



Stantec Consulting Services Inc.
209 Commerce Parkway, Cottage Grove, WI, 53527

June 16, 2020

Attention: Ms. Emily Truebner
Wood County Solar Project, LLC
422 Admiral Blvd.
Kansas City, MO 64106

Reference: Wild Lupine Surveys for the Proposed 138kV Gen-tie Line associated with the Wood County Solar Project in Wood County, WI

Dear Ms. Truebner,

This letter report summarizes the results of the 2020 wild lupine surveys conducted by Stantec Consulting Services Inc. on the site of the planned Wood County Solar Transmission Line Project located in Saratoga, Wisconsin.

PROJECT DESCRIPTION AND ENVIRONMENTAL REVIEW

The proposed 138kV gen-tie line Project (the "Project") entails the construction of a transmission line and switching station associated with a 149.76-megawatt (MW) photovoltaic (PV) energy-generating facility in Wood County, Wisconsin. During the Project's pre-application planning phase, Wood County Solar Project, LLC retained Stantec Consulting Services Inc. (Stantec) to perform an Endangered Resources (ER) Review. During the review process, Stantec identified that the Project is within the Wisconsin Department of Natural Resources' (WDNR) Karner Blue Butterfly High Potential Range (HPR) and that Karner blue butterflies (KBB) were documented within one mile of the Project survey corridor in 2013.

The KBB is listed as federally endangered by the United States Fish and Wildlife Service (USFWS), and the WDNR maintains a Habitat Conservation Plan (HCP) that accompanies an incidental take permit issued by the USFWS. The permit and the plan are designed to protect and conserve KBB while allowing activities to occur that could impact KBB or their habitat. By signing on as HCP partners, organizations such as utilities and timber companies agree to follow specific protocols to avoid and minimize impacts to KBB during the course of their work. In return, the HCP extends permit coverage allowing them to conduct activities that may inadvertently "take" (harass, harm or kill) the federally endangered KBB. Should the Project move forward as planned, Wood County Solar Project, LLC could consider becoming an HCP partner.

Stantec staff with valid WDNR HCP Karner Blue Butterfly and Lupine Survey Training Certificates (i.e., those who had completed authorized WDNR training within the past five years) performed a wild lupine survey between June 2-4, 2020 along an approximately 5.5 mile long, 100-foot wide Project survey corridor, including planned switching station area and proposed construction laydown yard area (Figure 1). A portion of the transmission line was previously surveyed in 2019 and not re-surveyed as part of this effort; no lupine was found on site during the 2019 survey. In addition, one additional parcel was not surveyed and will be surveyed in a future visit. This report summarizes the methods and results of the survey.

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WILD LUPINE SURVEY

Species Information

Wild lupine (*Lupinus perennis*) is a native perennial plant in the pea family which grows in habitats characterized by full sun, dry to moderate moisture, and sandy soils (Black & Judziewicz 2009). Wild lupine serves as the only known host plant of the KBB (WDNR 2014). Survey protocols for wild lupine were based on WDNR's document "A Guide to Conducting Monitoring for the Wisconsin Karner Blue Butterfly Habitat Conservation Plan" (WDNR 2014). WDNR protocols require that wild lupine surveys be conducted prior to July 31 of any given year, after which lupine may be senesced. Wild lupine surveys are valid for five years.

Methods and Results

WDNR protocols (WDNR 2014) indicate that the following sites are eligible for wild lupine surveys:

1. Sites within the High Potential Range (HPR) of KBB; and
2. Sites which meet the definition of potential habitat (i.e., sites on dry, sandy soils with dominant overstory vegetation of an age and/or character that could support KBB habitat). In particular, this includes:
 - a. Forest stands and upland openings or existing corridors;
 - b. If forested, stands which support trees between 0-15 years of age which are not dense enough to cause crown closure; or
 - c. If not forested, sites characterized by upland openings or existing corridors.

Sites considered a low priority for wild lupine surveys include:

1. Wetlands or other flooded areas;
2. Forests with dense canopy (>75%);
3. Sites on non-sandy soils; or
4. Cultivated or otherwise developed areas supporting no native vegetation.

Two KBB HCP trained Stantec biologists walked strip transects approximately 50-feet apart throughout the Project survey corridor, such that all lupine clusters or individuals could be seen by at least one biologist. No wild lupine was located during this systematic search.

CONCLUSIONS

The wild lupine survey conducted by Stantec included the project corridor, laydown yard, and switching station; however, no lupine was detected during the survey. Areas omitted from the survey included a parcel which will be revisited and a previously surveyed portion of the transmission line, where lupine was not detected in 2019. Lupine survey results and mapping are valid for five years. Due to the absence of wild

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lupine within the Project survey corridor, we determined per the WDNR HCP protocol that KBB surveys will not be required to demonstrate that take of the KBB will not occur associated with Project activities. This conclusion will be evaluated further after surveys of the final parcel are complete.

If you have any questions or need more information, please contact me at the phone number or email address listed below.

Regards,

Stantec Consulting Services Inc.



Amy Flansburg

Phone: (608) 294-8877
E-mail: Amy.Flansburg@Stantec.com

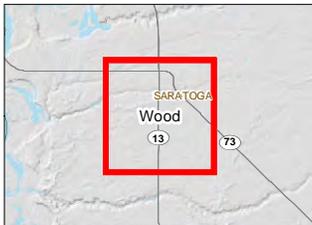
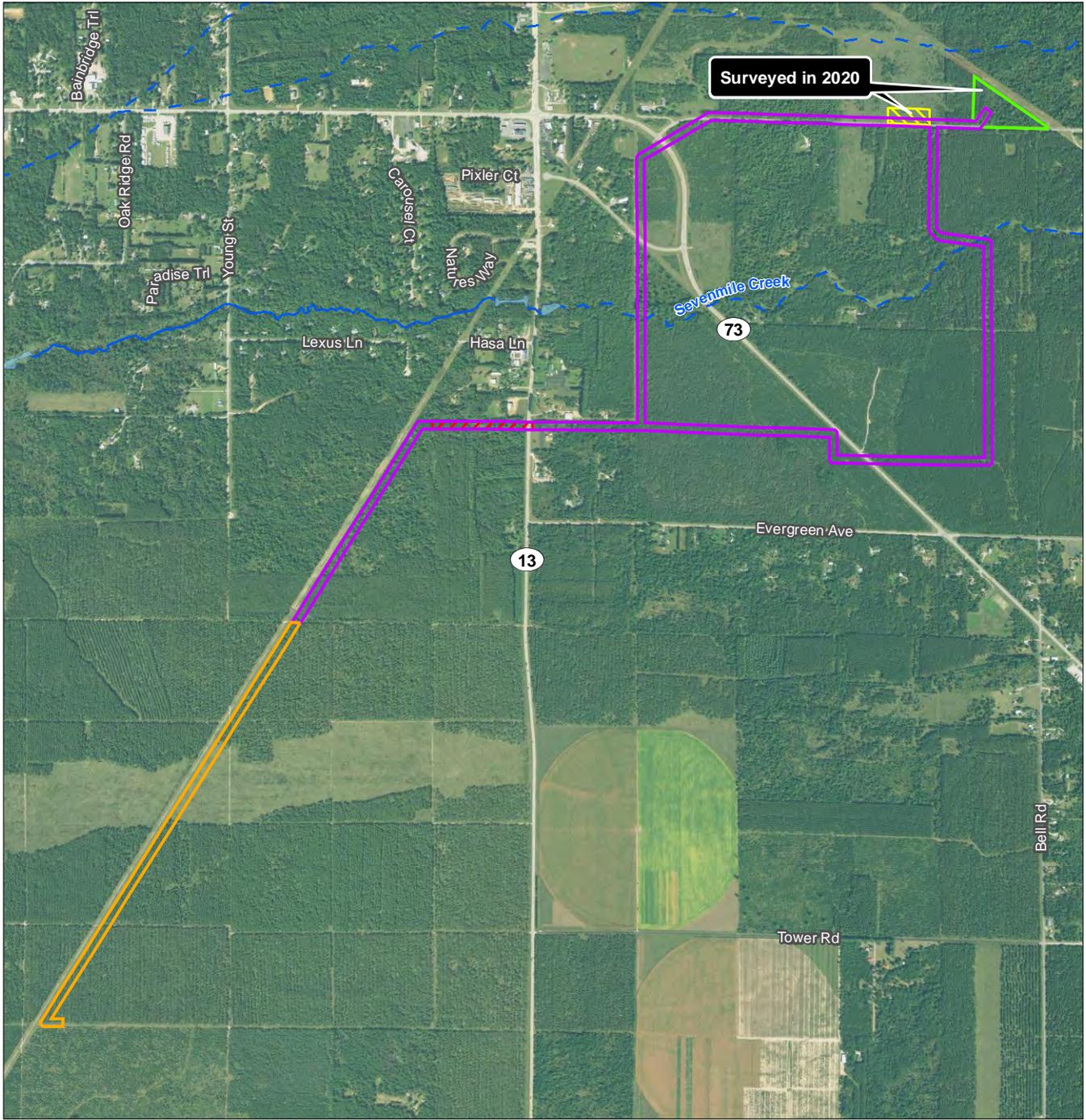
Attachments: Figure 1 – Lupine Survey Overview Map
Wood County Solar Project Transmission Line Lupine Presence/Absence Survey Report Form

REFERENCES

Black, Merel., & Judziewicz, Emmet. 2009. *Wildflowers of Wisconsin and the Great Lakes Region*. Second edition. The University of Wisconsin Press, Madison, WI, USA.

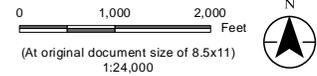
Wisconsin Department of Natural Resources (WDNR). 2014. *A Guide to Conducting Monitoring for the Wisconsin Karner Blue Butterfly Habitat Conservation Plan*.

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Notes
 1. Coordinate System: NAD 1983 StatePlane Wisconsin Central FIPS 4802 Feet
 2. Data Sources: Stantec, WCSP, WDNR, WisDOT
 3. Background: 2018 NAIP

- Legend**
- Transmission Line ROW
 - Surveys in 2019
 - Surveys in 2020
 - Laydown Area
 - Switching Station
 - Not Surveyed
 - DNR 24k Hydrography
 - Perennial Stream
 - Intermittent Stream
 - Waterbody



Project Location
 Town of Saratoga,
 Wood County, WI

Prepared by CA on 2020-06-12
 TR by BT on 2020-06-12
 IR by CP on 2020-06-15

Client/Project
 Wood County Solar Project, LLC
 Wood County Solar Project

193706930

Figure No.
 1

Title
 Karner Blue Butterfly Survey
 Overview Map

*No wild lupine was found within survey area.

Wisconsin Karner Blue Butterfly Habitat Conservation Plan

Survey Report Form

Lupine Presence/Absence

2020

Enter year of survey

Purpose

Wild lupine is the obligate host plant for the federally endangered Karner blue butterfly. The purpose of the Lupine presence/absence survey is to determine if sufficient lupine is present on the site to support Karners, and if present, to map its location. Lupine presence/absence surveys are also used to document nectar plant abundance.

General Instructions

Report on this form results of lupine presence/absence surveys and restoration assessment following construction projects conducted by HCP Partners and their agents. Collecting complete and accurate data will minimize potential project delays. Surveys are valid for 5 years for that particular site, and July 31st is the last day to survey. If it is a drought year, the last day to survey may be earlier. This information will be posted on the KBB website and communicated by the HCP coordinator.

Submit a copy of your completed surveys via email to Rebecca.Roth@wisconsin.gov, or by mail to:

HCP Coordinator
101 S. Webster St.
Madison, WI 53703

Keep a copy of this completed form for your records! Contact Karner blue Habitat Conservation Plan program staff at the Wisconsin Department of Natural Resources if you have any questions, or refer to the KBB website for current monitoring protocols.

Partner & Surveyor Information

Date of survey: 6/2-6/4
Partner Name: Wood County Solar
Landowner (if different than partner):

Surveyor(s) (Last name, First name):
Flansburg, Amy

Have you completed the online survey training provided by the WI DNR? [X] Yes [] No

If yes, what is the most recent year you took the training: 2018 (certification is valid for 5 years)

Did you attend the optional field day held by HCP staff with WDNR? [X] Yes [] No

Are you using this form for (check one):

- [X] Pre-management
[] Post-management
[] On-going management
[] Post-construction assessment
[] Site assessment
[] Other:

Site Location & Description

Complete all site identification information that applies:

County: Wood Partner site code: solar-transmission
Site/project name or comp/stand (or other descriptive name): Solar project transmission line corridor
Legal description: Township 21N Range 6E Section 9, 10, 15
Site size (acres): 5.5 mi x 100ft 16, 19, 20, 30

Management strategy type (check one):

- [X] Shifting mosaic (forestry/short term habitat)
[] Barrens, prairie, or savanna
[] Right-of-way
[] Post-construction restoration assessment

future ROW

**GPS Coordinates: Lat: 44.3019 Long: -89.8115

** Provide the coordinates for the approximate center of the site. If you are unable to provide GPS coordinates, please provide T-R-S information.

Date of last management activity (on this site): unknown Date of last survey (on this site): n/a

Wisconsin Karner Blue Butterfly Habitat Conservation Plan Lupine Presence/Absence Survey

Nectar plants (fill in observed species below)	1 st flight period (common, scarce, or abundant)	2 nd flight period (common, scarce, or abundant)
V. pedata	scarce	n/a
S. racemosa	scarce	n/a
L. canadense	scarce	n/a

Post-Construction or Restoration Projects

12. For restoration following construction, reference your approved Habitat Replacement Plan (in site location section) or ATTACH A COPY OF THE SEED MIX USED. In order to be considered successful, sites should not have large gaps in vegetation, and when applicable, contain abundant first and second flight nectar species. For measures of success, refer to Construction Guidelines and associated protocols or your approved restoration plan. For a complete list of 1st and 2nd flight nectar species, refer to HCP webpage or contact the HCP Program.

Date of seeding: _____ Density of established wild lupine: _____
 Percentage of mitigation area vegetated: _____ Are there large gaps in vegetation? _____
 Is wild lupine established? _____ Are native grasses established? _____

Additional Comments and Concerns (attach additional pages if necessary)

13.

Site Map

14. Mapping Options:

OPTION 1. Use the DNR's location finder tool to create a map.

- http://dnrmaps.wi.gov/H5/?viewer=Location_Finder
- Accept the Terms and Conditions
- Zoom to the survey area. Use the "Search By" tool to zoom to an area by coordinates, city name, town-range section, etc.
- Hit the "Get lat/long" button and click on the map where Karners or lupine are found. Numbered markers with the coordinates will be appear for each location you click on the map. You can delete and edit these markers by clicking on the 3 dots to the right of each coordinate.
- Once you are done, hit "Print". Change the output to "Pdf", change the map scale to 1:3960, add a title, and indicate in the notes what your markers represent. To reposition the print area, zoom in/out or pan to over and then hit "print" again at the top of the webpage.
- Hit "Print" below the notes section and then "Open File" to view and download your map.
- Save a copy of the PDF map.** Attach map to this survey form.

OPTION 2. Photo copy a USGS topo map, or print a satellite or aerial photo with hand-drawn locations (perhaps this is the map that was brought into the field for the survey).

- Make sure that road names, town-range-section information is included and legible
- Zoomed to 24,000m at minimum and 2,000m at maximum
- Indicate on map the karner and lupine observations (discretely hand-drawn patches or points) **with coordinates**
- Attach map to this survey form.