GREAT RIVER ENERGY™

12300 Elm Creek Blvd • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • www.greatriverenergy.com

June 9, 2015

VIA eMAIL: Andrew_Horton@FWS.gov

Mr. Andrew Horton, Habitat Conservation Biologist
United States Department of the Interior
Fish and Wildlife Service
Twin Cities Field Office
4101 American Blvd. East
Bloomington, MN 55425-1665

RE: Proposed Palisade 115 kV Transmission Project - Cass County

Dear Mr. Horton:

Great River Energy is currently gathering data to be used in preparation of a regulatory application necessary to obtain approval to construct the proposed Palisade 115 kilovolt (kV) Transmission Project (Project) in Cass County (see enclosed fact sheet and map). Great River Energy intends to seek a Route Permit for the Project from the Minnesota Public Utilities Commission. The proposed Project is needed to provide power to a new petroleum pump station (Palisade Pump Station) being proposed by Enbridge Energy (Enbridge).

The Project will include approximately 13 miles of 115 kV transmission line (see fact sheet map). The new line will begin near 390th Street and U.S. Hwy 169 at a new breaker station connected to the existing Minnesota Power 115 kV transmission line. The line will generally follow adjacent to Hwy 169 approximately 13 miles north to the new pump station near 510th Land and Hwy 169. In most cases, round wood transmission structures will be used that will range in height from 70 to 80 feet above ground.

The Fish and Wildlife Service website list for threatened and endangered species in Cass County includes the Canada lynx, Gray wolf, and the Northern long-eared bat (NLEB). Great River Energy does not believe the proposed transmission project will affect either the lynx or gray wolf, or the NLEB.

The U.S. Fish and Wildlife Service recently issued a final 4(d) rule on the northern long-eared bat. While the current DNR Natural Heritage Information System database does not list the bat in the vicinity of the project, we believe impacts to any bats present in the vicinity will be minimal because right-of-way clearing is scheduled to be completed January – April 2017; the final rule includes a conservation plan that limits tree removal work between June 1 to July 31.

As part of Enbridge's project, they used desktop analysis to identify areas of potentially suitable NLEB habitat along its preferred pipeline route both west and east of Clearbrook, MN. Data from this analysis were used to select survey target sites, which were reviewed and approved by the FWS prior to survey. Enbridge conducted presence/absence acoustic surveys in proximity to the Palisade Pump Station Project area between June 7 and July 25, 2014. Because this survey was conducted for pipeline permitting purposes (not transmission line permitting purposes), it only covered approximately the northern 3.5 miles of the transmission line Project area. There were 5 acoustic positives within 5 miles of linear survey in either direction of the Palisade Pump Station/transmission line Project area. The nearest NLEB acoustic detection was approximately 0.4 miles east of the transmission line, in Aitkin County. Of the eight follow-up mist net surveys conducted within this area, seven had positive NLEB captures. Follow-up telemetry surveys resulted in positive identification of two maternity roost trees, the closest being approximately 0.9 miles to the north of the Palisade Pump Station.

The DNR Rare features database indicates the following rare features intersect the proposed Project (see enclosed rare features map):

- Wilson's Phalarope (threatened)
- Yellow Rail (special concern)
- Upland Sandpiper (watch list)

Great River Energy is requesting concurrence or information on the possible effects of the proposed project on any listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area.

We would appreciate receiving any written comments from your office by Monday, July 13, 2015. If you have any questions about this proposed project, please contact me at (763) 445-5210 or MStrohfus@GREnergy.com.

Thank you for your attention to this important project.

Sincerely,
GREAT RIVER ENERGY

Mark Strohfus
Environmental Projects Lead

Enclosures: Fact Sheet/Project Map; Rare Features Map

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Palisade 115 kV Transmission Project

GREAT RIVER ENERGY
12300 Elm Creek Blvd
Maple Grove, MN 55369-4718
1-888-521-0130
www.greatriverenergy.com

MILLE LACS ENERGY COOPERATIVE
PO Box 230
Aitkin, MN 56431
1-800-450-2191
www.mlecmn.net

Project Need

Great River Energy, wholesale electric supplier to Mille Lacs Energy Cooperative and 27 other electric cooperatives, proposes to construct a new overhead 115 kilovolt (kV) transmission line and breaker station that is needed to provide electric power to a new petroleum pump station being proposed by Enbridge Energy (Enbridge). The Enbridge pump station is part of a pipeline replacement project that will require permits from the Minnesota Public Utilities Commission before it can be constructed.

Proposed Project

Two route options are proposed for the transmission line to provide alternatives for crossing the Mississippi River (see map on back).

East option

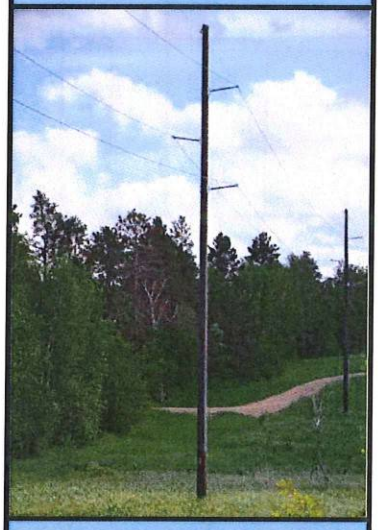
Under the East option the 13-mile transmission line would originate at a new breaker station proposed near the intersection of 390th Street and U.S. Highway 169. From there the route will follow Hwy 169 north for 13 miles, crossing the Mississippi River adjacent to Hwy 169 and terminating at the pump station location on the east side of Hwy 169 at 510th Lane.

West option

Under the West option the 13.5-mile transmission line would follow Hwy 169 from the proposed breaker station location and turn west on 430th Street. The route would continue for one-half mile to the termination of 430th Street. From here the route would follow a property line northwest across the Mississippi River to County Road 21. The route would follow County Road 21 for 1.2 miles back to Hwy 169 and north to the pump station location.

The proposed transmission line will consist of wood poles that are 350 to 400 feet apart and 70 to 80 feet above ground. Guy wires and anchors, when necessary, will be used to stabilize poles. Some specialty poles may also be required. The new transmission line will require a 100-foot-wide right of way, 50 feet on each side of the centerline. The opportunity to share road right of way along Hwy 169 will minimize easement requirements. Trees and vegetation in the right of way will be removed to provide a safe construction, operation and maintenance area.

Typical Transmission Breaker Station



Typical 115 kV Wood Transmission Structure

Permitting

Great River Energy will submit a route permit application for the proposed Project to the Minnesota Public Utilities Commission (MPUC). During the route permit process, the public and regulatory agencies will have numerous opportunities to provide input on the proposed Project, including public meetings facilitated by the MPUC and Department of Commerce Energy Environmental Review and Analysis (DOC EERA) staff. The DOC EERA will prepare an Environmental Assessment (EA) for the Project. Construction cannot begin until an approved route permit is granted by the MPUC.

Easements/Trees

Once the Project has been approved, Great River Energy will contact landowners to present an easement and offer of compensation. At that time, information will be shared on tree removal, construction access and practices, and restoration of the right of way.

Project Schedule

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Project permitting	Summer 2015 to spring 2016
Survey/design	1st quarter 2016
Easement acquisition/right-of-way permits	Summer/fall 2016
Transmission line construction	Starts 2nd quarter 2017
Energization	Winter 2017/2018

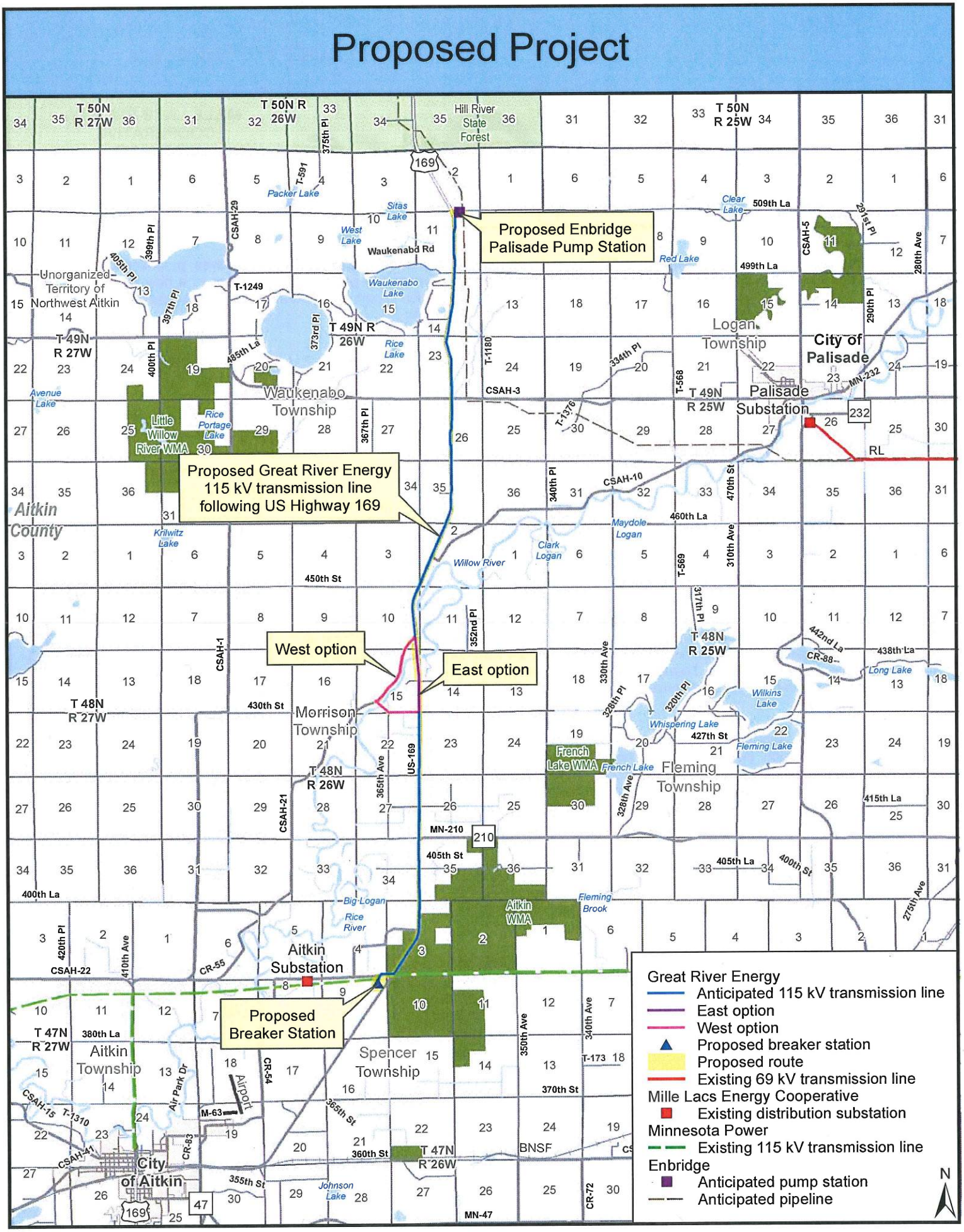
For project updates and information, visit greatriverenergy.com/palisade or contact:

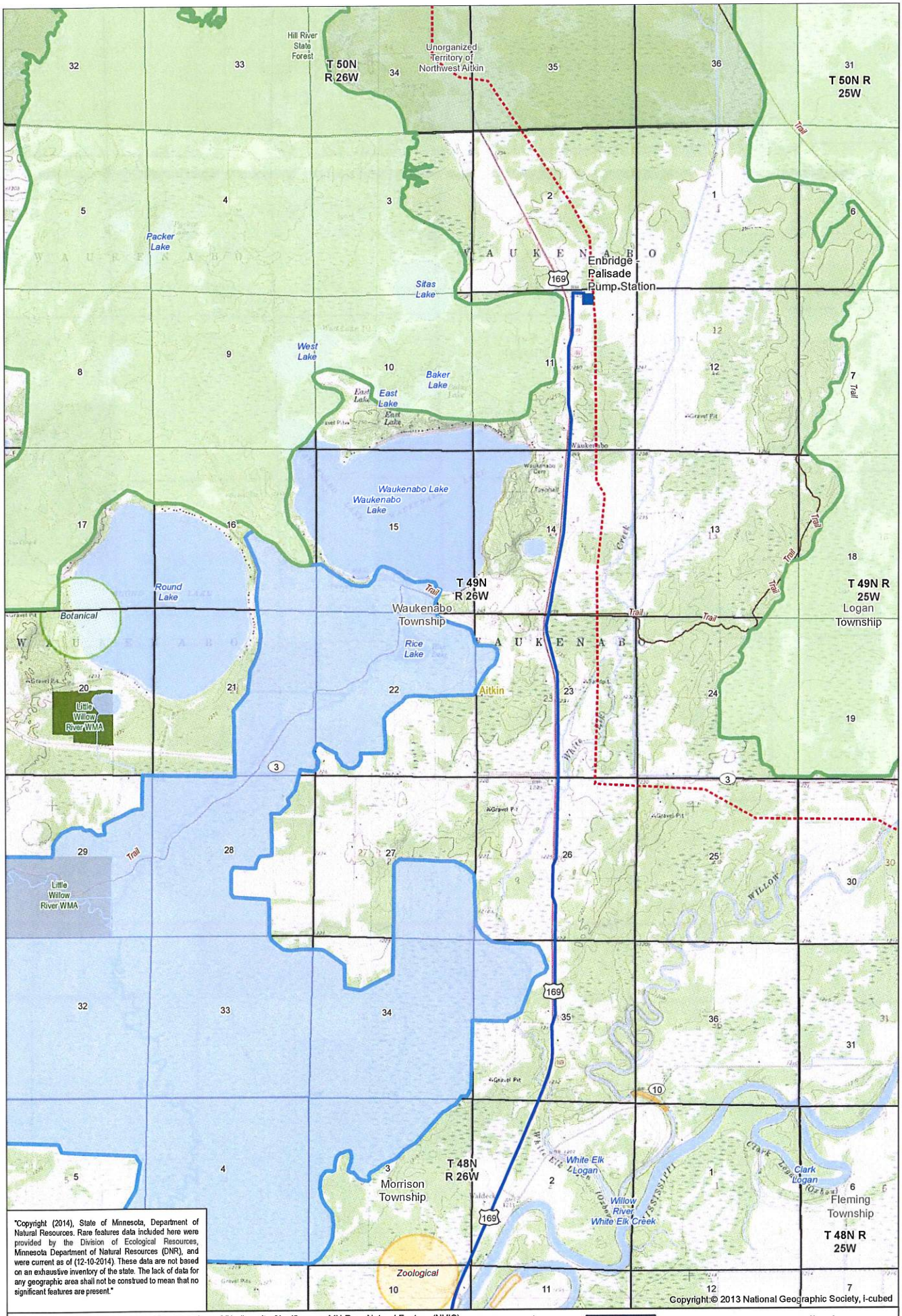
Dan Lesher
Sr. Field Representative
Great River Energy – Transmission Land Rights
(763) 445-5975 or (612) 817-9910
dlesher@grenergy.com

Mark Strohfus
Environmental Project Lead
Great River Energy
(763) 445-5210
mstrohfus@grenergy.com

Date last revised: 6/8/2015

Proposed Project





"Copyright (2014), State of Minnesota, Department of Natural Resources. Rare features data included here were provided by the Division of Ecological Resources, Minnesota Department of Natural Resources (DNR), and were current as of (12-10-2014). These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present."

Great River Energy
- Proposed 115 kV Transmission Line

Enbridge
- Proposed Pump Station
- Proposed Pipeline

MN Sites of Biodiversity Significance
Biodiversity Significance
- High
- Moderate

MN Rare Natural Feature (NHIS)
Protection Status
- Special Concern
- Not listed

0 1,000 Feet

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy
Topo from: ESRI World Topographic Basemap service
Map Projection: UTM, NAD83, Zone15, Meters

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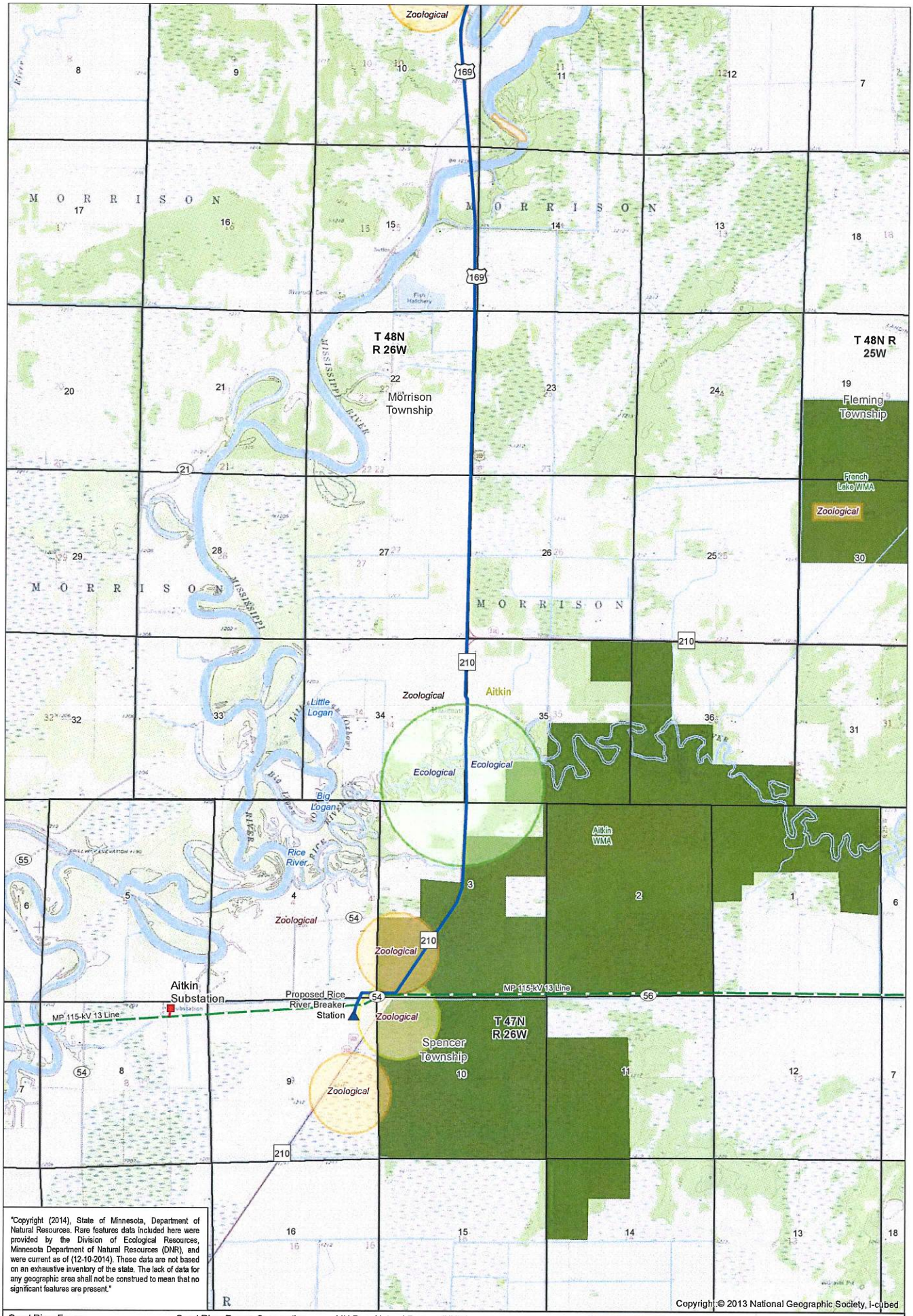
GREAT RIVER ENERGY™

Palisade Transmission Project
North Map
Rare Features

Updated: 6/8/2015



Great River Energy
- Proposed 115 kV Transmission Line
- Existing 115 kV Transmission Line
- Proposed Breaker Station

Great River Energy Cooperative
- Existing Distribution Substation

Minnesota Power (MP)
- Existing 115 kV Transmission Line

MN Rare Natural Feature (NHIS) Protection Status
- Special Concern
- Threatened
- Not listed

0 1,000 Feet

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy
Topo from: ESRI World Topographic Basemap service
Map Projection: UTM, NAD83, Zone15, Meters

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GREAT RIVER ENERGY™

Palisade Transmission Project South Map Rare Features

Updated: 6/8/2015

Strohfus, Mark GRE-MG

From: Strohfus, Mark GRE-MG
Sent: Sunday, August 09, 2015 11:10 AM
To: 'Horton, Andrew'
Cc: Schmidt, Carole GRE-MG
Subject: FW: Palisade 115 kV Project - Request for Review
Attachments: USFWS ltr - Palisade.pdf; Palisade fact sheet_20150608.pdf; Palisade_RareFeatureMap11x17_20150608.pdf; Palisade 115 kV Transmission Line [Rare Features Report]; NLEB Locations Map 2.pdf

Andrew,

On June 1, 2015, I sent you a request for comments on Great River Energy's proposed Palisade 115 kV Project. I have not yet received your response. I would like to submit our route permit application, including your comments, to the Public Utilities Commission the week of August 17th. **Your comments would be greatly appreciated on or before Wednesday, August 13, 2015.**

My original request is attached plus the recent results of the MN DNR NHIS review. You'll note that they have identified the NLEB within ¼ mile of the project (see NLEB Locations Map2.pdf).

The Project will also require a US Army Corps of Engineers Section 10 Permit because the proposed transmission line will cross the Mississippi River, a Section 10 listed water.

The Project schedule currently has tree clearing activities schedule for January through April or 2016.

If you have any questions, please contact me or Carole Schmidt (763-445-5214).

Thank You,

Mark Strohfus
Environmental Project Lead
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369-4718
Tel: 763-445-5210 | Cell: 612-961-9820
MStrohfus@GREnergy.com

From: Strohfus, Mark GRE-MG
Sent: Tuesday, June 09, 2015 3:15 PM
To: 'Horton, Andrew'
Subject: Palisade 115 kV Project - Request for Review

Mr. Horton:

Great River Energy request FWS review for our proposed Palisade 115 kV Project in Cass County, Mn. We respectfully request your review and response by Monday, July 13, 2015.

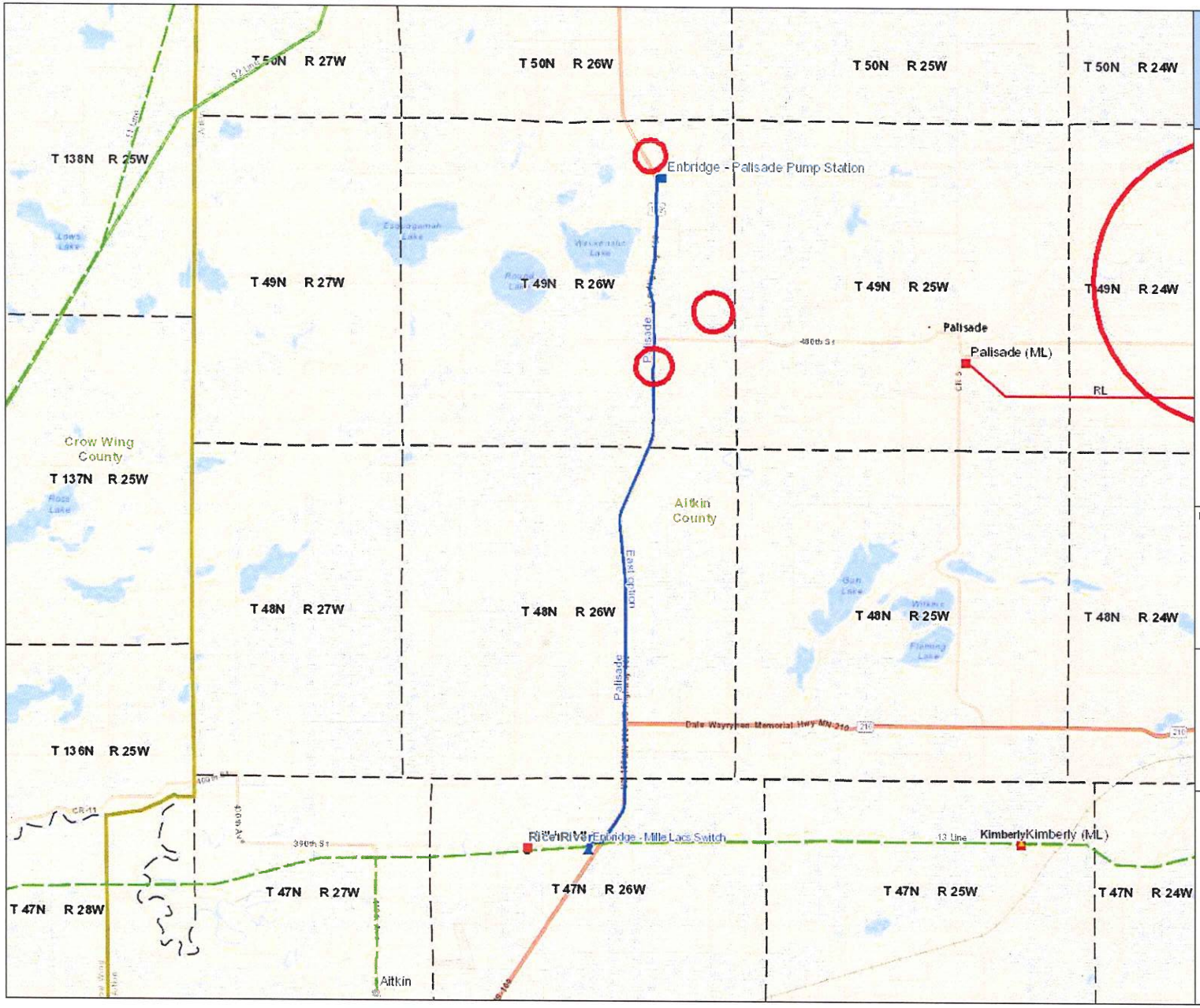
Attached are:

- Letter requesting FWS review

- Project Fact Sheet
- DNR NHIS Rare Features Map

If you have any questions about the project or our request for review, please contact me.

Sincerely,
Mark Strohfus
Environmental Project Lead
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369-4718
Tel: 763-445-5210 | Cell: 612-961-9820
MStrohfus@GREnergy.com



Great River Energy Enterprise GIS Map

Standard Mapviewer

Facility Site Locations
(Green is Foreign Owned)
- Generation Site
- Transmission Substation
- Breaker Station
- Switch Station
- GRE EQ in Foreign Sub
- Communication Site
- Capacitor Site
- Electrode Site
- Distribution Substation Site
- Headquarters
- Office
- Outpost
- Cooperative Office
- Cooperative Outpost

Facility Equipment Assets
(Grey is Foreign Owned)
- Breaker
- Substation Switch
- Capacitor
- Reactor
- Miscellaneous Device
- Transformer
- Ground-Fault Neutralizer
- Electrode
- Meter
- Generating Unit

Transmission Line Locations
By Voltage (Green is foreign Owned)
- Under 15-kV AC Line
- 23-kV AC Line
- 34.5-kV AC Line
- 41.6-kV AC Line
- 46-kV AC Line
- 57-kV AC Line
- 69-kV AC Line
- 115-kV AC Line
- 138-kV AC Line
- 16-kV AC Line
- 230-kV AC Line
- 250-kV DC Line
- 345-kV AC Line
- 400-kV DC Line
- 500-kV AC Line
- Busbar
- Joint Use Line
- Switch Site

Line Equipment Assets
- Structure Location
- Fault Indicator
- Line Switch
- Control Area Tie Meter

Land Information
- Easement Area

Northern Long-Eared Bat Locations

0 9,500 19,000 38,000 Feet

0 1.75 3.5 7 Miles

Author: Great River Energy
Date Produced: 8/8/2015
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the

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GREAT RIVER ENERGY
A Touchstone Energy Cooperative

Strohfus, Mark GRE-MG

From: Horton, Andrew [andrew_horton@fws.gov]
Sent: Thursday, August 13, 2015 3:12 PM
To: Strohfus, Mark GRE-MG; Schmidt, Carole GRE-MG
Subject: Re: FW: Palisade 115 kV Project - Request for Review

Mark,

Sorry for the delay. I have been caught up on way too many projects for one person.

I have reviewed the project area and description of the proposed action. Whether there will be a likely affect to the northern long-eared bat depends on the amount of suitable roosting habitat that will be removed as a result of this project. Based on our records, there is one known roost tree within 0.25 miles of your project area, however we anticipate the NLEB to be present along the entirety of this route where suitable habitat occurs. Conducting the forest clearing between January and April 2017 will greatly reduce the likelihood of direct take of the species, however, any clearing in the month of April runs an increased chance that NLEB will be present within the project area.

If tree removal associated with this project is small and there is no clearing between April 1 and September 30th, then a no effect determination may be possible. Given this type of project however, I believe that the action will probably fall under a "may affect, but not likely to adversely affect" determination (but that is up to the US Army Corps to decide). Remember that regardless of whether the project fits under the 4(d) Rule, if there is a federal action, the federal action agency will need to make their determination of impacts under the Endangered Species Act.

- Andrew

Andrew Horton
Twin Cities Ecological Services Field Office
U.S. Fish and Wildlife Service
4101 American Blvd East
Bloomington, MN 55425-1665
(612) 725-3548 ext. 2208

On Sun, Aug 9, 2015 at 11:09 AM, Strohfus, Mark GRE-MG <MStrohfu@grenergy.com> wrote:

Andrew,

On June 1, 2015, I sent you a request for comments on Great River Energy's proposed Palisade 115 kV Project. I have not yet received your response. I would like to submit our route permit application, including your comments, to the Public Utilities Commission the week of August 17th. **Your comments would be greatly appreciated on or before Wednesday, August 13, 2015.**

My original request is attached plus the recent results of the MN DNR NHIS review. You'll note that they have identified the NLEB within ¼ mile of the project (see NLEB Locations Map2.pdf).

The Project will also require a US Army Corps of Engineers Section 10 Permit because the proposed transmission line will cross the Mississippi River, a Section 10 listed water.

The Project schedule currently has tree clearing activities schedule for January through April or 2016.

If you have any questions, please contact me or Carole Schmidt (763-445-5214).

Thank You,

Mark Strohfus

Environmental Project Lead

Great River Energy

12300 Elm Creek Boulevard

Maple Grove, MN 55369-4718

Tel: 763-445-5210 | Cell: 612-961-9820

MStrohfus@GREnergy.com

From: Strohfus, Mark GRE-MG
Sent: Tuesday, June 09, 2015 3:15 PM
To: 'Horton, Andrew'
Subject: Palisade 115 kV Project - Request for Review

Mr. Horton:

Strohfus, Mark GRE-MG

From: Strohfus, Mark GRE-MG
Sent: Tuesday, June 09, 2015 9:16 AM
To: 'Review.NHIS@state.mn.us'
Subject: Palisade 115 kV Project - NHIS Data Request (Message 1 of 2)
Attachments: DNR ltr Palisade.pdf; Palisade fact sheet_20150608.pdf; DNR Maps.zip

Ms. Joyal,

Great River Energy request NHIS data review for our proposed Palisade 115 kV Project in Aitkin County. Please find attached in two separate email message (to keep message sizes < 10 MB) a:

- Project cover letter (1 of 2)
- Project fact sheet (1 of 2)
- Zipped rare features and hydrologic feature maps (1 of 2)
- NHIS data review request (2 of 2)
- Shape files for the proposed transmission line route (2 of 2)

We would appreciate your findings by July 13, 2015 so that we may incorporate them into our Route Permit Application to the Mn Public Utilities Commission.

If you or your staff have any questions on the data request or project, please contact me.

Sincerely,
Mark Strohfus
Environmental Project Lead
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Maple Grove, MN 55369-4718
Tel: 763-445-5210 | Cell: 612-961-9820
MStrohfus@GREnergy.com

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June 9, 2015

Ms. Lisa Joyal
Minnesota Department of Natural Resources
Natural Heritage and Nongame Research Program
500 Lafayette Road, Box 25
St. Paul, MN 55155

VIA eMAIL

RE: Proposed Palisade 115 kV - Cass County
NHIS Data Request

Dear Ms. Joyal:

Great River Energy is currently gathering data to be used in preparation of a regulatory application necessary to obtain approval to construct the proposed Palisade 115 kilovolt (kV) Transmission Project in Cass County (see enclosed fact sheet and map). Great River Energy intends to seek a Route Permit for the Project from the Minnesota Public Utilities Commission (PUC). The proposed Project is needed to provide power to a new petroleum pump station (Palisade Pump Station) being proposed by Enbridge Energy.

The Project will include approximately 13 miles of 115 kV transmission line (see fact sheet map). The new line will begin near 390th Street and U.S. Hwy 169 at a new breaker station connected to the existing Minnesota Power 115 kV transmission line. The line will generally follow adjacent to Hwy 169 approximately 13 miles north to the new pump station near 510th Land and Hwy 169. In most cases, round wood transmission structures will be used that will range in height from 70 to 80 feet above ground.

The transmission line will cross the Rice River, Mississippi River and two crossings of an unnamed stream (see enclosed hydrologic features map). There are also numerous wetlands adjacent to Hwy 169. Great River Energy will apply to the DNR for the water crossing license after the PUC issues a route permit.

The DNR Rare features database indicates the following rare features intersect the proposed Project (see enclosed rare features map):

- Wilson's Phalarope (threatened)
- Yellow Rail (special concern)
- Upland Sandpiper (watch list)

The U.S. Fish and Wildlife Service recently issued a final 4(d) rule on the northern long-eared bat. While the current NHIS database does not list the bat in the vicinity of the project, we believe impacts to any bats present in the vicinity will be minimal because right-of-way clearing is scheduled to be completed January – April 2017; the final rule includes a conservation plan that limits tree removal from June 1 to July 31. As part of Enbridge's project, they used desktop analysis to identify areas of potentially suitable NLEB habitat along its preferred pipeline route both west and east of Clearbrook, MN. Data from this analysis were used to select survey target sites, which were reviewed and approved by the USFWS prior to survey. Enbridge conducted presence/absence acoustic surveys in proximity to the Palisade Pump Station Project area between June 7 and July 25, 2014. Because this survey was conducted for pipeline permitting purposes (not transmission line permitting purposes), it only covered approximately the northern 3.5 miles of the transmission line Project area. There were 5 acoustic positives within 5 miles of linear survey in either direction of the Palisade Pump Station/transmission line Project area. The nearest NLEB acoustic detection was approximately 0.4 miles east of the transmission line, in Aitkin County. Of the eight follow-up mist net surveys conducted within this area, seven had positive NLEB captures. Follow-up telemetry surveys resulted in positive identification of two maternity roost trees, the closest being approximately 0.9 miles to the north of the Palisade Pump Station.

Great River Energy is requesting concurrence of its interpretation of the rare features in the vicinity and the possible effects of the new transmission line and breaker station on wetlands, threatened and endangered species, and other important state natural resources that occur in the project area. A Data Request Form and shape file are attached.

We would appreciate receiving any written comments from your office by Monday, July 13, 2015. If you have any questions about this proposed project or the data request, please contact me at 763- 445-5210 or MStrohfus@GREnergy.com.

Thank you for your attention to this important project.

Sincerely,
GREAT RIVER ENERGY

Mark Strohfus

Mark Strohfus
Environmental Projects Lead

Enclosures: Fact Sheet/Project Map; Hydrologic Features Map; Rare Features Map; Data Request Form; Shapefile

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Palisade 115 kV Transmission Project

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Energization	Winter 2017/2018

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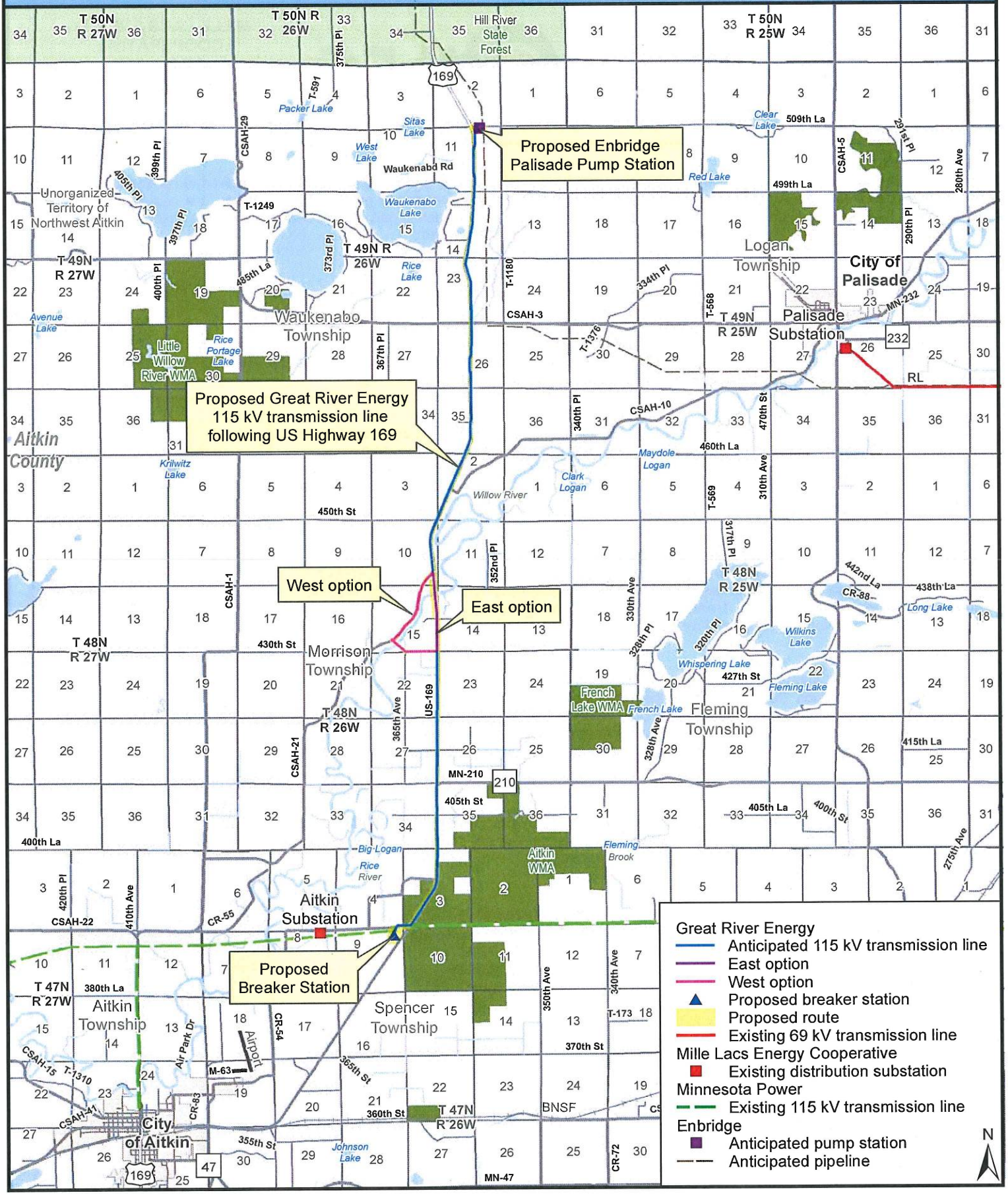
Mark Strohfus
Environmental Project Lead
Great River Energy
(763) 445-5210
mstrohfus@grenergy.com

Date last revised: 6/8/2015

Proposed Project



Strohfus, Mark GRE-MG

From: Strohfus, Mark GRE-MG
Sent: Tuesday, June 09, 2015 9:22 AM
To: 'Review.NHIS@state.mn.us'
Cc: 'Joyal, Lisa (DNR)'
Subject: FW: Palisade 115 kV Project - NHIS Data Request (Message 2 of 2)
Attachments: nhis_data_request-Palisade.pdf; PalisadeRoute.zip

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From: Strohfus, Mark GRE-MG
Sent: Tuesday, June 09, 2015 9:19 AM
To: 'Joyal, Lisa (DNR)'
Subject: Palisade 115 kV Project - NHIS Data Request (Message 2 of 2)

Ms. Joyal,

Great River Energy request NHIS data review for our proposed Palisade 115 kV Project in Aitkin County. Please find attached in two separate email message (to keep message sizes < 10 MB) a:

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- Project fact sheet (1 of 2)
- Zipped rare features and hydrologic feature maps (1 of 2)
- NHIS data review request (2 of 2)
- Shape files for the proposed transmission line route (2 of 2)

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If you or your staff have any questions on the data request or project, please contact me.

Sincerely,
Mark Strohfus
Environmental Project Lead
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369-4718
Tel: 763-445-5210 | Cell: 612-961-9820
MStrohfus@GREnergy.com

NO STAPLES PLEASE

Minnesota DEPARTMENT OF NATURAL RESOURCES

2012	For Agency Use Only:	#Sec _____ Contact Rqsted? _____
	Received _____ Due _____ Inv _____	#EOs _____ Survey Rqsted? _____
	Search Radius _____mi. L / I / D EM Map'd _____	#Com _____
	NoR / NoF / NoE / Std / Sub Let _____ Log out _____	Related ERDB# _____

NATURAL HERITAGE INFORMATION SYSTEM (NHIS) DATA REQUEST FORM

Please read the instructions on page 3 before filling out the form. Thank you!

WHO IS REQUESTING THE INFORMATION?

■ Mr. ☐ Ms.

Name and Title: Mark Strohfus

Agency/Company: Great River Energy

Mailing Address: 12300 Elm Creek Blvd, Maple Grove, MN 55369-4718
(Street) (City) (State) (Zip Code)

Phone: 763-445-5210 e-mail: MStrohfus@GREnergy.com

Responses will be sent via email. If you prefer US Mail check here: ☐

THIS INFORMATION IS BEING REQUESTED FOR A:

☐ Federal EA ☐ State EAW ☑ PUC Site or Route Application ☐ Watershed Plan ☐ BER

☐ Federal EIS ☐ State EIS ☐ Local Government Permit ☐ Research Project

☐ NEPA Checklist ☑ Other (describe) _____

☐ Check here if this project is funded through any of the following grant programs: Lessard-Sams Outdoor Heritage Council (L-SOHC), Conservation Partners Legacy (CPL), or Legislative-Citizen Commission on Minnesota Resources (LCCMR).

INFORMATION WE NEED FROM YOU:

1) **Enclose a map** of the project boundary/area of interest (topographic maps or aerial photos are preferred).

2) Please **provide a GIS shapefile*** (NAD 83, UTM Zone 15N) of the project boundary/area of interest.

3) List the following locational information* (attach additional sheets if necessary):

For Agency Use: Region / MCBS Status

For Agency Use: TRS Confirmed ☐

County	Township #	Range #	Section(s) (please list **all** sections)
Aitkin	47N	26W	3, 9, 10
Aitkin	48N	26W	2, 3, 10, 11, 14, 15, 22, 23, 26, 27, 34, 35
Aitkin	49N	26W	11, 14, 23, 26, 35

4) Please provide the following information (attach additional sheets if necessary):

Project Name: Palisade 115 kV Project

Project Proposer: Great River Energy

Description of Project (including types of disturbance anticipated from the project):

Construction of approximately 13 miles of new, 115-kV transmission line from the existing Minnesota Power 115-kV transmission to a new substation that will serve the proposed new Enbridge Palisade Pump Station. The new transmission line will connect to the existing Minnesota Power transmission line near the intersection of U.S. Hwy 169 and 390th Street in Spencer Township, Aitkin County. The new transmission line will generally follow Hwy 169 northerly for roughly 12 miles to the new pump station near Hwy 169 and 510th lane, except for an alternate crossing of the Mississippi River (the West Route Option). See the enclosed project fact sheet for a description of the alternate route option.

* Please see the instructions on page 3.

Describe the existing land use of the project site. What types of land cover / habitat will be impacted by the proposed project?

The proposed project would generally follow existing road right-of-way except for the West Route Option.

List any waterbodies (e.g., rivers, intermittent streams, lakes, wetlands) that may be affected by the proposed project, and discuss how they may be impacted (e.g., dewatering, discharge, riverbed disturbance).

The Rice River, Mississippi River, an unnamed stream in SESW 1/4 of Sect 35, T49N R26 W, and an unnamed stream in NWNE 1/4 of Sect 26, T49N R26 W would be crossed by the overhead transmission line. The proposed route also follows along Hwy 169, which is bounded by numerous wetlands.

Does the project have the potential to affect any groundwater resources (e.g., groundwater appropriation, change in recharge, or contamination)?

No.

To your knowledge, has the project undergone a previous Natural Heritage review? If so, please list the correspondence #: ERDB # _____. How does this request differ from the previous request (e.g., change in scope, change in boundary, project being revived, project expansion, different phase)?

No

To your knowledge, have any native plant community or rare species surveys been conducted within the site? If so, please list: No.

List any DNR Permits or Licenses that you will be applying for or have already applied for as part of this project:

We will be applying for a DNR License to Cross the PWI waterbodies listed above.

INFORMATION WE PROVIDE TO YOU:

1) The response will include a Natural Heritage letter. If applicable, the letter will discuss potential effects to rare features.

☐ Check here if you are interested in a list of rare features in the vicinity of the area of interest but you do **not** need a review of potential effects to rare features. Please list the reason a review is not needed:

_____

2) Depending on the results of the query or review, the response may include an Index Report of known aggregation sites and known occurrences of federally and state-listed plants and animals* within an approximate one-mile radius of the project boundary/area of interest. The Index Report and Natural Heritage letter can be included in any public environmental review document.

3) A Detailed Report that contains more information on each occurrence may also be requested. Please note that the Detailed Report may contain specific location information that is protected under *Minnesota Statutes*, section 84.0872, subd. 2, and, as such, the Detailed Report may not be included in any public document (e.g., an EAW).

☐ Check here if you would like to request a Detailed Report. Please note that if the results of the review are 'No Effects' or a standard comment, a Detailed Report may not be available.

FEES / TURNAROUND TIME

There is a fee* for this service. Requests generally take **3-4 weeks** from date of receipt to process, and are processed in the order received.

I have read the entire form and instructions, and the information supplied above is complete and accurate. I understand that material supplied to me from the Natural Heritage Information System is copyrighted and that I am not permitted to reproduce or publish any of this copyrighted material without prior written permission from the DNR. Further, if permission to publish is given, I understand that I must credit the Minnesota Division of Ecological and Water Resources, Minnesota Department of Natural Resources, as the source of the material.	
Signature **(required)**	Note: Digital signatures representing the name of a person shall be sufficient to show that such person has signed this document.

Mail or email completed form to:
Lisa Joyal, Endangered Species Review Coordinator
Division of Ecological and Water Resources
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, Minnesota 55155
Review.NHIS@state.mn.us

Form is available at
http://files.dnr.state.mn.us/eco/nhnrp/nhis_data_request.pdf

Revised March 2, 2012

* Please see the instructions on page 3.

Minnesota Department of Natural Resources

Division of Ecological and Water Resources, Box 25
500 Lafayette Road
St. Paul, Minnesota 55155-4025
Phone: (651) 259-5091 E-mail: samantha.bump@state.mn.us

August 7, 2015 **Correspondence # ERDB 20160019**

Mr. Mark Strohfus
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369-4718

RE: Natural Heritage Review of the proposed Palisade 115 kV Project, Aitkin County

Township (N)	Range (W)	Section(s)
47	26	3,9,10
48	26	2,3,10,11,14,15,22,23,26,27,34,35
49	26	11,14,23,26,35

Dear Mr. Strohfus,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (see the enclosed database report; please visit the Rare Species Guide at http://www.dnr.state.mn.us/rsg/index.html for more information on the biology, habitat use, and conservation measures of these rare species). Please note that the following **rare features *may* be adversely affected** by the proposed project:

- The Minnesota Biological Survey (MBS) has identified two Sites of Biodiversity Significance adjacent to the proposed project. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Factors taken into account during the ranking process include the number of rare species documented within the site, the quality of the native plant communities in the site, the size of the site, and the context of the site within the landscape (See enclosed map; GIS shapefiles of MBS Sites of Biodiversity Significance and MBS Native Plant Communities can be downloaded from the MN Geospatial Commons at https://gisdata.mn.gov/). In particular, there is a Sedge Meadow, an uncommon but not rare native plant community in Minnesota, adjacent to the proposed project.

  Given that activities in road rights-of-way can negatively affect adjacent native plant communities, especially through the introduction of invasive plant species, disturbance near these ecologically significant areas should be minimized. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

  - Confine construction activities to the opposite side of the road from the Sites of Biodiversity. If this is not feasible, confine construction activities to the existing road rights-of-way;
  - As much as possible, operate within already-disturbed areas;
  - Minimize vehicular disturbance in the area (allow only vehicles necessary for the proposed work);
  - Do not park equipment or stockpile supplies in the area;
  - Do not place spoil within MBS Sites or other sensitive areas;

- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- If possible, conduct the work under frozen ground conditions;
- Use effective erosion prevention and sediment control measures;
- Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; and
- Use only weed-free mulches, topsoils, and seed mixes. Of particular concern are birdsfoot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*), two invasive species that are sold commercially and are problematic in prairies and disturbed open areas, such as roadsides.

- There are several breeding records of rare birds in the vicinity of the proposed project. Potential impacts include disturbance due to construction during the nesting season and fatalities due to collisions or electrocutions. Consideration should be given to timing of construction and the use of bird diverters.

- The northern long-eared bat (*Myotis septentrionalis*), a state-listed species of special concern, can be found throughout Minnesota and is known to occur in the vicinity of the proposed project. During the winter this species hibernates in caves and mines, and during the active season (approximately April-October) it roosts underneath bark, in cavities, or in crevices of both live and dead trees. Activities that may impact this species include, but are not limited to, wind farm operation, any disturbance to hibernacula, and destruction/degradation of habitat (including tree removal).

  Effective May 4, 2015, the U.S. Fish and Wildlife Service (USFWS) listed the northern long-eared bat as threatened under the Endangered Species Act (ESA) and implemented an interim 4(d) rule. If you believe that your project may adversely affect ("take") the northern long-eared bat, you should determine whether the "take" is exempt under the interim 4(d) rule or whether you need a Federal permit. To make this determination, please refer to the USFWS Key to the Interim 4(d) Rule available at http://www.fws.gov/midwest/endangered/mammals/nleb/Interim4dRuleKeyNLEB.html. **Please note that the NHIS contains two known occurrences of northern long-eared bat tree roosts that may be within ¼ mile of the proposed project.**

- The creek heelsplitter (*Lasmigona compressa*) and the black sandshell (*Ligumia recta*), both state-listed mussels of special concern, have been documented in the Mississippi River in the vicinity of the proposed overhead crossing. As mussels are particularly vulnerable to deterioration in water quality, especially increased siltation, it is important that effective erosion and sediment control practices be implemented and maintained near the river.

- Please note that the proposed project is within the Leech Lake Reservation 1855 Treaty Area. Under federal treaties, Bands reserved rights to many resources, some of which might be identified in this review. To determine if this is the case in this review, I recommend that you contact the Band's Natural Resources Program. Failure to do so, and address the issues identified, could result in complications or delays in your project. The current contact at the Band is Steve Mortensen, Fish, Wildlife, and Plant Resources Program Director, Division of Resource Management (218-335-7421 or smortensen@lldrm.org).

- Please include a copy of this letter in any DNR license or permit application.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. **If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.**

The enclosed results include an Index Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location data, the report is copyrighted and only provides rare features locations to the nearest section. The Index Report may be reprinted, unaltered, in any environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the Index Report for any other purpose, please contact me to request written permission.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,

Samantha Bump

Samantha Bump
Natural Heritage Review Specialist

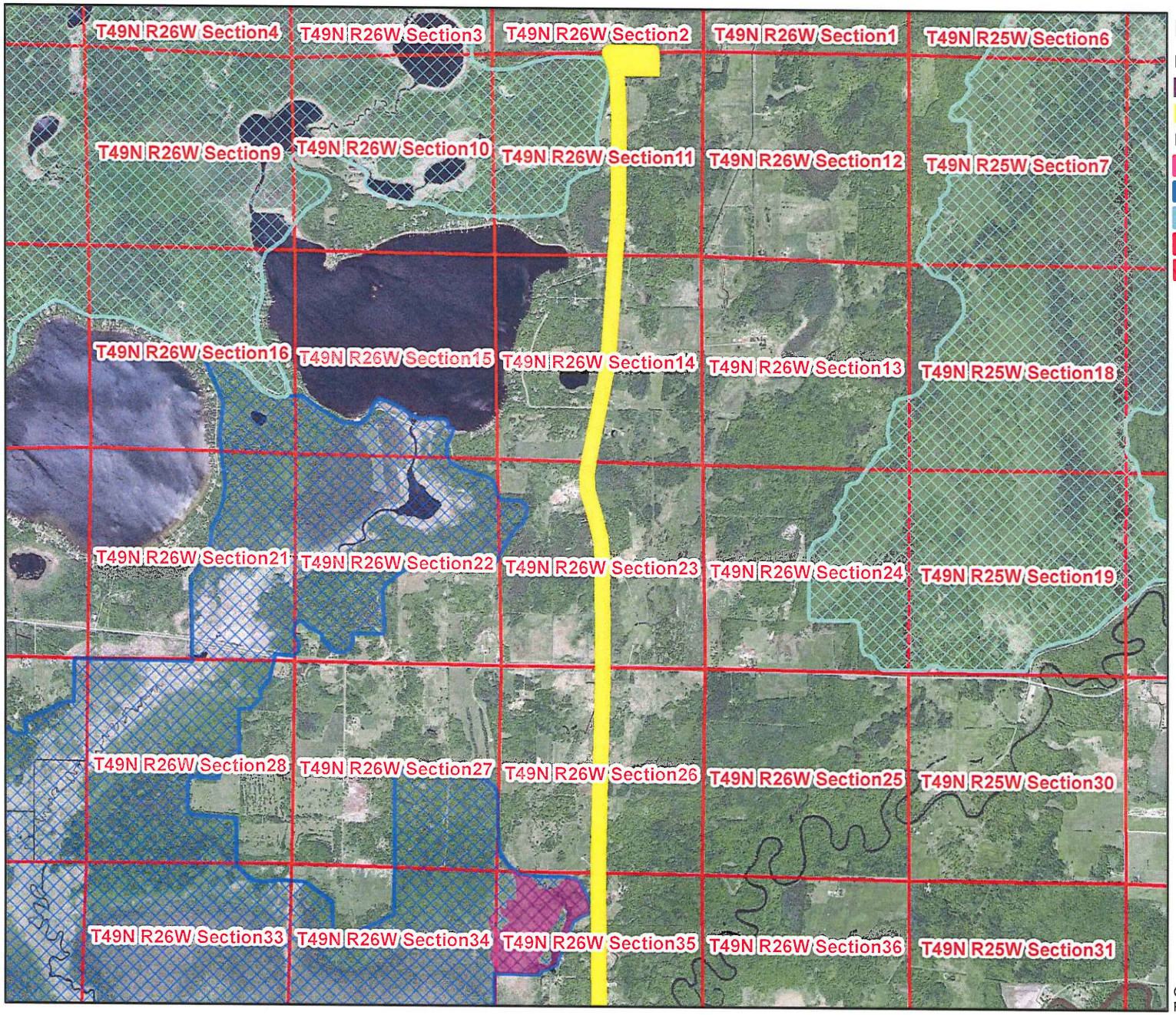
enc: Rare Features Database: Index Report
Map

Links: MBS Sites of Biodiversity Significance
http://www.dnr.state.mn.us/eco/mcbs/biodiversity_guidelines.html
DNR Native Plant Communities
http://www.dnr.state.mn.us/npc/index.html
USFWS Northern Long-eared Bat Website
http://www.fws.gov/midwest/endangered/mammals/nleb/index.html
USFWS Northern Long-eared Bat Fact Sheet
http://www.fws.gov/midwest/endangered/mammals/nleb/nlebFactSheet.html

cc: Rian Reed
Joe Rokala

ERDB# 20160019 - Palisade 115 kV Project
Multiple TRS
Aitkin County

GIS shapefiles of MBS Sites of Biodiversity Significance and DNR Native Plant Communities can be downloaded from the MN Geospatial Commons at https://gisdata.mn.gov/.



Legend

Native Plant Community

- Sedge Meadow
- PalisadeRouteCorridor

MBS Sites of Biodiversity Significance

- Outstanding
- High
- Moderate
- Below
- PLS Section

0 0.125 0.25 0.5
Miles

N

Printed August 2015
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB# 20160019 - Palisade 115 kV Project
Multiple TRS
Aitkin County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
Bartramia longicauda (Upland Sandpiper) #33 T48N R26W S33, T48N R26W S26, T47N R26W S3, T48N R26W S28, T [...]; Aitkin County		Watchlist		SGCN	S4B	G5	1992-06-20	7900
Bartramia longicauda (Upland Sandpiper) #248 T47N R26W S4; Aitkin County		Watchlist		SGCN	S4B	G5	1989-07-18	11955
Coturnicops noveboracensis (Yellow Rail) #7 T48N R26W S10, T48N R26W S3; Aitkin County		SPC		SGCN	S3B	G4	1973	1580
Coturnicops noveboracensis (Yellow Rail) #9 T47N R26W S10, T47N R26W S9; Aitkin County		SPC		SGCN	S3B	G4	1973	1582
Coturnicops noveboracensis (Yellow Rail) #10 T47N R26W S3, T47N R26W S4; Aitkin County		SPC		SGCN	S3B	G4	1973-05	1583
Haliaeetus leucocephalus (Bald Eagle) #2041 T47N R26W S4; Aitkin County		Watchlist		SGCN	S3B,S3N	G5	2005-03-28	26870
Myotis septentrionalis (Northern Long-Eared Bat) #40 T49N R26W S2; Aitkin County	LT	SPC		SGCN	S3	G1G3	2014-Summer	38154
Myotis septentrionalis (Northern Long-Eared Bat) #41 T49N R24W S22, T49N R24W S28, T49N R26W S24, T49N R26W S26, T [...]; Aitkin County	LT	SPC		SGCN	S3	G1G3	2014-08-08	38155
Phalaropus tricolor (Wilson's Phalarope) #22 T47N R26W S10, T47N R26W S3, T47N R26W S9, T47N R26W S4; Aitkin County		THR		SGCN	S2B	G5	1972-06-17	7826
Invertebrate Animal								
Lasmigona compressa (Creek Heelsplitter) #214 T48N R26W S11, T48N R26W S1, T49N R26W S35, T49N R26W S36; Aitkin County		SPC		SGCN	S3	G5	2007-06-19	32817
Ligumia recta (Black Sandshell) #381 T49N R25W S19, T49N R25W S30, T48N R26W S11, T48N R26W S1, T [...]; Aitkin County		SPC		SGCN	S3	G4G5	2007-06-19	32816
Other (Ecological)								

Printed August 2015
Data valid for one year

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB# 20160019 - Palisade 115 kV Project
Multiple TRS
Aitkin County

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Other (Ecological)								
Sedimentary structure (quaternary) #7 T47N R26W S3, T48N R26W S35, T48N R26W S34; Aitkin County		N/A			SNR	GNR	1980	134
Sedimentary unit or sequence (quaternary) #22 T47N R26W S3, T48N R26W S35, T48N R26W S34; Aitkin County		N/A			SNR	GNR	1980	227

Records Printed = 13

Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. For plants, taking includes digging or destroying. For animals, taking includes pursuing, capturing, or killing.

An Explanation of Fields:

Element Name and Occurrence Number: The Element is the name of the rare feature. For plant and animal species records, this field holds the scientific name followed by the common name in parentheses; for all other elements it is solely the element name. Native plant community names correspond to Minnesota's Native Plant Community Classification (Version 2.0). The Occurrence Number, in combination with the Element Name, uniquely identifies each record.

Federal Status: The status of the species under the U.S. Endangered Species Act: LE = endangered; LT = threatened; LE,LT = listed endangered in part of its range, listed threatened in another part of its range; LT,PDL = listed threatened, proposed for delisting; C = candidate for listing. If null or 'No Status,' the species has no federal status.

MN Status: The legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; NON = tracked, but no legal status. Native plant communities, geological features, and colonial waterbird nesting sites do not have any legal status under the Endangered Species Law and are represented by a N/A.

Draft Status: Proposed change to the legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; Watchlist = tracked, but no legal status.

SGCN Status: SGCN = The species is a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan (http://www.dnr.state.mn.us/cwcs/index.html). This designation applies to animals only.

State Rank: Rank that best characterizes the relative rarity or endangerment of the taxon or plant community in Minnesota. The ranks do not represent a legal status. They are used by the Minnesota Department of Natural Resources to set priorities for research, inventory and conservation planning. The state ranks are updated as inventory information becomes available. S1 = Critically imperiled in Minnesota because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. S2 = Imperiled in Minnesota because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. S3 = Vulnerable in Minnesota either because rare or uncommon, or found in a restricted range, or because of other factors making it vulnerable to extirpation. S4 = Apparently secure in Minnesota, usually widespread. S5 = Demonstrably secure in Minnesota, essentially ineradicable under present conditions. SH = Of historical occurrence in the state, perhaps having not been verified in the past 20 years, but suspected to be still extant. An element would become SH without the 20-year delay if the only known occurrences in the state were destroyed or if it had been extensively and unsuccessfully looked for. SNR = Rank not yet assessed. SU = Unable to rank. SX = Presumed extinct in Minnesota. SNA = Rank not applicable. S#S# = Range Rank: a numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the element. S#B, S#N = Used only for migratory

animals, whereby B refers to the breeding population of the element in Minnesota and N refers to the non-breeding population of the element in Minnesota.

Global Rank: The global (i.e., range-wide) assessment of the relative rarity or imperilment of the species or community. Ranges from G1 (critically imperiled due to extreme rarity on a world-wide basis) to G5 (demonstrably secure, though perhaps rare in parts of its range). Global ranks are determined by NatureServe, an international network of natural heritage programs and conservation data centers.

Last Observed Date: Date that the Element Occurrence was last observed to be extant at the site in format YYY-MM-DD.

EO ID #: Unique identifier for each Element Occurrence record.

Element Occurrence: An area of land and/or water in which an Element (i.e., a rare species or community) is, or was, present, and which has practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location. Specifications for each species determine whether multiple observations should be considered 1 Element Occurrence or 2, based on minimum separation distance and barriers to movement.