in CEA but DOC steadfastly proclaims other routes unable to fulfill project purpose. **Results: Evidence that peer review is not functioning and scope of alternatives arbitrarily limited w/o support of peer agencies.**
8. Well credentialed environmental science consultant for citizen groups is highly critical of methods used and conclusions reached in applicant's report and DOC's "high level ER". **Results: DOC's scientific credibility and objectivity called into question as more criticisms from qualified outside scientific experts are ignored**.
9. High level environmental review document on system alternatives employs clerical rather than science-based process to simply inventory and compare lists of arbitrarily selected resources within narrow corridors along system alternative

routes to base conclusion of no environmental benefits over applicant's preferred route. **Results: DOC appears immune to peer review and begins to appear more and more biased toward applicant's preferred project.**

10. Data, methods and conclusions drawn from "high level review" strongly criticized by public, DNR & PCA in public and evidentiary hearings but no requests for revisions are accepted by DOC; **Results: DOC again appears immune to peer review and biased toward applicant's preferred project.**
11. ALJ ultimately adopts findings of DOC analysis and recommends rejection of all system alternatives with PUC and DOC staff support. **Results: Further evidence that PUC and DOC staffs are not receptive to and are unskilled at peer review intended to improve analysis.**
12. PUC relies on DOC and ALJ findings to reject all but one slightly modified version of applicant's preferred route for further review in CEA and issues CON. **Results: Record provides evidence that flawed science delivered to policy-makers on PUC citizen's board more and more likely be used to make major decisions.**
13. Citizens file lawsuit; Appeals Court (and Supreme Court) order EIS based on citizen suit**. Results: Environmental review for pipelines provides DOC with opportunity for a "do-over" of environmental review utilizing peer reviewed science and reconsideration of alternatives previously excluded.**
14. PUC and DOC intercede by recommending non-peer reviewed routing and CON record be used once again to screen out system alternatives be included in the EIS. **Results: PUC and DOC staffs demonstrate that they will actively interfere with process that would otherwise ensure the use of peer reviewed science.**

Recalling here the principles and standards for peer reviewed science developed for this analysis were:

1. Must be performed by **experts**,
2. Must be **independent**,
3. Must be **external** (impartial), and
4. Must be **technical**.

This analysis supports the conclusion that the PUC and DOC staffs are either unfamiliar with are unskilled at or are unable to employ the principles and standards for peer reviewed science to their efforts for environmental review of pipelines. They have a consistent record of being offered highly qualified peer review from a numbers of credible sources including the MPCA and MDNR staff but DOC systematically rejects almost all such offers.

C. <u>Observations on Interagency Cooperation and Collaboration</u>

1. DOC did hold early coordination meetings in 2013 or 2014 with MDNR, MPCA and U.S. Army Corps of Engineers (COE) St. Paul Dist. **Result: MDNR and USACOE issue letters of guidance and requesting more information than was provided in application and applicants Environmental report.**

2. No known DOC communications, meetings or coordination with either states of North Dakota or Wisconsin or with Omaha District COE. **Results: N.D. issues state permits for preferred route. Omaha Dist COE and USFWS begin independent NEPA review for N.D. segment of project in 2015, Wisconsin begins environmental review for that State's segment issuing draft EIS in Feb, 2016. Wisconsin environmental review apparently not coordinated w/ Minnesota.**
3. In 2014 COE St. Paul Dist suspends NEPA and permit review at applicant's request pending completion of Minnesota's review process. **Result: Federal NEPA review not able to proceed in coordination w/ either Corp's Omaha Dist or the States of Wisconsin or Minnesota. Applicant allowed to decouple collaborative state/federal environmental review by manipulating the process w/ DOC/PUC staff complicity.**
4. **(Place holder for information on collaboration w/ DOC in Wisc. Draft EIS. Review in progress and supplemental information to be added when available.)**
5. As of Feb. 2016 (two years) Applicant still has not submitted information requested by USCOE or withdrawn request to suspend Federal reviews. **Result: State and Federal environmental review not able to proceed on coordinated timeframe losing opportunity for shared resources and efficiencies of government service.**
6. When challenged regarding lack of coordination with COE permit and NEPA review DOC takes position that there is no need for such coordination. **Results: DOC demonstrates that it has no interest in and feels no obligation to coordinate or collaborate on environmental review at the interstate or federal levels. Possible loss of expertise, data and additional routing options. Further demonstrates lack of expertise and commitment to MEPA process.**
7. DOC requests environmental review funding from applicant sufficient for PUC and DOC staff time commitment and that of consultant to assist them. However, no funds are requested to facilitate full partnership with MDNR and MPCA staff. **Result: PUC Commissioners are critical of state agencies for commenting but not contributing to review. MDNR points out that their department did not get funding needed to participate fully.**
8. The several Indian Tribes interested and possibly affected by the pipeline were not and have not been sufficiently sought out by PUC or DOC for coordination or consultation. **Result: Significant damage to intergovernmental relationships that have spilled over into other venues including the recent Governor's Water Summit.**
9. Both PUC and DOC staff resist request to effectively meet and confer with several Tribes and Tribal organizations that requested early and regular intergovernmental consultations on project. **Result: Tribal government and Tribal organizations lodge numerous complaints in record. White Earth Tribe files motion for RGU change supported by Tribal organizations. Demonstrates PUC/DOC lack of skill and expertise.**
10. DOC's Memorandum of Understanding for MPCA and MDNR contribution to EIS fails to address collaboration and peer review issues once again relegating

sister agencies to contributor but subordinate "commenter" role rather than co-lead authors of EIS. **Public disillusioned with DOC's seeming intransigence at maintaining rather than sharing control of EIS scoping and content. Parties filing objections. Demonstration of lack of expertise.**

Again these were the criteria developed for gauging RGU expertise at interagency cooperation and collaboration:

1. State Agencies, especially those with permitting authority over project;
2. Other state agencies with technical expertise in project or resource impact categories;
3. Neighboring state agencies when interstate projects are reviewed or impacts extend beyond state lines;
4. Federal agencies especially when project requires federal permits, federally owned/managed resources are impacted, project impacts several states, and when federal agencies have expertise and data sources useful for review and multi-state jurisdiction;
5. All Tribal governments in project area or zone of impacts;
6. Collaboration initiated early and exercised throughout, usually by forming interagency teams.

Based on the observations it would appear that the PUC and DOC staffs have met few if any of these metrics.

D. Observations on Alternatives Identification and Evaluation

1. Applicant proceeds to secure land easements for pipeline right-of-way along preferred route w/o transparent determination by DOC that such land acquisition is allowed and would not prejudice selection of possible alternative routes. **Results:** Applicant **appears confident that all proposed system alternatives will be rejected and its investments in purchasing easements will not be lost. Applicant is highly motivated to defend narrow scoping of environmental review thus reducing risk of lost investment.**
2. PUC and DOC staffs defined the geographic scope of the project as just that segment of the overall Sandpiper pipeline project lying within the Minnesota state boundaries excluding Sandpiper segments in North Dakota and Wisconsin. The larger system components in Wisconsin, Michigan and Illinois were also excluded. **Result: For purposes of environmental review the Minnesota portion of Sandpiper project is segmented from remainder of project in North Dakota and Wisconsin and from the larger system components downstream in two other neighboring states. Limiting the geographic scope to this middle segment restricts alternatives that may involve possible relocation of the pipeline in neighboring states that could reduce impacts.**
3. Ignoring MEPA requirements to the contrary PUC and DOC staff relied on and held citizens accountable to certain CON and Routing criteria for proposing

pipeline route alternatives imposing enormous burden of proof on citizens.[8] **Results: DOC staff and ALJ recommend rejection of several system alternatives that did not meet these criteria. This barrier narrowed the scope of alternatives accepted for environmental review.**

4. PUC and DOC evaded their RGU obligation to define the "purpose and need" statement for Sandpiper project and instead allowed the project proposer to craft this language to its advantage. **Result: The purpose statement (see below) prescribes the proposers preferred route that included obligatory intermediate way points thus prejudicing the scope of alternatives to be examined in environmental review. These intermediate way points appear to represent nonessential, cost related features of the project that benefit only the proposer and work to eliminate consideration of routes that may environmentally superior. EQB guidance instructs RGU's to prohibit this manipulation of project purpose statements for precisely this reason.**

> ***Project Purpose (from NDPL Sandpiper Route Permit application)***
> *The purpose of the Project is* ***to transport growing supplies of oil produced in North Dakota to the terminals in Clearbrook, Minnesota, and Superior, Wisconsin.*** *From these terminals, the crude oil can be shipped on various other pipelines, eventually providing refineries in Minnesota, and other states in the Midwest and the East Coast with crude oil."*

Discussion: Taking advantage of the opportunity to define the purpose of its project to its own advantage the applicant crafted a definition in both public purpose and private purpose terms to gain the best of both worlds. To qualify for powers of eminent domain the project must serve the public good so the public purpose to *"transport growing supplies of oil produced in North Dakota…to refineries in the Midwest and East Coast* is offered. But in the same breath the applicant reserves its private purpose of transporting this oil *to terminals in Clearbrook, Minnesota and Superior Wisconsin.*

By adopting this "private purpose" definition of shipping oil through Clearbrook and Superior on its way to the Midwest and East Coast refineries the DOC has allowed the applicant to narrow the scope of environmental review and eliminate any alternative routes that do not pass through these intermediate points. Anyone looking at a map of Minnesota can readily see that it is difficult to connect these three points without passing through Minnesota's most pristine waters and in-tact ecosystems. However, if the public purpose of simply transporting North Dakota oil to Midwest and East Coast refineries was used to define the project nearly all of the system alternative routes proposed by MPCA and citizen groups that avoid the pristine waters and intact ecosystems of northern Minnesota would qualify for further review.

5. PUC and DOC accept the applicant's assertion that as part of the project's purpose it must meet certain provisions in contracts with shippers that specify

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8 See Minnesota Rule 7852.1400 ROUTE PROPOSAL ACCEPTANCE Subp. 3 "*Requirements for Other Route Sources"* that are far more restrictive than MEPA for qualifying alternative routes proposed by parties other than the applicant.

their crude oil would be shipped to ultimate market locations while passing through certain obligatory waypoints including Clearbrook Minnesota and Superior Wisconsin. **Results: DOC and PUC staffs, the ALJ and ultimately the PUC Commission agree to eliminate any system alternative from environmental review that does not pass through Clearbrook on basis that these routes would not fulfill the company's contractual obligations and the accomplish the stated "private" purpose of the project.**

6. Project proposer claimed it relied on project cost estimates established for its preferred route when it won approval from the Federal Energy Regulatory Commission (FERC) for certain tariffs the company is allowed to charge potential customers. DOC either supported or did not object to applicant's assertion that alternative routes with higher project costs would undermine the calculations used to support the already approved tariffs and therefore not meet the project's purpose. **Result: DOC facilitates elimination of project alternatives from environmental review based on economics factors alone, an action prohibited by MEPA.**

Discussion: Here DOC allows the project proposer premature entry into certain contractual obligations to interfere with the full range of reasonable alternatives. Theoretically, if this were an accepted practice project proposers could strategically craft contracts with others that preclude any and all alternative site considerations in environmental review.

7. Project proposer claims certain operational difficulties including pressure cycling issues associated with certain system alternative routes. No independent pipeline experts are consulted to vet the legitimacy of this claim. **Result: DOC and PUC staffs, the ALJ and ultimately the PUC Commission acknowledge this operational issue as a valid factor for eliminating certain system alternatives from further environmental review. According to EQB guidance and MEPA cost related aspects of project alternatives such as this are not to be allowed to prejudice scoping of alternatives.**
8. ALJ imposes even more rigorous test for viable alternatives advising public that they must demonstrate capability to actually construct pipeline on proposed route in same timeframe as proposed by applicant. PUC and DOC staff failed to recommend deletion of this finding when recommending ALJ's report to the PUC Commission. **Result: This extraordinarily limiting criterion was used as part of the basis for eliminating nearly all system alternatives from further review.**

Again referring to the criteria demonstrating expertise in selection or elimination of alternatives: (all must be met for highest quality):

1. Addressing and resolving conflicting "burden of proof" limitations for identification of alternatives routes by parties other than applicant.

2. A well defined statement of project purpose developed by the RGU is used to screen project alternatives that is not overly restrictive thus eliminating alternatives;

3. Alternative exclusion criterion in EQB rules are observed;

4. Segment of larger project for review must be logical in relation to the design of the total system or network and must not be made merely to divide a large system into exempted segments.

5. Written statement is prepared why any alternatives were excluded from further consideration;

6. Geographic scope based on project impacts on natural rather than jurisdictional or administrative boundaries;

7. Broad agreement among peer groups on data sets and methodologies used to analyze potential impacts;

8. Avoid segmenting larger projects into smaller subparts that may eliminates alternatives or narrow geographic scope of impacts assessed;

9. Economic considerations are not the sole reason for eliminating an alternative;

10. Prior land acquisition or contractual obligations not used to prejudice selection of alternatives, especially in public projects.

Once again the PUC and DOC staffs have either allowed or exercised extraordinary measures to limit project alternatives considered in environmental review. With possible exception of #5 in the list above the metrics established for demonstrating expertise identifying and evaluating project alternatives are largely unmet.

E. Observations on Consensus Outcomes

The key characteristics chosen to indicate whether or not broad consensus of outcomes had not been achieved due to poor execution of the proper environmental review procedures identified by the CEQ studies were:

1. Public review initiated too late after major project decisions had already be made;
2. Lengthy unfocused documents that did not aid in good decision-making,
3. Lack of collaboration that caused loss of support from sister agencies and the public,
4. Greater public controversy when citizens were convinced they were not being heard often leading to a more protracted process,
5. Extensive, time consuming revisions to draft documents;

6. Citizen or applicant lawsuits, and
7. Complaints that process takes too much time.
8. Complaints from elected leaders that process was too long and proposals being considered to further streamline it.

PUC and DOC were unable or unwilling to commence environmental review before the applicant made a series of project commitments that were subsequently allowed to limit project location (route) alternatives. Staff's efforts have produced an immense but unfocused public record that does not aid in good public decision-making for the myriad reasons set forth here. These agencies have lost necessary support from both sister agencies and the public by resisting intergovernmental collaboration and peer reviewed science and thus not building consensus agreements. The public's frustration grew with more and more evidence that they were just being listened to but not being heard.

Ultimately, citizens did resort to a lawsuit in an attempt to improve the quality of environmental review by proper methods on an appropriate slate of project alternatives. And complaints that the review and permitting process is taking far too long continue to increase threatening to undermine legislative support for MEPA and the environmental review process as a whole.

So by this final set of indicators showing the PUC and DOC's overall environmental review process outcome is far from reaching consensus and has led to this request for change in RGU.

CEA vs. EIS –A COMMPARISON
CITIZEN'S MEETING WITH EQB COMMISSIONERS ON PIPELINE EIS
OCTOBER 7TH, 2015
By Willis Mattison

The MEQB's 2010 Guidance to Environmental Review opens with this clear statement:

> *"The function of the Minnesota Environmental Review Program is to avoid and minimize damage to Minnesota's environmental resources caused by public and private actions. The program accomplishes this by requiring certain proposed projects to undergo special review procedures prior to obtaining approvals and permits otherwise needed. The program assigns a unit of government—the Responsible Governmental Unit—**to conduct the review using a standardized public process designed to disclose information about environmental effects and ways to minimize and avoid them."***
>
> *"…It is an information gathering process to help governmental units with permitting authority over a project **make better-informed decisions**."* (emphasis added).

This has not been citizen's or Tribal member's experience with the environmental review for new pipeline projects proposed for Minnesota.

The MEQB granted authority for alternative environmental review to the Public Utilities Commission and the Department of Commerce for large energy facilities including pipelines under social, political and energy circumstances that existed over three decades ago. What those conditions were then have either been long since forgotten or are outdated. These laws and alternative rules were intended to expedite needed energy facility construction or upgrades in a more "stream lined" fashion and under an accelerated time frame to meet the circumstances of the time. These antiquated rules have long since been recognized as in need up updating but, do date no such effort has been initiated by either Department.

Until recently these two agencies have administered the alternative form of review largely under the public's radar having applied the process more frequently to routing of high voltage power lines rather than pipelines However, with news of recent large pipeline leaks and ruptures across the nation coupled with a series of proposals for new or expanded pipelines here in Minnesota, citizens have found good reason to learn how this process worked. Citizens began to pay closer attention to both the potential risks and impacts as well as for the proposed location of these facilities but only after reviews and permits for several previous pipelines had already been processed and permitted.

Citizens met with EQB Commissioners in December 2014 to express early concerns not only for the scope, scale, number and proposed highly sensitive locations of these new pipeline projects but to express serious early concerns for adequacy, accuracy and transparency of the alternative review process. In the ten months since this meeting citizens have fully participated in the PUC and DOC's process and now are better prepared to provide the EQB with critical reviews of the process and state a strong case that the process is not working as intended or needed.

Ultimately, citizens found the PUC's process not only unacceptable but they also believed it to be in violation of MEPA so they filed a law suit. Now, the Minnesota Court of Appeals has agreed. We are here now to basically point out how the court ordered EIS better serves the expressed intent of the MEQB Guidelines and MEPA for pipelines and to point out serious shortcomings of the alternative process as has been administered.

Below, in abbreviated chart form are problems experienced with the current process and the corresponding solutions offered by the full EIS as ordered by the Courts. This chart will, at least in part form the foundation for out conversation with the Commissioners.

PROBLEMS WITH THE PUC/DOC PROCESS USING CEA (ALTERNATIVE REVIEW	**HOW AN EQB ADMINISTERD EIS CAN ADDRESS THESE PROBLEMS**
1. Extraordinary opacity – important discretionary and procedural decisions made behind closed doors.	Extraordinary Transparency, decision-making and rationale open to public and subjected to peer review and public comment.
2. Extraordinarily exclusive –Process highly legalistic, expensive and time consuming exhausting citizen resources.	Extraordinarily Inclusive – Provisions can be made for citizen's and Tribal access and inclusion, even on EIS Team and thus emulating the EQB Board
3. Unusually Arbitrary - PUC staff dictates scope, data used and analytical methods	Highly Collaborative w/multi-Agency Team of peers operating by consensus and w/ citizen/Tribe member/observers
4. Extraordinarily Litigious argued by lawyers in terms not easily understood by public. Citizens must hire attorneys.	Public debate in open forums and responses to comments – Disputes aired publically by objective scientist, economist, engineers and technicians.
5. Confusing, Complex, Contradictory-Pipeline Statutes and Rules long over-due for revising. But, MEQB cannot intervene in current project review even if Alternative Review has serious problems.	Clear, Simple, open arbitration of disputes by inter-agency panel of peers in written record - EQB also provides technical assistance to interpret and apply rules.
6. Science and Technical Info subjected to endless debate by partisans then arbitrated by Law Judge often confounding all observers.	Science of environmental review practiced by scientists, engineers and risks assessed by experts arbitrated by peer review in full public view. Substantive comments must be responded to in final document.
7. Scope of project and array of alternatives narrowed based on prerequisite project features and economic considerations insisted upon by applicant and honored by PUC/DOC over objection by most parties.	RGU exercises independent judgment about what the document ultimately will contain and how it will be prepared*. All Reasonable Alternatives considered: Technical, engineering, geographic: multi-state if necessary & includes climate; must include credible risk assessment and realistic "worst case scenario" for each alternative by qualified consultant. (*MEQB Guidance Document)
8. Industry economic needs often allowed to trump public needs to prevent pollution, impairment or destruction when reasonable alternative exists	Public need for clean environment trumps proposer's economic need as clearly required by MEPA and guidance documents

9. Filtering of risk, impact, and project alternatives by ALJ, DOC and PUC staff hindering flow of critical information needed by PUC and other permitting agencies	Unfettered flow of final EIS info to PUC Commission, permitting agencies and public including, impacts risk assessments, worst case scenarios for project and alternatives
10. E.R. writer's not responsive to public, not held to EQB requirement to respond directly to substantive comments and criticisms of document.	Well established process requiring EIS writers to address substantive comments, criticisms and completeness in final written document.
11. No provision to challenge adequacy of final E.R. document, critics must challenge permit decisions instead.	RGU's determination of EIS adequacy challengeable in District Court before permit decisions are made
12. Individual projects driving major piecemeal revamping of continental pipelines system that is ostensibly a *public utility* thus forcing permitting agencies into reactive mode.	Generic EIS very well suited inform public policy and serve as pro-active guide to continental revamping of energy systems serving a public need.
13. Industry allowed to assume government's Power of Eminent Domain as entitlement rather than a privilege afforded projects serving a clear public need for energy supply and clean environment.	Review and permitting agency judiciously extends this awesome and valuable power to private industry in exchange for proposers willing concessions to serve all aspects of public need by exploring all impacts, risks and reasonable alternatives even if alternative chosen is not preferred by proposer.
14. Loss of Objectivity rooted in DOC's conflicted mission reflected in nearly all discretionary decisions and treatment of public.	DOC relieved of conflict though interagency team of EIS writers moderated by peer review and monitored by citizens
15. No funding requested for other agency staff work on ER resulting in limited direct participation/contributions from key agencies and considerable dispute in content ER content and methods.	EQB as RGU requests sufficient funds from applicant to fund all agency staff and consultant's work on interagency EIS team that could include funding for citizen and Tribal members on team, again emulating MEQB Board.
16. Process ignores Tribal communities that are disproportionately and significantly at risk in the pipeline proposals, with communities already under health and social duress. No acknowledgement of "structural racism" or "environmental injustices" in review or permitting.	It remains to be seen how the EQB and member agencies proposed to address Tribal government consultation in the pipeline proposals and in the EIS. Tribes point to documentation of existing "Structural Racism" and policies for "Environmental Justice" by several state agencies*

*See Minn Dept of Health and Minnesota Commissioner's commitment letters to combat "Structural Racism" at: http://www.health.state.mn.us/divs/chs/healthequity/ahe_leg_report_020414.pdf and MPCA's Environmental Justice Plan at: http://www.pca.state.mn.us/index.php/about-mpca/assistance/mpca-and-environmental-justice.html

Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-40_

May 30, 2014 (Replacement Letter June 10, 2014)

Larry Hartman
Environmental Review Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul MN 55101

Re: Extended Comment Period - Application of North Dakota Pipeline Company, LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota
PUC Docket Number: PL-6668/PPL-13-474
ERDB: 20130269

Dear Mr. Hartman:

The Minnesota Department of Natural Resources (DNR) appreciates the extension of the review period regarding the Pipeline Routing Permit Application for the Sandpiper Pipeline Project. The DNR previously submitted comments dated April 4, 2014. Please consider the following supplemental comments in addition to those submitted April 4, 2014 regarding the Pipeline Routing Permit Application.

Spire Valley AMA and Hatchery

Page 18 of the April 4, 2014 DNR comment letter explains the substantial construction and leak risk concerns regarding crossing Spring Brook in or near the Spire Valley Aquatic Management Area (AMA). As explained in more detail in the April 4, 2014 letter, this area includes a trout stream and a uniquely located, highly valuable, and sensitive fish hatchery. Due to a shallow artesian aquifer, the DNR is concerned that construction in this area may intercept the aquifer, causing a possible loss of flow to the hatchery. As previously described, it is not acceptable for a loss of flow to occur, even for a few hours.

The Spire Valley Aquatic Management Area (AMA) is also federally funded by Dingell-Johnson Sport Fish Restoration funding administered by the United States Fish and Wildlife Service (USFWS). The DNR must receive federal approval prior to issuing a License to Cross Public Lands and Waters for this area and any other state administered land crossing with federal funding. Obtaining a DNR License to Cross Public Lands and Waters in areas requiring federal approval requires a considerably longer review period, as previously described on page 28 of DNR's April 4, 2014 letter. Due to the sensitive nature of this crossing, additional review information may be required compared to other federal approvals, including possibly the need for an Environmental Assessment and the associated process time.

To address concerns regarding the Spire Valley AMA, the DNR met with representatives from the North Dakota Pipeline Company, LLC (NDPC) and discussed information needs and possible solutions. The DNR appreciates the thorough coordination occurring with the project proposer regarding this topic. In order to assess the depth to the aquifer, potential project

impacts, and necessary mitigation measures (including alternative routes) near the Spire Valley AMA; the DNR is working with NDPC to carefully plan geotechnical borings in a manner that will not impact the aquifer. The DNR issues temporary leases for this type of data collection.

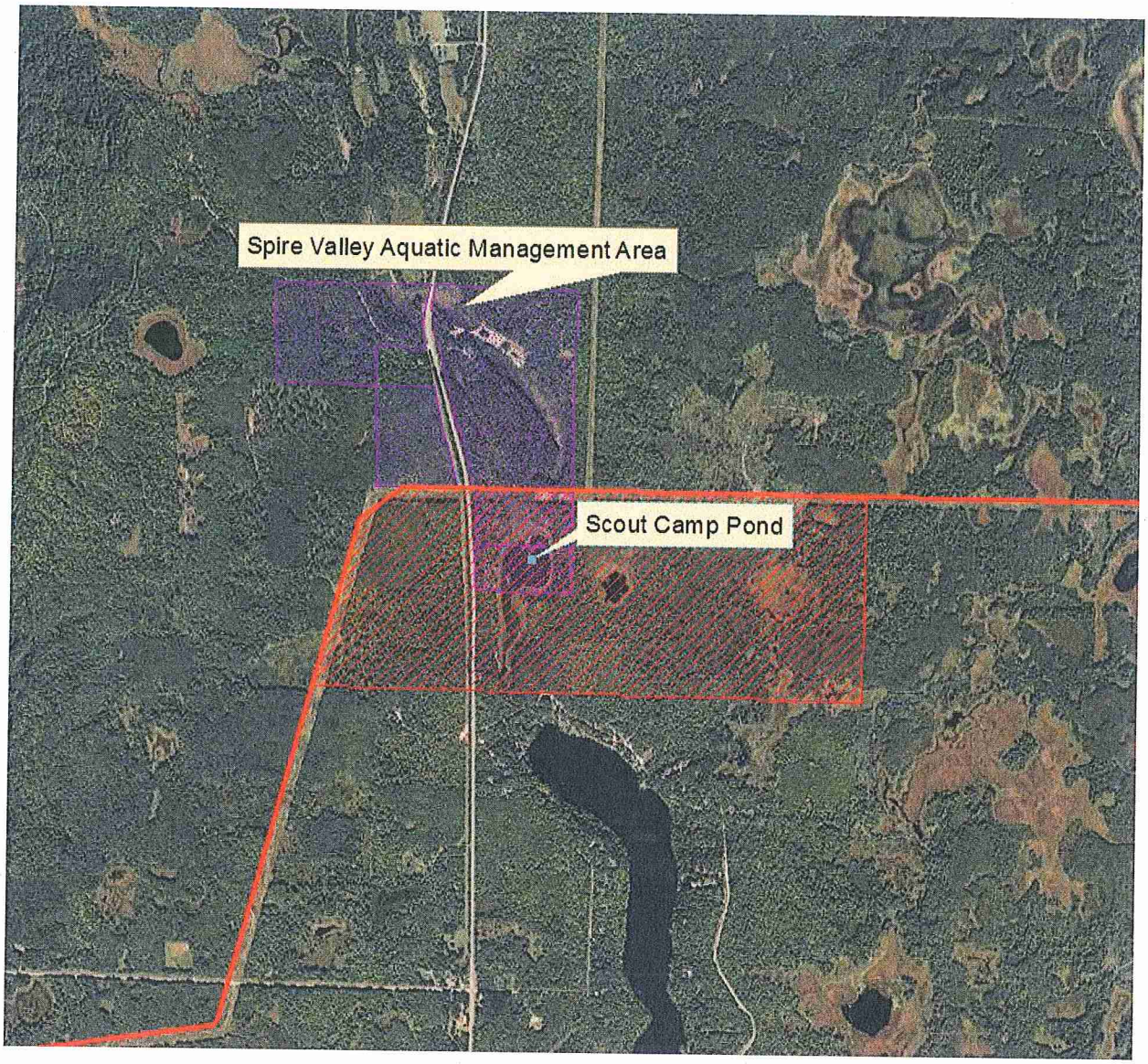
Until more investigation is completed and more engineering options are considered, there is uncertainty about the feasibility of constructing through this area. Therefore, the DNR recommends including the additional routing options described below in the CEA. Routing through this Lake Country region of the state is challenging and many options were considered before recommending route ideas for further analysis. It is important to also thoroughly explore creative engineering solutions through the AMA. For example, the CEA should clarify whether the pipeline could be buried above ground with a tunnel for the trout stream to avoid trenching the trout stream or puncturing the artesian aquifer with horizontal directional drilling.

Additional Routing Alternatives

Until reviewing the CEA, the DNR *does not* advocate or support one route over another. After reviewing the CEA, the DNR may identify routing with less natural resource impacts to assist with the natural resource element of the routing criteria the PUC considers for a routing decision. We encourage, and look forward to learning from, a comparison of these routing alternatives with a variety of proposed routing alternatives from NDPC, public commenters, organizations, and government agencies to best inform the Pipeline Routing Permit decision.

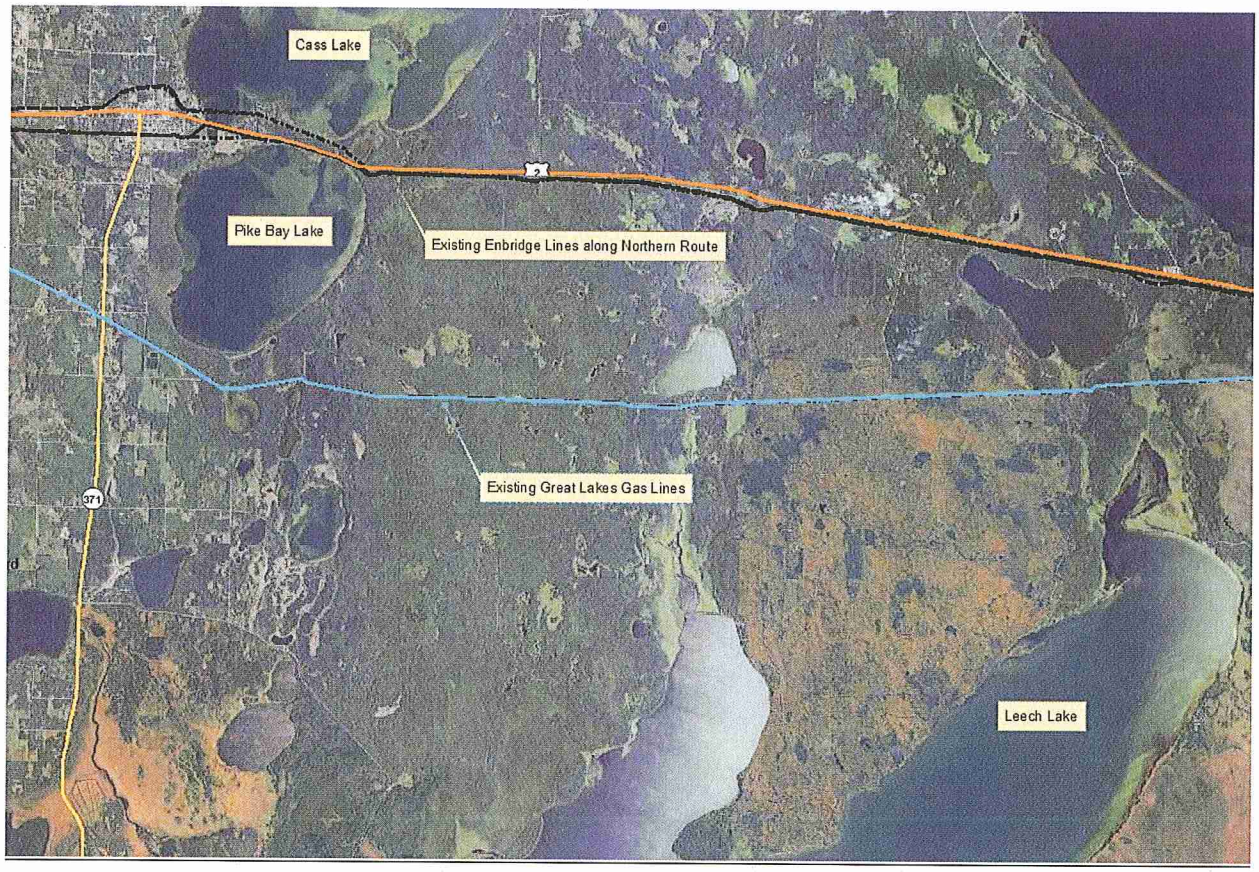
Spire Valley Route Widening Alternative

The DNR recommends widening the route width to be analyzed in the CEA approximately one half mile to the south along the Preferred Route at the crossing of Spring Brook at the Spire Valley AMA. Routing just south of Scout Camp Pond may help buffer possible hydrologic impacts to the Spire Valley hatchery due to construction activities. Though this would increase greenfield routing and forestry impacts, added flexibility is needed in this area to address substantial fisheries concerns. Note that there is limited geotechnical data currently available in the vicinity of the AMA. It is possible this route width increase may not fully address concerns regarding impacts to the hatchery. More investigation is needed.


Spire Valley Aquatic Management Area
Scout Camp Pond

Great Lakes Gas Lines Alternative

Page 3 of the April 4, 2014 DNR comment letter recommended analysis of the "Northern Route Alternative" in the CEA. The Northern Route and would avoid the Spire Valley hatchery. A nearby corridor of existing Great Lakes Gas pipelines is located in the vicinity of the Northern Route and would also avoid the hatchery and reduce greenfield routing in comparison to the Preferred Route. This corridor would also add flexibility to the project routing process due to its periodic interconnection with the Northern Route corridor, creating various crossover segments for the Public Utilities Commission to consider. The Great Lakes Gas Lines Alternative may avoid some challenges of the Northern Route such as more populated areas and a Superfund site. The DNR recommends analyzing the Great Lakes Gas Lines Alternative corridor in the CEA as depicted in the map below or using other combinations of nearby interconnections.



Third Party Monitoring

Third party environmental construction monitors have been required for previous pipeline and transmission projects. The DNR supports a Pipeline Routing Permit requirement for on-site third party monitors to review construction and restoration activities, considering various overlapping regulations. It has also been helpful when monitors keep agencies regularly updated. For the Sandpiper project the DNR recommends continuing this approach, with the exception of changing the method of hiring and administration of monitors' contracts.

Third party monitor(s) should not be hired by NDPC or Enbridge, but rather by a state agency such as the Public Utilities Commission (PUC) or Department of Commerce (DOC) or as a state contractor for the PUC or DOC. The position may still need to be funded by the project developer. This recommended separation in oversight is intended to increase the reporting and accountability to state agencies. Also, the DNR is concerned that environmental monitoring for a previous pipeline project ended earlier than all restoration activities. We recommend permitting language that would increase state agency direct control of environmental monitors' work assignments, reporting, and duration of monitoring. Note the distinction between PUC required monitors and various agency monitoring efforts related to permits and licenses other than the Pipeline Routing Permit (e.g. License to Cross Public Lands and Waters). This comment applies to PUC required monitors for the line as a whole.

Federally Funded Areas

As discussed above and in the April 4, 2014 DNR letter, when state lands that are federally funded are crossed, additional approval and process time is needed. For additional detail, please see the list below of locations of federally funded parcels associated with the Sandpiper Preferred Route. There may be more locations associated with alternative routes proposed during review of the Pipeline Routine Permit Application.

Crow Wing Chain WMA (9 parcels)

T139 R33 S32 SENW
T 139 R33 S 32 SWNE -also The Nature Conservancy (TNC) easement
T 139 R33 S32 SENE - also TNC easement
T139 R33 S33 SWNW
T139 R33 S33 SENW
T139 R33 S33 SWNE - also TNC easement
T139 R33 S33 SENE - also TNC easement
T139 R33 S33 NWSE - also TNC easement
T139 R33 S33 NESE - also TNC easement

Spire Valley Hatchery (3 parcels)

T139 R26 S10 NESE
T139 R26 S11 NWSW
T139 R26 S33 SWSW
Lawler WMA

T47 R22 S6 NENW (GL03)
T47 R22 S6 NWNE (GL02)
T47 R22 S6 SWNE

Salo WMA (1 parcel)

T47 R22 S2 NESE

Cumulative Impacts

The DNR previously recommended a robust analysis of cumulative impacts in the Comparative Environmental Analysis (CEA). Since the end of the previous comment period, Enbridge has announced a proposal for an additional pipeline, Line 3, along the Sandpiper Preferred Route. This development increases the importance of assessing cumulative impacts of possible future development such as increased corridor usage and work areas along the Preferred Route.

Resource Agency Coordination

Representatives from the Minnesota Pollution Control Agency, United States Army Corps of Engineers and DNR have met during the review periods for the Sandpiper Application for a Pipeline Routing Permit. The DNR has also met with the Department of Commerce and the United States Fish and Wildlife Service. The DNR appreciates this coordination and supports the efforts of state and federal resource agencies to encourage analysis of topics including accessing various routes in the event of a leak, leak risk analysis, and reducing impacts to wetlands, lakes and streams.

Thank you for the opportunity to provide comments regarding the Sandpiper Pipeline Project. Please contact me with any questions or to set up meetings regarding DNR application input during the preparation of the CEA.

Sincerely,

Jamie Schrenzel
Principal Planner
Environmental Review Unit
(651) 259-5115

cc: Scott Ek, Minnesota Public Utilities Commission
Patrice Jensen, Minnesota Pollution Control Agency
Bill Baer, US Army Corps of Engineers
Jeff Gosse, US Fish and Wildlife Service
Sara Ploetz, Enbridge

Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-40_

June 10, 2014

Larry Hartman
Environmental Review Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul MN 55101

Re: Corrected May 30, 2014 Letter
Extended Comment Period - Application of North Dakota Pipeline Company, LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota
PUC Docket Number: PL-6668/PPL-13-474
ERDB: 20130269

Dear Mr. Hartman:

Please accept the attached resubmittal of the Minnesota Department of Natural Resources (DNR) comment letter dated May 30, 2014 regarding the Application of North Dakota Pipeline Company, LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project. The aerial photograph and map on page 4 has been replaced with an updated map to comply with the security policy of the Pipeline and Hazardous Materials Safety Administration. Please use the enclosed replacement letter in the project record and do not distribute or retain the previous version of this letter. Thank you for your assistance regarding compliance with this security policy and your consideration of our comments.

Sincerely,

Jamie Schrenzel

Jamie Schrenzel
Principal Planner
Environmental Review Unit
(651) 259-5115

Enclosure: 1

cc: Scott Ek, Minnesota Public Utilities Commission
Patrice Jensen, Minnesota Pollution Control Agency
Bill Baer, US Army Corps of Engineers
Jeff Gosse, US Fish and Wildlife Service
Sara Ploetz, Enbridge

Minnesota Department of Natural Resources
Division of Ecological and Water Resources
2115 Birchmont Beach Rd NE
Bemidji, MN 56601
218-308-2641

July 2, 2013

Sara Ploetz
Enbridge Pipelines (North Dakota) LLC
1409 Hammond Avenue, Second Floor
Superior, WI 54880

Re: Enbridge Sandpiper Pipeline Project – Explanation of DNR Participation in Pipeline Review and Points of Contact

Dear Ms. Ploetz,

The Minnesota Department of Natural Resources (DNR) has received multiple comment solicitations concerning the above referenced pipeline project. The purpose of this letter is to explain DNR's participation in the pipeline development process and to provide points-of-contact for each participatory role. Having a clear communication protocol established upfront will help assure both an efficient review process as well as consistent transfer of information.

The DNR participates in several review activities associated with pipeline projects:

1. **Early Coordination**- The DNR Division of Ecological and Water Resources provides prospective project developers with information and guidance (i.e. presence of resources, recommendations, general licensing and permitting information, etc.) during early coordination that can help them site and develop a potential project in a manner which avoids potential environmental impacts. As part of the early coordination process, the Regional Environmental Assessment Ecologists (REAE's) coordinate review with all DNR Divisions, compile all divisions' comments, and provide consolidated Department responses to project developers.

   The Endangered Species Review Coordinator provides early coordination through the Natural Heritage letter and also provides input during both early coordination and formal environmental review documents.

   All comment solicitation and general information requests should be send to the following DNR points of contact for Early Coordination:

   - **Nathan Kestner, REAE, Reg. #1*
     (218)-308-2672
     Nathan.kestner@state.mn.us
   - *Rian Reed, REAE, Reg. #2*
     (218)-999-7826
     Rian.reed@state.mn.us
   - **Lisa Joyal, Endangered Species Review Coordinator*
     (651)259-5109

Lisa.joyal@state.mn.us

**Indicates initial primary contact.*

2. **DNR Licensing and Permits**-The DNR manages lands that it owns, and has regulatory responsibilities over listed species, public waters and utility crossings. DNR strives to maintain consistency between comments provided to other agencies (MN Department of Commerce, Corps of Engineers, County, etc.) and our own licensing and permitting conditions.

   A license must be obtained from the DNR for the passage of any utility lines crossing over or under any state land or public water. Utility project proposals in northern Minnesota typically involve a significant number of land and water crossings. Many of the different land types have specific individual review requirements and challenges. For these reasons, it is important that early coordination specific to DNR utility licensing occur parallel to the early coordination described above. The need for and contacts related to other DNR permits or approvals will be provided by the REAE's as explained above.

   All licensing specific information requests should be send to the following DNR Points of Contact for DNR Licenses to Cross:

   - **Cindy Buttleman, State Program Admin. Director, Reg. #1*
     (218)-308-2627
     Cindy.buttleman@state.mn.us
   - *Joe Rokala, State Program Admin. Director, Reg. #2*
     (218)-999-7894
     Joe.rokala@state.mn.us

     **Indicates initial primary contact.*

3. **Formal Environmental Review** - DNR recommendations are provided to the Department of Commerce, Energy Facility Permitting (EFP) unit and Public Utilities Commission (PUC) during the combined environmental review and route permitting phase. As part of the formal environmental review process, the DNR Central Office will lead the department responses and will issue letters and attend PUC meetings based on the regions' comments.

   All requests regarding DNR's involvement during formal environmental review process should be send to the following DNR Points of Contact:

   - *Jamie Schrenzel, Principal Planner, DNR Central Office*
     (651)-259-5115
     Jaimie.schrenzel@state.mn.us

The DNR looks forward to working in a positive and collaborative manner on this project to ensure projects goals are achieved while protecting Minnesota's natural resources. We have begun our early coordination review process and will be in contact with you once DNR internal comments are received and compiled.

With the exception of DNR Lands and Minerals staff listed above and the Endangered Species Review Coordinator, all communications from the DNR will come from the REAE's until the project transitions into formal environmental review. For the reasons stated above, please use the contacts above for all communications. A DNR regional map is available at http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf.

Please contact me directly at (218)-308-2672 if you have any questions.

Sincerely,

Nathan Kestner
Regional Environmental Assessment Ecologist – Reg. 1
Division of Ecological and Water Resources

cc:

Cindy Buttleman, DNR
Courtland Nelson, DNR
Diane Anderson, DNR
Jamie Schrenzel, DNR
Jeff Lightfoot, DNR
Joe Hiller, DNR
Joe Rokala, DNR
John Williams, DNR
Lisa Joyal, DNR
Pamela Arndt, DNR
Pat Collins, DNR
Peter Buesseler, DNR
Rian Reed, DNR

Minnesota Department of Natural Resources
Division of Ecological and Water Resources
2115 Birchmont Beach Rd NE
Bemidji, MN 56601
218-308-2672

August 14, 2013

Sara Ploetz
Environmental Analysis II
Enbridge Pipelines (North Dakota) LLC
1409 Hammond Ave
Superior, WI 54880

Re: Enbridge Sandpiper Pipeline Project – DNR Early Coordination Review

Dear Ms. Ploetz,

The Minnesota Department of Natural Resources (DNR) has received information concerning the above referenced pipeline project proposal. Based on the information provided to date, we understand that Enbridge Pipelines (North Dakota) LLC (Enbridge) is proposing to build a new pipeline that will begin at Enbridge's Beaver Lodge station south of Tioga, North Dakota to Clearbrook, Minnesota and will continue to Enbridge's terminal in Superior, Wisconsin. The project will transport growing supplies of North Dakota crude petroleum to Superior terminal and then connect to various other pipelines, eventually providing refineries in the Midwest and eastern Canada with crude oil. In Minnesota, the Sandpiper southern/preferred route would cross portions of Polk, Red Lake, Clearwater, Hubbard, Cass, Crow Wing, Aitkin, and Carlton counties. The northern route would cross portions of Polk, Red Lake, Clearwater, Beltrami, Hubbard, Cass, Itasca, Aitkin, St. Louis, and Carlton Counties.

Information provided for review includes electronic shapefiles for two approximately two-mile width route corridors which extend across the above mentioned counties. In recent conversations with Enbridge staff we learned that Enbridge does not view the northern route as a viable route and therefore is not expending further resources exploring it (July 30th personal communication with Sara Ploetz). Further we understand that all current efforts are focused on the southern route as the preferred route. We also understand that the Public Utilities Commission (PUC) Pipeline routing Application will include rationale for rejection of the routing alternatives. Based on this conversation, and in the interests of efficiency; DNR comments for the southern route are more extensive and based on both a desktop GIS review and interdisciplinary comments from DNR staff (information on the northern route based on a desktop review).

The DNR is providing this **early coordination preliminary review** as a mechanism to collaboratively work together to identify and avoid potential impacts to natural resources found within the project area (see DNR July 2nd letter for an explanation of DNR review activities associated with pipeline projects). This review specifically describes:

I. DNR's regulatory role and permitting information,
II. General pipeline impacts, and
III. State administered lands and high value resources within the pipeline route corridors.

DNR recommendations (and in some cases directives) are included throughout this review and for emphasis, are in **"bold"** text.

I. DNR Regulatory Role and Permitting Information

The DNR has jurisdiction over wildlife in Minnesota and administers the Minnesota Outdoor Recreation System (MINN. STAT. § 86A and § 84.027, subd. 2). The Minnesota Outdoor Recreation System managed by the DNR includes: Wildlife Management Areas, Scientific and Natural Areas, State Parks, State Forests, State Recreation Areas, and other DNR managed lands. The DNR reviews and comments on projects in order to meet statutory obligations that have been developed to ensure natural, recreational, and cultural resources are protected for the enjoyment of all residents of Minnesota and our visitors.

Project developers intending to cross over, under, or across any state land or public water with any utility (pipelines, power lines, etc.) need to first secure a DNR license to cross (Minnesota Statue 84.415). Information on how to obtain a License for Utility can be found at http://www.dnr.state.mn.us/permits/utility_crossing/index.html. DNR Division of Lands and Minerals (LAM) coordinates DNR staff license reviews and issues utility licenses to cross public waters and state lands managed by the DNR. For large linear projects such as pipelines, DNR requires application for and typically issues, one comprehensive land crossing license and one comprehensive public water crossing license for each phase. It is important to allow adequate time for all license review components. For example, crossing of state lands that were acquired with funding restrictions usually requires additional review time. Please use the link above or call DNR LAM at 218-308-2627 (northwest region) or 218-999-7894 (northeast region) as soon as possible to identify all requirements.

Many times pipeline projects require dewatering during construction. A water use (appropriation) permit from DNR Waters is required for all users withdrawing more than 10,000 gallons of water per day or 1 million gallons per year. Additional information about DNR water use permits is available at http://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/permits.html

Significant wetland acreage is present within the project boundary. Activities that impact wetlands many times involve overlapping local, state and federal regulations. Information about wetland regulation in Minnesota (along with regulator contact information) is available at http://www.bwsr.state.mn.us/wetlands/regulation.html.

Calcareous fens are rare and distinctive peat accumulating wetlands which have additional legal protected in Minnesota. Calcareous fens are designated as "outstanding resource value waters" in water quality regulations administered by the MPCA (Minnesota Rules part 7050.0180) and they are given special protection through Minnesota Rules part 8420.1010 - 8240.1060. The Wetlands Conservation Act (WCA), authorized by Minnesota Statutes 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan (i.e. Fen Management Plan [FMP]) approved by the Commissioner of the Department of Natural Resources.

Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of their dependence on delicate groundwater hydrology, calcareous fens can be indirectly affected by activities several miles away from the fen.

In addition to the protection afforded by the WCA, destruction of any state-threatened plants occurring on a calcareous fen may be regulated under Minnesota's endangered species law (MINN. STAT. § 84.0895). For additional information, see the DNR website at: http://www.dnr.state.mn.us/ets/index.html.

II. General Pipeline Impacts

General Comments:
DNR seeks to avoid, minimize all potential impacts and may also seek compensatory mitigation for unavoidable impacts. Potential environmental impacts from pipeline construction and operation include but are not limited to:

- Geology and soils: Pipelines may cross through areas of unstable soils, steep or rocky terrain, or bedrock. Erosion and sedimentation are concerns, along with the mixing of soil horizons. Fuel and hydraulic fluid contamination of soils during construction is a very real possibility, and a break in a functioning pipeline can quickly contaminate a large area.
- Public lands: The crossing of public lands can affect natural communities, habitat, and the quality of recreational experiences. Parcels, such as wildlife management areas and waterfowl production areas, usually can be avoided.
- Vegetation: Clearing the right-of-way and work areas of vegetation can have short-term and long-term consequences (habitat loss, degradation, and fragmentation). High quality, high value natural communities, wetlands, and other large blocks of habitats should be avoided.
- Wildlife: Pipeline construction results in the loss and fragmentation of wildlife habitat. The pipelines themselves do not impair the movement of species along migration corridors. Cleared and maintained rights-of-way, however, create barriers to movement for many species, give advantage to predators, and encourage the spread of invasive species. Special wildlife areas, such as rookeries, wildlife management areas, scientific and natural areas, prairie bank easements, areas of biodiversity significance, and key habitats for species of greatest conservation need (SGCN) should be avoided.
- Fisheries: Pipelines cross perennial and intermittent streams, cold water and warm water streams, and designated trout streams; and may affect high quality or high value fisheries (e.g. trout streams). Erosion and sedimentation, resulting from construction activities, impair water quality and aquatic habitats. Close attention needs to be paid to the crossing techniques to be used. DNR utility licenses to cross public waters may require specific crossing methods.
- Ground and surface water: Fuel and hydraulic spills, which are common on pipeline construction projects, have potential to contaminate ground and surface waters. While environmental review is typically focused on pipeline construction, the pipeline will remain a potential hazard throughout its useful life. Out of sight, breaks in the line can go unnoticed until the pipe's contents rise to the surface or emerge in waterways.

III. State Administered Lands & High Value Resources within the Pipeline Route Corridors

Numerous state parcels, public waters, and other high value resources occur throughout the project corridor provided. Shapefiles for many of the lands and high value resources listed below are available from for free download from the DNR Data Deli at http://deli.dnr.state.mn.us/. **DNR expects that potential impacts to all resources discussed in early coordination documents be fully assessed as part of forthcoming formal environmental review.** Following is a list of high value resources within the pipeline corridor provided for review along with recommendations for avoiding potential impacts.

State Administered Lands

Crossing of public lands can affect natural communities, habitat, and the quality of recreational experiences and in some cases conflict with the purposes for which certain areas were established. State, federal, and non-profit conservation groups have expended a considerable amount of time and money to acquire and manage these properties. Likewise, it is the DNR's preference to avoid, when possible, all potential adverse impacts to DNR administered lands. Shapefiles for all of the state managed lands included below are available through the DNR data deli. As part of any DNR license or approval associated with state administered lands, DNR will require that access to those lands be maintained at all times (i.e. survey work, during and after construction, etc.).

At the time of this review, temporary access permits are being applied for by Enbridge to gather data in close proximity the preferred route alignment. Please note that allowing access and data collection in these areas by no means is considered tacit approval by DNR.

Minerals

For the preferred route, the footprint for the pipeline study area intersects 3,083 state-owned parcels (trust, tax forfeit, con-con etc.), and also intersects an additional 1,300 parcels where the State owns a mineral interest but not the surface. This analysis has not been conducted for the north route, however; it is likely that similar mineral resources exist along that alignment.

There is significant active metallic mineral exploration activity taking place in the vicinity of the Aitkin-Carlton County boundary. State metallic mineral leases have been issued for most of the state-owned mineral interests in the Tamarack area, covering townships T48N-R22W and T49N-R22W in Aitkin County, and also the northwest quarter of Township T47N-R21W and southwest quarter of T48N-R21W in Carlton County. Paragraph 5 of the State's metallic mineral lease form (MN Rules 6125.0700) requires that the mineral lessee be consulted prior to issuance of any other surface leases, permits or licenses, and such leases, permits or licenses shall not unduly interfere with the exploration or mining operations conducted on the leased mining units. The study area route intersects active leases involving School Trust, State Acquired, Consolidated-Conservation, and Tax-Forfeit mineral rights. **DNR recommends that the project proposer (Enbridge), mineral owner (State), and mineral lessee (Kennecott Exploration Company) meet to determine if potential conflicts may exist where the study route intersects the active lease area. Additionally, Aitkin and Carlton County Land Departments administer the surface of Tax-Forfeit lands in their respective Counties, including many surface parcels where active state mineral leases are in effect. It will be important to consult with the County tax-forfeit surface administrators so that they are informed and aware of mineral lease implications for the tax-forfeit surface estate in the area.**

> Kennecott Exploration Company holds the following state metallic mineral leases that intersect the study route:
> T48N-R22W, Sections 31-36: leases MM9774P, MM10327 thru MM10331
> T48N-R21W, Sections 31-33: leases MM9810, MM9811, MM9854N, MM9855N, and MM9856N
> T47N-R21W, Sections 4-8: leases MM10176, MM9805, MM9806, MM10124N, MM10125N

Other Mineral Estate Mineral Resources (iron and nonferrous metallic minerals)

Along most of the study route, metallic mineral resources are avoided. The study route successfully avoids known iron resources of the Mesabi, Cuyuna and Emily iron districts. The study route crosses two bedrock greenstone belt terranes in the western half of Minnesota. While these bedrock belts may attract mineral exploration activity at some future date, they are relatively unexplored at present due to thickness of overlying glacial materials. There are no presently known mineral resources along the western half of the study route. The study route also passes through an area in central Carlton County that has

experienced repeated episodes of metallic mineral exploration (where the study route passes through Ranges 18W and 19W).

Surface Estate Mineral Resources (aggregate, crushed stone, peat, etc.)
Where surface estate mineral resources exist, compensation would be required for any encumbrance that precludes extraction activities due to the presence of the pipeline. Features such as the pipeline, associated setback and sloping requirements, areas of infrastructure, permanent access roads, etc. that encumber surface estate mineral resources would be evaluated (at proposer expense) at the time the route is finalized.

Peatland SNA's
There are approximately 6 million acres of "peatlands" in Minnesota; lands where the underlying substrate consists primarily of peat organic soils. Some of these peatlands are of world-wide significance, and contain some of Minnesota's last true wilderness. Acre upon acre of spruce, tamarack and sedge fens and wetlands exist here with little penetration by roads or human habitation. In 1978, the Minnesota DNR began evaluating the peatlands of Minnesota. As a result of this early effort, all of Minnesota's 6 million acres were evaluated as to their ecological significance, and recommendations were made to identify the most fragile and unique of all of the peatland acres in the state.
A report entitled Recommendations for the Protection of Ecologically Significant Peatlands in Minnesota PDF(5.9 Mb) was published in 1984. Eighteen ecologically significant peatlands were identified in this report.

Legislation passed in 1991 included the Peatland Protection Act. In this legislation, each of the 18 peatlands identified in the 1984 report were given SNA status. While SNA's in general are afforded the greatest protection relative to other state managed lands; Peatland SNA's differ from other SNA's in that there are additional regulations regarding activities on peatland SNA's. **Construction of new corridors of disturbance associated with pipelines through Peatland SNA's is a prohibited activity** [MN Statutes 84.035 Subd5(a)5].

Following is a list of Peatland SNA's within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
N/A
Northern Route
Wawina Peatland SNA

Wildlife Management Areas (WMA's)
As provided by Minnesota Statutes, section 86A.05, WMA's are established, *"to protect those lands and waters which have a high potential for wildlife production and to develop and manage these lands and waters for the production of wildlife, for public hunting, fishing, and trapping, and for other compatible outdoor recreational uses".*

Following is a list of Wildlife Management Areas (WMA's) within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route	
Polk WMA	McGregor WMA
Timber Doodle WMA	Grayling Marsh WMA*
Lessor WMA	Lawler WMA*
Enerson WMA	Upper Rice WMA
Mud Lake WMA	Salo marsh WMA*

Lowe WMA	
Crow Wing Chain WMA*	
Northern Route	
Lessor WMA	Polk WMA
Enerson WMA	Timber Doodle WMA
Polk WMA	West Four Legged Lake WMA
Bemidji Slough WMA	Swan River Deer Yard WMA

*Crossing appears unavoidable based on corridor provided

Aquatic Management Areas (AMA's)

As provided by Minnesota Statutes, section 86A.05, AMA's are established, "*to protect, develop, and manage lakes, rivers, streams, and adjacent wetlands and lands that are critical for fish and other aquatic life, for water quality, and for their intrinsic biological value, public fishing, or other compatible outdoor recreational uses*".

Following is a list of AMA's within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route	
La Salle Creek AMA	Spire Lake Hatchery AMA
Straight River AMA	Blackhoof River AMA
Snowshoe Lake AMA	
Northern Route	
Clearwater River AMA	Grace Lake AMA
Necktie River AMA	Prairie River AMA
Blackberry Lake AMA	Bruce Creek AMA
Ahmik Reek AMA	Otter Creek AMA
Little Otter Creek AMA	

*Note – Some of the AMAs listed above are also included below as state conservation easements.

State Conservation Easements (MS Chapter 84C)

As provided by Minnesota Statutes, section 86C.01, conservation easements refer to, "*nonpossessory interest of a holder in real property imposing limitations or affirmative obligations the purposes of which include retaining or protecting natural, scenic, or open-space values of real property, assuring its availability for agricultural, forest, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological, or cultural aspects of real property*".

Following is a list of conservation easements within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Straight River Trout Stream Easements (Hubbard County)
Shell River Conservation Easement (T139N, R35W, S20)
Northern Route
Clearwater River Trout Stream Easements (Beltrami County)
Necktie River Trout Stream Easements (Hubbard County)
Little Otter Creek Trout Stream Easement (Carlton County)

Prairie Bank Easements
Following is a list of the prairie bank easements within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Lake Pleasant Prairie Bank Easement
Northern Route
N/A

State Parks
As provided by Minnesota Statutes, section 86A.05, state parks are established, *"to protect and perpetuate extensive areas of the state possessing resources which illustrate and exemplify Minnesota's natural phenomena and to provide for the use, enjoyment, and understanding of such resources without impairment for the enjoyment and recreation of future generations".*

Following is a list of state parks within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Itasca State Park
Jay Cooke State Park
Northern Route
Jay Cooke State Park

State Recreation Areas (SRAs)
As provided by Minnesota Statutes, section 86A.05, SRA's are established, *"to provide a broad selection of outdoor recreation opportunities in a natural setting which may be used by large numbers of people".*

Following is a list of SRA's within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
LaSalle lake SRA
Northern Route
N/A

State Forests
As provided by Minnesota Statutes, section 86A.05, state forests are established, *"...for growing, managing, and harvesting timber and other forest crops and for the establishment and development of recreational areas and for the protection of watershed areas, and the preservation and development of rare and distinctive species of flora native to such areas...".*

Following is a list of state forests within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
White Earth State Forest
Mississippi Headwaters State Forest
Huntersville State Forest
Foothills State Forest
Land O' Lakes State Forest
Hill River State forest

Waukenabo State forest
Savanna State Forest
Fond Du Lac State Forest
Northern Route
Mississippi Headwaters State Forest
Bowstring State Forest
Savanna State Forest
Fond Du Lac State Forest

DNR Division of Forestry Administered Lands/School Trust Fund lands

Many state land parcels administered by DNR Division of Forestry are situated within the projects corridors. These areas are some of the most productive forestry lands in the state and pipeline construction through them (and maintenance) would be detrimental to future revenues. Routes passing through School Trust Lands must produce maximum long term economic return for the Trust. Normal reimbursement for existing timber would be common to all forest lands but land types (School trust, Con-Con, etc.) will impact specific compensation and there may be variability that will need to be determined.

State Trails

As provided by Minnesota Statutes, section 86A.05, state trails are established "*to provide a recreational travel route which connects units of the outdoor recreation system or the national trail system, provides access to or passage through other areas which have significant scenic, historic, scientific, or recreational qualities or reestablishes or permits travel along an historically prominent travel route or which provides commuter transportation*".

Following is a list of state trails within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Willard Munger State Trail (2 crossings) – Carlton County
Paul Bunyan State Trail – Cass County
Red River of the North Water Trail
Mississippi River Water Trail (2 crossing s)
Red lake River Water Trail (2 crossings)
Crow Wing River Water Trail
Pine River Water Trail
Northern Route
Mississippi River Water Trail (2 crossing s)
Paul Bunyan State Trail – Beltrami, Hubbard
Heartland State Trail - Cass
Taconite state Trail - Itasca
Willard Munger State Trail (2 crossings) – Carlton County

DNR understands that pipeline projects crossing rivers many times require use of temporary bridges and crossings of trails require detours. Temporary bridges and other trail obstacles that are kept in place during the construction period will be obstacles to such traffic, and perhaps at times involve safety issues.

Other public and non-profit lands such U.S. Fish and Wildlife Waterfowl Productions Areas (WPA), National Wildlife Refuges and The Nature Conservancy (TNC) lands occur in the area. The land managers for these areas should be contacted individually for their respective requirements and recommendations.

Pipeline construction through areas has the potential to conflict with the purposes for which they areas were established (purposes for establishment stated above). Likewise, it is the DNR's preference to avoid, when possible, potential adverse impacts to DNR administered lands.

Other High Value Resources

Trout Streams
Many trout streams occur within the project corridor provided for review. For the preferred route it appears that six trout stream crossings may be unavoidable (many more within corridor). For the northern route it appears that three would be difficult to avoid crossing. A GIS shapefile showing legally designated trout streams and trout stream tributaries (as identified in Minnesota Rules Chapter 6264) is available through the DNR data deli.

DNR recommends avoidance of all trout water crossings when practical. Due to the sensitive nature of these special waters, be advised that information needs and crossing requirements through these areas will be greater. We also recommend exploring the feasibility of incorporating shut-off valves in close proximity to trout stream crossings to minimize impacts in the event of a failure.

Calcareous Fens
The DNR maintains a list of known calcareous fens, which is available at the DNR's website at: http://www.dnr.state.mn.us/eco/wetlands.html. Based on the most current list, one calcareous fens occurs both within and in close proximity to the route corridor provided.

Calc Fen Name	Location (TRS)
Clearbrook Fen	149N037W - 17

The DNR data deli includes a point shapefile (nhis_mnfenpt3) which represents the official list of calcareous fens, however; calcareous fens are also included in the Rare Features Data and in the MBS Native Plant Communities data set. The point file is a screening tool only and the MBS Native Plant Communities (NPC) is a polygon shapefile that include delineated calcareous fens. Some fens are so small that they may not show up on the MBS NPC shapefile. All identified calcareous fens, whether on the official list or not, are included in the Rare Features data provided by the Endangered Species review Coordinator. There are likely many yet to be identified calcareous fens in MN. Likewise **it is important that staff providing wetland delineation and species surveys have the proper training and ability to identify calcareous fens and rare species.** This will be especially important in the beach ridge areas associated with historic Lake Aggasiz (i.e. Polk, Red Lake and Clearwater Counties).

Due to the unique characteristics of these resources and difficulty in approving impacts, DNR recommends that avoidance of impacts to calcareous fens be given high priority. Please contact DNR Regional Groundwater Specialist Michelle Walker at 218-308-2664 for questions about calcareous fens and FMP requirements.

Public Waters
Numerous public water courses, public waters basins and public water wetland occurred throughout the route corridor provided. Since many of the watercourses extend across the entire corridor, crossings will likely be unavoidable, however; minimizing the number of crossing is possible. Avoiding and minimizing public water crossing will help to avoid potential impacts to water quality and fish and wildlife habitat.

Since it would be inefficient to list all public waters in the project area; **DNR recommends that Public Waters shapefiles be download from to data deli (link provided above) and used during route planning to avoid and minimize water crossings to the extent possible.**

As part of future environmental review and permitting documents, DNR expects Enbridge to adaptively manage crossing proposals based on lessons learned from recent past projects. In deciding specific crossing requirements, DNR will also take into consideration lessons learned on past projects. For example, situations which were problematic in the past due to various factors such as significant bank slumping, flowing soils, frac-outs, etc. will be treated differently as to: what types of crossings will be considered (trenching, directional drilling, etc.), pre and post construction survey requirements, restoration requirements, long-term monitoring, and potentially mitigation requirements for crossings that don't go according to plans. In order to maximize habitat function and to help maintain the natural character, DNR prefers use of natural restoration methods and/or bio-engineering when practical.

In order to inform specific crossing requirements and minimize the potential impacts for impacts to public waters, DNR may require more detailed geological and waters survey information in proximity to more sensitive public water crossing. As part of their review process DNR lands and Minerals will solicit input from area staff both general and specific comments on the many public waters crossings.

Wetlands

Considerable wetlands occur throughout the project corridor. The alteration most commonly encountered with pipelines is - through disturbance and an inability to re-establish pre-existing wetland vegetation – a conversion in wetland type to a deeper water habitat. As an area becomes wetter, the first effects on vegetation of increased saturation include the invasion of species more characteristic of marshes. Many times these are invasive species such as hybrid cattail that form monotypic stand with limited habitats value. The result can be a significant modification or loss of ecological function and biodiversity.

DNR recommends avoidance and minimization of crossings. Where crossings are needed, winter construction is preferred to minimize wetland impacts due to construction. This is especially important in sensitive and difficult to restore wetlands such as bogs and fens.

The WCA exempts impacts for pipelines projects only **IF:** impacts have been avoided and minimized to extent possible (usually not a problem to demonstrate), **AND** the project (cannot be split into components to meet an exemption) significantly modifies or alters (notice it does not say impacts) less than .5 acres of wetland. Upon review of recent air photos along the most recent Enbridge pipeline project expansion corridor (alterations specific to most recent work) one will observe significant wetland modification and alteration which exceeds .5 acres. Furthermore, **the need to provide and maintain access to properties (public and private lands) and the project corridor usually results in additional wetland impacts. Such impacts should be estimated and included as part of the project**.

DNR has begun coordination with the MN Board of Water and Soil Resources (BWSR) and the Army Corps of Engineers in regards to wetland impacts due to pipeline construction and mitigation needs.

Another consideration is the projects potential to impact easements associated with wetland mitigation sites. **DNR recommends contacting the BWSR to obtain locations of wetland mitigation easements throughout the project corridors.**

Large Block Habitats

Large blocks of habitat and habitat complexes (grassland, wetlands, or forest) can provide an increased diversity and abundance of wildlife. A large block of habitat is a function of increased acres and shape of the patch. Larger rounder or square blocks provide interior habitat that is more isolated from noise, pollution, parasitic birds, and predators associated with edges of fragmented habitat. Habitat complexes consist of a combination of various resources, which may not be significant on their own, but form a habitat complex or mosaic, that concentrates wildlife. Area sensitive species require large blocks of intact and contiguous habitat in order to successfully reproduce. Direct habitat loss, habitat degradation, and fragmentation can occur when locating pipelines across large blocks of habitat and habitat complexes.

While not as abundant as other parts of the state, large block habitats consisting of wetlands, grasslands and forested areas do occur throughout the project area. Many of these are also native plant communities, areas of biodiversity significance, and key habitats for SGCN.

DNR recommends that, to the extent feasible, the project avoid fragmenting large contiguous block of habitat of 40 or more acres.

Rare Species

Information contained in this section is not a surrogate for information provided by DNR Natural Heritage and Nongame Research Program staff. We understand that you have begun coordination with the DNR Endangered Species Coordinator in regards to receiving the most recent rare species information and survey requirements. **All questions about rare species and associated requirements should continue to be directed to Endangered Species Review Coordinator at 651-259-5109.**

Minnesota endangered species law (Minnesota Statutes Section 84.0895) and associated rules (Minnesota Rules Part 6212.1800 to 6212.2300 and 6134) prohibit the taking of endangered or threatened species without a permit. Surveys may be required in order to determine if takings may occur. **Project planning should take into account that some species can only be surveyed at specific times of the year.**

Areas of Biodiversity Significance and Native Plant Communities (NPC's)

At the conclusion of work in a geographic region, Minnesota Biological Survey (MBS) ecologists assign a biodiversity significance rank to each survey site. A site's biodiversity significance rank is based on the presence of rare species populations, the size and condition of *native plant communities* (NPCs) within the site, and the landscape context of the site (for example, whether the site is isolated in a landscape dominated by cropland or developed land, or whether it is connected or close to other areas with intact native plant communities). These ranks are used to communicate the statewide native biological diversity significance of each site to natural resource professionals, state and local government officials, and the public.

The biodiversity ranks help to guide conservation and management. The Minnesota Biological Survey (MBS) has identified many Sites of Biodiversity Significance within and adjacent to the proposed project corridor. Since coverage is not continuous across the projects corridors, a comparative analysis is not provided as part of this review.

GIS shapefiles of MBS Sites of Biodiversity Significance and Native Plant Communities can be downloaded from the DNR Data Deli, however; MBS data for Clearwater County, Beltrami, Hubbard, Cass, Itasca, and Aitkin counties are not yet complete and/or publically available through the DNR data deli. **The DNR Endangered Species Review Coordinator should be contacted at the number provided above for obtaining preliminary shapefiles for areas for which data exists.**

We encourage you to consider a project route and alignment alternatives that would avoid direct impacts to Areas of Biodiversity Significance and Native Plant Communities (NPC's). For unavoidable impacts, we recommend impact minimization. In addition, Best Management Practices should be implemented in order to minimize indirect impacts such as the introduction or spread of invasive plant species.

Rare Natural Plant Communities

Permanent impacts to rare natural communities are not allowed by the Wetland Conservation Act (WCA) (MN Rule 8420.0515 Subp. 3). Rare natural communities under WCA are defined as:

> *"Native plant communities (NPCs) having a conservation status rank of S1, S2, or S3 that are mapped or determined by the DNR to be eligible for mapping in the Natural Heritage Information System; or*

any native plant community that is contained within an area mapped or determined by the MBS to be eligible for mapping in the Natural Heritage Information System as having an Outstanding or High biodiversity significance ranking." See http://www.bwsr.state.mn.us/wetlands/wca/guidance/Rare_natural_communities.pdf .

DNR recommends that disturbance to rare natural plant communities be avoided. A crosswalk between NPCS and associated conservation status ranks is available at http://files.dnr.state.mn.us/natural_resources/npc/s_ranks_npc_types_&_subtypes.pdf

As mentioned above, the project will have impacts to NPC's that qualify as "rare natural communities" under the WCA. The local government unit (LGU) is responsible for determining whether permanent impacts to rare natural communities will occur and whether proposed actions quality for exemptions. In most cases the LGU is either the County or the County SWCD. For state lands, MNDNR is the WCA LGU. **The applicant should be sure to contact all LGUs to begin coordination for WCA compliance.**

Old Growth Forests, Ecologically Important Lowland Conifers (EILCs), Representative Sample Areas (RSA), and High Conservation Value Forests (HCVF's)
DNR recommends avoidance of all old growth special management zones (330' surrounding the old growth perimeter), RSA's, EILCs, and HCVFs. For more information about these sensitive forest resources, please contact NE Regional Plant Ecologist / MCBS Botanist, Bruce Carlson at 218-723-4763 or email at bruce.carlson@state.mn.us.

Species of Greatest Conservation Need (SGCN) and Key Habitats
Every state recently completed a "state wildlife action plan (SWAP)" which identifies conservation needs, actions and priorities for species of concern, including threatened and endangered wildlife and other important wildlife species. Much of the species documentation within Minnesota's SWAP is provided by the MBS. Minnesota's SWAP titled, "*Tomorrow's Habitat for the Wild and Rare*" describes conservation concerns for species of greatest conservation need (SGCN) and their *key habitats* within various landscape settings (characterized using the Ecological Classification System [ECS]).

SGCN are defined as species whose populations are rare, declining, or vulnerable to decline and are below levels desirable to ensure long-term health and stability (includes threatened and endangered species). *Key habitats* are defined as the habitats most important to the greatest number of SGCN. Key habitats are specific to individual ecological subsections and are not found everywhere in the state.

The MDNR and the U.S. Forest Service developed the ECS for ecological mapping and landscape classification following the National Hierarchical Framework of Ecological Units (Ecomap 1993). ECS mapping enables resource managers to consider ecological patterns for areas as large as North America or as small as a single timber stand and identify areas with similar management opportunities or constraints relative to that scale. There are eight levels of ECS units in the United States. Map units for six of these levels occur in Minnesota: Provinces, Sections, Subsections, Land Type Associations, Land Types, and Land Type Phases. The project corridor provided crosses three of Minnesota's four Ecological Provinces (Prairie Parkland, Tallgrass Aspen Parkland, and Eastern Broadleaf Forest). These Provinces include three (26 total in MN) respective Ecological Subsections (i.e. Red River Prairie, Aspen Parklands, and Hardwood Hills).

Subsection profiles (which includes conservation actions and priorities) are available at http://www.dnr.state.mn.us/ecs/index.html. GIS shapefiles for subsections are also available through the DNR data deli.

Minnesota's SWAP identifies 292 SGCN in the state. Each of the species was evaluated to determine the factors influencing their rarity, vulnerability, or decline. The results of the species analysis indicated that habitat loss and degradation are the most significant challenges facing Minnesota's SGCN. A copy of

Minnesota's SWAP is available online at http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/chapters_appendix/tomorrows_habitat_toc.pdf.

Pipeline construction and ongoing maintenance has the potential to directly and indirectly affect key habitats and the SGCN that use them. Identified key habitats within subsections mentioned above are provided in the following table:

Ecological Subsection	Key Habitats
Red River Prairie	Prairie, Forest-Lowland Deciduous, Wetland-Nonforest, River-Headwater to large, River-Very Large (Red River)
Aspen Parklands	Shrub/Woodland-Upland (Brush prairie), Wetland-Nonforest (Wet prairie), grasslands, lake-shallow, River-Headwater to Large
Hardwood Hills	Forest-Upland Deciduous (aspen-oak), Forest-Upland Deciduous (Hardwood), Shrub/Woodland-Upland (Oak savanna, Brush prairie), Prairie, Wetland-Nonforest, Grassland, Lake-Shallow, River-Headwater to large
Chippewa Plains	Forest-Upland Coniferous, Shrub/Woodland-Upland (Jackpine woodland), Wetland-Nonforest, River-Headwater to Large
Pine Moraines and Outwash Plains	Forest-Upland Coniferous (Red-white pine), Shrub/Woodland-Upland (Jackpine woodland), Wetland-Nonforest, River-Headwater to Large
St. Louis Moraines	Forest-Upland Coniferous (Red-white pine), Lake-deep, River-Headwater to Large
Tamarac Lowlands	Forest-Upland Coniferous (Red-white pine), Forest-Lowland Coniferous, Wetland-Nonforest, River-Headwater to Large
Mille Lacs Uplands	Forest-Lowland Coniferous, Forest-Upland Deciduous (Mixed hardwood-pine), Wetland-Nonforest, Lake-Deep, Forest-Upland Coniferous, Shrub/Woodland-Upland (Jack pine woodland), Shoreline-dunes-cliff/talus, River-Headwater to Large, River-Very Large (St. Croix River)
Glacial Lake Superior Plain	Forest-Upland Deciduous (Aspen), Forest-Upland Coniferous (Pine flats), Forest-Upland Deciduous (Mixed hardwood-pine), River-Headwater to Large

While we acknowledge that avoidance of all key habitats is not realistic, we do recommend that key habitats are avoided to the extent practicable. The information in this section should be used in future environmental review documents in describing the existing environment/ecological setting (ecological subsection descriptions) and impacts to key habitats. NPC shapefiles can be a useful planning tool when used in combination with project shapefiles and key habitat descriptions (which include NPC crosswalks). As with the Areas of Biodiversity Significance, coverage for NPC is incomplete or preliminary for Clearwater, Beltrami, Hubbard, Cass, Itasca, and Aitkin counties. Likewise, **the DNR Endangered Species Review Coordinator should be contacted at the number provided above for obtaining preliminary shapefiles for areas for data exists.** To crosswalk the native plant communities to their corresponding key habitats (if applicable), refer to Appendix B of this guide or go to http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/key_habitat_by_subsection.pdf.

Specific Route Avoidance Comments

Following are specific route adjustment recommendations. DNR will likely have additional recommendations as the project is further developed/refined and as part of forthcoming environmental review and permitting.

- Shell River (Hubbard County) - Based on aerial photography, it appears there have been two corridors that have been used in the past near the Twin Lakes/Hinds Lake. From the standpoint of minimizing the number of crossings (and in absence of other factors unknown at this time), using the southern corridor of disturbance is prefer as it would cross one less tributary.
- Aitkin County - Based on aerial photography and other information, cutting east just south of the Moose River WMA (using the existing corridor of disturbance associated with a 250kV power line) would avoid Grayling Marsh WMA, Mcgregor WMA, Lawler WMA, and Salo Marsh WMA. DNR recommends the impacts and feasibility of this route be further assessed.

Conclusion

Accommodating DNR recommendations through route planning will help to minimize potential impacts to wildlife, forestry, habitats, and recreation as well as facilitate permitting.

This review constitutes an office review only and is not a substitute for field review. The DNR may have comments that are more specific after more project details are known. The DNR looks forward to working with you on this project to assist in meeting projects goals while protecting Minnesota's natural resources. Please contact myself directly at (218)-308-2672 or Rian Reed at (218)-999-7826 if you have any questions.

Sincerely,

Nathan Kestner
NW Regional Environmental Assessment Ecologist
Division of Ecological and Water Resources

cc: Jamie Schrenzel, DNR
Lisa Joyal, DNR
Rian Reed, DNR
Cindy Buttleman, DNR
Joe Rokala, DNR
Deb Pile, EFP

Figure 2.3.3-1
Northern Route Alternative

Figure 2.3.3-1
North Dakota Pipeline Company LLC
Sandpiper Pipeline Project
Northern Route Alternative

Figure 2.3.3-2
Aitkin County Powerline Route Alternative

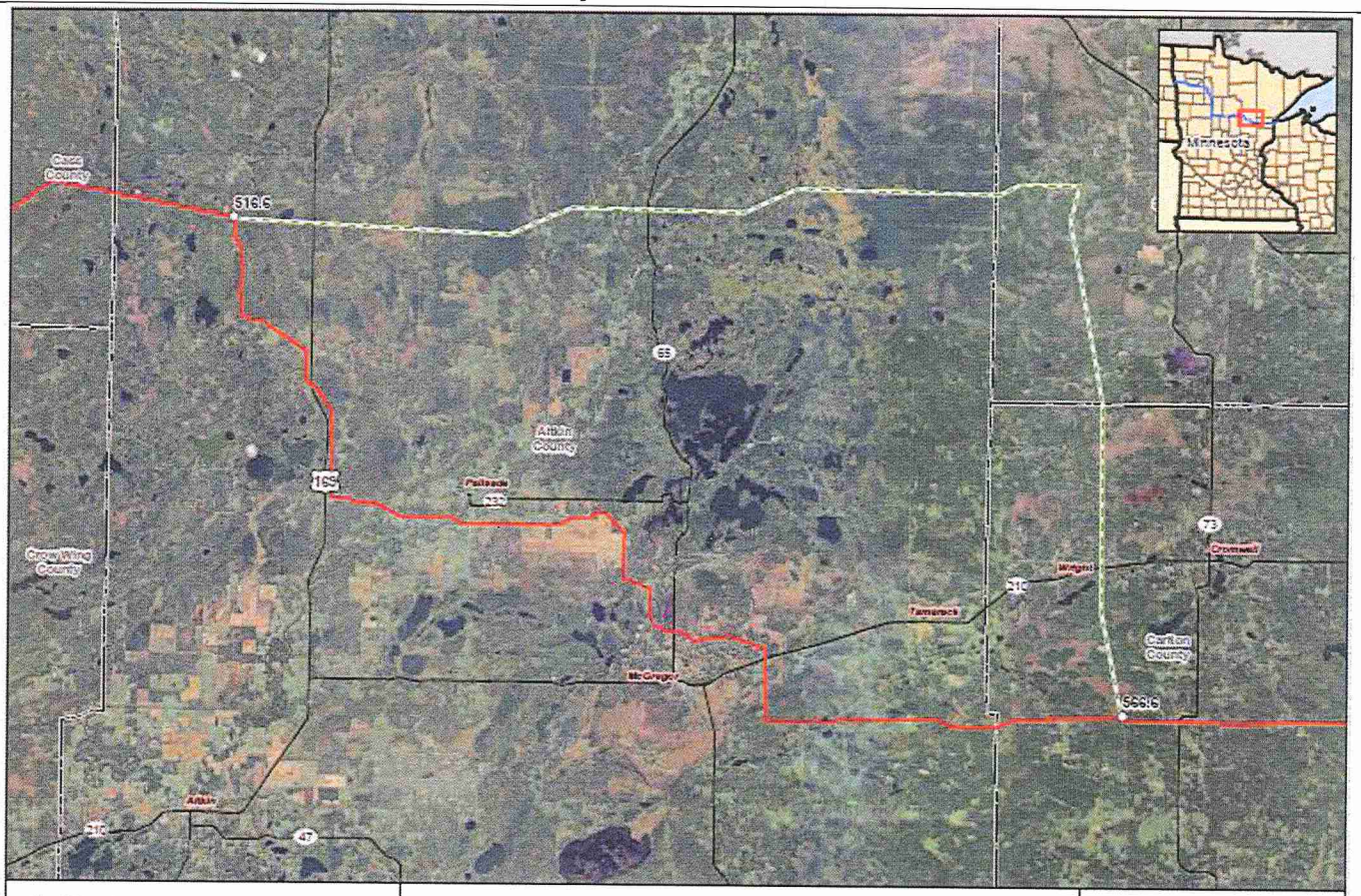


Figure 2.3.3-2
North Dakota Pipeline Company LLC
Sandpiper Pipeline Project
Aitkin County Powerline Route Alternative

Minnesota Department of Natural Resources
Division of Ecological and Water Resources
2115 Birchmont Beach Rd NE
Bemidji, MN 56601
218-308-2672

August 14, 2013

Sara Ploetz
Environmental Analysis II
Enbridge Pipelines (North Dakota) LLC
1409 Hammond Ave
Superior, WI 54880

Re: Enbridge Sandpiper Pipeline Project – DNR Early Coordination Review

Dear Ms. Ploetz,

The Minnesota Department of Natural Resources (DNR) has received information concerning the above referenced pipeline project proposal. Based on the information provided to date, we understand that Enbridge Pipelines (North Dakota) LLC (Enbridge) is proposing to build a new pipeline that will begin at Enbridge's Beaver Lodge station south of Tioga, North Dakota to Clearbrook, Minnesota and will continue to Enbridge's terminal in Superior, Wisconsin. The project will transport growing supplies of North Dakota crude petroleum to Superior terminal and then connect to various other pipelines, eventually providing refineries in the Midwest and eastern Canada with crude oil. In Minnesota, the Sandpiper southern/preferred route would cross portions of Polk, Red Lake, Clearwater, Hubbard, Cass, Crow Wing, Aitkin, and Carlton counties. The northern route would cross portions of Polk, Red Lake, Clearwater, Beltrami, Hubbard, Cass, Itasca, Aitkin, St. Louis, and Carlton Counties.

Information provided for review includes electronic shapefiles for two approximately two-mile width route corridors which extend across the above mentioned counties. In recent conversations with Enbridge staff we learned that Enbridge does not view the northern route as a viable route and therefore is not expending further resources exploring it (July 30th personal communication with Sara Ploetz). Further we understand that all current efforts are focused on the southern route as the preferred route. We also understand that the Public Utilities Commission (PUC) Pipeline routing Application will include rationale for rejection of the routing alternatives. Based on this conversation, and in the interests of efficiency; DNR comments for the southern route are more extensive and based on both a desktop GIS review and interdisciplinary comments from DNR staff (information on the northern route based on a desktop review).

The DNR is providing this **early coordination preliminary review** as a mechanism to collaboratively work together to identify and avoid potential impacts to natural resources found within the project area (see DNR July 2nd letter for an explanation of DNR review activities associated with pipeline projects). This review specifically describes:

I. DNR's regulatory role and permitting information,
II. General pipeline impacts, and
III. State administered lands and high value resources within the pipeline route corridors.

DNR recommendations (and in some cases directives) are included throughout this review and for emphasis, are in **"bold"** text.

I. DNR Regulatory Role and Permitting Information

The DNR has jurisdiction over wildlife in Minnesota and administers the Minnesota Outdoor Recreation System (MINN. STAT. § 86A and § 84.027, subd. 2). The Minnesota Outdoor Recreation System managed by the DNR includes: Wildlife Management Areas, Scientific and Natural Areas, State Parks, State Forests, State Recreation Areas, and other DNR managed lands. The DNR reviews and comments on projects in order to meet statutory obligations that have been developed to ensure natural, recreational, and cultural resources are protected for the enjoyment of all residents of Minnesota and our visitors.

Project developers intending to cross over, under, or across any state land or public water with any utility (pipelines, power lines, etc.) need to first secure a DNR license to cross (Minnesota Statue 84.415). Information on how to obtain a License for Utility can be found at http://www.dnr.state.mn.us/permits/utility_crossing/index.html. DNR Division of Lands and Minerals (LAM) coordinates DNR staff license reviews and issues utility licenses to cross public waters and state lands managed by the DNR. For large linear projects such as pipelines, DNR requires application for and typically issues, one comprehensive land crossing license and one comprehensive public water crossing license for each phase. It is important to allow adequate time for all license review components. For example, crossing of state lands that were acquired with funding restrictions usually requires additional review time. Please use the link above or call DNR LAM at 218-308-2627 (northwest region) or 218-999-7894 (northeast region) as soon as possible to identify all requirements.

Many times pipeline projects require dewatering during construction. A water use (appropriation) permit from DNR Waters is required for all users withdrawing more than 10,000 gallons of water per day or 1 million gallons per year. Additional information about DNR water use permits is available at http://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/permits.html

Significant wetland acreage is present within the project boundary. Activities that impact wetlands many times involve overlapping local, state and federal regulations. Information about wetland regulation in Minnesota (along with regulator contact information) is available at http://www.bwsr.state.mn.us/wetlands/regulation.html.

Calcareous fens are rare and distinctive peat accumulating wetlands which have additional legal protected in Minnesota. Calcareous fens are designated as “outstanding resource value waters” in water quality regulations administered by the MPCA (Minnesota Rules part 7050.0180) and they are given special protection through Minnesota Rules part 8420.1010 - 8240.1060. The Wetlands Conservation Act (WCA), authorized by Minnesota Statutes 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan (i.e. Fen Management Plan [FMP]) approved by the Commissioner of the Department of Natural Resources.

Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of their dependence on delicate groundwater hydrology, calcareous fens can be indirectly affected by activities several miles away from the fen.

In addition to the protection afforded by the WCA, destruction of any state-threatened plants occurring on a calcareous fen may be regulated under Minnesota’s endangered species law (MINN. STAT. § 84.0895). For additional information, see the DNR website at: http://www.dnr.state.mn.us/ets/index.html.

II. General Pipeline Impacts

General Comments:
DNR seeks to avoid, minimize all potential impacts and may also seek compensatory mitigation for unavoidable impacts. Potential environmental impacts from pipeline construction and operation include but are not limited to:

- Geology and soils: Pipelines may cross through areas of unstable soils, steep or rocky terrain, or bedrock. Erosion and sedimentation are concerns, along with the mixing of soil horizons. Fuel and hydraulic fluid contamination of soils during construction is a very real possibility, and a break in a functioning pipeline can quickly contaminate a large area.
- Public lands: The crossing of public lands can affect natural communities, habitat, and the quality of recreational experiences. Parcels, such as wildlife management areas and waterfowl production areas, usually can be avoided.
- Vegetation: Clearing the right-of-way and work areas of vegetation can have short-term and long-term consequences (habitat loss, degradation, and fragmentation). High quality, high value natural communities, wetlands, and other large blocks of habitats should be avoided.
- Wildlife: Pipeline construction results in the loss and fragmentation of wildlife habitat. The pipelines themselves do not impair the movement of species along migration corridors. Cleared and maintained rights-of-way, however, create barriers to movement for many species, give advantage to predators, and encourage the spread of invasive species. Special wildlife areas, such as rookeries, wildlife management areas, scientific and natural areas, prairie bank easements, areas of biodiversity significance, and key habitats for species of greatest conservation need (SGCN) should be avoided.
- Fisheries: Pipelines cross perennial and intermittent streams, cold water and warm water streams, and designated trout streams; and may affect high quality or high value fisheries (e.g. trout streams). Erosion and sedimentation, resulting from construction activities, impair water quality and aquatic habitats. Close attention needs to be paid to the crossing techniques to be used. DNR utility licenses to cross public waters may require specific crossing methods.
- Ground and surface water: Fuel and hydraulic spills, which are common on pipeline construction projects, have potential to contaminate ground and surface waters. While environmental review is typically focused on pipeline construction, the pipeline will remain a potential hazard throughout its useful life. Out of sight, breaks in the line can go unnoticed until the pipe's contents rise to the surface or emerge in waterways.

III. State Administered Lands & High Value Resources within the Pipeline Route Corridors

Numerous state parcels, public waters, and other high value resources occur throughout the project corridor provided. Shapefiles for many of the lands and high value resources listed below are available from for free download from the DNR Data Deli at http://deli.dnr.state.mn.us/. **DNR expects that potential impacts to all resources discussed in early coordination documents be fully assessed as part of forthcoming formal environmental review**. Following is a list of high value resources within the pipeline corridor provided for review along with recommendations for avoiding potential impacts.

State Administered Lands

Crossing of public lands can affect natural communities, habitat, and the quality of recreational experiences and in some cases conflict with the purposes for which certain areas were established. State, federal, and non-profit conservation groups have expended a considerable amount of time and money to acquire and manage these properties. Likewise, it is the DNR's preference to avoid, when possible, all potential adverse impacts to DNR administered lands. Shapefiles for all of the state managed lands included below are available through the DNR data deli. As part of any DNR license or approval associated with state administered lands, DNR will require that access to those lands be maintained at all times (i.e. survey work, during and after construction, etc.).

At the time of this review, temporary access permits are being applied for by Enbridge to gather data in close proximity the preferred route alignment. Please note that allowing access and data collection in these areas by no means is considered tacit approval by DNR.

Minerals

For the preferred route, the footprint for the pipeline study area intersects 3,083 state-owned parcels (trust, tax forfeit, con-con etc.), and also intersects an additional 1,300 parcels where the State owns a mineral interest but not the surface. This analysis has not been conducted for the north route, however; it is likely that similar mineral resources exist along that alignment.

There is significant active metallic mineral exploration activity taking place in the vicinity of the Aitkin-Carlton County boundary. State metallic mineral leases have been issued for most of the state-owned mineral interests in the Tamarack area, covering townships T48N-R22W and T49N-R22W in Aitkin County, and also the northwest quarter of Township T47N-R21W and southwest quarter of T48N-R21W in Carlton County. Paragraph 5 of the State's metallic mineral lease form (MN Rules 6125.0700) requires that the mineral lessee be consulted prior to issuance of any other surface leases, permits or licenses, and such leases, permits or licenses shall not unduly interfere with the exploration or mining operations conducted on the leased mining units. The study area route intersects active leases involving School Trust, State Acquired, Consolidated-Conservation, and Tax-Forfeit mineral rights. **DNR recommends that the project proposer (Enbridge), mineral owner (State), and mineral lessee (Kennecott Exploration Company) meet to determine if potential conflicts may exist where the study route intersects the active lease area. Additionally, Aitkin and Carlton County Land Departments administer the surface of Tax-Forfeit lands in their respective Counties, including many surface parcels where active state mineral leases are in effect. It will be important to consult with the County tax-forfeit surface administrators so that they are informed and aware of mineral lease implications for the tax-forfeit surface estate in the area.**

> Kennecott Exploration Company holds the following state metallic mineral leases that intersect the study route:
> T48N-R22W, Sections 31-36: leases MM9774P, MM10327 thru MM10331
> T48N-R21W, Sections 31-33: leases MM9810, MM9811, MM9854N, MM9855N, and MM9856N
> T47N-R21W, Sections 4-8: leases MM10176, MM9805, MM9806, MM10124N, MM10125N

Other Mineral Estate Mineral Resources (iron and nonferrous metallic minerals)

Along most of the study route, metallic mineral resources are avoided. The study route successfully avoids known iron resources of the Mesabi, Cuyuna and Emily iron districts. The study route crosses two bedrock greenstone belt terranes in the western half of Minnesota. While these bedrock belts may attract mineral exploration activity at some future date, they are relatively unexplored at present due to thickness of overlying glacial materials. There are no presently known mineral resources along the western half of the study route. The study route also passes through an area in central Carlton County that has

experienced repeated episodes of metallic mineral exploration (where the study route passes through Ranges 18W and 19W).

Surface Estate Mineral Resources (aggregate, crushed stone, peat, etc.)
Where surface estate mineral resources exist, compensation would be required for any encumbrance that precludes extraction activities due to the presence of the pipeline. Features such as the pipeline, associated setback and sloping requirements, areas of infrastructure, permanent access roads, etc. that encumber surface estate mineral resources would be evaluated (at proposer expense) at the time the route is finalized.

Peatland SNA's
There are approximately 6 million acres of "peatlands" in Minnesota; lands where the underlying substrate consists primarily of peat organic soils. Some of these peatlands are of world-wide significance, and contain some of Minnesota's last true wilderness. Acre upon acre of spruce, tamarack and sedge fens and wetlands exist here with little penetration by roads or human habitation. In 1978, the Minnesota DNR began evaluating the peatlands of Minnesota. As a result of this early effort, all of Minnesota's 6 million acres were evaluated as to their ecological significance, and recommendations were made to identify the most fragile and unique of all of the peatland acres in the state.
A report entitled Recommendations for the Protection of Ecologically Significant Peatlands in Minnesota PDF(5.9 Mb) was published in 1984. Eighteen ecologically significant peatlands were identified in this report.

Legislation passed in 1991 included the Peatland Protection Act. In this legislation, each of the 18 peatlands identified in the 1984 report were given SNA status. While SNA's in general are afforded the greatest protection relative to other state managed lands; Peatland SNA's differ from other SNA's in that there are additional regulations regarding activities on peatland SNA's. **Construction of new corridors of disturbance associated with pipelines through Peatland SNA's is a prohibited activity** [MN Statutes 84.035 Subd5(a)5].

Following is a list of Peatland SNA's within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
N/A
Northern Route
Wawina Peatland SNA

Wildlife Management Areas (WMA's)
As provided by Minnesota Statutes, section 86A.05, WMA's are established, *"to protect those lands and waters which have a high potential for wildlife production and to develop and manage these lands and waters for the production of wildlife, for public hunting, fishing, and trapping, and for other compatible outdoor recreational uses"*.

Following is a list of Wildlife Management Areas (WMA's) within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route	
Polk WMA	McGregor WMA
Timber Doodle WMA	Grayling Marsh WMA*
Lessor WMA	Lawler WMA*
Enerson WMA	Upper Rice WMA
Mud Lake WMA	Salo marsh WMA*

Lowe WMA	
Crow Wing Chain WMA*	
Northern Route	
Lessor WMA	Polk WMA
Enerson WMA	Timber Doodle WMA
Polk WMA	West Four Legged Lake WMA
Bemidji Slough WMA	Swan River Deer Yard WMA

*Crossing appears unavoidable based on corridor provided

Aquatic Management Areas (AMA's)

As provided by Minnesota Statutes, section 86A.05, AMA's are established, *"to protect, develop, and manage lakes, rivers, streams, and adjacent wetlands and lands that are critical for fish and other aquatic life, for water quality, and for their intrinsic biological value, public fishing, or other compatible outdoor recreational uses"*.

Following is a list of AMA's within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route	
La Salle Creek AMA	Spire Lake Hatchery AMA
Straight River AMA	Blackhoof River AMA
Snowshoe Lake AMA	
Northern Route	
Clearwater River AMA	Grace Lake AMA
Necktie River AMA	Prairie River AMA
Blackberry Lake AMA	Bruce Creek AMA
Ahmik Reek AMA	Otter Creek AMA
Little Otter Creek AMA	

*Note – Some of the AMAs listed above are also included below as state conservation easements.

State Conservation Easements (MS Chapter 84C)

As provided by Minnesota Statutes, section 86C.01, conservation easements refer to, *"nonpossessory interest of a holder in real property imposing limitations or affirmative obligations the purposes of which include retaining or protecting natural, scenic, or open-space values of real property, assuring its availability for agricultural, forest, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological, or cultural aspects of real property"*.

Following is a list of conservation easements within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Straight River Trout Stream Easements (Hubbard County)
Shell River Conservation Easement (T139N, R35W, S20)
Northern Route
Clearwater River Trout Stream Easements (Beltrami County)
Necktie River Trout Stream Easements (Hubbard County)
Little Otter Creek Trout Stream Easement (Carlton County)

Prairie Bank Easements

Following is a list of the prairie bank easements within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Lake Pleasant Prairie Bank Easement
Northern Route
N/A

State Parks

As provided by Minnesota Statutes, section 86A.05, state parks are established, *"to protect and perpetuate extensive areas of the state possessing resources which illustrate and exemplify Minnesota's natural phenomena and to provide for the use, enjoyment, and understanding of such resources without impairment for the enjoyment and recreation of future generations"*.

Following is a list of state parks within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Itasca State Park
Jay Cooke State Park
Northern Route
Jay Cooke State Park

State Recreation Areas (SRAs)

As provided by Minnesota Statutes, section 86A.05, SRA's are established, *"to provide a broad selection of outdoor recreation opportunities in a natural setting which may be used by large numbers of people*".

Following is a list of SRA's within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
LaSalle lake SRA
Northern Route
N/A

State Forests

As provided by Minnesota Statutes, section 86A.05, state forests are established, *"…for growing, managing, and harvesting timber and other forest crops and for the establishment and development of recreational areas and for the protection of watershed areas, and the preservation and development of rare and distinctive species of flora native to such areas…"*.

Following is a list of state forests within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
White Earth State Forest
Mississippi Headwaters State Forest
Huntersville State Forest
Foothills State Forest
Land O' Lakes State Forest
Hill River State forest

Waukenabo State forest
Savanna State Forest
Fond Du Lac State Forest
Northern Route
Mississippi Headwaters State Forest
Bowstring State Forest
Savanna State Forest
Fond Du Lac State Forest

DNR Division of Forestry Administered Lands/School Trust Fund lands

Many state land parcels administered by DNR Division of Forestry are situated within the projects corridors. These areas are some of the most productive forestry lands in the state and pipeline construction through them (and maintenance) would be detrimental to future revenues. Routes passing through School Trust Lands must produce maximum long term economic return for the Trust. Normal reimbursement for existing timber would be common to all forest lands but land types (School trust, Con-Con, etc.) will impact specific compensation and there may be variability that will need to be determined.

State Trails

As provided by Minnesota Statutes, section 86A.05, state trails are established "*to provide a recreational travel route which connects units of the outdoor recreation system or the national trail system, provides access to or passage through other areas which have significant scenic, historic, scientific, or recreational qualities or reestablishes or permits travel along an historically prominent travel route or which provides commuter transportation"*.

Following is a list of state trails within or in close proximity to the area under consideration for pipeline development:

Southern/Preferred Route
Willard Munger State Trail (2 crossings) – Carlton County
Paul Bunyan State Trail – Cass County
Red River of the North Water Trail
Mississippi River Water Trail (2 crossing s)
Red lake River Water Trail (2 crossings)
Crow Wing River Water Trail
Pine River Water Trail
Northern Route
Mississippi River Water Trail (2 crossing s)
Paul Bunyan State Trail – Beltrami, Hubbard
Heartland State Trail - Cass
Taconite state Trail - Itasca
Willard Munger State Trail (2 crossings) – Carlton County

DNR understands that pipeline projects crossing rivers many times require use of temporary bridges and crossings of trails require detours. Temporary bridges and other trail obstacles that are kept in place during the construction period will be obstacles to such traffic, and perhaps at times involve safety issues.

Other public and non-profit lands such U.S. Fish and Wildlife Waterfowl Productions Areas (WPA), National Wildlife Refuges and The Nature Conservancy (TNC) lands occur in the area. The land managers for these areas should be contacted individually for their respective requirements and recommendations.

Pipeline construction through areas has the potential to conflict with the purposes for which they areas were established (purposes for establishment stated above). Likewise, it is the DNR's preference to avoid, when possible, potential adverse impacts to DNR administered lands.

Other High Value Resources

Trout Streams

Many trout streams occur within the project corridor provided for review. For the preferred route it appears that six trout stream crossings may be unavoidable (many more within corridor). For the northern route it appears that three would be difficult to avoid crossing. A GIS shapefile showing legally designated trout streams and trout stream tributaries (as identified in Minnesota Rules Chapter 6264) is available through the DNR data deli.

DNR recommends avoidance of all trout water crossings when practical. Due to the sensitive nature of these special waters, be advised that information needs and crossing requirements through these areas will be greater. We also recommend exploring the feasibility of incorporating shut-off valves in close proximity to trout stream crossings to minimize impacts in the event of a failure.

Calcareous Fens

The DNR maintains a list of known calcareous fens, which is available at the DNR's website at: http://www.dnr.state.mn.us/eco/wetlands.html. Based on the most current list, one calcareous fens occurs both within and in close proximity to the route corridor provided.

Calc Fen Name	Location (TRS)
Clearbrook Fen	149N037W - 17

The DNR data deli includes a point shapefile (nhis_mnfenpt3) which represents the official list of calcareous fens, however; calcareous fens are also included in the Rare Features Data and in the MBS Native Plant Communities data set. The point file is a screening tool only and the MBS Native Plant Communities (NPC) is a polygon shapefile that include delineated calcareous fens. Some fens are so small that they may not show up on the MBS NPC shapefile. All identified calcareous fens, whether on the official list or not, are included in the Rare Features data provided by the Endangered Species review Coordinator. There are likely many yet to be identified calcareous fens in MN. Likewise **it is important that staff providing wetland delineation and species surveys have the proper training and ability to identify calcareous fens and rare species.** This will be especially important in the beach ridge areas associated with historic Lake Aggasiz (i.e. Polk, Red Lake and Clearwater Counties).

Due to the unique characteristics of these resources and difficulty in approving impacts, DNR recommends that avoidance of impacts to calcareous fens be given high priority. Please contact DNR Regional Groundwater Specialist Michelle Walker at 218-308-2664 for questions about calcareous fens and FMP requirements.

Public Waters

Numerous public water courses, public waters basins and public water wetland occurred throughout the route corridor provided. Since many of the watercourses extend across the entire corridor, crossings will likely be unavoidable, however; minimizing the number of crossing is possible. Avoiding and minimizing public water crossing will help to avoid potential impacts to water quality and fish and wildlife habitat.

Since it would be inefficient to list all public waters in the project area; **DNR recommends that Public Waters shapefiles be download from to data deli (link provided above) and used during route planning to avoid and minimize water crossings to the extent possible.**

As part of future environmental review and permitting documents, DNR expects Enbridge to adaptively manage crossing proposals based on lessons learned from recent past projects. In deciding specific crossing requirements, DNR will also take into consideration lessons learned on past projects. For example, situations which were problematic in the past due to various factors such as significant bank slumping, flowing soils, frac-outs, etc. will be treated differently as to: what types of crossings will be considered (trenching, directional drilling, etc.), pre and post construction survey requirements, restoration requirements, long-term monitoring, and potentially mitigation requirements for crossings that don't go according to plans. In order to maximize habitat function and to help maintain the natural character, DNR prefers use of natural restoration methods and/or bio-engineering when practical.

In order to inform specific crossing requirements and minimize the potential impacts for impacts to public waters, DNR may require more detailed geological and waters survey information in proximity to more sensitive public water crossing. As part of their review process DNR lands and Minerals will solicit input from area staff both general and specific comments on the many public waters crossings.

Wetlands

Considerable wetlands occur throughout the project corridor. The alteration most commonly encountered with pipelines is - through disturbance and an inability to re-establish pre-existing wetland vegetation – a conversion in wetland type to a deeper water habitat. As an area becomes wetter, the first effects on vegetation of increased saturation include the invasion of species more characteristic of marshes. Many times these are invasive species such as hybrid cattail that form monotypic stand with limited habitats value. The result can be a significant modification or loss of ecological function and biodiversity.

DNR recommends avoidance and minimization of crossings. Where crossings are needed, winter construction is preferred to minimize wetland impacts due to construction. This is especially important in sensitive and difficult to restore wetlands such as bogs and fens.

The WCA exempts impacts for pipelines projects only **IF:** impacts have been avoided and minimized to extent possible (usually not a problem to demonstrate), **AND** the project (cannot be split into components to meet an exemption) significantly modifies or alters (notice it does not say impacts) less than .5 acres of wetland. Upon review of recent air photos along the most recent Enbridge pipeline project expansion corridor (alterations specific to most recent work) one will observe significant wetland modification and alteration which exceeds .5 acres. Furthermore, **the need to provide and maintain access to properties (public and private lands) and the project corridor usually results in additional wetland impacts. Such impacts should be estimated and included as part of the project**.

DNR has begun coordination with the MN Board of Water and Soil Resources (BWSR) and the Army Corps of Engineers in regards to wetland impacts due to pipeline construction and mitigation needs.

Another consideration is the projects potential to impact easements associated with wetland mitigation sites. **DNR recommends contacting the BWSR to obtain locations of wetland mitigation easements throughout the project corridors.**

Large Block Habitats

Large blocks of habitat and habitat complexes (grassland, wetlands, or forest) can provide an increased diversity and abundance of wildlife. A large block of habitat is a function of increased acres and shape of the patch. Larger rounder or square blocks provide interior habitat that is more isolated from noise, pollution, parasitic birds, and predators associated with edges of fragmented habitat. Habitat complexes consist of a combination of various resources, which may not be significant on their own, but form a habitat complex or mosaic, that concentrates wildlife. Area sensitive species require large blocks of intact and contiguous habitat in order to successfully reproduce. Direct habitat loss, habitat degradation, and fragmentation can occur when locating pipelines across large blocks of habitat and habitat complexes.

While not as abundant as other parts of the state, large block habitats consisting of wetlands, grasslands and forested areas do occur throughout the project area. Many of these are also native plant communities, areas of biodiversity significance, and key habitats for SGCN.

DNR recommends that, to the extent feasible, the project avoid fragmenting large contiguous block of habitat of 40 or more acres.

Rare Species

Information contained in this section is not a surrogate for information provided by DNR Natural Heritage and Nongame Research Program staff. We understand that you have begun coordination with the DNR Endangered Species Coordinator in regards to receiving the most recent rare species information and survey requirements. **All questions about rare species and associated requirements should continue to be directed to Endangered Species Review Coordinator at 651-259-5109.**

Minnesota endangered species law (Minnesota Statutes Section 84.0895) and associated rules (Minnesota Rules Part 6212.1800 to 6212.2300 and 6134) prohibit the taking of endangered or threatened species without a permit. Surveys may be required in order to determine if takings may occur. **Project planning should take into account that some species can only be surveyed at specific times of the year.**

Areas of Biodiversity Significance and Native Plant Communities (NPC's)

At the conclusion of work in a geographic region, Minnesota Biological Survey (MBS) ecologists assign a biodiversity significance rank to each survey site. A site's biodiversity significance rank is based on the presence of rare species populations, the size and condition of *native plant communities* (NPCs) within the site, and the landscape context of the site (for example, whether the site is isolated in a landscape dominated by cropland or developed land, or whether it is connected or close to other areas with intact native plant communities). These ranks are used to communicate the statewide native biological diversity significance of each site to natural resource professionals, state and local government officials, and the public.

The biodiversity ranks help to guide conservation and management. The Minnesota Biological Survey (MBS) has identified many Sites of Biodiversity Significance within and adjacent to the proposed project corridor. Since coverage is not continuous across the projects corridors, a comparative analysis is not provided as part of this review.

GIS shapefiles of MBS Sites of Biodiversity Significance and Native Plant Communities can be downloaded from the DNR Data Deli, however; MBS data for Clearwater County, Beltrami, Hubbard, Cass, Itasca, and Aitkin counties are not yet complete and/or publically available through the DNR data deli. **The DNR Endangered Species Review Coordinator should be contacted at the number provided above for obtaining preliminary shapefiles for areas for which data exists.**

We encourage you to consider a project route and alignment alternatives that would avoid direct impacts to Areas of Biodiversity Significance and Native Plant Communities (NPC's). For unavoidable impacts, we recommend impact minimization. In addition, Best Management Practices should be implemented in order to minimize indirect impacts such as the introduction or spread of invasive plant species.

Rare Natural Plant Communities

Permanent impacts to rare natural communities are not allowed by the Wetland Conservation Act (WCA) (MN Rule 8420.0515 Subp. 3). Rare natural communities under WCA are defined as:

> *"Native plant communities (NPCs) having a conservation status rank of S1, S2, or S3 that are mapped or determined by the DNR to be eligible for mapping in the Natural Heritage Information System; or*

any native plant community that is contained within an area mapped or determined by the MBS to be eligible for mapping in the Natural Heritage Information System as having an Outstanding or High biodiversity significance ranking." See *http://www.bwsr.state.mn.us/wetlands/wca/guidance/Rare_natural_communities.pdf* .

DNR recommends that disturbance to rare natural plant communities be avoided. A crosswalk between NPCS and associated conservation status ranks is available at http://files.dnr.state.mn.us/natural_resources/npc/s_ranks_npc_types_&_subtypes.pdf

As mentioned above, the project will have impacts to NPC's that qualify as "rare natural communities" under the WCA. The local government unit (LGU) is responsible for determining whether permanent impacts to rare natural communities will occur and whether proposed actions quality for exemptions. In most cases the LGU is either the County or the County SWCD. For state lands, MNDNR is the WCA LGU. **The applicant should be sure to contact all LGUs to begin coordination for WCA compliance.**

Old Growth Forests, Ecologically Important Lowland Conifers (EILCs), Representative Sample Areas (RSA), and High Conservation Value Forests (HCVF's)
DNR recommends avoidance of all old growth special management zones (330' surrounding the old growth perimeter), RSA's, EILCs, and HCVFs. For more information about these sensitive forest resources, please contact NE Regional Plant Ecologist / MCBS Botanist, Bruce Carlson at 218-723-4763 or email at bruce.carlson@state.mn.us.

Species of Greatest Conservation Need (SGCN) and Key Habitats
Every state recently completed a "state wildlife action plan (SWAP)" which identifies conservation needs, actions and priorities for species of concern, including threatened and endangered wildlife and other important wildlife species. Much of the species documentation within Minnesota's SWAP is provided by the MBS. Minnesota's SWAP titled, "*Tomorrow's Habitat for the Wild and Rare*" describes conservation concerns for species of greatest conservation need (SGCN) and their *key habitats* within various landscape settings (characterized using the Ecological Classification System [ECS]).

SGCN are defined as species whose populations are rare, declining, or vulnerable to decline and are below levels desirable to ensure long-term health and stability (includes threatened and endangered species). *Key habitats* are defined as the habitats most important to the greatest number of SGCN. Key habitats are specific to individual ecological subsections and are not found everywhere in the state.

The MDNR and the U.S. Forest Service developed the ECS for ecological mapping and landscape classification following the National Hierarchical Framework of Ecological Units (Ecomap 1993). ECS mapping enables resource managers to consider ecological patterns for areas as large as North America or as small as a single timber stand and identify areas with similar management opportunities or constraints relative to that scale. There are eight levels of ECS units in the United States. Map units for six of these levels occur in Minnesota: Provinces, Sections, Subsections, Land Type Associations, Land Types, and Land Type Phases. The project corridor provided crosses three of Minnesota's four Ecological Provinces (Prairie Parkland, Tallgrass Aspen Parkland, and Eastern Broadleaf Forest). These Provinces include three (26 total in MN) respective Ecological Subsections (i.e. Red River Prairie, Aspen Parklands, and Hardwood Hills).

Subsection profiles (which includes conservation actions and priorities) are available at http://www.dnr.state.mn.us/ecs/index.html. GIS shapefiles for subsections are also available through the DNR data deli.

Minnesota's SWAP identifies 292 SGCN in the state. Each of the species was evaluated to determine the factors influencing their rarity, vulnerability, or decline. The results of the species analysis indicated that habitat loss and degradation are the most significant challenges facing Minnesota's SGCN. A copy of

Minnesota's SWAP is available online at http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/chapters_appendix/tomorrows_habitat_toc.pdf.

Pipeline construction and ongoing maintenance has the potential to directly and indirectly affect key habitats and the SGCN that use them. Identified key habitats within subsections mentioned above are provided in the following table:

Ecological Subsection	Key Habitats
Red River Prairie	Prairie, Forest-Lowland Deciduous, Wetland-Nonforest, River-Headwater to large, River-Very Large (Red River)
Aspen Parklands	Shrub/Woodland-Upland (Brush prairie), Wetland-Nonforest (Wet prairie), grasslands, lake-shallow, River-Headwater to Large
Hardwood Hills	Forest-Upland Deciduous (aspen-oak), Forest-Upland Deciduous (Hardwood), Shrub/Woodland-Upland (Oak savanna, Brush prairie), Prairie, Wetland-Nonforest, Grassland, Lake-Shallow, River-Headwater to large
Chippewa Plains	Forest-Upland Coniferous, Shrub/Woodland-Upland (Jackpine woodland), Wetland-Nonforest, River-Headwater to Large
Pine Moraines and Outwash Plains	Forest-Upland Coniferous (Red-white pine), Shrub/Woodland-Upland (Jackpine woodland), Wetland-Nonforest, River-Headwater to Large
St. Louis Moraines	Forest-Upland Coniferous (Red-white pine), Lake-deep, River-Headwater to Large
Tamarac Lowlands	Forest-Upland Coniferous (Red-white pine), Forest-Lowland Coniferous, Wetland-Nonforest, River-Headwater to Large
Mille Lacs Uplands	Forest-Lowland Coniferous, Forest-Upland Deciduous (Mixed hardwood-pine), Wetland-Nonforest, Lake-Deep, Forest-Upland Coniferous, Shrub/Woodland-Upland (Jack pine woodland), Shoreline-dunes-cliff/talus, River-Headwater to Large, River-Very Large (St. Croix River)
Glacial Lake Superior Plain	Forest-Upland Deciduous (Aspen), Forest-Upland Coniferous (Pine flats), Forest-Upland Deciduous (Mixed hardwood-pine), River-Headwater to Large

While we acknowledge that avoidance of all key habitats is not realistic, we do recommend that key habitats are avoided to the extent practicable. The information in this section should be used in future environmental review documents in describing the existing environment/ecological setting (ecological subsection descriptions) and impacts to key habitats. NPC shapefiles can be a useful planning tool when used in combination with project shapefiles and key habitat descriptions (which include NPC crosswalks). As with the Areas of Biodiversity Significance, coverage for NPC is incomplete or preliminary for Clearwater, Beltrami, Hubbard, Cass, Itasca, and Aitkin counties. Likewise, t**he DNR Endangered Species Review Coordinator should be contacted at the number provided above for obtaining preliminary shapefiles for areas for data exists.** To crosswalk the native plant communities to their corresponding key habitats (if applicable), refer to Appendix B of this guide or go to http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/key_habitat_by_subsection.pdf.

Specific Route Avoidance Comments

Following are specific route adjustment recommendations. DNR will likely have additional recommendations as the project is further developed/refined and as part of forthcoming environmental review and permitting.

- Shell River (Hubbard County) - Based on aerial photography, it appears there have been two corridors that have been used in the past near the Twin Lakes/Hinds Lake. From the standpoint of minimizing the number of crossings (and in absence of other factors unknown at this time), using the southern corridor of disturbance is prefer as it would cross one less tributary.
- Aitkin County - Based on aerial photography and other information, cutting east just south of the Moose River WMA (using the existing corridor of disturbance associated with a 250kV power line) would avoid Grayling Marsh WMA, Mcgregor WMA, Lawler WMA, and Salo Marsh WMA. DNR recommends the impacts and feasibility of this route be further assessed.

Conclusion

Accommodating DNR recommendations through route planning will help to minimize potential impacts to wildlife, forestry, habitats, and recreation as well as facilitate permitting.

This review constitutes an office review only and is not a substitute for field review. The DNR may have comments that are more specific after more project details are known. The DNR looks forward to working with you on this project to assist in meeting projects goals while protecting Minnesota's natural resources. Please contact myself directly at (218)-308-2672 or Rian Reed at (218)-999-7826 if you have any questions.

Sincerely,

Nathan Kestner
NW Regional Environmental Assessment Ecologist
Division of Ecological and Water Resources

cc: Jamie Schrenzel, DNR
Lisa Joyal, DNR
Rian Reed, DNR
Cindy Buttleman, DNR
Joe Rokala, DNR
Deb Pile, EFP

Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-40_

August 21, 2014

Burl Haar, Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul MN 55101-2147

Re: Sandpiper Pipeline Project – System Alternatives
PUC Docket Numbers: PL-6668/CN-13-473 (Certificate of Need)
PL-6668/PPL-13-474 (Route Permit)

The Minnesota Department of Natural Resources (DNR) previously provided input regarding the Pipeline Routing Permit Application and scoping for the Comparative Environmental Assessment (CEA) for the Sandpiper Pipeline Project. During the comment periods ending April 4, 2014 and May 30, 2014, the DNR requested further analysis of a number of routes and route segments in the relative vicinity of the Preferred Route proposed by the North Dakota Pipeline Company. The DNR also attended the August 7, 2014 PUC Agenda Meeting regarding routing alternatives. We appreciate the Public Utilities Commission (PUC) determination that routes identified in DNR letters will be further analyzed in the CEA. The following comments are submitted regarding the topic of "system alternatives," generally defined as routes that do not share one or both of the Preferred Route Clearbrook, Minnesota and Superior, Wisconsin terminals.

Though the DNR review did not focus on system alternatives, our previous letter stated that the DNR "supports the efforts of state and federal resource agencies to encourage analysis of topics including various routes in the event of a leak, leak risk analysis, and reducing impacts to wetlands, lakes and streams." The Preferred Route for the Sandpiper Project is proposed in a region of the state that contains a concentration of important lakes for fisheries, trout streams, sensitive aquifers, pubic conservation lands, and mineral and forestry resources. The DNR is also concerned about "greenfield" routing along areas without previous disturbance.

Considering the current demand for transportation of oil from North Dakota and the Enbridge Line 3 project proposed to follow the Sandpiper Pipeline route, the Sandpiper route could become a new corridor for multiple pipelines. Therefore, the DNR encourages the PUC to strongly consider analysis of one or more system alternatives having fewer environmental and natural resource impacts than the Preferred Route in addition to route alternatives approved for inclusion in the CEA. Environmental review of one or more system alternatives should be equivalent to the analysis conducted for route alternatives. If a system alternative is included in the scope of an environmental review document, the DNR encourages interagency coordination so that the DNR can provide data regarding a new corridor prior to environmental review document publication.

Thank you for the opportunity to provide these additional comments regarding system alternatives.

Sincerely,

Jamie Schrenzel
Principal Planner
Environmental Review Unit
(651) 259-5115

cc: Larry Hartman, Minnesota Department of Commerce
Patrice Jensen, Minnesota Pollution Control Agency
Sara Ploetz, Enbridge

Minnesota Pollution Control Agency
520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300
800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

June 20, 2014

Mr. Larry B. Hartman
Environmental Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Enbridge Sandpiper Pipeline Project - North Dakota Pipeline Company LLC
Pipeline Routing Permit Application, MPUC Docket No. PL-6668/PPL-13-474
Replacement May 30, 2014 Letter

Dear Mr. Hartman:

On April 14, 2014, the Minnesota Public Utilities Commission (PUC) extended the comment period in the matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project (Sandpiper) in Minnesota. This letter appends the Minnesota Pollution Control Agency (MPCA) letter on this subject, which was submitted to you on April 4, 2014.

We understand the topics open for comment include alternate routes, human and environmental impacts to be studied in the Comparative Environmental Analysis (CEA), and whether any specific methods or mitigation exist to address these impacts that should be studied in the CEA. MPCA's additional comments on these topics include:

- Inspection and monitoring
- Additional items for evaluation in the CEA
- Watershed Restoration and Protection Strategy
- Carbon footprint
- Environmental justice
- Alternate route analysis
- Cumulative impacts

Inspection and Monitoring

On April 16, 2014, Enbridge, doing business as North Dakota Pipeline Company LLC, submitted a proposal to the MPCA regarding independent/third-party environmental monitors for the proposed Sandpiper project. MPCA does not agree that Enbridge should be hiring and directing these inspectors/monitors, but rather that they report directly to a state agency with jurisdiction over the project. The MPCA requests that the PUC require that another agency directly hire independent inspection and monitoring contractors and/or temporary staff to conduct this work under MPCA oversight to be funded by Enbridge.

The structure, workplan,and cost of a monitoring and inspection plan should be determined while the CEA is being prepared. The MPCA and Minnesota Department of Natural Resources (MDNR) staff, who have been working collaboratively on the Sandpiper project, are willing to participate with Enbridge and

participating agencies to develop the appropriate information and mechanism. The mechanisms for this would be worked out among the parties. The payment of the state's reasonable costs should be a provision of the PUC's route permit issued to Enbridge.

Additional Items for Evaluation in the CEA

The MPCA requests that Enbridge complete a Phase I Environmental Assessment (Phase I) of the selected pipeline construction corridor in accordance with the All Appropriate Inquiry (AAI) standard as per the National Environmental Policy Act (NEPA), Title 40, Code of Federal Regulations Part 312. The Phase I is conducted to research and review potential locations of existing/historic dumps, hazardous waste sites, and other environmental concerns. If areas of environmental concern are identified in association with construction of the pipeline, Enbridge should be required to prepare work plans to describe how solid/hazardous waste/contaminated soil and groundwater will be investigated prior to construction, and how impacted areas will be dealt with in accordance with state and local regulations.

MPCA requests that the CEA include a detailed risk assessment regarding the potential for leaks to occur, how much oil might be released, and how this could affect groundwater, surface water, aquatic life, and others. The hydrogeology of the pipeline corridor area should be studied to determine potential fate and transport of a release, and potential vapor intrusion issues if a release occurs in close proximity to human habitation.

Watershed Restoration and Protection Strategy

In 2006, the Minnesota Legislature passed the Clean Water Legacy Act, which required the MPCA to develop an approach to comprehensively monitor and assess the waters of the state every 10 years, and provided one-time funding for that effort. In order to provide long term, consistent funding for Minnesota's clean water efforts, on November 4, 2008, Minnesota's voters passed the Clean Water Land and Legacy Amendment (Legacy Amendment) to the Minnesota Constitution to, in part, protect and restore lakes, rivers, streams, and groundwater. The Amendment imposed three-eighths of one percent sales tax to fund the effort for 25 years. Subsequently, in 2013, the Clean Water Accountability Act was passed by the Minnesota Legislature. This new law requires the MPCA to develop watershed restoration and protection strategies (WRAPS) for each of the state's 81 major watershed units, which correspond to the 8-digit hydrologic unit codes (HUCs). WRAPS include the monitoring and assessment information, as well as land use-based models that demonstrate the source of the highest contributors of pollutants in each watershed. This information is then used to develop strategies to either protect waters that meet water quality standards or restore waters that do not meet standards.

The WRAPS is a collaborative effort that involves the MPCA, the MDNR, the Board of Water and Soil Resources, the Department of Health, the Department of Agriculture, local soil and water conservation districts, watershed districts, the University of Minnesota, industry and business organizations, and the private citizens of Minnesota. WRAPS components are: monitoring and assessment of hydrology and the chemical and biological constituents of water quality, a stressor identification process, total maximum daily loads (TMDLs) and restoration plans for impaired waters, protection strategies for waters that currently meet standards, and a civic engagement process to assist stakeholders with implementing protection and restoration strategies.

While not yet completed, WRAPS are in process in the following major watersheds that the Sandpiper proposal will cross, also identified by the corresponding eight-digit HUCs:

- Grand Marais Creek HUC 09020306
- Red Lake River HUC 09020303
- Clearwater River HUC 09020305
- Mississippi – Headwaters HUC 07010101
- Crow Wing River HUC 07010106
- Pine River HUC 07010105
- Mississippi – Grand Rapids HUC 07010103
- Kettle River HUC 07030003
- St. Louis River HUC 04010201
- Nemadji River HUC 04010301

One of the first tenets of any protection strategy is to avoid impacts where possible. The Sandpiper proposal is not consistent with the protection strategies that are currently in development for these WRAPS, due to the large number of high quality surface waters that lie along the path of the proposed route. Enbridge should participate in stakeholder groups for these WRAPS. Stakeholder groups provide a forum for engaged citizens and interested groups to develop implementation strategies to restore and protect each watershed. The CEA should review and consider how to integrate the strategies into the proposal, or find alternate routes that have less potential for impacting surface and groundwater.

Carbon Footprint – Greenhouse Gas Emissions

The MPCA is concerned about the carbon footprint of a project. The Minnesota Legislature established greenhouse gas (GHG) reduction goals in the Next Generation Energy Act (Minn. Stat. 216H.02). The goals of the Next Generation Energy Act are to reduce greenhouse gas emissions by 15 percent below 2005 levels by 2015, and 80 percent by 2050. Greenhouse gases, upon release to the atmosphere, warm the atmosphere and surface of the planet, and lead to alterations in the earth's climate. The GHG emissions measured and reported in Minnesota include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), sulfur hexafluoride (SF_6), and two classes of compounds known collectively as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). These GHG emissions result from fuel combustion, the calcination of limestone, the degradation of organic (peats) and mineral soils, permanent land clearing and forest harvesting, and a variety of other sources. Pertaining to this project, source types include stationary and mobile source combustion from construction equipment, emissions from venting, and wetland and forest disruptions.

To track progress with the Next Generation Energy Act reduction goals, the CEA should evaluate the GHG emissions from the project and the impact these emissions may have on the attainment of the state's GHG reduction goals. Alternatives and options to reduce GHG emissions or to offset/mitigate GHG emissions should also be identified in the CEA. In addition, the CEA should evaluate the GHG impacts if this project is not built – specifically, if oil is transported by rail or truck instead of by pipeline.

Environmental Justice

The MPCA works to incorporate environmental justice principles into its projects. Environmental Justice (EJ) involves assuring the fair treatment and meaningful involvement of all persons, regardless of race or income when making environmental decisions. Fair treatment means that no group of people should

bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies. Meaningful involvement means: people have an opportunity to participate in decisions about activities that may affect their health and the environment in which they live; the public's contribution can influence the regulatory agency's decision; their concerns will be considered in the decision making process; and, decision makers seek out and facilitate the involvement of those potentially affected.

The proposed route of the Sandpiper Pipeline and other alternate routes may directly affect low income and minority populations. If a pipeline leak or break occurs, adverse impacts could occur in both surface and subsurface drinking water supplies, areas with stands of wild rice important to local Tribes and tribal members, cropland areas, impaired waters, and wildlife management areas among other types of environmental, social and economic impacts. If the Northern route or other alternate routes are chosen, the Sandpiper Pipeline may affect tribal lands.

The CEA should include consideration of EJ issues. The CEA should look at how pipeline construction and operation, and potential problems during each of these phases, may cause disproportionate impacts on low-income or minority populations. In addition, local, state, and federal agencies should engage residents to assure that they are aware of opportunities to participate in the process and understand how their comments and concerns are incorporated into the final draft CEA.

Alternate Route Analysis

The MPCA staff's analysis of the proposed Sandpiper route shows many water body crossings for which there would be very difficult or no access downstream of the crossing to clean up spills in the event of a crude oil release. The lack of possible access to these areas by people and equipment necessary to clean up spills increases the likelihood that an incident could result in significant long-term environmental damage. A failure to account for these possibilities is considered to be a substantial flaw with the currently proposed Sandpiper route.

There are many variables that could be examined when considering the potential for environmental damage in the event of a release. These include: soil types, wetland types, sensitive or endangered species, proximity to aquifers, hydrology, forest types, state park boundaries, proximity to human populations, proximity to areas with stands of wild rice, connectivity of surface waters, and others. However, for purposes of providing a simpler and effective comparison between alternative route proposals that is both visual and quantifiable (within certain limitations that will be discussed in this letter), MPCA staff has elected to compare the routes based on access to potential leak sites for purposes of containment of spills and possible clean up.

To minimize variables and subjectivity for this analysis, MPCA staff opted to identify, using ArcGIS technology, water body crossings that had neither road or traversable upland features within 250 feet of flowages of water (heavily forested areas are not considered for this purpose to be traversable, as trees would have to be removed before equipment could be brought in), or portions of larger wetland complexes that fell within a 2,000 foot buffer of the point where the proposed pipeline route was to cross a stream, lake, or wetland. The 250-foot distance from access point to flowage is somewhat arbitrary. MPCA staff conferred with contractors and engineers who specialize in road construction, and most felt that in a best-case scenario, with aggregate and equipment available, a 250-foot road into a bog or wetland would be constructed within 24 hours. Thus, for purposes of this analysis ,MPCA staff

assumed that it is possible to build an access road to reach areas where containment of a spill might be accomplished before the spilled product covers an area large enough that cleanup would be highly destructive to a sensitive environment, or impossible. Similarly, there is no regulatory basis for choosing the 2,000 foot buffer distance, other than it is a significant distance for oil impacts to occur over any surface water and easy to apply consistently statewide. It is a distance that for most people would be easy to visualize, yet small enough to create a fair comparison between routes. These numbers provide a basis for comparisons between routes and have little significance beyond that. However, if these criteria are used consistently for all proposed routes, it does provide a basis to compare the potential for each route to cause considerable environmental damage in the event of a release.

There are some factors to consider that fall beyond the scope of this comparison. For example, the water crossings proposed for the Sandpiper route are frequently streams or flowages with connectivity to other water bodies downstream. By contrast, water body crossings on the Northern route, including the Alberta Clipper Pipeline, frequently involve very large wetland complexes rather than smaller, faster moving flowages. The area needed to access might be much greater, but the oil may move more slowly in such areas. Counting becomes a bit more difficult here as well, because it is difficult to establish criteria for counting "crossings" that is comparable to the different features observed in the Sandpiper route. In most cases, MDNR catchment flow lines were used to distinguish one crossing point from another.

In any case, the method used as a basis for comparison by MPCA staff does provide quantifiable data to analyze the proposed routes from a meaningful perspective: Which route proposals pose the greatest risk to create destructive and expensive containment and cleanup operations in the event of a spill?

MPCA staff compared four proposed routes in their entirety. The four proposed routes that were compared were (1) The currently proposed Sandpiper route; (2) The "Northern" route, which includes the Alberta Clipper pipeline, which has been suggested as an alternative by other entities; (3) The "Alternative 3" route which was identified as a possible alternative by MPCA staff; and (4) The southern "Alternative 4" route which exits the state at the Iowa border and would be required to tie into the Enbridge infrastructure either in another state, or to circle around outside of Minnesota to end at the Superior Terminal. The fourth route was suggested as an alternative by a citizen group.

Any water body crossing, especially streams, rivers, or flowages of any kind that can carry oil downstream, pose the risk of creating large scale environmental damage in the event of a release. If possible, it is best to avoid crossing surface waters altogether with oil pipelines in order to minimize this risk. However, if a water body, bog or otherwise sensitive area is to be crossed, then serious consideration should be given to whether the site can be accessed quickly in the event of a release to contain the product, minimize migration of product into surface waters, soils and groundwater, and perform clean-up operations. In situations where roads have to be constructed to access a spill, the act of constructing the road, excavating and clearing vegetation can all exacerbate the damage that the spill itself created. Additionally, placement of flow control valves in strategic locations along/near sensitive areas may help to minimize backflow of product out of a fractured line into those areas.

A difficulty with aerial photograph analysis as opposed to field surveying of water crossings is that it is difficult to determine whether a stream or wetland is permanently, seasonally, or intermittently flooded. MPCA staff relied on National Wetland Inventory maps to identify wetland types, which will to some extent help to determine the likelihood of the wetland having open water at the time of a leak,

which would allow transport of released oil to occur more quickly, or merely be in a state of saturated soil, which would result in easier and faster containment and cleanup of a spill.

The results of the MPCA staff analysis are as follows:

Sandpiper Route

The proposed Sandpiper route crosses 28 water bodies for which there is no access for possible containment within 2,000 linear feet downstream of the proposed pipe crossing. Of these 28 water body crossings, one is a stream to lake system, 12 are wetland complexes, 10 are streams that flow to wetland systems, and five are streams that flow to areas with stands of wild rice. Below is a list of the water body crossings for this route option:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Sandpiper Route	Mahtowa	T47 R18W S8	Moose Horn River
Sandpiper Route	Salo	T47 R22W S1	Headwaters Sandy River
Sandpiper Route	Salo	T47 R22W S2	Headwaters Sandy River
Sandpiper Route	Automba	T47 R21W S6	West Branch River
Sandpiper Route	Salo	T47 R22W S6	Headwaters Sandy River
Sandpiper Route	Automba	T47 R21W S6	West Branch River
Sandpiper Route	Automba	T47 R21W S1	Heikkila Creek-Kettle River
Sandpiper Route	Atkinson	T48 R18W S36	Blackhoof River
Sandpiper Route	Copley	T147 R37W S34	Walker Brook
Sandpiper Route	Moose Creek	T146 R36W S29	Upper Rice Lake-Wild Rice River
Sandpiper Route	Bull Moose	T138 R31W S12	Headwaters South Fork Pine River
Sandpiper Route	Bull Moose	T138 R31W S11	Headwaters South Fork Pine River
Sandpiper Route	Bull Moose	T138 R31W S11	Headwaters South Fork Pine River
Sandpiper Route	Arago	T141 R35W S17	Hay Creek
Sandpiper Route	Northwest Aitkin	T50 R26W S22	White Elk Creek
Sandpiper Route	McKinley	T138 R32W S3	Goose Lake-Big Swamp Creek
Sandpiper Route	McKinley	T138 R32W S4	Goose Lake-Big Swamp Creek
Sandpiper Route	Crow Wing Lake	T139 R33W S36	Burgen Lake
Sandpiper Route	Crow Wing Lake	T139 R33W S36	Burgen Lake
Sandpiper Route	Crow Wing Lake	T139 R33W S33	Town of Huntersville-Crow Wing River
Sandpiper Route	Straight River	T139 R35W S36	Blueberry Lake-Shell River
Sandpiper Route	Blind Lake	T139 R28W S26	Arrowhead Lake
Sandpiper Route	Hubbard	T139 R34W S31	Shell River
Sandpiper Route	Beulah	T139 R25W S9	Moose River
Sandpiper Route	Straight River	T139 R35W S6	Straight River
Sandpiper Route	Bear Creek	T145 R36W S35	Gill Lake-Mississippi River
Sandpiper Route	Todd	T140 R35W S6	Fishhook Lake
Sandpiper Route	Lake Hattie	T144 R35W S19	LaSalle Lake-Mississippi River

Hill Route

The "Hill route alternative," suggested by the MDNR as a way to avoid features of concern, would not differ from the proposed Sandpiper route based on the criteria discussed here.

Northern Route

The Northern route, which follows the path of the Alberta Clipper project crosses 20 water bodies for which there is no access within 2,000 feet downstream of the location where crossings would occur if the route were followed. Along the Northern route, water bodies without access to potential leak sites within 2,000 feet include one stream that flows to a lake, 14 wetland complexes, five stream/wetland systems, and two streams or wetlands that flow to areas with stands of wild rice or wetlands. Below is a list of the water body crossings for this route option:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Northern Route	Pot Shot Lake	T52 R21W S8	Floodwood River
Northern Route	Northeast Aitkin	T52 R22W S1	West Branch Floodwood River
Northern Route	Wawina	T53 R22W S27	West Branch Floodwood River
Northern Route	Deer Lake	T56 R26W S29	Mississippi River
Northern Route	Bowstring Lake	T144 R26W S3	Little Winnibigoshish Lake-Miss. River
Northern Route	Morse	T145 R25W S35	White Oak Lake-Mississippi River
Northern Route	North Cass	T145 R27W S35	Sixmile Brook
Northern Route	North Cass	T145 R27W S34	Sixmile Brook
Northern Route	North Cass	T145 R27W S34	Sixmile Brook
Northern Route	North Cass	T145 R27W S33	Sixmile Brook
Northern Route	North Cass	T145 R28W S26	Sixmile Brook
Northern Route	Wawina	T53 R22W S28	West Branch Floodwood River
Northern Route	Blackberry	T54 R24W S13	Blueberry Lake-Mississippi River
Northern Route	North Cass	T145 R29W S24	Portage Creek
Northern Route	North Cass	T145 R29W S20	Portage Creek
Northern Route	Wilton	T147 R34W S34	Grant Creek
Northern Route	Pot Shot Lake	T52 R21W S22	Floodwood River
Northern Route	Perch Lake	T49 R18W S7	Perch Lake
Northern Route	North Carlton	T49 R19W S1	Stoney Brook
Northern Route	Arrowhead	T50 R19W S27	Bog Lake

Alternative 3 Route

The Alternative 3 route corridor, which was referenced earlier in the letter, begins at the same western point that both the Sandpiper and Northern routes do; however, roughly 20 miles west of the North Dakota border it veers south and follows an existing (possibly abandoned) pipeline south and then southwest to roughly five miles west of North Branch, Minnesota, where it then follows another corridor

in a northerly direction, where it eventually intersects with the proposed Sandpiper route just west of Superior, Wisconsin. This route has 7water body crossings with no access within 2,000 feet downstream of the pipe crossing; however, these water bodies are often smaller wetland complexes than are seen on either the Sandpiper route or the Northern route. These crossings without access within 2,000 feet include two wetland complexes, four stream/wetland systems, and one area with stands of wild rice. Below is a list of the water body crossings for this route option:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Alternate Route 3	Mission Creek	T40 R21W S12	Mission Creek
Alternate Route 3	Fawn Lake	T132 R32W S34	Lower Turtle Creek
Alternate Route 3	Fawn Lake	T132 R32W S19	Fish Trap Creek
Alternate Route 3	Kettle River	T44 R20W S8	City of Willow River-Kettle River
Alternate Route 3	Bartlett	T133 R34W S23	Moran Creek
Alternate Route 3	Compton	T134 R36W S5	Deer Creek-Leaf River
Alternate Route 3	Twin Lakes	T48 R17W S21	Blackhoof River

Alternative 4 Route

The Alternative 4 corridor enters the state in Traverse County just west of Wheaton, Minnesota, and runs to a southeast bearing until it exits the state south of Austin, Minnesota. A pipeline along this route would cross no water bodies lacking access within 2,000 feet of a potential leak site in surface water. There are very few water bodies crossed by this route in general over the proposed route.

National Hydrography Dataset

Even if access issues are taken out of the equation, the proposed Sandpiper route does not fare well in comparisons with alternative proposals based on examination of the National Hydrography Dataset (NHD) layer. Using the NHD layer, the proposed Sandpiper route would cross 20 water bodies, the Northern route would cross 10, the Alternative 3 route would cross 12, and the Alternative 4 route would cross 1 water body within the state of Minnesota. The NHD layer obviously does not identify all water bodies that are being crossed; however, it does identify water bodies that are part of a connected network of surface waters which may also be a good gauge of potential environmental impact if an incident were to occur.

Notably, the two routes in this analysis that crossed the fewest water bodies and put water resources at the lowest risk for environmental damage both aligned away from the Clearbrook terminal. Perhaps the most problematic aspect of the design of this proposed route is the continued expansion of terminal capacity at the Clearbrook location. Any pipelines that are built to transport material out of the Clearbrook terminal are forced to enter the largest concentration of lakes, streams, and open-water wetlands in the state. Any route proposed out of Clearbrook, either south or east will cross dense expanses of open waters. A northern to eastern route from Clearbrook would cross massive wetland complexes and areas with stands of wild rice. If future, new terminals, were to be constructed in

western Polk (could collect from Canada or North Dakota), Kittson (could collect from Canada or North Dakota) or even Clay counties (North Dakota) the creation a route proposal that avoids the greatest concentration of surface waters becomes feasible.

Summary of Route Analysis

There are numerous pipeline corridors that currently exist in Minnesota. Of those, there are several that cross far fewer water bodies and have better potential for access in the event of a release than the current Sandpiper proposal. MPCA staff examined three existing corridors in addition to the proposed Sandpiper route. While performing risk assessment, the current use of the corridors in question should also be considered, as much of the proposed Sandpiper route follows a corridor in which three other oil pipelines currently exist. Thus, not just one pipeline would be crossing sensitive water bodies with limited access, but four. The likelihood of an incident in which crude oil product is released is thus greater than what a single pipeline would entail. This is also true of the Northern route, in which numerous pipelines carrying crude oil exist. What has happened in the past with regard to location of pipeline routes is from this perspective unfortunate; MPCA staff believes that past routes have crossed too many water bodies in inaccessible areas, and the risk of large-scale impact as a result of a release incident is significant and ongoing. As this analysis shows, options posing a lesser risk to surface waters may be available.

Of the four possible routes that MPCA staff has examined, the proposed Sandpiper route and the previously followed Northern route show a significantly higher potential for environmental damage than either the Alternative 3 or Alternative 4 routes. It is also possible that an as-yet unexplored route could also score well relative to the Sandpiper proposal. The analysis of the Alternative 4 route is incomplete in that possible impacts outside of the Minnesota state boundaries were not looked at, so the surface waters avoided or protected by this route are only located in Minnesota per this analysis. It is also acknowledged that the MPCA staff analysis focused on the potential water quality and natural resource aspects of the project and not on other types of resources or land uses.

Nevertheless, the criteria adopted for this analysis show a clear difference in potential risk to surface waters between the Sandpiper proposal and other possible routes, and that in the event of a significant oil release, the Sandpiper route proposal has a significantly greater potential for large-scale environmental damage than other route proposals.

It is important to note that the construction of accesses through sensitive "no access" areas as a preventative measure can also create environmental hazards and damages and cannot be assumed to be an acceptable remedy. Rather, route proposals put forth now and in the future should take these factors into consideration and avoid continuing to cross surface waters at these locations. The minimization of surface water crossings in any location should become a priority for consideration when planning a route to construct a pipeline.

Cumulative Impacts

The NEPA, Title 40, C.F.R. 1508.7, defines cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes

such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The cumulative impacts review in the CEA should include current and proposed transmission line corridors, highway construction, water delivery systems, landfills, railroads, power generations plants, feedlots, and mine and mineral extraction sites which have the potential to interact with the proposed project. The CEA should also review the potential for significant cumulative effects related to past, present and future projects in the Duluth/Superior area involving increased transmission, storage, processing or refining activities, including the expansion of the Calumet Superior Refining facility in Superior, Wisconsin, or transportation of oil, fuels or products refined or manufactured from oil. Areas in which such impacts could occur include air quality in Duluth and the surrounding area in Minnesota, water quality as related to new or increased discharges or shipping activities, and transportation whether by truck, rail or ships.

The CEA should identify the impacts of past incidents associated with pipeline construction and operation, past incidents involving two or more associated utility lines, accidents or emergencies which may arise due to an unforeseen chain of events during the operational life of the pipeline, and effects within the project limits, and local and regional effects. Cumulative impacts may occur to:

- Human activities, such as recreation, agriculture and loss of prime farmland
- Wildlife including migratory birds and aquatic species
- Habitat and alterations to terrestrial vegetation
- Endangered species
- Air quality, including dust (particulate matter) and visual impacts
- Land values
- Watersheds
- Local and state socioeconomics

According to data provided by the Pipeline and Hazardous Materials Safety Administration (PHMSA), to date, there are 2,408 miles of crude oil pipeline in the state of Minnesota. More are planned within the next few years. Much of this infrastructure exists in corridors shared by several other pipelines carrying liquefied petroleum gas, natural gas, diluent for tar sands oil, refined petroleum product and other hazardous materials. In total, there are 10,475 miles of pipeline through the state. According to PHMSA, over the last 20 years, there has been an average of 14 spills from pipelines per year in Minnesota, an average of 1,812 barrels of hazardous liquids spilled per year in Minnesota, an average of 1,093 net barrels lost per year in Minnesota, and an average of $3,135,572 of property damage annually in Minnesota. Five lives have been lost as a result of pipeline incidents.

The MPCA has numerous concerns about the number of pipelines planned to use the same corridors. With each water body crossed by a pipeline carrying crude oil, the risk of a major incident increases. A cursory review of the PHMSA web site identifies apparent causes of pipeline failure to include: incorrect operation, equipment failure, internal and external corrosion, third party damage (excavation), construction damage, material failure (pipe, fitting, weld), weld leak, and other unknown causes. For example, at the site of the Enbridge pipeline release in Marshall, Michigan, the National Transportation Safety Board found "that deficiencies in Enbridge's integrity management (IM) program contributed to

the release of hazardous liquid..." (Federal Register, Volume 79, No. 87, Tuesday, May 6, 2014 (25990 – 25994). See also Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release, Marshall, Michigan, July 25, 2010 (NTSB/PAR-12/01, PB2012-916501). Ultimately, the perspective should not be if a pipeline fails, but how will a release be mitigated when a failure occurs and at any given location (and the environmental susceptibility of that area to a release).

As explained above, MPCA examination of the proposed Sandpiper route and the previously used Northern route (Alberta Clipper) shows that significantly more open water bodies are crossed by the pipelines in these corridors than alternative routes. Far more of these crossings have no available access within a 2,000 foot buffer, meaning that release incidents are more likely to impact surface waters within that 2,000 buffer. Both the Sandpiper and Alberta Clipper routes are corridors for numerous crude oil pipelines; consequently, these routes are more vulnerable and less able to properly mitigate damage to aquatic environments. Whereas oil does travel through soils and overland, it travels significantly farther in aquatic environments.

Pipeline construction will involve soil excavation, vegetation removal, the crossing of water bodies, and the alteration or loss of wildlife habitat. These activities and the creation of new corridors can result in forest fragmentation affecting numerous species of wildlife that require expanses of undisturbed forest. Wetland perches may be broken causing alteration of natural hydrology in wetland areas, and stream geomorphology can be altered by damaging banks or stirring up stream bottoms. Herbicides used to control vegetation in pipeline corridors may adversely affect pollinators, particularly honeybees, resulting in hidden impacts that are difficult to trace, but nonetheless exist.

The construction, operation, maintenance, incidents and repairs associated with crude oil pipelines have been accompanied by significant environmental impacts. With more proposals in the works, more cumulative impacts can be expected to occur. Therefore, concerted effort is needed to take a close look at and carefully analyze the creation of common routes and corridors for pipeline projects where the risks of impacts to the environmental and human health can be minimized. The routes that have been used in the past pose substantial risks as noted above. Continuing to open more corridors will increase these risks and impacts. The MPCA would support and participate in a joint effort by state agencies to begin examining the feasibility of such a corridor, both for the purpose of expediting approval of future proposals and minimizing the potential for environmental impacts. A fresh look at the routing of energy transportation projects from a larger and more comprehensive perspective has the potential to make a significant contribution to streamlining the review and permitting processes as well as preventing and minimizing cumulative impacts.

Conclusion

It is requested that the comments provided in this letter and MPCA's letter dated April 4, 2014, be entered into the record to be addressed in the Draft CEA. We continue to look forward to assisting the Department of Commerce, as desired, during the preparation of the CEA for this project and its subsequent review upon its release. Through this process, the MPCA seeks to obtain further additional information to facilitate the MPCA staff review of the Project, well in advance of the time a decisions on

the required MPCA authorizations are needed to commence construction. Ultimately, it is the responsibility of North Dakota Pipeline Company LLC to secure any required permits and to comply with any requisite permit conditions. If you have any questions, please contact me at 651-757-2465.

Sincerely,

Craig Affeldt

for Patrice Jensen
Planner Principal
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PJ:bt

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June 24, 2014

Mr. Larry B. Hartman
Environmental Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Enbridge Sandpiper Pipeline Project - North Dakota Pipeline Company LLC
Pipeline Routing Permit Application, MPUC Docket No. PL-6668/PPL-13-474
Replacement May 30, 2014 Letter with Maps

Dear Mr. Hartman:

On April 14, 2014, the Minnesota Public Utilities Commission (PUC) extended the comment period in the matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project (Sandpiper) in Minnesota. This letter appends the Minnesota Pollution Control Agency (MPCA) letter on this subject, which was submitted to you on April 4, 2014.

We understand the topics open for comment include alternate routes, human and environmental impacts to be studied in the Comparative Environmental Analysis (CEA), and whether any specific methods or mitigation exist to address these impacts that should be studied in the CEA. MPCA's additional comments on these topics include:

- Inspection and monitoring
- Additional items for evaluation in the CEA
- Watershed Restoration and Protection Strategy
- Carbon footprint
- Environmental justice
- Alternate route analysis
- Cumulative impacts

Inspection and Monitoring

On April 16, 2014, Enbridge, doing business as North Dakota Pipeline Company LLC, submitted a proposal to the MPCA regarding independent/third-party environmental monitors for the proposed Sandpiper project. MPCA does not agree that Enbridge should be hiring and directing these inspectors/monitors, but rather that they report directly to a state agency with jurisdiction over the project. The MPCA requests that the PUC require that another agency directly hire independent inspection and monitoring contractors and/or temporary staff to conduct this work under MPCA oversight to be funded by Enbridge.

The structure, work plan, and cost of a monitoring and inspection plan should be determined while the CEA is being prepared. The MPCA and Minnesota Department of Natural Resources (MDNR) staff, who have been working collaboratively on the Sandpiper project, are willing to participate with Enbridge and

participating agencies to develop the appropriate information and mechanism. The mechanisms for this would be worked out among the parties. The payment of the state's reasonable costs should be a provision of the PUC's route permit issued to Enbridge.

Additional Items for Evaluation in the CEA

The MPCA requests that Enbridge complete a Phase I Environmental Assessment (Phase I) of the selected pipeline construction corridor in accordance with the All Appropriate Inquiry (AAI) standard as per the National Environmental Policy Act (NEPA), Title 40, Code of Federal Regulations Part 312. The Phase I is conducted to research and review potential locations of existing/historic dumps, hazardous waste sites, and other environmental concerns. If areas of environmental concern are identified in association with construction of the pipeline, Enbridge should be required to prepare work plans to describe how solid/hazardous waste/contaminated soil and groundwater will be investigated prior to construction, and how impacted areas will be dealt with in accordance with state and local regulations.

MPCA requests that the CEA include a detailed risk assessment regarding the potential for leaks to occur, how much oil might be released, and how this could affect groundwater, surface water, aquatic life, and others. The hydrogeology of the pipeline corridor area should be studied to determine potential fate and transport of a release, and potential vapor intrusion issues if a release occurs in close proximity to human habitation.

Watershed Restoration and Protection Strategy

In 2006, the Minnesota Legislature passed the Clean Water Legacy Act, which required the MPCA to develop an approach to comprehensively monitor and assess the waters of the state every 10 years, and provided one-time funding for that effort. In order to provide long term, consistent funding for Minnesota's clean water efforts, on November 4, 2008, Minnesota's voters passed the Clean Water Land and Legacy Amendment (Legacy Amendment) to the Minnesota Constitution to, in part, protect and restore lakes, rivers, streams, and groundwater. The Amendment imposed three-eighths of one percent sales tax to fund the effort for 25 years. Subsequently, in 2013, the Clean Water Accountability Act was passed by the Minnesota Legislature. This new law requires the MPCA to develop watershed restoration and protection strategies (WRAPS) for each of the state's 81 major watershed units, which correspond to the 8-digit hydrologic unit codes (HUCs). WRAPS include the monitoring and assessment information, as well as land use-based models that demonstrate the source of the highest contributors of pollutants in each watershed. This information is then used to develop strategies to either protect waters that meet water quality standards or restore waters that do not meet standards.

The WRAPS is a collaborative effort that involves the MPCA, the MDNR, the Board of Water and Soil Resources, the Department of Health, the Department of Agriculture, local soil and water conservation districts, watershed districts, the University of Minnesota, industry and business organizations, and the private citizens of Minnesota. WRAPS components are: monitoring and assessment of hydrology and the chemical and biological constituents of water quality, a stressor identification process, total maximum daily loads (TMDLs) and restoration plans for impaired waters, protection strategies for waters that currently meet standards, and a civic engagement process to assist stakeholders with implementing protection and restoration strategies.

While not yet completed, WRAPS are in process in the following major watersheds that the Sandpiper proposal will cross, also identified by the corresponding eight-digit HUCs:

- Grand Marais Creek HUC 09020306
- Red Lake River HUC 09020303
- Clearwater River HUC 09020305
- Mississippi – Headwaters HUC 07010101
- Crow Wing River HUC 07010106
- Pine River HUC 07010105
- Mississippi – Grand Rapids HUC 07010103
- Kettle River HUC 07030003
- St. Louis River HUC 04010201
- Nemadji River HUC 04010301

One of the first tenets of any protection strategy is to avoid impacts where possible. The Sandpiper proposal is not consistent with the protection strategies that are currently in development for these WRAPS, due to the large number of high quality surface waters that lie along the path of the proposed route. Enbridge should participate in stakeholder groups for these WRAPS. Stakeholder groups provide a forum for engaged citizens and interested groups to develop implementation strategies to restore and protect each watershed. The CEA should review and consider how to integrate the strategies into the proposal, or find alternate routes that have less potential for impacting surface and groundwater.

Carbon Footprint – Greenhouse Gas Emissions

The MPCA is concerned about the carbon footprint of a project. The Minnesota Legislature established greenhouse gas (GHG) reduction goals in the Next Generation Energy Act (Minn. Stat. 216H.02). The goals of the Next Generation Energy Act are to reduce greenhouse gas emissions by 15 percent below 2005 levels by 2015, and 80 percent by 2050. Greenhouse gases, upon release to the atmosphere, warm the atmosphere and surface of the planet, and lead to alterations in the earth's climate. The GHG emissions measured and reported in Minnesota include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), sulfur hexafluoride (SF_6), and two classes of compounds known collectively as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). These GHG emissions result from fuel combustion, the calcination of limestone, the degradation of organic (peats) and mineral soils, permanent land clearing and forest harvesting, and a variety of other sources. Pertaining to this project, source types include stationary and mobile source combustion from construction equipment, emissions from venting, and wetland and forest disruptions.

To track progress with the Next Generation Energy Act reduction goals, the CEA should evaluate the GHG emissions from the project and the impact these emissions may have on the attainment of the state's GHG reduction goals. Alternatives and options to reduce GHG emissions or to offset/mitigate GHG emissions should also be identified in the CEA. In addition, the CEA should evaluate the GHG impacts if this project is not built – specifically, if oil is transported by rail or truck instead of by pipeline.

Environmental Justice

The MPCA works to incorporate environmental justice principles into its projects. Environmental Justice (EJ) involves assuring the fair treatment and meaningful involvement of all persons, regardless of race or income when making environmental decisions. Fair treatment means that no group of people should

bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies. Meaningful involvement means: people have an opportunity to participate in decisions about activities that may affect their health and the environment in which they live; the public's contribution can influence the regulatory agency's decision; their concerns will be considered in the decision making process; and, decision makers seek out and facilitate the involvement of those potentially affected.

The proposed route of the Sandpiper Pipeline and other alternate routes may directly affect low income and minority populations. If a pipeline leak or break occurs, adverse impacts could occur in both surface and subsurface drinking water supplies, areas with stands of wild rice important to local Tribes and tribal members, cropland areas, impaired waters, and wildlife management areas among other types of environmental, social and economic impacts. If the Northern route or other alternate routes are chosen, the Sandpiper Pipeline may affect tribal lands.

The CEA should include consideration of EJ issues. The CEA should look at how pipeline construction and operation, and potential problems during each of these phases, may cause disproportionate impacts on low-income or minority populations. In addition, local, state, and federal agencies should engage residents to assure that they are aware of opportunities to participate in the process and understand how their comments and concerns are incorporated into the final draft CEA.

Alternate Route Analysis

The MPCA staff's analysis of the proposed Sandpiper route shows many water body crossings for which there would be very difficult or no access downstream of the crossing to clean up spills in the event of a crude oil release. The lack of possible access to these areas by people and equipment necessary to clean up spills increases the likelihood that an incident could result in significant long-term environmental damage. A failure to account for these possibilities is considered to be a substantial flaw with the currently proposed Sandpiper route.

There are many variables that could be examined when considering the potential for environmental damage in the event of a release. These include: soil types, wetland types, sensitive or endangered species, proximity to aquifers, hydrology, forest types, state park boundaries, proximity to human populations, proximity to areas with stands of wild rice, connectivity of surface waters, and others. However, for purposes of providing a simpler and effective comparison between alternative route proposals that is both visual and quantifiable (within certain limitations that will be discussed in this letter), MPCA staff has elected to compare the routes based on access to potential leak sites for purposes of containment of spills and possible clean up.

To minimize variables and subjectivity for this analysis, MPCA staff opted to identify, using ArcGIS technology, water body crossings that had neither road or traversable upland features within 250 feet of flowages of water (heavily forested areas are not considered for this purpose to be traversable, as trees would have to be removed before equipment could be brought in), or portions of larger wetland complexes that fell within a 2,000 foot buffer of the point where the proposed pipeline route was to cross a stream, lake, or wetland. The 250-foot distance from access point to flowage is somewhat arbitrary. MPCA staff conferred with contractors and engineers who specialize in road construction, and most felt that in a best-case scenario, with aggregate and equipment available, a 250-foot road into a bog or wetland would be constructed within 24 hours. Thus, for purposes of this analysis ,MPCA staff

assumed that it is possible to build an access road to reach areas where containment of a spill might be accomplished before the spilled product covers an area large enough that cleanup would be highly destructive to a sensitive environment, or impossible. Similarly, there is no regulatory basis for choosing the 2,000 foot buffer distance, other than it is a significant distance for oil impacts to occur over any surface water and easy to apply consistently statewide. It is a distance that for most people would be easy to visualize, yet small enough to create a fair comparison between routes. These numbers provide a basis for comparisons between routes and have little significance beyond that. However, if these criteria are used consistently for all proposed routes, it does provide a basis to compare the potential for each route to cause considerable environmental damage in the event of a release.

There are some factors to consider that fall beyond the scope of this comparison. For example, the water crossings proposed for the Sandpiper route are frequently streams or flowages with connectivity to other water bodies downstream. By contrast, water body crossings on the Northern route frequently involve very large wetland complexes rather than smaller, faster moving flowages. The area needed to access might be much greater, but the oil may move more slowly in such areas. Counting becomes a bit more difficult here as well, because it is difficult to establish criteria for counting “crossings” that is comparable to the different features observed in the Sandpiper route. In most cases, MDNR catchment flow lines were used to distinguish one crossing point from another.

In any case, the method used as a basis for comparison by MPCA staff does provide quantifiable data to analyze the proposed routes from a meaningful perspective: Which route proposals pose the greatest risk to create destructive and expensive containment and cleanup operations in the event of a spill?

MPCA staff compared four proposed routes in their entirety (see Figure A below). The four proposed routes that were compared were (1) The currently proposed Sandpiper route; (2) The “Northern” route, used by Enbridge for previous projects and which has been suggested as an alternative by other entities; (3) The “Alternative 3” route which was identified as a possible alternative by MPCA staff; and (4) The southern “Alternative 4” route which exits the state at the Iowa border and would be required to tie into the Enbridge infrastructure either in another state, or to circle around outside of Minnesota to end at the Superior Terminal. The fourth route was suggested as an alternative by a citizen group.

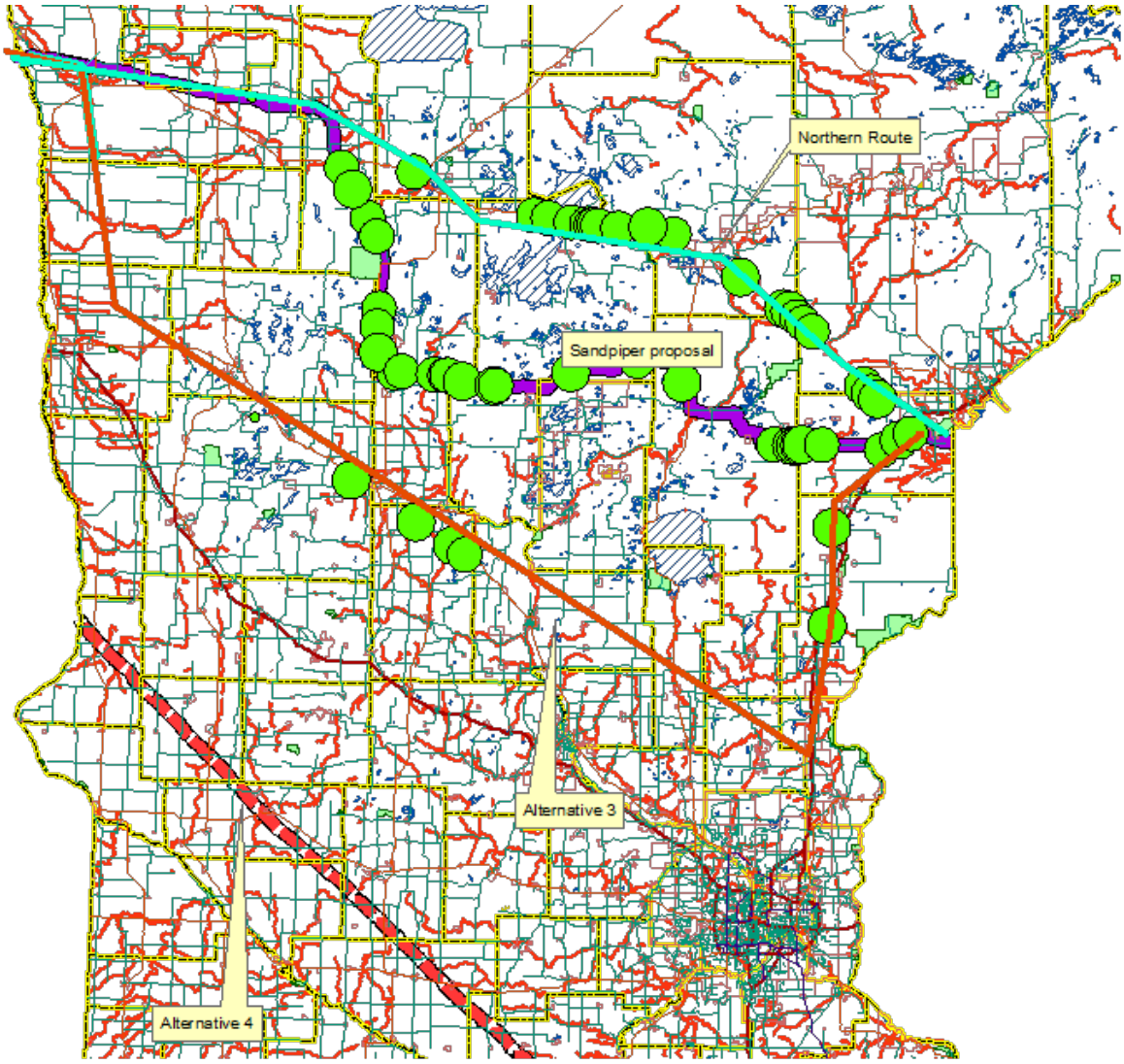

Figure A-The green circles mark points where MPCA staff have identified access concerns. Approximate locations of the four primarily examined proposals are also identified.

Any water body crossing, especially streams, rivers, or flowages of any kind that can carry oil downstream, pose the risk of creating large scale environmental damage in the event of a release. If possible, it is best to avoid crossing surface waters altogether with oil pipelines in order to minimize this risk. However, if a water body, bog or otherwise sensitive area is to be crossed, then serious consideration should be given to whether the site can be accessed quickly in the event of a release to contain the product, minimize migration of product into surface waters, soils and groundwater, and perform clean-up operations. In situations where roads have to be constructed to access a spill, the act of constructing the road, excavating and clearing vegetation can all exacerbate the damage that the spill itself created. Additionally, placement of flow control valves in strategic locations along/near sensitive areas may help to minimize backflow of product out of a fractured line into those areas.

A difficulty with aerial photograph analysis as opposed to field surveying of water crossings is that it is difficult to determine whether a stream or wetland is permanently, seasonally, or intermittently flooded. MPCA staff relied on National Wetland Inventory maps to identify wetland types, which will to

some extent help to determine the likelihood of the wetland having open water at the time of a leak, which would allow transport of released oil to occur more quickly, or merely be in a state of saturated soil, which would result in easier and faster containment and cleanup of a spill. The results of the MPCA staff analysis are as follows:

Sandpiper Route

The proposed Sandpiper route crosses 28 water bodies for which there is no access for possible containment within 2,000 linear feet downstream of the proposed pipe crossing. Of these 28 water body crossings, one is a stream to lake system, 12 are wetland complexes, 10 are streams that flow to wetland systems, and five are streams that flow to areas with stands of wild rice. Below is a list of the water body crossings for this route option, followed by example Figures B and C:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Sandpiper Route	Mahtowa	T47 R18W S8	Moose Horn River
Sandpiper Route	Salo	T47 R22W S1	Headwaters Sandy River
Sandpiper Route	Salo	T47 R22W S2	Headwaters Sandy River
Sandpiper Route	Automba	T47 R21W S6	West Branch River
Sandpiper Route	Salo	T47 R22W S6	Headwaters Sandy River
Sandpiper Route	Automba	T47 R21W S6	West Branch River
Sandpiper Route	Automba	T47 R21W S1	Heikkila Creek-Kettle River
Sandpiper Route	Atkinson	T48 R18W S36	Blackhoof River
Sandpiper Route	Copley	T147 R37W S34	Walker Brook
Sandpiper Route	Moose Creek	T146 R36W S29	Upper Rice Lake-Wild Rice River
Sandpiper Route	Bull Moose	T138 R31W S12	Headwaters South Fork Pine River
Sandpiper Route	Bull Moose	T138 R31W S11	Headwaters South Fork Pine River
Sandpiper Route	Bull Moose	T138 R31W S11	Headwaters South Fork Pine River
Sandpiper Route	Arago	T141 R35W S17	Hay Creek
Sandpiper Route	Northwest Aitkin	T50 R26W S22	White Elk Creek
Sandpiper Route	McKinley	T138 R32W S3	Goose Lake-Big Swamp Creek
Sandpiper Route	McKinley	T138 R32W S4	Goose Lake-Big Swamp Creek
Sandpiper Route	Crow Wing Lake	T139 R33W S36	Burgen Lake
Sandpiper Route	Crow Wing Lake	T139 R33W S36	Burgen Lake
Sandpiper Route	Crow Wing Lake	T139 R33W S33	Town of Huntersville-Crow Wing River
Sandpiper Route	Straight River	T139 R35W S36	Blueberry Lake-Shell River
Sandpiper Route	Blind Lake	T139 R28W S26	Arrowhead Lake
Sandpiper Route	Hubbard	T139 R34W S31	Shell River
Sandpiper Route	Beulah	T139 R25W S9	Moose River
Sandpiper Route	Straight River	T139 R35W S6	Straight River
Sandpiper Route	Bear Creek	T145 R36W S35	Gill Lake-Mississippi River
Sandpiper Route	Todd	T140 R35W S6	Fishhook Lake
Sandpiper Route	Lake Hattie	T144 R35W S19	LaSalle Lake-Mississippi River

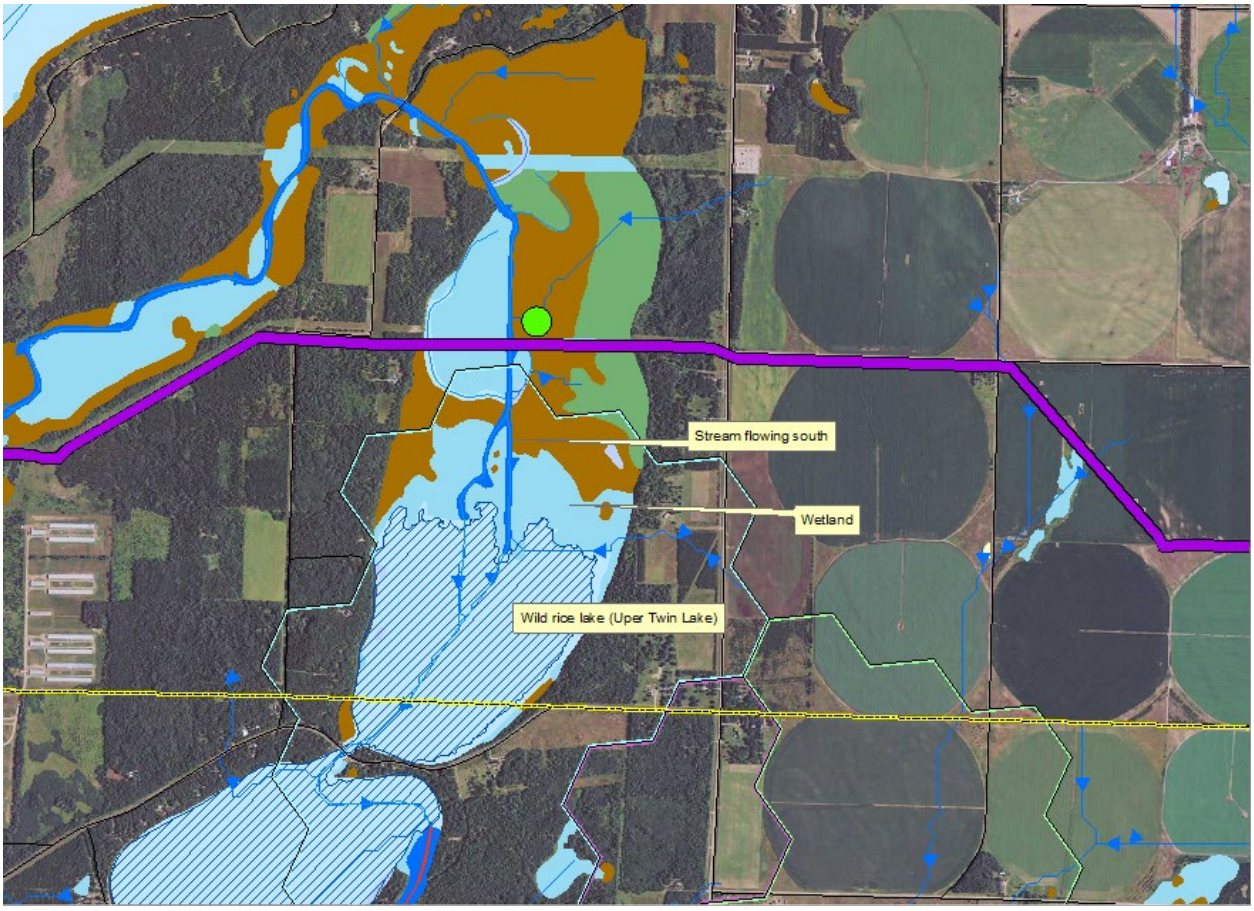

Figure B - This shows an example of a proposed crossing point over surface water that flows south (see arrows on dark blue flowage line) through a wetland complex and into a wild rice lake (the Twin Lakes near Menahga and Park Rapids, MN). However, to determine accessibility, the wetland identification layer must be turned off so that land features can be examined as in Figure C below. The purple line is the proposed Sandpiper route. (Scale 1:24,001)

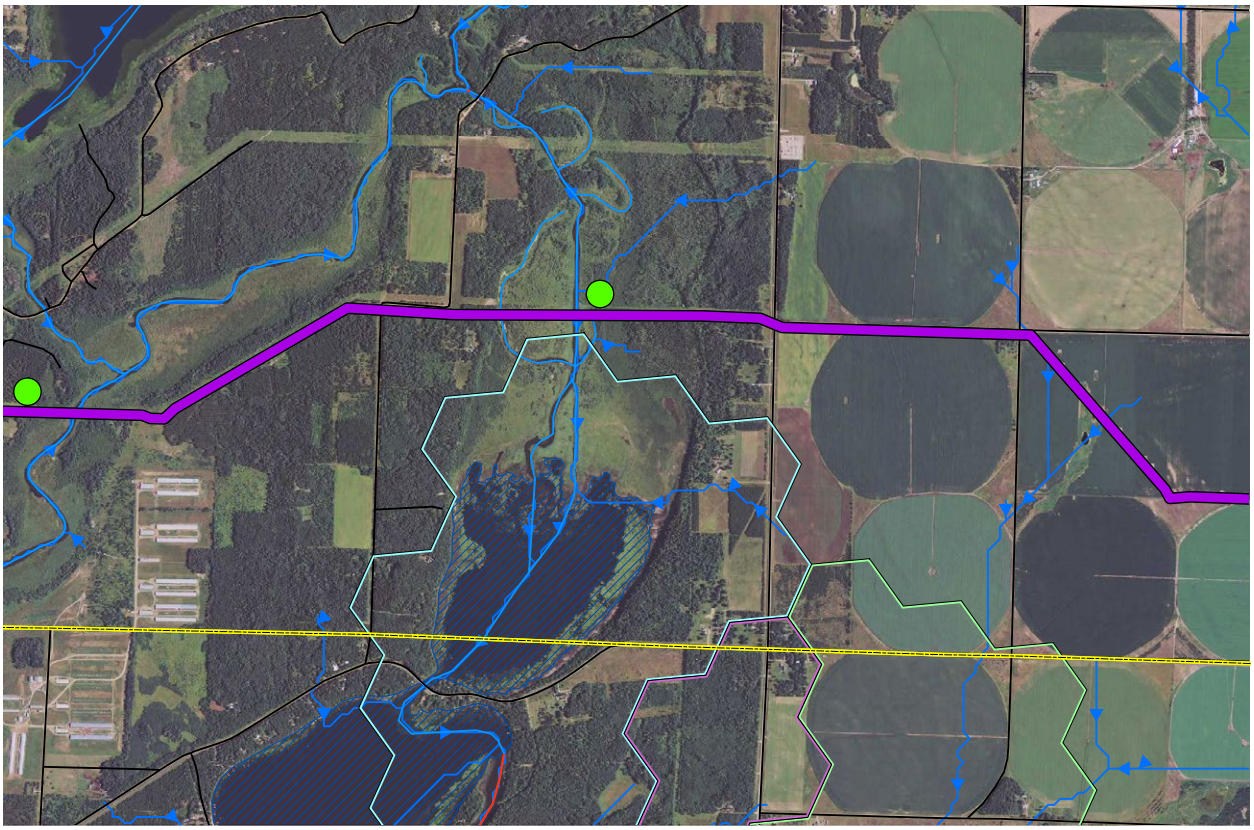

Figure C-Here, the wetland layer is turned off so that the landscape can be examined for accessibility. In this instance, there are no roads or open farmland to bring containment or clean-up equipment within 1,500 feet of the flowage that would potentially deliver leaked crude oil into the upper most of the Twin Lakes. The curvy black line between the lakes is a road, and the first good point of access. This road is 6,700 feet from the pipeline crossing, although it is possible that boats or barges could access the lake from the farm fields to the right (east) or the road (black line) to the left and contain a spill within the lake. (Scale 1:24,001)

Hill Route

The "Hill route alternative," suggested by the MDNR as a way to avoid features of concern, would not differ from the proposed Sandpiper route based on the criteria discussed here.

Northern Route

The Northern route, which parallels the path of the Alberta Clipper project, crosses 20 water bodies for which there is no access within 2,000 feet downstream of the location where crossings would occur if the route were followed. Along the Northern route, water bodies without access to potential leak sites within 2,000 feet include one stream that flows to a lake, 14 wetland complexes, five stream/wetland systems, and two streams or wetlands that flow to areas with stands of wild rice or wetlands. Below is a list of the water body crossings for this route option, followed by example Figures D and E:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Northern Route	Pot Shot Lake	T52 R21W S8	Floodwood River
Northern Route	Northeast Aitkin	T52 R22W S1	West Branch Floodwood River
Northern Route	Wawina	T53 R22W S27	West Branch Floodwood River
Northern Route	Deer Lake	T56 R26W S29	Mississippi River
Northern Route	Bowstring Lake	T144 R26W S3	Little Winnibigoshish Lake-Miss. River
Northern Route	Morse	T145 R25W S35	White Oak Lake-Mississippi River
Northern Route	North Cass	T145 R27W S35	Sixmile Brook
Northern Route	North Cass	T145 R27W S34	Sixmile Brook
Northern Route	North Cass	T145 R27W S34	Sixmile Brook
Northern Route	North Cass	T145 R27W S33	Sixmile Brook
Northern Route	North Cass	T145 R28W S26	Sixmile Brook
Northern Route	Wawina	T53 R22W S28	West Branch Floodwood River
Northern Route	Blackberry	T54 R24W S13	Blueberry Lake-Mississippi River
Northern Route	North Cass	T145 R29W S24	Portage Creek
Northern Route	North Cass	T145 R29W S20	Portage Creek
Northern Route	Wilton	T147 R34W S34	Grant Creek
Northern Route	Pot Shot Lake	T52 R21W S22	Floodwood River
Northern Route	Perch Lake	T49 R18W S7	Perch Lake
Northern Route	North Carlton	T49 R19W S1	Stoney Brook
Northern Route	Arrowhead	T50 R19W S27	Bog Lake

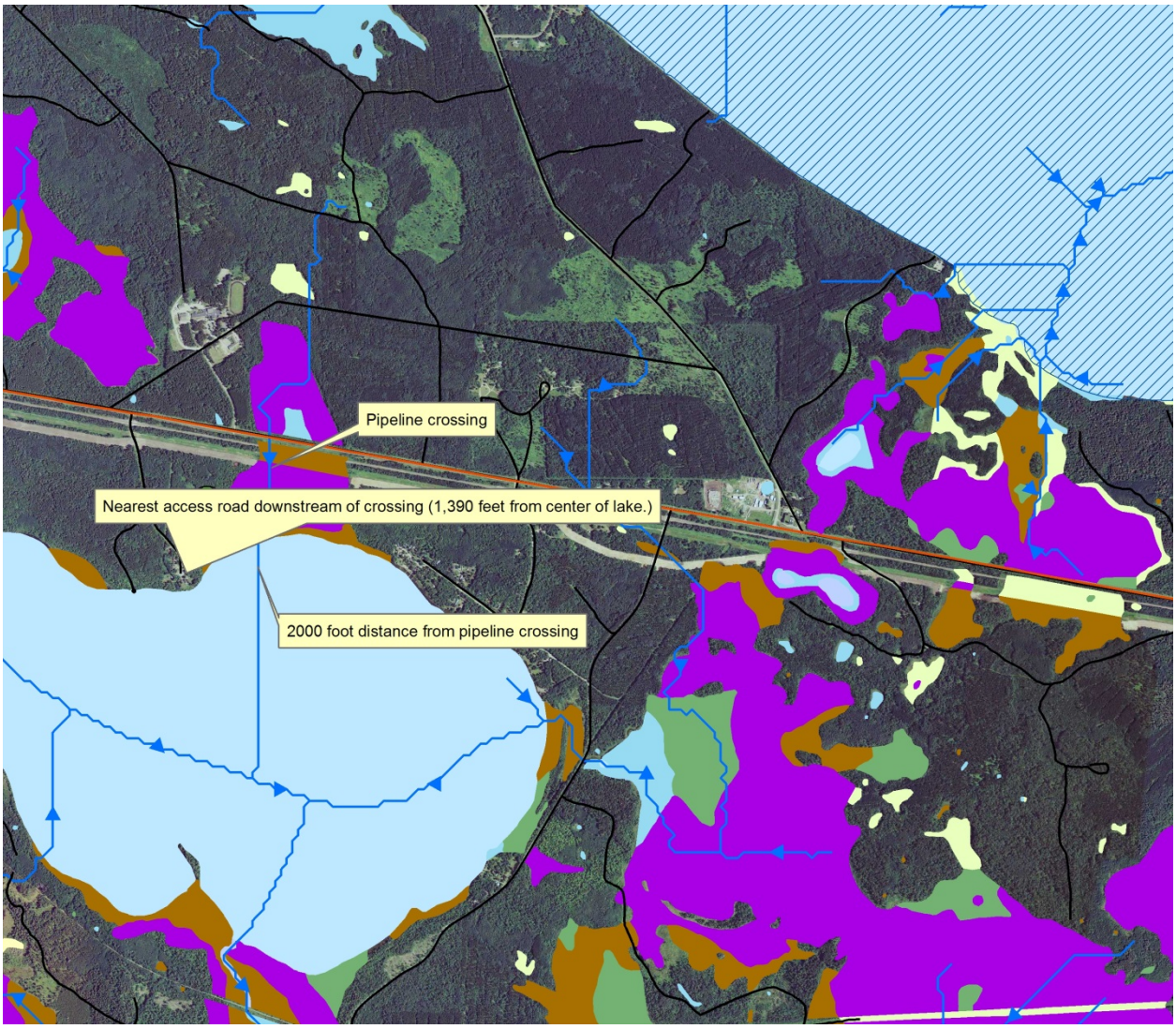

Figure D-With NWI wetland layer turned on, one can see wetland extending well beyond the 2,000 foot buffer at this crossing along the "Northern" route. The purple is bog, the green is forested wetland. In Figure E below the wetland layer is turned off so that accessibility to a potential leak here can be determined. (Scale 1:24,001)

Figure E- With the wetland identifying layers turned off, one can see that there are no roads or upland areas from which to access potential leak sites at this crossing. There is a possible access point identified to the southwest of the pipeline crossing, but containment equipment would have to be strung across over 3,000 feet of wetland as it flows into the lake to contain all of a release as it flows to the south. (Scale 1:24,001)

Alternative 3 Route

The Alternative 3 route corridor, which was referenced earlier in the letter, begins at the same western point that both the Sandpiper and Northern routes do; however, roughly 20 miles west of the North Dakota border it veers south and follows an existing (possibly abandoned) pipeline south and then southwest to roughly five miles west of North Branch, Minnesota, where it then follows another corridor in a northerly direction, where it eventually intersects with the proposed Sandpiper route just west of Superior, Wisconsin. This route has 7water body crossings with no access within 2,000 feet downstream of the pipe crossing; however, these water bodies are often smaller wetland complexes than are seen on either the Sandpiper route or the Northern route. These crossings without access within 2,000 feet

include two wetland complexes, four stream/wetland systems, and one area with stands of wild rice. Below is a list of the water body crossings for this route option, followed by example Figures F and G:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Alternate Route 3	Mission Creek	T40 R21W S12	Mission Creek
Alternate Route 3	Fawn Lake	T132 R32W S34	Lower Turtle Creek
Alternate Route 3	Fawn Lake	T132 R32W S19	Fish Trap Creek
Alternate Route 3	Kettle River	T44 R20W S8	City of Willow River-Kettle River
Alternate Route 3	Bartlett	T133 R34W S23	Moran Creek
Alternate Route 3	Compton	T134 R36W S5	Deer Creek-Leaf River
Alternate Route 3	Twin Lakes	T48 R17W S21	Blackhoof River

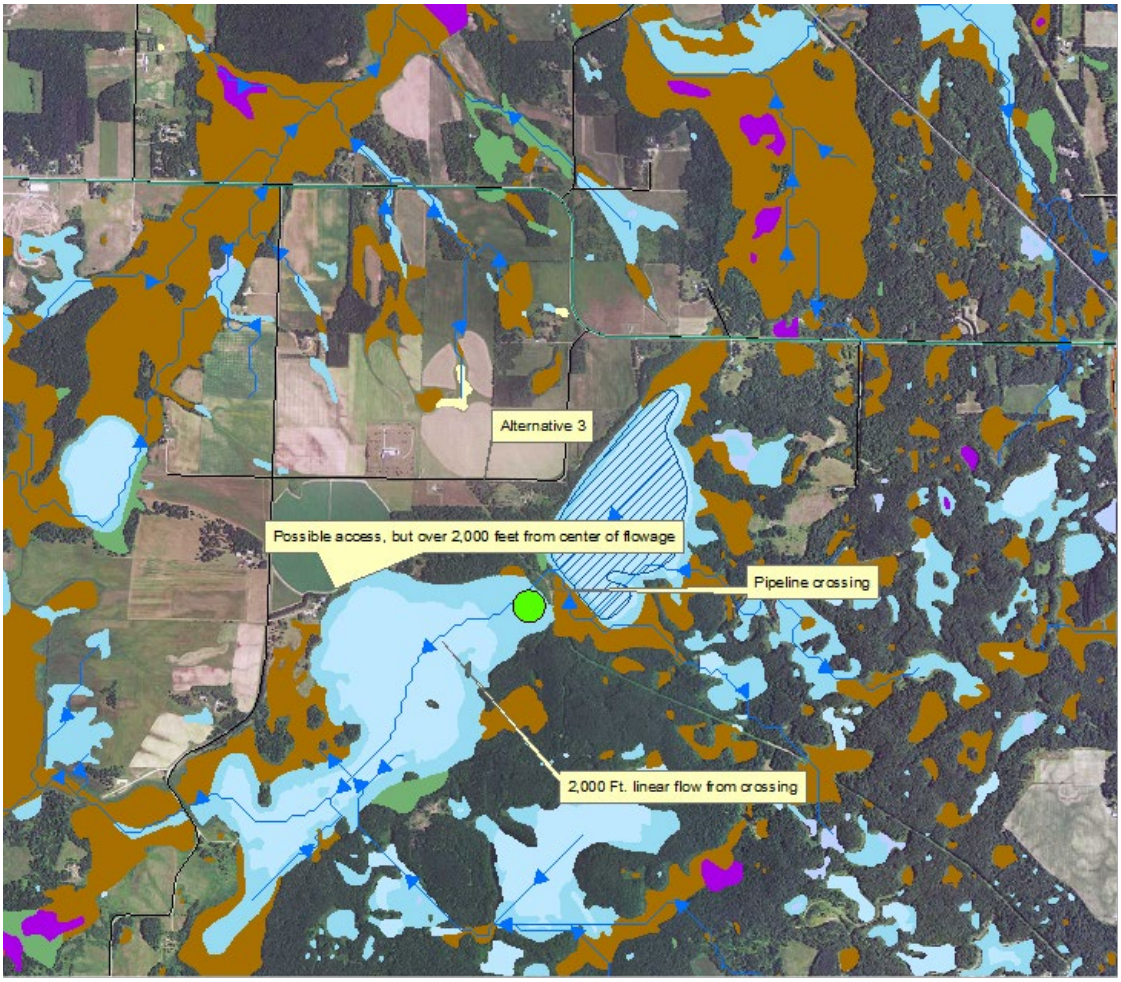

Figure F - Wetland layer identifies an open water wetland south of the pipe crossing that would likely receive oil from a leak. Wetland layer turned off in Figure G below. (Scale 1:24,001)

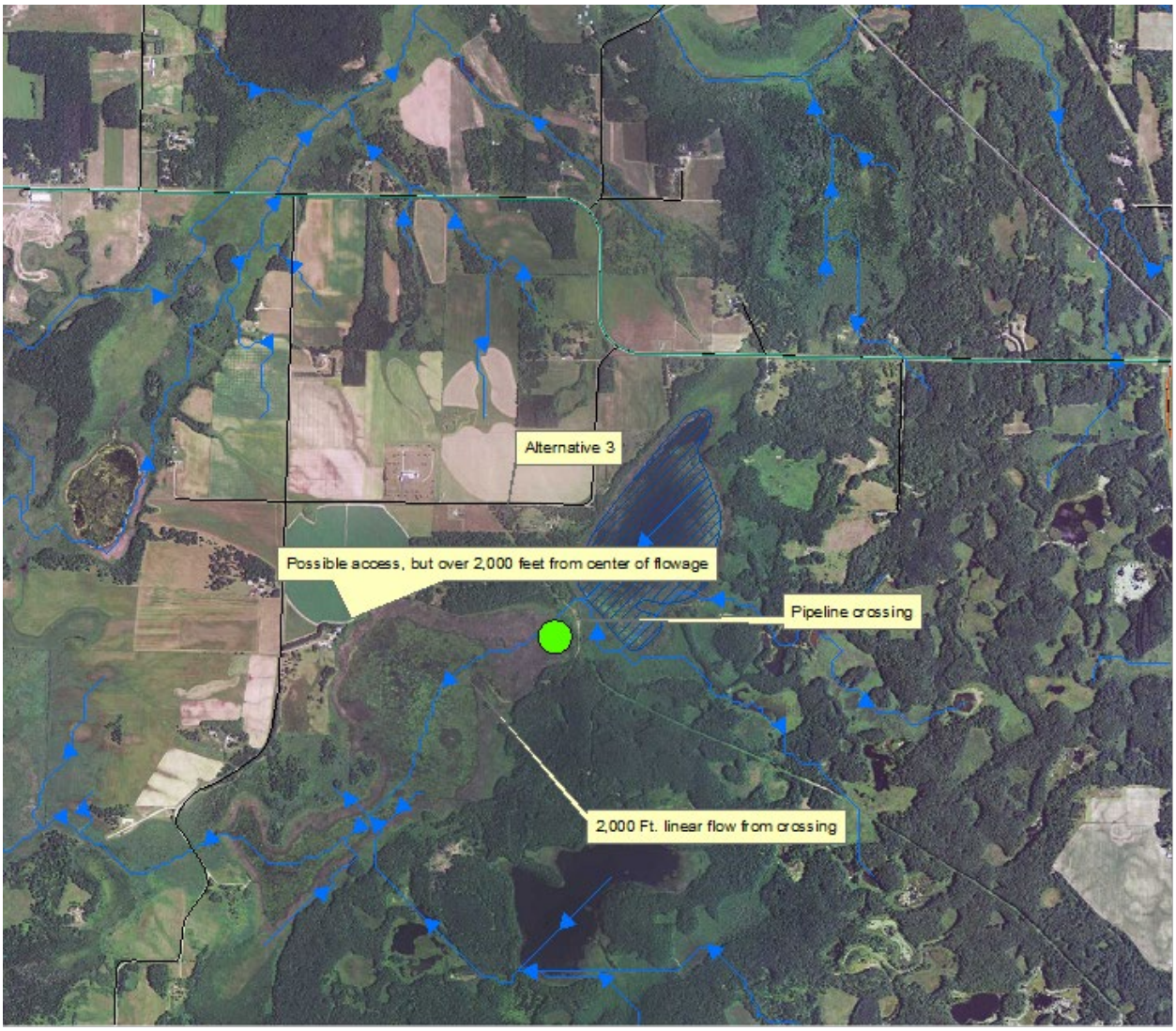

Figure G-With wetland layer turned off, one can see that the nearest access to the main stem of the flowage is roughly 2,000 feet to the west. If the wetland is traversable by boat or barge, which is possible given the wetland type (Type 3/5 shallow marsh and open water) then it is possible that access to material could be gained within the 2,000 foot buffer here. (Scale 1:24,001)

Alternative 4 Route

The Alternative 4 corridor enters the state in Traverse County just west of Wheaton, Minnesota, and runs to a southeast bearing until it exits the state south of Austin, Minnesota. A pipeline along this route would cross no water bodies lacking access within 2,000 feet of a potential leak site in surface water. There are very few water bodies crossed by this route in general over the proposed route.

National Hydrography Dataset

Even if access issues are taken out of the equation, the proposed Sandpiper route does not fare well in comparisons with alternative proposals based on examination of the National Hydrography Dataset

(NHD) layer. Using the NHD layer, the proposed Sandpiper route would cross 20 water bodies, the Northern route would cross 10, the Alternative 3 route would cross 12, and the Alternative 4 route would cross 1 water body within the state of Minnesota. The NHD layer obviously does not identify all water bodies that are being crossed; however, it does identify water bodies that are part of a connected network of surface waters which may also be a good gauge of potential environmental impact if an incident were to occur.

Notably, the two routes in this analysis that crossed the fewest water bodies and put water resources at the lowest risk for environmental damage both aligned away from the Clearbrook terminal. Perhaps the most problematic aspect of the design of this proposed route is the continued expansion of terminal capacity at the Clearbrook location. Any pipelines that are built to transport material out of the Clearbrook terminal are forced to enter the largest concentration of lakes, streams, and open-water wetlands in the state. Any route proposed out of Clearbrook, either south or east will cross dense expanses of open waters. A northern to eastern route from Clearbrook would cross massive wetland complexes and areas with stands of wild rice. If future, new terminals, were to be constructed in western Polk (could collect from Canada or North Dakota), Kittson (could collect from Canada or North Dakota) or even Clay counties (North Dakota) the creation a route proposal that avoids the greatest concentration of surface waters becomes feasible.

Summary of Route Analysis

There are numerous pipeline corridors that currently exist in Minnesota. Of those, there are several that cross far fewer water bodies and have better potential for access in the event of a release than the current Sandpiper proposal. MPCA staff examined three existing corridors in addition to the proposed Sandpiper route. While performing risk assessment, the current use of the corridors in question should also be considered, as much of the proposed Sandpiper route follows a corridor in which three other oil pipelines currently exist. Thus, not just one pipeline would be crossing sensitive water bodies with limited access, but four. The likelihood of an incident in which crude oil product is released is thus greater than what a single pipeline would entail. This is also true of the Northern route, in which numerous pipelines carrying crude oil exist. What has happened in the past with regard to location of pipeline routes is from this perspective unfortunate; MPCA staff believes that past routes have crossed too many water bodies in inaccessible areas, and the risk of large-scale impact as a result of a release incident is significant and ongoing. As this analysis shows, options posing a lesser risk to surface waters may be available.

Of the four possible routes that MPCA staff has examined, the proposed Sandpiper route and the previously followed Northern route show a significantly higher potential for environmental damage than either the Alternative 3 or Alternative 4 routes. It is also possible that an as-yet unexplored route could also score well relative to the Sandpiper proposal. The analysis of the Alternative 4 route is incomplete in that possible impacts outside of the Minnesota state boundaries were not looked at, so the surface waters avoided or protected by this route are only located in Minnesota per this analysis. It is also acknowledged that the MPCA staff analysis focused on the potential water quality and natural resource aspects of the project and not on other types of resources or land uses.

Nevertheless, the criteria adopted for this analysis show a clear difference in potential risk to surface waters between the Sandpiper proposal and other possible routes, and that in the event of a significant

oil release, the Sandpiper route proposal has a significantly greater potential for large-scale environmental damage than other route proposals.

It is important to note that the construction of accesses through sensitive "no access" areas as a preventative measure can also create environmental hazards and damages and cannot be assumed to be an acceptable remedy. Rather, route proposals put forth now and in the future should take these factors into consideration and avoid continuing to cross surface waters at these locations. The minimization of surface water crossings in any location should become a priority for consideration when planning a route to construct a pipeline.

Cumulative Impacts

The NEPA, Title 40, C.F.R. 1508.7, defines cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The cumulative impacts review in the CEA should include current and proposed transmission line corridors, highway construction, water delivery systems, landfills, railroads, power generations plants, feedlots, and mine and mineral extraction sites which have the potential to interact with the proposed project. The CEA should also review the potential for significant cumulative effects related to past, present and future projects in the Duluth/Superior area involving increased transmission, storage, processing or refining activities, including the expansion of the Calumet Superior Refining facility in Superior, Wisconsin, or transportation of oil, fuels or products refined or manufactured from oil. Areas in which such impacts could occur include air quality in Duluth and the surrounding area in Minnesota, water quality as related to new or increased discharges or shipping activities, and transportation whether by truck, rail or ships.

The CEA should identify the impacts of past incidents associated with pipeline construction and operation, past incidents involving two or more associated utility lines, accidents or emergencies which may arise due to an unforeseen chain of events during the operational life of the pipeline, and effects within the project limits, and local and regional effects. Cumulative impacts may occur to:

- Human activities, such as recreation, agriculture and loss of prime farmland
- Wildlife including migratory birds and aquatic species
- Habitat and alterations to terrestrial vegetation
- Endangered species
- Air quality, including dust (particulate matter) and visual impacts
- Land values
- Watersheds
- Local and state socioeconomics

According to data provided by the Pipeline and Hazardous Materials Safety Administration (PHMSA), to date, there are 2,408 miles of crude oil pipeline in the state of Minnesota. More are planned within the next few years. Much of this infrastructure exists in corridors shared by several other pipelines carrying liquefied petroleum gas, natural gas, diluent for tar sands oil, refined petroleum product and other

hazardous materials. In total, there are 10,475 miles of pipeline through the state. According to PHMSA, over the last 20 years, there has been an average of 14 spills from pipelines per year in Minnesota, an average of 1,812 barrels of hazardous liquids spilled per year in Minnesota, an average of 1,093 net barrels lost per year in Minnesota, and an average of $3,135,572 of property damage annually in Minnesota. Five lives have been lost as a result of pipeline incidents.

The MPCA has numerous concerns about the number of pipelines planned to use the same corridors. With each water body crossed by a pipeline carrying crude oil, the risk of a major incident increases. A cursory review of the PHMSA web site identifies apparent causes of pipeline failure to include: incorrect operation, equipment failure, internal and external corrosion, third party damage (excavation), construction damage, material failure (pipe, fitting, weld), weld leak, and other unknown causes. For example, at the site of the Enbridge pipeline release in Marshall, Michigan, the National Transportation Safety Board found "that deficiencies in Enbridge's integrity management (IM) program contributed to the release of hazardous liquid…" (Federal Register, Volume 79, No. 87, Tuesday, May 6, 2014 (25990 – 25994). See also Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release, Marshall, Michigan, July 25, 2010 (NTSB/PAR-12/01, PB2012-916501). Ultimately, the perspective should not be if a pipeline fails, but how will a release be mitigated when a failure occurs and at any given location (and the environmental susceptibility of that area to a release).

As explained above, MPCA examination of the proposed Sandpiper route and the previously used Northern route (Alberta Clipper) shows that significantly more open water bodies are crossed by the pipelines in these corridors than alternative routes. Far more of these crossings have no available access within a 2,000 foot buffer, meaning that release incidents are more likely to impact surface waters within that 2,000 buffer. Both the Sandpiper and Alberta Clipper routes are corridors for numerous crude oil pipelines; consequently, these routes are more vulnerable and less able to properly mitigate damage to aquatic environments. Whereas oil does travel through soils and overland, it travels significantly farther in aquatic environments.

Pipeline construction will involve soil excavation, vegetation removal, the crossing of water bodies, and the alteration or loss of wildlife habitat. These activities and the creation of new corridors can result in forest fragmentation affecting numerous species of wildlife that require expanses of undisturbed forest. Wetland perches may be broken causing alteration of natural hydrology in wetland areas, and stream geomorphology can be altered by damaging banks or stirring up stream bottoms. Herbicides used to control vegetation in pipeline corridors may adversely affect pollinators, particularly honeybees, resulting in hidden impacts that are difficult to trace, but nonetheless exist.

The construction, operation, maintenance, incidents and repairs associated with crude oil pipelines have been accompanied by significant environmental impacts. With more proposals in the works, more cumulative impacts can be expected to occur. Therefore, concerted effort is needed to take a close look at and carefully analyze the creation of common routes and corridors for pipeline projects where the risks of impacts to the environmental and human health can be minimized. The routes that have been used in the past pose substantial risks as noted above. Continuing to open more corridors will increase these risks and impacts. The MPCA would support and participate in a joint effort by state agencies to begin examining the feasibility of such a corridor, both for the purpose of expediting approval of future proposals and minimizing the potential for environmental impacts. A fresh look at the routing of energy transportation projects from a larger and more comprehensive perspective has the potential to make a

significant contribution to streamlining the review and permitting processes as well as preventing and minimizing cumulative impacts.

Conclusion

It is requested that the comments provided in this letter and MPCA's letter dated April 4, 2014, be entered into the record to be addressed in the Draft CEA. We continue to look forward to assisting the Department of Commerce, as desired, during the preparation of the CEA for this project and its subsequent review upon its release. Through this process, the MPCA seeks to obtain further additional information to facilitate the MPCA staff review of the Project, well in advance of the time a decisions on the required MPCA authorizations are needed to commence construction. Ultimately, it is the responsibility of North Dakota Pipeline Company LLC to secure any required permits and to comply with any requisite permit conditions. If you have any questions, please contact me at 651-757-2465.

Sincerely,

Patrice Jensen
Planner Principal
Environmental Review
Resource Management and Assistance Division

PJ:bt

cc: Jamie Schrenzel, MDNR
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August 6, 2014

Mr. Burl Haar, Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Dear Mr. Haar:

RE: Enbridge Sandpiper Pipeline Project, Docket No PL 6668/PPL-13-474

The Minnesota Pollution Control Agency (MPCA) has reviewed the comments and recommendations submitted by the Department of Commerce (DOC) on July 16, 2014, which will be considered by the Public Utilities Commission (Commission) at the August 7, 2014, hearing for the Enbridge Sandpiper Pipeline project. The MPCA offers the following comments on the project and the DOC's July 16, 2014, recommendations.

The recent boom in the production of oil and gas in North Dakota and surrounding areas has brought about an increase in the number of planned and proposed projects in Minnesota for the transportation, storage, and processing of these resources and their related products and uses. This activity has increased citizen and Agency interest in the amount and quality of information available to adequately assess the individual and cumulative environmental impacts of these projects and to fully inform decision-making processes.

Many alternatives to the proposed Sandpiper project and route have been suggested in the routing (PPL-13-474) and certificate of need (CN-13-473) proceedings, including rail transport, trucking, and numerous pipeline routes. The Commission will determine which alternatives are to be addressed in greater detail as the environmental review, certificate of need, and permitting processes move forward.

Given the high potential of additional pipelines and replacement or upgrading of existing pipelines in the near future, and within the same corridors, it is critical that the current effort consider multiple alternatives, including both route and system alternatives. For the reasons outlined below, limiting the alternatives to route options alone at this stage would unnecessarily narrow the scope of project options to reduce environmental and public health risks.

In our comments, the MPCA has suggested both route and system alternatives; these are discussed in the DOC's July 16, 2014, filing. I am concerned that the system alternative recommended for consideration by the MPCA may not be evaluated in these proceedings, since it does not include the Clearbrook terminal. The DOC evaluated the MPCA's system alternative, SA-03, and developed a connector segment to Clearbrook that would convert SA-03 into a route alternative. The MPCA supports inclusion of the SA-03 route with the connector segment developed by DOC as a less environmentally harmful route alternative than the proposer's route.

The MPCA's view is that the environmental impacts of system alternatives need to be considered as well as route alternatives. A system alternative that will transport oil to an alternative terminal with significantly less environmental harm should be evaluated in these proceedings.

My understanding is that system alternatives are considered in the Certificate of Need (CN) proceeding for this project. I also understand that DOC conducts environmental review of system alternatives in High Voltage Transmission Line certificate of need proceedings in the form of an Environmental Report (ER), but that this review is not conducted for pipeline certificate of need proceedings. The MPCA respectfully requests that the Commission request the DOC to prepare an ER-type review of alternatives to the project, including SA-03 as originally proposed by the MPCA without the connector segment to Clearbrook, for introduction into the CN proceeding. This position is based on MPCA's understanding as follows:

1. The project purpose can be met without constructing new storage capacity in Clearbrook. If the new terminal were to be built at a more westerly location, such as Crookston, a 75-mile long pipeline to Clearbrook could be constructed for the purpose of sending the oil that Enbridge is contractually obligated to send through Clearbrook (for transport to St. Paul refineries), while the remainder of the Bakken crude could be sent via a less environmentally harmful route well to the south of the sensitive water resources, and then on to the Superior, Wisconsin terminal.

2. Locating terminal facilities near Crookston, or at another site closer to the border of North Dakota, could offer other pipeline routes as viable alternatives, such as the proposed "System Alternatives" identified in the July 16, 2014, DOC recommendations. A terminal closer to the Minnesota/North Dakota border could be the point of origination for future pipelines that would travel to the south and avoid the potential threat to sensitive water resources that the MPCA has identified as being associated with the currently proposed Sandpiper route.

Thank you for consideration of our request.

Sincerely,

John Linc Stine
Commissioner

JLS:bt

January 23, 2015

The Honorable Eric Lipman
Minnesota Office of Administrative Hearings
600 North Robert Street
P.O. Box 64620
St. Paul, MN 55164-0620

RE: In the Matter of the Application of North Dakota Pipeline Company LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota
MPUC Docket No. PL6668/CN-13-473
OAH Docket No. 8-2500-31260

Dear Judge Lipman:

The Minnesota Pollution Control Agency (MPCA) submits the following comments for consideration by the Administrative Law Judge (Judge) in making recommendations to the Public Utilities Commission (Commission) in this matter. The MPCA's comments provide information addressing several of the criteria set forth in Minn. Rule 7853.0130 for making a determination on a certificate of need for the Sandpiper Pipeline Project (SA-Applicant) proposed by North Dakota Pipeline Company ("NDPC" or "Applicant"). The MPCA respectfully requests that if a determination of need is reached in this proceeding, the certificate of need be conditionally granted contingent upon suitable modification of SA-Applicant to protect and avoid high quality natural and environmental resources, and the inclusion in the Route Proceeding, Docket No. CN-13-474, of SA-03 and any other System Alternative that meets the identified need, pursuant to the Commission's authority under Minn. Rule 7853.0800. The MPCA will gladly provide additional information or comments that the Judge may find helpful in the course of this proceeding.

A. The MPCA's comments address four of the criteria required under Minn. Rule 7853.0130 for a determination on a certificate of need.

Minn. Rule 7853.0100 requires evaluation of all applicable and pertinent factors listed under each of the criteria set forth in Rule 7853.0130 and a specific written finding with respect to each of the criteria. Minn. Rule 7853.0130 states that a certificate of need shall be granted if all the listed determinations can be made. However, if one or more of those determinations cannot be met, a certificate of need may be denied, or conditionally granted subject to modification, under Minn. Rule 7853.0800.

The MPCA is providing comments that address the determinations required under Rule 7853.0130.B (2); 7835.0130.B (3); 7853.0130.C (2); and 7853.0130.C (3), which state:

- 7853.0130.B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering: . . .
  (2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;
  (3) the effect of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and . . . .

- 7853.0130.C. the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate, considering: . . .
  (2) the effects of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effect of not building the facility;
  (3) the effects of the proposed facility or a suitable modification of it, in inducing future development.

The MPCA comments will address each of the criteria mentioned above and associated listed factors.

B. SA-03 is a reasonable and prudent alternative to the Applicant's facility (SA-Applicant), since the respective costs of SA-Applicant and SA-03 and of oil to be supplied by SA-Applicant and by SA-03 are not significantly different. Minn. Rule 7853.0130.B(2).

Financial impacts and comparative costs are among the factors to be evaluated in determining whether the criteria in Minn. Rule 7853.0130.B are met. Since MPCA submitted its comments dated August 21, 2014 to the Public Utilities Commission,[1] additional relevant testimony have been submitted in this docket. This included the direct testimony of economist Adam Heinen of the Department of Commerce (Doc. ID 201411-104761-03 ("Heinen Direct"). Mr. Heinen stated his expert opinion that System Alternative SA-03, as proposed by the MPCA, would meet the need of the project if as also proposed by MPCA, the Clearbrook terminal location was moved westward to the Crookston area or another location closer to the North Dakota border. (Heinen Direct, p. 75,) Mr. Heinen also indicated that moving the terminal location could increase the cost of constructing the pipeline, and discussed Applicant's estimate of the cost increase. (Heinen Direct, 75-76). Mr. Heinen then stated in his opinion that any apparent higher costs of SA-03 based on Applicant's analysis were insignificant and unlikely to impact retail prices and that the Applicant had not shown that SA-03 was an unreasonable alternative to meet the need of the proposed project. (Heinen Direct, pp. 77-78)

[1] See PUC Docket Filing 20148-102458-02 and 20148-102458-04

Mr. Heinen reinforced his direct testimony when he filed rebuttal testimony addressing SA-03. Mr. Heinen affirmed that SA-03 appeared to be a reasonable alternative to meet the need for this project. (Heinen Rebuttal, p. 7) (Doc. No. 20151-105968-01). This testimony supports the finding that under Minn. Rule 7853.0130.B(2), based on comparative cost, SA-03 is at least a reasonable and prudent alternative. However, comparative effects on natural environments, i.e., potential environmental and natural resource impacts as discussed in the following sections, appear to make SA-03 "a more reasonable and prudent alternative" under Minn. Rule 7853.0130.B(3).

In addition to direct costs of construction and operation, the costs considered under Rule 7853.0130.B(2) should include an evaluation of whether a system alternative such as SA-03 is a more reasonable alternative to SA-Applicant because of a reduced risk of a costly spill to a sensitive environmental area. An Alternative that avoids or impacts fewer sensitive ecosystems and water bodies than SA-Applicant will have a smaller likelihood of incurring significant response costs. As documented by the U.S. Environmental Agency (USEPA), it costs considerably more to restore or rehabilitate water quality than to protect it.[2] The areas of the state traversed by the SA-Applicant have waters and watersheds that are currently subject to protection in the state's "Watershed Restoration and Protection Strategy" program, [3] financed through the Clean Water Fund and aided by significant volunteer participation of Minnesota citizens. By keeping these waters as clean as possible before they become impaired, extensive costs of restoring waters to state standards can be avoided. Location of oil pipelines in these areas place their pristine waters at risk, and also place potentially millions of dollars in state and federal funds allocated for protection of these areas at risk.

When evaluating spill response costs, the following factors would make one corridor a better choice than another in minimizing the potential for costly spills or accidental discharges: fewer crossings of flowing water; fewer adjacent water bodies; quality of those waters; presence of especially sensitive areas or habitats or species or uses; better access to downstream oiled areas; tighter soils; and closer and more equipped and prepared responders. The MPCA applies these factors in comparing SA-Applicant with SA-03 and other alternatives in the next section of our comments.

C. SA-Applicant presents significantly greater risks of potential environmental impacts and encroaches on higher quality natural resources than SA- 03 and several other system alternatives. Minn. Rule 7853.0130.B(3). The effects of SA-Applicant on the natural environment support a determination in favor of other alternatives. Minn. Rule 7853.0130.C(2) and C(3).

[2] See http://water.epa.gov/polwaste/nps/watershed/upload/economic_benefits_factsheet3.pdf (incorporated by reference) .

[3] See (http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/watershed-approach/index.html)

Environmental risks are posed by all aspects of pipeline construction and operation, including post-spill recovery and restoration activities. The primary and most significant risks are associated with the long-term effects upon environmental and natural features that will be permanently altered, eliminated, or otherwise impacted by the presence of a pipeline, as well as the potential impacts of the release of crude oil as the result of a spill event during the potential 40 years or more that the pipeline will be operational. Those risks include environmental damages such as loss of wildlife, contamination of drinking water, destruction of fisheries, loss of habitat, and alteration of ecological systems. (For a discussion of the behavior and cleanup of oil spilled to surface water, soil, and groundwater, see Appendix A to the MPCA's comments.)

During these proceedings, the MPCA has commented extensively on the environmental concerns regarding the route proposed by Applicant in comparison to alternative routes and system alternatives. MPCA's prior comments can be found in Document Nos. 20146-100780-01, 20148-102458-02 and 20148-102458-04, each incorporated by reference. These prior comments have addressed such specific items as access to potential release sites in surface waters, potential to impact ground water, wild rice, the state's highest-quality surface water systems, wildlife habitat, low income populations, watersheds currently being assessed for restoration and protection strategies, fisheries, economies, and numerous other parameters.

In these comments, the MPCA concluded that with respect to protection of the highest-quality natural resources in the state, the SA-Applicant route presents significantly greater risks of potential impacts to environment and natural resources than several of the system alternatives, including SA-03. Although all proposed routes and system alternatives have the potential to impact some natural resources, the Applicant's proposed route encroaches on higher quality resources, superior wildlife habitat, more vulnerable ground water, and more resources unique to the state of Minnesota than do many of the proposed system alternatives. Several examples of the greater potential for harmful environmental impacts of SA-Applicant compared to other alternatives are highlighted in the following pages.

The relevance of other system alternatives depends upon whether the need for the project is determined based upon a narrower and more localized view or upon a larger regional view. While SA-03 has been identified as a reasonable and prudent project alternative as a general matter, it serves as such an alternative from both a localized and regional view. However, if need is determined based on a larger regional view of need, several other system alternatives may also be reasonable and prudent alternatives to meet that regional need. Consequently, the MPCA also addresses the comparative impacts of other System Alternatives and SA-Applicant to inform a determination of need from a regional perspective.

The broader objective of the proposed project is transporting oil to markets in the Midwest and along the eastern and gulf coasts, not to transport oil through the state of Minnesota

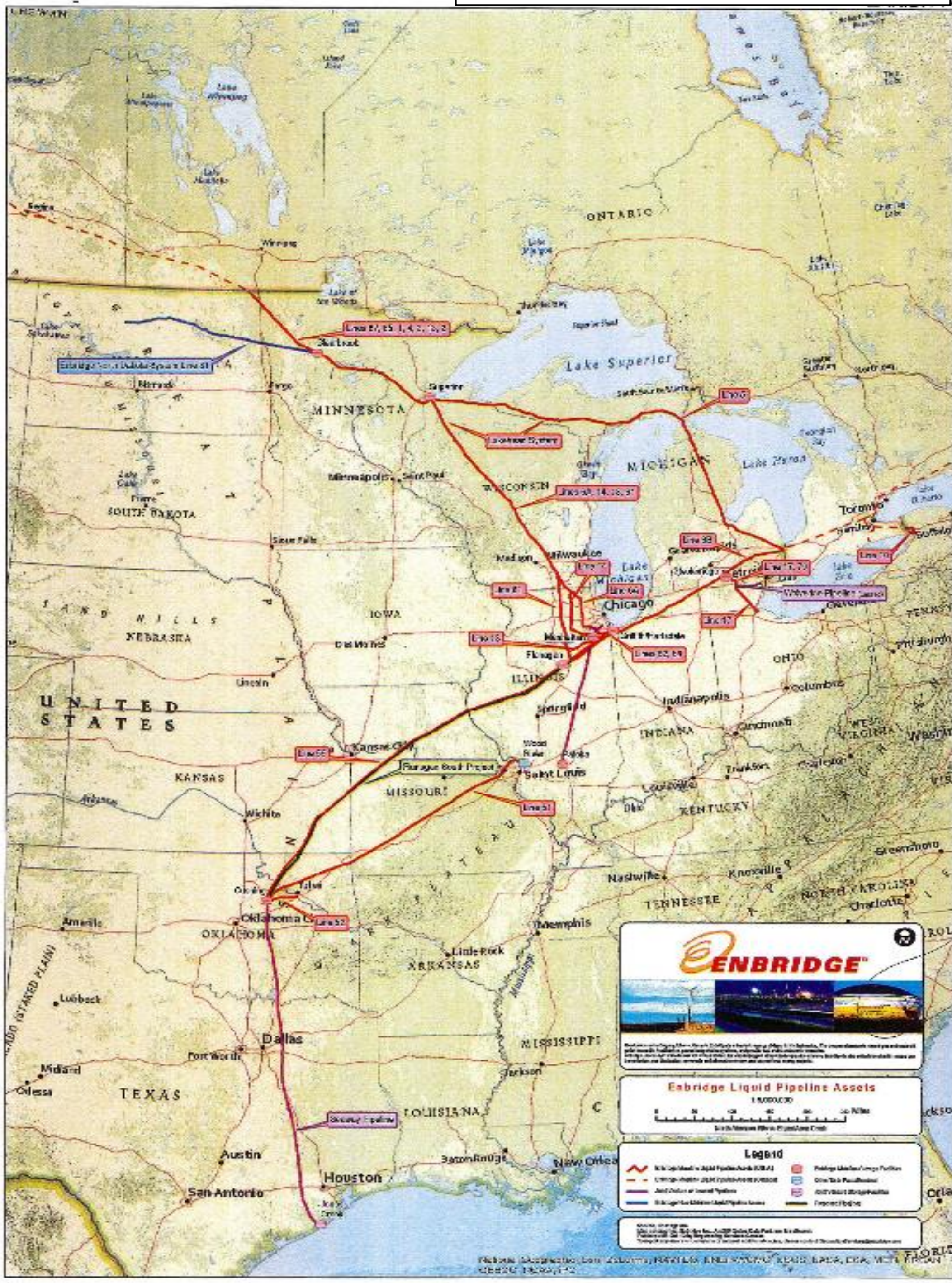
with termination in Superior Wisconsin. [4] Oil that is to be transported to Superior, Wisconsin through the proposed pipeline will continue through Wisconsin to Chicago (or Wisconsin and Michigan if routed to Sarnia, Ontario). Oil that would be transported via one of the southern system alternatives, such as SA-04, and on to the Chicago area would have to be transported through Iowa before reaching Illinois. In either case, Chicago appears to be a common destination for most if not all of the oil that is proposed to be moved through Minnesota.

Information regarding the existence of contractual agreements obtained when Applicant held an "open season" has been offered as the underlying basis for a determination of need.[5] The Applicant has suggested that the facility as proposed (SA-Applicant) is necessary in order to assure those contractual agreements are filled and that alternatives such as SA-03 would negatively affect the cost of fulfilling those agreements. This proceeding will determine whether the Applicant's open season agreements establish the need for siting a pipeline through Northern Minnesota instead of along a southern alternate route. If the underlying actual and predominate need of the project is to get Bakken oil to Midwest regional markets in Wisconsin, Michigan, or Illinois, that need can be achieved by several of the system alternatives. The foregoing is generally and specifically supported by the direct and rebuttal testimony of Applicant's witness Neil Earnest (Document ID Nos. 20148-102134-03, Earnest Direct Testimony, and 20151-105934-01, Earnest Rebuttal Testimony). See Figure 1, which is an overview of Applicant's regional infrastructure and corresponding destinations.

[4] Applicant testimony acknowledges that the project's intended destination is not Superior, Wisconsin but refineries in the Midwest. Applicant witness Earnest, in rebuttal, indicates that oil from this project is not only competing with alternative modes of transportation to refineries in Chicago, Patoka, and Cushing. The oil is also competing with all of the other crude oil choices available to the refineries in the Midwest. Enbridge rebuttal at pp 5-6. "Accordingly, all else equal, higher Sandpiper transportation costs to the Midwestern markets acts to decrease the volume of Bakken crude oil that can be expected to be processed in the Midwest, and to lower the utilization of the pipeline." (Earnest Rebuttal, 6) 20151-105934-01

[5] Heinen Direct, pp. 6-7. The nature and content of these open season transportation service agreements are confidential. The MPCA has not examined the nature or substance of these agreements or their duration. Mr. Heinen also indicates in his testimony that he does not know the ultimate destination of that oil.

Figure 1


ONTARIO
Lake Superior
MINNESOTA
MICHIGAN
WISCONSIN
SOUTH DAKOTA
NEBRASKA
IOWA
ILLINOIS
INDIANA
OHIO
KANSAS
MISSOURI
KENTUCKY
TENNESSEE
OKLAHOMA
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
UNITED STATES
Chicago
Toronto
Dallas
Houston
Oklahoma City
Memphis
Nashville
Saint Louis
Kansas City
Minneapolis
Superior
Flanagan
Austin
San Antonio
ENBRIDGE
Enbridge Liquid Pipeline Assets
Legend

Comparative Evaluation of Environmental Effects

The comparative long term environmental and eco-system impacts and the potential impact of spills must be carefully evaluated for each system alternative in determining the need for a pipeline project. Permanent harm to sensitive eco-systems, habitats, and species may occur following construction of a new pipeline. In addition, long-term impacts from a spill can be much more damaging in areas containing features such as environmentally sensitive areas and those with limited access. As discussed below, these long-term environmental and eco-system impacts should be accorded great weight in the determination of need for a pipeline project. Further, in associated routing proceedings, these impacts must be subjected to even more rigorous and detailed environmental review when evaluating alternative routes. It is not sufficient under Rule 7853.0130 to determine that the location for the proposed project is suitable or reasonable. Rather, the location should be one that best minimizes the risk to human populations and environmental and natural resources.

1. Adverse Impacts to High Quality Surface waters are Greater under SA-Applicant.

SA-Applicant traverses a greater number of high quality water bodies than does SA-03 and presents higher risk of environmental impacts from a spill or release of crude oil along its route corridor. Based on watershed health scores as determined by the Minnesota Department of Natural Resources in its Watershed Health Assessment Framework, MPCA documented that the adverse impacts to overall water quality from construction and operation, as well as spill cleanup and response, of Applicant's Alternative were more harmful than alternatives including SA-03, SA-04, and SA-05. See MPCA Comment letter dated August 21, 2014 , Document ID Nos. 20148-102458-02 and 20148-102458-0420148-04, page 5).

The MPCA provides these additional comments to assist in proper interpretation of the information on surface waters in the Department of Commerce environmental analysis "Comparison of Environmental Effects of Reasonable Alternatives" (DOC study) submitted on December 19, 2014, (ID 201412-105567-01) and in evaluating the criteria and factors based on that information. For example, on its face, the DOC study may be misinterpreted as indicating that SA-03 is a worse alternative than SA-Applicant in affecting impaired waters. The DOC study concluded that there were 50 impaired waters crossed by the Sandpiper route, and 98 impaired waters crossed by SA-03 (DOC Study, 72, 90). Under the Clean Water Act ("CWA"), an impaired water is any water body (e.g., lakes, rivers, streams, wetlands) that is too polluted or otherwise degraded to meet the applicable water quality standards set by states, territories, or authorized tribes. Water quality and water quality standards will vary throughout the state depending on the region of the state in which the waters reside. "Impaired" waters are not the same across the state. For a water body to be deemed impaired in southern or western Minnesota (western corn belt plains or Red River valley ecoregions), it typically will have a greater degree of contamination or degradation than would be required for a water body in the central

hardwood forest ecoregion of Minnesota traversed by the applicant's preferred route (Sandpiper) to be deemed impaired. Thus, waters that are listed as impaired along the SA-Applicant route are likely to be higher quality (having a lower contamination level) than a water listed as impaired in the southern part of the state, and might not be listed as impaired at all along the SA-03 route. Waters in northern Minnesota are generally of better water quality or more pristine.

2. Significant Environmental Damage Would Occur From a Release at or near a Water Crossing Extending up to at least a Distance of 10 Miles from the Point of Release. SA-Applicant Has Many Areas of Limited Access, Increasing the Risk of Extended Impact to Surface Waters.

The most significant potential impact to a surface water from a crude oil pipeline crossing is the environmental destruction that would occur in the event of a release at or near the water crossing. According to a third party risk assessment document developed as part of the Keystone XL EIS[6], Exponent states: "A distance of at least 10 miles downstream from the proposed centerline of the pipeline should be used for the identification of sensitive areas and for identifying CPSs(contributory pipeline segments) during the final design phase of the Project." The 10 mile estimate is fair, given the potential for flowing water to carry a release of oil, especially in remote areas such as those found throughout the proposed Sandpiper route. Considering that the 2010 Enbridge spill into Talmadge Creek and the Kalamazoo River caused significant damage approximately 35 miles from the spill site, a ten mile estimate of damages is conservative and reasonable. See Stolen testimony, Document ID 201411-104748-02, page 24.

Damage to aquatic systems from an oil release can occur either as a result of physical effects such as smothering of organisms, or toxic contamination due to the chemical compositions of the oil. An oil spill in an aquatic ecosystem could cause, among numerous other impacts, death of waterfowl, other bird species, amphibians, reptiles, aquatic mammals, microorganisms, plankton, fish, pets and livestock living adjacent to waters, stunted growth of surviving species, loss of vegetation, destruction of soils, long-term reduction of dissolved oxygen, human health damage, damage to air quality, property value loss, and destruction of drinking water resources. This does not include damages that would occur during the cleanup process, especially in areas with limited, restricted or no access.

3. Potential Damages During Pipeline Construction and Testing Are Greater for SA-Applicant than other Alternatives.

Damages to surface waters as a result of construction activities can and do occur. Flowing water can also carry these effects a long distance from their origin, as noted above. MPCA has observed and documented significant sediment discharges to surface water on pipeline

[6] See http://keystonepipeline-xl.state.gov/documents/organization/221278.pdf, page XV, "Recommendations",

projects as a result of failing to install sufficient sediment and erosion controls on hillsides adjacent to surface waters. The failure to account for spring time subsidence of soils as a result of winter construction is common; frozen soils that are dug up and replaced into trenches thaw and subside in warmer spring temperatures, causing the soils to sink over the pipeline and form a ditch. These ditches act as conduits for melt water or rain water, and as they do not have sediment controls installed, tend to erode significantly as water runs through them. It is common for these subsidence ditches to terminate in water bodies, causing sedimentation and habitat damage (MPCA Comment Letter dated April 4, 2014, -Document ID 20144-98170-01, page 8).

Damage to surface water resources during hydrostatic testing discharges has occurred recently in the state. During these tests, segments of pipeline are filled with a significant volume of pressurized water, often millions of gallons, to test the integrity of the pipe. The water is then released in a manner that should minimize environmental impact. During the Alberta Clipper/Southern lights diluent project, Enbridge exceeded agreed-upon maximum discharge rates on 15 of its hydrostatic testing discharge operations. At two of these sites (adjacent to the Mississippi River and adjacent to the Clearwater River), the exceedances were enough to cause significant erosion and sediment discharge to surface waters. These cases were referred to the U.S. Environmental Protection Agency and eventually settled by the U.S. Department of Justice in 2013 with Enbridge paying a $425,000 penalty. During these hydrostatic testing operations, as much as 4,000 gallons of water per minute can be discharged from valves. This water is general required to be discharged to an upland area or a dewatering device, but when discharged rates are exceeded, or sometimes even when they are not, the pressurized water can erode soils and carry those eroded soils to surface waters, causing turbidity or smothering of aquatic habitat.

The placement of the new terminal construction west of the proposed Clearbrook location as suggested by MPCA in SA-03 will assure that future pipelines are located west and south of these pristine areas, thus avoiding the resources that the state is spending millions of dollars to protect. Meanwhile, the continued expansion of the Clearbrook facility that will coincide with construction in the SA-Applicant location will mean continued impact and potential impact to the highest value (pristine) waters in our state as a result of future pipeline construction.

4. Threats to Groundwater and Potential Drinking Water Supplies from SA-Applicant are Difficult to Assess, but Appear to Pose More Significant Risks than the System Alternatives, including SA-03.

Highly detailed topographical data for the state of Minnesota (called “LIDAR” data)) illustrates that the Sandpiper route (SA-Applicant) traverses territory with greater topographical contrast than does the SA-03 route. Much of the topography along the SA-Applicant route in Minnesota is the result of the deposit of glacial till from thousands of years ago. The composition of this till is often dependent on how the till was deposited. A

term used to describe these soils is “moraine,” or a mass of rocks and sediment carried down and deposited by a glacier, typically as ridges at its edges or extremity.

What is most important to understand about the soils along the SA-Applicant route is that the complexity of moraines in the area creates a significant degree of localized changes in groundwater movement that are very difficult to predict, as opposed to some of the flatter lands to the west and south, such as those traversed by SA-03, SA-04, or SA-05. Typically, ground water through this till along the SA-Applicant route will move laterally and toward a water body, so it is important that significantly more data is gathered from this route before the possible movement of oil in the event of a release can be predicted and response plans developed. It would be very difficult, if not impossible, to accurately assess the potential for ground water contamination based solely on the examination of GIS layers. However, it can be predicted that the damage to groundwater, potentially used as a source of drinking water, as well as the connected soils could take decades to repair, if the damage could be repaired at all. Additional impacts could include damage to agricultural areas (inability to grow crops) and damage to surface waters, wildlife and habitat from oil carried through underground conduits to those areas.

The LIDAR data strongly suggests an increased potential for impacts to drinking water from SA-Applicant than from SA-03 and some other system alternatives. However, more in-depth study will need to be done in the routing phase in order to make an informed comparison and either confirm or negate what the LIDAR data suggests as a factual conclusion.

5. SA-Applicant Threatens a Greater Percentage of Wild Rice and Native Forests than any of the Proposed Alternatives, including SA-03.

Wild rice, in addition to being an important economic consideration in Minnesota, is also an extremely important cultural resource, as well as an essential food source for humans and wildlife. It requires very specific conditions and good water quality, both of which are provided by north central Minnesota lakes. The Sandpiper pipeline would encroach on some of the richest wild rice territory in the state of Minnesota. Further, MPCA staff has identified 10 wild rice locations along the Sandpiper route for which there is no access from pipeline to the location of the wild rice. By comparison, SA-03 has two such areas. As shown in Figure 2, SA-Applicant (in green) would threaten significantly more of the state wild rice crop than any system alternative.

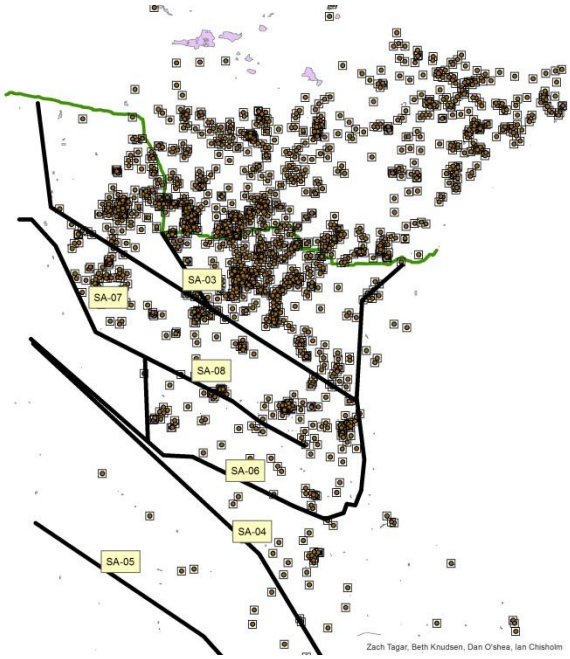


FIGURE 2 -- Wild Rice stands in Minnesota. The Sandpiper route (in green) would threaten more of the state's wild rice stands than any of the proposed system alternatives.

6. SA-Applicant Has a Greater Potential for Impact on Ecoregions than other Alternatives, including SA-03.

As accurately indicated in the DOC study, the majority of SA-03 crosses land that has been converted to agriculture or developed; this is true even when one considers only the portion of the system alternative within the state of Minnesota. Analysis of a GIS map of land cover in Minnesota (Figure 3 below) is helpful to indicate the land cover that would be crossed by SA-Applicant and the Alternatives. When the location of SA-Applicant, and other Alternatives are superimposed on Figure 3, it demonstrates that SA-03 skirts large areas of hay, grassland, pasture, and cultivated crop with infrequent passes through forested areas and wetland. By contrast, the SA-Applicant route crosses a significant amount of forested lands and wetlands, encroaching on significant agricultural land only west of Clearbrook and in the Park Rapids area. SA-Applicant can be seen to skirt far more forest and wetland areas than either system alternative SA-03, SA-04, or more southern alternatives.

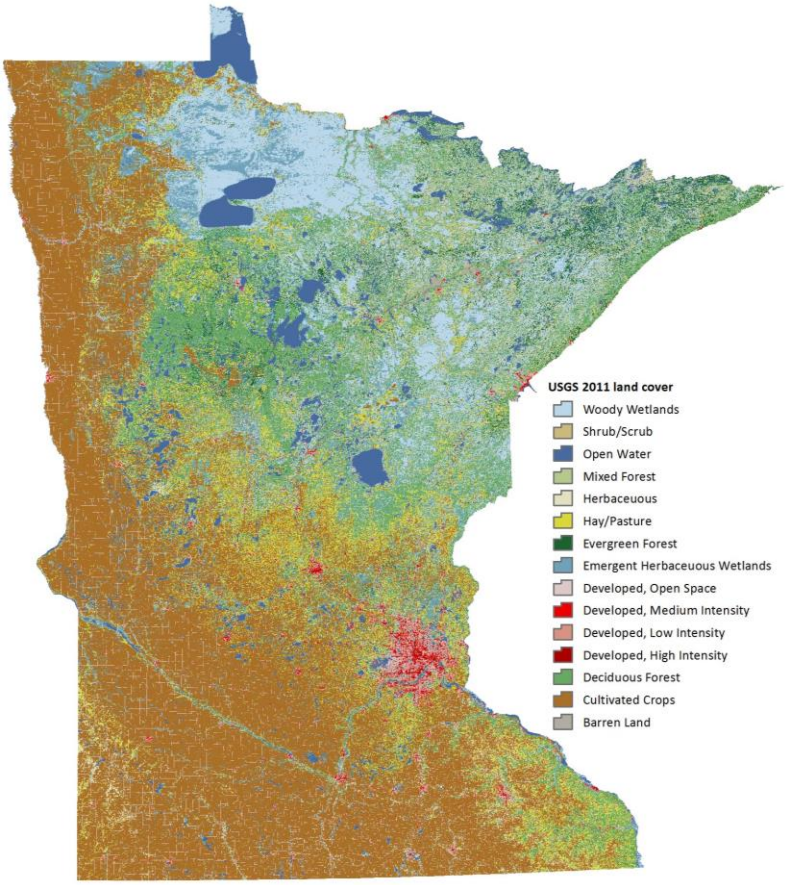


FIGURE 3-- The legend on the left indicates what land cover types are represented by what colors.

Forested areas, particularly larger, unfragmented expanses of forest, are necessary for a number of species of wildlife to survive. Many species of song birds, for example, need deep woods for nesting to avoid "edge species," or species that are more tolerant of human disturbance, because certain edge species such as cowbirds can parasitize their nests and cause mortality to their young. Other species, such as certain reptiles and amphibians, are very habitat specific and cannot easily disperse if that habitat is damaged, such as when a pipeline is placed through that habitat, altering vegetation, soils, and hydrology. Sensitive species of animals and plants require very specific, balanced conditions which can be permanently altered when a pipeline corridor is opened. Long term disturbance and fragmentation of these areas as a result of pipeline construction and siting will have negative impacts on these ecosystems and the wildlife dependent on these conditions.

In addition, an oil spill or release in these areas could result in toxic conditions in soils and vegetation which could kill wildlife. Vegetation would die off either as a result of direct exposure to oil, as a result of altering corridor topography or soil composition during construction activities or clean up after a spill. It is important to note that Enbridge has promised to separate topsoil only if asked to do so by landowners. It is equally important to separate and replace topsoil in forested, remote environments to maintain the integrity of those systems and mitigate some of the potential long-term impacts of pipeline construction.

Impacts to agriculture and pastureland can also occur, and have. However, farms typically do not provide habitat for large numbers of sensitive species or plants or animals that cannot exist elsewhere, and oil movement is likely to be reduced to some extent in flatter terrains with less water movement. Although financial impacts to the landowner and company responsible for the oil release may be greater than in some natural areas, actual environmental damage is apt to be less, and more easily mitigated.

7. SA-Applicant Has More Locations with Poor Access in the Event of a Release than SA-03 or other Alternatives.

As indicated in the June 24, 2014 letter by the MPCA (Document ID 20146-100780-01), access to potential leak sites in the State of Minnesota is of significantly greater concern along the SA-Applicant route than on any of the proposed system alternatives. MPCA staff identified 28 sites along the Sandpiper route for which access would be difficult or impossible within 250 feet of a 2000 foot downstream flow if oil were to be released in certain water bodies. By comparison, seven such areas were located on the SA-03 route, and none on SA-04.

A primary rule of thumb when planning for response to an oil leak is that a release in soil is better than a release in water, and a release in stagnant water is better than a release in flowing water. (For a more detailed discussion of the factors involved in oil spills and responses, see Appendix A to the MPCA comments.) In the Enbridge 2010 Kalamazoo River oil spill, oil caused environmental damage a reported 35 miles downstream from the original release site. The MPCA analysis was limited in scope and only took into account access within 2000 feet of a possible spill. The agency has not evaluated or assessed how much farther oil could travel in some of the identified locations along SA-Applicant's route before containment of a spill could be implemented if the leak were discovered in a timely manner. According to the aforementioned Exponent risk assessment for the Keystone XL pipeline, a small leak from a hole of 1/32 inch in diameter in a pipeline could remain undetected for several months, even with the most up-to-date leak detection technology in place. The same leak could release up to 28 barrels of oil per day, at 42 gallons per barrel. Thus, even a very small, virtually undetectable leak in a remote area, such as those located along much of the proposed Sandpiper route, could cause significant environmental damage such as that described under heading C.3 of this letter without being detected in remote areas, and limited access may also reduce the chance that a citizen may observe and report a leak too small for detection by technology.

The creation of access in remote locations where none exists can create its own problems, including damage to habitat, creation of a source of long-term erosion, fragmentation, aesthetic issues, alteration of hydrology, and other issues. The best way to avoid these concerns is to avoid or reduce the number of crossings of flowing water bodies, or those where access is limited.

From a perspective of minimizing risk of major environmental incidents due to inability to access potential leak sites in Minnesota, the proposed Sandpiper route fares more poorly than any of the proposed system alternatives.

8. SA-03 and Other System Alternatives Follow Existing Corridors to a Greater Extent than does SA-Applicant.

System Alternatives SA-03, SA-04, and SA-05 all follow specific, already existing pipeline corridors. Assuming that all have already passed at least some degree of environmental scrutiny and have been adjusted in critical areas to avoid key resources, a route in these corridors can also likely avoid critical areas and resources. It is important to consider that for these routes, there is no need to "estimate" possible impacts by using an inclusive buffer of a random width to determine quantities of resources that "might" be impacted if one imagines the width of the pipeline corridor to be several miles wide. Instead, one can make a fairly accurate determination of what the impacts or potential impacts of these routes would be based on a width of a few hundred feet. These proposed routes are not "crayon drawings" on a map, but represent actual in-the-ground infrastructure. Precise numbers of water body crossings, mineral extraction sites, forests, wetlands, population densities, cultural resources sites, access areas, and potential downstream carry of released oil all can be determined with relatively little effort by state agencies with access to the required location data. What cannot be determined without more detailed study because of limitations in ArcMap(GIS) capabilities is the quality of those resources. MPCA and Minnesota Department of Natural Resources (DNR) staff can provide general overviews of how the resources in those areas compare to the resources in the northern or forested parts of the state, but on the ground site-by-site analysis is required.

Some of the proposed system alternatives follow highway corridors to some extent, and thus specific placement of the lines is more difficult to guarantee and resource data would be difficult to assess at this stage without more specific information. However, a required consideration for pipeline routing as stated in MN. R. 7852.1900, subp. 3. F., is the use of existing rights-of-way and right-of-way sharing or paralleling. With that in mind, since SA-03, SA-04, and SA-05 all follow specific existing corridors, while SA-Applicant does not in its entirety, then all three system alternatives could be brought forward for further review if they are determined to meet the need for the project, provided that this criteria is considered worthy of sufficient weight in the process.

Conclusion.

SA-03 is a reasonable and prudent alternative to meet the need that may be demonstrated in this proceeding with fewer potential impacts to the highest quality surface waters and other natural resources in the state of Minnesota than SA-Applicant. Further, if the project need is to transport oil from the Bakken fields of North Dakota to markets in the Midwest, system alternatives SA-04 and SA-05 must also be considered as candidates to meet that

need, as they present fewer potential impacts to the natural environment of Minnesota and surrounding states than SA-Applicant.

If a determination of need is reached in this proceeding, the MPCA respectfully requests that the certificate of need be conditionally granted contingent upon suitable modification of SA-Applicant as necessary to protect and avoid high quality natural and environmental resource and the inclusion in the Route Proceeding, Docket No. CN-13-474, of SA-03 along with any other System Alternative that meets the identified need, pursuant to the Commission's authority under Minn. Rule 7853.0800.

Thank you for consideration of these comments.

Sincerely,

William Sierks
Manager, Energy and Environment Section
Minnesota Pollution Control Agency

APPENDIX A

BEHAVIOR AND CLEANUP OF OIL SPILLED TO SURFACE WATER, SOIL, AND GROUNDWATER

Presented below is general description of behavior and cleanup of oil spilled to surface water, soil, and groundwater.

Behavior of Oil in Surface Water

Many factors contribute to the spread and spill response efforts of an oil spill to surface waters, including weather, wave action and the chemical and physical properties of the oil. Oil that reaches surface water spreads on the surface of the water. If the water is flowing, the oil will be carried along. Additionally, wind will spread oil on water. By these forces thick layers of oil will spread and become thinner, more extensive layers. Oil spills may range from thickness measured in feet to a micron-thick rainbow of oil.

Some of the oil on water will evaporate. For example, Bakken oil is more volatile than many other crude oils. The evaporation of the "light end" portion of the oil increases the risk of ignition and exposure of responders to the toxic volatile components in the oil. Some of the oil on the water's surface will sink, especially as it mixes with sediment and as it loses the light ends through evaporation. Alberta oil sands crude is more prone to sinking than are many other crude oils. Sunken oil may move with water and/or may sink into bottom sediment. It may later release from bottom sediment if disturbed or with changes in temperature or current. Oil that sinks is especially challenging and tactics for finding and recovering sunken deposits of oil are not well developed. Removal of oiled sediment creates significant damage on its own. Some of the oil on water will dissolve into the water. Benzene, a toxic component of all crude oil, is among the most soluble components of crude and refined oils. Oil in moving waters will form emulsifications, called oil mousse, which is difficult to recover. Crude oils and refined oils will also have varying levels of hydrogen sulfide and other gases and constituents that are potentially toxic to humans and water life. In addition, oil spilled in surface water will coat and kill emergent vegetation, wildlife, shoreline, structures, and vessels.

Most aspects of response to an oil spill to surface water are made more difficult and less effective in winter ice and snow conditions. This is especially so if oil gets under ice, or if

the ice is not safe for holding up responders and equipment. Sometimes oil on frozen ground or oil on top of competent ice makes for easier oil recovery.

Often a point is reached where the environmental damage caused by attempting to recover spread out and dispersed oil outweighs the damage of the oil. Consequently, oil spill response strategy is to contain spilled oil before it gets away.

Spill Response to Protect Surface Water

Every oil spill recovery tactic requires speedy deployment of specialized equipment by specially trained responders. The tactics of recovery of oil from surface water include:

- Reaching the location of the spill, and reaching downstream oiled or potentially oiled locations. Access along a railroad track or pipeline right-of-way to the spill site sometimes is easy. But getting access to oil that has gotten away from the spill site down river or into fringing wetlands is often very difficult.
- Stopping the flow of oil from the land into the water. Each tactic requires access, and much equipment and specialized training.
- Capturing and containing oil downstream of the spill site. This is usually attempted with floating "containment booms" (floating 50 foot long plastic tubes chained together) to hold the oil. Placing containment booms require access and boats, booms and ropes, anchors, buoys, and specialized training. This equipment is seldom nearby. Containment booms are limited in the amount of oil they will hold back. Containment booms lose effectiveness in water with currents or shallow water. Containment also typically becomes less effective the further downstream oil travels and the more dispersed oil has become. Downstream capture and containment depends on the currents, weather, shoreline type, and access. The best-prepared companies have examined and prioritized potential down-stream containment sites in their response planning before the spill.
- Skimming, sorbing, or pumping oil from the water's surface. A skimmer is a vacuum or sorbing device that pulls the floating oil layer off of the water. Sorbents are natural or man-made materials that absorb oil but not water. The oiled sorbent must then be recovered from the water for disposal. Vacuum trucks can pump oil from oil pools or thick layers of oil on water. Skimming, sorbing, and pumping oil requires access to the oil location and equipment and tanks to store recovered oil for eventual disposal.
- Down-stream, ahead-of-oil protection of shorelines and sensitive features. Containment boom can be deployed at some sensitive locations before the oil arrives to deflect oil further down-stream. Protection measures require careful selection of sites to be protected, since equipment and time does not allow

protection of all areas. In the best of cases, sensitive areas have been examined and prioritized in response planning before the spill.

- Mopping up oil that has been stranded on shorelines, wetlands, marinas, structures, etc. This can be done with sorbents, power washers, oil-lifting chemicals, excavation, etc. This is very labor-intensive work requiring equipment, access, and specialized training. Some mopping-up methods can damage or destroy environmental features, for example excavating beaches, steam cleaning rocky shores, or moving people and boats through wetlands.
- Sampling water, sediment, shoreline, vegetation, etc. to assess where oil or oil components remain in the environment and whether additional recovery is possible and warranted.
- Recovering residual oil from sediments, shorelines, wetlands, and other places as possible.
- Monitoring the ongoing effects of residual oil and of recovery operations.

Even a very aggressive and effective spill response will not recover all spilled oil from a surface water.

Behavior of Oil on the Ground, And In Groundwater

As oil spilled onto the ground sinks into the ground, some oil will be retained by soil. So a small spill may be absorbed into soil and may never reach groundwater directly. But whether or not oil reaches groundwater, the oil retained on or in the soil will serve as a continuing source of groundwater contamination as infiltrating precipitation passes through it. Some soils such as clay have small or non-connected pore spaces such that oil will not readily pass through it, while soils like sands and gravels have large interconnected pore spaces through which oil will pass readily and quickly. The speed of travel is also dependent on the viscosity of the substance. Some oils are very "liquid," passing through soil quickly; other oils are thick, and those thick oils move through soil pores slowly.

"Groundwater" happens at the depth below the surface when the pore spaces between soil particles are filled with water instead of air. The depth of groundwater is highly variable in Minnesota from a few feet to one hundred or more feet. Groundwater moves, typically slowly, towards connections with surface water, wells, or other discharge points. Some fractured rock formations will allow oil plumes to move very quickly and very far.

When oil meets groundwater, the oil will mostly float near the surface of the groundwater, smearing the soils in that interface. The floating oil is termed "free product." It will spread out in a floating layer in the direction of groundwater flow. Some of this floating oil will

dissolve into groundwater forming a "plume." Some will evaporate and rise towards the surface. Some will remain sorbed onto soil.

Spill Response to Protect Groundwater

Once groundwater has become contaminated, the response strategies include understanding the direction, speed, and other characteristics of the groundwater. These response strategies use a variety of tools, including pre-existing information, soil borings, groundwater monitoring wells and geophysical methods. Classic physical strategies to protect groundwater from spills include:

- Pumping spilled oil from the ground's surface before it sinks into the soil;
- Digging oil-saturated soils so that the oil won't continue sinking into groundwater;
- Using high capacity blowers into the soil to suck the oil off the soil or groundwater as a vapor;
- Installing skimmers and pumps into the free product oil floating on the groundwater surface to pump out free product, and;
- Pumping groundwater to draw floating and dissolved oil to the surface for treatment.

Unfortunately, even a very aggressive and effective spill response will not recover all spilled oil from the ground. In those cases, if oil reaches groundwater, strategies for mitigating contaminated groundwater include:

- Ongoing groundwater pumping and treatment;
- Well replacement or treatment of a contaminated well;
- Adding restrictions on drilling new wells in the area;
- Adding oxygen and other materials to enhance natural degradation of oil;
- Ongoing monitoring to track contaminated groundwater behavior, and;
- Monitoring natural attenuation and biodegradation.

So, a spill of oil onto tight soils, with prompt recovery of oil from the ground's surface, and prompt excavation of contaminated soils is more effectively cleaned up and less damaging than is a spill of oil onto permeable soils, or areas with shallow groundwater. Especially concerning are spills of large volumes of oil on permeable soils near wellheads.

Biodegradation of Oil

It is well understood that oil that cannot be retrieved after a spill will eventually biodegrade over a period of years or decades. The rate at which biodegradation occurs in surface water, ground water, or soil is variable and contingent on many factors including oil concentration, soil types, temperatures, adequate oxygen and moisture. Oil-specific

chemical and physical properties influence biodegradation. Some refined oils have additives or other non-biodegradable components.

Dissolved oil at the front and side of the plume will typically be attacked by indigenous microbes. A steady-state will eventually be reached as the microbial biodegradation at the forward edge of the plume keeps up with the oncoming oil in the oncoming groundwater. As oil content of the plume is exhausted, this biodegradation consumes the most or all of the spilled oil and the plume shrinks. This process is called natural attenuation. Understanding natural attenuation is important in a spill response, but natural attenuation is never accepted as the sole response to any spill. Plumes of oil contamination in groundwater are typically measured in hundreds of feet or fractions of a mile from the spill. A plume's life may be only some years, or may be very long.

Synopsis of A Few Oil Pipeline Spills in Minnesota

The largest pipeline spill in Minnesota in recent decades was a 1.7 million gallon crude oil spill from Lakehead (now called Enbridge pipeline number 3 in Grand Rapids in March of 1991. Pumping and extensive excavations of wetland was done to recover most of the oil. About 300,000 gallons escaped to the Prairie River. Luckily, most of that oil flowed onto the river's ice surface, and was recovered by an aggressive and effective company response. If the spill had gone beneath the ice, or had it been in a different season, it would have been far more challenging to recover and would have caused much surface water and downstream damage.

In 2002, the Lakehead (now called Enbridge) pipeline number 3 leaked approximately 250,000 gallons of crude oil into wet land near Cohasset in 2002. An oil burn was done because of concern with impending rain pushing oil to the nearby Mississippi River. Remaining oil was pumped and excavated from the wet land and extensive land restoration done over several years.

In 2009 near Staples, Minnesota Pipe Line Company was reinforcing or replacing sections of pipe. A device placed on the line to temporarily reroute the line failed during the night, and approximately 210,000 gallons of crude oil was lost. It pooled at the surface and no surface water was nearby. An aggressive excavation was immediately begun. Many thousands of cubic yards of soil were removed and disposed off-site. A passive sump system was left in place for a few years at the deepest point of impact. The contamination did not migrate off site due to the significant excavation effort.

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Minnesota Pollution Control Agency

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May 12, 2015

Mr. Scott Ek
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: In the Matter of the Application of Enbridge Energy, Limited Partnership for a Certificate of Need and a Pipeline Routing Permit for the Line 3 Pipeline Replacement Project in Minnesota
PUC Docket No. PL-9/CN-14-916 (Certificate of Need)
PL-9/PPL-15-137 (Pipeline Routing Permit)

Dear Mr. Ek:

The Minnesota Pollution Control Agency (MPCA) offers these comments on the Certificate of Need (CON) application and the Pipeline Routing Permit application filed by the Enbridge Energy, Limited Partnership (Enbridge) in these dockets ("Line 3 Replacement" project).

The Minnesota Public Utilities Commission (PUC) has requested comments on three topics concerning the completeness of the Enbridge Line 3 Replacement applications:

1. Does the CON application contain the information required under Minn. R. 7853.0220 to 7853.0260 and Minn. R. 7853.0500 to 7853.0640?
2. Does the pipeline route permit application contain the information required under Minn. R. 7852.2100 to 7852.3100?
3. Are there any contested issues of fact with respect to the representations made in the applications?

The MPCA understands that Enbridge's preferred route is proposed to co-locate the Line 3 Replacement on the same route as its proposed Sandpiper pipeline project. Although the MPCA's environmental concerns with the Sandpiper project are known, it must be noted here that the discussion of alternatives in the Line 3 Replacement applications does not address those concerns or consider any system or route alternatives that were brought forward in the Sandpiper proceedings. Nor do the applications appear to provide adequate basis for selection of a southern route alternative over a northern route alternative, such as rebuilding of the Line 3 Replacement in its current location.

The MPCA contests both the adequacy of the environmental analysis and the lack of consideration of reasonable alternatives in the applications. [1]

Failure to address alternatives and evaluate environmental impacts. Enbridge intends to locate the Line 3 Replacement pipeline adjacent to the Sandpiper pipeline between Clearbrook and Superior. The MPCA has filed comments raising environmental concerns with this route in the Sandpiper dockets (see Dockets 13-473 and 13-474). Since the Line 3 Replacement project follows the same proposed route, it raises substantially the same concerns that the MPCA expressed in Sandpiper, but the applications do not address those concerns.

It does not appear that Enbridge evaluated any system alternatives or route alternatives that have been included in the Sandpiper docket. Sandpiper System Alternative 3 and System Alternative 3 Modified (a route alternative included by the Commission in the Sandpiper route proceeding) are given minimal to no consideration.[2] Despite Enbridge's awareness of the significant environmental concerns expressed by state agencies and interested parties in the Sandpiper proceedings, and the alternatives offered in those dockets, the Line 3 Replacement applications do not address these alternatives.

The applications discuss three options, the preferred route and two alternatives involving replacement along or parallel to the existing Line 3, i.e., rebuilding Line 3 in place. However, the applications do not adequately discuss the alternatives for rebuilding Line 3 in place or the resulting impacts to environmental values of all three options. The applications also do not provide sufficient information for comparison and informed consideration of the options.

Need for comprehensive environmental analysis of cumulative environmental effects. The proposal to place Line 3 next to Sandpiper increases the potential to impact some of Minnesota's most pristine natural resources. The Commission has authority and responsibility under the Minnesota Environmental Policy Act, Minn. Stat. ch. 116D, to make a detailed evaluation of the potentially significant environmental effects, including cumulative potential effects, alternatives, and measures that would avoid or mitigate the potential environmental harm from this project. The possibility of simultaneous construction is not addressed, nor is the effect of continuous construction of two pipelines over extended construction seasons.

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[1] The MPCA comments are generally directed to: the adequacy of Enbridge's CON application under Minn. R. 7853.0250.A (relating to the socially beneficial uses of the output of the project, including "its uses to protect or enhance environmental quality"); Rule 7853.0540 Alternatives; Rule 7853.0600 Information Required (environmental data); Rule 7853.0630, subp. 3 and 4 (safeguards); Rule 7852.2600, (route alternatives and description of environment); Rule 7852.2700 (environmental impact of preferred route); Rule 7852.3100 (consideration of alternative routes); and the sufficiency of the application for purposes of a detailed evaluation of the potentially significant environmental effects under the Minnesota Environmental Policy Act, Minn. Stat. Ch. 116D.

[2] The MPCA and MDNR have provided extensive environmental information on SA-3M as an alternative to the Applicant's route. (See MPCA's Oct. 29, 2014 comment identifying a specific route for SA-3M, and MDNR's Jan. 23, 2014 comment letter).

Section 7.1.3 of the route application (Impact Calculations) states that calculations are based on an assumption that the Sandpiper pipeline will be constructed first. Timing of the construction of both projects is important. Construction of both lines could begin in 2016, yet the possibility and consequences of simultaneous construction are not addressed. Construction of the two projects in the same corridor may well result in greater impacts to surrounding terrain and water bodies than would occur if one project were built after another, because staging, spoils placement, and work space could not fully use the corridor. The discussion of project impacts should address the potential of concurrent construction impacts and the effects of extended construction of two projects in the same corridor on human, natural and environmental resources. The absence of that analysis in this section contributes to an inadequate analysis of likely site conditions and of the anticipated construction activity sequence.

Response on spill analysis. The applications do not have a sufficiently detailed analysis of the effects of a potentially catastrophic failure. In the introduction to section 7.0 of the route application, addressing the environmental impact of the preferred route, Enbridge makes the following statement:

> The Minnesota Pollution Control Agency (MPCA) and Minnesota Department of Natural Resources (MNDNR) have expressed concern with regard to the potential impacts of a catastrophic oil spill from the Project on environmental resources. An overall incident frequency was developed for the Keystone XL Project[3], which is also designed of x70 steel pipe. Based on these statistics, it is highly unlikely that a spill or leak will occur along any given small section of the pipeline. Therefore potential impacts from a theoretical oil release are not identified in Section 7.0 due to the extremely low frequency and many assumptions that would first be necessary to adequately quantify how a leak would affect the environment. Enbridge will continue to work with the applicable agencies regarding leak prevention measures and emergency response.

While the MPCA agrees that it may be unlikely for a spill to occur at "any given small section of the pipeline," the applications do not adequately discuss potential environmental impacts such as what would occur to surface water, drinking water, human health, terrestrial wildlife, aquatic wildlife, vegetation, soils, and other resources in the event of a spill, as required by Rule 7852.2700. It is reasonable to anticipate that a leak or spill will occur at some point during the operational life of the pipeline. The applications should address the potential impacts that a significant spill would have on the various types of terrain and aquatic resources along the project route.

To summarize, the MPCA believes that information minimally necessary for any meaningful assessment and comparison of potential environmental impacts under the criteria of PUC rules and MEPA are missing from Enbridge's current applications.

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[3] The MPCA notes that the Executive Summary of the Final Supplemental Environmental Impact Statement for the Keystone XL project (Page 30), states that the risk of spills and leaks represents the "greatest potential threat to water and aquatic resources."

Thank you for consideration of these comments.

Sincerely,

William Sierks, Manager
Environment & Energy Section
Resource Management & Assistance Division

WS:bt

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June 24, 2014

Mr. Larry B. Hartman
Environmental Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Enbridge Sandpiper Pipeline Project - North Dakota Pipeline Company LLC
Pipeline Routing Permit Application, MPUC Docket No. PL-6668/PPL-13-474
Replacement May 30, 2014 Letter with Maps

Dear Mr. Hartman:

On April 14, 2014, the Minnesota Public Utilities Commission (PUC) extended the comment period in the matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project (Sandpiper) in Minnesota. This letter appends the Minnesota Pollution Control Agency (MPCA) letter on this subject, which was submitted to you on April 4, 2014.

We understand the topics open for comment include alternate routes, human and environmental impacts to be studied in the Comparative Environmental Analysis (CEA), and whether any specific methods or mitigation exist to address these impacts that should be studied in the CEA. MPCA's additional comments on these topics include:

- Inspection and monitoring
- Additional items for evaluation in the CEA
- Watershed Restoration and Protection Strategy
- Carbon footprint
- Environmental justice
- Alternate route analysis
- Cumulative impacts

Inspection and Monitoring

On April 16, 2014, Enbridge, doing business as North Dakota Pipeline Company LLC, submitted a proposal to the MPCA regarding independent/third-party environmental monitors for the proposed Sandpiper project. MPCA does not agree that Enbridge should be hiring and directing these inspectors/monitors, but rather that they report directly to a state agency with jurisdiction over the project. The MPCA requests that the PUC require that another agency directly hire independent inspection and monitoring contractors and/or temporary staff to conduct this work under MPCA oversight to be funded by Enbridge.

The structure, work plan, and cost of a monitoring and inspection plan should be determined while the CEA is being prepared. The MPCA and Minnesota Department of Natural Resources (MDNR) staff, who have been working collaboratively on the Sandpiper project, are willing to participate with Enbridge and

participating agencies to develop the appropriate information and mechanism. The mechanisms for this would be worked out among the parties. The payment of the state's reasonable costs should be a provision of the PUC's route permit issued to Enbridge.

Additional Items for Evaluation in the CEA

The MPCA requests that Enbridge complete a Phase I Environmental Assessment (Phase I) of the selected pipeline construction corridor in accordance with the All Appropriate Inquiry (AAI) standard as per the National Environmental Policy Act (NEPA), Title 40, Code of Federal Regulations Part 312. The Phase I is conducted to research and review potential locations of existing/historic dumps, hazardous waste sites, and other environmental concerns. If areas of environmental concern are identified in association with construction of the pipeline, Enbridge should be required to prepare work plans to describe how solid/hazardous waste/contaminated soil and groundwater will be investigated prior to construction, and how impacted areas will be dealt with in accordance with state and local regulations.

MPCA requests that the CEA include a detailed risk assessment regarding the potential for leaks to occur, how much oil might be released, and how this could affect groundwater, surface water, aquatic life, and others. The hydrogeology of the pipeline corridor area should be studied to determine potential fate and transport of a release, and potential vapor intrusion issues if a release occurs in close proximity to human habitation.

Watershed Restoration and Protection Strategy

In 2006, the Minnesota Legislature passed the Clean Water Legacy Act, which required the MPCA to develop an approach to comprehensively monitor and assess the waters of the state every 10 years, and provided one-time funding for that effort. In order to provide long term, consistent funding for Minnesota's clean water efforts, on November 4, 2008, Minnesota's voters passed the Clean Water Land and Legacy Amendment (Legacy Amendment) to the Minnesota Constitution to, in part, protect and restore lakes, rivers, streams, and groundwater. The Amendment imposed three-eighths of one percent sales tax to fund the effort for 25 years. Subsequently, in 2013, the Clean Water Accountability Act was passed by the Minnesota Legislature. This new law requires the MPCA to develop watershed restoration and protection strategies (WRAPS) for each of the state's 81 major watershed units, which correspond to the 8-digit hydrologic unit codes (HUCs). WRAPS include the monitoring and assessment information, as well as land use-based models that demonstrate the source of the highest contributors of pollutants in each watershed. This information is then used to develop strategies to either protect waters that meet water quality standards or restore waters that do not meet standards.

The WRAPS is a collaborative effort that involves the MPCA, the MDNR, the Board of Water and Soil Resources, the Department of Health, the Department of Agriculture, local soil and water conservation districts, watershed districts, the University of Minnesota, industry and business organizations, and the private citizens of Minnesota. WRAPS components are: monitoring and assessment of hydrology and the chemical and biological constituents of water quality, a stressor identification process, total maximum daily loads (TMDLs) and restoration plans for impaired waters, protection strategies for waters that currently meet standards, and a civic engagement process to assist stakeholders with implementing protection and restoration strategies.

While not yet completed, WRAPS are in process in the following major watersheds that the Sandpiper proposal will cross, also identified by the corresponding eight-digit HUCs:

- Grand Marais Creek HUC 09020306
- Red Lake River HUC 09020303
- Clearwater River HUC 09020305
- Mississippi – Headwaters HUC 07010101
- Crow Wing River HUC 07010106
- Pine River HUC 07010105
- Mississippi – Grand Rapids HUC 07010103
- Kettle River HUC 07030003
- St. Louis River HUC 04010201
- Nemadji River HUC 04010301

One of the first tenets of any protection strategy is to avoid impacts where possible. The Sandpiper proposal is not consistent with the protection strategies that are currently in development for these WRAPS, due to the large number of high quality surface waters that lie along the path of the proposed route. Enbridge should participate in stakeholder groups for these WRAPS. Stakeholder groups provide a forum for engaged citizens and interested groups to develop implementation strategies to restore and protect each watershed. The CEA should review and consider how to integrate the strategies into the proposal, or find alternate routes that have less potential for impacting surface and groundwater.

Carbon Footprint – Greenhouse Gas Emissions

The MPCA is concerned about the carbon footprint of a project. The Minnesota Legislature established greenhouse gas (GHG) reduction goals in the Next Generation Energy Act (Minn. Stat. 216H.02). The goals of the Next Generation Energy Act are to reduce greenhouse gas emissions by 15 percent below 2005 levels by 2015, and 80 percent by 2050. Greenhouse gases, upon release to the atmosphere, warm the atmosphere and surface of the planet, and lead to alterations in the earth's climate. The GHG emissions measured and reported in Minnesota include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), sulfur hexafluoride (SF_6), and two classes of compounds known collectively as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). These GHG emissions result from fuel combustion, the calcination of limestone, the degradation of organic (peats) and mineral soils, permanent land clearing and forest harvesting, and a variety of other sources. Pertaining to this project, source types include stationary and mobile source combustion from construction equipment, emissions from venting, and wetland and forest disruptions.

To track progress with the Next Generation Energy Act reduction goals, the CEA should evaluate the GHG emissions from the project and the impact these emissions may have on the attainment of the state's GHG reduction goals. Alternatives and options to reduce GHG emissions or to offset/mitigate GHG emissions should also be identified in the CEA. In addition, the CEA should evaluate the GHG impacts if this project is not built – specifically, if oil is transported by rail or truck instead of by pipeline.

Environmental Justice

The MPCA works to incorporate environmental justice principles into its projects. Environmental Justice (EJ) involves assuring the fair treatment and meaningful involvement of all persons, regardless of race or income when making environmental decisions. Fair treatment means that no group of people should

bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies. Meaningful involvement means: people have an opportunity to participate in decisions about activities that may affect their health and the environment in which they live; the public's contribution can influence the regulatory agency's decision; their concerns will be considered in the decision making process; and, decision makers seek out and facilitate the involvement of those potentially affected.

The proposed route of the Sandpiper Pipeline and other alternate routes may directly affect low income and minority populations. If a pipeline leak or break occurs, adverse impacts could occur in both surface and subsurface drinking water supplies, areas with stands of wild rice important to local Tribes and tribal members, cropland areas, impaired waters, and wildlife management areas among other types of environmental, social and economic impacts. If the Northern route or other alternate routes are chosen, the Sandpiper Pipeline may affect tribal lands.

The CEA should include consideration of EJ issues. The CEA should look at how pipeline construction and operation, and potential problems during each of these phases, may cause disproportionate impacts on low-income or minority populations. In addition, local, state, and federal agencies should engage residents to assure that they are aware of opportunities to participate in the process and understand how their comments and concerns are incorporated into the final draft CEA.

Alternate Route Analysis

The MPCA staff's analysis of the proposed Sandpiper route shows many water body crossings for which there would be very difficult or no access downstream of the crossing to clean up spills in the event of a crude oil release. The lack of possible access to these areas by people and equipment necessary to clean up spills increases the likelihood that an incident could result in significant long-term environmental damage. A failure to account for these possibilities is considered to be a substantial flaw with the currently proposed Sandpiper route.

There are many variables that could be examined when considering the potential for environmental damage in the event of a release. These include: soil types, wetland types, sensitive or endangered species, proximity to aquifers, hydrology, forest types, state park boundaries, proximity to human populations, proximity to areas with stands of wild rice, connectivity of surface waters, and others. However, for purposes of providing a simpler and effective comparison between alternative route proposals that is both visual and quantifiable (within certain limitations that will be discussed in this letter), MPCA staff has elected to compare the routes based on access to potential leak sites for purposes of containment of spills and possible clean up.

To minimize variables and subjectivity for this analysis, MPCA staff opted to identify, using ArcGIS technology, water body crossings that had neither road or traversable upland features within 250 feet of flowages of water (heavily forested areas are not considered for this purpose to be traversable, as trees would have to be removed before equipment could be brought in), or portions of larger wetland complexes that fell within a 2,000 foot buffer of the point where the proposed pipeline route was to cross a stream, lake, or wetland. The 250-foot distance from access point to flowage is somewhat arbitrary. MPCA staff conferred with contractors and engineers who specialize in road construction, and most felt that in a best-case scenario, with aggregate and equipment available, a 250-foot road into a bog or wetland would be constructed within 24 hours. Thus, for purposes of this analysis ,MPCA staff

assumed that it is possible to build an access road to reach areas where containment of a spill might be accomplished before the spilled product covers an area large enough that cleanup would be highly destructive to a sensitive environment, or impossible. Similarly, there is no regulatory basis for choosing the 2,000 foot buffer distance, other than it is a significant distance for oil impacts to occur over any surface water and easy to apply consistently statewide. It is a distance that for most people would be easy to visualize, yet small enough to create a fair comparison between routes. These numbers provide a basis for comparisons between routes and have little significance beyond that. However, if these criteria are used consistently for all proposed routes, it does provide a basis to compare the potential for each route to cause considerable environmental damage in the event of a release.

There are some factors to consider that fall beyond the scope of this comparison. For example, the water crossings proposed for the Sandpiper route are frequently streams or flowages with connectivity to other water bodies downstream. By contrast, water body crossings on the Northern route frequently involve very large wetland complexes rather than smaller, faster moving flowages. The area needed to access might be much greater, but the oil may move more slowly in such areas. Counting becomes a bit more difficult here as well, because it is difficult to establish criteria for counting “crossings” that is comparable to the different features observed in the Sandpiper route. In most cases, MDNR catchment flow lines were used to distinguish one crossing point from another.

In any case, the method used as a basis for comparison by MPCA staff does provide quantifiable data to analyze the proposed routes from a meaningful perspective: Which route proposals pose the greatest risk to create destructive and expensive containment and cleanup operations in the event of a spill?

MPCA staff compared four proposed routes in their entirety (see Figure A below). The four proposed routes that were compared were (1) The currently proposed Sandpiper route; (2) The “Northern” route, used by Enbridge for previous projects and which has been suggested as an alternative by other entities; (3) The “Alternative 3” route which was identified as a possible alternative by MPCA staff; and (4) The southern “Alternative 4” route which exits the state at the Iowa border and would be required to tie into the Enbridge infrastructure either in another state, or to circle around outside of Minnesota to end at the Superior Terminal. The fourth route was suggested as an alternative by a citizen group.

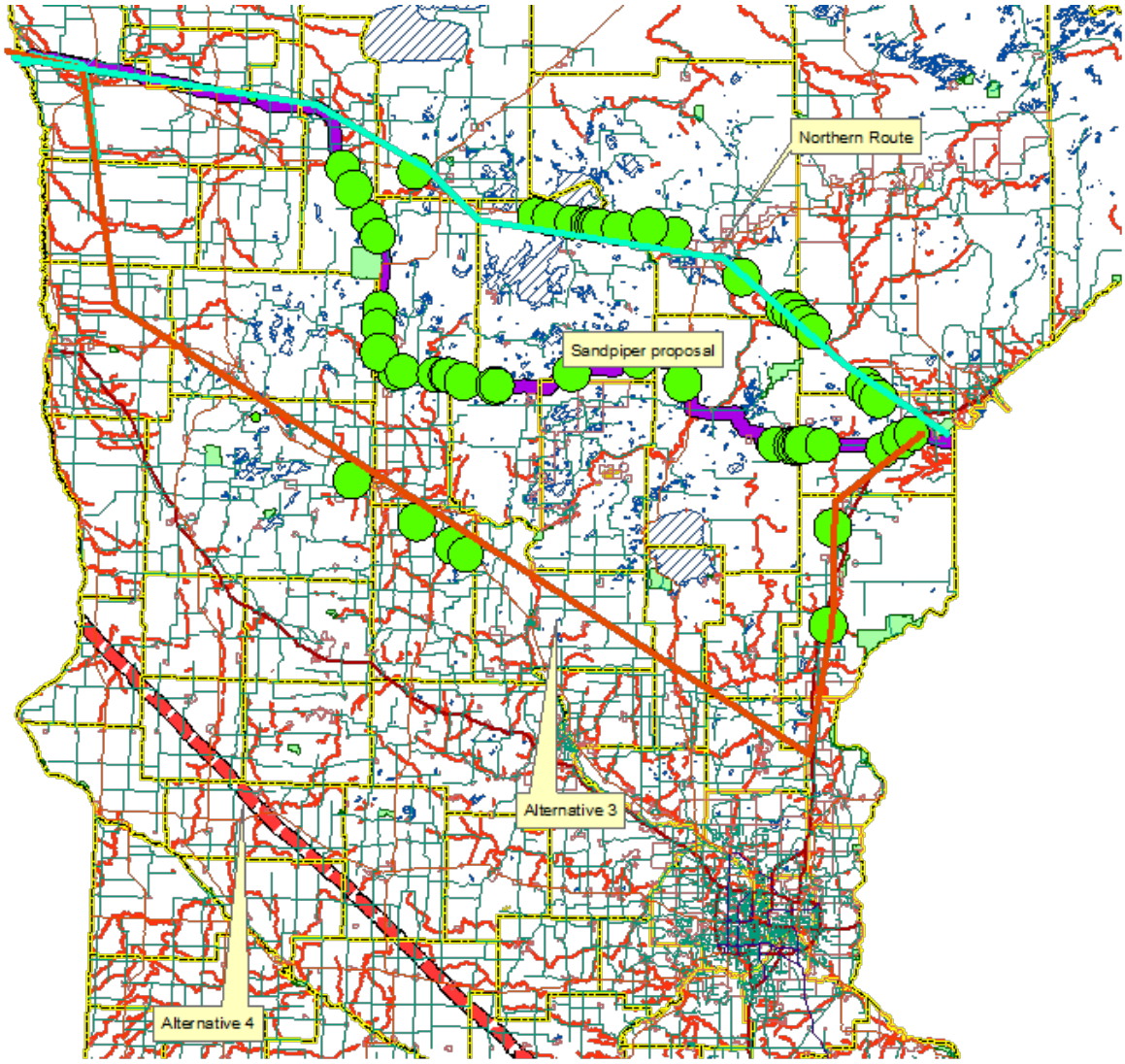

Figure A-The green circles mark points where MPCA staff have identified access concerns. Approximate locations of the four primarily examined proposals are also identified.

Any water body crossing, especially streams, rivers, or flowages of any kind that can carry oil downstream, pose the risk of creating large scale environmental damage in the event of a release. If possible, it is best to avoid crossing surface waters altogether with oil pipelines in order to minimize this risk. However, if a water body, bog or otherwise sensitive area is to be crossed, then serious consideration should be given to whether the site can be accessed quickly in the event of a release to contain the product, minimize migration of product into surface waters, soils and groundwater, and perform clean-up operations. In situations where roads have to be constructed to access a spill, the act of constructing the road, excavating and clearing vegetation can all exacerbate the damage that the spill itself created. Additionally, placement of flow control valves in strategic locations along/near sensitive areas may help to minimize backflow of product out of a fractured line into those areas.

A difficulty with aerial photograph analysis as opposed to field surveying of water crossings is that it is difficult to determine whether a stream or wetland is permanently, seasonally, or intermittently flooded. MPCA staff relied on National Wetland Inventory maps to identify wetland types, which will to

some extent help to determine the likelihood of the wetland having open water at the time of a leak, which would allow transport of released oil to occur more quickly, or merely be in a state of saturated soil, which would result in easier and faster containment and cleanup of a spill. The results of the MPCA staff analysis are as follows:

Sandpiper Route

The proposed Sandpiper route crosses 28 water bodies for which there is no access for possible containment within 2,000 linear feet downstream of the proposed pipe crossing. Of these 28 water body crossings, one is a stream to lake system, 12 are wetland complexes, 10 are streams that flow to wetland systems, and five are streams that flow to areas with stands of wild rice. Below is a list of the water body crossings for this route option, followed by example Figures B and C:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Sandpiper Route	Mahtowa	T47 R18W S8	Moose Horn River
Sandpiper Route	Salo	T47 R22W S1	Headwaters Sandy River
Sandpiper Route	Salo	T47 R22W S2	Headwaters Sandy River
Sandpiper Route	Automba	T47 R21W S6	West Branch River
Sandpiper Route	Salo	T47 R22W S6	Headwaters Sandy River
Sandpiper Route	Automba	T47 R21W S6	West Branch River
Sandpiper Route	Automba	T47 R21W S1	Heikkila Creek-Kettle River
Sandpiper Route	Atkinson	T48 R18W S36	Blackhoof River
Sandpiper Route	Copley	T147 R37W S34	Walker Brook
Sandpiper Route	Moose Creek	T146 R36W S29	Upper Rice Lake-Wild Rice River
Sandpiper Route	Bull Moose	T138 R31W S12	Headwaters South Fork Pine River
Sandpiper Route	Bull Moose	T138 R31W S11	Headwaters South Fork Pine River
Sandpiper Route	Bull Moose	T138 R31W S11	Headwaters South Fork Pine River
Sandpiper Route	Arago	T141 R35W S17	Hay Creek
Sandpiper Route	Northwest Aitkin	T50 R26W S22	White Elk Creek
Sandpiper Route	McKinley	T138 R32W S3	Goose Lake-Big Swamp Creek
Sandpiper Route	McKinley	T138 R32W S4	Goose Lake-Big Swamp Creek
Sandpiper Route	Crow Wing Lake	T139 R33W S36	Burgen Lake
Sandpiper Route	Crow Wing Lake	T139 R33W S36	Burgen Lake
Sandpiper Route	Crow Wing Lake	T139 R33W S33	Town of Huntersville-Crow Wing River
Sandpiper Route	Straight River	T139 R35W S36	Blueberry Lake-Shell River
Sandpiper Route	Blind Lake	T139 R28W S26	Arrowhead Lake
Sandpiper Route	Hubbard	T139 R34W S31	Shell River
Sandpiper Route	Beulah	T139 R25W S9	Moose River
Sandpiper Route	Straight River	T139 R35W S6	Straight River
Sandpiper Route	Bear Creek	T145 R36W S35	Gill Lake-Mississippi River
Sandpiper Route	Todd	T140 R35W S6	Fishhook Lake
Sandpiper Route	Lake Hattie	T144 R35W S19	LaSalle Lake-Mississippi River

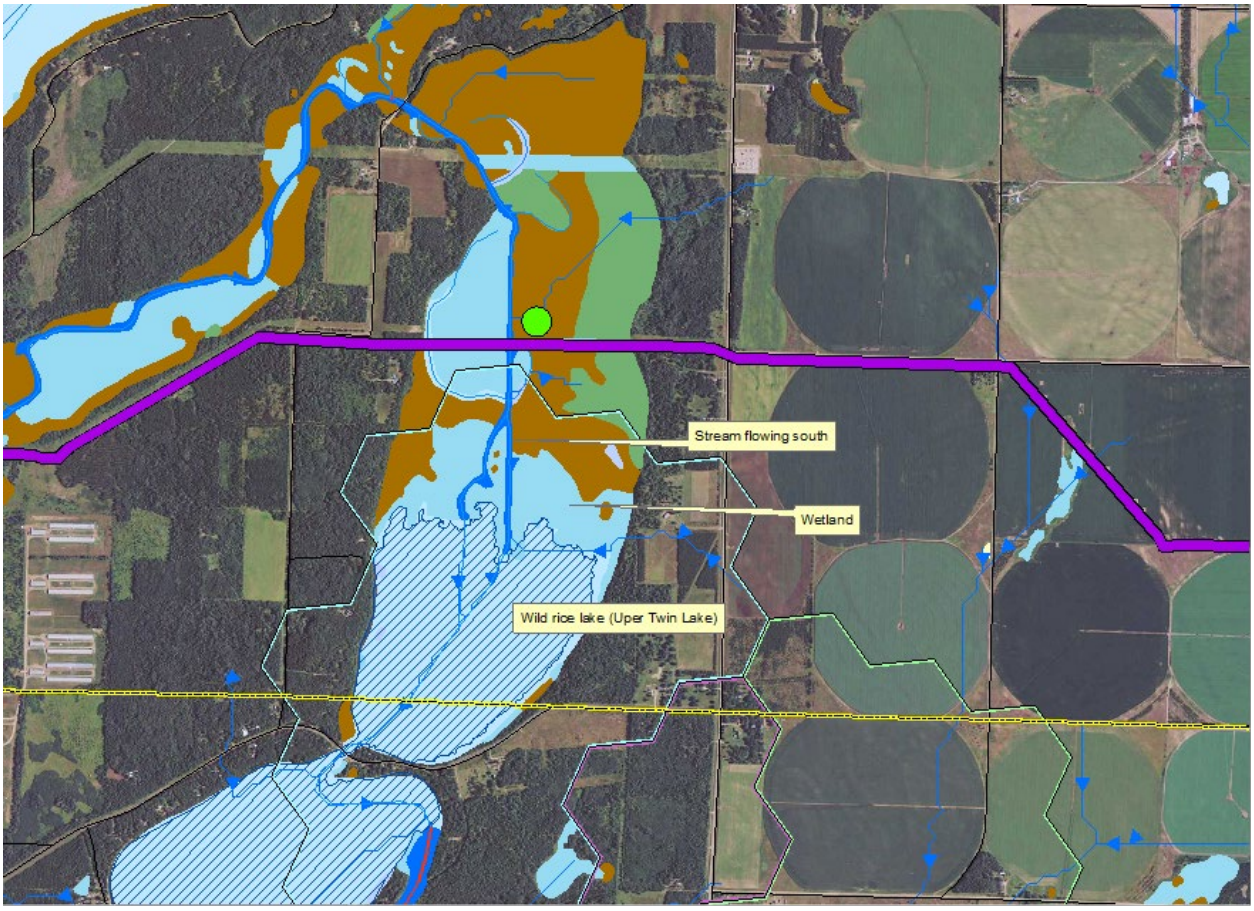

Figure B - This shows an example of a proposed crossing point over surface water that flows south (see arrows on dark blue flowage line) through a wetland complex and into a wild rice lake (the Twin Lakes near Menahga and Park Rapids, MN). However, to determine accessibility, the wetland identification layer must be turned off so that land features can be examined as in Figure C below. The purple line is the proposed Sandpiper route. (Scale 1:24,001)

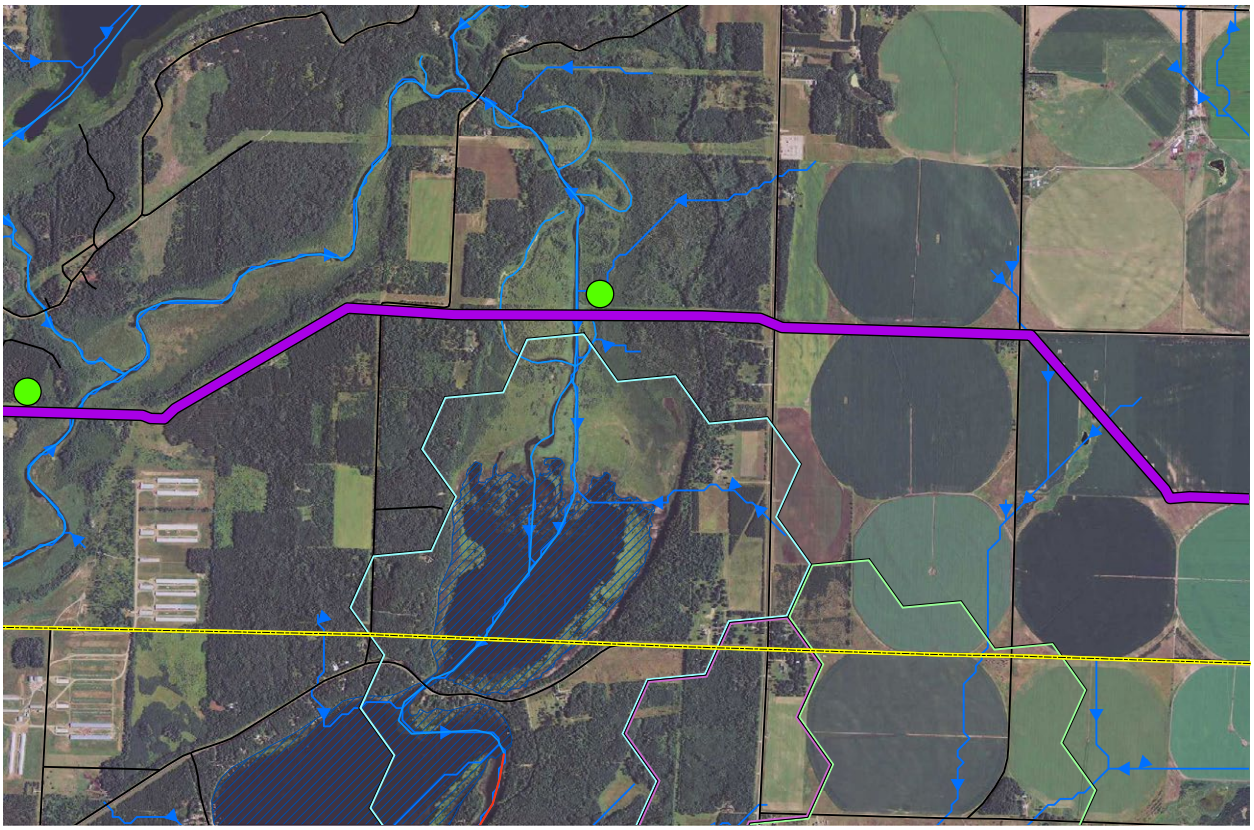

Figure C-Here, the wetland layer is turned off so that the landscape can be examined for accessibility. In this instance, there are no roads or open farmland to bring containment or clean-up equipment within 1,500 feet of the flowage that would potentially deliver leaked crude oil into the upper most of the Twin Lakes. The curvy black line between the lakes is a road, and the first good point of access. This road is 6,700 feet from the pipeline crossing, although it is possible that boats or barges could access the lake from the farm fields to the right (east) or the road (black line) to the left and contain a spill within the lake. (Scale 1:24,001)

Hill Route

The "Hill route alternative," suggested by the MDNR as a way to avoid features of concern, would not differ from the proposed Sandpiper route based on the criteria discussed here.

Northern Route

The Northern route, which parallels the path of the Alberta Clipper project, crosses 20 water bodies for which there is no access within 2,000 feet downstream of the location where crossings would occur if the route were followed. Along the Northern route, water bodies without access to potential leak sites within 2,000 feet include one stream that flows to a lake, 14 wetland complexes, five stream/wetland systems, and two streams or wetlands that flow to areas with stands of wild rice or wetlands. Below is a list of the water body crossings for this route option, followed by example Figures D and E:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Northern Route	Pot Shot Lake	T52 R21W S8	Floodwood River
Northern Route	Northeast Aitkin	T52 R22W S1	West Branch Floodwood River
Northern Route	Wawina	T53 R22W S27	West Branch Floodwood River
Northern Route	Deer Lake	T56 R26W S29	Mississippi River
Northern Route	Bowstring Lake	T144 R26W S3	Little Winnibigoshish Lake-Miss. River
Northern Route	Morse	T145 R25W S35	White Oak Lake-Mississippi River
Northern Route	North Cass	T145 R27W S35	Sixmile Brook
Northern Route	North Cass	T145 R27W S34	Sixmile Brook
Northern Route	North Cass	T145 R27W S34	Sixmile Brook
Northern Route	North Cass	T145 R27W S33	Sixmile Brook
Northern Route	North Cass	T145 R28W S26	Sixmile Brook
Northern Route	Wawina	T53 R22W S28	West Branch Floodwood River
Northern Route	Blackberry	T54 R24W S13	Blueberry Lake-Mississippi River
Northern Route	North Cass	T145 R29W S24	Portage Creek
Northern Route	North Cass	T145 R29W S20	Portage Creek
Northern Route	Wilton	T147 R34W S34	Grant Creek
Northern Route	Pot Shot Lake	T52 R21W S22	Floodwood River
Northern Route	Perch Lake	T49 R18W S7	Perch Lake
Northern Route	North Carlton	T49 R19W S1	Stoney Brook
Northern Route	Arrowhead	T50 R19W S27	Bog Lake

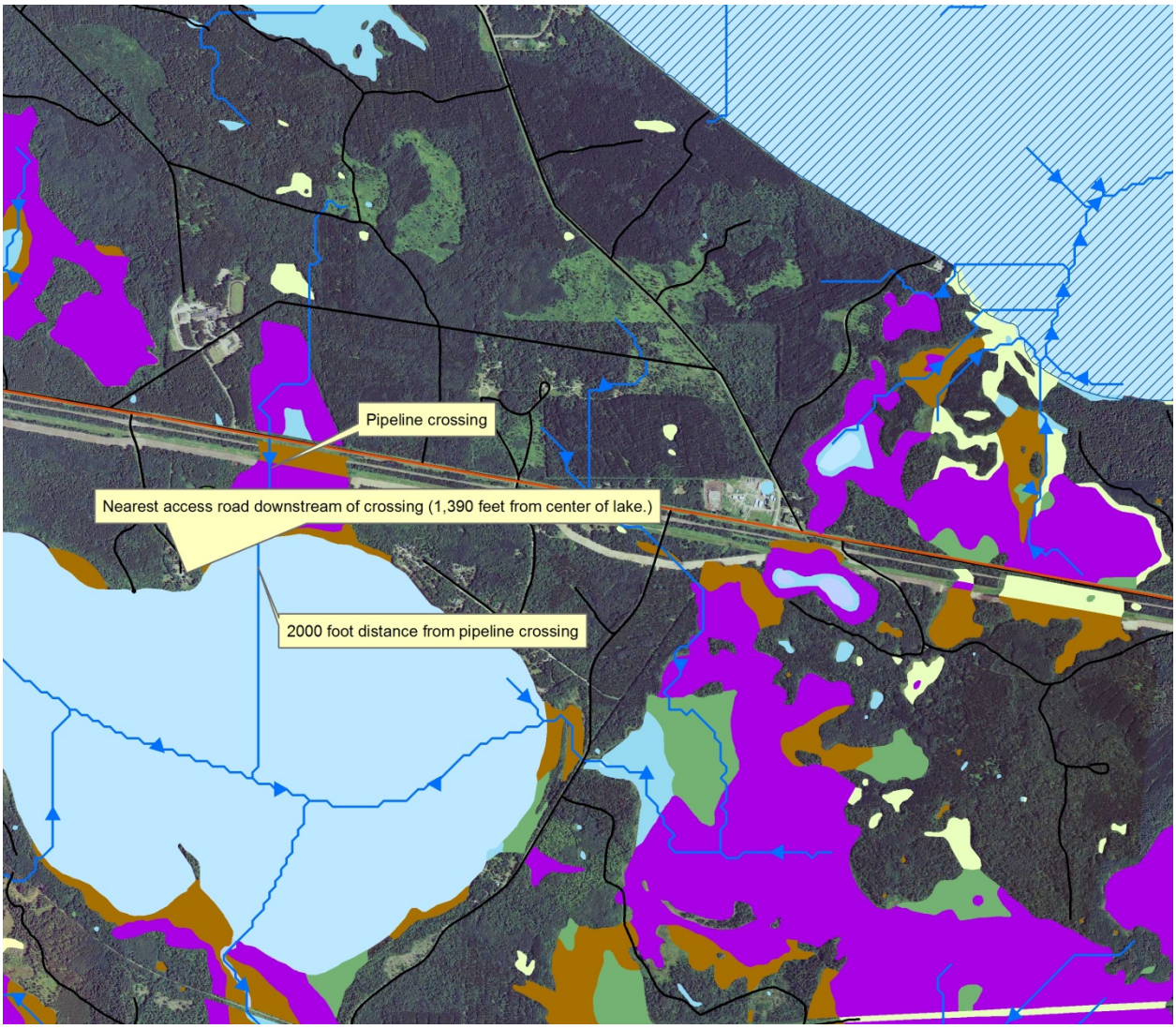

Figure D-With NWI wetland layer turned on, one can see wetland extending well beyond the 2,000 foot buffer at this crossing along the "Northern" route. The purple is bog, the green is forested wetland. In Figure E below the wetland layer is turned off so that accessibility to a potential leak here can be determined. (Scale 1:24,001)

Figure E- With the wetland identifying layers turned off, one can see that there are no roads or upland areas from which to access potential leak sites at this crossing. There is a possible access point identified to the southwest of the pipeline crossing, but containment equipment would have to be strung across over 3,000 feet of wetland as it flows into the lake to contain all of a release as it flows to the south. (Scale 1:24,001)

Alternative 3 Route

The Alternative 3 route corridor, which was referenced earlier in the letter, begins at the same western point that both the Sandpiper and Northern routes do; however, roughly 20 miles west of the North Dakota border it veers south and follows an existing (possibly abandoned) pipeline south and then southwest to roughly five miles west of North Branch, Minnesota, where it then follows another corridor in a northerly direction, where it eventually intersects with the proposed Sandpiper route just west of Superior, Wisconsin. This route has 7water body crossings with no access within 2,000 feet downstream of the pipe crossing; however, these water bodies are often smaller wetland complexes than are seen on either the Sandpiper route or the Northern route. These crossings without access within 2,000 feet

include two wetland complexes, four stream/wetland systems, and one area with stands of wild rice. Below is a list of the water body crossings for this route option, followed by example Figures F and G:

NAME of ROUTE	TOWNSHIP NAME	LOCATION (TWP/RNG/SEC)	LOCATION of AREA
Alternate Route 3	Mission Creek	T40 R21W S12	Mission Creek
Alternate Route 3	Fawn Lake	T132 R32W S34	Lower Turtle Creek
Alternate Route 3	Fawn Lake	T132 R32W S19	Fish Trap Creek
Alternate Route 3	Kettle River	T44 R20W S8	City of Willow River-Kettle River
Alternate Route 3	Bartlett	T133 R34W S23	Moran Creek
Alternate Route 3	Compton	T134 R36W S5	Deer Creek-Leaf River
Alternate Route 3	Twin Lakes	T48 R17W S21	Blackhoof River

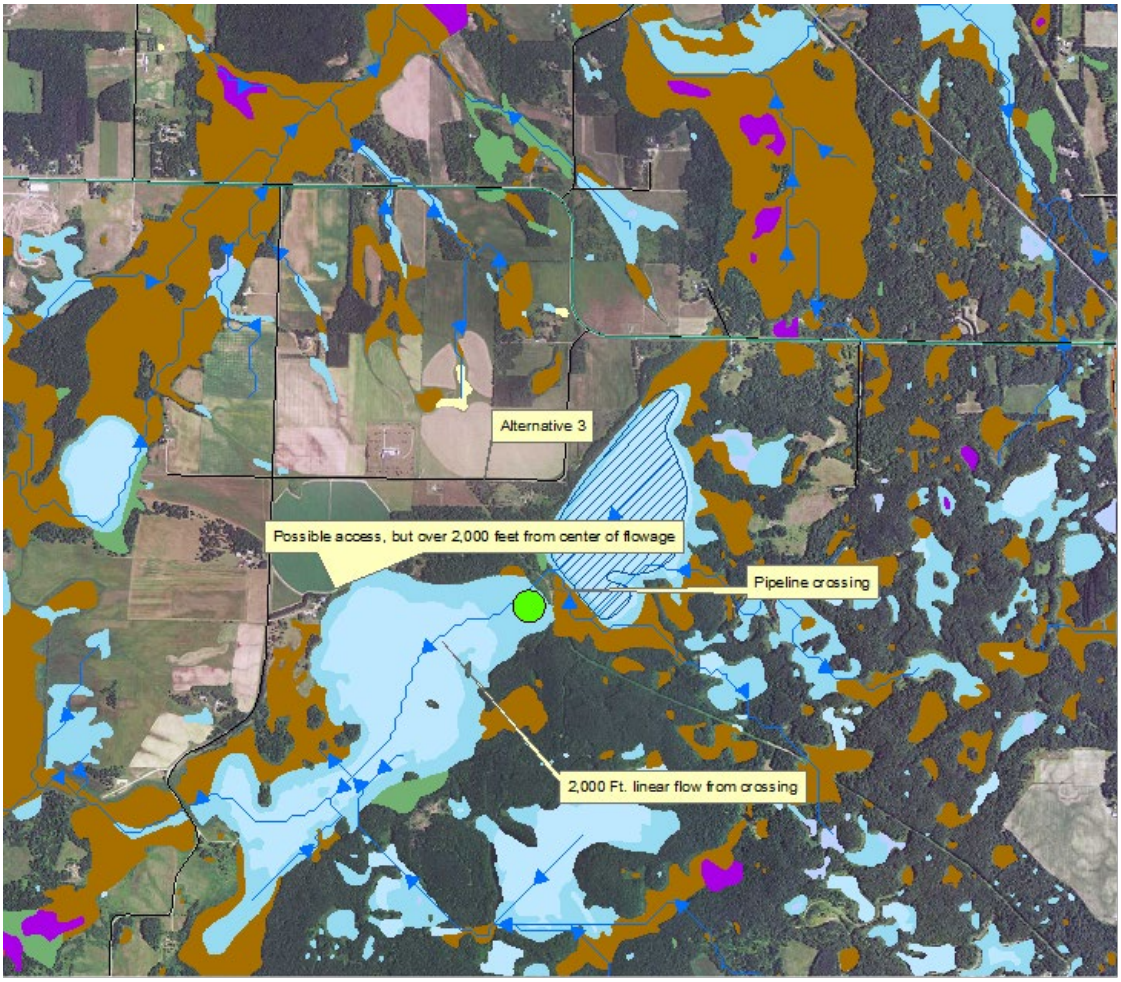

Figure F - Wetland layer identifies an open water wetland south of the pipe crossing that would likely receive oil from a leak. Wetland layer turned off in Figure G below. (Scale 1:24,001)

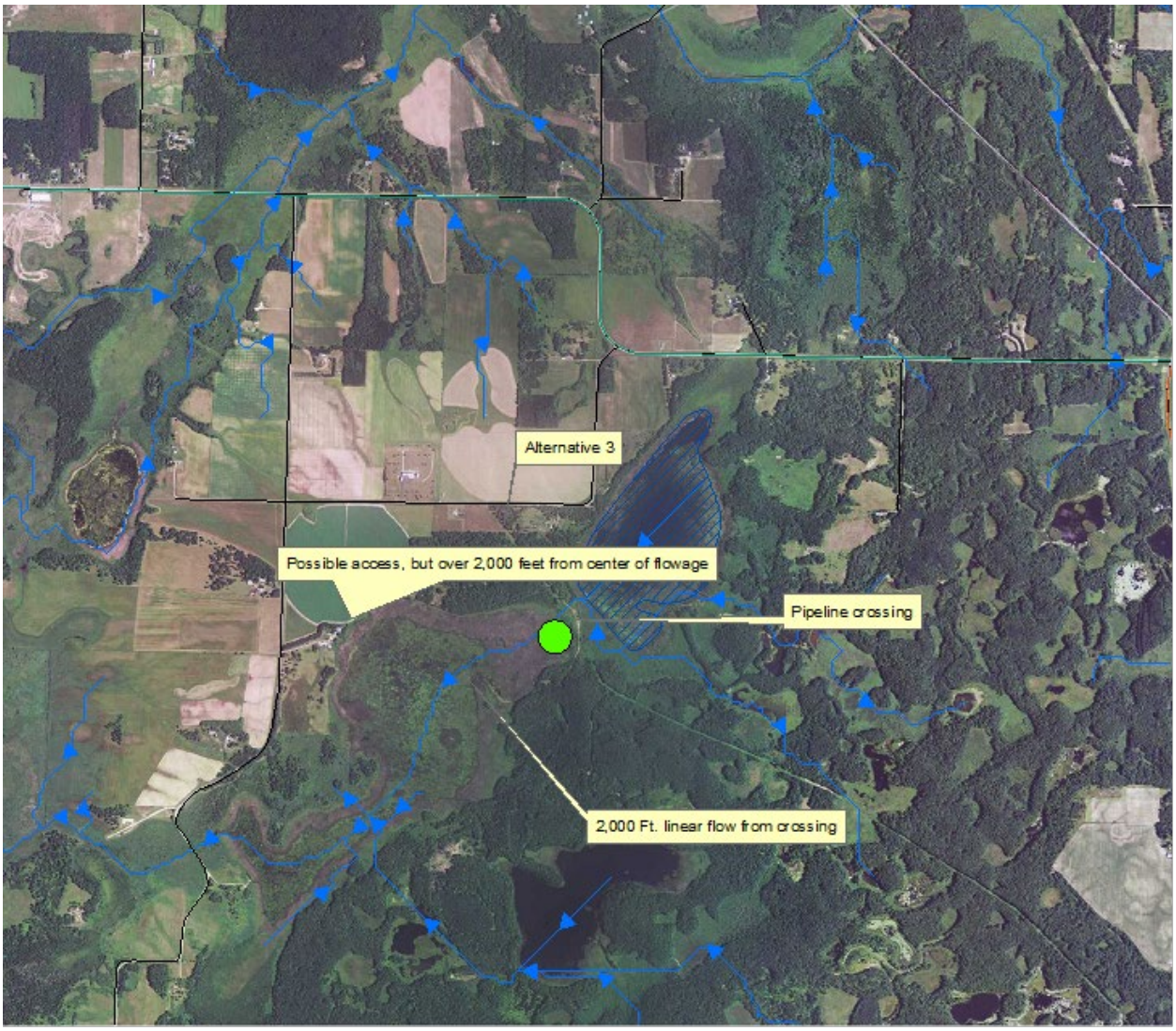

Figure G-With wetland layer turned off, one can see that the nearest access to the main stem of the flowage is roughly 2,000 feet to the west. If the wetland is traversable by boat or barge, which is possible given the wetland type (Type 3/5 shallow marsh and open water) then it is possible that access to material could be gained within the 2,000 foot buffer here. (Scale 1:24,001)

Alternative 4 Route

The Alternative 4 corridor enters the state in Traverse County just west of Wheaton, Minnesota, and runs to a southeast bearing until it exits the state south of Austin, Minnesota. A pipeline along this route would cross no water bodies lacking access within 2,000 feet of a potential leak site in surface water. There are very few water bodies crossed by this route in general over the proposed route.

National Hydrography Dataset

Even if access issues are taken out of the equation, the proposed Sandpiper route does not fare well in comparisons with alternative proposals based on examination of the National Hydrography Dataset

(NHD) layer. Using the NHD layer, the proposed Sandpiper route would cross 20 water bodies, the Northern route would cross 10, the Alternative 3 route would cross 12, and the Alternative 4 route would cross 1 water body within the state of Minnesota. The NHD layer obviously does not identify all water bodies that are being crossed; however, it does identify water bodies that are part of a connected network of surface waters which may also be a good gauge of potential environmental impact if an incident were to occur.

Notably, the two routes in this analysis that crossed the fewest water bodies and put water resources at the lowest risk for environmental damage both aligned away from the Clearbrook terminal. Perhaps the most problematic aspect of the design of this proposed route is the continued expansion of terminal capacity at the Clearbrook location. Any pipelines that are built to transport material out of the Clearbrook terminal are forced to enter the largest concentration of lakes, streams, and open-water wetlands in the state. Any route proposed out of Clearbrook, either south or east will cross dense expanses of open waters. A northern to eastern route from Clearbrook would cross massive wetland complexes and areas with stands of wild rice. If future, new terminals, were to be constructed in western Polk (could collect from Canada or North Dakota), Kittson (could collect from Canada or North Dakota) or even Clay counties (North Dakota) the creation a route proposal that avoids the greatest concentration of surface waters becomes feasible.

Summary of Route Analysis

There are numerous pipeline corridors that currently exist in Minnesota. Of those, there are several that cross far fewer water bodies and have better potential for access in the event of a release than the current Sandpiper proposal. MPCA staff examined three existing corridors in addition to the proposed Sandpiper route. While performing risk assessment, the current use of the corridors in question should also be considered, as much of the proposed Sandpiper route follows a corridor in which three other oil pipelines currently exist. Thus, not just one pipeline would be crossing sensitive water bodies with limited access, but four. The likelihood of an incident in which crude oil product is released is thus greater than what a single pipeline would entail. This is also true of the Northern route, in which numerous pipelines carrying crude oil exist. What has happened in the past with regard to location of pipeline routes is from this perspective unfortunate; MPCA staff believes that past routes have crossed too many water bodies in inaccessible areas, and the risk of large-scale impact as a result of a release incident is significant and ongoing. As this analysis shows, options posing a lesser risk to surface waters may be available.

Of the four possible routes that MPCA staff has examined, the proposed Sandpiper route and the previously followed Northern route show a significantly higher potential for environmental damage than either the Alternative 3 or Alternative 4 routes. It is also possible that an as-yet unexplored route could also score well relative to the Sandpiper proposal. The analysis of the Alternative 4 route is incomplete in that possible impacts outside of the Minnesota state boundaries were not looked at, so the surface waters avoided or protected by this route are only located in Minnesota per this analysis. It is also acknowledged that the MPCA staff analysis focused on the potential water quality and natural resource aspects of the project and not on other types of resources or land uses.

Nevertheless, the criteria adopted for this analysis show a clear difference in potential risk to surface waters between the Sandpiper proposal and other possible routes, and that in the event of a significant

oil release, the Sandpiper route proposal has a significantly greater potential for large-scale environmental damage than other route proposals.

It is important to note that the construction of accesses through sensitive "no access" areas as a preventative measure can also create environmental hazards and damages and cannot be assumed to be an acceptable remedy. Rather, route proposals put forth now and in the future should take these factors into consideration and avoid continuing to cross surface waters at these locations. The minimization of surface water crossings in any location should become a priority for consideration when planning a route to construct a pipeline.

Cumulative Impacts

The NEPA, Title 40, C.F.R. 1508.7, defines cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The cumulative impacts review in the CEA should include current and proposed transmission line corridors, highway construction, water delivery systems, landfills, railroads, power generations plants, feedlots, and mine and mineral extraction sites which have the potential to interact with the proposed project. The CEA should also review the potential for significant cumulative effects related to past, present and future projects in the Duluth/Superior area involving increased transmission, storage, processing or refining activities, including the expansion of the Calumet Superior Refining facility in Superior, Wisconsin, or transportation of oil, fuels or products refined or manufactured from oil. Areas in which such impacts could occur include air quality in Duluth and the surrounding area in Minnesota, water quality as related to new or increased discharges or shipping activities, and transportation whether by truck, rail or ships.

The CEA should identify the impacts of past incidents associated with pipeline construction and operation, past incidents involving two or more associated utility lines, accidents or emergencies which may arise due to an unforeseen chain of events during the operational life of the pipeline, and effects within the project limits, and local and regional effects. Cumulative impacts may occur to:

- Human activities, such as recreation, agriculture and loss of prime farmland
- Wildlife including migratory birds and aquatic species
- Habitat and alterations to terrestrial vegetation
- Endangered species
- Air quality, including dust (particulate matter) and visual impacts
- Land values
- Watersheds
- Local and state socioeconomics

According to data provided by the Pipeline and Hazardous Materials Safety Administration (PHMSA), to date, there are 2,408 miles of crude oil pipeline in the state of Minnesota. More are planned within the next few years. Much of this infrastructure exists in corridors shared by several other pipelines carrying liquefied petroleum gas, natural gas, diluent for tar sands oil, refined petroleum product and other

hazardous materials. In total, there are 10,475 miles of pipeline through the state. According to PHMSA, over the last 20 years, there has been an average of 14 spills from pipelines per year in Minnesota, an average of 1,812 barrels of hazardous liquids spilled per year in Minnesota, an average of 1,093 net barrels lost per year in Minnesota, and an average of $3,135,572 of property damage annually in Minnesota. Five lives have been lost as a result of pipeline incidents.

The MPCA has numerous concerns about the number of pipelines planned to use the same corridors. With each water body crossed by a pipeline carrying crude oil, the risk of a major incident increases. A cursory review of the PHMSA web site identifies apparent causes of pipeline failure to include: incorrect operation, equipment failure, internal and external corrosion, third party damage (excavation), construction damage, material failure (pipe, fitting, weld), weld leak, and other unknown causes. For example, at the site of the Enbridge pipeline release in Marshall, Michigan, the National Transportation Safety Board found "that deficiencies in Enbridge's integrity management (IM) program contributed to the release of hazardous liquid…" (Federal Register, Volume 79, No. 87, Tuesday, May 6, 2014 (25990 – 25994). See also Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release, Marshall, Michigan, July 25, 2010 (NTSB/PAR-12/01, PB2012-916501). Ultimately, the perspective should not be if a pipeline fails, but how will a release be mitigated when a failure occurs and at any given location (and the environmental susceptibility of that area to a release).

As explained above, MPCA examination of the proposed Sandpiper route and the previously used Northern route (Alberta Clipper) shows that significantly more open water bodies are crossed by the pipelines in these corridors than alternative routes. Far more of these crossings have no available access within a 2,000 foot buffer, meaning that release incidents are more likely to impact surface waters within that 2,000 buffer. Both the Sandpiper and Alberta Clipper routes are corridors for numerous crude oil pipelines; consequently, these routes are more vulnerable and less able to properly mitigate damage to aquatic environments. Whereas oil does travel through soils and overland, it travels significantly farther in aquatic environments.

Pipeline construction will involve soil excavation, vegetation removal, the crossing of water bodies, and the alteration or loss of wildlife habitat. These activities and the creation of new corridors can result in forest fragmentation affecting numerous species of wildlife that require expanses of undisturbed forest. Wetland perches may be broken causing alteration of natural hydrology in wetland areas, and stream geomorphology can be altered by damaging banks or stirring up stream bottoms. Herbicides used to control vegetation in pipeline corridors may adversely affect pollinators, particularly honeybees, resulting in hidden impacts that are difficult to trace, but nonetheless exist.

The construction, operation, maintenance, incidents and repairs associated with crude oil pipelines have been accompanied by significant environmental impacts. With more proposals in the works, more cumulative impacts can be expected to occur. Therefore, concerted effort is needed to take a close look at and carefully analyze the creation of common routes and corridors for pipeline projects where the risks of impacts to the environmental and human health can be minimized. The routes that have been used in the past pose substantial risks as noted above. Continuing to open more corridors will increase these risks and impacts. The MPCA would support and participate in a joint effort by state agencies to begin examining the feasibility of such a corridor, both for the purpose of expediting approval of future proposals and minimizing the potential for environmental impacts. A fresh look at the routing of energy transportation projects from a larger and more comprehensive perspective has the potential to make a

significant contribution to streamlining the review and permitting processes as well as preventing and minimizing cumulative impacts.

Conclusion

It is requested that the comments provided in this letter and MPCA's letter dated April 4, 2014, be entered into the record to be addressed in the Draft CEA. We continue to look forward to assisting the Department of Commerce, as desired, during the preparation of the CEA for this project and its subsequent review upon its release. Through this process, the MPCA seeks to obtain further additional information to facilitate the MPCA staff review of the Project, well in advance of the time a decisions on the required MPCA authorizations are needed to commence construction. Ultimately, it is the responsibility of North Dakota Pipeline Company LLC to secure any required permits and to comply with any requisite permit conditions. If you have any questions, please contact me at 651-757-2465.

Sincerely,

Patrice Jensen
Planner Principal
Environmental Review
Resource Management and Assistance Division

PJ:bt

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF MINNESOTA DEPARTMENT OF COMMERCE ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS STAFF

DOCKET NO. PL-6668/PPL-13-474

Date: July 16, 2014

EERA Staff: Larry B. Hartman……651-539-1839
Deborah R. Pile……..651-539-1837

In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota

Issue(s) Addressed: These comments and recommendations discuss the route alternative proposals received during the public comment period ending May 30, 2014, and include recommendations as to which alternatives the Department of Commerce Energy Environmental Review and Analysis (EERA) staff believes are appropriate for further consideration.

Documents Attached:
1. Project Overview Map
2. Minnesota Pipeline Existing Route Map
3. Pipeline Routing – Full Permitting Process
4. Sandpiper Alternative Routes Summary Report
5. System Alternatives Map

Additional documents and information can be found on eDockets: https://www.edockets.state.mn.us/EFiling/search.jsp (13-474) and on the Department of Commerce's energy facilities website for the Sandpiper Pipeline Project at: http://mn.gov/commerce/energyfacilities/Docket.html?Id=33599.

This document can be made available in alternative formats (i.e., large print or audio) by calling 651-539-1530 (voice).

Introduction and Background

On November 8, 2013, North Dakota Pipeline Company LLC (NDPC or the Company) filed applications for a Certificate of Need (13-473) and Routing Permit (13-474) with the

Commission for the Minnesota portion of the Sandpiper Pipeline Project – a proposed 612-mile pipeline to transport crude oil from Tioga, North Dakota, to existing terminals in Clearbrook, Minnesota and Superior Wisconsin.[1]

NDPC's application for a pipeline route permit was filed with the Commission in accordance with the requirements (Minnesota Rules (7852.0800 through 7852.1800 and 7852.2000) to construct and operate the Minnesota portion of the Sandpiper Pipeline Project, comprised of approximately 75 miles of 24-inch pipeline and approximately 224 miles of 30-inch pipeline, along with two (2) 150,000-barrel crude oil storage tanks, 4 transfer pump stations, including all valves and appurtenances, and one (1) new pump station in proximity to Enbridge's existing terminal facilities in Clearbrook (Project). The Sandpiper Pipeline Project, as proposed by NDPC will cross the Minnesota counties of Polk, Red Lake, Clearwater, Hubbard, Cass, Crow Wing, Aitkin and Carlton.[2]

On November 14, 2013, the Commission issued a notice soliciting comments on the completeness of the route permit application for the project.[3]

On January 15, 2014, the Commission met to consider acceptance of the route permit application. On February 11, 2014, an Order of the Commission accepted the application as complete. The Order also authorized the Department of Commerce Environmental Review and Analysis (EERA) staff to: 1) facilitate the development of route proposals beyond those proposed by NDPC; 2) to prepare an analysis of alternative route proposals on the basis of their harm to the environment; and 3) take other procedural steps to enable an evaluation of the Company's proposed pipeline route.[4]

On January 31, 2013, NDPC updated its route permit application, environmental information supplement and route maps.[5]

[1] Enbridge Pipelines (North Dakota) LLC submitted the initial filing, but later changed its name to North Dakota Pipeline Company LLC; see NDPC Reply Comments (December 16, 2013), eDockets at 201312-94650-02.
[2] Enbridge Pipelines North Dakota LLC, now d/b/a North Dakota Pipeline Company (NDPC or the Company) Application to the Minnesota Public Utilities Commission for a Route Permit for the Sandpiper Pipeline Project and Associated Facilities in Polk, Red Lake, Clearwater, Hubbard, Cass, Crow Wing, Aitkin and Carlton, November 8, 2013, eDockets, Document ID Numbers 201311-93532-01, 201311-93532-02, 201311-93532-03, 201311-93532-04, 201311-93532-05, 2013311-93532-06, 201311-93532-07, 201311-93532-08, 201311-93532-09, 201311-93532-10, 201311-93535-01, 201311-93535-02, 201311-93535-03, 201311-93535-04, 201311-93535-05, 201311-93535-06, 201311-93535-07, 201311-93535-08, 201311-93535-09, 201311-93535-10, 201311-93536-01, 201311-93536-02, 201311-93536-03, 201311-93536-04, 201311-93536-05, 201311-93536-06 201311-93536-07, 201311-93536-08, 201311-93536-09, 201311-93536-10, 201311-93537-01 [hereinafter Route Permit Application].
[3] Notice of Comment Period on Route Permit Application Completeness, November 14, 2013, eDockets, Document ID 201311-93681-01.
[4] Order Finding Application Substantially Complete, February 11, 2014. See eDockets, Document ID 20142-96351-01, p.2.
[5] Revised route permit application, See eDockets, Document ID Numbers 20141-96101-10, 20141-96101-01, 20141-96101-02, 20141-96101-03, 20141-96101-04, 20141-96101-05, 20141-96101-06, 20141-96101-07, 20141-96101-08; Revised route permit aerial photography and U.S.G.S. Maps (Map # 0-0) (M 32-38) 20141-96101-09, (M 39-45) 20141-96104-01, (M 46-52) 20141-96104-02, (M 53-59) 20141-96104-03, (M 60-66) 20141-96104-04, (M 67-74) 20141-96104-05, M 75-82) 20141-96104-06, M 83-89) 20141-96104-07, (M 91-

Notice of Application Acceptance and Public Information (Scoping) Meetings was issued on January 31, 2014.[6]

Project Purpose

NDPC indicates in its route permit application that "The purpose of the Project is to transport growing supplies of oil produced in North Dakota to the terminals in Clearbrook, Minnesota, and Superior, Wisconsin. From these terminals, the crude oil can be shipped on various other pipelines, eventually providing refineries in Minnesota, and other states in the Midwest and the East Coast with crude oil." At Clearbrook, the crude oil will be delivered to interconnected facilities operated by Minnesota Pipeline Company for delivery to the Flint Hills and St. Paul Park refineries in the Twin Cities. At Superior, the crude oil will be delivered into the Enbridge Mainline System and other third party pipelines for delivery to refineries in the Midwest and the East Coast.[7]

Project Description (Proposed Pipeline, Associated Facilities and Land Requirements)

NDPC proposes to construct the project, known as the Sandpiper Pipeline Project (Project or Sandpiper) to transport Bakken and Three Forks crude oil from growing production regions in the Williston Basin of eastern Montana and western North Dakota. The Project begins at NDPC's Beaver Lodge Station, south of Tioga, North Dakota, and extends to a new terminal facility to be constructed west of Clearbrook, Minnesota, and then on to an Enbridge affiliate's terminal and tank farm in Superior, Wisconsin. From the Superior terminal, the crude oil will be transported to other refining markets via the Enbridge Mainline System. The Sandpiper Project will also provide for redundant service for deliveries to the Minnesota Pipe Line Company's facilities during routine maintenance activities on NDPC's existing Line 81, or to satisfy additional demand from refineries connected to the Minnesota Pipe Line System.

Pipeline

The Project is comprised of a new 612-mile 24-inch and 30-inch outside diameter crude oil pipeline and associated facilities described as follows. Approximately 299 miles of the Project will be located in Minnesota. (Attachment 1, Project Overview Map.)

Beginning at the North Dakota border in Polk County (Milepost 299), approximately two miles south of Grand Forks, and extending east to Clearbrook (MP 375) across portions of Polk, Red Lake and Clearwater county, approximately 75 miles of 24-inch outside diameter (OD) steel pipe, with an average annual capacity of 225,000 barrels per day (bpd), to the extend feasible, will be located parallel and adjacent to NDPC's existing Line 81, which currently transports approximately 150,000 bpd to Clearbrook.

The Sandpiper Pipeline segment between Clearbrook and the Wisconsin border, as proposed by NDPC, is approximately 224 miles across the counties of Clearwater, Hubbard, Cass, Crow Wing, Aitkin and Carlton, and will be 30-inch OD steel pipeline and have an annual average capacity of 375,000 bpd.

98) 20141-96104-08, (M 99-106) 20141-96104-09, (M 107-114) 20141-96104-10, (M 115-121) 20141-96105-01, (M 122-123) 20141-96105-02.

[6] Notice of Application Acceptance, dated January 31, 2014. See eDockets, Document ID 20141-96003-01.

[7] NDPC Application for Routing Permit, January 31, 2014, See eDockets, Document ID 20141-96101-01, pp. 4-5.

Between Clearbrook and the city of Hubbard (MP 375 - 440), the NDPC preferred route generally parallels the existing multiple line pipeline rights-of-way in which Minnesota Pipe Company (MPL) has three to four existing pipelines, depending on location. The MPL maintained right-of-way is approximately 100 feet in width. (Attachment 2, Minnesota Pipeline Existing Route Map)

Between the Hubbard and the Wisconsin border, the EPND preferred route turns east, following portions of existing electrical transmission and railroad rights-of-way. This portion of the Project also requires the most new right-of-way.

The minimum depth of burial for the pipeline is between 36 to 54 inches or more, depending on pipeline location.

The X70 Carbon steel pipe used for the 24-inch portion of the pipeline will have a nominal wall thickness of 0.375 inches, while the 30-inch pipe will have a wall thickness of 0.469 inches. The pipeline will have an operating pressure of 1,352 pounds per square inch gauge (psig) at station discharge. The maximum allowable operating pressure is 1,480 psig.

Associated Facilities

The Project will also include the installation of associated facilities (or appurtenances). Associated facilities will include valves and flanges and a cathodic protection to prevent corrosion on the pipelines. Based on preliminary engineering design and environmental survey work, approximately 15 mainline valves are currently planned to be installed in Minnesota. Valve installation locations are typically near major rivers, other environmentally sensitive areas, population centers, and pump stations. Pipeline markers will also be installed at various locations (e.g., road crossings) in accordance with applicable federal and state regulations.

As part of the Project, NDPC also proposes to develop a new terminal facility approximately three miles west of Clearbrook. The new terminal will consist of two crude oil storage tanks holding approximately 150,000 barrels (bbls) or 6,300,000 gallons each, two 500 horse power (HP) injection pumps to move up to 150,000 barrels per day (bpd) from the existing NDPC Line 81 into Sandpiper, two 650 HP transfer pumps for delivery to NDPC, and three sets of leak detection meters (1 set for delivery from the Sandpiper to NDPC tankage, 1 set for Line 81 delivery to NDPC tankage, and 1 set for flow injection NDPC tankage into the Sandpiper pipeline). Also included are all associated terminal piping, interconnections, valves, manifold and sumps, as well as an electrical substation, a fire suppression system (e.g. building, pond and piping), a maintenance building and a cold storage building. Schematic drawings of the new terminal facilities are depicted on station plat drawings in Appendix G.3 of the Environmental Information Report (EIR).

The pump station facilities include four 5,500 HP pumps, four 5,750 HP Variable Frequency Drives (VFD), a pump shelter, four VFD buildings, and a switchgear building. Additionally, it will include two coriolis meters, a 24-inch PIG receiver and a 30-inch PIG launcher, as well as associated pump station piping and valves. See Appendix G.3 of the EIR for schematic drawings.

Launch and receiver traps along with one of the mainline valves will be installed at a site near Pine River in Cass County. See schematic in Appendix G.3 of the EIR

Land Requirements (Right-Of-Way Width and Temporary Work Space(s)

Appendix F in the EIR provides schematic drawings for the various right-of-way requirements.[8]

Right-of-Way Requirement – West of Clearbrook
From the North Dakota border to the Clearbrook Terminal, the Project will generally be constructed and installed adjacent to the existing NDPC right-of-way (Line 81). Typically, the right-of-way requirements in upland areas include up to 55 feet of permanent easement, of which 25 feet would be new easement and 65 feet would be temporary workspace, for a total land requirement width of 120 feet. In wetland areas, the temporary workspace requirement would be reduced to 40 feet, for a total land requirement of 95 feet.

NDPC's design configuration and anticipated construction execution methods are intended to take advantage of the proximity of the Project to the existing NDPC pipeline west of Clearbrook to minimize new right-of-way requirements.

Right-of-Way Requirements – East of Clearbrook
From Clearbrook to the city of Hubbard, the NDPC preferred route follows or parallels the Minnesota Pipeline Company right-of-way. Between Hubbard and the Wisconsin border, the NDPC preferred route generally follows or parallels existing electrical transmission and railroad lines. Where it is not possible to co-locate with existing rights-of-way, the pipeline will be constructed on new right-of-way (greenfield areas). The proposed construction footprint is approximately 120 feet for standard pipeline construction in upland areas, including 50 feet of new permanent easement and 70 feet of temporary workspace. In wetland areas, the temporary workspace requirement would be reduced to 40 feet, for a total land requirement of 95 feet.

Both the permanent easement and the temporary workspace areas may be returned to pre-existing uses by the landowners if they do not impact safe operation and inspection of the pipeline.

In certain limited areas, the right-of-way encounters environmental features (such as extended wetlands) that require special construction methods. Typically, this results in a maximum construction footprint of 95 feet, including 50 feet of permanent easement and 45 feet of temporary workspace. NDPC has presently identified approximately 9 miles of potential right-of-way in the following areas that contain environmental features that will necessitate special construction methods:

- MP 395 to 396
- MP 415 to 416
- MP 460 to 462

[8] See eDockets, Document ID 201311-93532-10, (6 pages).

- MP 484 to 485
- MP 496.5 to 520
- MP 546 to 555
- MP 558 to 562

Regulatory Process and Procedures

In Minnesota, no person may construct a high pressure petroleum pipeline without a pipeline routing permit issued by the Commission unless the pipeline is exempted from the Commission's routing authority (Minnesota Statute 216G.02 Subd.2.). A high pressure pipeline is a pipe with a nominal diameter of six inches or more that is designed to transport hazardous liquids or a pipe designed to be operated at a pressure of more than 275 pounds per square inch and to carry gas. The proposed project will consist of approximately 300 miles of 24-inch and 30-inch pipe; therefore, the project requires a route permit from the Commission.

The proposed Sandpiper Project also requires a Certificate of Need from the Commission, per Minnesota Statute 216B.2421. NDPC applied to the Commission for a certificate of need on November 8, 2013.[9]

Route Permit Application Review
Commission review of NDPC's Sandpiper Route Permit application is taking place pursuant to the requirements of Minnesota Statute 216G.02 and the pipeline route selection procedures in Minnesota Rules, 7852.0800 to 7852.1900, as illustrated in Attachment 3.[10]

Acceptance of the application allowed Commission and Department of Commerce EERA staff to initiate the procedural requirements of Minnesota Rules, 7852 through 7852.1900.

As with previous pipeline route permit proceedings under the full process (MinnCan and Enbridge's Alberta Clipper Projects), the Commission authorized EERA staff to receive and evaluate all route or route segment proposals submitted for consideration. Proposals are then submitted to the Commission for a final determination as to whether they should be accepted for consideration at the public hearing. Proposals accepted by the Commission will be considered by the Office of Administrative Hearings (OAH) at the contested case hearing and evaluated in the Comparative Environmental Analysis prepared for the project.

Environmental Review Requirements for Pipelines
The review processes established for pipelines, Minnesota Rules Chapter 7852, includes the Environmental Assessment Supplement as part of the pipeline routing permit application, a scoping process and comparative environmental analysis to fulfill the intent and requirements of the Minnesota Environmental Policy Act and Minnesota Rules parts 4410.0200 to 4410.6500.

[9] NDPC LLC Application to the Minnesota Public Utilities Commission for a Certificate of Need for the Sandpiper Pipeline Project, November 8, 2013, See eDockets at 13-373.
[10] Attachment 3 or See eDockets, Document ID 20146-100299-01.

The Minnesota Environmental Quality Board (EQB) developed and approved of the pipeline routing rules (Chapter 7852) as an alternative form of environmental review pursuant to the requirements of Minnesota Rules 4410.3600 [Alternative Review] on February 16, 1989.

Critical to development and approval of the pipeline routing rules was incorporation of the equivalent environmental review requirements established by Minnesota Rules 4410.3600, subp1., items A. through H., to allow for EQB approval of the pipeline rules as an alternative form of environmental review and also to provide for timely review and elimination of duplication.

The EQB determined that the pipeline routing rules satisfied all the conditions for approval as a substitute form of environmental review as provided by Minn. Rules 4410.3600, subp.1, items A. through H. Consequently, pipelines subject to the routing rules are not reviewed through environmental assessment worksheets (EAWs) or environmental impact statements (EISs), but receive equivalent review under the routing and permitting process established by the pipeline routing rules.

This alternative form of environmental review requires preparation of a comparative environmental analysis, which evaluates all of the alternative routes authorized by the Commission for consideration at public hearing.

Alternative Route Analysis (Minnesota Rules 7852.1500)

The Commission, in its February 11, 2014, "Order Finding Application Substantially Complete and Varying Timelines; Notice of Hearing"[11] at VII. Comparative Environmental Analysis, authorized EERA staff to prepare the comparative environmental analysis (CEA), along with an initial technical analysis of the record. The Commission stated that the CEA should provide a tool to assist the public and agencies in understanding the environmental consequences of the various alternatives.

The Commission further stated that the CEA should:

- Analyze the environmental consequences of each route and route segment alternative.
- Include a discussion of the proposed project's compliance with applicable statutes and rules.
- Analyze how well each route meets the routing permit selection criteria set forth in statute and rule.
- Identify routes with common or similar environmental consequences.
- Identify routes that:
    - Require no environmental mitigation
    - Have negative environmental consequences that would need mitigation, together with alternative mitigation strategies
    - Have negative environmental consequences that cannot be mitigated
    - Have fatal flaws.

[11]Commission Order, dated February 11, 2014, See eDockets, Document ID 20142-96351-01, p. 8.

- Include recommendations for permit language, including language specifically drafted for certain routes.

Minnesota Rule 1405 requires that the comparative environmental analysis be submitted as pre-filed testimony.

Public Information (Scoping) Meetings (Minnesota Rule 7852.1300)
After acceptance of an application for pipeline route selection, a public information/scoping meeting is held in each county crossed by the applicant's preferred pipeline route, unless a variance is granted by the Commission, to explain the route designation process, to respond to questions raised by the public, and to solicit comments on route and route segment proposals and other issues that should to be examined in greater detail in the comparative environmental analysis prepared for the project.

Notice of the information meetings was directly mailed to all landowners along the preferred route identified by NDPC in its application, and was published in 22 newspapers in proximity to the proposed project, including both the St. Paul Pioneer Press and Star Tribune.[12] Notice also appeared in the *EQB Monitor*, Vol. 38, No. 4, February 17, 2014.[13]

Between March 3, 2014, and March 13, 2014, Commission and EERA staff held seven public information/scoping meetings in seven of the nine counties crossed by the proposed Sandpiper Project.

Information/Scoping Meetings for the Sandpiper Project

COUNTY	CITY	DATE AND TIME	ATTENDANCE	Oral Record of Information Meetings (eDocket ID #, pages)
Polk	Crookston	Monday, March 3, 2014 6:00-9:00pm	90 to 95	20143-97800-01 / 165 pages
Polk	McIntosh	Tuesday, March 4, 2014 11:00am-2:00pm	30 to 35	20143-97801-01 / 88 pages
Clearwater	Clearbrook	Tuesday, March 4, 2014 6:00-9:00pm	45 to 50	20143-97803-01 /135 pages
Hubbard	Park Rapids	Wednesday, March 12, 2014	130 to 140	20143-97805-01 140

[12] Public Information Meeting Notice Compliance, See eDockets, Document ID 20144-98307-02.
[13] *EQB Monitor*, Volume 38, No. 4. See eDockets, Document ID 20146-100298-01.

		11:00am-2:00pm		pages
Cass	Pine River	Wednesday, March 12, 2014 6:00pm-9:00pm	70 to 80	20143-97807-01 / 102 pages
Aitkin	McGregor	Thursday, March 13, 2014 11:00am-2:00pm	90 to 100	20143-97811-01 / 145 pages
Carlton	Carlton	Thursday, March 13, 2014 6:00pm-9:00pm	120 to 130	20143-97813-01 / 152 pages

The format of the seven information/scoping meetings was the same. All meetings started with an overview presentation provided by the Commission's public advisor, followed by a brief North Dakota Pipeline Company overview of its Sandpiper Project, then Department of Commerce, Energy Environmental Review and Analysis (EERA) staff provided an overview of the Commission's route permitting process, which was followed by questions and comments from the public and responses from Commission staff, NDPC and EERA staff.[14]

The initial comment period, as provided for in the public notice, closed April 4, 2014. On April 14, 2014, the Commission issued a "Notice of Extended Comment Period" for the NDPC Pipeline Routing Permit in order to allow the public to submit additional comments on potential human and environmental impacts and alternative pipeline routes to be considered in the comparative environmental analysis. The new deadline for filing comments closed May 30, 2014.

Minnesota Rule 7852.1300 also requires a second round of public information meetings to be held prior to the contested case hearing. These meetings, as well as hearings, must be held in each county through which a route accepted by the Commission for hearing passes to explain the route designation process, present major issues, and respond to questions raised by the public. In recent pipeline proceedings (MinnCan (05-2003) and Alberta Clipper (07-360 and 07-361)), the second public information meeting was held immediately prior to the start of the contested case hearing.

Comments Received

Approximately 1087 comments from 940 unique commenters and organizations were received by the close of the comment period on May 30, 2014. Comments were received through various methods including public meeting oral comments, documents submitted to the court reporter and comments submitted by mail, email and fax.

Comments were received from numerous sources, including:

[14] Commission, NDPC and DOC EERA Power Point Presentation, See eDockets ID # 20142-96875-01

- Tribal: Honor the Earth, Mawinzo AsiniGaazo Berry Pickers, the Minnesota Chippewa Tribe, and White Earth Reservation Tribal Council.

- State Agencies: Minnesota Department of Transportation (MnDOT), Minnesota Department of Natural Resources (DNR), the Minnesota Pollution Control Agency (PCA) and Minnesota Representative Steve Green, District 2B.

- Local Units of Government: Hubbard County, Polk County, and the townships of Arago, Badora, Clover, Lake Emma, Todd and Wrenshall.

- Organization and Business Comments: Association of Cass County Lakes, Big Sandy Lake Association, Carlton County Land Stewards, Detroit Lakes Chamber of Commerce, EOG Resources, Friends of the Headwaters, Hubbard County COLA, Kennecott Exploration Company, Long Lake Association, Minnesota Backcountry Hunters and Anglers, Minnesota Coalition of Lake Associations; Minnesota League of Woman Voters, Minnesota Trout Unlimited, Palmer Lake Organization, Park Rapids League of Woman Voters, Pine River Watershed Alliance, RE/MAX First Choice, The Climate Crisis Coalition of the Twin Cities, Tidal Energy Marketing, Trout Unlimited, Northwestern Minnesota, University of Minnesota Northwest Research and Outreach Center, and White Fish Area Property Owners Association.

- Citizen Comments: Numerous written comments were received from citizens and have been filed alphabetically by last name of the individual commenting.

- North Dakota Pipeline Company

Comments generally fell into the following broad categories:

- **General Opposition:** Opposition was explicitly expressed, whether solely or throughout their comment
- **General Support:** Support was explicitly expressed, whether solely or throughout their comment
- **Wants an EA/EIS:** Request for an EA or EIS process was explicitly expressed by many commenters in reference to the fact that a CEA is planned to be conducted in lieu of an EA or EIS.
- **Extend Comment Period and/or Hold Additional Public Meetings:** Expressed a desire to extend the comment period and to hold additional public meetings to allow for more communication of the project.
- **Need of Project:** Questioned the need for the project.
- **State Parks:** State park land preservation, proximity to it, and comments about routing through state park land
- **Trees/Forests:** Preserving or avoidance of trees and mitigation comments or concerns
- **Wildlife:** Concerns for wildlife and avoidance of impacts to wildlife
- **Impacts to Water:** Preserving water quality and water resources including avoidance of lakes, rivers, streams, wetlands, wells and watersheds

- **General Environmental:** General environmental concerns without a specific concern or location stated or a generalized list of environmental issues; comments on general land use
- **Soils:** Soil concerns for the land use and concerns for soils that transport oil more quickly in the event of a leak
- **Organic Farming:** Specific mention of organic and/or sustainable farming
- **General Agriculture:** Land used for economic cultivation (agriculture) including comments with concerns for wild rice as an agricultural commodity.
- **Health and Safety:** Safety concerns during construction and operation of the pipeline and comments stating general health concerns related to human life
- **Aesthetics:** Visual and appearance concerns during and after construction
- **Tribal and Cultural Resources:** Concerns related to a specific tribe, tribal activity (i.e., wild rice as a cultural way of life) or general cultural resources concerns
- **Property Values and Landowner Rights:** Impact to the value of a home and/or property with the construction of the new pipeline and questions/concerns for the treatment of property owners and their rights
- **Cost of Easement:** Questions or concerns on cost of easement purchases by Enbridge
- **Socioeconomics and Tourism:** Impacts to tourism and the social economics of a community and/or region
- **Preference for an Alternative Route:** Preference for an alternative route including an existing alternative route already proposed or a new route proposed by the commenter.

Comment Categorization Summary

Special attention was paid to identify each individual comment whether it was submitted multiple times by different people or the same person submitted multiple comments.

Comment Category	Citizens	Organizations and Businesses	Local Units of Government	State Agencies	Tribal	Totals
General Opposition	402	55	1	0	1	**459**
General Support	30	5	1	1	0	**37**
Wants an EA/EIS	97	58	0	1	1	**157**
Extend Comment Period/More Mtgs	53	10	5	0	1	**69**
Need of Proj	20	1	0	0	0	**21**
State Parks	33	2	1	0	0	**36**
Trees/Forests	120	11	0	1	0	**132**
Wildlife	139	54	1	0	1	**195**
Impacts to Water Quality	320	29	4	2	2	**357**
General Env Concern	307	69	5	1	2	**384**
Soil and Soil Erosion	89	5	1	1	0	**96**
Organic Farms	133	9	1	0	0	**143**
General Agricultural Impacts	188	51	1	1	2	**243**
Health and Safety	93	10	2	1	1	**107**
Aesthetics	5	0	0	0	0	**5**
Tribal Concerns	83	45	1	0	4	**131**
Property Values	48	1	0	0	0	**49**
Cost of Easement	18	0	0	0	0	**18**
Tourism	51	5	1	0	0	**57**
Preference for an Alternative Route	309	30	4	2	2	**347**

Route and Route Segment Proposals and Acceptance by the Commission
The Commission is now being asked to determine what routes and route segments will be considered at the contested case hearing for the Sandpiper Project and analyzed in the Comparative Environmental Analysis (CEA).

Route proposal acceptance is addressed in Minnesota Rules 7852.1400, Subp. 1 as follows:

> The Commission shall accept for consideration at the public hearing the routes and route segments proposed by the applicant and may accept for public hearing any other route or route segment it considers appropriate for further consideration. No route shall be considered at the public hearing unless accepted by the Commission before the notice of the hearing. Routes shall be identified by the Commission in accordance with part 7852.1600. A proposer of a route or route segment that the Commission has accepted for consideration at the hearing shall make an affirmative presentation of facts on the merits of the route proposal at the public hearing.

If the proposal contains the required information, the Commission must consider acceptance of the route proposal for public hearing. Minnesota Rule 7852.1400 provides that no route shall be considered at the public hearing unless accepted by the Commission before notice of the hearing.

The comment period for identification of route or route segment alternatives to the proposed North Dakota Pipeline Company (Enbridge) Sandpiper pipeline ended May 30, 2014. During the comment period, approximately 1090 comments were received by letter, email and verbal communications recorded by a court reporter at seven public meetings. The written and verbal comments were screened to determine whether commenters had proposed alternatives, yielding a total of 62 proposals. As necessary, commenters were contacted to clarify the location and purpose of their proposals.

The attached *Sandpiper Alternative Routes Summary Report*, prepared by the Department of Commerce Energy Environmental Review and Analysis (EERA) with assistance from HDR Inc., is a summary of those system and route alternatives; it includes recommendations on routes or route segments for consideration at public hearing and evaluation in the CEA pursuant to Minnesota Rule 7852.1400, Route Proposal Acceptance.

The 62 proposals were then sorted into two categories, system alternatives and route alternatives, based on an evaluation of whether the proposal addressed the purpose of the Sandpiper project as proposed by NDPC.

System Alternatives
A system alternative is an alternate that proposes a different configuration of pipelines for moving oil from the Williston Basin than the Applicant's proposal. It is a wholly separate or independent route from the Applicant's proposed route and is, in essence, a different project than the one proposed by the applicant.

Enbridge is requesting a route permit to transport oil produced in North Dakota to the terminals in Clearbrook, Minnesota, and Superior, Wisconsin. Minnesota Rule 7852.0100, subpart 31, defines a route as "the proposed location of a pipeline between two end points." In this docket, Enbridge has requested a route from the North Dakota border to Clearbrook and from Clearbrook to Superior. Thus, the project, for route permit application purposes, is defined by these three points.

However, eight alternatives proposed during the comment period do not connect with one or more of these three points (*Sandpiper Alternative Routes Summary Report*, Table 1 and Figure 1). The proposed system alternatives include routing the pipeline far north or far south of the applicant's proposed route. None of the system alternatives would connect to the new Clearbrook terminal. Three of the system alternatives do not connect into Enbridge's Superior Terminal.

Proposed System Alternatives (SA-01 through SA-08) (See *Sandpiper Alternative Routes Summary Report* Figure 1)

SA-01. SA-01 was offered by Robert and Karen Lindesmith; it calls for the pipeline upon entering Minnesota to proceed in a northeasterly direction to enter Canada, with no clear connection to terminals in Clearbrook or Superior. If this alternative were to enter the United States at some point east of Lake Superior and return to Superior, it would be approximately 1,200 miles in length. The proposers offered no addition information in support of this system alternative.

EERA staff believes that this system alternative fails to meet the applicant's stated project purpose, as it does not connect to a terminal in Clearbrook terminal and may or may not terminate at the Superior terminal. Therefore, EERA staff recommends that the Commission not accept SA-01 as proposed for further consideration in this proceeding.

SA-02. SA-02 was offered by Sharon Natzel, Long Lake Area Association, as a system alternative to avoid impacting ground water resources and the lakes area of northern Minnesota. SA-02 is approximately 340 miles in length and attempts to follow existing road rights-of-way and areas without extensive water resources. Although SA-02 does not connect to a terminal in Clearbrook, it does connect back into Enbridge's Mainline Corridor and does terminate in Superior.

SA-03. SA-03 was suggested by the Minnesota Pollution Control Agency (PCA) as a system alternative to avoid the lakes areas crossed by NDPC's preferred route and to provide for a new terminal in the Crookston area, so as to provide for greater routing flexibility for future pipeline projects.

As proposed, this system alternative would follow the existing 24-inch Viking natural gas pipeline southward to Clay County, then southeast across the counties of Becker, Ottertail, Wadena, Todd, Morrison, Benton, Milles Lacs and Isanti before proceeding northward generally following either a 8-inch Magellan petroleum products pipeline or a Northern Natural Gas Pipeline, in proximity to I-35 through the counties of Chicago, Pine and Carlton before

connecting with one of the proposed Sandpiper route alternatives in Carlton County. SA-03 as proposed is approximately 360 miles long.

Similar to other system alternatives proposed, it does not provide for a connection to a terminal in Clearbrook. If the new proposed Clearbrook terminal were moved westward to the Crookston area, as suggested by the proposer, a pipeline would still be required to extend from a Crookston terminal to Clearbrook in order to provide oil to MinnCan and Minnesota Pipeline for transport to refineries in the Twin Cities.

SA-04. System alternative SA-04, suggested by Friend of the Headwaters (FOH), is proposed to follow the existing Alliance Pipeline, a hot gas natural gas pipeline, with an outside diameter of approximately 42-inches built in 2000 that traverses North and South Dakota, Minnesota, Iowa and Illinois and is approximately 1,050 miles in length. SA-04 does not connect with terminals in Clearbrook or Superior. This alternative was proposed to avoid the lakes areas traversed by the NDPC Sandpiper proposed route. The Alliance Pipeline route crosses the Minnesota counties of Traverse, Stevens, Swift, Chippewa, Kandiyohi, Renville, Sibley, Nicollet, Blue Earth, Waseca, Freeborn and Mower, crossing primarily agricultural land in Minnesota. The Alliance Pipeline was permitted by the Federal Energy Regulatory Commission (FERC) and was the first pipeline project in Minnesota to require an agricultural mitigation plan.

SA-05. SA-05, also suggested by FOH, if it were to connect to Superior would be approximately 1,100 miles in length. As with SA-04, it also follows a gas pipeline, the Northern Border Natural Gas Pipeline that cuts across southwestern Minnesota, through the counties of Lincoln, Lyon, Murray, Cottonwood, Jackson and Martin.

SA-05 does not connect with the terminals in Clearbrook or Superior.

SA-06. SA-06, also suggested by FOH, would follow Minnesota Highway 9 south, until it intersects an existing Magellan products pipeline, approximately 8 to 12-inches in diameter, that it would follow south and east to a point where it intersects with the existing 24-inch MinnCan crude oil pipeline. It would then follow the MinnCan route to the refineries, then continue north along the I-35 corridor in proximity to the 8-inch Magellan products pipeline and Northern Natural Gas Pipeline until it intersects with other Sandpiper route alternatives.

As a part of this proposal it was also suggested that the pipeline route could follow an existing 8-inch Magellan products pipeline east into Wisconsin until it intersects the existing Enbridge right-of-way at which point a pipeline could be built to carry the oil back up to Superior or down to Chicago.

EERA believes that SA-06 partially satisfies the stated project purpose because it does connect back to the terminal in Superior. However, SA-06 does not connect to the Clearbrook terminal. The proposer of this SA-06 does not indicate how it would proceed north from the refinery through the Twin Cities and suburbs.

SA-07. SA-07, also suggested by FOH, may be viewed as a combination of two different system alternatives: first, as a combination of SA-07 and SA-06, and the second as a combination of SA-07 and SA-08.

SA-07 and SA-06 when combined to form SA-07 would follow I-29 in North Dakota to Fargo, then follow the same corridor east and southeast adjacent to I-94, then follow an existing Magellan product pipeline south and east to a point where it intersect with the MinnCan 24-inch crude oil pipeline and follow it to Minnesota's two refineries. At those points it is suggested that the pipeline can proceed northward to the Duluth area by following I-35 or the existing Magellan product and Northern Natural Gas pipelines to a point where it intersects with other Sandpiper route alternative and then proceed to the Superior terminal.

The other system alternative would combine SA-07 and SA-08, by following SA-08 (I-94) and extending it through the Twin Cities along the freeway or existing Magellan product pipeline to 1) a point where it intersects I-35 and two other pipelines (Magellan and Northern Natural Gas) that proceed northward as described above, or 2) follow an existing Magellan Product pipeline east into Wisconsin until it intersect the existing Enbridge right-of-way at which point a pipeline could be built to carry the oil back up to Superior or down to Chicago.

Because SA-07 does not connect to a terminal in Clearbrook terminal or provide viable means for locating a pipeline in the Twin Cities, EERA staff recommends that the Commission should not accept SA-07 for further consideration in this proceeding.

SA-08. As proposed by Honor the Earth, SA-08 would be located adjacent to or within the right-of-way of I-29 and I-94. Also, SA-08 does not connect to terminals in Clearbrook or Superior.

Route Alternatives (RA-01 through RA-54) (See *Sandpiper Alternative Routes Summary Report* Tables 2 through 6 and Figures 2-6)

A route alternative deviates from the applicant's preferred route to address a commenter's concern or issue. Fifty four route alternatives were proposed during the comment period. The alternatives were suggested by the Applicant, agencies and individuals.

Enbridge provided 23 of the 54 route alternatives in order to address individual landowner concerns, agency concerns, engineering constraints or constructability issues. The Minnesota Department of Natural Resources and Minnesota Pollution Control Agency also offered suggestions for routing options, including following Enbridge's mainline corridor that contains up to seven pipelines, the Great Lakes Natural Gas Pipeline, Highway 2 and the Soo Line railroad right-of-way. Some of these routing options vary in length from 30 to 205 miles. Many are shorter options submitted by landowners to address a specific concern related to location on their property.

Specific maps of each route alternative are included in Appendix A of the *Sandpiper Alternative Routes Summary Report*, which is not attached due to size but will be filed separately documents.

EERA Staff Analysis and Comments

EERA find that all 54 route alternative proposals were submitted within the time frame established by the Commission. In addition, EERA believes that all contain the information required in Minnesota Rule 7852.1400, Subp. 2., in order for the Commission to make a decision as to whether they should be accepted for hearing and analysis in the CEA. EERA finds that they provide options for avoiding and minimizing identified issues associated with the Applicant's proposed route.

However, one landowner offered three route alternatives, RA-31, 34 and 35, to address concerns related to his property. EERA believes that the longest of these, RA-31, need not be carried forward given analysis of the other two route alternatives.

System Alternatives

Because the proposed system alternatives are not alternative routes for meeting the purpose of the project as identified in the permit application, EERA does not believe that these alternatives are appropriate for further consideration. NDPC articulated a similar position in its May 30, 2014, letter regarding route alternatives.[15]

In addition, several system alternatives suggest placing the pipeline adjacent to or within the interstate rights-of-way. Federal Highway Administration and MnDOT right-of-way accommodation policies prohibit longitudinal placement of utility facilities within the fenced area of the Interstate Highway System. Currently a 345 kV High Voltage Transmission Line (HVTL) permitted by the Commission is being built along I-94 between Moorhead and Monticello, Minnesota, limiting the opportunity for further longitudinal placement adjacent to that highway's right-of-way.

However, EERA believes that two proposals, SA-02 and SA-03, might be appropriate for further consideration if connector segments between them and the Clearbrook terminal were developed. (See Attachment 5)

SA-02 Possible Modification. EERA staff believes that SA-02, as proposed, partially satisfies the stated project purpose; however, it provides no connection to a terminal in Clearbrook. With the addition of a connector to Clearbrook, SA-02 could provide a "northern option."

One possible modification to SA-02 would be to follow the Sandpiper proposed route to Clearbrook and develop a route segment that would proceed north to join SA-02. Beginning at the terminal in Clearbrook, this route segment would proceed westward paralleling Line 81 or extending northwest from the new Clearbrook terminal to a point where it intersects with Polk County Highway 2, then generally paralleling Polk County Highway 2, Pennington County Highway 27 and Marshall County Highway 28, until it intersects SA-02, then proceeds east and north of the Red Lake Indian Reservation. This route segment modification to SA-02 is approximately 35 miles in length and does not appear to present significant routing constraints at this time.

[15] See eDockets (13-474) Document ID 20145-99996-01

SA-03 Possible Modification. As with SA-02, this system alternative does not provide for a connection with the new Clearbrook terminal.

One possible modification to SA-03 would be to follow the Sandpiper proposed route until it veers east south of Park Rapids. This modified alternative would follow NDPC's proposed route to Clearbrook and from the proposed Clearbrook terminal continue along the proposed route southward paralleling the existing 24-inch MinnCan and 16-inch pipelines in the existing Minnesota Pipeline rights-of-way. However, rather than tuning eastward near the city of Hubbard just south of Park Rapids, this route alternative would continue south through the counties of Todd, Wadena and Morrison, paralleling the MinnCan and Minnesota Pipeline rights-of-way to approximately Mile Post 119 on the MinnCan pipeline in Morrison County, where it would intersect with the existing 24-inch Viking Natural Gas Pipeline, and join SA-03 system alternative described above. At the point where the Viking pipeline intersects the 8-inch Magellan products pipeline and the Northern Natural Gas Pipeline, as described above, the route would proceed northward to connect with the Superior terminal.

This route modification is shorter than SA-03 and would parallel a crude oil pipeline system rather than a natural gas pipeline. This could provide for better utilization of existing right-of-way, consolidating crude oil pipelines in one corridor rather than two, and provide for higher concentration of emergency responders, equipment and supply materials when responding to a crude oil pipeline incident.

The MinnCan project received both a certificate of need and route permit from the Commission in 2007 (See Route Permit Docket 05-2003), and was constructed in accordance with the requirements of the Commission issued permit. Other portions of the Minnesota Pipeline system comprised of two 16-inch pipelines and pipeline loops, obtained route permits from the Minnesota Environmental Quality Board when jurisdiction resided with the Board. The record from those previous proceedings may help inform this docket.

Where concerns have been expressed along the proposed Sandpiper route between Clearbrook and Hubbard County, six route alternatives (RA-09, RA-10, RA-11, RA-12, RA-13, and RA-14) have been proposed to mitigate potential project impacts.

Another possible modification of SA-03 would be to follow the Sandpiper proposed route to Clearbrook and then back-track to the Viking Line to join SA-03.

Line 3 Replacement Program

On March 3, 2014, Enbridge Energy Limited Partnership announced that it received shipper support for the Line 3 Replacement Program (L3R) to replace the existing 34-inch located on its mainline right-of-way, along most of its route from Edmonton, Alberta, to Superior, Wisconsin, with a new 36-inch pipeline and associated facilities.

In Minnesota, Enbridge proposes that Line 3 will be replaced along its existing mainline pipeline route from the North Dakota/Minnesota, border to Clearbrook, Minnesota. This portion of the route will cross the Minnesota counties of Kittson, Marshall, Pennington, Red Lake, Polk and

Clearwater. Between Clearbrook and the Minnesota/Wisconsin border – approximately 225miles – Enbridge is proposing to locate the L3R pipeline along its preferred route for the Sandpiper Pipeline. Enbridge anticipates filing the Certificate of Need and Pipeline Route Permit applications for the L3R Project with the Commission in April 2015. Consequently, EERA will include evaluation of the right-of-way needed for this pipeline in the CEA for the Sandpiper project.

NDPC in its May 30, 2014, filing (Exhibit D),[16] provided tables showing the potential additive impacts of the preliminary L3R Project route. The section and table numbers correspond to the number in its Minnesota Environmental Information Report filed on January 31, 2014.

DOC EERA Staff Recommendation

Fifty-three of the 54 route alternatives received during the comment period are recommended to be carried forward for analysis in the CEA. EERA believes that they provide options for avoiding and minimizing identified issues associated with the Applicant's proposed route and are appropriate for further consideration. Route alternative RA-31 is not recommended to be carried forward, because the same landowner offered two other route alternatives that addressed similar concerns.

Wider Analysis Areas (See *Sandpiper Alternative Routes Summary Report* Figures 7-11)
In general, a width of 500 feet is recommended to be used to analyze the proposed and alternate routes in the CEA. In most cases, this width provides ample room for the development of a centerline. However, there are several areas where a wider width would be beneficial to the analysis, due to existing conditions or the presence of multiple route alternatives in close proximity to each other. These areas are listed below. Widths of up to 6,500 feet are recommended for analysis in these areas, except in the Crow Wing Wildlife Management Area as discussed below.

Carlton County 1
Eight route alternatives (RA-42 to RA-49) were suggested in an area surrounding several existing pipelines, Highway 61, and Interstate-35 in Carlton County (Figure 7). A width ranging from 2,500 feet to 6,500 feet would allow for flexibility in using different parts of the route alternatives to develop a route that minimizes impacts.

Carlton County 2
Carlton County 2 is a smaller area adjacent to Carlton County 1 and encompasses three route alternatives (RA-50, 51, and 52) that deviate slightly from the proposed route (Figure 7). A width of 1,500 feet to 2,500 feet would allow for analysis of these alternatives.

Aitkin County
Four route alternatives (RA-33 to RA-36) were suggested in Aitkin County along Highway 65 (Figure 8). A width of 1,500 feet to 4,700 feet would allow for flexibility in comparing the alternatives and developing a route that minimizes impacts.

[1616] See eDockets (13-474) Document ID 20145-99996-02, p. 78-97.

Spire Valley Aquatic Management area
The DNR requested that a wider width be analyzed in this area (RA-20) to fins routes to avoid and minimize potential impacts to the Spire Valley fish hatchery, due to construction activities (Figure 9). The width recommended for this area is 3,000 feet.

Crow Wing Chain Wildlife Management Area (Crow Wing WMA)
The DNR expressed concerns regarding the crossing of the Crow Wing Chain WMA (RA-16) because of deed restrictions associated with gifted properties from the Nature Conservancy to the State. Enbridge provided a route alternative in late June to avoid the WMA. A width of 9,400 feet is recommended, which would provide flexibility in further developing a route in the area of the WMA (Figure 10).

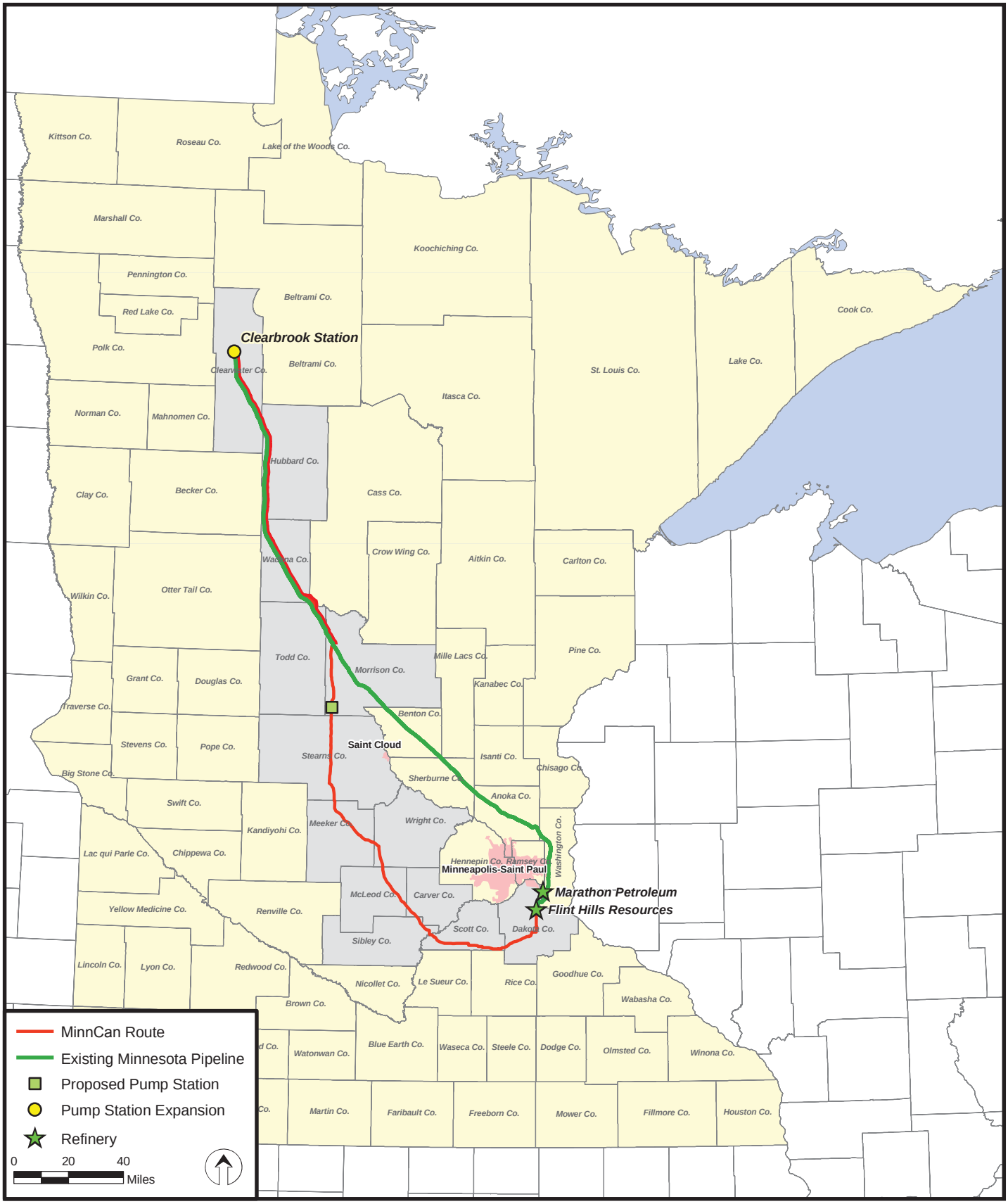
LaSalle Creek
Two similar route alternatives (RA-09 and 10) were suggested to minimize impacts to Big LaSalle Lake and LaSalle Creek (Figure 11). A 6,500 foot width is recommended to allow for flexibility to avoid impacts to Big LaSalle Lake and LaSalle Creek.

Northern Pipelines
Numerous commenters, including the DNR and PCA, expressed interest in analyzing existing pipeline corridors (Enbridge and Great Lakes) that run generally along Highway 2 from Clearbrook to Superior (RA-7 and 8). A width of 500 feet to 6,500 feet would allow flexibility in following the existing pipelines, railroad, and/or Highway 2 and is based on the proximity of the existing infrastructure to each other.

System Alternatives
EERA does not believe that any of the eight system alternatives are appropriate for further consideration in the routing docket hearing and CEA analysis because they do not meet the purpose of the project as identified in the permit application and are, therefore, not alternative routes for accomplishing the purpose of the project.

As described above, EERA believes that two system alternatives, SA-02 and SA-03, could be modified to include connections to Clearbrook, thus meeting the purpose of the project. The Commission may want to consider whether these proposals as modified are appropriate for further consideration.


Enbridge Energy Partners System
Thief River Falls
Grand Forks
EPND Line 81
Red Lake
Crookston
Polk
Clearbrook
Bemidji
Chisholm
Virginia
Hibbing
Grand Rapids
Clearwater
Hubbard
Cass
Park Rapids
Fargo
Detroit Lakes
Aitkin
Carlton
Cloquet
Duluth
Superior
Douglas
WI
Crow Wing
Staples
Brainerd
Long Prairie
Little Falls
300
350
400
450
500
550
600
2
59
71
169
210
35
180
Legend
New Sandpiper Pump Station at Existing Enbridge Facility
New Sandpiper Pump Station
Proposed Mile Post
Existing Facilities
Existing Enbridge Pipelines
Preliminary Route
ENBRIDGE
MINNESOTA STATE
SANDPIPER PRELIMINARY ROUTE MAP
N
0 5 10
Miles
MLB
Date: 12/13/2013



MINNCAN PROJECT

Minnesota Pipeline Existing Route Map

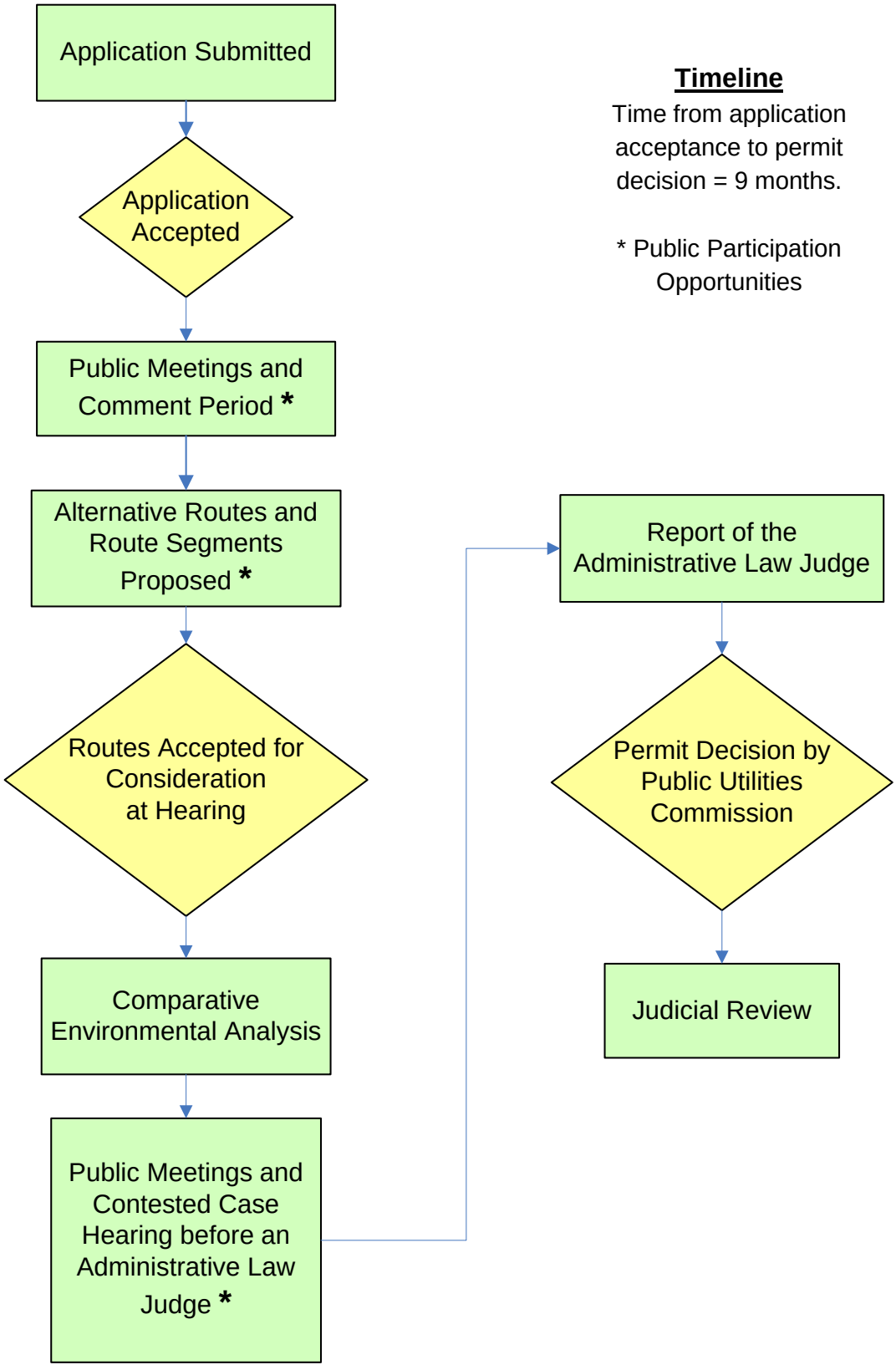
DATE: 12/10/05
REVISED: 01/03/06
SCALE: 1:3,125,000
DRAWN BY:RSMcGREGOR
M:\Clients\J-L\KPL\Central_MN_ArcGIS\PUC_RA_Sup_F01_Proposed.mxd

NATURAL RESOURCE GROUP, INC.

MINNESOTA DEPARTMENT OF COMMERCE

Pipeline Routing
Full Permitting Process

Minnesota Rules 7852



Timeline

Time from application acceptance to permit decision = 9 months.

* Public Participation Opportunities

Sandpiper Alternative Routes Summary Report

In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project in Minnesota

Docket No. PL-6668/PPL-13-474

July 16, 2014

Prepared by Minnesota Department of Commerce, Energy Environmental Review and Analysis staff with assistance from HDR, Inc.

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mn.gov/commerce/energyfacilities

Summary of System and Route Alternatives

The comment period for identification of route or route segment alternatives to the proposed North Dakota Pipeline Company (Enbridge) Sandpiper pipeline ended May 30, 2014. During the comment period, approximately 1090 comments were received by letter, email and verbal communications recorded by a court reporter at seven public meetings. The written and verbal comments were screened to determine whether commenters had proposed alternatives, yielding a total of 62 proposals. As necessary, commenters were contacted to clarify the location and purpose of their proposals.

The 62 proposals were then sorted into two categories: system alternatives and route alternatives.

This Sandpiper Alternative Routes Summary Report, prepared by the Department of Commerce Energy Environmental Review and Analysis (EERA), is a summary of those system and route alternatives and provides recommendations on routes or route segments for consideration at public hearing and evaluation in the Comparative Environmental Analysis (CEA) pursuant to Minnesota Rule 7852.1400, Route Proposal Acceptance.

System Alternatives

A system alternative is an alternate that proposes a different configuration of pipelines for moving oil from the Williston Basin than the applicant's proposal. It is a wholly separate or independent route from the Applicant's proposed route and is, in essence, a different project than the one proposed by the applicant.

Enbridge is requesting a route permit to transport oil produced in North Dakota to the terminals in Clearbrook, Minnesota, and Superior, Wisconsin. Minnesota Rule 7852.0100, subpart 31, defines a route as "the proposed location of a pipeline between two end points." In this docket, Enbridge has requested a route from the North Dakota border to Clearbrook and from Clearbrook to Superior. Thus, the project, for route permit application purposes, is defined by these three points.

However, eight alternatives proposed during the comment period do not connect with one or more of these three points (Table 1 and Figure 1). The proposed system alternatives include routing the pipeline far north or far south of the applicant's proposed route. None of the system alternatives would connect to the new Clearbrook terminal. Three of the system alternatives do not connect into Enbridge's Superior Terminal.

Because the proposed system alternatives are not alternative routes for meeting the purpose of the project as identified in the permit application, EERA does not believe that these alternatives are appropriate for further consideration.

Two proposals, SA-02 and SA-03, might be appropriate for further consideration if connector segments between them and the Clearbrook terminal were developed.

System Alternatives

Table 1: Proposed System Alternatives (Figure 1)

Comment Number	System Alternative Number	Commenter	County/State	Comment[1]	Evaluation[2]
50	SA-01	Robert and Karen Lindesmith	N/A	Would like Enbridge to route through Canada	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service, or terminate at Superior.
94	SA-02	Sharon Natzel (Long Lake Area Association)	Northern Minnesota	Commenter route proposal is intended to maximizes the protection of the clearest waters of northern Minnesota and the groundwater that are most susceptible. Ronald Vegemast, commenter 156, suggested a very similar route.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service. Needs connector to Clearbrook. Estimated at 340 miles in length.
182	SA-03	Minnesota Pollution Control Agency	Minnesota	Route would follow the existing 24-inch Viking Natural Gas Pipeline south and southeast to Chisago County, then turn north paralleling existing 8-inch Magellan refined products pipeline and/or a Northern Natural Gas Pipeline to a point where it would interconnect with Sandpiper Alternative Routes in Carlton County, then to terminal in Superior. Calls for new terminal in Crookston area.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service. Needs connector to Clearbrook. Estimated at 360 miles in length.
116A	SA-04	Friends of the Headwaters	North Dakota, South Eastern Minnesota, Iowa, Illinois	Follows the Alliance Natural Gas Pipeline to parallel an existing pipeline right-of-way; traverses primarily agricultural land and avoids the freshwater lakes.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service, or terminate at Superior. Estimated at 1050 miles in length.
116B	SA-05	Friends of the Headwaters	North Dakota, South Dakota, Minnesota, Iowa, Illinois	This route is modeled after 116A and parallels the Northern Border Natural Gas Pipeline, traversing primarily agricultural land and avoids crossing the Red River of the North.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service, or terminate at Superior. Estimated at 1100 miles in length.

Comment Number	System Alternative Number	Commenter	County/State	Comment[1]	Evaluation[2]
116C	SA-06	Friends of the Headwaters	North Dakota, Minnesota	Route would follow Minnesota Highway 9 south, until it intersects existing Magellan 8 to 12-inch product pipeline that it would follow south and east to a point where it crosses the MinnCan pipeline, then follow the MinnCan alignment to the existing Minnesota refineries, then continue north by following I-35 or the Northern Natural Gas and Magellan products pipelines north to a point where the route would intersect with the Sandpiper route alternatives in Carlton County and then continue to the terminal in Superior. Also suggested that pipeline route could follow the 8-inch Magellan products pipeline east into Wisconsin and then follow Enbridge's existing pipeline right-of-way back to Superior or down to the Chicago area.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service. Needs connector to Clearbrook. Estimated at 390 miles in length.
116D	SA-07	Friends of the Headwaters	North Dakota, Minnesota	SA-07 can be viewed as a combination of two different systems. One is a combination of SA-07 and SA-06, and the other as a combination of SA-07 and SA-08. See Figure 1 System Alternatives. SA-07 and SA-06 when combined to form SA-07, would follow I-29 in North Dakota to Fargo, then follow the same corridor east southeast adjacent to I-94, then follow an existing Magellan product pipeline south and east to a point where it intersects with the MinnCan 24-inch crude oil pipeline to Minnesota's two existing refineries. At those points it is suggested that the pipeline can proceed northward to the Duluth area by following I-35 or the existing Magellan product and Northern Natural gas pipelines to a point when they can interconnect with other alternative Sandpiper routes that continue to the Wisconsin border and terminal in Superior. The other system alternative would combine SA-07 and SA-08, by following SA-08 (I-94) and extending it through the Twin Cities along the freeway or existing Magellan product pipeline to 1) a point where it intersects I-35 and two other pipelines (Magellan and Northern Natural Gas) that proceed northward as described above, or 2) follow an existing Magellan Product pipeline east into Wisconsin until it intersect the existing Enbridge right-of-way at which point a pipeline could be built to carry the oil back up to Superior or down to Chicago.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service. Needs connector to Clearbrook. Estimated at 395 miles in length.

Comment Number	System Alternative Number	Commenter	County/State	Comment[1]	Evaluation[2]
133	SA-08	Honor the Earth		Wants route to follow I-29 in North Dakota and I-94 in Minnesota.	The route does not go through Clearbrook, which provides redundant delivery if a component is out of service, or terminate at Superior. Estimated at 400 miles in length, if continued on to Superior.

[1] Comment: The comment column is a summary of the issue that was identified in the comment submitted during notice period.

[2] Evaluation: The evaluation column describes why the system alternative will not be further analyzed.

Route Alternatives

A route alternative deviates from the applicant's preferred route to address a commenter's concern or issue. Fifty four route alternatives were proposed during the comment period. The alternatives were suggested by Enbridge, Minnesota Department of Natural Resource (DNR), Minnesota Pollution Control Agency (PCA), and stakeholders. A route alternative was deemed viable if it met the purpose and need of the project and contained no apparent major engineering or environmental issue, based on a visual desktop assessment.

The proposed project is approximately 300 miles long and because of its length the results of the screening effort have been divided into five geographic areas to illustrate locations of the proposed route alternatives (Tables 2 through 6 and Figures 2 through 6):

- North Dakota to Clearbrook
- Clearbrook to Wisconsin
- Clearbrook to Aitkin County
- Aitkin County
- Carlton County

Specific maps of each route alternative are included in Appendix A.

North Dakota to Clearbrook

The North Dakota to Clearbrook area includes five route alternatives, as shown on Figure 2. A brief summary of the comment regarding the route alternative and the justification for moving forward with the alternative is included in Table 2, below.

Table 2: North Dakota to Clearbrook

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-01	Polk	North Dakota to Clearbrook	Co-locating the proposed pipeline with the existing line 81 would reduce habitat fragmentation and there would be fewer cumulative effects	Addresses DNR concerns regarding fragmentation and stream erosion. Impacts new property owners.		186	PC	3.76
RA-02	Polk	North Dakota to Clearbrook	Route alternative requested to move pipeline further away from property owner house, Wants pipeline to be 700 feet away from home instead of 200 feet	The route alternative impacts the same environmental features as he proposed route and new landowners are impacted.	5/30 #1		EPC	1.61
RA-03	Polk	North Dakota to Clearbrook	Route alternative requested to minimize impacts to agricultural research sites. Avoidance of "Field 18" and moving north to drainage ditch in "Field 17" to make sure field 18 can still be used in future research	Addresses University of Minnesota's concern regarding future use of field research plots and does not impact new property owners.	5/30 #2	66	EPC	1.88
RA-04	Polk	North Dakota to Clearbrook	Route alternative to avoid an overhead power line.	Route alternative increases safety during construction. Environmental impacts are the same and no new landowners are impacted.	5/30 #3		ED	0.23
RA-05	Clearwater	North Dakota to Clearbrook	Route alternative requested to accommodate refinement of facility design at the Clearbrook Terminal.	Route alternative impacts the same environmental features as the proposed route and no new landowners are impacted.	5/30 #4		ED	0.33

[1] Comment: The comment column is a summary of the issue that was identified in the comment submitted during notice period.

[2] Justification: The justification column describes why the route alternative is being carried forward for further analysis.

[3] Enbridge Alternative: The Enbridge alternative column tracks routes developed to address commenter concerns by Enbridge according to their letter submittal dates of 4/4 or 5/30.

[4] Comment Source: PC = Public comment submitted route during comment period; EPC = Public comment submitted route during comment period, Enbridge submitted route that addresses the comment; ELO = Enbridge submitted route that addresses an unknown landowner concern; ED = Enbridge submitted route that addresses an engineering design concern

Clearbrook to Wisconsin

The Clearbrook to Wisconsin includes three route alternatives from Clearbrook to just west of the Wisconsin/Minnesota border following either existing pipelines or going north around several lakes and the Leech Lake Band of Ojibwe Reservation. The route alternatives are shown on Figure 3.

Table 3: Clearbrook to Wisconsin

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-06	Clearwater, Beltrami, Koochiching, Itasca	Clearbrook to Wisconsin	The pipeline should be routed to the north around the lakes area.	Addresses commenters concerns regarding lakes area impacts. Route alternative would impact the Chippewa National Forest (CNF), state forest land and the Dishpan Wildlife Management Area (WMA).		3	PC	205.52
RA-07	Clearwater, Beltrami, Koochiching, Itasca	Clearbrook to Wisconsin	The pipeline should be routed with existing pipelines along highway 2. (Enbridge's mainline)	Addresses commenter's and DNR and PCA concerns regarding lakes area impacts. Route alternative would impact the CNF and the Leech Lake Band of Ojibwe Reservation (LLBO). In addition, the alternative would cross several populated areas.		3	PC	179.82
RA-08	Great Lakes Gas Pipeline	Clearbrook to Wisconsin	The pipeline should be routed with existing Great Lakes pipelines that run generally south of Hwy 2 through Beltrami, Cass, Itasca and St Louis Counties	Addresses DNR concerns regarding lakes area impacts and utilizing existing corridors. Route alternative would impact the CNF, the Leech Lake Band of Ojibwe Reservation (LLBO). In addition, the route would cross several populated areas and is space limited due to other utilities within the corridor.		186	PC	174.22

[1] Comment: The comment column is a summary of the issue that was identified in the comment submitted during notice period.

[2] Justification: The justification column describes why the route alternative is being carried forward for further analysis.

[3] Enbridge Alternative: The Enbridge alternative column tracks routes developed to address commenter concerns by Enbridge according to their letter submittal dates of 4/4 or 5/30.

[4] Comment Source: PC = Public comment submitted route during comment period; EPC = Public comment submitted route during comment period, Enbridge submitted route that addresses the comment; ELO = Enbridge submitted route that addresses an unknown landowner concern; ED = Enbridge submitted route that addresses an engineering design concern

Clearbrook to Aitkin County

The Clearbrook to Aitkin County area includes 10 route alternatives, as shown on Figure 4. Several of the alternatives were developed to avoid sensitive resources in the Big LaSalle Lake and LaSalle Creek area.

Table 4: Clearbrook to Aitkin County

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-09	Clearwater Hubbard	Clearbrook to Aitkin County	Alternative route starting in Section 11 of Itasca Township in Clearwater County and Hattie Township in Hubbard County to avoid the Big LaSalle Lake area.	Avoids the Big LaSalle Lake area, however, impacts new property owners.		194	PC	8.05
RA-10	Clearwater	Clearbrook to Aitkin County	Big La Salle Creek alternative, lack of access near crossing of LaSalle Creek could result in delayed spill response times, suggest moving route to a crossing that is more accessible	Addresses PCA concern for more accessible crossing, farther away from Big LaSalle Lake. Alternative recommended would impact new property owners.		182	PC	6.83
RA-11	Clearwater	Clearbrook to Aitkin County	Route Alternative proposed to accommodate a landowner request to avoid the lake.	This re-route reduces impacts to lake front property and is further away from Big LaSalle Lake. No new landowners will be impacted.	4/4 #1		ELO	0.90
RA-12	Hubbard	Clearbrook to Aitkin County	Route alternative is being requested to remove a temporary workspace from adjacent land.	Route alternative requested by landowner because it would impact fewer property owners. No new landowners will be impacted.	4/4 #2		ELO	0.34
RA-13	Hubbard	Clearbrook to Aitkin County	Route alternative requested to route through North Dakota Pipeline Company land recently purchased.	Re-route environmental impacts are the same and no new landowners are impacted.	5/30 #5		ED	0.18
RA-14	Hubbard	Clearbrook to Aitkin County	Route alternative being requested because two property owners want the pipeline further away from structures.	Re-route does not involve new landowners; however, it does move the route onto an existing landowner's property. This alternative would avoid taking down two barns.	4/4 #3		ELO	1.57

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-15	Hubbard	Clearbrook to Aitkin County	Twin Lakes route alternative, lack of access near Twin Lakes and Shell river could result in delayed spill response times. Twin Lakes are identified as wild rice lakes by the DNR.	Addresses PCA concern for more accessible crossing. Alternative recommended would impact new property owners and traverse an area of center pivot irrigation. It would also be closer to the town of Hubbard.		182	PC	9.46
RA-16	Hubbard, Wadena	Clearbrook to Aitkin County	Enbridge provided a route to avoid the Crow Wing WMA due to easement restrictions.	Addresses DNR concerns of avoiding the WMA. Alternative would impact new landowners.			ELO	10.46
RA-17	Cass	Clearbrook to Aitkin County	Route Alternative being proposed to avoid a large wetland complex in Foot Hill State Forest.	Route alternative would impact 1 wetland the original route impacts 2. Both the original and alternative are within the Foot Hill State Forest.	4/4 #4		ED	0.41
RA-18	Cass	Clearbrook to Aitkin County	Route alternative requested to accommodate changes to engineering design to add a pipeline inspection gauge launcher and receiver trap.	Route alternative environmental impacts are the same and no new landowners are impacted.	5/30 #6		ED	0.18
RA-19	Cass	Clearbrook to Aitkin County	Route alternative requested that the pipeline be constructed near an existing fence line.	Route alternative impacts more greenfield than the original route and does not affect new landowners.	5/30 #7		ELO	1.11
RA-20	Aitkin	Clearbrook to Aitkin County	DNR requested a wider route south of the Spire Valley Fish Hatchery to minimize impacts the hatchery.	The wider route provides flexibility to address DNR concerns about the fish hatchery.		186	PC	1.25

[1] Comment: The comment column is a summary of the issue that was identified in the comment submitted during notice period.

[2] Justification: The justification column describes why the route alternative is being carried forward for further analysis.

[3] Enbridge Alternative: The Enbridge alternative column tracks routes developed to address commenter concerns by Enbridge according to their letter submittal dates of 4/4 or 5/30.

[4] Comment Source: PC = Public comment submitted route during comment period; EPC = Public comment submitted route during comment period, Enbridge submitted route that addresses the comment; ELO = Enbridge submitted route that addresses an unknown landowner concern; ED = Enbridge submitted route that addresses an engineering design concern

Aitkin County

The Aitkin County area includes 23 route alternatives, as shown on Figure 5. Several of the route alternatives suggested in this area were landowner requests that the pipeline avoid structures on their property. In addition, a number of the route alternatives suggested to avoid sensitive natural resources.

Table 5: Aitkin County

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-21	Aitkin	Aitkin County	DNR recommended the Aitkin County Power Line as a route alternative to eliminate concerns regarding Sandy River fisheries and wild rice habitat as well as trout stream habitat. This would also avoid 3.1 miles of WMA's and follows existing corridor.	Addresses DNR concerns regarding the fisheries and habitat impacts, however, it does impact new property owners.		186	PC	53.88
RA-22	Aitkin, St Louis, Carlton	Aitkin County	DNR recommended a route alternative that would avoid critical habitat in the Big Sandy lake watershed as well as Grayling Marsh WMA, McGregor WMA, Lawler WMA and Salo Marsh WMA.	Addresses DNR concerns related to resources in the area follows existing corridors, however, impacts new property owners.		186	PC	38.82
RA-23	Aitkin	Aitkin County	The Aitkin County Soo Line Route Alternative was considered in the Enbridge January 31, 2014 Permit Application but removed from further analysis by the company.	The Soo Line Route Alternative removed from further analysis by Enbridge is being carried forward into the route analysis because it was recommended by several landowners throughout the comment period and it would parallel the existing ATV trail.			PC	31.13
RA-24	Aitkin	Aitkin County	Commenter proposing route alternative to minimize forest fragmentation and avoid old growth forests in the Hill River State Park	Route impacts less greenfield. The applicant proposed route and the suggested route alternative are both located in the Hill River State Park.	4/4 #6	186	EPC	1.65
RA-25	Aitkin	Aitkin County	Commenter would like the route to move to the east across wetland (former rice paddy areas) to preserve all high land for future building plans.	Addresses landowner concern. Alternative recommended would not impact new property owners.	5/30 #8	229	EPC	0.61
RA-26	Aitkin	Aitkin County	Commenter would prefer route alternative that would veer south and southeast from the intersection of US Highway 169 and CSAH 3 west of Palisade.	Route alternative impacts state forest land and new landowners.	4/4 #7	262	EPC	3.41
RA-27	Aitkin, Carlton	Aitkin County	DNR is recommending that the analysis includes the Soo line to avoid the McGregor SNA and the Sandy River watershed	Addresses DNR concerns related to the McGregor SNA and the Sandy River Watershed.		186	PC	13.23

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-28	Aitkin	Aitkin County	Commenter suggested a route alternative that turns south in Aitkin County and meets back with the proposed route to the east.	There was a map submitted during the comment period without a written comment attached. Based on the aerial image the proposed route was suggested to avoid gravel pits.		757	PC	3.50
RA-29	Aitkin	Aitkin County	Commenter suggested a route alternative suggested accommodating landowner request related to future home sites along the road.	Route alternative would impact more greenfield and wetland. There would be no new landowner impacts.	4/4 #8		ELO	0.66
RA-30	Aitkin	Aitkin County	Route alternative requested to avoid bending the pipeline in the road ditch which could impact the integrity of the roadway.	Route alternative environmental impacts would be the same and no new landowners are impacted.	5/30 #9		ELO	0.07
RA-31	Aitkin	Aitkin County	Commenter requested a route alternative to cut straight and diagonally across several miles in Aitkin County.	Addresses commenter concern regarding distance from home. Alternative recommended would impact new property owners.		2.3	PC	6.12
RA-32	Aitkin	Aitkin County	Commenter is requesting that the pipeline be located on Aitkin County Tax forfeit land which avoids an Old Growth Forest.	Addresses commenter concerns which would avoid the old growth forest would put route alternative on tax forfeit land.		75	PC	0.45
RA-33	Aitkin	Aitkin County	Commenter would like the pipeline moved east to the back edge of his property where it joins with the Peat Plant.	Addresses commenter concern and would impact new property owners.		89	PC	1.80
RA-34	Aitkin	Aitkin County	Commenter suggesting shifting the pipeline north into the tree line.	Addresses commenter concern regarding distance from home. Alternative recommended would impact new property owners.		2.1	PC	2.22
RA-35	Aitkin	Aitkin County	Commenter suggesting route alternative that would cut south on township road 270th and traverse east until it meets with the proposed route.	Addresses commenter concern regarding distance from home. Alternative route would impact new property owners and potentially impact a peat farm.		2.2	PC	1.72
RA-36	Carlton	Aitkin County	Commenter suggesting a route alternative to shift the pipeline to the north into tree line.	Route alternative addresses concern with other environmental impacts the same as the proposed route; no new landowners are impacted.	5/30 #10		ELO	0.38

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-37	Aitkin, Carlton	Aitkin County	Commenter suggesting Route Alternative that would parallel Hwy 210 after mile marker 550 then turn south to reconnect with the proposed route south of Cloquet.	The recommended route alternative would follow existing corridor, avoiding the Salo Marsh and Lawler WMA.		756.1	PC	38.68
RA-38	Aitkin, Carlton	Aitkin County	Commenter suggested a Route Alternative to avoid the Salo Marsh WMA.	Route alternative avoids the Salo Marsh WMA and does not impact new property owners.	5/30 #11		ELO	6.73

[1] Comment: The comment column is a summary of the issue that was identified in the comment submitted during notice period.

[2] Justification: The justification column describes why the route alternative is being carried forward for further analysis.

[3] Enbridge Alternative: The Enbridge alternative column tracks routes developed to address commenter concerns by Enbridge according to their letter submittal dates of 4/4 or 5/30.

[4] Comment Source: PC = Public comment submitted route during comment period; EPC = Public comment submitted route during comment period, Enbridge submitted route that addresses the comment; ELO = Enbridge submitted route that addresses an unknown landowner concern; ED = Enbridge submitted route that addresses an engineering design concern

Carlton County

The Carlton County area includes thirteen route alternatives, as shown on Figure 6. Many of the route alternatives from landowners request that the pipeline avoid structures on their property.

Table 6: Carlton County

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-39	Carlton and Aitkin	Aitkin County	Commenter would prefer route alternative that veers south of proposed route near Salo Marsh WMA Impoundment to avoid mineral development land.	Addresses commenter concern. Alternative recommended would impact new property owners, the Salo Marsh, and State Forest Land.		183	PC	9.01
RA-40	Carlton	Carlton County	Commenter suggested a route to use county land to the north of property owners land.	Addresses commenter concern regarding distance from home. Alternative recommended would not impact new property owners.		756.2	PC	1.04
RA-41	Carlton	Carlton County	Commenter suggested shifting the pipeline south to avoid a beaver dam.	Addresses commenter concern regarding the impacts to the beaver dam. Alternative recommended would not impact new property owners.	4/4 #9		ELO	0.61
RA-42	Carlton	Carlton County	Commenter requesting to co-locate pipeline with an existing power line corridor.	Addresses commenter concern. Alternative recommended would impact new property owners.		152	PC	3.48
RA-43	Carlton	Carlton County	Commenter suggesting to move pipeline to north side of Hwy 61, co-locating it with a utility corridor.	Addresses commenter concerns regarding continuity of utility corridors. Alternative recommended would impact new property owners.		34	PC	3.08
RA-44	Carlton	Carlton County	Commenter suggested following and existing utility corridor on the north side of Highway 61 to avoid the Blackhoof watershed.	Addresses commenter concern regarding groundwater flow around the watershed. Alternative recommended would impact new property owners.		97	PC	7.66
RA-45	Carlton	Carlton County	Commenter suggested following south side of Highway 61 to avoid the Blackhoof Watershed	Addresses commenter concern regarding ground water flow around the watershed. Alternative recommended would impact new property owners.		97	PC	7.13

Route Alternative Number	County	Project Section	Comment[1]	Justification[2]	Enbridge Alt[3]	Comment Database Number	Comment Source[4]	Length (miles)
RA-46	Carlton	Carlton County	Commenter suggested shifting the pipeline to the south, running parallel to County Road 61.	Addresses commenter concern. Alternative recommended would impact new property owners.		121	PC	1.91
RA-47	Carlton	Carlton County	Route alternative requested moving the pipeline south to avoid a grove of trees.	Addresses commenter concern regarding distance from the trees. Alternative would not impact new property owners.	4/4 #10		ELO	0.85
RA-48	Carlton	Carlton County	Commenter suggested shifting the pipeline to the other side of I-35 to avoid cutting off access road.	Addresses commenter concerns regarding road access. Alternative recommended would impact new property owners.		68	PC	1.28
RA-49	Carlton	Carlton County	Commenter requested to follow the south sides of I-35 and Highway 61 to distance pipeline from multiple properties.	Addresses commenter concern. Alternative recommended would impact new property owners.		162	PC	5.96
RA-50	Carlton	Carlton County	Commenter requested to reduce the number of Blackhoof River crossings.	Addressed commenter concern reducing river crossings down from 4 to 1. Increases wetland and greenfield impacts. Alternative would not impact new landowners	4/4 #11		PC	0.56
RA-51	Aitkin	Carlton County	Commenter proposed shifting the pipeline north to follow the tree line and distance it from homesteads.	Addresses commenter concern regarding distance from home. Alternative recommended would impact new property owners.		1	PC	1.41
RA-52	Aitkin	Carlton County	Commenter proposed shifting the pipeline north to follow the tree line and distance it from homesteads.	Addresses landowner concern regarding distance from home. Alternative would impact new property owners.		1	PC	0.84
RA-53	Carlton	Carlton County	Enbridge requested route alternative to avoid multiple crossings of an overhead power line.	Addresses crossing concerns and reduces the number of property owners impacted. Also, has about the same environmental impacts as the original route.	4/4 #12		ED	0.20
RA-54	Carlton	Carlton County	Commenter suggested locating the pipeline closer to an existing natural gas line.	Addresses commenter concerns regarding co-locating the pipeline. Reduces impacts to greenfield; no new property owners impacted.	4/4 #13		ELO	0.31

[1] Comment: The comment column is a summary of the issue that was identified in the comment submitted during notice period.
[2] Justification: The justification column describes why the route alternative is being carried forward for further analysis.
[3] Enbridge Alternative: The Enbridge alternative column tracks routes developed to address commenter concerns by Enbridge according to their letter submittal dates of 4/4 or 5/30.

[4] Comment Source: PC = Public comment submitted route during comment period; EPC = Public comment submitted route during comment period, Enbridge submitted route that addresses the comment; ELO = Enbridge submitted route that addresses an unknown landowner concern; ED = Enbridge submitted route that addresses an engineering design concern

Recommended Route Alternatives

Fifty-four route alternatives were proposed by Enbridge, agencies and stakeholders. Fifty-three of the 54 route alternatives are recommended to be carried forward for analysis in the CEA. Route alternative RA-31 is not recommended to be carried forward, because the same landowner offered two other route alternatives that addressed similar concerns.

In general, a width of 500 feet is recommended to be used to analyze the proposed and alternate routes in the CEA. In most cases, this width provides ample room for the development of a centerline. However, there are several areas where a wider width would be beneficial to the analysis, due to existing conditions or the presence of multiple route alternatives in close proximity to each other. These areas are listed below. Widths of up to 6,500 feet are recommended for analysis in these areas.

Wider Analysis Areas

CARLTON COUNTY 1

Eight route alternatives (RA-42 to RA-49) were suggested in an area surrounding several existing pipelines, Highway 61, and Interstate-35 in Carlton County (Figure 7). A width ranging from 2,500 feet to 6,500 feet would allow for flexibility in using different parts of the route alternatives to develop a route that minimizes impacts.

CARLTON COUNTY 2

Carlton County 2 is a smaller area adjacent to Carlton County 1 and encompasses three route alternatives (RA-50, 51, and 52) that deviate slightly from the proposed route (Figure 7). A width of 1,500 feet to 2,500 feet would allow for analysis of these alternatives.

AITKIN COUNTY

Four route alternatives (RA-33 to RA-36) were suggested in Aitkin County along Highway 65 (Figure 8). A width of 1,500 feet to 4,700 feet would allow for flexibility in comparing the alternatives and developing a route that minimizes impacts.

SPIRE VALLEY AQUATIC MANAGEMENT AREA

The DNR requested that a wider route alternative width be analyzed in this area (RA-20) to minimize potential impacts to the Spire Valley fish hatchery, due to construction activities (Figure 9). The width recommended for this area is 3,000 feet.

CROW WING CHAIN WILDLIFE MANAGEMENT AREA (CROW WING WMA)

The DNR expressed concerns regarding the crossing of the Crow Wing Chain WMA (RA-16) because of deed restrictions associated with gifted properties from the Nature Conservancy to the State. Enbridge provided a route alternative in late June to avoid the WMA. A width of 9,400 feet is recommended, which would provide flexibility in further developing a route in the area of the WMA (Figure 10).

LASALLE CREEK

Two similar route alternatives (RA-09 and 10) were suggested to minimize impacts to Big LaSalle Lake and LaSalle Creek (Figure 11). A 6,500 foot width is recommended to allow for flexibility to avoid impacts to Big LaSalle Lake and LaSalle Creek.

NORTHERN PIPELINES

Numerous commenters, including the DNR and PCA, expressed interest in analyzing existing pipeline corridors (Enbridge and Great Lakes) that run generally along Highway 2 from Clearbrook to Superior (RA-7 and 8). A width of 500 feet to 6,500 feet would allow flexibility in following the existing pipelines, railroad, and/or Highway 2 and is based on the proximity of the existing infrastructure to each other.

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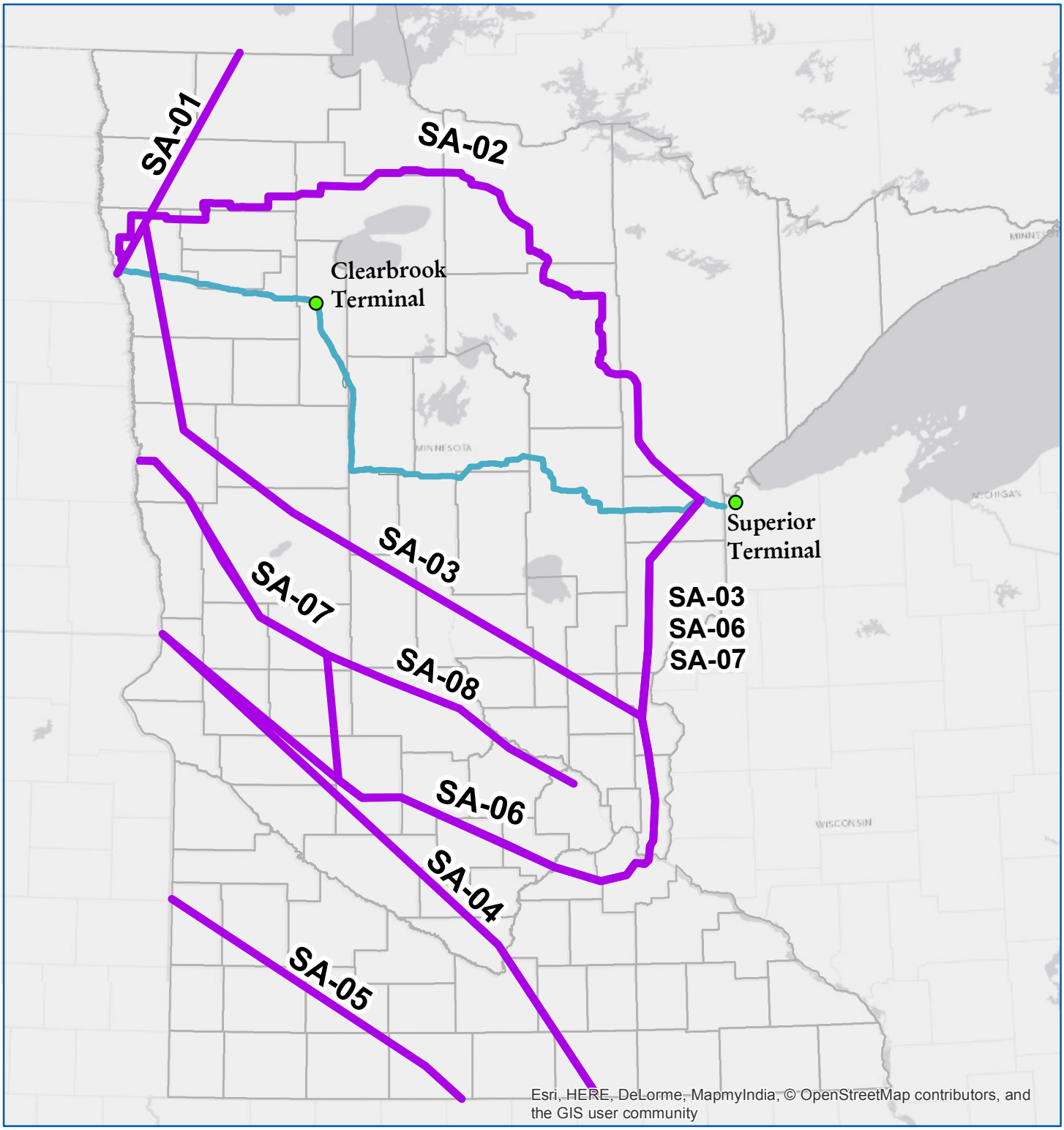
Figure 1 System Alternatives
Sandpiper Alternatives Summary



Legend

- System Alternative
- System Alternative Connector
- Sandpiper Proposed Route
- County Boundary

0 100 Miles

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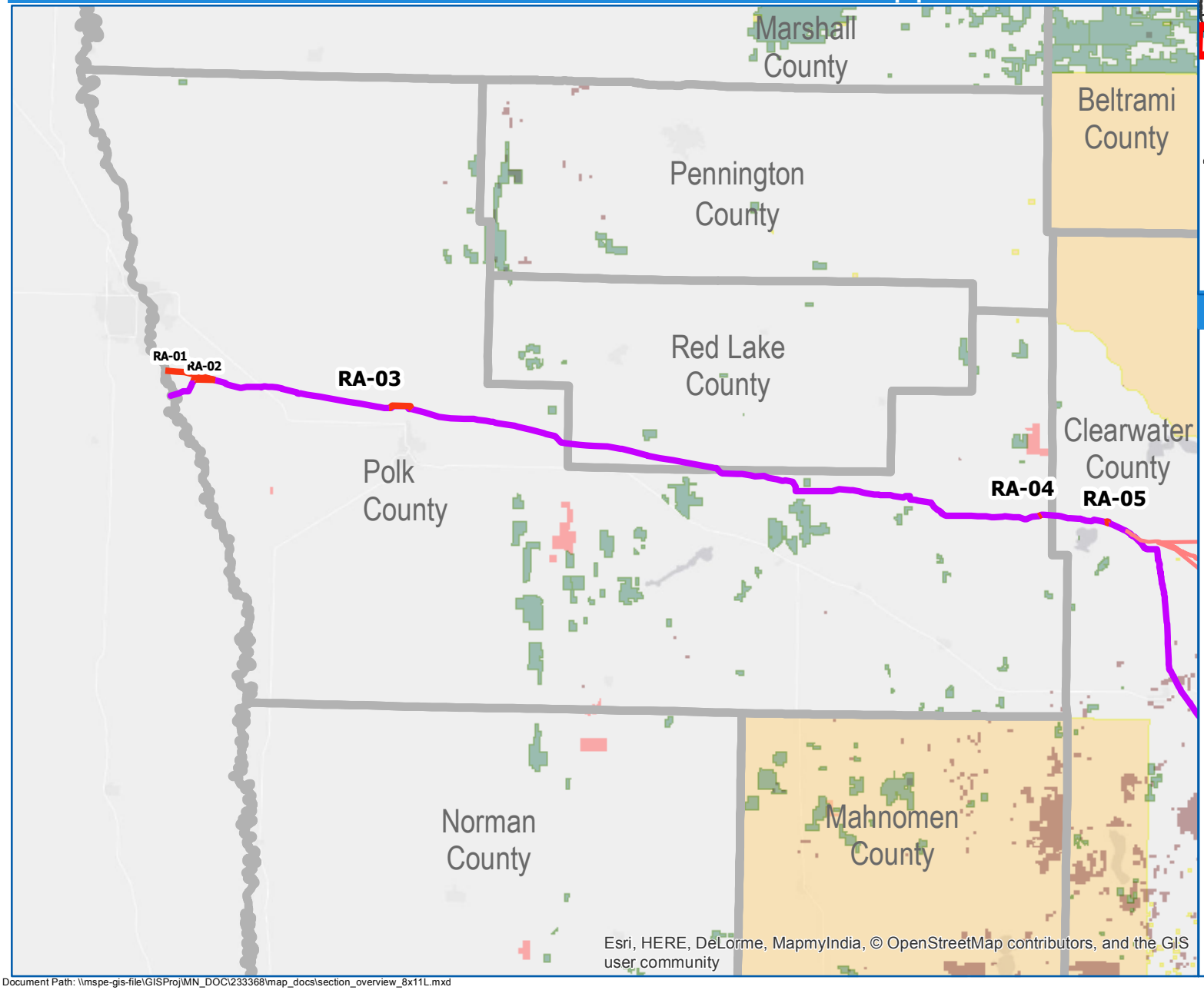
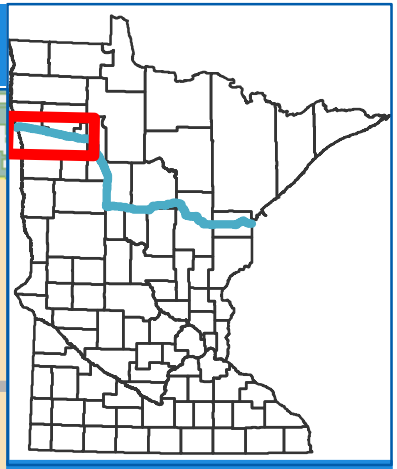
Figure 2 North Dakota to Clearbrook
Sandpiper Route Alternatives





Legend

- Sandpiper Route Alternative
- Sandpiper Proposed Route
- Adjacent Route Alternatives
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- Soo Line ATV Trail
- County Boundary

0 10 Miles

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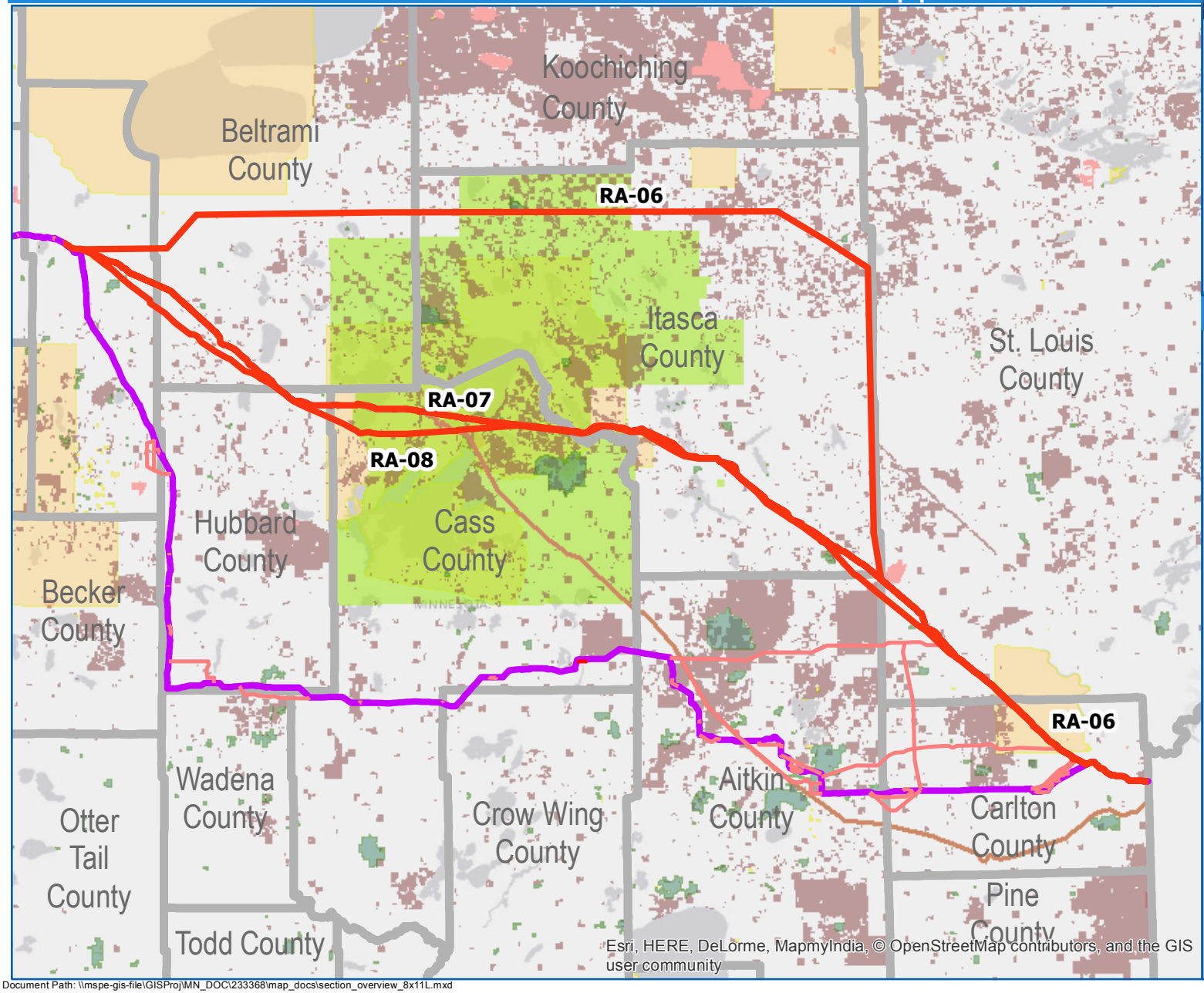
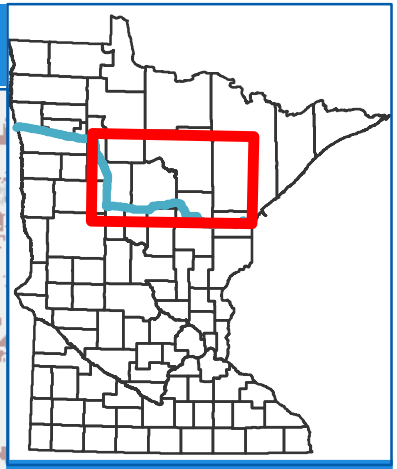
Figure 3 Clearbrook to Wisconsin Sandpiper Route Alternatives





Legend

- Sandpiper Route Alternative
- Sandpiper Proposed Route
- Adjacent Route Alternatives
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- Soo Line ATV Trail
- County Boundary

0 25 Miles

HDR

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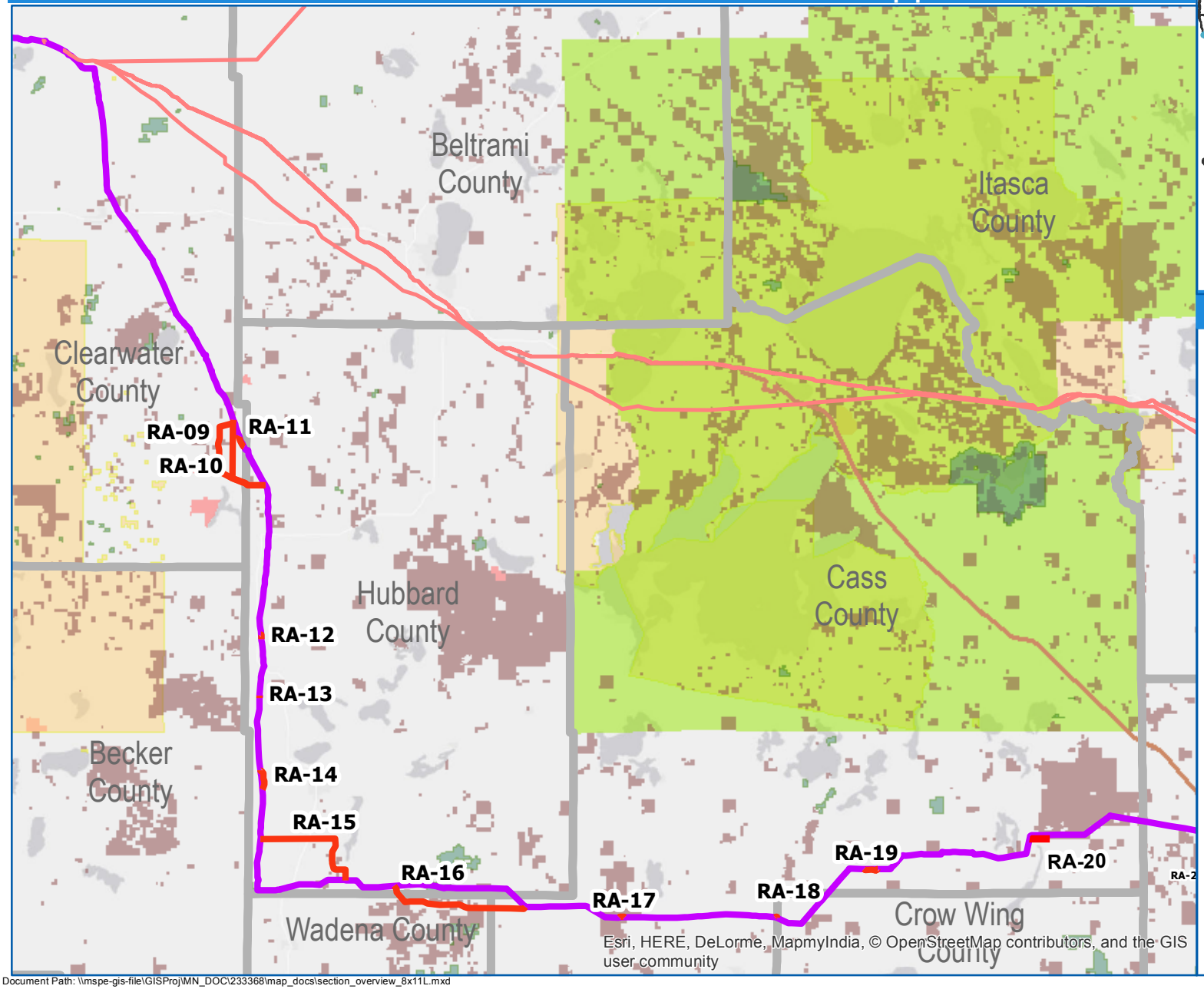
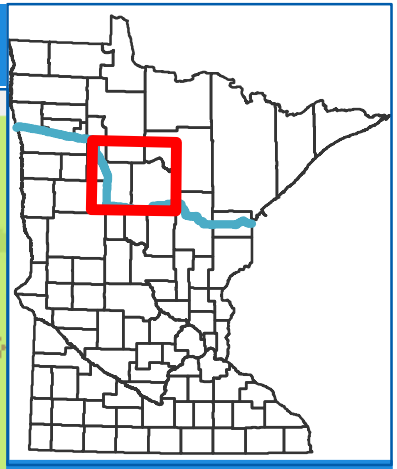
Figure 4 Clearbrook to Aitkin County
Sandpiper Route Alternatives





Legend

- Sandpiper Route Alternative
- Sandpiper Proposed Route
- Adjacent Route Alternatives
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- Soo Line ATV Trail
- County Boundary

0 10 Miles

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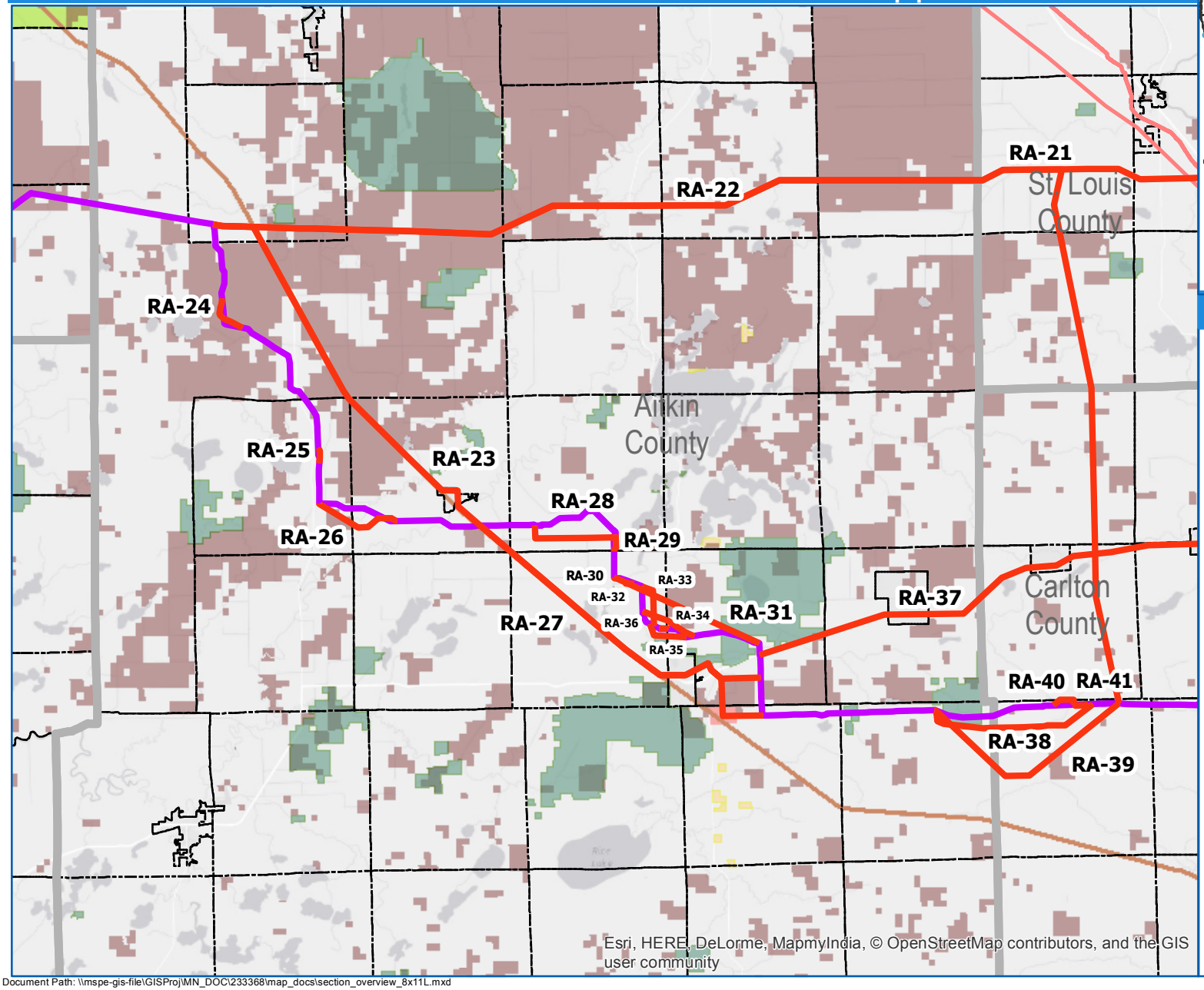
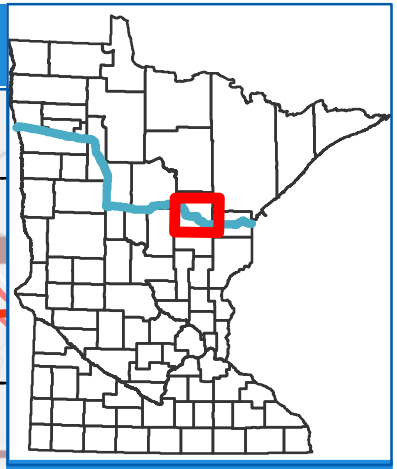
Figure 5 Aitkin County Sandpiper Route Alternatives





Legend

- Sandpiper Route Alternative
- Sandpiper Proposed Route
- Adjacent Route Alternatives
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- Soo Line ATV Trail
- County Boundary
- City / Township Boundary

0 8 Miles

N

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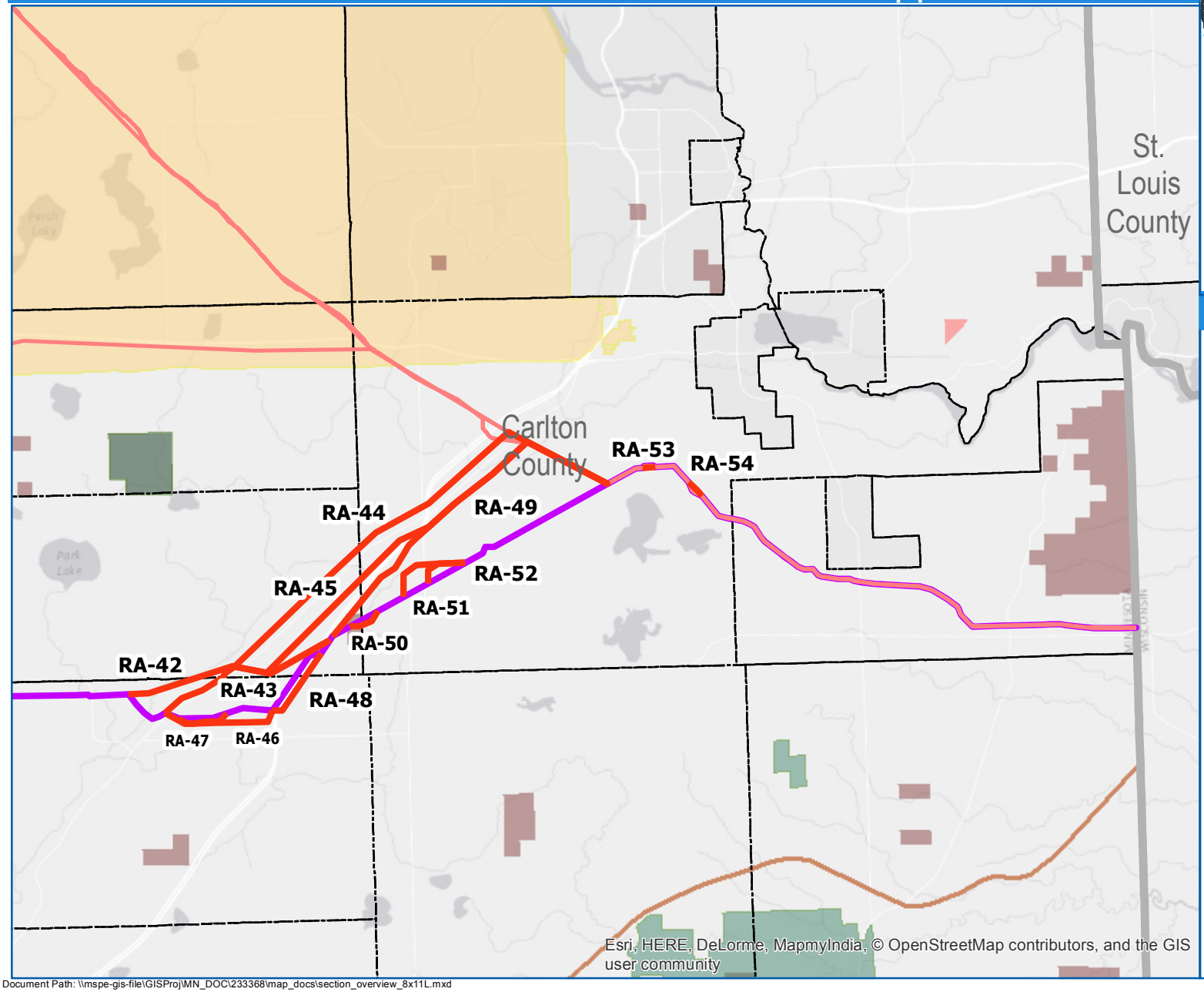
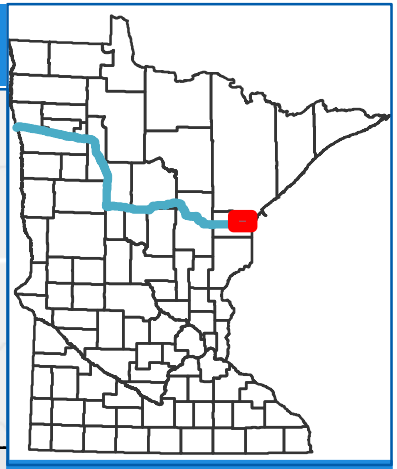
Figure 6 Carlton County Sandpiper Route Alternatives





Legend

- Sandpiper Route Alternative
- Sandpiper Proposed Route
- Adjacent Route Alternatives
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- Soo Line ATV Trail
- County Boundary
- City / Township Boundary

0 3 Miles

N

HDR

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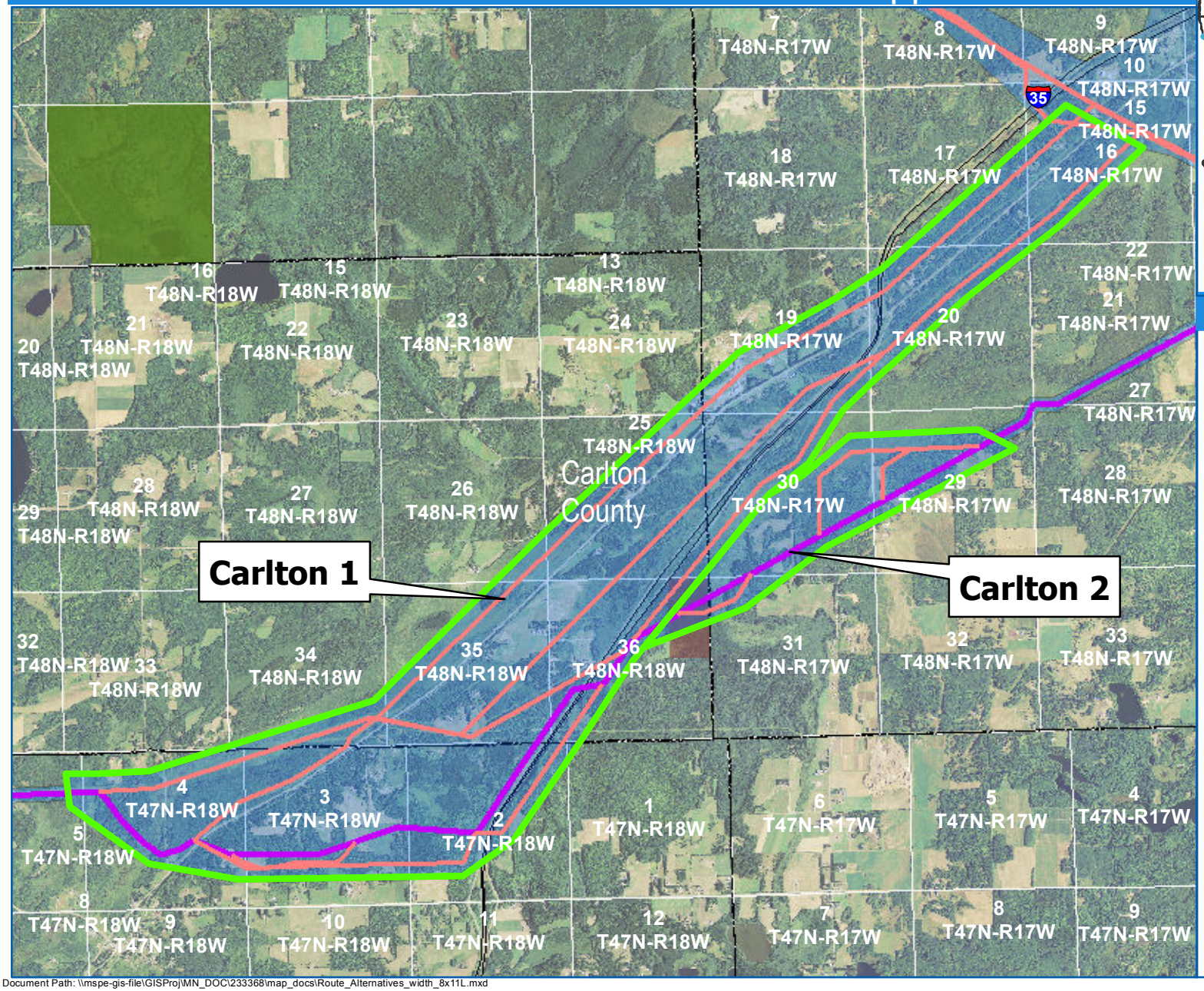
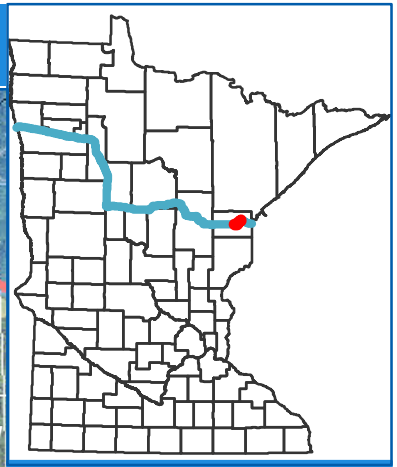
Figure 7 Carlton 1 and 2
Sandpiper Wider Route Areas





Legend

- Sandpiper Proposed Route
- Route Alternatives
- Areas where route is wider
- Route Alternative Width
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- County Boundary
- City / Township Boundary

Carlton 1	Carlton 2
RA-42	RA-50
RA-43	RA-51
RA-44	RA-52
RA-45	
RA-46	
RA-47	
RA-48	
RA-49	

0 1 Miles

N

HDR

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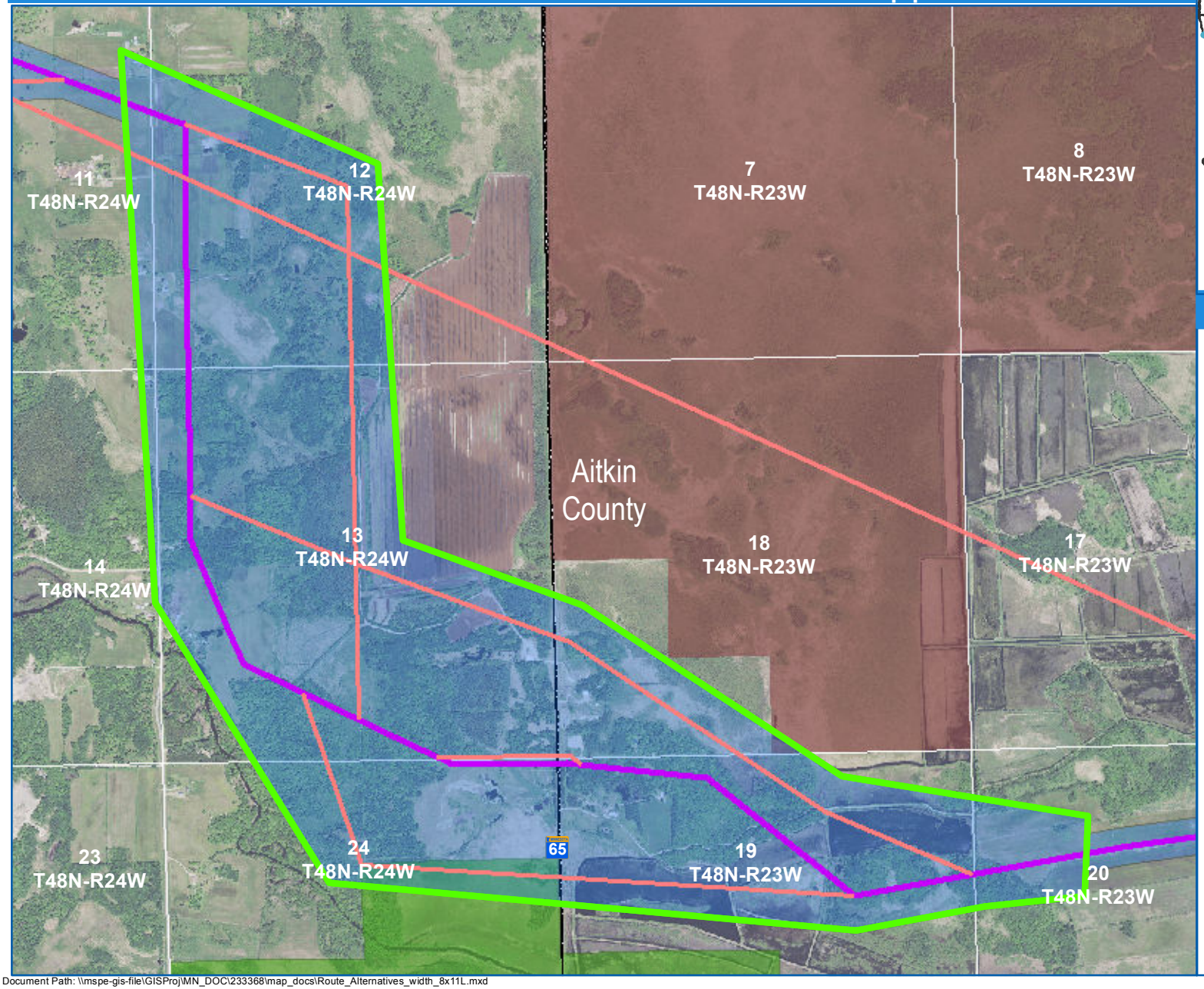
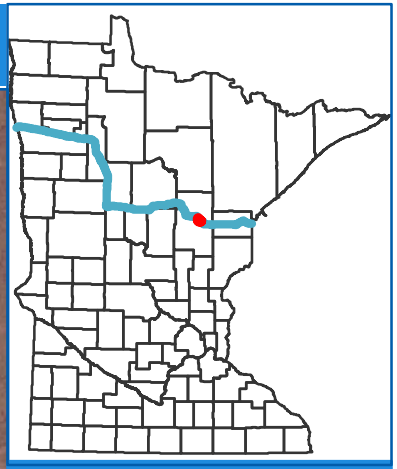
Figure 8 Aitkin County
Sandpiper Wider Route Areas





Legend

- Sandpiper Proposed Route
- Route Alternatives
- Areas where route is wider
- Route Alternative Width
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- County Boundary
- City / Township Boundary

Aitken County

RA-33
RA-34
RA-35
RA-36

0 0.5 Miles

N

HDR

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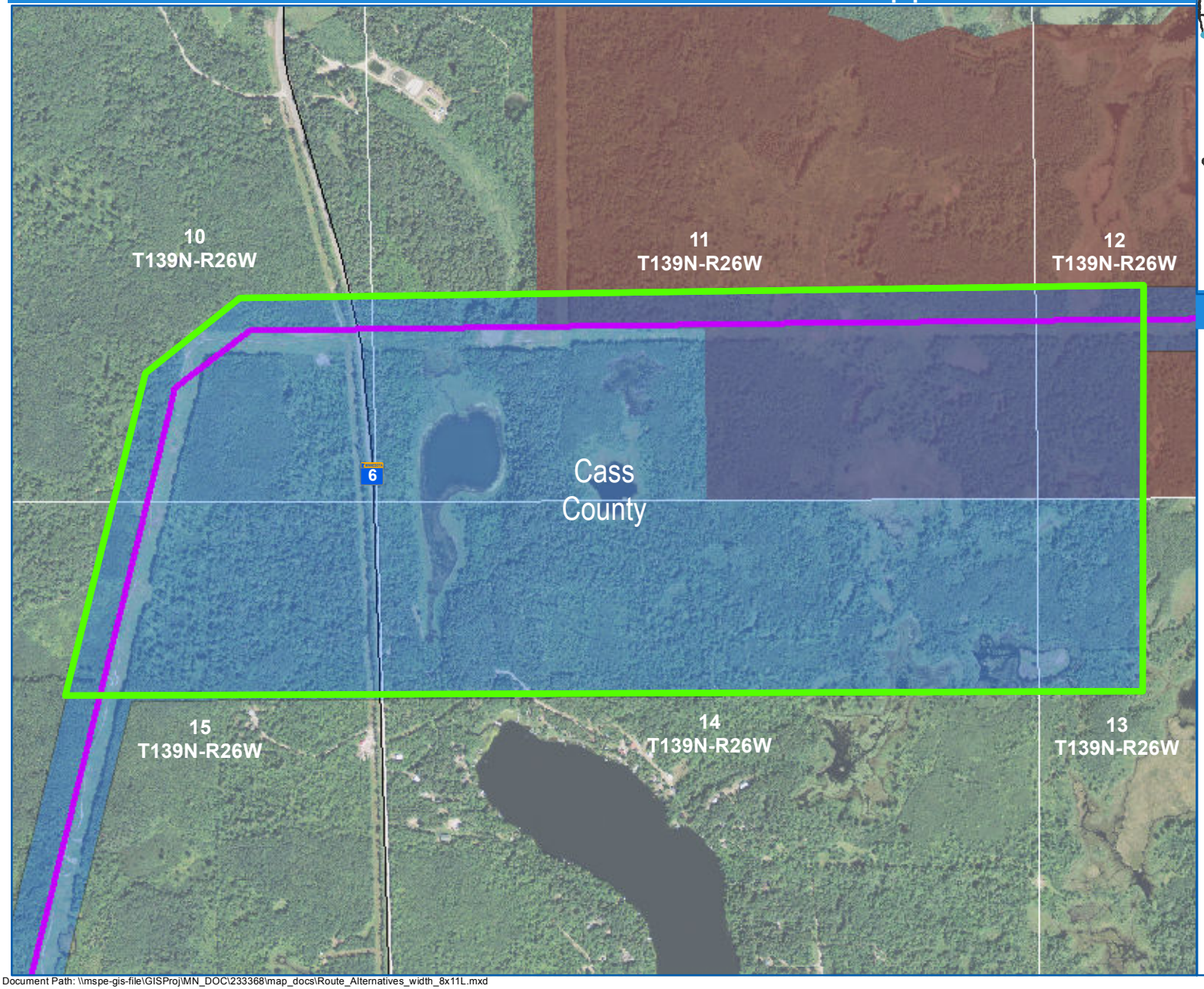
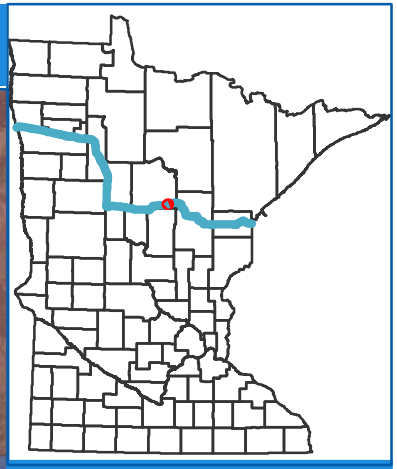
Figure 9 Spire Valley AMA
Sandpiper Wider Route Areas





Legend

- Sandpiper Proposed Route
- Route Alternatives
- Areas where route is wider
- Route Alternative Width
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- County Boundary
- City / Township Boundary

Spire Valley AMA

RA-20

0 0.3 Miles

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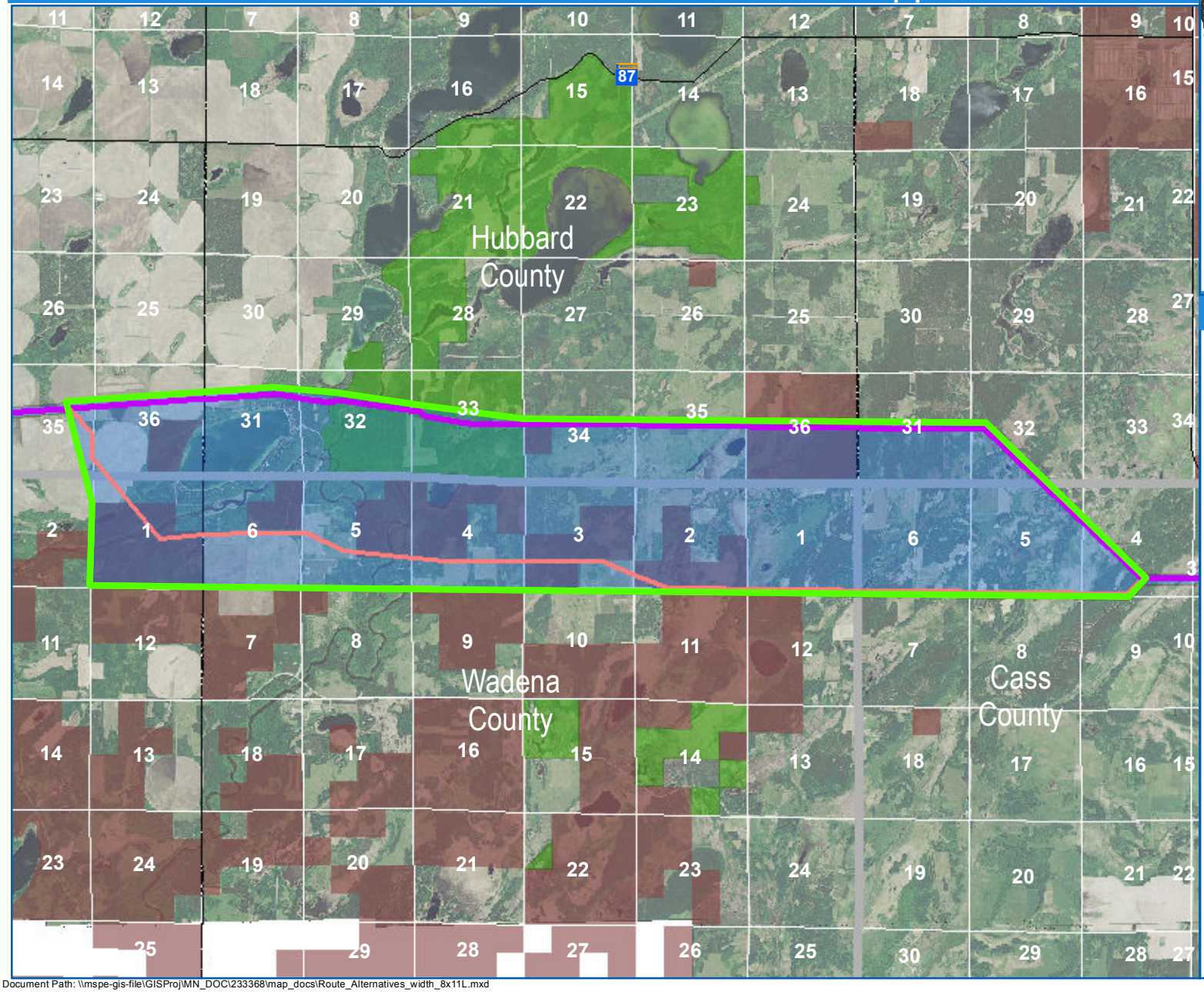
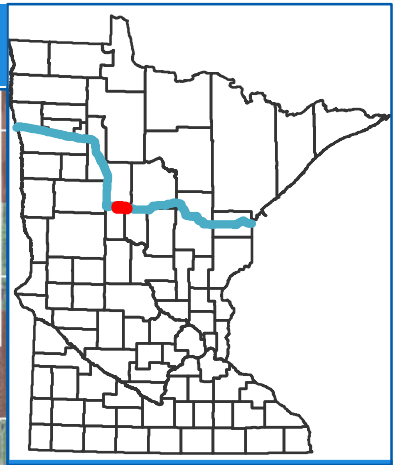
Figure 10 Crow Wing Chain WMA
Sandpiper Wider Route Areas





Legend

- Sandpiper Proposed Route
- Route Alternatives
- Areas where route is wider
- Route Alternative Width
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- County Boundary
- City / Township Boundary

Crow Wing Chain WMA

RA-16

0 1.5 Miles

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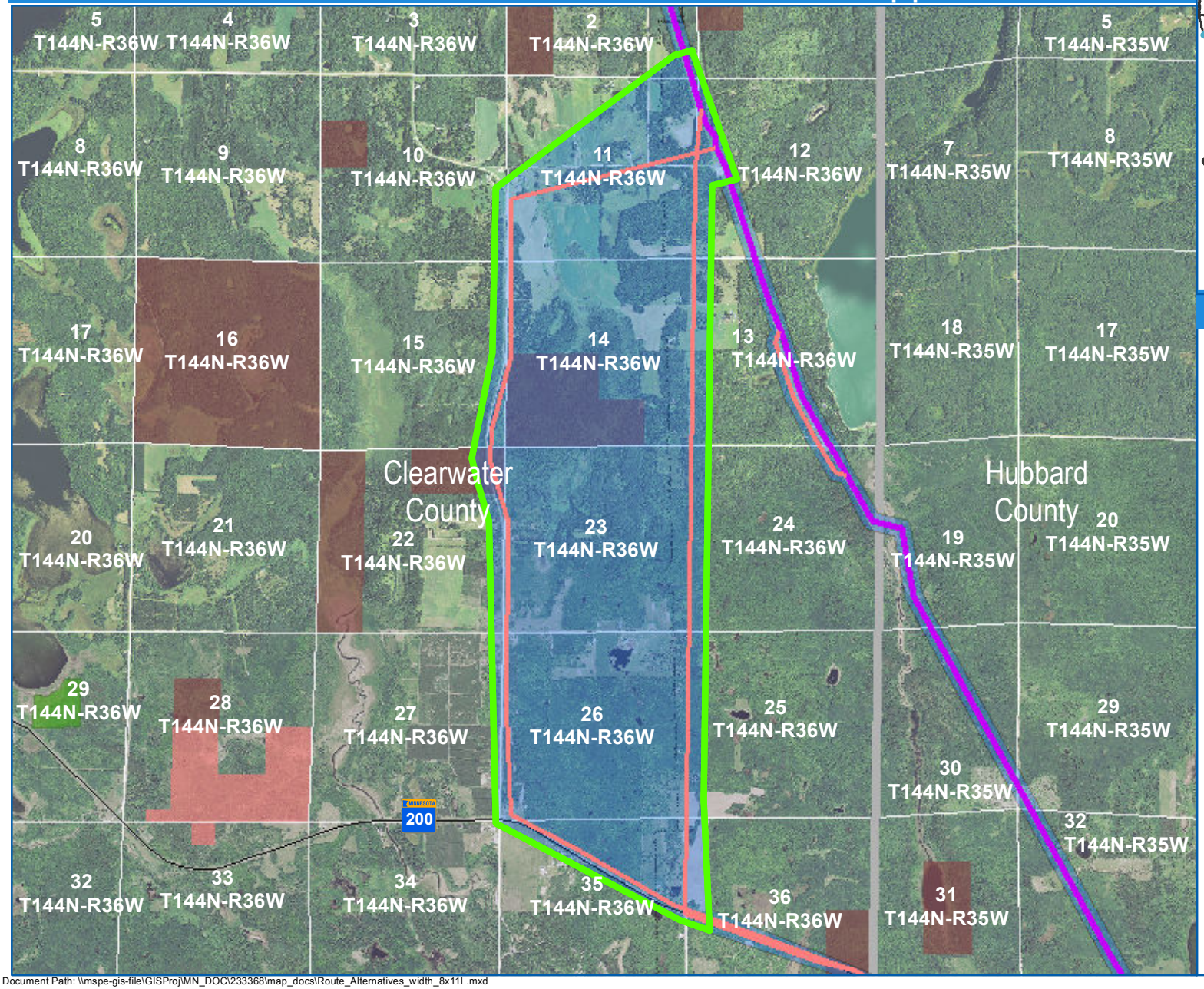
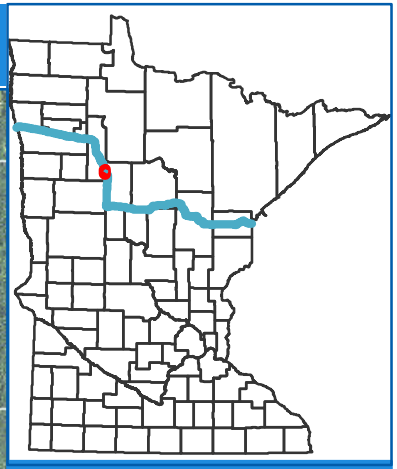
Figure 11 LaSalle Creek
Sandpiper Wider Route Areas





Legend

- Sandpiper Proposed Route
- Route Alternatives
- Areas where route is wider
- Route Alternative Width
- Reservation Boundary
- Chippewa National Forest
- Scientific & Natural Area
- Wildlife Management Area
- State Forest
- County Boundary
- City / Township Boundary

LaSalle Creek

RA-09
RA-10

0 1 Miles

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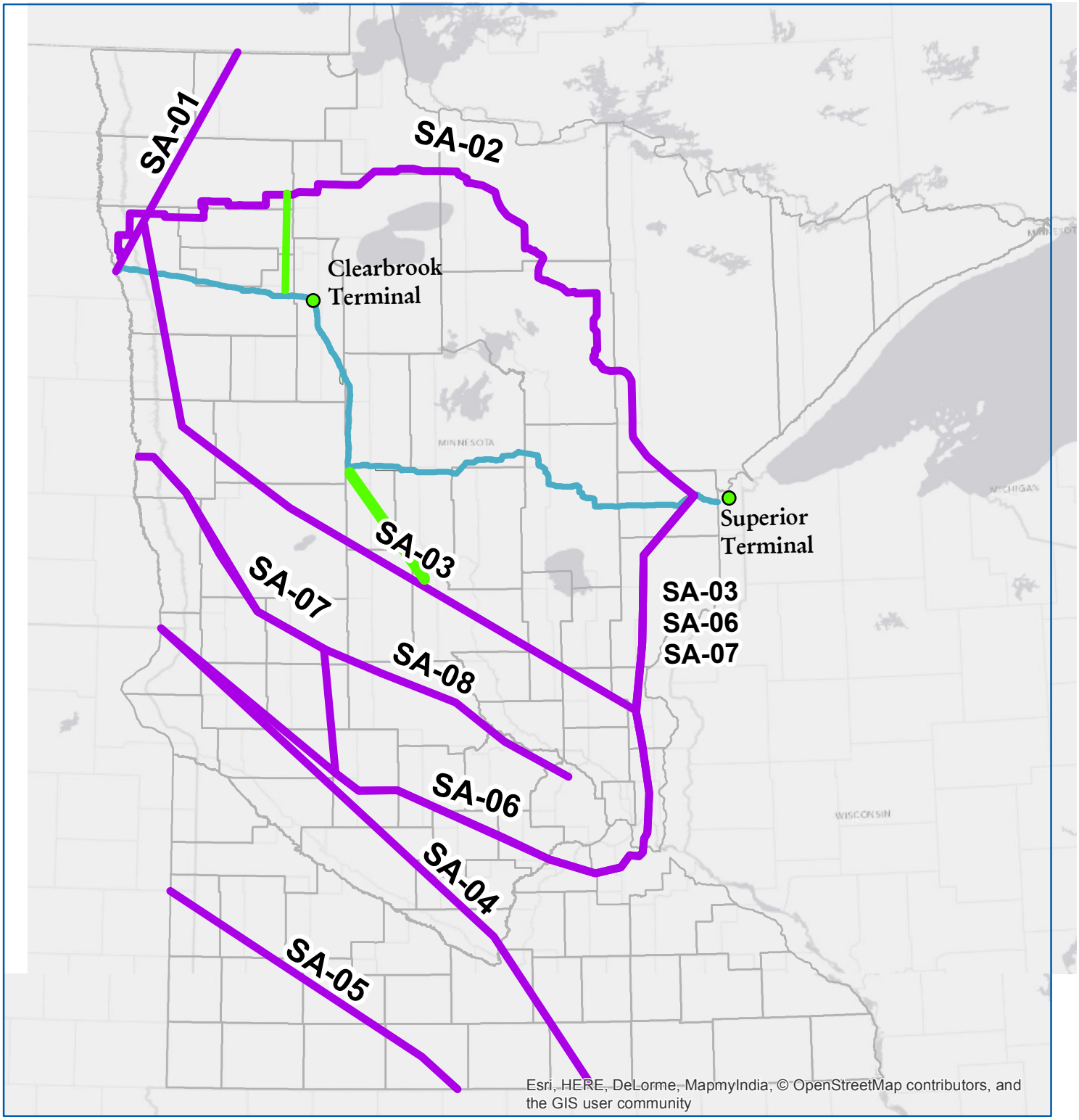
SA-02 and 03 System Alternative Connector Segments



Legend

- System Alternative
- System Alternative Connector
- Sandpiper Proposed Route
- County Boundary

0 100 Miles

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From: Ek, Scott (PUC) [mailto:Scott.Ek@state.mn.us]
Sent: Monday, May 12, 2014 3:23 PM
To: willis mattison
Subject: RE: Certificate of Need Criterion

Dear Mr. Mattison:
There is no separate document prepared to address Minn. Rules 7853.0130. Rather the evidence on record that is amassed through the certificate of need proceedings is used to make such decisions. Once the process gets closer to the contested case hearing process information such as testimony, rebuttal, and surrebuttal will be filed by the applicant, the Department of Commerce Division of Energy Resources, and Intervenors to the process. There is also the opportunity for the public to provide comments orally at the public hearings and during a prescribed comment period. The administrative judge will use the evidence on record to prepare a report for the Commission to use in making its final determination. As stated in the Commission's February 11, 2014, Order on Certificate of Need Application Completeness:

> *VI. Issues to be Addressed*
> *The ultimate issue in this case is whether NDPC's proposed pipeline meets the need criteria set forth in Minn. Stat. § 216B.243 and Minn. Rules Chapter 7853. This issue turns on numerous factors that are best developed in formal evidentiary proceedings. The parties to this proceeding should address whether the proposed project meets these criteria and address these factors. The parties may also raise and address other issues relevant to the application.*

I hope this helps to answer your questions.
Sincerely,
Scott E. Ek
Minnesota Public Utilities Commission
121 7th Place East, Suite 350 | St. Paul, MN 55101
(651) 201-2255 | scott.ek@state.mn.us | www.puc.state.mn.us
From: willis mattison [mailto:mattison@arvig.net]
Sent: Saturday, May 10, 2014 11:06 AM
To: Ek, Scott (PUC)
Cc: Pile, Deborah (COMM)
Subject: Certificate of Need Criterion
Thanks Scott,
I will pursue the answers to my previous questions on pipeline routing with the DOC.
However, on another matter, I realize that the DOC will prepare the Comparative Environmental Analysis for the pipeline routing process but is there a separate document prepared for the PUC that demonstrates the provisions of Mn Rule 7853.0130 CRITERIA are satisfied? If so, who prepares that document and when is it available for public review and comment? As you might expect I'm most interested in the provision of Section B of that rule.
Does the PUC staff or others (DOC staff)gather and enter into the "record" evidence of impacts of the proposed project and its alternatives including the "no action" alternative? Or is this largely left to the public, as with pipeline routing, to identify the reasonable alternatives and compare impacts to the proposed project

(pipeline)? I've copied Deborah Pile w/ DOC on these questions as well in the event she has information that will assist me in understanding the different ways environmental impacts are considered in both routing and CON proceedings.

Thanks,

Willis Mattison

> **B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant, considering:**
>
> > **(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;**
> >
> > **(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;**
> >
> > **(3) the effect of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and**
> >
> > **(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;**

From: Ek, Scott (PUC) [mailto:Scott.Ek@state.mn.us]
Sent: Friday, May 09, 2014 11:51 AM
To: mattison@arvig.net
Cc: Eknes, Bret (PUC)
Subject: RE: Download Problems

Dear Mr. Mattison:

Due to ex parte communication restrictions Commission staff does not meet with individual persons, parties, or groups to discuss the material issues of a project or alternative to a project in matters pending before the Commission and that are referred to the Office of Administrative Hearings. Commission staff is, however, able to discuss issues related to procedural matters.

As you know, the current comment period for the submission of alternative routes ends on May 30, 2014. Relatively soon after the close of the comment period the Commission will meet to decide which alternatives should proceed to hearing for consideration as well as the analysis in the comparative environmental analysis to be prepared by the Department of Commerce. Therefore, Commission staff is unable to discuss subject matter related to the merits of alternative routes. Commission staff is, however, able to discuss issues related to procedural matters.

I would suggest that you contact Larry Hartman at the Department of Commerce to discuss your questions regarding the requirements of alternative route submittals and preparation of the comparative environmental analysis, as they are not subject to ex parte communication requirements and is the agency tasked with preparing the comparative environmental analysis.

Please feel free to contact me with any additional questions that you may have.

Sincerely,

Scott E. Ek
Minnesota Public Utilities Commission
121 7th Place East, Suite 350 | St. Paul, MN 55101
(651) 201-2255 | scott.ek@state.mn.us | www.puc.state.mn.us
From: willis mattison [mailto:mattison@arvig.net]
Sent: Friday, May 09, 2014 10:21 AM
To: Ek, Scott (PUC)
Cc: Richard Smith; Hartman, Larry (COMM); staff, cao (PUC); Pile, Deborah (COMM)
Subject: RE: Download Problems

Thanks Scott, the staff got right on my complaint and got the server back up and running in short order.

On another matter, Friends of the Headwaters has been asking for meetings with DOC and PUC staff regarding the final development of alternative routes for Sandpiper per discussions with Larry Hartman, Deb Pile and others at the pre-hearing scheduling Conference call back in March. Richard Smith, President of FOH has sent several letters and email to your Departments without response. As Technical Advisor to FOH, I'm intervening in their behalf to see if we can move forward with clear, and frequent communication with department staff and this large citizen organization formed to focus on and be involved in this important decision making process.

As you know, one of the reasons for all the requests for extended comment period on routes was the time required to meet the overwhelming justification requirements in adm rules for getting any alternative routes to qualify for PUC adoption into the routing process. We did finally get the GIS Shapefiles for the preferred route and have developed a Shapefile for our alternative route "A", our top priority for PUC consideration. But, our technical person with GIS capability underwent back surgery this month, has been in re-hab since, and has been unable to make much progress past that point.

We would like to sit down with staff (DOC and PUC) to work out the details for completing these alternatives as soon as possible.

We also have some procedural information requests regarding the DOC's retention of outside consultants for the CEA preparation including the requests for qualifications and requests for proposals. We all recognize that these documents are crucial to the nature and scope of the work to be included in a CEA or and EIS. Transparency of these documents and procedural steps is essential to building public trust in the process, a commodity that has suffered some serious setbacks over the months since startup of Sandpiper. Some of the mistrust is a carry-over from Alberta Clipper and MinnCan that pretty much flew under the pubic radar in Northern Minnesota until piles of pipe began to accumulate along rights of way.

Can you assist us in gaining access to these steps of the process and securing the promised assistance in developing the proposed alternative route supporting analysis with your staff and with DOC? We will develop a more complete agenda for the requested meeting for staff so they can prepare for a more productive discussion but we first have to secure the intention to meet by negotiating a time/ place and date. How can we move forward on this?

Willis Mattison, Tech Adv.

Friends of the Headwaters

From: Ek, Scott (PUC) [mailto:Scott.Ek@state.mn.us]
Sent: Friday, May 09, 2014 9:39 AM
To: willis mattison
Subject: RE: Download Problems

Hello Mr. Mattison,
Attached is the document you were trying to download. It is my understanding that there are some technical problems with the eDocket system at this time. I believe they are currently working to fix.
Sincerely,
Scott E. Ek
Minnesota Public Utilities Commission
121 7th Place East, Suite 350 | St. Paul, MN 55101
(651) 201-2255 | scott.ek@state.mn.us | www.puc.state.mn.us
From: willis mattison [mailto:mattison@arvig.net]
Sent: Friday, May 09, 2014 8:40 AM
To: Admin, EService (PUC)
Cc: Ek, Scott (PUC)
Subject: Download Problems
This document cannot be downloaded at my end. Can you fix?
You have subscribed to receive documents in the following matter. A new document has been submitted.
Submission Number: 20145-99328
Docket Number: PL6668/PPL-13-474
Docket Type: Petroleum Pipeline
Docket Description: Sandpiper Pipeline Project
Document Type: Public Comment
Received Date: 05/08/2014
On behalf of: puc

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

REPLY TO
ATTENTION OF

December 17, 2015

Operations Division
Regulatory Branch (2013-00934-WAB)

Mr. Bobby Hahn
Enbridge
26 East Superior Street, Suite 313
Duluth, Minnesota 55802

Dear Mr. Hahn:

This letter concerns the completeness review of your application for Department of the Army authorization to construct the Sandpiper pipeline project in waters of the U.S. and across navigable waters of the U.S. The portion of the project described in the application and subject to St. Paul District review extends from the Minnesota-North Dakota border to Superior, Wisconsin.

Supplemental application information was provided to the Corps on October 13 and October 30, 2015. With the receipt of the supplemental information, the application is considered complete. However, per your request, the Corps will not issue a public notice at this time.

If you have any questions, contact Bill Baer in our Bemidji office at (651) 290- 5338 or William.a.baer@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

William Baer

for Benjamin R. Cox
Chief, Northwest Section

cc: Linda Fisher, Fredrikson & Byron
John Muehlhausen, Merjent

Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-40_

August 21, 2014

Burl Haar, Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul MN 55101-2147

Re: Sandpiper Pipeline Project – System Alternatives
PUC Docket Numbers: PL-6668/CN-13-473 (Certificate of Need)
PL-6668/PPL-13-474 (Route Permit)

The Minnesota Department of Natural Resources (DNR) previously provided input regarding the Pipeline Routing Permit Application and scoping for the Comparative Environmental Assessment (CEA) for the Sandpiper Pipeline Project. During the comment periods ending April 4, 2014 and May 30, 2014, the DNR requested further analysis of a number of routes and route segments in the relative vicinity of the Preferred Route proposed by the North Dakota Pipeline Company. The DNR also attended the August 7, 2014 PUC Agenda Meeting regarding routing alternatives. We appreciate the Public Utilities Commission (PUC) determination that routes identified in DNR letters will be further analyzed in the CEA. The following comments are submitted regarding the topic of "system alternatives," generally defined as routes that do not share one or both of the Preferred Route Clearbrook, Minnesota and Superior, Wisconsin terminals.

Though the DNR review did not focus on system alternatives, our previous letter stated that the DNR "supports the efforts of state and federal resource agencies to encourage analysis of topics including various routes in the event of a leak, leak risk analysis, and reducing impacts to wetlands, lakes and streams." The Preferred Route for the Sandpiper Project is proposed in a region of the state that contains a concentration of important lakes for fisheries, trout streams, sensitive aquifers, pubic conservation lands, and mineral and forestry resources. The DNR is also concerned about "greenfield" routing along areas without previous disturbance.

Considering the current demand for transportation of oil from North Dakota and the Enbridge Line 3 project proposed to follow the Sandpiper Pipeline route, the Sandpiper route could become a new corridor for multiple pipelines. Therefore, the DNR encourages the PUC to strongly consider analysis of one or more system alternatives having fewer environmental and natural resource impacts than the Preferred Route in addition to route alternatives approved for inclusion in the CEA. Environmental review of one or more system alternatives should be equivalent to the analysis conducted for route alternatives. If a system alternative is included in the scope of an environmental review document, the DNR encourages interagency coordination so that the DNR can provide data regarding a new corridor prior to environmental review document publication.

Thank you for the opportunity to provide these additional comments regarding system alternatives.

Sincerely,

Jamie Schrenzel
Principal Planner
Environmental Review Unit
(651) 259-5115

cc: Larry Hartman, Minnesota Department of Commerce
Patrice Jensen, Minnesota Pollution Control Agency
Sara Ploetz, Enbridge

US Army Corps of Engineers
St. Paul District

Information Paper

Regulatory Program: Enbridge, Inc., Sandpiper Pipeline, Minnesota/Wisconsin

Contact

William A. Baer, Project Manager
(651) 290-5338
william.a.baer@usace.army.mil

Description

Enbridge, Inc. proposes to construct the Sandpiper Pipeline, an interstate crude oil pipeline of 24" or more in diameter, originating at the Beaver Lodge Station south of Tioga, North Dakota, connecting through the Enbridge terminal and tank farm in Clearbrook, Minnesota, and ending at the Enbridge terminal in Superior, Wisconsin. Environmental impacts associated with the proposal have not yet been identified.

Background

The proposed project would transport crude oil from the Bakken Formation in North Dakota to the Superior, Wisconsin, terminal. At Superior, Enbridge connects to various other pipelines, expanding access to refinery markets in the U.S. Midwest and beyond. The project's initial capacity would be 225,000 barrels per day (bpd) into Clearbrook, Minnesota, and 375,000 bpd into Superior, Wisconsin.

Enbridge has reported a planned in-service date of the first quarter of 2016 for the proposed project.

Two general corridor segments have been considered within Minnesota, connecting Clearbrook to Superior. Approximately 30 miles of the southern route would be established along a new landscape corridor. The overall project would cross approximately 65 miles of aquatic resources following this route. The southern Minnesota route is approximately 230 miles long and would be co-located with approximately 90 miles of existing pipelines and 110 miles of electrical transmission lines. The northern Minnesota route is approximately 185 miles long and would generally follow existing Enbridge pipelines.

Following the northern alignment, the overall proposed project is estimated to cross approximately 70 miles of aquatic resources. In July 2013, Enbridge informed the U.S. Army Corps of Engineers (Corps) that they do not consider the northern route to be viable based on failed negotiations with the Leech Lake Band of Ojibwe regarding a new pipeline crossing their reservation.

Proposed impacts to waters of the U.S. would be evaluated by the Corps Omaha District for crossings in North Dakota, and by the Corps St. Paul District for crossings in Minnesota and Wisconsin, pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899

Status

The Corps has not yet received a permit application from Enbridge. However, Enbridge staff and consultants have met with Corps St. Paul District and Omaha District staff to discuss the proposal. The Corps has assembled an internal team of personnel responsible for subsequent permitting, National Environmental Policy Act (NEPA) compliance, wetland delineation review, and other assignments.

Authority

Section 404 of the Clean Water Act of 1977 and Section 10 of the Rivers and Harbors Act of 1899.

Minnesota Center for
Environmental Advocacy

Using law, science, and research to protect Minnesota's environment, its natural resources, and the health of its people.

26 East Exchange Street - Suite 206
Saint Paul, MN 55101-1667

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651.223.5967 fax

info@mncenter.org
www.mncenter.org

March 9, 2016

Dan Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

VIA ELECTRONIC SERVICE

Re: *In the Matters of the Application of Enbridge Energy, Limited Partnership for a Certificate of Need and Routing Permit for the Line 3 Replacement Project in Minnesota from the North Dakota Border to the Wisconsin Border* and *of the Applications of North Dakota Pipeline Company LLC for a Certificate of Need and Pipeline Routing Permit for the Sandpiper Pipeline Project.*

MPUC Docket Nos. PL-9/CN-14-916; PL-9/PPL-15-137
PL-6668/CN-13-473; PL-6668/PPL-13-474
OAH Docket Nos. 65-2500-32764
8-2500-31260; 8-2500-31259

Dear Mr. Wolf,

In connection to the above-captioned dockets please find the enclosed Motion To Order The Department Of Commerce To Renegotiate The Memorandum Of Understanding And To Establish An Expert Advisory Council Under Minn. Stat. § 116D.03, filed on behalf of Friends of the Headwaters. Also attached is an Affidavit of Service.

Sincerely,

/s/ Kathryn M. Hoffman
Kathryn M. Hoffman
Staff Attorney

KMH/em

Enclosure

cc: Service List

STATE OF MINNESOTA
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
John Tuma	Commissioner

In the Matters of the Applications of North Dakota Pipeline Company LLC for a Certificate of Need and Pipeline Routing Permit for the Sandpiper Pipeline Project	MPUC Docket Nos. PL-6668/CN-13-473 PL-6668/PPL-13-474 OAH Docket Nos. 8-2500-31260 8-2500-31259
In the Matters of Enbridge, Limited Partnership, for a Certificate of Need and Pipeline Routing Permit for the Line 3 Replacement Project	PUC Docket Nos. PL-9/PPL-15-137 PL-9/CN-14-916 OAH Docket No. 65-2500-32764

MOTION TO ORDER THE DEPARTMENT OF COMMERCE TO RENEGOTIATE THE MEMORANDUM OF UNDERSTANDING, AND TO ESTABLISH AN EXPERT ADVISORY COUNCIL UNDER MINN. STAT. § 116D.03

Pursuant to Minn. R. 1400.6600 and Minn. Stat. § 116D.03, subd. 2, the Friends of the Headwaters ("FOH") hereby moves that the Commission: 1) order the Department of Commerce to Renegotiate the Memorandum of Understanding to ensure non-discretionary involvement of the assisting agencies, and 2) order the formation of an Expert Advisory Council to assist in properly scoping the Environmental Impact Statement ("EIS") in this case and to ensure compliance with applicable state laws and regulations concerning environmental review.

INTRODUCTION

FOH is gravely concerned that the preparation of the Sandpiper EIS is proceeding contrary to well-established law and procedure. Divergence between the legal requirements of environmental review and the development of the EIS, especially at this early stage, will almost certainly result in reversal on appeal, an outcome that will only lengthen the delays with which North Dakota Pipeline Company LLC ("NDPC") and its supporters are so concerned. The recently-filed Memorandum of Understanding ("MOU") does not alleviate these concerns; if anything, the MOU heightens these concerns, as it provides for the *possibility* of assistance from other agencies, but it does not *require* it. Any assistance is contingent on the availability of funding and staff, neither of which are presumed to exist. To prevent any further delays, FOH

requests that the Commission order the Department to renegotiate the MOU to ensure non-discretionary involvement of DNR and PCA through specified minimum commitments of funding and staff time. FOH also requests that the Commission establish an Advisory Council under § 116D.03, subd. 2(2) to assist the Department of Commerce ("the Department") in the scoping process and to generally advise the Department on two areas of expertise: (1) MEPA compliance and implementation and (2) the environmental impacts of pipelines to be evaluated.

Recent comments from the Department suggesting that "the discretion to set schedules for contested cases, including schedules for dates of prefiled testimony, is within the ALJ's purview,"[1] demonstrate a poor understanding of EIS procedure. Most importantly, these comments illustrate a faulty understanding of the Responsible Governmental Unit's ("RGU") legal responsibilities in EIS preparation. Perhaps this is understandable, given the novel circumstances in which the Department finds itself. Preparing an EIS is a highly specialized, technical, and difficult endeavor for any agency, but especially so for an agency unfamiliar with the process. To make the matter even more difficult, this EIS concerns two massive pipelines traversing 300 miles of sensitive Minnesota landscape and affecting 14,000-15,000 acres. It also incorporates the environmental impact of the Line 3 Replacement Project, which proposes to carry diluted bitumen across Minnesota wetlands.[2] A recent National Academies of Science report emphasized the uniquely challenging aspects of the environmental impact of diluted bitumen spills, which highlights the need for additional expertise as part of the EIS.[3] Such an EIS is much more complicated than a single-site project such as Polymet's NorthMet proposal. Without guidance from experts well-versed in the preparation of EISs, this complexity and lack of experience greatly increases the risk that the EIS will be found inadequate upon judicial review, further delaying these proceedings.

FOH is further concerned that the Department's role in the preparation of the EIS will be highly influenced by the privileged position of NDPC, the applicant in this case. Their reliance on NDPC for advice on EIS implementation is troubling, as recent statements from NDPC have also indicated a fundamental misunderstanding of how environmental review works under state law.

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[1] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *Comments Of The Minnesota Department Of Commerce*, February 12, 2016, at page 2.

[2] *See* Docket Nos. PL-9/CN-14-916; PL-9/PPL-15-137, *Order Joining Need And Routing Dockets*, February 1, 2016, at page 10 ("The Commission authorizes a combined environmental review that considers the cumulative impact of the Sandpiper Pipeline Project and the Line 3 Project.").

[3] National Academies of Sciences, Engineering, and Medicine. 2016. *Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response*. Washington, DC: The National Academies Press ("[D]iluted bitumen spills in the environment pose particular challenges when they reach water bodies. Progressive evaporative loss of the diluent leaves behind the relatively dense and viscous bitumen, which can then become submerged, perhaps first by adhering to particles, and ultimately sink to the sediments.").

The Commission's reliance on the Department's Comments in this matter (and by implication, on the comments of NDPC) will almost certainly result in procedural delays to allow for the Court of Appeals to provide guidance on proper EIS implementation. In order to prevent such delays from occurring, FOH urges the Commission to create an Expert Advisory Council as authorized by Minn. Stat. § 116D.03, subd. 2(2), which states that each state department and agency shall "utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment; as an aid in accomplishing this purpose there shall be established advisory councils or other forums for consultation with persons in appropriate fields of specialization so as to ensure that the latest and most authoritative findings will be considered in administrative and regulatory decision making as quickly and as amply as possible." An expert advisory council could be the difference between a legally inadequate EIS and a thorough analysis that can assist both the public and decision-makers. FOH also urges the Commission to order the renegotiation of the MOU to provide for non-discretionary assistance from DNR and MPCA.

FACTS AND PROCEDURAL BACKGROUND

After meeting in December 2015 to consider how to proceed in light of the Minnesota Court of Appeals decision in this case, the Commission on January 11, 2016 lifted the stay on the Certificate of Need docket, joined the need docket with the routing docket, and referred the matter to OAH for contested case proceedings.[4] The order also "authorize[d] the preparation of a combined EIS that addresses issues related to the certificate of need and route permit dockets" and ordered that the final EIS "shall be issued prior to the filing of intervenor direct testimony."[5] The Commission found that issuance of the final EIS prior to direct testimony would "best reconcile the contested case process with the MEPA process, and [] avoid delay related to use of the EIS document in that process."[6]

On February 1, 2016, multiple parties petitioned the Commission to reconsider that order, all making substantially identical arguments that that Commission should require issuance of the draft EIS prior to the direct testimony, not the final EIS. Also on February 1, 2016, the Department of Commerce filed a "request for clarification" in which it asked whether the Commission "intended the Department to include some or all of the six system alternatives

[4] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Order Lifting Stay, Rejoining Need And Routing Dockets, And Referring For Contested Case Proceedings*, January 11, 2016, at page 6-7.
[5] *Id.* at 7.
[6] *Id.* at 6.

considered in its environmental review in the EIS scoping document, in addition to the Company's preferred route and SA-03-AM."[7]

In response, FOH noted first that the Department's request for clarification "demonstrates a rather extraordinary misunderstanding of the Minnesota Environmental Policy Act and EISs in general."[8] FOH explained that MEPA does not allow the RGU to "take any steps to limit alternatives prior to scoping" the EIS.[9] The very purpose of scoping an EIS is to identify those alternatives that are reasonable based on the scoping comments.[10] To predetermine those alternatives before scoping has even taken place is a clear violation of MEPA.[11]

As part of its discussion on the troublingly misleading comments from the Department, FOH suggested that the Commission could head off any future procedural difficulties in EIS preparation by exercising its authority to form expert advisory councils under § 116D.03.[12] NDPC has misconstrued this suggestion, arguing that it is an untimely request for reconsideration of the Commission's January 11, 2016 Order.[13] To the contrary, FOH was not requesting any changes or modifications to the Commission's January 11, 2016 Order. FOH believes that order was both justified and clearly lawful, and has not asked for it to be modified in any way. However, FOH does have continuing concerns about how that order is being implemented by the Department. FOH is concerned that the preparation of the Sandpiper EIS is proceeding contrary to well-established law and procedure. FOH also believes that the Commission has clear ongoing authority under MEPA to establish advisory councils, and to clarify its position, FOH is submitting the present motion to establish such a council.

On March 3, 2016, the Department of Commerce filed its Memorandum of Understanding ("MOU") with MPCA and DNR regarding the preparation of the EIS for the proposed Sandpiper and Line 3 pipelines. The MOU fails to commit any minimum level of staffing, resources or expertise from MPCA or DNR. It also includes several caveats that could easily prevent any cooperation whatsoever between the agencies.

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[7] Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Request For Clarification*, February 1, 2016, at page 3.
[8] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Response To Minnesota Department Of Commerce's Request For Clarification And Other Parties' Motions For Reconsideration*, February 11, 2016, at page 1. FOH also responded to the many petitions for reconsideration, noting that the Commission was well within its statutory discretion to control the timing of the EIS issuance, as it did in this case.
[9] *Id.*
[10] *Id.* (citing Minn. R. 4410.2100, subp. 1).
[11] *Id.*
[12] *Id.* at 7.
[13] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *North Dakota Pipeline Company LLC's Response To Friends Of The Headwaters, Carlton County Land Stewards, And Honor The Earth's Requests For Reconsideration*, February 22, 2016, at page 2-3.

ARGUMENT

I. THE MOU FILED BY THE DEPARTMENT FAILS TO FULFILL THE COMMISSION'S PREVIOUS ORDER.

The MOU fails to obligate either the DNR or the MPCA to even a minimum level of non-discretionary participation in the EIS, and therefore should be renegotiated. The Commission, in its previous order, authorized the Department to "enter into an agreement with the Department of Natural Resources and the Pollution Control Agency to ensure that the EIS fulfills the requirements of MEPA."[14] In the discussion that led to this order, Commissioners expressed concern about the anemic participation of these agencies during the Certificate of Need proceedings. During the Certificate of Need proceedings, those agencies were only able to participate to the extent that minimal staff was available to comment, unsolicited and uncompensated, during the public comment periods for the project. The expectation was that a formal agreement between the Department and MPCA and DNR would remedy that deficiency by *dedicating* staff time to EIS assistance. It would give the Department a way to leverage DNR and MPCA resources.

Unfortunately, the MOU filed by the Department last week fails to leverage any resources from MPCA and DNR. Rather, it provides multiple caveats that may result in little or no cooperation at all between the agencies, despite the fact that the Department is embarking on a major EIS with limited experience. Rather than make MPCA and DNR co-lead agencies, therefore obligating them to provide meaningful assistance, the MOU is clear that the Department is the sole lead agency on the EIS.[15] The agreement contains laudable language that the assisting agencies will "ensure that each EIS fulfills applicable MEPA requirements," but without any specific commitment of resources, this language is largely aspirational.[16] Agency assistance is predicated on the assisting agencies using their "best efforts to provide the staffing resources necessary to accomplish the purpose of this MOU."[17] Even these "best efforts" are subject to availability, however, as the MOU establishes that "[a]ll obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources for the work undertaken by the Agencies to accomplish the MOU's purpose and allocation of responsibilities."[18] This all-encompassing caveat destroys the very purpose of the document itself, which is to ensure that the Department

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[14] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Order Lifting Stay, Rejoining Need And Routing Dockets, And Referring For Contested Case Proceedings*, January 11, 2016, at page 6-7.
[15] *See* Docket No. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Memorandum Of Understanding Between The Minnesota Department Of Commerce And The Minnesota Department Of Natural Resources And The Minnesota Pollution Control Agency*, March 3, 2016, at page 1.
[16] *Id.*
[17] *Id.* at 2.
[18] *Id.*

has the assistance necessary to produce an adequate EIS. If that assistance and EIS oversight is in fact nominal or even hypothetical because of agency resource limitations, the MOU is rendered virtually meaningless.

It need not be so. An effective MOU could be crafted by the inclusion of a few key provisions that turn potential assistance and oversight into actual assistance and oversight. At a minimum, such an MOU could designate DNR and/or MPCA as RGU and co-lead agencies; or, in the alternative, it could require participation by those agencies in certain areas where they have expertise. The document could also specify areas where DNR and MPCA will provide insight and resources specific to each agencies' areas of expertise, including experience with MEPA implementation. Rather than expressing a desire for the assisting agencies to help with EIS preparation, the MOU could *commit* each agency to a minimum level of resources, staff, or expertise. Importantly, since the MOU appears to imply that the availability of funding and staff time could be at a premium, Minnesota's environmental review regulations specify that the costs of scoping an EIS are "part of the reasonable costs of preparing, reviewing, and distributing the EIS and are to be assessed to the project proposer by the RGU."[19] These scoping costs include staff time, including direct salary and fringe benefit costs, the cost of consultants hired by the RGU, and other direct and indirect costs of the RGU incurred during the scoping process.[20] The MOU could implement this provision by specifying that MPCA and DNR are to be compensated for their contributions through the EIS costs that are assessed to the project proposer. Utilizing this provision could ensure that adequate agency resources are ready and available to provide crucial oversight and assistance to the Department. FOH therefore urges the Commission to direct the Department to renegotiate the MOU to include non-discretionary assistance from MPCA and DNR.

II. THE COMMISSION IS AUTHORIZED BY § 116D.03 TO CREATE AN EXPERT ADVISORY COUNCIL THAT WOULD PROVIDE CRUCIAL OVERSIGHT AND ASSISTANCE WITH THE SCIENTIFIC, TECHNICAL AND PROCEDURAL ASPECTS OF EIS SCOPING

MEPA authorizes RGUs such as the Commission to engage in a wide range of measures to ensure thorough and adequate environmental review, including establishing an expert panel. Sections 116D.02-.03 provide a set of statutory guidelines framing the RGU's responsibilities that are coherent and mutually reinforcing. They are also sweeping in language, and worth quoting in full, as it is easy to forget the scope of this state's clearly expressed policy:

> The legislature, recognizing the profound impact of human activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high density urbanization, industrial expansion, resources exploitation, and new and expanding technological advances

[19] Minn. R. 4410.6200, subp. 3 (2015).
[20] *Id.*, subp. 1.

> and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of human beings, declares that it is the continuing policy of the state government, in cooperation with federal and local governments, and other concerned public and private organizations, ***to use all practicable means and measures***, ***including*** financial and ***technical assistance***, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which human beings and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of the state's people.[21]

In order to carry out these grand goals, the statute continues, "it is the continuing responsibility of the state government *to use all practicable means*, consistent with other essential considerations of state policy, to improve and coordinate state plans, functions, programs and resources," so that the state may (among other goals) "discourage ecologically unsound aspects of population, economic and technological growth, and develop and implement a policy such that growth occurs only in an environmentally acceptable manner."[22]

Although the primary means of implementing these lofty goals is through the assurance that important governmental actions are informed by considerations of environmental impacts through environmental review such as EISs, they are not the only means. Section 116D.03 imposes a host of duties on state departments and agencies that are designed to further implement the notion that state actions should be guided not only by principles of economic and technological efficiency, but by concern for the protection of natural resources and habitats. The law thus directs that:

> All departments and agencies of the state government ***shall:***
>
> . . . .
>
> (2) utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment; as an aid in accomplishing this purpose ***there shall be established advisory councils*** or other forums for consultation with persons in appropriate fields of specialization so as to ensure that the latest and most authoritative findings will be considered in administrative and regulatory decision making as quickly and as amply as possible.[23]

Both the federal and state environmental review laws are designed not only to inform decisionmakers but to involve the public and affected persons in the decisionmaking process itself. A core requirement of both MEPA and NEPA is that significant governmental action cannot be taken until environmental impact documents are disseminated to the public and

[21] Minn. Stat. § 116D.02, subd. 1 (2015) (emphasis added).
[22] *Id.*, subd. 2 (emphasis added).
[23] Minn. Stat. § 116D.03, subd. 2(2) (2015) (emphasis added).

individuals have had the opportunity to comment on scoping and drafts of those documents.[24] State environmental review regulations are quite specific on this point, stating that the process "is designed to . . . provide the public with systematic access to decision makers, which will help to maintain public awareness of environmental concerns and encourage accountability in public and private decision making."

The requirement to establish expert advisory councils to assist in environmental review, in other words, is not some mere formality or forgotten technicality; it is both a mandatory directive (such councils "shall be established"[25]) and a core function of the law. It is one of the few ways in which MEPA differs from NEPA, its federal corollary and the source of much of MEPA's language. NEPA states that all federal agencies shall "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment."[26] MEPA goes one step further: all state departments and agencies shall "utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment; as an aid in accomplishing this purpose there shall be established advisory councils or other forums for consultation with persons in appropriate fields of specialization so as to ensure that the latest and most authoritative findings will be considered in administrative and regulatory decision making as quickly and as amply as possible."[27]

MEPA adopts the NEPA language almost verbatim, but adds the second clause requiring the establishment of advisory councils to aid state agencies in their environmental review. This requirement, so distinctive and clear, cannot be ignored. Indeed, NEPA's § 102 (quoted above) to which § 116D.03 adds the additional advisory council requirement, has been held to be a rigid, enforceable duty:

> Thus the Section 102 duties are not inherently flexible. They must be complied with to the fullest extent, unless there is a clear conflict of statutory authority. Considerations of administrative difficulty, delay or economic cost will not suffice to strip the section of its fundamental importance. We conclude then, that Section 102 of NEPA mandates a particular sort of careful and informed decisionmaking process and creates judicially enforceable duties.[28]

As it is drawn so closely to its federal counterpart, MEPA must be interpreted similarly. The statutory mandate to establish expert advisory councils was tailor-made for the very sorts of circumstances seen in this matter: an inexperienced agency charged with a technical, difficult,

[24] *See* Minn. R. 4410.0300, subp. 3, 4 (2015); 40 C.F.R. § 1506.6 (2015);
[25] Minn. Stat. § 116D.03, subd. 2(2) (2015).
[26] 42 U.S.C. § 4332(A) (2015).
[27] Minn. Stat. § 116D.03, subd. 2(2) (2015).
[28] *Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n,* 449 F.2d 1109, 1114 (D.C. Cir. 1971).

and overwhelming task, exhibiting signs of its unfamiliarity with crucially important MEPA procedures, and relying on the legally incorrect assertions of the project proposer, who has also betrayed its unfamiliarity with those same MEPA procedures. Fortunately, MEPA allows for guidance in these circumstances, and the Commission should avail itself of that guidance by establishing an expert advisory council.

This council could be composed of experts familiar with the EIS process as well as experts that are well-versed in the particular scientific and technical challenges associated with a pipeline project of this scope. Perhaps most importantly, however, state law is quite clear that such a council must be *neutral* and *transparent*.[29] A baseline requirement of such a council, therefore, is that it must not include 'experts' that are employees of, affiliates of, or contractors with NDPC. As the project proposer, NDPC will have ample opportunities to let their interests and preferred assumptions be known. But the central nature of environmental review is that it is not simply a post-hoc rationale for justifying predetermined decisions.[30] It is designed to provide objective and authoritative information that would otherwise not be accounted for in the decision. Any expert advisory council formed to consult and advise on the EIS process must therefore be independent, neutral and transparent. Including employees or affiliates of NDPC would violate this general principle, and would violate § 116D.03, subd. 2(3), which requires all state departments and agencies to develop methods and procedures "that will ensure that environmental amenities and values, whether quantified or not, will be given at least equal consideration in decision making along with economic and technical considerations." As the project proposer staking significant capital investments and future profits on the outcome of this EIS, NDPC has an explicitly economic interest in the content of the eventual document. Their presence on an expert advisory council would by necessity result in 'advice' that was neither independent nor neutral, contrary to state policy on environmental review.[31]

II. THE DEPARTMENT'S RECENT COMMENTS DEMONSTRATE AN UNFAMILIARITY WITH EIS PROCEDURES THAT WILL SIGNIFICANTLY INCREASE THE RISK OF AN INADEQUATE EIS, THUS FURTHER DELAYING THESE PROCEEDINGS

As FOH noted in its February 11, 2016 Response, the Department has become accustomed to the Comparative Environmental Assessment process authorized under Minnesota

[29] Minn. Stat. § 116D.03, subd. 2(3) (all state departments and agencies shall "identify and develop methods and procedures that will ensure that environmental amenities and values, whether quantified or not, will be given at least equal consideration in decision making along with economic and technical considerations"); Minn. R. 4410.0300, subp. 4 (objective of environmental review is to provide *usable* information, to help maintain public awareness of environmental concerns, and encourage accountability in public decision making); Minn. R. 4410.0300, subp 3 ("Environmental documents shall not be used to justify a decision").
[30] Minn. R. 4410.0300, subp. 3 (2015).
[31] Minn. R. 4410.0300, subp. 4;

Rules Chapter 7852. They have never conducted an EIS on a pipeline before. Indeed, no agency in Minnesota ever has, to FOH's knowledge.[32] Such a novel situation cries out for additional consultation and advice. The novelty of these circumstances alone would typically justify the creation of an experienced council to offer advice, but it is especially necessary here, where the Commission has numerous indications that the Department's understanding of the EIS process is, at best, incomplete.

The Department's recently-filed Memorandum of Understanding ("MOU") with MPCA and DNR will not remedy this problem. Although MPCA and DNR have considerably more expertise with EISs, they have not conducted a pipeline EIS, and would still benefit from expertise specific to pipelines such as Mr. Stolen, and an expert on diluted bitumen. Nor, of course, can they offer the expertise on treaty rights and tribal resources that White Earth and Mille Lacs would bring. Additionally, the MOU is limited and provides no assurance of meaningful cooperation between agencies. MPCA and DNR are not co-lead agencies, and thus have no legal obligation to ensure a quality EIS. There is no discussion in the MOU of how or whether MPCA and DNR will provide staff. The MOU provides for a separate agreement, which has not been filed, to provide for "specific staffing needs." It also states that "All obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources…"[33] Thus, any real involvement of MPCA and DNR is both entirely discretionary by the Department, and contingent on other factors, including the availability of funding and staff. Put simply, there is nothing in this agreement that ensures quality involvement by MPCA and DNR.

The Department will make a series of other internal decisions going forward that are not subject to public scrutiny yet are extremely significant, especially for an agency that has not previously conducted a full EIS on a pipeline. An advisory committee as proposed by FOH would not have a "veto" over any of these decisions, but would provide Commerce the opportunity to obtain input before making an important decision. Such an advisory council

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[32] FOH notes, however, that there was state agency involvement in an EIS for the Alberta Clipper pipeline, for which the U.S. Department of State was the lead agency. The Department of State notes that they consulted with other federal agencies in preparing the EIS for the Alberta Clipper project, and that "state agencies also were consulted to ensure that their needs for analyses in relation to their respective state permitting processes would be reflected in the EIS." U.S. Dep't of State, Bureau of Energy Resources, *Final Environmental Impact Statement Executive Summary*, available at http://www.state.gov/e/enr/applicant/applicants/202453.htm. (last visited March 1, 2016). Such consultation, clearly, is a far cry from the substantive and procedural duties encompassed by the bearing the sole responsibility for preparing an adequate EIS, particularly where the entire burden falls on the state agency.

[33] *See* Docket No. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Memorandum Of Understanding Between The Minnesota Department Of Commerce And The Minnesota Department Of Natural Resources And The Minnesota Pollution Control Agency*, March 3, 2016, at page 2.

would increase transparency and produce better, more informed decisions, as envisioned by the drafters of MEPA.

Recently the Commission received Comments from the Department that indicate a fundamental misunderstanding of environmental review in general, and MEPA requirements in particular. The DOC suggested that "the discretion to set schedules for contested cases, including schedules for dates of prefiled testimony, is within the ALJ's purview."[34] As these comments were submitted in response to the Commission's Order that the final EIS be issued prior to direct testimony in the contested case proceedings, they appear to indicate the Department's view that OAH has the discretion to determine when in the contested case proceedings the final EIS must be issued. To the extent that these schedules include dates by which the EIS must be issued, this statement is legally incorrect, and therefore grossly misleading to the Commission. Allowing OAH to determine at what point the final EIS be issued would be an abdication of the Commission's (and the Department's, as the Commission's delegate) responsibilities as the RGU in this matter, thereby clearly violating MEPA.[35]

The Commission is the RGU in this matter. It is the RGU's responsibility to ensure that the EIS is prepared in accordance with state law, [36] and any abdication of that responsibility is a violation of law:

> NEPA establishes environmental protection as an integral part of the [RGU's] basic mandate. The primary responsibility for fulfilling that mandate lies with the [RGU]. Its responsibility is not simply to sit back, like an umpire, and resolve adversary contentions at the hearing stage. Rather, it must itself take the initiative of considering environmental values at every distinctive and comprehensive stage of the process beyond the staff's evaluation and recommendation.[37]

As part of this obligation, the *RGU* determines at what stage the EIS is to be prepared, not OAH. Because MEPA is fundamentally a procedural law, the timing of the EIS preparation

[34] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *Comments Of The Minnesota Department Of Commerce*, February 12, 2016, at page 2.
[35] *See Calvert Cliffs*, 449 F.2d at 1119 (the only agency in a position to ensure decisions are informed by environmental considerations is the RGU; abdication of that key role is a violation of law); *Sierra Club v. Lynn*, 502 F.2d 43, 59 (5th Cir. 1974) (environmental review requirements are directed only to the RGU; delegation of those responsibilities is an unlawful abdication).
[36] *See* Minn. Stat. § 116D.04, subd. 2a; subd. 2a(g); subd. 2a(h) (2015); Minn. R. 4410.0400, subp. 2 ("RGU's shall be responsible for verifying the accuracy of environmental documents and complying with environmental review processes in a timely manner.").
[37] *See Calvert Cliffs*, 449 F.2d at 1119.

is an essential determination under the law.[38] As federal courts have noted, it is an "important fact of administrative life" that "as time goes on, it will become ever more difficult to undo an improper decision."[39] MEPA codifies this concern by requiring that certain decisions be informed by a proper consideration of the environmental effects of that decision, and that such consideration take place early enough to influence the decision making process. The primary purpose of MEPA is therefore to identify and study the environmental impacts of a particular decision *before* that decision is made. The Act's lodestar, in other words, is *informed choice*:

> The Minnesota Environmental Policy Act recognizes that the restoration and maintenance of environmental quality is critically important to our welfare. The act also recognizes that human activity has a profound and often adverse impact on the environment. A first step in achieving a more harmonious relationship between human activity and the environment is understanding the impact which a proposed project will have on the environment. The purpose of parts 4410.0200 to 4410.6500 is to aid in providing that understanding through the preparation and public review of environmental documents. Environmental documents shall contain information that addresses the significant environmental issues of a proposed action. This information shall be available to governmental units and citizens ***early in the decision making process.***
>
> . . . . .
>
> Environmental documents shall be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality.[40]

Subpart 4 of that Rule states that the process is designed to "provide *usable* information to the project proposer, governmental decision makers and the public concerning the primary environmental effects of a proposed project."[41] If the central purpose of the law is to inform a particular decision, the timing of that information's delivery will determine whether that information is usable or even relevant, which is why the Rules direct the information to be generated and delivered as early as possible.[42]

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[38] *See Calvert Cliffs*, 449 F.2d at 1113 ("However, [NEPA] also contains very important 'procedural' provisions – provisions which are designed to see that all federal agencies do in fact exercise the substantive discretion given them. These provisions are not highly flexible. Indeed, they establish a strict standard of compliance.").
[39] *Sierra Club v. Marsh*, 872 F.2d 497, 503 (1st Cir. 1989).
[40] Minn. R. 4410.0300, subp. 3 (emphasis added).
[41] *Id.*, subp. 4 (emphasis added).
[42] *See, e.g.*, *Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974) ("The procedures required by NEPA . . . are designed to secure the accomplishment of the vital purpose of NEPA. That result

On judicial review, the central question for the court is whether the agency took a "'hard look' at the salient issues,"[43] and in answering this question the *timing* of the EISs issuance is a critical detail. In the present matter it was in fact the *timing* of the EIS issuance that was reversed on appeal, when the Court determined that this Commission could not issue a Certificate of Need without conducting an EIS first.[44] It is therefore a critical role for the RGU to determine when the EIS is to be issued, and abdicating that role to OAH would violate MEPA. Just as the deferral of the EIS was found unlawful in this matter, it would have been similarly unlawful if the RGU had simply allowed OAH to decide whether the EIS would be issued early or deferred until later, which is what the Department is suggesting in its comments to the Commission.

But the RGU's responsibilities extend beyond merely determining when the EIS shall be issued. Its responsibilities are to oversee the entire process of environmental review as it relates to the decision being considered, to ensure that the decision incorporates a proper consideration of environmental effects. The statute is clear that it is the RGU's responsibility to ensure coordination between environmental review and permitting.[45] This responsibility is a core function of the RGU, not a mere formality. The coordination between environmental review and permitting is the heart of MEPA, and the RGU must ensure that this coordination renders the environmental review useful, timely, and relevant to properly inform the permitting decision. For the OAH to undertake a crucial role in this regard, by determining when in the contested case proceedings the final EIS should be issued, would be a direct violation of the RGU's coordination responsibilities.

If there is a conflict between OAH's procedural rules and an agency order made pursuant to state law, including MEPA, the agency order takes precedence. This is made clear by the state law itself. In cases requiring multiple permits, for instance, the agency may consolidate the hearing process, "notwithstanding any law or rule to the contrary."[46] That statute also directs the agency to "establish appropriate procedures for the consolidated hearing process."[47] When it comes to complying with state environmental review laws, the agency cannot delegate crucial procedural milestone scheduling to a non-RGU agency like OAH.

Fortunately, the Commission did not delegate that crucial role in this instance. Rather, it determined that contested case proceedings must begin after the issuance of the final EIS, "[t]o

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can be achieved only if the prescribed procedures are faithfully followed; grudging, pro forma compliance will not do.").

[43] *See, e.g., Friends of Twin Lakes v. Roseville*, 764 N.W.2d 378, 381 (Minn. Ct. App. 2009).

[44] *In re North Dakota Pipeline Co., LLC*, 869 N.W.2d 693, 698 (Minn. Ct. App. 2015) ("In this case, the completion of an EIS at the certificate of need stage satisfies the imperative identified above by ensuring decision-makers are fully informed regarding the environmental consequences of the pipeline, before determining whether there is a need for it.").

[45] Minn. Stat. § 116D.04, subd. 2a(g) (2015).

[46] Minn. Stat. § 116D.04, subd. 2a(g) (2015).

[47] *Id.*

best reconcile the contested case process with the MEPA process, and to avoid delay related to use of the EIS document in that process."[48] As described in FOH's February 11, 2016 Response to Minnesota Department of Commerce's Request for Clarification and Other Parties' Motions for Reconsideration, the Commission has the legal authority and discretion to take this action, as part of their obligation to ensure that the eventual decision is properly informed.

But the Commission's suggestion that this scheduling decision is within the purview of the OAH is an alarmingly incorrect statement coming from the RGU's delegate. Combined with its previous conduct in this case, they presage a very high risk of producing an EIS that is either poorly substantiated, overly restrictive in scope, or otherwise affected by procedural error. Their recent statements are merely the latest instance of a series of events demonstrating an inexperience and unfamiliarity with fundamental principles of environmental review. As but one example, FOH understands that the Department is currently renegotiating an earlier contract with Cardno, rather than put out a new Request for Proposal from other consultants. These negotiations are taking place without oversight or assistance, and these decisions can have irreversible consequences.

EIS preparation is a difficult and technical process, but because MEPA is a fundamentally procedural law, it is critical that the proper procedures and timing are followed. The Department's inexperience with this process should not be allowed to jeopardize the integrity of both the process and the eventual document, but the Commission can help protect the process by creating an expert advisory council to assist the Department.

III. THE COMMISSION'S RELIANCE ON NPDC WOULD CLEARLY VIOLATE MEPA REQUIREMENTS

FOH is concerned that the Department of Commerce may be allowing NDPC to prepare the scoping EAW, which is unlawful under MEPA. As the Responsible Governmental Unit for this EIS, the Commission is responsible for the content of both the scoping EAW and the EIS.[49] The Commission may not delegate the responsibility for preparation of these key documents to NDPC.

The reasoning for this requirement should be self-evident. NDPC has a strong interest in a narrow EIS that rejects consideration of any serious alternatives and minimizes potential environmental impacts. Under no circumstances should such a conflicted entity be preparing a

[48] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Order Lifting Stay, Rejoining Need And Routing Dockets, And Referring For Contested Case Proceedings*, January 11, 2016, at page 6.

[49] Minn. R. 4410.1400 ("The EAW shall be prepared by the RGU or its agents… The RGU shall be responsible for the completeness and accuracy of all information."); Minn. Stat. § 116D.04, subd. 2a ("Where there is potential for significant environmental effects resulting from any major governmental action, the action shall be preceded by a detailed environmental impact statement *prepared by the responsible governmental unit*.") (emphasis added).

document that is intended to educate the public and inform decision-makers by describing "the proposed action in detail, analyz[ing] its significant environmental impacts, discuss[ing] appropriate alternatives to the proposed action and their impacts, and explor[ing] methods by which adverse environmental impacts of an action could be mitigated."[50]

Moreover, NDPC is already trying to mislead the Commission in violation of MEPA in its comments. In its February 11, 2016 Response to the Petitions for Reconsideration, NDPC acknowledges that making scoping decisions before the scoping process has been completed would be inconsistent with state law. However, it then argues that, should the Commission consider the Department's Request for Clarification, it should inform the Department that "six system alternatives were considered for inclusion within the EIS but rejected (and therefore not proposed for inclusion within the EIS) because they do not meet the identified purpose and need for the Project."[51] This statement is a clear violation of state environmental review laws, and illustrates elementary misconceptions of how to scope an EIS under state regulations.

Under MEPA, the purpose of the scoping process is to focus the EIS on the relevant issues by:

> Identify[ing] only those potentially significant issues relevant to the proposed project, define the form, level of detail, content, *alternatives*, time table for preparation, and preparers of the EIS, and to determine the permits for which information will be developed concurrently with the EIS.[52]

After scoping is complete, the RGU will make a "scoping decision" that contains, among other things, the alternatives that will be addressed in the EIS.[53] Thus, it is appropriate for DOC to turn to the Commission for a scoping decision on alternatives, but it is premature to do so prior to scoping.

Eliminating alternatives prior to scoping is illegal under MEPA. This Commission's decision to grant a certificate of need to the Sandpiper Pipeline was overturned by the Court of Appeals because, under MEPA, the State may not grant a permit to a project prior to completion of an EIS.[54] But the reason for this prohibition is that agencies may not pre-determine significant

[50] Minn. Stat. § 116D.04, subd. 2a.
[51] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *North Dakota Pipeline Company LLC's Response To Petitions For Reconsideration*, February 11, 2016, at page 3.
[52] Minn. R. 4410.2100, subp. 1 (emphasis added).
[53] *Id.* at subp. 6.
[54] Minn. Stat. § 116D.04, subd. 2b; *In re North Dakota Pipeline Co., LLC*, 869 N.W.2d 693, 698 (Minn. Ct. App. 2015)("Therefore, based on the plain language of subdivision 2b, the MPUC's issuance of a certificate of need constitutes a final governmental decision that is prohibited until the required environmental review is completed.").

decisions about the project prior to the EIS process.[55] The EIS process is designed to thoroughly vet a proposed project; it is not designed to affirm a decision that was already made. Courts have regularly overturned efforts by agencies to control and limit the outcome of an EIS in this way.

As noted in FOH's Response to Minnesota Department of Commerce's Request for Clarification and Other Parties' Motions for Reconsideration, federal courts have held that agencies that take steps to limit the range of potential alternatives prior to completion of environmental review violate NEPA.[56]

Similarly, if the Commission instructs the Department to eliminate certain alternatives from consideration prior to the scoping process, it will violate MEPA and fail to take a "hard look" at the environmental consequences of this pipeline. The prohibition against action by the state prior to the EIS is not limited merely to granting a permit, but to *any* action that would limit the range of alternatives considered in the EIS too early in the process, thereby "seriously impeding the degree to which their planning and decisions could reflect environmental values."[57] The EIS stage is deliberative – as the Court of Appeals noted, it is intended to study the project and the alternatives early in the process, such that "important environmental effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."[58] To refuse to study system alternatives at this stage is no different than granting a certificate of need prior to an EIS – it commits the State to a particular project and location before the environmental effects have been fully understood.

NDPC's comments in this regard are unusual and alarming not only because they would constitute reversible error if followed by the Commission, but also because NDPC's reasoning is based on the Commission's Order Granting Certificate of Need that was *invalidated* for failure to comply with environmental review laws.[59] It is frankly absurd to suggest that the Commission may restrict the alternatives prior to scoping, in violation of MEPA, because the Commission had already rejected those alternatives in an Order that was made illegally in this very case. The Court of Appeals found that the Commission could not grant a certificate of need specifically because it was considered prior to completion of an EIS. NDPC is now suggesting to the

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[55] *In Re NDPC*, 869 N.W.2d at 698-99 ("In this case, the completion of an EIS at the certificate of need stage satisfies the imperative identified above by ensuring decision-makers are fully informed regarding the environmental consequences of the pipeline, before determining whether there is a need for it.").

[56] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *FOH's Response To Minnesota Department Of Commerce's Request For Clarification And Other Parties Motions For Reconsideration*, February 11, 2016, at page 3-4.

[57] *Metcalf*, 214 F.3d at 1143-44 (quoting *Save the Yaak Comm. v. Block*, 840 F.2d 714, 718-19 (9th Cir. 1988)).

[58] *In Re NDPC*, 869 N.W.2d at 698.

[59] *See* Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *North Dakota Pipeline Company Llc's Response To Petitions For Reconsideration*, at page 3.

Commission that it may disregard the Court of Appeals opinion and re-adopt that invalidated decision, and in so doing, illegally restrict the alternatives prior to scoping. This is, to say the least, faulty reasoning, and the fact that it is coming from the project proposer and a party of obvious significance and influence in these proceedings makes the need for oversight quite clear.

If the Commission were to rely on NDPC's preparation of an EAW, or its statements in this matter, its actions would likely be reversed on appeal for a second time. The primary parties in this matter – the RGU's delegate and the project proposer – have amply demonstrated an unfamiliarity with, and dangerously erroneous understanding of, the legal requirements for EIS preparation. Rather than risk further delays, the Commission should exercise its authority to create an advisory council that can correct any such errors before they are propagated into an inadequate EIS document.

CONCLUSION

EIS preparation is a complex task, substantively as well as procedurally. To FOH's knowledge, this is the first instance in which a Minnesota agency has conducted an EIS on a pipeline without federal support. It is a difficult task even for an experienced agency, but for an inexperienced agency like the Department, assistance and oversight are critical, especially where it may be relying on the project proposer to the detriment of the EIS. FOH therefore urges the Commission to utilize all resources available to it and the Department, including a revised MOU providing for non-discretionary assistance from DNR and PCA, and the advisory councils of § 116D.03.

Dated: March 9, 2016

Respectfully submitted,

/s/ Kathryn Hoffman

/s/ Kevin P. Lee

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STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matters of Enbridge, Limited Partnership, for a Certificate of Need and Pipeline Routing Permit for the Line 3 Replacement Project

MPUC Docket Nos. PL-9/PPL-15-137
PL-9/CN-14-916
OAH Docket No. 65-2500-32764

AFFIDAVIT OF SERVICE

In the Matters of the Application of North Dakota Pipeline Company LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota

MPUC Docket Nos. PL-6668/CN-13-473
PL-6668/PPL-13-474
OAH Docket Nos. 8-2500-31260
8-2500-31259

STATE OF MINNESOTA)
)ss.
COUNTY OF RAMSEY)

Erin Mittag, being duly sworn, says that on the 9th day of March, 2016, she served via e-dockets the following:

- Motion To Order The Department Of Commerce To Renegotiate The Memorandum Of Understanding And To Establish An Expert Advisory Council Under Minn. Stat. § 116D.03, filed on behalf of Friends of the Headwaters

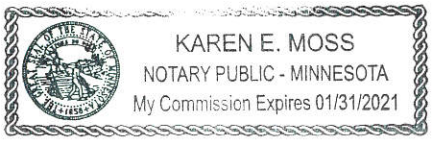
on the following persons, in this action, by filing through e-dockets or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing the same in the post office at St. Paul, Minnesota, directed to said persons at the last known mailing address of said persons:

Attached Service List.

Erin Mittag

Subscribed and sworn to before me
this 9th day of March, 2016

Karen Moss



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John E.	Drawz	jdrawz@fredlaw.com	Fredrikson & Byron, P.A.	Suite 4000 200 South Sixth Street Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Peter	Erlinder	proferlinder@gmail.com	International Humanitarian Law Institute	325 Cedar St. Suite 308 St. Paul, MN 55101	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
John R.	Gasele	jgasele@fryberger.com	Fryberger Buchanan Smith & Frederick PA	700 Lonsdale Building 302 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Andrew	Gibbons	andrew.gibbons@stinson.com	Stinson Leonard Street	150 S Fifth St Ste 2300 Minneapolis, MN 54002	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Jon	Godfread	Jon@ndchamber.com	Greater North Dakota Chamber	2000 Schafer Street Bismarck, ND 58501	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Emerald	Gratz	emerald.gratz@state.mn.us	Office of Administrative Hearings	PO Box 64620 Saint Paul, Minnesota 55164-0620	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Lowell	Hassler	lhassler@blm.gov	BLM Bureau Land Management	920 NE Main Lewistown, MT 59457	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Danny	Hendrix	N/A	Pipeliners Union 798	PO Box 470798 Tulsa, OK 74147-0798	Paper Service	No	OFF_SL_13-473_OFF_SL_13-473_Official

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Kathryn	Hoffman	khoffman@mncenter.org	Minnesota Center for Environmental Advocacy	26 E. Exchange St Ste 206 St. Paul, MN 55101	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Frank	Hornstein	Rep.Frank.Hornstein@house.mn		100 MLK Blvd saint paul, mn 55155	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_13-473_OFF_SL_13-473_Official
Patrice	Jensen	patrice.jensen@state.mn.us	MN Pollution Control Agency	520 Lafayette Rd N St. Paul, MN 55155	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Rachel	Kitze Collins	rakitzecollins@locklaw.com	Lockridge Grindeal Nauen PLLP	100 Washington Ave S Suite 2200 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Karen	Kromar	karen.kromar@state.mn.us	MN Pollution Control Agency	520 Lafayette Rd Saint Paul, MN 55155	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Eric	Le Dain	N/A	Enerplus Resources (USA) Corporation	US Bank Tower, Suite 2200 950 - 17'h Street Denver, CO 80202-2805	Paper Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_13-473_OFF_SL_13-473_Official
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Joseph	Plumer	joep@whiteearth.com	White Earth Band of Ojibwe	P.O. Box 418 White Earth, Minnesota 56591	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Kevin	Pranis	kpranis@liunagroc.com	Laborers' District Council of MN and ND	81 E Little Canada Road St. Paul, Minnesota 55117	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
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Richard	Smith	grizrs615@gmail.com	Friends of the Headwaters	P.O. Box 583 Park Rapids, MN 56470	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Byron E.	Starns	byron.starns@stinson.com	Stinson Leonard Street LLP	150 South 5th Street Suite 2300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
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Kirk	Titus	kirk.titus@crowwing.us	Crow Wing County Land Services	322 Laurel Street Suite 12 Brainerd, MN 56401	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official

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James	Watts	james.watts@enbridge.com	Enbridge Pipelines (North Dakota) LLC	26 E Superior St Ste 309 Duluth, MN 55802	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Cam	Winton	cwinton@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-473_OFF_SL_13-473_Official
David	Zoll	djzoll@locklaw.com	Lockridge Grindal Nauen PLLP	100 Washington Ave S Ste 2200 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_13-473_OFF_SL_13-473_Official

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Frank	Bibeau	frankbibeau@gmail.com	Honor the Earth	51124 County Road 118 Deer River, Minnesoa 56636	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Ellen	Boardman	eboardman@odonoghuelaw.com	O'Donoghue & O'Donoghue LLP	4748 Wisconsin Ave NW Washington, DC 20016	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
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John E.	Drawz	jdrawz@fredlaw.com	Fredrikson & Byron, P.A.	Suite 4000 200 South Sixth Street Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Peter	Erlinder	proferlinder@gmail.com	International Humanitarian Law Institute	325 Cedar St. Suite 308 St. Paul, MN 55101	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	Yes	OFF_SL_13-474_Official Service List - CC
John R.	Gasele	jgasele@fryberger.com	Fryberger Buchanan Smith & Frederick PA	700 Lonsdale Building 302 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Andrew	Gibbons	andrew.gibbons@stinson.com	Stinson Leonard Street	150 S Fifth St Ste 2300 Minneapolis, MN 54002	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Jon	Godfread	Jon@ndchamber.com	Greater North Dakota Chamber	2000 Schafer Street Bismarck, ND 58501	Electronic Service	No	OFF_SL_13-474_Official Service List - CC

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Helene	Herauf	Laney@ndchamber.com	Greater North Dakota Chamber	PO Box 2639 Bismarck, ND 58502	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_13-474_Official Service List - CC
Rachel	Kitze Collins	rakitzecollins@locklaw.com	Lockridge Grindeal Nauen PLLP	100 Washington Ave S Suite 2200 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
James	LaFave	james.lafave@state.mn.us	Office of Administrative Hearings	PO Box 64620 St. Paul, MN 55164-0620	Electronic Service	Yes	OFF_SL_13-474_Official Service List - CC
Peter	Madsen	peter.madsen@ag.state.mn.us	Office of the Attorney General-DOC	Bremer Tower, Suite 1800 445 Minnesota Street St. Paul, Minnesota 55101	Electronic Service	Yes	OFF_SL_13-474_Official Service List - CC
Patrick	Mahlberg	pmahlberg@fredlaw.com	Fredrikson & Byron, P.A.	200 S 6th St Ste 4000 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Brian	Meloy	brian.meloy@stinson.com	Stinson,Leonard, Street LLP	150 S 5th St Ste 2300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Joseph	Plumer	joep@whiteearth.com	White Earth Band of Ojibwe	P.O. Box 418 White Earth, Minnesota 56591	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Kevin	Pranis	kpranis@liunagroc.com	Laborers' District Council of MN and ND	81 E Little Canada Road St. Paul, Minnesota 55117	Electronic Service	No	OFF_SL_13-474_Official Service List - CC

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates	Ste 122 9100 W Bloomington Frwy Bloomington, MN 55431	Electronic Service	Yes	OFF_SL_13-474_Official Service List - CC
Eileen	Shore	eileenshore@outlook.com	Eileen Shore	3137 42nd Ave So Minneapolis, MN 55406	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Richard	Smith	grizrs615@gmail.com	Friends of the Headwaters	P.O. Box 583 Park Rapids, MN 56470	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Byron E.	Starns	byron.starns@stinson.com	Stinson Leonard Street LLP	150 South 5th Street Suite 2300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Randy V.	Thompson	rthompson@nmtlaw.com	Nolan, Thompson & Leighton	5001 American Blvd W Ste 595 Bloomington, MN 55437	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Gerald	Von Korff	jvonkorff@rinkenoonan.com	Rinke Noonan	PO Box 1497 St. Cloud, MN 56302	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Kevin	Walli	kwalli@fryberger.com	Fryberger, Buchanan, Smith & Frederick	380 St. Peter St Ste 710 St. Paul, MN 55102	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
James	Watts	james.watts@enbridge.com	Enbridge Pipelines (North Dakota) LLC	26 E Superior St Ste 309 Duluth, MN 55802	Electronic Service	No	OFF_SL_13-474_Official Service List - CC
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-474_Official Service List - CC

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Army	Corp of Engineers	N/A	Army Corps of Engineers	180 5th St E Ste 700 Saint Paul, MN 55101	Paper Service	No	OFF_SL_14-916_Official
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Ken	Vraa	N/A		22070 512th Ln McGregor, MN 55760	Paper Service	No	OFF_SL_14-916_Official
Janice	Vraa	N/A		22070 512th Ln McGregor, MN 55760	Paper Service	No	OFF_SL_14-916_Official
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James	Watts	james.watts@enbridge.com	Enbridge Pipelines (North Dakota) LLC	26 E Superior St Ste 309 Duluth, MN 55802	Electronic Service	No	OFF_SL_14-916_Official
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_14-916_Official
Jonathan	Wolfgram	Jonathan.Wolfgram@state.mn.us	Department of Public Safety	445 Minnesota Street Suite 147 St. Paul, MN 55101-1547	Electronic Service	No	OFF_SL_14-916_Official

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Randall	Doneen	randall.doneen@state.mn.us	Department of Natural Resources	500 Lafayette Rd, PO Box 25 Saint Paul, MN 55155	Electronic Service	No	OFF_SL_15-137_Official
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_15-137_Official
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John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_15-137_Official
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Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_15-137_Official
Jonathan	Wolfgram	Jonathan.Wolfgram@state.mn.us	Department of Public Safety	445 Minnesota Street Suite 147 St. Paul, MN 55101-1547	Electronic Service	No	OFF_SL_15-137_Official

From: Sprenger, Matt [mailto:matt_sprenger@fws.gov]
Sent: Monday, February 22, 2016 7:33 AM
To: pop3.arvig.net
Cc: Renschler, Jason J NWO
Subject: Re: [EXTERNAL] Status of Information Request (UNCLASSIFIED)

Willis,

We have not been contacted by any Minnesota based agencies, state or federal, regarding a coordinated NEPA effort. Additionally, the Fish and Wildlife Service has not made any determinations regarding the extent of interagency coordination because a final special use permit application has not been submitted by Enbridge. I am still hopeful that the final Sandpiper route will avoid impacts to all Fish and Wildlife Service refuge program easement and fee-title interests.

Do not hesitate to give me a call if you have any quesitons.

Matt Sprenger
701-662-8611 ext. 328

On Fri, Feb 19, 2016 at 8:19 PM, pop3.arvig.net <mattison@arvig.net> wrote:

Hello Jason and Matt,

This a follow up on my December 28, 2015 email to each of you in regard to my interest in coordinated federal environmental review for the Sandpiper Pipeline. As you may be aware, a Minnesota State Appeals Court ruling that was upheld by the State Supreme has ordered state agencies to prepare a full EIS on the Sandpiper Pipeline.

Because NEPA requires coordination of environmental review activities with state and federal agencies and Minnesota's own environmental policy act (MEPA)requires coordination with Federal agencies it would seem obvious that this coordination is not only in order but should probably be well under way.

Therefore, my question now (updated from my December email to reflect the court-ordered EIS in Minnesota) is, has the State of Minnesota (Minnesota Public Utilities Commission (PUC) is the presumptive RGU) or the Minnesota Department of Commerce who plans to prepare the EIS for the PUC entered into any communication with your respective Departments regarding coordinated environmental review?

If not, have your agencies opened or plan to open communications with the MPUC or MDOC to begin state/federal coordination of environmental review? And, if not, could you help me understand why such coordination would not have begun?

Thanks,

Willis Mattison

MINNESOTA DEPARTMENT OF COMMERCE

85 7TH PLACE EAST, SUITE 500
SAINT PAUL, MINNESOTA 55101-2198
MN.GOV/COMMERCE
651.539.1500 FAX: 651.539.1547
AN EQUAL OPPORTUNITY EMPLOYER

March 3, 2016

Daniel Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101

RE: Docket No. PL-6668/CN-13-473, PL-6668/PPL-13-474

Dear Mr. Wolf:

Pursuant to the Commission's January 16, 2016 Order in the above-referenced dockets, the Department of Commerce, Pollution Control Agency and Department of Natural Resources submit the attached Memorandum of Understanding regarding development of Environmental Impact Statements for the proposed Sandpiper and Line 3 Replacement pipeline projects, dated March 2, 2016.

Sincerely,

William Grant
Deputy Commissioner

MEMORANDUM OF UNDERSTANDING

BETWEEN
THE MINNESOTA DEPARTMENT OF COMMERCE

AND

THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES AND THE MINNESOTA POLLUTION CONTROL AGENCY

REGARDING
DEVELOPMENT OF ENVIRONMENTAL IMPACT STATEMENTS FOR THE

SANDPIPER AND LINE 3 REPLACEMENT PIPELINE PROJECTS

This Memorandum of Understanding (MOU) between the Minnesota Department of Commerce (Commerce or Lead Agency) and the Minnesota Department of Natural Resources (MnDNR) and Minnesota Pollution Control Agency (MPCA) (collectively referred to as the Agencies) defines the roles and responsibilities of Commerce, the MnDNR and MPCA (Assisting Agencies) regarding the development of the necessary environmental review documents, including Environmental Impact Statements (EISs), for the proposed Sandpiper and Line 3 Replacement pipeline projects (Proposed Projects).

I. COMMISSION RESPONSIBILITIES

The Minnesota Public Utilities Commission (Commission) is the Responsible Governmental Unit (RGU) for the environmental review of the Proposed Projects. In that capacity, the Commission will make all final decisions regarding the scope and adequacy of the EISs for both of the Proposed Projects.

II. COMMERCE SCOPE OF WORK AND RESPONSIBILITIES

Pursuant to the Commission's January 11, 2016 Order, Commerce shall serve as Lead Agency for the development of the relevant environmental review documents for both of the Proposed Projects and administer the development of the Sandpiper EIS and the Line 3 EIS pursuant to the requirements set forth in the Minnesota Environmental Policy Act (MEPA), Minn. Stat. Ch. 116D, and Minnesota Rules Ch. 4410.

III. MnDNR AND MPCA SCOPE OF WORK AND RESPONSIBILITIES

The MnDNR and MPCA, as Assisting Agencies, shall assist the Lead Agency in identifying issues, alternatives, routes and alternative route proposals, data, and analysis to address environmental review topics and requirements and help Commerce ensure that each EIS fulfills applicable MEPA requirements; review, assess and comment on data and analysis in environmental documents prepared during the environment review process; address any potential deficiencies in environmental review documents in a timely manner to allow the deficiencies to be addressed as early as possible in the environmental review process; review and provide comments on

environmental review documents prepared for either of the Proposed Projects; and provide such other assistance as the Lead Agency and the Assisting Agencies mutually agree are necessary for MEPA compliance.

IV. AGENCY RESOURCES

1. The Assisting Agencies agree to use best efforts to provide the staffing resources necessary to accomplish the purpose of this MOU. Specific staffing needs to accomplish the purpose of this MOU will be identified in a separate interagency funding agreement that designates the specific Assisting Agency staff assigned, their general scope of duties, and maximum total funding to be provided.

2. It is understood by the Lead Agency and the Assisting Agencies that the Lead Agency will enter into a separate arrangement with the Project Proposer(s) to cover the cost of environmental review for both Proposed Projects pursuant to Minn. Stat. § 116D.045 and Minn. R. 4410.6000 through 4410.6500. Costs assessed to the Project Proposer(s) shall include the costs necessary to reimburse the Assisting Agencies for all costs incurred by the Assisting Agencies in accomplishing the purpose of this MOU.

3. All obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources for the work undertaken by the Agencies to accomplish the MOU's purpose and allocation of responsibilities.

V. GENERAL PROVISIONS

1. Agency Designees: The Agencies agree to designate personnel as the Agency designee with primary responsibility for implementing the terms of this agreement.

The Agencies' designees are, hereby, authorized to develop procedures and agreed timelines necessary to accomplish the purpose of this MOU.

2. Data Practices. The Lead Agency and Assisting Agencies agree to coordinate compliance with the requirements of the Minnesota Government Data Practices Act (MGDPA) as it pertains to the data collected or used to accomplish the purpose of this MOU.

3. Amendments. This MOU may be amended only by written agreement of all parties.

4. Termination. This MOU will remain in effect until issuance of the Commission's determination of EIS adequacy for both of the Proposed Projects. Notwithstanding the forgoing, any party may withdraw from this MOU upon written notice to the other signatories to this MOU.

5. Liability. Each party to this MOU shall be liable for its own acts and the results thereof to the extent authorized by law and shall not be responsible for the acts of the other party, its officers, employees or agents. Nothing in this MOU shall be deemed to be a waiver by any of the parties of any applicable state immunities or limits of liability.

6. Effective Date. This MOU will be effective upon execution by all parties hereto.

BY THEIR SIGNATURES, THE UNDERSIGNED ATTEST THAT THEY HAVE THE AUTHORITY TO COMMIT TO THIS MOU ON BEHALF OF THE PARTY THAT THEY REPRESENT.

Minnesota Department of Commerce

By: _____

Print Title/Name: Deputy Commissioner, William Grant

Date: 3-2-16

Minnesota Pollution Control Agency

By: Michelle Beeman

Print Title/Name: Deputy Commissioner / Michelle Beeman

Date: 3/2/16

Minnesota Department of Natural Resources

By: Barbara Naramore

Print Title/Name: Assistant Commissioner Barbara L. Naramore

Date: 3/2/16

North Dakota Pipeline Company LLC
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Barry Simonson
Sr. Manager, Engineering and Construction
Sandpiper Mainline Execution, Major Projects
Tel. (855) 714-8374
sandpiperproject@enbridge.com

May 30, 2014

VIA E-FILING

Larry Hartman, Environmental Review Manager
Minnesota Department of Commerce
85 7th Place E, Suite 500
St. Paul, MN 55101

RE: *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259)

Dear Mr. Hartman:

North Dakota Pipeline Company LLC ("NDPC") submits this letter to propose route alternatives for Sandpiper Pipeline Project ("Project"), as well as to provide comments regarding proposed route alternatives filed with the Minnesota Public Utilities Commission ("Commission") during the public comment period. In the sections that follow, NDPC discusses: (1) proposed route alternatives it has incorporated into its preferred route, which should be included in the Comparative Environmental Analysis ("CEA") prepared for the Project; (2) proposed alternatives that do not meet the Project's purpose and, therefore, should not be included in the CEA; and (3) the feasibility of certain proposed route alternatives. With respect to any proposed route alternatives not addressed in these comments, NDPC takes no position on whether the Commission and the Department of Commerce, Energy Environmental Review and Analysis ("EERA"), should include those alternatives in the CEA.

In addition, as requested by the EERA, NDPC provides updated information regarding cumulative potential effects of the proposed Project and Enbridge Energy, Limited Partnership's ("Enbridge") proposed Line 3 Replacement Program ("L3R Project").

A. Proposed Route Alternatives NDPC Incorporated Into the Preferred Route, Which Should Be Included in the CEA.

On April 4, 2014, NDPC submitted thirteen route alternatives that it had incorporated into its preferred route for the Project (*see* the attached **Exhibit A**). NDPC has identified an additional eleven route alternatives that address landowner, environmental, engineering, design, or constructability concerns, and has incorporated these additional route alternatives into its preferred route. The alternatives are consistent with the Project's purpose, are feasible from an engineering, design, and constructability standpoint, and have similar or fewer environmental impacts. The attached **Exhibit B** provides a description of each of the eleven route alternatives,

the reasons for incorporation into the preferred route, and a map depicting each alternative's location.

NDPC respectfully requests that the preferred route submitted on January 31, 2014, as modified by the route alternatives provided in its April 4, 2014, filing (*see* **Exhibit A**), and in this filing (*see* **Exhibit B**),[1] be included in the CEA, addressed at the public hearings as NDPC's preferred route, and ultimately approved as the Project route. A CD containing shapefiles of the preferred route (as modified), as well as shapefiles of each of the route alternatives, has been sent under separate cover.

B. Proposed Route Alternatives That Do Not Meet the Project's Purpose and, Therefore, Should Be Excluded From the CEA.

Certain route alternatives proposed in public comments do not meet the Project's purpose and, therefore, should not be addressed in the CEA. Each of these proposed route alternatives is discussed below.

1. North Dakota to Twin Cities Route Alternatives.

Friends of the Headwaters proposed a route alternative (referred to by Friends of the Headwaters as Alternative Route "C") that would extend from North Dakota into Minnesota along MN Hwy 9, then intersect with and follow first an existing Magellan Pipeline Company pipeline and then the existing MinnCan Pipeline, ultimately terminating at the Flint Hills and Saint Paul Park Refineries, south of the Minneapolis/St. Paul metro area.[2] Similar proposals were included in other public comments, including a route alternative that would follow I-94 from North Dakota to terminate at an unknown location in the Minneapolis/St. Paul area.[3] Such proposals do not reach the Project's designated connecting points and, thus, do not meet the Project's intended purpose.

The Project's purpose is to transport the growing supplies of oil produced in North Dakota to existing terminals at Clearbrook, Minnesota, and Superior, Wisconsin, within the

[1] Please note that the Peterson Lake Route Alternative in this filing replaces the Blind Lake Creek Route Alternative submitted on April 4, 2014.

[2] *See* Friends of the Headwaters Public Comments, dated April 4, 2014, filed by DOC EERA on April 21, 2014 (Doc. IDs 20144-98540-05, 20144-98540-06 and 20144-98540-07), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

[3] *See*, *e.g.*, Monicken Public Comments, dated April 4, 2014, and Mosner Public Comments, dated April 4, 2014, filed by the EERA on April 17, 2014 (MPUC Doc. ID 20144-98433-08), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259); *see also* Honor the Earth's Motion for Alternative Sandpiper Route 29-94, filed by Honor the Earth on April 4, 2014 (MPUC Doc. ID 20144-97984-01), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

Enbridge Pipeline System.[4] From these two terminals, crude oil can be shipped on other pipelines and delivered to not only refineries located in Minnesota, but also to other states in the Midwest and on the East Coast.[5] Extending the Project from North Dakota to the Clearbrook and Superior terminals enables NDPC to utilize existing facilities within the Enbridge Pipeline System, and to meet its shipper obligations. Utilizing the Clearbrook and proposed Clearbrook West terminals allows NDPC to provide back-up service to the existing Line 81 Pipeline deliveries, which in turn ensures reliable deliveries of 60,000 barrels per day ("bpd") annual capacity into the Minnesota Pipe Line Company system for delivery to Minnesota refineries.[6] However, as noted, the Project's purpose goes beyond delivery to only Minnesota refineries, and for that reason connecting to both the Clearbrook and proposed Clearbrook West terminals along with the existing Superior terminal is essential to meeting this purpose.

In essence, the proponents of a North Dakota to Twin Cities route alternatives propose a *different project*, rather than an alternative route for the proposed Project.[7] Therefore, NDPC requests that the Commission and the EERA not include route alternatives extending from North Dakota to the Twin Cities in the CEA.

2. North Dakota to Illinois Route Alternatives.

Friends of the Headwaters also suggest two route alternatives (referred to by Friends of the Headwaters as Alternative "A" and Alternative "B"), which extend from North Dakota to Illinois, passing through southwestern Minnesota.[8] Similar routes were proposed in other public comments.[9] These proposals do not reach either of the Project's designated connecting points

[4] *See* Section 7852.2100(D)(2) of NDPC's Pipeline Route Permit Application ("Application"), filed on November 8, 2013 (MPUC Doc. ID 201311-93532-03), as supplemented on January 31, 2014 (MPUC Doc. ID 20141-96101-01), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259), at pp. 4-5.

[5] *Id.*

[6] *See* Section 7852.2100(D)(5) of NDPC's Application, filed on November 8, 2013 (MPUC Doc. ID 201311-93532-03), as supplemented on January 31, 2014 (MPUC Doc. ID 20141-96101-01), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259), at p. 5.

[7] The proposals also do not contain all of the data and analysis required for route alternatives. *See* Minn. R. 7852.1400, subp. 3(B) and Minn. R. 7852.2700.

[8] *See* Friends of the Headwaters Public Comments, dated April 4, 2014, filed by DOC EERA on April 21, 2014 (Doc. IDs 20144-98540-05, 20144-98540-06 and 20144-98540-07), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

[9] *See, e.g.*, Mosner Public Comments, dated April 4, 2014, filed by the EERA on April 17, 2014 (MPUC Doc. ID 20144-98433-08), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

and, thus, do not meet the Project's intended purpose. These are proposals for *different projects*, not alternative routes, much like the North Dakota to Twin Cities route alternatives discussed above.[10] Thus, for the same reasons discussed in Section B.1, NDPC requests that the Commission and EERA not include route alternatives extending from North Dakota to Illinois in the CEA.

3. Northern Minnesota Route Alternatives.

Two route alternatives extending north of and around the Red Lake Indian Reservation were proposed in public comments. One route alternative was proposed by Sharon Natzel,[11] and the other is a conceptual route proposed by Ronald Vegemast.[12]

Neither proposed alternative connects to Enbridge's existing terminal in Clearwater, Minnesota, which, as discussed above, is a designated connecting point for the Project and essential to meeting the Project's purpose.[13] Therefore, NDPC requests that the Commission and the EERA not include these alternatives in the CEA.

C. Comments on Route Alternative Feasibility.

Two route alternatives have been proposed in areas where NDPC has no legal authority or recourse to obtain rights to construct the Project. Several public comments suggested that NDPC follow the Northern Route Alternative[14] discussed in NDPC's pipeline route permit

[10] The proposals also do not contain all of the data and analysis required for route alternatives. *See* Minn. R. 7852.1400, subp. 3(B) and Minn. R. 7852.2700.

[11] *See* Natzel Public Comments, dated April 3, 2014, filed by DOC EERA on April 17, 2014 (MPUC Doc. ID 20144-98436-02), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

[12] *See* Vegemast Public Comments, dated April 3, 2014, filed by DOC EERA on April 17, 2014 (MPUC Doc. ID 20144-98436-10), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

[13] The proposals also do not contain all of the data and analysis required for route alternatives. *See* Minn. R. 7852.1400, subp. 3(B) and Minn. R. 7852.2700.

[14] *See, e.g*., Sterle Public Comments, filed by DOC EERA on March 24, 2014 (MPUC Doc. ID 20143-97538-02), Carlton County Land Stewards Public Comments, dated April 3, 2014, filed by DOC EERA on April 21, 2014 (MPUC Doc. ID 20144-98540-03), Shulstrom Public Comments, dated April 3, 2014, filed by DOC EERA on April 7, 2014 (MPUC Doc. ID 20144-98036-01), Rasch Public Comments, dated March 3, 2014, filed by DOC EERA on April 17, 2014 (MPUC Doc. ID 20144-98436-04), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

application ("Application")[15] and accompanying Environmental Information Report ("EIR").[16] Others suggested that the Project route follow the Soo Line ATV Trail, which extends from Cass Lake, Minnesota, to Moose Lake, Minnesota.[17] NDPC understands that both route alternatives will be studied in the CEA. NDPC takes no position on their inclusion in the CEA, but notes that both alternatives cross the Leech Lake Indian Reservation, where Enbridge cannot construct the Project.[18]

D. Updated Information Regarding Cumulative Potential Effects.

On March 3, 2014, Enbridge announced that it had received shipper support for the L3R Project to replace the existing 34-inch Line 3 Pipeline along most of its route from Edmonton, Alberta, to Superior, Wisconsin, with a new 36-inch pipeline and associated facilities. Within the United States, Enbridge plans to replace three segments of the Line 3 Pipeline as three separate replacement projects: (1) the Canadian border to Joliette, North Dakota, segment; (2) the Joliette, North Dakota, to the Wisconsin border segment; and (3) the Wisconsin border to the Superior terminal segment. Enbridge proposes to route the Clearbrook, Minnesota, to Wisconsin border portion of the second segment of the Line 3 Pipeline along the preferred route for the Sandpiper Pipeline.[19] In general, Enbridge plans to locate the Line 3 Pipeline 25 feet from the Sandpiper Pipeline. Enbridge plans to file Certificate of Need and Pipeline Route Permit applications for the Minnesota portion of the LR3 Project with the Commission in 2015. Pending receipt of all necessary permits and approvals, construction of the LR3 Project is anticipated to commence in late 2016, with an in-service date in late 2017.

In light of Enbridge's recent announcement regarding the L3R Project, the EERA requested that NDPC provide updated information regarding the cumulative potential effects of the Sandpiper Pipeline Project and the LR3 Project.[20] As noted in its Application, as a general matter, NDPC has routed the Sandpiper Pipeline to facilitate construction of future projects, such

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[15] NDPC's Application, filed on November 8, 2013 (MPUC Doc. ID 201311-93532-03), as supplemented on January 31, 2014 (MPUC Doc. ID 20141-96101-01), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

[16] Environmental Information Report ("EIR"), filed by NDPC on November 8, 2013 (MPUC Doc. ID 201311-93532-04), as supplemented on January 31, 2014 (MPUC Doc. ID 20141-96101-02), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259).

[17] *See* Sterle and Carlton County Land Stewards Public Comments, *supra*, note 14.

[18] *See* Letter from Steven Howard, Executive Director for the Leech Lake Band of Ojibwe to Tracy Smetana, MPUC, October 25, 2013, attached as **Exhibit C**.

[19] NDPC's preferred route includes the route alternatives incorporated by NDPC in its April 4, 2014 filing and this filing.

[20] *See* Minn. R. 7852.1900, subp. 3(I); *see also* Minn. R. 7852.2700.

as the L3R Project, as co-located facilities with the Sandpiper Pipeline right-of-way.[21] Cumulative environmental impacts of L3R Project construction will be reduced by utilizing the work space created for the Sandpiper Pipeline, to the extent practicable. With respect to specific data regarding cumulative potential effects of the two projects, the attached **Exhibit D** provides updates to the Tables in the EIR[22] showing the potential additive impacts of the L3R Project. Only those Tables that required updating to account for cumulative potential effects of the L3R Project and the Sandpiper Pipeline are provided in **Exhibit D**, and any Tables not included in this update remain as filed on January 31, 2014.

Since Enbridge plans to co-locate the Line 3 Pipeline along the same route as the Sandpiper Pipeline, the cumulative potential effects of the two projects should be analyzed not only for NDPC's preferred route, but also for each route alternative included in the CEA and addressed at the public hearings. Such an analysis is necessary to ensure an accurate comparison of NDPC's preferred route to any route alternatives.

Should the Commission or the EERA have questions regarding this filing, please contact Jonathan Minton at (713) 821-2000.

Sincerely,

Barry Simonson
Senior Manager
North Dakota Pipeline Company LLC

[21] *See* Section 7852.2700(I) of NDPC's Application, filed on November 8, 2013 (MPUC Doc. ID 201311-93532-03), as supplemented on January 31, 2014 (MPUC Doc. ID 20141-96101-01), *In the Matter of the Application of North Dakota Pipeline Company LLC for a Pipeline Routing Permit for the Sandpiper Pipeline Project*, MPUC Docket No. PL-6668/PPL-13-474 (OAH Docket No. 8-2500-31259), at pp. 12 and 11, respectively.

[22] EIR, *supra*, note 16.

April 4, 2014

Larry Hartman, Environmental Review Manager
Energy Environmental Review and Analysis (EERA)
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul MN 55101

Email: larry.hartman@state.mn.us

Re: PUC Docket Number 13-473 and 13-474

Dear Mr. Hartman,

Please consider the comments below the collective and cumulative concerns and recommendation of Friends of the Headwaters (FOH), a local citizen's group organized for the purpose of protecting Minnesota's resources; advocating for citizen's right to fully participate in its government's decisions and ensuring adherence to all local, state and federal laws in all actions taken in regard to Enbridge Pipeline, (now dba North Dakota Pipeline LLC) and their plans to construct and operate the Sandpiper Crude Oil Pipeline in Minnesota. Friends of the Mississippi have over 600 members and supporters who share the concerns, comments and recommendations expressed below.

We have organized our comments into twelve sections under the following broad categories:

1. Concerns, objections, and failure to provide due process;
2. Quality and scope of alternative environmental reviews;
3. Certain time and resource constraints;
4. Unjustified limited scope of environmental review;
5. Pipeline leak/rupture event impact scenario analysis;
6. Need for additional leak/rupture scenarios unique to sandpiper routes;
7. Bakken sweet crude oil volatility/flammability consideration in leak/rupture scenario development;
8. Dept. of Commerce staff commitment to provide FOE assistance in development of alternative route data;
9. Methods of developing and comparing alternative routes;
10. Cumulative impacts;
11. Financial assurance;
12. Transparency, equal access and equal treatment;

1. CONCERNS, OBJECTIONS, AND FAILURE TO PROVIDE DUE PROCESS

Our primary concern is for what appears to be a decoupling and therefore the confusion of the procedures employed by your Department and the Public Utilities Commission in performing the state's responsibilities under the provisions of the various Statutes and Administrative Rules pertaining specifically to both the need for and the routing of petroleum pipelines in Minnesota.

The effect of the apparent decoupling of the Certificate of Need and Routing permit is the perception if not the reality that the applicant's realization of the pipeline project is but a foregone conclusion and that the routing process is relegated to simply comparing the applicant's preferred route to any other route that can possible manage to clear the myriad regulatory hurdles of requirements for complex supporting data and survive the virtually insurmountable maze of procedural requirements. The process has the appearance of being so favorably stacked in favor of the applicant's preferred route as to discourage the public from mounting the effort necessary to have any other route qualify for serious consideration. In fact, the applicant is acting in ways that would readily lead even the most casual observer to believe that the proposed southern route for the Sandpiper pipeline is a "done deal". Why else would Enbridge representatives gamble so much money to secure landowner easements all along their "preferred" route were they not so confident that the "process" will work in their favor?

FOH is requesting affirmative action on the part of the DOC and PUC that demonstrate that the need and associated pipeline routing process are transparent avoiding even the appearance of a process with a pre-determined outcome. The public has a right to expect a meticulously developed, well coordinated and interrelated need and routing process such that all material evidence is adequately weighed and publically well reasoned throughout.

It is very unclear and disturbing to the public that serious social, economic and environmental considerations seem so narrowly defined and constrained by unreasonable time schedules that favor the applicant at the expense of the public interest. It is unclear who develops the environmental impact information required by rule in the Certificate of Need (CON) process and how this environmental information may differ from the "comparative environmental analysis" or CEA prepared by the DOC that has the appearance of being operative only in the pipeline routing process. It is unclear and somewhat disturbing to realize, if it is true, that the narrow constraints imposed on the CEA document may also constrain the quality of the only environmental decision document available for the parallel but still separate CON process.

Furthermore, FOH is particularly concerned for your Department's actions which may violate the Minnesota Environmental Policy Act (MEPA) in the preparation of the CEA, particularly if the CEA is the only environmental review document made available for the CON decision as well.

It is our belief that while the several recent amendments to Minnesota Statutes you have cited at recent public meetings regarding the Sandpiper project provide for an "alternative" environmental review process for pipelines these Statutes and Rules to not allow for "inferior" environmental review for either the CON or the CEA developed for the Routing Permit.

Our reviews of all pertinent Minnesota Statutes and Rules applicable to the either the determinations of need and/or for the selection of routes for crude oil pipelines find

nothing that absolves the applicant or any state agencies from adherence to either the letter or the spirit of certain overarching and vital policy provisions of MEPA. For example, we believe that the applicant and your respective departments as well as commenting state agencies are bound by Subdivision 6, Minnesota Statutes 116D.04 regarding which states:

> **Prohibitions.** 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.

This provision of MEPA sets a very high standard for making a finding that all "reasonable and prudent alternatives" have indeed been considered before any state action may be taken to permit projects such as a crude oil pipeline.

2. QUALITY AND SCOPE OF ALTERNATIVE ENVIRONMENTAL REVIEW

FOH recognizes that the Departments of Commerce and/or the Public Utilities Commission are empowered by certain Statutes to utilize alternative environmental review for certain crude oil pipelines as authorized by Minnesota Statutes 216G.02 pertaining to Routing of Certain Pipelines and Minnesota Statutes 2004, section 216B.2421 that applies to certain large energy facilities and specifically, subdivision 2, subsection 4. specifies that these provisions apply to pipelines such as the Sandpiper.

FOH further recognizes that Minnesota Statutes 2004, section 216B.2421, Subdivision 5 describing environmental review goes on to state:

> [ENVIRONMENTAL REVIEW.] For the projects identified in subdivision 2 and following these procedures, the commissioner of the Department of Commerce shall prepare for the commission an environmental assessment. The environmental assessment shall contain information on the human and environmental impacts of the proposed project and other sites or routes identified by the commission and shall address mitigating measures for all of the sites or routes considered. The environmental assessment shall be the only state environmental review document required to be prepared on the project.

However, while MEPA specifically, in Subdivision 4a. makes provisions for such forms of exclusive "alternative review" as allowed in Statutes 216B, this section of MEPA also makes the intentions of such alternative review quite clear.

> Subd. 4a. Alternative review. The board shall by rule identify alternative forms of environmental review which will address the same issues and utilize similar procedures as an environmental impact statement in a more timely or more efficient manner to be utilized in lieu of an environmental impact statement.

FOH brings your attention to the fact that while the purpose of "alternative review' as contemplated under Subdivision 4a of MEPA is to allow for "a more timely or more efficient manner to be utilized in lieu of an environmental impact statement, such alternative review is also required to: …"address the same issues and utilize similar procedures as an environmental impact statement…"

3. CERTAIN TIME AND RESOURCE CONSTRAINTS

The expedited time schedules and the omission of certain requirements for publishing of drafts documents and for soliciting public and other agency comments on draft documents are all streamlining of the normal EIS process provided as special privilege for pipelines under MN Statutes 216 G.02. The compression of time-lines and reduction of time and limiting opportunity for public or other agency comments does not excuse the PUC and/or the DOC from preparing robust, thorough and complete environmental review documents for pipelines. If the compressed nine and twelve month schedules provided for in rule and law, respectively for both issuing Certificates of Need (CON) and Routing Permits place constraints on the quality or completeness of the public involvement or the quality and completeness of environmental review portions of these processes it is incumbent on the PUC and DOC to either act to secure the necessary resources to accomplish these tasks within the provided timeframes or grant itself sufficient time extensions to perform the environmental review adequately. Your individual departments have ample provision in rule and law to shift the costs of the accelerated pubic input and environmental review to the applicant as their responsibility in return for the benefits of the streamlined process.

Specifically, in regard to cost constraints, Minnesota Statutes 216G.02 ROUTING OF CERTAIN PIPELINES. Subdivision 3.B Section 6 requires the PUC to:

> (Section 6) provide for the payment of fees by persons proposing to construct pipelines to cover the costs of the commission in implementing this section;

Lacking sufficient resources your departments have little choice, if acting in the better interest of the public than to request additional funding and/or extend the time taken to properly meet these obligations to the citizens of Minnesota.

It is FOH's understanding of these Statutes and Rules that if at any time during CON or Routing Permit process your respective departments become aware that more extensive public involvement will be needed, or that more detailed information must be analyzed or

that more alternative routes than anticipated will have to be evaluated to meet the minimum requirements of MEPA or other applicable rules the Public Utilities Commission on recommendation from the Department of Commerce, in providing such just cause, can extend either of the CON or the Routing Permit schedules. Specifically PUC procedural rules in Section 5 states:

> "(Section 5) provide a procedure that the commission will follow in issuing pipeline routing permits and require the commission to issue the permits within nine months after the permit application is received by the commission, unless the commission extends this deadline for cause;" (emphasis added by FOH)

FOH contends that citizen comments have by appropriate mean requested, sufficiently justified and provided evidence in support to constitute the required "cause" for the commission to extend the several deadlines necessary to allow full and complete public involvement and for expanding the time and resources necessary for preparation of appropriate environmental review documents.

4. UNJUSTIFIED LIMITED SCOPE OF ENVIRONMENTAL REVIEW

FOH finds that the Department of Commerce Environmental Review staff may believe that the Comparative Environmental Analysis for alternative routes and comments from any state or federal agencies or from the general public are necessarily constrained to impacts of pipeline construction only. FOH point out that under PUC Rules 7852.1900 CRITERIA FOR PIPELINE ROUTE SELECTION states in Subpart. 3 Criteria and in section J:

> Criteria. 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:
>
> > J. 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. (note: bold underlining added by FOH)

Therefore, FOH requests that the Comparative Environmental Review for the preferred route and all alternative routes include all *operational* impacts of the proposed Sandpiper pipeline. Operational aspects of crude oil pipelines over their entire projected life history include the high potential for pipeline failure, rupture, leaks and other releases of product into the environment. Probabilities of these types of releases have been found in other recent pipeline project environmental reviews to be high enough to be considered reasonably predictable impacts of operating crude oil pipelines over their projected lifetimes. These were the findings of a recently published 2014 Federal Environmental Impact Statement (EIS) prepared by the U.S. Environmental Protection Agency (EPA) for the proposed Pebble Mine in Bristol Bay Alaska. The full EIS is available on line at:

http://cfpub.epa.gov/ncea/bristolbay/recordisplay.cfm?deid=253500#Download

In Chapter 11 of the aforementioned EIS the EPA supports this conclusion by statistical analysis of United States, Canadian pipeline operating history as well as data from other countries: The EPA's rather sobering and significant conclusions are shown in two excerpts from the EIS below:

> *"This overall estimate of annual failure probability, coupled with the 113-km length of each pipeline as it runs along the transportation corridor within the Kvichak River watershed, results in an 11% probability of a failure in each of the four pipelines each year. Thus, the probability of a pipeline failure occurring over the duration of the Pebble 2.0 scenario (i.e., approximately 25 years) would be 95% for each pipeline."*
>
> *"The chance of a large rupture in each of the three pipelines over the life of the mine would exceed 25%, 30%, and 67% in the Pebble 0.25, 2.0, and 6.5 scenarios, respectively. In each of the three scenarios, there would be a greater than 99.9% chance that at least one of the three pipelines carrying liquid would fail during the project lifetime".*

The Bristol Bay EIS goes on to discount the likelihood that improved engineering standards for pipeline materials would reduce pipeline failure rates because engineering has little effect on the rate of human errors leading to leaks and ruptures. See this discussion in a following paragraph:

> *"It may be argued that engineering can reduce pipeline failures rates below historical levels, but improved engineering has little effect on the rate of human errors. Many pipeline failures, such as the cyanide water spill at the Fort Knox mine (Fairbanks, Alaska) that resulted from a bulldozer ripper blade hitting the pipeline (ADEC 2012), are due to human errors. Perhaps more important, human error can negate safety systems. For example, on July 25 and 26, 2010, crude oil spilled into the Kalamazoo River, Michigan, from a pipeline operated by Enbridge Energy. A series of in-line inspections had showed multiple corrosion and crack-like anomalies at the river crossing, but no field inspection was performed (Barrett 2012). When the pipeline failed, more than 3 million L (20,000 barrels) of oil spilled over 2 days as operators repeatedly overrode the shut-down system and restarted the line (Barrett 2012). The spill was finally reported by a local gas company employee who happened to witness the leak. The spill may have been prevented if repairs had been made when defects were detected, and the release could have been minimized if operators had promptly shut down the line".*

The following January 27, 2012 article in the Watershed Sentinel, an online British Columbian Newsletter reviews a 10- year spill history of the Enbridge Pipeline System in the U.S. and Canada demonstrating that Enbridge pipeline leak/spill history is consistent with the data analyzed in the Bristol Bay EIS.

A Decade of Enbridge Oil Pipeline Spills
by Joyce Nelson,

2000: 7,513 barrels. Enbridge reported 48 pipeline spills and leaks, including a spill of 1,500 barrels at Innes, Sask.

2001: 25,980 barrels. Enbridge pipelines reported 34 spills and leaks, totalling 25,980 barrels of oil, including a January spill from Enbridge's Energy Transportation North Pipeline that leaked 23,900 barrels of crude oil into a slough near Hardisty, Alberta, and a September spill of 598 barrels in Binbrook, Ont.

2002: 14,683 barrels. Enbridge reported 48 oil spills and leaks, totalling 14,683 barrels, including a leak of 6,133 barrels in Kerrobert, Sask. in January; a seam failure in May that spilled 598 barrels in Glenboro, Man.; and a pipeline rupture into a marsh west of Cohasset, Minn. To prevent 6,000 barrels of crude oil from reaching the Mississippi River, Enbridge set the oil on fire.

2003: 6,410 barrels. Enbridge pipelines had 62 spills and leaks, totalling 6,410 barrels, including a January spill of 4,500 barrels of oil at the company's oil terminal near Superior, Wisc., and a June spill of 452 barrels of oil into Wisconsin's Nemadji River. In April, an Enbridge gas pipeline exploded, levelling a strip mall in Etobicoke, Ont. and killing seven people.

2004: 3,252 barrels. Enbridge pipelines had 69 reported spills, totalling 3,252 barrels of oil, including a February valve failure in Fort McMurray, Alta. that leaked 735 barrels of oil.

2005: 9,825 barrels. Enbridge had 70 reported spills, totalling 9,825 barrels of oil.

2006: 5,363 barrels. Enbridge had 61 reported spills, totalling 5,363 barrels of oil, including a March 613 barrel spill at its Willmar terminal in Saskatchewan and a December spill of 2,000 barrels at a pumping station in Montana.

2007: 13,777 barrels. Enbridge had 65 spills and leaks, totalling 13,777 barrels of oil, including a January pipeline break near Stanley, North Dakota, which spilled 215 barrels of oil; two pipeline incidents in January/February in Clark and Rusk Counties in Wisconsin which spilled 4,200 barrels of oil; and an April spill of approximately 6,227 barrels of oil into a field down-stream of an Enbridge pumping station at Glenavon, Sask. In November, an Enbridge pipeline carrying bitumen to U.S. Midwest markets exploded near Clearbrook, Minn., killing two workers.

2008: 2,682 barrels. Enbridge had 80 reported spills and leaks, totalling 2,682 barrels of oil, including a January incident at an Enbridge pumping station at the

Cromer Terminal in Manitoba that leaked 629 barrels of crude; a February incident in Weyburn, Sask., which leaked 157 barrels; and a March spill of 252 barrels of oil in Fort McMurray, Alberta.

2009: 8,441 barrels. Enbridge had 103 reported oil spills and leaks, totalling 8,441 barrels, including a pipeline incident at the Enbridge Cheecham Terminal tank farm that spilled 5,749 barrels of oil near Anzac, Alberta; a spill of 704 barrels in Kisbey, Sask.; and a spill of 1,100 barrels at Odessa, Sask.

2010: 34,122 barrels. Enbridge had 80 reported pipeline spills, totalling 34,122 barrels, including a January Enbridge pipeline leak near Neche, North Dakota of 3,000 barrels of oil; an April incident near Virden, Man. that leaked 12 barrels of oil into Bosshill Creek; a July pipeline spill in Marshall, Michigan that dumped 20,000 barrels of tar sands crude into the Kalamazoo River, causing the biggest oil spill in U.S. Midwest history; and a September pipeline spill of 6,100 barrels in Romeoville, Ill.

Total: 132,715 barrels of oil, more than half the Exxon Valdez spill of 257,000 barrels

Sources: Prince George Citizen (March 12, 2010); The Polaris Institute (May 2010); The Tyee (31 July 2010); Reuters (Sept. 10, 2010); Enbridge.com 2010; Vancouver Sun (May 10, 2011); The Globe & Mail (June 17, 2011); Dogwood Initiative

- See more at: http://www.watershedsentinel.ca/content/enbridge-spills#sthash.e8U7c4zM.dpuf

FOH asserts that Minnesota Statute and Rule applicable to pipeline route permit review and comparative environmental analysis both permit and justify inclusion and assessments of impact from predictable events during the life history of the pipeline including the high probability for major leaks and/or ruptures releasing large quantities of crude oil into the environment. These predictable releases of oil are very likely to have significant adverse impacts on persons, property and natural resources along and downstream of each of the several route alternatives evaluated. Comparing these predictable impacts for all alternative routes should be a major factor in final route selection of the Sandpiper pipeline.

5. Pipeline Leak/Rupture Event Impact Scenario Analysis

The Bristol Bay EIS continues in Section 11.2 with identification of 64 streams and rivers as potential product spill receiving waters because they were proposed to be crossed by the pipeline. But there were many more watersheds crossed at points near enough to downstream receiving waters to also be within the impact zone of a predicted pipeline leak or rupture.

In sections 11.3 of the EIS pipeline rupture/leak scenarios are described in detail including extensive treatment of probable duration and volumes of spills and flow times

to and extending predictable distances down receiving waters. Impacts are then described for two receiving streams typical of the landscape traversed by the pipeline.

The leak/rupture scenarios are developed fully in terms of:

1. Exposure – the physical mechanisms by which aquatic organisms would become exposed to the spilled product;
2. Transport and fate – the distance down stream the toxic components would travel down stream before dissipating, degrading or diluting below applicable water quality standards for each or most important chemical constituent of the product spilled;
3. Exposure - Response – A full analysis of the product for all toxic components, state and federal water quality standards for these chemicals and laboratory methods used to simulate water column concentrations of each chemical of concern;
4. A review of analogous spills into likely receiving water types including isolated lakes, lake chains, high or low quality streams, wetlands of different types;
5. Risk Characterization –comparing exposure levels to toxicological benchmark levels, duration of risks, actual spill histories including potential for remediation and recovery of spilled product, site specific factors and overall weight of evidence; and
6. The Range of Uncertainties in each of these pieces of evidence.

Scenarios for important Bakken Sweet Crude flowing to receiving rivers, streams, lakes, wetlands or wild rice beds along preferred Sandpiper route (and all accepted alternative routes) could then be developed similar to that developed for diesel fuel spill scenario in the Bristol Bay EIS with similar assumptions and calculations in Table 11-7 from that EIS below:

Table 11-7. Parameters for diesel pipeline spills to Chinkelyes and Knutson Creeks.

Parameter	Spill into Chinkelyes Creek		Spill into Knutson Creek
	Chinkelyes Creek	Iliamna River	Knutson Creek
Water Flow			
Discharge (m^3/s)	1.8	22	3.4
Velocity (m/s)	2.2	2.0	2.2
Channel Length (km)	14	7.6	2.6
Pipeline Drainage and Dilution			
Flow rate while draining (m^3/s)	0.035	-	0.023
Flow rate while pumping (m^3/s)	0.005	-	0.005
Release time—draining (minutes)	13	-	7.9
Release time—pumping (minutes)	5	-	5
Volume—total (m^3)	30	-	12
Volume % diesel to water in stream at spill	2.2%	-	0.83%
Mass of diesel in stream at input (mg/L)	17,000	1,500	6,500
Maximum concentration dissolved diesel (mg/L)	1.9–7.8	1.7–7.2	1.9–7.8
Distance traveled during release (km)	1.7		1.1
Travel time to confluence (minutes)[a]	110	64	19
Pipeline and Diesel Specifications			
Length from top of nearest hill to valve (m)	2100	-	810
Elevation drop (m)	150	-	25
Viscosity of diesel at 15°C (cP)	2		
Density of diesel at 15°C (metric tons/m^3)	0.85		

Notes:
Dashes (-) indicate that spill is not directly into Iliamna River, which receives flow from Chinkelyes Creek.
[a] Confluence with Iliamna River for Chinkelyes Creek; confluence with Iliamna Lake for the Iliamna River and Knutson Creek.

Based on these spill parameters similar predictions could be developed for important aquatic plant and/or animal life in the selected receiving waters along each alternative route in the CEA as shown in the following chart from the Bristol Bay EIS that compares the scenarios developed for Alaskan steams to other case histories of similar spills around the country as a means of "ground truthing" or testing validity of their predictive scenarios

Table 11-9. Cases of diesel spills into streams. For comparison, the diesel pipeline failure scenarios evaluated here would release 30 and 8 m^3 of diesel into receiving streamflows of 1.8 and 3.4 m^3/s for spills into Chinkelyes Creek and Knutson Creek, respectively.

Case	Diesel Released (m^3)	Receiving Streamflow (m^3/s)	Observed Effects
Happy Valley Creek, AK	3.7	14	Significant declines in the abundance and species richness of invertebrates
Camas Creek, MT	Unknown	0.42	Low invertebrate abundance and richness
Hayfork Creek, CA	15	4.1	Large kill of vertebrates and invertebrates
Mine Run Creek, VA	240	1.2	Reduced invertebrate abundance and diversity
Reedy River, SC	3,600	6.4	Near-complete fish kill
Cayuga Inlet, NY	26	1.8	Fish kill and reduced abundance, reduced invertebrate abundance and species composition
Westlea Brook, UK	9.8	1.34	Fish kill, invertebrates severely affected
Hemlock Creek, NY	0.5	0.76	No significant effects on invertebrates

Notes:
- Mean flow from NHDPlus v2; others as reported by the authors.

6. NEED FOR ADDITIONAL LEAK/RUPTURE SCENARIOS UNIQUE TO SANDPIPER ROUTES

Sandpiper Leak/Rupture Ground Water Aquifer Contamination Scenario
In the Bristol Bay/Pebble Mine EIS there was no identified need to assess potential for groundwater contamination that might result from a typical leak or spill from the pipelines serving the mines. However, in the case of the preferred route for the Sandpiper crude oil pipeline there are several highly vulnerable aquifers including the Straight River Aquifer near Park Rapids that has been extensively studied.
To fully appreciate the nature and scope of the contamination risk to this important aquifer a set of leak/spill scenarios similar to the surface water impact scenarios used in the Bristol Bay EIS should be developed in the Comparative Environmental Analysis for Sandpiper and any of the alternative routes accepted for consideration in the analysis.

Preparation of groundwater aquifer impact scenarios in susceptible glacial outwash formations that exist along the proposed Sandpiper route are likely to be made significantly more accurate by virtue of extensive study of an historic Enbridge (then dba Lakehead Pipeline Company in Minnesota) pipeline rupture in 1979 west of Bemidji near the small community of Pinewood. The Pinewood study would provide case study calibration data and the equivalent "ground truthing" of predictive groundwater contamination scenarios developed for Sandpiper route alternatives as was recommended in the surface water scenarios above..

A summary of the history and some of the research results applicable and useful in preparation of the Comparative Environmental Analysis for the Sandpiper project is found in a US Geological Survey factsheet found at the website shown below and an excerpt from this factsheet follows:

http://mn.water.usgs.gov/projects/bemidji/results/fact-sheet.pdf

(Excerpt from factsheet)
Description and History of Site
On August 20, 1979 approximately 16 kilometers northwest of Bemidji, Minnesota, the land surface and shallow subsurface were contaminated when a crude-oil pipeline burst, spilling about 1,700,000 L (liters) (about 10,700 barrels) of crude oil onto a glacial outwash deposit (fig. 1). Crude oil also sprayed to the southwest covering an approximately 7,500 m2 (square meter) area of land (spray zone). After cleanup efforts were completed about 400,000 L (about 2,500 barrels) of crude oil remained. Some crude oil percolated through the unsaturated zone to the water table near the rupture site (North oil pool, fig. 1). Some of this sprayed oil flowed over the surface toward a small wetland forming a second area of significant oil infiltration (South oil pool).

The land surface is a glacial outwash plain underlain by stratified glacial outwash deposits. The water table ranges from near land surface to about 11 m below the land surface. About 370 wells and test holes had been installed as of 1998.

Research Results
The fate, transport, and multiphase flow of hydrocarbons depends on geochemical processes and on the processes of volatilization, dissolution, biodegradation, transport, and sorption (fig. 2). An interdisciplinary investigation of these processes is critical to successfully evaluate the migration of hydrocarbons in the subsurface. The investigation at the Bemidji site involved the collection and analysis of crude oil, water, soil, vapor, and sediment samples. The oil phase that occurs as floating product on the water table and as residuum on sediment grains provided a continued source of hydrocarbon to the ground-water and vapor plumes. Knowledge of the geochemistry of a contaminated aquifer is important to understanding the chemical and biological processes controlling the migration of hydrocarbon contaminants in the subsurface. Studies were also conducted to document the concentrations of gases in the unsaturated zone.

Predictable Sandpiper pipeline lead/rupture ground water impact scenarios for susceptible glacial outwash aquifers along the preferred and all alternative routes evaluated could be modeled graphically (as in the figure below from that study) with methods developed in the Pinewood Spill study. Graphics thus developed could be made available in the CEN for the public and regulatory agencies to weigh in making various permit decisions and choices between alternative routes.

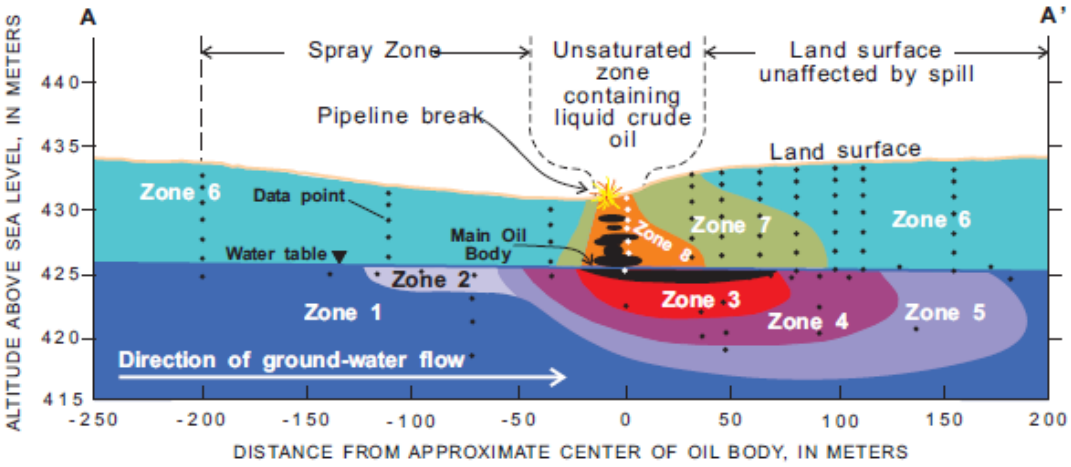


Figure 4. Geochemical zones in the unsaturated and saturated zones at the North oil pool, 1997 (Modified from Baedecker and others, 1993).

Note: Predictive models for groundwater contaminant plumes in leak/rupture scenarios can be used for comparing alternative routes and for setting GIS Spatial Analysis friction parameters discussed elsewhere in these comments.

A brief bibliography of studies of the Bemidji/Pinewood spill site assembled by the U.S. Geological Survey Minnesota Water Science Center that can be used to develop and support groundwater contamination scenarios for selected susceptible glacial outwash aquifers along the proposed Sandpiper route and its alternatives is shown below:

Fact sheet describing results from the Bemidji Toxics project

Toxics Papers:

- "Ground water contamination by crude oil" (146 KB) by Geoffrey Delin and William Herkelrath.
- "Long-term monitoring of unsaturated-zone properties to estimate recharge at the Bemidji crude-oil spill site"(498 KB) by Geoffrey Delin and William Herkelrath.
- "Aromatic and Polyaromatic Hydrocarbon Degradation under Fe (III)-Reducing Conditions" (135 KB) by Robert T. Anderson, et al.
- "Coupled Biogeochemical Modeling of Ground Water Contamination at the Bemidji Minnesota Crude Oil Spill Site" (60 KB) by Gary Curtis, et al.
- "Investigating the Potential for Colloid- and Organic Matter-Facilitated Transport of Polycyclic Aromatic Hydrocarbons in Crude Oil-Contaminated Ground Water" (136 KB) by Joseph Ryan, et al.
- "Determining BTEX Biodegradation Rates Using In Situ Microcosms at the Bemidji site, Minnesota: Trials and Tribulations" (69KB) by E. Michael Godsy, et al.
- "Inhibition of Acetoclastic Methanogenesis by Crude Oil from Bemidji, Minnesota" (143 KB) by Ean Warren, Barbara Bekins, and E. Michael Godsy.

Posters Presented at Technical Conferences:

- "Estimating multiphase hydraulic properties at a crude-oil spill site" by William Herkelrath, Hedeff Essaid, and Leslie Dillard, USGS, Menlo Park CA

  A poster presented at the "International workshop on Characterization and measurement of the hydraulic properties of unsaturated porous media", Riverside, CA, October 22-24, 1997.

Related links that include results from the Bemidji site:

- Fate of Organic Chemicals in Subsurface Environments
- Microbiology and Molecular Ecology studies in Bemidji, MN
- Multiphase flow, transport, reaction and biodegradation
- Comprehensive Organic Analysis of Water
- Transport and Biogeochemical Fate of Organic Substances in Aquatic Environments
- Biogeochemical Controls on Organic Contaminant Degradation in Heterogeneous Near Surface Environments
- Comparative Study of Organic Degradation in Selected Hydrologic Environments

Figures:

- Geochemical zonation (17 KB) diagram.
- Plan view aerial photo from 1991 (85 KB) showing topographic contours and well locations at the site.

7. Bakken Sweet Crude Oil Volatility/Flammability Consideration in Leak/Rupture Scenario Development

Transportation Safety Board of Canada's Operation Service Branch Laboratory Report # LP148/2013 entitled "Analysis of Crude Oil Samples - Montreal, Maine & Atlantic Railway, Train MMA-002 - Date of Occurrence: 06-Jul-2013" which was just released on released on February 6th 2014. The relevance of this report to the Sandpiper routing process Comparative Environmental Analysis is that the train derailment investigated involved a major spill of the same product proposed to be shipped by the Sandpiper, namely Bakken sweet crude oil. The full report is available at:

http://www.tsb.gc.ca/eng/enquetes-investigations/rail/2013/R13D0054/lab/20140306/LP1482013.asp

Excerpts from the report follow:

> "On 06 July 2013, a unit train carrying petroleum crude oil operated by Montreal, Maine & Atlantic Railway derailed in Lac-Mégantic, Quebec. Numerous tank cars ruptured and a fire ensued.
>
> "Conventional oil, which can range from light to medium in grade, is found in reservoir rocks with sufficient permeability to allow the oil to flow through the rock to a well. The petroleum crude oil on the occurrence train originated from suppliers with producing wells in the Bakken Shale formation region of North

> Dakota. The Bakken Shale formation is a tight oil reservoir. Tight oil is a type of conventional oil that is found within reservoirs with very low permeability. Most oil produced from low-permeability reservoirs is of the light to medium variety, with a lower viscosity. "

Elsewhere in this Canadian TSB report Bakken Sweet Crude is compared to the volatility of unleaded gasoline:

> "The Environmental Technology Centre (ETC) Oil Properties Database reports the following properties for unleaded gasoline: [45]
>
> ☐ Flash point -30°C
>
> ☐ Density at 15°C 750 to 850 kg/m3
>
> ☐ Kinematic viscosity <1 cSt at 38°C
>
> "Comparing these values to the occurrence crude oil results summarized in Table 2, it is apparent that the occurrence crude oil's flash point is similar to that of unleaded gasoline. The density results obtained for the occurrence crude oil samples (see Table 10) are also within the range reported for unleaded gasoline. However, unleaded gasoline has lower viscosity than the occurrence crude oil samples."

The Canadian TSB report includes the following pertinent conclusions that would be important in the development of leak/rupture incident response scenarios in the Sandpiper comparative environmental analysis:

> "4.3 The occurrence crude oil's properties were consistent with those of a light sweet crude oil with volatility comparable to that of a condensate or gasoline product.
>
> 4.6 The large quantities of spilled crude oil, the rapid rate of release, and the oil's high volatility and low viscosity were likely the major contributors to the large post-derailment fireball and pool fire.
>
> 4.7 The occurrence crude oil contained concentrations of BTEX that were comparable to typical values reported for crude oils. This explains why concentrations of benzene and other VOCs well above exposure limits were detected at the derailment site."

8. DEPT OF COMMERCE STAFF COMMITMENT TO PROVIDE FOH ASSISTANCE IN DEVELOPMENT OF ALTERNATIVE ROUTE DATA.

FOH has complained strenuously to Department of Commerce, to the Public Utilities Commission and to the applicant that two factors have severely limited its member's ability to identify and develop reasonable and prudent alternative routes for use in preparation of the planned Comparative Environmental Analysis for Sandpiper. Most important among these limitations has been the very short amount of time allotted for the public to prepare route proposals and the withholding by both Enbridge and the two

Departments of certain techical data in the form of Geographic Information System (GIS) data files called "GIS shapefiles" for the proposed Sandpiper route.

Requests by FOH for extensions of time beyond the established deadline of April 4th 2014 for submitting alternative route proposals have been steadfastly refused by Department staff. These denials of FOH's requests for such time extensions, while provided for in applicable administrative rules with showing of cause, have issued from the Department's staff without their providing justification for denying such requests.

FOH takes very seriously all the considerations as described in Subpart 3. that must be taken into account when selecting suitable alternative routes for transporting such hazardous material as Bakken Crude Oil across Minnesota. As required by the rules as set forth in PUC 7852.1400 great multitude of parameters must be considered simultaneously and repeatedly for what could be endless possible routes. Thankfully, technology has recognized the complexity of the task and the enormity of data that one has to consider to meet the rule and Geographic Information Spatial Analysis is one such technology.

From Enbridge's Minnesota Environmental Information Report on Sandpiper submitted to the PUC as part of the company's application it is apparent that Enbridge used Geographic Information System data analysis method similar to the Spatial Analysis referenced above. The following paragraphs are excerpted in part from that report:

> "EPND assessed the route from Tioga, North Dakota to Superior, Wisconsin, with the intent of maximizing existing right-of-way to the extent practicable while identifying specific areas where co-location may not be practicable. The first step in the environmental review of the route and the selection process consisted of collecting publicly available environmental data to identify routing constraints. The sources of data consisted primarily of: Geographic Information Systems ("GIS") digital information layers, including U.S. Geological Survey ("USGS") topographic maps, USGS land use database, U.S. Department of Agriculture ("USDA") Farm Services Agency aerial photography and GIS data, National Wetlands Inventory ("NWI") maps, Minnesota Department of Natural Resources ("MNDNR") Natural Heritage Information System ("NHIS") data, Minnesota Department of Transportation ("MDOT") highway maps, USDA state soil geographic (State Soil Geographic ["STATSGO2"] and Soil Survey Geographic ["SSURGO"]) databases, and other natural feature databases obtained from the MNDNR website and other state and federal sources. Existing major utility rights-of-way also were identified for potential use in co-location.
>
> 2.3.3 Comparison of Route Alternatives
> EPND conducted a detailed quantitative analysis of environmental impacts along each route alternative identified during the routing process. The analysis used the same sources of publicly available environmental data described in Section 2.3.1 to compare a variety of factors, including proximity to existing rights-of-way,

> wetlands, highly wind erodible soils, bedrock outcrops, prime farmland soils, perennial waterbodies, national forest land, tribal land, state forest land, state Wildlife Management Area ("WMA") land, state Aquatic Management Area ("AMA") land, railroads crossed, roads crossed, and other site-specific matters. No field survey data was used in the alternatives analysis as field surveys were not completed along the alternate routes. EPND identified and analyzed four route alternatives, which are presented in the following subsections and shown in Figure 2.3.2-1. None of the route alternatives were adopted as the Project's preferred route."

Enbridge apparently had submitted the GIS information they developed for their preferred route to the PUC including the GIS shapefile they constructed. FOH had hoped to utilize the GIS Shapefiles Enbridge had applied to their alternative route analysis to explore the applicants preferred southern route to any and all alternative routes considered viable by cursory examination of various maps and other resources. However neither Enbridge nor the Department of Commerce (DOC) staff would release the shapefile claiming it was protected information under both Federal and State statute.

FOH was never granted access to the subject GIS shapefile by either Enbridge or Dept of Commerce but did successfully obtain the shapefile from the Minnesota Department of Natural Resources after finding that the data were not protected by either Federal or State Statute as claimed by Enbridge and DOC. Unfortunately, the release of the GIS shapefile for the Sandpiper preferred route was far too late into the comment period for FOH to make productive use of the data.

Having made its case that FOH was severely hindered in its efforts FOH has appealed to DOC staff for assistance in meeting the rigorous criterion that must be met in 7852.1400 Subp. 3. Requirements for other route sources.

> Subp. 3. A person other than one listed in subpart 2 (the applicant) may propose a route or a route segment according to items A to C. In Subpart 3.B. of this rule it states that: "The pipeline route or route segment proposal must contain the data and analysis required in parts7852.2600, subpart 3, and 7852.2700, unless the information is substantially the same as provided by the applicant."

Department of Commerce staff, in a prehearing scheduling conference call in the presence of all the parties to the Sandpiper project and the Administrative Law Judge, Judge Eric Lipman agreed to assist FOH in developing the necessary detailed information necessary to meet the minimum requirements of MN 7852.1400 cited above such that suggested alternative routes put forth by FOH would not be summarily dismissed from consideration for lack of required supporting data analysis required by that rule. FOH is committed to meeting with DOC staff immediately following the April 4th comment deadline. FOH will, under separate cover be submitting alternative routes for Sandpiper before the comment deadline. It was understood that the alternative routes thus submitted by FOH will require the DOC staff assistance offered to meet the criterion in the rule to

make them viable per this agreement thus it is expected that the DOC will continue to develop FOH alternatives submitted such that the FOH alternatives will be found acceptable by the commission.

9. METHODS OF DEVELOPING AND COMPARING ALTERNATIVE ROUTES

The applicant, the PUC, the DOC and the public are all confronted with the same challenge. That is to develop alternative routes for Sandpiper that meet the criterion established in MN Rules 7852.1900 CRITERIA FOR PIPELINE ROUTE SELECTION while satisfying the requirement in MEPA for having considered all reasonable and prudent alternatives.

The applicant, having already utilized considerable GIS technology should be well positioned to employ computerized route optimization algorithms to evaluate their preferred route against any and all routes that meet PUC criterion. In fact, they may have already done so during their own comparison of routes. Furthermore, it is the understanding of FOH that the DOC is considering hiring an outside consultant for purposes of assisting the DOC in preparing the Comparative Environmental Analysis. There are many private consultants in the United States performing optimization analysis of linear public and private utilities by applying route optimization software. We would be happy to provide such consultant lists to the DOC staff upon their request.

We provide below, for those who may not be familiar with this technology, a brief description of how Geographic Information Spatial Analysis Systems have evolved into a powerful tool for selecting optimal routes for linear facilities like power lines, pipelines, highways and other utilities. FOH strongly encourages the DOC to specifically contract with outside consultants skilled and experienced in linear facility route optimization to more fully satisfy the requirements in applicable rules and statute to find and select the most reasonable and prudent alternative route for the Sandpiper and all future linear facilities of this nature. It is recommended that the DOC exercise its and the PUC's authority under rule to also develop alternative routes for Sanpiper.

Here is a detailed description of how this technology could be used to satisfy the statutory requirement to examine all reasonable and prudent alternative routes for Sandpiper while adhering most closely to the constraints of time frames provided in rule and law.

5.1.1.20 Graphical Information System

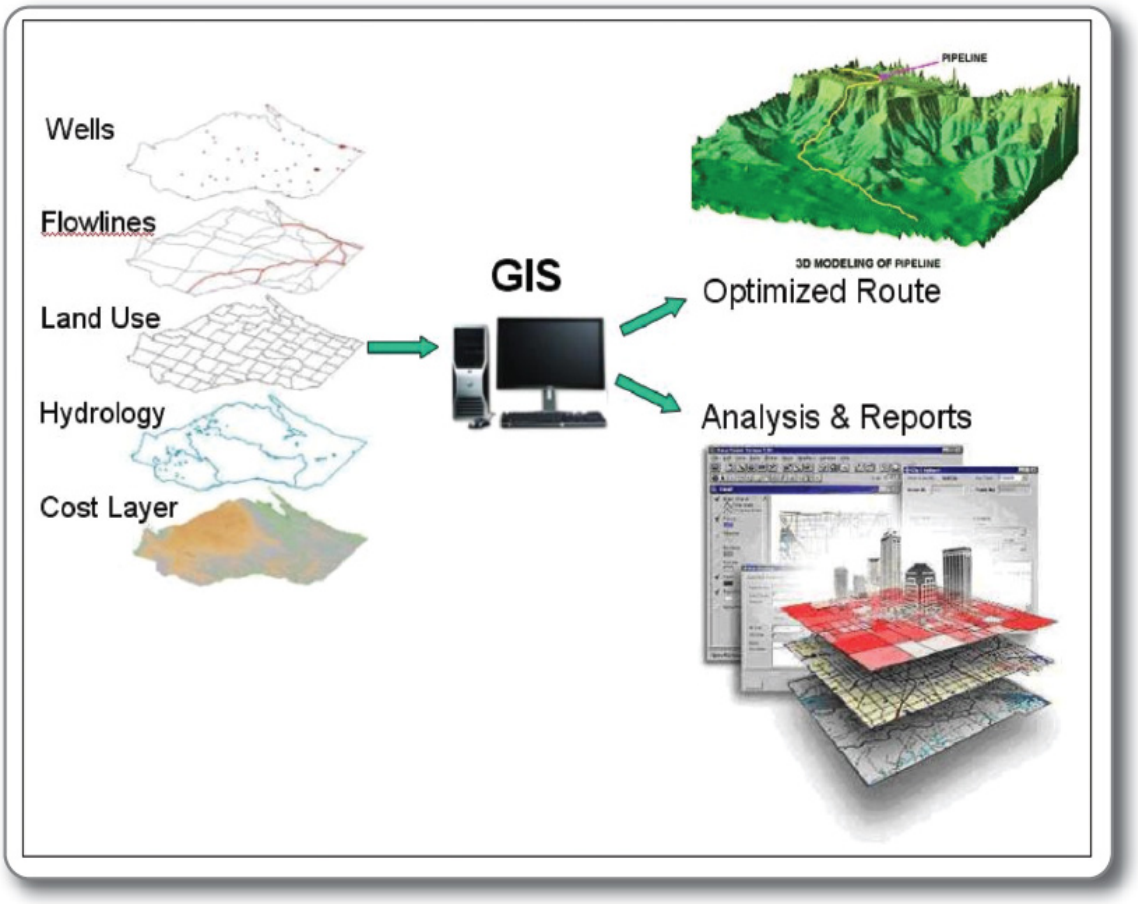
5.1.1.20.1 General

Geographic Information Systems (GIS) are scientific and technological tools that enable the integration of data from different sources into a centralized database from which the data is modeled and analyzed based on its spatial component. GIS-based tools and processes have been extensively used to address the challenges of optimizing pipeline route selection and route networks based on the collection, processing and analysis of spatial data such as topography, vegetation, soil type, land use, geology and landslide areas.

Traditional manual pipeline routing uses available paper maps, drawings, aerial photographs, surveys and engineer experience. GIS techniques combine all of these sources of data in a convenient computer-based information system. The key to the GIS is that it has advantages in terms of speed of data processing and analytical capability.

Fig. 2 is a simplified representation of how data is combined and processed in a GIS to produce models and required outputs. Data, such as well locations, surface topography, land use activities, soil conditions and infrastructure features, are combined based on their spatial component. This enables the engineer to test real-world scenarios within the spatial models.

Fig. 2: Process To Optimize Pipeline Routes



GIS represents an innovative approach to pipeline routing that is both systematic and effective. Optimizing a pipeline route is essentially an optimization between costs of the material and the costs of the construction. Natural and man-made terrain obstructions cause spatial variations in construction cost due to changing features like types of soils, intervals of slope. GIS allows the engineer to use dynamic spatial models to aid in selecting an optimized pipeline route. The GIS software and data enables the processing of a large amount of location-based information to find a least cost path (LCP) between two locations by taking into account natural and manmade obstructions and features.

5.1.1.20.2 GIS Routing Optimization Methodology

The GIS approach to pipeline routing optimization is based on relative rankings and weights assigned to project specific factors that may affect the potential route. The result of this process is a least cost path (LCP) which represents that most economic path between the origin and the destination points of the pipeline.

Fig. 3 is a representation of the methodology flow used to determine the LCP

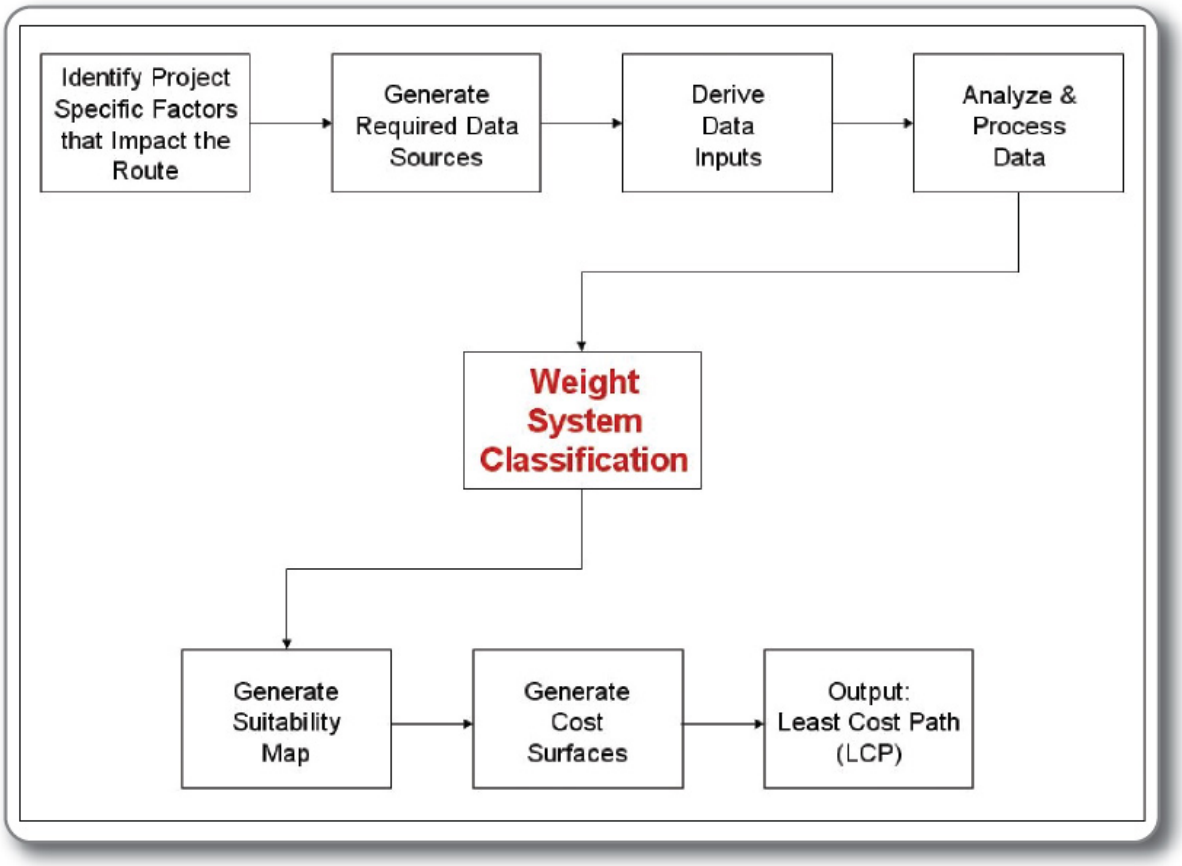


Fig. 3: Pipeline Optimization Methodology

5.1.1.20.3 Identification of Factors Affecting the Route

As mentioned in the previous section on selection criteria the identification of project-specific factors that may constrain or impact on the pipeline is an important step and a vital input to the GIS. Several factors such as geo-hazards, social issues and construction costs impact on the route and need to be taken into account. At this stage a set of rules are determined that will be used in the routing exercise. Input from experienced engineers is required to ensure that the appropriate features are identified and the correct rules established. The accuracy of the subsequent analysis is dependent on the factors being correctly identified as the analysis is only as good as the inputted data. Examples of some factors and rules include:

Factor/Feature	Rule
Roads	• Avoid road crossings • Proximity to roads is important
Railway lines	• Avoid railway line crossings
Rivers	• Avoid river crossings
Urban areas	• Avoid built up/populated areas • Avoid future development areas
Terrain/topography	• Avoid steep slopes • Use flat terrain where possible

Environmental areas	• Avoid highly-sensitive areas
Wetlands	• Avoid wetland crossings
Water bodies	• Avoid water bodies
Surface geology	• Avoid surface/sub-surface rock • Stable soils are important

5.1.1.20.4 GIS Data and Data Sources

Satellite imagery, maps, aerial photography, existing GIS data, LiDAR surveys and traditional geotechnical and topographical surveys are all sources of data that should be gathered and incorporated into the project GIS. The maps, satellite imagery and remote sensed data are scanned and geo-referenced and are then used to derive spatial features such as roads, rivers, urban areas and geological boundaries which form the GIS data to be used in the routing process.

5.1.1.20.5 GIS Data Processing and Analysis

Once the data has been captured it needs to be processed and converted into raster data. The raster data is used to calculate the feature distance cost for each feature – the weighted cost as one moves away from a feature. For example rivers are given a high cost and the further you move away from the river the lower the feature distance cost becomes.

The significance of the effect of a single feature on the pipeline route varies for each feature. For example, it is more important to avoid a deep valley crossing than it is to avoid a road crossing. The analytical hierarchy process (AHP) is one of the structured methods that can be employed to quantitatively rank each of the identified factors. Each factor is assigned a cost value which is benchmarked with typical constructions costs. The input from experienced engineers is vital when it comes to ranking and assigning weights to each layer.

5.1.1.20.6 GIS Suitability Map Generation

After the feature layers have been ranked the data layers are combined together into one single layer based on the numerical value factor derived from the weighting process. The resultant layer is referred to as the suitability layer and this layer forms the basis for the GIS analytical work.

The suitability map is used to create cost maps which related to relative construction costs. The highest costs are in steep mountainous terrain, urban areas, roads and large bodies of water. Moderate costs are associated with wetlands, forests and high slope areas. The lowest costs are to be found in areas of relatively flat bare ground, agricultural land or less dense native vegetation. See Fig. 4 for an example of a cost map.

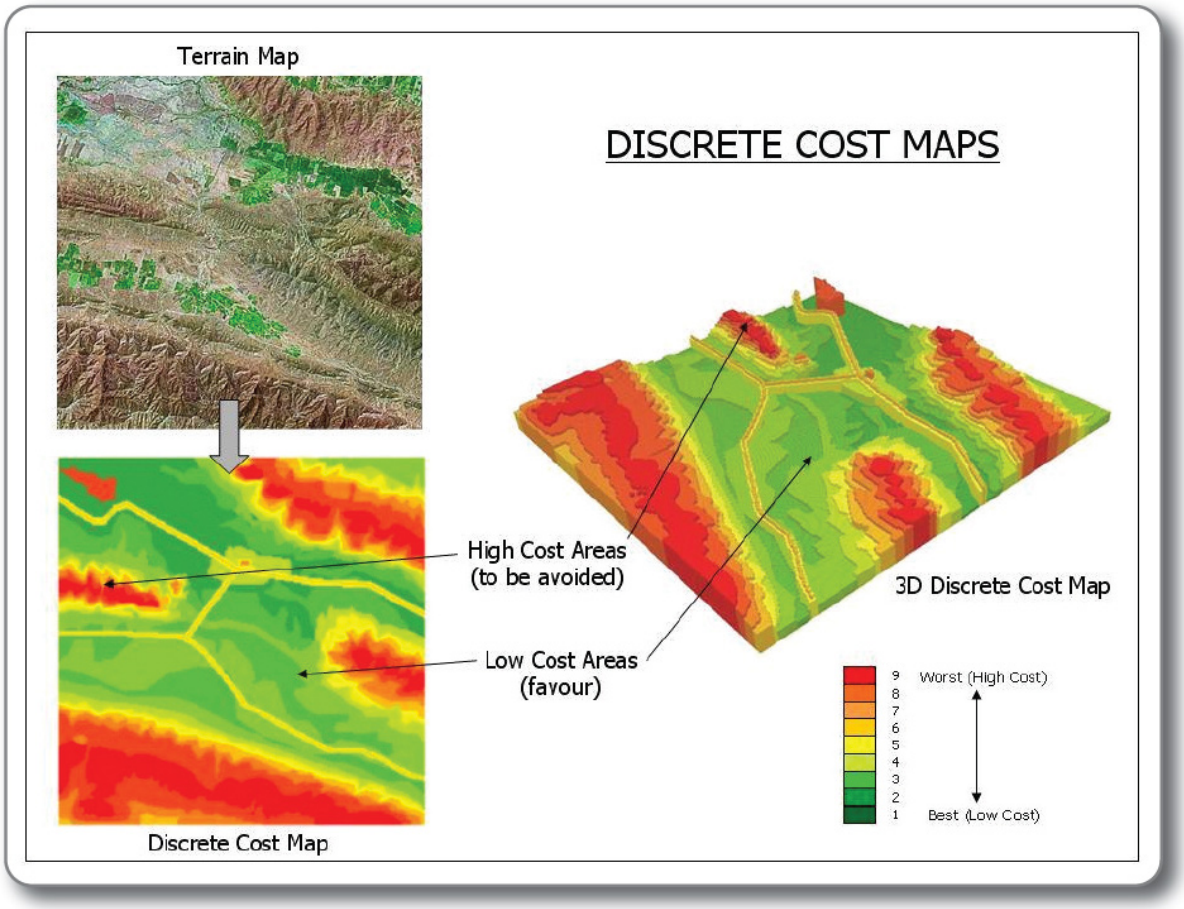


Fig. 4: Discrete Cost Map

The least cost path is the product of the GIS analysis and represents the path of least resistance from the origin of the pipeline along a surface to the destination point.

The strength of the GIS is that re-routes can quickly be incorporated into the system and the implications of the reroutes or alternative routes can be quickly assessed.

The combination of the data layers allows the engineer to test multiple pipeline network design and selection scenarios easily and efficiently. The GIS automatically calculates the lengths of new pipelines or pipeline networks. This allows for rapid total cost calculations and the running of multiple 'what if' scenarios to see the effect of changes to the pipeline design.

A GIS can produce a number of outputs quickly and efficiently in relation to pipeline routing:

- Survey request area delimitation drawings
- Land allocation/permitting drawings
- Pipeline routing drawings
- Alignment sheets (see Fig. 5)
- Tabular outputs (i.e. MTOs)
- Pipeline coordinates

(The GIS Route Optimization shown above is an open source document available on the internet and is not the property of FOH)

It is a vitally important step in employing GIS route optimization methodology that the selection of factors (environmental, demographic, social issues, and others) that are to affect the potential route selected and the weight each of these factors has in the final outcome must be carefully constructed. (See Section 5.1.1.20.2 GIS Routing Optimization Methodology in the method description above). FOH strongly recommends that a Citizen Advisory Committee or other expert panel be assembled to generate a draft set of criterion that includes the mandatory criterion set forth in PUC pipeline routing rules and other factors that may reasonably be considered and suggest a scheme of weighting of these factors to be utilized in identifying the "least cost path" and ranking of all alternative routes being considered for the Sandpiper pipeline.

This draft set of route selection criterion and assigned weights of each factor should be subjected to a full round of public information and comment sessions as required by applicable rules in the routing and/or pipeline need process. After a full public vetting and consensus building process the GIS Route Optimization product or products produced with this final set of weighted criterion would be ready to move forward through the remaining steps of the prescribed permitting process.

Minnesota is fortunate to have had forward looking government agency staff that recognized the importance and utility of providing the public with access to statewide data sets in GIS digital format. The MDNR maintains the state Data Deli system available at: http://deli.dnr.state.mn.us/ and provide links to many other state and federal sources of useful GIS data.

As a special note here, one important criterion that FOH believes has been under represented in past pipeline routing efforts in Minnesota and that must be included here as a heavily weighted routing criterion is groundwater aquifer susceptibility.

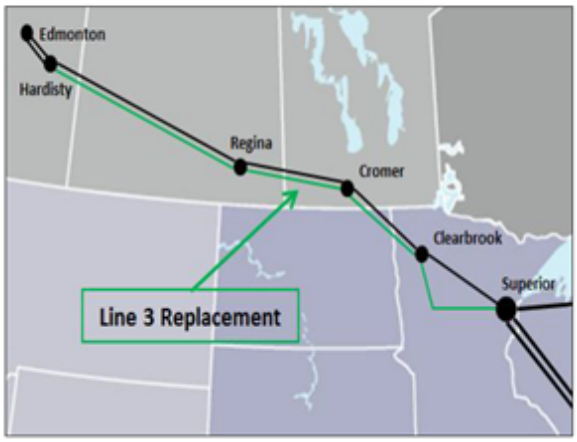
10. CUMMULATIVE IMPACTS

A. Reasonably Foreseeable Future Actions

In an investor conference held on April 2nd 2014 Enbridge announced publically and publically published the company's future plans for expanding pipeline infrastructure in Minnesota. Contained in this published document was a map for the replacement of Enbridge's existing line three which was announce earlier this spring. What was not disclosed in the earlier announcement was that Enbridge's preferred route for the line 3 replacement follows the proposed preferred route for the Sandpiper pipeline. This constitutes a "reasonably foreseeable future action" that must be folded in to any environmental review document assessing impacts of the Sandpiper pipeline including the CEA being prepared by the DOC on sandpiper.

See the cover page with date and authors and the map from page 50 of the Enbridge document.

Line 3 Replacement



The Project:
•Replace 1,031 miles of 34" pipeline with 36" pipeline

Cost:
•U.S. Portion: $2.6 Billion*

In-service date:
•2017

Status:
•Reassembled successful Alberta Clipper project team
•Securing supply chain
•Known corridor with established relationships

* Project to be jointly funded by ENB and EEP at participation levels to be finalized and approved by a Special Committee of the independent Board of Directors.

B. Impacts of Pipelines on Future Urban or Rural Development

Pipelines become significant impediments to growth and development along their easement corridors. Because of the risk for damage to an operating pipeline, pipeline companies have very strict and complex requirements for granting encroachments into their easements. As a result, it becomes costly and time consuming for local governments to extend roads and underground utilities over a pipeline easement. This has not been factored into the State's process of reviewing proposed pipeline routes because it is outside of their purview. It might prove useful to contact every local jurisdiction along the route to let them know how difficult it will be for them to obtain permission to extend new roads or utilities across pipeline easements and the extra time and expense they can expect. Communities should be alerted to the need for reviewing their comprehensive growth plans and considering future road needs as a relevant issue to evaluate. Areas within orderly annexation districts should consider future private development interests and realize that developers will shy away from parcels with pipeline easements recognizing they are as difficult to deal with as railroads and they can present adverse marketing impacts.

Pipelines have been handled differently by states and larger cities across the country with some establishing conditions and laws to address the above

concerns. Minnesota has not yet done that, leaving the local governments simply adversely impacted without compensation. Developing this information in the comparative environmental analysis could be used to both minimize these impacts on local units of government as well as to alert those along the route finally selected of the need to update comprehensive plans and transportation plans to respond to the presence of the new pipeline.

The impacts of the several alternative routes for sandpiper should include these impediments to development as a cumulative impact.

C. Community Preparedness For Pipeline Rupture/Leak Incidents

Scenario development for highly predictable leak/rupture events logically lead to considerations for disaster preparedness needed by communities near the pipeline route. Special training for first responders that alert communities to the volatility, flammability, explosiveness and human exposure concerns would be essential. Rupture/leak disaster preparedness would involve consideration and possible need to procure special fire fighting, remediation and recovery equipment and training local fire departments would need to be alert to and prepared for extraordinarily difficult fire fighting conditions. Consideration of the consequent new burdens and or risks imposed on local fire/rescue personnel and the need for more or specialized equipment posed by having a pipeline transporting hazardous materials near or through their communities should be included in the CEA. Alternative routes could be evaluated to explore ways to lessen or to mitigate these predictable impacts.

FOH recommends that this socio-economic impact be included in the CEA among the potential cumulative impacts of the project.

11. FINANCIAL ASSURANCE

FOH has serious concerns for the apparent ephemeral nature of a Limited Liability Corporation being created by Enbridge for the sole purpose of constructing and operating the proposed Sandpiper and possibly other crude oil pipelines in Minnesota. This is especially true for pipelines intended to transport the extremely hazardous Bakken Sweet Crude, the nature of which is described earlier in these comments. FOH would urge your Departments, if it has such authority, to seriously examine the financial assurance Minnesota citizens will have that North Dakota Pipeline Company LLC will be financially capable and responsible for appropriate response, remediation, and long term care of any pipeline or pipeline product impacts on people, property and/or the natural environment, whether intended or accidental. If neither the DOC nor the PUC have the authority to impose requirements of special financial instruments that can assure such financial assurance exists, FOH requests that your departments work with such agencies that may have this authority or, lacking any such authority in state or federal government, we request that your respective department's join with FOH to approach the state legislature with draft legislation enabling the appropriate state agency with the necessary

authority to require adequate financial assurance from all pipeline companies doing business in Minnesota.

12. TRANSPARENCY, EQUAL ACCESS AND EQUAL TREATMENT

FOH concludes its comments with some remarks about the PUC and DOC "general responsibilities" as provided in rule and principles of good government and citizen's right to basic freedom of speech. We remind you of one of the applicable rules here.

> 7852.4100 GENERAL RESPONSIBILITIES.
> The commission shall monitor the effectiveness of this chapter and shall take appropriate measures to modify and improve the effectiveness of this chapter. The commission shall assist governmental units and interested persons in understanding the rules.

The overall experience of FOH members throughout their involvement in the matter of the proposed Sandpiper pipeline has ranged from frustration to befuddlement, to confusion, rejection, and exclusion. Having our state government department staffs perform in ways that have been outwardly defiant, defensive, obfuscating and off putting has created a deep sense of distrust, suspicion and at times utter outrage. Our members and organization representative's attempts to fully participate in the decision-making process have been rebuffed on numerous occasions.

When FOH members prepared an information display for the public viewing at the several public meetings Enbridge's attorney and both Commerce Department (DOC) and Public Utilities Commission (PUC) staff rejected us advising us that such a display was not allowed in this public forum. This rejection was in spite of the fact that Enbridge was allowed to use similar visual aids in the form of posters, charts, maps and mounted photographs to not only present the facts of their pipeline proposal but to self-promote and embellish themselves as good corporate citizens claiming the company was a stellar corporate citizen with an excellent record of pipeline operating safety. FOH contends that for our state government to create a public forum for the express purpose of receiving public comment on a pending permit action and then deny the public the opportunity to voice its questions, concerns and to counter misrepresentations of Enbridge's safety record utilizing similar media methods is an infringement of citizen's freedom of speech as protected by the First Amendment of the U.S. Constitution.

FOH was denied access to certain technical data including Geographic Information System (GIS) files submitted to the PUC by Enbridge with their application. And when FOH, many individual citizens, a number of state wide organizations representing these citizens as well as Township and County government units requested extensions of comment deadlines to allow disenfranchised "snowbird" citizens opportunity to participate in the important "routing" phase of the project, DOC staff have summarily rejected these requests. DOC staffs defend their refusal to extend timelines as being firmly based on their unswerving intent to honor the compressed timeline set out in

recently amended statutes and rules that clearly favor pipeline industry interests over those of the public.

And, to add insult to injury, when the DOC and PUC staff established an on-line public record website that is advertised a “full record” of documents and comments received in the matter of the pipeline project they refuse to post the many petitions they received requesting that timelines be extended. This denies the general public the right to know that if they have made a request for comment period extension that they are not alone. This refusal by government agencies to fully and accurately publish the public record in the manner intended acts to discourage citizens from participating believing that their voices are not being heard. This defiance of citizen’s right to be heard on the part of government agencies not only violates First Amendment rights but works to destroy the general public’s trust in fair and equal treatment under the laws that govern us as a people.

Implore you to acknowledge the respective Department’s responsibility to prioritize the citizen’s rights to know fully about and be effectively involved in all decisions of your respective departments in regard to the Sandpiper project. This has not been our experience with your departments to date. We respectfully resubmit our standing request to meet with the Commissioner of the Department of Commerce and the Executive Secretary of the Public Utilities Commission and department staff with the intent to find ways to improve the public’s overall perception of both the process of pipeline permit review and the manner in which the public is allowed to be fully involved in important government decisions the effect their lives.

This concludes the comments and FOH thanks you and the Department of Commerce for considering our concerns, we look forward to opportunities to fully participate in the remainder of the process.

Sincerely,

Richard Smith, President
Friends of the Headwaters

May 29, 2014

Mr. Larry Hartman, Environmental Review Manager
Energy Environmental Review and Analysis (EERA)
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Dear Mr. Hartman,

Regarding Public Utilities Commission (PUC) Docket No. PL9/PPL-13-474:

Please find attached our supplemental comments to be added to our position paper dated April 2, 2014 concerning the Enbridge/North Dakota Pipeline Company, LLC Sandpiper pipeline request for a proposed southern corridor route across northern Minnesota from Grand Forks, ND to Superior, WI.

The Friends of the Headwaters oppose this current projected route. You, the DOC and the Public Utility Commissioners will find further reasoning for our opposition and our proposal for an alternate route in the attached documents.

Friends of the Headwaters requests these documents be posted to the eDocket website as soon as possible.

Writing for the members of Friends of the Headwaters I thank you for your attention to these documents and for your attention to our concerns for the welfare and quality of our lands, waters and lives in the Headwaters Country.

Sincerely,

Richard Smith
President
Friends of the Headwaters

P.O. Box 583, Park Rapids, MN 56470
mnfriendsoftheheadwaters@gmail.com
facebook.com/savemississippiheadwaters
www.friendsoftheheadwaters.org

SUPPLEMENTAL COMMENTS TO POSITION PAPER DATED 4/2/2014
REGARDING THE ENBRIDGE/NORTH DAKOTA PIPELINE COMPANY (NDPC) LLC
SANDPIPER PIPELINE PROJECT

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

May 29, 2014

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

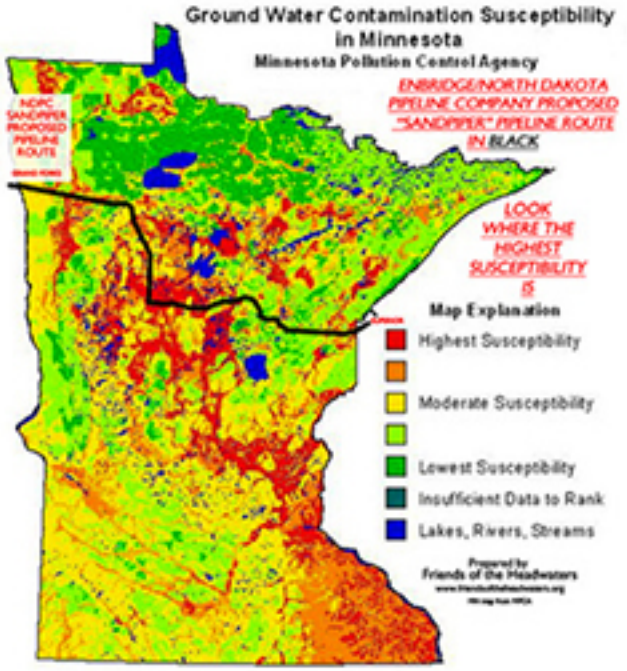
TO REVIEW:

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 Enbridge/NDPC's proposed "southern corridor" will NOT protect the high quality waters and other natural resoures along this route.

Friends of the Headwaters also believes Enbridge intends to proliferate another multiple pipeline corridor with their southern route proposal. Enbridge presented just that in an investor conference held April 2, 2014 in New York City.

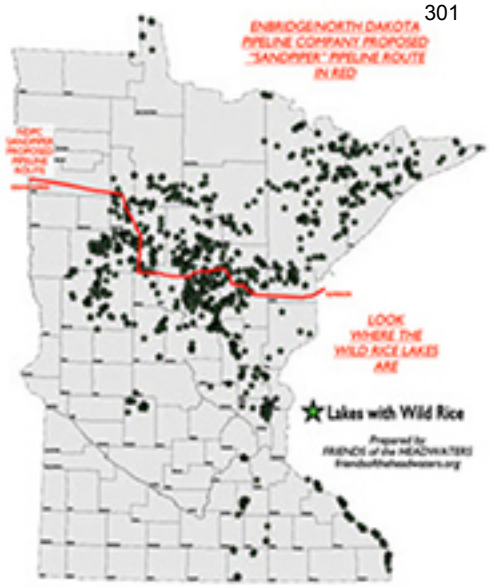
We believe Enbridge/NDPC could not have chosen a worse route as evidenced by the maps below.

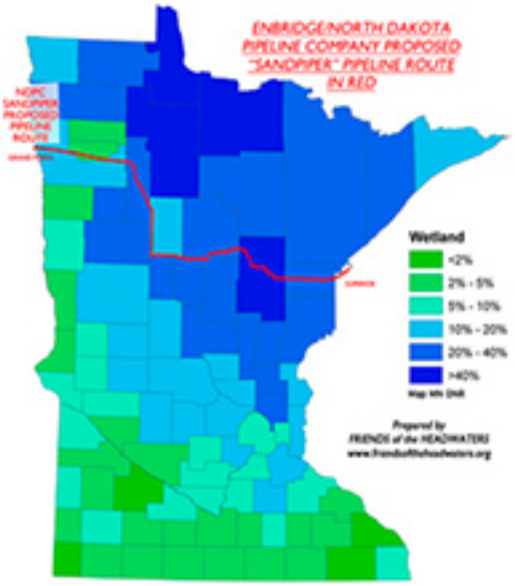


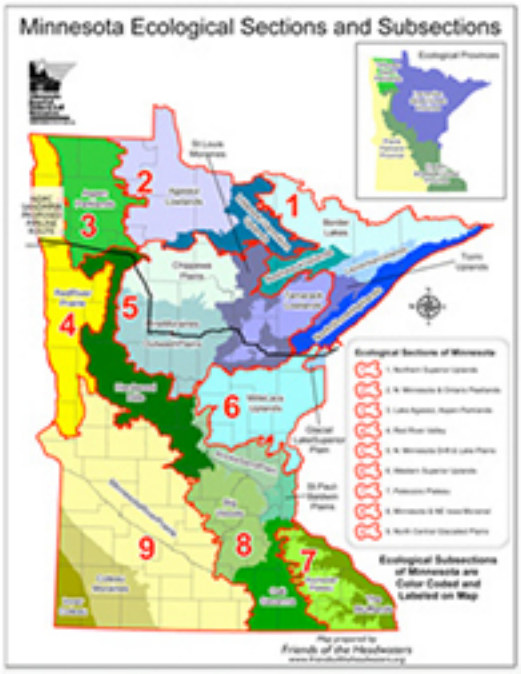
AT RISK: MINNESOTA'S

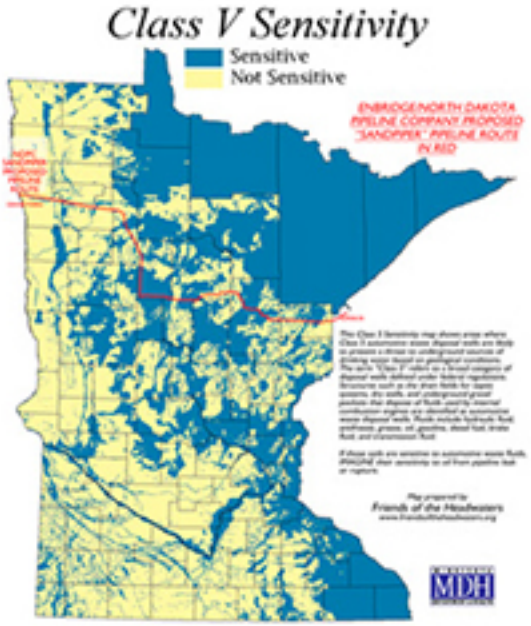
CLEAREST AND CLEANEST LAKES
GROUND WATER AQUIFERS
WILD RICE LAKES
WETLANDS
MOST SENSITIVE SOILS TO SPILLS
DIVERSITY OF VEGETATION
SENSITIVE ECOLOGICAL ZONES
THE LAKE SUPERIOR BASIN
HIGH VALUE RECREATIONAL AND RESIDENTIAL WATERS
- $342 million annual revenue from fishing
- $4.3 billion annual retail sales hunting, fishing, wildlife watching
- $2 billion water-influenced properties in Hubbard County alone.

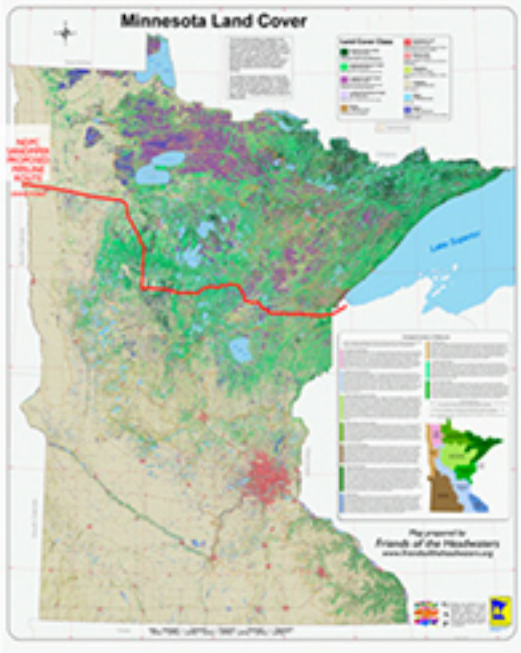
ENBRIDGE/NDPC COULD NOT HAVE PICKED A WORSE ROUTE.











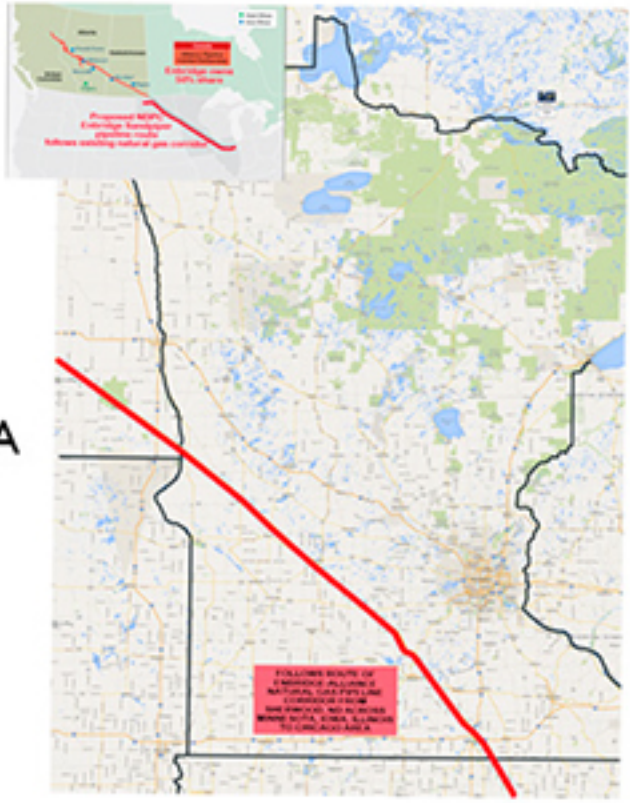
Given the high risk factors of Enbridge/NDPC's proposed Sandpiper 'southern corridor' route *FRIENDS of the HEADWATERS* has proposed a true 'southern corridor' across Minnesota which eliminates the potential for spills and damage to the state's most environmentally sensitive lands and waters.

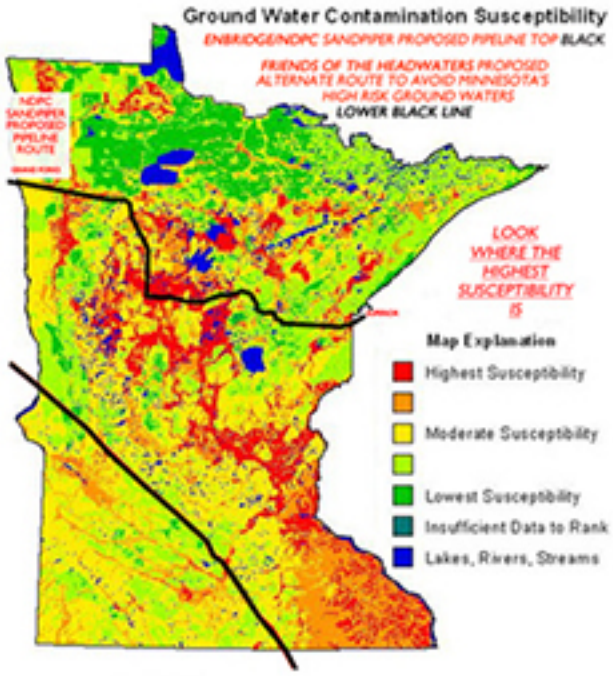
FRIENDS of the HEADWATERS Alternate Route A utilizes an existing energy corridor of which Enbridge is a 50% shareholder with Alliance Company of Canada. This corridor originates in Canada and ends west of Chicago. The proposed Enbridge/NDPC pipeline route would intersect this corridor east of Minot, ND at which point NDPC would turn and follow the corridor to Illinois.

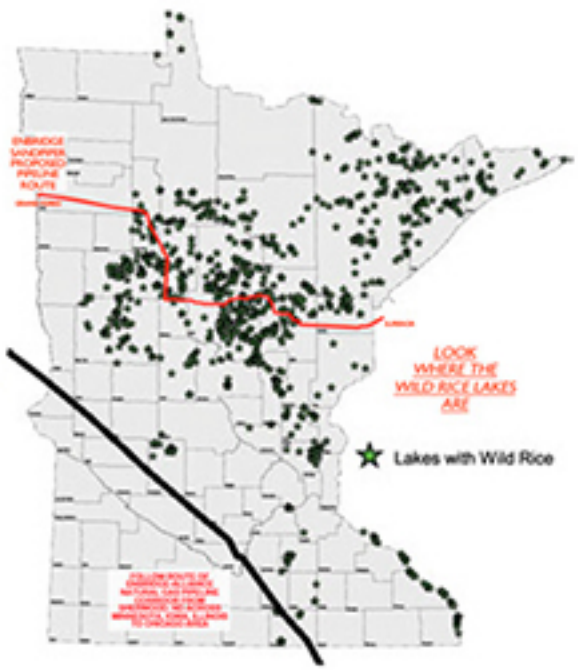
Alternate Route A below.

Compare the route risk factors in following maps.

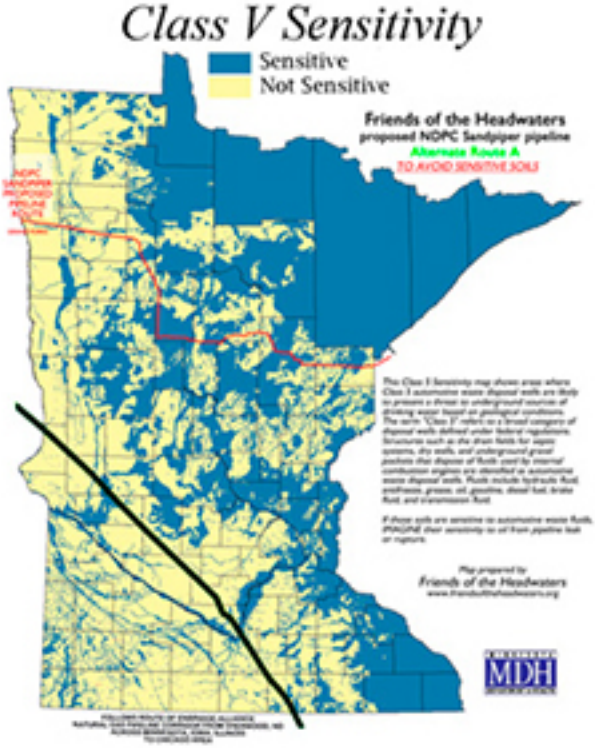
A

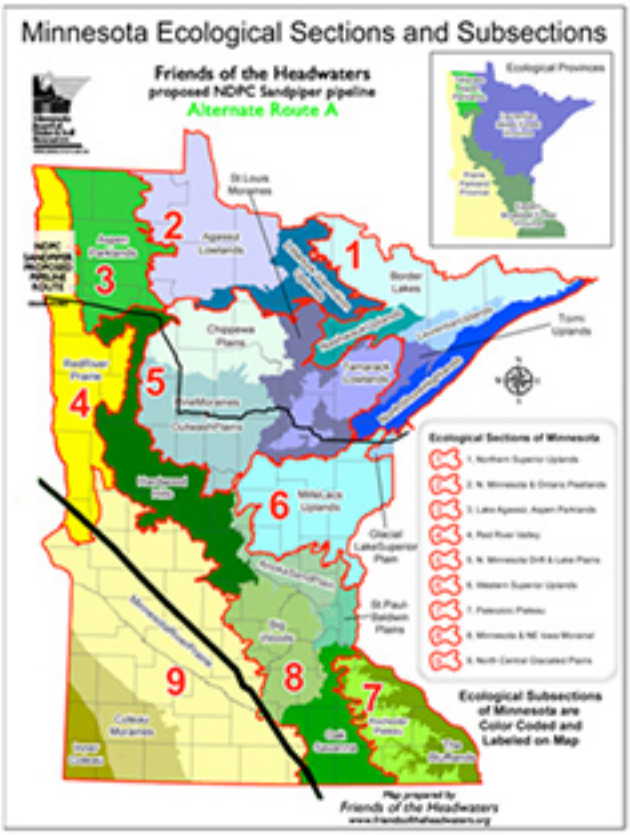


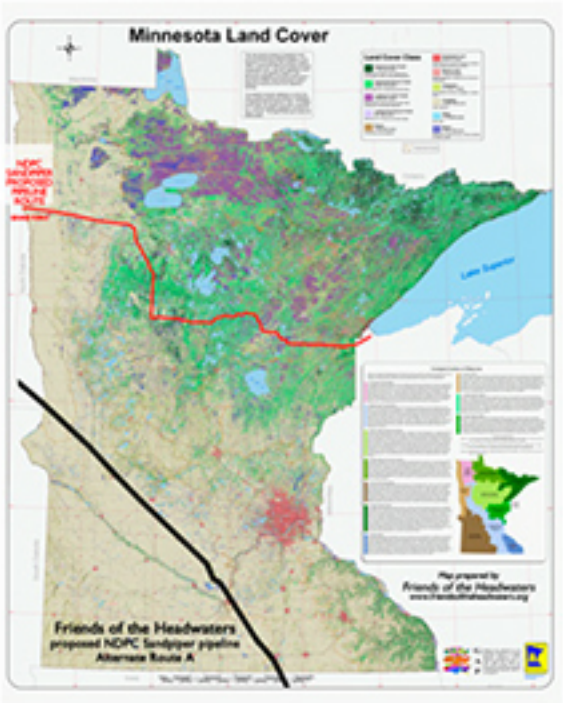


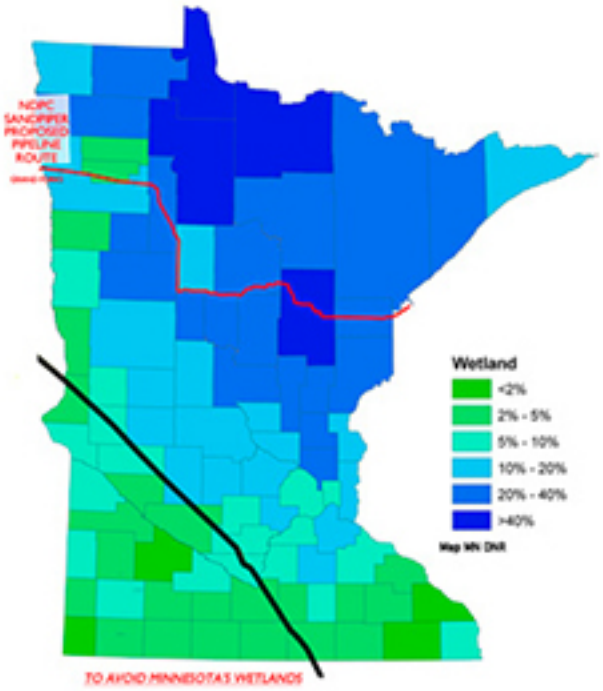


Route map comparisons continued:





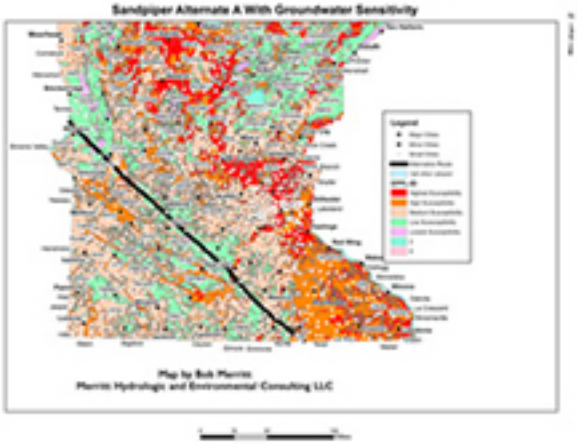




ALT ROUTE A traverses almost exclusively agricultural lands below Minnesota's primary lake country. This area is sparsely populated with mostly small towns among the farmlands.

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.

Two additional maps by Bob Merritt, hydrologist, showing Alternate Route A in better detail.

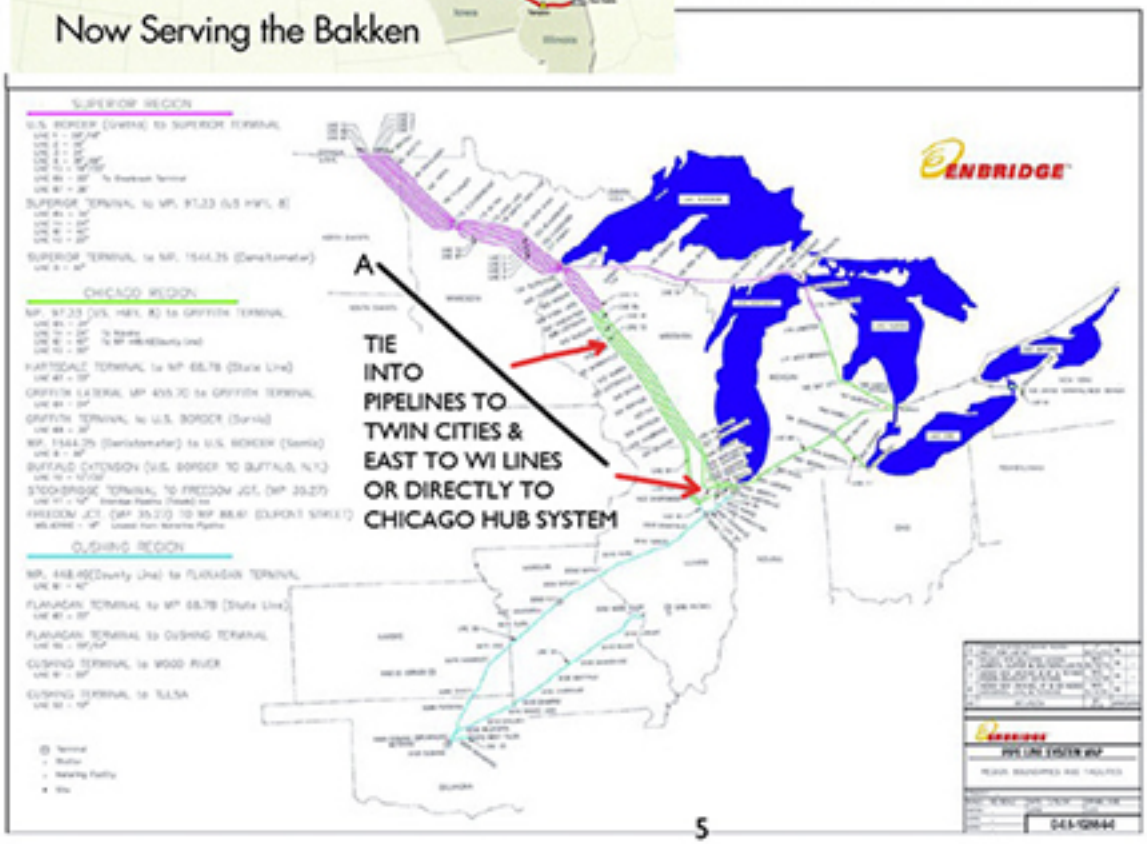


Minnesota still gets to keep jobs the construction will provide as well as North Dakota plus Iowa and Illinois.

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.

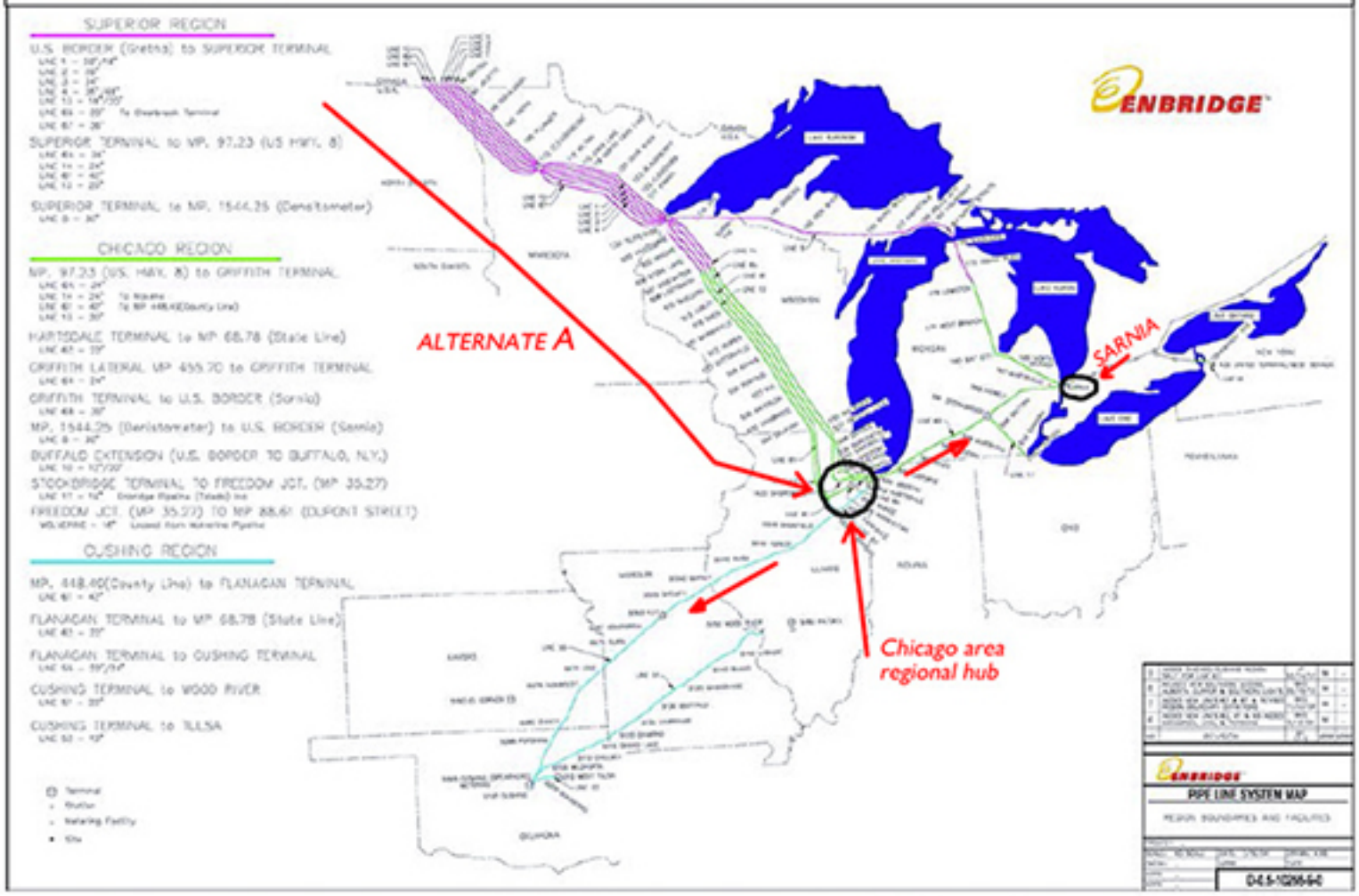
Since it's an existing corridor the company should have access to the mapping previously done for the pipeline already there. ALT ROUTE A also intersects pipelines in southern Minnesota owned and operated by other companies which provide the option of re-routing Bakken crude to the refineries in Rosemont 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.

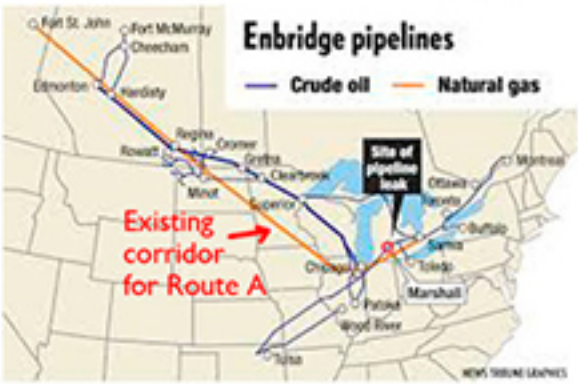


The *FRIENDS of the HEADWATERS* disputes Enbridge/NDPC's contention that the Sandpiper must end in Superior, Wisconsin. Enbridge has provided no rationale for the route ending in Superior other than "We want it. It connects to our existing system in Superior." The Alternate Route A proposed by *FRIENDS 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



Alternate Route A 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 Alternative Route A 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.

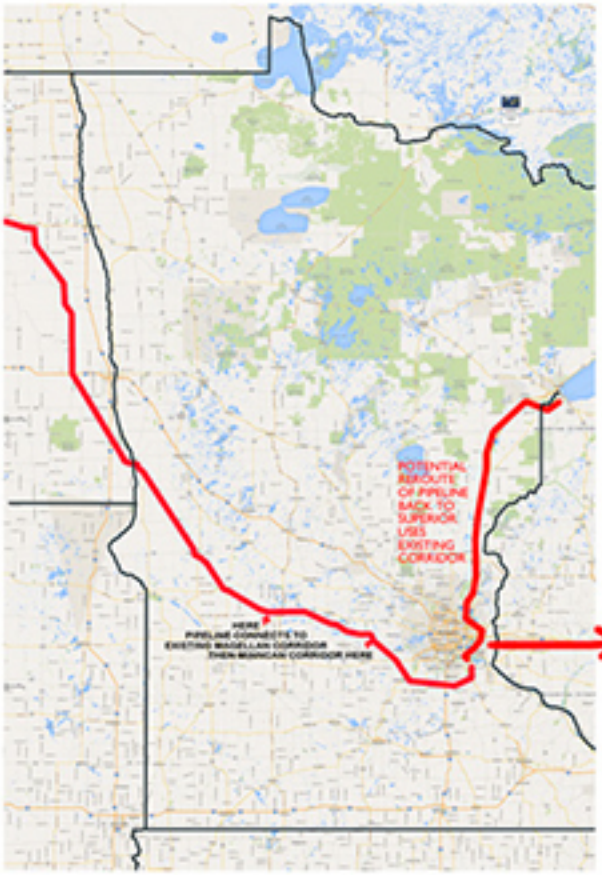
The *FRIENDS of the HEADWATERS* also sponsors other alternate routes at this time.

These routes can be connected back to Superior along existing energy corridors.

ALTERNATE ROUTE "C" as previously proposed in Position Paper of 4/2/2014

West of Grand Forks near Larimore the Sandpiper would turn south following either railroad easements or road easements south-southeast down the Red River Vally, crossing the Red River near Wahpeton, ND and continuing along MN Hgy 9 until it intersects an existing pipeline corridor owned by the Magellan Company. The Sandpiper follows this corridor until its intersection with the MinnCan pipeline corridor at which point it follows this corridor to the Flint Hills and Saint Paul Park refineries and pipeline system southeast of the Twin Cities Metro area. Optionally the route could turn south from Enbridge/NDPC's proposed pumping station near Lakota, ND.

Route C bypasses Minnesota's sensitive lands and waters and gives Enbridge the option of two routes back to Superior. They can use an existing pipeline corridor along I35 to Duluth whereupon they would intersect their northern corridor and can turn east to Superior. Or they can use another existing pipeline corridor, the Magellan straight east into Wisconsin where that line intersects the Enbridge system in central Wisconsin. At that point Enbridge can use their proposed expansion line to move the oil back to Superior or down to Illinois.



MAP APPENDIX

Wisconsin Petroleum Pipelines

Friends of the Headwaters does question how excited the people of Wisconsin might be about new pipelines.

The *FRIENDS of the HEADWATERS* also sponsors other alternate routes at this time.

These routes can be connected back to Superior along existing energy corridors.

ALTERNATE ROUTE "D" as previously proposed in Position Paper of 4/2/2014

Near Grand Forks the Sandpiper would turn south following an existing pipeline corridor along Interstate 29 south towards Fargo, North Dakota then follow the same corridor east southeast adjacent Interstate 94. This existing pipeline corridor is owned by the Magellan Company, the same company which has the line continuing east from Minneapolis-StPaul into Wisconsin to intersect Enbridge's existing corridor there. The Sandpiper follows this corridor until its intersection with the MinnCan pipeline corridor at which point it follows this corridor to the Flint Hills and Saint Paul Park refineries and pipeline system southeast of the Twin Cities Metro area.

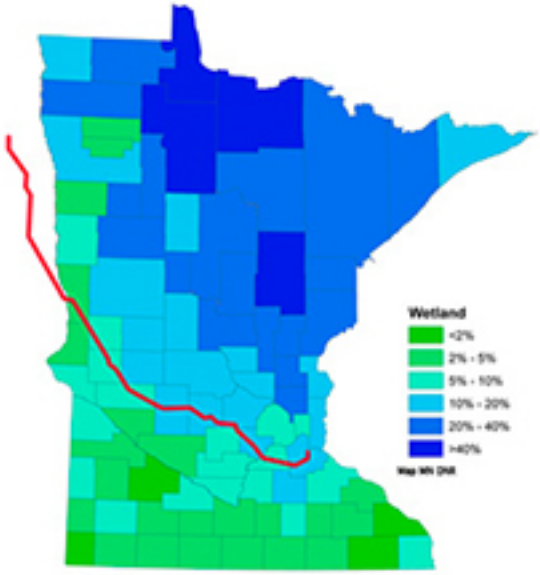
Route D bypasses most of Minnesota's sensitive lands and waters and gives Enbridge the option of two routes back to Superior. They can use an existing pipeline corridor along I35 to Duluth whereupon they would intersect their northern corridor and can turn east to Superior. Or they can use another existing pipeline corridor, the Magellan straight east into Wisconsin where that line intersects the Enbridge system in central Wisconsin. At that point Enbridge can use their proposed expansion line to move the oil back to Superior or down to Illinois.

Route D could also stay in the Magellan corridor along I94 and continue on into Wisconsin.

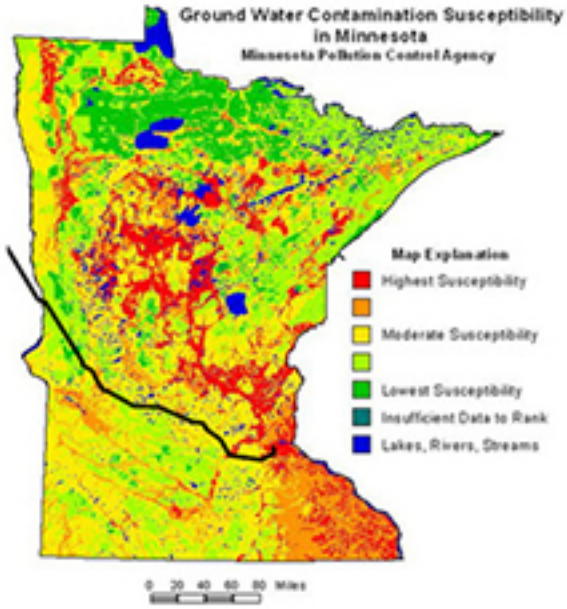
MAP APPENDIX

Wisconsin Petroleum Pipelines

Although these alternate routes avoid the high risk environmental lands and waters of the state as exhibited in the maps below, they do traverse areas of higher population near the Twin Cities. This route does allow a connection along existing pipeline corridors into western and central Wisconsin to Enbridge's pipeline system in Wisconsin. Enbridge has option to ship oil north back to Superior, WI or south to Chicago hub.



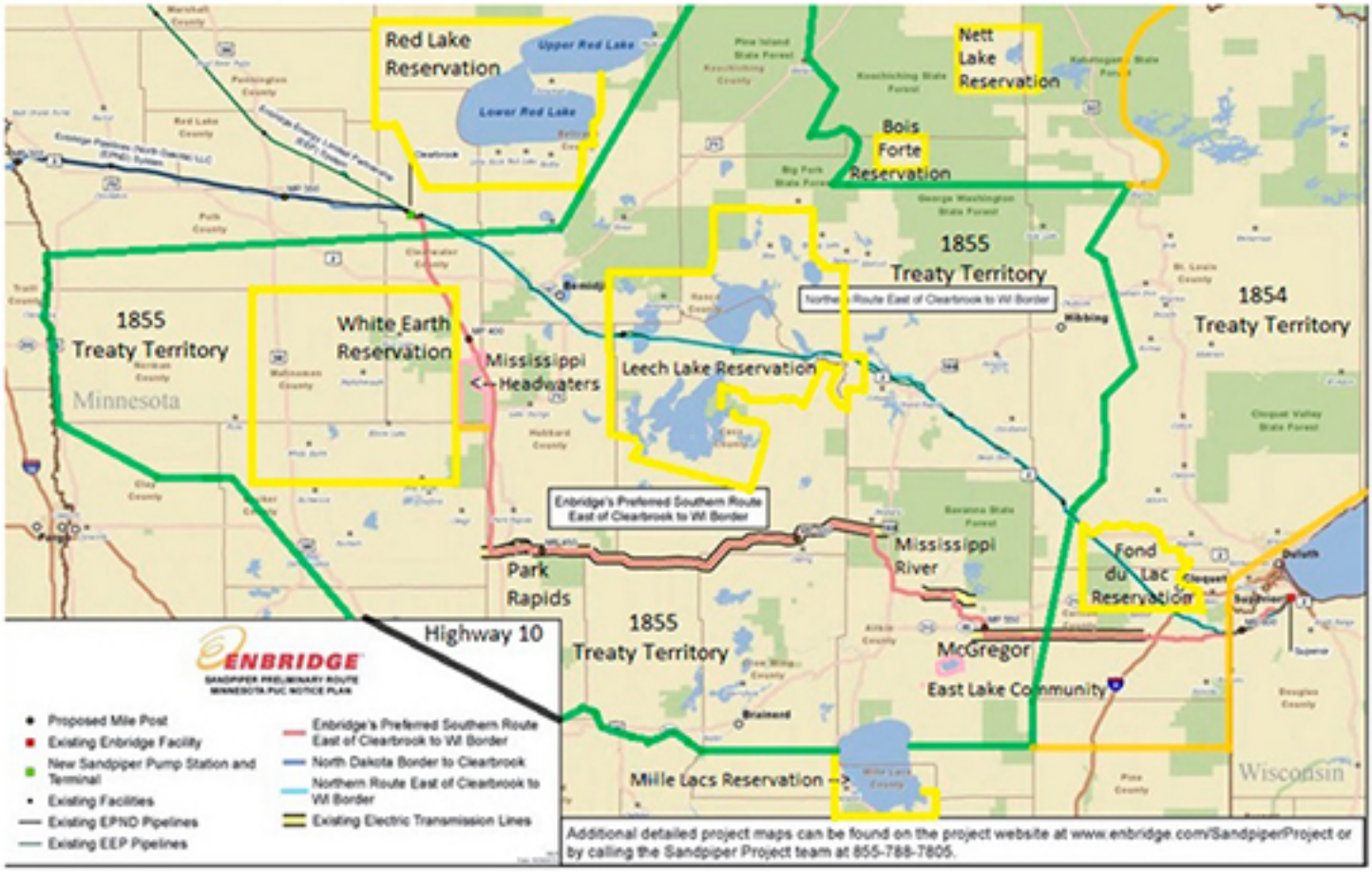
TO AVOID MINNESOTA'S WETLANDS



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. 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/NDPC's proposed Sandpiper pipeline corridor through Minnesota's prime lake country. A perfectly viable, low risk alternative is available south of our best waters.

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.

The company has yet to explain the need for Superior as the end point. This proposed pipeline route should not proceed without legitimate justification. Said reasoning should not include corporate profits.

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

STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
John A. Tuma	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Application of North Dakota Pipeline Company LLC for a *Certificate of Need* for the Sandpiper Pipeline Project in Minnesota

Amended
MOTION FOR COMMENCEMENT OF ENVIRONMENTAL IMPACT STATEMENT and IDENTIFICATION OF RESPONSIBLE GOVERNMENT UNIT and ENGINEERING FIRM(S)

To the above-named Commission:

Pursuant to the decision of the Minnesota Court of Appeals, the White Earth Band of Ojibwe (White Earth) hereby requests that the an Environmental Impact Statement (EIS) for assessment of the proposed Sandpiper Pipeline in the proceedings for a Certificate of Need for the project be commenced. White Earth requests that the Public Utilities Commission (PUC) relinquish its status as the Responsible Government Unit (RGU) and defer to the Environmental Quality Board to identify an RGU. White Earth offers the proposed engineering firms and recommends that requests for proposals be sent to these firms. White Earth requests that an EIS be commenced as soon as practicably possible.

In support of this motion, the White Earth Band of Ojibwe (White Earth) offers the following:

1. On December 15, 2015, the Minnesota Supreme Court declined to hear the petitions for review of the September 14, 2015 decision of the Minnesota Court of Appeals filed by the Minnesota Department of Commerce and the Applicant, North Dakota Pipeline Company, LLC. The Court of Appeals determined that an EIS must be

completed prior to the issuance of a Certificate of Need for the proposed Sandpiper Pipeline. White Earth requests that the EIS begin as soon as possible.

2. White Earth requests that the PUC relinquish its status as the RGU, and defer to the EQB to identify the RGU.
3. White Earth strongly objects to the PUC serving in the role of the RGU, as it is a conflict of interest given its relationship to the Department of Commerce and because of its approval of the prior environmental review completed by the Department of Commerce which was determined to be inadequate by the Court of Appeals.
4. White Earth recommends that the EQB designate the Minnesota Pollution Control Agency or the Minnesota Department of Natural Resources as the RGU because of the particular expertise of these agencies and the independence and objectivity of these agencies in the present proceedings.
5. White Earth requests that the RGU appoint it as a cooperating agency because White Earth has expertise in cultural, historical and environmental matters that directly relate to the pipeline corridor preferred by the North Dakota Pipeline Company and Enbridge; and because White Earth is able to identify in a timely manner significant issues in which the Applicant's proposed route will impact the human and natural environment.[1]
6. White Earth recommends that the RGU ensure that Exponent and Battelle, the environmental firms that completed the EIS for the Keystone XL Pipeline, receive

[1] *See, e.g.*, 42 U.S.C. §§ 4331(a), 4332(2) (provisions of NEPA which mandate cooperation between the RGU and State and local governments, and other agencies with jurisdiction or special expertise in consideration of the factors provided).

RFPs for completion of the EIS in this case. Because of the complexity of the proposed projects (Sandpiper and Line 3), the additional concerns regarding abandonment of the existing Line 3, and the Commission's orders that the cumulative impacts of the two projects be considered in a single environmental review,[2] White Earth requests that the Commission and the RGU weigh heavily the experience of Exponent and Battelle, the engineering and environmental firms that completed the EIS for the Keystone XL Pipeline.

7. White Earth's request to commence an EIS as soon as possible is consistent not only with the decisions of the Court of Appeals and the Supreme Court, but with the position taken by the Applicant and also by Commissioner Rothman of the Department of Commerce. Additionally, many of the party intervenors have also requested that an EIS be completed, including Honor the Earth, Friends of the Headwaters, Carlton County Land Stewards, and the Sierra Club. The Commission referred both projects for a combined EIS at its meeting on December 17, 2015, subsequent to the initial filing of this motion.

The White Earth Band of Ojibwe respectfully requests that the Public Utilities Commission refer the Sandpiper and Line 3 Applications for commencement of an EIS as soon as possible and defer to the Environmental Quality Board to designate the RGU. The White Earth Band of Ojibwe offers the the Minnesota Pollution Control Agency or Minnesota Department of Natural Resources as appropriate RGUs; requests that the RGU appoint the White Earth Band of Ojibwe as a cooperating agency; and requests that the

[2] Order Granting Certificate of Need with Conditions dated August 3, 2015; decision of the Commission at its December 17, 2015 meeting that Sandpipe and Line 3 should both be considered in an EIS.

RGU ensure that Exponent and/or Battelle, the environmental and engineering firms that completed the EIS for the Keystone XL Pipeline, receive RFPs for the EIS.

Respectfully submitted,

Dated: 12/21/15

Joseph Plumer (MN #164859)
Attorney for White Earth Band of Ojibwe
P.O. Box 418
White Earth, MN 56591
Telephone: (218) 983-3285
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Submission Information

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Filer Information

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Document Information

Document Date: 12/16/2015
Document Type: Motion
On Behalf Of: White Earth Band of Ojibwe

Service List Information

Docket #	List Name
13-473	OFF_SL_13-473_Official

Existing Dockets Information

Related Industry	Year	Number
Energy	13	473

Uploaded Documents Information

Selected Document	Classification	Additional Information
Motion 12-16-15.pdf	Public	

Electronic Service

Last Name	First Name	Email	Company Name	Delivery Method	View Trade Secret
Anderson	Julia	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	Electronic Service	Yes
Barnett	David	daveb@uanet.org	United Association of Journeymen & Apprentices	Electronic Service	No
Best	Erik	erik.best@riotinto.com	Kennecott Exploration Company	Electronic Service	No
Bibeau	Frank	frankbibeau@gmail.com	Honor the Earth	Electronic Service	No
Blackburn	Paul	paul@paulblackburn.net	N/A	Electronic Service	No
Boardman	Ellen	eboardman@odonoghuelaw.com	O'Donoghue & O'Donoghue LLP	Electronic Service	No
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Drawz	John E.	jdrawz@fredlaw.com	Fredrikson & Byron, P.A.	Electronic Service	No
Erlinder	Peter	proferlinder@gmail.com	International Humanitarian Law Institute	Electronic Service	No
Ferguson	Sharon	sharon.ferguson@state.mn.us	Department of Commerce	Electronic Service	No
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Gerber	Benjamin	bgerber@mnchamber.com	Minnesota Chamber of Commerce	Electronic Service	No
Gibbons	Andrew	andrew.gibbons@stinson.com	Stinson Leonard Street	Electronic Service	No
Godfread	Jon	Jon@ndchamber.com	Greater North Dakota Chamber	Electronic Service	No
Gratz	Emerald	emerald.gratz@state.mn.us	Office of Administrative Hearings	Electronic Service	No
Hassler	Lowell	lhassler@blm.gov	BLM Bureau Land Management	Electronic Service	No
Herauf	Helene	Laney@ndchamber.com	Greater North Dakota Chamber	Electronic Service	No
Hoffman	Kathryn	khoffman@mncenter.org	Minnesota Center for Environmental Advocacy	Electronic Service	No

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Miller	Jessica	Jessica.Miller@whiteearth-nsn.gov	White Earth Band of Ojibwe	Electronic Service	No
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Roesler	Neil	nroesler@vogellaw.com	Vogel Law Firm	Electronic Service	No
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Schoneberger	Robert	bob.schoneberger@unitedpiping.us	United Piping Inc	Electronic Service	No
Schrenzel	Jamie	jamie.schrenzel@state.mn.us	Minnesota Department of Natural Resources	Electronic Service	No
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Walli	Kevin	kwalli@fryberger.com	Fryberger, Buchanan, Smith & Frederick	Electronic Service	No
Watts	James	james.watts@enbridge.com	Enbridge Pipelines (North Dakota) LLC	Electronic Service	No
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Zoll	David	djzoll@locklaw.com	Lockridge Grindal Nauen PLLP	Electronic Service	No

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Hendrix	Danny	Pipeliners Union 798	PO Box 470798, Tulsa, OK - 74147-0798	Paper Service	No
Le Dain	Eric	Enerplus Resources (USA) Corporation	US Bank Tower, Suite 2200, 950 - 17'h Street, Denver, CO - 80202-2805	Paper Service	No

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White Earth Reservation Tribal Council
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White Earth, Minnesota 56591
Tel. (218) 983-3285
Fax (218) 983-3641

June 1, 2015

Beverly Jones Heydinger, Chair
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, MN 55101-2147

Re: Certificate of Need for the Sandpiper Pipeline Project

Dear Chairwoman Heydinger:

The White Earth Band of Ojibwe requests that the Public Utilities Commission postpone its vote on whether to adopt Administrative Law Judge Eric Lipman's Findings of Fact, Summary of Public Testimony, Conclusions of Law, and Recommendation; and on whether to refer this matter for proceedings with respect to Enbridge's application for a route permit. The White Earth Band of Ojibwe believes that a postponement of this vote is necessary in order for the State of Minnesota to engage in government-to-government consultation with the White Earth Band of Ojibwe and the other Tribal Nations potentially impacted by the Sandpiper Pipeline project. To date, government-to-government consultation required between state agencies and Tribal Nations pursuant to Governor Dayton's Executive Order 13-10 has not occurred on this matter, nor was there any mechanism for consultation in the Administrative Hearing process on the Certificate of Need.

The White Earth Band of Ojibwe intervened in the permit proceedings regarding the Sandpiper Pipeline because of its concern that the project as proposed poses a significant risk to the environment on and near the White Earth Reservation, as well as within the 1855 treaty-ceded territory where White Earth members and other successors in interest to the signatories of the Treaty possess retained and reserved usufructuary use rights that are threatened by this project. The White Earth Band of Ojibwe has repeatedly noted its concern that the project as proposed poses a significant risk, in particular, to wild rice, a plant of supreme cultural significance to the people of White Earth and the other Ojibwe Tribes of Minnesota.

The White Earth Band of Ojibwe requested, and received assurances, that a public meeting would be held on the White Earth Reservation to permit its members to participate in the proceedings. None of the public hearings were held on White Earth. The White Earth Band of Ojibwe is holding a Public Hearing in the Rice Lake Community on June 4, 2015 at 5:00 p.m., the purpose of which is to collect information from White Earth members and experts regarding the proposed Sandpiper Pipeline. The Mille Lacs Band of Ojibwe will hold a Public Hearing in its East Lake Community Center on June 5, 2015 at 10:00 a.m. for the same purpose. The White Earth Band of Ojibwe requests that the Public Utilities Commission postpone its vote of June 5, 2015 until after the Commission has had an opportunity to review the hearing reports from these hearings.

The White Earth Band of Ojibwe expects that the hearing report will reflect valuable legal and environmental information that the Public Utilities Commission will benefit from prior to making any final decisions regarding the proposed Sandpiper Pipeline project. The White Earth Band of Ojibwe invites and encourages members of the Public Utilities Commission to attend the hearings on June 4 and June 5, 2015.

The purpose of the hearing is to collect information from White Earth Band Members and experts regarding:

(1) Concerns regarding oil spills and the potential risks to surface and ground water on or near the White Earth Reservation, lands held in federal trust status for the White Earth Band of Ojibwe, and lands within the 1855 Treaty-ceded territory;
(2) Concerns regarding the self-sufficiency of individual Band members and cultural practices, such as harvesting wild rice within the White Earth Reservation and the 1855 Treaty-ceded territory;
(3) The implications of the lack of consultation with the White Earth Band of Ojibwe;
(4) The legal implications of the lack of consultation between Enbridge and the White Earth Band of Ojibwe's Historic Preservation Office regarding the identification of lands along the pipeline route of historic, archeological, and cultural significance;
(5) The potential legal involvement of the Federal Government: First, whether the Department of the Interior is properly carrying out its trust responsibility with regard to federal and tribal land; Second, whether the Environmental Protection Agency should conduct an Environmental Impact Statement (EIS) to assess the safety of the Sandpiper Pipeline project to lands and waters important to Tribal Nations and federal land; and Third, whether the U.S. Army Corps of Engineers should conduct an EIS to assess the potential impact of the Sandpiper Pipeline project to wetlands and waters under its jurisdiction.

Respectfully, the White Earth Band of Ojibwe again urges the Public Utilities Commission to postpone its vote scheduled on the Sandpiper Pipeline project scheduled for June 5, 2015 until such time as the members of the Public Utilities Commission have had an opportunity to consider the views of the Native Americans who will be most impacted by potential spills and

the construction of this project, and have had an opportunity to study the report on the hearing on June 4, 2015, which will be provided to the Commission immediately upon completion.

Again, the White Earth Band of Ojibwe encourages and warmly invites members of the Public Utilities Commission to attend the hearing on June 4, 2015 and hear the perspective of tribal members potentially impacted by the proposed route, as well as national experts.

Sincerely,

Erma J. Vizenor
Chairwoman

cc: Commissioner Lange
Commissioner Lipschultz
Commissioner Tuma
Commissioner Wergin
Governor Mark Dayton
Congressman Collin Peterson
Senator Amy Klobuchar
Senator Al Franken

Department of Commerce brief to PUC with reasoning on elimination of "System Alternatives" based on applicant"s definition of project purpose:

Date: July 16, 2014 EERA Staff: Larry B. Hartman…….....651-539-1839
Deborah R. Pile……...651-539-1837

"System Alternatives - A system alternative is an alternate that proposes a different configuration of pipelines for moving oil from the Williston Basin than the applicant's proposal. It is a wholly separate or independent route from the Applicant's proposed route and is, in essence, a different project than the one proposed by the applicant. Enbridge is requesting a route permit to transport oil produced in North Dakota to the terminals in Clearbrook, Minnesota, and Superior, Wisconsin. Minnesota Rule 7852.0100, subpart 31, defines a route as "the proposed location of a pipeline between two end points." In this docket, Enbridge has requested a route from the North Dakota border to Clearbrook and from Clearbrook to Superior. Thus, the project, for route permit application purposes, is defined by these three points. However, eight alternatives proposed during the comment period do not connect with one or more of these three points (Table 1 and Figure 1). The proposed system alternatives include routing the pipeline far north or far south of the applicant's proposed route. None of the system alternatives would connect to the new Clearbrook terminal. Three of the system alternatives do not connect into Enbridge's Superior Terminal. Because the proposed system alternatives are not alternative routes for meeting the purpose of the project as identified in the permit application, EERA does not believe that these alternatives are appropriate for further consideration."

NEPA requirement for Scientific Integrity:

Sec. 1502.24 Methodology and scientific accuracy.

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

Sec. 1502.4 Major Federal actions requiring the preparation of environmental impact statements.

> (a) Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined. Agencies shall use the criteria for scope (Sec. 1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals

which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

Sec. 1508.25 Scope.

Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (Secs.1502.20 and 1508.28). To determine the scope of environmental impact statements, agencies shall consider 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

(a) Actions (other than unconnected single actions) which may be:

1. Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

    (i) Automatically trigger other actions which may require environmental impact statements.

    (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.

    (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

2. Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.
3. Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequencies together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.

(b) Alternatives, which include:

4. No action alternative.
5. Other reasonable courses of actions.
6. Mitigation measures (not in the proposed action).

(c) Impacts, which may be: (1) Direct; (2) indirect; (3) cumulative.

USACOE has authority to proceed with Environmental Review in spite of applicant's request to suspend:

Sec. 1508.23 Proposal.

"Proposal" exists at that stage in the development of an action when an agency subject to the Act has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated. Preparation of an environmental impact statement on a proposal should be timed (Sec. 1502.5) so that the final statement may be completed in time for the statement to be included in any recommendation or report on the proposal. A proposal may exist in fact as well as by agency declaration that one exists.

Letters from the Minnesota Public Utilities Commission, the Department of Commerce, the Pollution Control Agency and the Department of Natural Resources

Minnesota Public Utilities Commission

March 25, 2016

William Seuffert
Executive Director
Environmental Quality Board
520 Lafayette Road North
St. Paul, MN 55155

Dear Mr. Seuffert:

I am responding to your March 16, 2016, letter requesting information about the Minnesota Public Utilities Commission's (Commission) role as the responsible governmental unit (RGU) for two proposed oil pipeline projects: the 612-mile crude oil pipeline between Tioga, North Dakota and Superior, Wisconsin proposed by North Dakota Pipeline Company (NDPC). Approximately 300 miles of this 24"/30" pipeline, known as the Sandpiper project, would be located in Minnesota. The other project, the Line 3 replacement project, is a 1031-mile crude oil pipeline that runs from Hardisty, Alberta to Superior, Wisconsin proposed by Enbridge Energy, Limited Partnership (Enbridge). Approximately 337 miles of this 36" pipeline would be located in Minnesota.

The Environmental Quality Board's (EQB) Rule 4410.0500, subp. 1, provides that when a proposed project is subject to both a mandatory Environmental Assessment Worksheet (EAW) under Rule 4410.4300, and a mandatory Environmental Impact Statement (EIS) under 4410.4400, the RGU shall be the agency designated in Rule 4410.4400. The Sandpiper project is subject to both a mandatory EAW (Rule 4410.4300, subp. 7.A.) and a mandatory EIS (Rule 4410.4400, subp. 24), therefore, the Commission is the RGU as designated in Rule 4410.4400. The Commission is also the RGU for the Line 3 project will also be subject under these rule provisions.

The Commission is currently carrying out its role as the RGU for the Sandpiper EIS and for the Line 3 EIS as provided by the EQB's rules. In each case, the respective EIS will provide the environmental information necessary for the Commission to determine, pursuant to Minn. Stat. § 216B.243, whether a certificate of need should be granted to NDPC to build the Sandpiper project, and to Enbridge to build the Line 3 project. In the event a certificate of need is granted, the EIS will further guide the Commission's determination whether to grant the Sandpiper and Line 3 projects route permits pursuant to Minn. Stat. § 216G.02, specifying the design, routing, right-of-way preparation, facility construction and operation, and any other appropriate conditions deemed necessary.

The Commission recognizes that pursuant to Rule 4410.0500, subp. 6, the EQB can consider designating another agency as the RGU for the Sandpiper EIS and for the Line 3 EIS upon determining that the other agency has greater expertise in analyzing the potential impacts of the project. There is no other agency, including the Minnesota Pollution Control Agency (MPCA) and the Department of Natural Resources (DNR), that has greater experience and expertise in reviewing certificate of need and route permit applications for petroleum pipelines than the Commission.

The environmental review of pipelines required by MEPA has historically has been performed through an alternative EIS process created by EQB, in which EQB embedded MEPA's environmental review requirements into the Commission's rules governing pipeline permits. *See, e.g., In the Matter of Proposed Permanent Rules Relating to Pipeline Routing,* Statement of Need and Reasonableness (Sept. 30, 1988); *In the Matter of Approval of EQB Pipeline Routing Rules, Chapter 4415, as an Alternative Form of Environmental Review,* Findings of Fact, Conclusions, and Order of Approval (1988). The Commission has been responsible for deciding certificates of need since 1983, and has been implementing all environmental review for both the certificate of need and routing of pipelines since 2005. See Minn. R. Ch. 7852 and 7853; 1983 Minn. Law Ch. 289, § 115; 2005 Minn. Laws Ch. 97, art. 3, § 19.

A review of the Commission's pipeline certificate of need criteria under Minn. R. 7853.0130 and pipeline route permit criteria under Minn. R. 7852.1900, subp. 3, demonstrates that the Commission conducts an exhaustive examination of the potential impacts of a proposed pipeline. These criteria not only include consideration of the pipeline's impacts on human settlement, on the natural and socioeconomic environments, and possible mitigation of those impacts, but also consideration of (i) alternatives to construction of the pipeline that would meet the need for the pipeline; and (ii) the pipeline's compliance with other applicable policies, rules, and regulations of other state and federal agencies and local authorities regarding the location, design, construction, and operation of pipelines and associated facilities.

As recognized by the EQB's rules that designate the Commission as the RGU for the preparation of an EIS relating to large pipeline projects, the Commission is the agency with the experience and expertise necessary to prepare an EIS that will adequately address all the factors the Commission must consider under Minnesota law in making pipeline certificate of need and route permit determinations. Neither the MPCA nor the DNR have the same level of experience applying these pipeline criteria.

By way of illustration, attached is a list of the pipeline applications for which the Commission has conducted environmental review, as well as a list of other large energy projects for which the Department of Commerce has prepared an EIS that the Commission has determined to be adequate.

It also important to note that at its regular agenda meeting on March 24, 2016, the Commission denied a motion by the White Earth Band of Ojibwe requesting that the Commission relinquish its RGU role for the EIS on the Sandpiper and the Line 3 projects.

Accordingly, I believe the EQB should deny the March 10, 2016, Request for change in RGU Designation for Environmental Review of North Dakota Company LLC's proposed Sandpiper Pipeline Project and Enbridge Energy, Limited Partnership's proposed Line 3 Replacement Project.

Sincerely,

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission

John Linc Stine, Commissioner MPCA
Tom Landwehr, Commissioner MNDNR
Mike Rothman, Commissioner, Commerce
Dave Fredrickson, EQB Chair

Pipeline applications; Commission responsible for the permitting and environmental review:

- February 2006 - Xcel Energy – High Bridge Natural Gas Pipeline Project – Natural Gas (PUC Docket GP-05-1706)
- July 2006 – CenterPoint Energy – Riverside Pipeline Project – Natural Gas (PUC Docket GP-06-426)
- October 2006 – Greater Minnesota Transmission, LLC – Cannon Falls Natural Gas Pipeline Project – Natural Gas (PUC Docket GP-06-931)
- April 2007 – Minnesota Pipeline Company – MinnCan Pipeline Project – Petroleum (PUC Docket PPL-05-2003)
- April 2008 – Nashwauk Public Utilities Commission – Blackberry Pipeline Project – Natural Gas (PUC Docket GP-06-1481)
- September 2008 – Minnesota Power – Boswell Pipeline – Natural Gas (PUC Docket GP-08-586)
- June 2009 – Enbridge – Alberta Clipper Southern Lights Pipeline Project – Petroleum/Diluent (PUC Docket PPL-07-361)
- May 2014 – Minnesota Power – Laskin Natural Gas Pipeline – Natural Gas (PUC Docket GP-13-978)
- August 2015 – Minnesota Pipeline Company – Minnesota Pipeline Reliability Project – Petroleum (PUC Docket CN-14-320)
- Pending – North Dakota Pipeline Company – Sandpiper Pipeline Project – Petroleum (PUC Docket PPL-13-474)
- Pending – Enbridge – Line 3 Pipeline Replacement Project – Petroleum (PUC Docket PPL-15-137)
- Pending – Minnesota Energy Resources Corporation – Rochester Natural Gas Pipeline Project – Natural Gas (PUC Docket GS-15-858)

Other projects where the EIS were prepared by Department of Commerce; and determined adequate by the Commission:

- Split Rock to Lakefield Junction 345 kV Transmission Line EIS, March 2005 (EQB Docket 03-73-TR-XCEL)
- Monticello Dry Cask Storage EIS, March 2006 (PUC Docket CN-05-123)
- Big Stone Transmission Line Project EIS, December 2006 (PUC Docket TR-05-1275)
- Prairie Island Power Uprate EIS, July 2009 (PUC Docket GS-08-509, 510, 690)
- Noble Flat Hill 230 kV Transmission Line EIS, October 2009, (PUC Docket TL-08-988)
- Mesaba Energy Project EIS, November 2009 (PUC Docket GS-06-668)
- CapX2020 Brookings to Hampton Transmission Line EIS, January 2010 (PUC Docket TL-08-1474)
- Monticello to St. Cloud 345 kV Transmission Line EIS, March 2010 (PUC Docket TL-09-246)
- Essar Steel Transmission Line EIS, May 2010 (PUC Docket TL-09-512)
- Hiawatha Transmission Line Project, June 2010 (PUC Docket TL-09-38)
- Bemidji to Grand Rapids 230 kV Transmission Line EIS, September 2010 (PUC Docket TL-07-1327)
- Fargo to St. Cloud 345 kV Transmission EIS, July 2011 (PUC Docket TL-09-1056)

- Hampton to Rochester to La Crosse 345 kV Transmission Line EIS, August 2011 (PUC Docket TL-09-1448)
- ITC Midwest Minnesota to Iowa 345 kV Transmission Line EIS, July 2014 (PUC Docket TL-12-1337)
- Minnesota Power Great Northern Transmission Line EIS, October 2015 (PUC Docket TL-14-21)

MINNESOTA DEPARTMENT OF COMMERCE

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AN EQUAL OPPORTUNITY EMPLOYER

March 25, 2016

Will Seuffert
Executive Director
Environmental Quality Board
520 Lafayette Road North
Saint Paul, MN 55155

Re: Response to Letter of March 16, 2016, Regarding Request for a Different Responsible Governmental Unit for the Environmental Review of the North Dakota Pipeline Company LLC's Proposed Sandpiper and Line 3 Replacement Pipeline Projects

Dear Mr. Seuffert:

I am writing in response to your March 16, 2016 letter to the Department of Commerce (Commerce) with questions related to a citizen request for a different responsible governmental unit (RGU) for the environmental review of the proposed Sandpiper and Line 3 Replacement Pipelines (Pipeline Projects). The letter stated that the citizen requested that the Environmental Quality Board (EQB) relieve the Minnesota Public Utilities Commission (Commission) of its current RGU designation for the projects and replace it with a joint RGU between the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (DNR). You requested our response by Friday, March 25, to assist you in preparing a staff recommendation for the EQB's consideration at its meeting on April 20, 2016.

As you know, the Commission has been designated by the EQB as the RGU for pipelines,[1] and the Commission has been responsible for the overall approval and supervision of the Pipeline Projects for quite some time. Under the existing framework, the Commission must determine whether to grant a Certificate of Need (CN) and to issue a Route Permit. In the CN process, the Commission determines whether the project is needed based on an evaluation of various criteria.[2] This criteria requires the Commission to consider whether the probable result of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states; a more reasonable and prudent alternative to the

[1] *See* Minn. R. 4410.4400, subp. 24. By its own terms, the rule cited in your letter regarding RGU selection generally, Minn. R. 4410.0500, subp. 5., would not appear to be applicable in this case.
[2] *See* Minn. R. 7853.0130.

proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant; the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate; and, whether it has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.[3]

If the Commission decides to grant a CN, it must then issue a Route Permit. The Pipeline Projects cannot be constructed without a Route Permit issued by the Commission.[4] "In determining the route of a proposed pipeline, the commission shall consider the characteristics, the potential impacts, and methods to minimize or mitigate the potential impacts of all proposed routes so that it may select a route that minimizes human and environmental impact."[5] In determining the route, the Commission is required to consider the following criteria:

> A. human settlement, existence and density of populated areas, existing and planned future land use, and management plans;
> B. 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;
> D. economies within the route, including agricultural, commercial or industrial, forestry, recreational, and mining operations;
> E. pipeline cost and accessibility;
> F. use of existing rights-of-way and right-of-way sharing or paralleling;
> G. natural resources and features;
> 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 part 7852.3400 for pipeline right-of-way preparation, construction, cleanup, and restoration practices;
> I. cumulative potential effects of related or anticipated future pipeline construction; and,
> J. 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.[6]

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[3] *Id*.
[4] *See* Minn. Stat. § 216G.02, subd. 2.
[5] Minn. R. 7852.1900, subp. 2.
[6] Minn. R. 7852.1900, subp. 3.

In making its determinations, the Commission is required to consider all of the impacts of a project -- environmental, societal, and economic. The Commission is the only entity that has conducted this analysis for a pipeline. And its analysis has been assisted by Commerce, the only entity that has prepared an environmental review for a pipeline in Minnesota.

The Commission also has the authority and responsibility to modify or suspend a permit if it determines that substantial evidence supports a finding that a violation of the terms or conditions of a Route Permit has occurred or is likely to occur.[7] Finally, the Commission is required to determine whether the permitted pipeline construction has been completed in compliance with all permit conditions or if deficiencies must be corrected after a permittee files its completion certification.[8]

Commerce's role regarding pipelines has been to provide the services or information requested by the Commission, including, but not limited to, CN information and environmental review, so that the Commission can fulfill its responsibilities. By Commission order, it authorized Commerce to be responsible for the preparation of the EISs and to enter into an agreement with the PCA and DNR to assist to ensure that the EISs would meet all of the requirements of the Minnesota Environmental Policy Act (MEPA). Commerce, PCA and DNR have formalized their collaboration under a Memorandum of Understanding (MOU), a copy of which is attached for reference. Under this arrangement, the expertise of the Commission and all three agencies will be utilized in analyzing the potential impacts of the proposed projects and ensuring that the requirements of MEPA are met.

Moreover, in addition to environmental reviews for pipelines, Commerce has done 13 EISs for power plant and transmission lines since 2009. And the Commerce Division of Energy Resources' Energy Environmental Review and Analysis team that is responsible for preparing the EISs is the same section that provided technical assistance to the EQB before it was transferred to Commerce in 2005.

Commerce thus recommends that the RGU for the Pipeline Projects remain with the Commission as provided by the EQB's rules.[9]

Sincerely,

Mike Rothman

Mike Rothman
Commerce Commissioner

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[7] *See* Minn. R. 7852.3800, subp. 2.
[8] See Minn. R. 7852.3900.
[9] *See* Minn. R. 4410.4400, subp. 24.

MEMORANDUM OF UNDERSTANDING

BETWEEN
THE MINNESOTA DEPARTMENT OF COMMERCE

AND

THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES AND THE MINNESOTA POLLUTION CONTROL AGENCY

REGARDING
DEVELOPMENT OF ENVIRONMENTAL IMPACT STATEMENTS FOR THE

SANDPIPER AND LINE 3 REPLACEMENT PIPELINE PROJECTS

This Memorandum of Understanding (MOU) between the Minnesota Department of Commerce (Commerce or Lead Agency) and the Minnesota Department of Natural Resources (MnDNR) and Minnesota Pollution Control Agency (MPCA) (collectively referred to as the Agencies) defines the roles and responsibilities of Commerce, the MnDNR and MPCA (Assisting Agencies) regarding the development of the necessary environmental review documents, including Environmental Impact Statements (EISs), for the proposed Sandpiper and Line 3 Replacement pipeline projects (Proposed Projects).

I. COMMISSION RESPONSIBILITIES

The Minnesota Public Utilities Commission (Commission) is the Responsible Governmental Unit (RGU) for the environmental review of the Proposed Projects. In that capacity, the Commission will make all final decisions regarding the scope and adequacy of the EISs for both of the Proposed Projects.

II. COMMERCE SCOPE OF WORK AND RESPONSIBILITIES

Pursuant to the Commission's January 11, 2016 Order, Commerce shall serve as Lead Agency for the development of the relevant environmental review documents for both of the Proposed Projects and administer the development of the Sandpiper EIS and the Line 3 EIS pursuant to the requirements set forth in the Minnesota Environmental Policy Act (MEPA), Minn. Stat. Ch. 116D, and Minnesota Rules Ch. 4410.

III. MnDNR AND MPCA SCOPE OF WORK AND RESPONSIBILITIES

The MnDNR and MPCA, as Assisting Agencies, shall assist the Lead Agency in identifying issues, alternatives, routes and alternative route proposals, data, and analysis to address environmental review topics and requirements and help Commerce ensure that each EIS fulfills applicable MEPA requirements; review, assess and comment on data and analysis in environmental documents prepared during the environment review process; address any potential deficiencies in environmental review documents in a timely manner to allow the deficiencies to be addressed as early as possible in the environmental review process; review and provide comments on

environmental review documents prepared for either of the Proposed Projects; and provide such other assistance as the Lead Agency and the Assisting Agencies mutually agree are necessary for MEPA compliance.

IV. AGENCY RESOURCES

1. The Assisting Agencies agree to use best efforts to provide the staffing resources necessary to accomplish the purpose of this MOU. Specific staffing needs to accomplish the purpose of this MOU will be identified in a separate interagency funding agreement that designates the specific Assisting Agency staff assigned, their general scope of duties, and maximum total funding to be provided.

2. It is understood by the Lead Agency and the Assisting Agencies that the Lead Agency will enter into a separate arrangement with the Project Proposer(s) to cover the cost of environmental review for both Proposed Projects pursuant to Minn. Stat. § 116D.045 and Minn. R. 4410.6000 through 4410.6500. Costs assessed to the Project Proposer(s) shall include the costs necessary to reimburse the Assisting Agencies for all costs incurred by the Assisting Agencies in accomplishing the purpose of this MOU.

3. All obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources for the work undertaken by the Agencies to accomplish the MOU's purpose and allocation of responsibilities.

V. GENERAL PROVISIONS

1. Agency Designees: The Agencies agree to designate personnel as the Agency designee with primary responsibility for implementing the terms of this agreement.

The Agencies' designees are, hereby, authorized to develop procedures and agreed timelines necessary to accomplish the purpose of this MOU.

2. Data Practices. The Lead Agency and Assisting Agencies agree to coordinate compliance with the requirements of the Minnesota Government Data Practices Act (MGDPA) as it pertains to the data collected or used to accomplish the purpose of this MOU.

3. Amendments. This MOU may be amended only by written agreement of all parties.

4. Termination. This MOU will remain in effect until issuance of the Commission's determination of EIS adequacy for both of the Proposed Projects. Notwithstanding the forgoing, any party may withdraw from this MOU upon written notice to the other signatories to this MOU.

5. Liability. Each party to this MOU shall be liable for its own acts and the results thereof to the extent authorized by law and shall not be responsible for the acts of the other party, its officers, employees or agents. Nothing in this MOU shall be deemed to be a waiver by any of the parties of any applicable state immunities or limits of liability.

6. Effective Date. This MOU will be effective upon execution by all parties hereto.

BY THEIR SIGNATURES, THE UNDERSIGNED ATTEST THAT THEY HAVE THE AUTHORITY TO COMMIT TO THIS MOU ON BEHALF OF THE PARTY THAT THEY REPRESENT.

Minnesota Department of Commerce

By: _____

Print Title/Name: Deputy Commissioner, William Grant

Date: 3-2-16

Minnesota Pollution Control Agency

By: _____

Print Title/Name: Deputy Commissioner / Michelle Beeman

Date: 3/2/16

Minnesota Department of Natural Resources

By: _____

Print Title/Name: Assistant Commissioner Barbara L. Naramore

Date: 3/2/16

Minnesota Pollution Control Agency

MNDNR

March 25, 2016

William Seuffert
Executive Director
Environmental Quality Board
520 Lafayette Road
Saint Paul, MN 55155

RE: Response to Request for a Different Responsible Governmental Unit for the Environmental Review of the North Dakota Pipeline Company LLC's Proposed Sandpiper Pipeline and Line 3 Replacement Pipeline Projects

Dear Director Seuffert:

On March 16, 2016, you shared with us a citizen request regarding the responsible governmental unit (RGU) designation for the environmental review of the North Dakota Pipeline Company LLC's proposed Sandpiper Pipeline and Line 3 Replacement Pipeline Projects. As you summarized, the citizen is asking the Environmental Quality Board (EQB) to take the RGU designation for the projects from the Minnesota Public Utilities Commission (PUC) and assign it in a joint capacity to the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (DNR). You requested that our agencies provide you with a response by Friday, March 25, that will assist you in preparing a staff recommendation for the EQB's consideration at its meeting on April 20, 2016.

As you summarize in your letter, the EQB has jurisdiction over RGU selection, and that selection process is outlined in Minnesota Rules 4410.0500. Subpart 5 further defines applicable considerations in determining the appropriate RGU for these projects. In the case of any pipeline proposal, there are numerous issues that are relevant and important in preparing a complete environmental review. By virtue of their breadth, these issues do not all fall within the regulatory purview or expertise of a single state agency. Indeed, some require the expertise of multiple agencies. Because of this, our two agencies have voluntarily entered into an agreement with the Department of Commerce (Commerce) to assist in the evaluation of North Dakota Pipeline Company's two proposed pipeline projects. Our interagency agreement is articulated in a joint Memorandum of Understanding (MOU) that was filed with the PUC on March 3, 2016 (enclosed). In the MOU, the three agencies collectively commit to working together to prepare the EIS documents, each of us providing our particular expertise and regulatory insights to the process. We believe this cooperative effort is fully in keeping with Minnesota Rules 4410.0500 and is, in fact, the best means of ensuring the EISs rigorously, thoroughly, and efficiently analyze the potential impacts of the two proposed projects. This approach will best serve the interests of all concerned, including citizens, the project proposer, and the entities with approval or regulatory authority.

As to the specific questions posed in your letter, the MPCA and the DNR have limited overall regulatory authority over these projects. As you know, the PUC has the primary approval authority for an entire pipeline project, including routing decisions, while the MPCA and DNR have authority to regulate specific activities in connection with pipeline construction and operation. MPCA's and DNR's authorities include various permits and licenses for construction stormwater, public water and public land crossings, air emissions, water discharges, endangered species protection, water appropriations, and minerals encumbrances. However, neither the MPCA nor the DNR has such a singular regulatory role to play that it warrants removing the RGU status from the PUC. The PUC's current approach, in which it delegated the preparation of the EIS to Commerce with the explicit condition of involving the MPCA and DNR, accomplishes the goal of bringing the full range of state expertise to the analysis. There is no one single agency that has demonstrably greater expertise than Commerce in analyzing the potential impacts of the project in its entirety. Rather, each of our three agencies has specific expertise around certain categories of potential impacts. Minnesota Rules 4410.2200 provide a means by which an RGU can gain access to other governmental units that have relevant areas of expertise for a specific review. The approach reflected in our MOU is consistent with this rule and will ensure that the environmental review process fully engages the expertise and regulatory perspectives of all three agencies. Since the relevant authorities are dispersed among the agencies, the MOU is the most effective way to leverage our collective expertise, and we see no advantage to, or basis for, changing the RGU designation.

We have directed the staff in both our agencies to work together with the staff in Commerce to ensure we bring all appropriate expertise to bear as we collectively scope and conduct the environmental review processes. We are currently finalizing our staffing plans and the necessary fiscal arrangements under which North Dakota Pipeline Company will be paying the state's expenses in conducting the environmental reviews.

Our recommendation is that the EQB deny the request to change the RGU designation. If you have additional questions, please contact us.

Sincerely,

John Linc Stine
MPCA Commissioner

Tom Landwehr
MDNR Commissioner

c: Dave Frederickson, EQB Chair

MINNESOTA DEPARTMENT OF COMMERCE

85 7TH PLACE EAST, SUITE 500
SAINT PAUL, MINNESOTA 55101-2198
MN.GOV/COMMERCE
651.539.1500 FAX: 651.539.1547
AN EQUAL OPPORTUNITY EMPLOYER

March 3, 2016

Daniel Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101

RE: Docket No. PL-6668/CN-13-473, PL-6668/PPL-13-474

Dear Mr. Wolf:

Pursuant to the Commission's January 16, 2016 Order in the above-referenced dockets, the Department of Commerce, Pollution Control Agency and Department of Natural Resources submit the attached Memorandum of Understanding regarding development of Environmental Impact Statements for the proposed Sandpiper and Line 3 Replacement pipeline projects, dated March 2, 2016.

Sincerely,

William Grant
Deputy Commissioner

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MEMORANDUM OF UNDERSTANDING

BETWEEN
THE MINNESOTA DEPARTMENT OF COMMERCE

AND

THE MINNESOTA DEPARTMENT OF NATURAL RESOURCES AND THE MINNESOTA POLLUTION CONTROL AGENCY

REGARDING
DEVELOPMENT OF ENVIRONMENTAL IMPACT STATEMENTS FOR THE

SANDPIPER AND LINE 3 REPLACEMENT PIPELINE PROJECTS

This Memorandum of Understanding (MOU) between the Minnesota Department of Commerce (Commerce or Lead Agency) and the Minnesota Department of Natural Resources (MnDNR) and Minnesota Pollution Control Agency (MPCA) (collectively referred to as the Agencies) defines the roles and responsibilities of Commerce, the MnDNR and MPCA (Assisting Agencies) regarding the development of the necessary environmental review documents, including Environmental Impact Statements (EISs), for the proposed Sandpiper and Line 3 Replacement pipeline projects (Proposed Projects).

I. COMMISSION RESPONSIBILITIES

The Minnesota Public Utilities Commission (Commission) is the Responsible Governmental Unit (RGU) for the environmental review of the Proposed Projects. In that capacity, the Commission will make all final decisions regarding the scope and adequacy of the EISs for both of the Proposed Projects.

II. COMMERCE SCOPE OF WORK AND RESPONSIBILITIES

Pursuant to the Commission's January 11, 2016 Order, Commerce shall serve as Lead Agency for the development of the relevant environmental review documents for both of the Proposed Projects and administer the development of the Sandpiper EIS and the Line 3 EIS pursuant to the requirements set forth in the Minnesota Environmental Policy Act (MEPA), Minn. Stat. Ch. 116D, and Minnesota Rules Ch. 4410.

III. MnDNR AND MPCA SCOPE OF WORK AND RESPONSIBILITIES

The MnDNR and MPCA, as Assisting Agencies, shall assist the Lead Agency in identifying issues, alternatives, routes and alternative route proposals, data, and analysis to address environmental review topics and requirements and help Commerce ensure that each EIS fulfills applicable MEPA requirements; review, assess and comment on data and analysis in environmental documents prepared during the environment review process; address any potential deficiencies in environmental review documents in a timely manner to allow the deficiencies to be addressed as early as possible in the environmental review process; review and provide comments on

environmental review documents prepared for either of the Proposed Projects; and provide such other assistance as the Lead Agency and the Assisting Agencies mutually agree are necessary for MEPA compliance.

IV. AGENCY RESOURCES

1. The Assisting Agencies agree to use best efforts to provide the staffing resources necessary to accomplish the purpose of this MOU. Specific staffing needs to accomplish the purpose of this MOU will be identified in a separate interagency funding agreement that designates the specific Assisting Agency staff assigned, their general scope of duties, and maximum total funding to be provided.

2. It is understood by the Lead Agency and the Assisting Agencies that the Lead Agency will enter into a separate arrangement with the Project Proposer(s) to cover the cost of environmental review for both Proposed Projects pursuant to Minn. Stat. § 116D.045 and Minn. R. 4410.6000 through 4410.6500. Costs assessed to the Project Proposer(s) shall include the costs necessary to reimburse the Assisting Agencies for all costs incurred by the Assisting Agencies in accomplishing the purpose of this MOU.

3. All obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources for the work undertaken by the Agencies to accomplish the MOU's purpose and allocation of responsibilities.

V. GENERAL PROVISIONS

1. Agency Designees: The Agencies agree to designate personnel as the Agency designee with primary responsibility for implementing the terms of this agreement.

The Agencies' designees are, hereby, authorized to develop procedures and agreed timelines necessary to accomplish the purpose of this MOU.

2. Data Practices. The Lead Agency and Assisting Agencies agree to coordinate compliance with the requirements of the Minnesota Government Data Practices Act (MGDPA) as it pertains to the data collected or used to accomplish the purpose of this MOU.

3. Amendments. This MOU may be amended only by written agreement of all parties.

4. Termination. This MOU will remain in effect until issuance of the Commission's determination of EIS adequacy for both of the Proposed Projects. Notwithstanding the forgoing, any party may withdraw from this MOU upon written notice to the other signatories to this MOU.

5. Liability. Each party to this MOU shall be liable for its own acts and the results thereof to the extent authorized by law and shall not be responsible for the acts of the other party, its officers, employees or agents. Nothing in this MOU shall be deemed to be a waiver by any of the parties of any applicable state immunities or limits of liability.

6. Effective Date. This MOU will be effective upon execution by all parties hereto.

BY THEIR SIGNATURES, THE UNDERSIGNED ATTEST THAT THEY HAVE THE AUTHORITY TO COMMIT TO THIS MOU ON BEHALF OF THE PARTY THAT THEY REPRESENT.

Minnesota Department of Commerce

By: _____

Print Title/Name: Deputy Commissioner, William Grant

Date: 3-2-16

Minnesota Pollution Control Agency

By: _____

Print Title/Name: Deputy Commissioner / Michelle Beeman

Date: 3/2/16

Minnesota Department of Natural Resources

By: _____

Print Title/Name: Assistant Commissioner Barbara L. Naramore

Date: 3/2/16

Letter from the Proposers – North Dakota Pipeline Company LLC and Enbridge Energy, Limited Partnership

Enbridge Energy, Limited Partnership
26 East Superior Street,
office 408G
Duluth, MN 55802

March 25, 2016

VIA EMAIL

William Seuffert
Executive Director
Environmental Quality Board
520 Lafayette Road North
St. Paul, MN 55155

Re: Request for a Different Responsible Governmental Unit for the Environmental Review of the North Dakota Pipeline Company LLC's Proposed Sandpiper Pipeline and Line 3 Replacement Pipeline Projects

Dear Mr. Seuffert:

I write in response to your March 16, 2016 correspondence, in which you ask North Dakota Pipeline Company LLC and Enbridge Energy, Limited Partnership (together, the "Project Proposers") to respond to several questions related to Mr. Willis Mattison's March 10, 2016 request to change the responsible government unit ("RGU") for environmental review of the Sandpiper Pipeline Project and Line 3 Replacement Project (together, the "Projects") from the Minnesota Public Utilities Commission ("Commission") to the Minnesota Department of Natural Resources ("DNR") and Minnesota Pollution Control Agency ("PCA"). Responses to the specific questions raised in your letter are below. As you will see, it is the Project Proposers' position that the Commission should remain the RGU for the Projects because the Commission is the only agency authorized by statute or rule with permitting the Projects as a whole and has greater expertise in environmental review of large linear infrastructure projects.

1. Minnesota Rule 4410.0500, Subpart 5.

a. Which agency, the Commission, the PCA, or the DNR, has the greatest responsibility for supervising or approving the above-entitled projects?

The Commission has the greatest responsibility for supervising and approving the Projects. Specifically, the Commission has sole authority to determine the need for and routing of the Projects.[1] Under these statutes and rules, the Commission is tasked with evaluating a full

[1] *See* Minn. Stat. § 216B.243; Minn. Stat. Ch. 216G; Minn. R. Ch. 7852, 7853.

and broad spectrum of potential effects.[2] To consider the environmental effects, the Commission works with the Department of Commerce ("Department") to conduct its environmental review.[3]

By contrast, DNR and PCA have important, yet more limited, resource-specific roles. For example, DNR may issue licenses to cross state lands, and PCA may issue any needed air emissions or water appropriation permits for the Projects. However, these agencies do not have authority over the Projects as a whole. Nor are they charged with reviewing the socioeconomic analysis required by the Commission's rules.

b. Is the supervision and/or approval for the project as a whole?

Yes. The Commission has exclusive authority over determining need and routing for the Projects.[4] In addition, the federal Department of Transportation, Pipeline Hazardous Materials Administration ("PHMSA") has exclusive jurisdiction over pipeline safety. In Minnesota, PHMSA carries out this authority through the Minnesota Office of Pipeline Safety ("MnOPS").

c. Please provide any additional information relevant to Minnesota Rule 4410.0500, Subp. 5.

As noted above, the Commission has sole authority for approving the Projects as a whole. However, recognizing that DNR and PCA have resource-specific expertise, the Commission has directed the Department to enter into a memorandum of understanding ("MOU") with DNR and PCA for the Projects' environmental review. The Department, DNR, and PCA have now executed an MOU, which provides, in part, that DNR and PCA will assist the Department:

> in identifying issues, alternatives, routes and alternative route proposals, data, and analysis to address applicable MEPA requirements; review, assess and comment on data and analysis in environmental documents prepared during the environment review

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[2] *Id.*

[3] The rules contemplate that the Commission, as the RGU, may use an agent, such as the Department, to complete environmental review. *See* Minn. R. 4410.1400; http://mn.gov/commerce/industries/energy/ (stating that the Department "provides objective analysis and technical assistance to the Minnesota Public Utilities Commission" and "conduct[s] the environmental review required for large energy projects in Minnesota, and provide[s] technical expertise and assistance to the Commission regarding the siting and routing of large energy projects."); *see also* https://mn.gov/puc/resources/energyfacilities.jsp (stating that the Department "conducts an environmental review, provides technical expertise and submits recommendations to the Commission after analysis of siting and routing applications").

[4] *See* Minn. Stat. § 216B.243; Minn. Stat. Ch. 216G; Minn. R. Ch. 7852, 7853.

> process; address any potential deficiencies in environmental review documents in a timely manner to allow the deficiencies to be addressed as early as possible in the environmental review process; review and provide comments on environmental review documents prepared for either of the Proposed Projects; and provide such other assistance as the [Department and MDNR and MPCA] mutually agree are necessary for MEPA compliance.

As a result of the MOU, the environmental review for the Projects will benefit from not only the oversight of the Commission (which is the only agency tasked with permitting the Projects as a whole), but also the resource-specific expertise of DNR and PCA.

Further, as the EQB may know, the Projects have already been the subject of numerous delays, despite a regulatory process that is supposed to be completed within one year.[5] The request at issue here appears to be another attempt to delay critical infrastructure projects in Minnesota and add additional procedural irregularities (*i.e.*, adding a new RGU) into these proceedings. Delay and procedural irregularities create uncertainties for the Project Proposers, the public, and others considering whether to invest in important infrastructure projects in Minnesota.

2. Minnesota Rule 4410.0500, Subpart 6.

a. Which agency, the Commission, the PCA, or the DNR, has greater expertise in analyzing the potential impacts of the proposed projects?

The Commission and the Department have greater expertise in pipeline permitting and the related environmental review.[6] The applicable statutes and rules for both need and routing require the Commission to consider a broad range of issues, including environmental issues, when determining whether to grant pipeline permits and whether any conditions should be attached to those permits.[7] In addition, the Commission and the Department regularly conduct permitting and related environmental review for other large infrastructure projects, such as

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[5] Minn. Stat. § 216B.243, subd. 5; Minn. R. 7853.0200, subp. 6; Minn. Stat. § 216G.02, subd. 3(5); Minn. R. 7852.0800.

[6] *E.g.*, *In the Matters of the Applications of Enbridge Pipelines (Southern Lights) LLC for a Certificate of Need and Pipeline Routing Permit for the LSr Project*, MPUC Docket Nos. PL9/CN-07-464 and PPL-07-360; *In the Matters of the Application of Enbridge Energy, Limited Partnership for a Certificate of Need and Pipeline Routing Permit for the Alberta Clipper Pipeline Project*, MPUC Docket Nos. PL-9/CN-07-465 and PPL-07-361.

[7] *See* Minn. Stat. § 216B.243; Minn. Stat. Ch. 216G; Minn. R. Ch. 7852, 7853.

transmission lines, wind farms, solar farms, and power plants.[8] Notably, the Commission has conducted numerous EISs for transmission lines.[9] Although these EISs proceed under Minn. R. Ch. 7850, rather than Minn. R. Ch. 4410, the process and content is very much similar. Notably, transmission and pipeline projects are both linear in nature and can span hundreds of miles and cross state and international borders. By contrast, neither DNR nor PCA have conducted any project-wide environmental review for pipelines or other linear infrastructure projects. Accordingly, the Commission has greater expertise in analyzing the Projects' potential impacts.

b. Please provide any additional information relevant to Minnesota Rule 4410.0500, Subp. 6.

As noted above, the Department, DNR, and PCA have already entered into an MOU for the Projects' environmental review, thereby taking advantage of the Commission and the Department's expertise in pipeline and linear infrastructure permitting and environmental review, as well as the resource-specific expertise of DNR and PCA.

3. Recommendation.

The Commission has permitting authority over the Projects and greater expertise in analyzing the full spectrum of potential impacts of linear infrastructure like the Projects. Accordingly, the Project Proposers respectfully recommend and request that the Commission remain the RGU for the Projects.

Thank you for the opportunity to respond. Please contact me if you have any further questions.

Sincerely,

/s/ John Swanson

John Swanson
Vice President – US Major Onshore Projects

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[8] *See* Minn. R. Ch. 7849, 7850, 7851, 7854, and 7855.

[9] *See* Minn. R. 7850.2500.

Letters of Support for the Request for a Different Responsible Governmental Unit

STEPHEN L. ROE
11663 Whitefish Ave
Crosslake, Minnesota 56442-2042
218-692-3331 home
218-232-3554 cell
roetreat@crosslake.net

March 18, 2016

Delivered via Electronic Email Service

Mr. David Fredrickson, Chair
Minnesota Environmental Quality Board
520 Lafayette Rd.
St. Paul, Minnesota 55155

Re: Comments on the Request for Change of RGU in regard to the Environmental Review for current proposed pipelines in Minnesota.

Dear Chairman Fredrickson,

I am writing as a resident of the Whitefish Lake Chain of Lakes. I am concerned with all matters concerning the proposed route of the Sandpiper, Line3 and future pipelines across the Pine River Watershed, a sub-watershed of the Mississippi Watershed here in Cass and Crow Wing Counties.

I believe that a full and complete EIS would reveal the disastrous threat of spills to this pristine area of rivers, streams, creeks and waterways that flow from the proposed pipeline route. To continue this review with the prior review agencies might not be the best process going forward. The recent court decision supports that position, and that a full and complete EIS is required. Qualified personnel are required to produce a high quality EIS.

We must involve the DNR, MPCA, MEPA, Tribal Interests and the public, particularly those of us who live and work in the shadow of this project. You might also consider enlisting the input of the USGS, EPA and the USACE. These organizations have significant knowledge and experience relative to the environmental issues that should be considered when reviewing the route of these pipelines.

Therefore, on behalf of our citizen's right to a clean and healthy environment and to defend the functional integrity of the Minnesota Environmental Policy Act (MEPA) as administered by the Environmental Quality Board (EQB) , I hereby request that you consider the requested change in the Responsible Governmental Unit (RGU) for the subject pipeline. The request for this change justified under in Minnesota Statute 4410.500 Subpart 5 for General RGU Selection and/or under the RGU exceptions clause in Subpart 6 of that rule.

Respectfully,

Stephen L. Roe
PRWA Board Member

Cc: Will Seuffert, Executive Director, Minnesota Environmental Quality Board
Dan Wolf, Executive Secretary, Minnesota Public Utiliti3es Commission
Mike Rothman, Commissioner, Division of Energy Resources, Minnesota Department of Commerce
John Linc-Stine, Commissioner, Minnesota Pollution Control Agency
Tom Landwehr, Commissioner, Minnesota Department of Natural Resources

March 20, 2016

David Fredrickson
Chairman of the Board
Minnesota Environmental Quality Board (EQB)
520 Lafayette Rd
St Paul Minnesota 55155

Will Seuffert
Executive Director
Minnesota Environmental Quality Board (EQB)
520 Lafayette Rd
St Paul Minnesota 55155

Courtney Ahlers-Nelson
Planning Director
Environmental Review Program
Minnesota Environmental Quality Board (EQB)
520 Lafayette Rd
St Paul Minnesota 55155

Re: Sandpiper and Line 3 RGU changed from PUC to PCA and/or DNR

Fellow Minnesotans:

I am corresponding to you as an individual and resident of Warba, Minnesota which is three hours north of you up Highway 65 and four miles from the Alberta Clipper. I have testified orally and in writing for the past few years on the two Clipper upgrades, the Sandpiper, and Line 3 and have been very disappointed concerning how flawed the process is from the ALJ to the DOC to the PUC. However I will confine myself to Sandpiper/Line 3 comments.

It is really incumbent upon the EQB to change the RGU to the PCA and/or DNR in light of the recent court decision requiring an EIS and not just a CEA for the new upcoming and proposed 'new pipeline corridor' piercing the heart of Northern Minnesota's lake and wetlands country. Can we expect anything but a 'wolf in sheep's clothing' with the PUC (and the DOC) dressing up the same old CEA in a pretty new EIS dress?

Can we expect anything but bias from the PUC, DOC, and ALJ who, shockingly, refused to even comment on the negative critiques of the PCA and DNR concerning the Enbridge proposed route in Sandpiper testimony? Is money and cost the ONLY driving issue rather than routing a pipeline farther south through farmland where a spill can be cleaned up easily in contrast to it getting into a wetland, lake, river, stream, or aquifer farther north? The current routing is crazy on its face.

We know all of these pipelines will all break. It is only a question of time. Enbridge NEVER replaces a pipeline except when they have an ulterior motive in the case of Line 3. They still operate a 66 year old pipeline going through Red Lake and they still operate a 62 year old pipeline going under the Mackinac Straits which could pollute a sizeable segment of the Great Lakes. They only are replacing Line 3 from the 60's because they are prohibited by its 900 'anomolies' from running it to capacity with tar sands AND they are getting a two-fer if the State allows them to let it lie in place so they don't have to dig it up which would uncover all the little leaks slowly wending their way down to the groundwater they would be mandated to spend a lot of money cleaning clean up.

To have the PUC (DOC) do the environmental assessment is a conflict of interest with the mandate of the DOC to regulate (promote) commerce. Peer Review should be the guiding principle. PCA has obviously got a lot more staff and experience in dealing with pipelines and their leaks and the DNR has obviously got a knowledge regarding proper routings and valued opinions on a WHOLE NEW OIL CORRIDOR than the DOC could ever conceive of. The PCA and DNR can do or can farm out competently a full risk assessment and worst case scenarios.

The PCA and DNR have the staff to adequately review alternative routings which the PUC cannot. It is totally unrealistic to expect individuals like me to propose and get accepted another routing against the army of Enbridge arguing against me. This is another very crazy part of the current process.

The Department of Commerce has its place in economic trends, market for oil, and—maybe—alternate carriers such as trains. But, they have not distinguished themselves so far and should not be given a privileged place over other agencies. All their data needs to be re-done in fact in the fast-changing current environment and other agencies need to hold THEIR feet to the fire. The Feds are abolishing the 'bomb train cars' and mandating standards better than the best on the rail these days.

The price of oil is down so far only a few counties in the Bakken can pump at a profit and Alberta really needs oil price in the 85-100$ a barrel range to make a profit. All these pipelines were being planned in an era that planned on the doubling and tripling of oil volumes. That will not happen for at least many years. It is clear, in fact, that the Saudis plan on bankrupting these oil companies. Now THAT we could, maybe, plan on. Renewables are catching on quickly. The 2012 MN study on renewables said Minnesota could be 100% energy renewable with rooftop solar and wind machines with storage going north to south.

Without a different RGU lawsuits could surely be filed again. The tribes have not been consulted adequately but they engaged in the process showing their desire. By rights, they should file federal lawsuits alleging infringement of the 19th century treaty rights to 'hunt, fish, and gather' off reservation if pipelines infringe upon their wild rice. Please do not let the PUC and DOC short-circuit true review.

Sincerely, John Munter

14860 Bruce Creek Rd, Warba, MN 55793 (218-492-4179, mumooatthefarm@yahoo.com)

DELIVERED VIA EMAIL

March 22, 2016

Mr. David Fredrickson, Chairman
Minnesota Environmental Quality Board
520 Lafayette Rd
St. Paul, Minnesota 55155

Dear Chairman Fredrickson,

By this letter Lake Detroiters Association goes on record supporting the requested change in agencies assigned to prepare the environmental impact statement on the Sandpiper pipeline project.

It came as no surprise to observant citizens that the Department of Commerce would have its divided allegiance manifest itself in any environmental review efforts on this project. From the very beginning it was a dubious assignment of responsibility to have this business oriented department performing regulatory functions dealing with environmental and natural resource impact matters.

The Department of Commerce staff's casual dismissal of alternative routes for this pipeline project that would avoid Minnesota's most valuable, sensitive, and iconic water resources shocks the sensibilities and marginalizes our intelligence as citizens working to protect public waters. Lake Detroiters Association, as well as other Minnesota lake communities, work hard to understand the science of lake water quality protection strategies and put in countless hours volunteering in many state and local programs to protect these resources.

To have the Department of Commerce so cavalierly place these same water resources in harm's way with this enormous hazardous materials transportation project while ignoring admonitions to the contrary from citizens and sister agencies is unacceptable to us. We strongly encourage the Environmental Quality Board to exercise its authority to remedy this problem and place the authority for preparing the EIS in the hands of the agencies better equipped to deal with these issues objectively. The Pollution Control Agency and the Department of Natural Resources are far better suited for this assignment.

The additional suggestion being made by others that these agencies go even further to ensure objectivity and sound science through establishment of independent panels of experts in preparation of this EIS is especially warranted.

Sincerely,

Barb Halbakken Fischburg
President

copy: Will Seuffert, Executive Director, Minnesota Environmental Quality Board

March 25, 2016 (Delivered by Electronic Email Service)

Mr. David Fredrickson, Chairman
Minnesota Environmental Quality Board
520 Lafayette Rd
St. Paul, Minnesota 55155

Re: Willis Mattison's request for the EQB to change the Minnesota RGU designation for the State environmental review of two proposed oil pipeline projects (Sandpiper and Line 3 replacement).

Dear Chairman Fredrickson:

Mr. Willis Mattison has recently initiated a process whereby he is requesting that the Minnesota Environmental Quality Board (EQB) change the designation of the Responsible Government Unit (RGU) for conducting the environmental review of the Minnesota's portions of both the N. Dakota Pipeline Company's proposed Sandpiper pipeline project and Enbridge Energy's proposed Line 3 pipeline replacement project.

Specifically, Mr. Mattison is asking the EQB to switch the RGU designation from the MN Public Utilities Commission (PUC) and MN Department of Commerce (DOC) to the MN Department of Natural Resources (DNR) and Minnesota Pollution Control Agency(MPCA).

A major purpose of my letter to you is to enthusiastically support Mr. Mattison's request, which he persuasively justifies through submitted documentation to the EQB.

I also want to demonstrate by way of comparison with the State of Wisconsin's environmental review process, that Wisconsin is more faithfully adhering to its enabling environmental act than is Minnesota.

First, a little background. I worked in air pollution regulations for the Wisconsin DNR (WDNR) for 35 years. Recently retired, I now live in Minneapolis.

Second, as you already know, the WDNR conducts regulatory duties that in Minnesota are collectively performed by the MN DNR (resource management) and the MPCA (environmental control). My air pollution regulatory work, if done for Minnesota, would have been at the MPCA.

Third, both Minnesota and Wisconsin have enacted overall environmental statutes that are modeled after the National Environmental Policy Act (NEPA). The NEPA is a 1969 federal law that requires all federal agencies to submit environmental impact statements for all the major actions that could significantly affect the environment.

The Minnesota Environmental Policy Act (MEPA) was enacted in 1973 (Chapter 116D, Minnesota Statutes). Unlike other states' environmental policy acts, Minnesota's law requires an environmental impact statement (EIS) for all major state government and all major private

actions (which are defined as having more than just local significance) that may have an environmental impact (Section 116D.04, Minnesota Statutes). The list of project types that are exempt from MEPA requirements is relatively small (e.g., feedlots, highway projects, nonmetallic mineral mining and ethanol plants [1]).

The EQB has dutifully recognized that proposed oil pipelines in Minnesota are subject to MEPA requirements.

Similarly, the Wisconsin Environmental Policy Act (WEPA) was enacted in 1972. Additionally, the WDNR also recognizes that proposed oil pipelines in Wisconsin are subject to WEPA requirements. Specifically, according to a Wis DNR web page about energy and utility projects (http://dnr.wi.gov/topic/sectors/energy.html) the WDNR's Bureau of Environmental Analysis and Sustainability (BEAS) is responsible for coordinating the review of proposed energy and utility projects, including oil pipelines.

Indeed, the WDNR, in February, 2016 under the stated requirements of WEPA (Chapter 150, Wis Administrative Code), issued a Draft Environmental Impact Statement (DEIS) on the concluding 14 mile segments of both the proposed Sandpiper and proposed Line 3 replacement oil pipelines in Douglas County (3).

The WDNR, in this draft EIS (3), also did a significant evaluation of alternative considerations to the project, including route variations (page ES-5)

On the draft EIS's page ES-1 of this draft EIS (3), the WDNR identifies itself "..as the lead agency under the WEPA, the [W]DNR has prepared this draft EIS.."

The "lead agency" designation under WEPA would be approximately the same as the RGU designation under the MEPA requirements.

According to the EQB's "Guide to Minnesota Environmental Review Rules" (2) the EQB has the authority to designate a state agency as the RGU for a particular project that is subject to MEPA requirements. For reasons that are too regulatory-wise and historically complex to explain here, the EQB has designed the MN DOC and the MN PUC as RGUs for proposed pipeline projects.

This RGU designation includes for the proposed Sandpiper and proposed Line 3 replacement oil pipelines in Minnesota.

In Sept, 2015 the Minnesota Court of Appeals ordered, under state law, that a full EIS be completed for the Sandpiper project before the MN PUC could grant a Certificate of Need for it.

Presumably this requirement also applies to the Line 3 replacement project.

It is these specific RGU designations that Mr. Mattison is strongly challenging. Mr. Mattison has submitted substantial documentation in convincing support of his request that the RGU designations be changed to State agencies that are better qualified to prepare an EIS for each of these proposed oil projects (i.e., MN DNR and MPCA).

Of note in the EQB's "Guide to Minnesota Environmental Review Rules" (2, page 6) that:

> "The EQB can exercise extraordinary authority to change the RGU. The EQB has limited authority to change an RGU that is properly designated under the rules. The EQB can change the RGU only if making the change results in the appointment of an RGU with greater expertise in analyzing potential environmental impacts (part 4410.0500, subpart 6)."

In the case of the proposed Sandpiper and Line projects in Minnesota– the MN DNR and MPCA clearly qualify as agencies "..with greater expertise in analyzing potential environmental impacts."

As is demonstrated above, the State of Wisconsin has already designated its WDNR as the so-called RGU ("lead agency") on preparing an EIS for these same proposed projects in Wisconsin.

The EQB should do the right thing and similarly give RGU designations to the MPCA and MN DNR for these proposed projects.

1. "State environmental policy acts", Ballotpedia web site.
https://ballotpedia.org/State_environmental_policy_acts .

2. Minnesota Environmental Quality Board, "Guide to Minnesota's Environmental Rules", 2010.
http://www.mnplan.state.mn.us/pdf/rulguid3.pdf .

3. WDNR: Draft Environmental Impact Statement, Sandpiper Pipeline and Line 3 Replacement Projects Douglas County, Wisconsin, Feb 2016.
http://dnr.wi.gov/topic/EIA/documents/Enbridge/SPL3_Draft_EIS_Vol_I.pdf.

Sincerely,

William Adamski
4433 Garfield Ave. S.
Minneapolis, MN 55419
Phone: 612-926-8459

Cc: Will Seuffert, Executive Director, Minnesota Environmental Quality Board
Dan Wolf, Executive Secretary, Minnesota Public Utilities Commission
Mike Rothman, Commissioner, Minnesota Department of Commerce
Bill Grant, Deputy Commissioner, Division of Energy Resources,
Minnesota Department of Commerce
John Linc-Stine, Commissioner, Minnesota Pollution Control Agency
Tom Landwehr, Commissioner, Minnesota Department of Natural Resources

March 25, 2016

Chuck Diessner
24328 Hazelwood Drive
Park Rapids, MN 56470

Chairman David Frederickson
Minnesota Environmental Quality Board
520 Layfayette Road
St. Paul, MN 55155

VIA EMAIL

Re: EIS for: Application of North Dakota Pipeline Company LLC For a Certificate of Need and Route Permit for the Sandpiper Pipeline Project. PUC Docket No. PL6668/CN 13-473/RP 13-474; and

Application of Enbridge Energy, Limited Partnership For a Certificate of Need and Route Permit for the Line 3. PUC Docket No. PL 9/CN 14-916 /RP 15-137.

Dear Chairman Frederickson:

I am filing this letter with the EQB on my own behalf and in support of Willis Mattison's requests set forth in his letter to the EQB dated March 10th.

My name is Chuck Diessner and I live on Potato Lake in Park Rapids, Minnesota. I have followed very closely the PUC process regarding the captioned Applications in light of the close proximity of the Applicants' preferred Sandpiper and Line 3 pipelines routes relative to Potato Lake and other critical environmental conditions and natural resources enjoyed by the public.

I am not against either of the proposed pipelines; however, I do object to the Applicants' preferred pipeline routes because of the potential serious damage a spill, leak or other event could cause to our environment and natural resources.

I believe that in order to protect the best interests of the state and the public with regard to the preparation of the EIS for these pipeline projects, it is imperative that the EQB (i) remove the Public Utilities Commission (PUC) as the RGU and the Department of Commerce (DOC) as its agent and (ii) designate the Department of Natural Resources (DNR) and the Minnesota Pollution Control Agency (MPCA) as the joint RGU.

REMOVAL OF PUC AS THE RGU

The PUC should be removed as the RGU because it:

a. failed to remove the DOC as its agent even in light of the DOC's failures as described in Factor 1 below and as requested by intervenors;

b. required an illegal environmental process before considering the Sandpiper Certificate of Need and refused to order an EIS at the beginning of the Sandpiper Pipeline process as requested by Friends of the Headwaters (FOH) and other intervenors on numerous occasions;

c. caused FOH to obtain a Court of Appeals decision which required that the requested EIS be prepared;

d. failed to require the DOC to perform the duties it assigned to the DOC as described in Factor 1 below;

e. failed to take into consideration Factors 2 and 3 described below when it appointed the DOC as it agent; and

f. failed to perform it's duties as set forth in Mr. Mattison's request.

Since the PUC failed to act in the best interests of the state and public in these ways, the EQB must remove the PUC as the RUG and the DOC as its agent and appoint the DNR and MPCA as the joint RGU. Words alone do not provide the protection of the state and public as required under Minnesota law and rule. It is only the PUC's actions that determine if it is acting in the best interest of the state and public and those actions to date clearly show that the PUC has failed in this regard and, therefore, the PUC must be removed as the RGU.

REMOVAL OF THE DOC AS THE AGENT OF THE RGU

Also, I strongly believe that the only way to ensure that the best interest of the state and public will be protected in the preparation of the EIS is for the DOC to be removed as the RGU's agent.

The PUC, at its December 17th hearing, stated that everything possible must be done to insure that the new process for considering the Applications is robust, comprehensive, high quality, independent, fair, avoids further delay as much as possible without sacrificing quality, involves the public and eliminates the likelihood of a future legal challenge ("Process Goals"). Again, these are the right words, but they mean nothing if the actions of the PUC and DOC are not consistent with such words.

The PUC's decision to appoint the DOC as its agent to prepare the EIS is not consistent with achieving any of the Process Goals or in the best interest of the state or the public because (i) the DOC has demonstrated bias and prejudice in support of the Sandpiper Application throughout its process regarding numerous environmental matters, (ii) the DNR and MPCA clearly qualify under Minnesota Rules to be appointed as the RGU and (iii) the DOC has shown a shocking lack of understanding of the law and rules relating to MEPA and an EIS.

If the RGU is going to achieve the Process Goals, the EQB must remove the DOC as the agent of the RGU because of the foregoing three factors as explained below.

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Factor 1: The DOC's is not independent as shown by its bias and prejudice in the Sandpiper process. Some examples include the following:

a. In the DOC's initial report and recommendations to the PUC regarding which routes, route alternatives and system alternatives should be considered as part of the Sandpiper process, it failed to include the serious concerns, objections and recommendations of the DNR and MPCA. There is no possible justification for this failure.

When the PUC became aware of such failure it told the DOC in a hearing that the PUC could not make a decision in the Sandpiper matter without taking into consideration the comments and recommendations of the DNR and MPCA, the two highest state agencies responsible for protecting our natural resources and environment and with the most expertise in these matters. The PUC then told the DOC to take into consideration those agencies comments and to include the DNR's and MPCA's preferred system alternatives SA-03 and SA-04 and any other system alternatives those agencies recommended be considered as part of the process.

b. When the PUC decided in September, 2014 that an environmental report ("ER"), not an EIS, was to be prepared by the DOC, Chair Heydinger stated that it was necessary for the DNR and MPCA to assist in the development of the record by participating in the ER; that

she respected their views that the company's proposal has significant potential environmental impacts and there may be better choices; and that she wanted the ER to "help assure that there is a robust record on what the potential environment consequences may be of different alternatives." Notwithstanding these requirements:

(1) the DOC did not include the DNR and MPCA in the preparation of the ER.

(2) The DOC refused to provide the DNR, MPCA and with certain background information used to prepare the ER because it said that such information was confidential. As a result the ER was useless to the DNR, MPCA and other requesting parties and prevented the ER from helping to create a robust record.

3) The DOC's approach of applying equal weight to all the environmental conditions and natural resources regarding potential environmental impacts was not accepted by the DNR, MPCA and other intervenors as an appropriate way to compare system alternatives . This approach prevented the ER from providing a "robust record on what the potential environmental consequences may be of different alternatives."

Factor 2: It is my understanding that the DNR and MPCA have far greater expertise than the DOC alone or with the PUC in

"analyzing the potential impacts" of the oil pipelines on the environment and natural resources (such as rivers, lakes, wetlands, wild rice, aquifers, etc.) that will be included in the oil pipeline EIS (the "Oil Pipeline Potential Impacts"). It is only this type of expertise that is relevant. The PUC acknowledged during its hearings that the DNR and MPCA have the most expertise in protecting our natural resources and environment. have greater expertise in pipeline environmental review than any other Minnesota agency

Factor 3: The DOC demonstrated its shocking lack of understanding of even the most basic requirements of MPEA and an EIS as evidenced by its Request for Clarification filed with the PUC. If the DOC cannot handle even this most basic of issues under MEPA and an EIS, what is the DOC going to do when it faces a complicated issue?

Potential Additional Factor: It is my understanding that the DOC recently hired John Wachtler, a former vice president of Barr Engineering, to head the Energy Environmental Review & Analysis (EERA) division of the DOC and that the EERA will be responsible for the preparation of the EIS. The hiring of Mr. Wachtler may create a conflict of interest for the DOC to act as the PUC's agent because (i) while Mr. Wachtler was at Barr Engineering the company was an environmental consultant for the Applicants and one of its employees testified as an expert for NDPC in the Sandpiper contested hearing and (ii) Barr Engineering may still be an environmental consultant for the Applicants and may provide information on behalf of the Applicants regarding the EIS. The EQB needs to determine if a conflict of interest exists and, if it does, then it must remove the

DOC as the RGU's agent on this basis alone.

It is clear from the EQB's summary of Minnesota Rules and the materials filed by Mr. Mattison that the neither the law or rules require the PUC to serve as the RGU, there is clear authority to remove the PUC as the RGU and the DOC as its agent and appoint the DNR and MPCA as the joint RGU, and the DNR and MPCA qualify under Minnesota Rules to be appointed the RGU in this matter.

The process for considering these Applications is unique and covers new ground in many ways for the PUC and DOC, especially the need for and preparation of an EIS. The preparation of a pipeline EIS is not unique or cover new ground for either the DNR or the MPCA.

It is time to stop taking chances on the PUC's and DOC's ability to get things right for this unique situation. Unfortunately, history has shown the state and the public that the PUC and the DOC cannot be relied upon to get it right on how to prepare a pipeline EIS. The EIS process is not intended to be a learning exercise for the PUC and the DOC.

This is the perfect situation where the EQB can make sure that the pipeline EIS in this matter is prepared in the best interest of the state and the public by the highly qualified, experienced and independent DNR and MPCA If this change is not made by the EQB there is no doubt in my mind that mistakes will continue to be made, this matter will be tied up in numerous delays and there will be a high likelihood of future litigation.

Thank you for considering my comments.

Sincerely,

Charles F. Diessner

Chuck Diessner
612-790-6565
cfdiessner@gmail.com

cc: VIA EMAIL

Will Seuffert
Environmental Quality Board

Courtney Ahlers Nelson
Environmental Quality Board

Minnesota Center for Environmental Advocacy

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March 23, 2016

Will Seuffert
Executive Director
Environmental Quality Board
520 Lafayette Road
St. Paul, MN 55101

Dear Mr. Seuffert,

I write on behalf of Friends of the Headwaters and the Minnesota Center for Environmental Advocacy in regards to the request before the Environmental Quality Board (EQB) from Mr. Willis Mattison. As you know, Mr. Mattison has requested that the EQB exercise its authority to change the Responsible Governmental Unit (RGU) for the environmental review process for the proposed Sandpiper and Line 3 pipelines.

FOH and MCEA are concerned about the lack of public involvement and transparency in this process. We understand that this matter has been scheduled to be discussed at an EQB meeting in April. However, there has been no public notice or public comment period, and the only entities that have been notified about this meeting are the agencies involved, and Enbridge. This is unacceptable for a project that has a state-wide impact and has garnered state-wide interest.

We ask that you hold a public comment period of at least 30 days to solicit input on the question of the appropriate RGU for the Sandpiper and Line 3 Environmental Impact Statement. We ask that the comment period be held prior to a meeting of the EQB discussing the petition to change the RGU. While FOH and MCEA remain neutral at this time on the question of whether the Department of Commerce should be removed as RGU, we do have significant concerns about Commerce's work so far. Those concerns are summarized in a motion that we recently filed with the Public Utilities Commission, which I have attached for your reference. The motion asks for, among other things, the appointment of an independent expert panel to assist with the EIS, particularly in areas where Commerce lacks experience and expertise.

In the spirit of transparency and good governance, the EQB should not make a decision about the appropriate RGU based only on input from the agencies in question and Enbridge. Open comment periods for the proposed pipelines have regularly brought in hundreds of public comments, and both the Sandpiper and Line 3 dockets now have many intervenors on both sides, including tribes and a tribal organization. There is no doubt that these pipelines and the EIS process are part of a state-wide conversation. The public and the intervening parties deserve the opportunity to weigh in on this question, and the EQB cannot be fully informed about its decision without input from tribes and citizens.

Thank you for your consideration. Please do not hesitate to contact me with questions.

Best Regards,

Kathryn M. Hoffman
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Attorney for Friends of the Headwaters

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March 9, 2016

Dan Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

VIA ELECTRONIC SERVICE

Re: *In the Matters of the Application of Enbridge Energy, Limited Partnership for a Certificate of Need and Routing Permit for the Line 3 Replacement Project in Minnesota from the North Dakota Border to the Wisconsin Border* and *of the Applications of North Dakota Pipeline Company LLC for a Certificate of Need and Pipeline Routing Permit for the Sandpiper Pipeline Project.*

MPUC Docket Nos. PL-9/CN-14-916; PL-9/PPL-15-137
PL-6668/CN-13-473; PL-6668/PPL-13-474
OAH Docket Nos. 65-2500-32764
8-2500-31260; 8-2500-31259

Dear Mr. Wolf,

In connection to the above-captioned dockets please find the enclosed Motion To Order The Department Of Commerce To Renegotiate The Memorandum Of Understanding And To Establish An Expert Advisory Council Under Minn. Stat. § 116D.03, filed on behalf of Friends of the Headwaters. Also attached is an Affidavit of Service.

Sincerely,

/s/ Kathryn M. Hoffman
Kathryn M. Hoffman
Staff Attorney

KMH/em

Enclosure

cc: Service List

STATE OF MINNESOTA
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
John Tuma	Commissioner

In the Matters of the Applications of North Dakota Pipeline Company LLC for a Certificate of Need and Pipeline Routing Permit for the Sandpiper Pipeline Project	MPUC Docket Nos. PL-6668/CN-13-473 PL-6668/PPL-13-474 OAH Docket Nos. 8-2500-31260 8-2500-31259
In the Matters of Enbridge, Limited Partnership, for a Certificate of Need and Pipeline Routing Permit for the Line 3 Replacement Project	PUC Docket Nos. PL-9/PPL-15-137 PL-9/CN-14-916 OAH Docket No. 65-2500-32764

MOTION TO ORDER THE DEPARTMENT OF COMMERCE TO RENEGOTIATE THE MEMORANDUM OF UNDERSTANDING, AND TO ESTABLISH AN EXPERT ADVISORY COUNCIL UNDER MINN. STAT. § 116D.03

Pursuant to Minn. R. 1400.6600 and Minn. Stat. § 116D.03, subd. 2, the Friends of the Headwaters ("FOH") hereby moves that the Commission: 1) order the Department of Commerce to Renegotiate the Memorandum of Understanding to ensure non-discretionary involvement of the assisting agencies, and 2) order the formation of an Expert Advisory Council to assist in properly scoping the Environmental Impact Statement ("EIS") in this case and to ensure compliance with applicable state laws and regulations concerning environmental review.

INTRODUCTION

FOH is gravely concerned that the preparation of the Sandpiper EIS is proceeding contrary to well-established law and procedure. Divergence between the legal requirements of environmental review and the development of the EIS, especially at this early stage, will almost certainly result in reversal on appeal, an outcome that will only lengthen the delays with which North Dakota Pipeline Company LLC ("NDPC") and its supporters are so concerned. The recently-filed Memorandum of Understanding ("MOU") does not alleviate these concerns; if anything, the MOU heightens these concerns, as it provides for the *possibility* of assistance from other agencies, but it does not *require* it. Any assistance is contingent on the availability of funding and staff, neither of which are presumed to exist. To prevent any further delays, FOH

requests that the Commission order the Department to renegotiate the MOU to ensure non-discretionary involvement of DNR and PCA through specified minimum commitments of funding and staff time. FOH also requests that the Commission establish an Advisory Council under § 116D.03, subd. 2(2) to assist the Department of Commerce ("the Department") in the scoping process and to generally advise the Department on two areas of expertise: (1) MEPA compliance and implementation and (2) the environmental impacts of pipelines to be evaluated.

Recent comments from the Department suggesting that "the discretion to set schedules for contested cases, including schedules for dates of prefiled testimony, is within the ALJ's purview,"[1] demonstrate a poor understanding of EIS procedure. Most importantly, these comments illustrate a faulty understanding of the Responsible Governmental Unit's ("RGU") legal responsibilities in EIS preparation. Perhaps this is understandable, given the novel circumstances in which the Department finds itself. Preparing an EIS is a highly specialized, technical, and difficult endeavor for any agency, but especially so for an agency unfamiliar with the process. To make the matter even more difficult, this EIS concerns two massive pipelines traversing 300 miles of sensitive Minnesota landscape and affecting 14,000-15,000 acres. It also incorporates the environmental impact of the Line 3 Replacement Project, which proposes to carry diluted bitumen across Minnesota wetlands.[2] A recent National Academies of Science report emphasized the uniquely challenging aspects of the environmental impact of diluted bitumen spills, which highlights the need for additional expertise as part of the EIS.[3] Such an EIS is much more complicated than a single-site project such as Polymet's NorthMet proposal. Without guidance from experts well-versed in the preparation of EISs, this complexity and lack of experience greatly increases the risk that the EIS will be found inadequate upon judicial review, further delaying these proceedings.

FOH is further concerned that the Department's role in the preparation of the EIS will be highly influenced by the privileged position of NDPC, the applicant in this case. Their reliance on NDPC for advice on EIS implementation is troubling, as recent statements from NDPC have also indicated a fundamental misunderstanding of how environmental review works under state law.

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[1] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *Comments Of The Minnesota Department Of Commerce*, February 12, 2016, at page 2.

[2] *See* Docket Nos. PL-9/CN-14-916; PL-9/PPL-15-137, *Order Joining Need And Routing Dockets*, February 1, 2016, at page 10 ("The Commission authorizes a combined environmental review that considers the cumulative impact of the Sandpiper Pipeline Project and the Line 3 Project.").

[3] National Academies of Sciences, Engineering, and Medicine. 2016. *Spills of Diluted Bitumen from Pipelines: A Comparative Study of Environmental Fate, Effects, and Response*. Washington, DC: The National Academies Press ("[D]iluted bitumen spills in the environment pose particular challenges when they reach water bodies. Progressive evaporative loss of the diluent leaves behind the relatively dense and viscous bitumen, which can then become submerged, perhaps first by adhering to particles, and ultimately sink to the sediments.").

The Commission's reliance on the Department's Comments in this matter (and by implication, on the comments of NDPC) will almost certainly result in procedural delays to allow for the Court of Appeals to provide guidance on proper EIS implementation. In order to prevent such delays from occurring, FOH urges the Commission to create an Expert Advisory Council as authorized by Minn. Stat. § 116D.03, subd. 2(2), which states that each state department and agency shall "utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment; as an aid in accomplishing this purpose there shall be established advisory councils or other forums for consultation with persons in appropriate fields of specialization so as to ensure that the latest and most authoritative findings will be considered in administrative and regulatory decision making as quickly and as amply as possible." An expert advisory council could be the difference between a legally inadequate EIS and a thorough analysis that can assist both the public and decision-makers. FOH also urges the Commission to order the renegotiation of the MOU to provide for non-discretionary assistance from DNR and MPCA.

FACTS AND PROCEDURAL BACKGROUND

After meeting in December 2015 to consider how to proceed in light of the Minnesota Court of Appeals decision in this case, the Commission on January 11, 2016 lifted the stay on the Certificate of Need docket, joined the need docket with the routing docket, and referred the matter to OAH for contested case proceedings.[4] The order also "authorize[d] the preparation of a combined EIS that addresses issues related to the certificate of need and route permit dockets" and ordered that the final EIS "shall be issued prior to the filing of intervenor direct testimony."[5] The Commission found that issuance of the final EIS prior to direct testimony would "best reconcile the contested case process with the MEPA process, and [] avoid delay related to use of the EIS document in that process."[6]

On February 1, 2016, multiple parties petitioned the Commission to reconsider that order, all making substantially identical arguments that that Commission should require issuance of the draft EIS prior to the direct testimony, not the final EIS. Also on February 1, 2016, the Department of Commerce filed a "request for clarification" in which it asked whether the Commission "intended the Department to include some or all of the six system alternatives

[4] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Order Lifting Stay, Rejoining Need And Routing Dockets, And Referring For Contested Case Proceedings*, January 11, 2016, at page 6-7.
[5] *Id.* at 7.
[6] *Id.* at 6.

considered in its environmental review in the EIS scoping document, in addition to the Company's preferred route and SA-03-AM."[7]

In response, FOH noted first that the Department's request for clarification "demonstrates a rather extraordinary misunderstanding of the Minnesota Environmental Policy Act and EISs in general."[8] FOH explained that MEPA does not allow the RGU to "take any steps to limit alternatives prior to scoping" the EIS.[9] The very purpose of scoping an EIS is to identify those alternatives that are reasonable based on the scoping comments.[10] To predetermine those alternatives before scoping has even taken place is a clear violation of MEPA.[11]

As part of its discussion on the troublingly misleading comments from the Department, FOH suggested that the Commission could head off any future procedural difficulties in EIS preparation by exercising its authority to form expert advisory councils under § 116D.03.[12] NDPC has misconstrued this suggestion, arguing that it is an untimely request for reconsideration of the Commission's January 11, 2016 Order.[13] To the contrary, FOH was not requesting any changes or modifications to the Commission's January 11, 2016 Order. FOH believes that order was both justified and clearly lawful, and has not asked for it to be modified in any way. However, FOH does have continuing concerns about how that order is being implemented by the Department. FOH is concerned that the preparation of the Sandpiper EIS is proceeding contrary to well-established law and procedure. FOH also believes that the Commission has clear ongoing authority under MEPA to establish advisory councils, and to clarify its position, FOH is submitting the present motion to establish such a council.

On March 3, 2016, the Department of Commerce filed its Memorandum of Understanding ("MOU") with MPCA and DNR regarding the preparation of the EIS for the proposed Sandpiper and Line 3 pipelines. The MOU fails to commit any minimum level of staffing, resources or expertise from MPCA or DNR. It also includes several caveats that could easily prevent any cooperation whatsoever between the agencies.

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[7] Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Request For Clarification*, February 1, 2016, at page 3.
[8] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Response To Minnesota Department Of Commerce's Request For Clarification And Other Parties' Motions For Reconsideration*, February 11, 2016, at page 1. FOH also responded to the many petitions for reconsideration, noting that the Commission was well within its statutory discretion to control the timing of the EIS issuance, as it did in this case.
[9] *Id.*
[10] *Id.* (citing Minn. R. 4410.2100, subp. 1).
[11] *Id.*
[12] *Id.* at 7.
[13] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *North Dakota Pipeline Company LLC's Response To Friends Of The Headwaters, Carlton County Land Stewards, And Honor The Earth's Requests For Reconsideration*, February 22, 2016, at page 2-3.

ARGUMENT

I. THE MOU FILED BY THE DEPARTMENT FAILS TO FULFILL THE COMMISSION'S PREVIOUS ORDER.

The MOU fails to obligate either the DNR or the MPCA to even a minimum level of non-discretionary participation in the EIS, and therefore should be renegotiated. The Commission, in its previous order, authorized the Department to "enter into an agreement with the Department of Natural Resources and the Pollution Control Agency to ensure that the EIS fulfills the requirements of MEPA."[14] In the discussion that led to this order, Commissioners expressed concern about the anemic participation of these agencies during the Certificate of Need proceedings. During the Certificate of Need proceedings, those agencies were only able to participate to the extent that minimal staff was available to comment, unsolicited and uncompensated, during the public comment periods for the project. The expectation was that a formal agreement between the Department and MPCA and DNR would remedy that deficiency by *dedicating* staff time to EIS assistance. It would give the Department a way to leverage DNR and MPCA resources.

Unfortunately, the MOU filed by the Department last week fails to leverage any resources from MPCA and DNR. Rather, it provides multiple caveats that may result in little or no cooperation at all between the agencies, despite the fact that the Department is embarking on a major EIS with limited experience. Rather than make MPCA and DNR co-lead agencies, therefore obligating them to provide meaningful assistance, the MOU is clear that the Department is the sole lead agency on the EIS.[15] The agreement contains laudable language that the assisting agencies will "ensure that each EIS fulfills applicable MEPA requirements," but without any specific commitment of resources, this language is largely aspirational.[16] Agency assistance is predicated on the assisting agencies using their "best efforts to provide the staffing resources necessary to accomplish the purpose of this MOU."[17] Even these "best efforts" are subject to availability, however, as the MOU establishes that "[a]ll obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources for the work undertaken by the Agencies to accomplish the MOU's purpose and allocation of responsibilities."[18] This all-encompassing caveat destroys the very purpose of the document itself, which is to ensure that the Department

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[14] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Order Lifting Stay, Rejoining Need And Routing Dockets, And Referring For Contested Case Proceedings*, January 11, 2016, at page 6-7.
[15] *See* Docket No. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Memorandum Of Understanding Between The Minnesota Department Of Commerce And The Minnesota Department Of Natural Resources And The Minnesota Pollution Control Agency*, March 3, 2016, at page 1.
[16] *Id.*
[17] *Id.* at 2.
[18] *Id.*

has the assistance necessary to produce an adequate EIS. If that assistance and EIS oversight is in fact nominal or even hypothetical because of agency resource limitations, the MOU is rendered virtually meaningless.

It need not be so. An effective MOU could be crafted by the inclusion of a few key provisions that turn potential assistance and oversight into actual assistance and oversight. At a minimum, such an MOU could designate DNR and/or MPCA as RGU and co-lead agencies; or, in the alternative, it could require participation by those agencies in certain areas where they have expertise. The document could also specify areas where DNR and MPCA will provide insight and resources specific to each agencies' areas of expertise, including experience with MEPA implementation. Rather than expressing a desire for the assisting agencies to help with EIS preparation, the MOU could *commit* each agency to a minimum level of resources, staff, or expertise. Importantly, since the MOU appears to imply that the availability of funding and staff time could be at a premium, Minnesota's environmental review regulations specify that the costs of scoping an EIS are "part of the reasonable costs of preparing, reviewing, and distributing the EIS and are to be assessed to the project proposer by the RGU."[19] These scoping costs include staff time, including direct salary and fringe benefit costs, the cost of consultants hired by the RGU, and other direct and indirect costs of the RGU incurred during the scoping process.[20] The MOU could implement this provision by specifying that MPCA and DNR are to be compensated for their contributions through the EIS costs that are assessed to the project proposer. Utilizing this provision could ensure that adequate agency resources are ready and available to provide crucial oversight and assistance to the Department. FOH therefore urges the Commission to direct the Department to renegotiate the MOU to include non-discretionary assistance from MPCA and DNR.

II. THE COMMISSION IS AUTHORIZED BY § 116D.03 TO CREATE AN EXPERT ADVISORY COUNCIL THAT WOULD PROVIDE CRUCIAL OVERSIGHT AND ASSISTANCE WITH THE SCIENTIFIC, TECHNICAL AND PROCEDURAL ASPECTS OF EIS SCOPING

MEPA authorizes RGUs such as the Commission to engage in a wide range of measures to ensure thorough and adequate environmental review, including establishing an expert panel. Sections 116D.02-.03 provide a set of statutory guidelines framing the RGU's responsibilities that are coherent and mutually reinforcing. They are also sweeping in language, and worth quoting in full, as it is easy to forget the scope of this state's clearly expressed policy:

> The legislature, recognizing the profound impact of human activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high density urbanization, industrial expansion, resources exploitation, and new and expanding technological advances

[19] Minn. R. 4410.6200, subp. 3 (2015).
[20] *Id.*, subp. 1.

> and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of human beings, declares that it is the continuing policy of the state government, in cooperation with federal and local governments, and other concerned public and private organizations, ***to use all practicable means and measures***, ***including*** financial and ***technical assistance***, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which human beings and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of the state's people.[21]

In order to carry out these grand goals, the statute continues, "it is the continuing responsibility of the state government *to use all practicable means*, consistent with other essential considerations of state policy, to improve and coordinate state plans, functions, programs and resources," so that the state may (among other goals) "discourage ecologically unsound aspects of population, economic and technological growth, and develop and implement a policy such that growth occurs only in an environmentally acceptable manner."[22]

Although the primary means of implementing these lofty goals is through the assurance that important governmental actions are informed by considerations of environmental impacts through environmental review such as EISs, they are not the only means. Section 116D.03 imposes a host of duties on state departments and agencies that are designed to further implement the notion that state actions should be guided not only by principles of economic and technological efficiency, but by concern for the protection of natural resources and habitats. The law thus directs that:

> All departments and agencies of the state government ***shall:***
>
> . . . .
>
> (2) utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment; as an aid in accomplishing this purpose ***there shall be established advisory councils*** or other forums for consultation with persons in appropriate fields of specialization so as to ensure that the latest and most authoritative findings will be considered in administrative and regulatory decision making as quickly and as amply as possible.[23]

Both the federal and state environmental review laws are designed not only to inform decisionmakers but to involve the public and affected persons in the decisionmaking process itself. A core requirement of both MEPA and NEPA is that significant governmental action cannot be taken until environmental impact documents are disseminated to the public and

[21] Minn. Stat. § 116D.02, subd. 1 (2015) (emphasis added).
[22] *Id.*, subd. 2 (emphasis added).
[23] Minn. Stat. § 116D.03, subd. 2(2) (2015) (emphasis added).

individuals have had the opportunity to comment on scoping and drafts of those documents.[24] State environmental review regulations are quite specific on this point, stating that the process "is designed to . . . provide the public with systematic access to decision makers, which will help to maintain public awareness of environmental concerns and encourage accountability in public and private decision making."

The requirement to establish expert advisory councils to assist in environmental review, in other words, is not some mere formality or forgotten technicality; it is both a mandatory directive (such councils "shall be established"[25]) and a core function of the law. It is one of the few ways in which MEPA differs from NEPA, its federal corollary and the source of much of MEPA's language. NEPA states that all federal agencies shall "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment."[26] MEPA goes one step further: all state departments and agencies shall "utilize a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences and the environmental arts in planning and in decision making which may have an impact on the environment; as an aid in accomplishing this purpose there shall be established advisory councils or other forums for consultation with persons in appropriate fields of specialization so as to ensure that the latest and most authoritative findings will be considered in administrative and regulatory decision making as quickly and as amply as possible."[27]

MEPA adopts the NEPA language almost verbatim, but adds the second clause requiring the establishment of advisory councils to aid state agencies in their environmental review. This requirement, so distinctive and clear, cannot be ignored. Indeed, NEPA's § 102 (quoted above) to which § 116D.03 adds the additional advisory council requirement, has been held to be a rigid, enforceable duty:

> Thus the Section 102 duties are not inherently flexible. They must be complied with to the fullest extent, unless there is a clear conflict of statutory authority. Considerations of administrative difficulty, delay or economic cost will not suffice to strip the section of its fundamental importance. We conclude then, that Section 102 of NEPA mandates a particular sort of careful and informed decisionmaking process and creates judicially enforceable duties.[28]

As it is drawn so closely to its federal counterpart, MEPA must be interpreted similarly. The statutory mandate to establish expert advisory councils was tailor-made for the very sorts of circumstances seen in this matter: an inexperienced agency charged with a technical, difficult,

[24] *See* Minn. R. 4410.0300, subp. 3, 4 (2015); 40 C.F.R. § 1506.6 (2015);
[25] Minn. Stat. § 116D.03, subd. 2(2) (2015).
[26] 42 U.S.C. § 4332(A) (2015).
[27] Minn. Stat. § 116D.03, subd. 2(2) (2015).
[28] *Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n,* 449 F.2d 1109, 1114 (D.C. Cir. 1971).

and overwhelming task, exhibiting signs of its unfamiliarity with crucially important MEPA procedures, and relying on the legally incorrect assertions of the project proposer, who has also betrayed its unfamiliarity with those same MEPA procedures. Fortunately, MEPA allows for guidance in these circumstances, and the Commission should avail itself of that guidance by establishing an expert advisory council.

This council could be composed of experts familiar with the EIS process as well as experts that are well-versed in the particular scientific and technical challenges associated with a pipeline project of this scope. Perhaps most importantly, however, state law is quite clear that such a council must be *neutral* and *transparent*.[29] A baseline requirement of such a council, therefore, is that it must not include 'experts' that are employees of, affiliates of, or contractors with NDPC. As the project proposer, NDPC will have ample opportunities to let their interests and preferred assumptions be known. But the central nature of environmental review is that it is not simply a post-hoc rationale for justifying predetermined decisions.[30] It is designed to provide objective and authoritative information that would otherwise not be accounted for in the decision. Any expert advisory council formed to consult and advise on the EIS process must therefore be independent, neutral and transparent. Including employees or affiliates of NDPC would violate this general principle, and would violate § 116D.03, subd. 2(3), which requires all state departments and agencies to develop methods and procedures "that will ensure that environmental amenities and values, whether quantified or not, will be given at least equal consideration in decision making along with economic and technical considerations." As the project proposer staking significant capital investments and future profits on the outcome of this EIS, NDPC has an explicitly economic interest in the content of the eventual document. Their presence on an expert advisory council would by necessity result in 'advice' that was neither independent nor neutral, contrary to state policy on environmental review.[31]

II. THE DEPARTMENT'S RECENT COMMENTS DEMONSTRATE AN UNFAMILIARITY WITH EIS PROCEDURES THAT WILL SIGNIFICANTLY INCREASE THE RISK OF AN INADEQUATE EIS, THUS FURTHER DELAYING THESE PROCEEDINGS

As FOH noted in its February 11, 2016 Response, the Department has become accustomed to the Comparative Environmental Assessment process authorized under Minnesota

[29] Minn. Stat. § 116D.03, subd. 2(3) (all state departments and agencies shall "identify and develop methods and procedures that will ensure that environmental amenities and values, whether quantified or not, will be given at least equal consideration in decision making along with economic and technical considerations"); Minn. R. 4410.0300, subp. 4 (objective of environmental review is to provide *usable* information, to help maintain public awareness of environmental concerns, and encourage accountability in public decision making); Minn. R. 4410.0300, subp 3 ("Environmental documents shall not be used to justify a decision").
[30] Minn. R. 4410.0300, subp. 3 (2015).
[31] Minn. R. 4410.0300, subp. 4;

Rules Chapter 7852. They have never conducted an EIS on a pipeline before. Indeed, no agency in Minnesota ever has, to FOH's knowledge.[32] Such a novel situation cries out for additional consultation and advice. The novelty of these circumstances alone would typically justify the creation of an experienced council to offer advice, but it is especially necessary here, where the Commission has numerous indications that the Department's understanding of the EIS process is, at best, incomplete.

The Department's recently-filed Memorandum of Understanding ("MOU") with MPCA and DNR will not remedy this problem. Although MPCA and DNR have considerably more expertise with EISs, they have not conducted a pipeline EIS, and would still benefit from expertise specific to pipelines such as Mr. Stolen, and an expert on diluted bitumen. Nor, of course, can they offer the expertise on treaty rights and tribal resources that White Earth and Mille Lacs would bring. Additionally, the MOU is limited and provides no assurance of meaningful cooperation between agencies. MPCA and DNR are not co-lead agencies, and thus have no legal obligation to ensure a quality EIS. There is no discussion in the MOU of how or whether MPCA and DNR will provide staff. The MOU provides for a separate agreement, which has not been filed, to provide for "specific staffing needs." It also states that "All obligations of the Lead Agency and Assisting Agencies under this MOU are contingent upon the appropriation, allotment, or the availability of funding sources…"[33] Thus, any real involvement of MPCA and DNR is both entirely discretionary by the Department, and contingent on other factors, including the availability of funding and staff. Put simply, there is nothing in this agreement that ensures quality involvement by MPCA and DNR.

The Department will make a series of other internal decisions going forward that are not subject to public scrutiny yet are extremely significant, especially for an agency that has not previously conducted a full EIS on a pipeline. An advisory committee as proposed by FOH would not have a "veto" over any of these decisions, but would provide Commerce the opportunity to obtain input before making an important decision. Such an advisory council

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[32] FOH notes, however, that there was state agency involvement in an EIS for the Alberta Clipper pipeline, for which the U.S. Department of State was the lead agency. The Department of State notes that they consulted with other federal agencies in preparing the EIS for the Alberta Clipper project, and that "state agencies also were consulted to ensure that their needs for analyses in relation to their respective state permitting processes would be reflected in the EIS." U.S. Dep't of State, Bureau of Energy Resources, *Final Environmental Impact Statement Executive Summary*, available at http://www.state.gov/e/enr/applicant/applicants/202453.htm. (last visited March 1, 2016). Such consultation, clearly, is a far cry from the substantive and procedural duties encompassed by the bearing the sole responsibility for preparing an adequate EIS, particularly where the entire burden falls on the state agency.

[33] *See* Docket No. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Memorandum Of Understanding Between The Minnesota Department Of Commerce And The Minnesota Department Of Natural Resources And The Minnesota Pollution Control Agency*, March 3, 2016, at page 2.

would increase transparency and produce better, more informed decisions, as envisioned by the drafters of MEPA.

Recently the Commission received Comments from the Department that indicate a fundamental misunderstanding of environmental review in general, and MEPA requirements in particular. The DOC suggested that "the discretion to set schedules for contested cases, including schedules for dates of prefiled testimony, is within the ALJ's purview."[34] As these comments were submitted in response to the Commission's Order that the final EIS be issued prior to direct testimony in the contested case proceedings, they appear to indicate the Department's view that OAH has the discretion to determine when in the contested case proceedings the final EIS must be issued. To the extent that these schedules include dates by which the EIS must be issued, this statement is legally incorrect, and therefore grossly misleading to the Commission. Allowing OAH to determine at what point the final EIS be issued would be an abdication of the Commission's (and the Department's, as the Commission's delegate) responsibilities as the RGU in this matter, thereby clearly violating MEPA.[35]

The Commission is the RGU in this matter. It is the RGU's responsibility to ensure that the EIS is prepared in accordance with state law, [36] and any abdication of that responsibility is a violation of law:

> NEPA establishes environmental protection as an integral part of the [RGU's] basic mandate. The primary responsibility for fulfilling that mandate lies with the [RGU]. Its responsibility is not simply to sit back, like an umpire, and resolve adversary contentions at the hearing stage. Rather, it must itself take the initiative of considering environmental values at every distinctive and comprehensive stage of the process beyond the staff's evaluation and recommendation.[37]

As part of this obligation, the *RGU* determines at what stage the EIS is to be prepared, not OAH. Because MEPA is fundamentally a procedural law, the timing of the EIS preparation

[34] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *Comments Of The Minnesota Department Of Commerce*, February 12, 2016, at page 2.
[35] *See Calvert Cliffs*, 449 F.2d at 1119 (the only agency in a position to ensure decisions are informed by environmental considerations is the RGU; abdication of that key role is a violation of law); *Sierra Club v. Lynn*, 502 F.2d 43, 59 (5th Cir. 1974) (environmental review requirements are directed only to the RGU; delegation of those responsibilities is an unlawful abdication).
[36] *See* Minn. Stat. § 116D.04, subd. 2a; subd. 2a(g); subd. 2a(h) (2015); Minn. R. 4410.0400, subp. 2 ("RGU's shall be responsible for verifying the accuracy of environmental documents and complying with environmental review processes in a timely manner.").
[37] *See Calvert Cliffs*, 449 F.2d at 1119.

is an essential determination under the law.[38] As federal courts have noted, it is an "important fact of administrative life" that "as time goes on, it will become ever more difficult to undo an improper decision."[39] MEPA codifies this concern by requiring that certain decisions be informed by a proper consideration of the environmental effects of that decision, and that such consideration take place early enough to influence the decision making process. The primary purpose of MEPA is therefore to identify and study the environmental impacts of a particular decision *before* that decision is made. The Act's lodestar, in other words, is *informed choice*:

> The Minnesota Environmental Policy Act recognizes that the restoration and maintenance of environmental quality is critically important to our welfare. The act also recognizes that human activity has a profound and often adverse impact on the environment. A first step in achieving a more harmonious relationship between human activity and the environment is understanding the impact which a proposed project will have on the environment. The purpose of parts 4410.0200 to 4410.6500 is to aid in providing that understanding through the preparation and public review of environmental documents. Environmental documents shall contain information that addresses the significant environmental issues of a proposed action. This information shall be available to governmental units and citizens ***early in the decision making process.***
>
> . . . . .
>
> Environmental documents shall be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality.[40]

Subpart 4 of that Rule states that the process is designed to "provide *usable* information to the project proposer, governmental decision makers and the public concerning the primary environmental effects of a proposed project."[41] If the central purpose of the law is to inform a particular decision, the timing of that information's delivery will determine whether that information is usable or even relevant, which is why the Rules direct the information to be generated and delivered as early as possible.[42]

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[38] *See Calvert Cliffs*, 449 F.2d at 1113 ("However, [NEPA] also contains very important 'procedural' provisions – provisions which are designed to see that all federal agencies do in fact exercise the substantive discretion given them. These provisions are not highly flexible. Indeed, they establish a strict standard of compliance.").
[39] *Sierra Club v. Marsh*, 872 F.2d 497, 503 (1st Cir. 1989).
[40] Minn. R. 4410.0300, subp. 3 (emphasis added).
[41] *Id.*, subp. 4 (emphasis added).
[42] *See, e.g.*, *Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974) ("The procedures required by NEPA . . . are designed to secure the accomplishment of the vital purpose of NEPA. That result

On judicial review, the central question for the court is whether the agency took a "'hard look' at the salient issues,"[43] and in answering this question the *timing* of the EISs issuance is a critical detail. In the present matter it was in fact the *timing* of the EIS issuance that was reversed on appeal, when the Court determined that this Commission could not issue a Certificate of Need without conducting an EIS first.[44] It is therefore a critical role for the RGU to determine when the EIS is to be issued, and abdicating that role to OAH would violate MEPA. Just as the deferral of the EIS was found unlawful in this matter, it would have been similarly unlawful if the RGU had simply allowed OAH to decide whether the EIS would be issued early or deferred until later, which is what the Department is suggesting in its comments to the Commission.

But the RGU's responsibilities extend beyond merely determining when the EIS shall be issued. Its responsibilities are to oversee the entire process of environmental review as it relates to the decision being considered, to ensure that the decision incorporates a proper consideration of environmental effects. The statute is clear that it is the RGU's responsibility to ensure coordination between environmental review and permitting.[45] This responsibility is a core function of the RGU, not a mere formality. The coordination between environmental review and permitting is the heart of MEPA, and the RGU must ensure that this coordination renders the environmental review useful, timely, and relevant to properly inform the permitting decision. For the OAH to undertake a crucial role in this regard, by determining when in the contested case proceedings the final EIS should be issued, would be a direct violation of the RGU's coordination responsibilities.

If there is a conflict between OAH's procedural rules and an agency order made pursuant to state law, including MEPA, the agency order takes precedence. This is made clear by the state law itself. In cases requiring multiple permits, for instance, the agency may consolidate the hearing process, "notwithstanding any law or rule to the contrary."[46] That statute also directs the agency to "establish appropriate procedures for the consolidated hearing process."[47] When it comes to complying with state environmental review laws, the agency cannot delegate crucial procedural milestone scheduling to a non-RGU agency like OAH.

Fortunately, the Commission did not delegate that crucial role in this instance. Rather, it determined that contested case proceedings must begin after the issuance of the final EIS, "[t]o

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can be achieved only if the prescribed procedures are faithfully followed; grudging, pro forma compliance will not do.").

[43] *See, e.g., Friends of Twin Lakes v. Roseville*, 764 N.W.2d 378, 381 (Minn. Ct. App. 2009).

[44] *In re North Dakota Pipeline Co., LLC*, 869 N.W.2d 693, 698 (Minn. Ct. App. 2015) ("In this case, the completion of an EIS at the certificate of need stage satisfies the imperative identified above by ensuring decision-makers are fully informed regarding the environmental consequences of the pipeline, before determining whether there is a need for it.").

[45] Minn. Stat. § 116D.04, subd. 2a(g) (2015).

[46] Minn. Stat. § 116D.04, subd. 2a(g) (2015).

[47] *Id.*

best reconcile the contested case process with the MEPA process, and to avoid delay related to use of the EIS document in that process."[48] As described in FOH's February 11, 2016 Response to Minnesota Department of Commerce's Request for Clarification and Other Parties' Motions for Reconsideration, the Commission has the legal authority and discretion to take this action, as part of their obligation to ensure that the eventual decision is properly informed.

But the Commission's suggestion that this scheduling decision is within the purview of the OAH is an alarmingly incorrect statement coming from the RGU's delegate. Combined with its previous conduct in this case, they presage a very high risk of producing an EIS that is either poorly substantiated, overly restrictive in scope, or otherwise affected by procedural error. Their recent statements are merely the latest instance of a series of events demonstrating an inexperience and unfamiliarity with fundamental principles of environmental review. As but one example, FOH understands that the Department is currently renegotiating an earlier contract with Cardno, rather than put out a new Request for Proposal from other consultants. These negotiations are taking place without oversight or assistance, and these decisions can have irreversible consequences.

EIS preparation is a difficult and technical process, but because MEPA is a fundamentally procedural law, it is critical that the proper procedures and timing are followed. The Department's inexperience with this process should not be allowed to jeopardize the integrity of both the process and the eventual document, but the Commission can help protect the process by creating an expert advisory council to assist the Department.

III. THE COMMISSION'S RELIANCE ON NPDC WOULD CLEARLY VIOLATE MEPA REQUIREMENTS

FOH is concerned that the Department of Commerce may be allowing NDPC to prepare the scoping EAW, which is unlawful under MEPA. As the Responsible Governmental Unit for this EIS, the Commission is responsible for the content of both the scoping EAW and the EIS.[49] The Commission may not delegate the responsibility for preparation of these key documents to NDPC.

The reasoning for this requirement should be self-evident. NDPC has a strong interest in a narrow EIS that rejects consideration of any serious alternatives and minimizes potential environmental impacts. Under no circumstances should such a conflicted entity be preparing a

[48] *See* Docket Nos. PL-6668/CN-13-473, PL-6668/PPL-13-474, *Order Lifting Stay, Rejoining Need And Routing Dockets, And Referring For Contested Case Proceedings*, January 11, 2016, at page 6.

[49] Minn. R. 4410.1400 ("The EAW shall be prepared by the RGU or its agents… The RGU shall be responsible for the completeness and accuracy of all information."); Minn. Stat. § 116D.04, subd. 2a ("Where there is potential for significant environmental effects resulting from any major governmental action, the action shall be preceded by a detailed environmental impact statement *prepared by the responsible governmental unit*.") (emphasis added).

document that is intended to educate the public and inform decision-makers by describing "the proposed action in detail, analyz[ing] its significant environmental impacts, discuss[ing] appropriate alternatives to the proposed action and their impacts, and explor[ing] methods by which adverse environmental impacts of an action could be mitigated."[50]

Moreover, NDPC is already trying to mislead the Commission in violation of MEPA in its comments. In its February 11, 2016 Response to the Petitions for Reconsideration, NDPC acknowledges that making scoping decisions before the scoping process has been completed would be inconsistent with state law. However, it then argues that, should the Commission consider the Department's Request for Clarification, it should inform the Department that "six system alternatives were considered for inclusion within the EIS but rejected (and therefore not proposed for inclusion within the EIS) because they do not meet the identified purpose and need for the Project."[51] This statement is a clear violation of state environmental review laws, and illustrates elementary misconceptions of how to scope an EIS under state regulations.

Under MEPA, the purpose of the scoping process is to focus the EIS on the relevant issues by:

> Identify[ing] only those potentially significant issues relevant to the proposed project, define the form, level of detail, content, *alternatives*, time table for preparation, and preparers of the EIS, and to determine the permits for which information will be developed concurrently with the EIS.[52]

After scoping is complete, the RGU will make a "scoping decision" that contains, among other things, the alternatives that will be addressed in the EIS.[53] Thus, it is appropriate for DOC to turn to the Commission for a scoping decision on alternatives, but it is premature to do so prior to scoping.

Eliminating alternatives prior to scoping is illegal under MEPA. This Commission's decision to grant a certificate of need to the Sandpiper Pipeline was overturned by the Court of Appeals because, under MEPA, the State may not grant a permit to a project prior to completion of an EIS.[54] But the reason for this prohibition is that agencies may not pre-determine significant

[50] Minn. Stat. § 116D.04, subd. 2a.
[51] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *North Dakota Pipeline Company LLC's Response To Petitions For Reconsideration*, February 11, 2016, at page 3.
[52] Minn. R. 4410.2100, subp. 1 (emphasis added).
[53] *Id.* at subp. 6.
[54] Minn. Stat. § 116D.04, subd. 2b; *In re North Dakota Pipeline Co., LLC*, 869 N.W.2d 693, 698 (Minn. Ct. App. 2015)("Therefore, based on the plain language of subdivision 2b, the MPUC's issuance of a certificate of need constitutes a final governmental decision that is prohibited until the required environmental review is completed.").

decisions about the project prior to the EIS process.[55] The EIS process is designed to thoroughly vet a proposed project; it is not designed to affirm a decision that was already made. Courts have regularly overturned efforts by agencies to control and limit the outcome of an EIS in this way.

As noted in FOH's Response to Minnesota Department of Commerce's Request for Clarification and Other Parties' Motions for Reconsideration, federal courts have held that agencies that take steps to limit the range of potential alternatives prior to completion of environmental review violate NEPA.[56]

Similarly, if the Commission instructs the Department to eliminate certain alternatives from consideration prior to the scoping process, it will violate MEPA and fail to take a "hard look" at the environmental consequences of this pipeline. The prohibition against action by the state prior to the EIS is not limited merely to granting a permit, but to *any* action that would limit the range of alternatives considered in the EIS too early in the process, thereby "seriously impeding the degree to which their planning and decisions could reflect environmental values."[57] The EIS stage is deliberative – as the Court of Appeals noted, it is intended to study the project and the alternatives early in the process, such that "important environmental effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."[58] To refuse to study system alternatives at this stage is no different than granting a certificate of need prior to an EIS – it commits the State to a particular project and location before the environmental effects have been fully understood.

NDPC's comments in this regard are unusual and alarming not only because they would constitute reversible error if followed by the Commission, but also because NDPC's reasoning is based on the Commission's Order Granting Certificate of Need that was *invalidated* for failure to comply with environmental review laws.[59] It is frankly absurd to suggest that the Commission may restrict the alternatives prior to scoping, in violation of MEPA, because the Commission had already rejected those alternatives in an Order that was made illegally in this very case. The Court of Appeals found that the Commission could not grant a certificate of need specifically because it was considered prior to completion of an EIS. NDPC is now suggesting to the

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[55] *In Re NDPC*, 869 N.W.2d at 698-99 ("In this case, the completion of an EIS at the certificate of need stage satisfies the imperative identified above by ensuring decision-makers are fully informed regarding the environmental consequences of the pipeline, before determining whether there is a need for it.").

[56] Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *FOH's Response To Minnesota Department Of Commerce's Request For Clarification And Other Parties Motions For Reconsideration*, February 11, 2016, at page 3-4.

[57] *Metcalf*, 214 F.3d at 1143-44 (quoting *Save the Yaak Comm. v. Block*, 840 F.2d 714, 718-19 (9th Cir. 1988)).

[58] *In Re NDPC*, 869 N.W.2d at 698.

[59] *See* Docket Nos. PL-6668/CN-13-473; PL-6668/CN-13-474, *North Dakota Pipeline Company Llc's Response To Petitions For Reconsideration*, at page 3.

Commission that it may disregard the Court of Appeals opinion and re-adopt that invalidated decision, and in so doing, illegally restrict the alternatives prior to scoping. This is, to say the least, faulty reasoning, and the fact that it is coming from the project proposer and a party of obvious significance and influence in these proceedings makes the need for oversight quite clear.

If the Commission were to rely on NDPC's preparation of an EAW, or its statements in this matter, its actions would likely be reversed on appeal for a second time. The primary parties in this matter – the RGU's delegate and the project proposer – have amply demonstrated an unfamiliarity with, and dangerously erroneous understanding of, the legal requirements for EIS preparation. Rather than risk further delays, the Commission should exercise its authority to create an advisory council that can correct any such errors before they are propagated into an inadequate EIS document.

CONCLUSION

EIS preparation is a complex task, substantively as well as procedurally. To FOH's knowledge, this is the first instance in which a Minnesota agency has conducted an EIS on a pipeline without federal support. It is a difficult task even for an experienced agency, but for an inexperienced agency like the Department, assistance and oversight are critical, especially where it may be relying on the project proposer to the detriment of the EIS. FOH therefore urges the Commission to utilize all resources available to it and the Department, including a revised MOU providing for non-discretionary assistance from DNR and PCA, and the advisory councils of § 116D.03.

Dated: March 9, 2016

Respectfully submitted,

/s/ Kathryn Hoffman

/s/ Kevin P. Lee

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STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matters of Enbridge, Limited Partnership, for a Certificate of Need and Pipeline Routing Permit for the Line 3 Replacement Project

MPUC Docket Nos. PL-9/PPL-15-137
PL-9/CN-14-916
OAH Docket No. 65-2500-32764

AFFIDAVIT OF SERVICE

In the Matters of the Application of North Dakota Pipeline Company LLC for a Certificate of Need for the Sandpiper Pipeline Project in Minnesota

MPUC Docket Nos. PL-6668/CN-13-473
PL-6668/PPL-13-474
OAH Docket Nos. 8-2500-31260
8-2500-31259

STATE OF MINNESOTA)
)ss.
COUNTY OF RAMSEY)

Erin Mittag, being duly sworn, says that on the 9th day of March, 2016, she served via e-dockets the following:

- Motion To Order The Department Of Commerce To Renegotiate The Memorandum Of Understanding And To Establish An Expert Advisory Council Under Minn. Stat. § 116D.03, filed on behalf of Friends of the Headwaters

on the following persons, in this action, by filing through e-dockets or mailing to them a copy thereof, enclosed in an envelope, postage prepaid, and by depositing the same in the post office at St. Paul, Minnesota, directed to said persons at the last known mailing address of said persons:

Attached Service List.

Erin Mittag

Subscribed and sworn to before me
this 9th day of March, 2016

Karen Moss