



HAND DELIVERED
MAY 3, 2017

May 3, 2017

John Schumacher, Resource Biologist
North Dakota Game and Fish Department
100 N. Bismarck Expressway
Bismarck, North Dakota 58501

Subject: Submission of Critical Issues Analysis, Site Characterization Study and a Pre-Construction Avian and Bat Survey Plan for the Proposed Ruso Wind Project in North Dakota

Dear Mr. Schumacher:

Ruso Wind Partners, LLC is developing the Ruso Wind Project and will be preparing an application for a Certificate of Site Compatibility for the proposed Ruso Wind energy conversion project (the Wind Project), in accordance with North Dakota Century Code (NDCC) Chapter 49-22. The proposed Wind Project will be located in Ward and Mclean Counties and would consist of approximately 200 megawatts (MW). As part of that application, we have contracted Westwood to complete a Critical Issues Analysis, Site Characterization Study and a Pre-Construction Avian and Bat Survey Plan for the project which are enclosed for your review.

We are consulting your agency for assistance in identifying concerns or issues within the Study Area Boundary found in the enclosed Site Characterization Study. We would appreciate any additional information that the NDG&F Department has to offer. The information provided will be used to help guide Wind Project development in a manner that identifies and avoids impacts to sensitive resources where practicable.

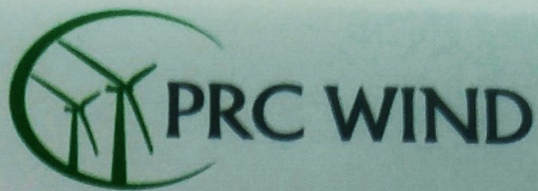
We would also like to set up an in-person meeting with U.S. Fish and Wildlife Service (USFWS) and North Dakota Game and Fish (NDGF) to introduce the Project. We will be in contact to schedule a meeting. In the meantime, please let us know if you have any questions. Thank you for your assistance.

Respectfully submitted,

Jay Regnier P.Eng.

Vice President, Projects
PRC Wind on behalf of Ruso Wind Partners, LLC

Attachments (3): Ruso Wind Project Critical Issues Analysis
Ruso Wind Project Site Characterization Study
Ruso Wind Project Pre-Construction Avian and Bat Survey Plan



May 3, 2017

Kevin Shelley, North Dakota State Supervisor, Ecological Services
U.S. Fish and Wildlife Service
3425 Miriam Avenue
Bismarck, North Dakota 58501

*HAND DELIVERED
MAY 3, 2017*

Subject: Submission of Critical Issues Analysis, Site Characterization Study and a Pre-Construction Avian and Bat Survey Plan for the Proposed Ruso Wind Project in North Dakota

Dear Mr. Shelley:

Ruso Wind Partners, LLC is developing the Ruso Wind Project and will be preparing an application for a Certificate of Site Compatibility for the proposed Ruso Wind energy conversion project (the Wind Project), in accordance with North Dakota Century Code (NDCC) Chapter 49-22. The proposed Wind Project will be located in Ward and Mclean Counties and would consist of approximately 200 megawatts (MW). As part of that application, we have contracted Westwood to complete a Critical Issues Analysis, Site Characterization Study and a Pre-Construction Avian and Bat Survey Plan for the project which are enclosed for your review.

We are consulting your agency for assistance in identifying concerns or issues within the Study Area Boundary found in the enclosed Site Characterization Study. We would appreciate any additional information that the USFWS has to offer. The information provided will be used to help guide Wind Project development in a manner that identifies and avoids impacts to sensitive resources where practicable.

We would also like to set up an in-person meeting with U.S. Fish and Wildlife Service (USFWS) and North Dakota Game and Fish (NDGF) to introduce the Project. We will be in contact to schedule a meeting. In the meantime, please let us know if you have any questions. Thank you for your assistance.

Respectfully submitted,

Jay Regnier P.Eng.

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PRC Wind on behalf of Ruso Wind Partners, LLC

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Ruso Wind Project Site Characterization Study
Ruso Wind Project Pre-Construction Avian and Bat Survey Plan

**Ruso Wind Project
U.S. Fish and Wildlife Service and
North Dakota Game and Fish Department Meeting
Via Tel-Con
July 5, 2017**

Meeting Notes

Attendees:

- ✓ Kevin Shelley – U.S. Fish & Wildlife Service (“USFWS”)
- ✓ John Schumacher – North Dakota Game and Fish Department (“NDGFD”)
- ✓ Jay Regnier – Ruso Wind Partners, LLC (“RWP”)
- ✓ Ryan Ammermann – Ruso Wind Partners, LLC (“RWP”)
- ✓ Brad Norling – Westwood Professional Services (“Westwood”)

Project Introduction:

- Jay introduced Ryan who will be taking the lead with regard to environmental coordination for the Project. Jay noted that Ryan would be the primary agency point of contact for the Project.
- Jay discussed aspects of the proposed Project including the location, size, and other existing wind facilities nearby. Kevin asked about level of site control and Jay indicated that site control is at approximately 50%. Jay further mentioned that the Project is proposed at 200 MW nameplate capacity and that construction is anticipated to begin in either 2019 or 2020. He added that the Project start date is largely driven by the MISO interconnect agreement.
- Kevin noted that there are a lot of USFWS easements in the Project Area. Brad mentioned that the SCS contains the latest data for easements, which was obtained from the USFWS Habitat and Population Evaluation Team office. Kevin asked about avoidance of grasslands, especially as it pertains to USFWS grassland easement areas. Jay mentioned that it was the intent of Ruso Wind to avoid all USFWS grassland easement areas.

General Discussion:

- Kevin stated that the USFWS would provide updated information on Dakota skipper locations and that a shapefile of the Project Boundary would be helpful. Jay noted that he would send a shapefile of the Project Boundary to the USFWS. Kevin stated that the USFWS could also send over whooping crane use areas and occurrence locations.
- Kevin mentioned that Dakota skippers are known to occur near the Project and recommended presence/absence surveys for skippers in 2018, focusing on areas with the highest quality habitat. Kevin also noted that the general region is also home to a relatively high density of Sprague’s pipit. Brad discussed with the group that the habitat within the Project Area is not very good with respect to native prairie vegetation, since much of the area contains dense stands of shrubland. Brad also mentioned that the grassland shown in the exhibits was mapped at the desktop level and that the data needs to be field verified.

- Jay asked about any changes or recommendations to the existing study plan. Kevin indicated they would like to see a more long-term conservation strategy for grasslands and grassland obligate species. Kevin continued to discuss about how the risk profile could potentially change over time depending on long-term land use practices. Kevin mentioned that what they are lacking in North Dakota is an overall conservation strategy for grasslands at a landscape scale.
- Jay asked Kevin again about what RWP can do specifically to address grassland breeding bird issues. Kevin proposed a working meeting in the future to develop a conservation strategy going forward for the Project. John indicated he would be open for a discussion on this topic as well. Jay mentioned to the group that RWP is still moving ahead with the typical pre-construction studies required by the PSC. Jay said he would be amenable for such a discussion and asked about the timing for the meeting. Kevin indicated he is available for a face-to-face meeting as early as August 17, 2017. John indicated that he would likely be available and Jay mentioned that he would send out an invite to get that date on everyone's calendar. Kevin and John agreed to put together an initial list of variances to the Pre-construction Avian and Bat Survey Plan to address this issue by the end of July as a starting point of discussion.
- Brad recommended to the group that he had already put together a survey protocol for grassland breeding birds and that this could be used as a baseline for further discussion and development of a more detailed long-term conservation strategy. Kevin mentioned that he would like to start the process by providing RWP with a map of sensitive species locations relative to the Project Area. Kevin discussed the types of data he would be providing including Dakota skipper locations, and historical whooping crane stopover GPS locations to use as a baseline for risk characterization for the Project.
- Brad presented an overview of survey results to date to the group. He mentioned that very few trees are present on site that could be used for nesting raptors and that there were few eagle nests located within the 10-mile buffer around the Project Area. Brad noted that there were only three inactive bald eagle nests and one active bald eagle nest located within the survey area but none in the Project Area. Brad went on further to describe the deployment of acoustic bat detectors at three locations in the Project Area and that general avian point count surveys have documented no special-status species to date.
- Kevin indicated that the USFWS is currently having an active discussion with the PSC about a robust strategy around a more broad-based landscape-level conservation strategy.

Action Items:

- Jay to send out meeting invite to participants for August 17, 2017.
- RWP to send USFWS shapefile of project boundary.
- USFWS to provide data on current locations of Dakota skipper, confirmed observations of whooping cranes, GSP data on whooping crane locations, and whooping crane habitat data per USGS study on whooping crane habitat use.
- USFWS and NDG&F to provide RWP with a list of variances to the Pre-construction Avian and Bat Survey Plan to address conservation of grassland breeding birds.

**Ruso Wind Project
North Dakota Game and Fish Department Meeting
February 21, 2018**

Meeting Notes

Attendees:

- ✓ John Schumacher – North Dakota Game and Fish Department (“NDGFD”)
- ✓ Elisha Mueller – North Dakota Game and Fish Department (“NDGFD”)
- ✓ Ryan Ammermann – Project Resources Corporation (“PRC”)
- ✓ Eric Hansen – Westwood Professional Services (“Westwood”)
- ✓ Kristin Mohon – Southern Power (“SPC”)
- ✓ Katie Gase – Southern Power (“SPC”)

General Discussion:

- Meeting is a follow up to the previous meeting held on August 24, 2017 to introduce the new project owners, Southern Power to NDGFD. Ryan discussed the schedule for various aspects of the Project, which include the following: (1) 60-70% of the land is currently leased, (2) moving to project permitting in Spring 2018, (3) construction starting in August 2019, (4) generator interconnection agreement (GIA) process will occur at the end of 2019-Spring of 2020, and (5) the Project will be commercially operational in June-July of 2020.
- NDGFD provided an overview of their guidelines that are based on a habitat protection approach rather than featured species management. Discussion was centered on the development of State-specific wind energy guidelines for offsetting impacts to fish and wildlife resources with an emphasis on habitat
- Discussion continued with the Foxtail Project where the NDGFD recommended an offset package for the permanent impacts of roads and turbine pads that are to be constructed within unbroken prairie habitat >160 acres in size. NDGFD recommended that this offset package include direct effects of development features, as well as indirect effects of the fragmentation of unbroken prairie habitat of up to 100 meters from new or upgraded roads and 200 meters from turbine sites. NDGFD further recommended a 10 meter avoidance area around all wetlands from the National Wetland Inventory (NWI) maps. John mentioned that formal guidelines from the NDFG would be completed and available within the next several weeks.
- NDGFD stated that the goal for the development project is to work collaboratively in order to provide the PSC with a favorable letter in support of Ruso Wind.
- NDGFD mentioned that the ultimate goal would be to avoid unbroken prairie to the greatest extent possible and maintained that NDGFD are not looking at the quality of individual parcels but that all unbroken would be treated equally, regardless of the quality.

- To evaluate the level of impacts from individual wind projects, NDGFD is recommending that project proponents use the most recent 2014 NDGFD GIS spatial layers they developed. NDGFD also indicated that they would be open to other data sources of native prairie developed by consultants. John mentioned that NDGFD would send the 2014 native prairie GIS data to SPC.
- NDGFD explained that the rationale for much of their guidance for calculated impacts was based on Nebraska guidelines. John mentioned that the indirect impacts were based on decreased use and avoidance of areas by wildlife adjacent to project features.
- PRC mentioned that the project would have a capacity of approximately 200 MW and that they were considering using 2.0-3.65 MW turbines. Ryan mentioned that additional fieldwork was anticipated to commence in late March and that the PSC siting application would be submitted in mid-spring.
- NDGFD mentioned that they would like to see a wildlife conservation plan early in the process. Additionally, NDGFD mentioned that there would be an approximate 1-2 month timeframe for their internal review and discussion.

Action Items

- NDGFD (Sandra Johnson) to send 2014 native prairie GIS data to SPC in shapefile format.
- SPC/PRC to determine who manages the state lands and easements and send information to John.
- The guidelines NDGFD to send formal guidelines for native prairie to SPC when available.

**Ruso Wind Project
USFWS Meeting
February 22, 2018**

Meeting Notes

Attendees:

- ✓ Kevin Shelley – U.S. Fish & Wildlife Service (“USFWS”)
- ✓ Ryan Ammermann – Project Resources Corporation (“PRC”)
- ✓ Eric Hansen – Westwood Professional Services (“Westwood”)
- ✓ Kristin Mohon – Southern Power (“SPC”)
- ✓ Katie Gase – Southern Power (“SPC”)
- ✓ Brad Norling – Westwood Professional Services (“Westwood”) [Via TelCon]

General Discussion:

- Meeting is a follow up to the previous meeting held on August 24, 2017 to introduce the new project owners, Southern Power to the USFWS. Ryan discussed the following schedule for various aspects of the Project, which include the following: (1) 60-70% of the land is currently leased, (2) moving to project permitting in Spring 2018, (3) construction starting in August 2019, (4) generator interconnection agreement (GIA) process will occur at the end of 2019-Spring of 2020, and (5) the Project will be commercially operational in June-July of 2020.
- USFWS mentioned that it was advantageous for the project proponents to maintain close coordination with the USFWS during the early phases of Project permitting. Kevin briefly explained the ongoing wildlife collaborative process to SPC. He stressed that while this new effort was important, the current Wind Energy Guidelines (WEGs) were still the “Gold Standard” for evaluating the impacts of proposed wind facilities on wildlife.
- Discussion continued with a summary of the meeting with the NDGFD whereby they recommended an offset package for the permanent impacts of roads and turbine pads that are to be constructed within unbroken prairie habitat >160 acres in size. NDGFD also recommended that this offset package include direct effects of development features, as well as indirect effects of the fragmentation of unbroken prairie habitat of up to 100 meters from new or upgraded roads and 200 meters from turbine sites.
- While the NDGFD does not recognize the different levels of quality of native prairie, it was noted that some of the preliminary mapping conducted by Westwood could be used in the evaluation of suitable Dakota skipper habitat. Kevin mentioned that in order for him to give a favorable letter to the PSC, he will need to know the quality of the habitat (USFWS holds the position that habitat does matter for the skipper). USFWS also holds the position that native grassland impact is not limited to the 160 acres that NDGFD recommends. USFWS is concerned with any large tracts of grassland, determined on a project-specific basis, and is willing to negotiate on offsets that make sense for the project.

- The focus of the remaining portion of the meeting shifted to endangered species. Kevin mentioned that there was a positive occurrence of Dakota skipper immediately east of the Project Area. Since the Project Area is within an area of potential habitat, Kevin recommended considering presence/absence surveys for Dakota skipper be conducted in spring in 2018 focusing on areas with the highest quality habitat once the habitat survey has been completed. Discussion also ensued over the habitat model for Dakota skipper, which could be used to determine which areas, within the larger Project Area would be targeted for surveys. USFWS is developing a Dakota skipper survey protocol which should be finalized in the near future. Kevin explained the protocol includes a 1 year/2 season survey with 2-3 sites visits separated by 48 hours each. There is currently a limited number of qualified surveyors in the area.
- If the project proponents were to find Dakota skippers in the Project Area, there would be two options:
 1. Develop an HCP, which also invokes NEPA. Assuming there is a non-jeopardy opinion, the USFWS would issue an incidental take permit for the Project or
 2. Avoid areas where Dakota skipper occurs altogether. Surveys of areas which are determined to be negative, are only negative for 3 years. Butterflies found in a specific area can disperse at distances of up to 1-km, so corridors are important to these species. Therefore, in order to avoid take it would be best to stay out of the areas that are the highest quality habitat for butterflies. Might want to consider multiple year surveys as well. Kevin suggested that in the absence of surveys the USFWS could make a reasonable case for occupancy within the Project Area based on documented occurrences nearby.
- With regard to the other federally listed species, the group briefly discussed whooping cranes. Kevin mentioned that most companies choose an adaptive management approach to risk and that he didn't see any glaring issues with regard to take of whooping cranes from the proposed Ruso Project. Mitigation is limited primarily to the operational phase of a project through options such as monitoring, via observers and directly through communication to develop a situational awareness to shut down turbines, etc. Kevin also mentioned several studies that use real-time GPS data to track whooping crane habitat use and that information from these studies could be used to sharpen the BBCS.
- Kevin also discussed the potential for a number of other sensitive "prairie obligate" birds to occur with the Project Area and surrounding region. Brad mentioned to the group that much of the native prairie with the Project Area was in poor condition and has transitioned into more of an open shrubland. This notion is supported by the fact that results from the avian point surveys for the project suggest very few "prairie obligate" species. Brad mentioned that species groups within the Project Area are more representative of waterfowl and shorebirds rather than grassland bird species.
- The group discussed the results of field work to date and agreed that it would be more beneficial to put remaining time and effort into native prairie mapping rather than conducting an additional season of avian studies. Kevin mentioned that the project

proponents may want to include supplemental information on waterfowl numbers from associated basin waterfowl count work. This could be incorporated into the BBCS. There was mention about intensive grazing practices and how working with landowners could possibly open additional land and look favorable to the agency.

- The final part of the meeting was a discussion around USFWS easements as they pertain to the Project Area. Brad mentioned that there are a lot of USFWS wetland and grassland easements within the Project Area. Kevin mentioned that if you want to avoid invoking a federal nexus, and therefore NEPA, you should avoid impacting areas with easements. Brad noted that the current data on easements was from several years ago and recommended updating this data with more recent GIS data from the USFWS. Kevin mentioned that he could get the most recent data and could send to SPC upon request.

Action Items

- Kevin to provide Dakota skipper protocol when finalized
- Kevin to provide SPC with any new/updated data on whooping crane locations or habitat use within the Project Area or surrounding region/ Aaron Pierce
- Katie to send request to USFWS for updated GIS data on wetland and upland easements.
- Kevin to provide information on the NRCS Data Transition Model.
- Kevin to provide observation dates with whooping crane GPS data.
- Katie to send email to USFWS requesting eagle data.
- SPC to set up a whooping crane call mid Spring 2018

**Ruso Wind Project
Agency Update Meeting
Meeting Minutes**

September 13, 2018

U.S. Fish and Wildlife Service Ecological Services Office
3425 Miriam Ave.
Bismarck, ND 58501

Attendees

- ✓ Kevin Shelley – U.S. Fish & Wildlife Service (“USFWS”)
- ✓ John Schumacher – North Dakota Game and Fish Department (“NDGFD”)
- ✓ Elisha Mueller – North Dakota Game and Fish Department (“NDGFD”)
- ✓ Kristin Mohon – Southern Power (“SPC”)
- ✓ Katie Gase – Southern Power (“SPC”)
- ✓ Kristen Chodachek – Western EcoSystems Technology, Inc. (“WEST”)
- ✓ Clayton Derby – Western EcoSystems Technology, Inc. (“WEST”) [Via TelCon]

Minutes

Introductions

- Southern Power (SPC) reminded U.S. Fish and Wildlife Service (USFWS) and North Dakota Game and Fish Department (NDGFD) that SPC purchased the Ruso Wind project (the Project) from PRC at the beginning of 2018. All environmental studies and permitting responsibilities have transferred from PRC to SPC, but PRC remains involved in the project as land agents.
- Consultants – PRC had previously retained Westwood, who we have kept for the remaining eagle monitoring. SPC retained WEST for other aspects of project including grassland surveys, wetlands mapping, and Dakota Skipper surveys.
- K. Shelley announced that he will be resigning from the USFWS at the end of September. Scott Larsen of the South Dakota USFWS office will be taking over all wind energy projects for North Dakota. Scott will respond to the Project’s solicitation for information.
- NDGFD indicated that they will also be responding to the Project’s solicitation for information.

Review of Project Overview

- The Ruso Wind facility, located in Ward and McLean Counties, ND, will be approximately 200MW with about 52 turbines (3 alternatives are currently included in the layout). The anticipated commercial operation date (COD) is fall 2021 with construction to begin fall 2020.
- SPC anticipates the submission of Public Service Commission (PSC) permit this fall, anticipating a permit hearing 3-4 months after submission. USFWS and NDGFP indicated that the PSC has a backlog of permit applications to review.

Biological Survey Results

- Avian and Eagle Monitoring
 - SPC provided an updated on avian and eagle monitoring for the project.
 - 1 year of general avian monitoring was completed in March 2018. Per discussion with K. Shelley in February, SPC has decided to forgo a second year.
 - Year 2 of eagle point count surveys is underway. Minimal eagle use has been noted in the project. During year 1, one sub-adult bald eagle was observed in April 2017 for 2 minutes and 2 adult bald eagles were observed in March 2018 for 17 minutes.
- Raptor Nest Surveys
 - SPC briefly reviewed raptor nest survey results
 - There are 2 inactive eagle nests outside of the Project area and one active eagle nest located 9.5 miles south of the Project.
- Grasslands
 - SPC presented a progression of turbine layouts with various layers including the estimated wind speeds, sharp-tailed grouse locations, broken and unbroken grasslands, and landowner control.
 - SPC noted that over the layout progression, considerable efforts were made to move turbines out of unbroken grasslands.
 - NDGFD requested that all turbines be moved out of unbroken grasslands. They indicated that collection lines are not as much of a concern as turbines.
 - NDGFD expressed concern over proximity of turbines to leks. Traditionally NDGFD recommends a 2-mile buffer from leks, but the Department's largest concern is the grassland impact.
 - WEST provided copies of the Grassland Assessment Final Report. WEST led the discussion on methodology and results of the surveys.
 - USFWS noted that Sprague's pipit has a historically healthy population in the northeast corner of the Project due to the presence of native forb communities. USFWS asked what was seen in the surveys regarding the native forbs. WEST responded that there are no longer many native forbs present, and there has been an infestation of silver berry.
 - USFWS noted that grasslands provide habitat for avian predation of pollinators. K. Shelley suggested to start describing communities based on landscape level changes to help inform impact during Tier 3 studies.
 - Direct payments are no longer an option for impact to grasslands. Third party options are available for offsets, but there is no definitive rule of thumb.
 - USFWS would like to help landowners take part in offsets but will not initiate request without full transparency.
- Dakota Skipper
 - WEST provided copies of the 2018 Dakota Skipper Habitat Assessment and Survey Report. WEST retained HDR Engineering Inc. (HDR) to conduct the habitat assessment and flight surveys. Scott Krych was the lead biologist for the survey effort.
 - WEST presented the survey methodology and results. WEST explained that the survey was conducted within USFWS's guidance of 3 flight surveys during the peak survey window. No Dakota skippers were observed during the survey, but four blocks of suitable habitat were identified.
 - USFWS noted that 3 male and 1 female Dakota skippers have been observed just east of the Project.
 - USFWS discussed the Service's position of the Dakota skipper. USFWS is uncertain of the detection rates of the surveys – the survey should not be classified as “unoccupied” but as “no detection.” USFWS acknowledged that offsets are difficult to assess. USFWS prefers 2 years of probable absence for the surveys. Due to the limited survey window and compressed Project schedule, SPC indicated they will aim to avoid identified blocks of suitable habitat in order to not conduct a second year of surveys.

- USFWS would like to evaluate the field notes of WEST and HDR for risk to Dakota skipper for relative abundance.
- USFWS suggested that SPC seek a statement in writing from the Service on how likely or unlikely Dakota skipper are to occur within the Project.
- USFWS suggests SPC engage the Service for an onsite visit in June or July 2019 to evaluate vegetation composition.
- Upcoming Studies and Plans
 - SPC explained that WEST will be conducting wetland mapping in the fall, before snowfall. USFWS recommended discussing wetland easement with the USFWS Wetland Management District. SPC indicated that preliminary conversations had occurred with the district and SPC will continue to work with their office.
 - SPC indicated that they will be creating a Bird and Bat Conservation Strategy (BBCS) and SPC will share the BBCS with the agencies when available.

Action Items

- SPC will coordinate with SD USFWS on transition of Project review.
- USFWS will provide response to solicitation of information.
- NDGFD will provide response to solicitation of information.
- WEST will provide field notes of Dakota skipper survey to USFWS for review.
- SPC will share better map of turbine layout once available.

Ruso Wind Project
 USFWS Update Meeting
 December 14, 2018

Anticipated Attendees

- Natalie Gates – U.S. Fish & Wildlife Service (“USFWS”)
- Kristin Mohon – Southern Power (“SPC”)
- Katie Gase – Southern Power (“SPC”)

Agenda

I. Introductions

- *Reminder that SPC purchased project from PRC at beginning of 2018 (sister project to Philip)*
- *Have transitioned all environmental studies and permitting responsibilities to SPC*
- *Consultants – PRC had previously retained Westwood, who we have kept for the remaining eagle monitoring. Brought on WEST for other aspects of project (grasslands, wetlands, Dakota Skipper (HDR))*

II. Project Overview

- *~200MW, 53 turbines*
- *Ward County, ND; gen-tie route in McHenry Co.*
- *Submission of PSC permit by end of December (anticipate hearing 3-4 months after)*
- *COD fall 2020 or 2021 (construction begin fall 2019 or 2020)*
- *Have been coordinating with ND USFWS and NDGF – meeting minutes provided to Natalie 11/6/18*

III. Biological Survey Results

a. Avian and eagle monitoring

- *Provided Natalie avian survey & raptor nest reports 11/6/18*
- *1 year of avian monitoring complete – per discussion with Kevin in February, forgo 2nd year*
- *Ongoing 2nd year of eagle surveys*

Eagle Survey Period	Number of Observation Minutes/ (Hours)	Number of Eagles Observed	Point ID	Total Time Observed within 800m Radius (Min)	Time Observed >200 m Elevation (Min)	Time Observed 0-200 m Elevation (Min)	Notes
4/10/17 - 4/11/17	1,080/(18)	1	10	2	0	2	
3/27/18 - 3/28/18	1,140/(18)	2	14	17	17	2	--
10/20/18 - 10/22/18	1,080/(18)	1	11	1	0	1	--
11/17/18 - 11/19/18	1,080/(18)	3	4, 3, 15	10	0	10	--
				30	17	15	

b. Dakota Skipper survey

- *Provided report to Natalie 11/6/18*

- *Only 2 blocks that had habitat - 3 rounds of surveys found no skippers*
- *Avoiding Dakota skipper habitat*
- c. *Bats*
 - *Provided report to Natalie 11/6/18*
 - *Surveys completed April 2017 – November 2017*
 - *Two ground-based detector stations and one detector mounted on a meteorological tower at 5 and 45 meters*
 - *Primary species detected were the little brown (43.54%), hoary (7.83%), and silver-haired bat (9.53%)*
 - *After completion of analysis, potential calls by the northern long-eared bat represented 2.37 percent (n=88 bat passes) of the total bat passes recorded. Additionally, likelihood of presence analyses suggested that this species does likely occur in the area based on the number of calls originally identified to the northern long-eared bat.*
- d. *Grassland survey*
 - *Provided report to Natalie 11/6/18*
 - *26% of project unbroken, 9.2% previously broken, 1.2% mixed*
 - *Avoiding all unbroken prairie*
- e. *Wetlands*
 - *Can provide report if requested*
 - *Surveys completed October 5 – 19 and November 29 – December 3, 2018*
 - *Turbines avoiding wetlands*
 - *Coordinating with Kathy Baer, Wetlands District Manager, on wetland and grassland easements*
- f. *Next steps*
 - *BBCS*

IV. Discussion

- *Request agency feedback on grasslands impact/mitigation options*
- *Confirmation that all studies and proposed mitigation are adequate*
- *Any other questions to catch up on project*

**Ruso Wind
Overview of Site Studies**

Current as of December 5, 2018

Avian and Eagles	
General Avian Use	<ul style="list-style-type: none"> • Year 1 of surveys complete (April 2017-April 2018), forgoing 2nd year at advice of USFWS • Spring surveys – most common species include Red-winged Blackbird (25.08%), yellow-headed blackbird (7.55%), Canada goose (7.92%), lesser scaup (7.19%), and mallard (7.02%) • Summer surveys – most common species include red-winged blackbird (14.55%), mourning dove (11.02%), ring-billed gull (9.46%), and barn swallow (8.33%) • 20 special status species identified during spring and summer surveys. No federally listed species encountered. No bald eagles encountered.
Eagle Use	<ul style="list-style-type: none"> • Year 1 of surveys complete (April 2017-March 2018) <ul style="list-style-type: none"> ◦ A single adult bald eagle was observed during spring and summer 2017 eagle point count surveys for a mean use of 0.009 eagles per hour. • Year 2 surveys ongoing <ul style="list-style-type: none"> ◦ Eagles observed in March, October, and November for a total of 28 eagle minutes
Raptor Nests	<ul style="list-style-type: none"> • 4 bald eagle nests identified in survey area. All but one were found to be unoccupied. No nests were found within the Project Area. • Red-tailed hawks were the most commonly occurring raptor nests recorded and were observed at seven locations, all of which were found within the Project Boundary (Exhibit 12). Five of the nests were occupied and two were unoccupied. • Two occupied great horned owl nests were observed within the Survey Area, both of which were outside of the Project Area.
Leks	<ul style="list-style-type: none"> • Surveys for sharp-tailed grouse conducted along accessible roads in April 2017 • Results of the survey effort identified a total of five (5) leks; four (4) of which were located within the Project Area • Lek sizes ranged from 8 to 13 individuals
Whooping Crane	<ul style="list-style-type: none"> • Located within whooping crane corridor • At advice of USFWS, forgoing formal study but will include incidental curtailment in BBCS
Other species	
Dakota Skipper	<ul style="list-style-type: none"> • Three-tiered process – Tier 1: Desktop review, Tier 2: on-site field assessment and verification, Tier 3: on-site flight survey • 26 habitat blocks identified during Tier 1 & 2; of the 26, a total of 4 harbored habitat capable of supporting all life cycles of Dakota skipper • No skippers observed during flight surveys
Bats	<ul style="list-style-type: none"> • Surveys completed April 2017 – November 2017 • Two ground-based detector stations and one detector mounted on a meteorological tower at 5 and 45 meters • Primary species detected were the little brown (43.54%), hoary (7.83%), and silver-haired bat (9.53%) • After completion of analysis, potential calls by the northern long-eared bat represented 2.37 percent (n=88 bat passes) of the total bat passes recorded. Additionally, likelihood of presence analyses suggested that this species does likely occur in the area based on the number of calls originally identified to the northern long-eared bat.
Land Cover	
Grasslands	<ul style="list-style-type: none"> • Field survey conducted in July 2018 • 25.5% of project unbroken native prairie, 10% previously broken grassland • All turbines sited to avoid unbroken native prairie
Wetlands	<ul style="list-style-type: none"> • Multiple USFWS wetland easements present in project boundary – coordinating with USFWS ND Wetlands District • Field survey completed October – December 2018 • Turbines sited to avoid all wetland basins

Ruso Turbine Layouts

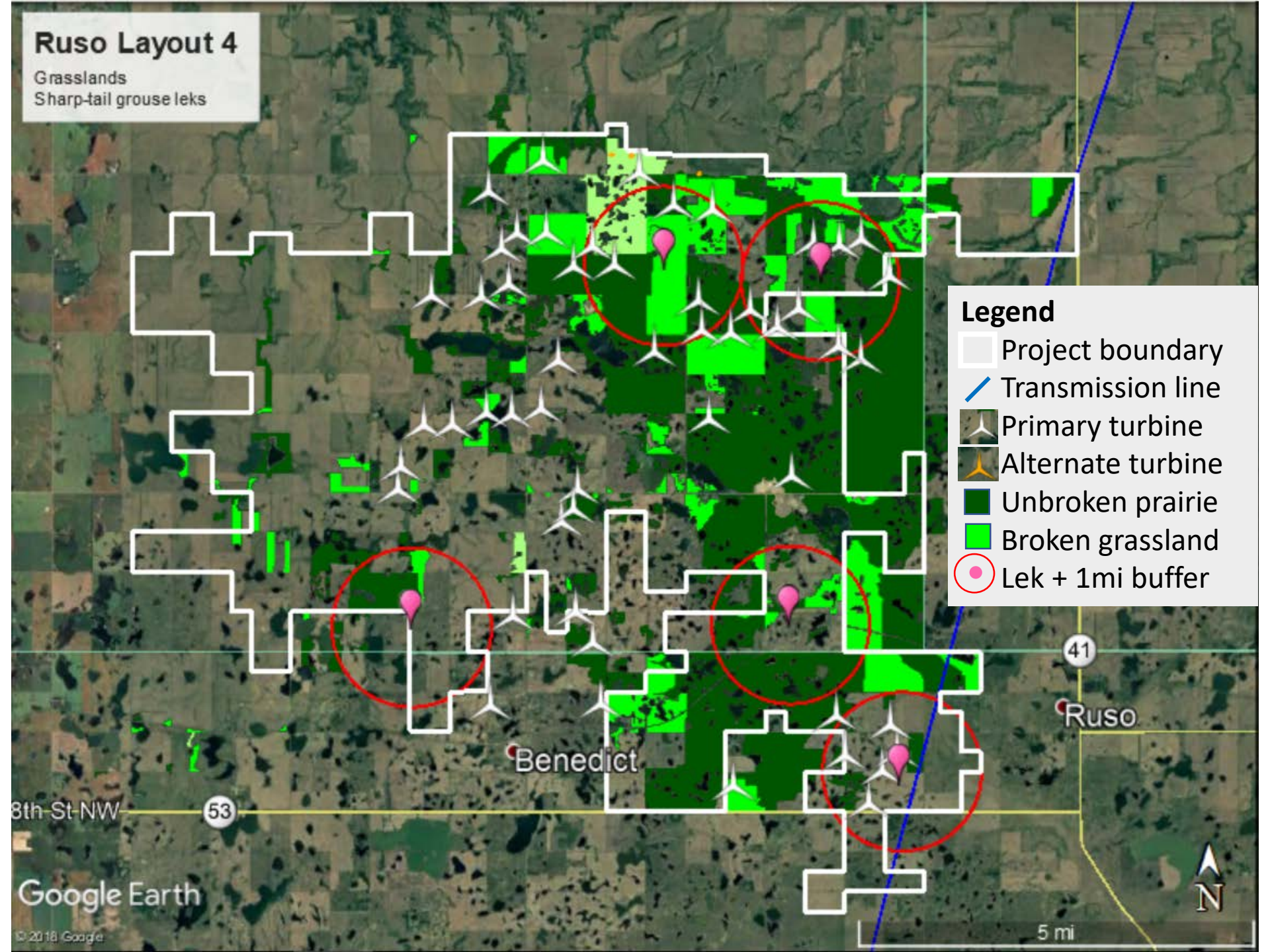
December 14, 2018

Ruso Layout 4

Grasslands
Sharp-tail grouse leks

Legend

- Project boundary
- Transmission line
- Primary turbine
- Alternate turbine
- Unbroken prairie
- Broken grassland
- Lek + 1mi buffer



8th St NW 53

41

Ruso

Benedict

Google Earth

© 2018 Google

5 mi



Ruso Layout 9

Grasslands
Sharp-tail grouse leks

Legend

- Project boundary
- Transmission line
- Primary turbine
- Unbroken prairie
- Broken grassland
- Lek + 1mi buffer

8th St NW 53

41

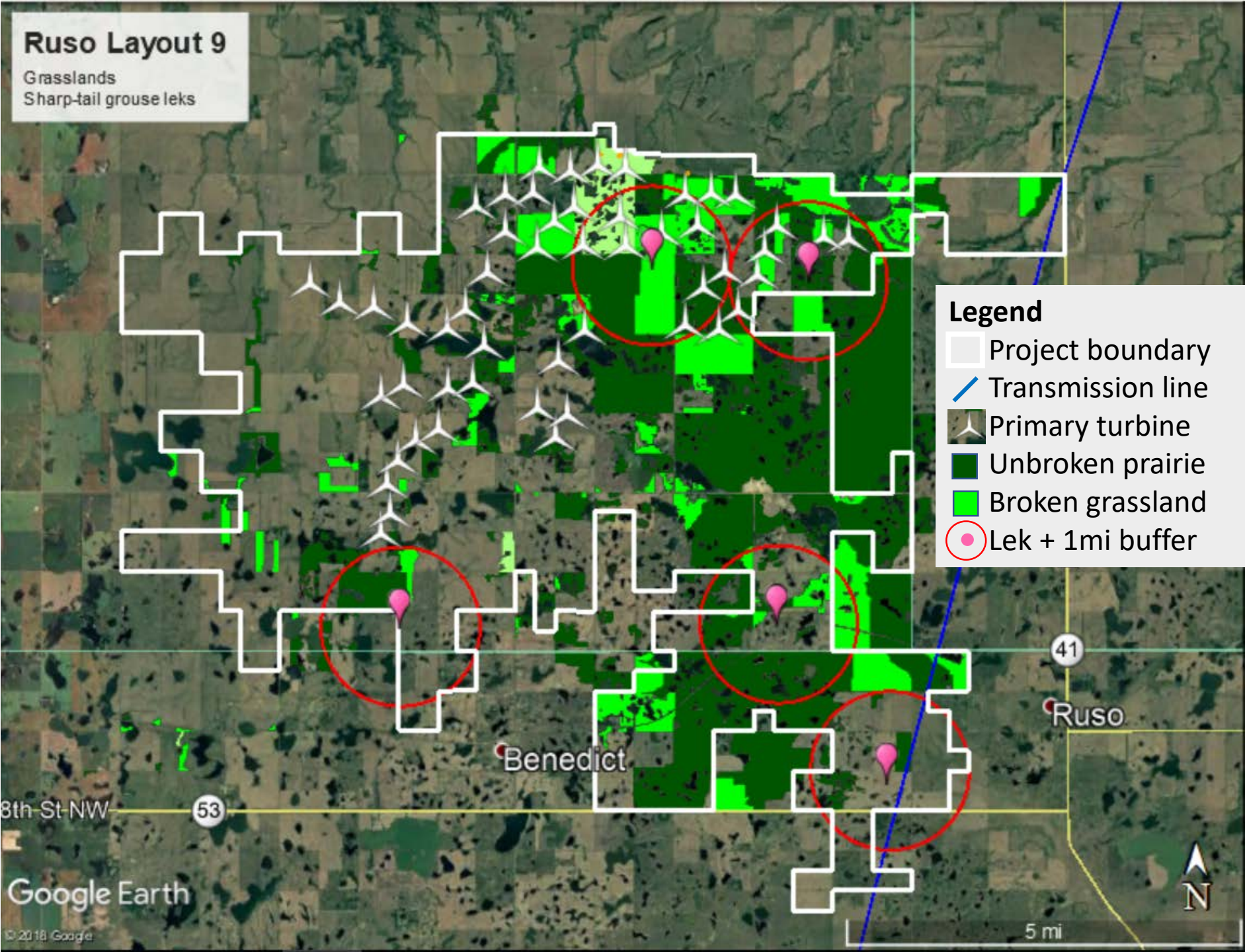
Ruso

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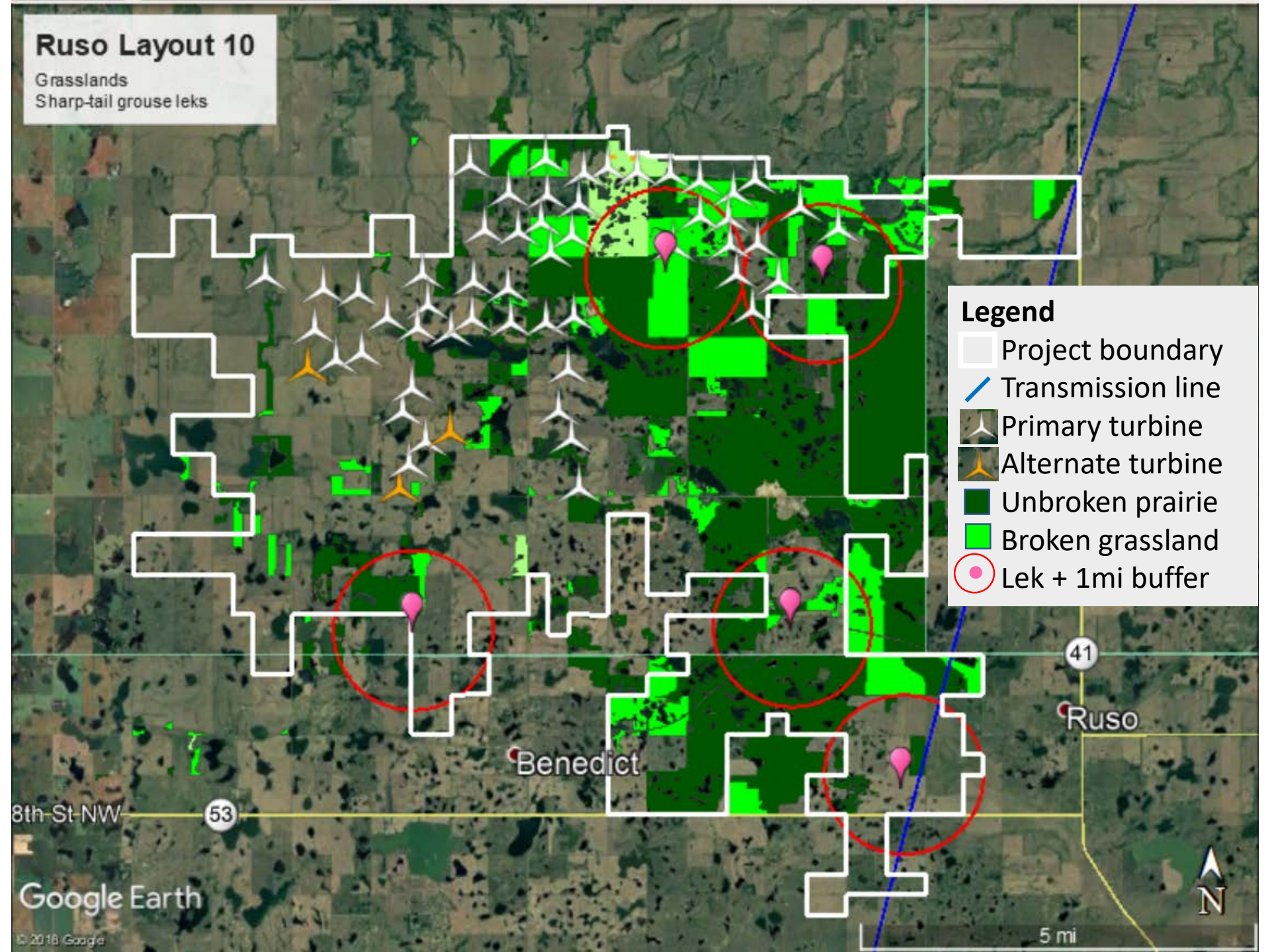


Ruso Layout 10

Grasslands
Sharp-tail grouse leks

Legend

- Project boundary
- Transmission line
- Primary turbine
- Alternate turbine
- Unbroken prairie
- Broken grassland
- Lek + 1mi buffer

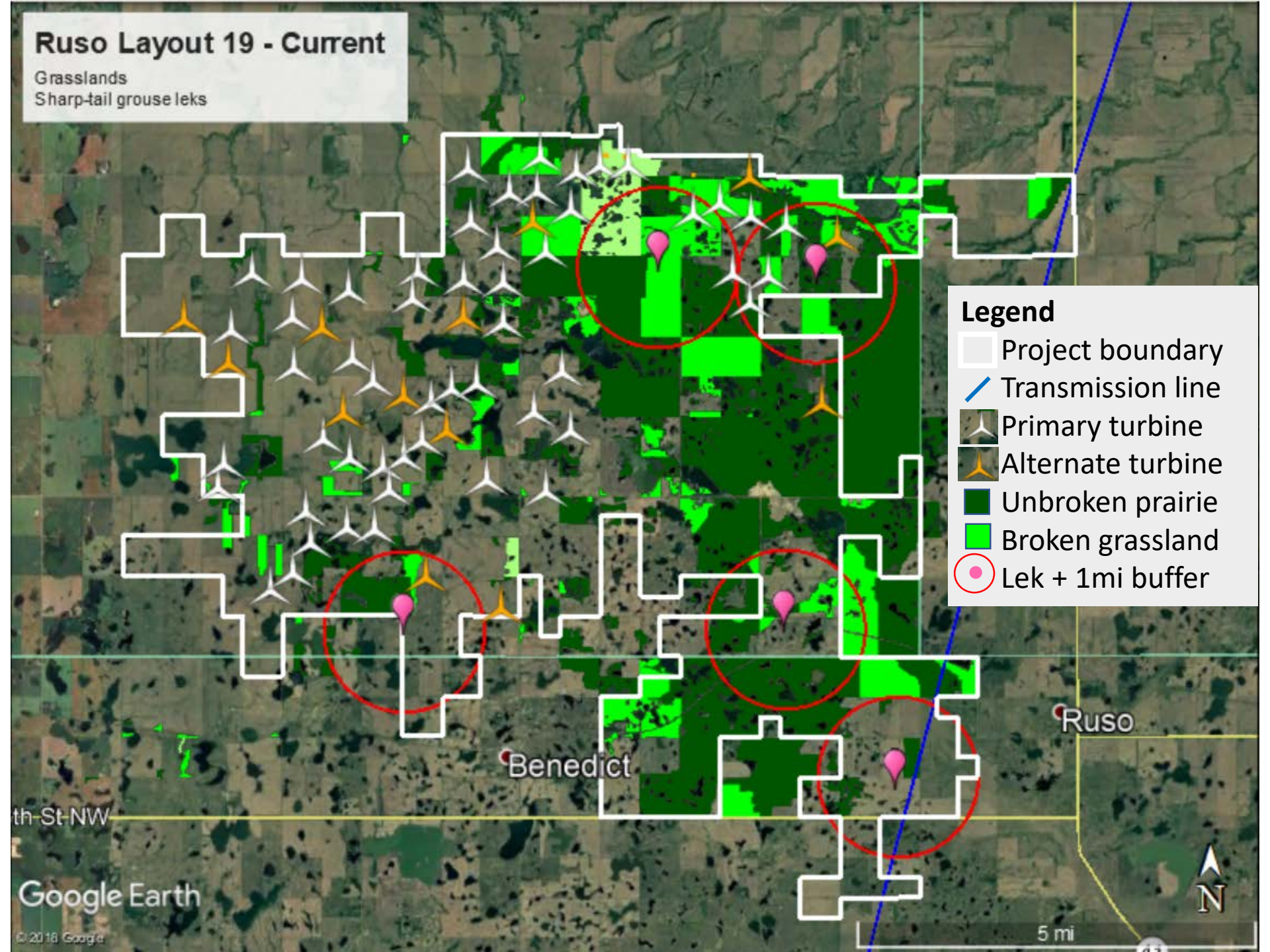


Ruso Layout 19 - Current

Grasslands
Sharp-tail grouse leks

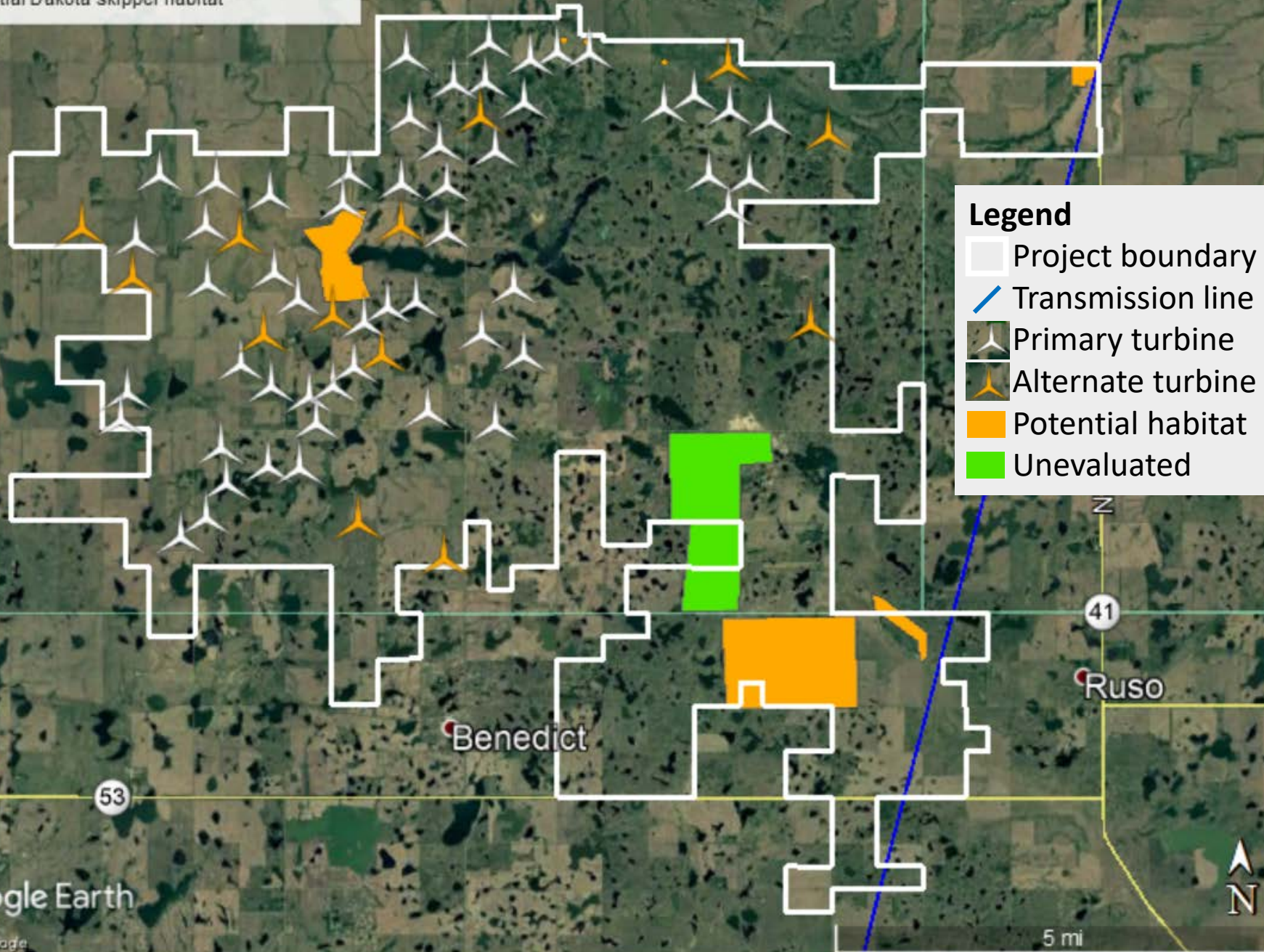
Legend

- Project boundary
- Transmission line
- Primary turbine
- Alternate turbine
- Unbroken prairie
- Broken grassland
- Lek + 1mi buffer



Ruso Layout 19 - Current

potential Dakota skipper habitat



Legend

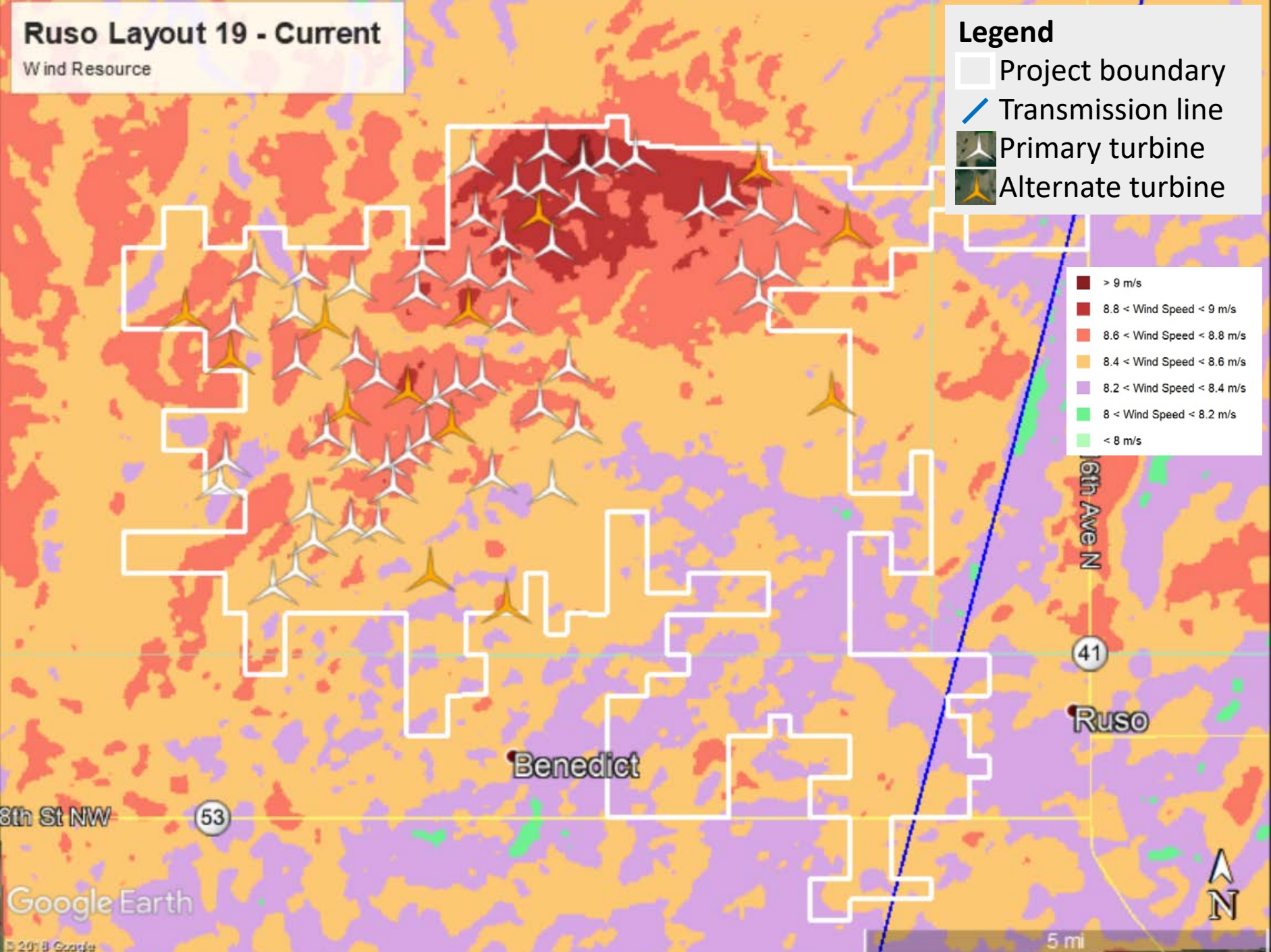
- Project boundary
- Transmission line
- Primary turbine
- Alternate turbine
- Potential habitat
- Unevaluated

Ruso Layout 19 - Current

Wind Resource

Legend

- Project boundary
- Transmission line
- Primary turbine
- Alternate turbine



Ruso Layout 19 - Current

Land control

Legend

- Project boundary
- Transmission line
- Primary turbine
- Alternate turbine
- Under control
- In negotiation

th-St-NW

Google Earth

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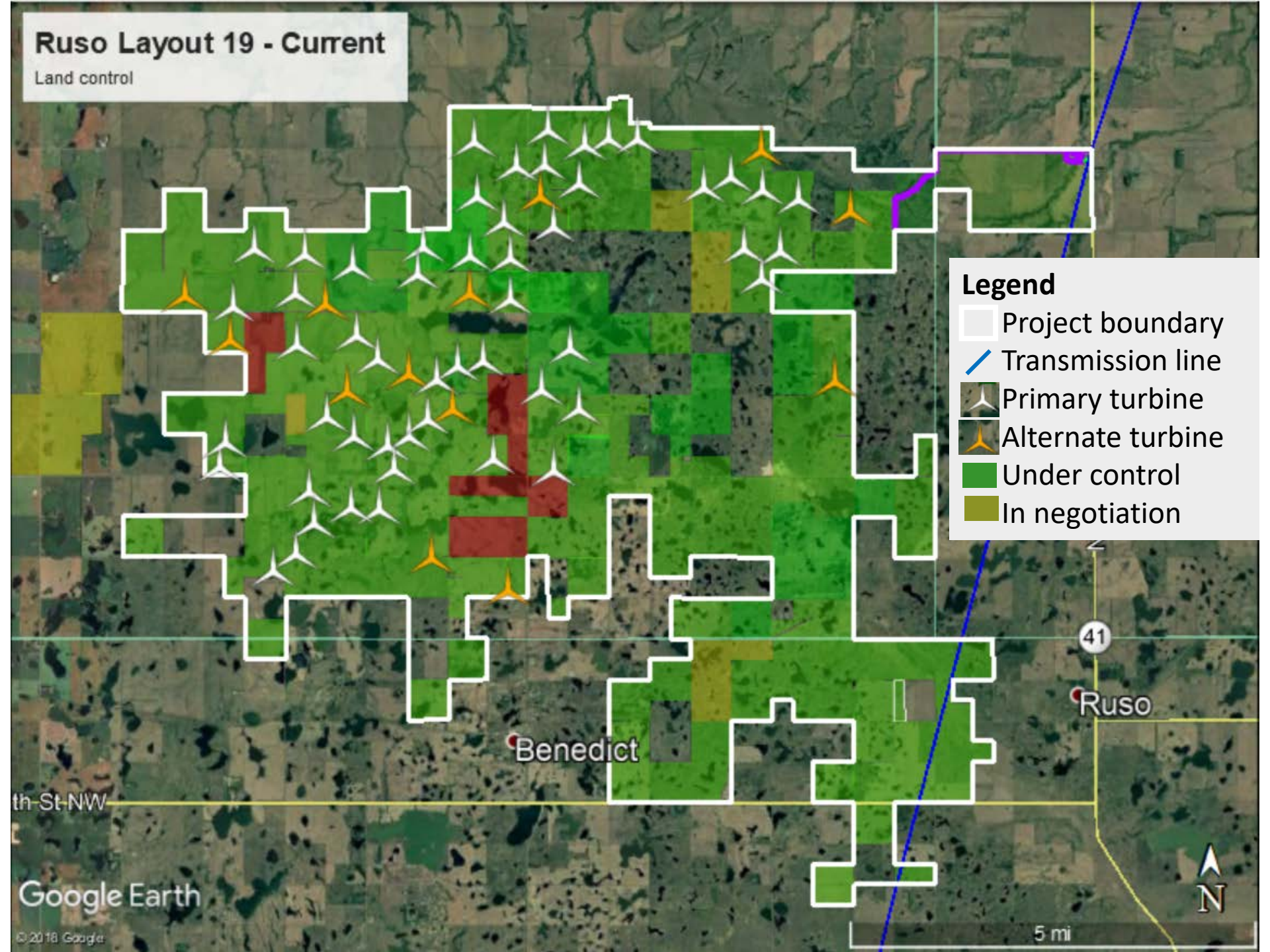
Benedict

41

Ruso



5 mi



Ruso Wind Project
North Dakota Game and Fish Department Meeting
May 9, 2019

Attendees:

- ✓ Kristin Mohon – Southern Power
- ✓ Clayton Derby – West Inc.
- ✓ Greg Link – North Dakota Game and Fish
- ✓ Steve Dyke – North Dakota Game and Fish
- ✓ Sandra Johnson – North Dakota Game and Fish
- ✓ Elisha Mueller – North Dakota Game and Fish
- ✓ Natalie Gates – United States Fish and Wildlife Service

General discussion:

- The last meeting on the project was in September of 2018.
- Kristin provided a summary of the project as currently proposed. Construction is scheduled to begin in the 3rd quarter of 2019 with an estimated COD in the 4th quarter of 2020.
- All environmental studies were completed last year except for the eagle study which was just completed in April.
 - 1 year of general avian use
 - 2 years of eagle surveys
 - Lek surveys- 4 found
 - Whooping cranes – will be addressed in BBCS
 - Dakota skippers – no skippers found, will avoid all habitats instead of conducting 2nd survey
 - Bat surveys
 - There were NLEB calls identified, so will do mist net surveys this summer
 - Clayton mentioned that previous reports of Northern Long Eared Bats in the state may have been false according to NDSU researchers currently looking at that issue.
- Kristin discussed proposed placement of turbines for the Ruso wind project.
 - All turbines placed outside of unbroken native grassland and wetland basins.
 - Closest turbine to lek: 3280 ft
 - Shifted most turbines to west, to more disturbed habitat (no negative responses from landowners with this shift)
 - All turbines placed outside of skipper habitat.
- Natalie asked about the possibility of using some of the ‘alternate’ turbine locations as they would appear to have less impacts on wetland and grassland resources.
 - Kristin said they would look at possibly using some of the alternate turbine locations.

- Kristin and Clayton reviewed the Grassland impact table that was provided in the handout. Only impacts associated with roads and collection lines within unbroken prairie analyzed. Permanent impacts are “low”, but “temporary direct” impacts are over 20 acres.
 - Steve mentioned that the table did not include any impacts associated with grasslands or wetland basins adjacent to turbines per Shaefer & Buhl and Loesch et al.
 - A group discussion then ensued about how the Dept and Service have used research from Schaefer & Buhl and Loesch as the best available science with respect to gauging indirect impacts to grassland and wetland resources.
 - Natalie – have made good adjustments within project area, but overall project location (chosen by previous project owner) is the type of area to avoid
 - Clayton – suggests identifying priority areas to avoid, rank, and look at project-level impacts, not turbine-level impacts to help reduce uncertainties on impacts and offsets
 - Steve – this info is already available to companies, need to consult early with resource agencies.

Action Items:

- Kristin will have a voluntary offset package to share with the Department on May 15th and have call to discuss by May 16.
- Dept staff will continue to discuss impacts and voluntary offsets with proponents of the Ruso Wind project but will have their letter on the project to PSC by the end of May.
- Metrics calculated for Departments evaluation of the project for PSC:
 - Habitat loss: total acres.
 - The removal of native vegetation and top soil.
 - Grassland bird displacement: calculated in acres needed to offset displaced birds.
 - Grassland birds are used as keystone species for other species of conservation priority that rely on native grasslands for population health and persistence.
 - Per Shaefer & Buhl’s study.
 - Waterfowl displacement: calculated in number of wetland basins to restore to offset displaced birds.
 - Waterfowl are used as a keystone species for other species of conservation priority that rely on wetlands for population health and persistence.
 - Per Loesch et al. study.