

## **APPENDIX B – AGENCY COORDINATION**

**From:** [Ryan Henning](#)  
**To:** "[Kempema, Silka](#)"  
**Cc:** [Jennie Geiger](#); [Kirschenmann, Tom](#); [Murphy, Leslie](#); [Natalie\\_Gates@fws.gov](mailto:Natalie_Gates@fws.gov)  
**Subject:** RE: Dakota Range III - Anabat Locations  
**Date:** Friday, July 6, 2018 11:53:51 AM  
**Attachments:** [image001.png](#)

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Hi Silka,

Thanks for the email and information. We currently have 8 units collecting data: 6 paired units on three meteorological towers and two ground units in bat habitat features. The project has been well-sited to avoid impacts to the species of greatest conservation need referenced in the PDF document and we will be looking to schedule a meeting with SDGFD and USFWS this fall to discuss the project and surveys completed to date.

Regards,

-Ryan

RYAN HENNING  
Sr. Permitting Manager

Apex Clean Energy, Inc.  
310 4th St. NE, Suite 200, Charlottesville, VA 22902  
cell: 303-807-2429 | fax: 434-220-3712  
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**From:** Kempema, Silka [mailto:[Silka.Kempema@state.sd.us](mailto:Silka.Kempema@state.sd.us)]  
**Sent:** Tuesday, June 26, 2018 12:12 PM  
**To:** Ryan Henning <[ryan.henning@apexcleanenergy.com](mailto:ryan.henning@apexcleanenergy.com)>  
**Cc:** Jennie Geiger <[jennie.geiger@apexcleanenergy.com](mailto:jennie.geiger@apexcleanenergy.com)>; Kirschenmann, Tom <[Tom.Kirschenmann@state.sd.us](mailto:Tom.Kirschenmann@state.sd.us)>; Murphy, Leslie <[Leslie.Murphy@state.sd.us](mailto:Leslie.Murphy@state.sd.us)>; [Natalie\\_Gates@fws.gov](mailto:Natalie_Gates@fws.gov)  
**Subject:** RE: Dakota Range III - Anabat Locations

Hi Ryan,

I would recommend having four locations where acoustic detectors should be placed. These locations should be spread out geographically in the project area. Two monitoring locations should be in potential bat habitat such as along watercourses or waterbodies such as streams, lakes or wetlands. I see from a GIS there are three streams running from the northeast to the southwest along which there is native woodland and potentially untilled grassland). Other wooded areas or areas with buildings or structures that may serve as either night or daytime roosts would also be considered potential bat habitat. The other two locations should be placed in areas not necessarily commonly thought of as bat habitat (e.g. cropland), but over which migrating bats may pass and on which turbines should be placed. I am unaware of the proposed turbine layout so I can't comment on exact locations for these non-bat habitat locations. For example, you would have one "bat habitat" location in the north and another in the south. The same would go for the "non-bat habitat" locations.

At each location there should be at least one detector that is elevated (approximately turbine height) and another (ideally) at ground level.

I recommend using full-spectrum detectors, specifically the SMXBat by Wildlife Acoustics. I recommend two years of pre-construction bat acoustic monitoring from 1 April through the end of October.

The native woodlands and potentially untilled grasslands layer can be found at [https://openprairie.sdstate.edu/data\\_land-easternSD/1/?utm\\_source=sdgrassinfo&utm\\_campaign=sdgrassinfo&utm\\_medium=email&utm\\_term=sdgrassinfo&utm\\_content=sdgrassinfo](https://openprairie.sdstate.edu/data_land-easternSD/1/?utm_source=sdgrassinfo&utm_campaign=sdgrassinfo&utm_medium=email&utm_term=sdgrassinfo&utm_content=sdgrassinfo)

Also, please go to page 10 of the PDF document found at [https://gfp.sd.gov/UserDocs/WAPCh2\\_SGCN.pdf](https://gfp.sd.gov/UserDocs/WAPCh2_SGCN.pdf) for a list of our Species of Greatest Conservation Need. Avoid impacts to these species.

Based on our records, there is one known STGR lek located in T121N, R52W, Sec 21, Grant County in the project location as provided below. I recommend a 1-mile no construction buffer and a 2-mile no disturbance buffer during the lekking period. Other leks may occur in the project area for which we do not have record.

Silka

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**From:** Ryan Henning [<mailto:ryan.henning@apexcleanenergy.com>]

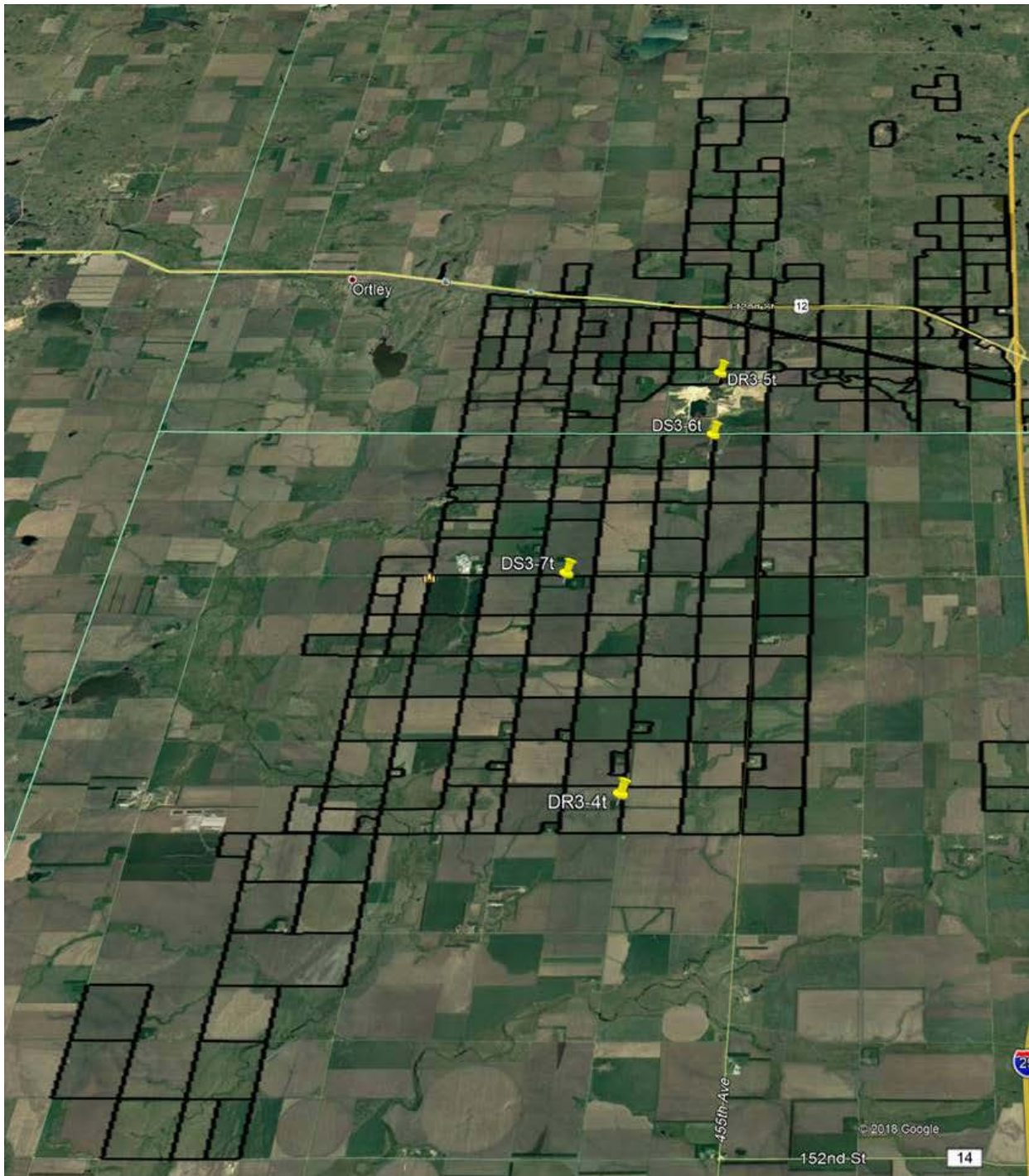
**Sent:** Tuesday, June 12, 2018 3:57 PM

**To:** Kempema, Silka

**Subject:** [EXT] Dakota Range III - Anabat Locations

Hi Silka,

I wanted to follow up as I have not been able to reach you via telephone. The Dakota Range III and IV wind energy project has been revised based on the outcome of the transmission system impact study. Apex is currently proceeding with the now Dakota Range III project, which entails approximately 152-megawatts. As such, we have revised the boundary and are seeking input on the location of the Anabat units. Attached is a SnipIt detailing four possible locations in the Dakota Range III project boundary. Can you please review and let me know your suggestions for placement of the units. My contact information is below.



Regards,

-Ryan

RYAN HENNING  
Sr. Permitting Manager

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**From:** Lance Rom  
**To:** [Ryan Henning](#)  
**Subject:** Record of Phone Conversation with Paige Olson, SD SHPO compliance officer Wed 7/25/2018 12:57 PM to 1:16 PM re: Dakota Range III DAT  
**Date:** Tuesday, July 31, 2018 1:41:02 PM

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## Record of Phone Conversation with Paige Olson, SD SHPO compliance officer Wed 7/25/2018 12:57 PM to 1:16 PM re: Dakota Range III DAT

I just had a phone conversation with Paige Olson to discuss the Dakota Range 3 cultural resources management plan and give her an update on project plans for cultural resources work.

For the management plan Paige indicated she wanted an inadvertent discoveries procedure which is tied similar to the Section 106 process, and that it should cite State laws for discoveries of human remains. Regarding methods to protect archeological or spiritual sites she prefers orange construction fencing rather than stakes, so that it would be very obvious to construction equipment operators. Paige also mentioned that someone had recently suggested reflective rope to her rather than orange fencing. I told her if any SHPO staff had other thoughts or concerns on this to let me know so they could be incorporated into this plan.

In regard to upcoming field work I told Paige we would be starting survey with the Tribe July 30, 2018 and the architectural survey as well. We will have another crew surveying areas for sites that the Tribe's survey methods would not find shortly thereafter, in August. Paige indicated that for the architectural survey she wanted detailed discussions about why architectural resources were being considered eligible for the State and/or National Register of Historic Places, and to discuss potential visual effects based on the eligibility criteria. This is something we are doing on all our projects.

I discussed with her how we had worked with the Tribe earlier on Dakota Range 1-2, and that we would be doing the same thing again. This included how we work in the field as we are recording sites, to get sites that the Tribe indicates are important protected, and to move project facilities with on-site agreement between the Tribe, Gerry Bermel (Apex field representative/tribal liaison) and Apex engineers (via phone and email), and the field archeologists. Also that as the facilities need to be moved we immediately do the needed field surveys of the new areas to be utilized.

Paige said several times during the conversation “It sounds like this is awesome”. She also indicated she’s had several good conversations with Gerry in the past.

Paige requested that I send her a project map and I told her I would do that (with Apex’s approval) next week. She indicated she would be in Waubay August 13 for a meeting on a different topic, and would use the map to familiarize herself the Dakota Range 3 project area at that time. I also said I would keep her updated as the project proceeds and she said she would appreciate that.

Thank you!

Lance

Quality Services, Inc.

Archeology, Architectural History, Geophysics, GIS, History, NEPA & Paleontology

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## Jennie Geiger

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**From:** Dave Phillips  
**Sent:** Wednesday, October 18, 2017 9:52 AM  
**To:** dianned@swo-nsn.gov; James Whitted (jamesw@swo.nsn.gov)  
**Cc:** Jennie Geiger; Gerry Bermel  
**Subject:** Apex- Dakota Range Wind 3 - meeting followup

Hi Dianne and Jim, this email is in regard to the Dakota Range Wind 3 Project currently in development by Apex. I wanted to follow up with you by providing notes on our discussion last week to summarize the key points and commitments made.

- 1) SWO has significant concerns about visual impacts from turbines located north of HWY 12 due to proximity to religious ceremonial sites
  - a. This is an important issue that warrants attention by Apex and further review and coordination with SWO.
  - b. Although there is no clear regulatory requirement to site south of the HWY, Apex is reviewing layout options to address this request as effectively as possible within the economic limitations of the project.
  - c. Apex will provide preliminary layouts for review and consideration by SWO in the near term (1-2 weeks)
- 2) SWO suggested that more smaller turbines may be preferred over fewer taller turbines, but this is not necessarily a requirement.
  - a. Apex may need to consider larger capacity turbines to reduce the number of turbines overall and thus limit locations north of the HWY.
  - b. SWO had no anticipated concerns regarding visual impact for turbines sited south of the HWY.
- 3) SWO expects tribal cultural surveys of the entire layout, including ag lands. SWO can survey the ag lands quickly using a drone in many cases and determine if additional pedestrian surveys are needed.
  - a. Surveys are planned in summer 2018 once a layout is near final.
  - b. TCP surveys will be done in coordination with SWO field staff on the entire facilities layout, including ag and low probability areas.
  - c. Sensitive tribal resources will be avoided per SWO input. If there are situations that are problematic for avoidance, we will work together in good faith to resolve the siting issue.
- 4) SWO has requested a written agreement, modeled after what they've set up with NextEra. Apex has asked for a draft to review and will do so once provided by the SWO.

Thank you both for your time and helpful input on this project to date, especially the clear recommendation regarding turbines north of the HWY at this early stage of siting and development. I look forward to any feedback you may have on this meeting summary.

Also, our preliminary layout generated based on your input to date should be ready early next week and it may be good to discuss that in-person as soon as possible. I will be in town next Weds (Oct 25) morning and could sit down with you and Gerry at that time. If that doesn't work, Tues PM or Thurs AM could also work. Please let me know.

Sincerely, Dave

---

DAVE PHILLIPS  
Director, Environmental and Wildlife Permitting

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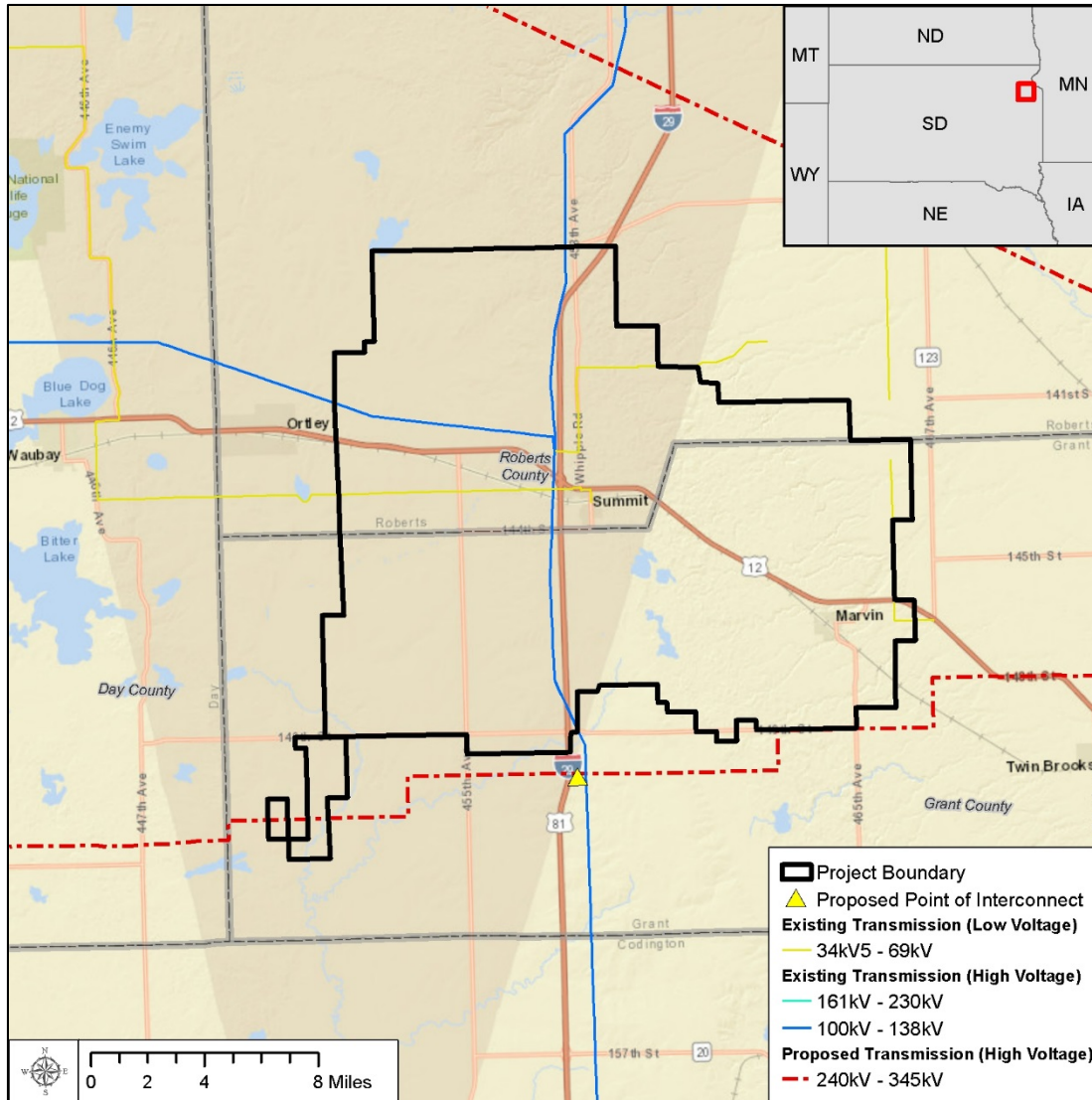


## **Dakota Range III Wind Project**

Coordination Meeting with Sisseton Wahpeton  
Oyate

October 10, 2017

# Project Description



## Project Capacity and Details

Up to 302.4 MW

≤100 turbines

## Commercial Operations

Q3 2020 COD Target

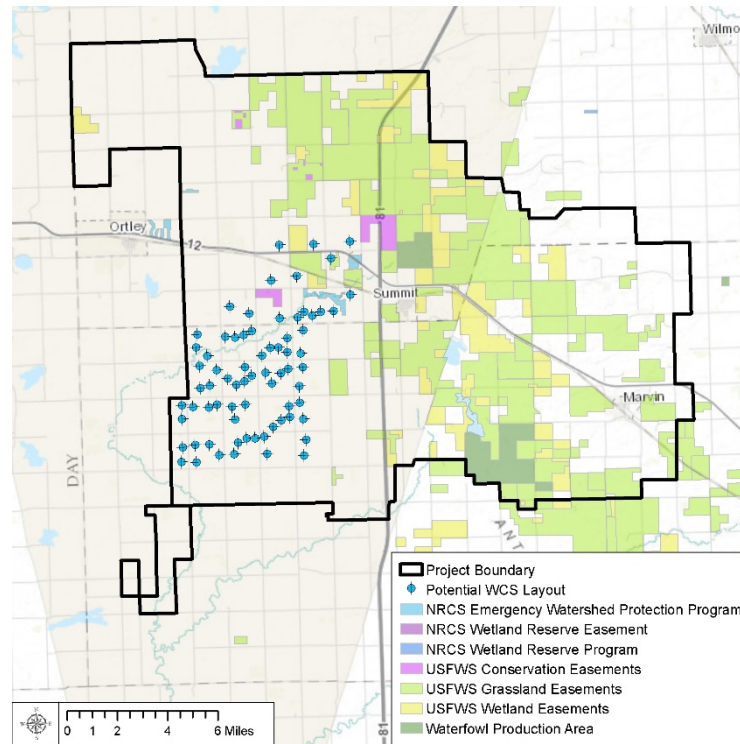
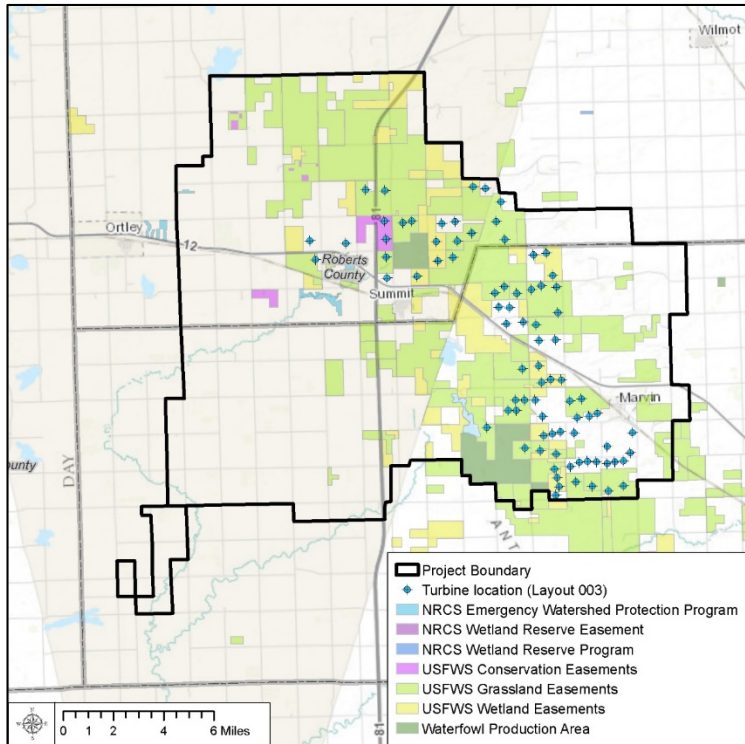
## Project Status

Existing high-voltage power lines adjacent to Project

Strong and proven wind resource

Commercial interest in Project

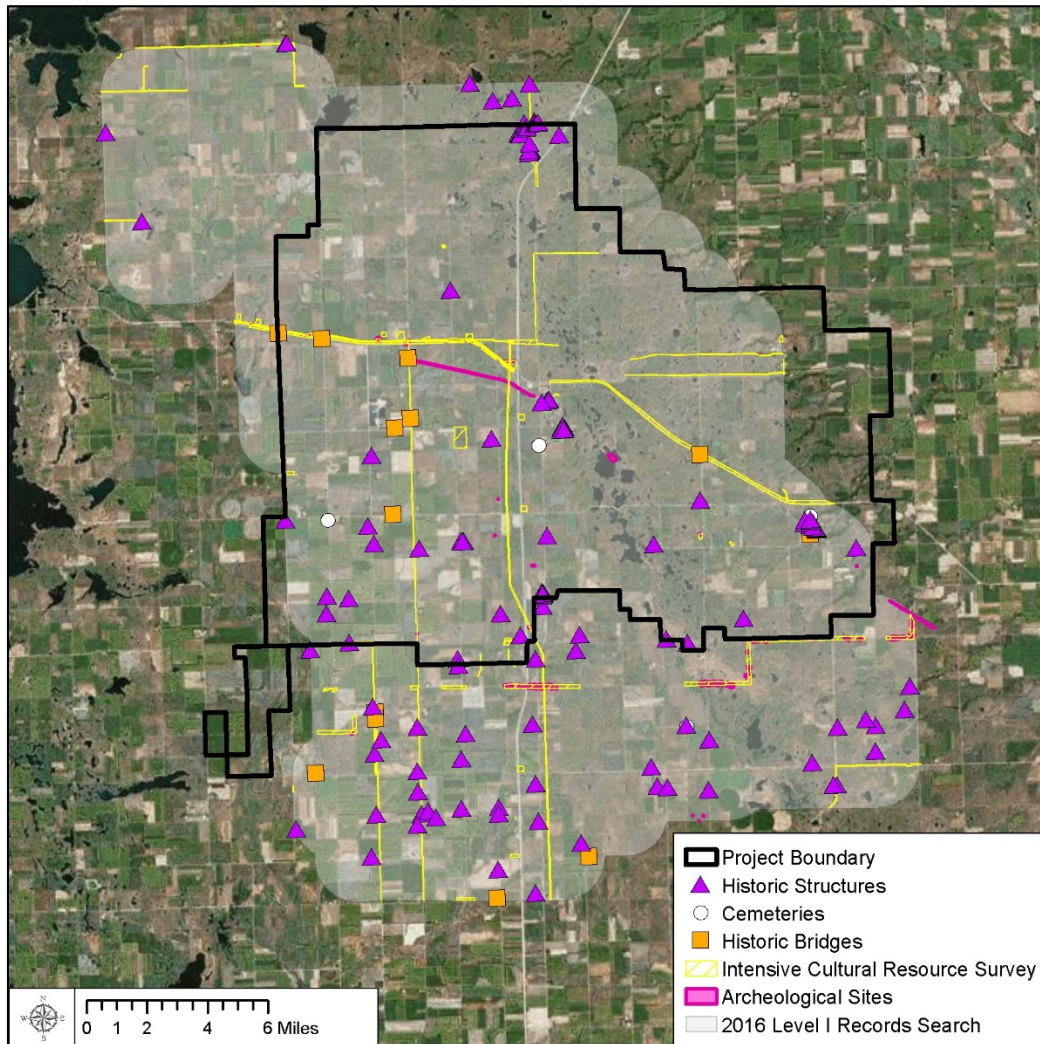
# USFWS Easements



Conceptual Layouts under consideration

- Project likely to Impact USFWS grassland easements, resulting in federal nexus
- NEPA analysis TBD depending on extent of impacts
- Planned avoidance of TCPs and tribal lands
- Impacts focused on ag/disturbed habitats
- Avoid/minimize impacts to waters/wetlands and sensitive wildlife habitats

# Cultural Resource Surveys



- Level I Cultural Resources Records Search completed in 2016 (Westwood)
  - Includes majority of project area
- Level III Intensive Surveys will be conducted on federal lands and within High Probability Areas (HPAs) identified in coordination with SD State Historic Preservation Office
  - HPAs determined based on land cover, topography, and proximity to water sources
  - No surveys currently anticipated within low probability areas (LPAs) with Unanticipated Discoveries Plan implemented during construction

# Anticipated Project Timeline

Date	Milestone	Comment
Apr 2018	Cultural resource and TPC surveys	Surveys to occur where facilities are being placed on federal land, and within HPAs on private land. Date proposed if compatible with SWO, otherwise timing adjusted.
May 2018	Adjust layout/facilities in response to findings	Goal is acceptable approach per coordination with SHPO and SWO.
May 2018	Planned PUC Permit Application Submittal	
Nov 2018	Initiate NEPA Review	USFWS to lead NEPA review process with other federal agencies.
Jun 2019	NEPA Compliance Determination	Completion goal, assuming 9-12 month review period.
Aug 2019	Planned construction start	
Sep 2020	Commercial operation	

**From:** Dianne Desrosiers  
**To:** [Ryan Henning](#)  
**Subject:** Re: DAT - October 26 Meeting Summary Notes  
**Date:** Friday, October 27, 2017 3:25:35 PM  
**Attachments:** [image001.png](#)

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Good afternoon, the minutes look good and we look forward to the next meeting. Let us know what dates may work as our schedules are filling up for the next two weeks.

Sent from my iPhone

On Oct 27, 2017, at 2:58 PM, Ryan Henning <[ryan.henning@apexcleanenergy.com](mailto:ryan.henning@apexcleanenergy.com)> wrote:

Dear Dianne and Jim,

I would like to express my sincere gratitude for our meeting yesterday. It was a great pleasure to meet both of you in person. Your insightful communications about the Sisseton Wahpeton Oyate population growth and proximity to the Enemy Lake and Hurricane Lake provided a helpful perspective on your future growth and prosperity.

On behalf of Apex Clean Energy, I want to express our sincere appreciation to your voiced concerns and our commitment to continue ongoing communications as we further develop this project. I have drafted a summary of our meeting (attached). Please review and add any revisions that summarize our meeting. I look forward to discussing this project further at our next meeting.

Regards,

-Ryan

RYAN HENNING  
Sr. Permitting Manager

Apex Clean Energy, Inc.  
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[<image001.png>](#)

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<DAT\_SWO Meeting Summary\_2017-10-27.docx>

**DAKOTA RANGE III WIND PROJECT - MEETING SUMMARY**

Meeting Attendees: Dianne Desrosiers, Sisseton Wahpeton Oyate  
James Whitted, Sisseton Wahpeton Oyate  
Dave Phillips, Apex Clean Energy  
Ryan Henning, Apex Clean Energy  
Gerry Bermel, Apex Clean Energy

Notes Prepared by: Apex Clean Energy

Date: October 26, 2017

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On October 26, 2017, Apex Clean Energy (Apex) met with James Whitted and Dianne Desrosiers of the Sisseton Wahpeton Oyate (SWO)THPO office to discuss the proposed Dakota Range Wind III Project (Project) proposed in Grant and Robert Counties, South Dakota. The purpose of the meeting was to present a conceptual layout that was informed based on discussions in the October 10, 2017, meeting. Apex introduced Ryan Henning to the SWO as the newest member of the Apex environmental permitting team. The following summarizes the topics discussed and next steps.

**Conceptual Layout**

Apex presented a conceptual layout that detailed wind turbine locations both south of and within a 1.5-mile buffer north of Highway 12. Apex provided the reasoning to include wind turbine locations north of the Highway 12 and within a designated 1.5-mile buffer. Additional discussions were undertaken by Apex to detail the necessity to site turbines within this buffer area (i.e., windiest portion of the project is on the highest terrain of the Coteau bluff, turbines removed in the northern area substantially impacted overall net capacity factor and economic viability, energy losses to the transmission line point of interconnect, crane setup and take downs due to transmission line, and road and railroad crossings).

The SWO were very direct in voicing concerns about potential visual resource impacts to tribal members living north and northwest of the proposed turbine locations. Specifically, the SWO was concerned about potential viewshed impacts to members living in the communities of Enemy Swim Lake and Hurricane Lake located west of the planned DAT III project. In addition, they stated the viewshed of wind towers would be a hindrance to their people that still use this area in the Coteau for gatherings and ceremonies. The SWO provided additional background on their concerns, which included the fact that the SWO communities aren't mapped by the State and tribe is undergoing an estimated population growth of approximately 3% per year. Additionally, more of their younger members are showing interest in traditional tribal religious and ceremonial practices. To assist in accommodating this population growth, the SWO annually acquires approximately 5,000 acres of lands, generally within the historical Sisseton Wahpeton Oyate Lake Traverse Reservation boundary. As the lands are acquired, they are put into the SWO Land Trust and used for various economic development purposes and for expansion of existing communities, while at the same time preserving the many cultural sites, including burials in this area. The SWO has been acquiring targeted lands around both the Enemy Swim Lake and Hurricane Lake (and elsewhere) to accommodate the growing SWO population and associated ceremonial activities. Therefore, they



have concerns about viewshed impacts associated with turbines in proximity to these two communities.

Based on the potential viewshed concerns to the SWO Enemy Swim Lake and Hurricane Lake communities, Apex agreed to evaluate the feasibility of a project with no wind turbines north of the Highway 12 and west of Interstate 29. The SWO provided additional guidance on areas potentially suitable for wind turbine locations, which followed the Grant and Roberts County line east of Interstate 29 and north of Highway 12 west of Interstate 29. This recommendation was made to ensure that SWO citizens and property owners or leases would not be unduly impacted by the proposed Project.

**SWO Cultural Resource Field Staff**

Based on the previous October 10 meeting, SWO identified staff to assist with field surveys. They also stated that THPO staff from Spirit Lake and Yankton Tribes would in all probability assist with these surveys. They will accompany Quality Services, Inc. during surveys that are scheduled to initiate on or around April 1, 2018 (spring, after snowmelt).

**Action Items:**

- Apex will revise the conceptual layout as per SWO recommendations (detailed above) and schedule another meeting with SWO to discuss layout revisions. Meeting is planned for the week of October 30, 2017, but is dependent on SWO and Apex availability.

**From:** [Ryan Henning](#)  
**To:** [dianned@swo-nsn.gov](mailto:dianned@swo-nsn.gov); [James Whitted \(jamesw@swo-nsn.gov\)](mailto:Jamesw@swo-nsn.gov); ["vinem@swo-nsn.gov"](mailto:vinem@swo-nsn.gov)  
**Cc:** [Gerry Bermei](#)  
**Subject:** DAT November 02 2017 Meeting Summary Notes  
**Date:** Monday, November 6, 2017 3:48:05 PM  
**Attachments:** [image001.png](#)  
[DAT\\_SWO\\_November\\_02\\_Meeting\\_Summary\\_2017-11-06.docx](#)

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Hi Dianne, Jim, and Vine,

Thanks again for making time last week to discuss the Dakota Range Wind III Project. And it was a pleasure to be introduced and meet you Vine. As always, Apex Clean Energy greatly appreciates both your time and willingness to continue our Project development discussions. Attached are summary notes from our November 02, 2017 meeting. Please review at your earliest convenience and make any necessary revisions, comments, edits, etc.

Regards,

-Ryan

RYAN HENNING  
Sr. Permitting Manager

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**DAKOTA RANGE III WIND PROJECT - MEETING SUMMARY**

Meeting Attendees: Dianne Desrosiers, Sisseton Wahpeton Oyate  
James Whitted, Sisseton Wahpeton Oyate  
Vine Marks, Sisseton Wahpeton Oyate  
Ryan Henning, Apex Clean Energy  
Gerry Bermel, Apex Clean Energy

Notes Prepared by: Apex Clean Energy

Date: November 02, 2017

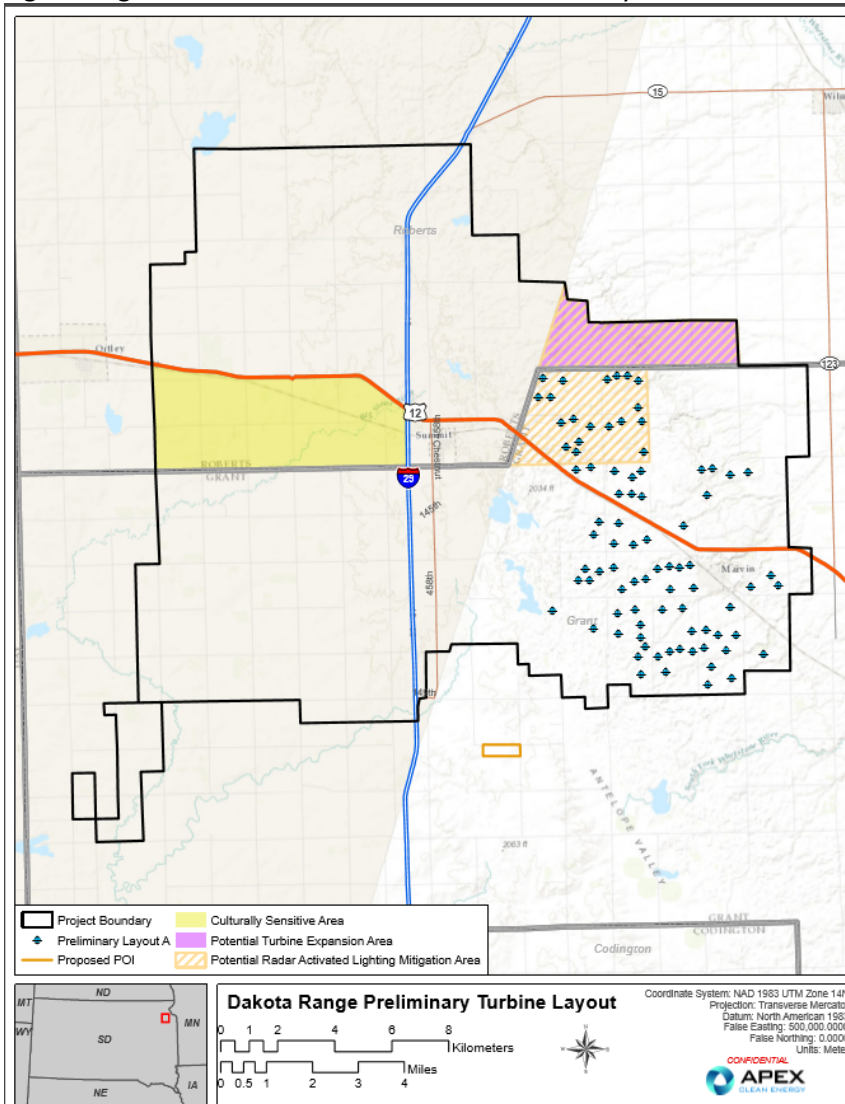
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On November 02, 2017, Apex Clean Energy (Apex) met with Dianne Desrosiers, James Whitted and Vine Marks of the Sisseton Wahpeton Oyate (SWO) Tribal Historic Preservation Office (THPO) to continue communications regarding the proposed Dakota Range Wind III Project (Project). The purpose of the meeting was to present a revised conceptual layout that was developed in response to SWO input provided during the October 10, 2017 and October 26, 2017 meetings. The following summarizes the topics discussed and action items.

**Revised Conceptual Layout**

Apex presented a revised conceptual wind turbine layout addressing the SWO's preferences and recommendations for wind turbine siting locations. The revised conceptual layout did not have any wind turbines north of the Roberts County Line per the previous guidance and recommendations of the SWO (see Figure 1). However, Apex would like to add up to 10 additional wind turbines in Roberts County to allow for future layout flexibility and alternative wind turbine locations. The SWO were receptive to this additional area expansion if Apex would explore the potential addition of RADAR activated lighting systems on the northern wind turbine arrays. The SWO recommended a general area where they would like to see the RADAR activated lighting systems potentially installed (see also Figure 1). The SWO agreed to complete a general field reconnaissance on November 6, to assess the area and provide additional feedback if necessary.

**Figure 1 – Rough Sketch of the Roberts County Wind Turbine Location Expansion, RADAR Activated Light Mitigation and Southwest Lease Area Culturally Sensitive Areas**



**Southwest Lease Area Development**

Based on the large lease area and early development of the project, Apex discussed the potential to site wind turbines in the area south of Highway 12 and within the historic reservation boundary (i.e. southwest lease area). The SWO discussed knowledge of cultural resource locations on grazed pasturelands within Roberts County and immediately south of Highway 12, indicating that siting turbines in this area may be more challenging than in tilled agricultural areas (See also Figure 1). The exact areas of avoidance would be determined by Cultural Surveys. The SWO did not object to wind turbines in the rest of the southwest lease area if the wind turbines maximized siting on existing agricultural lands and adjacent areas where practicable.

**Action Items:**

- Apex will explore the costs to add RADAR activated lighting to the northern wind turbine arrays.
- SWO to conduct a field reconnaissance of the area within Roberts County that Apex would like to add wind turbine locations.

**From:** Mueller, Connie  
**To:** [Ryan Henning](#)  
**Cc:** [Dave Phillips](#); [Jennie Geiger](#); [rschroeder@envalue.us](mailto:rschroeder@envalue.us)  
**Subject:** Re: Answers from Nov 2 meeting  
**Date:** Wednesday, November 15, 2017 12:08:05 PM  
**Attachments:** [image001.png](#)

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Ryan,

Thanks for the notes and continued communication.

I would request we include language in the notes that discusses the tightness of the time line, especially considering that the wildlife survey results should be used for minimizing turbine placement. I understand how critical timing can be for the company and I want to maintain a continued open discussion of the timeline and expectations. You may want to consider an interim wildlife survey report after nesting season.

One clarification is the use of the term 'digital format' on page 2 paragraph 2. When USFWS provide the wetland basins protected by wetland easement to Apex it will be a scanned paper map in all cases. Apex will still need to digitize the information from the scan. We do not have that information as a shapefile for any of the contracts.

We can scan the entire contract, but those are all written with the same language. Generally companies only request the maps for wetland easement basins and exterior boundaries of grassland easements. If you want the contracts too, please let me know.

Connie

Connie Mueller, Project Leader  
Waubay NWR Complex  
44401 134 A Street  
Waubay, SD 57273  
605-947-4521 ext 110 office



**National Wildlife Refuges - Where Wildlife Comes First**

On Wed, Nov 15, 2017 at 9:04 AM, Ryan Henning <[ryan.henning@apexcleanenergy.com](mailto:ryan.henning@apexcleanenergy.com)> wrote:

Good morning Connie,

I would like to express Apex Clean Energy's sincere gratitude for meeting with us on November 02 and the additional follow up information and guidance. It was a pleasure to meet you in person, and especially at the refuge office. I have drafted a summary of our meeting (attached). Please review and let me know if you have any edits or revisions. We plan to be back in touch after some additional layouts have been analyzed.

**From:** [Ryan Henning](#)  
**To:** [Mueller, Connie](#); [Dave Phillips](#); [Jennie Geiger](#); [rschroeder@envalue.us](mailto:rschroeder@envalue.us)  
**Subject:** RE: Answers from Nov 2 meeting  
**Date:** Wednesday, November 15, 2017 8:04:58 AM  
**Attachments:** [image001.png](#)  
[DAT\\_USFWS November 02 NEPA Grassland Easement Meeting Summary 2017-11-15.docx](#)

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Good morning Connie,

I would like to express Apex Clean Energy's sincere gratitude for meeting with us on November 02 and the additional follow up information and guidance. It was a pleasure to meet you in person, and especially at the refuge office. I have drafted a summary of our meeting (attached). Please review and let me know if you have any edits or revisions. We plan to be back in touch after some additional layouts have been analyzed.

Please feel free to contact me if you have any additional questions.

Regards,

-Ryan

RYAN HENNING  
Sr. Permitting Manager

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**From:** Mueller, Connie [mailto:connie\_mueller@fws.gov]  
**Sent:** Tuesday, November 14, 2017 5:29 PM  
**To:** Dave Phillips <dave.phillips@apexcleanenergy.com>; Jennie Geiger <jennie.geiger@apexcleanenergy.com>; Ryan Henning <ryan.henning@apexcleanenergy.com>; rschroeder@envalue.us  
**Subject:** Answers from Nov 2 meeting

All,

During our meeting earlier this month we discussed an example EA and priority grasslands.

In speaking with our NEPA specialist there is no example EA to share in the Region. There has

not been a finalized EA since the programmatic EIS was written. My best advise is to use the programmatic to step down the specifics of your project. List the BMPs you will be using. Show what you do to first avoid and then minimize impacts. When those steps are demonstrated you will propose to purchase new easements to offset the impacts you discuss.

The second thing we discussed is how to proactively know the more sensitive areas. One source is the undisturbed grass layer available at: [http://openprairie.sdstate.edu/data\\_land-easternSD/1/](http://openprairie.sdstate.edu/data_land-easternSD/1/)

The second tool is the Priority Grassland model USFWS has developed for easement acquisition. I've received the clearance to share that with you. Priority zone 1 are the areas that will be of greater interest. This is at a broad scale, and there are also smaller scale things we consider like not placing a turbine on a peninsula where birds are likely to nest and fly.

When you share the footprint I could send a map showing the priority areas clipped to your project area. If you want to give me broad outer boundaries it can be done on that scale too before you have the final footprint. I know we spoke about the general area, so I've attached a general map to give you the idea.

Connie

Connie Mueller, Project Leader  
Waubay NWR Complex  
44401 134 A Street  
Waubay, SD 57273  
605-947-4521 ext 110 office



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**DAKOTA RANGE III WIND PROJECT –FWS EASEMENT & NEPA COMPLIANCE MEETING SUMMARY**

Meeting Attendees: Connie Mueller, U.S. Fish and Wildlife Service  
Ryan Henning, Apex Clean Energy  
Randy Schroeder, ENValue  
Dave Phillips, Apex Clean Energy (via Phone)  
Jennie Geiger, Apex Clean Energy (via Phone)

Notes Prepared by: Apex Clean Energy

Date: November 02, 2017

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On November 02, 2017, Apex Clean Energy (Apex) met Connie Mueller of the U.S. Fish and Wildlife Service (FWS) to discuss the process for locating wind turbines and associated facilities on grassland and wetland easements for the proposed Dakota Range Wind III Project (Project) in Grant and Robert Counties, South Dakota. The following summarizes the topics discussed and action items.

Apex provided an update on the October 24, 2017 FWS and South Dakota Game, Fish and Parks meeting. This meeting discussed Apex's Tier 1/Tier 2 and Stage 1 risk reviews (i.e., completed in accordance with the FWS 2012 Land-based Wind Energy Guidelines and 2013 Eagle Conservation Plan Guidance), and Tier 3 study plans designed to assess site-specific conditions and ensure adequate information is gathered for analysis of potential federal actions associated with development on USFWS easements located within the Project area. In addition, Apex provided updates on the potential project size, coordination with the Sisseton Wahpeton Oyate Tribal Historic Preservation Office, and potential development schedule that would allow for construction in either 2019 or 2020.

**National Environmental Policy Act (NEPA) Compliance**

Western Area Power Administration (Western) and FWS jointly prepared a programmatic environmental impact statement (PEIS) to identify environmental impacts associated with various environmental review processes that could be implemented to evaluate requests for interconnection of wind energy projects to Western's transmission system or requests for land exchanges to accommodate wind energy elements that may affect wetland or grassland conservation easements managed by the FWS in Western's Upper Great Plains Customer Service Region. The Record of Decision allows wind energy projects to tier to the PEIS and proceed with site-specific NEPA evaluations. Therefore, the NEPA analysis for the Dakota Range III project would tier off the PEIS and impacts to existing grassland and wetland easements will be evaluated via an Environmental Assessment (EA). The FWS does not have an EA to share as a go-by since one has not been finalized EA since the PEIS was written.

The FWS provided guidance on the process for siting and evaluating facilities on the easements will need to show how easements were avoided to the extent possible, how impacts to easements were minimized (via micro-siting), and how impacts were further minimized by application of mitigation

and best management practices (BMPs). Part of the minimization process will be to locate facilities on the lowest priority easements (FWS will provide data showing which easements are Priority 1, 2, and 3) and also on the lowest quality habitat within each easement (i.e. on crop areas vs upland areas vs wetland areas). Also, impact minimization such as burying collector lines (possibly under access roads), narrowing roads, and using mats to reduce areas that would be temporarily impacted if practicable in sensitive areas, were also suggested.

The FWS will require the review of potential environmental impacts and have a priority focus on grassland nesting birds and waterfowl (i.e., wetland and grassland easements were acquired using monies derived from the Federal Duck Stamp). Mitigation will require that the acreage of permanent impacts to the easements be offset by the acquisition of new easements in the area on at least a 1:1 basis. FWS has identified lease acquisition targets in the area. Also, the FWS will require a bond to cover the estimated decommissioning costs.

The FWS does not have all of the grassland and wetland easements initiated prior to 1976 in a digital format. Apex would need to coordinate with the FWS to ensure the easement locations are properly documented and recorded and subsequently analyzed in the EA.

The FWS would initiate consultation with the 15-16 Native American tribes under Section 106 of the National Historic Preservation Act (NHPA) regarding potential effects on cultural and historic resources. It is the FWS preference to have a late stage layout completed prior to initiating the Section 106 consultation process and cultural field surveys.

Endangered Species Act (ESA) Section 7 consultation would be initiated by Connie Mueller. The FWS would initiate the consultation once the results of the surveys are reported.

The EA would be signed by the Regional Supervisor located in Denver office. Additional FWS staff with localized expertise would supplement the FWS NEPA team including the FWS staff in Pierre, NEPA coordinator in Denver, and Migratory Bird Office in Denver. Once the project is initiated, the FWS recommended convening a monthly conference call to improve communications on the status of the environmental review. There would be a 30-day public review of the Draft EA.

#### **Apex Proposed Timeline for Key NEPA Milestones**

Task	Timeline	Comment
Preliminary Layout and Project Boundary	December 2017	Apex will provide the preliminary layout and boundary, so that FWS can initiate pulling easement information.
Late stage layout and engineering design	November 2017 – February 2018	Apex would work with the FWS to obtain easement information and micro-siting of turbines and appurtenant facilities
Wildlife Studies	September 2017 – September 2018	Apex would complete time sensitive surveys in late spring

		– early summer; avian and bat would conclude in fall
Cultural Surveys	April 2018 – July 2018	Surveys would be initiated on completion of late stage layout
Draft EA Analysis	April 2018 – December 2019	Analyses would be initiated upon late stage layout, engineering design and would be finalized after wildlife and cultural surveys are completed
Circulate EA / FONSI and initiate 30-day comment period	January 2019	
Final signed EA / FONSI	March 2019	
Section 106 Consultation	April 2018 – February 2019	
Section 7 Consultation	July 2018 – February 2019	

### Next Steps

The following would be the next steps in the process with FWS:

- Apex to provide a shapefile of the project boundary to be analyzed in the EA to the FWS
- FWS would identify/confirm all easements within the boundary
- FWS would scan those easements including maps of sensitive habitats within them
- Meet with FWS for micro-siting exercise to minimize impacts within each easement to be affected

**From:** Kempema, Silka  
**To:** [Jennie Geiger](mailto:Jennie.Geiger)  
**Subject:** RE: BUSINESS CONFIDENTIAL: Follow Up on Dakota Range III Apex\_Agency Meeting  
**Date:** Friday, November 17, 2017 2:47:26 PM  
**Attachments:** [image001.png](#)

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Got it.

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**From:** Jennie Geiger [mailto:[jennie.geiger@apexcleanenergy.com](mailto:jennie.geiger@apexcleanenergy.com)]  
**Sent:** Friday, October 27, 2017 2:28 PM  
**To:** [Natalie\\_Gates@fws.gov](mailto:Natalie_Gates@fws.gov); Kempema, Silka; Murphy, Leslie  
**Cc:** Dave Phillips; Ryan Henning; Mueller, Connie ([connie\\_mueller@fws.gov](mailto:connie_mueller@fws.gov))  
**Subject:** [EXT] BUSINESS CONFIDENTIAL: Follow Up on Dakota Range III Apex\_Agency Meeting

Hi Natalie/Silka/Leslie –

Thank you for meeting earlier this week to discuss the Dakota Range III Wind Project. I have attached meeting notes outlining the topics discussed, as well as the Powerpoint presentation (PPT) presented, for your review and consideration.

I have also attached shps and a pdf of the current Project boundary for your records; however, please note that the boundary may change (reduce) as the project becomes more defined. If you could please confirm receipt due to the large file size I would appreciate it.

Thank you again for your time and helpful input.  
Jennie

JENNIE GEIGER  
Environmental Permitting Manager

Apex Clean Energy, Inc.  
310 4th St NE, Suite 200, Charlottesville, VA 22902  
office: 434-260-6982 | cell: 720-320-9450 | fax: 434-220-3712  
[jennie.geiger@apexcleanenergy.com](mailto:jennie.geiger@apexcleanenergy.com) | [www.apexcleanenergy.com](http://www.apexcleanenergy.com)



## Jennie Geiger

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**From:** Mueller, Connie <connie\_mueller@fws.gov>  
**Sent:** Wednesday, November 15, 2017 2:24 PM  
**To:** Jennie Geiger  
**Cc:** Natalie Gates (natalie\_gates@fws.gov); Silka Kempema (silka.kempema@state.sd.us); Murphy, Leslie; Dave Phillips; Ryan Henning  
**Subject:** Re: BUSINESS CONFIDENTIAL: Follow Up on Dakota Range III Apex\_Agency Meeting  
**Attachments:** Dakota Range III and undisturbed grass map.pdf; Dakota Range III and grassland priority map.pdf

All,

I apologize that I missed the project boundary broad shapefile that was attached to these notes.

Attached please find maps of this shapefile as it contains grassland priority zones (red is priority 1 and highest value) and undisturbed grasslands. As we discussed at the Refuge these could be used to guide your efforts to avoid and minimize impacts. As you can see the two tools mirror each other which is a good indication of the natural resources. These maps can be done again after you refine your project area, but they might help with the refinement process.

Additionally I've requested a map of easements on this broader scale that might be helpful for your efforts. I will pass that along to the group when it is received.

Connie

Connie Mueller, Project Leader  
Waubay NWR Complex  
44401 134 A Street  
Waubay, SD 57273  
605-947-4521 ext 110 office



**National Wildlife Refuges - Where Wildlife Comes First**

On Fri, Oct 27, 2017 at 2:27 PM, Jennie Geiger <[jennie.geiger@apexcleanenergy.com](mailto:jennie.geiger@apexcleanenergy.com)> wrote:

Hi Natalie/Silka/Leslie -

Thank you for meeting earlier this week to discuss the Dakota Range III Wind Project. I have attached meeting notes outlining the topics discussed, as well as the Powerpoint presentation (PPT) presented, for your review and consideration.

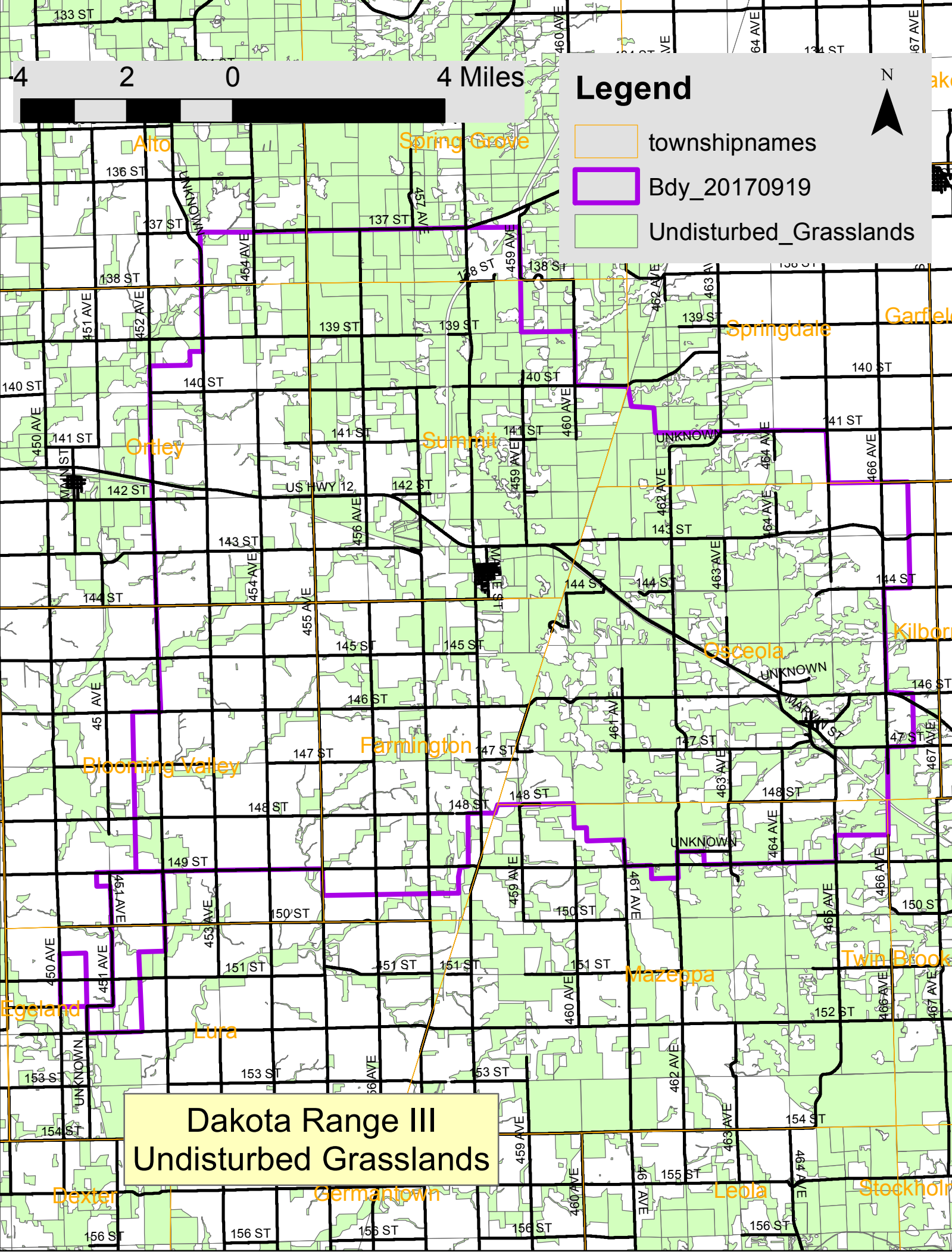
I have also attached shps and a pdf of the current Project boundary for your records; however, please note that the boundary may change (reduce) as the project becomes more defined. If you could please confirm receipt due to the large file size I would appreciate it.

Thank you again for your time and helpful input.  
Jennie

JENNIE GEIGER  
Environmental Permitting Manager

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[www.apexcleanenergy.com](http://www.apexcleanenergy.com)<http://www.apexcleanenergy.com/>

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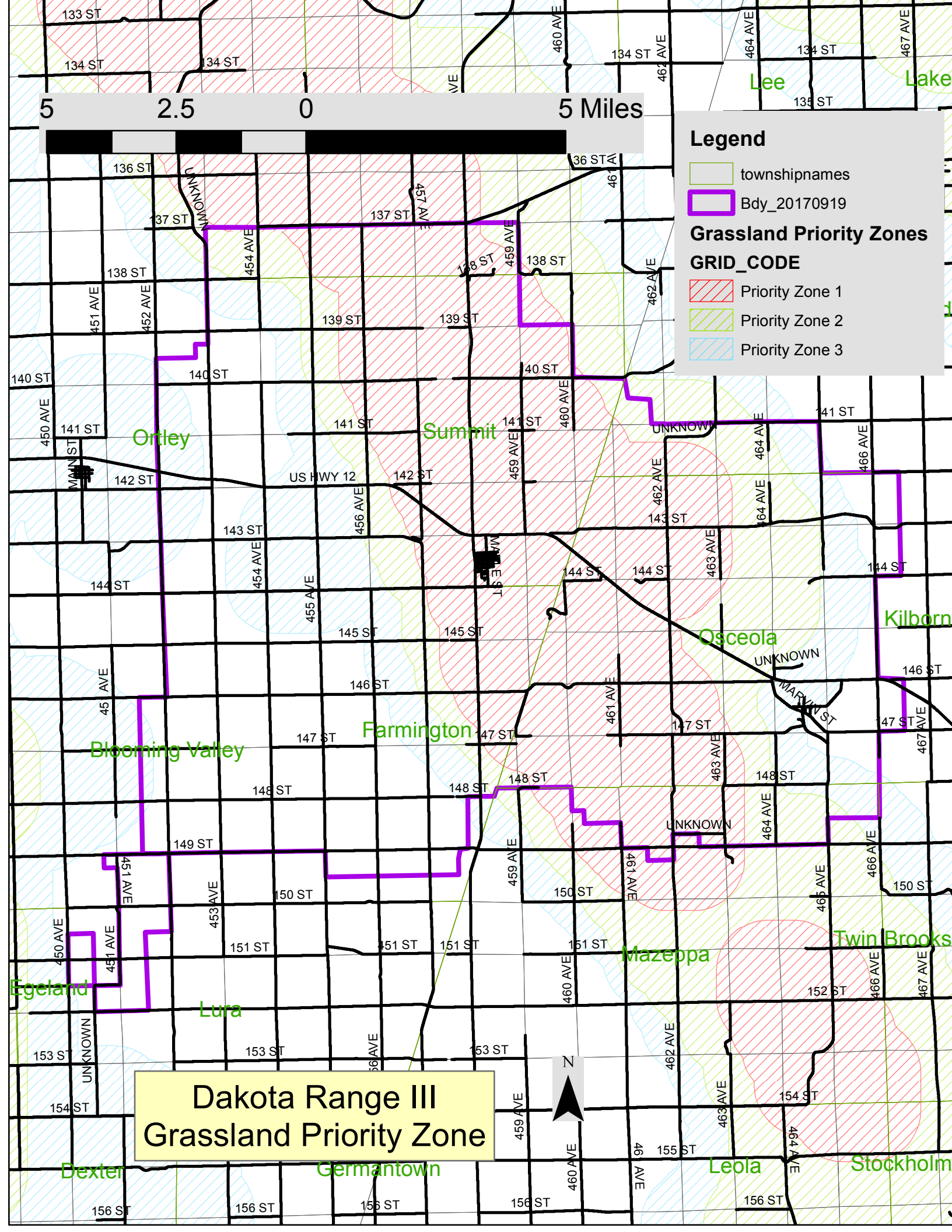


4 2 0 4 Miles

### Legend

- townshipnames
- Bdy\_20170919
- Undisturbed\_Grasslands

Dakota Range III  
Undisturbed Grasslands



5 2.5 0 5 Miles

### Legend

- townshipnames
- Bdy\_20170919

### Grassland Priority Zones

#### GRID\_CODE

- Priority Zone 1
- Priority Zone 2
- Priority Zone 3

Dakota Range III  
Grassland Priority Zone



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**DAKOTA RANGE I WIND PROJECT - MEETING SUMMARY**

Meeting Attendees:     Natalie Gates, USFWS  
                              Silka Kempema, SDGFP  
                              Leslie Murphy, SDGFP  
                              Jennie Geiger, Apex  
                              Dave Phillips, Apex (by phone)  
                              Ryan Henning, Apex (by phone)

Notes Prepared by:     Apex

Date:                     October 27, 2017

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On October 24, 2017, Apex Clean Energy (Apex) met with the U.S. Fish and Wildlife Service (USFWS), and South Dakota Game, Fish and Parks (SDGFP) to discuss the proposed Dakota Range III Wind Project (Project) in Grant and Covington Counties, South Dakota. The purpose of the meeting was to introduce the Project, discuss and receive input on Apex's Tier 1/Tier 2 and Stage 1 risk reviews completed in accordance with the USFWS 2012 Land-based Wind Energy Guidelines (WEG) and 2013 Eagle Conservation Plan Guidance (ECPG), and agree on Tier 3 study plans to assess site-specific conditions and ensure adequate information is gathered for analysis of potential federal actions associated with development on USFWS easements located within the Project area. The meeting was held at the SDGFP Office in Pierre, South Dakota. The attached Powerpoint (PPT) presentation was provided and the following is a summary of the topics discussed.

There was general agreement that the material presented in the PPT accurately evaluated and characterized the site in accordance with WEG Tiers 1 and 2 and ECPG Stage 1 and supported progression to Tier 3/Stage 2 studies. Both agencies recommended avoiding or minimizing impacts to intact grasslands to the maximum extent practicable. SDGFP requested that potential impacts to South Dakota species of greatest conservation need (SGCN) be evaluated.

**Federally/State Listed Species:** USFWS and SDGFP confirmed that impact to federally listed species with the potential to occur (see slide 11) is not expected with proper siting and implementation of best management practices (BMPs). USFWS recommended a 1 km setback from USFWS Designated Critical Habitat and that Apex complete habitat assessments for the butterfly species throughout the project area so that suitable habitat could be avoided, or so that presence/absence surveys could be completed in areas where impacts cannot be avoided to determine if habitat is occupied (i.e., impacts are likely) and/or if take authorization is warranted. Similar measures were recommended for the federally threatened western prairie fringed orchid, which has limited protections on private land. It was agreed that feathering to manufacturer's cut in speed from April 15 – October 15 would minimize impacts to bats, but that the federally threatened northern long-eared bat was exempt from take prohibitions under the Endangered Species Act per the 4d Rule. It was agreed that red knot and whooping crane are unlikely to occur, but training staff to recognize and respond to whooping cranes if present and respond with specified response plan are reasonable precautions.

**Avian Studies:** Apex presented results from avian use surveys conducted to date. Both agencies agreed that risk to eagles is low at the site, but that an additional year of ECPG-level studies to further evaluate risk and inform siting was appropriate. USFWS and SDGFP suggested surveys be spread across the month during migration periods when possible (i.e., late fall 2017 and spring 2018) to ensure variations in species usage during migration is evaluated. Apex confirmed with WEST that surveys are being conducted for 5 consecutive days every other week, rather than 1 time per month.

It was also agreed that sharp-tailed grouse and greater sage-grouse are likely to occur in or near the Project area and lek surveys are warranted in spring 2018. Apex committed to completing surveys and implementing siting and construction timing BMPs to avoid or minimize impacts to any identified leks (see slide 18 in the PPT). Similarly, raptor nest surveys will be completed in spring of 2018 (eagles out to 10 miles, raptors out to 1 mile) to inform siting.

**Bats:** It was agreed that the period of risk for bats is most likely from July 15 to August 15, based on existing data from the Summit Wind Project, and that feathering to manufacturer's cut in speed was appropriate during this period. Although the risk to bats is low at the site, USFWS and SDGFP recommended collecting additional acoustic data at met towers and in treed and wetland habitats in the eastern portion of the Project to effectively characterize baseline conditions for the purposes of potential USFWS approvals expected on USFWS easement lands. It was agreed that paired acoustic detectors would be placed on two meteorological towers and that ground based detectors would be placed in treed and wetland areas during the bat active period (April 15 to October 15).

Both agencies agreed that avoiding/minimizing impacts to forests and wetlands and feathering to manufacturer's cut in speed from sunset to sunrise during the bat active period [Apr 15- October 15], and that one year of operational monitoring during this period to evaluate low risk conclusions is appropriate.

**USFWS Easements:** Apex indicated that facilities will need to be placed upon USFWS easement lands for the project to be viable, which will require USFWS approval. Therefore, Apex will work closely with the Waubay National Wildlife Refuge (NWR) Complex (specifically Connie Mueller, Project Leader) to obtain appropriate approvals in a timely manner.

**Tier 3 Survey Plans:** The following surveys were recommended and agreed upon as appropriate for the project given the potential for USFWS approvals on easement lands and the planned state permitting processes:

- Aerial raptor nest surveys out to 1 mile and eagle nest surveys in suitable habitat out to 10 miles, completed no later than leaf-on in spring 2018
- 1 yr of ECPG-level surveys (approximately 30% of the area evaluated with 800-m plots, 1x/mo with 60 min counts), including 5 min small bird and 20 min raptor/large bird surveys.
- Lek surveys out to 1 mile, completed Apr-May 2018
- Desktop habitat assessment and field verification of potentially suitable habitat for Dakota skipper and Powshiek skipperling followed by presence/absence surveys if facilities will be located in areas of potentially suitable habitat

- Desktop habitat assessment and field verification of potentially suitable habitat for western prairie fringed orchid if facilities will be located on federal lands followed by presence/absence surveys if facilities will be located in areas of suitable habitat
- Bat acoustic surveys (2 paired units on met towers and 2 units in forest and wetland habitats) from April 15 – October 15, 2018.

Action Items:

- Apex to provide shapefiles and a pdf of the boundary to SDGFP and USFWS recognizing that the boundary may change (reduce) as the project becomes more defined in response to environmental and other constraints.
- SDGFP to provide information or shps on known lek locations in vicinity of Project.
- Apex to complete studies and coordinate with USFWS and SDGFP on findings.
- Apex to coordinate with the Waubay NWR regarding approvals for impacts on USFWS easement lands.

## Attachment 1: Power Point Presentation



## **Dakota Range III Wind Project**

USFWS/SDGFP Coordination Meeting

October 24, 2017

# Agenda and Goals

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## Agenda

- Introductions
- Project Status and Drivers
- Tier 1& 2, Stage 1 Review
- Tier 3, Stage 2 Study Plan
- Next Steps

## Goals

- Agency/Apex Coordination per the WEG
- Agency input on Tier 3, Stage 2 Study Plan
- Discuss NEPA timeline and commitments

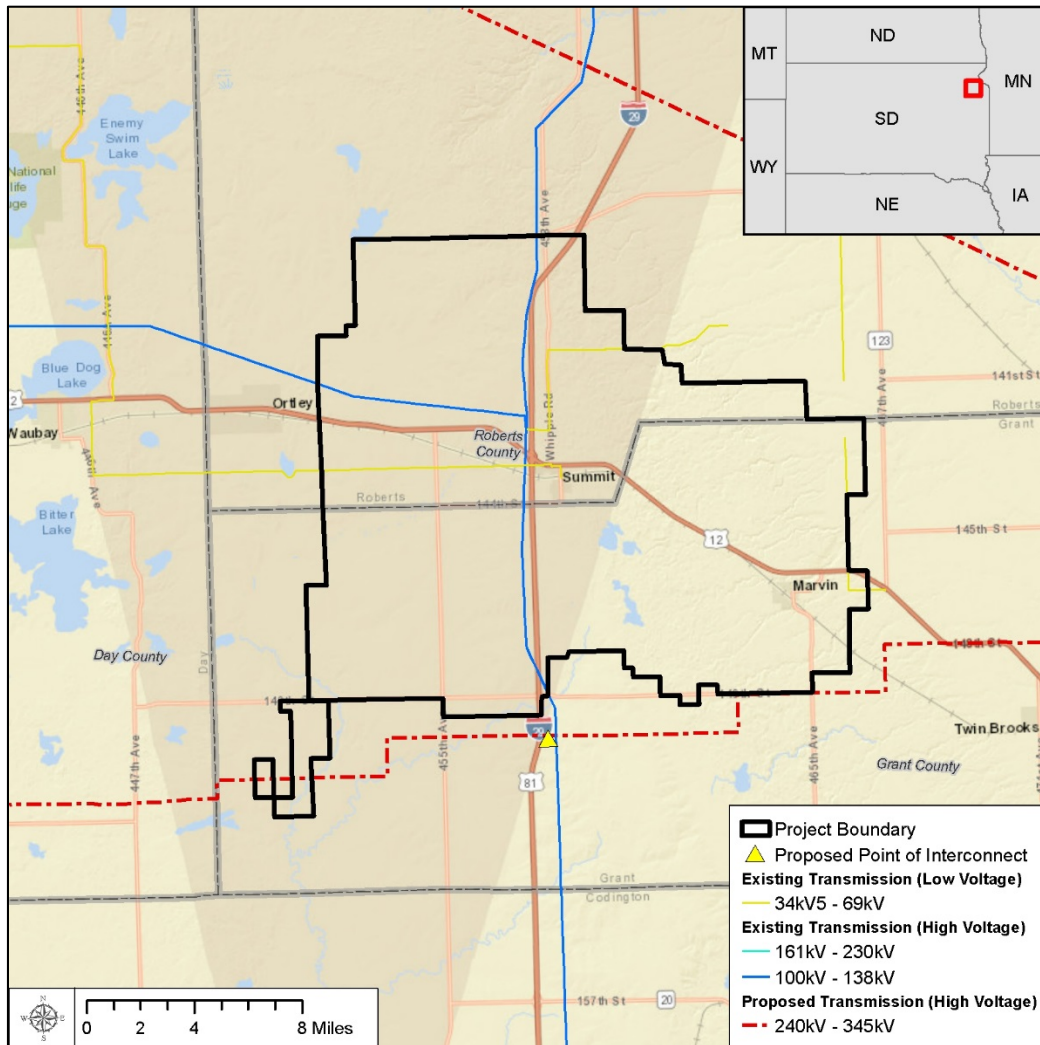


# Business Confidentiality/FOIA Exemption

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- Importance of sharing data and open collaboration
- Withheld from release under Exemption 4 if the information is:
  - (a) commercial or financial, (b) obtained from a person, and (c) privileged or confidential
- Information contained herein is Confidential Business Information
  - Voluntarily submitted
  - Held confidential by Company
  - Contains confidential business information valuable to the Company
- Exempt from release under Exemption 4 of FOIA
- Request same treatment of information submitted to SDGFP

# Project Status and Drivers



## Project Capacity and Details

Up to 304 MW, Up to 100 turbines

## Commercial Operations

Q3 2020 COD Target

## Project Drivers

Existing high-voltage power lines adjacent to Project

Commercial interest in Project

Strong and proven wind resource

## Project Status

Tier 1/2 studies complete

Tier 3 studies initiated in Jan 2017

Potential to impact USFWS Grassland Easements

## Meeting Objectives

Introduce project

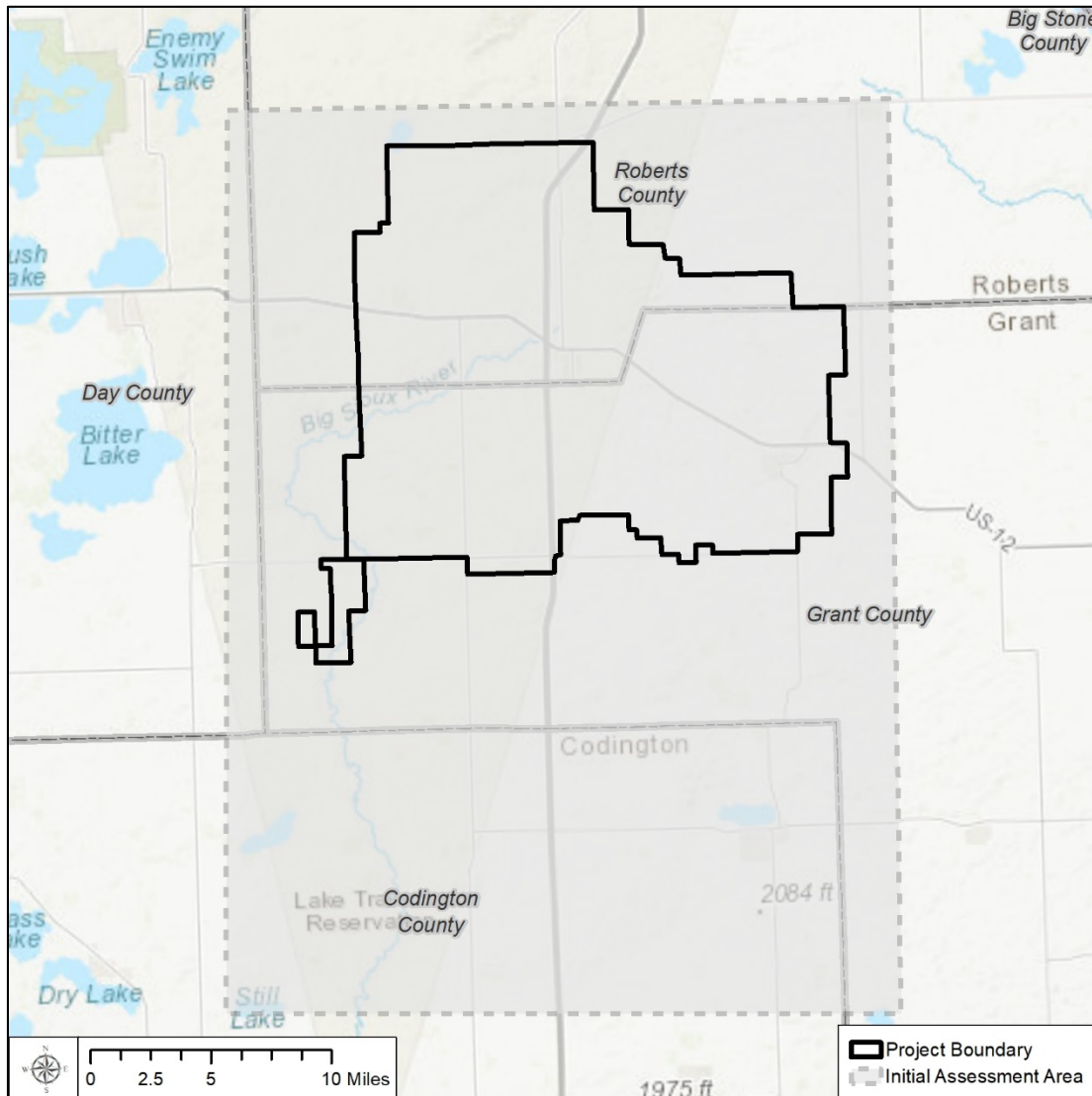
Review Tier 1 & 2, Stage 1 Risk Review and results of Tier 3 Surveys conducted to date

Agree on Tier 3/Stage 2 Study Plan

Synchronize FWS/Apex schedules to complete NEPA by May 2019



# Landscape Level Siting – Tier 1 Review

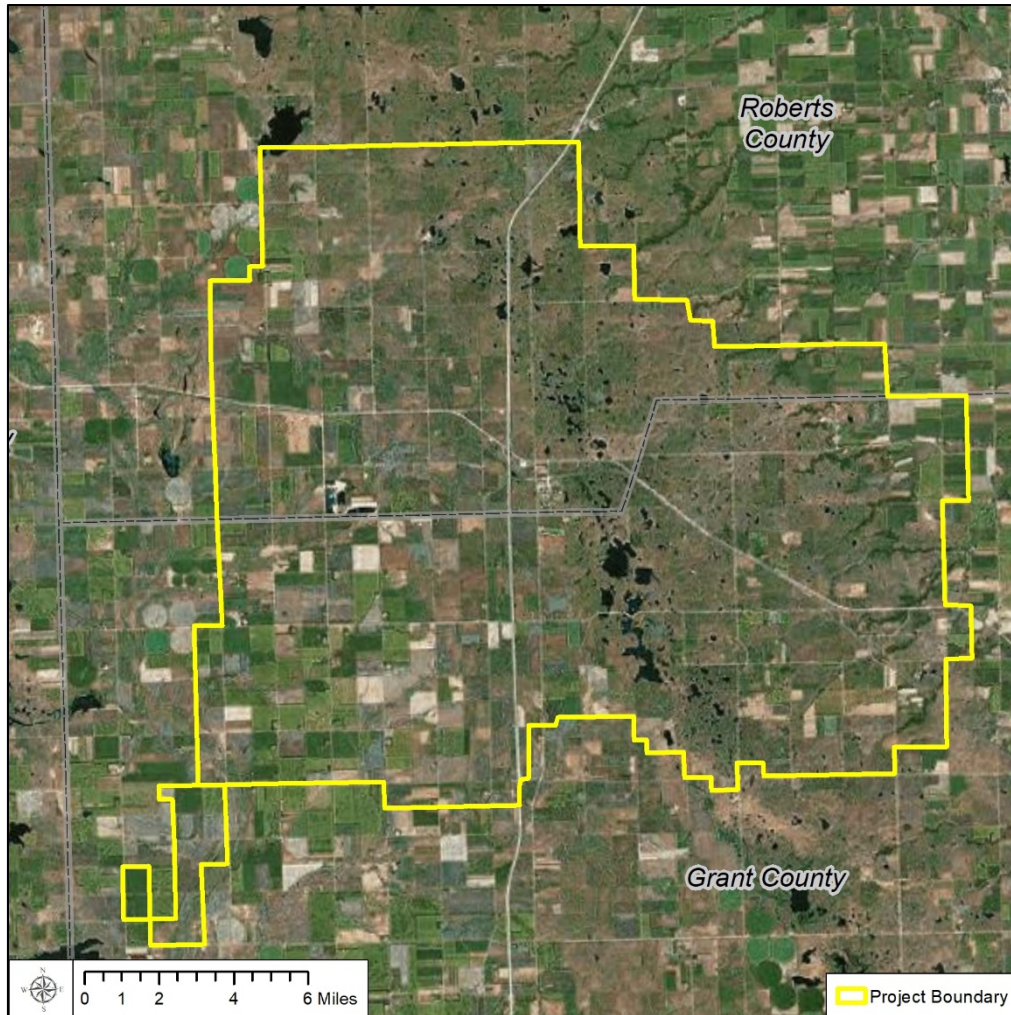


Apex originally assessed a larger area in this portion of South Dakota, considering factors such as:

- Transmission
- Wind Resource
- FAA constraints
- Military airspace
- Public acceptance
- Tribal input
- Environmental sensitivity:
  - Sensitive species
  - Sensitive habitats
  - Protected lands

Apex is targeting development efforts in the area shown (black boundary).

# Tier 2, Stage 1 Review



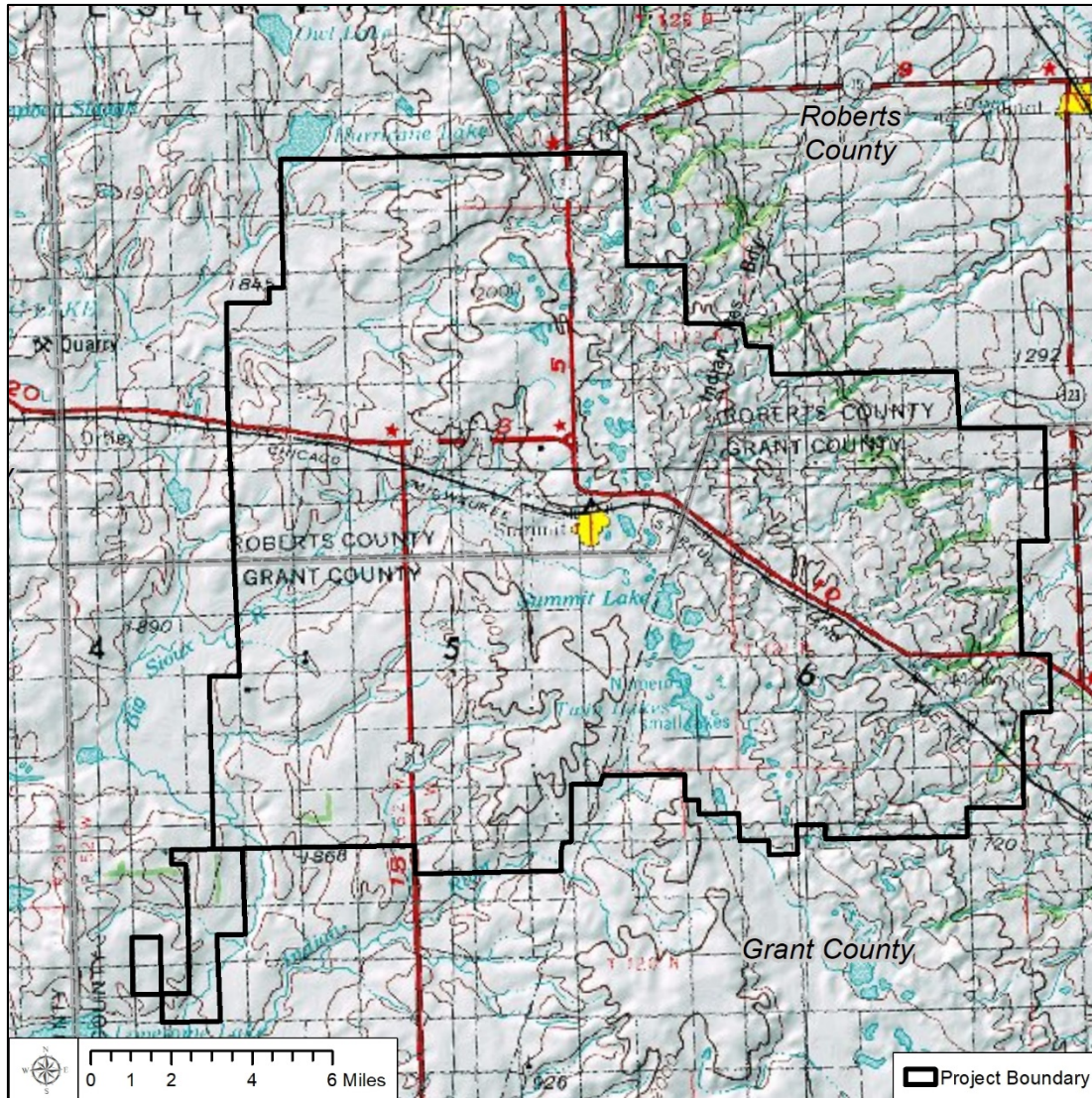
## Methods

- Landscape level assessment of habitat for species of concern per USFWS Guidelines
- Site Characterization (species likelihood, habitat, concentration areas, etc. via review of existing data sources)

## Data Sources Used

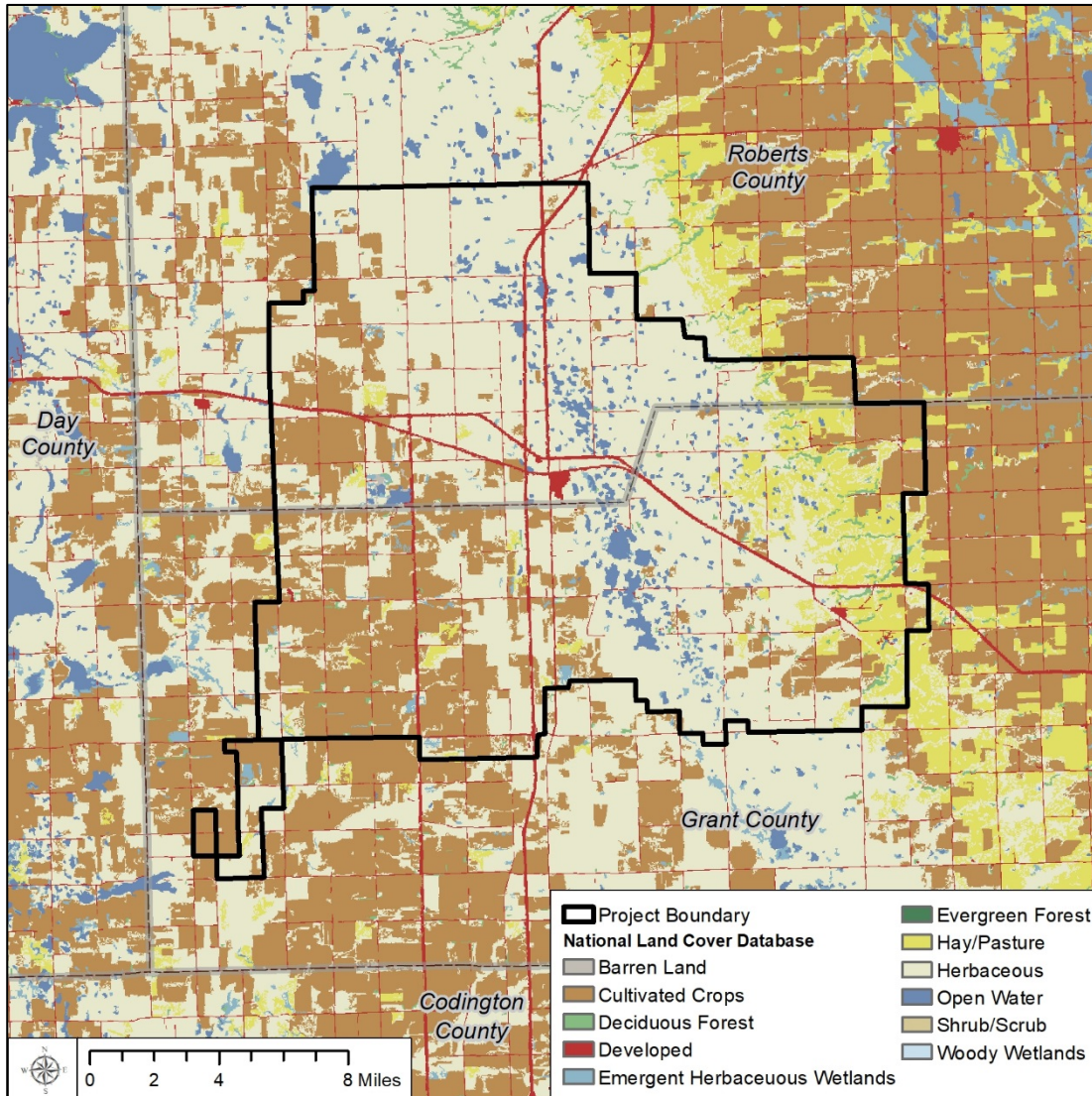
- USFWS IPaC
- SDGFP ESA Listed Species
- Data request and personal communication with agencies
- Existing data from adjacent projects (i.e., Summit Wind and Dakota Range I Wind)
- USGS North American Breeding Bird Survey Routes and Breeding Bird Atlas
- eBird
- HMANA Data
- AWWI Landscape Assessment Tool
- Cornell Lab of Ornithology and Natureserve
- Audubon Important Bird Areas
- TNC Northern Great Plains Low-Impact Wind Tool
- National Wetland Inventory database
- National Hydrography Dataset (NHD)
- Protected Areas Database of the U.S. (PADUS)

# Topography



- Gently rolling topography typical of the region, with declining elevation to the east
- No significant ridges, rock outcrops, or unique topographical features
- No obvious topographical features that would concentrate bird or bat activity

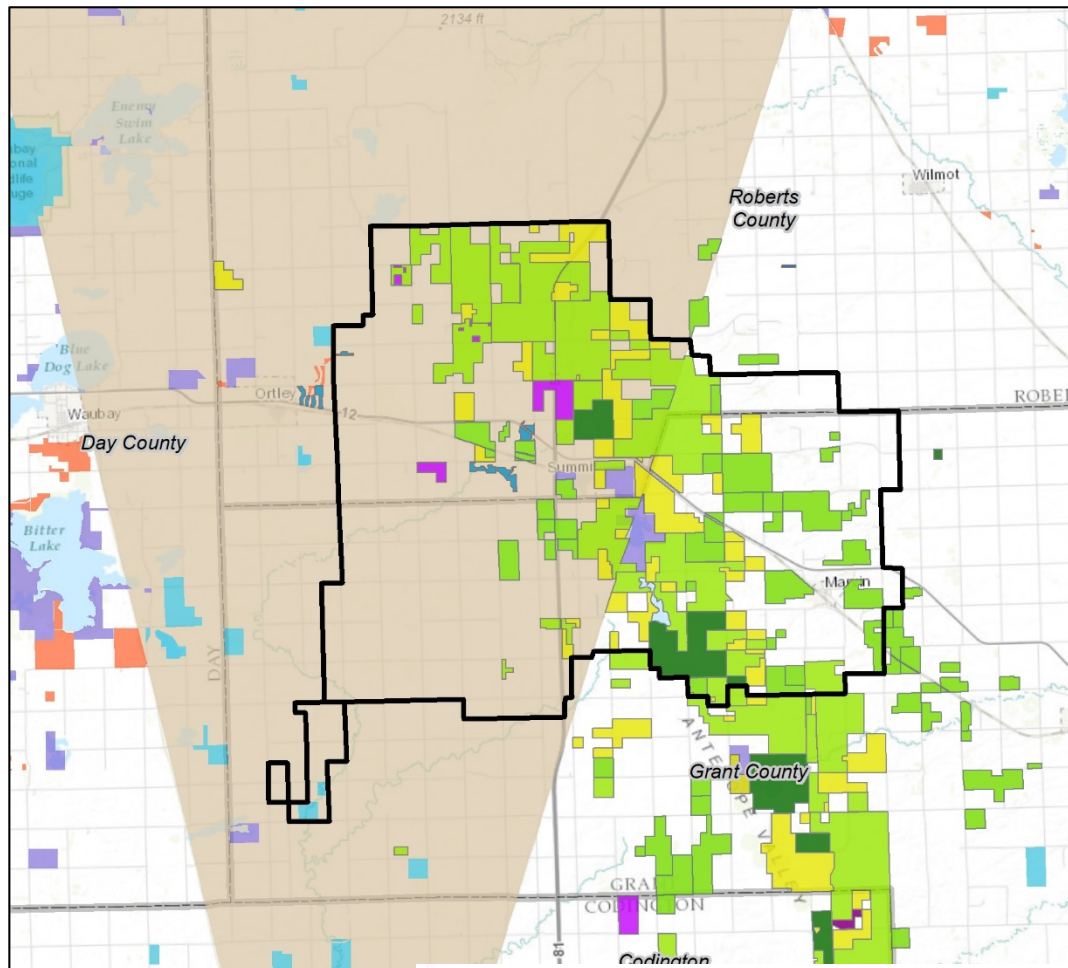
# Habitat



Source: NLCD

- Cultivated crops/hay-pasture and grassland/herbaceous rangeland dominate
- Very few trees in Project area
- Project avoids large waterbodies to the west
- Wetlands and waterbodies throughout central/eastern portion of Project
- Project will be designed to avoid wetlands and minimize impacts to native grasslands to the maximum extent practicable

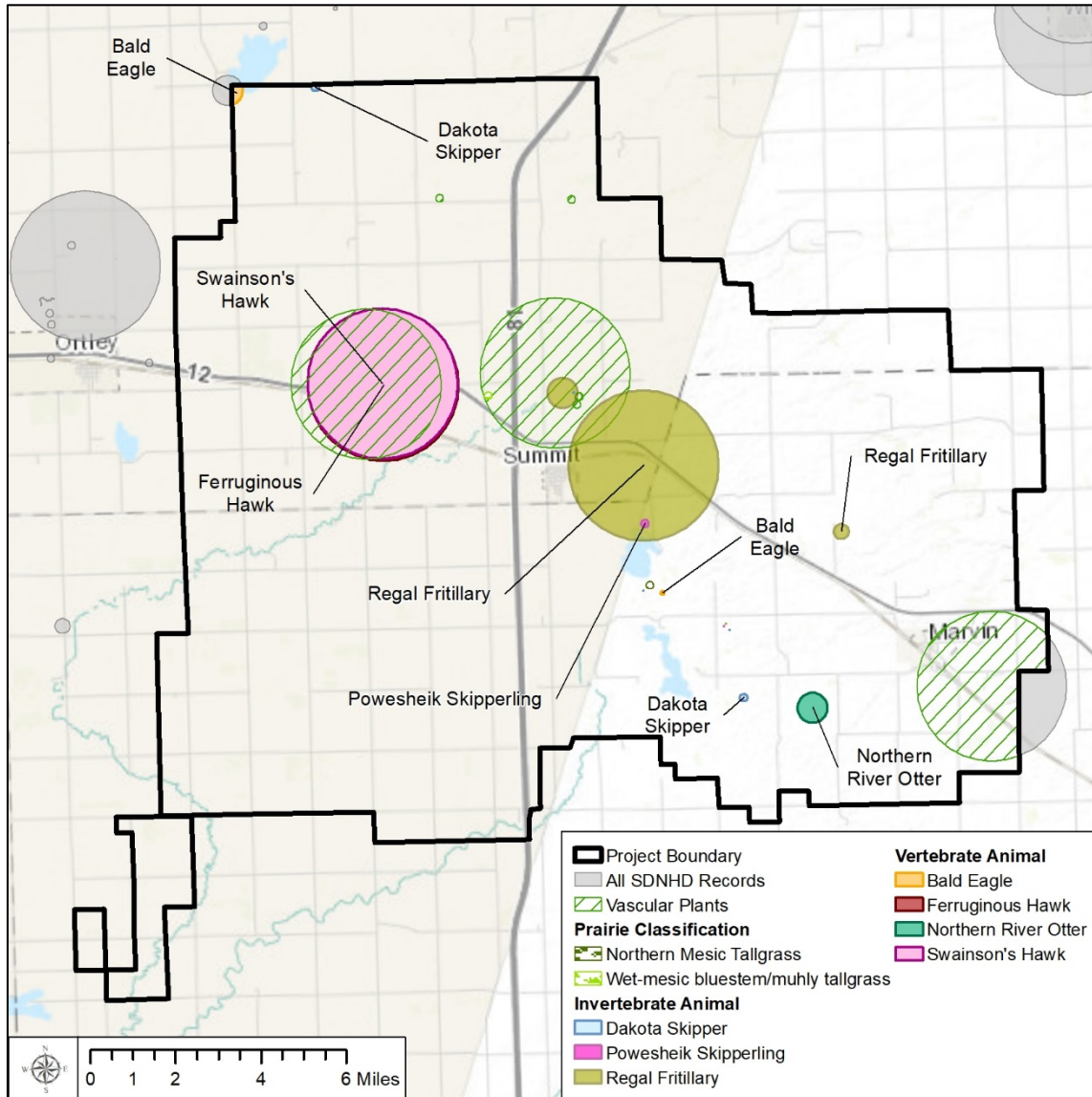
# Conservation Lands



- Closest Audubon IBA is 6 mi W of Project (Bitter Lake)
- Project will be designed to:
  - focus impacts on ag/disturbed habitats to the maximum extent practicable
  - avoid/minimize impacts to waterbodies and wetlands and sensitive areas to extent practicable
  - avoid sensitive tribal resources
- Impacts to USFWS grassland easements anticipated
- Extent of NEPA analysis TBD depending on extent of impact



# Natural Heritage Database Review



- 17 NHD sensitive resources within Project area
- Only 3 recorded in last 10 years (Regal fritillary, Dakota skipper, bald eagle)

# Federally Listed Species with Potential to Occur Within Project

Species	Federal Status	Potential	Comments
<b>Dakota skipper</b>	Threatened	Possible in suitable habitat	<ul style="list-style-type: none"> <li>• Inhabits unplowed native prairie</li> <li>• Critical habitat exists within Project boundary</li> <li>• Avoid habitat or presence/absence surveys</li> </ul>
<b>Poweshiek skipperling</b>	Endangered	Unlikely	<ul style="list-style-type: none"> <li>• Inhabits virgin prairie, fens, and grassy lakeshores</li> <li>• Largely extirpated from region, but could have remaining parcels of potential habitat</li> <li>• Avoid habitat or presence/absence surveys</li> </ul>
<b>Northern long-eared Bat</b>	Threatened	Possible	<ul style="list-style-type: none"> <li>• Summer habitat largely lacking in area</li> <li>• 4d rule BMPs warranted (no tree removal Jun/Jul)</li> <li>• No surveys planned</li> </ul>
<b>Red knot</b>	Threatened	Unlikely	<ul style="list-style-type: none"> <li>• Primarily an Atlantic Coast migrant, rarely observed in Midwest</li> <li>• No impact anticipated</li> </ul>
<b>Western prairie fringed orchid</b>	Threatened	Possible in suitable habitat	<ul style="list-style-type: none"> <li>• Commonly found in full sun on moist tallgrass prairies and sedge meadows, most often in undisturbed grassland</li> <li>• Avoid habitat or presence/absence surveys</li> </ul>

<https://ecos.fws.gov/ipac> (September 2017)

- Very low risk to federally-listed species with proper siting
- Avoid T/E spp. potential habitat and/or confirm absence
- ITA may be possible per Sect 7, but avoidance is expected

# Birds of Conservation Concern

Marsh/Waterbodies	Grassland/Open Country	Open Woodlands/Shrub	Forest
American bittern (b) <sup>+</sup>	Bobolink (b) <sup>+</sup> *	Red-headed woodpecker (b)	Black-billed cuckoo (b)
Black tern (b) <sup>+</sup>	Buff-breasted sandpiper (m) <sup>+</sup>		
Dunlin (m) <sup>+</sup>	Chestnut-collared longspur (b)		
Hudsonian godwit (m) <sup>+</sup>	Nelson's sparrow (b)		
Lesser yellowlegs (m) <sup>+</sup>	Smith's longspur (m) <sup>+</sup>		
Marbled godwit (b) <sup>+</sup>			
Semipalmated sandpiper (m)			
Short-billed dowitcher (m)			

Source: USFWS IPaC (Sept 2017). b = breeding, w = wintering, yr = year round, m = migration  
<sup>+</sup>Species documented onsite via ebird, \* species documented onsite during field surveys

- Wetland and grassland species likely to occur
- Studies ongoing to assess risk
- Only 1 species (BOBO) documented onsite during 175 hrs of surveys completed to date



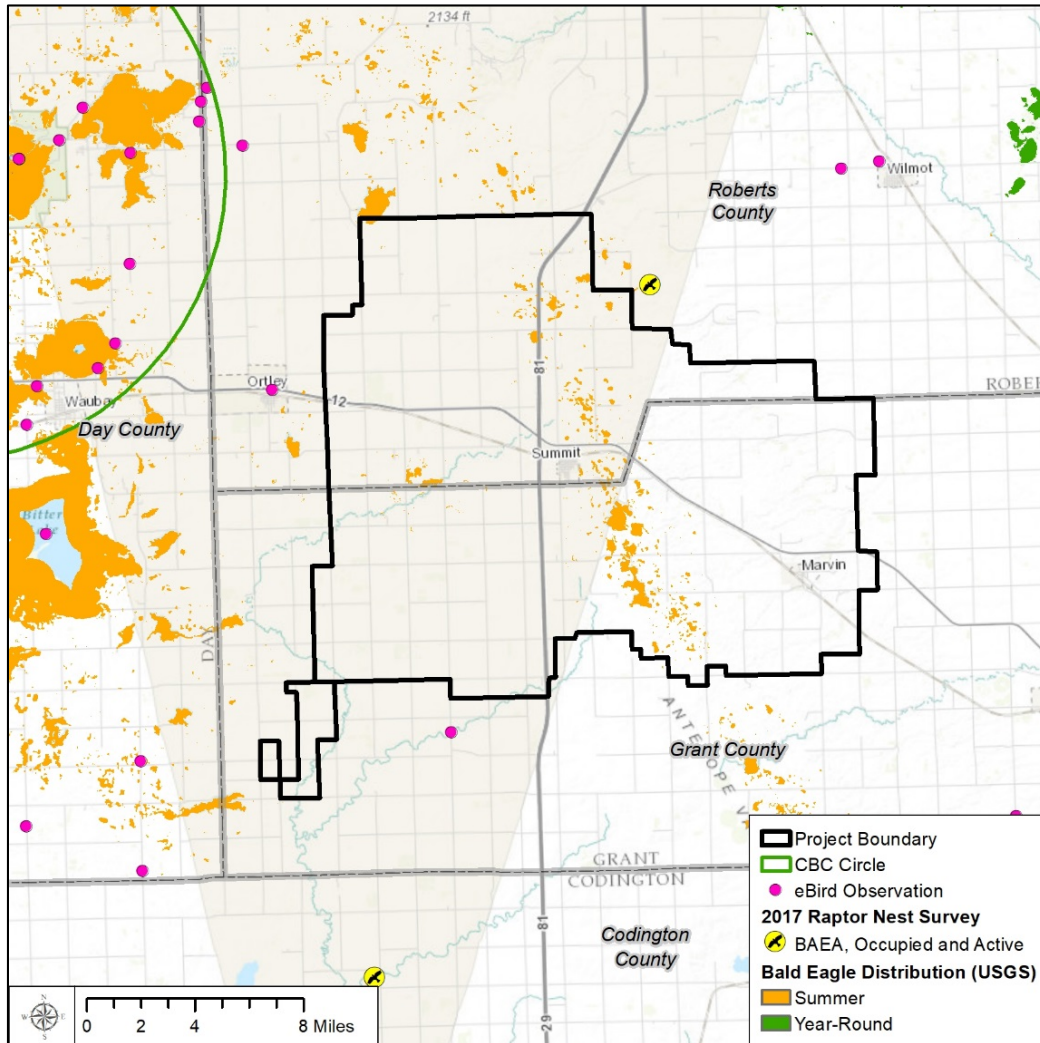
# State Listed Species in Roberts and Grant Counties

Species	Status	Potential	Comments
<b>Whooping crane</b>	SE	Unlikely	<ul style="list-style-type: none"> <li>• Approximately 150 mi east of migration corridor</li> <li>• Unlikely to occur, low risk</li> </ul>
<b>Osprey</b>	ST	Unlikely	<ul style="list-style-type: none"> <li>• Found near aquatic areas, rare outside Black Hills, low risk</li> </ul>
<b>Blacknose shiner</b>	SE	Unlikely	<ul style="list-style-type: none"> <li>• Project outside range, or impacts to habitat generally avoided (small streams/creeks)</li> <li>• SWPPP measures address potential sedimentation concerns</li> </ul>
<b>Northern redbelly dace</b>	ST	Unlikely	“
<b>Northern river otter</b>	ST	Unlikely	<ul style="list-style-type: none"> <li>• Riparian vegetation along wetland margins, low risk</li> </ul>

Source: <https://gfp.sd.gov/wildlife/docs/ThreatenedCountyList.pdf> (September 2017); doesn't include federally listed species

- No state listed species expected
- No impact expected
- Avoid wetlands/waterbodies with turbine siting

# Bald Eagle



## AWWI Landscape Assessment Tool

- Project sited within modeled distribution for species

## eBird Data

- 1 record in project (Sep 2015)

## Christmas Bird Count Data

- Low numbers (1-6) seen regularly during CBC (2006-2016)

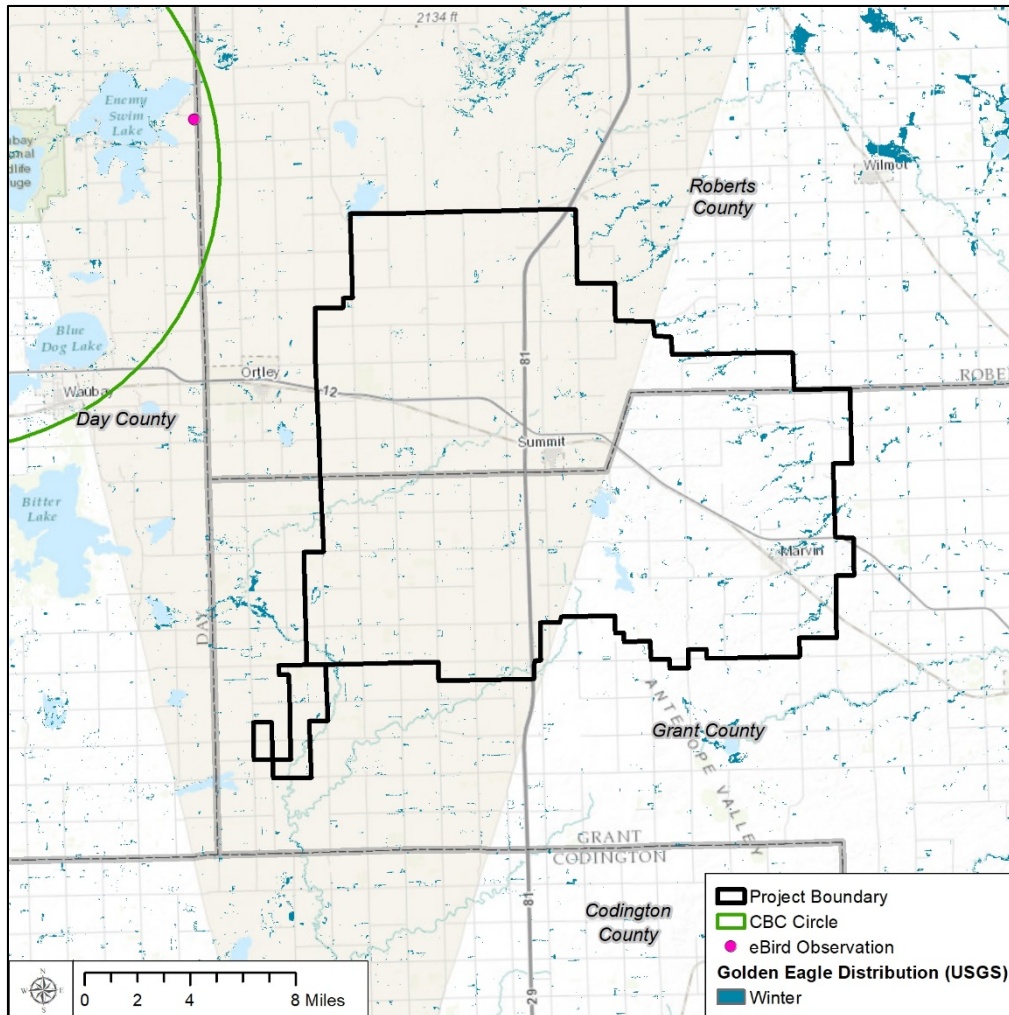
## Nesting

- Habitat atypical for eagle nesting
- One known nest ~0.5 mi NE

## Response

- ECPG-level eagle use studies ongoing (Sept 2017 – Sept 2018)

# Golden Eagle



## AWWI Landscape Assessment Tool

- Project within modeled winter distribution for species

## Observations

- No eBird records in project

## Christmas Bird Count Data

- No records (2006-2016)

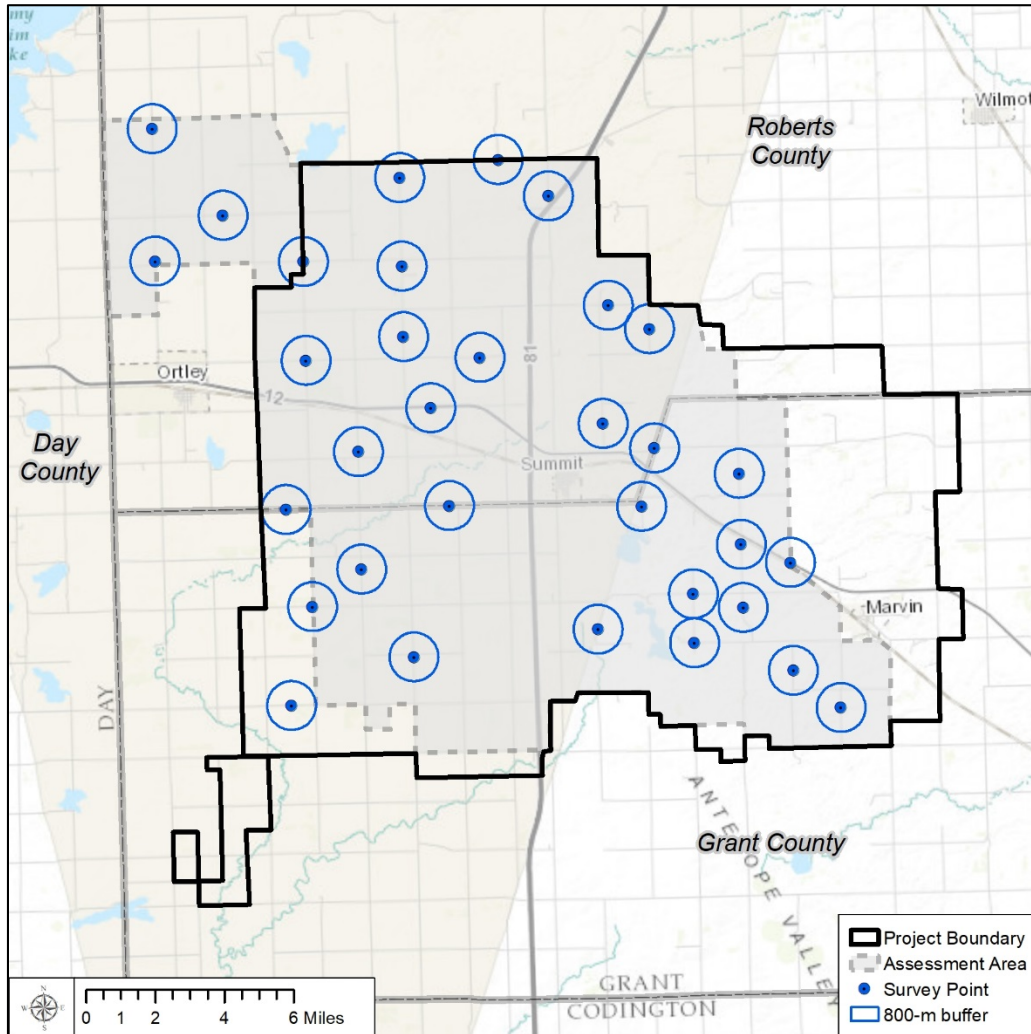
## Nesting

- Habitat atypical for GOEA nesting
- No known nests w/in 10 mi

## Response

- No surveys warranted; however, ECPG-level studies ongoing for bald eagles

# General Avian/Eagle Use Surveys (Year 1)



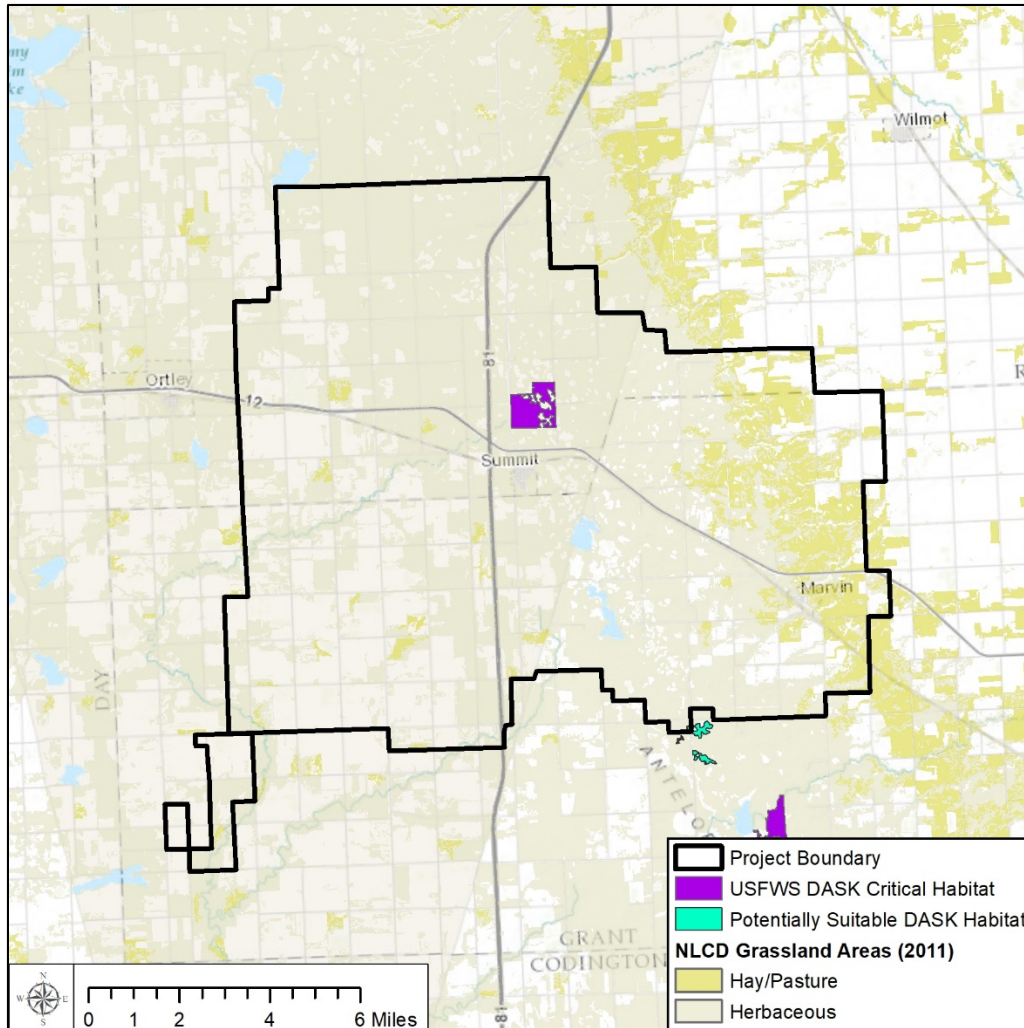
## Methods

- Dec 3, 2015 – May 31, 2017
- 33 points, 1x/mo
  - 5-min small bird counts
  - 20-min large bird/raptor counts
  - 1-hr eagle counts (ECPG protocol; 175 hrs total survey)

## Results To Date

- No federally or state listed species, and 1 BCC (BOBO) observed in low numbers
- Species common to grassland/ag habitats
- No GOEA and 3 BAEA risk obs in 175 hrs of study (0.02/hr) indicating very low risk
- Avian/eagle use surveys ongoing (Sept 2017-Sept 2018) to improve risk assessment and inform siting

# Poweshiek Skipperling and Dakota Skipper



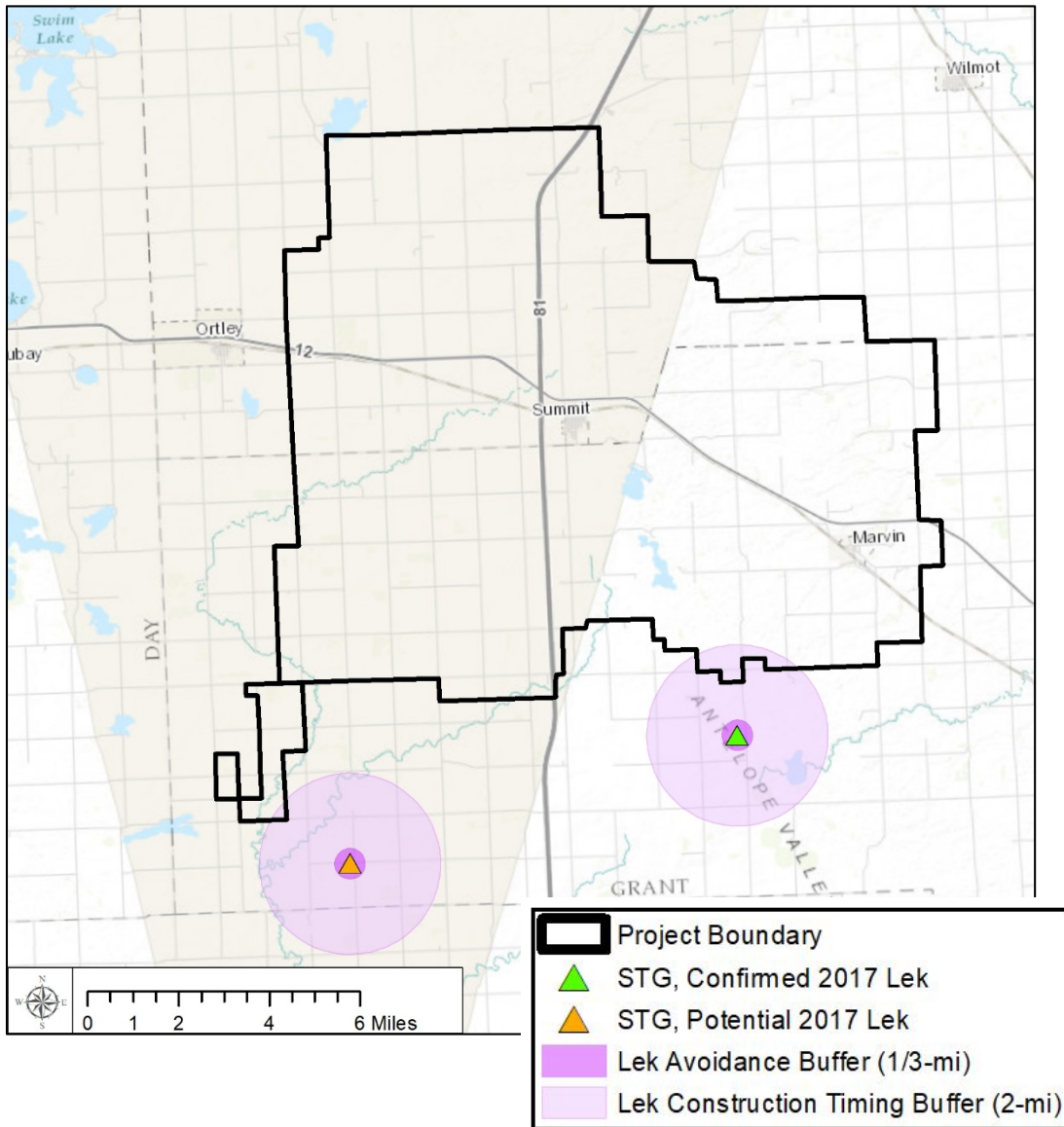
## Data

- Designated DASK Critical Habitat within Project area
- Untilled grassland areas may provide suitable habitat
- Substantial grazing/ag history in portions of the Project

## Response

- Identify potentially suitable habitat (i.e., native grasslands)
- Avoid impacts to suitable habitat, or confirm absence to ensure no impact

# Prairie Grouse



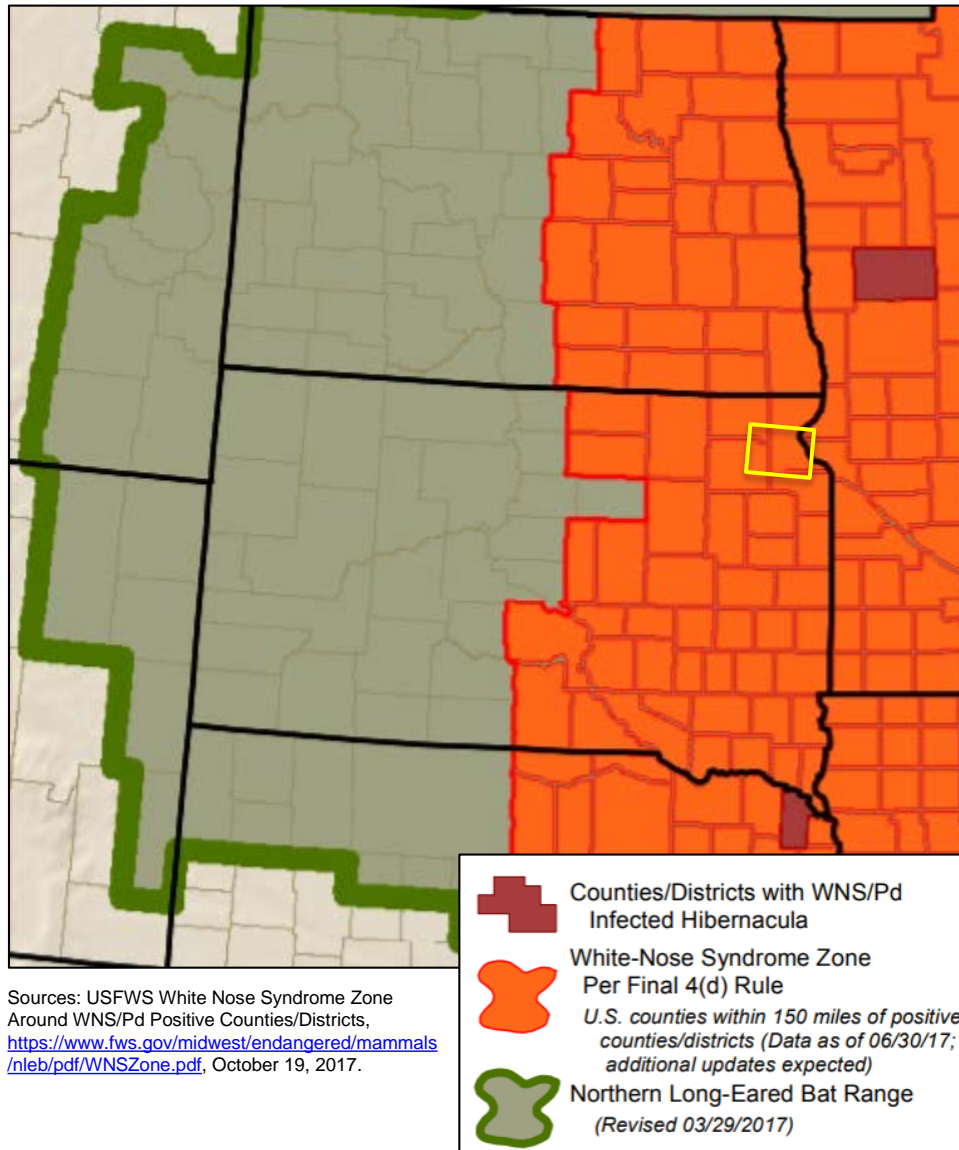
## Data

- Located within GPC and STG range
- Leks possible in or near project
- One active and one potential STG lek identified during 2017 surveys at adjacent project
  - Closest lek is 1.2 miles south

## Response

- Lek surveys planned in 2018 per SDGFP protocol
- Siting and construction timing BMPs planned to avoid/minimize impacts
- Very low impact expected with BMPs implemented

# Bats



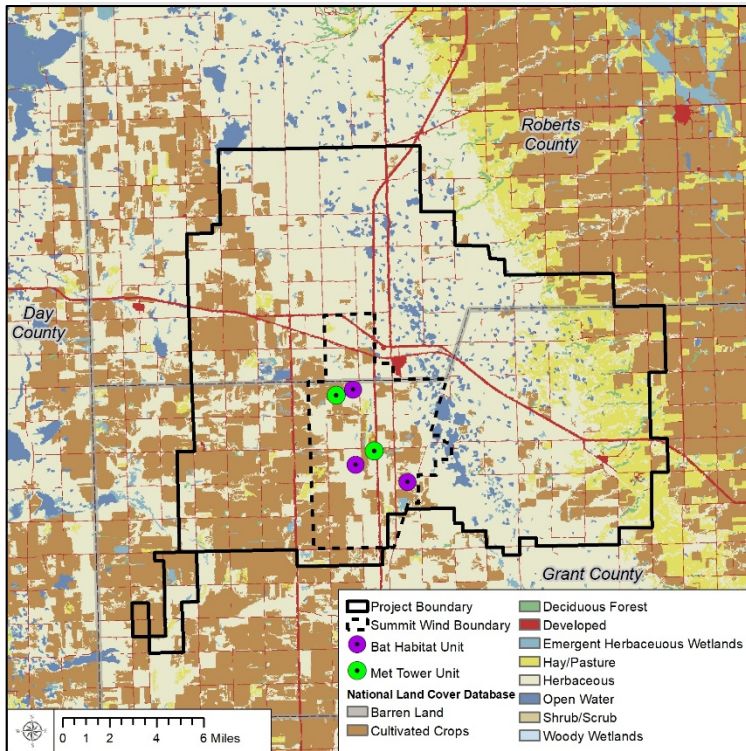
## Northern Long-eared Bat

- Within range of NLEB
- Limited roosting habitat onsite
- BMPs warranted but take exempt per 4d Rule
  - Feather to mfr cut in
  - Jun/Jul tree removal restrictions

## All Bats

- No other fed/state protected bats
- Very few trees onsite to concentrate bats, some water features for foraging
- No known hibernacula or summer roosts
- Summit Wind acoustic data indicate low bat activity in area
- Impacts likely low and similar to operating projects in region

# Bats (cont.) – Summit Wind Farm Acoustic Bat Study



Location of the acoustic detectors used in the Summit Wind Farm study in relation to the Dakota Range I Wind Project.

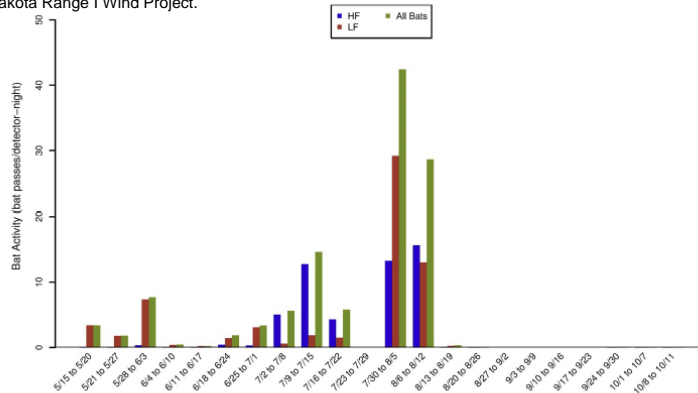


Figure 6. Weekly patterns of bat activity by high-frequency (HF), low-frequency (LF), and all bats at the Summit Wind Farm for the study period May 15 to October 11, 2014.

## Overview

### Methods

- May 15 – Oct 11, 2014
- 3 SM2 detectors at ground level
  - 2 units at base of MET towers (i.e., open habitat)
  - 1 unit rotated between 3 locations in suitable bat habitat (wooded areas)

### Results

- Very low bat activity in habitat representing turbine locations
  - Open habitat =  $0.32 \pm 0.08$  bat passes/detector-night
  - Wooded habitat =  $12.90 \pm 2.48$
- 97% of passes recorded in wooded habitat
- 52.6% low frequency bats, 47.4% high frequency bats
- Activity peak in late July/early August

### Conclusions

- Very low bat use compared to other studies
- Bat activity highest in forested habitats than in open areas where turbines would be located
- Low risk site

## Implications for Dakota Range III Wind

- Summit Wind bat data applicable to project area with similar habitat
- BMPs appropriate to minimize risk:
  - Feather to manufacturer cut in speed Aug 1-Oct 15
  - Avoid treed areas, avoid tree removal Jun/Jul
- No further study warranted with BMPs implemented



# Summary

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- **Federal Listed Species**

- No impact anticipated to Dakota skipper, Poweshiek skipperling, or western prairie fringed orchid (where applicable) with surveys and avoidance measures
- NLEB exempt under 4d rule; no other federally listed species likely to be affected

- **State Listed Species/Eagles**

- Very low levels of bald eagle activity documented
- Surveys ongoing to inform siting and avoid need for take permit

- **Avian**

- Avian community typical for habitats and region
- Low levels of BCC or SGNC expected – Low risk, localized use, no significant impact concerns
- Raptors – no obvious concentrating features; common, widespread raptors expected (additional nest and use surveys planned)
- STG/GPC – impacts avoided/minimized via siting or construction timing BMPs. Additional lek sureys planned

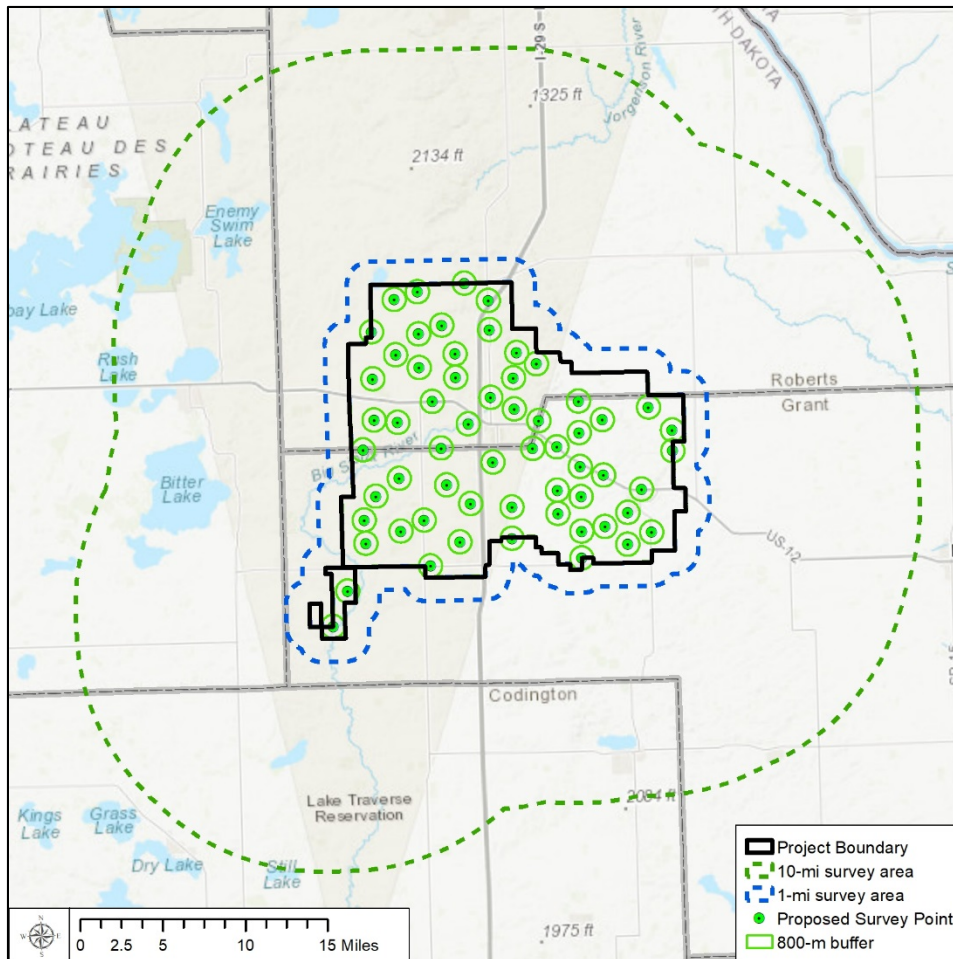
- **Bats**

- Low bat risk with siting/feathering BMPs implemented. Operational surveys planned to confirm low risk conclusion

- **General**

- Site is outside concentrated avian flyways and migration corridors
- Impacts to grasslands protected under USFWS easements anticipated, which may trigger NEPA and associated mitigation to ensure no significant impact

# Next Steps/Survey Plan



Survey	Methods
Avian/ Eagle Use	<ul style="list-style-type: none"> <li>Additional year of surveys to inform risk assessment (Sep 2017-Sep 2018)                             <ul style="list-style-type: none"> <li>61 points, 1x/mo</li> <li>65-min counts                                     <ul style="list-style-type: none"> <li>5-min small bird counts</li> <li>20-min raptor/large bird counts</li> <li>60-min eagle counts (~700 hrs total)</li> </ul> </li> </ul> </li> </ul>
Raptor Nests	<ul style="list-style-type: none"> <li>Spring 2018</li> <li>Aerial nest surveys prior to leaf out                             <ul style="list-style-type: none"> <li>All raptor species within 1 mi</li> <li>Eagles within 10 mi</li> </ul> </li> </ul>
Leks	<ul style="list-style-type: none"> <li>Apr-May 2018</li> <li>Project area and ½-mile buffer</li> </ul>
DASK/ POSK	<ul style="list-style-type: none"> <li>May-June 2018</li> <li>Desktop assessment of entire Project area, ground surveys within potentially suitable habitat</li> <li>Presence/absence surveys if applicable</li> </ul>
W Prairie Fringed Orchid	<ul style="list-style-type: none"> <li>June –July 2018</li> <li>Presence/absence surveys if applicable</li> </ul>

# NEPA Plan

Actions	Comments
Complete Field Surveys <ul style="list-style-type: none"> <li>• Wildlife</li> <li>• Wetlands</li> <li>• Cultural Resources</li> </ul>	<ul style="list-style-type: none"> <li>• Most completed by Jul 2018, with exception of Avian/Eagle in Sep 2018.</li> <li>• Layout finalized May/Jun 2018*</li> <li>• Preliminary avian/eagle use analysis (Dec 2015-Jun 2018 data) used in drafting EA, complete data incorporated into final EA</li> </ul>
Draft EA preparation	<ul style="list-style-type: none"> <li>• Jul-Aug 2018 (Applicant/consultant prepared EA)</li> </ul>
ESA Section 7 Consultation	<ul style="list-style-type: none"> <li>• Consultant Draft BA Jun 2018</li> <li>• USFWS BiOp Aug/Sep 2018</li> </ul>
NHPA Section 106 Consultation	<ul style="list-style-type: none"> <li>• Apex is currently coordinating with SWO</li> <li>• FWS to initiate formal 106 consult in Fall 2017 and complete Aug 2018</li> </ul>
DEA Public Comment period	<ul style="list-style-type: none"> <li>• Oct 2018 (30 days)</li> </ul>
FEA/FNSI/NTP	<ul style="list-style-type: none"> <li>• Jan 2018</li> </ul>

Aggressive NEPA schedule, requires close coordination and commitment from all parties.

\*Note: PUC Application to be submitted in May/Jun 2018, so most studies and siting issues will be resolved at that point (i.e., cultural, leks, nests, wetlands, grasslands, etc.)

# Next Steps

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## 2017-18

- Complete surveys necessary to inform siting and minimize impacts and draft EA

## 2018

- Review findings along the way, agree on impact avoidance/minimization measures, and prepare EA
- Completed Sec 7 and 107 consultations and finalize EA

## Apex Goals and Commitments

- Coordinate closely with USFWS and SDGFP to maintain NEPA schedule
- Bring low impact project to operations
- Work proactively to ensure regulatory compliance and meet NEPA standards