

APPENDIX D – AVIAN USE SURVEY



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MEMORANDUM

Dakota Range III Wind Project – Avian/Eagle Use Survey Summary

TO: Dakota Range III, LLC
FROM: Western EcoSystems Technology, Inc.
DATE: October 18, 2018

Western EcoSystems Technology, Inc. (WEST) completed one year of avian use surveys within the Dakota Range III Wind Project (Project) area located in eastern South Dakota. The surveys were completed following the study plan, as developed in coordination with the U.S. Fish and Wildlife Service (USFWS) and South Dakota Game, Fish, and Parks Department. Surveys were completed from September 2017 to August 2018 at 14 point survey points. Large bird surveys were completed for 60-minutes during each visit with an 800-meter survey radius, to achieve approximately 30% spatial coverage of the Project to meet the survey level recommended in the USFWS Eagle Conservation Plan Guidance (Figure 1). Small bird surveys were completed for 5-minutes before the 60-minute large bird surveys at the same 14 points with a 100-meter survey radius. A total of 165 hours of large bird surveys and 13.75 hours of small bird surveys were completed during the year of study within the Project.

A total of 26 unique large bird species were identified during the large bird surveys (Table 1). The most common species groups observed included waterfowl, waterbirds, and upland game birds. A limited number of raptors were observed, with red-tailed hawk being the most common raptor species recorded. Only one bald eagle was observed during the one year of survey. The eagle was observed on June 29, 2018 along the northern edge of the project.

A total of 29 small bird species were recorded during the small bird surveys (Table 2). The most common species included chestnut-collared longspur, red-winged blackbird, and snow bunting.

Birds of Conservation Concern (BCC) and South Dakota Species of Greatest Conservation Need (SGCN) were observed infrequently and in low numbers. Five large bird BCC species, of which two are also SGCN, were recorded in 165 hrs of study across the 12-month period (Table 1). Three small bird BCC species, of which 1 is a SGCN, were recorded in 13.75 hrs of study across the 12-month period (Table 2).

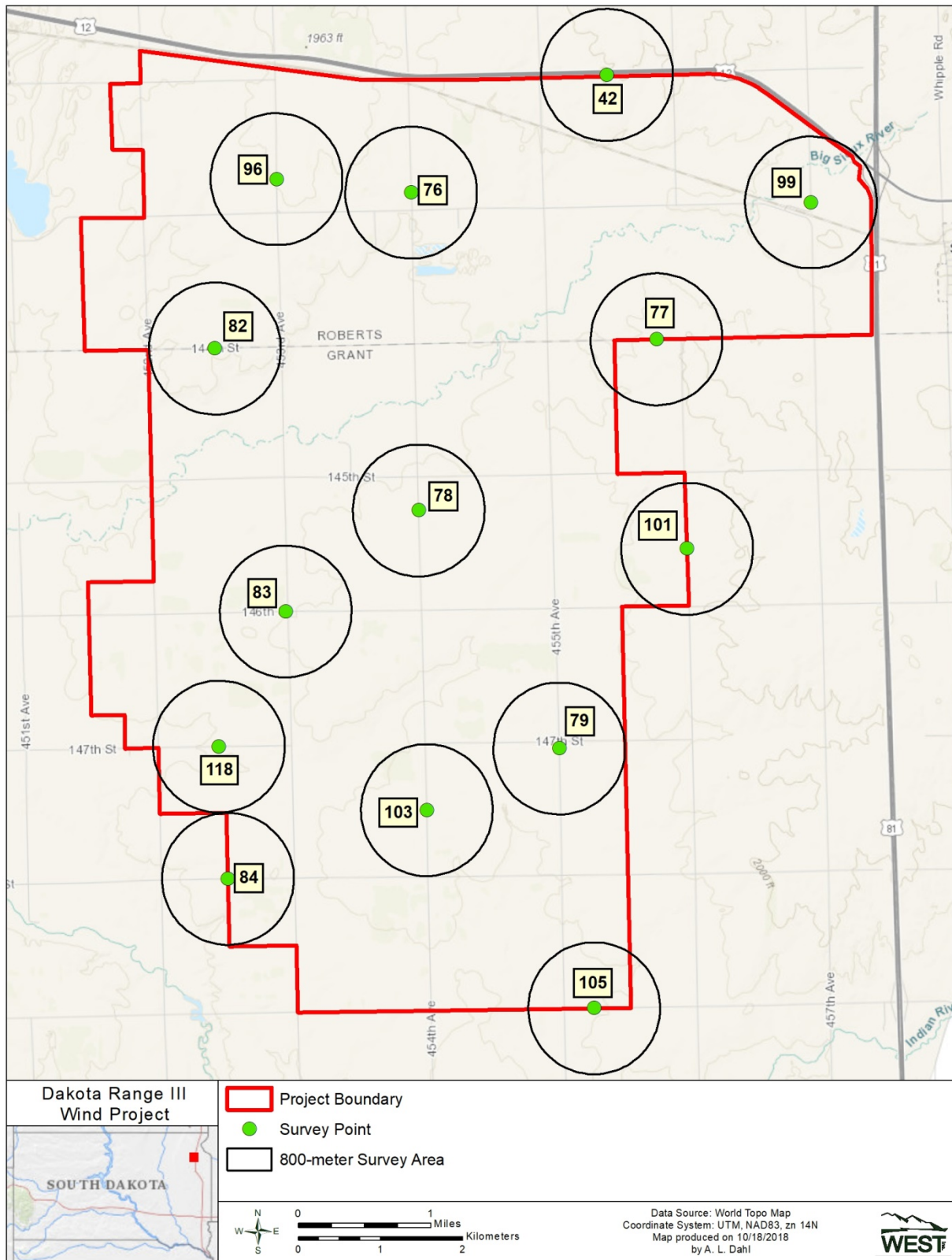


Figure 1. Dakota Range III Wind Project area and avian use survey locations.

Table 1. Number of each species recorded during large bird surveys at the Dakota Range III Wind Project.

Large Bird Species	Observations
American white pelican	30
bald eagle ^{1,2}	1
blue-winged teal	15
Canada goose	234
double-crested cormorant	7
gadwall	6
greater white-fronted goose	585
Hudsonian godwit ¹	5
killdeer	5
marbled godwit ^{1,2}	1
mallard	60
mourning dove	2
northern harrier	7
northern pintail	3
northern shoveler	3
ring-billed gull	62
rough-legged hawk	8
ring-necked pheasant	1
red-tailed hawk	24
snow goose	105
sharp-tailed grouse	5
Swainson's hawk ¹	3
tundra swan	20
upland sandpiper ¹	1
wild turkey	17
wood duck	2
Total	1212

¹Birds of Conservation Concern

²Species of Greatest Conservation Need

Table 2. Number of each species recorded during small bird surveys at the Dakota Range III Wind Project.

Small Bird Species	Observations
American crow	1
American goldfinch	4
American robin	11
barn swallow	19
brown-headed cowbird	30
blue jay	1
Bobolink	5
Brewer's blackbird	1
chestnut-collared longspur ^{1,2}	100
clay-colored sparrow	1
cliff swallow	7
dark-eyed junco	19
Dickcissel ¹	18
eastern kingbird	2
European starling	1
field sparrow	1
grasshopper sparrow ¹	1
Harris' sparrow	5
horned lark	73
orchard oriole	1
red-winged blackbird	95
Savannah sparrow	9
snow bunting	75
song sparrow	2
vesper sparrow	1
white-breasted nuthatch	1
white-crowned sparrow	10
western meadowlark	25
Wilson's snipe	3
Total	522

¹Birds of Conservation Concern

²Species of Greatest Conservation Need