COCHISE COUNTY
Arizona

Development Services
520-432-9300
developmentservices@cochise.az.gov
www.cochise.az.gov
1415 Melody Ln, Bdg F
Bisbee, Arizona 85603

Special Use Application

Special Uses are activities or uses that, because of their unique characteristics, potentially could generate greater impacts than uses permitted in a zoning district. Due to these greater impacts, special uses are not granted administratively. Rather, they must be reviewed and approved by the Planning and Zoning Commission at a public hearing.

Applicant Info

Name: Winchester Solar III, LLC

Address: 929 Pearl Street, Suite 300

Phone: (720) 699-8465

Email: rtaylor@torchcleanenergy.com

Describe your relationship to this application (select one):

☐ Property owner (skip next question) ☑ Authorized agent

By typing their name below, the undersigned, registered property owner of the property subject to this application, hereby grants the authorized agent noted above to act on their behalf and take all actions necessary for the processing, issuance and acceptance of this permit or application.

Signature: Julie and Curtis Nolan Date: 2/26/2026

Property Info

Property Owner Name(s): Julie and Curtis Nolan

Parcel Number (APN): 20986016F; 20986010B

Property Size (in acreage or square feet): Approximately 80 acres

Property Zoning Designation: RU-4

Processing Fees

$500 + ($20/acre, ($2,000 acreage fee max)) Applicants may pay online with a credit card or mail a check to the Development Services Department at 1415 W Melody Ln, Building F, Bisbee, AZ 85603, payable to the Cochise County Treasurer.

Required Submittals

- [x] This application
- [x] A concept plan
- [x] A copy of the neighborhood notification letter and any information provided to the public
- [x] A non-refundable processing fee

Project Info

Identify the utility company/service provider for each of the following services and state if additional provisions or future connections are required in the space below.

Service	Utility Company/Service Provider
Water/Well	Private well(s)
Sewer/Septic*	Not applicable/needed
Electricity	SSVEC
Fire Protection	Willcox Fire Department
Waste Disposal	Any trash will be disposed of off-site in accordance with regulations.

* If the property is, or will be, served by a septic system, indicate the location of the septic system and the 100% expansion area on the site plan. State whether the system is existing or proposed.

Is this request consistent with all deed restrictions or private covenants in effect for this property? If applicable, please include a copy of these restrictions/covenants with this application.

- [ ] Yes
- [ ] No
- [x] N/A, no deed restrictions

Supplemental Questions

1. Please state the reason for this request and why it should be supported.

The Special Use request is for a utility-scale solar photovoltaic (PV) energy generation facility and Battery Energy Storage System (BESS) that has been developed to meet demand and reinforce grid reliability for a local Arizona utility and its members.

2. Describe all **existing** structures/uses present on the subject property. Note: Show the location and size of existing structures on the accompanying site plan.

The subject property is predominantly vacant land which has previously been used for ranching/grazing (see attached site plan).

3. Describe all **proposed** structures/uses that will be placed on the property. Note: Show the location and size of proposed structures on the accompanying site plan.

- Ground-mounted arrays of solar PV modules on single-axis tracking systems
- Battery Energy Storage System (BESS) – enclosed integrated battery container systems
- Electrical collection systems, including switchgear, inverters, transformers and collection lines
- Associated infrastructure including site perimeter fencing, internal access roads and access driveways/gates
- Meteorological stations, and a remotely operated SCADA system

4. What materials will be used to construct the new building(s)? (Note, for an existing building(s), please also list the construction type(s), i.e., factory-built building, wood, block, metal).

Not applicable as the Project will not require any buildings.

5. Will the project be constructed/completed within one year or phased?

☐ One year ☑ Phased

Supplemental Questions Continued

5.a. If this is a phased project, describe the phases here and physically depict them on the site plan.

The typical construction timeline for this type of project ranges from 12-18 months.

6. Describe all intermediate and final products/services that will be produced/offered/sold, if applicable.

The proposed Project is a utility-scale solar photovoltaic (PV) and battery energy storage system (BESS) facility that will generate and store electricity. The primary and final product will be wholesale electrical energy, with the integrated battery system storing and dispatching power to enhance grid reliability and optimize energy delivery.

7. What are the days of the week and hours of operation (if applicable)?

Once constructed, the facility will operate continuously, 24 hours per day, seven days per week.

8. What are the number of employees expected to work onsite?

Initially: 60 Future: 2-4

9. Describe the permanent legal access to the property. State which streets or easement will be used by traffic to enter or exit the property. Specify whether the vehicular access is from a public road, private road, or easement, and label all legal access on the concept plan.

Project access would be reached via Airport Road.

10. What impact will this have on the traffic volume of roads that serve the subject property?

The Project is not expected to generate significant ongoing traffic once operational, and a detailed traffic management plan will be submitted to the County for review.

10.a. Number of passenger vehicles entering and leaving the site (per day/week)? 40/week

10.b. Number of large trucks entering and leaving the site (per day/week)? 15-30/week

Supplemental Questions Continued

10.c. At what time of day, day of week, and season (if applicable) will traffic be the heaviest?

Traffic associated with the Project is expected to be heaviest during daytime weekday hours in the construction phase with minimal traffic once operational.

11. How many driveway cuts are proposed along streets or easements to allow site access? State whether this is an increase/decrease and whether any existing cuts will need relocation.

The Project plans to improve and utilize the existing access off Airport Road.

12. What is your water source? If your property is served by a well, show the existing or proposed location of the well on the site plan. State whether the well is private or shared (if applicable).

Private well(s) within the subject parcels (see attached Preliminary Concept Plan).

13. Total gallons of water needed for the proposed use, either daily or annually: 0

14. List any strategies you will use on site to minimize water use, recycle water, and/or enhance onsite natural recharge.

Water will be used from on onsite well for dust control during construction. Once constructed, the facility will use minimal water for occasional maintenance and dust control.

15. Describe your citizen review process. Specifically, state whether you received any responses to your mailed notice or public meeting. Explain how your special use application has incorporated the feedback you received. Upload a copy of the mailed notice to the portal.

The Project team has made contact with all adjacent landowners as well as many of the neighbors in the vicinity of the Project.

Supplemental Questions Continued

15.a. Date of mailing by applicant: 2/27/2026

15.b. Mailing radius: .5 mile

16. Describe any outdoor activity associated with your special use proposal, if applicable.

Once operational, the Project will have minimal outdoor activity, limited to periodic on-site inspections, routine maintenance, and occasional equipment servicing.

17. Will outdoor storage of equipment, materials or products be needed? If yes, show the location on the site plan. Describe any measures to be taken to screen this storage from neighboring properties.

Yes, limited outdoor storage of maintenance equipment and spare parts will be needed on-site. A temporary laydown yard will be used during construction for equipment delivery. Preliminary locations for these areas are shown on the attached site plan.

18. Will any noise or vibrations be produced that can be heard or felt on neighboring properties on a regular basis? if yes; describe the level and duration of this noise. What measures are you proposing to prevent this noise from being heard on neighboring properties?

Once operational, the facility is not expected to produce noise or vibrations that would be regularly heard or felt on neighboring properties.

19. Will odors be created? If yes, what measures will be taken to prevent these odors from escaping onto neighboring properties?

The Project will not create any odors during operation, and no odor control measures are necessary.

Supplemental Questions Continued

20. Will any on-site activities attract pests, such as flies or mice? If yes, what measures will be taken to mitigate/discourage their presence?

The nature of the Project will not attract pests such as flies or mice, and standard maintenance practices will be followed to ensure the site remains free of any potential pest activity.

21. Will additional dust be created on a regular basis? If yes, what measures will be taken to prevent this dust from escaping onto neighboring properties or roadways?

During construction, dust will be generated from site grading, earthwork, and vehicle traffic. Standard dust control measures, such as watering exposed areas and limiting vehicle speeds, will be implemented. Once operational, the Project is not expected to generate dust on a regular basis, and any occasional dust from maintenance activities will be minimal and managed through standard site practices to prevent impacts on neighboring properties or roadways.

22. Do you anticipate the use of any hazardous or dangerous materials? If yes, please complete a "Hazardous or Polluting Materials Attachment" and attach it to this application.

☐ Yes ☑ No

23. Do you anticipate the need to clear more than one acre of vegetation? If so, describe the proposed dust and erosion control measures to be used and show their approximate location on site plan, if appropriate. Also, indicate if any drainage pattern alterations are proposed or necessary.

A water truck, or possibly environmentally safe polymers, will be used for dust control. Silt fences, coir logs, coir blankets, etc. will be used to reduce water erosion during construction. Once constructed, the only permanently cleared land will be area used for a substation, inverter and transformers skids, and the BESS. Re-seeding will take place post-construction.

Acknowledgments

By typing their name below, the applicant certifies that all information in this application, on the site plan, and within any supplemental documents is true and accurate. They understand that if any information is false, it may be grounds for revocation of this permit. In addition, they hereby request all inspections necessary to process this application, and if the permit is issued, they request all inspections necessary to monitor progress, and document completion, at all stages of the work related to this permit.

Applicant Signature: Sara Born Date: 2/26/2026

Acknowledgments Continued, Prop 207 Waiver

By typing their name below, the property owner acknowledges that the approval being sought by this application may cause a reduction in the existing rights to use, divide, sell or possess the private property that is the subject of this application. The property owner further acknowledges that it is the property owner who has requested the action sought by the filing of this application. Therefore, with full knowledge of all rights granted to the property owner pursuant to A.R.S.§12-1132 through 1138, the property owner does hereby waive any and all claims for diminution in value of the property with regard to any action taken by Cochise County as result of the filing of this application.

Signature (Property Owner): Julie Nolan / Curtis Nolan Date: 2/26/2026

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Signature: Shane Smith / Jolyn Smith Date: 2/26/2026

Property Info

Property Owner Name(s): Jolyn and Shane Smith

Parcel Number (APN): 20986016H; 20986016G; and 20986016E

Property Size (in acreage or square feet): Approximately 1,132 acres

Property Zoning Designation: RU-4

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Applicant Signature: Sara Born Date: 2/26/2026

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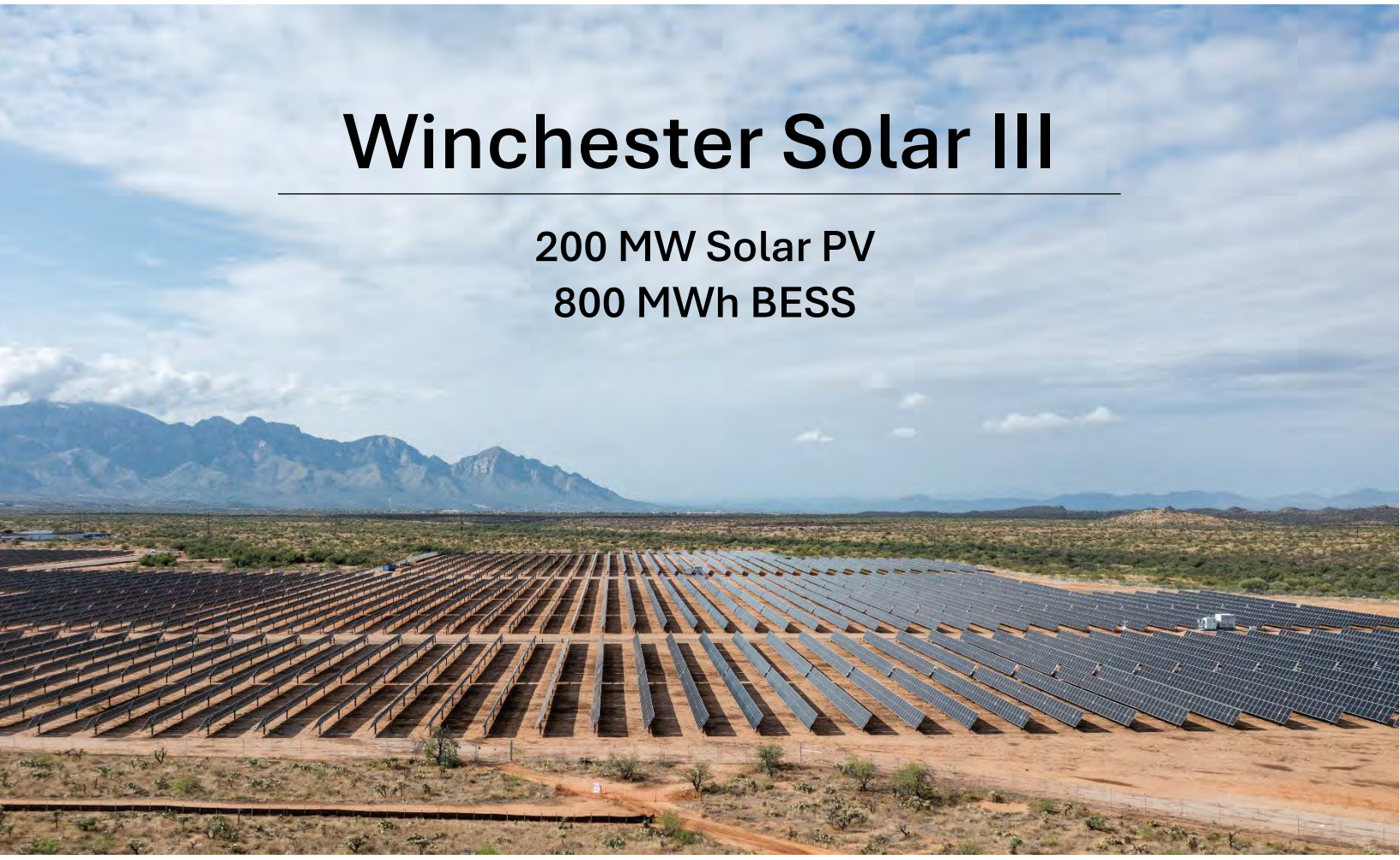
Signature (Property Owner): Shane Smith / Jolyn Smith Date: 2/26/2026

Winchester Solar III

200 MW Solar PV
800 MWh BESS



TORCH CLEAN ENERGY

Special Use Permit

Cochise County, AZ

Submitted: February 27, 2026

929 Pearl St, Boulder CO, 80302

Contents

Contents

Executive Summary

This narrative report includes the required information about the Winchester Solar III (Project) to support the application for a Special Use Permit (SUP) on private lands in unincorporated Cochise County. The Project is a utility-scale solar photovoltaic (PV) energy generation facility and Battery Energy Storage System (BESS) that has been developed to meet demand and reinforce grid reliability for a local Arizona utility and its members.

Winchester Solar III, LLC requests a Special Use Permit to develop, construct, and operate the Project.

Site Description

Project Location

The Project site is located approximately seven (7) miles southwest of the Town of Willcox, within Sections 12 and 13, Township 14 South, Range 23 East, and encompasses the following five (5) privately-owned Cochise County tax parcels:

APN	**Acreage** **(Approximate and according to Cochise County GIS)**
20986016H	1,044.5
20986016G	80.25
20986016E	40
20986016F	40
20986010B	40

In total, the Project area is approximately 1,250 acres.

Zoning Information

The project site is zoned RU-4 and designated as Category D (Rural) in the Cochise County Comprehensive Plan. Category D zones are characterized by low densities and having availability of sites large enough for intensive industrial uses that cannot be accommodated in other growth areas. These characteristics are generally compatible with the nature of the proposed use. The Project requires few built structures aside from the PV arrays, inverter block, switchgear and a battery system. The Project would not increase the density of the area, is quiet, adds only minimal intermittent light during nighttime emergency maintenance, and would strive to preserve the character of the area as much as possible. The Winchester Solar III Project, located on land zoned RU-4, would have setbacks that meet or exceed the requirements for its use in RU-4 zoning (40 feet from property lines and roads).

Current Land Use

The Project area and the surrounding land hosts a combination of agricultural, commercial, and residential uses. The Project site is comprised of two 40-acre parcels with residences and vacant land as well as three vacant parcels. The site

is bound to the north by Airport Road, private land and ASLD lands leased for grazing. To the south, the Project is bound by one of the initial phases of the Winchester Energy Facility, Winchester Solar II, which began construction in January 2026. To the west of the Project is both ASLD grazing land as well as privately-owned parcels with residences located at varying distances from the Project boundary. To the east of the Project site is one residence as well as state and privately-owned agricultural and vacant land (see Appendix A: Preliminary Site Plan).

Project Description

Proposed Use

The proposed uses for the subject lands would include utility-scale photovoltaic solar power generation paired with battery energy storage. More specifically, the Project is comprised of:

- 200-megawatt (MW) photovoltaic (PV) solar generation facility;
- 200 MW-4hr / 800-megawatt-hour (MWh) battery energy storage system (BESS)

Project Components

The primary components of the Project are expected to include:

- Ground-mounted arrays of solar PV modules on single-axis tracking systems
- Battery Energy Storage System – enclosed integrated battery container systems
- Electrical collection systems, including switchgear, inverters, transformers, and collection lines
- Associated infrastructure including site perimeter fencing, internal access roads and access driveways/gates
- Meteorological stations, and a remotely operated SCADA system

Solar Array

The solar PV modules will be organized into connected groups (arrays). The solar arrays will consist of PV modules mounted on a single axis tracking rack system supported by driven posts, driven concrete piles. The single-axis tracking system will rotate east-to-west to follow the sun throughout the day and the panel rows will be oriented north/south. The rotation of the panels will be essentially noiseless and extremely slow. Solar panels will be mounted on single-axis tracker systems with a maximum height of approximately 10 to 12 feet above grade at their highest tilt position. The site topography is relatively flat and would require minimal grading. Drainage control features may be included in the site design such as berms, channels, and basins.

BESS

The Battery Energy Storage System (BESS) is comprised of industry-standard lithium-ion battery cells, racks, switchboards, and integrated heating, ventilation, and cooling units (HVAC) in self-contained battery storage modules within an estimated 10 acre area. Each container is approximately 23.5 ft long x 10 ft high x 8ft wide. The energy storage system will also include inverters and controls located in the adjacent cabinets or containers. The enclosures will have appropriate fire mitigation systems built to the codes and standards listed below (see Fire Protection Measures). The BESS area will be appropriately graded to manage site drainage and to protect the equipment.

Electrical Collection System

The PV array will connect to a power conversion station (PCS) consisting of power inverters and transformers, cabling systems, and grounding systems. The inverters convert the low voltage direct current (DC) electricity generated by the panels to alternating current (AC) electricity and transformers step up the voltage to 34.5kV. The 34.5kV voltage cabling runs through a main power transformer at the project substation to step up the power to 230kV to interconnect to the grid.

Site Control

The Project area is under site control through purchase option agreements with the associated landowners.

Access

Existing access to the site will be via Airport Road on an improved private drive on APN 20986016E. The Project has also applied for a Right of Way for additional access via the bend in Airport Road (see Appendix A: Preliminary Concept Plan).

Operations and Maintenance

The Project will operate year-round and require only a limited amount of maintenance. Remote monitoring and controls enhance the efficiency and minimization of maintenance visits. Maintenance activities include periodic inspections of equipment, dust control, vegetation maintenance and weed control, maintaining electrical collection system components.

Fire Protection Measures

The Project team has been in coordination with the Willcox Fire Department for the initial phases of the Winchester project and has met with fire personnel on site to establish local fire protection requirements as well as an Emergency Response Plan and training for those projects. The Winchester Solar III Project will coordinate with the Willcox Fire Department to confirm their willingness to establish fire protection measures for this project phase.

In case of a fire, the batteries' control system would notify the appropriate fire response contacts.

Equipment and installation will meet the following standards at a minimum:

- 2023 NEC (National Electric Code, NFPA 70)
- NFPA 855 / IFC *(comprehensive requirements for stationary ESS installations)*
- UL-9540/ UL-9540a/UL-1973/UL-1741 *(essential BESS and inverter testing standards)*

Battery equipment will be locked and inaccessible to non-authorized personnel. It will be equipped with remote SCADA monitoring and multiple fail safes to detect and provide alerts for potential issues which will allow the system to be disconnected immediately remotely. In addition, if high temperatures, smoke or fire is detected the battery systems have internal mechanisms to prevent further temperature increases and self-extinguish as further discussed below. In an emergency, the SCADA monitoring system will notify the appropriate fire response contact immediately. Points of contact for the Willcox Fire Department, system owner/operator, and battery manufacturer (if appropriate) will also be labeled on site in addition to an emergency response label attached to equipment outlining the Emergency Response Plan.

BESS systems are designed to self-extinguish and consume themselves slowly without explosive bursts or unexpected hazards and without propagating to neighboring enclosure units. The risk of explosion is considered "infinitesimal."

Deflagration vents are designed to evacuate gas buildup that may increase the risk of explosion, and the multi-layered heavy steel enclosures are designed to contain the risk of explosion from the sides. In the case of a fire, the strategy is defensive, focusing on cooling the surrounding areas, vegetation, and other equipment while the fire burns itself out.

The Tier-1 BESS system is designed with safety architecture that includes numerous electrical and mechanical protection measures at the cell, module, and enclosure levels. Internal to the enclosures is a thermal management system designed to maintain the BESS at a safe operating temperature. The SCADA system monitors all systems, processes, and temperatures and can initiate disconnects, alerts, and notifications.

BESS area access roads will be built with a minimum 20 ft width, minimum height clearance of 13ft 6in, 75,000lb weight capacity, 35ft radii, and will incorporate an approved means of turn-around to accommodate fire-fighting apparatus. Security gates will have a minimum width of 24ft and an approved means of emergency operation and entry. Road grades shall not exceed 15%. The Project has coordinated with the Willcox Fire Department and will provide a listed NFPA 1142 compliant water tank for fire suppression.

Anticipated Construction Timeline and Lifecycle

Construction is anticipated to begin by Spring of 2027, with a commercial operation date (COD) by the end of 2028. The project equipment is designed for a 20-year lifespan. A decommissioning plan will outline the removal of the equipment and restoration of the site at the end of its life cycle.

Lighting

Lighting will be designed to provide the minimum illumination needed for safety and security objectives, will be downward facing and shielded to focus illumination on the desired areas only and only be utilized if maintenance is needed at night. There will be no lighting in the solar field. If lighting at individual solar panels or other equipment is needed for occasional night maintenance, portable lighting will be used.

Environmental Considerations

Water Use

The Winchester Solar III Project will use water during construction for dust control. Some water may be used during operation for further dust control until the site is stabilized. During construction, portable toilets will be used to provide needed wastewater facilities. No water is needed for panel washing.

Water would be supplied from existing well on the Winchester Solar II project site that is permitted with ADWR to supply construction water.

Biological Evaluation

A Biological Evaluation has been prepared to address the Endangered Species Act of 1973 and Arizona Game and Fish Department. The objectives of the evaluation are to describe vegetation in the survey area and evaluate habitat suitability for federally listed and other special-status species. The evaluation identified six species with historical or potential ranges in the survey area or its vicinity, though ultimately concluded that the Project would have no effect on any species listed under the Endangered Species Act.

The Biological Evaluation also addressed birds protected under the Migratory Bird Treaty Act of 1918 and found the survey area does not contain nesting habitat for bald or golden eagles, though limited foraging habitat may be present and individuals may occasionally fly over the site. Any loss of foraging habitat from construction would be minimal, as these species are expected to utilize other suitable habitat in the surrounding area.

A Potential Avian Impact Study was also prepared for the Project. The general findings indicated that anticipated effects would be limited in scope and primarily localized to the immediate project area. Under conservative assumptions, the Project may result in minor impacts to certain bird species, primarily passerines, doves, and pigeons in the immediate vicinity of the facility. Minor impacts to waterbirds are also possible due to the proximity of the Willcox Playa, located less than three miles southeast of the site; however, waterbirds are expected to be more attracted to the playa itself than to the solar facility. Any potential changes in bird abundance near the Project would not result in species-specific, population-level effects and would not extend beyond the operational life of the facility, and photovoltaic solar generation is considered a comparatively lower-impact energy source for birds relative to other forms of electricity generation.

The Project team will coordinate with the Arizona Game and Fish Department about the Project regarding design, construction timing, and implementation of any recommended avoidance or mitigation measures.

Visual Resources

To evaluate how the Project will fit into the surrounding environment and assess potential impacts, visual simulations are being prepared to illustrate views from nearby homes, roads, and public viewpoints. Once completed, these materials will be provided to the County to support the review process and communication with the Project's with nearby property owners.

Operational Considerations

Once operational, the Project would not produce any noise or dust and use nearly no water. The equipment is low in height with minimal visual disturbances. Remote monitoring means traffic to the site would be limited to occasional maintenance visits.

The Project:

- Will not affect agricultural uses on adjacent properties. Also, the Project would not impact any important biological, cultural, riparian, or conservation lands.
- Has adequate accessibility to the county road network; project access will be provided via existing roads.
- Will be developed and designed in accordance with county engineering standards. Project design will meet all applicable zoning and engineering standards.
- Will meet county standards in terms of the control of noise, smoke, glare or heat, odors, vibrations, fly, ash, dust, fumes, vapors, gases and other forms of air pollution, liquids and solid waste. The operation of the Project would not generate off-site emissions of any of the items outlined above.
- Will not have hours of operation detrimental to adjoining residents. The Project would not generate any off-site nuisances to neighbors as discussed above.

Key Project Benefits

The Project will deliver reliable, local electricity by combining solar and battery storage. The mix of technologies allows power to be available when it's needed most, supporting the local grid and keeping energy dependable and cost-effective.

The Project will stimulate the local economy by providing jobs during construction and secondary benefits to the hotel and restaurant businesses and supporting the county tax base.

Applicant and Ownership Information

The Project is being developed by Winchester Solar III, a wholly-owned subsidiary of Torch Clean Energy LLC (Torch). Torch is an integrated clean power platform that develops, constructs, and manages utility-scale solar and battery storage projects across the United States. The company has a proven track record of success, having originated, developed, and sold more than 1 gigawatt of renewable power assets. In January 2025, Torch and Morgan Stanley Infrastructure Partners ("Morgan Stanley") announced a strategic partnership.

The company maintains expertise in the Southwest and Mid-Atlantic regions of the United States. Torch differentiates itself through a strategic approach to project siting and interconnection, combined with strong relationships with power purchasers in high-growth markets. Furthermore, we are one of the most active utility-scale renewable energy developers in the Southwest.

Torch's expertise focuses on greenfield development and construction management through commercial operations. We believe our desire to remain active partners throughout the lifecycle of the project, from initial development through operations, creates strongly aligned incentives with our community stakeholders, landowners, contract counterparties, and equity and other financing partners.

Winchester Solar III, the Applicant, would enter into a Power Purchase Agreement (PPA) with the local utility, under which the facility's electricity output would be sold and delivered to the grid. Ownership and operational responsibilities would remain with the Applicant, while the PPA ensures a long-term, contractual relationship with the utility.

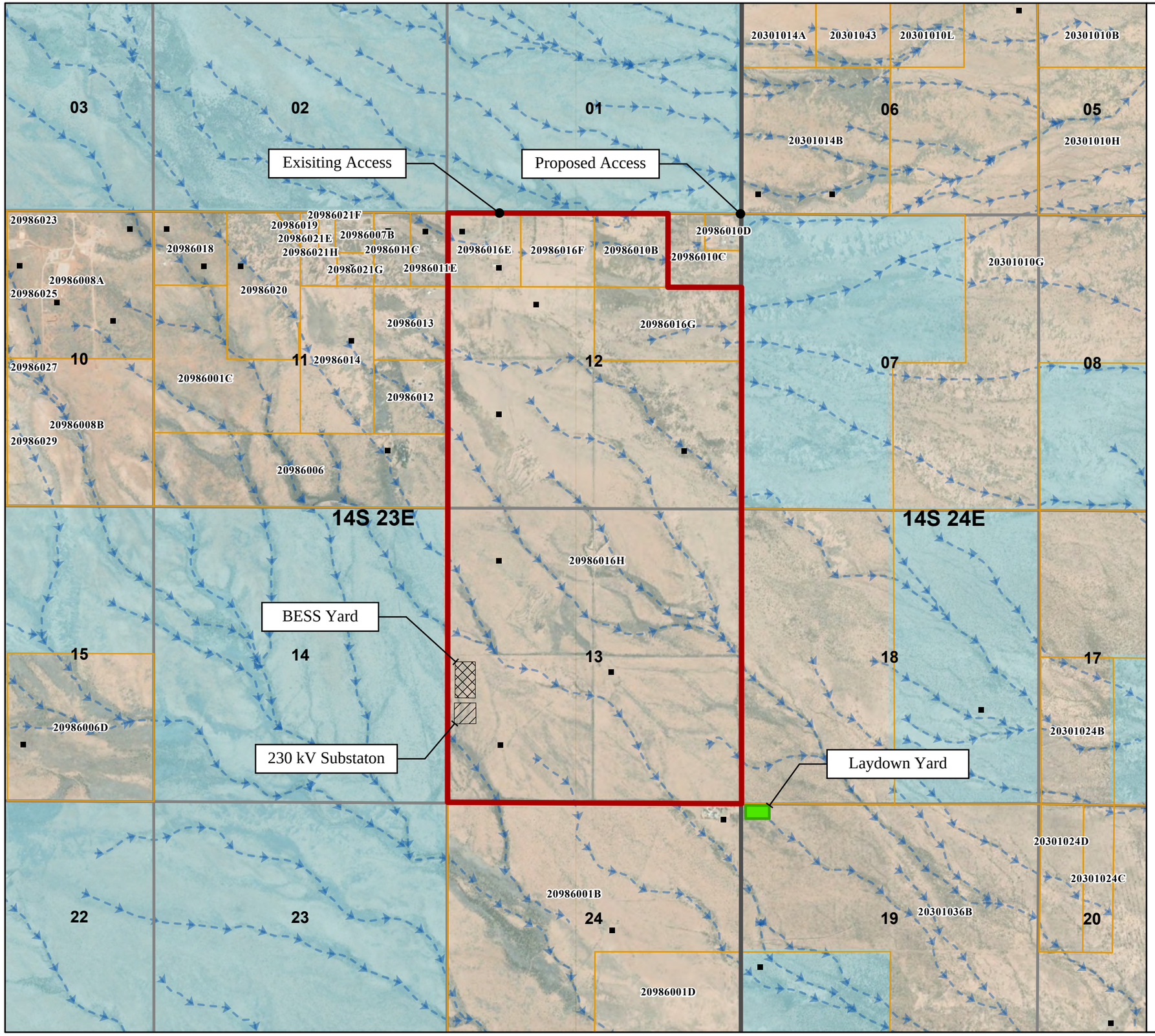
Appendices

Appendix A: Preliminary Concept Plan

Appendix B: Biological Evaluation

Appendix C: Potential Avian Impact Summary

Appendix D: Neighbor Notification Letter



N

0 1,000 2,000 4,000 Feet

LEGEND:

- Project Boundary
- Substation
- BESS Yard
- County Parcel Boundaries
- ASLD Ownership
- Laydown Yard
- Drain Arrows
- Well Registry

NOTES:

1. Substation and BESS location is preliminary and may change during final design.
2. Modules will have a 100-ft parcel setback where adjacent to residences.
3. Project is on private land.
4. Permanent Parking will be located at the substation.
5. Temporary Parking will be located at Project Access.
6. All archeological sites will be avoided.
7. All electrical equipment will be 1 foot above BFE.

REV	DATE
3	02/26/2026

PREPARED BY:
H. HIRANANDANI

TORCH CLEAN ENERGY

WINCHESTER ENERGY DEVELOPMENT 200 MW

ARIZONA

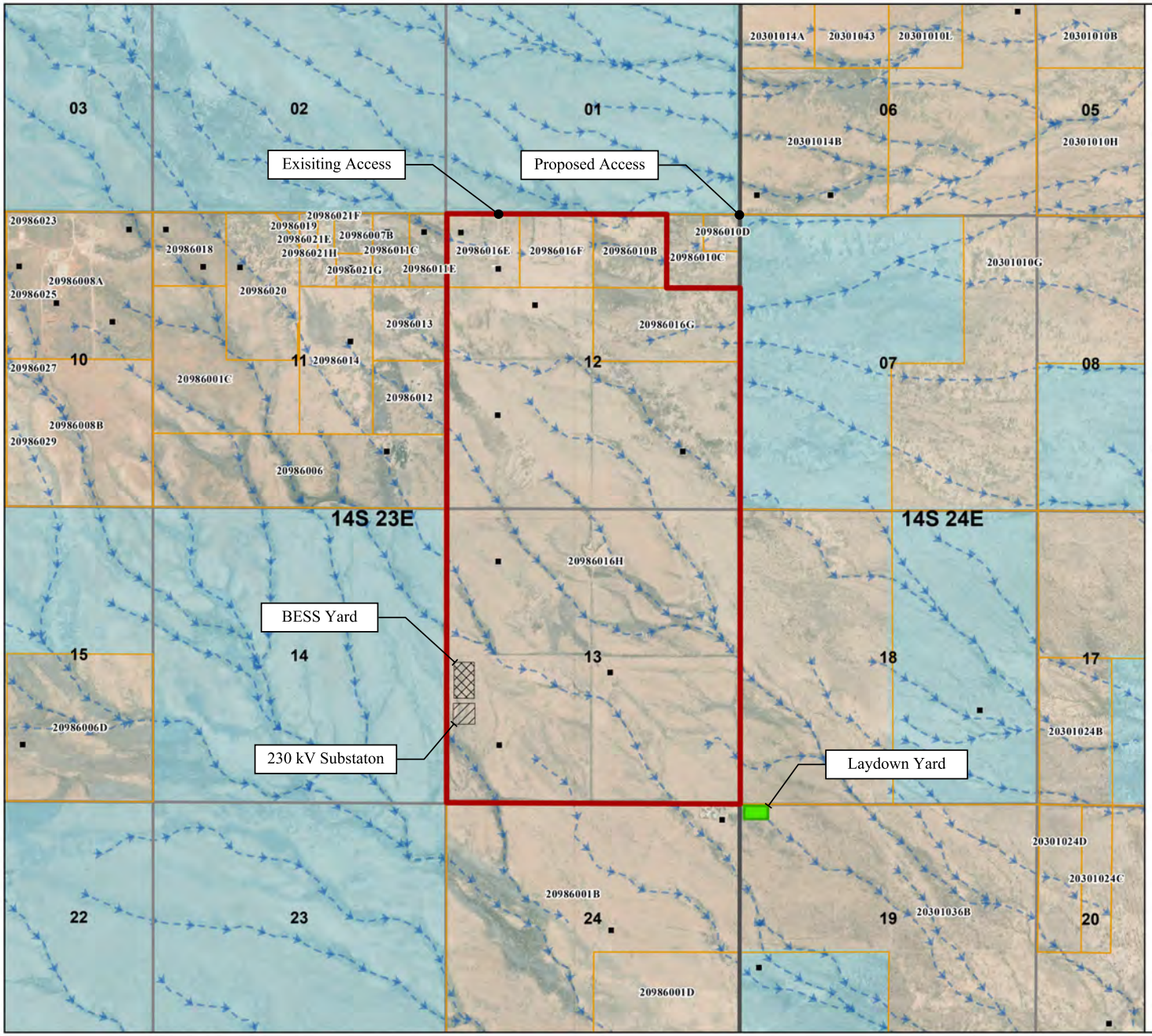
COCHISE COUNTY

PRELIMINARY CONCEPT PLAN

SHEET NUMBER

EX-1

Appendix A: Preliminary Concept Plan



N

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PREPARED BY:
H. HIRANANDANI

TORCH CLEAN ENERGY

WINCHESTER ENERGY DEVELOPMENT 200 MW

ARIZONA
COCHISE COUNTY

PRELIMINARY CONCEPT PLAN

SHEET NUMBER
EX-1

Appendix B: Biological Evaluation

Biological Evaluation for the Winchester Energy Facility Project in Cochise County, Arizona

FEBRUARY 2026

PREPARED FOR

Winchester Solar III, LLC

PREPARED BY

SWCA Environmental Consultants

BIOLOGICAL EVALUATION FOR THE WINCHESTER ENERGY FACILITY PROJECT IN COCHISE COUNTY, ARIZONA

Prepared for

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Prepared by

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www.swca.com

SWCA Project No. 101515.002

February 2026

EXECUTIVE SUMMARY

The purpose of this biological evaluation (BE) is to address the Endangered Species Act of 1973, as amended (ESA) (16 United States Code 1531 et seq.), for the proposed, approximately 200-megawatt photovoltaic solar energy and 800-megawatt-hour battery energy storage system facility that would be within an approximately 1,250-acre site entirely on private lands in Cochise County, Arizona. The survey area is in Sections 1, 11-14, 23, and 24, Township (T) 14 South (S), Range (R) 23 East (E); Sections 7, 18, and 19, T14S, R24E Gila and Salt River Baseline and Meridian.

The objectives of this BE are to 1) describe vegetation communities in the survey area and 2) evaluate habitat suitability for federally listed and other special-status species. This BE is intended to identify and document special-status species and habitat that may be present within the survey area.

The project-specific U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation database results lists six species with historical or potential ranges in the survey area or its vicinity: Arizona eryngo (*Eryngium sparganophyllum*), Gila topminnow (including Yaqui) (*Poeciliopsis occidentalis*), monarch butterfly (*Danaus plexippus*), northern aplomado falcon (*Falco femoralis septentrionalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), and yellow-billed cuckoo (*Coccyzus americanus*). Of these six species, one may occur within the survey area—monarch butterfly; the project area is within the known range of and contains suitable habitat for monarch butterfly. Monarch butterfly is a proposed threatened species under the ESA and as such does not receive regulatory protection. The remaining five species are not likely to occur in the project area because it is either clearly beyond the known geographic or elevational range of the species, does not contain vegetation or landscape features known to support these species, or both. Habitat requirements, potential for occurrence, and possible effects of the project activities for all six species are included in this BE.

The project would have *no effect* on any species listed under the ESA. For monarch butterfly, a species proposed to be listed, the project is *not likely to jeopardize the continued existence of the species*. Furthermore, the proposed project activities would not create habitat for any of these species. The project would have *no effect* on any proposed or designated critical habitat.

Birds protected under the Migratory Bird Treaty Act of 1918 (16 USC 703–712) (MBTA) were observed in the survey area and additional species have the potential to occur. In southern Arizona, nesting bird season is typically mid-February through late September. If individuals, nests, or eggs of any MBTA-protected species are present in the project area and cannot be avoided, they must be relocated before construction begins, which would require an MBTA permit from the USFWS, but Section 1 of the Interim Empty Nest Policy of the USFWS Region 2 states that if the nest is completely inactive at the time of destruction or movement, a permit is not required to comply with the MBTA. If an active nest is observed before or during construction, measures should be taken to protect the nest from destruction and to avoid a violation of the MBTA.

The survey area does not contain nesting habitat for bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*), but may contain limited foraging opportunities for both species. Bald eagles and golden eagles may also pass over the project area to reach suitable habitats. Loss of foraging habitat from the construction of this project would be extremely minor as individuals of both species would be expected to shift their use to other locations within the vicinity

Nineteen Species of Greatest Conservation Need (SGCN) have occurrence records within 5 miles of the project, and others have the potential to occur based on modeled habitat. For SGCN that occur, the project *may impact individuals but is not likely to result in a trend toward federal listing or loss of viability.*

CONTENTS

Appendices

Figures

Tables

1 INTRODUCTION

SWCA Environmental Consultants (SWCA) was contracted by Winchester Solar III, LLC (Winchester) to complete a biological evaluation (BE) for the Winchester Energy Facility Project (project) in northwestern Cochise County, Arizona (Figure 1). Winchester is proposing to develop an approximately 200-megawatt photovoltaic solar energy and 800-megawatt-hour battery energy storage system facility within an approximately 1,250-acre site entirely on private lands in Cochise County, Arizona. The survey area is in Sections 1, 11-14, 23, and 24, Township (T) 14 South (S), Range (R) 23 East (E); Sections 7, 18, and 19, T14S, R24E Gila and Salt River Baseline and Meridian (Figure 2). The purpose of this BE is to address the Endangered Species Act of 1973, as amended (ESA) (16 United States Code [USC] 1531 et seq.), the Migratory Bird Treaty Act of 1918 (16 USC 703–712) (MBTA), the Bald and Golden Eagle Protection Act of 1940, as amended (16 USC 668–668d or 50 Code of Federal Regulations Part 22), and other special-status species regulations.

The scope of work for this BE included:

- review of the U.S. Fish and Wildlife Service (USFWS) project-specific species list generated through the Information for Planning and Conservation (IPaC) system;
- review of the Arizona Game and Fish Department (AZGFD) online occurrence records for special-status species near the survey area;
- field reconnaissance of the property; and
- evaluation of the potential for the species listed in this report to occur in the survey area.

2 METHODS

SWCA biologists Robert Hergenrother and Neil Clark visited the project area on February 2 and 3, 2026, to collect the data necessary to complete this biological resources overview. The primary objective of the site visit was to evaluate vegetation and other habitat features considered important to special-status plant and wildlife species with the potential to occur in the project area, in accordance with the federal and state biological regulations cited above. All plant and wildlife species observed during the site visit were documented. This site visit did not include any species-specific or systematic surveys for protected biological components.

SWCA reviewed satellite imagery (Google Earth 2026) to confirm that site conditions remained similar to how they were described in the 2023 revised report. The U.S. Geological Survey 7.5-minute quadrangle Red Bird Hills, Arizona, and maps provided by the client were used for general orientation and to locate the project boundaries. The field reconnaissance consisted of a pedestrian survey of the survey area. Vegetation was classified to the community level according to *Biotic Communities of the Southwest* (Brown 1994) and plant taxonomy and nomenclature followed the standardized information presented in the PLANTS database maintained by the Natural Resources Conservation Service (NRCS) (NRCS 2026). Federally listed plants are referred to by the nomenclature used by the USFWS for listing.

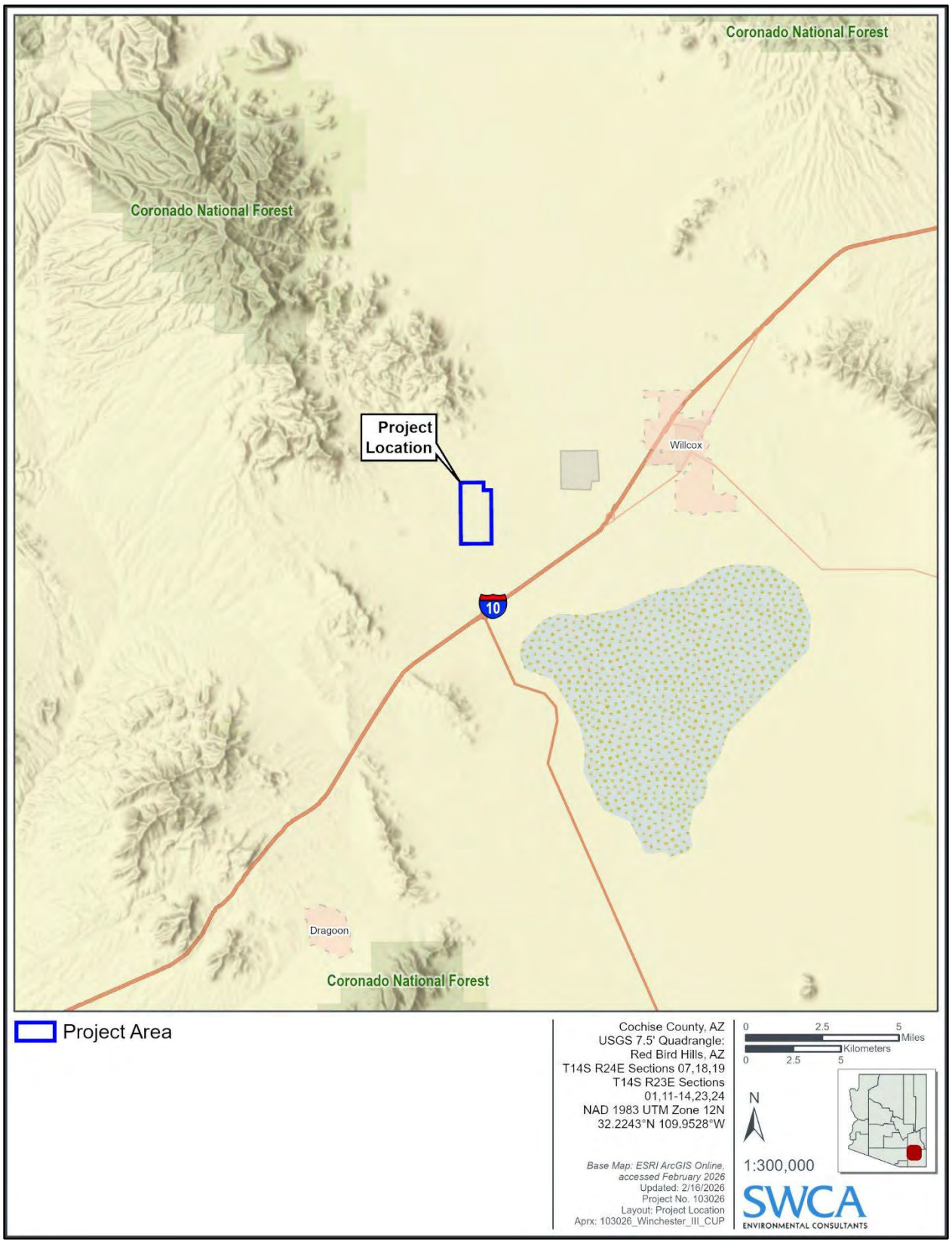

Figure 1. General location of the survey area.

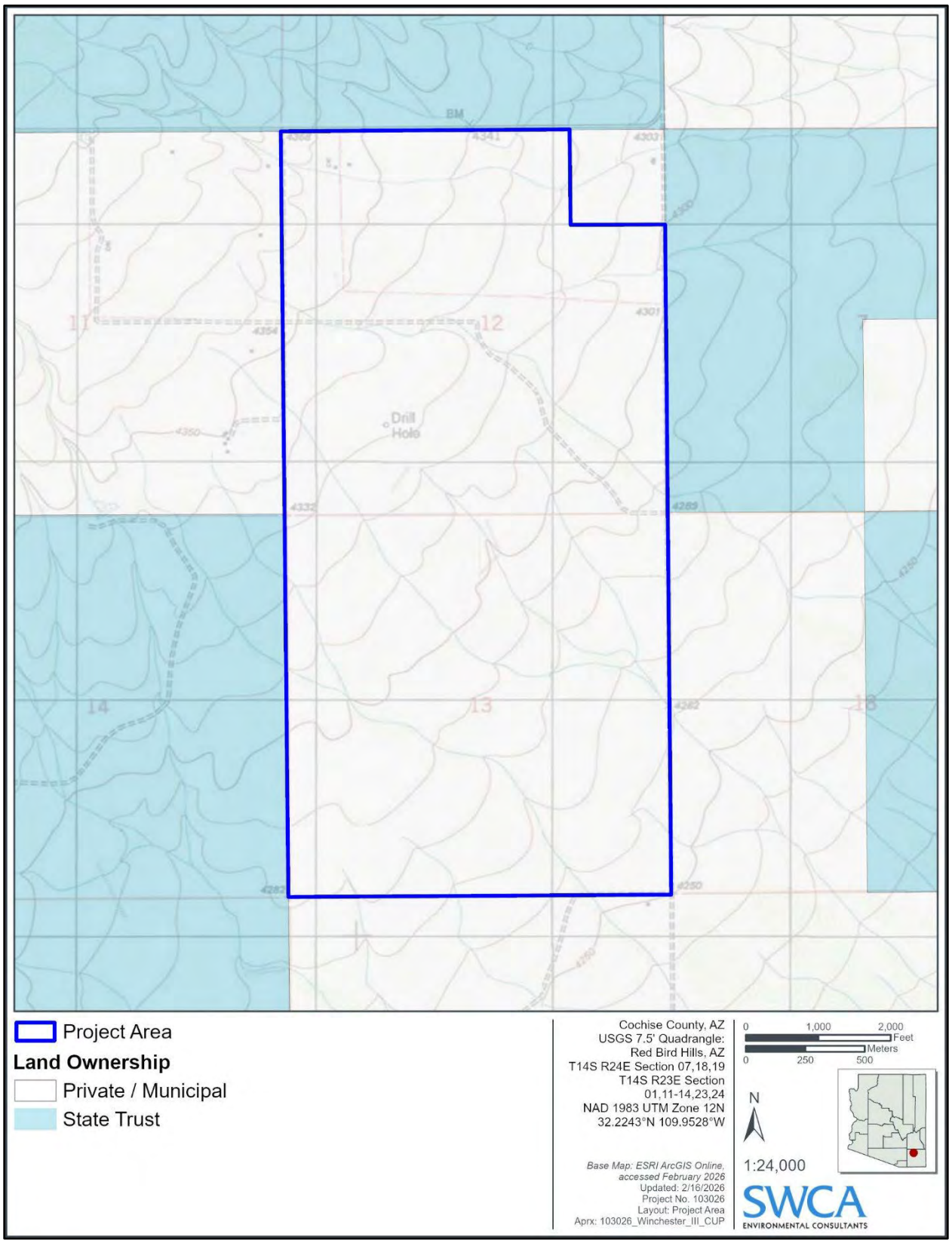

Figure 2. Survey area location.

2.1 Species Identification

Six species are addressed in this BE, including five species listed as threatened or endangered under the ESA (including one non-essential experimental population of a listed species) and one proposed threatened species. These species are addressed because they have historical or potential ranges in the survey area or its vicinity based on a site-specific query of the USFWS IPaC database (USFWS 2026a; Appendix A).

The ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to engage in any such conduct." The ESA prohibits take of endangered wildlife without authorization. Take prohibitions are extended to threatened wildlife by USFWS special rules known as 4(d) rules (ESA Section 4(d): Protective Regulations). Many threatened wildlife species are subject to a "blanket" 4(d) rule that extends all the take prohibitions for an endangered species. Some threatened wildlife species have specific 4(d) rules that prohibit take only in certain circumstances. Take of threatened or endangered plant species is not prohibited under the ESA. However, the ESA prohibits other kinds of actions against listed plants (e.g., possession, import, and export) when the listed plant is on federal lands. Additionally, on private and state lands in Arizona, state law restricts the transport of ESA-listed plants without a permit.

SWCA also accessed the AZGFD online Arizona Heritage Geographic Information System (AZHGIS) Online Environmental Review Tool (ERT) to generate a project-specific report (AZGFD 2026a) (Appendix B). The ERT provides additional information on the presence of ESA-listed species, and also identifies other special-status species that may be present based on observation records or modeled habitat.

2.2 Species Evaluation

The potential for occurrence of each species was summarized according to the categories listed below. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided. Potential for occurrence categories are as follows:

- *Known to occur* – the species has been documented in the survey area by a reliable observer.
- *May occur* – the survey area is within the species' currently known range, and vegetation communities, soils, etc., resemble those known to be used by the species.
- *Unlikely to occur* – the survey area is within the species' currently known range, but vegetation communities, soils, etc., do not resemble those known to be used by the species, or the survey area is clearly outside the species' currently known range.

Effect determinations follow the ESA definitions (USFWS and National Marine Fisheries Service 1998). Species listed under the ESA by the USFWS or proposed or designated critical habitats were assigned to one of three categories of possible effect, in accordance with the following USFWS recommendations:

- *No effect* – The project will have no effect (including effects that may be beneficial, insignificant, or discountable) on a species.
- *May affect, is not likely to adversely affect* – The project's actions are not likely to adversely affect a species if the project activity effects on a listed species are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are positive effects without any adverse effects on the species. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur. Based on

best judgment, a person would not 1) be able to meaningfully measure, detect, or evaluate insignificant effects or 2) expect discountable effects to occur.

- *May affect, is likely to adversely affect* – The project's actions are likely to adversely affect a species if 1) the species occurs or may occur in the project area and 2) any adverse effect on listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. In the event that the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects, the proposed action "is likely to adversely affect" the listed species.

Species that are proposed or candidates for listing or are experimental population, non-essential (EXPN) and treated as proposed by the USFWS were assigned to one of two categories of possible effect, in accordance with the following USFWS recommendations:

- *Not likely to jeopardize the continued existence of the species* – The project would not be reasonably expected to, directly or indirectly, reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.
- *Likely to jeopardize the continued existence of the species* – The project would reasonably be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Special-status species that are not listed, proposed, or candidate species under the ESA were assigned one of the following categories of effect:

- *No impact* – the project would have no impact to a species if the species is considered unlikely to occur (range, vegetation, etc., are inappropriate; no records of occurrence).
- *Beneficial impact* – the project is likely to benefit the species, whether it is currently present or not, by creating or enhancing habitat elements known to be used by the species.
- *May impact individuals but is not likely to result in a trend toward federal listing or loss of viability* – the project is not likely to adversely impact a species if 1) the species may occur or is known to occur and 2) project activities would not result in disturbance to areas or habitat elements known to be used by the species.
- *May impact individuals and is likely to result in a trend toward federal listing or loss of viability* – the project is likely to adversely impact a species if 1) the species may occur or is known to occur in the project area, and 2) project activities would disturb areas or habitat elements known to be used by the species or would directly affect an individual.

3 RESULTS

3.1 Ecological Overview

The survey area is mapped within the semidesert grassland biotic community (Brown 1994), at an elevation ranging from approximately 4,260 to 4,370 feet above mean sea level (amsl) in northwest Cochise County, Arizona.

The survey area is north of Interstate 10 (I-10) where it intersects U.S. Route 191, west of Willcox, Arizona. The survey area is bounded by Cascabel Road to the north, South Perimeter Road to the east,

and semidesert grassland habitat to the south and west. The survey area is along the western edge of the Sulphur Springs Valley. The Willcox Playa is approximately 3 miles southeast of the survey area, across I-10. The topography within the survey area is generally flat, sloping southeast toward the Willcox Playa with an average slope of 0.8% (Google Earth 2026). The Winchester Mountains, San Pedro River, and Dos Cabezas Mountains lie approximately 3 miles north, 20 miles west, and 16 miles east of the survey area, respectively.

Several unnamed ephemeral washes cross the survey area, generally flowing from northwest to southeast toward the Willcox Playa, a closed basin.

Several excavated cattle ponds/tanks occur near the survey area, all of which contained water at time of the survey (February 2026). The shores of the excavated cattle ponds were typically barren or were bordered by scattered velvet mesquite (*Prosopis velutina*). No emergent vegetation occurred within the excavated stock ponds. Soils varied widely across the survey area, ranging from sandy to rocky with alkali flats being mapped within the survey area.

The survey area contains human disturbances, including unnamed, unpaved roads ranging from well-maintained, graded, unpaved roads to two-track roads associated with existing electrical infrastructure or fence lines. Off-highway vehicle use, and cattle grazing were also observed.

Land use in the vicinity surrounding the survey area is largely semidesert grassland, with the exception of existing roads (including I-10) with sparsely distributed residential areas, cattle ranch operations, agricultural activities associated with the Sulphur Springs Valley and San Pedro River areas, and a solar and wind energy generation facility.

3.2 Vegetation

Vegetation is generally uniform throughout the survey area except for along the xeroriparian washes. Vegetation cover and species diversity increases within and surrounding the xeroriparian washes; however, no riparian areas or wetlands occur. No broadleaf deciduous riparian vegetation communities (i.e., communities containing willow [*Salix* spp.], ash [*Fraxinus* spp.], etc.) were noted in the survey area.

Vegetation within the survey area is typical of semidesert grassland and shrub-invaded semidesert grassland. Vegetation was typically open, with small-stature trees, shrubs, cacti, and succulents that are widely scattered and form a sparse upper canopy with an understory of grasses and patches of bare ground.

Grasses observed in the survey area included native species such as bristlegrass (*Setaria* sp.), sixweeks threeawn (*Aristida adscensionis*), tobosagrass (*Pleuraphis mutica*), low woollygrass (*Dasyochloa pulchella*), and nonnative species including Bermudagrass (*Cynodon dactylon*), and Mediterranean grass (*Schismus barbatus*).

Trees, shrubs, and succulents observed in the survey area included alkali goldenbush (*Isocoma acradenia*), alkali sacaton (*Sporobolus airoides*), Canaigre dock (*Rumex hymenosepalus*), candy barrelcactus (*Ferocactus wislizeni*), carelessweed (*Amaranthus palmeri*), catclaw acacia (*Senegalia greggii*), Christmas cactus (*Cylindropuntia leptocaulis*), walkingstick cactus (*C. spinosior*), coyote gourd (*Cucurbita palmata*), desertbroom (*Baccharis sarothroides*), lotebush (*Ziziphus obtusifolia*), Menzies fiddleneck (*Amsinckia menziesii*), rough cocklebur (*Xanthium strumarium*), silverleaf nightshade (*Solanum elaeagnifolium*), soaptree yucca (*Yucca elata*), narrowleaf yucca (*Yucca angustissima*), spike dropseed (*Sporobolus contractus*), tulip pricklypear (*Opuntia phaeacantha*), velvet mesquite, and honey mesquite (*Prosopis glandulosa*).

Nonnative plant species present within the survey area included Lehmann lovegrass (*Eragrostis lehmanniana* Nees), London rocket (*Sisymbrium irio*), prickly Russian thistle (*Salsola tragus*), and redstem stork's bill (*Erodium cicutarium*).

Seven of the plant species observed within the survey area are protected under the Arizona Native Plant Law (Arizona Revised Statutes [ARS] 3-904) as administered by the Arizona Department of Agriculture (AZDA). These species are candy barrelcactus, narrowleaf yucca, soaptree yucca, honey mesquite, velvet mesquite, Christmas cactus, and walkingstick cactus. More information regarding this state regulation can be found on the AZDA's Protected Native Plants by Category website (AZDA 2026a). Other protected native plants have the potential to occur. A notice of intent for the removal or destruction of these plants must be provided to the AZDA before any such action (Appendix C). For projects over 40 acres, the AZDA requires 60 days' written notice.

No noxious weed species were identified during the site visit. More information regarding noxious weeds listed by the AZDA under Arizona Administrative Code R3-4-245 is available on the AZDA's Plant Services Division website (AZDA 2026b).

3.3 Wildlife

Fourteen avian species were documented within the survey area during the site visit: black-throated sparrow (*Amphispiza bilineata*), Brewer's sparrow (*Spizella breweri*), cactus wren (*Campylorhynchus brunneicapillus*), common raven (*Corvus corax*), curve-billed thrasher (*Toxostoma curvirostre*), duck sp. (Family Anatidae), horned lark (*Eremophila alpestris*), killdeer (*Charadrius vociferus*), loggerhead shrike (*Lanius ludovicianus*), mourning dove (*Zenaida macroura*), northern flicker (*Colaptes auratus*), northern mockingbird (*Mimus polyglottos*), red-tailed hawk (*Buteo jamaicensis*), and verdin (*Auriparus flaviceps*).

All avian species observed in the survey area are protected under the MBTA (16 USC 703–712), which provides federal protection to all migratory birds, including nests and eggs. To relocate or alter any MBTA-protected nests or western burrowing owl (*Athene cunicularia hypugaea*) burrows, a permit must be obtained from the USFWS to maintain compliance with the MBTA. However, Section 1 of the Interim Empty Nest Policy of the USFWS Region 2 states that if the nest is completely inactive at the time of destruction or movement, a permit is not required to comply with the MBTA. If an active nest is observed before or during construction, measures should be taken to protect the nest from destruction in accordance with the MBTA.

Mammals observed either visually or by scat or tracks were coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), domestic cattle (*Bos taurus*), javelina (*Pecari tajacu*), horse (*Equus caballus*), and kangaroo rat (*Dipodomys* sp.). Small mammal burrows were observed. No suitable bat roost sites (e.g., natural caves or mine features) are present in the survey area; however, bat roost sites likely occur in the mountains to the north, west, and south of the survey area.

No fish or amphibians were observed in the cattle tanks in the vicinity, although amphibians are likely to reproduce in cattle tanks that hold water following summer rainstorms.

The AZGFD Online ERT report (see Appendix B) identifies no special area within the survey area (AZGFD 2026a).

The survey area does not intersect any wildlife linkages.

3.4 Species Evaluation

Of the six ESA-listed species listed for the survey area in the USFWS IPaC report (USFWS 2026a) (see Appendix A), only one, monarch butterfly (*Danaus plexippus*), a proposed threatened species, has the potential to occur in the survey area. The remaining five species listed for the survey area by the USFWS do not have the potential to occur in the survey area because the survey area is clearly beyond the known geographic or elevational range of these species, it does not contain vegetation or landscape features known to support these species, or both (Table 1). The project would have *no effect* on any species listed under the ESA and for the EXPN species. The proposed threatened species, monarch butterfly, has the potential to occur in the project area. However, the project is *not likely to jeopardize the continued existence of the species*.

The IPaC report and the USFWS Critical Habitat Mapper indicate that there is no designated critical habitat within the project area (USFWS 2026a, 2026c) (see Appendix A).

The AZGFD Online ERT indicated that one ESA-listed species has been recorded within 5 miles of the survey area, Chiricahua leopard frog (*Rana chiricahuensis*) (AZGFD 2026a; see Appendix B). Table 1 addresses Chiricahua leopard frog. Additional federally protected species recorded within 5 miles of the survey area are the golden eagle (*Aquila chrysaetos*) and bald eagle (winter population) (*Haliaeetus leucocephalus*) (AZGFD 2026a; see Appendix B). Section 3.6 addresses the golden and bald eagles.

Nineteen other special-status species have been recorded within 5 miles of the survey area: red flower onion (*Allium rhizomatum*), little striped whiptail (*Aspidoscelis arizonae*), verdin, Swainson's hawk (*Buteo swainsoni*), lark bunting (*Calamospiza melanocorys*), scaled quail (*Callipepla squamata*), cactus wren, pyrrhuloxia (*Cardinalis sinuatus*), killdeer, Chihuahuan raven (*Corvus cryptoleucus*), horned lark, Scott's oriole (*Icterus parisorum*), Sonoran desert toad (*Incilius alvarius*), loggerhead shrike, canyon towhee (*Melozone fusca*), Harris's hawk (*Parabuteo unicinctus*), plains leopard frog (*Rana blairi*), and ornate box turtle (*Terrapene ornata*) (AZGFD 2026a; see Appendix B).

Sixteen of these species are SGCN in Arizona (see Appendix B). SGCN receive no statutory protection in Arizona. The SGCN designation and tier ranking is used to develop conservation strategies and formulate recommendations for land management activities and development projects (AZGFD 2022).

Five of the 19 species are known to occur within the study area as they were observed during the site visit. Based on habitat and range, the remaining 14 species have the potential to occur in the survey area as permanent residents or temporarily during foraging, migration, dispersal, or summering (AZGFD 2023, 2026b; Cornell Lab 2026; eBird 2026).

For the above species that may occur, construction and operation of the project *may impact individuals but is not likely to result in a trend toward federal listing or loss of viability* because of the abundance of similar grassland habitats outside the survey area in the vicinity and because the survey area does not contain riparian areas, pristine grassland, or other habitats of high value to wildlife species.

Table 1. Federally Listed Species Potentially Occurring in the Survey Area

Common Name (Species Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Survey Area	Determination of Effect
Arizona eryngo (*Eryngium sparganophyllum*)	E	Found in spring-fed ciénega wetlands in moist to saturated organic alkali soils (USFWS 2022). Plants thrive in full sun in areas without nonnative plant species or excessive woody vegetation. In Arizona, occurs in three disjunct populations in: Pima and Cochise Counties at elevations from 2,707 to 4,000 feet amsl: Agua Caliente Ranch, where it is extirpated but reintroduced; La Cebadilla Cienega, near Tanque Verde Wash east of Tucson; and in Lewis Springs Cienega within the San Pedro Riparian National Conservation Area.	**Unlikely to occur.** The project area is not within the current range of this species and does not contain ciénega wetland habitat.	No effect.
Gila topminnow (*Poeciliopsis occidentalis occidentalis*)	E	Found in small streams, springs, and ciénegas at elevations below 4,500 feet amsl, primarily in shallow areas with aquatic vegetation and debris for cover. In Arizona, most of the remaining native populations are in the Santa Cruz River system.	**Unlikely to occur.** There are no suitable, perennial water sources in the project area.	No effect
Monarch butterfly (*Danaus plexippus*)	PT†	A migratory species found in a variety of habitats; monarch butterflies require milkweed (family Asclepiadaceae) for breeding. During fall migration in Arizona, monarchs favor nectar from a variety of native and garden plants. Populations in Arizona can migrate either to coastal California or central Mexico for winter or may overwinter in the low deserts in California. In the southwestern United States, migrating monarchs are often found near water sources (e.g., rivers, creeks, riparian corridors, roadside ditches, irrigated gardens). In the low deserts of Arizona, they breed in late August to early September; however, monarch butterfly reproduction in Arizona is more common at higher elevations and is less common in Sonoran desertscrub (Morris et al. 2015).	**May occur.** There are no species occurrence records of monarch butterfly within 5 miles of the survey area (AZGFD 2026a). They have been observed approximately 8 miles east of the survey area and milkweed plants have been observed approximately 13 miles southwest of the survey area (Western Monarch Milkweed Mapper 2026). Additionally, other flowering plants that adult monarch butterflies may use for forage occur.	Not likely to jeopardize the continued existence of the species.
Northern aplomado falcon (*Falco femoralis septentrionalis*)	EXPN	The species has somewhat variable habitat preferences, with historic habitats in Arizona, including semidesert grassland or riparian associations with scattered trees and shrubs at elevations from 3,300–4,900 feet amsl. They do not build their own nests, but occupy old stick nests left by raptors; those of Chihuahuan ravens (*Corvus cryptoleucus*) are used extensively. Nests are typically in mesquite, yucca, or low bushes up to 5 meters in height.	**Unlikely to occur.** Though the boundary of the 10(j) reintroduction area includes all of New Mexico and Arizona, birds have only been released in New Mexico. This species has not been recorded in Arizona since 1977 and is considered extirpated from the state (AZGFD 2026b). Habitat in the survey area has been degraded over many years by livestock grazing, which resulted in reduction of grassland habitat and its natural fire regime and promoted the incursion of mesquite and other shrubs.	Not likely to jeopardize the continued existence of the species.

Common Name (Species Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Survey Area	Determination of Effect
Southwestern willow flycatcher (*Empidonax traillii extimus*)	E	Found in dense riparian habitats along streams, rivers, and other wetlands where cottonwood, willow, boxelder (*Acer negundo*), saltcedar (*Tamarix* spp.), Russian olive (*Elaeagnus angustifolia*), buttonbush (*Cephalanthus* spp.), and arrowweed (*Pluchea sericea*) are present. Nests are found in thickets of trees and shrubs, primarily those that are 13 to 23 feet high, among dense, homogeneous foliage. Habitat occurs at elevations below 8,500 feet amsl.	**Unlikely to occur.** Suitable habitat for this species is not present in or adjacent to the survey area. There are no occurrence records for this species within 5 miles of the survey area (AZGFD 2026a).	No effect.
Yellow-billed cuckoo (*Coccyzus americanus*)	T	Typically found in riparian woodland vegetation (cottonwood, willow, or saltcedar) at elevations below 6,600 feet amsl. Dense understory foliage appears to be an important factor in nest site selection. The highest concentrations in Arizona are along the Agua Fria, San Pedro, upper Santa Cruz, and Verde River drainages and Cienega and Sonoita Creeks.	**Unlikely to occur.** Suitable habitat for this species is not present in the project area.	No effect.

Sources: Range or habitat information is from Arizona Rare Plant Committee (2000); AZGFD (2026a, 2026b); USFWS (2026b).

* USFWS Status Definitions:

E = Endangered. An animal or plant species in danger of extinction throughout all or a significant portion of its range.

EXPN = Experimental Population, Non-Essential. Experimental populations of a species designated under Section 10(j) of the ESA for which the USFWS, through the best available information, believes is not essential for the continued existence of the species. Regulatory restrictions are considerably reduced under an EXPN designation.

PT = Proposed Threatened. A species the USFWS has determined is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

T = Threatened. An animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

†According to statutory timelines, a listing decision for this species was anticipated in 2025. However, in late 2025, the USFWS changed the listing decision for this species to a long-term action and no anticipated date for a listing decision can be predicted at this time.

3.5 Migratory Bird Treaty Act

The MBTA prohibits the take of nearly all native birds, their parts, eggs, or nests by anyone without a permit. *Take* is defined by the MBTA as "to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof."

Fourteen avian species were observed in the survey area, and many other bird species are likely to be present. All the observed species are protected under the MBTA. Western burrowing owls are protected under the MBTA but require a species-specific approach, as discussed below. If individuals, nests, or eggs of any other MBTA-protected species are present in the project area and cannot be avoided, they must be relocated before construction begins, which would require an MBTA permit from the USFWS; however, Migratory Bird Permit Memorandum (MBPM)-2-02 states that if the nest is completely inactive at the time of destruction, a permit is not required (USFWS 2025). If an active nest is observed before or during construction, measures should be taken to protect the nest from destruction and to avoid a violation of the MBTA. In southern Arizona, some bird species are multi-clutch species, which means that they nest multiple times during the nesting season, generally mid-February through late September, depending on the species and habitat. Most raptor species nest from January through late June (Corman and Wise-Gervais 2005).

Suitable habitat is present for burrowing owls within the project area (AZGFD 2026b). In the event that burrowing owls and active burrows in the project area cannot be avoided with at least a 100-foot buffer, the burrowing owls may be relocated by Wild at Heart, a raptor rescue organization that provides capture, care, and relocation services. Wild at Heart holds the necessary permits from the USFWS and AZGFD to conduct owl relocation activities. The project proponent will also need a project-specific USFWS special purpose permit for burrowing owl relocation. If a burrowing owl is observed on-site, the *Burrowing Owl Project Clearance Guidance for Landowners* (Arizona Burrowing Owl Working Group 2009) should be followed to avoid affecting the species (Appendix D).

3.6 Bald and Golden Eagle Protection Act

Bald eagle and golden eagle are protected under both the MBTA and the Bald and Golden Eagle Protection Act (BGEPA) on all lands (public or private). The BGEPA prohibits anyone without a permit from "taking" eagles, their parts, eggs, or nests. *Take* is defined by the BGEPA as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb;" the BGEPA's definition of "take" differs from the definition in the ESA in that it does not include habitat destruction or alteration, unless such damage "disturbs" an eagle. *Disturb* is defined as "to agitate or bother to a degree that causes, or is likely to cause, based on the best 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."

No suitable bald eagle or golden eagle nesting habitat is in or near the survey area. Although the survey area does not contain bodies of water that would contain the bald eagle's preferred prey (i.e., fish) (AZGFD 2026b), it may provide limited foraging items for this species in the form of large mammal carrion and waterfowl. Communal roosting sites are unlikely to occur within or proximal to the project area because it is far from aquatic foraging resources and tall trees are absent or extremely rare on the survey area. eBird (2026) indicates that bald eagle has been documented approximately 7 miles east of the survey area. Therefore, this species has the potential to occur in the survey area. The survey area is within the golden eagle's year-round range and contains appropriate foraging (i.e., open grassland vegetation communities) (Kochert et al. 2002) and nesting habitats. Golden eagle has been documented within 2 miles of the survey area (eBird 2026). Though no concentrated prey sources were observed during the February 2026 site visit, the species is expected to use the site for foraging given the presence of nearby nesting sites (i.e., mountainous areas with cliffs) and appropriate foraging conditions. Impacts of the project on eagles would be the loss of a small amount of foraging habitat. Because the foraging habitat in the survey area has relatively low value for both species and abundant foraging habitat occurs outside the survey area for both species, impacts because of the loss of foraging habitat from construction of this project would be extremely minor as individuals of both species would be expected to shift their use to other locations within the vicinity.

4 LIMITATIONS AND WARRANTY

Within the limitations of schedule, budget, and scope of work, SWCA warrants that this study was conducted in accordance with accepted environmental science practices, including the technical guidelines, evaluation criteria, and species' listing status in effect at the time this evaluation was performed, as outlined in the species evaluation.

The results and conclusions of this report represent the best professional judgment of SWCA scientists and are based on information provided by the project proponent and on information obtained from agencies and other sources during the study. No other warranty, expressed or implied, is made. This report should be reviewed by the appropriate regulatory agencies before any detailed site planning or construction activities are started.

5 LITERATURE CITED

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APPENDIX A

USFWS IPAC Species List for Survey Area

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
Phone: (602) 242-0210 Fax: (602) 242-2513

In Reply Refer To: 02/13/2026 16:12:14 UTC
Project Code: 2026-0049792
Project Name: Winchester III

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:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within the One-Range that has been delineated for the species (candidate, proposed, or listed) and it's critical habitat (designated or proposed) with which your project polygon intersects. These range delineations are based on biological metrics, and do not necessarily represent exactly where the species is located. Please refer to the species information found on ECOS to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act 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 Federal trust resources and to determine whether projects may affect federally listed 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 (42 U.S.C. 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 the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual

or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint." For example, projects that involve streams and river systems should consider downstream affects. If the Federal action agency determines that the action may jeopardize a *proposed* species or may adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf.

We also advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668 *et seq.*). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Service. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs. Currently 1,026 species of birds are protected by the MBTA, including the western burrowing owl (*Athene cunicularia hypugaea*). Protected western burrowing owls can be found in urban areas and may use their nest/burrows year-round; destruction of the burrow may result in the unpermitted take of the owl or their eggs.

If a bald eagle or golden eagle nest occurs in or near the proposed project area, our office should be contacted for Technical Assistance. An evaluation must be performed to determine whether the project is likely to disturb or harm eagles. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see https://www.fws.gov/law/bald-and-golden-eagle-protection-act and https://www.fws.gov/program/eagle-management).

The Division of Migratory Birds (505/248-7882) administers and issues permits under the MBTA and Eagle Act, while our office can provide guidance and Technical Assistance. For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site: https://www.fws.gov/program/migratory-bird-permit. Guidance for minimizing impacts to migratory birds for communication tower projects (e.g. cellular, digital television, radio, and emergency broadcast) can be found at https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation.

The U.S. Army Corps of Engineers (Corps) may regulate activities that involve streams (including some intermittent streams) and/or wetlands. We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources, please visit this link or visit https://www.fws.gov/program/national-

wildlife-refuge-system to locate the refuge you would be working in or around.

If your action is on tribal land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our Tribal Coordinator, John Nystedt, at 928/556-2160 or John_Nystedt@fws.gov.

We also recommend you seek additional information and coordinate your project with the Arizona Game and Fish Department. Information on known species detections, special status species, and Arizona species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise (*Gopherus morafkai*) can be found by using their Online Environmental Review Tool, administered through the Heritage Data Management System and Project Evaluation Program (https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/project-evaluation-program/).

We appreciate your concern for threatened and endangered species. 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. If we may be of further assistance, please contact our Flagstaff office at 928/556-2118 for projects in northern Arizona, our general Phoenix number 602/242-0210 for central Arizona, or 520/670-6144 for projects in southern Arizona.

Sincerely,
/s/

Heather Whitlaw
Field Supervisor
Attachment

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

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:

Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
(602) 242-0210

PROJECT SUMMARY

Project Code: 2026-0049792
Project Name: Winchester III
Project Type: Power Gen - Solar
Project Description: proposed project area for construction of new solar plant
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@32.224348500000005,-109.9527959044597,14z

Counties: Cochise County, Arizona

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 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[1], 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.

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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
Northern Aplomado Falcon *Falco femoralis septentrionalis* Population: U.S.A (AZ, NM) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1923	Experimental Population, Non-Essential
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

FISHES

NAME	STATUS
Gila Topminnow (incl. Yaqui) *Poeciliopsis occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1116	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Arizona Eryngo *Eryngium sparganophyllum* Population: There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/10705	Endangered

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information

on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

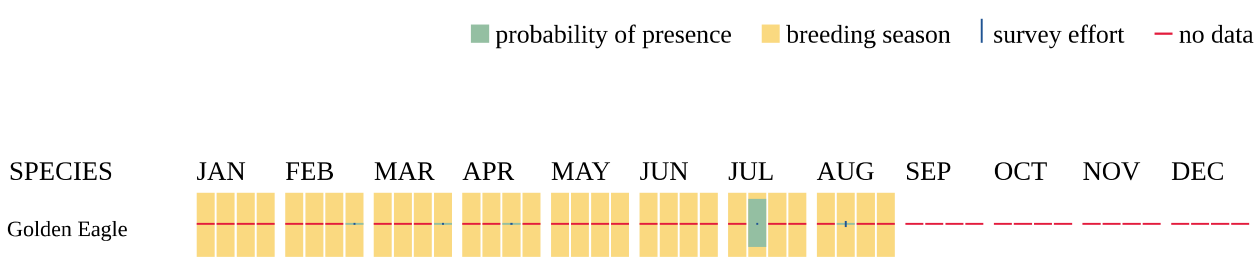
Probability of Presence (▪)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (▪)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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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)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Scott's Oriole *Icterus parisorum* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/11968	Breeds May 21 to Aug 15

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 "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

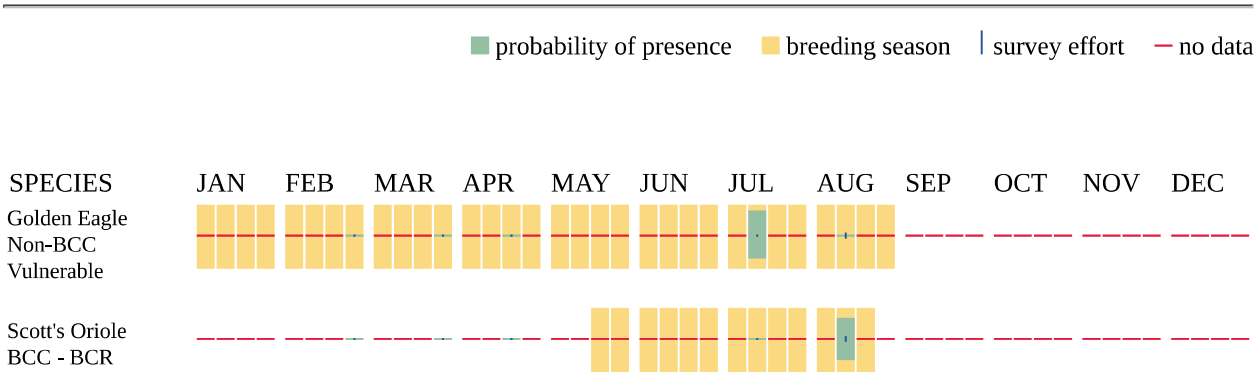
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency:	SWCA
Name:	Tyler Loomis
Address:	20 E Thomas Rd
Address Line 2:	suite 1700
City:	phoenix
State:	AZ
Zip:	85012
Email	tyler.loomis@swca.com
Phone:	4804067351

APPENDIX B

AZGFD Online Environmental Review Tool Report

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department requests further coordination to provide project/species specific recommendations. Please use the Project Evaluation Form to submit your project to the Project Evaluation Program at PEP@azgfd.gov.

Project Name:
Winchester III

Project Type:
Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project ID:
HGIS-27467

Project Description:
proposed project area for new solar facility

Contact Person:
Tyler Loomis

Organization:
SWCA

On Behalf Of:
PRIVATE

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

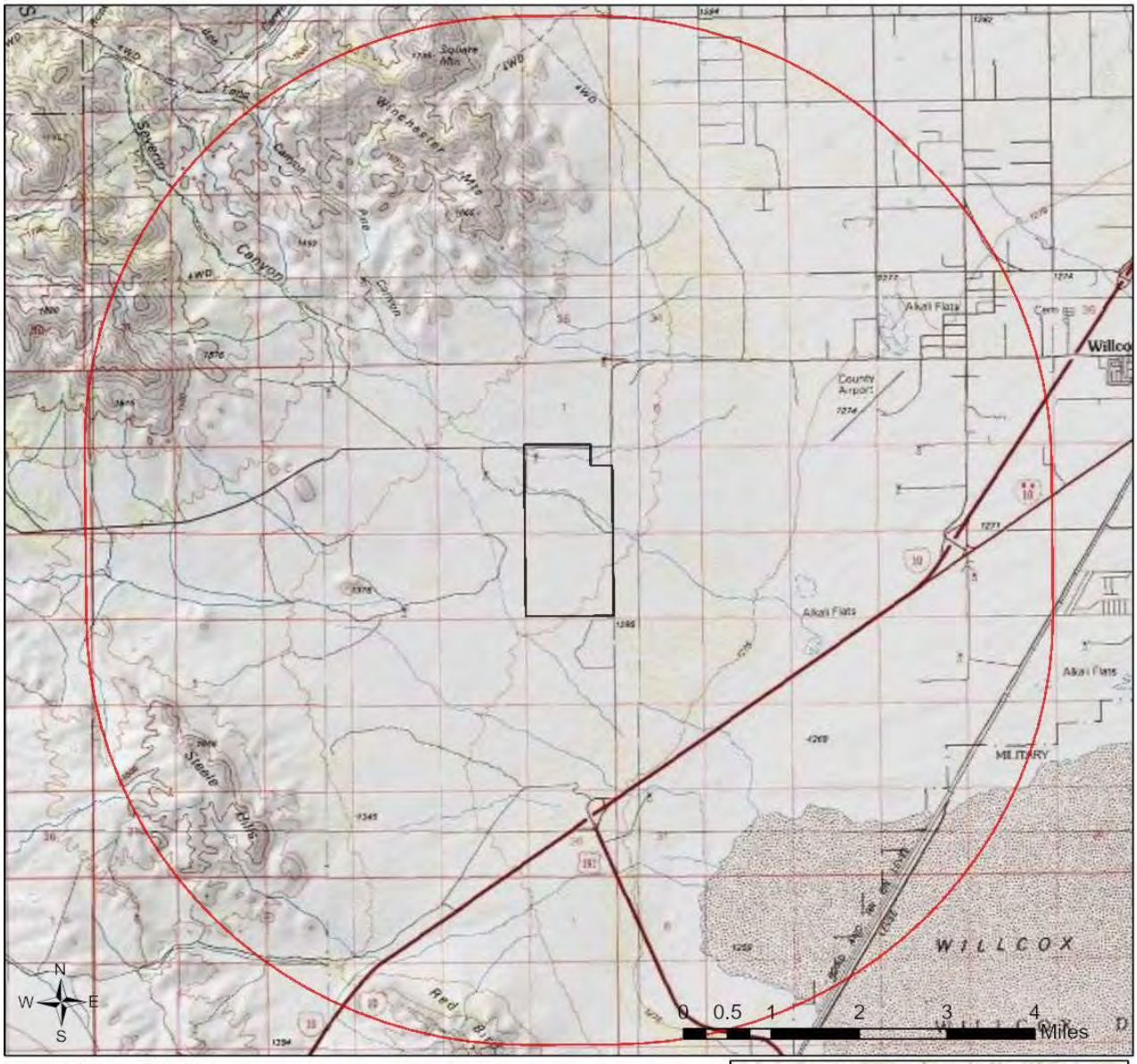
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Winchester III

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 1,244.46

Lat/Long (DD): 32.2240 / -109.9530

County(s): Cochise

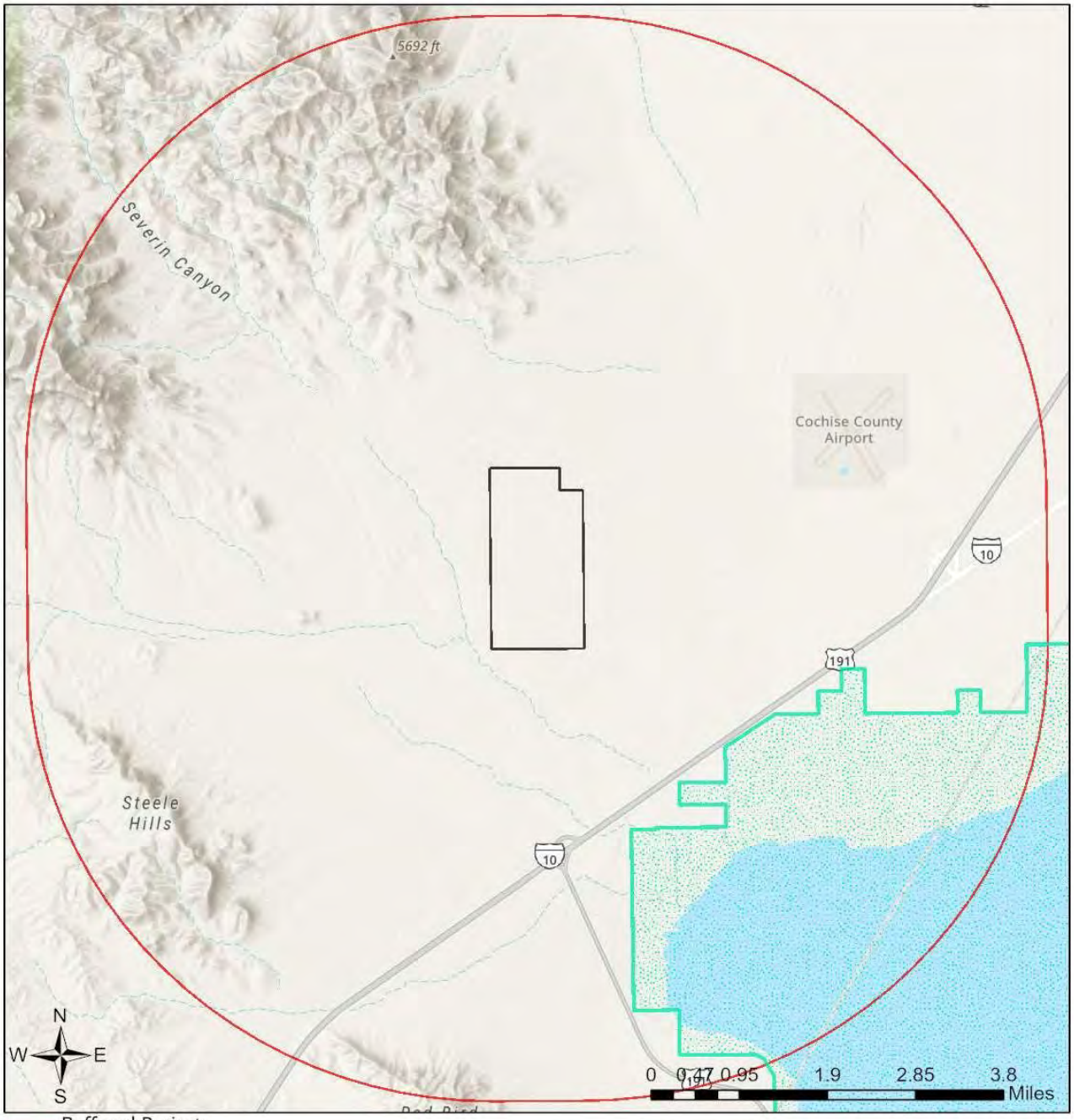
AGFD Region(s): Tucson

Township/Range(s): T14S, R23E; T14S, R24E

USGS Quad(s): RED BIRD HILLS

Winchester III

Important Areas



- Buffered Project Boundary
- Project Boundary
- Important Bird Areas
- Critical Habitat
- Pinal County Riparian
- Wildlife Connectivity

Project Size (acres): 1,244.46

Lat/Long (DD): 32.2240 / -109.9530

County(s): Cochise

AGFD Region(s): Tucson

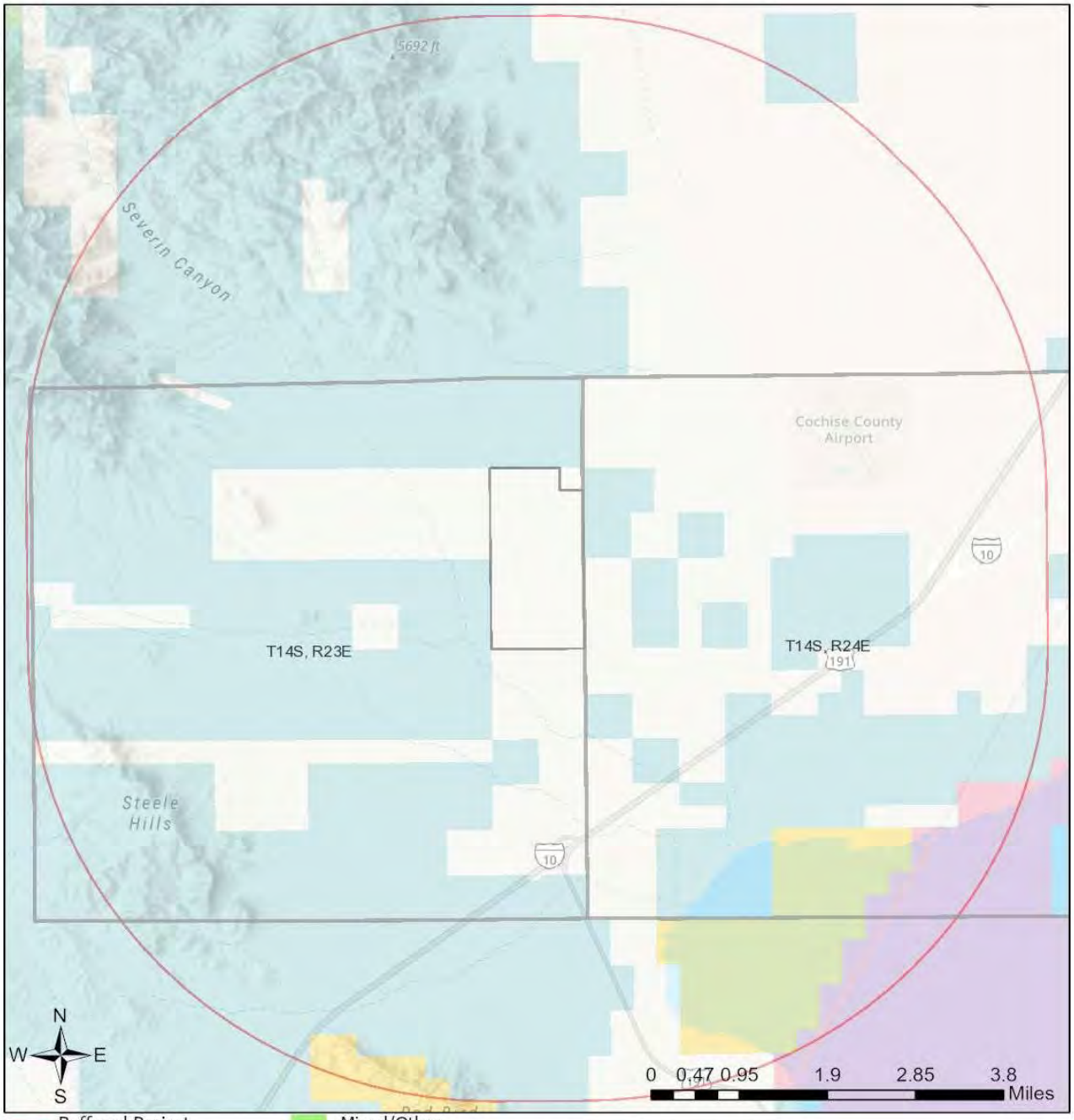
Township/Range(s): T14S, R23E; T14S, R24E

USGS Quad(s): RED BIRD HILLS

Esri, NASA, NGA, USGS
CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Winchester III

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 1,244.46

Lat/Long (DD): 32.2240 / -109.9530

County(s): Cochise

AGFD Region(s): Tucson

Township/Range(s): T14S, R23E; T14S, R24E

USGS Quad(s): RED BIRD HILLS

Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Allium rhizomatum	Redflower Onion				SR	
Aquila chrysaetos	Golden Eagle	BGA		S		2
Aspidoscelis arizonae	Little Striped Whiptail			S		
Auriparus flaviceps	Verdin					2
Buteo swainsoni	Swainson's Hawk					2
Calamospiza melanocorys	Lark Bunting					2
Callipepla squamata	Scaled Quail					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Cardinalis sinuatus	Pyrrhuloxia					2
Charadrius vociferus	Killdeer					2
Corvus cryptoleucus	Chihuahuan Raven					2
Eremophila alpestris	Horned Lark					2
Falco sparverius	American Kestrel					2
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	NA, BGA	S	S		
Icterus parisorum	Scott's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike					2
Melozone fusca	Canyon Towhee					2
Parabuteo unicinctus	Harris's Hawk					2
Rana blairi	Plains Leopard Frog			S		1
Rana chiricahuensis	Chiricahua Leopard Frog	LT		S		1
Terrapene ornata	Ornate Box Turtle			S		1

Note: Status code definitions can be found at https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/.

No Special Areas Detected
No special areas were detected within the project vicinity.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Ammodramus savannarum perpallidus	Western Grasshopper Sparrow					2
Ammospermophilus harrisii	Harris' Antelope Squirrel					2
Anarhynchus montanus	Mountain Plover					2
Anthus spragueii	Sprague's Pipit					2
Antilocapra americana americana	American Pronghorn					2
Aquila chrysaetos	Golden Eagle			S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					3

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Asio otus	Long-eared Owl					2
Aspidoscelis sonorae	Sonoran Spotted Whiptail					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Auriparus flaviceps	Verdin					2
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Callipepla squamata	Scaled Quail					2
Camptostoma imberbe	Northern Beardless-Tyrannulet		S			2
Campylorhynchus brunneicapillus	Cactus Wren					2
Chaetodipus baileyi	Bailey's Pocket Mouse					2
Choeronycteris mexicana	Mexican Long-tongued Bat		S	S		2
Chordeiles minor	Common Nighthawk					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Corvus cryptoleucus	Chihuahuan Raven					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Cynomys ludovicianus	Black-tailed Prairie Dog	CCA		S		1
Cyrtonyx montezumae	Montezuma Quail					3
Elgaria kingii	Madrean Alligator Lizard					2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat			S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Haemorhous cassinii	Cassin's Finch					2
Icterus bullockii	Bullock's Oriole					2
Idionycteris phyllotis	Allen's Lappet-browed Bat		S	S		2
Incilius alvarius	Sonoran Desert Toad					2
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2
Lasiurus frantzii	Desert Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Leptonycteris yerbabuenae	Lesser Long-nosed Bat			S		1
Megascops kennicottii	Western Screech-owl					2
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Micrathene whitneyi	Elf Owl					3

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Myadestes townsendi	Townsend's Solitaire					2
Myotis auriculus	Southwestern Myotis					2
Myotis thysanodes	Fringed Myotis					2
Myotis velifer	Cave Myotis			S		2
Myotis yumanensis	Yuma Myotis					2
Notiosorex cockrumi	Cockrum's Desert Shrew					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Peucaea botterii arizonae	Arizona Botteri's Sparrow			S		2
Pooecetes gramineus	Vesper Sparrow					2
Rana yavapaiensis	Lowland Leopard Frog		S	S		1
Rhynchophanes mccownii	McCown's Longspur					2
Setophaga nigrescens	Black-throated Gray Warbler					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Terrapene ornata	Ornate Box Turtle			S		1
Toxostoma bendirei	Bendire's Thrasher					2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Antilocapra americana americana	America Pronghorn					
Callipepla gambelii	Gambel's Quail					
Callipepla squamata	Scaled Quail					
Odocoileus hemionus	Mule Deer					
Patagioenas fasciata	Band-tailed Pigeon					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), photovoltaic solar facility (new/expansion)

Project Type Recommendations:
During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and it is important to identify and conserve upland wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife species. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The AZGFD recommends using only the minimum amount of light needed for safety, especially in areas immediately adjacent to open space or undeveloped lands. The AZGFD encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/ and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Evaluate potential impacts to wildlife and fish species due to changes in access to water, water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing the project to minimize impacts to spawning fish and other aquatic species. Wash, drain, and dry equipment to reduce the spread of exotic invasive species. AZGFD recommends early coordination with the Project Evaluation Program (PEP@azgfd.gov) for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The AZGFD recommends that wildlife surveys are conducted to determine if noise-sensitive species, such as birds or mammals, occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

The AZGFD recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in the current version of *Suggested Practices for Avian Protection on Power Lines and Reducing Avian Collisions with Power Lines*. Large bodied birds, such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large-bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The AZGFD's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, can provide further information on specific design features and best management practices.

The AZGFD recommends that a qualified biologist conduct a survey for nesting birds within the project area prior to removal or trimming of trees/vegetation, if the removal or trimming occurs during the breeding season (the Project Evaluation Program can be contacted at PEP@azgfd.gov or 623-236-7600 to determine the appropriate breeding season within the project area). Trees and/or vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA) and protected under state law. If it is anticipated the project will not be in compliance with MBTA, the AZGFD recommends contacting the U.S. Fish and Wildlife Service (https://www.fws.gov/office/arizona-ecological-services) for technical assistance. The USFWS will provide options to comply with the MBTA.

The AZGFD recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts. The AZGFD also recommends the development of a short and long-term monitoring plan, including adaptive management guidelines to address invasive species control and maintain native vegetation.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

HDMS records indicate that **Chiricahua Leopard Frogs** have been documented within the vicinity of your project area. Please review the Chiricahua Leopard Frog Management Guidelines found at: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FINALLithchirHabitatGdlns.pdf

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

APPENDIX C

Notice of Intent to Clear Land

Arizona Department of Agriculture (AZDA)
Central Licensing
Physical Location: 1010 W Washington St., Phoenix, AZ 85007
Mailing Address: 1802 W Jackson St., #78 Phoenix, AZ 85007
Phone: (602) 542-6408 Fax: (602)542-0466
Website: https://agriculture.az.gov Email: licensing@azda.gov

Notice of Intent to Clear Land — ARS § 3-904

Pursuant to A.R.S. § 3-904 the undersigned, as Owner of the Property described herein, gives this Notice of Intent to Clear Land of protected native plants.

1. **Owner/landowner's agent.** The owner or landowner's agent of the Property upon which protected native plants will be affected:

   Owner's Name _____ Phone _____

   Address _____

   Agent's Name _____ Phone _____

   Address _____

2. **Property.** The description and location of the Property upon which protected native plants will be affected:

   County _____

   Name of Property/Project _____

   Address _____

   Physical Location (attach map) _____

   (Note: Map must also show surrounding land for 1/2 mile in each direction)

   Tax Parcel ID Nos. _____

   Legal Description (or attach copy) _____

   Number of Acres to be Cleared _____

3. **Owner's Intent.** Landowner's intentions when clearing private land of protected native plants.

   ☐ Owner intends to allow salvage of the plants, and agrees to be contacted by native plant salvagers.

   ☐ Owner intends to transplant the plants onto the same property, or to another property he also owns.

   ☐ Owner has already arranged for salvage of the plants.

   ☐ Owner does not intend to allow salvage of the plants.

   ☐ Other _____

4. **Approximate starting date.** _____
   (See notice period listed on reverse side)

   The information contained in this application is true and accurate to the best of my knowledge. I understand that providing false information is a felony in Arizona

Signature _____ **Date** _____

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

Explanation Of This Form

1. **Notice of Intent to Clear Land.**
   The majority of the desert plants fall into one of four groups specially protected from theft, vandalism or unnecessary destruction. They include all of the cacti, the unique plants like Ocotillo, and trees like Ironwood, Palo Verde and Mesquite. In most cases the destruction of these protected plants may be avoided if the private landowner gives prior notice to the Arizona Department of Agriculture.

2. **Notice Period.**
   When properly completed, this form is to be sent to the Department within the time periods described below. Landowners/ developers are encouraged to salvage protected native plants whenever possible.

3. **Information to Interested Parties.**
   The information in this notice will be posted in the applicable state office of the Department and mailed to those parties (salvage operators, revegetation experts) who have an interest in these plants and may approach the landowner with the possibility of saving the plant(s) from unnecessary destruction.

Notice to Landowner:

1. The owner may not begin destruction of protected native plants until he receives confirmation from the Arizona Department of Agriculture and the time prescribed below has elapsed. The "Confirmed" stamp only verifies that the Notice has been filed.

Size of area over which the Destruction of Plants will occur	**Length of Notice Period**
Less than one acre	20 days, oral or written
One acre or more, but less than 40 acres	30 days, written
40 acres or more	60 days, written

2. If you are clearing land over an area of less than one acre, oral notice may be given by calling the applicable state office at the telephone number given below.
3. If the land clearing or plant salvage does not occur within one year, a new Notice is required.

This Notice must be sent to the applicable state office of the Department of Agriculture at the address given below:

Central Licensing
Physical Location: 1010 W Washington St., Phoenix, AZ 85007
Mailing Address: 1802 W Jackson St., #78 Phoenix, AZ 85007
Email: licensing@azda.gov

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

APPENDIX D

Burrowing Owl Project Clearance Guidance for Landowners

Burrowing Owl Project Clearance Guidance for Landowners

Arizona Burrowing Owl Working Group

Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086

January 2009

Bruce Taubert

BURROWING OWL PROJECT CLEARANCE GUIDANCE FOR LANDOWNERS

Arizona Burrowing Owl Working Group

INTRODUCTION

The western burrowing owl (*Athene cunicularia*) is one of the most interesting birds of prey in Arizona (Figure 1). Its species name, *cunicularia*, means "miner", in reference to this owl's unusual habit of spending time underground. It is also called the "rattlesnake owl", because young burrowing owls make a buzzing sound that sounds like a rattlesnake when disturbed. Burrowing owls can be seen during daylight hours, and use underground burrows for nesting and escape cover. Despite the fact they are active during the day and are adaptable to human presence, the burrowing owl can go unnoticed in an area due to their secretive nature. Their use of burrows also makes them susceptible to impacts from ground disturbing activities.

Figure 1. Adult burrowing owl. *Photo by Bruce Taubert.*

Over the past 50 years, most burrowing owl populations have experienced declines throughout their range in North America. Because of this decline, these owls are protected by various Federal, state, and local laws. The burrowing owl is listed by the USFWS as a National Bird of Conservation Concern, listed as endangered in Canada, and threatened in Mexico. It is also listed as endangered, threatened, or a species of concern in 9 U.S. States. All owls in Arizona are protected federally by the Migratory Bird Treaty Act (MBTA) and Arizona state law (ARS Title 17). Violation of these laws, intentional or benign, may result in prosecution.

Burrowing owls are found in areas of Arizona where urbanization and other human activities are occurring. Arizona is one of the fastest growing states in the U.S., leading to frequent conflicts between burrowing owls and development. Owls can be affected by disturbance and habitat loss, even though there may be no direct impacts to the birds themselves or their burrows. There is often inadequate information about the presence of burrowing owls on a project site until ground disturbance is imminent. By then, it is too late to develop a solution that is helpful to the owls or the developer. These guidelines are intended to provide information and tools than can be applied when there is the potential for a project or action to adversely affect burrowing owls and the resources that support them. Each project and situation is different and should be evaluated for the tools and approach that is most effective in allowing a project to move forward while achieving burrowing owl conservation. These guidelines may not provide the necessary procedures for every project, and we encourage coordination with the agencies and entities listed in the Contact section of this document (Appendix A).

BURROWING OWLS SURVEY PROTOCOL

This guidance was developed by State, Federal, and other burrowing owl experts to help individuals avoid violating the laws protecting burrowing owls. This effort will provide a standardized means for conducting burrowing owl surveys in areas where burrows are likely to be disturbed by projects that may displace them in order to minimize impacts to the owls.

This protocol involves visual surveying for owls and burrows using transects to look for occupancy and/or signs of occupancy. We recommended that only individuals with proper training and certification conduct the survey. This document will be revised as necessary, and updates will be provided to certified surveyors, along with any guidance related to maintaining certification. Updates to this document will also be made available to the public. To facilitate statewide burrowing owl management, we recommend that all survey areas, routes, times, and detections be reported to Arizona Game and Fish Department (AGFD) within 30 days of survey completion. If owls or active burrows are detected, coordination with the appropriate agencies prior to initiating ground-disturbing activity will facilitate compliance with the applicable laws (see Appendix A).

SUITABLE HABITAT

Burrowing owl nesting habitat typically consists of dry, treeless, short-grassland or prairie plains. In the desert environment they nest in areas of short, open scrublands such as mesquite (*Prosopis* spp.), creosote bush (*Larrea tridentate*), rabbit-brush (*Chrysothanmus nauseous*), and four-wing saltbush (*Atriplex canescens*). They tend to be tolerant of human presence, and will nest in human-modified landscapes such as: abandoned lots within rapidly developing urban areas, airports, golf courses, agricultural fields, irrigation canals, storm drains, roadsides, and parking lots (Figure 2). In the western United States, burrowing owls do not dig their own burrows, and therefore depend on the presence of burrowing mammals. Throughout Arizona, burrowing owls are associated with Gunnison's prairie dogs (*Cynomys gunnisonii*), American badgers (*Taxidea taxus*), ground squirrels (*Spermophilus* spp.), rock squirrels (*Spermophilus variegatus*), foxes (*Vulpes* spp.), and coyotes (*Canis latrans*). Therefore, any open grassland, scrubland, or park-like area devoid of dense tree cover and containing burrowing mammals or adequate artificial nest burrows (e.g., erosion channels or storm drain pipes) can represent adequate nesting, wintering or migratory habitat.

Figure 2. Natural burrow on a wash bank. *Photo by Elissa Ostergaard.*

SURVEYOR CREDENTIALS

Burrowing owl surveyors should have burrowing owl survey protocol certification (training provided by AGFD; see Website in Contacts below for next date and location) with appropriate documentation.

Completed burrowing owl survey reports provided to AGFD should include each surveyor's certification. Certification will be awarded on an individual basis based on attendance at the training, and will not need to be renewed unless new information or conditions dictate substantial change to the survey protocol.

SURVEY TIMING

Burrowing owls are most likely to occupy breeding burrows between March and mid-July (Figure 3). While burrowing owl migration habits are not well documented, it is believed that owls in northern Arizona generally migrate south for the winter, whereas a larger proportion (12 to 61%; Conway and Ellis 2004) of owls in southern and western Arizona is thought to be non-migratory (Sheffield 1997).

We recommend that preliminary surveys be conducted at the time of property acquisition or before project design to allow time to properly accommodate or mitigate for owls, if present (Table 1). We recommend avoiding project initiation in March due to the possibility of new owls arriving during construction unless all suitable burrows were permanently closed by a properly permitted individual or group before project-related activities. If owls or occupied burrows are detected within the construction area at any time during project implementation, burrows must be avoided (see below for buffer requirements) until: 1) status of the burrows can be determined and owls removed by properly permitted individuals or groups, or 2) other conservation measures are implemented.

Figure 3. Artificial burrow with signs of occupancy. *Photo by Elissa Ostergaard.*

Surveys should be conducted within first light (typically ½ hour before sunrise) and 3 hours after sunrise, and between 2 hours before sunset until dusk (typically ½ hour after sunset). Do not conduct surveys during or within 24 hours after a heavy rain or when wind speed is greater than 32 km/hr (20 mi/hr).

Table 1. Schedule for burrowing owl surveys.

Fall or Winter Initial Survey	
Results	Action
No burrows detected	None.
Unoccupied burrows found	Implement conservation measures* and conduct a second survey 90 days prior to grading.
Occupied burrows or owls found	Implement conservation measures* and survey 30 days prior to grading.
Spring or Summer Initial Survey	
Results	Action
No burrows detected	None.
Unoccupied burrows found	Implement conservation measures* and conduct a second survey 30 days prior to grading.
Occupied burrows or owls found	See below.

*Potential conservation measures include: 1) collapsing all unoccupied burrows of suitable dimensions by a permitted individual, 2) identifying open space areas to be protected as a buffer around occupied and suitable owl burrows, 3) passive exclusion of owls, or 4) translocation of owls by a permitted individual.

FIELD SURVEY PROTOCOL

We recommend that surveys be conducted in all portions of the project site that fit the description of Suitable Habitat (see above). Surveys are conducted by walking straight-line transects 10 m (33 ft) apart (or arranged so that all ground surfaces can be seen) and looking for evidence of owls: individuals, burrows, and sign of occupancy at burrow entrances (pellets, feces or other "ornamentation", feathers, prey remains, whitewash, etc) (Figure 4). Transects should be located over the entire project area, and oriented so the tops and sides of all topographic features are examined. For example, if the project area includes a wash with a steep bank, one transect should be near the top of the bank, and another near the base of the bank in the wash.

Figure 4. Adult burrowing owl at an artificial burrow entrance. *Photo by Bruce Taubert.*

At the start of each transect and every 100 m (300 ft), scan the entire visible project area for owls using binoculars or a spotting scope. Record the location of all burrows (natural and artificial). Burrows may include holes dug by mammals, birds, or created by erosion, pipes, spaces below concrete or other solid structures, etc. Each burrow (entrance height 8 + cm [3 + in]; width 8 +

cm [3 + in]; burrow depth > 1 m [3 ft]) should be assessed to determine potential use by burrowing owls, unless owls are present.

An "active" burrow has a live owl or owls, or shows sign of recent use (e.g., fresh whitewash, fresh pellets, feathers, or nest ornamentation – Figure 2). A "potentially active" burrow is one with evidence of previous use, but not recent (e.g., old whitewash, old pellets, cobwebs over entrance, and/or debris at burrow entrances). An "inactive" burrow exhibits no evidence of use by burrowing owls but is of suitable size for occupancy.

Record the number and location of all owls seen within or near the project area. Clean and remove all owl sign at potentially active burrows. Visit the site again after 2-8 days and check all potentially active burrows for fresh sign.

SURVEY REPORTING

Record the surveys locations, dates, and the details of all burrow and owl detections (even if outside the construction zone), either on a hard copy map or as UTMs (Universal Transverse Mercator map coordinates compatible with GIS and GPS systems) using the standard form provided. Attach credentials of all surveyors as described above. Send within 30 days to raptors@azgfd.gov (preferred) or by mail:

Raptor Management Coordinator
Arizona Game and Fish Department
Nongame Branch
5000 West Carefree Highway
Phoenix, Arizona 85086

OWL DETECTIONS, CONSERVATION AND MITIGATION

Should preliminary measures fail to prevent burrowing owl occupancy of a project site during implementation, or if active burrows are located in the construction zone during construction activities, the owls should not be disturbed as it may violate federal and state laws. A 35-m (100-ft) radius buffer, excluding all heavy machinery and foot traffic, should be set up around all active burrow entrances during construction and until the appropriate conservation action is determined (B. Fox, pers. comm.). To permanently accommodate owls on site, we recommend that a buffer of 35-m (100-ft) should remain in perpetuity between the burrows and new construction and managed to maintain breeding habitat suitability (Millsap and Bear 2000). On-site conservation areas should be connected to adjacent burrowing owl habitat through the use of habitat connections. Conservation areas should avoid isolation or fragmentation of burrowing owl habitat. Delineating protected areas (fencing, cones, etc.) is encouraged as long as it does not enclose the owls or prevent the owls' ability to see nearby predators.

If after surveys are completed and reports submitted to AGFD, burrowing owls or active or potentially active burrows are located within the project boundaries, the landowner is advised to contact the nearest AGFD office (see Appendix A) for direction. Further mitigation or costs may be avoided if occupied owl areas can be set aside for at least 10 years and if suitable habitat for nesting and foraging will remain after development is finished. If it is determined that the best option is to disturb and then mitigate for the disturbance of the owls, the owner must obtain a permit from U.S. Fish and Wildlife Service. Mitigation may include excluding owls from disturbed burrows prior to construction and/or providing artificial burrows on-site or in a different location and monitoring to determine the success of the actions taken.

Figure 5. Owlets at a natural burrow entrance. *Photo by Bruce Taubert.*

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APPENDIX A: CONTACTS

In Tucson and southern AZ:

Arizona Game and Fish Department
Urban Wildlife Program, Tucson Office
555 N. Greasewood Rd.
Tucson, AZ 85745
(520) 628-5376

US Fish and Wildlife Service
Ecological Services Office
201 N. Bonita Ave., Ste. 141
Tucson, AZ 85745
(520) 670-6144

In Phoenix, central and northern AZ:

Arizona Game and Fish Department
Raptor Management Coordinator
5000 W. Carefree Highway
Phoenix, AZ 85086
(623) 236-7500
www.azgfd.gov

US Fish and Wildlife Service
Ecological Services Office
2321 W. Royal Palm Road, Ste. 103
Phoenix, AZ 85021
(602) 242-0210
http://www.fws.gov/southwest/es/arizona/

Burrowing Owl Working Group Members

Marit Alanen, U.S. Fish and Wildlife Service
Troy Corman, Nongame Branch, Arizona Game and Fish Department
Tim Snow, Region V, Arizona Game and Fish Department
James Driscoll, Nongame Branch, Arizona Game and Fish Department
Bob Fox, Wild At Heart (Burrowing Owl Conservation Group)
Sam Fox, Wild At Heart (Burrowing Owl Conservation Group)
David Grandmaison, Research Branch, Arizona Game and Fish Department
Mike Ingraldi, Research Branch, Arizona Game and Fish Department
Shawn Lowery, Research Branch, Arizona Game and Fish Department
Scott Richardson, U.S. Fish and Wildlife Service
Ray Schweinsberg, Research Branch, Arizona Game and Fish Department
Aninna Thornburg, Region V, Arizona Game and Fish Department

APPENDIX B. BURROWING OWL SURVEY REPORT FORM

Surveyor(s): Date of Survey:

Project Location Information
Project Name:
City:
County:
Legal Description (address, ¼ Section, Township, Range):

Weather Conditions During Survey
Precipitation: Y / N (circle one)
Wind Speed (mph):
Temperature: °F / °C (circle)
% Cloud Cover:

Survey Data
Area Surveyed: acres / ha / km^2 / m^2 (circle one)
Adult burrowing owls detected:
Juvenile burrowing owls detected:
Total # burrowing owls detected:
Total # Active burrows:
Total # Potentially Active burrows:

Habitat Description within Project Area (check if applicable)

- Open, treeless area
- Creosote flats
- Wash corridor
- Suitable burrows
- Fossorial mammals present – list species:
- Sonoran desert scrub
- Agriculture
- Urban development

Attach map of surveyed area with locations of survey transects. Identify locations of owls and suitable burrows. List owl detections and active or potentially active burrow locations in the following table (please include coordinates and datum) Attach additional pages if necessary:

Observation Type (Owl or Burrow)	Coordinates

Observation Type (Owl or Burrow)	Coordinates

Return completed forms (regardless of whether burrowing owls are detected) along with the surveyor's certification to:

Raptor Management Coordinator
Arizona Game and Fish Department
Nongame Branch
5000 West Carefree Highway
Phoenix, AZ 85086
(623) 236-7500
raptors@azgfd.gov

Appendix C: Potential Avian Impact Study

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

1645 South Plaza Way
Flagstaff, Arizona 86001
Tel 928.774.5500 Fax 928.779.2709
www.swca.com

TECHNICAL MEMORANDUM

To: Sara Born, P.E., Senior Vice President - Development
Winchester Solar III, LLC
929 Pearl Street, Suite 300
Boulder, Colorado 80302
sborn@torchcleanenergy.com

From: Tom Koronkiewicz, Avian Ecologist/Environmental Specialist

Date: February 25, 2026

Re: **Potential Avian Impact Summary, Winchester Solar III / SWCA Project No. 10151.002**

INTRODUCTION

Winchester Solar III, LLC (Winchester), is proposing to develop a solar and battery energy storage facility (project) on privately owned lands in Cochise County, Arizona. The proposed project includes a photovoltaic (PV) solar energy facility with a generation capacity of up to 200 megawatts (MW) and 800 MW of battery energy storage facility. Construction of the PV solar panels would be located within approximately 1,250 acres of semidesert grassland and Madrean evergreen woodland biotic communities (Brown 1994; Figure 1).

Winchester requested that SWCA Environmental Consultants (SWCA) summarize the potential impacts of the project to bird species that use the landscape near the proposed site, using the most recent and cited publicly available literature. To do this, SWCA reviewed literature that quantified PV solar facility-related bird mortality rates and identified potential mechanisms that could explain potential impacts to birds.

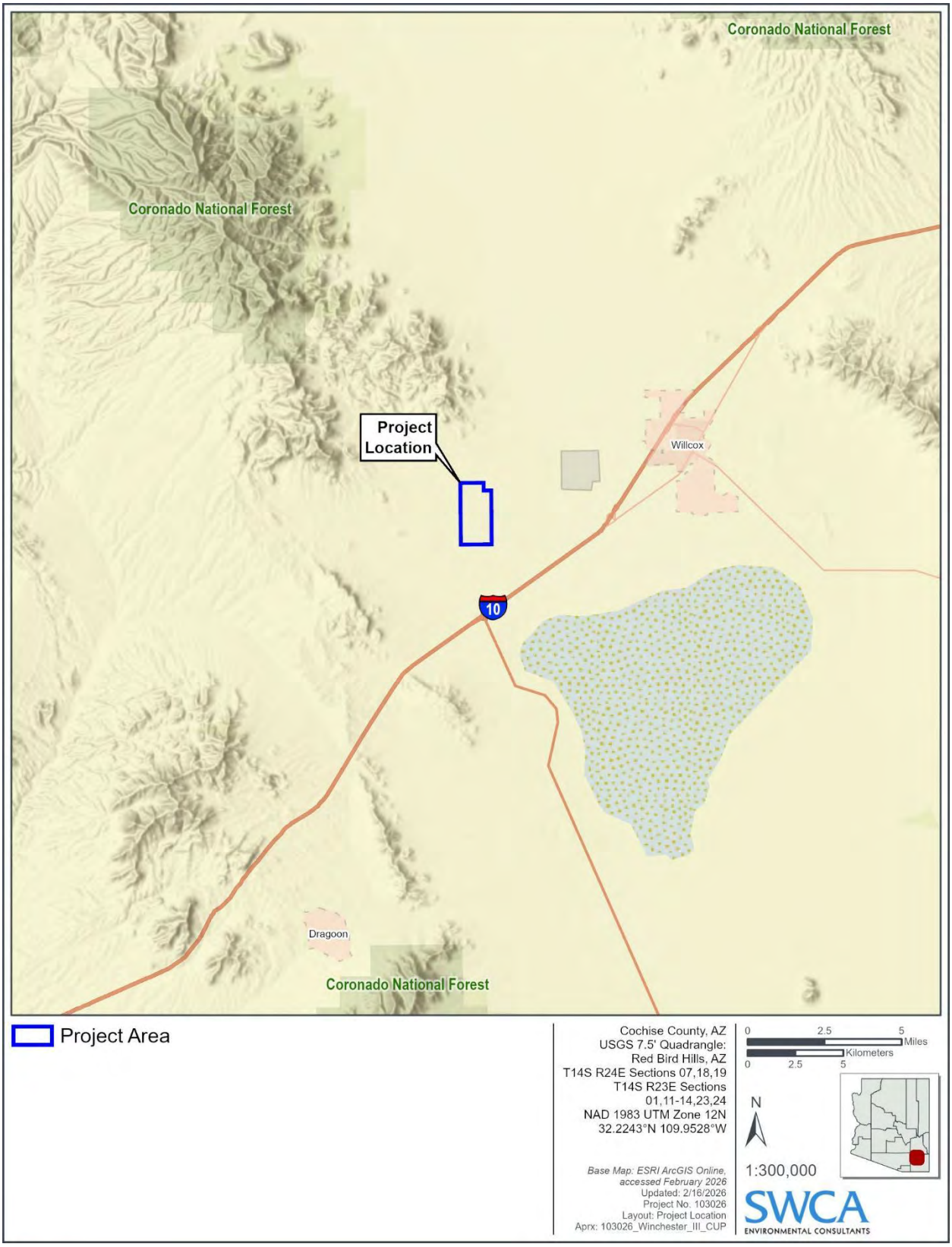

Figure 1. Project location.

Literature Describing Potential Bird Impacts at PV Solar Facilities

Unlike wind energy, few publicly available studies currently address potential impacts to birds from PV solar facilities, and risks to bird species are not well understood (BSG Ecology 2014; Gomez-Catasus et al. 2024; Leitner 2009; Walston et al. 2015; Western Ecosystems Technology, Inc. [WEST] 2014). The recent study by Kosciuch et al. (2020) reviewed the existing literature related to bird carcass observations made near southwestern U.S. PV solar facilities. They identified 10 solar facilities, all in southern California or Nevada,[1] where carcass observation rates have been quantified. In each instance, quantification was based on repeated searches of PV solar sites during which observations of bird carcasses were recorded. Kosciuch et al. (2020) reported that total bird fatality estimates averaged across facilities were only 0.44 birds per acre per year. While some of these fatalities may have resulted because of the PV solar facility, others would have occurred whether the facility was present or not; these deaths represent "baseline mortality," or naturally occurring mortality. One of the facilities in the Kosciuch et al. (2020) review found that only about 25% of the total bird mortalities may have been facility-related, while the remaining 75% likely represented baseline mortality.

Kosciuch et al. (2021) conducted a daytime study alternating between live bird surveys and fatality surveys at three solar facilities and three paired reference sites (each 1 kilometer from the paired solar facility and composed of similar vegetation communities). The study found that aquatic habitat birds were infrequently observed at the desert/scrub and grassland study sites, and there was no evidence of behaviors such as landing attempts or flocks repeatedly circling a facility to indicate a misperception of aquatic habitat or open water. Instead, the observations were of aquatic habitat birds moving through the facility, and the same species were often observed in the paired reference site. The study concluded that fatalities were not distinctly higher in the reference or facility areas of any site, accounting for differences in searcher efficiency by site and facility or reference area, and different amounts of total area searched and that the concept of "lake effect" is likely nuanced by species and time of year.

With innovations in passive monitoring techniques and artificial intelligence (AI), researchers can use software to detect and track avian interactions at PV sites over long periods of time. Hamada et al. (2026) reviewed over 19,000 hours of daytime footage from five PV sites in three regions of the U.S. from 2019 to 2024, and most notably found no observations of bird collisions. The highest rate of avian attendance was observed in the Midwest and Northeast with an average of 30 observations per hour (fewer in the desert Southwest), with most birds flying over or near panels. However, at one facility, Hamada et al. (2026) observed several occasions of raptors carrying prey which appeared to be small birds, through the solar facility, adding insight to potential sources of mortalities observed at PV facilities.

Another approach to estimating bird fatality at PV solar facilities uses necropsy data to assign a cause of death to individual carcasses. Kosciuch et al. (2020) reported that, among the intact carcasses observed across the sites they reviewed, approximately 38% died of collisions or electrocution (that is, they were facility-related). This result is similar to Kagan et al. (2014) who reported necropsy-based estimates of 31% facility-related impacts.

Based on the preceding information, it can be assumed that approximately two-thirds of total bird fatalities at PV solar facilities would have occurred naturally, at baseline. Thus, the existing data from sites in southern California or Nevada, suggest approximately 0.15 facility-related bird mortalities per acre per year. Of these mortalities, 55% would likely occur among passerines (songbirds; e.g., sparrows, robins, and cardinals), 17% among doves and pigeons, and about 8% among waterbirds (e.g., wading

[1] Data characterizing bird mortality rates at PV solar facilities are sparse. For example, Walston et al. (2016) conducted a systematic literature and internet search and identified only a single California facility that had collected data appropriate for estimating bird mortality rate. The 10 facilities identified by Kosciuch et al. (2020) were the result of a systematic literature and internet search supplemented with interviews of government agencies and solar facility operators.

birds and waterfowl). Whether these rates would be similar for the proposed project is undetermined. Estimations would likely result in erroneous findings due to the overall lack of publicly available data in Arizona, the use of modern solar panel design for the proposed project (see below), and because the proposed project is in a relatively different habitat than the project sites referenced above. Further, because bird fatality data for PV solar facilities have only recently become available, and these data are exceptionally limited, science-based predictions of potential bird impacts are limited.

Potential Causes of Bird Impacts at PV Solar Facilities

Bird carcass observations at PV solar facilities have prompted several researchers to speculate as to causal mechanisms that could explain such occurrences. The following theories have been considered:

1. One hypothesis is that solar facilities may attract birds that mistake the reflective solar panels for a body of water and suffer collision trauma when attempting to land, which has been called the "lake effect." Moreover, it has been further hypothesized that water birds, which require a body of water to take off and land, may become trapped at a solar facility after landing if they are unable to reach nearby surface water. However, there is no clear evidence for the lake effect phenomenon to date, and mortalities at PV solar facilities have included both landbird and waterbird species (Kagan et al. 2014). Evidence that birds collide with PV solar panels more often than non-reflective stationary infrastructure is also lacking, as is evidence that collisions with PV panels at solar facilities are a biologically significant source of avian mortality.
2. Some glass and plastic objects can alter the polarization of natural light, thereby attracting certain species of insects, with the increased density of insects attracting birds to a site. Alternatively, birds themselves may also key on light polarization and be drawn to such objects. Under either of the polarization hypotheses, carcass observations could be elevated relative to the baseline, at least in part, simply because on-site bird density exceeds the density in other nearby areas.

The PV solar panels to be used for the proposed project have a modern design. The panels have surface coatings that are designed to maximize energy absorption; these were not available a few years ago. As a result of the coatings, the glare and reflection are significantly reduced relative to solar panels at existing older facilities. The reduction in reflectivity and differential impacts on light polarization relative to older panels at the proposed project would limit the potential for adverse impacts to birds arising from either reflectivity or light polarization.

Contextualizing Potential Bird Impacts at PV Solar Facilities

Numerous anthropogenic mortality sources directly kill birds. Cause-specific annual mortality in the United States varies from billions (domestic cat predation) to hundreds of millions (building and automobile collisions), tens of millions (power line collisions), millions (power line electrocutions, communication tower collisions), and hundreds of thousands (wind turbine collisions) (Loss et al. 2015). Walston et al. (2016) estimated between 37,000 and 138,600 total U.S. bird deaths per year across all types of solar facilities. These data lead to the conclusion that, in the context of other anthropogenic sources of bird impacts and mortality (here we consider domesticated cats to be anthropogenic), the potential effect of PV solar facilities is far from significant on bird populations.

Additionally, there is potential for positive impacts to avian populations through thoughtful design of PV facilities. Studies using passive acoustic monitoring have been conducted in the Midwest to determine the potential effects of PV solar facilities designed to offset the loss of farmland by restoring native vegetation, "ecovoltaic" sites. Walston et al. (2025) studied 13 PV sites constructed in the last 2 to 8 years and 12 control sites (row crop agricultural fields) across five Midwestern states from May to September of 2023 and 2024. Using passive acoustic monitoring, over 11,000 hours of acoustic recordings were

analyzed. Researchers detected more grassland species at the ecovoltaic sites in the initial monitoring months with the difference between the control and ecovoltaic sites narrowing toward the end of the season. Although the ecovoltaic sites generally support biodiversity, species that prefer open landscapes are unlikely to benefit from the conversion of agricultural lands to ecovoltaic solar facilities.

Conclusion

We conclude that, under reasonable worst-case assumptions, the project could result in minor potential impacts to birds, primarily passerines, doves, and pigeons near the facility. The project could also result in minor potential impacts to waterbirds due to the proximity of the Willcox Playa, which is located less than 3 miles to the southeast of the proposed project. However, it could be argued that waterbirds would likely be more drawn to the playa itself than the PV solar facility.

Importantly, the resulting potential change in bird abundance near the project, if any, would not result in any species-specific population-level effects and would not persist past the operational life of the project. Further, to the extent that the demand for electricity increases, with energy production trying to optimize the methods used to generate electricity, PV solar is likely a preferable alternative from a bird impact perspective relative to other potential sources of electricity generation. Additional structured bird impact studies of utility-scale PV solar facilities are necessary before conclusions about potential impacts to birds associated with PV solar facilities can be drawn.

Limitations and Warranty

Within the limitations of schedule, budget, and scope of work, SWCA warrants that this summary was conducted using the most recent, best publicly available science at the time this evaluation was performed, as outlined. The results and conclusions of this summary represent the best professional judgment of SWCA scientists and are based on information provided by the project proponent and on information obtained from publicly available literature. No other warranty, expressed or implied, is made.

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Appendix D: Neighbor Notification Letter

February 27, 2026

[Neighbor Name]
[Neighbor Address]

Subject: Notice of Proposed Special Use in Cochise County

I am writing to inform you about a special use proposal near your property. Special uses are uses that are not typically permitted in a specific zoning district. Consequently, they require case-by-case review and approval from Cochise County Planning and Zoning Commission at a public hearing.

The details are as follows:

Special Use Overview: The purpose of this special use authorization is to allow construction of a solar and battery energy power plant, Winchester Solar III, on approximately 1,250 acres located near Willcox. The proposed uses for the subject lands would include utility-scale photovoltaic solar power generation facility paired with battery energy storage. More specifically, the Project is comprised of:

- 200-megawatt (MW) photovoltaic (PV) solar generation facility.
- 200 MW-4hr / 800-megawatt-hour (MWh) battery energy storage system (BESS)

Location: The Project is approximately two miles north of the interchange of Interstate 191 and I-10 (see attached Preliminary Concept Plan).

Public Hearing Information: We will schedule a public meeting to discuss the project with community residents. A public hearing before the Planning and Zoning Commission will follow application submittal, providing an additional opportunity for residents to express their views and/or concerns regarding the proposed special use.

How to Get Involved: You will soon receive a letter from the county, which will provide additional public hearing and case planner information. However, if you have any concerns, questions, or objections, we ask that you contact us first at rtaylor@torchcleanenergy.com within 15-days of receiving this letter.

If you wish to participate in the public hearings or have questions about the approval process, you may contact the Cochise County Development Services Department at developmentservices@cochise.az.gov or 520-432-9300. Feel free to visit the County's website to learn more about special uses: https://www.cochise.az.gov/268/Special-Uses

Thank you for your attention to this notification.

Respectfully,

Sara Born
Senior Vice President of Development
Torch Clean Energy