

## TECHNICAL MEMORANDUM

**To:** Crowned Ridge Wind II, LLC

**From:** SWCA Environmental Consultants

**Date:** May 15, 2020

**Re:** **Crowned Ridge II Wind Facility Whooping Crane Contingency Plan / SWCA Project No. 44512**

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### INTRODUCTION

Crowned Ridge Wind II, LLC (Crowned Ridge) has developed this operational contingency plan, which outlines the process for whooping crane (*Grus americana*) monitoring, and describes what steps will be taken in the unlikely event that a whooping crane is observed within, or within 2 miles of, the Crowned Ridge II Wind Energy Project (Project). The objective of monitoring will be to minimize the likelihood of whooping crane collisions with wind turbines during the species' spring and fall migration periods.

### BACKGROUND

As described in the Project's Wildlife Conservation Strategy,<sup>1</sup> South Dakota is within the whooping crane migration corridor and the species may stopover in suitable habitat including cropland and pastures, wet meadows, shallow marshes, shallow portions of large waterbodies, and both freshwater and alkaline basins. The Project area is approximately 50 miles east of the delineated 95% core migration corridor,<sup>2,3</sup> at its closest, indicating that the species is relatively less likely to be present within the Project area than in areas closer to the migration corridor. According to the U.S. Fish and Wildlife Service (USFWS) Whooping Crane Tracking Project Database, the closest whooping crane observation is from 1973, approximately 23.5 miles northwest of the Project.

In 2017, Crowned Ridge completed an assessment for suitable whooping crane habitat in the Project area plus a 1-mile buffer following The Watershed Institute model.<sup>4</sup> That assessment indicated that 85 wetlands within the Project area, totaling 2,419.6 acres, scored 12 or higher. The Watershed Institute considers a habitat score of 12 or higher as potential suitable habitat. Only 25 of the 85 wetlands, totaling 95.0 acres, overlap the Project area. These wetlands comprise only 0.2% of the total Project area.

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<sup>1</sup> SWCA Environmental Consultants. *Wildlife Conservation Strategy for the Crowned Ridge II Wind Facility, Codington, Deuel, and Grant Counties, South Dakota, April 2020*. Unpublished report.

<sup>2</sup> Pearse, A.T., M. Rabbe, L.M. Juliusson, M.T. Bidwell, L. Craig-Moore, D.A. Brandt, and W. Harrell. 2018a. Delineating and identifying long-term changes in whooping crane (*Grus americana*) migration corridor. *PLoS ONE* 13:e0192737. Available at: <https://doi.org/10.1371/journal.pone.0192737>. Accessed November 5, 2018.

<sup>3</sup> Pearse, A.T., M. Rabbe, L.M. Juliusson, M.T. Bidwell, L. Craig-Moore, D.A. Brandt, and W. Harrell. 2018b. Map of whooping crane migration corridors. U.S. Geological Survey data release. Available at: <https://doi.org/10.5066/F7FT8K74>. Accessed November 5, 2018.

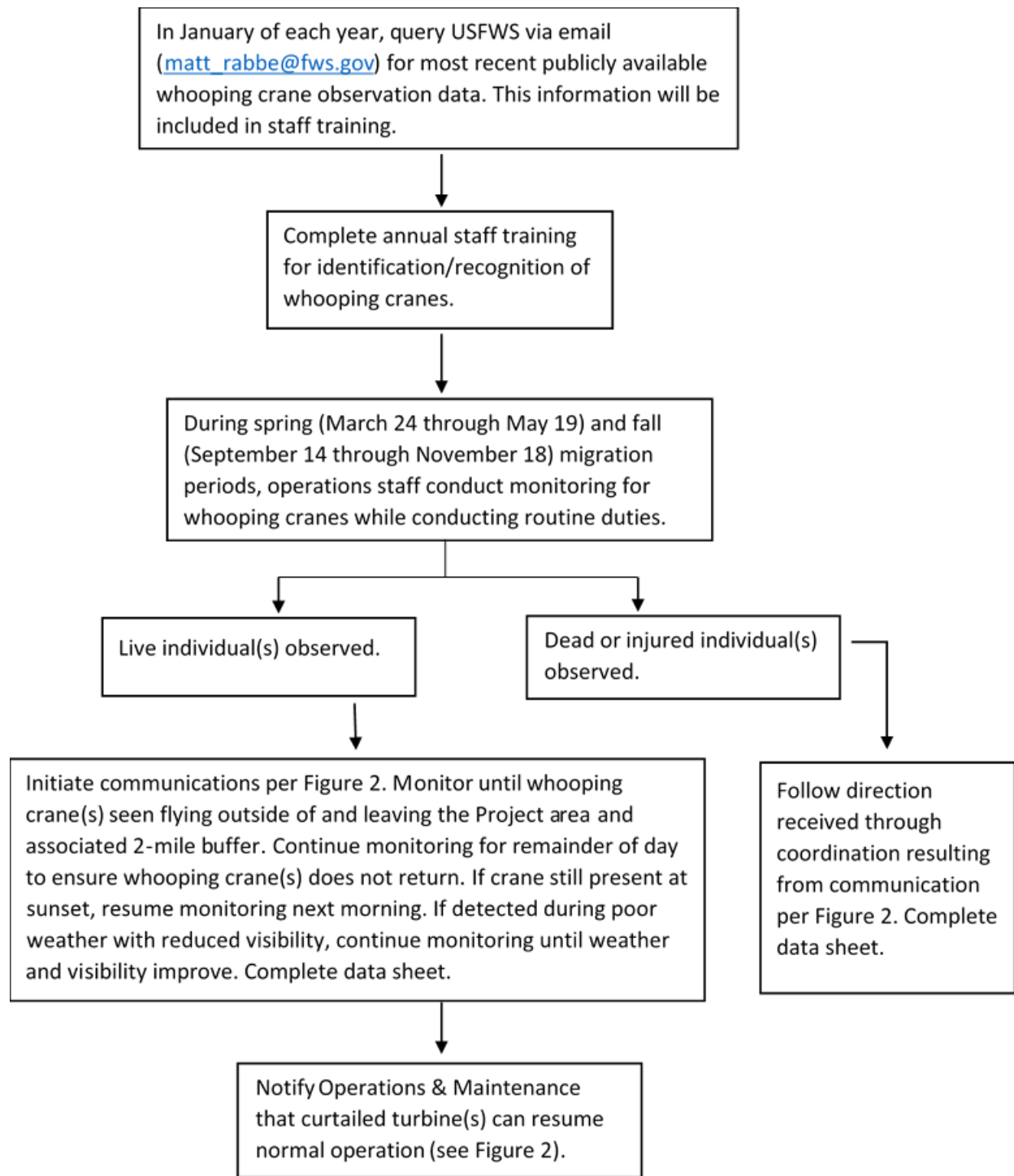
<sup>4</sup> The Watershed Institute. 2013. *Potentially Suitable Habitat Assessment for the Whooping Crane (Grus americana)*. Topeka, Kansas: The Watershed Institute, Inc.

No whooping cranes were observed during avian use surveys for nearby study areas, for earlier iterations of the Project area, or for the Project area itself during the most recent avian studies in 2017.

The combination of no whooping crane sightings during avian use surveys and the paucity of suitable stopover habitat within the Project area compared to surrounding areas suggests a low likelihood of whooping crane occurrence in the Project area. However, to be conservative of the species, Crowned Ridge coordinated with the South Dakota Game, Fish and Parks and the USFWS to develop and implement this contingency plan.

## **MONITORING**

Operations staff will annually conduct whooping crane monitoring during the course of routine job duties during the spring (March 24–May 19) and fall (September 14–November 18) migration periods for the life of Project operation. Figure 1 describes the steps staff will undertake in the event a live, dead, or injured whooping crane is observed. Figure 2 provides the appropriate chain of communications to be completed immediately following the observation of a live, dead, or injured whooping crane. A copy of the whooping crane data sheet referred to in Figure 1 is provided in Attachment A.



**Figure 1. Flow chart of whooping crane monitoring and response at the Crowned Ridge II Wind Facility.**

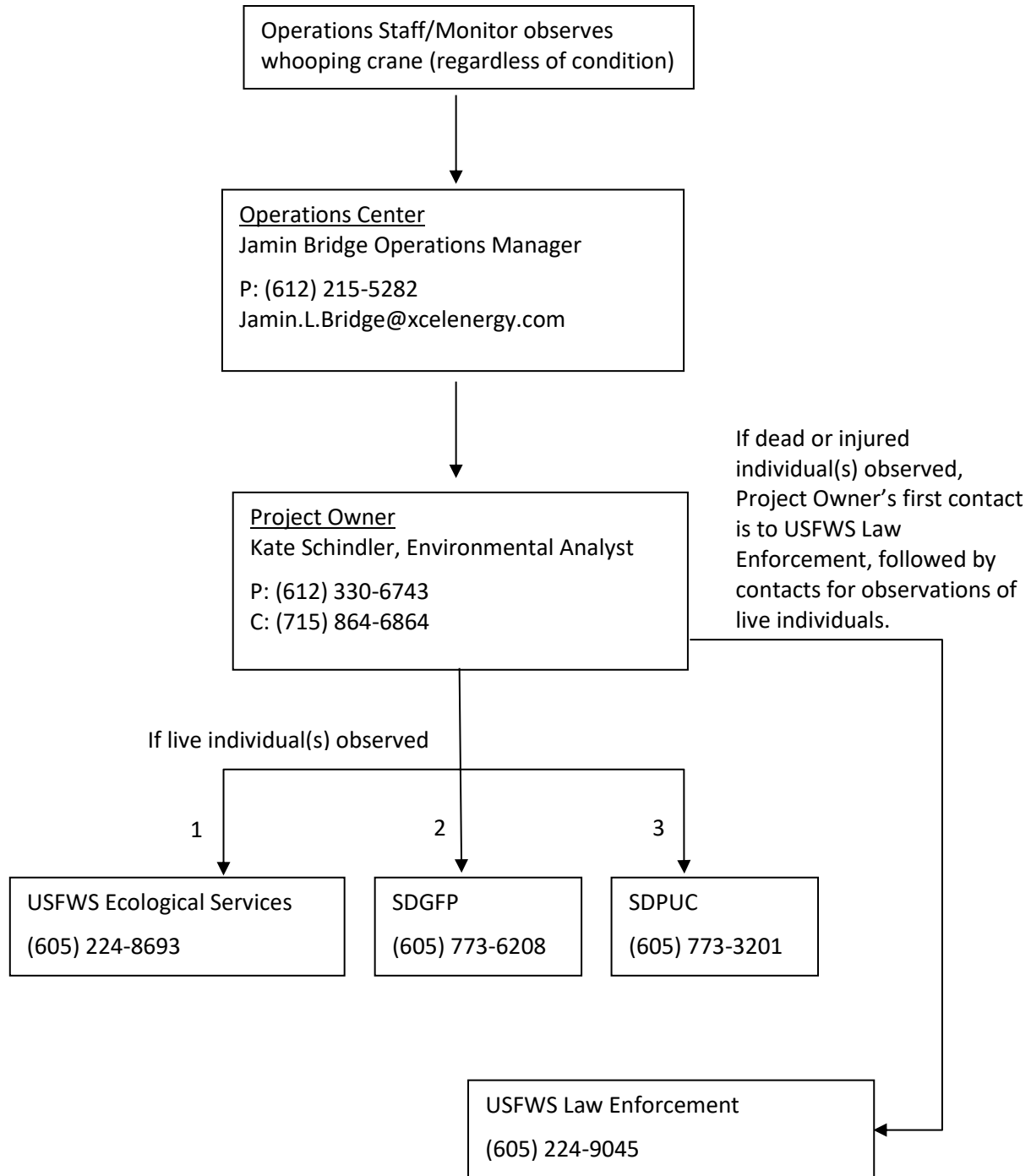


Figure 2. Communication tree for observations of whooping cranes at the Crowned Ridge II Wind Facility.

## **ATTACHMENT A**

### **Whooping Crane Report Field Sheet**

### WHOOPING CRANE REPORT FIELD SHEET

STATE: **SOUTH DAKOTA**

Report filled out by:

Date:

Phone number:

**RECORDS CENTER ONLY**

Obs. Number: \_\_\_\_\_

Confirmed \_\_\_\_\_

Probable/Unconfirmed \_\_\_\_\_

State/County: \_\_\_\_\_

If a whooping crane is sighted or reported, IMMEDIATELY notify one of the designated agency contacts below. Complete ALL information requested in **RED** text and submit this form whenever you observe or receive a report of a whooping crane.

**STATE CONTACT PERSONS:**

**Eileen Dowd Stukel**

Work Phone: (605) 773-4229

[Eileen.DowdStukel@state.sd.us](mailto:Eileen.DowdStukel@state.sd.us)

**Casey Heimerl**

Work Phone: (605) 773-4345

[Casey.Heimerl@state.sd.us](mailto:Casey.Heimerl@state.sd.us)

**FWS CONTACT PERSONS:**

**Jay Peterson**

Work Phone: (605) 885-6320 ext. 213

Cell Phone: (605) 380-7556

[Jay\\_Peterson@fws.gov](mailto:Jay_Peterson@fws.gov)

**Natalie Gates**

Work Phone: (605) 224-8693, ext. 227

[Natalie\\_Gates@fws.gov](mailto:Natalie_Gates@fws.gov)

**OBSERVER CONTACT INFORMATION**

1. Observer's Name: \_\_\_\_\_

2. Observer's Email: \_\_\_\_\_

3. Primary and Alternate Phone Number: \_\_\_\_\_

4. Secondary Observer(s) Name and Contact Info: \_\_\_\_\_

**DETAILS OF WHOOPING CRANE OBSERVATION**

1. Date (if multiple days, indicate length of stay): \_\_\_\_\_

2. Time (CST) and duration of observation: \_\_\_\_\_

3. # of adult and juvenile whooping cranes (e.g., 2 adults, one juvenile would be 2:1): \_\_\_\_\_

4. Observation distance (e.g., 1/2 mile): \_\_\_\_\_

5. Binoculars, scope, or camera used? (attach photos if available): \_\_\_\_\_

6. Description of birds, observer experience: \_\_\_\_\_

7. Color bands or GPS transmitter present (If yes, describe)? Right leg: \_\_\_\_\_ Left leg: \_\_\_\_\_

8. Evidence of injury, sickness, or hazard (Y/N) (If yes, describe)?: \_\_\_\_\_

9. Behavior of cranes (flying, landed, feeding, loafing, roosting): \_\_\_\_\_

10. Other species present: \_\_\_\_\_

11. Habitat type(s) used by whooping crane (i.e., wetland, river, agriculture field): \_\_\_\_\_

**DETAILS OF WHOOPING CRANE LOCATION**

1. County: \_\_\_\_\_

2. Approximate GPS coordinates (Decimal Deg.)- Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

3. Section, Township, Range (If unable to provide latitude, longitude): \_\_\_\_\_

4. Landmark features or descriptions (e.g., 100 yd. W of boat dock on S end of Long Lake): \_\_\_\_\_

5. Estimated accuracy of GPS location (i.e., "w/i 200 yards" or "section", "1/4 section", etc.). If accuracy is considered to be near 100 feet or less, indicate "GPS": \_\_\_\_\_

\*NOTE: If only Section, Township, Range were provided above (#3), accuracy is recorded to the most detailed description (i.e., w/i the 1/4 Section, 1/2 Section, etc., or landmark information).

6. Proximity to nearest town (e.g., 2 mi. W, 4.5 mi. N of Ord): \_\_\_\_\_