



414 Nicollet Mall
Minneapolis, MN 55401

December 21, 2016

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: **Supplemental Information for the Black Dog Natural Gas Pipeline Project;
Docket No. G002/GP-16-656**

Dear Mr. Wolf:

On August 18, 2016, pursuant to Minn. Stat. §216G.02 and Minn. Rules Chapter 7852, Xcel Energy (the Company) filed a route permit for a 2.2 mile pipeline from Northern Natural Gas Company's Cedar Station to Northern States Power Company's Black Dog Generating Plant in Burnsville. The Minnesota Public Utilities Commission (Commission) accepted the Company's application as complete through its Order dated September 30, 2016.

On November 30, 2016, the Minnesota Department of Commerce (DOC) filed comments stating: "It is not clear whether some of the criteria in Minn. Rules 7852, part 0700 have been met due to the outstanding issues mentioned above. EERA staff does not feel it would be appropriate to support the granting of a partial exemption from the pipeline route selection procedures at this time." In order to ensure a robust record sufficient for the Commission to find that the requirements for a partial exemption are met, on December 7, the Company filed a letter waiving the 90-day deadline for the Commission to either grant or deny the partial exemption and stated our intention to provide additional data to satisfy the open issues. The Company now seeks to supplement the record, which is appropriate at this time. Even if the Commission had denied the partial exemption, Minn. Rules 7852, part 0600, Subp. 6, allows "filing information after revisions are made to meet objections specified as reasons for denial." In this case, while the Commission has not denied the partial exemption, the Company is filing supplemental information to answer the outstanding issues described in DOC's November 30 comments.

Included below are summaries and discussions of items which were submitted during the comment period. Relevant correspondences and filings addressing the items discussed below are included in subsequent attachments.

Department of Commerce (DOC) EERA Comments:

Bill Storm's November 30, 2016 EERA review letter noted a number of outstanding issues, as of that date, which were previously raised by other agencies or individuals. Issues identified in the

EERA review letter that relate to specific comments are addressed under the relevant agency sections below. The letter also stated that for any permit conditions requiring additional information, consultation or approvals from downstream permitting agencies a subsequent finding should describe how this information will be submitted to the Commission for review.

Xcel Energy supports this and will submit appropriate confirmation to the docket for any outstanding items or approvals as they are acquired.

Lower Minnesota River Watershed District (LMRWD), multiple comments from public information meeting and submitted through the Commission's Speak Up! Web site:

Linda Loomis and Della Young, representing the LMRWD, attended the November 2, 2016 public information meeting and posed questions regarding the Project's impacts to surface and ground waters in the vicinity of the project. Xcel Energy staff had a meeting with Linda and Della on November 10 to discuss their concerns in more detail and answer questions. One of the key concerns was whether there would be any impacts to nearby calcareous fens as a result of the project. This concern was also raised by Gilman Dedrick, a Burnsville resident, at the meeting. The LMRWD also requested more information regarding any potential impacts to a nearby trout stream and Black Dog Lake. The LMRWD and Xcel Energy agreed that Xcel Energy would prepare a water resources report that would address all of their items of concern. The report *Additional Information Regarding Potential to Impact Water Resources* was filed to the docket on November 30, 2016, and a copy was sent to Linda and Della. A copy of the report is also attached with this filing. The document addresses the concerns raised in the public meeting which correspond to those submitted through Speak Up! in detail. A summary of the key points is included here:

- **LMRWD would like a condition in the route permit that the SWPPP should be submitted to LMRWD for review.**

Xcel Energy supports this condition and plans to provide a draft SWPPP to the LMRWD as soon as internal review is complete.
- **Concern regarding whether Project construction would result in any impacts to surface or ground waters which could adversely impact nearby fens.**

The nearest fen to the proposed Project footprint, Black Dog Lake North fen, is approximately 1800 feet away at its closest point. Xcel Energy worked with fen and hydrology experts to analyze potential impacts. Based on the planned construction methods and the distance from the Project footprint to the nearest fen there are no impacts to calcareous fens anticipated as a result of the Project.
- **Concern regarding whether Project construction would result in any impacts to surface or ground waters which could adversely impact a nearby trout stream.**

Similar to the fen analysis, the designated trout stream is of such a distance (2300 feet at its closest point) from the Project footprint that no impacts to the stream's current, course or cross-section are anticipated as a result of the Project.
- **Concern regarding whether Project construction would result in any impacts to Black Dog Lake.**

Black Dog Lake will be crossed using horizontal directional drilling (HDD). The drill path will be designed to be well below the lake's confining clay layer within the underlying bedrock, which provides greater integrity for the bore. There will be no dewatering (water appropriation) of the bedrock aquifer during the HDD process, therefore no potential drawdown of the lake level.

Since filing the water resources report Xcel Energy staff followed up with Linda and Della via email to ensure that there were no outstanding concerns or questions. A copy of this email exchange is included with this filing.

MN DNR, Blanding's Turtle and Fen Management Plan Comments:

The DNR's November 16, 2016 letter indicated (and the November 30 EERA review noted) that, although there were no known occurrences of Blanding's turtles within a one-mile radius of the project footprint, the turtles could be encountered on site during construction. The DNR's letter also noted that any work that had the potential to impact a calcareous fen would require a fen management plan.

Xcel Energy addressed both of these concerns in its report *Additional Information Regarding Potential to Impact Water Resources* filed to the docket on November 30. We also followed up with DNR staff regarding the report and provided staff with soil boring logs and GIS locations. Based on planned Project construction methods and analysis of nearby surface and ground waters, fen hydrology, and the distance from the Project footprint to the nearest fen, no impacts to the fens are anticipated as a result of this Project.

Following review of the report and soil boring data the DNR indicated to Xcel Energy that they were satisfied that it is unlikely that the project will impact the nearby calcareous fen, and that the measures identified in the report would be adequate to protect turtles. The DNR also submitted a letter to the docket on December 13 indicating that a fen management plan will not be needed and noting the methods that will be implemented to protect Blanding's turtles. A copy of the DNR letter is attached.

Note: the December 13 letter states that no construction stormwater discharge can be directed into a fen. Xcel Energy agrees and will ensure that the SWPPP clearly notes this requirement.

City of Burnsville, comments regarding multiple items:

As noted in the EERA review comments there were several items included in the City of Burnsville comment letter that were not yet directly addressed by Xcel Energy on the docket. Xcel Energy and City staff have had ongoing communication and coordination regarding items identified in the City's November 15, 2016 letter. In order to document this coordination Xcel Energy summarized each item identified by the City's letter in an email to City staff along with a summary of how each had either been addressed or how we would address them as we work through the approval process with the City. A copy of the email correspondence is attached.

City staff and Xcel Energy are drafting an easement agreement to allow Xcel Energy's natural gas pipeline to occupy City property. We will continue working with the City on developing the agreement and getting the necessary approvals in order to move forward.

Minnesota Department of Transportation, exceptions to Utility Accommodation Policy comments:

The comment letter submitted by MnDOT on November 15, 2016 noted that there were three concerns with the proposed pipeline alignment as identified in the October 26, 2016 Xcel Energy filing and in preliminary engineering drawings shared with MnDOT staff in a meeting held on November 9, 2016. The specific concerns identified were:

- Placement of the pipeline longitudinally within road right-of-way;
- Placement of the pipeline on the opposite side of the highway from an existing NNG pipeline; and
- Crossing Highway 13 at a skewed angle rather than at a right angle, which is typically required.

The November 15 letter noted that Xcel Energy and MnDOT staff had met to discuss these concerns and that there was a process to approve an exception from the normal requirements when a utility can demonstrate that extreme hardship or unusual conditions exist. At that time Xcel Energy had not yet submitted an application for a Utility Accommodation Permit, but had discussed the alignment and application requirements with MnDOT staff. In an effort to ensure that MnDOT will be able to permit the proposed alignment Xcel Energy has submitted an Application for Utility Accommodation in Road Right-of-way and an exception request to the DOT for review.

On December 14, 2016 Ann Driver, Utility Permits Unit Supervisor, sent an email to Xcel Energy stating that while MnDOT will not issue an accommodation permit until the Commission has approved the route, based on the information provided MnDOT believes that the exception letter and permit application provided will be permissible. A copy of the email is attached.

Minnesota Pollution Control Agency (MPCA) comments regarding directional drilling, spill prevention plans and stormwater treatment:

The MPCA submitted comments in a letter which posted to the docket on November 29, 2016 concerning three items for which the PCA has regulatory responsibility:

- **Water Resources – Surface Waters (directional drilling):** The MPCA noted that the application did not specifically address how Xcel Energy would respond to a release of drilling fluid into Black Dog Lake.
Information regarding construction methods to prevent a drilling mud release and development of a contingency spill response plan is included in the November 30 water resources report. A copy of the report was sent via email to the MPCA on December 14 with the relevant paragraphs included in the cover email.
- **Water Resources – Groundwater (spill prevention plan):** The MPCA noted that the SPCC plan is a federal requirement and that Xcel Energy should state that it will comply with Minnesota’s spill reporting response requirements.

Xcel Energy will comply with all state reporting requirements. Xcel Energy's Environmental Services Department has developed protocols for addressing any spills which are at least as stringent, and in some cases more stringent, than the State's requirements. Information on the Company's requirements was provided in the December 14 email to MPCA.

- **Inventory of Impaired Waters (enhanced stormwater treatment): The MPCA noted that the Minnesota River is an impaired water, and as such has additional increased stormwater treatment requirements.** Note: Gilman Dedrick a Burnsville resident, also noted in a comment on the Commission's Speak Up! web site that no additional pollutants should be allowed to enter the Minnesota River.

Xcel Energy will comply with all required stormwater treatment requirements. These enhanced requirements are included in the draft Stormwater Pollution Prevention Plan (SWPPP) currently under development, and will require review and approval by MPCA. This was also noted in the water resources report and in the December 14 email to the MPCA.

A copy of the email exchange with PCA staff is attached.

Laura Hedlund, citizen, general comments on Speak Up!:

- **How much money is being spent on this pipeline?**
As stated in the route permit application the project is estimated to cost between \$5.0 and \$5.4 million.
- **What are the ecological consequences of leaving the pipes in the ground?**
CenterPoint Energy owns and maintains the existing pipeline which supplies natural gas to the plant, and ultimately they will decide its final disposition in conjunction with regulatory agencies.

In general, natural gas pipelines are often retired in place and grouted with sand or cement to prevent the pipe from potentially becoming a preferential flow path should the pipe rust through in the future. The pipeline is purged of gas prior to grouting and the grouting material is inert. U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration regulations include inspection and maintenance obligations for pipelines which are not formally abandoned, and prescribe steps for formal abandonment of natural gas pipelines.

Xcel Energy submits the above and attached information in order to ensure that the record is complete regarding the Black Dog Natural Gas Pipeline Project. Xcel Energy filings referenced in this letter, or in the attached correspondence, are included. We will continue to work with stakeholders on consultation and necessary approvals as the project moves forward. The Company requests that the Commission grant our request for a route permit under the partial exemption process with direction to continue to work with stakeholders to address their concerns.

Please contact Ellen Heine at ellen.l.heine@xcelenergy.com or 612-330-6073 if you have questions or would like further information regarding this matter.

Sincerely,

A handwritten signature in blue ink that reads "Ellen Heine". The signature is written in a cursive style with a small flourish at the end.

Ellen Heine
Xcel Energy
Sr. Land Agent

Attachments

Comments and Correspondence:

Minnesota Department of Commerce EERA Review

Lower Minnesota River Watershed District

Minnesota Department of Natural Resources

City of Burnsville

Minnesota Department of Transportation

Minnesota Pollution Control Agency

Citizen Comments

Xcel Energy filings:

November 30, 2016 filing: Additional Information Regarding Potential to Impact Water Resources for the Black Dog Natural Gas Pipeline Project

November 23, 2016 filing: Draft Proposed Findings of Fact and Responses to Public Comments for the Black Dog Natural Gas Pipeline Project (FOF attachment excluded)

November 16, 2016 filing: Additional Information on Anticipated Pipeline Alignment and Construction Impacts for the Black Dog Natural Gas Pipeline Project

August 22, 2016 filing: Revision to Application for a Route Permit for the Black Dog Natural Gas Pipeline Project

Minnesota Department of Commerce

EERA Review

November 30, 2016

Daniel P. Wolf, Executive Secretary
Minnesota Public Utilities Commission
127 7th Place East, Suite 350
St. Paul, MN 55101-2147

**Re: EERA Review
Application for a Partial Exemption
Xcel Energy Black Dog Natural Gas Pipeline Project
Docket No. G002/GP-16-656**

Dear Mr. Wolf:

EERA staff has reviewed the record and the proposed Findings of Fact submitted by the Applicant and provides the following comments for Commission staff's consideration.

Proposed Findings of Fact

- Under Part III of the Findings of Fact, following Finding Number 18, findings detailing the oral comments and written comments (Minnesota Pollution Control Agency, Minnesota Department of Transportation, Minnesota Department of Natural Resources, and the City of Burnsville) made during the Commission's public meeting and subsequent comment period should be developed into findings and included. There should also be a finding describing Xcel Energy's November 16, 2016, correspondence responding to oral comments made at the public meeting on how the alignment might impact landowners along the existing HVTL corridor.
- On Finding Number 55, within the third paragraph, EERA makes the following suggestion:

Vegetation maintenance of the right-of-way will comply with ~~any~~ wildlife timing windows ~~if~~ as specified in the Minnesota Department of Natural Resource's November 16, 2016 comment letter and post-permit input on the development of a vegetative restoration plan by natural resource agencies.

General Comment.

If an individual finding indicates that post permit issuance, further information (as example Report on Water Resource Impacts) or a need for consultation/approval (as example Vegetation Management Plan) from a “down-stream” permitting agency will be required, a subsequent finding should describe how this information/approval will be submitted to the Commission for review (permit compliance deliverable).

Outstanding Issues

There appear to be several outstanding issues that should be addressed prior to the Commission’s granting a partial exemption from the pipeline route selection procedures for the Black Dog Natural Gas Pipeline project.

Minnesota Department of Natural Resources

Blanding’s Turtle. The MNDNR comment letter mentions the potential for the project construction activities to encounter the Blanding’s turtle and states that the MNDNR has provided the Applicant with a fact sheet on the turtle and recommends that trenches be checked for the presence of turtles prior to backfilling. The record is lacking the Applicant’s concurrence on this issue or how the Commission’s permit would assure compliance with these concerns.

Fen Management Plan. The MNDNR comment letter states that the project has the potential to impact the designated Black Dog Calcareous fen. Any work that has the potential to adversely impact a calcareous fen must have a MNDNR approved fen management plan. This issue appears to be unresolved in the record, including how the Commission’s permit would assure compliance.

City of Burnsville.

The City of Burnsville comment letter states that it supports the project and the proposed route provided certain conditions (10 conditions) are meet. The record is lacking the Applicant’s concurrence on this issue or how the Commission’s permit would assure compliance with these concerns.

Minnesota Department of Transportation

The MNDOT comment letter outlines three (3) significant concerns regarding the Applicant’s proposed route and alignment:

1. Xcel proposes to place the gas pipeline longitudinally within the highway right of way.
2. The proposed route and alignment places the new pipeline on the opposite side of the highway from an existing pipeline, which MNDOT feels constrains any future modifications or repair work to the highway.
3. The proposed alignment crosses TH 13 at a long skewed angle rather than at a right angle, which is ordinarily required of a gas pipeline under a highway.

While MNDOT's *Utility Accommodation Policy* contains a process for approving an exception from its normal requirements when a utility owner can demonstrate that extreme hardship or unusual conditions exist, it is unclear within the record how these issues will be resolved should the Applicant fail to reach the required threshold.

Minnesota Pollution Control Agency

The MPCA comment letter raises several items for the Commission to consider in the Black Dog Gas Pipeline project proceeding.

Directional Drilling. The MPCA letter states that the record does not address how the Applicant would prevent and respond to any release of drilling fluid (released into Black Dog Lake) from construction activities (i.e. blowouts, seeps, etc.). This remains unresolved in the record.

Spill Prevention Control and Counter-measure (SPCC) Plan. The MPCA letter recommends that the record should indicate that the Applicant must comply with the State's spill reporting and response requirements, as many of those may be more stringent than those of the federal SPCC Plan requirements. It is unclear within the record how the Commission's permit would assure compliance with these requirements.

Enhanced Stormwater Treatment. The MPCA comment letter states that due to the Minnesota River listing on the MPCA *Inventory of Impaired Waters* that additional stormwater treatment requirements may be imposed during construction and that the Applicant should determine whether compliance with these increased stormwater water quality treatment requirements can be achieved on the project site. It is unclear within the record whether this enhanced treatment can be met or how the Commission's permit would assure compliance with these requirements.

Partial Exemption Procedures – Minnesota Rules 7852.0600

Minnesota Rules 7852.0600 states that a person may apply to the Commission for partial exemption from the pipeline route selection procedures for the issuance of a pipeline routing permit. To apply for a partial exemption, a person must comply with the application procedures of Minn. Rules, part 7852.2000 and submit an application that contains the information identified in Minn. Rules, parts 7852.2100 to 7852.3000.

The commission shall decide whether to grant or deny the partial exemption within 90 days after Commission acceptance of the partial exemption application.

In deciding whether to grant or deny the partial exemption, the Commission shall consider any comments that are filed, the record of the public information meetings, and the information contained in the application relevant to the criteria for partial exemption.

In granting a partial exemption from the pipeline route selection procedures, the commission must determine that the proposed pipeline and associated facilities will not have a significant impact on humans or the environment. In determining whether a proposed pipeline project qualifies for partial exemption, the Commission shall consider the impact of the pipeline on the criteria listed in Minn. Rules, part 7852.0700.

If the commission grants the partial exemption, the commission must issue a pipeline routing permit in accordance with Minn. Rules, part 7852.3200.

If a partial exemption is denied, the applicant must be notified in writing of the reasons for denial. A denial is without prejudice to the applicant's right to an appearance before the Commission, filing information after revisions are made to meet objections specified as reasons for the denial, or to request that the commission continue processing its application under full pipeline route selection procedures.

EERA Recommendation

It is not clear whether some of the criteria in Minn. Rules 7852, part 0700 have been met due to the outstanding issues mentioned above. EERA staff does not feel it would be appropriate to support the granting of a partial exemption from the pipeline route selection procedures at this time.

EERA recommends that the Commission deny the partial exemption without prejudice. EERA staff encourages the Applicant to file the additional information required to resolve these outstanding issues.

Sincerely,

William Cole Storm, Environmental Review Manager
Energy Environmental Review and Analysis
(651) 539-1844 | bill.storm@state.mn.us

Lower Minnesota River Watershed District

Heine, Ellen L

From: Della Schall Young <della@youngecg.com>
Sent: Friday, December 16, 2016 4:36 PM
To: Heine, Ellen L
Cc: Linda Loomis (naiadconsulting@gmail.com); Rogers, Timothy G
Subject: Re: follow-up on water resource concerns for the Black Dog Natural Gas Pipeline Project

XCEL ENERGY SECURITY NOTICE: This email originated from an external sender. Exercise caution before clicking on any links or attachments and consider whether you know the sender. For more information please visit the Phishing page on XpressNET.

Thanks Ellen. I'll review the information provided and contact you should we have any additional questions or concerns.

Take care and have a great week...stay warm and safe!

Della Schall Young, PMP, CPESC
Principal
Young Environmental Consulting Group, LLC

Phone: (651) 249.6974
Email: della@youngecg.com

On Fri, Dec 16, 2016 at 4:26 PM, Heine, Ellen L <Ellen.L.Heine@xcelenergy.com> wrote:

Hi Della and Linda,

Thanks for working with us to help make sure that the record for the Black Dog Natural Gas Pipeline Project is complete and addresses any outstanding issues. In an effort to make sure that we have addressed all of the concerns and questions that you have raised regarding the Project I have provided a summary below. While we have had multiple discussions and email exchanges, I think the comments that Linda submitted through Speak Up cover all of the items that we have discussed with you in a more succinct way than I could do by trying to summarize everything we have talked about. So I included the comments submitted on the Speak Up site along with how we have addressed or plan to address each. If I missed anything else or if there are any outstanding issues please let me know. If your concerns have been addressed I would really appreciate if you could note that in a reply to this email. I'd like to include the email along with an update I am preparing to file to the Project docket regarding all outstanding issues and information needs identified during the Public Information meeting and the comment period. As I have said multiple times we will continue to coordinate with you throughout the entire project and welcome your thoughts or input at any time.

Comments from Speak Up:

- **The Lower Minnesota River Watershed District (LMRWD) would like a condition placed on the permit that a SWPPP be submitted to the Watershed District for review once it has been applied for.**

Xcel Energy supports this condition and will provide a draft of the Stormwater Pollution Prevention Plan to the LMRWD for review prior to submitting to the PCA for an NPDES permit, as well as a final SWPPP and a copy of the NPDES permit once issued by the PCA. This has been noted in the water resources report as well.

- **The District would also request a condition that the District is notified of any temporary dewatering that may need to be done during construction that would require a Water Appropriation permit from the MN DNR.**

As noted in the water resources report filed to the docket on November 30, we do not anticipate the need for a Water Appropriation Permit for this project. However, if such a need is identified later in the process Xcel Energy will notify the LMRWD and work with you and the DNR to determine appropriate conditions for the appropriation permit at that time.

- **Section 9.1.1 states: the elevation of the proposed pipeline ranges from 700 – 880 feet about mean sea level. However, Section 9.1.3 does not discuss the project’s interaction with groundwater relative to the pipeline’s profile. Xcel’s staff will provide a profile of the pipeline inclusive of groundwater interactions and other elements.**

Detailed engineering is still underway, however a discussion on the Project’s interaction with groundwater is included in the water resources report in the Construction Methods section (note: Plan and Profile drawings will be submitted to the docket for review prior to any construction starting). As noted in the report there is some evidence that shallow perched water lenses may be encountered during construction, however we do not anticipate needing a water appropriation permit, though some minimal construction dewatering may be required, which will be addressed in the SWPPP. Based on our discussions with the two of you our understanding is that the primary concern is how any interaction with groundwater layers could impact the fens or the nearby trout stream. Based on our discussions with the hydrologist we have been working with at Barr Engineering, Ray Wuolo, the project will not impact the nearby fens or stream due, primarily, to the distance these are from the project site, and secondarily, because we will not be appropriating water for Project construction.

- **As proposed, the pipeline alignment goes under Black Dog Lake. The route application states that no surface water will be impacted by the project. How does Black Dog Lake interact with groundwater water, and where is the pipeline in relation to them? As stated, Xcel’s staff will provide a profile of the pipeline inclusive of groundwater interactions and other elements.**

The crossing under Black Dog Lake will be done using horizontal directional drilling (HDD). This will involve drilling down into bedrock which will likely involve encountering groundwater. The HDD method is described in the Construction Methods section of the water resource report. While groundwater is expected to be encountered there will no appropriation (pumping) of this water, so there will be no drawdown of water beneath

the lake bed. The engineers are currently modifying the profile for the HDD, based on the recently acquired soil boring data, in order to assure the lake bed is protected. While the directional drill path is being designed to prevent any drilling mud releases beneath the lake, a project-specific drilling mud containment and response contingency plan will also be developed in consultation with Jim Arndt, the fen expert we've been working with at Merjent (who also has significant experience with HDD projects) and the drilling contractor (not yet selected).

- **Black Dog Fen is near this project and is sensitive to groundwater disturbance. However, other than a calcareous fen notation on Figure 10, an assessment of the project's effect on Black Dog Fen is not addressed. The District requests an assessment of the direct and indirect impacts this Project may have on the Black Dog Fen. Although not mentioned in the route application, Xcel has been in contact with consulting fen experts from Barr Engineering Company and Merjent, Inc. and have received conclusive information that Black Dog Fen will not be adversely impacted by the project.**

Additional information regarding the fens located near the Project was included in the water resources report including a description of the fens and additional figures showing mapped fen locations and distance from the project site. We worked with Ray Wuolo as well as Jim Arndt at Merjent, who has a significant amount of fen expertise, to evaluate any potential impacts to the closest fen, Black Dog North. As noted above no hydrological impacts to the fen are anticipated because of the distance from the project site and the construction methods being used. There will also be no direct impacts to the fens because of the distance from the project, and any stormwater construction dewatering flows will be located well away from the fens.

- **Figure 5 (from the application) highlights directional drill below a section identified on Figure 9 as NWI (national wetland inventory). What are the direct and/or indirect impacts to the wetland? Xcel acknowledged the omission and noted that the information had been updated in future drafts. Also, Xcel's proposed construction method avoids the surface and subsurface of the wetland, which will be highlighted on the proposed pipeline profile.**

In the initial application document Figure 9 did show the NWI wetlands associated with Black Dog Lake, however the application text incorrectly stated that there were no NWI wetlands identified within the proposed pipeline route. A corrected page 9-2 was filed to the docket on August 22, 2016 and the correction was included in copies of the route permit application that was mailed out following the determination of application completeness. I've also included a copy as an attachment to this email.

Potential impacts to wetlands associated with Black Dog Lake are addressed in the Other Wetlands/Floodplain Impacts section of the water resources report. The entry pit for the directional drilling will be located well uphill from the wetland and there will be no work located within the wetlands.

- **The District requests, as a permit condition, a review of and an opportunity to comment on the Project's construction stormwater pollution prevention plan and the Project's Department of Natural Resources Temporary Dewatering Permit (if required).**

Agreed and noted above.

- The Lower Minnesota River Watershed District does not see any reason the partial exemption should not be granted, with the condition requested; that the Watershed District be provided with the SWPPP permit application for review.

Thank you for working with us to help us make the record more complete and address the important items noted above. We will continue to keep you informed as the process moves forward.

Ellen Heine

Xcel Energy | Responsible By Nature

Sr. Land Agent

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E: ellen.l.heine@xcelenergy.com

LMRWD comments from PUC Speak Up!

Topic: [Does this proposed project have a significant impact on humans or the environment?](#)

[Linda Loomis](#) at November 14, 2016 at 3:45pm CST

The Lower Minnesota River Watershed has some specific comments to the application. Representatives of the Watershed District met with Xcel Energy to discuss the comments and were assured the concerns expressed would be addressed. The District's comments are:

1. Section 9.1.1 states: the elevation of the proposed pipeline ranges from 700 – 880 feet about mean sea level. However, Section 9.1.3 does not discuss the project's interaction with groundwater relative to the pipeline's profile. Xcel's staff will provide a profile of the pipeline inclusive of groundwater interactions and other elements.
2. As proposed, the pipeline alignment goes under Black Dog Lake. The route application states that no surface water will be impacted by the project. How does Black Dog Lake interact with groundwater water, and where is the pipeline in relation to them? As stated, Xcel's staff will provide a profile of the pipeline inclusive of groundwater interactions and other elements.
3. Black Dog Fen is near this project and is sensitive to groundwater disturbance. However, other than a calcareous fen notation on Figure 10, an assessment of the project's effect on Black Dog Fen is not addressed. The District requests an assessment of the direct and indirect impacts this Project may have on the Black Dog Fen. Although not mentioned in the route application, Xcel has been in contact with consulting fen experts from Barr Engineering Company and Merjent, Inc. and have received conclusive information that Black Dog Fen will not be adversely impacted by the project.
4. Figure 5 highlights directional drill below a section identified on Figure 9 as NWI (national wetland inventory). What are the direct and/or indirect impacts to the wetland? Xcel acknowledged the omission and noted that the information had been updated in future drafts. Also, Xcel's proposed construction method avoids the surface and subsurface of the wetland, which will be highlighted on the proposed pipeline profile.
5. The District requests, as a permit condition, a review of and an opportunity to comment on the Project's construction stormwater pollution prevention plan and the Project's Department of Natural Resources Temporary Dewatering Permit (if required).

Topic: [Should the Commission grant or deny the partial exemption requested by Xcel Energy?](#)

[Linda Loomis](#) at November 14, 2016 at 3:41pm CST

The Lower Minnesota River Watershed District does not see any reason the partial exemption should not be granted, with the condition requested; that the Watershed District be provided with the SWPPP permit application for review.

Topic: [Are the Commission's general pipeline permit conditions reasonable for this project?](#)

No replies to this topic.

Topic: [Should any specific permit conditions be placed on this project?](#)

[Linda Loomis](#) at November 14, 2016 at 3:59pm CST

The Lower Minnesota River Watershed District would like a condition placed on the permit that a SWPPP (Storm Water Pollution Prevention Plan) Permit be submitted to the Watershed District for review once it has been applied for. The District would also request a condition that the District is notified of any temporary dewatering that may need to be done during construction, that would require a Water Appropriation permit from the MN Department of Natural Resources.

Minnesota Department of Natural Resources



MINNESOTA DEPARTMENT OF NATURAL RESOURCES
CENTRAL OFFICE
500 LAFAYETTE ROAD
SAINT PAUL, MN 55155
651-296-6157
888-646-6367

December 13, 2016

[Electronic transmittal]

Tricia DeBleeckere
Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: Additional Information Regarding Potential to Impact Water Resources for the Black Dog
Natural Gas Pipeline Project

PUC Docket Number: G002/GP-16-656

Dear Ms. DeBleeckere:

The Minnesota Department of Natural Resources (DNR) has reviewed the additional information provided by Xcel Energy regarding the potential for the Black Dog Natural Gas Pipeline Project to impact water resources.

Based on the additional information provided, it is unlikely that the proposed pipeline installation will impact the Black Dog Lake North calcareous fen. The pipeline trench is well above the groundwater found in the unconsolidated sediments at this site and groundwater dewatering is not anticipated. It is important that construction stormwater discharge not be directed into the fen. The Stormwater Pollution Prevention Plan (SWPPP), which will be needed prior to start of construction, should clearly state that water will not be discharged to the fen. Provided that groundwater dewatering is not necessary and water is not discharged to the fen, no impacts to the fen are anticipated and a fen management plan will not be required.

There are no known occurrences of Blanding's turtles within an approximate one-mile radius of the project footprint. Construction contractors will be notified of the potential for turtles to become trapped in trenches and will be required to inspect the trenches for turtles prior to backfilling. If erosion control blanketing is needed, wildlife-friendly (non-welded) blankets will be used.

mndnr.gov



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MINNESOTA DEPARTMENT OF NATURAL RESOURCES
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500 LAFAYETTE ROAD
SAINT PAUL, MN 55155
651-296-6157
888-646-6367

The DNR appreciates the ongoing coordination with Xcel Energy to assess potential fen impacts.

Sincerely,

A handwritten signature in black ink that reads "Cynthia Warzecha". The signature is written in a cursive, flowing style.

Cynthia Warzecha
Principal Planner
Environmental Review Unit

cc: Bill Storm, Minnesota Department of Commerce
Ellen Heine, Xcel Energy

ERDB # 20170057

mndnr.gov



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November 16, 2016

[Electronic transmittal]

Tricia DeBleeckere
Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy for a Route Permit for the Black Dog Natural Gas Pipeline Project in Burnsville, Minnesota

PUC Docket Number: G002/GP-16-656

Dear Ms. DeBleeckere:

The Minnesota Department of Natural Resources (DNR) has reviewed the route permit application for the Black Dog Natural Gas Pipeline Project.

The DNR concurs with Xcel Energy's assessment of the project's potential to impact rare features. According to the assessment, there are no known occurrences of rare species within the project footprint and there will be no direct impacts to any identified DNR Native Plant Community.

Although there are no known occurrences of Blanding's turtles within an approximate one-mile radius of the project footprint, this rare turtle may be encountered on site. The DNR has provided Xcel Energy with a fact sheet and flyer that includes recommendations to minimize disturbance to this species. In particular, trenches should be checked for turtles before backfilling and, if applicable, wildlife friendly erosion control is recommended. If the proposed project will include dewatering, potential impacts to Blanding's turtles and calcareous fens will need to be adequately addressed.

The route permit application states that after construction is completed, vegetation will be reestablished by applying seed, mulch, and fertilizer mixtures specified by permit conditions, land managing agencies, and/or landowners. The DNR recommends using a native seed mix.

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The route permit application states that vegetation maintenance of the right-of-way will comply with any wildlife timing windows if specified by natural resource agencies. The DNR recommends that vegetation maintenance of the right-of-way occur outside of the avian nesting season (generally mid-May through July).

Any work that has the potential to adversely impact a calcareous fen must have a DNR approved fen management plan prior to conducting the work. The Black Dog Gas Pipeline project has the potential to impact the designated Black Dog Calcareous fen. The DNR understands that Xcel Energy is drafting a memorandum explaining how the project is not expected to adversely affect nearby fens. The DNR will determine the need for a calcareous fen management plan after it reviews this memorandum. Xcel Energy has indicated a willingness to coordinate with the DNR regarding its concerns about fen impacts. The DNR appreciates the opportunity to work with the company on this issue.

Sincerely,

A handwritten signature in black ink that reads "Cynthia Warzecha". The signature is written in a cursive, flowing style.

Cynthia Warzecha
Principal Planner
Environmental Review Unit

cc: Bill Storm, Minnesota Department of Commerce
Ellen Heine, Xcel Energy

ERDB # 20170057

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City of Burnsville

Heine, Ellen L

From: Heine, Ellen L
Sent: Tuesday, December 20, 2016 4:04 PM
To: 'Steve Albrecht'
Cc: Daryl Jacobson; Ryan Peterson; Rogers, Timothy G; Swanson, Michelle M; Deb Garross; Archer, Alison C
Subject: RE: Responses to items identified in Burnsville Nov 15 Black Dog Pipeline letter

Thanks Steve,

That will work for us. Let me know if you need anything from us at this point to get that started.

Ellen

Ellen Heine
Xcel Energy | Responsible By Nature
P: 612.330.6073
E: ellen.l.heine@xcelenergy.com

From: Steve Albrecht [mailto:Steve.Albrecht@burnsvillemn.gov]
Sent: Tuesday, December 20, 2016 3:47 PM
To: Heine, Ellen L
Cc: Daryl Jacobson; Ryan Peterson; Rogers, Timothy G; Swanson, Michelle M; Deb Garross
Subject: RE: Responses to items identified in Burnsville Nov 15 Black Dog Pipeline letter

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Ellen,

I have added some minor edits in red and we do not have additional comments on the rest. The City would most likely utilize a Pipeline or Construction agreement very similar to the agreements we with Xcel had for Black Dog Road. I would proposed the City Attorney draft an agreement as a starting point.

Please let us know.

Steve Albrecht, P.E.
Public Works Director
City of Burnsville
952-895-4544

From: Heine, Ellen L [mailto:Ellen.L.Heine@xcelenergy.com]
Sent: Monday, December 19, 2016 1:55 PM
To: Steve Albrecht <Steve.Albrecht@burnsvillemn.gov>
Cc: Daryl Jacobson <Daryl.Jacobson@burnsvillemn.gov>; Ryan Peterson <Ryan.Peterson@burnsvillemn.gov>; Rogers, Timothy G <Timothy.G.Rogers@xcelenergy.com>; Swanson, Michelle M <michelle.m.swanson@xcelenergy.com>; Deb Garross <Deb.Garross@burnsvillemn.gov>
Subject: RE: Responses to items identified in Burnsville Nov 15 Black Dog Pipeline letter

Steve,

Thanks for all your help on this project. Based on our recent discussions and responses I've received since I initially sent this summary I have updated some of the responses below. As I noted in the previous version I sent to you, I went through the comment letter you provided and summarized each below along with some comments from Xcel Energy on how they have or will be addressed. We have discussed some of these items with you over the phone, but I wanted to make sure we have clearly addressed each item in writing so the record is clear. Please respond to this email to let me know if you agree with my summaries below or if there are any outstanding items or questions we should address. As we have discussed Xcel Energy will begin a draft agreement to address all items which will be included as conditions for granting the easement on City park land and will work with you on finalizing the agreement and preparing for review by the PNRC and the City Council.

Thanks!

Ellen

Items to be addressed:

1.a. The alternative alignment utilizing USFWS property is not feasible. Steve to confirm with Andrew Horton or Gerry Shimek.

Ellen Heine provided Steve Albrecht with background on the FWS discussions contact information for Andrew Horton (acting MN Valley NWR manager) and Gerry Shimek (former NWR manager). Steve received an email response from Andrew Horton confirming the infeasibility of crossing USFWS owned land. Andrew also indicated he would send a letter to confirm.

1.b. The new pipeline is constructed as close to the center of the City's property (as far from private property) as possible

Xcel Energy asked Project engineers to go back and shift the alignment to be located at least 20 feet from all private property lines. The updated proposed alignment is 20 feet or more from private properties along the Burnsville corridor (as shown and described in the November 16 filing to the docket). The pipeline couldn't be placed between the two existing electric transmission lines due to the presence of an existing storm sewer.

1.c. Tree removal is minimized and buffer trees are not removed.

Xcel Energy plans to remove only those trees needed for the proposed permanent pipeline right-of-way and, if needed, to accommodate vehicle access. The anticipated tree clearing locations are shown in the November 16 alignment update filed to the docket, and City staff indicated that this was acceptable. Xcel Energy will work with the City to acquire the necessary Tree Removal Permit prior to any tree removal.

1.d. All applicable safety measures are incorporated into the design and maintenance of the proposed pipeline.

Xcel Energy will follow all applicable safety requirements for construction and operation of the pipeline. This includes compliance with all requirements from the US Department of Transportation and the MN Office of Pipeline Safety. Xcel Energy design and construction standards exceed what is required by applicable codes. Ellen Heine and Conrad Miller held a conference call with Steve on Friday November 18 to discuss pipeline safety measures and features and answer his questions. This was similar to the material that was presented and discussed at the November 2nd public meeting. Steve indicated that this information was what he needed to confirm that Xcel Energy was meeting all applicable safety measures, and to respond to any questions from the City Council.

1.e. Xcel obtains an easement from the City for the Pipeline

Xcel Energy will work closely with City staff to address all requirements and notifications necessary to obtain an easement on Burnsville land. This will include addressing the recreational bike trail, review and approval of any wetland permits if needed, and any other coordination with other departments as needed.

2. The City would like Xcel to construct a recreational 10' wide bituminous trail down the Burnsville corridor.

Xcel Energy understands that the City will require a paved bike trail to be constructed in the Tenniseaux Park corridor as part of Project restoration. Tim Rogers and Ellen Heine spoke with Deb Garross to clarify this item. We understand that City Parks and Recreation staff will work with Xcel Energy to determine the design and location of the trail. The City will facilitate any permits necessary for construction of the bike path. We also understand that Xcel Energy is not expected to construct a bike path on land west of the project corridor where the trail would ultimately connect to Black Dog Park. Construction of that segment of the path will likely be done by the City at a future date **and an interim connection to Radisson Drive will be considered as part of this project.**

3. The existing trail along TH 13 will need to be replaced as the proposed route will impact the trail.

The proposed alignment along the north side of Hwy 13 which would require tearing up of the existing bike trail during construction. Restoration crews will rebuild the trail once construction is complete. We have confirmed with DOT staff that this is a city-owned trail, and that they do not have any specific requirements regarding replacement. We will work with the City as well as the DOT to acquire all necessary right-of-way permits/easements for trail replacement.

4. The City will need to review any wetland delineations and proposed impacts.

Xcel Energy has provided City staff with a copy of the wetland delineation report and the letter to the Corps of Engineers requesting concurrence that this project meets the non-reporting requirements. **Daryl Jacobson has confirmed that once the City received the concurrence letter from the Corps the City will not need to review or complete a boundary and type approval for the wetlands.** We will continue to work with Natural Resources staff to provide information and develop a restoration plan.

5. Neighborhood meetings should be held by Xcel to share the plans and gather community input.

A mailing was sent to residents located near the proposed project and open house style meeting was held at the Burnsville City Hall on June 20th to present the project to the public and solicit feedback. Another meeting was held at City Hall as part of the PUC Partial Exemption routing permit process on November 2nd where Xcel Energy staff gave a presentation on the project and PUC staff provided information on how the Public could comment on the project. A number of questions were asked and answered regarding construction impacts, timing, pipeline safety, possible alignment changes. Public comments received during or after the June 20th meeting were summarized in the route permit application. **Xcel Energy will continue to work with the City on the process for approvals through the Parks and Natural Resources Committee and the City Council. The City anticipates receiving public input at the Parks and Natural Resources Committee prior to the City Council considering a Pipeline Agreement with Xcel.**

6. The proposed plans will need to be reviewed by the Burnsville Parks and Natural Resources Commission because there will be impacts to City park land

Xcel Energy will provide information regarding the pipeline alignment and construction to the PNRC as well as any information on the new bike trail planned in the City park corridor. Xcel Energy staff will work with City staff to develop **the necessary agreement document to address conditions required for the city to approve the easement on park land as well as any materials or presentations for the Commission meeting.**

7. The Project design team will need to work with City staff early on to establish a trail alignment.

8. Xcel will need to work with the Natural Resources Department to develop and landscaping plan that maximizes the use of native plants to restore the corridor.

Xcel Energy plans to set up a meeting soon with City staff to determine next steps and appropriate contacts for each item where we will be working with the City. This will include identifying who to coordinate with on bike

trail development and restoration with native plants as well as wetland impacts, floodplain certificates, easement acquisition, etc.

9. The City of Burnsville and Xcel Energy have a “Road Access Improvements/Assessment and Development Agreement” which states that if the Plant is re-powered as a 600 MW or greater plant Xcel Energy will “improve Plant access by extending 12th Avenue through Black Dog Park to the Plant’s southerly access”.

The current Black Dog Unit 6 project (E002/GS 15-834) will result in a new 215 MW turbine. Xcel Energy recognizes that we have an agreement with the City. The current Unit 6 project does not exceed the agreement threshold and therefore does not necessitate the 12th Avenue road improvements identified in the agreement.

10. Based on documentation to date there does not appear to be any work in the floodway of the Minnesota River. A FEMA Elevation Certificate and No Rise Certificate will need to be provided and as-built plans submitted once construction is complete.

It is correct that no above ground work is planned within the floodway. Xcel Energy has confirmed with Barr Engineering that a No Rise Certificate can be provided. We will request that the Elevation Certificate and No Rise Certificate be developed soon and provide these to the City.

Ellen Heine

Xcel Energy | Responsible By Nature

Sr. Land Agent

414 Nicollet Mall, 414-6A, Minneapolis, MN 55401

P: 612.330.6073 F: 612.318.4298

E: ellen.l.heine@xcelenergy.com

November 15, 2016

Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: City of Burnsville Comments to the Public Utilities Commission Concerning Xcel Energy Route Permit for the Black Dog Natural Gas Pipeline Project in Burnsville, Minnesota.

PUC Docket Number G002/GP-16-656

To Whom This May Concern:

The purpose of this letter is to provide comments from the City of Burnsville for consideration by the Public Utilities Commission for the Black Dog Gas Pipeline Project proposed by Xcel Energy. These updated comments are based on a recent review of more detailed pipeline alignment drawings submitted to the City by Xcel Energy, and feedback received from residents along the proposed pipeline corridor. The City has reviewed the proposed route map and is in support of the project provided the following items are addressed as part of the project:

1. The City supports the gas line extension down the route shown through the existing overhead transmission power corridor from TH 13 to the UP Railroad with the following conditions:
 - a. The original alternative alignment utilizing US Fish and Wildlife (USFW) property is not feasible. The City will contract the USFW to confirm that route is not feasible.
 - b. The new pipeline is constructed as close to the center of the City's property (as far from private property) as possible.
 - c. Tree removal is minimized and buffer trees along the City property lines are not removed. All proposed tree removal should be clearly identified and approved by the City and a Tree Removal Permit shall be obtained prior to removal.
 - d. All applicable safety measures are incorporated in to the design and maintenance of the proposed pipeline.
 - e. Xcel obtains an easement for the pipeline from the City of Burnsville.
2. The City would like Xcel to construct a recreational 10' wide bituminous trail down this corridor from the trail on TH 13 to the City's parking area in Black Dog Park. This will require some trail construction out of this corridor to construct from the City land where the transmission lines are to the park. The City will provide access to these areas for no compensation beyond Xcel's construction of the described recreational trail.
3. The existing trail along TH 13 will need to be replaced as the proposed route will impact our trail. The applicable right-of-way use, easements, permits for this work will need to be obtained from MnDOT and the City of Burnsville.

4. The City will need to review any wetland delineations and proposed wetland impacts associated with the project.
5. Neighborhood meeting(s) should be held by Xcel to share the plans and gather community input.
6. The proposed plans will need to be reviewed by the Burnsville Parks & Natural Resources Commission (PNRC) because part of the project impacts City park land.
7. The Xcel project design team will need to work with City staff early on to establish a trail alignment that will meet the needs of both parties.
8. Xcel will need to work with the Natural Resources Department staff to develop a landscaping plan that maximizes the use of native plants to restore the corridor after construction.
9. The City of Burnsville and Xcel Energy have a signed "Road Access Improvements/Assessment and Development Agreement" that states once the plant proceeds "with plans to repower the Plant with an approximately 600MW or greater power plant" that Xcel also will "improve Plant access by extending 12th Avenue through Black Dog Park to the Plant's southerly access". Please provide how many megawatts the plant will be operating at, in total, with the new gas powered burner addition. If it is 600 MW or more, the 12th Avenue extension is required to be built at the same time.
10. Based on the documentation submitted to date, there does not appear to be any work proposed within the floodway of the Minnesota River therefore no Conditional Use Permit will be required for the project. A FEMA Elevation Certificate and No Rise Certificate will need to be provided and "as-constructed" plans will need to be submitted to the City. In the event plans change as the project evolves, a floodplain CUP may be required if the project meets or exceeds ordinance thresholds.

The City of Burnsville and Xcel Energy have worked together in partnership for many years and we understand the need for this project to provide electric services to the City and region. The City is in support of the project and based on the items identified herein and discussed with Xcel throughout this process, we believe that there will be mutual benefits to the public and all parties associated with this project.

Thank you for the opportunity to provide comments on the proposed Black Dog Pipeline Project.

Sincerely,



Deb Garross
City Planner

Ms. Ellen Heine
Xcel Energy
414 Nicollet Mall, 404-6
Minneapolis, MN 55401

Gilman Dedrick comments from PUC Speak Up!

Minnesota Department of Transportation

Heine, Ellen L

From: Driver, Ann (DOT) <ann.driver@state.mn.us>
Sent: Wednesday, December 14, 2016 9:33 AM
To: Miller, Conrad A; Butler, David W
Subject: TH 13 pipeline

Good Morning Conrad and David,

Although MnDOT won't issue a utility accommodation permit until the PUC has approved the route, with the information supplied to us by Xcel, MnDOT does believe that the request for exception letter and utility accommodation application provided would be a permissible placement of the 16 inch natural gas pipeline across and along TH 13 in the cities of Eagan and Burnsville. Any changes to the proposed route would need to be re-evaluated.

Ann Driver
Minnesota Department of Transportation
Office of Land Management
Utility Permits Unit Supervisor
395 John Ireland Blvd, MS 678
St. Paul, MN 55155
651-366-4620
ann.driver@state.mn.us





Minnesota Department of Transportation

Office of Land Management

395 John Ireland Boulevard
Saint Paul, MN 55155

Phone: 651-366-4635

Fax: 651-366-3450

stacy.kotch@state.mn.us

Mailstop 678

November 15, 2016

Bill Storm, Environmental Review Manager
Energy Environmental Review and Analysis
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul MN 55101

RE: In the Matter of the Application of Northern States Power Company d/b/a Xcel Energy for a Route Permit for the Black Dog Natural Gas Pipeline Project in Burnsville, Minnesota
PUC Docket Number: G002/GP-16-656

Dear Mr. Storm,

On October 18, 2016, the Minnesota Public Utilities Commission (MPUC) and the Minnesota Department of Commerce (DOC) issued a Notice of Public Information Meeting, which includes a public comment period regarding the environmental analysis of the Pipeline Routing Permit Application by Northern States Power Company d/b/a Xcel Energy for a Route Permit for the Black Dog Natural Gas Pipeline Project in Burnsville, Minnesota. The Minnesota Department of Transportation (MnDOT) has reviewed the application regarding the proposed project and submits the following comments in response to the Notice.

Pipelines may be placed across a trunk highway (TH) pursuant to Minn. Stat. §222.37, subd. 2. The environmental document should address the permit requirements of MnDOT as well as all relevant permits or authorizations the Applicant must obtain from road authorities relating to any pipeline or associated facilities placement that cross a trunk highway. MnDOT has adopted a formal policy and procedures for accommodation of utilities, including pipelines, on the highway rights of way ("Utility Accommodation Policy"). A copy of MnDOT's policy can be found at <http://www.dot.state.mn.us/utility/policy/utilitypolicy.html>. MnDOT's policy seeks to permit utilities to occupy portions of the trunk highway rights-of-way where such occupation does not put the safety of the traveling public or highway workers at risk or unduly impair the public's investment in the transportation system.

Based on the information provided in the Application, MnDOT has three significant concerns about the route and alignment proposed by Xcel. First, Xcel proposes to place the gas pipeline longitudinally within the highway right of way. Second, it is on the opposite side of the highway from an existing pipeline, which constrains any future modifications or repair work to the highway. Third, Xcel proposes to cross TH 13 at a long skewed angle rather than at a right angle, which is ordinarily required of a gas pipeline under a highway.

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MnDOT has met with representatives of Xcel to discuss these concerns. Xcel is aware that MnDOT has a process for approving an exception from its normal requirements when a utility owner can demonstrate that extreme hardship or unusual conditions exist. MnDOT will work with Xcel to assess measures that may be available to mitigate MnDOT's concerns with the proposed alignment. For example, Xcel proposes that the depth of the pipeline could be 20 feet or more at the location where it would cross under the highway. Placing the pipeline at this depth should reduce the prospects that the pipeline would need to be relocated at the time of future highway repair or reconstruction work. MnDOT would also discuss with Xcel locations for the proposed pipeline that are as far from the highway travel lanes and appurtenances as possible.

Permits the Applicant will seek from MnDOT to cross trunk highways will also need to address matters such as construction methods for boring under highways, impact on other utilities, traffic control in construction areas, authorized access points for construction activities, impact on highway traffic, highway drainage, highway vegetation, and other similar concerns.

Oversize/Overweight Permits:

There may be highway-related considerations related to oversize/overweight hauling of the pipeline and equipment. Specifically, these large loads of freight are often transported along nearby interregional corridors (IRC) such as I-35. Because MnDOT's highway construction activities could impact the Applicant's plans to haul oversize loads to the proposed site, the Applicant will need to coordinate with MnDOT when planning such loads.

Any pipeline construction work, including delivery or storage of materials or equipment that may affect MnDOT right of way is of concern such that MnDOT should be involved in planning and coordinating such activities. Please note that if work is required within MnDOT right of way for temporary or permanent access, such work should be coordinated with MnDOT Engineering Specialist Senior, Buck Craig, Roadway Regulations & Enforcement at 651-234-7911 or buck.craig@state.mn.us

Thank you for the opportunity to provide these comments

Sincerely,



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Stacy Kotch
Utility Transmission Route Coordinator
Minnesota Department of Transportation

cc: Buck Craig – MnDOT Metro Permits
Conrad Miller – Senior Engineer, Xcel Energy

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Minnesota Pollution Control Agency

Heine, Ellen L

From: Jensen, Patrice (MPCA) <patrice.jensen@state.mn.us>
Sent: Wednesday, December 14, 2016 2:28 PM
To: Heine, Ellen L
Subject: RE: follow up on PCA Black Dog Pipeline comments PUC docket G002/GP-16-656

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Ellen – thank you for providing the additional information. I will forward this on to the appropriate staff here at the MPCA.

From: Heine, Ellen L [mailto:Ellen.L.Heine@xcelenergy.com]
Sent: Wednesday, December 14, 2016 12:42 PM
To: Jensen, Patrice (MPCA) <patrice.jensen@state.mn.us>
Cc: Dean Sather <dsather@merjent.com>; Brie Anderson (banderson@merjent.com) <banderson@merjent.com>; Rogers, Timothy G <Timothy.G.Rogers@xcelenergy.com>
Subject: follow up on PCA Black Dog Pipeline comments PUC docket G002/GP-16-656

Hi Patrice,

I left you a phone message a little bit ago. I'm emailing to include some information regarding your comments on the Black Dog Natural Gas Pipeline Project. I've attached a copy of the water resources report, and included the relevant language below, which we filed to the docket during the reply comment period. This report addresses two of the items listed in the MPCA comment letter. I've also included additional information regarding Xcel Energy's spill response and reporting requirements to address the third concern noted in the comment letter.

- **Water Resources – Surface Waters (Directional Drilling)** –Page 3 paragraph 2 under **Construction Methods** and Page 4 **Black Dog Lake**:

Once the diameter of the bore is large enough, pipe installation is done by attaching a section of pipe to the reaming assembly and pulling it back through the hole. For long crossings pieces of pipe will be welded onto the pipe string just before pulling them through the borehole. Once the pipe has been pulled back through, the annulus (space around the pipe) will be grouted to prevent preferential water flow along the pipeline. The use of pressurized drilling mud in the HDD method involves the risk of inadvertent releases, or frac-out, of the mud through porous soils or geologic seams. Because of this the drilling mud pressure will be monitored and cuttings will be evaluated continually throughout the drilling and reaming process to ensure integrity of the bore. The viscosity of the slurry can be adjusted as needed to address any decreases in pressure that could indicate that a fracture has been encountered. To address any potential inadvertent releases Xcel Energy will work with the drilling contractor to develop a site specific response plan which will address monitoring, response and containment. This plan will be included as a requirement in the request for bids for potential drilling contractors.

Black Dog Lake

Black Dog Lake is located between the Minnesota River and the bluffs. Preliminary soil boring logs show that the basin of the lake is defined by a confining organic clay layer which lies atop sandy layers of soil. Beneath the sandy layers is dolostone bedrock which is part of the Prairie

du Chien and Jordan aquifer. Because the lake will be crossed using HDD no impacts from the surface to the bed or shore of the lake are anticipated. Project engineers are using data from the soil borings and geologic maps to develop a drill path which provides adequate depth and support beneath the bed of the lake. To accomplish this the drill path will enter into the bedrock then run horizontally through the bedrock before curving back up to the Black Dog Plant. Maintaining a layer of bedrock, in addition to the clay layer, between the pipeline and the bed of the lake will provide greater integrity of the bore and significantly reduces the risk of a drilling fluid release beneath Black Dog Lake.

- **Water Resources Groundwater (Spill Prevention Plan):**

Xcel Energy will comply with Minnesota's spill response and reporting requirements. Xcel Energy's Environmental Services Department has developed protocols for addressing any spills which occur during any phase of a project. These requirements are at least as stringent, and in some cases more stringent, than the State's spill reporting requirements. In the event of a spill, Xcel employees/contractors are instructed to call a 24-hour spill hotline supported by Xcel Energy Environmental Services (XEES). If for any reason the on-site crews are unable to handle cleanup, XEES will request additional support from spill response and cleanup contractors such as OSI and Clean Harbors. XEES is also responsible for making the necessary regulatory notifications. All construction contractors are contractually obligated to conform to conditions set forth in the XEES document *Environmental Directives for Contractors*, which includes (but is not limited to) requirements for control of chemicals, hazardous waste management, tank management and spill response and reporting.

- **Inventory of Impaired Waters (Enhanced Stormwater Treatment) – Page 4 paragraph 2 under Black Dog Lake:**

Black Dog Lake is a public water body as identified in the Public Waters Inventory. Crossing of a Public Water by a utility requires a License to Cross Public Waters from the MN DNR and Xcel Energy will work with DNR Lands and Minerals staff on application materials and will incorporate any special conditions into the construction plan. The lake is also listed on the Minnesota Pollution Control Agency (MPCA) Impaired Waters list. Construction near impaired waters involves more stringent protection requirements in the SWPPP such as shorter durations allowed before exposed soils must be stabilized and maintenance of buffer zones (the complete list is included in Appendix A of the MPCA CSW General Permit, attached). These requirements will be identified and addressed in the SWPPP when it is developed. No issues are anticipated regarding implementation of these enhanced stormwater treatment requirements.

We are currently in the process of reviewing a draft SWPPP and will be providing a copy of the draft to staff at the Lower Minnesota River Watershed District and the MN DNR to review prior to submitting with our application to the PCA. Please let me know if you have any questions or concerns.

Thanks,

Ellen

Ellen Heine

Xcel Energy | Responsible By Nature

Sr. Land Agent

414 Nicollet Mall, 414-6A, Minneapolis, MN 55401

P: 612.330.6073 F: 612.318.4298

E: ellen.l.heine@xcelenergy.com



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

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November 16, 2016

Mr. Bill Storm
Energy Facility Permitting
Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Black Dog Natural Gas Pipeline Project
PUC Docket Number: G002/GP-16-656

Dear Mr. Storm:

Thank you for the opportunity to review and comment on the Black Dog Natural Gas Pipeline Project (Project) located in Burnsville and Eagan. The Project consists of the construction of an underground natural gas pipeline originating from the Northern Natural Gas Cedar Station in Eagan to its terminus at the Black Dog Generating Plant in Burnsville, a length of approximately 11,300 feet. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff have the following comments for your consideration.

- Section 9.1.3 – Water Resources – Surface Waters - It states Xcel Energy will perform directional drilling under Black Dog Lake. MPCA did not see anything within the application that directly addressed how it would prevent and respond to a release of drilling fluid – should it be released into Black Dog Lake from any variety of potential pathways (i.e. blowouts, seeps, etc.).
- Section 9.1.3 – Water Resources – Groundwater (last paragraph) - It states that Xcel Energy will develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan to manage equipment spills or leaks should these occur. The SPCC Plan is a federal requirement; however, Xcel Energy should also state in the application that it will comply with Minnesota's spill reporting and response requirements, as many of those may be more stringent than those of the federal SPCC Plan requirements.
- Please be aware that the Minnesota River is listed on the MPCA Inventory of Impaired Waters located on the MPCA website at <http://www.pca.state.mn.us/water/tmdl-303dlist.html>. The impairment will dictate additional increased stormwater treatment during construction and require additional increased treatment post construction. These requirements will be included in the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater permit. Xcel Energy should determine that compliance with these increased stormwater water quality treatments can be achieved on the Project site or elsewhere. Information regarding the MPCA's Construction Stormwater program is located on the MPCA's website at <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>.

RECEIVED

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MAILROOM

Mr. Bill Storm
Page 2
November 16, 2016

Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit actions by the MPCA. Ultimately, it is the responsibility of Xcel Energy to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning MPCA's review of this Project, please contact me at 651-757-2465 or Patrice.jensen@state.mn.us

Sincerely,



Patrice Jensen
Planner Principal
Environmental Review
Resource Management and Assistance Division

PJ:bt

Citizen Comments

Topic: [Should any specific permit conditions be placed on this project?](#)

[Gilman Dedrick](#) at November 16, 2016 at 1:51pm CST

A permit for this construction to proceed should be acquired from the MN Pollution Control Agency the administrator in the state of MN for the federal agency EPA's Clean Water Act. Specific should be the clear indication that during construction of the pipeline no additional pollutants will enter the already impaired MN River especially mercury and PAHs due to construction and that no other violations of the Clean Water Act will be tolerated.

DOES THIS PROPOSED PROJECT HAVE A SIGNIFICANT IMPACT ON HUMANS OR THE ENVIRONMENT?

2 Answers, 0 Replies

Laura Hedlund · Citizen · (Postal Code: unknown) · Nov 23, 2016 2:06 pm 0 Votes

I am not certain this is the best place for these general comments. Like many people around the world, I am deeply moved by the actions of water protectors in Standing Rock. We all know that the way we are collectively relating to the natural world results in climate change and we are breaking the nine boundaries. Those with empathy and those who care about the future FEEL the pain. The system blindly moves forward in ways that are irrational and cruel.

Read Mark Z Jacobson from Sanford Institute. We can choose to have these pipelines be obsolete technology. Instead of "investing" so many millions in pipelines - lets look at our energy situation from an open mind and open heart. If we include empathy our decisions will become more rational.

I assume this segment is added to the \$50 million pipeline going thru Lebanon Hills. How much money is being spent on this pipeline? Because this is so expensive - does spending this much money burden future rate payers? Is this out of date technology? I understand the old pipelines are left in the ground. What are the ecological consequences of leaving the pipes in the ground? As someone who buys energy - I want my money to match my values. I think distributed energy offers us the framework to make empathic and futuristic choices regarding energy. From passive houses, to friction, to tidal and of course solar, we are collectively smart enough to solve the climate crisis. Or we spend - tens of millions of dollars - on extractive pipelines because the people in power make money doing things this way. Other ways also have jobs. Activists may start to inform people of the banks that fund pipelines. As far as the Minnesota Public Utilities - do these pipeline increase cost for future rate payer in harmful ways?

For example, those with financial resources may be able to buy sustainable energy solutions such as passive homes. The grid will be left serving those fewer economic resources. Instead of more pipelines, lets have creative, responsive solutions.

ARE THE COMMISSION'S GENERAL PIPELINE PERMIT CONDITIONS REASONABLE FOR THIS PROJECT?

1 Answers, 0 Replies

Laura Hedlund · Citizen · (Postal Code: unknown) · Nov 23, 2016 2:32 pm 0 Votes
should the Commission require old pipelines be removed?

Xcel Energy November 30, 2016 filing:

Additional Information Regarding Potential to Impact
Water Resources for the Black Dog Natural Gas Pipeline
Project



414 Nicollet Mall
Minneapolis, MN 55401

November 30, 2016

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: **Additional Information Regarding Potential to Impact Water Resources for the Black Dog Natural Gas Pipeline Project; Docket No. G002/GP-16-656**

Dear Mr. Wolf:

On August 18, 2016 Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, submitted an Application for a Route Permit for the Black Dog Natural Gas Pipeline Project (Project) pursuant to the partial exemption procedures pursuant to Minnesota Rules Chapter 7852.0600. The purpose of this letter and attached report is to provide additional information about our analysis of the potential to impact nearby water resources.

Xcel Energy has received questions from representatives of the Lower Minnesota River Watershed District and the Minnesota Department of Natural Resources regarding analysis of potential impacts to nearby water resources including calcareous fens, Blanding's turtles and trout streams which are located near the project, but outside of the proposed route. Additional comments from the Minnesota Pollution Control Agency were recently filed to the docket. Sections 9.1.3 - *Water Resources* and 9.1.4 - *Biological Resources* in the final permit document discuss impacts to groundwater and the nearby fens and these features were shown in Figures 9 and 10 respectively. However, in response to comments received, Xcel Energy is providing more detail on our analysis of potential impacts to water resources and associated protected species in the enclosed report. As described in the report Project construction is not anticipated to have negative impacts on nearby waters or the turtles or plants dependent on them.

Please contact Ellen Heine at ellen.l.heine@xcelenergy.com or 612-330-6073 if you have questions or would like further information regarding this matter.

Sincerely,

A handwritten signature in blue ink that reads 'Ellen Heine'.

Ellen Heine
Xcel Energy
Sr. Land Agent

Black Dog Natural Gas Pipeline Project Additional Information Regarding Potential to Impact Water Resources

As described in the route permit application, the Black Dog Natural Gas Pipeline Project (Project) is an approximately 2.2 mile long natural gas pipeline with runs from the NNG Cedar Station to the Black Dog Generating Plant. The proposed pipeline alignment runs along local roads, a state highway and down an existing electric transmission line corridor. The Project is located south of the Minnesota River in an area that contains a number of water features including lakes, streams, wetlands and floodplain. Included in these features are Black Dog Lake, a number of designated trout streams, and protected calcareous fens. The Minnesota Natural Heritage Inventory also identifies historic occurrences of Blanding's turtles, a state threatened species, within two miles of the project site.

This report provides more detail on the planned construction methods and an analysis of potential impacts to water resources near the project. This report was developed in consultation with experts on horizontal directional drilling, soils, hydrology and calcareous fens.

Construction Methods

As described in the route permit application construction of the pipeline will be done using a combination of open trenching and directionally drilling as shown in Figure 1. Approximately two thirds of the proposed pipeline will be constructed using open trench installation. The trench will be excavated with a backhoe to a depth of approximately 6 feet and approximately 3 feet wide at the bottom. Any rocky locations will be padded as needed with gravel or sand to protect the pipe. Pipe will then be strung along the trench and welded before being lowered into the trench and backfilled. If there is significant rainfall or soils are very saturated some construction stormwater dewatering may be necessary to enable inspection of the bottom of the trench prior to lowering the pipe in. A Stormwater Pollution Prevention Plan (SWPPP) will be developed prior to start of construction. The SWPPP will identify best management practices (BMPs) to prevent sediment laden waters from leaving the site. If pumping is needed BMPs will include energy dissipating devices such as filter bags or straw bale structures that remove sediment from stormwater. Ditch checks may also be used during construction as well as following backfilling to prevent movement of stormwater along the trench. The SWPPP will also address any additional requirements for special or impaired waters located near the Project. The Lower Minnesota River Watershed District and the City of Burnsville have both asked that they be given the opportunity to review the SWPPP once it is developed. Xcel Energy will provide a draft SWPPP to both for review prior to finalizing.

The remaining one third of the pipeline is planned to be constructed using the horizontal directional drilling (HDD) method. This includes where the pipeline crosses beneath Highway 13, Cedar Bridge Ave and River Hills Drive and from the top of the bluff to the Black Dog Generating Plant. Directional drilling involves excavation of entry and exit pits and then setup of the drilling equipment adjacent to the entry pit. The drilling method involves using a small diameter steerable drill pilot head and guiding the boring to pre-determined depths to achieve required clearances and minimize contact with unstable soil layers. A pressurized bentonite slurry, also referred to as drilling mud, is pushed through the drill head which helps seal the boring walls and prevent caving in or water infiltration from any wet layers that the boring

travels through. The bentonite slurry carries the drilled material (cuttings) back to the entry pit where the bentonite is reclaimed and reused. The pilot head is followed by a reaming head which enlarges the pilot hole to the necessary diameter for installing the pipe. As with the pilot head the reaming assembly uses a pressurized bentonite slurry, so as the hole is made larger the bore walls are continually packed and sealed.

Once the diameter of the bore is large enough, pipe installation is done by attaching a section of pipe to the reaming assembly and pulling it back through the hole. For long crossings pieces of pipe will be welded onto the pipe string just before pulling them through the borehole. Once the pipe has been pulled back through, the annulus (space around the pipe) will be grouted to prevent preferential water flow along the pipeline. The use of pressurized drilling mud in the HDD method involves the risk of inadvertent releases, or frac-out, of the mud through porous soils or geologic seams. Because of this the drilling mud pressure will be monitored and cuttings will be evaluated continually throughout the drilling and reaming process to ensure integrity of the bore. The viscosity of the slurry can be adjusted as needed to address any decreases in pressure that could indicate that a fracture has been encountered. To address any potential inadvertent releases Xcel Energy will work with the drilling contractor to develop a site specific response plan which will address monitoring, response and containment. This plan will be included as a requirement in the request for bids for potential drilling contractors.

HDD will not involve a significant amount of dewatering. If the smaller pilot head were to encounter a pressurized source of groundwater, such as is found in artesian conditions, the hole would be promptly sealed with bentonite and the drilling crew would back out and adjust the drill path to avoid the water source. Ongoing pumping to remove large amounts of water from such a bore is not feasible because of the impacts the pressurized water would have on the walls of the bore.

When the route permit application was submitted Xcel Energy did not yet have specific detail on depth to groundwater. Since that time soil borings have been completed and the preliminary report does show that there are some locations where there appear to be shallow perched lenses of water along the proposed pipeline alignment. Soil boring locations are shown in Figure 1. Boring logs showed that at soil boring #3 water was encountered at a depth of four feet (elevation 881). Water was encountered at similar elevations in borings 4 and 5 (approximately 878 and 872 respectively) however the depth from grade to the water in these locations was greater than 6 feet and wouldn't be encountered by trenching. The table below shows depth to water and elevation for each soil boring.

Boring Name	Water Depth from Surface (ft)	Water Level Elevation (ft)
SB1	Not encountered	NA
SB2	28	852
SB3	4	881
SB4	14.5	878
SB5	13	872
SB6	Not encountered	NA

Boring Name	Water Depth from Surface (ft)	Water Level Elevation (ft)
SB7	Not encountered	NA
SB8	Not encountered	NA
SB9	14.5	700
SB10	1	693

Based on these results it appears that there is a perched shallow lens of water located beneath Highway 13, but that it does not continue along the proposed alignment significantly beyond borings 3 and 5. Perched surface groundwater associated with the highway is not unexpected because of the amount of ditching and stormwater management associated with the highway. The pipeline will be horizontally drilled from an entry pit near soil boring 1, crossing beneath Highway 13 and Cedar Bridge Ave, and exiting near soil boring 4. The directional drilling methods, as described above, are expected to punch through this lens of water as it angles back up to the exit pit southwest of Cedar Bridge Ave. If water appears in the entry or exit bore pits some minor construction dewatering may be required in order to allow crews to see and access the equipment within the pits. As with trenching, any construction dewatering will employ appropriate BMPs to remove sediment.

Black Dog Lake

Black Dog Lake is located between the Minnesota River and the bluffs. Preliminary soil boring logs show that the basin of the lake is defined by a confining organic clay layer which lies atop sandy layers of soil. Beneath the sandy layers is dolostone bedrock which is part of the Prairie du Chien and Jordan aquifer. Because the lake will be crossed using HDD no impacts from the surface to the bed or shore of the lake are anticipated. Project engineers are using data from the soil borings and geologic maps to develop a drill path which provides adequate depth and support beneath the bed of the lake. To accomplish this the drill path will enter into the bedrock then run horizontally through the bedrock before curving back up to the Black Dog Plant. Maintaining a layer of bedrock, in addition to the clay layer, between the pipeline and the bed of the lake will provide greater integrity of the bore and significantly reduces the risk of a drilling fluid release beneath Black Dog Lake.

Black Dog Lake is a public water body as identified in the Public Waters Inventory. Crossing of a Public Water by a utility requires a License to Cross Public Waters from the MN DNR and Xcel Energy will work with DNR Lands and Minerals staff on application materials and will incorporate any special conditions into the construction plan. The lake is also listed on the Minnesota Pollution Control Agency (MPCA) Impaired Waters list. Construction near impaired waters involves more stringent protection requirements in the SWPPP such as shorter durations allowed before exposed soils must be stabilized and maintenance of buffer zones (the complete list is included in Appendix A of the MPCA CSW General Permit, attached). These requirements will be identified and addressed in the SWPPP when it is developed. No issues are anticipated regarding implementation of these enhanced stormwater treatment requirements.

Calcareous Fens

A calcareous fen is a rare type of wetland which is created when groundwater rich in calcium and magnesium bicarbonates wells up through peat to support a community of rare plants called calciphiles. Calcareous fen communities are extremely rare and are made up of a number of plant species which are listed as threatened or endangered by the State of Minnesota. Calcareous fens are also susceptible to disturbances such as changes in subsurface hydrology or surface impacts which can damage plants or introduce invasive species. More detail is included in the attached calcareous fen factsheet. Because of their rarity and sensitivity calcareous fens are legally protected in MN.

There are nine calcareous fen sites listed in Dakota County. This includes the Black Dog Lake Fens a, b, c, and North, Gun Club Lake North and South and Nicols Meadow Fens a, b, and c (partial list enclosed). These fens are largely affected by the upwelling and pressures of water originating in the Prairie du Chien Group and Jordon Sandstone aquifer. The depth of these aquifers ranges from 700 – 950 feet in elevation in Dakota County (see attached contour map). As shown on Figure 2, Black Dog Lake North is the fen closest to the proposed Project location. While fen boundaries tend to change over time approximate boundaries are represented on the map using Minnesota County Biological Survey (MCBS) data. At its closest point, just northwest of the Cedar Station, the distance from Black Dog Lake North fen to the Project is approximately 1800 feet. At the point where the proposed pipeline crosses beneath the railroad it is approximately 4600 feet (0.9 miles) from the fen (Figure 3). Black Dog Lake Fen c, to the SW, is approximately 1.5 miles away. The distance between the drilling path and the fens is so great that, in the unlikely event that a frac-out were to occur during drilling, no drilling mud would reach the fens. As stated previously, in such a case the inadvertent release plan would be implemented. Because of the Project's distance from the fens there will be no direct impacts as a result of construction.

The trenching and directional drilling above the bluff are unlikely to have any impact on the hydrology due to the distance from the fens and the shallow and temporary nature of the disturbance. There is also considerable water storage in the pore spaces of the unconsolidated geological deposits in the area, which would dampen any temporary limited construction dewatering. Regarding the directionally drilled segment that passes beneath Black Dog Lake, as described in the construction methods section there will be no water appropriation/drawdown used in HDD. If any pressurized water-bearing layers are encountered that drill path will be grouted (plugged) and a new path taken. Where the pipeline runs though the bedrock there will be water-bearing seams which are part of the aquifer, however these are likely not under pressure and the drilling process is able to accommodate this type of water source. Water within the aquifer will be able to flow above and below the pipeline similar to a wire in a stream. The pipeline itself is not a large enough obstacle to have any impact on aquifer flow. Therefore the Project is not anticipated to result in any indirect impacts to groundwater sources which support fen hydrology.

Though we do not anticipate the need for a water table drawdown (water appropriation) on any part of the Project, were it to be implemented it would likely only impact groundwater within 500-700 feet of the location of the pumping. Drawdown decreases logarithmically as the distance from the site increases, so at distances of 1800 feet (Black Dog North) or greater any drawdown would be unlikely to be measurable.

For the reasons described in this section no impacts to nearby fens are anticipated as a result of project construction and a fen management plan is not needed.

Trout Streams

There are various restrictions on the use of or impacts to designated trout streams (listed in MN Rule 6264.0050, partial list attached) in order to protect and foster the propagation of trout. These restrictions include the prohibition of any activities which alter the current, course or cross section of the stream. Alteration of the current (flow) could result if a project involved significant water appropriation such as the placement of large wells near the stream or site dewatering which draws down the local water table. The trout stream nearest the Project, Unnamed Stream #4, is approximately 2300 feet (0.4 miles) from the Project at its nearest point (Figure 3). Unnamed Stream #7 is approximately 1 mile SW (Figure 2). At these distances there will be no direct impacts to the current, course or cross-sections of the streams. As described in the Construction Methods and Calcareous Fen sections above, no water appropriation is planned or anticipated for this project. Therefore there are no indirect impacts to the streams anticipated as a result of this project.

Note: MN DNR designated trout stream data from 2013 identified the longer Public Water Stream shown on the map as the designated trout stream. DNR staff noticed some errors in the 2013 data and the entire dataset has gone through a quality review process. The trout streams shown on the maps are based on the 2016 final corrected data.

Other Wetlands/Floodplain Impacts

At the bottom of the bluff a wetland system surrounds Black Dog Lake between the railroad tracks and the Black Dog Plant. The entry pit for the HDD is located at the top of the bluff above the wetlands and the exit pit is on upland at the Plant. Therefore these wetlands will not be impacted by the project. Two small wetlands identified by field delineation are located along the electric transmission line corridor above the bluff. The locations are shown in Figure 3. These small wetlands will be temporarily impacted by Project construction and Xcel Energy is preparing a notice letter for the US Army Corps of Engineers and the City of Burnsville Water Resources to request approval for these impacts.

The area between the railroad and the Black Dog Generating Plant is part of the Minnesota River floodplain. Because there will not be above ground work or facilities located in this section of the project the City of Burnsville has indicated that a Conditional Use Permit is not required. Xcel Energy will provide a FEMA Elevation Certificate and a No Rise Certificate to the City as well as as built plans as requested by the City.

Blanding's Turtles

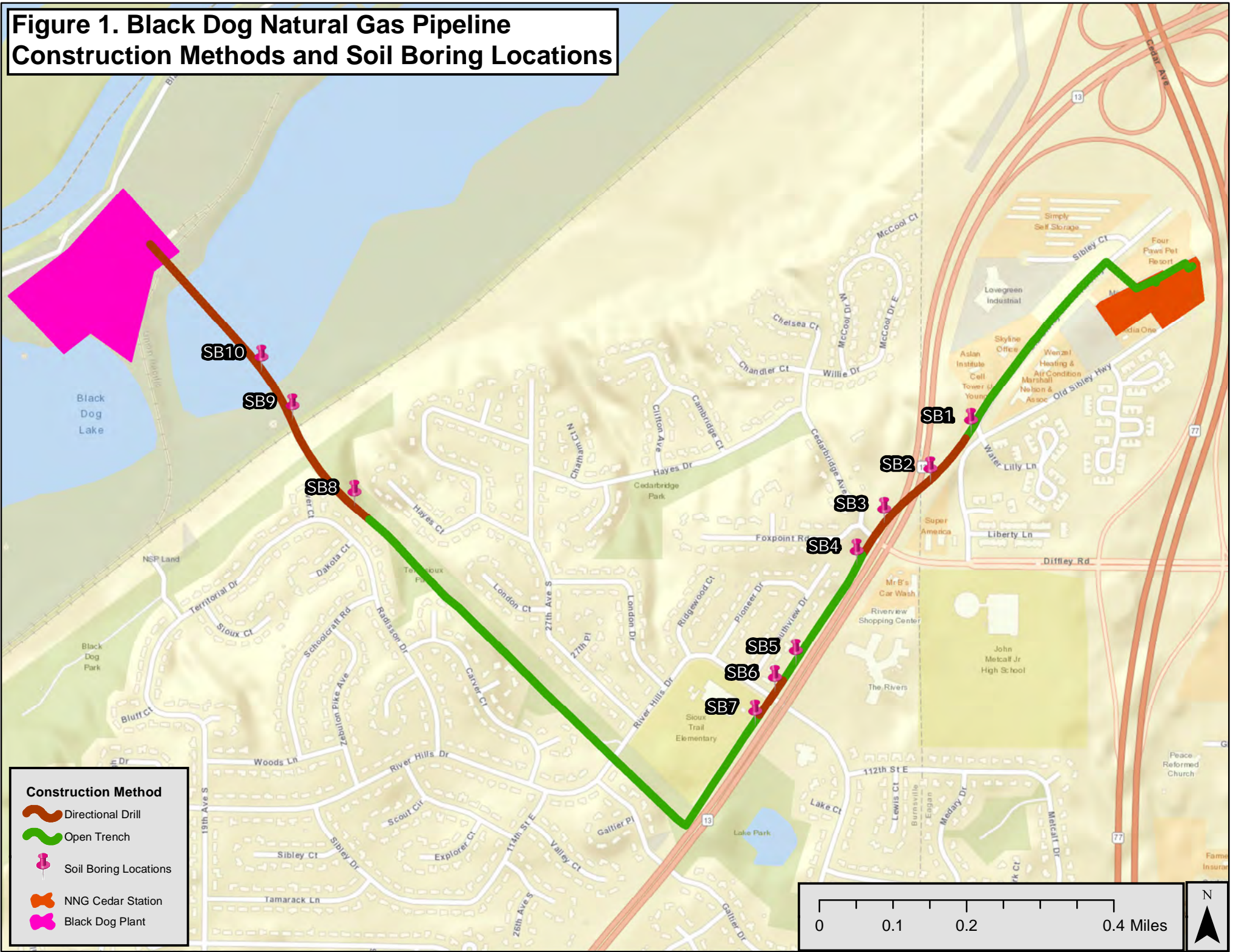
Blanding's turtles utilize both wetland and upland habitat. They have a preference for calm, shallow water bodies that have mud bottoms and abundant aquatic vegetation such as Black Dog Lake and the surrounding wetlands. The MN DNR has noted that there could possible encounters with the Blanding's turtle due to the proximity of wetlands and suitable habitat for

upland nesting. Because water will not be appropriated for the Project there will be no hydrological impacts to any Blanding's turtles that may be located near the project. Xcel Energy will notify all construction contractors of the potential for turtles to become trapped in trenches and to inspect for turtles prior to backfilling. If any erosion control blanketing is needed wildlife-friendly (non-welded) blanket will be used.

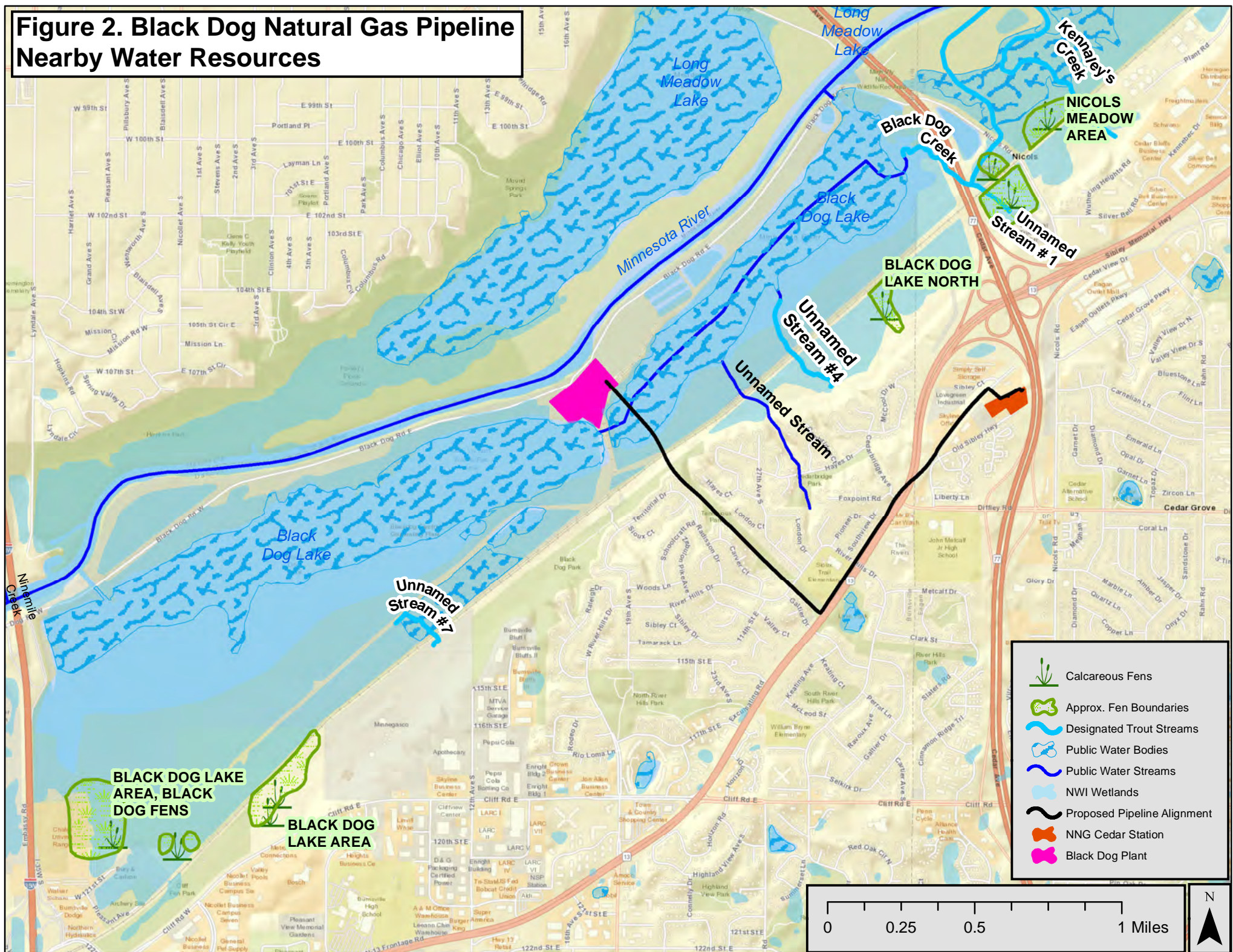
Conclusion










Based on the location of the project in relation to these water resources and the construction practices that will be used Project construction is not anticipated to have negative impacts on any of these waters or the turtles or plants dependent on them.

Figure 1. Black Dog Natural Gas Pipeline Construction Methods and Soil Boring Locations



**Figure 2. Black Dog Natural Gas Pipeline
Nearby Water Resources**



-  Calcareous Fens
-  Approx. Fen Boundaries
-  Designated Trout Streams
-  Public Water Bodies
-  Public Water Streams
-  NWI Wetlands
-  Proposed Pipeline Alignment
-  NNG Cedar Station
-  Black Dog Plant

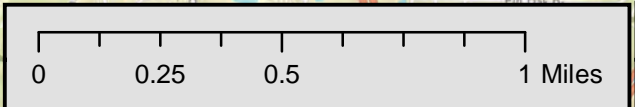


Figure 3. Black Dog Natural Gas Pipeline Distance to Protected Resources

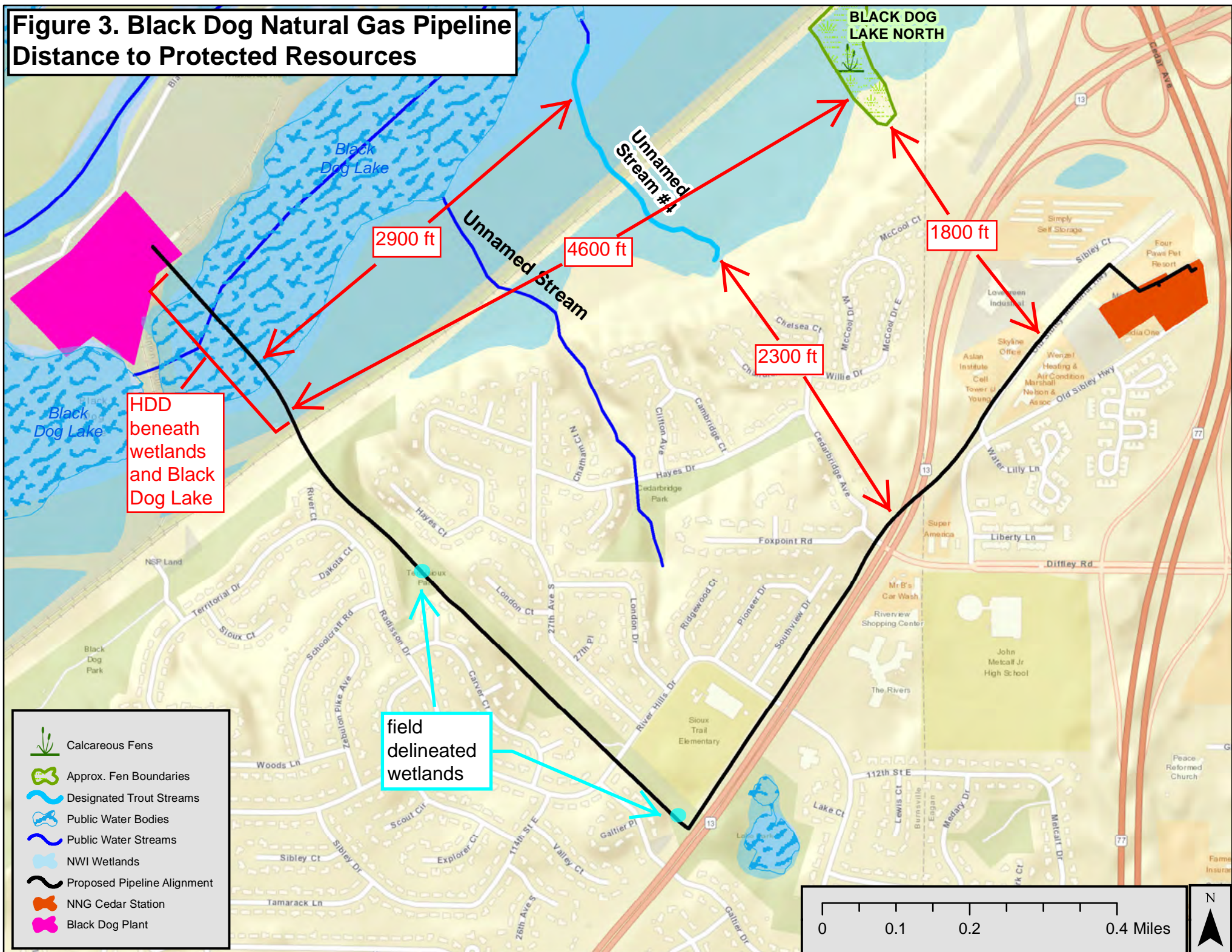









Figure 3. Black Dog Natural Gas Pipeline Distance to Protected Resources

-  Calcareous Fens
-  Approx. Fen Boundaries
-  Designated Trout Streams
-  Public Water Bodies
-  Public Water Streams
-  NWI Wetlands
-  Proposed Pipeline Alignment
-  NNG Cedar Station
-  Black Dog Plant

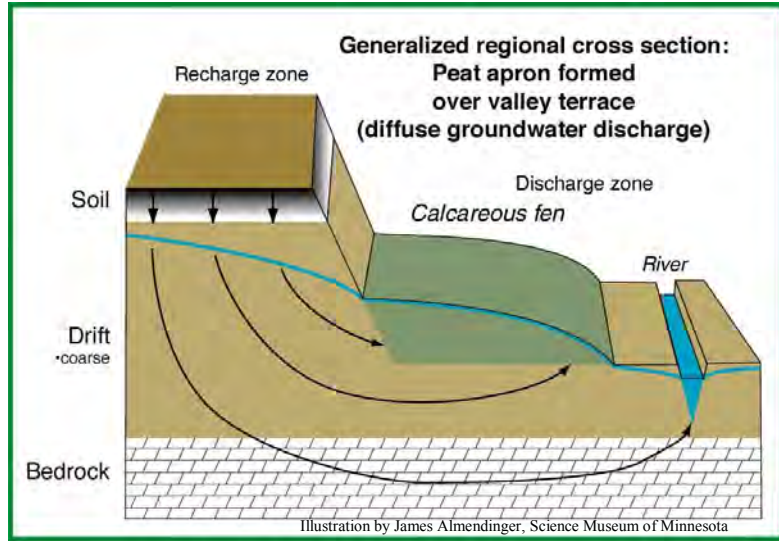
field delineated wetlands

HDD beneath wetlands and Black Dog Lake



WHAT IS A CALCAREOUS SEEPAGE FEN?

Calcareous fens are rare and distinctive wetlands characterized by a substrate of non-acidic peat and dependent on a constant supply of cold, oxygen-poor groundwater rich in calcium and magnesium bicarbonates. This calcium-rich environment supports a plant community dominated by “calciphiles,” or calcium-loving species. These fens typically occur on slight slopes where upwelling water eventually drains away and where surface water inputs are minimal. Sometimes they occur as domes of peat that grow to the

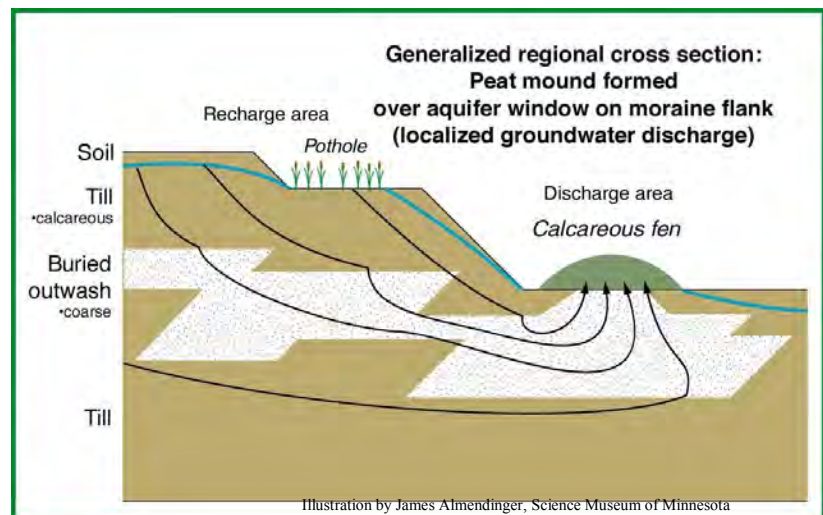


height of the hydraulic head. These settings create an unusual wetland regime where the substrate is almost always saturated to the surface, but flooding is rare and brief. Shallow pools of water in which marl precipitates are typically present surrounded by low, tussocky, grass- and sedge-dominated vegetation. The substrate is springy or quaking underfoot. The figures above and below illustrate the geologic features and groundwater flows that lead to the formation of calcareous seepage fens.

HOW RARE ARE CALCAREOUS SEEPAGE FENS?

Calcareous seepage fens are one of the rarest natural communities in the United States. These fens have been reported from 10 states, mostly in the Midwest.

Approximately 200 are known in Minnesota, most of which are only a few acres in extent. They are concentrated at the bases of terrace escarpments in river valleys in southeastern Minnesota, on the sides of morainal hills and valley



sideslopes in southern and west-central Minnesota, and on the downslope side of beach ridges in the Glacial Lake Agassiz basin in the northwest. There are also a few in northern Minnesota where upwelling groundwater reaches the surface within large, more acidic peatlands.



Fact Sheet

WHY ARE CALCAREOUS SEEPAGE FENS PROTECTED?

In addition to the rarity of the community itself, calcareous seepage fens support a disproportionately large number of rare plant species in Minnesota, four of which (*) occur almost exclusively in this community. Eight state-listed, rare plant species are known from calcareous seepage fens:

<i>Carex sterilis</i> *	Sterile sedge	State threatened
<i>Cladium mariscoides</i> *	Twig-rush	State special concern
<i>Rhynchospora capillacea</i> *	Fen beak-rush	State threatened
<i>Fimbristylis puberula</i> *	Hairy fimbristylis	State endangered
<i>Scleria verticillata</i>	Nut-rush	State threatened
<i>Eleocharis rostellata</i>	Beaked spike-rush	State threatened
<i>Valeriana edulis</i>	Valerian	State threatened
<i>Cypripedium candidum</i>	Small white lady's slipper	State special concern

Calcareous seepage fens are highly susceptible to disturbance. Reduction in the normal supply of groundwater results in oxidation of the surface peat, releasing nutrients and fostering the growth of shrubs and tall, coarse vegetation that displaces the fen plants. Nitrogen-rich surface water runoff into



fens promotes the invasion of aggressive exotic plants, especially reed canary grass, that also outcompete the fen plants. Flooding drowns the fen plants. The soft, saturated character of the peat makes almost any level of activity within them, by humans or domestic livestock, highly disruptive.

HOW ARE CALCAREOUS SEEPAGE FENS PROTECTED?

Under the Minnesota Wetlands Conservation Act (WCA), impacts to calcareous seepage fens are regulated by the Department of Natural Resources. According to the WCA, calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, unless the commissioner of natural resources, under an approved management plan, decides some alteration is necessary (Minn. Statutes 103G.223).

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. Statutes 84.0895). For additional information, see the DNR website at:

<http://www.dnr.state.mn.us/ets/index.html>.

The DNR maintains a list of known calcareous fens, which is available at the DNR's website at:

http://files.dnr.state.mn.us/publications/waters/calcareous_fen_list_nov_2009.pdf

Landowners or others proposing activities that may affect a calcareous fen or that are interested in protecting or managing a calcareous fen should contact the DNR, Ecological and Water Resources Division at 651-259-5125.

Department of Natural Resources

Identification of Known Calcareous Fens

Pursuant to the provisions of *Minnesota Statutes*, section 103G.223, the following described lands contain calcareous fens as defined in *Minnesota Rules*, part 8420.0935, subpart 2. These calcareous fens have been identified by the commissioner by written order published in the State Register on March 14, 2005 (29 SR 1061-1065), June 2, 2008 (32 SR 2148-2154), August 31, 2009 (34 SR 278), December 7, 2009 (34 SR 823-824), and July 5, 2016 (40 SR 8).

Additional sites may be added to this list as new calcareous fens are discovered and existing sites may be removed from the list if it is determined that the wetland no longer meets the definition of a calcareous fen. Future revisions to the list will be published in the *State Register* and the current list of fens is posted on the Department of Natural Resources web site.

County Calcareous Fen Site Name	Fen ID No.	Located in:		
		Township	Range	Section(s)
Becker				
Spring Creek WMA South	251	T142N	R42W	SWNE12, NWSE13, NENE13
White Earth 5	34594	T142N	R41W	NW05
White Earth 6	34595	T142N	R41W	NW06
Waubun WMA South	19190	T142N	R42W	NENE01
Anderson WPA	28540	T139N	R42W	NWNE01
Pederson WPA	34161	T142N	R41W	SWNW29
Hamden 36	34839	T140N	R42W	NWNW36
Big Stone				
Stony Run	19784	T121N	R45W	ESENE19
Blue Earth				
Lime 30	38219	T109	R26W	SWSW30
		T109	R27W	SESE25, NESE25
Carver				
Seminary Fen	20977	T116N	R23W	SWNESE34, SW35 NESWSW35
Chippewa				
Chippewa River Fen	18688	T118N	R41W	SWSE23
Kragero 26	26001	T119N	R42W	NESW26
Watson Sag East - a	18689	T119N	R42W	SE36
Tunsberg 10	25999	T118N	R41W	SWNW10
Montevideo Fen	26005	T117N	R41W	NESW01
Rosewood 31	25195	T118N	R40W	NESE31
Watson Sag SW	18687	T118N	R41W	SESW16

County Calcareous Fen Site Name	Fen ID No.	Located in:		
		Township	Range	Section(s)
Watson Sag East - b	18692	T118N	R41W	NWNW06
Zion Church Prairies	18686	T118N	R41W	NSW06
		T118N	R42W	SESWNE01, NENESE01
Clay				
Barnesville Swamp Humboldt 1	13722	T137N	R45W	SESE01
Barnesville Swamp Tansem 18NW	246	T137N	R44W	NWNW18
Barnesville Swamp Tansem 18SW	6625	T137N	R44W	SWSW18
Barnesville Swamp Tansem 7a	18814	T137N	R44W	SESWSW07
Barnesville Swamp Tansem 7b	1973	T137N	R44W	NSW07
Felton Prairie B Bar B Ranch	252	T141N	R46W	E13
Felton Prairie County Land	7726	T142N	R45W	SNW31
Felton Prairie Felton WMA	247	T142N	R46W	ESE36
Felton Prairie Flowing 24	7723	T141N	R46W	WNWSE24
Haugtvedt WPA South Unit	21259	T137N	R44W	SWSE32
Clearwater				
Clearbrook Fen	249	T149N	R37W	NW17
Cottonwood				
Delton 20	31977	T107N	R35W	SESE20
Amo 2	35483	T106N	R37W	SESE02
Amo 13	31985	T106N	R37W	SWSW13
Storden 21	33992	T107N	R37W	SWNW21
Storden 34	35383	T107N	R37W	NENE34
Dakota				
Black Dog Lake Fen - a	242	T027N	R24W	NW34, NWNE34
Black Dog Lake Fen - b	14373	T027N	R24W	NNW34
Black Dog Lake Fen - c	31929	T027N	R24W	SESE27, NENE34
Black Dog Lake North	16550	T027N	R24W	SENE24
Gun Club Lake North	20941	T028N	R23W	WSE33
Gun Club Lake South	244	T027N	R23W	W04
Nicols Meadow Fen - a	243	T027N	R23W	NESW18
Nicols Meadow Fen - b	20942	T027N	R23W	NWSESW18
Nicols Meadow Fen - c	20943	T027N	R23W	SWSESW18
Dodge				
Pheasants Forever WMA	28257	T107N	R17W	SWSE24
Wasioja WMA	28258	T107N	R17W	SESWSESW17

6264.0050 RESTRICTIONS ON DESIGNATED TROUT LAKES AND STREAMS.

Subpart 1. **Restrictions on designated trout lakes.** The lakes described in this part are inhabited by trout other than lake trout. In order to protect and foster the propagation of trout, the following restrictions on fishing in these lakes apply:

- A. taking of fish is prohibited, except during the open season;
- B. not more than one line may be used for angling at any time, including when angling through the ice;
- C. taking of minnows is prohibited, except under special permit issued by the commissioner; and
- D. possession or use of minnows as bait, except live leeches and processed minnows in a dried, frozen, or pickled condition, is prohibited.

Subp. 2. **Listing of designated trout lakes.** The following described lakes are designated as trout lakes:

	Name	Location		
		Section	Township	Range
A.	Aitkin County:			
(1)	Loon (Townline) Lake	7	50	22W
		12, 13	50	23W
(2)	Taylor Lake	16	52	25W
B.	Anoka County:			
	Cenaiko Lake (Unnamed)	26	31	24W
C.	Becker County:			
	Hanson Lake	6	139	39W
D.	Beltrami County:			
	Benjamin Lake	7, 18	148	30W
		13	148	31W
E.	Carlton County:			
	Corona Lake	11, 12	48	19W
F.	Carver County:			

Subp. 3. **Restrictions on designated trout streams.** In order to protect and foster the propagation of trout, the following restrictions apply to fishing in these streams:

A. taking of fish is prohibited, except during the open season; and

B. taking of minnows in the waters designated as trout streams by this rule is prohibited at all times, except under special permit issued by the commissioner.

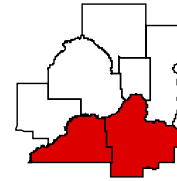
Subp. 4. Listing of designated trout streams. The following described streams and portions of streams and their tributaries within the section specified are designated as trout streams and counties whose names appear in parentheses contain portions of those streams:

	Name	Location		
		Township	Range	Section
A.	Aitkin County:			
(1)	Libby Brook	50	23	5, 6
		50	24	1, 2
(2)	Long Lake Creek	46	25	10, 15
(3)	Morrison Brook (Itasca)	52	26	4, 9, 10, 14, 15
(4)	Two Rivers Springs	51	23	19
		51	24	24, 25, 26
B.	Becker County:			
(1)	Dead Horse Creek	138	38	3, 4, 7, 8, 9, 16
(2)	Elbow Lake Creek (Clearwater)	142	38	6
(3)	Straight Creek, Upper	140	36	6
		141	36	30, 31
		141	37	24, 25
(4)	Straight Lake Creek	140	36	6
		140	37	1, 2
(5)	Straight River (Hubbard)	139	36	1
		140	36	28, 29, 33, 34, 35, 36
(6)	Sucker Creek	138	40	18
		138	41	13
(7)	Toad River	138	38	6, 7, 18, 19, 30
		139	38	30, 31

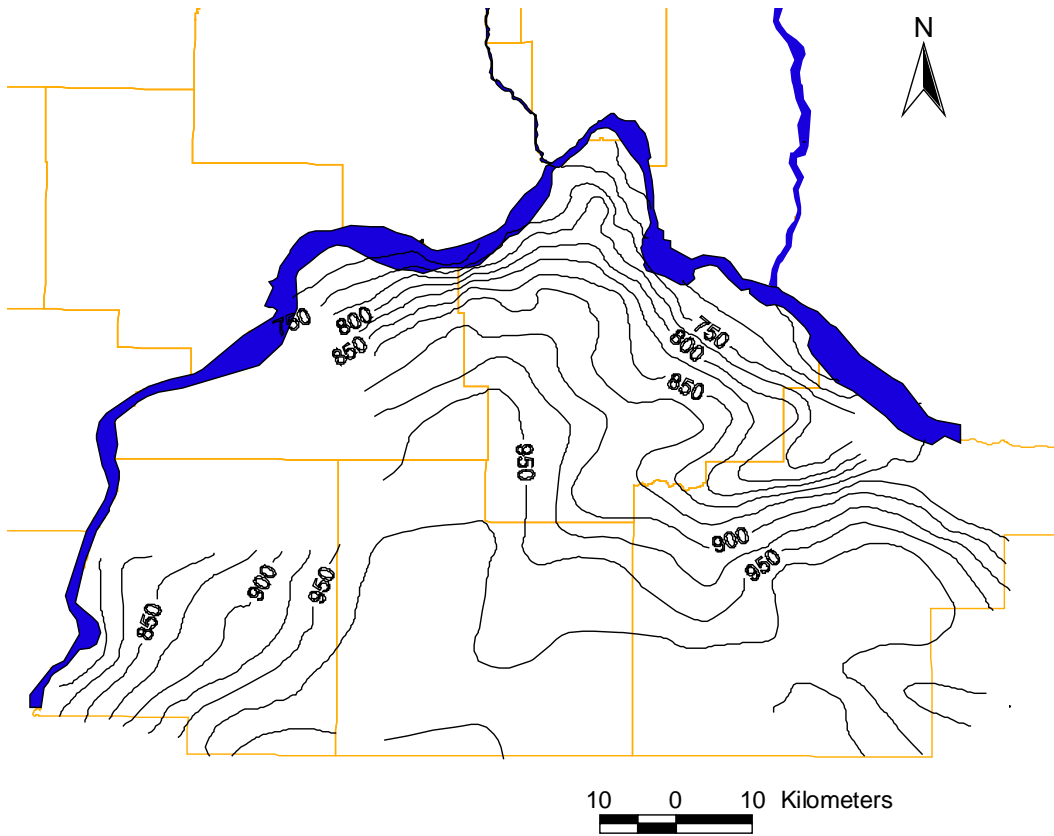
(2)	Black Bear Brook	44	28	7, 8
(3)	Blackhoof Creek	46	29	16
(4)	Borden Creek	44	28	8, 9, 17, 20
(5)	Camp Creek	43	28	4, 5
(6)	Cullen Brook	136	28	18, 19, 30
		136	29	13
(7)	Long Brook, Lower South	44	30	12, 13
(8)	Long Brook, Upper South	44	29	6, 7
(9)	Round Creek	43	31	14, 15
(10)	Sand Creek	45	30	2, 3, 11, 13, 14
		46	30	34
(11)	Spring Brook	138	28	27, 34
(12)	Van Sickle Brook	138	26	14, 15, 23, 24
(13)	Whitley's Creek	45	30	16, 17, 20, 21
Q.	Dakota County:			
(1)	Kennaley's Creek	27	23	18
(2)	Pine Creek	113	17	31
		113	18	25, 26, 35, 36
(3)	Trout Brook (Goodhue)	113	17	26, 27, 35, 36
(4)	Unnamed #1	27	23	18
		27	24	13
(5)	Unnamed #4	27	24	24
(6)	Unnamed #7	27	24	26
(7)	Vermillion River	113	20	1, 2, 3, 4, 9
		114	18	19, 20
		114	19	21, 22, 23, 24, 28, 29, 30, 31
		114	20	33, 34, 35, 36
(8)	Vermillion River, South Branch	113	19	1
		114	18	29, 30, 31

Groundwater Contours in the Prairie Du Chien/Jordan Aquifer- Layer 3

South Province



Twin Cities Area
South Province



Andrew Streit, 800

Explanation

850 Groundwater Contours
25 foot interval

Minnesota Pollution Control Agency
Metro Groundwater Model



Xcel Energy November 23, 2016 filing:

Draft Proposed Findings of Fact and Responses to Public
Comments for the Black Dog Natural Gas Pipeline Project

(FOF attachment excluded)



414 Nicollet Mall
Minneapolis, MN 55401

November 23, 2016

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: **Draft Proposed Findings of Fact and Responses to Public Comments for the Black Dog Natural Gas Pipeline Project; Docket No. G002/GP-16-656**

Dear Mr. Wolf:

On August 18, 2016 Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, submitted an Application for a Route Permit for the Black Dog Natural Gas Pipeline Project (Project) pursuant to the partial exemption procedures of Minnesota Rules Chapter 7852.0600.

Draft Proposed Findings of Fact

At the request of PUC staff Xcel Energy submits the enclosed DRAFT proposed findings of fact (FOF) for the Black Dog Natural Gas Pipeline Project route permit. As we continue to address public comments Xcel Energy may also add additional proposed findings.

Public Comments

Comments regarding impacts to water resources and associated protected species from LMRWD, MN DNR, City of Burnsville, and Gilman Dadrack, Burnsville Resident:

Xcel Energy is currently drafting a report to address a number of questions that were raised during the public comment period regarding any potential for the Project to impact water resources and associated protected species (fen plants, Blanding's turtles) in the area. The report will provide additional detail regarding the Project's impacts to ground and surface waters and will be filed to the docket shortly.

As noted in the route permit application, and at the November 2, 2016 Public Information Meeting, Xcel Energy will develop a Stormwater Pollution Prevention Plan (SWPPP) and will get a NPDES General Stormwater Permit from the Minnesota Pollution Control Agency prior to the start of any ground disturbing activities. Xcel Energy will submit a draft of the SWPPP to the Lower Minnesota River Watershed District for review prior to submitting it to the MPCA.

Comments regarding the use of native plants in restoration – MN DNR, City of Burnsville:

Xcel Energy will work with the City of Burnsville Parks and Recreation Department staff, with input from DNR staff, on development of a restoration plan which incorporates native plants to the extent practicable.

MN Department of Transportation comments regarding alignment:

Xcel Energy has had ongoing communication with MN DOT staff beginning prior to filing of the route permit application. As noted in the DOT's November 15 letter Xcel Energy has met with DOT staff to discuss their concerns and we will work with them on development of the accommodation permit and exception request. As noted in Xcel Energy's October 26 update on the anticipated alignment, the change in the Highway 13 crossing is due horizontal and vertical angles needed to drill and install pipe.

City of Burnsville comments on the updated alignment:

Xcel Energy staff has had multiple communications with Burnsville staff to answer questions and address concerns regarding the proposed alignment update. As stated in our November 16 filing regarding additional information on the updated alignment, based on comments from the public and City staff engineers have been directed to shift the pipeline closer to the electric transmission lines to increase the distance from homes.

On Friday November 18 we held a call with City staff to review pipeline safety related to construction and operations and maintenance, which was presented at the Public Information Meeting, and to answer any additional questions. In this call we also addressed the discussions between Xcel Energy and US Fish and Wildlife staff regarding the evaluated northern route which would have crossed FWS owned land. As noted in the route permit application, the FWS assured Xcel Energy that a finding of Appropriate Use would not be reasonable and a crossing would not be granted. We have provided Burnsville staff with FWS contacts so they can independently confirm this information.

As noted above a report on water resource impacts will be filed shortly. Xcel Energy will review all comments filed and post any additional reply comments, as needed, prior to the comment period closing on November 30, 2016 at 4:30.

Please contact Ellen Heine at ellen.l.heine@xcelenergy.com or 612-330-6073 if you have questions or would like further information regarding this matter.

Sincerely,



Ellen Heine
Xcel Energy
Sr. Land Agent

Xcel Energy November 16, 2016 filing:

Additional Information on Anticipated Pipeline Alignment
and Construction Impacts for the Black Dog Natural Gas
Pipeline Project



414 Nicollet Mall
Minneapolis, MN 55401

November 16, 2016

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

**RE: Additional Information on Anticipated Pipeline Alignment and Construction
Impacts for the Black Dog Natural Gas Pipeline Project
Docket No. G002/GP-16-656**

Dear Mr. Wolf:

On August 18, 2016 Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, submitted an Application for a Route Permit for the Black Dog Natural Gas Pipeline Project (Project) pursuant to Minnesota Rules Chapter 7852.0600. On October 26th an update on the anticipated alignment based on more detailed engineering was filed to the docket. The purpose of this filing is to provide some additional information on the updated anticipated pipeline alignment.

As described in the alignment update filed on October 26th the anticipated alignment of the pipeline within the City of Burnsville/electric transmission line corridor was shifted to the southwest side of that corridor due to the presence of an existing storm sewer running down the center of much of that corridor. At the Public Information Meeting on November 2nd there were questions raised as to how this alignment shift might impact landowners along that corridor as well as vegetation clearing on Burnsville property. Staff from the City of Burnsville also has similar questions following the meeting.

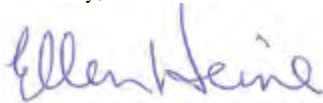
Enclosed are two map sets showing the updated alignment from Highway 13 to the railroad corridor. The first set shows the approximate alignment and associated preliminary 40 foot right-of-way. Initial engineering drawings included some locations where the pipeline was less than 20 feet from private property lines. This was based on some pipeline curvature constraints and existing Xcel Energy standards for offset distances from electric transmission lines. This preliminary alignment did not include any temporary or permanent construction impacts on private property, and Xcel Energy planned to request a narrower right-of-way in these locations. However, based on comments received, the project team has evaluated further and determined that the line can be shifted closer to the electric transmission lines without consequences to the pipeline. This shift will place the pipeline 20 feet or more from all private properties within this corridor.

The second map set shows that same proposed alignment along with locations where tree clearing is anticipated for project construction and maintenance. While there will be some clearing needed along the southwest side of the corridor, that clearing will be limited as much as possible to the proposed 40 foot wide right-of-way. No tree clearing is planned to accommodate temporary construction activities. In the route permit application, *Section 6.2 Temporary Rights-of-Way* we described the need for a wider temporary construction corridor in some locations. This is due to the fact that the terrain within this corridor is variable and often very steep. In some cases access along the center or northeast side would be more feasible, and there is currently an unimproved two track path running along the corridor for approximately 1500 feet of its length, which would likely be used for construction access. Some pictures of the corridor showing the two track path and terrain are enclosed with this filing.

Please note, the Xcel Energy Vegetation Management group currently maintains vegetation clearances within this corridor for the existing electric transmission and distribution lines. Crews were out in October to remove any incompatible trees as part of the regular 4 year maintenance cycle. Some of this clearing overlaps the area proposed as pipeline right-of-way, however the clearing the recently took place was only related to the power lines.

Please contact me at ellen.l.heine@xcelenergy.com or 612-330-6073 if you have questions or would like further information regarding this matter.




Sincerely,




Ellen Heine
Sr. Land Agent
Xcel Energy



Black Dog Natural Gas Pipeline Proposed Alignment and Right-of-Way

-  Parcel Boundaries
-  Proposed Pipeline Alignment
-  Proposed 40 foot right-of-way

N


0 50 100 200 Feet

CITY OF BURNSVILLE

CITY OF BURNSVILLE

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CITY OF BURNSVILLE

Highway 13

CITY OF
BURNSVILLE

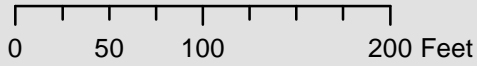
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Black Dog Natural Gas Pipeline Proposed Alignment and Right-of-Way

- Parcel Boundaries
- Proposed Pipeline Alignment
- Proposed 40 foot right-of-way





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Black Dog Natural Gas Pipeline Proposed Alignment and Right-of-Way

-  Parcel Boundaries
-  Proposed Pipeline Alignment
-  Proposed 40 foot right-of-way

N


0 50 100 200 Feet



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Highway 13

Black Dog Natural Gas Pipeline Proposed Alignment and Anticipated Tree Clearing

-  Anticipated Tree Clearing
-  Parcel Boundaries
-  Proposed Pipeline Alignment



0 50 100 200 Feet




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Black Dog Natural Gas Pipeline Proposed Alignment and Anticipated Tree Clearing

-  Anticipated Tree Clearing
-  Parcel Boundaries
-  Proposed Pipeline Alignment



0 50 100 200 Feet



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Black Dog Natural Gas Pipeline Proposed Alignment and Anticipated Tree Clearing

-  Anticipated Tree Clearing
-  Parcel Boundaries
-  Proposed Pipeline Alignment



0 50 100 200 Feet





Proposed alignment looking northwest from River Hills Dr.



Tree that will need to be removed within proposed alignment.



Two-track maintenance road running between existing transmission lines (proposed pipeline alignment is up to the left (NW))



Looking up to the NW toward proposed alignment from two-track maintenance road



View back to the SE from bluff above railroad tracks, maintenance road visible in the distance between transmission line poles

Xcel Energy August 22, 2016 filing:

Revision to Application for a Route Permit for the Black
Dog Natural Gas Pipeline Project



414 Nicollet Mall
Minneapolis, MN 55401

August 22, 2016

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: **Revision to Application for a Route Permit for the Black Dog Natural Gas Pipeline Project, Docket No. G002/GP-16-656**

Dear Mr. Wolf:

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, respectfully filed an Application for a Route Permit for the Black Dog Natural Gas Pipeline Project (Project) on August 18, 2016. After the application was filed Xcel Energy noted an error on page 9-2 as described below.

In Section 9.1.3 Wetlands, the application indicated that a National Wetlands Inventory (NWI) review was done and that no NWI wetlands were identified within the proposed pipeline route. This was an error as NWI wetlands were identified in the lowland area around Black Dog Lake. **Figure 9 - Water Resources** did show these wetlands and **Table 6 – Proposed Pipeline Wetland Cover** on page 9-2 correctly identified the total number of acres of wetland within the proposed right-of-way. A revised page 9-2 is enclosed with this letter with corrected language describing the wetland review. **Figure 9** is also included for reference.

Please contact me at ellen.l.heine@xcelenergy.com or 612-330-6073 if you have questions or would like further information regarding this matter.

Sincerely,

A handwritten signature in blue ink that reads 'Ellen Heine'.

Ellen Heine
Xcel Energy
Sr. Land Agent

9.1.2 Soils

Potential temporary impacts to soils resulting from construction of the Project include soil erosion, soil compaction, loss of soil productivity associated with mixing of topsoil, introduction of rock into the topsoil, and poor revegetation following construction. In order to protect topsoil resources topsoil segregation procedures will be used as required in areas specified by applicable regulations, permit conditions or landowner requests. An erosion control plan will be developed pursuant to the MPCA NPDES Construction Storm Water Discharge Permit. Temporary erosion controls will include slope breakers, mulching, and the use of silt fence. Following construction, application of seed, fertilizer and mulch will commence in accordance with any existing permit requirements or landowner agreements. Inspector(s) will be used to ensure contractor compliance with these procedures.

9.1.3 Water Resources

Surface Waters

The Project is located within the Lower Minnesota River watershed within the Minnesota River Basin. A watershed is defined as the entire physical area or basin drained by a distinct stream or riverine system, physically separated from other watersheds by ridgetop boundaries. No surface waters will be impacted by the Project, including those listed on the MN DNR's Public Waters Inventory (PWI). The Project will directionally drill under Black Dog Lake, which is a PWI basin. Xcel Energy will coordinate with MN DNR to obtain a Public Water Crossing License for crossing this water feature. **Figure 8** illustrates waterbodies and wetlands that were identified and discussed in this section.

Wetlands

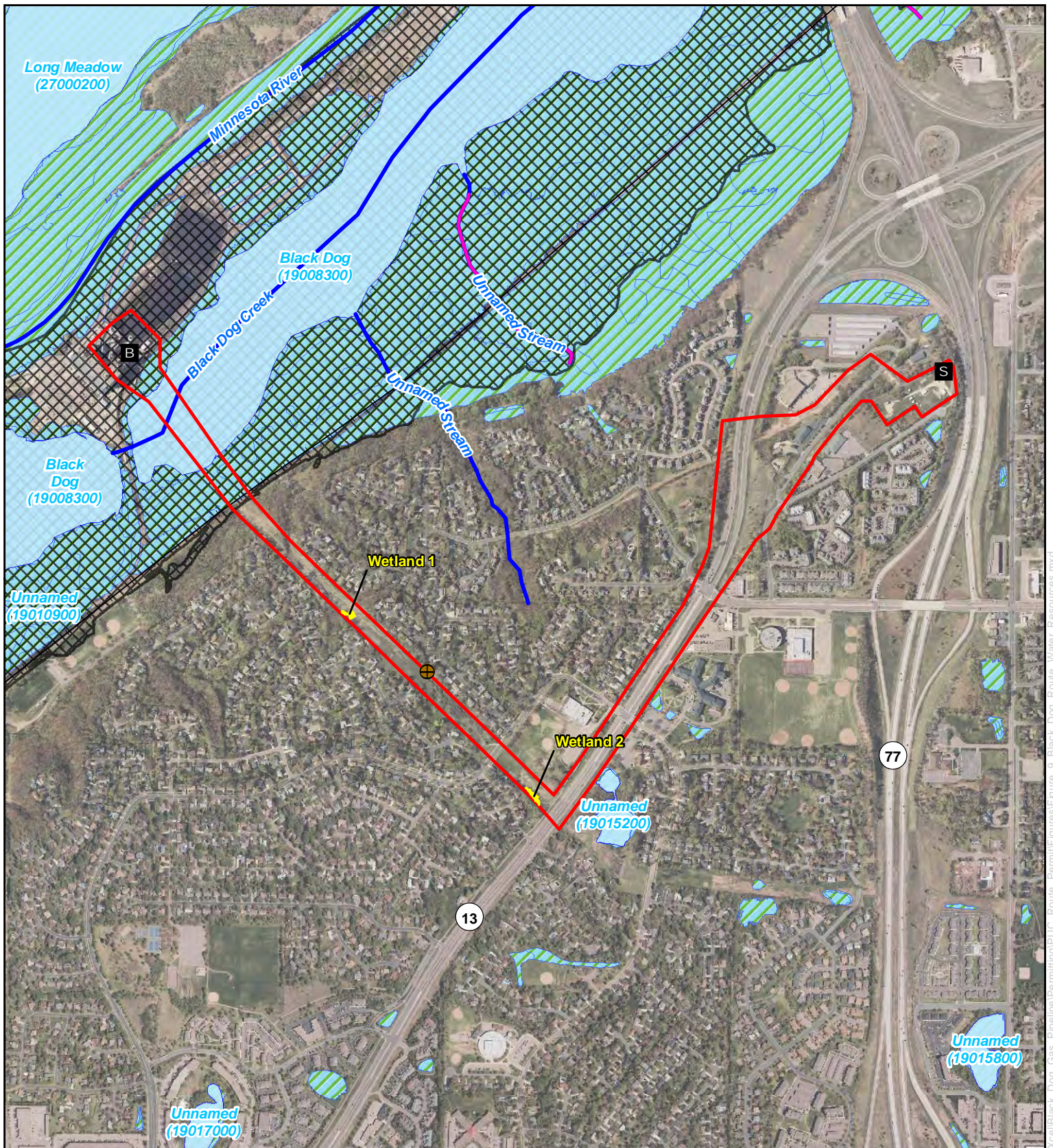
Wetland areas were initially identified using National Wetlands Inventory (NWI) data to assess wetlands that may be present within the proposed pipeline route. Merjent, Inc., on behalf of Xcel Energy, also conducted a wetland delineation within the anticipated alignment. Two additional palustrine emergent (PEM) wetlands were identified, both in the electric transmission line right-of-way (**Figure 9**). Wetlands identified are shown in **Table 6**.

Table 6—Proposed Pipeline Wetland Cover

<i>Wetland Category</i>	Anticipated Alignment	
	<i>Acres</i>	<i>Percent</i>
PEM	0.38	27.3%
L2U	0.49	35.3%
PFO	0.28	20.1%
PSS	0.24	17.3%
Totals:	1.39	100.0%

The U.S. Army Corps of Engineers (COE) and the City of Burnsville regulate construction activities in wetlands. Xcel Energy will submit the wetland delineation report to COE and Burnsville and coordinate impacts and potential mitigation as appropriate.

Groundwater



0 600 1,200 Feet
1 inch = 1,200 feet



Figure 9
Water Resources
Xcel Energy Black Dog
Gas Pipeline Project

- | | | | |
|----------|----------------------------|--|--------------------------|
| B | Black Dog Generation Plant | | Floodplain |
| S | Cedar Station | | NWI |
| | Proposed Pipeline Route | | Abandoned Well (CWI) |
| | Field Delineated PEM | | Public Water Watercourse |
| | Designated Trout Stream | | Public Waters Basins |
| | Public Water Watercourse | | |
| | Public Waters Basins | | |