

# Natural Resource Assessment Report

Diamond Tail Solar

Northwest of Golden, New Mexico

February 3, 2023

Terracon Project No. 66227139



## **PREPARED FOR:**

PCR Investments SP4 LLC  
Houston, Texas



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February 3, 2023

Ms. Cynthia Mara Schuchner  
PCR Investments SP4 LLC  
1334 Brittmoore Road, Suite 2407  
Houston, Texas 77043

Phone: (954) 319-4143

E-mail: [cschuchner@pcr.com](mailto:cschuchner@pcr.com)

**Re: Natural Resources Assessment Report**

Diamond Tail Solar Site  
Northwest of Golden, New Mexico  
Terracon Project No. 66227139

Dear Ms. Schuchner:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Natural Resources Assessment Report for the Diamond Tail Solar site. This analysis was performed in accordance with Terracon Proposal No. P66227139 dated August 1, 2022.

We appreciate the opportunity to work on this project. If you have questions or need additional information, please give Trevor Hartwig a call at 303-817-2989.

Sincerely,

**TERRACON Consultants, Inc.**

A handwritten signature in cursive script that reads "Trevor Hartwig".

Trevor Hartwig  
Staff Scientist

A handwritten signature in cursive script that reads "Jennifer".

Jennifer Trombley Peters  
NEPA Program Manager

**Explore with us**

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## **1.0 INTRODUCTION**

Terracon Consultants, Inc. (Terracon) was retained by PCR US Investments Corporation (Client) to conduct a Threatened and Endangered (T&E) species assessment for the Diamond Tail Solar site in Sandoval and Santa Fe County, New Mexico. The purpose of the assessment was to preliminarily identify T&E species that may occur within the project site.

In the past, informal consultation with the United States Fish and Wildlife Service (USFWS) was often conducted (via a letter request) for projects determined to be unlikely to affect T&E species or their critical habitats. Following their review, the USFWS (assuming agency agreement with Terracon's assessment) would then provide its concurrence that a proposed project would not be likely to jeopardize the continued existence of federally listed T&E species or result in the destruction or adverse modification of their critical habitats. However, some the USFWS' field offices have discontinued providing concurrences with "no effect" determinations for proposed projects. Their current policy makes it incumbent on the developer to ascertain the potential for effects to T&E species for each project and then notify the USFWS for formal consultation if a proposed project "may affect" a listed species or its critical habitat. The USFWS notes that "a qualified biologist should use the USFWS website and other current information to make this determination." For non-federally funded projects that "may affect" or are likely to adversely affect T&E species or their habitat, a Section 10(a)(1)(B) permit would be required. The USFWS also notes that for those projects with a federal (government) nexus, it is the responsibility of the federal action agency [under Section (7)(a)] to determine if a proposed project "may affect" T&E species or their habitat.

### **1.1 Regulatory Setting**

#### **Endangered Species Act**

Administered by the U.S. Fish and Wildlife Service (USFWS), the Endangered Species Act (ESA), as amended (16 U.S.C. 1531–1544, 87 Stat. 884), serves to protect and recover imperiled plant and animal species and the ecosystems upon which they depend. Specifically, the ESA authorizes the determination and listing of species as endangered or threatened; prohibits unauthorized taking, possession, sale, and transport of endangered species; provides authority for land acquisition for conservation of listed species using land and water conservation funds; authorizes the establishment of cooperative agreements and grants-in-aid to states that establish and maintain threatened and endangered species programs; authorizes assessment of civil and criminal penalties for violating the ESA; and authorizes payment of rewards for information leading to arrest and conviction of violators of the ESA. The ESA has various amendments, including provisions for designations of critical habitat, recovery plans, and monitoring for candidate and recovered species. Endangered species include as those at

risk of extinction and threatened species as those likely to become Endangered in the foreseeable future.

### **Migratory Bird Treaty Act**

ESA and State-listed avian species, as well as other migratory birds, are protected under the MBTA. The 1918 MBTA establishes a federal prohibition “to pursue, hunt, capture, kill, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg, without a permit” issued in accordance with the policies and regulations of the MBTA. Take is defined as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect migratory birds”. The MBTA does not prohibit the destruction of the bird nest alone (without birds or eggs) provided that no possession of the nest occurs during destruction.

Under the current regulatory framework, there are no provisions for allowing the take of migratory birds that are unintentionally killed or injured (incidental take). The USFWS is actively undertaking rule making procedures to define and regulate incidental take. The USFWS has issued a Director’s Order to provide interim guidance for the regulation of incidental take. In the Order, the USFWS indicates that they would enforce incidental takes as a statutory take in accordance with case law presiding in the state where the incidental take occurs. In Arkansas there is presiding case law that would allow or limit the enforcement against incidental take by the USFWS. Under the Order, the following types of conduct are not a priority for enforcement against incidental take:

- (1) A member of the general public conducting otherwise legal activities that incidentally take migratory birds.
- (2) A Federal agency conducting activities in accordance with a signed memorandum of understanding with the Service developed under Executive Order 13186 for the conservation of migratory birds; or
- (3) A public- or private-sector entity conducting activities in accordance with applicable beneficial practices for avoiding and minimizing incidental take.

Activities in accordance with applicable beneficial practices for avoiding and minimizing incidental take can include conducting habitat removal outside of migratory bird nesting season or conducting nesting surveys of appropriate habitat to limit disturbance of nesting birds coinciding with habitat removal during nesting season.

### **The Bald and Golden Eagle Protection Act**

Bald and golden eagles, having been delisted under the ESA, are still afforded federal protections under the BGEPA (16 U.S.C. 668-668c), enacted in 1940. Under the BGEPA it is unlawful to take, possess, sell, purchase, barter, offer to sell, possess, transport, export or import, bald or golden eagles, alive or dead, including any part (including feathers), nest (including inactive nests), or egg, unless allowed by permit. A “take” under the BGEPA is defined as to “pursue, shoot, shoot at, poison, wound, capture, trap, collect, molest or disturb.” The term “disturb”, as defined in a final rule published in the Federal Register on June 5, 2007 (Volume 72, page 31332) means to “agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

## **1.2 Project Area**

The site is located on privately-owned land approximately 2.5 miles northwest of Golden, New Mexico in Sandoval and Santa Fe Counties (Appendix A; Figure 1). It consists of approximately 1,873 acres of undeveloped land and the project would include include 1,800-acre solar photovoltaic (PV) electric generating facility and a 5.73-mile-long gen-tie corridor.

## **2.0 METHODOLOGY**

Literature and agency file searches were conducted to identify the potential occurrence of federally listed T&E species, and their designated critical habitats, in the vicinity of the proposed project area. Terracon reviewed best available information to determine whether the project “may affect” T&E species or their habitat. Sources reviewed included the USFWS Information for Planning and Consultation (IPaC) system, New Mexico Department of Game and Fish (NMDGF) T&E species list, U.S. Fish and Wildlife Service, U.S. Geological Survey Quadrangle maps, and aerial imagery.

To confirm the results of the desktop analysis, a Terracon Wildlife and Wetland Biologist conducted a field reconnaissance of the Site from October 10, 2022, through October 13, 2022. The project site was walked, and observations of species occurrences and suitable habitat were documented.



### 3.0 FINDINGS AND CONCLUSIONS

#### 3.1 Federally Listed T&E Species

A report from the USFWS’s IPaC system was generated on November 10, 2022, and a total of seven species were identified with potential to occur on the project site (Table 1; Appendix B). No critical habitat was identified within the project vicinity.

A total of seven federally listed species were identified as having the potential to be located within Santa Fe and Sandoval counties. The habitat requirements for each species were compared to existing conditions of the proposed project site. Of the seven species, six species are not anticipated to be located on-site due to the lack due to the lack of suitable habitat and no anticipated impact to available water to / from the Rio Grande River Basin.(Table 1). The monarch butterfly (*Danaus plexippus*) has the potential to occur on the site and is discussed in more detail below.

**Table 1. Federally Listed T&E Species.**

Species	Status*	Habitat Requirements / Species Information	Potential to Occur within the Project Site?	Designated Critical Habitat
<b>Birds</b>				
Mexican Spotted Owl ( <i>Strix occidentalis lucida</i> )	FT	Occurs in old growth forests and rocky canyons in the arid southwest. Uses mixed conifer forests for nesting and roosting as well as cliff ledges and caves in canyons (USFWS 2022).	No. Project site does not contain canyon or old growth conifer habitat.	Yes, but not within project area
Southern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	FE	Occurs in dense riparian corridors that contain cottonwoods, willows, or tamarisk. Requires saturated soils, standing water, and streams for nesting habitat (USFWS 2022).	No. No riparian habitat or standing water was observed within the project site.	Yes, but not within project area
Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )	FE	A riparian species that breeds in low to moderate elevation along native forests lining rivers and streams of the western U.S.; Associated with lowland deciduous woodlands,	No. Wooded habitat within the project area was not near water.	Yes, but not within project area

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Species	Status*	Habitat Requirements / Species Information	Potential to Occur within the Project Site?	Designated Critical Habitat
		willow and alder thickets, second-growth woods, deserted farmlands, and orchards (USFWS 2022).		
<b>Amphibians</b>				
Jemez Mountains Salamander ( <i>Phethodon neomexicanus</i> )	FE	Occurs in terrestrial habitat that has moist soils. The salamander is found within the Santa Fe National Forest (USFWS 2022).	No. No activity will take place within Santa Fe National Forest.	Yes, but not within project area
<b>Fish</b>				
Rio Grande Cutthroat Trout ( <i>Oncorhynchus clarkii virginalis</i> )	FC	Occurs downstream and only needs to be considered if the project results in water depletions to the Rio Grande River Basins (USFWS 2022).	No. No water depletions are associated with the proposed project.	No
Rio Grande Silvery Minnow ( <i>Hybognathus amarus</i> )	FE	Occurs downstream and only needs to be considered if the project results in water depletions to the Rio Grande River Basins (USFWS 2022).	No. No water depletions are associated with the proposed project.	Yes, but not within project area
<b>Insects</b>				
Monarch Butterfly ( <i>Danaus plexippus</i> )	FC	Patches of milkweed species ( <i>Asclepias</i> spp.) (USFWS 2022).	Yes. Suitable habitat may occur within the Project Site.	No

\*FT = Federally Threatened; FE = Federally Endangered; FC = Federal Candidate

### 3.1.1 Monarch Butterflies

Monarch butterflies breed on patches of milkweed (*Asclepias* spp.). The species requires the right plants at the right time along their migration route. Caterpillars need to feed on milkweed to complete their life cycle and adult butterflies need the right nectar producing plants in bloom for needed energy (USFWS 2022). Milkweed is typically a widespread and somewhat weedy species, but populations have been declining, which has impacted the reproductive success of the monarch butterfly.

Milkweed was observed during the October 10, 2022 site visit adjacent to access roads on the south and west sides of the proposed solar array area. The monarch butterfly is a Candidate for listing under the ESA and no federal protection is afforded to Candidate species. However, before full design and ground disturbing activities, an updated T&E species list should be



obtained from the USFWS to ensure the species has not been modified to either a threatened or endangered species.

### 3.2 State-listed Species

Information on state-listed T&E species was obtained from the New Mexico Game and Fish Threatened and Endangered List (NMGF 2022). A total of 21 species; 11 endangered and 6 threatened, were identified. Species that are also federally listed are discussed in Section 3.1 of this document. To determine species with potential to occur on the project site, habitat requirements and species' ranges were analyzed. Results showed that 18 species have little to no potential to occur near the project site (Table 2; Appendix C).

**Table 2. State-Listed T&E Species**

Species	Status*	Habitat Information/Requirements	Potential to Occur in the Project Site or be impacted by the Project?
<b>Mammals</b>			
Spotted Bat ( <i>Euderma maculatum</i> )	ST	Low-deserts and ponderosa pine forest habitat.	No. No suitable habitat occurs within the project site.
Pacific Marten ( <i>Martes caurina</i> )	ST	Prefers fir and conifer forests.	No. No suitable habitat occurs within the project site
Meadow Jumping Mouse ( <i>Zapus luteus luteus</i> )	SE, FE	Prefers riparian areas with shrubs and emergent wetlands.	No. Project site is outside the known distribution for the species.
<b>Birds</b>			
White-tailed Ptarmigan ( <i>Lagopus leucura</i> )	SE	Inhabit alpine tundra and timberline habitats, which in New Mexico are mainly above 3200m. Association with rocky alpine habitats that support a variety of sedges, forbs and shrub willows. In alpine areas, low growing perennial graminoids, forbs, mosses, lichens, and dwarf shrubs.	No. No suitable habitat occurs within the project site.
Costa's Hummingbird ( <i>Calypte costae</i> )	ST	Found in desert washes below 3,300 feet in elevation with saguaro and cholla cacti.	No. Cholla cacti was present, but site is too high in elevation.
Broad-billed Hummingbird ( <i>Cynanthis latirostris</i> )	ST	Found along streams in canyons and mountain meadows below 6,500 feet	No. No suitable habitat occurs within the project site.
Violet-crowned Hummingbird ( <i>Leucolia violiceps</i> )	ST	Found along canyon streams and juniper-pine forests in the elevation range of 4,000 and 6,000 feet.	No. The project site is outside the occupied range of the species.

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Species	Status*	Habitat Information/Requirements	Potential to Occur in the Project Site or be impacted by the Project?
Least Tern ( <i>Sternula antillarum</i> )	SE	Seacoasts, beaches, bays, estuaries, lagoons, lakes, salt flats and rivers. Breeds on sandy or gravelly beaches and banks of rivers or lakes.	No. No suitable habitat occurs within the project site.
Neotropic Cormorant ( <i>Phalacrocorax brasilianus</i> )	ST	Found along a variety of waterbodies with fresh and brackish water or saltwater wetlands. Waterbodies should have plenty of fish.	No. No suitable habitat occurs within the project site.
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	ST	Nest in forested areas close to waterbodies. Prefer areas with taller trees for perching.	No. No suitable habitat occurs within the project site.
Common Black Hawk ( <i>Buteogallus anthracinus</i> )	ST	Common black hawks are found in riparian woodlands at lower elevation; hawks' nest only in mature deciduous trees often in forests that grow adjacent to or within the flood plains of perennial streams.	No. No suitable habitat occurs within the project site.
Boreal Owl ( <i>Aegolius funereus</i> )	ST	Species inhabit stands of spruce, aspen, poplar, birch and fir in the vast boreal forests that stretch across much of North America and Eurasia.	No. No suitable habitat occurs within the project site.
Peregrine Falcon ( <i>Falco peregrinus</i> )	ST	Highly varied habitat. Found in various forest types, annual grasslands, farms, desert scrub, desert riparian woodland, marsh, rivers. Also found on cliffs and river gorges as well as urban areas near skyscrapers.	Yes. Potential suitable habitat is found on site.
Northern Beardless-Tyrannulet ( <i>Camptostoma imberbe</i> )	SE	Found in woodlands and thickets that are along washes and streams in the southwest. Found with the elevation range of 2,000-4,500 feet.	No. No suitable habitat occurs within the project site.
Bell's Vireo ( <i>Vireo bellii</i> )	ST	In the southwest, the vireo is found along streams and arroyos in shrubby habitat. Can be found in the lower stories of willow and cottonwood riparian stands.	Yes. Potential suitable habitat is found on site.
Gray Vireo ( <i>Vireo vicinior</i> )	ST	Pinyon pine-juniper, mesquite scrub, oak scrub, and chaparral habitats of the Southwest; from lowlands into foothills and mountains, including portions of the Mojave, Sonoran and Chihuahuan Deserts.	No. No suitable habitat occurs within the project site.

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Species	Status*	Habitat Information/Requirements	Potential to Occur in the Project Site or be impacted by the Project?
Baird's Sparrow ( <i>Centronyx bairdii</i> )	ST	Habitats in plains and semiarid grasslands; species breeds in mixed grass prairies of southern Canada and northern U.S. and migrate through the central mixed grass prairie and shortgrass prairie of the Midwestern and southern U.S., and winter in the semi-desert grasslands of the southwestern U.S. and northern Mexico.	Yes. Potential suitable habitat is found on site.
<b>Fish</b>			
Rio Grande Silvery Minnow ( <i>Hybognathus amarus</i> )	SE	Prefers large streams with low currents that flow over silt and/or sand substrate. Not found in streams with a greater depth than 16 inches with a moderate water velocity. Prefers eddies, debris piles, pools, and shorelines.	No. No suitable habitat occurs within the project site.
<b>Mollusks</b>			
Wrinkled Marshsnail ( <i>Stagnicola caperata</i> )	SE	Found in freshwater sources that is seasonally dry near Valles Caldera National Preserve. Occupies marshes, ponds, and streams.	No. No suitable habitat occurs within the project site.
Paper Pondshell ( <i>Utterbackia imbecillis</i> )	SE	Found in the Rio Grande River and prefers to bury themselves in sand, mud, or gravel substrate of the bank of the river.	No. No suitable habitat occurs within the project site.
Lilljeborg's Peaclam ( <i>Pisidium lilljeborgi</i> )	ST	Only found in high elevation ponds and lakes in the western United States. In New Mexico, the snail is found in Nambe Lake.	No. No suitable habitat occurs within the project site.

\*SE = State Endangered; ST = State Threatened

Based on observations of the site, there was suitable habitat observed for three species that are listed as state threatened. The Peregrine falcon has highly varied habitat which the project site provides, a Peregrine falcon was observed flying over the property at the time of the survey. Impacts from construction related activity will likely discourage the falcon from entering the project area but these activities are not anticipated to impact nesting habitat since Peregrine falcons require cliffs and canyons and none of these features are present within the immediate vicinity of the project area or transmission line corridor. The Bell's vireo has potential suitable habitat along the washes and arroyos that are found along the transmission line corridor. Construction activities should take place outside of the nesting season to avoid impacts to the

vireo. Lastly, Baird's sparrow could utilize the open areas as wintering habitat, as those areas consist of a variety of mixed grasses; however, due to the abundance of juniper and grazing activities, this habitat would be less suitable for the sparrow.

### **3.3 Raptors and Migratory Birds**

ESA and State-listed avian species, as well as other migratory birds, are protected under the MBTA. The 1918 MBTA establishes a federal prohibition "to pursue, hunt, capture, kill, collect, possess, buy, sell, trade, or transport any migratory bird, nest, young, feather, or egg, without a permit" issued in accordance with the policies and regulations of the MBTA. Take is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect migratory birds". The MBTA does not prohibit the destruction of the bird nest alone (without birds or eggs) provided that no possession of the nest occurs during destruction. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. The USFWS is the lead agency determining permitting requirements for nest removal or destruction.

The IPaC lists seven birds of particular concern because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the study area location. The seven species include: Cassin's finch (*Carpodacus cassinii*), Clark's nutcracker (*Nucifraga columbiana*), Evening grosbeak (*Coccothraustes vespertinus*), Grace's warbler (*Dendroica graciae*), Olive-sided flycatcher (*Contopus cooperi*), Pinyon jay (*Gymnorhinus cyanocephalus*) was listed in the document, and these species are known to breed between January to August. None of these seven species were observed during field reconnaissance; however suitable habitat was observed for the Pinyon jay, Evening grosbeak, and Cassin's finch. Terracon did not perform an official presence/absence survey.

Under current guidance covering incidental takes under the MBTA legal activities resulting in an incidental take while conducting activities in accordance with applicable beneficial practices for avoiding and minimizing incidental take would not be priority enforceable activities. In order to avoid incidental take enforcement actions, it is recommended that the clearing of habitat suitable for migratory birds be conducted outside of nesting season. Additionally, when habitat disturbance is conducted during nesting season, a nest survey should be conducted to identify migratory birds and active nests to avoid during clearing activities.

### **3.4 Other Wildlife Observations**

During the field reconnaissance several small colonies of burrows, were observed throughout the site. The burrows are assumed to be made by a small burrowing rodent. These burrows were documented, and their location was marked using GPS coordinates (Appendix A, Figure 4). These burrows likely do not belong to any protected state or federally listed species and should

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not impact the construction of the solar facility. Wild horses (*Equus caballus*) and black-tailed jackrabbits (*Lepus californicus*) also observed within the project area and transmission line corridor, these species are not protected under state or federal endangered species laws.

### 4.0 GENERAL COMMENTS

Threatened and Endangered Species Assessment was performed in accordance with generally accepted practices of this profession undertaken in the similar geographical area. No other warranty is expressed nor implied. Readily available resources do not typically include comprehensive records of documented sightings of listed species as such information is generally not made available to the public. No determination can wholly eliminate uncertainty regarding project effects on listed species. The determinations, findings and conclusions provided in this scope of services should not be considered authoritative. The limited scope of services described herein may not allow a conclusive determination to be made. In such cases, additional assessment may be recommended.

This report has been prepared for the exclusive use and reliance of the client. Use or reliance by other parties is prohibited without the written authorization of the Client and Terracon. Reliance on the report by the Client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, signed agreement, and report.

## 5.0 REFERENCES

New Mexico Department of Game and Fish (NMDGF). 2023. Biota Information System of New Mexico. Available at: <https://www.bison-m.org/Index.aspx>

United States Fish and Wildlife Service (USFWS). 1940. Bald and Golden Eagle Protection Act. Available at: <https://www.govinfo.gov/app/details/USCODE-2010-title16/USCODE-2010-title16-chap5A-subchapI>

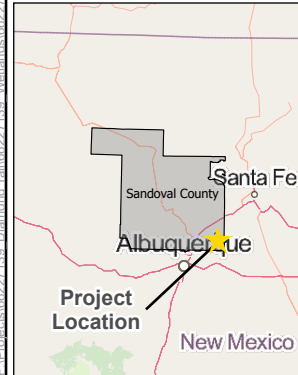
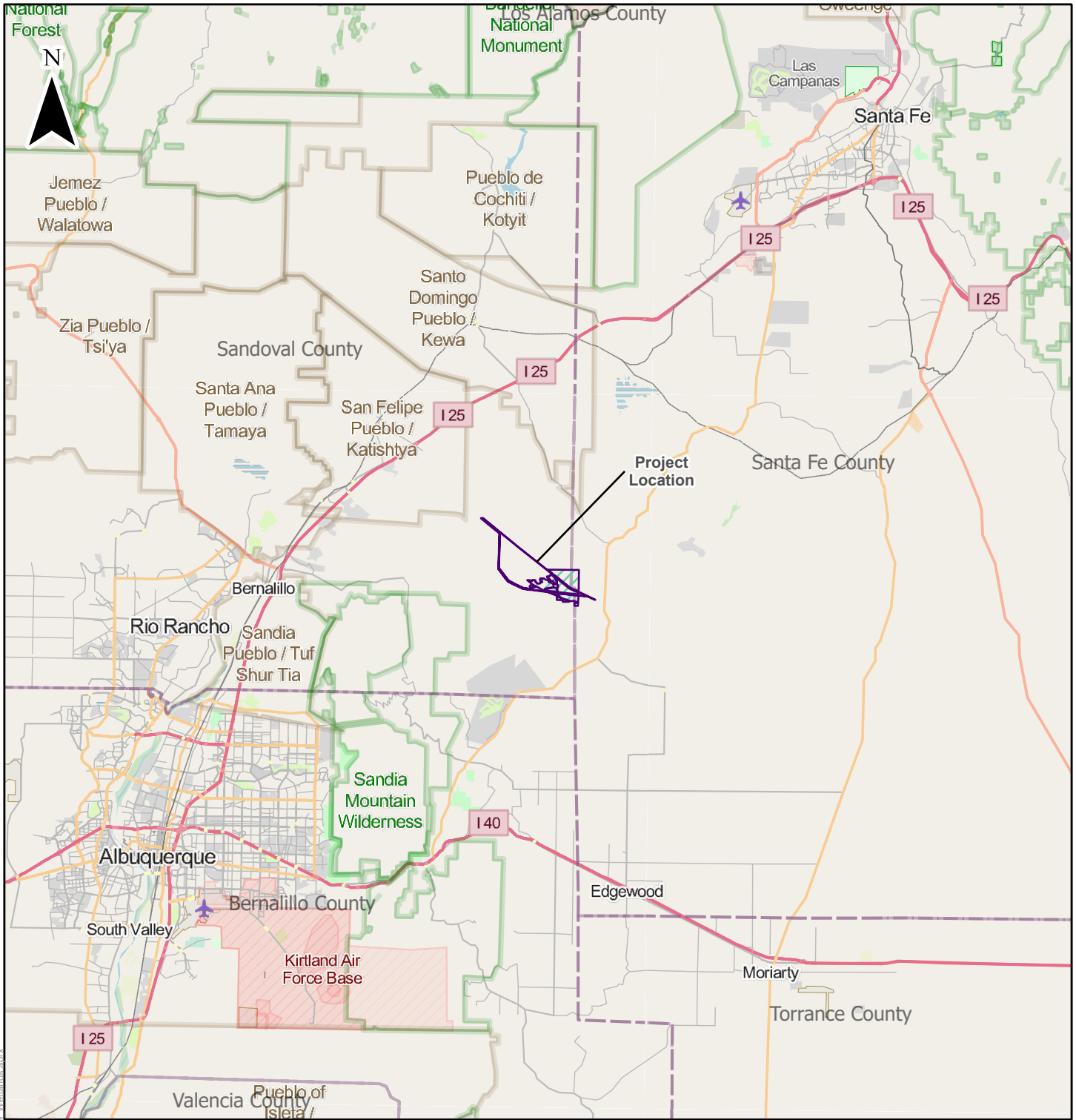
United States Fish and Wildlife Service (USFWS). 1973. Endangered Species Act. Available at: <https://www.fws.gov/sites/default/files/documents/endangered-species-act-accessible.pdf>


United States Fish and Wildlife Service (USFWS). 2022. Environmental Conservation Online System. Available at: <https://ipac.ecosphere.fws.gov/>

United States Fish and Wildlife Service (USFWS). 1918. Migratory Bird Treaty Act. Available at: <https://www.govinfo.gov/content/pkg/USCODE-2020-title16/pdf/USCODE-2020-title16-chap7-subchapII-sec703.pdf>

## Appendix A – Figures





**Legend**  
 Study Area

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC



4172 Center Park Dr. Colorado Springs, CO 80916  
 PH. (719) 597-2116 terracon.com

0 5 10  
 Kilometers

0 5 10  
 Miles

Coordinate System: NAD 83, UTM Zone 13  
 Scale: 1:500,000

DATA SOURCES:  
 ESRI Bing Map service layer (2022)

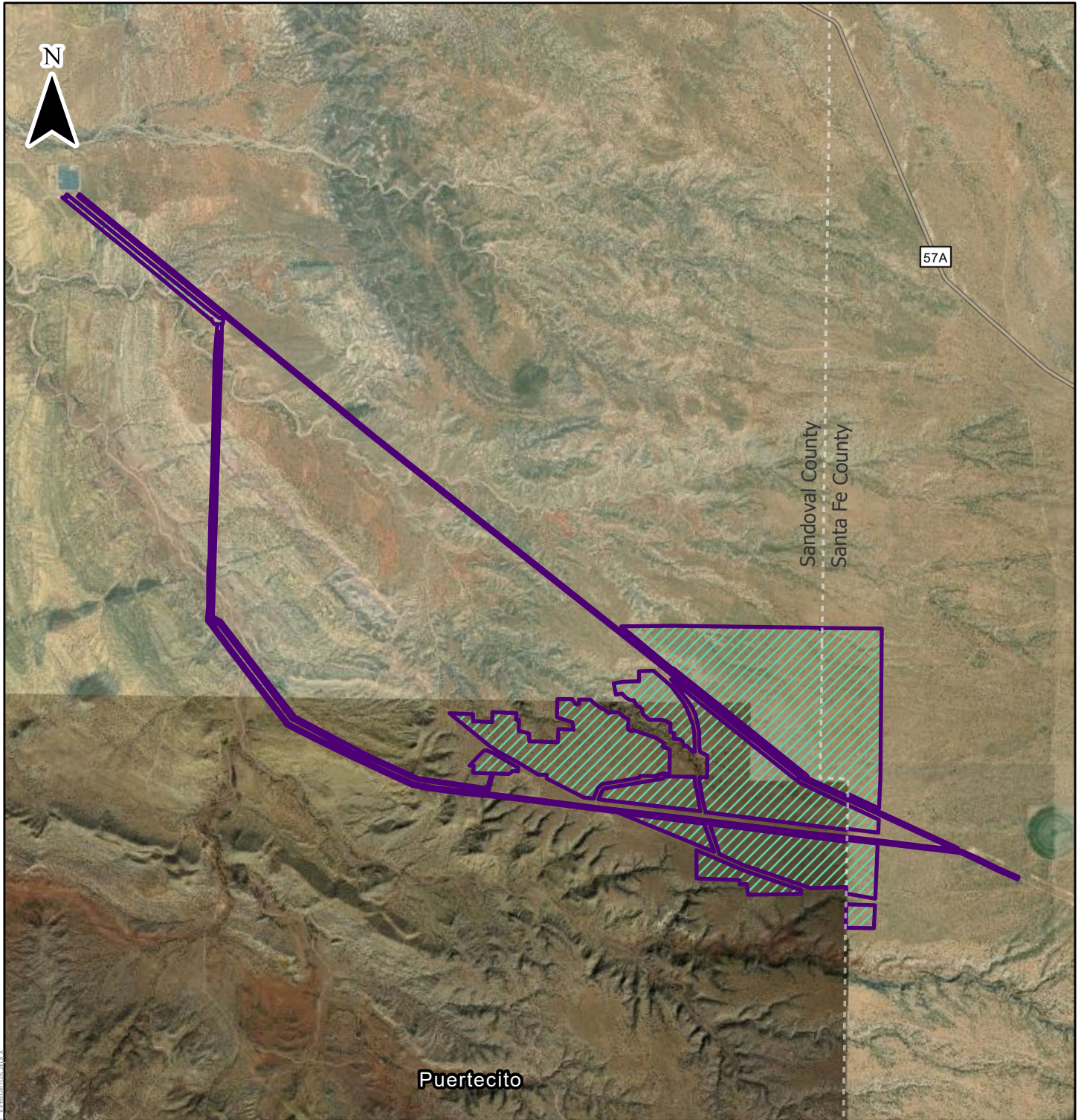
## Exhibit 1

**Vicinity Map**

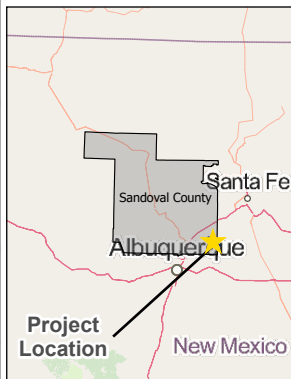
Diamond Tail  
 Sandoval County, New Mexico

Prepared for Conifer Power Company

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F:\Projects\66227139\_Diamond\_Tail\66227139\_ Wetlands\66227139\_ Wetlands.aprx



**Legend**

Study Area

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC



4172 Center Park Dr. Colorado Springs, CO 80916  
PH. (719) 597-2116 terracon.com

0 500 1,000 1,500  
Meters

0 1,500 3,000 4,500  
Feet

Coordinate System: NAD 83, UTM Zone 13  
Scale: 1:60,000

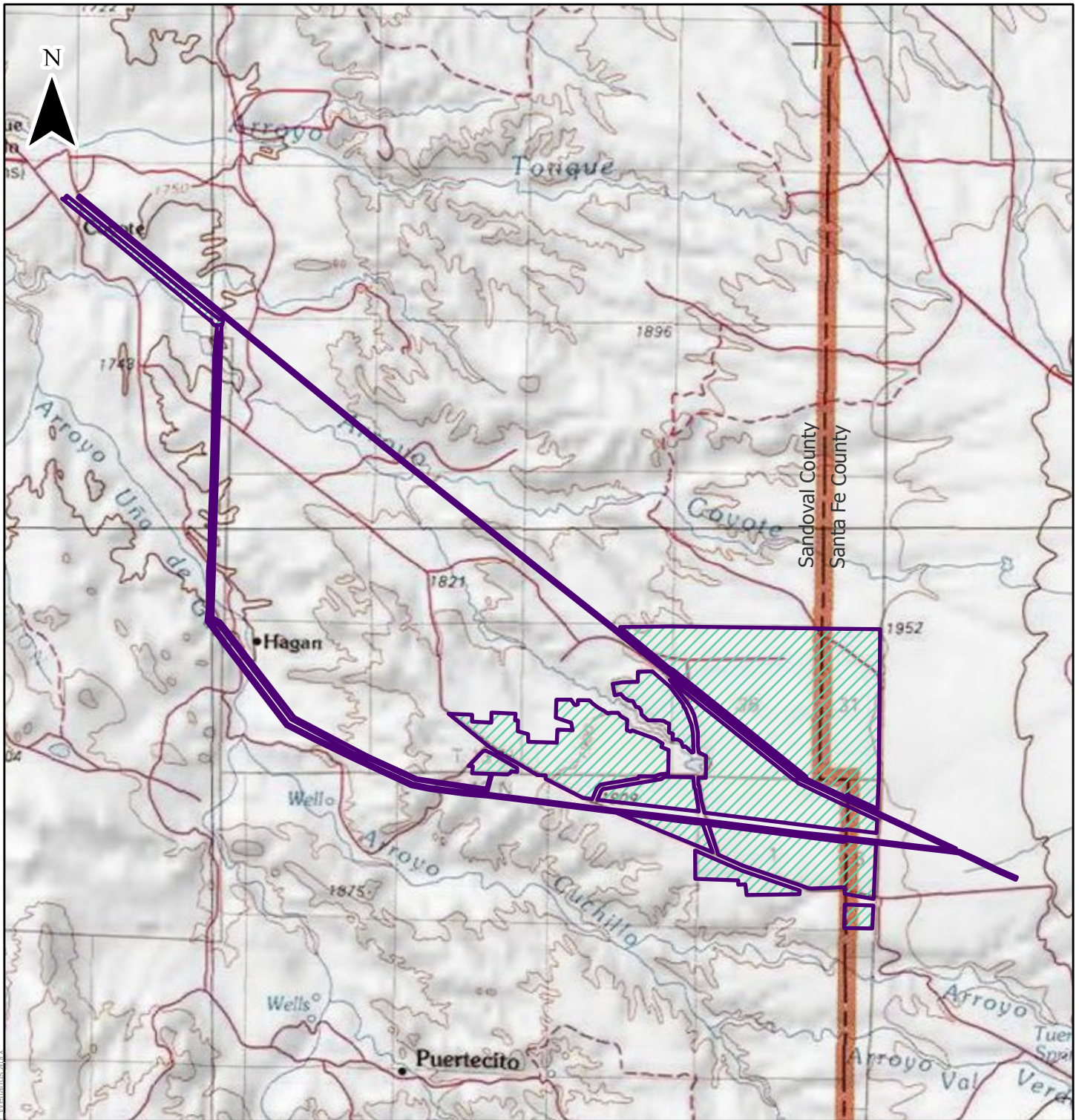
DATA SOURCES:  
ESRI Hybrid service layer (2022)  
Colorado Parks and Wildlife (2022)

**Exhibit 2**

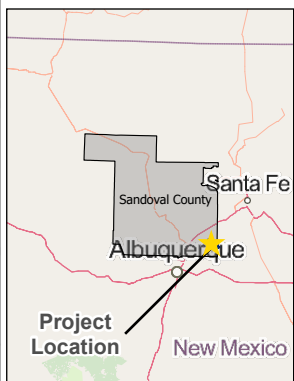
**Aerial Imagery**

Diamond Tail  
Sandoval County, New Mexico  
Prepared for Conifer Power Company





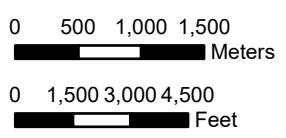
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**Legend**  
 Study Area

Project No.:	23227128
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC

4172 Center Park Dr. Colorado Springs, CO 80916  
 PH. (719) 597-2116 terracon.com



Coordinate System: NAD 83, UTM Zone 13  
 Scale: 1:160,000

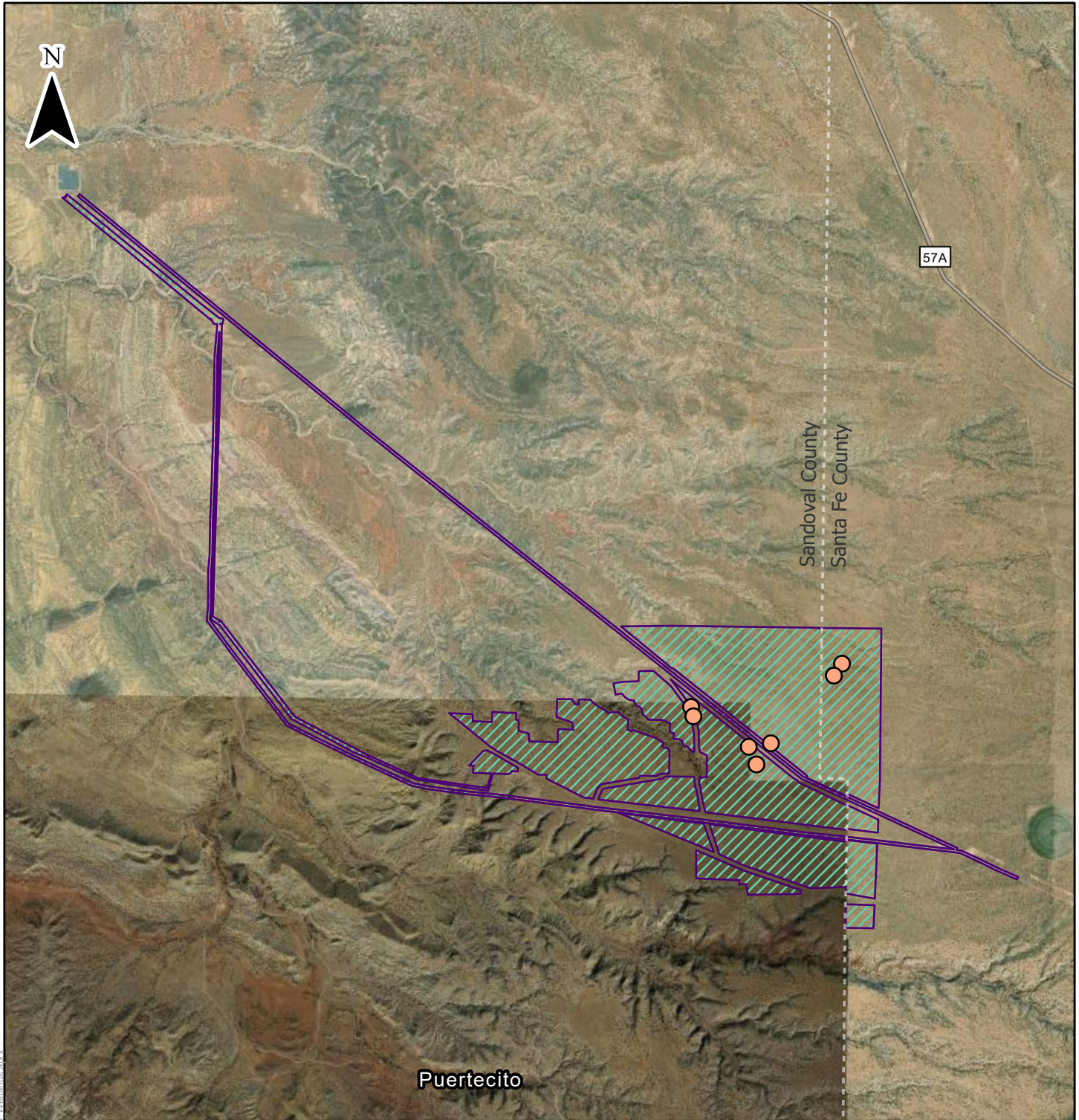
DATA SOURCES:  
 USA TOPO service layer (2022)  
 USGS QUAD NORTHWEST PUBLBLO, 2021

**Exhibit 3**

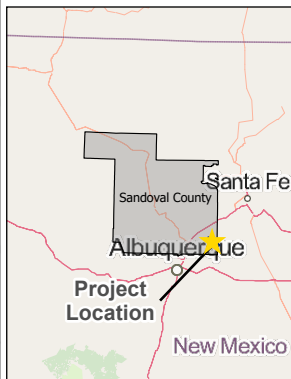
**USGS Topographic Map**

Diamond Tail  
 Sandoval County, New Mexico  
 Prepared for Conifer Power Company





F:\Projects\66227139\_Diamond\_Tail\66227139\_Wetlands\66227139\_Wetlands.aprx

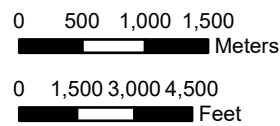


**Legend**

- Study Area
- Wildlife Burrow

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC

4172 Center Park Dr. Colorado Springs, CO 80916  
PH. (719) 597-2116      terracon.com



Coordinate System: NAD 83, UTM Zone 13  
Scale: 1:60,000

DATA SOURCES:  
ESRI Hybrid service layer (2022)

**Exhibit 4**

Field Data
<p>Diamond Tail</p> <p>Sandoval County, New Mexico</p> <p>Prepared for Conifer Power Company</p>

# Appendix B – Information for Planning and Consultation Report



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New Mexico Ecological Services Field Office  
2105 Osuna Road Ne  
Albuquerque, NM 87113-1001  
Phone: (505) 346-2525 Fax: (505) 346-2542

In Reply Refer To:  
Project Code: 2023-0014826  
Project Name: 66227139 Diamond Tail Solar

November 10, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 *et seq.*), the Migratory Bird Treaty Act as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act as amended (16 USC 668-668(c)). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area, and to recommend some conservation measures that can be included in your project design.

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the ESA is to provide a means whereby threatened and endangered species and



the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (NEPA; 42 USC 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

### **Candidate Species and Other Sensitive Species**

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico State agencies. These lists, along with species information, can be found at the following websites.

Biota Information System of New Mexico (BISON-M): [www.bison-m.org](http://www.bison-m.org)

New Mexico State Forestry. The New Mexico Endangered Plant Program:  
<https://www.emnrd.nm.gov/sfd/rare-plants/>

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: [nmrareplants.unm.edu](http://nmrareplants.unm.edu)

Natural Heritage New Mexico, online species database: [nhnm.unm.edu](http://nhnm.unm.edu)

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## WETLANDS AND FLOODPLAINS

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.

We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, [www.fws.gov/wetlands/Data/Mapper.html](http://www.fws.gov/wetlands/Data/Mapper.html), integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

## MIGRATORY BIRDS

In addition to responsibilities to protect threatened and endangered species under the ESA, there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the Service (50 CFR 10.12 and 16 USC 668(a)). For more information regarding these Acts see <https://www.fenws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a Federal nexus) or a Bird/Eagle Conservation Plan (when there is no Federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>. We also recommend review of the Birds of Conservation Concern list (<https://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>) to fully evaluate the effects to the birds at your site. This list identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent top conservation priorities for the Service, and are potentially threatened by disturbance, habitat impacts, or other project development activities.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 thereby provides additional protection for both migratory birds and migratory bird habitat. Please visit <https://www.fws.gov/migratorybirds/pdf/management/executiveordertoprotectmigratorybirds.pdf> for information

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regarding the implementation of Executive Order 13186.

We suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State protected and at-risk species fish, wildlife, and plants.

For further consultation with the Service we recommend submitting inquiries or assessments electronically to our incoming email box at [nmesfo@fws.gov](mailto:nmesfo@fws.gov), where it will be more promptly routed to the appropriate biologist for review.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - Migratory Birds
-

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New Mexico Ecological Services Field Office**

2105 Osuna Road Ne

Albuquerque, NM 87113-1001

(505) 346-2525

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## Project Summary

Project Code: 2023-0014826

Project Name: 66227139 Diamond Tail Solar

Project Type: Power Gen - Solar

Project Description: A proposed 1,800 acre solar farm that would be located northwest Golden, New Mexico.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.323884699999994,-106.32031623431592,14z>



Counties: Sandoval and Santa Fe counties, New Mexico

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## Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
Mexican Spotted Owl <i>Strix occidentalis lucida</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8196">https://ecos.fws.gov/ecp/species/8196</a>	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

### Amphibians

NAME	STATUS
Jemez Mountains Salamander <i>Plethodon neomexicanus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4095">https://ecos.fws.gov/ecp/species/4095</a>	Endangered

## Fishes

NAME	STATUS
Rio Grande Cutthroat Trout <i>Oncorhynchus clarkii virginalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/920">https://ecos.fws.gov/ecp/species/920</a>	Candidate
Rio Grande Silvery Minnow <i>Hybognathus amarus</i> Population: Wherever found, except where listed as an experimental population There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1391">https://ecos.fws.gov/ecp/species/1391</a>	Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Cassin's Finch <i>Carpodacus cassinii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9462">https://ecos.fws.gov/ecp/species/9462</a>	Breeds May 15 to Jul 15
Clark's Nutcracker <i>Nucifraga columbiana</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 15 to Jul 15
Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10

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NAME	BREEDING SEASON
Grace's Warbler <i>Dendroica graciae</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 20 to Jul 20
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>	Breeds May 20 to Aug 31
Pinyon Jay <i>Gymnorhinus cyanocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9420">https://ecos.fws.gov/ecp/species/9420</a>	Breeds Feb 15 to Jul 15
Virginia's Warbler <i>Vermivora virginiae</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9441">https://ecos.fws.gov/ecp/species/9441</a>	Breeds May 1 to Jul 31

## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

**Breeding Season (■)**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort (|)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

**No Data (-)**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



BCC Rangewide  
(CON)

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

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Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

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If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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## **IPaC User Contact Information**

Agency: Terracon  
Name: Trevor Hartwig  
Address: 10625 W Interstate 70 Frontage Road  
Address Line 2: Suite 3  
City: Wheat Ridge  
State: CO  
Zip: 80033  
Email: [twhartwig@terracon.com](mailto:twhartwig@terracon.com)  
Phone: 3038172989

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# Appendix C – New Mexico State-listed Threatened and Endangered Species List

## Species of Greatest Conservation Need and Federal or State Threatened/Endangered Sandoval, Santa Fe

<u>Taxonomic Group</u>	<u># Species</u>	<u>Taxonomic Group</u>	<u># Species</u>
Amphibians	1	Birds	17
Fish	1	Mammals	3
Molluscs	3		

TOTAL SPECIES: 25

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>USFWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
<a href="#">Spotted Bat</a>	<i>Euderma maculatum</i>	T			Y	<a href="#">View</a>
<a href="#">Pacific Marten</a>	<i>Martes caurina</i>	T			Y	<a href="#">View</a>
<a href="#">Meadow Jumping Mouse</a>	<i>Zapus luteus luteus</i>	E	E	Y	Y	<a href="#">View</a>
<a href="#">White-tailed Ptarmigan</a>	<i>Lagopus leucura</i>	E			Y	<a href="#">View</a>
<a href="#">Yellow-billed Cuckoo (western pop)</a>	<i>Coccyzus americanus occidentalis</i>		T	Y	Y	<a href="#">View</a>
<a href="#">Costa's Hummingbird</a>	<i>Calypte costae</i>	T			Y	<a href="#">View</a>
<a href="#">Broad-billed Hummingbird</a>	<i>Cynanthus latirostris</i>	T			Y	<a href="#">View</a>
<a href="#">Violet-crowned Hummingbird</a>	<i>Leucolia violiceps</i>	T			Y	<a href="#">View</a>
<a href="#">Least Tern</a>	<i>Sternula antillarum</i>	E			Y	<a href="#">View</a>
<a href="#">Neotropic Cormorant</a>	<i>Phalacrocorax brasilianus</i>	T			Y	<a href="#">View</a>
<a href="#">Bald Eagle</a>	<i>Haliaeetus leucocephalus</i>	T			Y	<a href="#">View</a>
<a href="#">Common Black Hawk</a>	<i>Buteogallus anthracinus</i>	T			Y	<a href="#">View</a>
<a href="#">Mexican Spotted Owl</a>	<i>Strix occidentalis lucida</i>		T	Y	Y	<a href="#">View</a>
<a href="#">Boreal Owl</a>	<i>Aegolius funereus</i>	T			Y	<a href="#">View</a>
<a href="#">Peregrine Falcon</a>	<i>Falco peregrinus</i>	T			Y	<a href="#">View</a>
<a href="#">Northern Beardless-Tyrannulet</a>	<i>Camptostoma imberbe</i>	E			Y	<a href="#">View</a>
<a href="#">Southwestern Willow Flycatcher</a>	<i>Empidonax traillii extimus</i>	E	E	Y	Y	<a href="#">View</a>
<a href="#">Bell's Vireo</a>	<i>Vireo bellii</i>	T			Y	<a href="#">View</a>
<a href="#">Gray Vireo</a>	<i>Vireo vicinior</i>	T			Y	<a href="#">View</a>
<a href="#">Baird's Sparrow</a>	<i>Centronyx bairdii</i>	T			Y	<a href="#">View</a>
<a href="#">Jemez Mountains Salamander</a>	<i>Plethodon neomexicanus</i>	E	E	Y	Y	<a href="#">View</a>
<a href="#">Rio Grande Silvery Minnow</a>	<i>Hybognathus amarus</i>	E	E	Y	Y	<a href="#">View</a>
<a href="#">Wrinkled Marshsnail</a>	<i>Stagnicola caperata</i>	E			Y	<a href="#">View</a>
<a href="#">Paper Pondshell</a>	<i>Utterbackia imbecillis</i>	E			Y	<a href="#">View</a>



Species of Greatest Conservation Need and Federal or State Threatened/Endangered  
**Sandoval, Santa Fe**

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGE</u>	<u>USFWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
<a href="#">Liljeborg's Peadam</a>	Pisidium liljeborgi	T			Y	No Photo

## Appendix D – Photographic Log



Photo 1. Overview juniper grassland habitat found within proposed solar facility area of the project area, looking north.



Photo 2. Overview juniper grassland habitat found within proposed solar facility area of the project area, looking east.



Photo 3. Overview juniper grassland habitat found within proposed solar facility area of the project area, looking south.



Photo 4. Overview juniper grassland habitat found within proposed solar facility area of the project area, looking west.





Photo 5. Habitat adjacent to arroyos along transmission line corridor, looking north.



Photo 6. Habitat adjacent to arroyos along transmission line corridor, looking southwest.



Photo 7. Desert habitat along transmission line corridor, looking north.



Photo 8 Desert habitat along transmission line corridor, looking southeast.





Photo 9. Habitat found along washes in the transmission line corridor, looking north.



Photo 10. Habitat found along washes in the transmission line corridor, looking south.