Application

for

Certificate of Environmental Compatibility

WEST CAMP 2 GEN-TIE PROJECT

Prepared for:

State of Arizona
Power Plant and Transmission Line Siting Committee

Submitted by:

West Camp Wind Farm II, LLC

September 2025

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INTRODUCTION

West Camp Wind Farm II, LLC (Applicant), an indirect subsidiary of The AES Corporation (AES), seeks approval of a Certificate of Environmental Compatibility (CEC) for a 345-kilovolt (kV) or 500-kV generation-tie transmission line (Gen-Tie Line) and up to one 500-kV interconnection switching station and line tap (On-Site Switchyard). The two interconnection options are: Option A) an up to 25-mile-long 345- or 500-kV transmission line to the existing Arizona Public Service (APS) Sitgreaves Substation and Option B) an up to 10-mile-long 500-kV transmission line to a new switchyard and line tap on the existing Salt River Project (SRP) 500-kV Cholla-Sugarloaf-Coronado transmission line. The two interconnection options are collectively referred to in this application as the Gen-Tie Project. The Gen-Tie Project for which the Applicant seeks authorization under the CEC will support the Applicant's proposed West Camp 2 Wind Farm, a 500-megawatt (MW) wind energy generation facility and 500-MW battery storage facility on an approximately 58,243-acre area. The planned West Camp 2 Wind Farm is approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona, as shown on Figure A-1 of Exhibit A. The Gen-Tie Project will be sited within the CEC Corridor (as depicted on Figure A-1 of Exhibit A).

The Gen-Tie Project will be constructed primarily on private lands; a small portion of the infrastructure may be sited on Arizona State Trust lands managed by the Arizona State Land Department (ASLD). The CEC Corridor overlaps both the proposed West Camp 2 Wind Farm and the existing West Camp Wind Farm (as depicted on Figure A-3 of Exhibit A).

The Gen-Tie Project will employ technology with which the Applicant has existing expertise. AES is a Fortune 500 company that generates and distributes electrical power worldwide. Headquartered in Arlington, Virginia, AES holds global assets totaling over $47 billion, including a portfolio of 32 gigawatts (GW) of mixed energy assets, 13.9 GW of which are in the United States. AES Clean Energy, an indirect wholly owned subsidiary of AES, owns and operates over 12.8 GW of renewable energy projects across the United States, 1.3 GW of which are operating in Arizona, with another 1.25 GW under construction in the state. AES has also developed, constructed, and is currently operating over 2,800 miles of transmission lines and numerous high-voltage substations and related electrical infrastructure in the United States.

Gen-Tie Project Overview

Pursuant to Arizona Revised Statutes (ARS) 40-360 et seq., the Applicant seeks a CEC for

- up to approximately 25 miles of 345- or 500-kV Gen-Tie Line, to be constructed on private lands and Arizona State Trust lands within the CEC Corridor; and
- a single on-site 500-kV interconnection switching station, which will provide interconnection to the SRP 500-kV Cholla-Sugarloaf-Coronado transmission line via a new line tap within the CEC Corridor.

The Applicant is proposing up to two collector substations. Collector substations are not jurisdictional but are presented in this application for illustrative purposes.

One benefit of the Gen-Tie Project's location is that it provides the flexibility to interconnect at either 345 kV or 500 kV and to either APS- or SRP-operated transmission lines. Accordingly, this application requests approval for both the APS and SRP interconnection options: at the existing Sitgreaves Substation for Option A (which is currently 345 kV but APS may upgrade to 500 kV) and via the 500-kV On-Site Switchyard for Option B. Both interconnection options are being pursued such that the West Camp 2

Wind Farm can meet different customer energy requirements and deliverability needs. Both options are located within the single requested CEC Corridor, which has been studied extensively and presented in this application. Technical, engineering, and ongoing interconnection study factors will drive the selected interconnection voltage of the West Camp 2 Wind Farm.

Project Location

As shown on Figures A-2.1, A-2.2, and A-2.3 of Exhibit A, the Gen-Tie Project will be constructed on private lands and Arizona State Trust lands within the following sections, townships, and ranges:

- **CEC Corridor**
  - Section 7 and the northern half of Sections 8, 9, 10, 11, and 12 of Township 16 North, Range 18 East
  - The southern half of Sections 1 and 3 and the northern half of Sections 7, 8, 9, 10, 11, and 12 of Township 16 North, Range 19 East
  - The northern half of Section 7 and Sections 3, 5, 6, 10, 15, 21, and 22 of Township 16 North, Range 20 East
  - The eastern three-quarters of Section 32 and Section 33 of Township 17 North, Range 20 East
- **Sitgreaves Substation**
  - Section 7 of Township 16 North, Range 18 East
- **On-Site Switchyard Siting Area**
  - Sections 10, 15, and 22 of Township 16 North, Range 20 East

The Applicant has executed lease agreements and transmission easements with the private landowners within the CEC Corridor. Additionally the Applicant's right-of-way application for the Arizona State Trust lands within the CEC Corridor (the eastern three-quarters of Section 32 of Township 17 North, Range 20 East) was approved by ASLD for further processing on July 16, 2025.

Description of Project Infrastructure

The Gen-Tie Line will consist of transmission poles or towers capable of supporting up to six conductor cables (depending on single-circuit vs. double-circuit applications), plus two lightning protection and communication cables, suspended between the structures. The structures are expected to range from approximately 115 feet to no more than 195 feet tall and will be spaced approximately 1,000 feet apart. Variations may be made to achieve site-specific engineering requirements. An estimated six structures will be required per mile of line, but additional or fewer structures may be required based on final engineering design. Specific structure types will be selected closer to construction but may consist of any combination of steel monopoles, H-frames, 3-pole structures, steel lattice towers, or tubular steel structures (see Exhibit G for a complete list). If the potential On-Site Switchyard is constructed, it will consist of many of the same components as the collector substation(s), except that no power transformers would be installed. The switchyard would also be enclosed by an 8-foot-tall fence and would occupy a siting footprint of up to 30 acres. To interconnect the new switchyard to the regional transmission grid, the existing SRP 500-kV Cholla-Sugarloaf-Coronado transmission line would be severed near the location of the switchyard, and the two ends would be looped into the new switchyard.

Purpose and Need

The Gen-Tie Project is needed to connect the planned West Camp 2 Wind Farm to the regional transmission grid for delivery of reliable, domestically produced electricity. The West Camp 2 Wind Farm, of which the Gen-Tie Project is an essential part, will provide numerous economic and environmental benefits to Navajo County and the State of Arizona. It will provide a clean and renewable source of energy that uses no water for electrical generation and emits no air pollution. It will diversify the energy resources available to the State of Arizona and provide other state and local socioeconomic benefits that are further described below. The flexibility requested regarding infrastructure within the CEC Corridor and the two voltage and interconnection options is needed to ensure that the West Camp 2 Wind Farm can be constructed to meet different customer energy requirements and deliverability needs.

State and Local Benefits

The West Camp 2 Wind Farm, through the Gen-Tie Project, will benefit the state and local communities by providing the following:

- Electricity equivalent to powering over 132,000 homes annually, with no operational air emissions or water use.
- Approximately 500 temporary construction jobs and around 20 to 25 full-time jobs during the West Camp 2 Wind Farm's planned 30-year useful life.
- Lease payments to rural ranching families who will be able to maintain ranching operations within the West Camp 2 Wind Farm because ranching and wind generation are compatible uses.
- Property taxes for Navajo County and sales taxes for the State of Arizona.
- Over $1.5 million in annual local worker salary payments during operation.
- At least $9.7 million of indirect local spending during construction, which includes local businesses, such as lodging, mechanics, fuel, meals, hardware, etc.
- Over $700,000 of indirect local spending annually during operations, which includes local businesses, such as lodging, mechanics, fuel, meals, hardware, etc.

The West Camp 2 Wind Farm, through the Gen-Tie Project, will provide electricity customers with a clean and reliable form of energy. This clean form of energy does not use any of the valuable water resources in the region and does not produce air emissions.

Public Involvement Overview

A community outreach program is underway to ensure that local jurisdictions and community residents are provided the opportunity to ask questions, request information, and express concerns or support of the West Camp 2 Wind Farm and Gen-Tie Project. Public involvement was sought in support of the West Camp 2 Wind Farm's application for approval(s) from Navajo County. A notice for a public open house was mailed on July 28, 2025, inviting neighbors within 1 mile of the West Camp 2 Wind Farm and Gen-Tie Project, agencies, and other stakeholders to two public open house meetings held on August 27, 2025, in Holbrook, Arizona. Other outreach efforts included a legal advertisement placed in the local newspaper and a project website that includes an online comment form. A second outreach letter specific to the CEC application process for the proposed Gen-Tie Project will be sent—following the CEC application filing—to landowners within 1 mile of the West Camp 2 Wind Farm and Gen-Tie Project, as well as

agencies and other stakeholders. Further information about the public involvement process is included as Exhibit J.

Environmental Setting

The CEC Corridor is characterized by flat to rolling terrain dominated by semi-desert grassland, shrub steppe, and open juniper savanna in the eastern and central portions of the CEC Corridor, which transitions to juniper savanna and patches of dense juniper woodlands in the western third of the CEC Corridor. Ephemeral washes and canyons, some deeply incised, drain surface runoff generally northward to the Little Colorado River. Other surface waters in the vicinity include scattered stock tanks. Additional information about the physical and biological properties of the CEC Corridor is provided in Exhibits C and D.

The predominant land uses in and around the CEC Corridor are cattle ranching, dispersed recreation, transportation, and electrical generation and transmission facilities. The Gen-Tie Project may cross any or all of the following existing transmission lines:

- West Camp Wind Farm 345-kV Gen-Tie Line, within the West Camp Wind Farm near the APS Sitgreaves Substation
- APS 500-kV Cholla-Saguaro line, within the West Camp Wind Farm near the APS Sitgreaves Substation
- SRP 500-kV Cholla-Sugarloaf-Coronado line, within the West Camp 2 Wind Farm near State Route 377 (SR-377)

Holbrook, a community of approximately 5,000 people, lies approximately 5 miles north of the CEC Corridor. There are no residences, schools, or churches within 1 mile of the CEC Corridor. Aside from scattered residences near the incorporated limits of Holbrook and in the Chevelon Canyon Ranch subdivision to the west, very few people live within 3 miles of the CEC Corridor. Residences were determined based on a review of aerial imagery; review of Navajo County permit databases for occupancy, structure, and septic permits; and discussions with Navajo County planning staff. The two closest residences are 1.4 miles southwest and 1.4 miles west of the western extreme CEC Corridor (see Figure A-3 of Exhibit A).

SR-377 provides access to the eastern part of the CEC Corridor and links the area to Interstate 40 to the north. The western part of the CEC Corridor is accessible via McLaws Road, which extends west out of Holbrook to Obed Road. Several private dirt ranch roads and wind farm access roads intersect the CEC Corridor; most are associated with Aztec Land and Cattle Company, Ltd.'s grazing operations. Though the Applicant has access rights to these private roads, they are not open to the public.

Summary of Environmental Compatibility

The Applicant is committed to thoroughly studying, avoiding, and minimizing environmental impacts of the Gen-Tie Project and seeks approval of the CEC for the Gen-Tie Project according to the factors outlined in ARS 40-360.06. The Gen-Tie Project will provide transmission services for the West Camp 2 Wind Farm, a new renewable energy project that will use no water and produce no greenhouse gas or other air emissions, to generate electricity. There will be negligible use of water in the operations and maintenance building. The West Camp 2 Wind Farm is undergoing thorough environmental review by Navajo County, the Arizona Game and Fish Department, and other agencies.

As further described and supported by the exhibits accompanying this application, the Gen-Tie Project itself

- will permanently disturb a relatively small amount of land, most of which has already been disturbed by livestock grazing and related ranching activities, as well as existing transmission lines and energy generation facilities;
- will allow the continued use of private lands for their existing uses (predominantly livestock grazing and transmission lines);
- will not disturb any areas of unique biological wealth and will have minimal impact to special-status species with the potential to occur in the CEC Corridor;
- will have minimal visual effects, because few people live near or pass through the area and other high-voltage transmission lines already exist within the CEC Corridor;
- will avoid known archaeological or historical sites of significance;
- is approximately 1.4 miles from the nearest legally permitted residence and is not anticipated to result in significant impacts associated with noise or signal interference; and
- is an appropriate use of the selected site, given its total environment, including the wind resource specific to this location.

The Applicant therefore respectively requests that the Power Plant and Transmission Line Siting Committee grant, and the Arizona Corporation Commission approve, a CEC for the construction of the Gen-Tie Project described herein.

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APPLICATION

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APPLICATION FOR
CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY

(Pursuant to A.R.S. § 40-360.03 and 40-360.06 and A.A.C. Rules R14-3-219)

1. Name and address of the Applicant

West Camp Wind Farm II, LLC
282 Century Place, Suite 2000
Louisville, Colorado 80027

2. Name, address, and telephone number of a representative of the applicant who has access to technical knowledge and background information concerning this application, and who will be available to answer questions or furnish additional information

Rob Gardner
Senior Manager, Western Wind Development
The AES Corporation
282 Century Place, Suite 2000
Louisville, Colorado 80027
(928) 404-1630
robert.gardner@aes.com

3. Date on which the applicant filed a Ten-Year Plan in compliance with A.R.S. § 40-360.02, in which the facilities for which this application is made were described

West Camp Wind Farm II, LLC, filed its Ten-Year Plan on January 31, 2025. (E000041211)

4. Description of the proposed facility, including:

a. With respect to an electric generating plant:

[Not applicable]

b. With respect to a proposed transmission line:

i. Nominal voltage for which the line is designed; description of the proposed structures and switchyards or substations associated therewith; and purpose for constructing said transmission line

(1) Nominal voltage:

The nominal voltage for the proposed Gen-Tie Line will be 345- or 500-kV alternating current. The voltage of the Gen-Tie Line will be determined based on the Gen-Tie Line option selected in coordination with APS or SRP during ongoing interconnection studies.

(2) Description of the proposed structures:

The Gen-Tie Line will consist of transmission poles or towers capable of supporting up to six conductor cables (depending on single-circuit vs. double-circuit applications), plus two lightning protection and communication cables, suspended between the structures. The structures are expected to range from approximately 115 feet to no more than 195 feet tall and will be spaced approximately 1,000 feet apart. Variations may be made to achieve site-specific engineering requirements. An estimated six structures will be required per mile of line, but additional or fewer structures may be required based on final engineering. Specific structure types will be selected closer to construction but may consist of any combination of steel monopoles, H-frames, 3-frame structures, steel lattice towers, or tubular steel structures. Conceptual drawings showing typical structures are provided in Exhibit G.

(3) Description of proposed switchyards and substations:

Under either interconnection option, up to two non-jurisdictional collection substations will be constructed within the CEC Corridor. The collector substations will step up power from 34.5 kV to the transmission voltage of 345 kV or 500 kV. Each collector substation is expected to cover approximately 5 acres and will consist of one or multiple power transformer(s), a control house, and a substation superstructure within an approximately 8-foot-tall fence enclosure.

If the potential On-Site Switchyard is constructed, it will consist of many of the same components as the collector substation(s), except that no power transformers would be installed. The switchyard would also be enclosed by an 8-foot-tall fence and would occupy a siting footprint of up to 30 acres. To interconnect the new switchyard to the regional transmission grid, the existing SRP 500-kV Cholla-Sugarloaf-Coronado transmission line would be severed near the location of the switchyard, and the two ends would be looped into the new switchyard.

Conceptual drawings of the collector substations and switchyard are provided in Exhibit G.

(4) Purpose for constructing said transmission line:

The purpose of the transmission line is to deliver electrical power generated by the West Camp 2 Wind Farm, a planned 500-MW wind energy generating facility and 500-MW battery storage facility, to the regional transmission grid.

ii. Description of geographical points between which the transmission line will run, the straight-line distance between such points and the length of the transmission line for each alternative route for which the application is made

(1) Description of geographical points between which the transmission line will run:

Within the CEC Corridor, the Gen-Tie Line will originate at the new substation location(s), which will be sited within the CEC Corridor.

Under Option A, from the collector substation location(s), the Gen-Tie Line will run approximately 20 to 25 miles to the west to the APS Sitgreaves Substation in Section 7 of Township 16 North, Range 18 East.

Under Option B, the Gen-Tie Line will run from the collector substation location(s) approximately 8 to 10 miles to the new On-Site Switchyard and line tap in Section 10, 15, or 22 of Township 16 North, Range 20 East.

An illustration of a conceptual interconnection option is provided on Figures A-2.1 through A-2.3 of Exhibit A.

(2) Straight-line distance between such points:

The straight-line distance between the furthest collector substation and point of interconnection for each interconnection option is as follows:

- Option A: Approximately 15 miles from the southernmost substation in Section 21 of Township 16 North, Range 20 East to the APS Sitgreaves Substation in Section 7 of Township 16 North, Range 18 East.
- Option B: Approximately 6 miles from the westernmost substation in Section 10 of Township 16 North, Range 19 East to the furthest possible location for the On-Site Switchyard and line tap in Section 22 of Township 16 North, Range 20 East.

(3) Length of the transmission line for each alternative route:

The length of the Gen-Tie Line for each interconnection option is as follows:

- Option A: Up to approximately 25 miles
- Option B: Up to approximately 10 miles

iii. Nominal width of right-of-way required, nominal length of spans, maximum height of supporting structures and minimum height of conductor above ground

(1) Nominal width of right-of-way required:

The Gen-Tie Line will be constructed within the boundaries of the West Camp Wind Farm and West Camp 2 Wind Farm. The Gen-Tie Line will be constructed within a 150-foot-wide right-of-way, to be located entirely within the requested CEC Corridor.

(2) Nominal length of spans:

The typical span length between structures will be approximately 1,000 feet, with variations made to achieve site-specific mitigation objectives or meet site-specific engineering requirements.

(3) Maximum height of supporting structures:

The maximum height of the supporting structures will be up to 195 feet above ground.

(4) Minimum height of conductor above ground:

The minimum height of the conductor above existing grade will be 30 feet.

iv. To the extent available, the estimated costs of proposed transmission line and route, stated separately. (If application contains alternative routes, furnish an estimate for each route and a brief description of the reasons for any variations in such estimates.)

The cost for the proposed transmission line is estimated at up to $37.5 million. This includes the costs for construction of the Gen-Tie Line, including the conductor and the supporting structures. The cost of the On-Site Switchyard is estimated at up to $60 million. These cost estimates are for illustrative purposes only and are subject to future market pricing and final engineering details.

v. Description of proposed route and switchyard locations. (If application contains alternative routes, list routes in order of applicant's preference with a summary of reasons for such order of preference and any changes such alternative routes would require in the plans reflected in (i) through (iv) hereof.)

As described above, the Applicant is pursuing two interconnection options, both within the same requested CEC Corridor. Within the CEC Corridor, the Gen-Tie Line will be constructed primarily on private lands in the sections specified below; a small portion of the infrastructure may be sited on Arizona State Trust lands (in the eastern three-quarters of Section 32 of Township 17 North, Range 20 East). For both Option A and Option B, the Gen-Tie Line will be constructed within a 150-foot-wide right-of-way.

- Section 7 and the northern half of Sections 8, 9, 10, 11, and 12 of Township 16 North, Range 18 East
- The southern half of Sections 1 and 3 and the northern half of Sections 7, 8, 9, 10, 11, and 12 of Township 16 North, Range 19 East
- The northern half of Section 7 and Sections 3, 5, 6, 10, 15, 21, and 22 of Township 16 North, Range 20 East
- Section 33 of Township 17 North, Range 20 East

The geographical points between which the Gen-Tie Line will run and the locations of the collector substation(s) and potential On-Site Switchyard are described above. The collector substation(s) will be sited within the CEC Corridor; the maximum transmission line lengths and straight-line distances between points are calculated based on a westernmost substation location in Section 10 of Township 16 North, Range 19 East and a southernmost substation location in Section 21 of Township 16 North, Range 20 East. The potential On-Site Switchyard and line tap would be located within Section 10, 15, or 22 of Township 16 North, Range 20 East.

This application requests approval for both Option A and Option B.

vi. For each alternative route for which application is made, list the ownership percentages of land traversed by the entire route (federal, state, Indian, private, etc.).

The CEC Corridor consists of 10,473 acres (95.6%) of private lands and 482 acres (4.4%) of Arizona State Trust lands in unincorporated Navajo County.

The Gen-Tie Project will be constructed almost entirely on private land within unincorporated Navajo County. The final location of the Gen-Tie Line within the CEC Corridor will be based on further electrical engineering requirements and siting surveys; however, it is anticipated that

no more than 1 mile of the up to 25-mile-long Gen-Tie Line will cross Arizona State Trust lands.

5. **List the areas of jurisdiction [as defined in A.R.S. § 40-360(1)] affected by each alternative site or route and designate those proposed sites or routes, if any, which are contrary to the zoning ordinances or master plans of any of such areas of jurisdiction.**

   The Gen-Tie Project is primarily located on private lands, all of which are within the jurisdiction of Navajo County. A small portion of the Project may be located on Arizona State Trust lands managed by the ASLD. The proposed Gen-Tie Project is an authorized use under the Navajo County zoning ordinances and master plans. Land crossed by the Gen-Tie Project is zoned A-General (see Figure A-4 of Exhibit A). Under Section 302, of Article 3 in the *Navajo County Zoning Ordinance*, the Gen-Tie Line, collector substation(s), and On-Site Switchyard are permitted facilities in the A-General zone.

   Under Section 1201 of Article 12 in the *Navajo County Zoning Ordinance*, renewable energy generation facilities, including wind projects, are allowed uses within the A-General zone, subject to either securing a Special Use Permit or Development Agreement, or both. Consistent with that provision, the Applicant intends to apply for County approval(s) for the West Camp 2 Wind Farm in October 2025, with Navajo County review and hearings to follow.

6. **Describe any environmental studies applicant has performed or caused to be performed in connection with this application or intends to perform or cause to be performed in such connection, including the contemplated date of completion.**

   The Applicant has evaluated potential Gen-Tie Project impacts to biological resources, visual resources, cultural resources, recreational resources, land use, noise levels, and communications signals. These evaluations are described in Exhibits B, C, D, E, F, H, and I.

   Furthermore, as described in Exhibit B, the West Camp 2 Wind Farm as a whole, including the Gen-Tie Project, has been the subject of numerous other environmental studies and is undergoing review by Navajo County in conjunction with the permitting process.

WEST CAMP WIND FARM II, LLC

_____

Arlo Corwin
Director of Development

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EXHIBIT A

Land Use

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EXHIBIT A. PROJECT MAPS AND LAND USE

In accordance with Arizona Administrative Code Rules of Practice and Procedure R14-3-219, the applicant provides the following location maps and land use information:

*Exhibit A-3: Where commercially available,** a topographic map,1:250,000 scale, showing any proposed transmission line route of more than 50 miles in length and the adjacent area. For routes of less than 50 miles in length, use a scale of 1:62,500. If application is made for alternative transmission line routes, all routes may be shown on the same map, if practicable, designated by applicant's order of preference.*

*Exhibit A-4: Where commercially available,** a topographic map,1:62,500 scale, of each proposed transmission line route longer than 50 miles showing that portion of the route within two miles of any subdivided area. The general land use plan within the area shall be shown on a 1:62,500 map required for Exhibit A-3, and for the map required by this Exhibit A-4, which shall also show the areas of jurisdiction affected and any boundaries between such areas of jurisdiction. If the general land use plan is uniform throughout the area depicted, it may be described in the legend in lieu of on an overlay.*

***If a topographic map is not commercially available, a map of similar scale, which reflects prominent or important physical features of the area in the vicinity of the proposed site or route, shall be substituted.*

Project Maps

The following figures are provided in this exhibit:

1. **Figure A-1. Gen-Tie Project location.**

   Figure A-1 provides an overview of the proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) location. Under either interconnection Option A or Option B, as further described in the Certificate of Environmental Compatibility (CEC) Application narrative, all Gen-Tie Project infrastructure will be located within the CEC Corridor.

2. **Figures A-2.1 through A-2.3. Gen-Tie Project overview.**

   Figures A-2.1 through A-2.3 show the CEC Corridor on a topographic map at a 1:62,500 scale (the proposed route is less than 50 miles).

3. **Figure A-3. Gen-Tie Project land use and ownership.**

   Figure A-3 shows existing infrastructure and land uses in the CEC Corridor and its vicinity. Land uses shown on this figure include the West Camp Wind Farm, transmission lines, natural gas pipelines, and the nearest residences to the CEC Corridor. As described in the Environmental Setting section of the CEC Application Introduction, residences were determined based on a review of aerial imagery; review of Navajo County permit databases for occupancy, structure, and septic permits; and discussions with Navajo County planning staff.

4. **Figure A-4. Gen-Tie Project zoning.**

   Figures A-4 shows the Navajo County zoning within the CEC Corridor and its vicinity.

5. **Figure A-5. Gen-Tie Project Navajo County Comprehensive Plan future land uses and Aztec Area Plan character areas.**

   Figure A-5 shows Navajo County Comprehensive Plan future land use categories and Aztec Area Plan–designated character areas within the CEC Corridor and its vicinity.

Existing Land Use (Zoning)

The Gen-Tie Project will be primarily sited on private lands, all of which are within the jurisdiction of Navajo County; a small portion of the infrastructure may be sited on Arizona State Trust lands managed by the Arizona State Land Department (ASLD). The private lands in the CEC Corridor are zoned as A-General (Navajo County 2025). This zoning district is described below.

A-General: As described in Section 301 of the *Navajo County Zoning Ordinance* (referred to herein as "the ordinance") (Navajo County 2025), the primary purpose of the A-General Zone is to provide for unincorporated areas of the county not otherwise designated for some other specific zone. Uses permitted in the A-General Zone include farm and non-farm residential uses; farms; and recreational, institutional, commercial, and industrial uses, as specifically listed in the ordinance. Under Section 302(6) of the ordinance, utility facilities for the delivery of electricity to the public, including electrical transmission lines, substations, and other associated facilities, are permitted uses in the A-General zoning district. Under Section 1201 of the ordinance, Renewable Energy Generation facilities, including wind facilities and associated electrical infrastructure (including substations, switchyards, and line taps), are allowed in the A-General Zone, subject to securing a Special Use Permit or Development Agreement, or both (Navajo County 2025). Consistent with that provision, the Applicant will be submitting an application for a Development Agreement for the West Camp 2 Wind Farm in October 2025. A decision on the application is anticipated by early 2026.

ASLD does not establish or delineate zoning districts, and Navajo County does not zone ASLD-managed land. Rather, ASLD leases or grants rights-of-way and uses through permits (e.g., commercial lease; utility, agricultural, grazing and range rights-of-way; recreational permits; and gas, oil, mineral, and water permits).

Future Land Use (Land Use Plans)

Two Navajo County–adopted planning documents apply to the Gen-Tie Project, the *Navajo County 2050 Comprehensive Plan* (Comprehensive Plan) (Navajo County 2024) and the *Aztec Area Plan, Navajo County, AZ* (Aztec Area Plan) (LVA Urban Design Studio 2011).

The Aztec Area Plan, which is incorporated into the Comprehensive Plan by reference, was developed to guide the future development of 228,040 acres of private property owned by the Aztec Land and Cattle Company and related companies (LVA Urban Design Studio 2011). The Aztec Area Plan is the controlling planning document for all private land within the CEC Corridor.

The Comprehensive Plan represents the community's vision for all of Navajo County and is the foundation for all other planning documents, including the Aztec Area Plan. The Comprehensive Plan establishes future land use categories in areas outside the Aztec Area Plan boundaries, such that the

Comprehensive Plan future land use designations and Aztec Area Plan character areas are mutually exclusive; Figure A-5 depicts both to provide context on surrounding land uses.

The primary Comprehensive Plan future land use designation in the vicinity of the CEC Corridor is Rural Residential, which denotes areas that have large lots or property with limited and appropriate rural-scale nonresidential uses, such as ranching, agriculture, or commercial (Navajo County 2024).

As with the future land use categories in the Comprehensive Plan, character areas in the Aztec Area Plan are intended to "provide a general framework for development...rather than establish a more precise guide that mirrors a zoning district map" (LVA Urban Design Studio 2011:19). The majority of the CEC Corridor is designated as Rural Edge or Rural Ranch (see Figure A-5). Similar to the Comprehensive Plan Rural Residential category, the purpose of these Aztec Area Plan character areas is the preservation of open character of land for rural uses while also allowing for rural residential development. The Aztec Area Plan encourages utilities and generation facilities in the Rural Edge and Rural Ranch character areas.

Agriculture, Commercial/Office, and Community Village character areas are also present in the CEC Corridor, though to a lesser extent (see Figure A-5). The purpose of the Agricultural character area is to promote agriculture. The Commercial/Office character area is intended to promote a variety of commercial, retail, office, hotels/motels, and other service-related uses that will support the needs of the residential population and employment centers that serve the entire community or region.
The Community Village character area is intended to promote higher density residential development with a mix of related commercial, employment, industrial, institutional, and recreational uses extending from highway corridors and other major roadways. The Sitgreaves Substation and eastern extreme of the CEC Corridor fall within a Powerline Corridor Overlay character area (see Figure A-5), which is intended to promote and encourage future major transmission lines within existing transmission line corridors (LVA Urban Design Studio 2011:20–21).

Due to the size of the Aztec property, the Aztec Area Plan is subdivided into 14 planning areas.
The majority of the CEC Corridor falls within the West Camp and Apache District planning areas, which are divided by State Route 377. The Aztec Area Plan acknowledges the potential for future wind energy development in the West Camp and Apache District planning areas. The northern extreme of the CEC Corridor falls within the Aztec Ranch planning area, which is part of a large, master planned community, which will provide a range of uses for a comprehensive, sustainable community (LVA Urban Design Studio 2011). Though this planning area and the aforementioned Commercial/Office and Community Village character areas exist within the CEC Corridor, associated development has not commenced, and Aztec confirmed development of the West Camp 2 Wind Farm and Gen-Tie Project do not conflict with their Aztec Area Plan and existing land uses (see Attachment A-1).

One of the intents of the Aztec Area Plan is to encourage economic growth in the county (LVA Urban Design Studio 2011:17). Pursuing the economic growth potential afforded by evolving wind energy and battery storage technologies and generation interconnections with the existing regional transmission grid is consistent with that intent of the Aztec Area Plan. Nothing in the Aztec Area Plan precludes the development of the Gen-Tie Project, and the sponsors of the Aztec Area Plan confirmed in a letter to the Applicant that development of the West Camp 2 Wind Farm is consistent with the plan (see Attachment A-1).

Literature Cited

LVA Urban Design Studio. 2011. *Aztec Area Plan, Navajo County, AZ*. Prepared for Aztec Land and Cattle Company, Limited, Aztec Land Company, LLC [and] Aztec Despain Ranch, LLC. Available at: https://www.navajocountyaz.gov/DocumentCenter/View/914/Aztec-Area-Plan-PDF. Accessed June 2025.

Navajo County. 2024. *Navajo County 2050 Comprehensive Plan*. Available at: https://publicinput.com/Customer/File/Full/7651d729-ee5e-4733-ac63-1d3c89b5d8fd. Accessed June 2025.

———. 2025. Zoning Ordinance. Available at: https://www.navajocountyaz.gov/405/Zoning-Ordinance. Accessed June 2025.

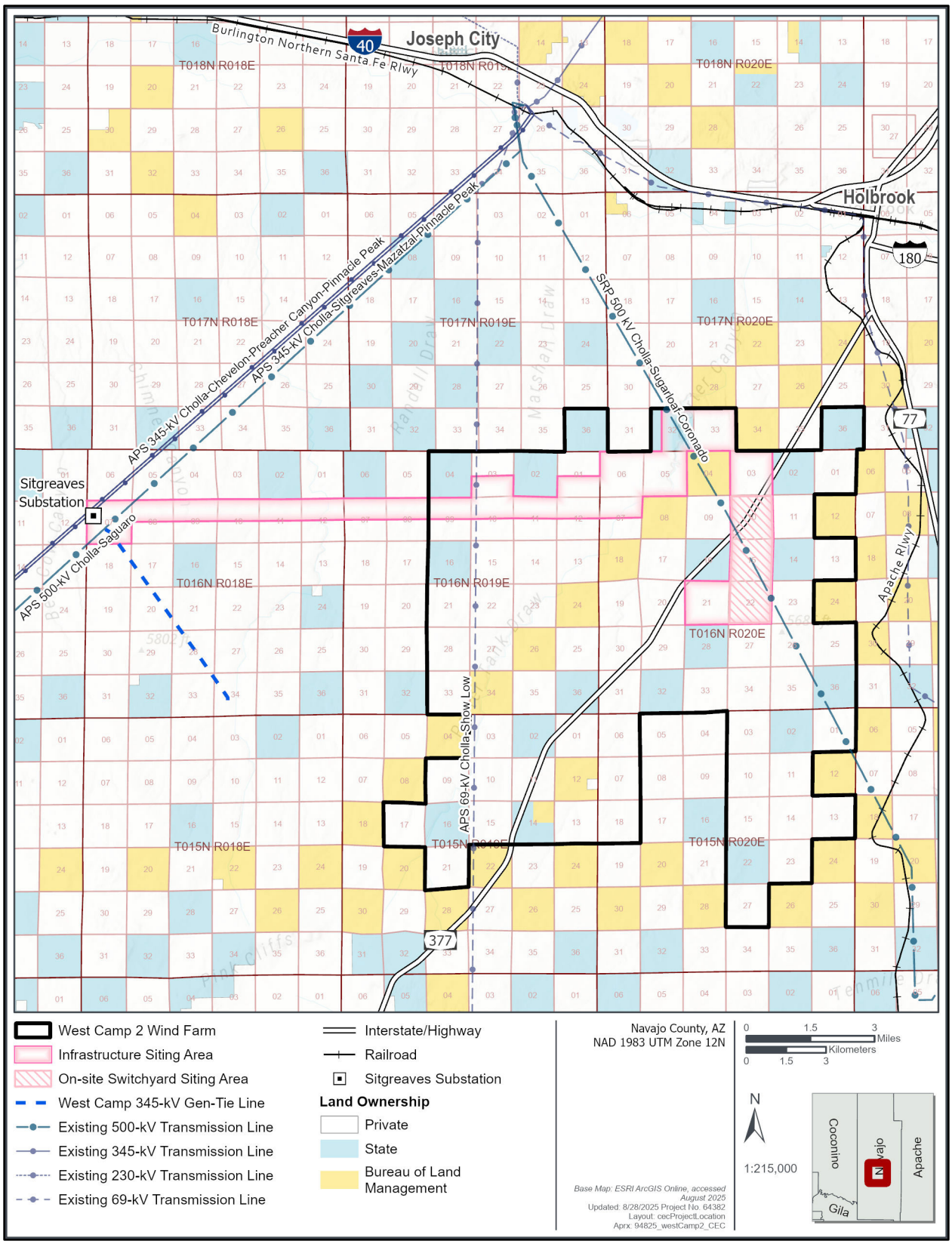

Figure A-1. Gen-Tie Project location.

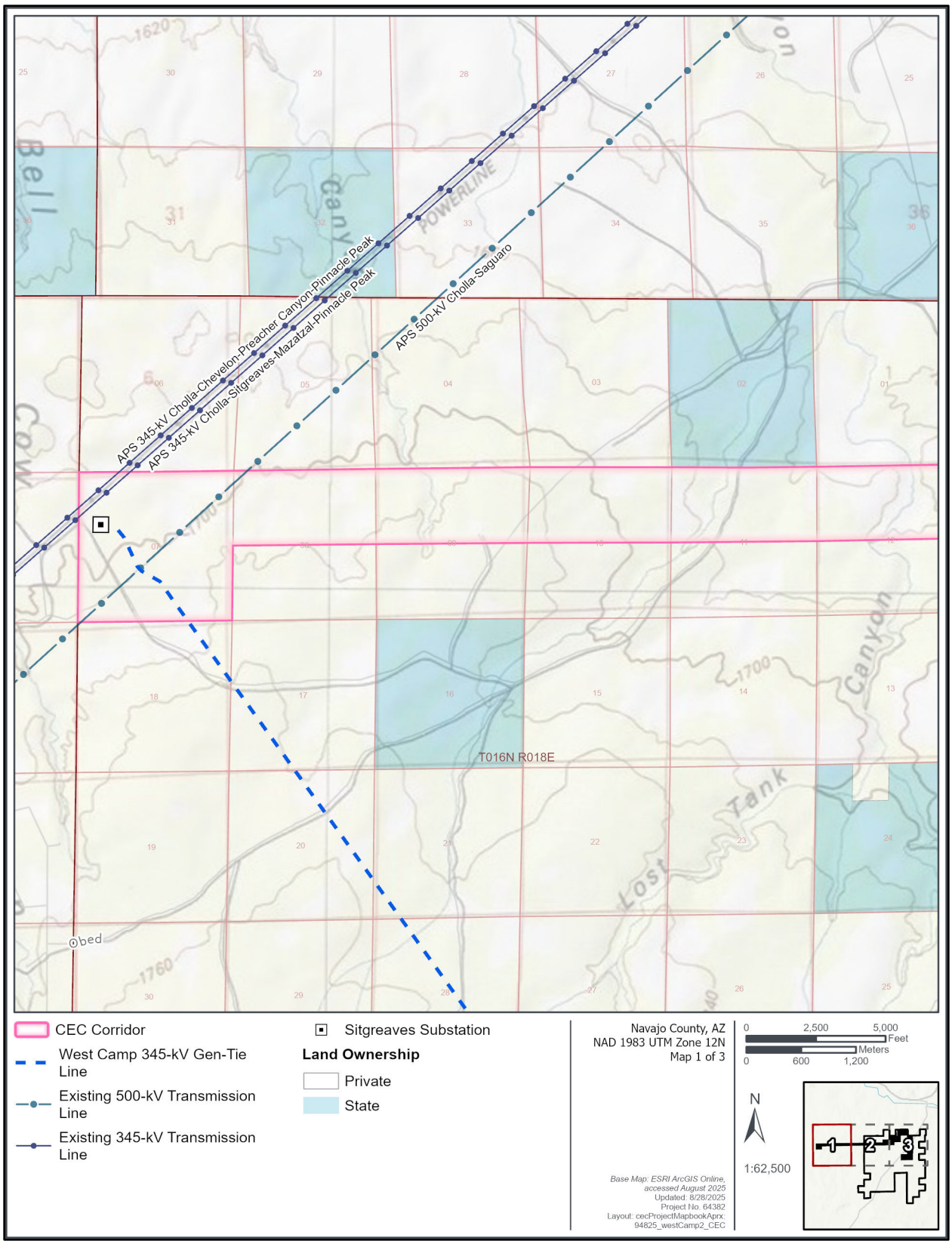

Figure A-2.1. Gen-Tie Project overview.

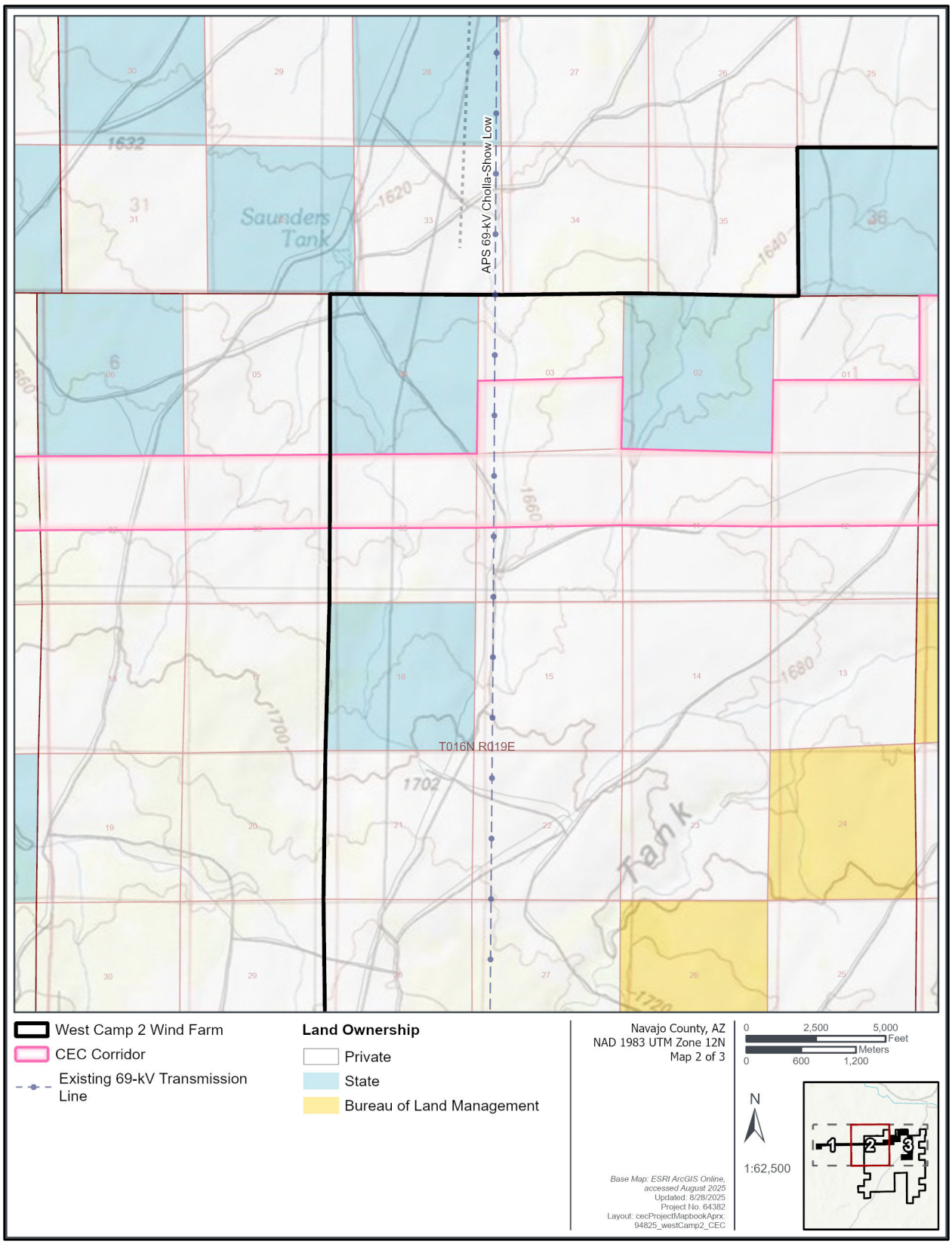

Figure A-2.2. Gen-Tie Project overview.

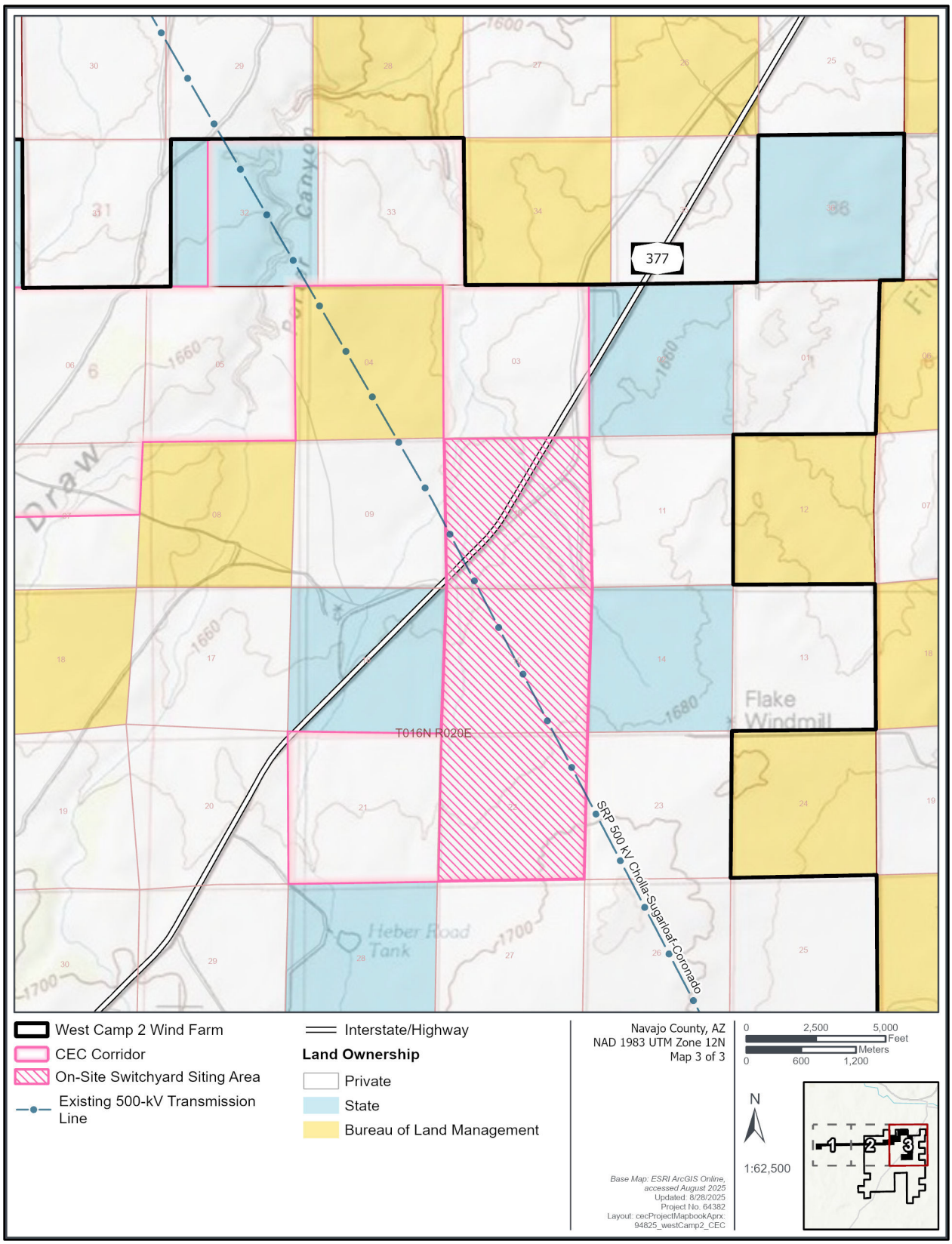

Figure A-2.3. Gen-Tie Project overview.

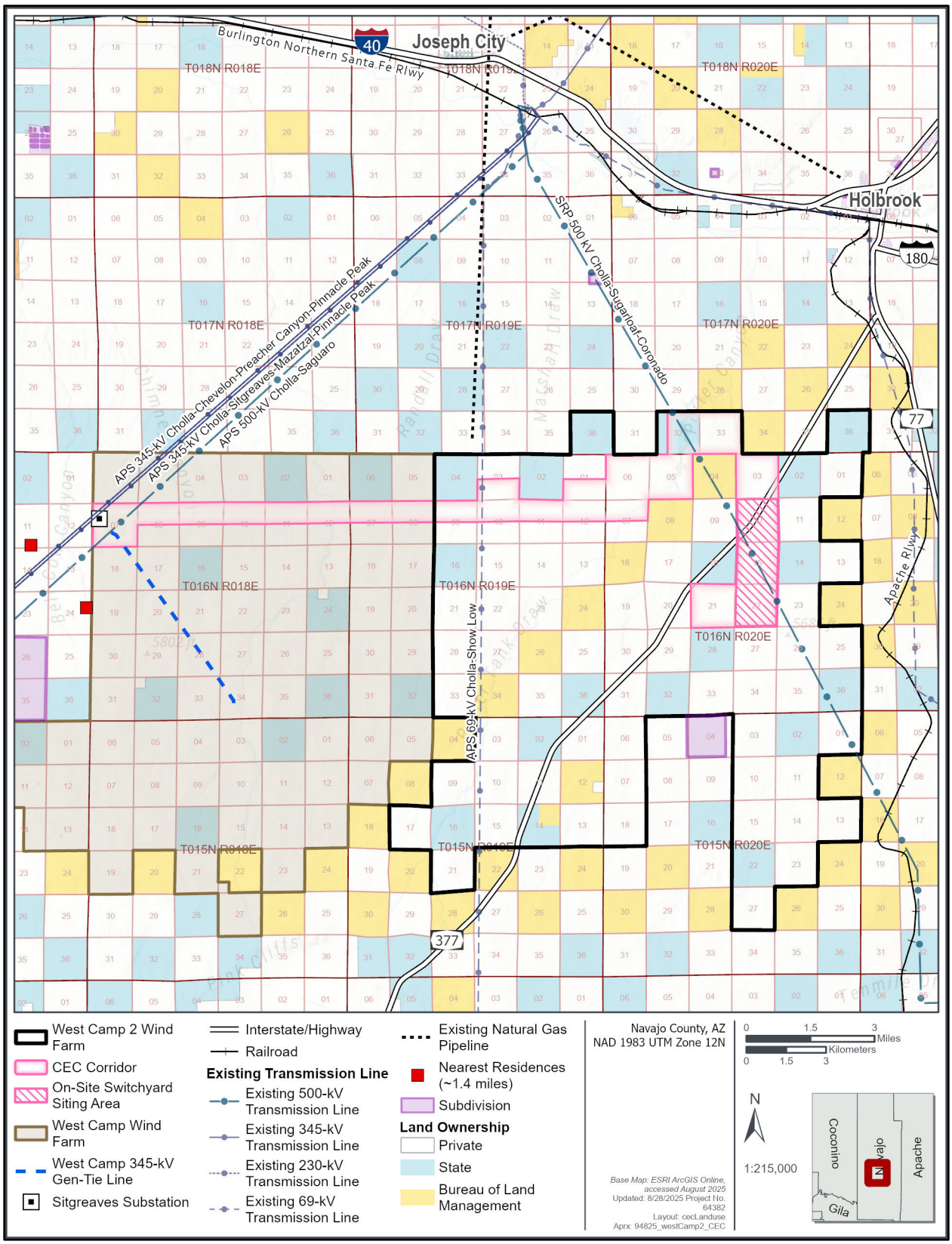

Figure A-3. Gen-Tie Project land use and ownership.

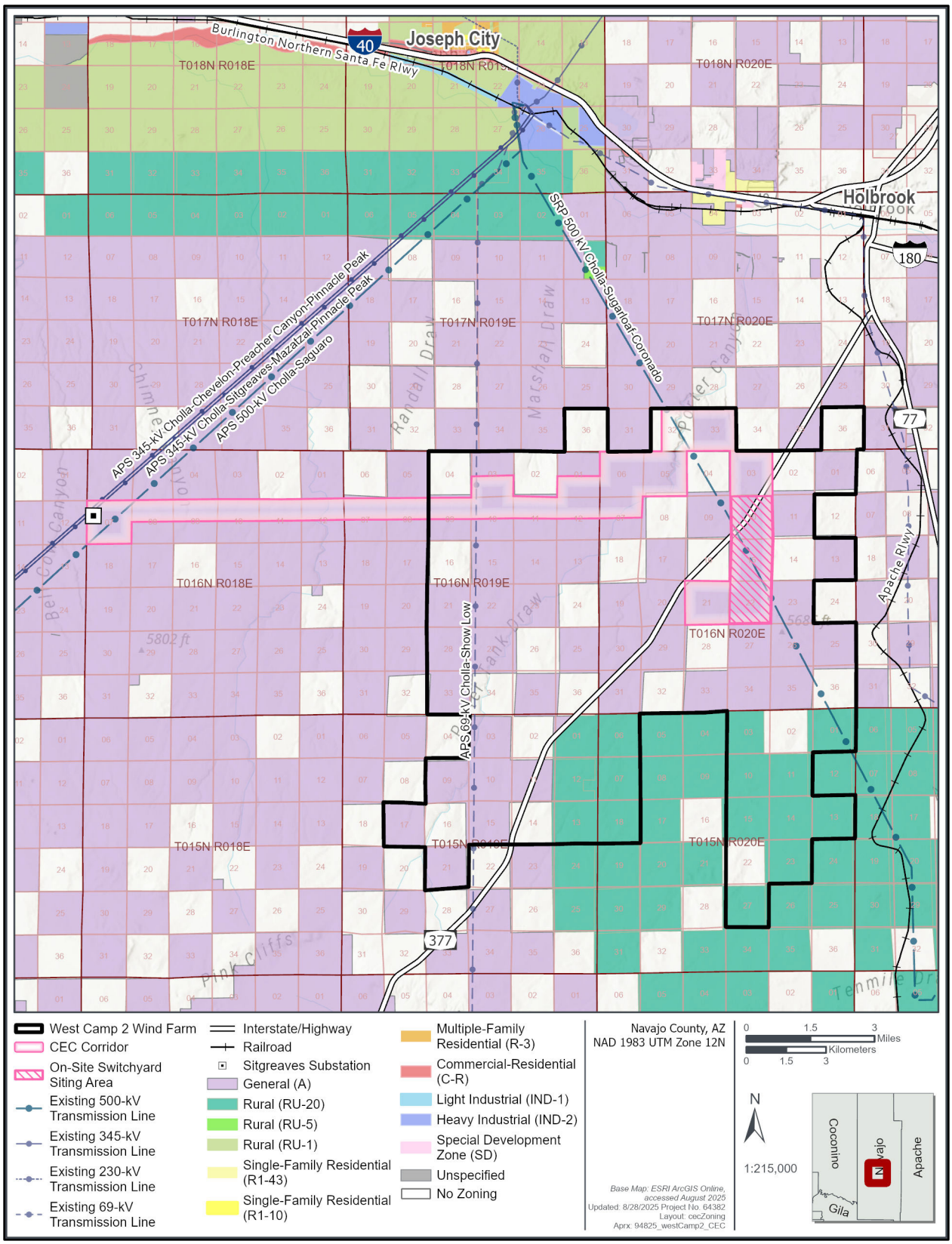

Figure A-4. Gen-Tie Project zoning.

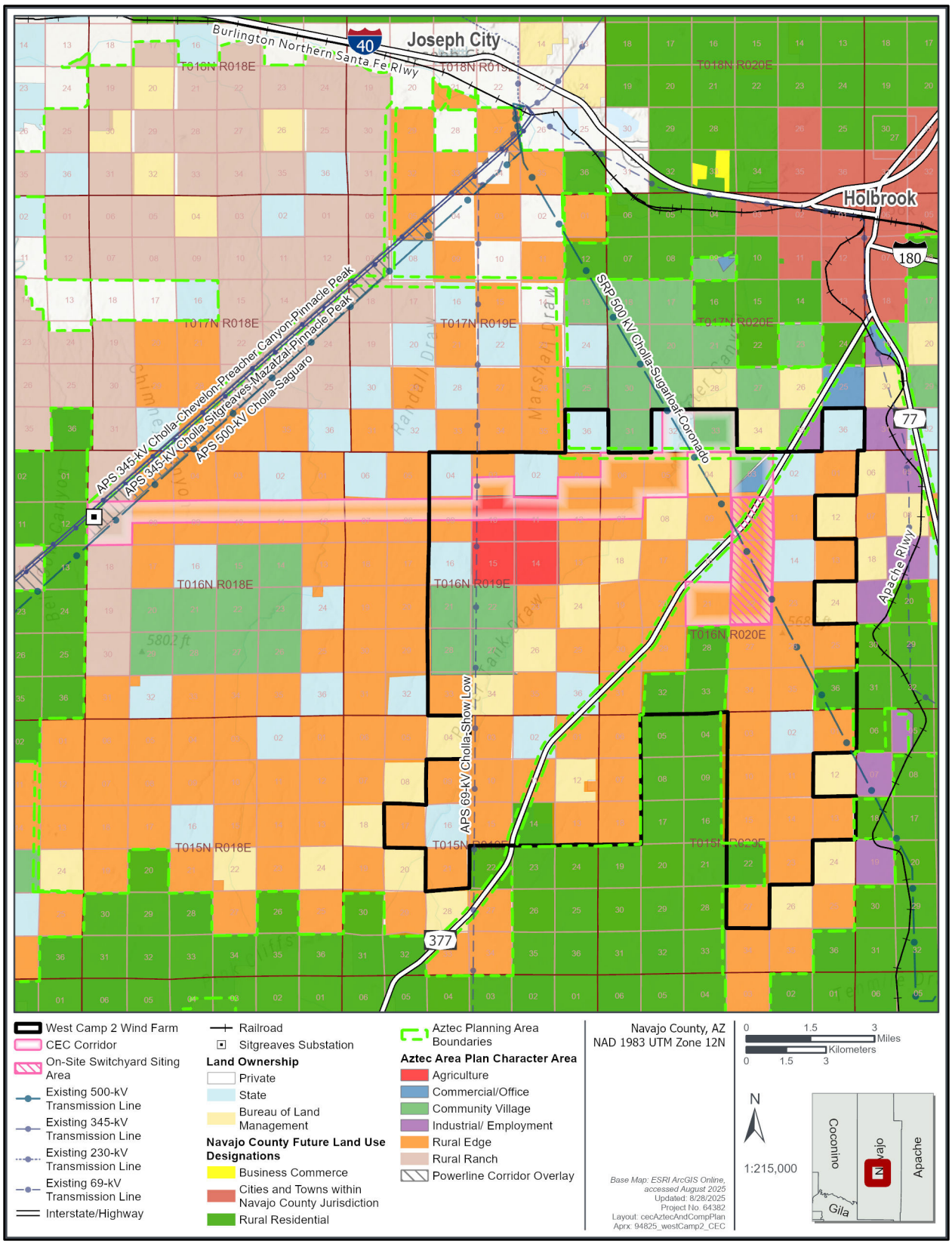

Figure A-5. Gen-Tie Project Navajo County Comprehensive Plan future land uses and Aztec Area Plan character areas.

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EXHIBIT A – ATTACHMENT A-1

Landowner Letter

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AZTEC LAND AND CATTLE COMPANY, LIMITED

INCORPORATED 1884
4647 N. 32nd STREET, NO. 240
PHOENIX, ARIZONA 85018
(623) 772-6222
FAX (623) 772-0145

STEPHEN M. BROPHY
PRESIDENT

August 29, 2025

Mr. Cody Cooper
Navajo County Planning and Zoning
100 West Public Works Drive
PO Box 668
Holbrook, AZ 86025

Re: West Camp 2 Wind Farm

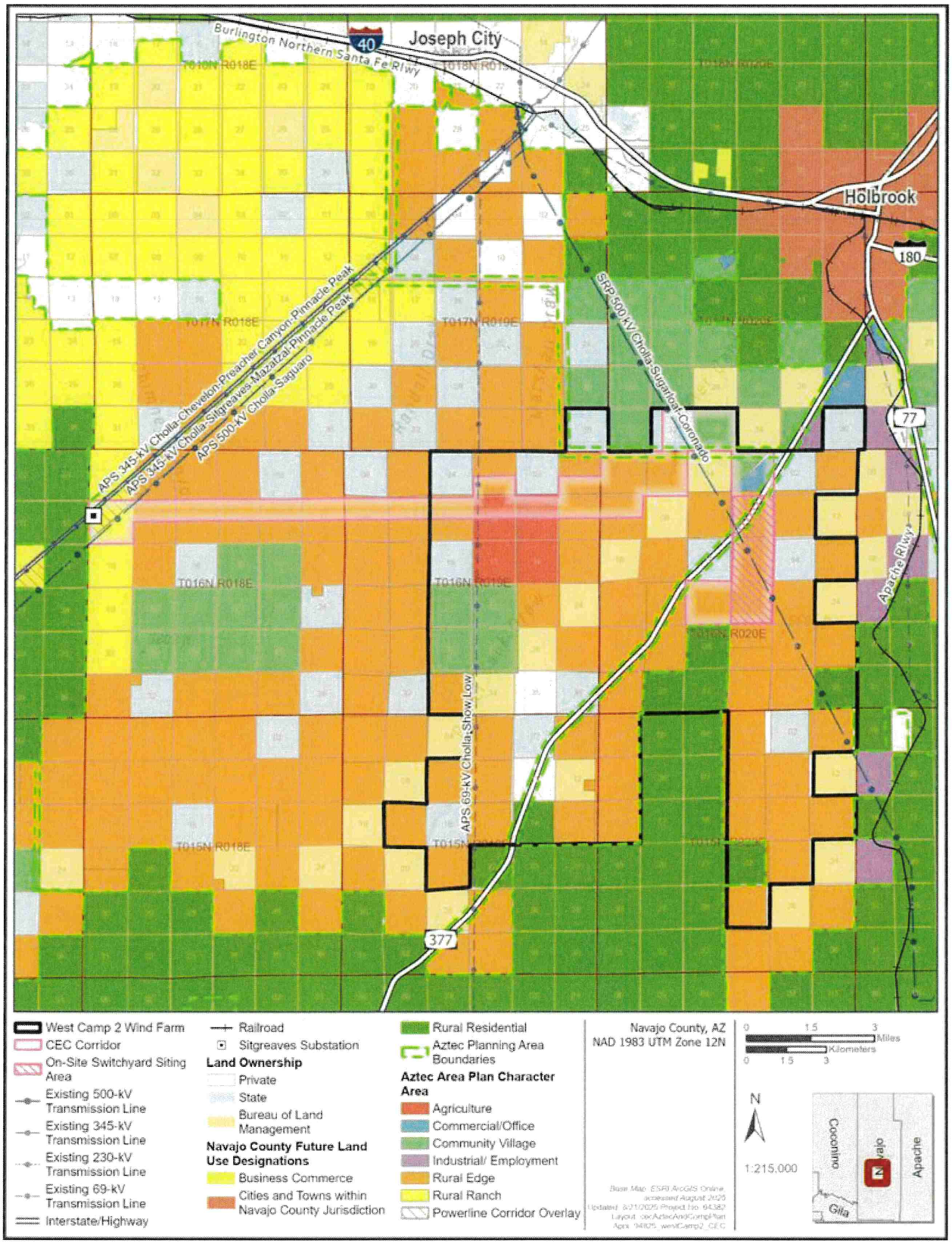
Dear Mr. Cooper,

This letter is written in support of AES's proposed West Camp 2 Wind Farm (the "Project") and its generation-tie line and associated infrastructure (the "Gen-Tie Project"), and to affirm the Project's and Gen-Tie Project's compatibility with the Aztec Area Plan (the "Plan"). The Project is located across 63 sections (~41,200 acres), and the Gen-Tie Project's CEC Corridor is located across 16 ¾ sections (10,975 acres). The majority of the Project area and CEC Corridor are designated as Rural Edge, for which the Aztec Area Plan encourages utilities and generation facilities. Rural Ranch, Agriculture, Commercial/Office, and Community Village character areas are also present in the Project area and CEC Corridor, though to a lesser extent. All Project and Gen-Tie Project sections are located within character areas that both encourage economic development and allow for any zoning designation.

The majority of the Project area and CEC Corridor fall within the West Camp and Apache District planning areas – areas that are currently traversed by power lines and for which the Aztec Area Plan acknowledges the potential for future wind energy. The northern extreme of the Project area and CEC Corridor fall within the Aztec Ranch planning area. Though the Aztec Ranch planning area and the aforementioned Commercial/Office and Community Village character areas exist within the Project area and CEC Corridor, the associated commercial and residential development has not commenced and is not currently contemplated. Therefore, development of the Project and Gen-tie Project is compatible with the Aztec Area Plan and existing land uses. Thank you for your assistance in permitting the Project and please let us know if we can offer additional support or be of further assistance.

Sincerely,

Stephen M. Brophy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APS 345-kV Cholla-Chevelon-Preacher Canyon-Pinnacle Peak
APS 345-kV Cholla-Sitgreaves-Mazatzal-Pinnacle Peak
APS 500-kV Cholla-Saguaro
SRP 500-kV Cholla-Sugarloaf-Coronado
APS 69-kV Cholla-Show Low
Apache Rlwy
West Camp 2 Wind Farm
CEC Corridor
On-Site Switchyard Siting Area
Existing 500-kV Transmission Line
Existing 345-kV Transmission Line
Existing 230-kV Transmission Line
Existing 69-kV Transmission Line
Interstate/Highway
Railroad
Sitgreaves Substation
Land Ownership
Private
State
Bureau of Land Management
Navajo County Future Land Use Designations
Business Commerce
Cities and Towns within Navajo County Jurisdiction
Rural Residential
Aztec Planning Area Boundaries
Aztec Area Plan Character Area
Agriculture
Commercial/Office
Community Village
Industrial/ Employment
Rural Edge
Rural Ranch
Powerline Corridor Overlay
Navajo County, AZ
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Gila
Base Map: ESRI ArcGIS Online, accessed August 2025
Updated: 8/21/2025 Project No. 64382
Layout: cec/AztecAndCompPlan
Apn: 94825_wenCamp2_CEC

EXHIBIT B

Environmental Studies

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EXHIBIT B. ENVIRONMENTAL STUDIES

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *Attach any environmental studies which applicant has made or obtained in connection with the proposed site(s) or route(s). If an environmental report has been prepared for any federal agency or if a federal agency has prepared an environmental statement pursuant to Section 102 of the National Environmental Policy Act, a copy shall be included as a part of this exhibit.*

Introduction

The Applicant's consultant, SWCA Environmental Consultants, began conducting environmental studies at the proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) site in 2019. All Gen-Tie Project infrastructure will be within the Certificate of Environmental Compatibility (CEC) Corridor, which crosses through the West Camp Wind Farm and West Camp 2 Wind Farm (see Figure A-3 of Exhibit A). The West Camp 2 Wind Farm was initially studied under the name Hot Air Wind and was renamed by the Applicant in 2024. Both the West Camp Wind Farm and West Camp 2 Wind Farm project areas have been studied in accordance with their respective preconstruction survey plans, which were developed in coordination with state and federal wildlife agencies. All studies for the West Camp Wind Farm portion of the CEC Corridor have been completed; however, some studies for the West Camp 2 Wind Farm portion of the CEC Corridor are still in progress (Table B-1). Completed reports are either attached to this exhibit or are included in subsequent exhibits as indicated in Table B-1. Ongoing and planned West Camp 2 Wind Farm wildlife studies are described in the *Preconstruction Wildlife Survey Plan for the Proposed Hot Air Wind Energy Project*, which is provided in this exhibit as Attachment B-3.

No federal permitting or other federal nexus requiring compliance with the National Environmental Policy Act is anticipated for the Gen-Tie Project; thus, no environmental report or environmental statement has been prepared for or by any federal agency.

Table B-1. Completed, Ongoing, and Planned Environmental Studies

Environmental Study	Study Status*	Location in CEC Application
Wetlands and Other Waters of the United States Delineation Desktop Review	WC – Completed WC2 – Planned	Exhibit B, Attachment B-1 and discussion below
Wildlife Site Characterization	WC – Completed WC2 – Completed	Exhibit B, Attachment B-2
Preconstruction Wildlife Survey Plan: • Eagle and other large bird use surveys • Small bird use surveys • Eagle nest surveys • Non-eagle species nest surveys • Bat acoustic surveys	WC – Completed WC2 – Completed	Exhibit B, Attachment B-3
Phase I Environmental Site Assessment	WC – Completed WC2 – Planned	See discussion below
Cultural Resources	WC – Completed WC2 – Planned	See Exhibit E and discussion below
Land Use	Completed	See Exhibit A

Environmental Study	Study Status*	Location in CEC Application
Visual Resources	Completed	See Exhibit E
Recreation	Completed	See Exhibit F
Noise and Interference	Completed	See Exhibit I

* WC = West Camp Wind Farm; WC2 = West Camp 2 Wind Farm

Completed Studies

Wetlands and Other Waters of the United States Delineation Desktop Review

A desktop review of wetlands and other waters of the United States (WOTUS) was completed for the West Camp Wind Farm in June 2022. The memorandum summarizing the results of the initial desktop review and outlining future steps to be taken in the delineation process is appended to this exhibit as Attachment B-1. Following the desktop evaluation, a field delineation of the West Camp Wind Farm turbine corridors was conducted in May 2023 and September 2023. The memorandum identified potential WOTUS within the West Camp Wind Farm, which includes the western portion of the CEC Corridor, and a subset of these potential WOTUS were delineated within the turbine corridors.

Wildlife Site Characterization

A Wildlife Site Characterization was completed for the West Camp Wind Farm and West Camp 2 Wind Farm in coordination with the Arizona Game and Fish Department (AZGFD) and the U.S. Fish and Wildlife Service (USFWS) to gather existing information about the wildlife community potentially using the site and to identify additional data collection or information needs. The report for the West Camp Wind Farm was completed in June 2022, and the report for the West Camp 2 Wind Farm (known at that time as Hot Air Wind) was completed in December 2021. Both reports are appended to this exhibit as Attachment B-2.

Preconstruction Wildlife Survey Plan

A Preconstruction Wildlife Survey Plan was prepared for the West Camp Wind Farm and West Camp 2 Wind Farm in coordination with the AZGFD and USFWS. The plan for West Camp Wind Farm was completed and delivered to wildlife agencies in April 2022, and the plan for West Camp 2 Wind Farm (known at that time as Hot Air Wind) was completed and delivered to wildlife agencies in May 2021. The plans, which are appended to this exhibit as Attachment B-3, describe the methods for site-specific preconstruction wildlife surveys, which are now complete. Studies addressed in each report include the following:

- Eagle and other large bird use surveys
- Small bird use surveys
- Eagle nest surveys
- Non-eagle species nest surveys
- Bat acoustic surveys

These surveys have been completed for both the West Camp Wind Farm and the West Camp 2 Wind Farm and were conducted according to the methods presented in each project's Preconstruction Wildlife Survey Plan.

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (Phase I ESA) is performed to assess the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property that may present risks of harm to public health or the environment. Phase 1 ESAs satisfy part of the due diligence requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on Comprehensive Environmental Response, Compensation, and Liability Act liability for a commercial transaction. The Applicant completed its most recent Phase 1 ESA for the West Camp Wind Farm in June 2025. The assessment found no recognized environmental conditions (RECs), controlled RECs, or significant data gaps in connection with the subject property.

Cultural Resources

A Class I cultural resources records review identified one historic structure and 15 archaeological sites within the CEC Corridor. The results of this search are described in greater detail in Exhibit E. Data from this review will be used during the siting of the Gen-Tie Project, and the Applicant will consult with Arizona State Historic Preservation Office (SHPO) regarding the Gen-Tie Project.

Planned Studies

The studies discussed below are planned for the eastern portion of the CEC Corridor, which lies within the West Camp 2 Wind Farm project area (see Figure A-1 in Exhibit A).

Wetlands and Other Waters of the United States Delineation Desktop Review

A wetland review and delineation (similar to that conducted for the West Camp Wind Farm) of any potential WOTUS is planned for the West Camp 2 Wind Farm (including its portion of the CEC Corridor) prior to commencement of construction. If potentially jurisdictional wetlands or waters are identified, documentation to address permitting requirements for potential project impacts to these resources will be prepared.

Phase I Environmental Site Assessment

The Applicant will complete a Phase I ESA for the West Camp 2 Wind Farm (including its portion of the CEC Corridor) prior to commencement of construction.

Cultural Resources

An archaeological survey, consistent with Arizona SHPO and Navajo County ordinances, will be conducted prior to commencement of construction of the Gen-Tie Project. The archaeological survey for the Gen-Tie Project will be based on the outcome of consultation with the SHPO regarding the Gen-Tie Project.

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EXHIBIT B – ATTACHMENT B-1

Wetlands and Other Waters of the United States Delineation Desktop Review of the West Camp Wind Farm

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ENVIRONMENTAL CONSULTANTS
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Tucson Office
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Tucson, AZ 85701
Tel 520.325.9194 Fax 520.325.2033
www.swca.com

Technical Memorandum

To: Robert Gardner
West Camp Wind Farm, LLC
282 Century Place #2000
Louisville, Colorado 80027

From: Russell Waldron, Senior Clean Water Act Specialist

Date: June 20, 2022

Re: **Wetlands and Other Waters of the U.S. Delineation Desktop Review of the West Camp Wind Farm Study Area in Navajo County, Arizona / SWCA Project No. 64382.01 / Special Land Use Permit No. (TBD)**

INTRODUCTION

West Camp Wind Farm, LLC, a wholly owned subsidiary of The AES Corporation, is proposing to develop a maximum 500-megawatt wind energy facility and associated generation-tie transmission line within Navajo County, Arizona. SWCA Environmental Consultants (SWCA) completed a desktop classification of the surface water features that would be potentially jurisdictional waters of the U.S. (WOTUS) to be used during the initial design of the West Camp Wind Farm (project). The project area (hereafter, study area) consists of the wind farm boundary and generation-tie transmission line route options (Figure 1). The northern boundary of the approximate 53,000-acre study area is located about 9 miles south of Joseph City (Figure 1). The study area consists of all of Sections 1–36, Township 16 North, Range 18 East; Sections 5–8, 17–20, and 29–32, Township 16 North, Range 19 East; Sections 5–7, Township 15 North, Range 19 East; Sections 1–19, 21, 22, 23, and 27, Township 15 North, Range 18E East; and Sections 1–3 and 10–14, Township 15 North, Range 17 East, of the Gila Salt River Baseline and Meridian (Figure 2). Landownership in the study area is a mixture of privately owned lands and Arizona State Trust lands administered by the Arizona State Land Department (ASLD) (Figures 1 and 2).

The project disturbance footprint—the area encompassing proposed project infrastructure—will be approximately 5% or less of the total study area. Project components will include up to 104 wind turbine generators, meteorological towers, 34.5 kV underground collector lines, a generation-tie transmission line and associated substations and switchyard facilities, a battery storage facility, an operations and maintenance building and laydown yard, and access roads. The wind turbines and associated components will be sited on private and Arizona State Trust lands. The generation-tie transmission line and associated facilities will be sited on private lands.

This desktop review of potential wetlands and other WOTUS was completed as part of a due diligence effort to determine an initial extent of the U.S. Army Corps of Engineers' (USACE's) jurisdiction under Section 404 of the Clean Water Act (CWA) within the study area and identify the Section 404 permitting options and requirements, if any, for the project.

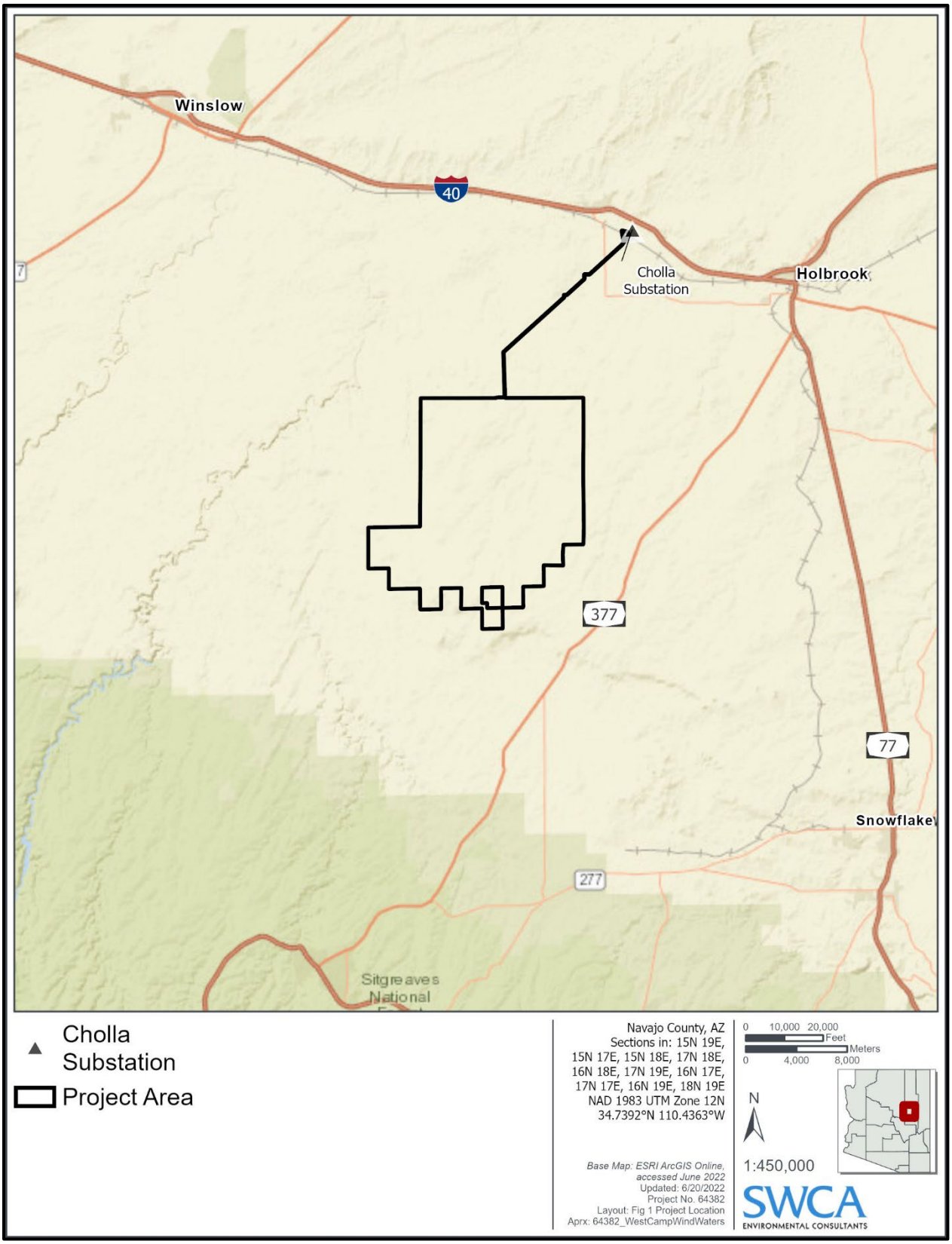

Figure 1. General project location.

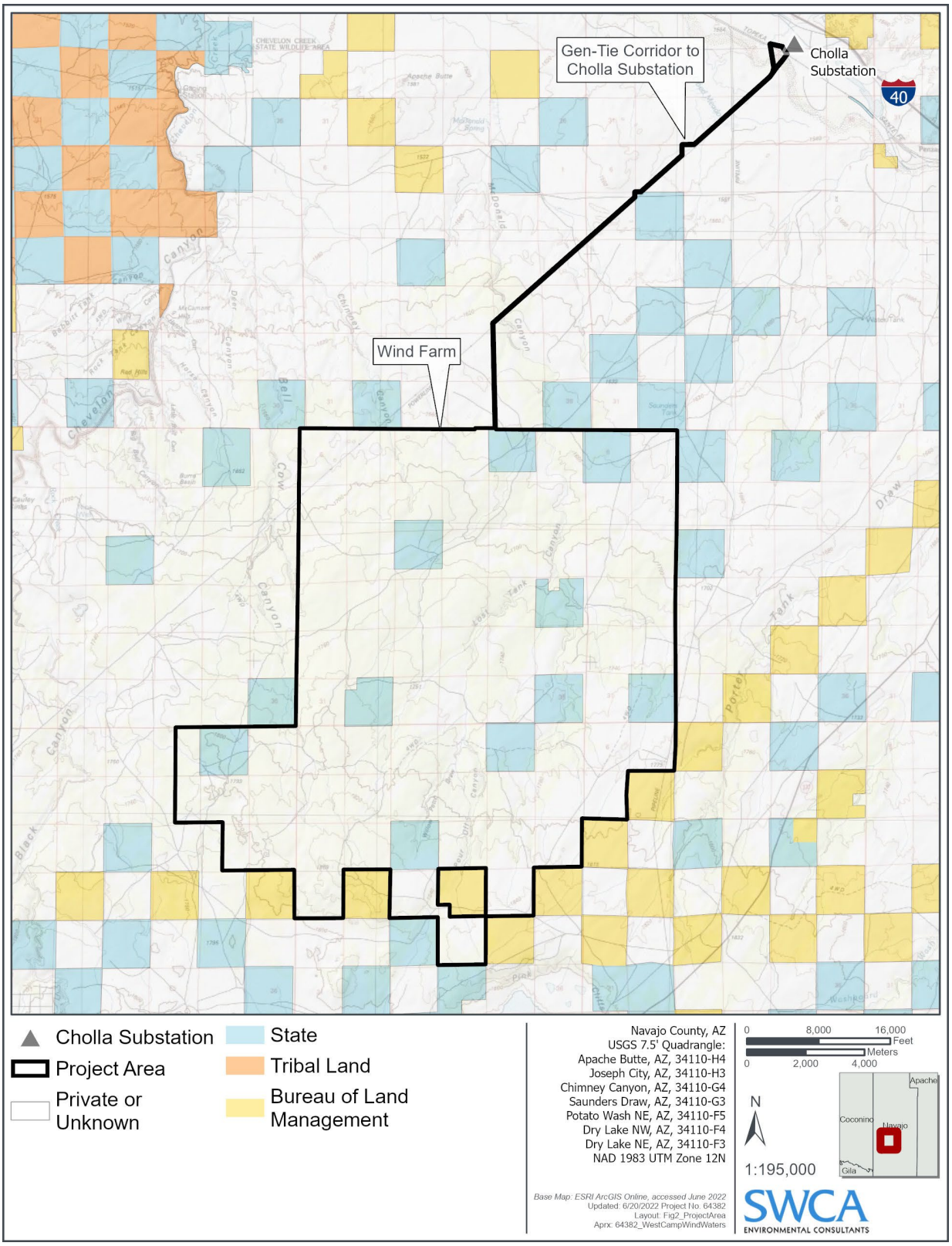

Figure 2. Project location.

METHODS

SWCA personnel completed a desktop review of the study area to identify potential WOTUS, including wetlands and other special aquatic sites as defined under the CWA,[1] by accessing public databases and studies to identify previously mapped surface water features in the study area. The following data sources were accessed:

- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) modeled flowlines
- U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) modeled surface water features
- USGS Watershed Boundary Dataset
- USGS provisional digital land cover map for the southwestern United States
- Natural Resources Conservation Service (NRCS) Soil Survey data for the survey area
- Google Earth aerial imagery
- USGS topographic maps
- Federal Emergency Management Agency (FEMA) floodplain insurance rate maps
- SWCA report dated May 2022 and entitled *Wildlife Site Characterization for the West Camp Wind Farm, Navajo County, Arizona*

RESULTS

Project and Study Area Setting

The study area is within the Arizona/New Mexico Plateau Level 3 ecoregion[2] at elevations between approximately 5,000 and 6,100 feet. It is within the Grand Canyon physiographic section of the Colorado Plateau province[3] in northern Arizona. Topography at the site is generally characterized by flat to rolling terrain. Several shallow canyons are present across the site, generally oriented north-south.

Land uses in the study area include cattle ranching/grazing and hunting. Obed Road to the north and Hutch Road off State Route 377 to the east provide access to the site. Established two-track dirt roads are present throughout the study area.

Vegetation

The study area is within the Great Basin Conifer Woodland and Plains and Great Basin Grassland biotic communities[4]. Six dominant land/vegetation cover types are mapped by USGS within the study area: Inter-Mountain Basins (IMB) Semi-Desert Grassland Colorado Plateau Pinyon-Juniper Woodland, , IMB Juniper Savanna, IMB Semi-Desert Shrub Steppe, Colorado Plateau Mixed Low

[1] United States Code Title 33 Part 328.3(a).

[2] U.S. Environmental Protection Agency. 2011. EPA Ecoregions of the United States – Level III. Available at: https://databasin.org/datasets/ff7444d321c14e6da2e4ede30452798a. Accessed February 2022.

[3] Fenneman, N.M., and D.W. Johnson. 1946. Physiographic divisions of the conterminous U.S. Reston, Virginia: US. Geological Survey. Available at: https://water.usgs.gov/GIS/metadata/ usgswrd/XML/physio.xml. Accessed February 2022.

[4] Brown, D.E. (ed.). 1994. *Biotic Communities: Southwestern United States and Northwestern Mexico*. Salt Lake City: University of Utah Press.

Sagebrush Shrubland, and IMB Greasewood Flat[5]. Eight other land-vegetation cover types are also mapped by USGS.

The study area is dominated by graminoids and forbs with an open shrub and tree layer. Denser juniper woodlands are present, particularly along drainages and in the northeastern portions of the study area. The dominant juniper species observed is oneseed juniper (*Juniperus monosperma*), with occasional twoneedle pinyon pines (*Pinus edulis*) interspersed. Large sections of the pinyon/juniper woodland have been treated in an effort to revert the landscape back to grassland. In addition to the reclaimed grassland areas, there are also natural grasslands present, primarily on the southeastern side of the study area. Characteristic grasses found throughout the area include mesa dropseed (*Sporobolus flexuosus*), sand dropseed (*Sporobolus cryptandrus*), spike dropseed (*Sporobolus contractus)*, blue grama (*Bouteloua gracilis*), sideoats grama (*Bouteloua curtipendula*), and ring muhly (*Muhlenbergia torreyi*). Shrubs observed include fourwing saltbush (*Atriplex canescens*), winterfat (*Krascheninnikovia lanata*), snakeweed (*Gutierrezia* sp.), Fremont's mahonia (*Mahonia fremontii*), Bigelow sage (*Artemisia bigelovii*), jointfir (*Ephedra* spp.), globemallow (*Sphaeralcea* spp.), Stansbury cliffrose (*Purshia stansburiana*), prickly Russian thistle (*Salsola tragus*), Whipple cholla (*Cylindropuntia whipplei*), narrowleaf yucca (*Yucca angustissima*), banana yucca (*Yucca baccata*), and pricklypear (*Opuntia* spp.).

Soils

Sixteen soil map units are mapped within the study area (Table 1). Soil components forming these units are mostly classified as well drained, with two being classified as excessively drained; none of the soils within these mapped units meet hydric criteria.

Table 1. Soil Units within the Study Area

Soil Unit	Acres (%)
Pensom-Chedeski complex, 1 to 5 percent slopes	16506.0 (31.3)
Leanto-Bisoodi complex, 1 to 12 percent slopes	11945.8 (22.6)
Mellenthin-Rock outcrop complex, 1 to 20 percent slopes	7243.0 (13.7)
Rock outcrop-Arches complex, 2 to 30 percent slopes	5203.9 (9.9)
Rock outcrop-Needle complex, 1 to 10 percent slopes	3917.3 (7.4)
Bisoodi fine sandy loam, 1 to 8 percent slopes	2628.0 (5.0)
Epikom channery sandy loam, 1 to 12 percent slopes	2506.2 (4.8)
Kech fine sandy loam, 1 to 12 percent slopes	864.5 (1.6)
Kech-Rock outcrop complex, 1 to 20 percent slopes	801.1 (1.5)
Leanto-Bisoodi-Rock outcrop complex, 1 to 20 percent slopes	406.5 (0.8)
Tours clay loam, 1 to 3 percent slopes	176.7 (0.3)
Radnik silt loam, 0 to 3 percent slopes	141.1 (0.3)
Cerrillos-Ubank complex, 1 to 8 percent slopes	114.2 (0.2)
Nuffel silt loam, 0 to 3 percent slopes	101.7 (0.2)
Cerrillos sandy loam, 1 to 10 percent slopes	69.6 (0.1)
Purgatory fine sandy loam, 1 to 8 percent slopes	45.2 (0.1)

[5] U.S. Geological Survey (USGS). 2016. Southwest Regional Gap Analysis Project. Available at: http://swregap.org/. Accessed February 2022.

Soil Unit	Acres (%)
Navajo silty clay, saline-sodic, 0 to 1 percent slopes	23.3 (< 0.1)
Ives fine sandy loam, wet, 0 to 1 percent slopes	16.6 (< 0.1)
Barx fine sandy loam, 3 to 10 percent slopes	13.9 (< 0.1)
Medisaprists, saline, 0 to 1 percent slopes	10.3 (< 0.1)
Jocity sandy clay loam, saline-sodic, 0 to 1 percent slopes	8.6 (< 0.1)
Tours silty clay loam, saline-sodic, 0 to 1 percent slopes	7.9 (< 0.1)
Riverwash-Typic Torrifluvents complex, 0 to 5 percent slopes	2.3 (< 0.1)

Source: NRCS (2022) soil unit data.[6]

Hydrology

The majority of the study area lies within the 209,616-acre McDonald Canyon-Little Colorado Watershed (10-digit Hydrologic Unit Code 1502000806), as defined by the USGS National Watershed Boundary Dataset.[7] Portions of the remaining study area lie in an additional four surrounding watersheds (Lower Chevelon Canyon, Black Canyon, Phoenix Park Wash-Dry Lake, and Porter Tank Draw-Little Colorado River). The study area is indicated on five FEMA Flood Insurance Rate Map (FIRM) panels (04017C3525E, 04017C3550E, 04017C3725E, 04017C3750E, and 04017C37275E) and lies within Zone X, areas of minimal flood hazard, except along select drainages which contain relatively narrow and linear areas mapped as Zone A, areas with a 1% flood hazard without base flood elevations.[8] The average annual precipitation from 2002 to 2021 for the nearby Winslow Airport, Arizona, was 6.07 inches.[9]

Notable water features within the region include the Little Colorado River just south of Joseph City, which is approximately 9 miles north of the wind farm area at the northern end of the generation-tie corridor, and Silver Creek, approximately 15 miles to the east of the study area. Chevelon Creek is approximately 4 miles from the northwest corner of the study area and Dry Lake is approximately 1.5 miles to the south. The general flow pattern across the study area is south to north towards the Little Colorado River.

The USFWS NWI dataset identified modeled surface water features within the study area, including approximately 8.8 acres of freshwater ponds and approximately 303.6 acres of riverine features. The NHD review indicated approximately 126.6 miles of modeled ephemeral linear flowlines and approximately 8.6 acres of waterbodies within the study area (Table 2). All the NHD flowlines within the study area are associated with NWI riverine features and all but one of NHD waterbodies are associated with NWI freshwater ponds (Figures 3 and 4).

[6] Natural Resources Conservation Service. 2022. Custom soil resource report for Coconino County Area, Arizona, Central Part. Report generated using online database available at: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm. Accessed May 2022.

[7] U.S. Geological Survey (USGS). 2022. National Watershed Boundary Dataset. Available at: https://nhd.usgs.gov/wbd.html. Accessed May 2022.

[8] Federal Emergency Management Agency. 2022. FEMA Flood Map Service Center. Available at https://msc.fema.gov/portal/home. Accessed May 2022.

[9] National Oceanic and Atmospheric Administration. 2022. Applied Climate Information System. Available at: http://agacis.rcc-acis.org/. Accessed May 2022.

Table 2. NWI and NHD Features within the Study Area

NWI Code[10] or NHD Feature Type	Code Translation	Quantity within Study Area	Associated Feature(s)
R4SBC	Riverine, intermittent, streambed, seasonally flooded	236.8 acres	Ephemeral drainages
R4SBJ	Riverine, intermittent, streambed, intermittently flooded	63.7 acres	Ephemeral drainages
R4SBA	Riverine, intermittent, streambed, temporarily flooded	2.2 acres	Little Colorado River
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	0.8 acres	Livestock tanks
PUSAh	Palustrine, unconsolidated shore, temporarily flooded, diked/impounded	1.3 acres	Livestock tanks
PUSAx	Palustrine, unconsolidated shore, temporarily flooded, excavated	0.4 acres	Livestock tanks
PUSJh	Palustrine, unconsolidated shore, intermittently flooded, diked/impounded	7.1 acres	Livestock tanks
Flowline	Ephemeral stream/river or artificial path	126.6 miles	Ephemeral drainages
Waterbody	Intermittent lake/pond	8.6 acres	10 livestock tanks, 9 named and 1 unnamed

The R5UBH NWI features are mapped as "unknown perennial"; however, no perennial surface water features or sources (such as springs or seeps) were observed within the study area during biological site reconnaissance visits conducted between October 2019 through September 2021 and January 2022[11]. There are potential wetlands in the study area in the form of freshwater ponds constructed along the ephemeral drainages to capture stormwater flows for livestock use (e.g., Chamise Tank and Big Oil Well Tank) and drainages (e.g., Lost Tank Canyon and Pour Off Canyon). The R5UBH NWI features are associated with the inlets and outlets of the livestock tanks in the study area, including White Tank, Lower Bigler Tank, Red Tank, and others. During the biological site reconnaissance visit, SWCA noted that these stock tanks lack shrub/tree riparian vegetation and all but one lacked emergent wetland vegetation. Cement Tank, on the east side of the study area, is formed by a cement revetment damming a shallow, narrow canyon that flows intermittently. Senescent rushes (*Juncus* spp.) were observed during the biological site reconnaissance visit, indicating that riparian vegetation may grow at this location seasonally, primarily after summer monsoon storms.

[10] Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, North Dakota: Northern Prairie Wildlife Research Center Home Page. Available at: http://www.npwrc.usgs.gov/resource/1998/classwet/classwet.htm (Version 04DEC98). Accessed May 2022.

[11] SWCA 2022, *Wildlife Site Characterization for the West Camp Wind Farm, Navajo County, Arizona*. June 2022. SWCA Environmental Consultants, Flagstaff, Arizona.

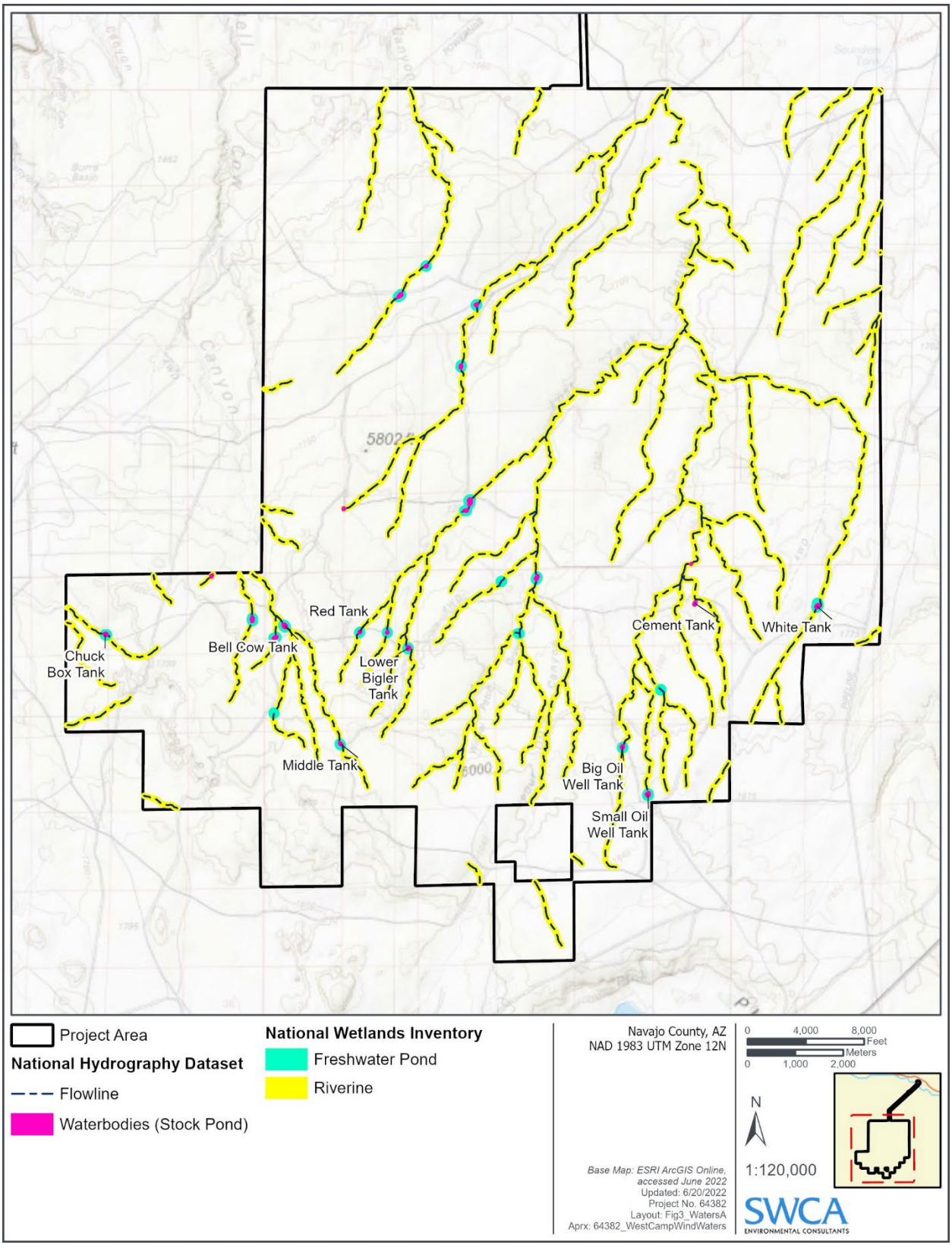

Figure 3. NHD and NWI surface water features in the Study Area.

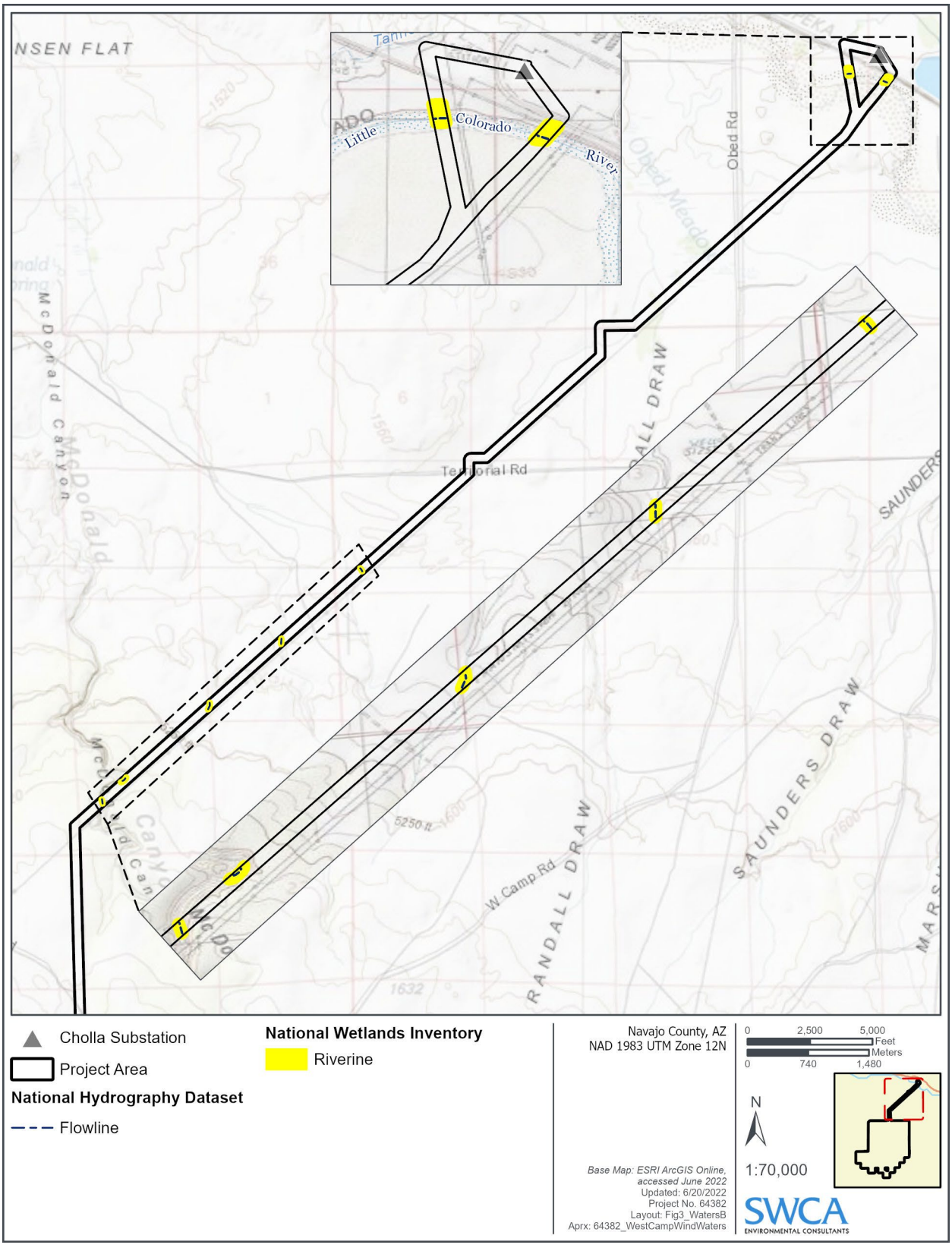

Figure 4. NHD and NWI surface water features intersecting the generation-tie transmission line corridor.

Potentially Jurisdictional Wetlands and Other Waters of the US

The results of the desktop research indicated that there are ephemeral surface water features present in the study area that may be potentially jurisdictional WOTUS. The livestock tanks and R5UBH features associated with the ephemeral streams in the study area would likely be non-jurisdictional if they are manmade features constructed entirely in uplands. However, if it can be shown that any one of the tanks exhibit all three USACE indicators of wetlands; specifically, a dominance of hydrophytic vegetation, wetland hydrology, and development of hydric soil, that tank would likely be considered jurisdictional.

CLEAN WATER ACT SECTION 404 PERMITTING OVERVIEW

CWA Section 404 permitting is a two-step process. The first step is to determine the geographic area of the USACE jurisdiction (i.e., WOTUS) as described above. If the surface water features on a project area are determined not to be WOTUS (i.e., no features within the geographical jurisdiction of the USACE) by the USACE through a standalone written jurisdictional determination, then Section 404 does not apply and there is no need to proceed to the second (i.e., permitting) step. There are two types of jurisdictional determinations: an approved jurisdictional determination (AJD) and a preliminary jurisdictional determination (PJD). Under an AJD, surface water features must display an ordinary high water mark (OHWM) and have a significant nexus on the nearest downstream traditional navigable water (TNW) in order to be considered a WOTUS and subject to CWA Section 404 permitting regulations. Under a PJD, surface water features must only display an OHWM, and connectivity or nexus to the nearest downstream TNW is not a consideration; in effect the USACE and applicant agree, for streamlined Section 404 permitting purposes, on the geographic limits of the USACE jurisdiction.

The second step, if there are WOTUS identified under step one, is to determine the type of Section 404 Permit (standard individual permit or nationwide permit [NWP]) required by type, location, and amount of unavoidable project-related fill activities to WOTUS features. If project-related fill activities result in permanent impacts (i.e., loss) of greater than 0.5 acre of WOTUS (below the plane of the OHWM) for the entire project area, then a standard individual permit would be required and an applicant would need to provide significant documentation to prepare an environmental assessment, including an alternatives analysis that presents the proposed action as the least environmentally damaging practicable alternative. The USACE can take between 12 and 18 months to process this type of permit, and the applicant may need significant resources to prepare the application and supporting documentation required.

The more streamlined permit for activities that result in less than 0.5 acre of permanent impacts to WOTUS is the NWP program, which has 57 different permits, depending on the type of fill activity. Depending on the type of fill activity, amount of fill involved (generally less than 0.1 acre of permanent fill to WOTUS), and NWP, project-related impacts can sometimes be permitted under a non-notifying situation where all the terms and conditions of the nationwide permit program must be followed, but the applicant does not need to file an application for verification of coverage with the USACE before proceeding with the activity. A non-notifying NWP has no processing time because the USACE does not review; however, it is recommended that the applicant prepare due diligence documentation demonstrating that the project-related activities are compliant with all the terms and conditions of the NWP program, including the conditions relating to thresholds for having to notify the USACE.

In some cases, the type of fill activity, or amount of fill (more than 0.1 acre and less than 0.5 acre of permanent fill to WOTUS) requires verification of coverage (i.e., authorization of the activity) by the USACE through an applicant-prepared pre-construction notification (PCN). The PCN provides documentation to the USACE for verification purposes. The PCN process can take between 60 and 90 days, depending on the complexity of the project and whether consultations between the USACE and

other agencies such as the U.S. Fish and Wildlife Service and the State Historic Preservation Office are necessary. The PCN preparation is a moderate level of complexity and requires a biological evaluation of the effect of the fill activities (i.e., in the Section 404 permit area only) on species listed as threatened or endangered under the Endangered Species Act, as well as a cultural resources Class III survey and report to determine whether cultural resources are present in the Section 404 permit area. In addition, engineering drawings and calculations of fill types and volumes must be provided as part of the PCN package.

RECOMMENDATIONS

Field Verification of Surface Waters

All surface water features identified during the desktop review should be verified by conducting field jurisdictional delineations within the project area footprint. During those surveys, photos of the features would be taken, and the presence or absence of OHWM indicators would be noted allowing recommendations of whether each feature is a WOTUS. Once the survey is complete, a preliminary jurisdictional delineation map would be developed to inform the project's final design and Section 404 permitting option.

Project Design Considerations

To the extent practicable, the project should be designed to avoid placing project components within the OHWMs of surface water features (i.e., potential WOTUS). The generation-tie line would span potential WOTUS aerially, but the line structures should be sited to avoid potential WOTUS, Similarly, turbine towers and their pads should be sited to avoid potential WOTUS. Other project components, such as access roads and buried collector lines, will likely need to cross potential WOTUS and the number of crossings should be minimized, and considerations made to co-locate the roads and lines as much as possible.

Clean Water Act Section 404 Permitting Scenarios

The project would likely require coverage under a CWA Section 404 permit because the wind farm development would impact potential WOTUS both temporarily during collector line installation and permanently for access road construction. Permanent impacts are further defined as a "loss of WOTUS"[12], and temporary impacts are those that occur during permitted activities, but for which the WOTUS are "…restored to preconstruction contours and elevations…"[13] so that the activities' impacts to functions and services of the WOTUS are not permanent.

The project could possibly be permitted under Nationwide Permit #51 (NWP #51) for Land-Based Renewable Energy Generation Facilities; however, this permit has a maximum 0.5-acre threshold for loss of WOTUS for all components associated with the project and the combined amount of WOTUS loss associated with the project would likely exceed this threshold. Even if the combined WOTUS loss associated with the project can be kept below the 0.5-acre threshold of NWP #51, this permit requires a PCN to be submitted to the USACE for review and verification that the activity meets all the terms and conditions of the NWP program.

Assuming that the project can be designed to avoid WOTUS except at access road and collector line crossings, it is recommended that a combination of NWPs is used: NWP #14 Linear Transportation

[12] *Federal Register* 86[8]:2876

[13] *Federal Register* 86[8]:2876

Projects for the access roads and NWP #57 Utility Line and Telecommunications Activities for the collector lines. Both NWPs (14 and 57) have thresholds of a maximum of 0.5 acre of loss per wash crossing. If loss of WOTUS at any road or utility crossings are 0.1 acre or higher (but less than 0.5 acre), then PCN is required. For those projects in which all the loss of WOTUS falls below 0.1 acre and there are no other PCN submittal triggers, such as potential effects on threatened or endangered species or cultural resources impacts within 100 feet of an impact area (temporary or permanent, i.e., a road or utility crossing), the project would qualify for non-notifying coverage under the NWP program. All Section 404 permit-specific, general, and regional terms and conditions would be in full effect and all construction, operation, and maintenance activities must be compliant with all applicable terms and conditions.

For the purposes of calculating permanent impacts on a per-WOTUS basis when there are multiple road or utility crossings of the same WOTUS, the USACE provides guidance under its definition for "single and complete linear project" (*Federal Register* 86[8]:2877). This definition states, "For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization." While there is no written guidance on the definition of "distant," experience suggests that this distance is generally between 0.5 and 1.0 mile for projects in the arid West region.

LIMITATIONS AND WARRANTY

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. The USACE and the EPA have the ultimate authority to determine the jurisdictional status of any surface water feature.

EXHIBIT B – ATTACHMENT B-2

Wildlife Site Characterizations for the West Camp Wind Farm and Hot Air Wind (West Camp 2 Wind Farm), Navajo County, Arizona

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Wildlife Site Characterization for the West Camp Wind Farm, Navajo County, Arizona

JUNE 2022

PREPARED FOR

West Camp Wind Farm, LLC

PREPARED BY

SWCA Environmental Consultants

WILDLIFE SITE CHARACTERIZATION FOR THE WEST CAMP WIND FARM, NAVAJO COUNTY, ARIZONA

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SWCA Project No. 64382

June 2022

EXECUTIVE SUMMARY

West Camp Wind Farm, LLC, a wholly owned subsidiary of The AES Corporation (AES), is proposing to develop a wind energy facility in Navajo County, Arizona. The proposed 52,500-acre project area is located on private and state lands approximately 10 miles south of Joseph City. The project is evaluating several generation-tie (gen-tie) options, including one interconnection option within the project area (wind development area) and two interconnect options with a gen-tie corridor external to the project area. For the purposes of this report, the project area and external gen-tie corridor are distinguished from each other. SWCA Environmental Consultants prepared this wildlife site characterization to provide an initial landscape-scale screening and site-level characterization of the proposed project. The report addresses the U.S. Fish and Wildlife Service's *Land-Based Wind Energy Guidelines* Tiers 1 and 2 (preliminary site evaluation and site characterization) and *Eagle Conservation Plan Guidance* Stage 1 (site assessment), as well as the Arizona Game and Fish Department's (AGFD's) *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona*.

Objectives were addressed through desktop evaluation of publicly available information, communication with AGFD's experts, a site visit on January 27, 2022, and repeated visits to the site (on foot and by helicopter) during initial preconstruction wildlife surveys from October 2019 to November 2021. A summary of findings and next steps is presented in the last section of this report. The purpose of this evaluation is to:

- Address federal and state guidance landscape-scale screening and site-level characterization objectives, including gathering an understanding of the wildlife community potentially using the site.
- Determine additional data collection or information needs at this stage. Specific data gaps identified in this report include the following:
    - The extent to which special-status species are present.
    - The extent to which important golden eagle use areas (e.g., occupied eagle nests, or concentrated flight paths indicating areas that the species would rely on for breeding, feeding, or sheltering activities) are present within or near the project footprint.
    - Location and characterization of other areas of seasonal importance (e.g., bat maternity colonies or hibernacula sites, raptor nests).
    - Specific baseline bird and bat species composition and use (temporal and spatial).
    - Compensation requirements associated with Arizona Native Plant Law–protected species in areas of State lands planned for development.
    - Whether there would be significant adverse impacts to special-status species, considering the design of the project.

Upon delivery of this report, AES is requesting a recommendation letter for the project from AGFD's Project Evaluation Program to support county and line siting permitting.

Tier 3 preconstruction wildlife surveys and reporting, which will provide quantitative and qualitative assessments used to further evaluate risk and make siting and operational decisions, are ongoing.

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1 INTRODUCTION

West Camp Wind Farm, LLC, a wholly owned subsidiary of The AES Corporation (AES), is proposing to develop the West Camp Wind Farm (project). The project is a proposed maximum 500-megawatt (MW) wind energy facility and associated generation-tie (gen-tie) transmission line. The project would be located almost entirely on private lands, with minor utilization of Arizona State Trust lands, within an approximately 52,500-acre project area 10 miles southwest of Joseph City, Navajo County, Arizona (Figures 1 and 2). A federal nexus is not anticipated for the siting of this project.

The project is evaluating several gen-tie options to interconnect with the regional transmission grid. These options include up to 11-mile-long gen-tie and onsite line-tap within the project area (wind development area), or a 17-mile or 25-mile-long gen-tie connecting the project to the Arizona Public Service (APS) Cholla Substation 2 miles southeast of Joseph City. The gen-tie options with an interconnection to the Cholla Substation include a 150-foot-wide corridor external to the project area (Figure 1 and 2). Within the project area, the gen-tie options would be sited within 500-foot-wide corridors; however, the specific location of the internal corridors are not yet known. In this report, the term project area is inclusive of the internal gen-tie corridors and the term gen-tie refers only to the external gen-tie corridor. Further definitions for project terminology used in this report are provided in Section 2.2 below.

The purpose of this report is to provide an initial landscape-scale screening and site-level characterization of the proposed project to address the U.S. Fish and Wildlife Service's (USFWS's) *Land-Based Wind Energy Guidelines* (WEG; USFWS 2012) Tiers 1 and 2 (preliminary site evaluation and site characterization) and *Eagle Conservation Plan Guidance* (ECPG) (USFWS 2013) Stage 1 (site assessment), as well as the Arizona Game and Fish Department's (AGFD's) *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* (AGFD 2012a) preliminary site screening objectives. This report answers the following questions, to the extent they can be answered at this stage, which are meant to 1) identify potential impacts to wildlife, and 2) categorize eagle risk at this stage:

- Are special-status species or their habitats (including designated critical habitat) present or likely to be present?
- Are plant communities of concern present or likely to be present?
- Are there high-priority conservation areas for non-governmental organizations, or other local, state, regional, federal, tribal, or international designations?
- Are there large areas of intact habitat with the potential for fragmentation, with respect to species of concern needing large contiguous blocks of habitat?
- Are their known critical areas of wildlife congregation or other areas of seasonal importance?
- Are there important eagle use areas or migration concentration sites present?
- How is the site categorized with respect to USFWS's ECPG site categorization criteria?

This report is being submitted after an initial wildlife agency coordination meeting, which was held on May 18, 2022. A Navajo County Special Use Permit (SUP) and an Arizona Corporation Commission (ACC) Certificate of Environmental Compatibility (CEC) will be pursued in the third and fourth quarters of 2022, with an SUP application anticipated to be delivered to Navajo County on June 23, 2022. Tier 3 (preconstruction wildlife surveys) are underway, initiated by a different developer from October 2019 through March 2020 and continued by AES from May 2020 through November 2021. These surveys will continue in 2023.

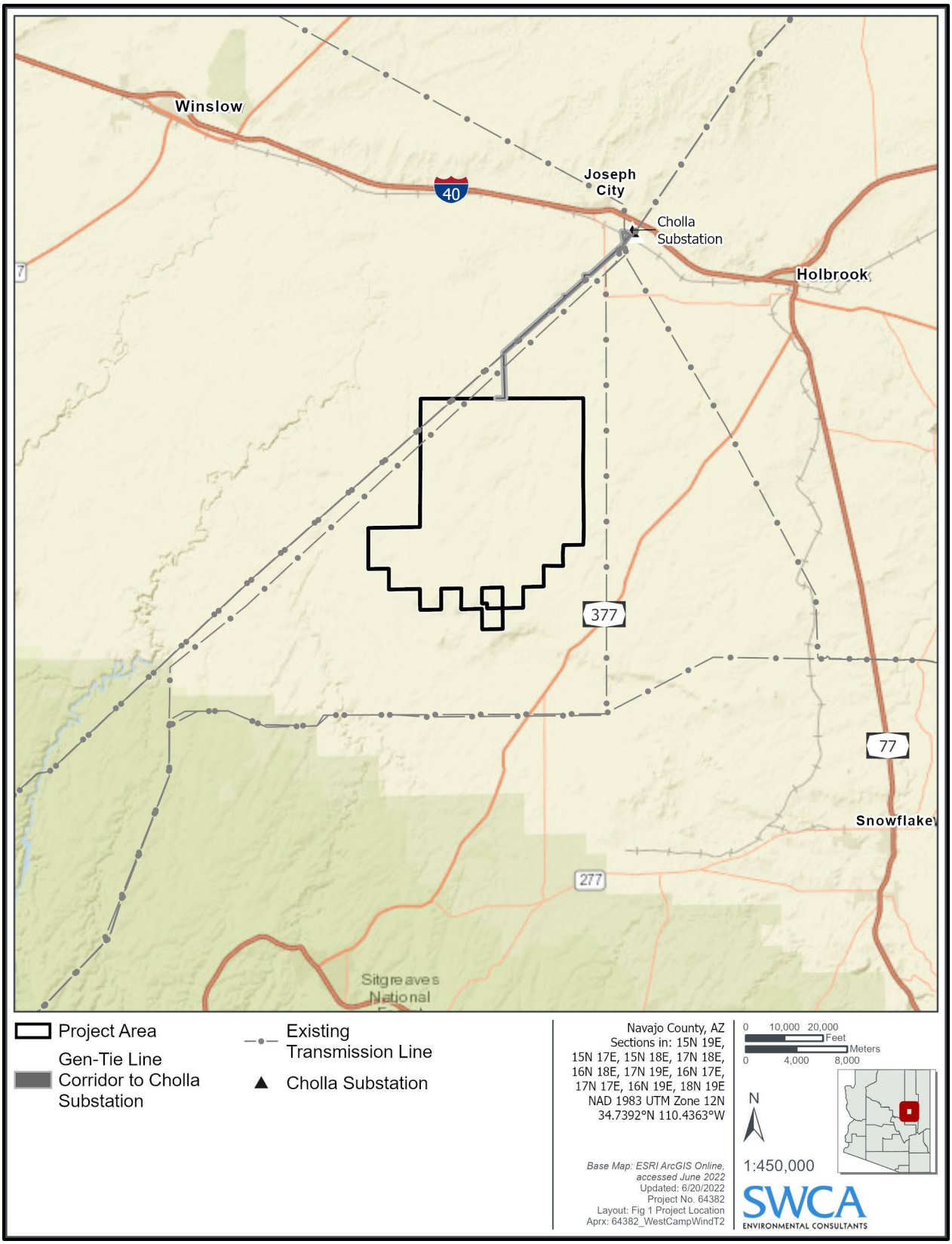

Figure 1. Project location.

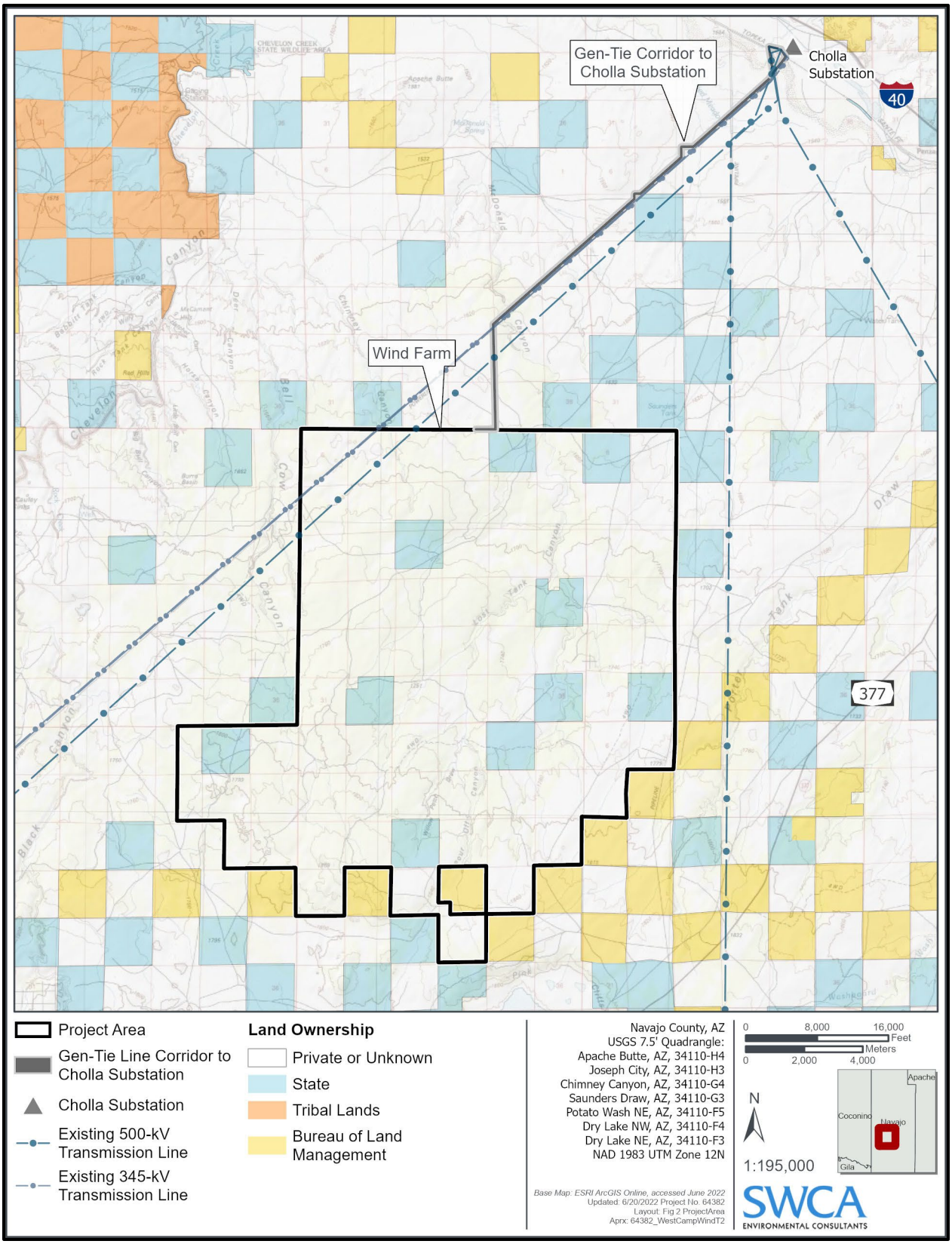

Figure 2. Project area and gen-tie detail.

Wind project impacts to wildlife are typically framed in the context of direct impacts resulting from bird and bat collisions with turbine blades, or other project infrastructure (towers, guy wires, or power lines), electrocution with power lines, and indirect impacts resulting from the effects of project construction and operation on a species' use of habitat (e.g., disturbance or displacement, habitat loss, habitat fragmentation, and hydrological impacts) (Allison et al. 2019; American Wind Wildlife Institute 2021; Avian Power Line Interaction Committee [APLIC] 2022a).

1.1 Applicable Regulations and Conservation Priorities

Applicable federal and state wildlife and plant laws regulating wind energy development in Arizona, as well as non-regulated special-status species, are described below.

1.1.1 *Federal*

1.1.1.1 ENDANGERED SPECIES ACT

The Endangered Species Act of 1973, as amended (ESA), protects imperiled (threatened and endangered) species and their habitats, prohibiting anyone without a permit to "take" these species; permits are generally available for conservation and scientific purposes. Section 9 of the ESA makes it unlawful for any person—including private and public entities—to take individuals of an endangered animal species. These prohibitions have been extended, by regulation, to threatened species. *Take* is defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." *Harm* may include significant habitat modification or degradation that results in killing or injuring listed species by significantly impairing essential behavioral patterns. If a federal nexus, i.e., federal permit, federal funding, or any federal involvement, does not apply to a project, section 9 is the provision of the ESA that applies.

1.1.1.2 MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act of 1918, as amended (MBTA), prohibits incidental "take" of migratory birds—more than 1,000 species (50 Code of Federal Regulations [CFR] 10 and 21)—their parts, eggs, or nests. *Take* is defined by the MBTA as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." An MBTA violation can result in fines and/or imprisonment; however, the USFWS focuses its enforcement resources on project proponents that fail to identify and implement appropriate and practicable mitigation measures that avoid bird injury or mortality.

Effective December 3, 2021, the USFWS revoked rules based on M-37050, which was permanently revoked and withdrawn in March 2021 by M-37065. The legal and regulatory interpretations of the MBTA are now aligned to prohibit incidental take, consistent with judicial precedent. Relevant to construction and operations activities, a permit is not required to destroy inactive migratory bird nests (i.e., those without viable eggs or nestlings), provided that no possession occurs, and no permit or other regulatory authorization is required (USFWS 2018; see Arizona Revised Statutes [ARS] 17-236 below).

1.1.1.3 BALD AND GOLDEN EAGLE PROTECTION ACT

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits anyone without a permit from "taking" eagles, their parts, eggs, or nests. *Take* is defined by the Eagle Act as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb;" the Eagle Act's definition of "take" differs from the ESA's definition 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."

In 2009, the USFWS promulgated regulations that established two new permit types authorizing 1) purposeful take (removal, relocation, or destruction) of eagle nests under limited circumstances, and 2) incidental take. In 2016, the USFWS revised the regulations for eagle incidental take permits, allowing developers to obtain a 30-year permit subject to mitigation and monitoring, among other requirements. The 2016 rule also removed the distinction between standard (to address one-time effects from projects) and programmatic (to authorize recurring take from projects) permit types and modified the preservation standard definition: any authorized take must be "consistent with the goals of maintaining stable or increasing breeding populations in all eagle management units and the persistence of local populations throughout the geographic range of each species."

1.1.1.4 BIRDS OF CONSERVATION CONCERN

USFWS Birds of Conservation Concern (BCC) are migratory and non-migratory bird species, beyond those designated as federally threatened or endangered, that represent USFWS's highest conservation priorities. The list does not govern "take," rather it is intended to proactively prevent or remove the need for additional ESA bird listings by promoting greater study and protection of the habitats and ecological communities upon which these species depend.

The USFWS updated its BCC list in 2021 (USFWS 2021).

1.1.2 *State*

Pursuant to ARS 17-102, wildlife is the property of the state and can be taken only as authorized by the Arizona Game and Fish Commission. Violations can result in criminal prosecution and/or civil liability. ARS 17-236 is described below; other state statutes and Commission policies pertinent to wind energy projects are described in AGFD (2012a).

1.1.2.1 STATE OF ARIZONA SPECIAL-STATUS SPECIES

The *Arizona State Wildlife Action Plan* (AGFD 2012b; SWAP) identifies Species of Greatest Conservation Need (SGCN): vertebrate, crustacean, and mollusk species that are indicative of the diversity and health of the state's wildlife, including low and declining populations, warranting heightened attention. AGFD (2012b) prioritized SGCN species into three tiers: 1A, 1B, and 1C. Tier 1A species are those for which AGFD has entered into an agreement or has legal or other contractual obligations or warrants the protection of a closed season. Tier 1B represents the remainder of the species meeting vulnerability criteria. Tier 1C species are those representing priority research and information needs due to their unknown status. Species identified as vulnerable (1A and 1B species) are evaluated in this report.

AGFD is currently working on a comprehensive revision of the 2012 plan, to be completed in 2022, which will include an updated SGCN list.

1.1.2.2 ARIZONA REVISED STATUTES 17-236

In Arizona, it is unlawful to "take or injure any bird or harass any bird upon its nest, or remove the nests or eggs of any bird, except as may occur in normal horticultural and agricultural practices and except as authorized by commission order" (ARS 17-236). The intention of the statute is to prohibit removal

of active nests, rather than inactive nests; a state permit is not required to remove an inactive nest (personal communication, Christina Kondrat-Smith, Permitting Specialist, AGFD, with Allen Graber, Ecologist, SWCA Environmental Consultants [SWCA], December 3, 2019; and personal communication, Kenneth "Tuk" Jacobson, Raptor Management Coordinator, AGFD, with Allen Graber, Ecologist, SWCA, January 28, 2021).

1.1.2.3 ARIZONA DEPARTMENT OF AGRICULTURE ARIZONA NATIVE PLANT LAW

The Arizona Native Plant Law (ARS 3-904) (ANPL) prohibits taking, transporting, or possessing protected plants from any lands without permission and a permit from the Arizona Department of Agriculture; it requires notification prior to land clearing (destruction) or removal. Protected plants are categorized as Highly Safeguarded, Salvage Restricted, Salvage Assessed, and Harvest Restricted.

1.1.2.4 ARIZONA DEPARTMENT OF AGRICULTURE NOXIOUS WEED REGULATIONS

The Arizona Department of Agriculture (Administrative Code R3-4-245) maintains a list of noxious weeds that may be controlled or quarantined to prevent further infestation or contamination, as well as those that are prohibited from entering the state. Noxious weeds are categorized as Class A, B, and C.

1.2 Applicable Guidelines

1.2.1 *U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines*

The USFWS's WEG (USFWS 2012) are designed for utility-scale land-based wind energy projects to reduce potential impacts to species of concern at all stages of development. The WEG tiered approach provides a decision framework for collecting information in increasing detail to evaluate risk and make siting and operational decisions. It provides the opportunity for evaluation and decision-making at each tier, enabling a developer to abandon or proceed with project development, or to collect additional information if required. Tiers 1 and 2 provide an initial landscape-scale screening and site-level characterization that addresses potential risk a project would pose to species of concern and their habitats.

This tiered approach does not require that every tier, or every element within each tier, be implemented for every project. Instead, the tiered approach allows efficient use of developer and agency resources with increasing levels of effort until sufficient information and the desired precision is acquired for the risk assessment. Adherence to the WEG is voluntary and does not relieve any individual, company, or agency of the responsibility to comply with laws and regulations; however, if a violation occurs, USFWS will consider a developer's documented efforts to communicate with the USFWS and adhere to the WEG in its enforcement decision.

1.2.2 *U.S. Fish and Wildlife Service Eagle Conservation Plan Guidance*

The USFWS's ECPG (USFWS 2013) supplements the WEG tiered approach to inform whether a site will meet standards for issuance of an eagle take permit. Stage 1 provides an initial site assessment at broad-landscape and project scales to determine the spatial, temporal, and type of eagle use of the site. The staged process is used to identify avoidance and minimization measures to reduce eagle disturbance

and potential mortality. Neither the WEG nor the ECPG confers the take authorization necessary to shield an entity from enforcement for prohibited take under the Eagle Act.

1.2.3 *Arizona Wind Energy Development Guidelines*

AGFD's (2012a) guidelines are meant to assist energy developers in identifying potential impacts to wildlife and wildlife habitats and measures to avoid, minimize, and mitigate for those impacts. Like the WEG and ECPG, adherence to the state guidelines is voluntary and does not absolve individuals and entities from liability for violating state law; however, AGFD will take compliance with these guidelines into consideration when considering law enforcement action. AGFD (2012a) encourages project proponents to coordinate with their Project Evaluation Program staff throughout the tiered process. As part of the early site screening, they encourage a site reconnaissance survey to obtain information on the vegetative communities and significant topographic features to help determine the wildlife community using the site.

1.2.4 *Avian Power Line Interaction Committee Guidance*

The APLIC has developed guidance documents identifying avian-safe power line construction and design practices. Guidance documents include *Avian Protection Plan Guidelines* (developed in conjunction with the USFWS; APLIC 2005), *Suggested Practices for Avian Protection of Power Lines: State of the Art in 2006* (APLIC 2006), *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012), and *Recommendations for Power Pole Configurations at Wind Energy Projects* (APLIC 2022b). Key avian-safe design elements identified by APLIC include installing line-marking devices (also known as diverters) in collision risk areas, removing ground wires, spacing energized and grounded parts appropriately, and capping energized parts.

2 METHODS

2.1 Approach

As described in the WEG, Tier 1 questions may be addressed by desktop evaluation alone or Tiers 1 and 2 questions may be combined to adequately evaluate these questions after one or repeated site visits. In both approaches, the developer evaluates potential risk to species of concern and their habitats related to multiple possible sites or a single site within a landscape context. Combining the Tier 2 evaluation with that of Tier 1 provides a preliminary assessment of site-specific information. In this document, a single site is evaluated using the Tiers 1 and 2 combined approach. ECPG Stage 1 and AGFD's (2012a) preliminary site screening questions have also been incorporated in our evaluation.

2.2 Landscape Scales Considered

In this document, we consider the presence of natural resources (e.g., critical habitats and special designations, eagle breeding areas, wildlife corridors) within broad landscape and project scales defined by the USFWS and AGFD. Generally, the area within 10 miles of the project area and within 3 miles of the gen-tie is evaluated for consistency with AGFD's Environmental Online Review Tool reports (AGFD 2022a, 2022b). Where relevant, we consider specific resources in the context of the larger region. For example, specific to potential species' occurrence determinations, the habitat conditions within the project area and gen-tie are considered; nearest records of these species within the region are presented when known. Relevant landscape scales, considered herein, are defined as follows:

Project area (site): the 52,500-acre project area, inclusive of the gen-tie line within the project area. The gen-tie line exterior to the project area is treated separately from the term "project area" (see definition below). The ECPG defines project area in the context of eagle impact considerations as the area that includes the project footprint and contiguous land that shares relevant characteristics. To distinguish these terms in this document, the ECPG term "project area" is referred to as the project's *eagle nesting population area*.

Gen-tie: Gen-tie refers to the gen-tie line exterior to the project area. The 150-foot-wide gen-tie corridor is approximately 225 acres and consists of only private lands.

Project footprint: defined by the ECPG, the minimum-convex polygon that encompasses the turbines and any associated infrastructure, roads, etc., within the project area, excluding the gen-tie located outside of the project area. This area is applicable when considering ECPG's risk categorization for a site. The project footprint is not currently known.

Nesting eagle ranging behavior (2-mile buffered project boundary): USFWS (2020a), citing eagle ranging behavior around nests, suggests that those eagle nesting pairs within 2 miles of a project may be subject to disturbance or lethal take.

10-mile buffered project area: AGFD's Environmental Online Review Tool (AGFD 2022a, 2022c) screens special-status species and special areas (e.g., critical habitats, Important Connectivity Zones [ICZs], Important Bird Areas [IBAs]) within 10 miles of a wind energy project site.

3-mile buffered gen-tie: AGFD's Environmental Online Review Tool (AGFD 2022b, 2022c) screens special-status species and special areas within 3 miles of a power line. The 3-mile buffer query used for this report covers the gen-tie line external to the project area. Internal gen-tie corridors are captured through the 10-mile buffered project area query.

Region: The term "region" is used broadly in this report to describe the area surrounding the project area, or nearest occurrence of a species, but generally matches USFWS's (2022a) official project-specific species and critical habitats list evaluation area: the U.S. Geological Survey (USGS) 7.5-minute quadrangle(s) which intersect(s) with the project area; each quadrangle covers, at a minimum, 49 square miles.

2.3 Potential for Occurrence of Special-Status Species and Their Habitats

This document evaluates potential for occurrence of 1) federally protected (endangered and threatened) species and their critical habitats (USFWS 2022a, 2022b), 2) both Eagle Act–protected species, 3) State SGCN 1A and 1B species (AGFD 2012b, 2022a, 2022b), and 4) BCCs for Bird Conservation Region (BCR) 16 (USFWS 2021). The potential for occurrence of each species is based on 1) documented records, 2) existing information on distribution, and 3) qualitative comparisons of the habitat requirements of each species with the vegetation communities or landscape features present in the project area or gen-tie.

Potential for occurrence categories are as follows:

- *Known to occur*—the species has been documented in the project area or gen-tie by a reliable observer.

- *May occur*—the project area or gen-tie is within the species' currently known range, and vegetation communities, soils, or other habitat conditions resemble those known to be used by the species.
- *Unlikely to occur*—the project area or gen-tie is within the species' currently known range, but vegetation communities, soils, or other habitat conditions do not resemble those known to be used by the species, or the project area and gen-tie is clearly outside the species' currently known range.

As part of this effort, SWCA requested and obtained the following:

- An official project-specific species and critical habitats list via the USFWS Information for Planning and Consultation (IPaC) system (USFWS 2022a; Appendix A).
- Separate project-specific Arizona Environmental Online Review Tool reports for the project area and gen-tie (AGFD 2022a, 2022b; Appendix B).[1]

The following resources were also reviewed to describe the general site characteristics, soils, vegetation, and aquatic resources as they pertain to potential for occurrence of the relevant species:

- *Biotic Communities of the Southwest* (Brown and Lowe 1982).
- National Wetlands Inventory (USFWS 2022c).
- Natural Resources Conservation Service (NRCS) Web Soil Survey data (NRCS 2019).
- Southwest Regional Gap Analysis Project (SWReGAP) data (USGS 2016).

2.4 Data Sources Reviewed

In addition to those resources described above, SWCA coordinated with AGFD who provided general areas (4 × 4–mile blocks) and associated past occupancy/activity[2] data for known, historic, and possible eagle breeding areas/territories[3] that have been identified during past survey efforts within 5 miles of the project area (personal communication, Andrew Cavalcant, former Project Evaluation Specialist, AGFD, with Allen Graber, Ecologist, SWCA, January 19, 2021). As part of this coordination, SWCA also requested any information on bats (i.e., general use of the area, presence of nearby bat colonies) that could be shared but did not receive additional information at that time.

Additionally, during the initial coordination meeting held on May 18, 2022, AGFD and USFWS provided some initial insight on wildlife issues to consider for the project. Some concerns that were raised included potential impacts to pronghorn (*Antilocapra americana*) fawning during construction, and collision risk to high-flying bats (e.g., big-free tailed bats [*Nyctinomops macrotis*], greater bonneted bats [*Eumops perotis*]). These topics are reviewed below (see Sections 3.3.2.5 and 3.3.2.1).

The following data sources were also reviewed:

- Arizona's Wildlife Linkages Assessment (Arizona Wildlife Linkages Workgroup [AWLW] 2006)

[1] The *Arizona Environmental Online Review Tool* reports summarized special-status species and special areas within 10 miles of the wind farm project area (AGFD 2022a) and within 3 miles of the gen-tie (AGFD 2022b).

[2] An *active* nest is one in which an egg or eggs are laid and/or young are raised (Driscoll 2010; Postupalsky 1974).

[3] A *territory or breeding area* is an area that contains, or historically contained, one or more nests within the home range of a mated pair: a confined locality where nests are found, usually in successive years, and where no more than one pair is known to have bred at any one time (Steenhof and Newton 2007). The number of unique territories in a given area can be refined over multiple years of survey and may vary from year to year.

- AGFD's Online Environmental Review Tool map (AGFD 2022c) which provides landscape-level spatial data, such as wildlife corridors, unfragmented areas, wilderness areas, wildlife waters, and special-status species range models, for purposes of land use and conservation planning
- AGFD's (2012b) *Arizona State Wildlife Action Plan: 2012–2022*
- Audubon's Important Bird Areas (IBAs) (Audubon 2022)
- Bureau of Land Management (BLM) Areas of Critical Environmental Concern (BLM 1988, 1989)
- eBird and Birds of the World's bird species' range maps (eBird 2022a, Billerman et. al. 2022)
- eBird bird migration hotspots (eBird 2022b)
- National Trails (National Park Service 2022)
- National Wildlife Refuges (USFWS 2022d)
- Species-specific migration corridors (e.g., sandhill crane flyways) (Pacific Flyway Council 2022)
- State parks (Arizona State Parks 2022)
- USFWS critical habitats (USFWS 2022e)
- Western Association of Fish and Wildlife Agencies' (WAFWA) Crucial Habitat Assessment Tool (CHAT) (WAFWA 2020)
- Western Hemisphere Shorebird Reserve Network (WHSRN) sites (WHSRN 2019)
- Wetlands of International Importance (Ramsar 2014)
- Wild and Scenic Rivers (National Wild and Scenic Rivers System 2022).

2.5 Site Reconnaissance

Two SWCA biologists with expertise in the ecology of the regional wildlife community conducted a reconnaissance visit to the project area on January 27, 2022. The objective of the visit was to "ground-truth" available desktop information to effectively evaluate habitat associations and wildlife site characterization objectives.

Tier 3 preconstruction wildlife surveys have also been conducted and are ongoing within the project area, which has provided a comprehensive familiarity with the site's wildlife habitat conditions. This has included 2 full years of avian use surveys conducted monthly at fixed points distributed throughout the project area from October 2019 through September 2021, raptor nest surveys within 2 miles of the project area in February and March 2021, and bat acoustic surveys at fixed stations from March through November 2021, at which avian surveyors maintained the bat acoustic units monthly. Since these surveys began, surveyors have been recording incidental data contributing to our overall understanding of wildlife use of the site. Surveyors have been specially instructed to record incidental eagle flight paths and perch locations, special-status species or their suitable habitats/prey items, bird nests, bird concentrations (i.e., flocks, migration events, waterfowl use of the site's water features), and a running list of bird species seen and heard.

2.6 Eagle Risk Categorization

The ECPG defines eagle risk category (Category 1: high–Category 3: minimal) criteria for a proposed project site as follows:

Category 1: High risk to eagles, potential to avoid or mitigate impacts is low.

- Has an important eagle-use area or migration concentration site within the project footprint; or
- has an annual eagle fatality estimate (mean estimate) greater than 5% of the estimated local area population (LAP) size; or
- causes the cumulative mortality for the LAP to exceed 5% of the estimate LAP size.

Category 2: High or moderate risk to eagle, opportunity to mitigate impacts.

- Has an important eagle-use area or migration concentration site within the project area nesting population area (i.e., within 10 miles of the project area) but not in the project footprint; or
- has an annual eagle fatality estimate between 0.03 eagle per year and 5% of the estimated LAP size; or
- causes cumulative annual mortality of the LAP of less than 5% of the estimated LAP size.

Category 3: Minimal risk to eagles.

- Has no important eagle-use areas or migration concentration sites within the project area nesting population area; and
- has an annual eagle fatality estimate less than 0.03; and
- causes cumulative annual mortality of the LAP of less than 5% of the estimated LAP size.

Because assigning a category to a site is determined through an iterative process, beyond the initial site characterization, incorporating ECPG Stages 2 through 4 site-specific survey data and assessments, site categorization at this stage (Stage 1) is preliminary. The Stage 1 site assessment may inform a decision on whether to invest in Stage 2 (WEG Tier 3) surveys and/or the level of survey effort warranted; in this case, surveys have already been initiated.

2.7 Arizona Game and Fish Department's Framework for Determining Bat and Bird Study Effort

AGFD (2012a) recommends categorizing (Category 1: low–Category 4: significant) a site based on criteria used to inform anticipated impacts to wildlife as follows:

Category 1: Sites with low potential for wildlife impacts as informed by sufficiently studied nearby wind energy projects for which little uncertainty as to the low-impact level exists. For such sites, AGFD recommends 1 year of preconstruction surveys focusing on information gaps and particular species of concern.

Category 2: Sites for which information from nearby sites indicates low potential for wildlife impacts and the initial site screening indicates there are no potential issues. For these sites, AGFD recommends a minimum of 1 year of preconstruction surveys.

Category 3: Sites with high levels of bird and bat use, presence of special-status species, or considerable uncertainty regarding potential impacts. For these sites, AGFD recommends a minimum of 2 years of preconstruction surveys. Example habitats include the following:

- High prey abundance such as prairie dog colonies
- Known avian migration stopovers such as water bodies
- Bat foraging attractants such as edge habitats important for certain commuting or foraging bats
- High concentrations of migrating, wintering, or breeding raptors.

Category 4: Sites for which potential to avoid or mitigate impacts is low or those proposed within special designation areas (e.g., wilderness areas, national parks or monuments, state parks, regional parks, and wildlife or nature preserves), riparian corridors, and areas of significant topographic relief. For these sites, AGFD recommends a minimum of 3 years of preconstruction survey data indicating that suspected impacts to wildlife populations are not significant.

3 RESULTS

3.1 Potential for Occurrence of Special-Status Species and Their Habitats

3.1.1 *Environmental Setting*

The project area and gen-tie, characterized by flat to rolling terrain at elevations between 5,000 and 6,100 feet (1,500 and 1,860 m), are within the Arizona/New Mexico Plateau ecoregion (U.S. Environmental Protection Agency 2011). The project is within the Grand Canyon physiographic section, the highest part of the Colorado Plateau province (Fenneman and Johnson 1946). Notable landforms in the project's vicinity include the Pink Cliffs, Dry Lake, Chevelon Canyon, and the Little Colorado River located 0.5 mile south of the project area (5 miles southeast of the gen-tie), 1.5 miles south of the project area (6 miles southeast of the gen-tie), 4 miles northwest of the project area (and gen-tie), and 9 miles north of the project area (bisecting the northern extreme of the gen-tie), respectively.

Few shallow canyons are present within and proximal to the site including Lost Tank (see Appendix C, Photograph C-11) and Pour Off Canyons located within the project area, Bell Cow Canyon, 0.75 mile to the west, Porter Tank Draw, 1.5 miles to the east, Chimney Canyon, just north of the project area, and McDonald Canyon, 2 miles to the north. Chimney Canyon and McDonald Canyon bisect the gen-tie. Several small sinkholes arranged in a series of gentle rings, an extension of the McCauley Sinks to the northwest, are present in the southwestern portion of the project area (see Appendix C, Photograph C-1).

Land uses include cattle ranching/grazing and hunting. The nearest residence to the project area is 0.5 mile to the west, beyond which rural residences are sparsely distributed. The Cholla coal-fired power plant and Cholla Substation are located 10 miles northeast of the project area. Initial access to the site is via U.S. Highway 40 to Obed Road from the north and, from the east: State Route 377 to Hutch Road (see Figure 1). Established county and two-track roads provide additional access within the site.

3.1.2 *Land/Vegetation Cover*

Appendix C includes representative photographs of the project area vegetation communities.

The project area and gen-tie are primarily within the Plains and Great Basin Grassland biotic community (Brown 1994). The southern portion of the project area and northern terminus of the gen-tie are also within the Great Basin Conifer Woodland and Great Basin Desertscrub communities, respectively (Brown 1994). The majority (53%) of the project area is mapped by USGS (2016) as Inter-Mountain Basins (IMB) Semi-Desert Grassland (27%) and Colorado Plateau Pinyon-Juniper Woodland (26%), followed by IMB Juniper Savanna (18%), IMB Semi-Desert Shrub Steppe (14%), and Colorado Plateau Mixed Low Sagebrush Shrubland (11%) (Table 1, Figure 3). Eight additional land/vegetation cover types are mapped in the project area by USGS (2016) (see Table 1; see Figure 3), of which one (Invasive Southwest Riparian Woodland and Shrubland (<0.1%) appears to have been mapped in error based on our review of Google Earth imagery.

The gen-tie is mapped by USGS (2016) as IMB Semi-Desert Grassland (53%), IMB Mixed Salt Desert Scrub (18%), IMB Semi-Desert Shrub Steppe (12%), IMB Greasewood Flat (8%), and seven lesser land/vegetation cover components (Table 1, Figure 3).

Table 1. SWReGAP Land/Vegetation Cover Types within the Project Area

Land/Vegetation Cover Type	Acres (%)
IMB Semi-Desert Grassland	13,957.9 (26.6)
Colorado Plateau Pinyon-Juniper Woodland	13,825.7 (26.3)
IMB Juniper Savanna	9,594.1 (18.3)
IMB Semi-Desert Shrub Steppe	7,285.9 (13.9)
Colorado Plateau Mixed Low Sagebrush Shrubland	5,581.6 (10.6)
IMB Greasewood Flat	1,351.6 (2.6)
Colorado Plateau Blackbrush-Mormon-tea Shrubland	557.3 (1.1)
Colorado Plateau Mixed Bedrock Canyon and Tableland	165.3 (0.3)
Southern Colorado Plateau Sand Shrubland	123.4 (0.2)
IMB Mixed Salt Desert Scrub	73.6 (0.1)
IMB Big Sagebrush Shrubland	10.5 (<0.1)
IMB Shale Badland	1.3 (<0.1)
Invasive Southwest Riparian Woodland and Shrubland	1.1 (<0.1)

Source: USGS (2016) GAP data.

Table 2. SWReGAP Land/Vegetation Cover Types within the Gen-Tie

Land/Vegetation Cover Type	Acres (%)
IMB Semi-Desert Grassland	119.1 (53.0)
IMB Mixed Salt Desert Scrub	40.6 (18.1)
IMB Semi-Desert Shrub Steppe	26.4 (11.8)
IMB Greasewood Flat	17.3 (7.7)
Invasive Southwest Riparian Woodland and Shrubland	9.7 (4.3)
Southern Colorado Plateau Sand Shrubland	6.7 (3.0)
Colorado Plateau Mixed Bedrock Canyon and Tableland	1.6 (0.7)
IMB Big Sagebrush Shrubland	1.3 (0.6)
Colorado Plateau Pinyon-Juniper Woodland	0.8 (0.4)

Rocky Mountain Lower Montane Riparian Woodland and Shrubland	0.7 (0.3)
Colorado Plateau Blackbrush-Mormon-tea Shrubland	0.3 (0.2)

Source: USGS (2016) GAP data.

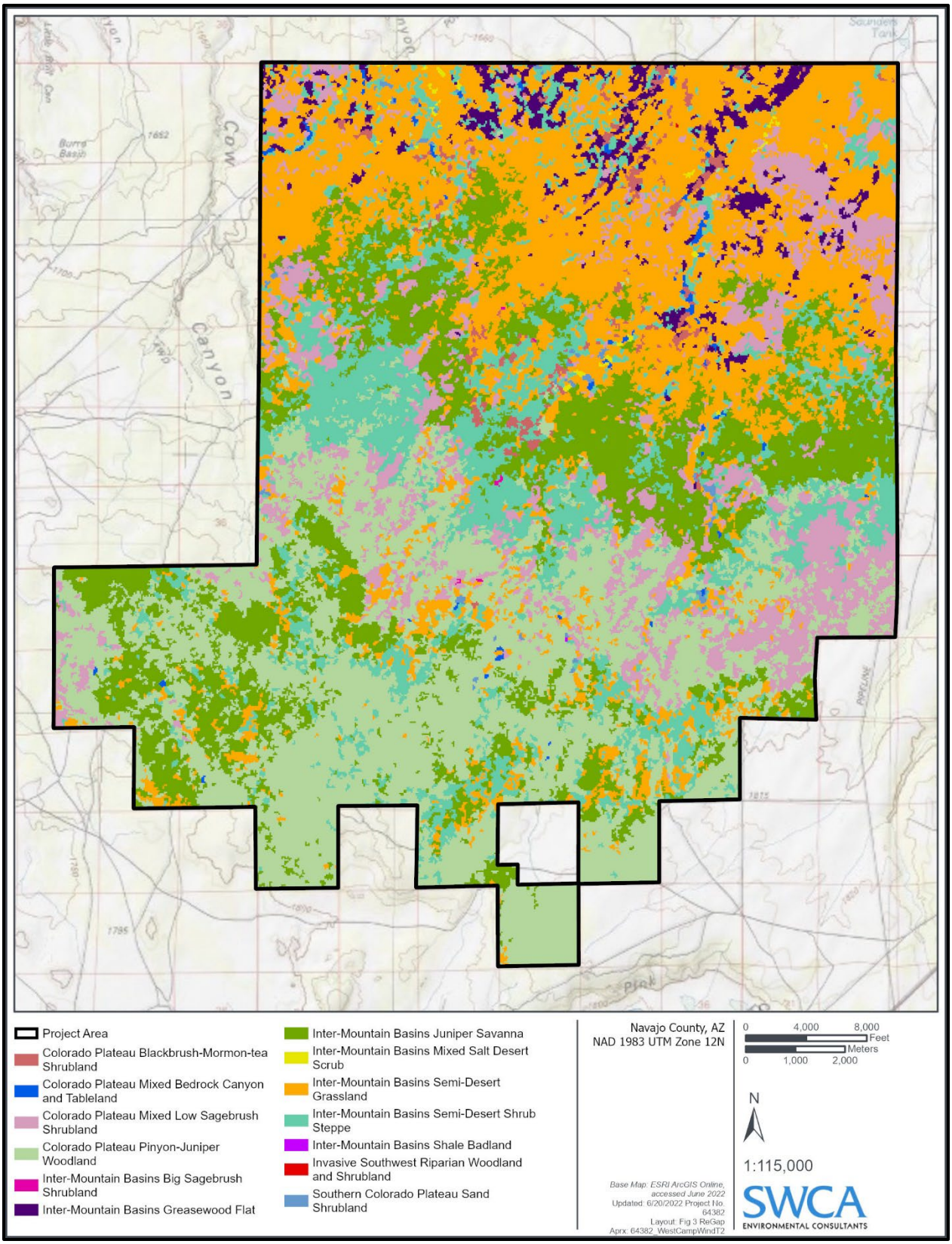

Figure 3. Land/vegetation cover within the project area.

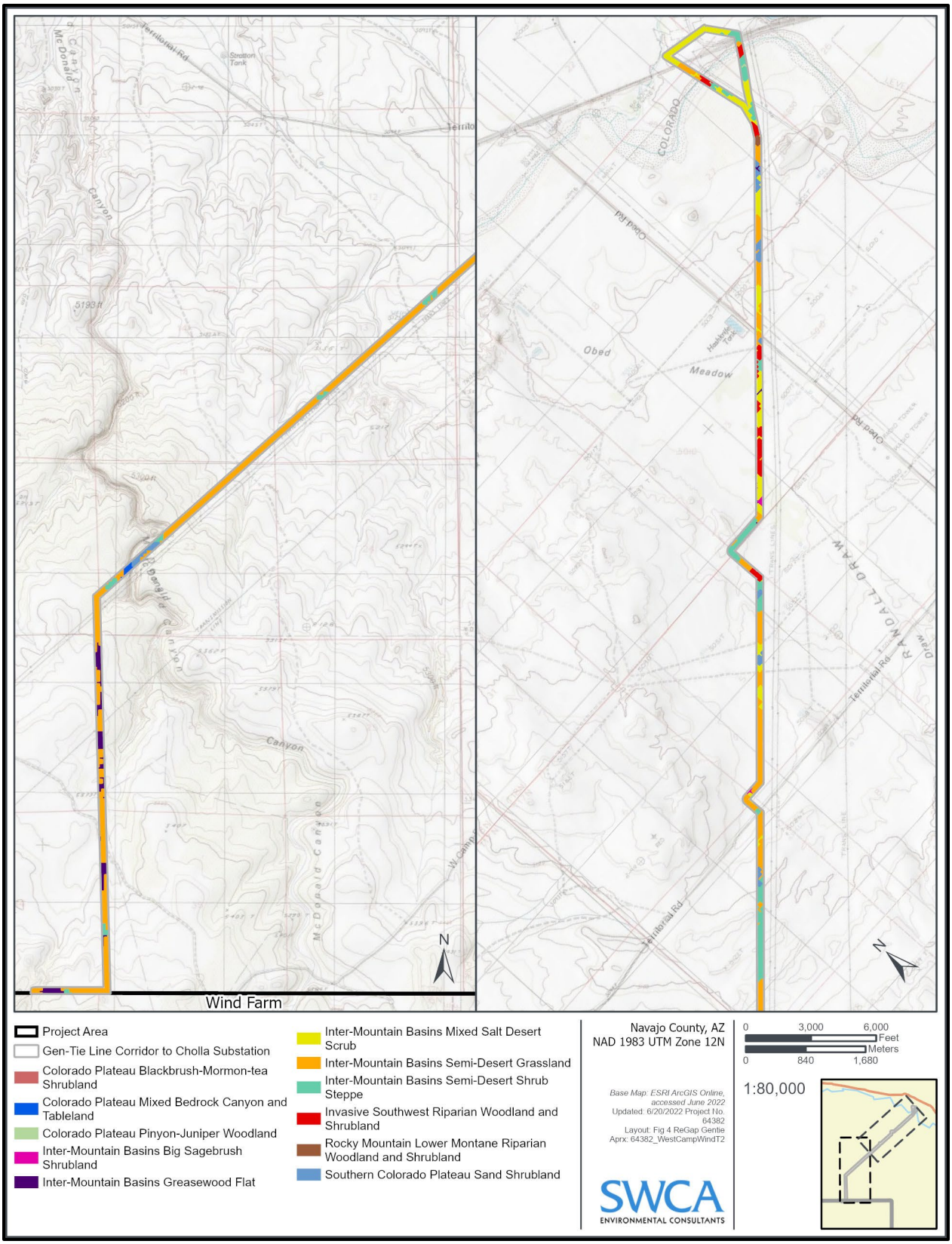

Figure 4. Land/vegetation cover within the gen-tie.

As observed during the January 27, 2022, reconnaissance survey, the project area vegetation is generally characterized as juniper savanna dominated by perennial bunchgrasses and forbs and scattered to locally dense shrub and tree layer. The southeastern portion of the project area is characterized as shortgrass grassland and shrub-steppe (without the pinyon and juniper component). Denser patches of pinyon-juniper woodlands exist in the central and northeastern portions of the project area. Although the site reconnaissance focused on the project area rather than the gen-tie, based on our review of Google Earth imagery and the USGS (2016) mapped layers, the gen-tie, where it extends north of the project area, transitions south to north from pinyon-juniper savanna to sparsely vegetated shortgrass grassland and shrub-steppe. Where the gen-tie would span the Little Colorado River, the riparian habitat appears to consist of patchy tamarisk (*Tamarix* sp.).

Characteristic project area grasses include blue grama (*Bouteloua gracilis*), mesa dropseed (*Sporobolus flexuosus*), sand dropseed (*Sporobolus cryptandrus*), sideoats grama *(Bouteloua curtipendula*), spike dropseed (*Sporobolus contractus)*, and ring muhly (*Muhlenbergia torreyi*). Scattered to locally dense shrubs and subshrubs include Bigelow sage (*Artemisia bigelovii*), fourwing saltbush (*Atriplex canescens*), Fremont's mahonia (*Mahonia fremontii*), globemallow (*Sphaeralcea* spp.), jointfir *(Ephedra* spp.), one-seed juniper (*Juniperus monosperma*), snakeweed (*Gutierrezia* sp.), Stansbury cliffrose (*Purshia stansburiana*), Whipple cholla (*Cylindropuntia whipplei*), and winterfat (*Krascheninnikovia lanata*). The tree layer, where present, includes one-seed juniper and pinyon pine (*Pinus edulis*). One ponderosa pine (*Pinus ponderosa*) was observed in the southeastern portion of the project area (adjacent to Cement Tank). Signs of pinyon and juniper mechanical mastication and chemical treatments were noted during the site visit, particularly in the southwestern portion of the project area (see Appendix C, Photograph C-3).

Other plant species observed within the project area include Abert's creeping zinnia (*Sanvitalia abertii*), alderleaf mountain mahogany (*Cercocarpus montanus),* banana yucca (*Yucca baccata*), beardlip penstemon (*Penstemon barbatus*), brickelbush (*Brickellia* sp.), broadleaf milkweed (*Asclepias latifolia*), canyon grape (*Vitis arizonica*), crispleaf buckwheat (*Eriogonum corymbosum*), grama-grass cactus (also referred to as paperspine fishhook cactus; *Sclerocactus papyracanthus*), hairy false goldenaster (*Heterotheca villosa*), Indian ricegrass (*Achnatherum hymenoides*), kingcup cactus (*Echinocereus triglochidiatus*), narrowleaf yucca (*Yucca angustissima*), nightshade (*Solanum* sp.), plains pricklypear (*Opuntia polyacantha*), prairie spiderwort (*Tradescantia occidentalis*), Russian thistle (*Salsola tragus*), sacred thorn-apple (*Datura wrightii*), tulip pricklypear (*Opuntia phaeacantha*), prickly Russian thistle (*Salsola tragus*), shaggy dwarf morning-glory (*Evolvulus nuttallianus*), threadleaf ragwort (*Senecio flaccidus*), and Yavapai County buckwheat (*Eriogonum pulchrum*).

3.1.3 *Soils*

Sixteen soil map units are mapped within the project area (Table 3, Figure 5). Soil components forming these units are mostly classified as well drained, with one being classified as excessively drained; they do not meet hydric criteria (NRCS 2019). Parent material of these soils include alluvium derived from basalt, limestone, sandstone, siltstone, and/or mudstone; mixed alluvium derived from volcanic and sedimentary rock; eolian deposits; or eolian sands derived from sandstone or over alluvium derived from sandstone (NRCS 2019).

Eleven soil map units are mapped within the gen-tie area (Table 4, Figure 6). Soil components forming these units are mostly classified as well drained, with one being classified as excessively drained and three poorly or somewhat poorly drained. Medisaprists, saline is the only soil with a hydric rating (NRCS 2019). Parent material of these soils include organic material and/or alluvium derived from limestone, mudstone, sandstone, and/or siltsone; mixed alluvium derived from volcanic and sedimentary rock; eolian

sands derived from sandstone; or gypsiferous eolian sands and/or gypsiferous alluvium derived from mudstone and/or sandstone (NRCS 2019).

No pink-red Navajo sandstone vertical cliffs (Navajo sedge [*Carex specuicola*] habitat requirement); or active, unvegetated sand dunes derived from Navajo sandstone (Welsh's milkweed [*Asclepias welshii*] habitat requirement) are present within or proximal to the project (see Section 3.1.5; the project area and gen-tie are also outside of the geographic ranges of these species). No soils that formed in mixed alluvium belonging to the Gypsiorthids-Torriorthents Association (Peebles Navajo cactus [*Pediocactus peeblesianus* var. *peeblesianus*] habitat requirement) are present within the project area or gen-tie (but see Section 3.1.5).

Table 3. Soil Units within the Project Area

Soil Unit	Acres (%)
Pensom-Chedeski complex, 1–5% slopes	16,506.0 (31.4)
Leanto-Bisoodi complex, 1–12% slopes	11,945.8 (22.7)
Mellenthin-Rock outcrop complex, 1–20% slopes	7,243.0 (13.8)
Rock outcrop-Arches complex, 2–30% slopes	5,203.9 (9.9)
Rock outcrop-Needle complex, 1–10% slopes	3873.0 (7.4)
Bisoodi fine sandy loam, 1–8% slopes	2,612.4 (5.0)
Epikom channery sandy loam, 1–12% slopes	2,463.8 (4.7)
Kech fine sandy loam, 1–12% slopes	864.5 (1.6)
Kech-Rock outcrop complex, 1–20% slopes	801.1 (1.5)
Leanto-Bisoodi-Rock outcrop complex, 1–20% slopes	406.5 (0.8)
Tours clay loam, 1–3% slopes	168.8 (0.3)
Radnik silt loam, 0–3% slopes	141.1 (0.3)
Cerrillos-Ubank complex, 1–8% slopes	114.2 (0.2)
Nuffel silt loam, 0–3% slopes	101.7 (0.2)
Cerrillos sandy loam, 1–10% slopes	69.6 (0.1)
Barx fine sandy loam, 3–10% slopes	13.9 (<0.1)

Source: NRCS (2019) soil unit data.

Table 4. Soil Units within the Gen-Tie

Soil Unit	Acres (%)
Purgatory fine sandy loam, 1–8% slopes	45.2 (20.1)
Rock outcrop-Needle complex, 1–10% slopes	44.3 (19.8)
Epikom channery sandy loam, 1–12% slopes	42.4 (18.9)
Navajo silty clay, saline-sodic, 0–1% slopes	23.3 (10.4)
Ives fine sandy loam, wet, 0–1% slopes	16.6 (7.4)
Bisoodi fine sandy loam, 1–8% slopes	15.6 (7.0)
Medisaprists, saline, 0–1% slopes	10.3 (4.6)
Jocity sandy clay loam, saline-sodic, 0–1% slopes	8.6 (3.8)
Tours silty clay loam, saline-sodic, 0–1% slopes	7.9 (3.5)

Soil Unit	Acres (%)
Tours clay loam, 1–3% slopes	7.8 (3.5)
Riverwash-Typic Torrifluvents complex, 0–5% slopes	2.3 (1.0)

Source: NRCS (2019) soil unit data.

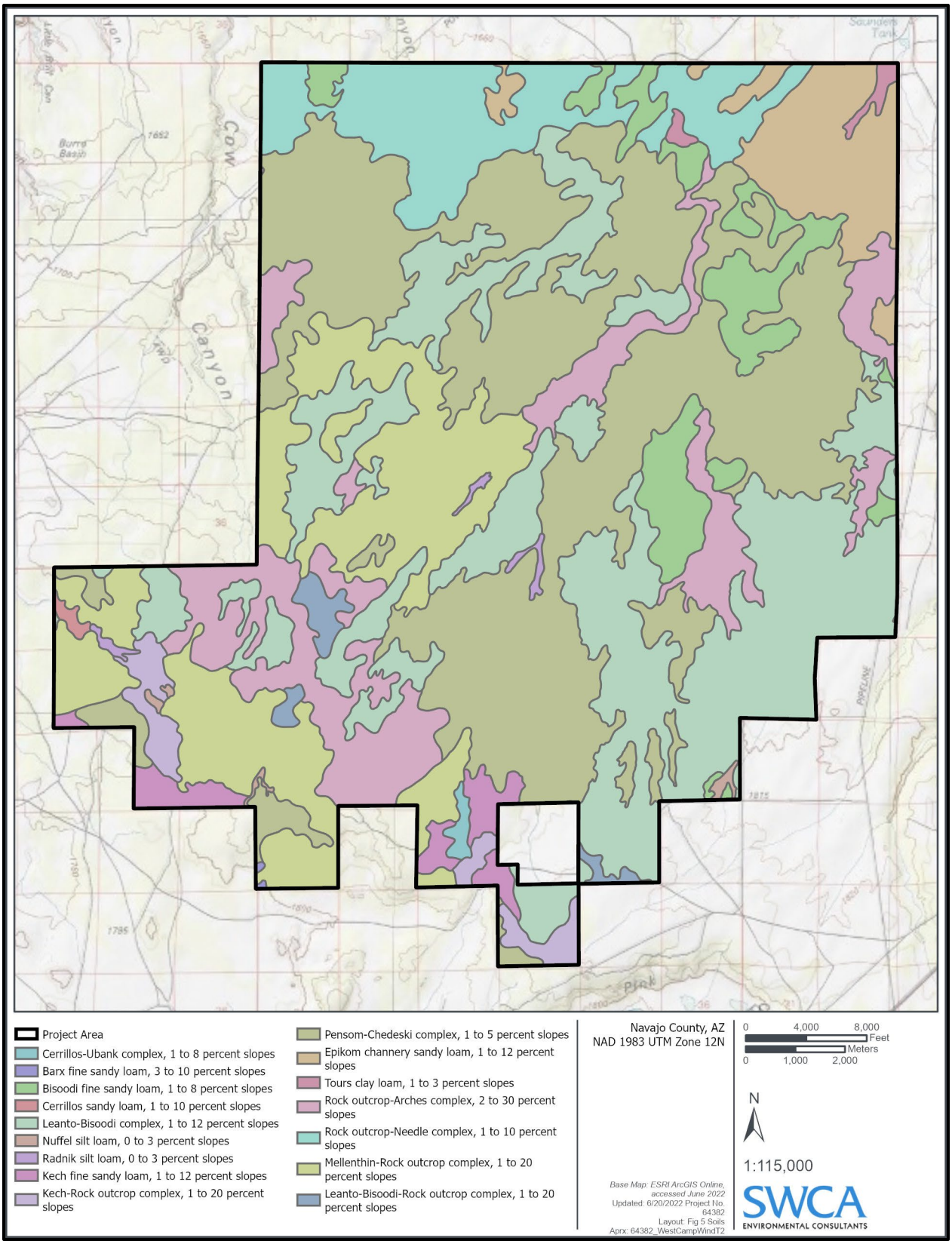

Figure 5. NRCS-mapped soil units within the project area.

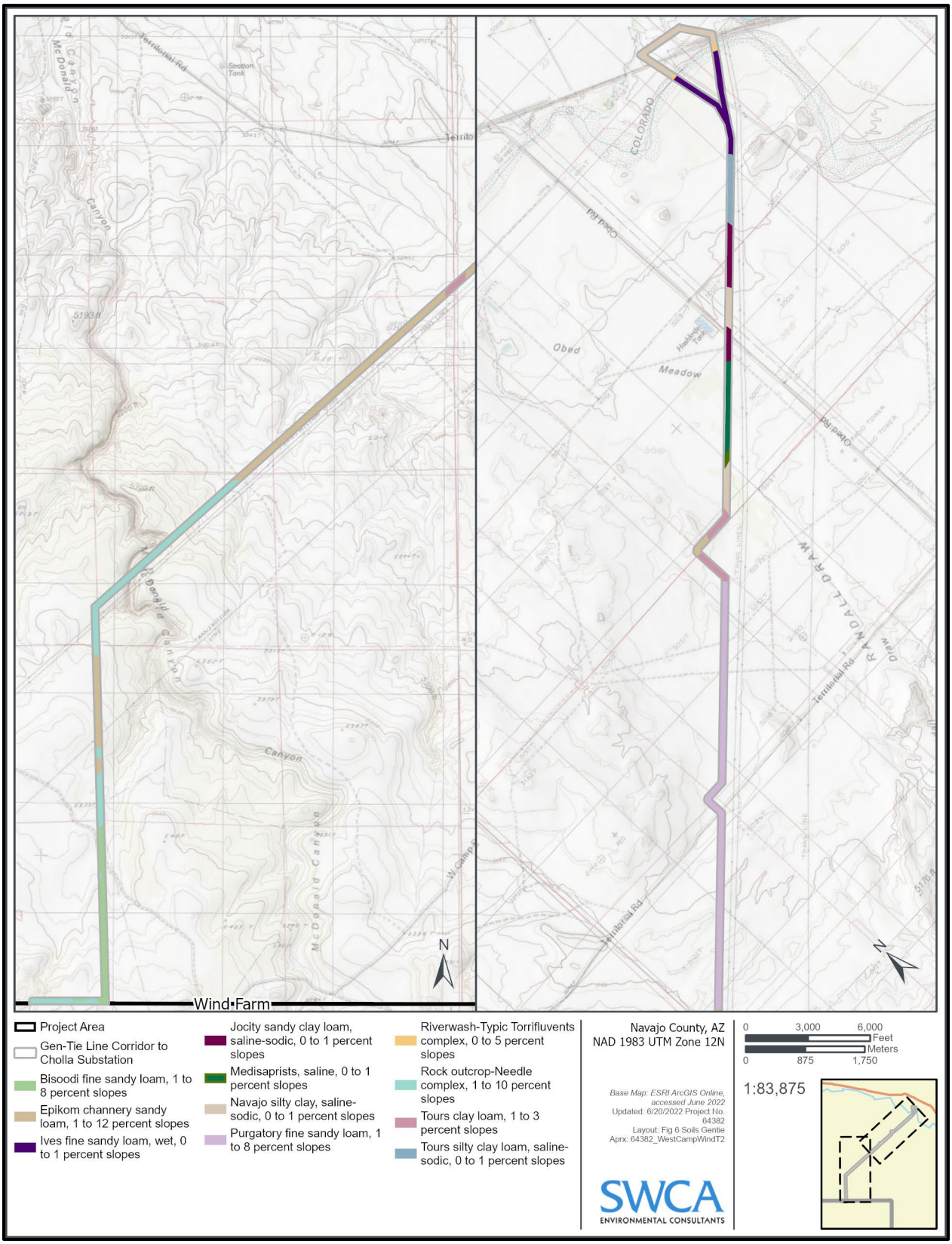

Figure 6. NRCS-mapped soil units within the gen-tie.

3.1.4 *Wetlands/Riparian Areas*

The Little Colorado River bisects the northern terminus of the gen-tie. Other notable water features in proximity to the project include Dry Lake (south of the project area) and Chevelon Creek (northwest of the project area and gen-tie) (see Section 3.1.1 for distances of these features from the project area and gen-tie). Silver Creek is approximately 15 miles to the east. The general flow pattern across the project area and gen-tie is south to north toward the Little Colorado River.

Wetlands within the project area and gen-tie (Figure 7) include ephemeral stock tanks and drainages (e.g., Lost Tank Canyon and Pour Off Canyon). Table 5 presents the acreages by National Wetlands Inventory (NWI)-mapped feature type within the project area and gen-tie. The National Wetlands Inventory (USFWS 2022c) classifies the stock tanks as "freshwater ponds: temporarily or intermittently flooded impoundments" (e.g., Cement Tank and Big Oil Well Tank, Figure 8). During site reconnaissance, SWCA noted that the project area stock tanks lack shrub/tree riparian vegetation and all but one (Cement Tank; see Appendix C, Photograph C-9) lacks emergent wetland vegetation. Cement Tank, on the southeast side of the project area, formed by a cement revetment damming a shallow, narrow canyon that flows intermittently, contains senescent rushes (*Juncus* spp.) (as observed during the January 2022 site visit). Drainages in the project area and gen-tie are classified as "riverine: intermittently, seasonally, or permanently flooded" (USFWS 2022c; Table 5, Figure 7). The R5UBH NWI features within the project area is mapped as "unknown perennial"; however, no perennial surface water features or sources (such as springs or seeps) have been observed in the project area during preconstruction wildlife surveys (October 2019–November 2021) or during the January 27, 2022 site reconnaissance. The R5UBH NWI features are associated with the inlets and outlets of the livestock tanks in the study area, including White Tank, Lower Bigler Tank, Red Tank, and others.

The Little Colorado River, where the gen-tie would span the river, is ephemeral with limited riparian habitats (sparse tamarisk).

Table 3. National Wetlands Inventory Features within the Project Area and Gen-Tie

NWI Code	Description	Acres in Project Area (%)	Acres in Gen-Tie (%)
Freshwater Pond			
PUSAh	Palustrine, unconsolidated shore, temporarily flooded, diked/impounded	1.3 (0.4)	0.2 (2.9)
PUSAx	Palustrine, unconsolidated shore, temporarily flooded, excavated	0.4 (0.1)	--
PUSJh	Palustrine, unconsolidated shore, intermittently flooded, diked/impounded	7.1 (2.2)	--
Riverine			
R4SBA	Riverine, intermittent, streambed, temporarily flooded	2.2 (0.7)	2.2 (32.8)
R4SBC	Riverine, intermittent, streambed, seasonally flooded	236.8 (76.4)	3.4 (50.7)
R4SBJ	Riverine, intermittent, streambed, intermittently flooded	63.7 (20.5)	0.9 (13.4)
R5UBH	Riverine, unknown perennial, unconsolidated bottom, permanently flooded	0.8 (0.2)	--

Source: USFWS (2022c).

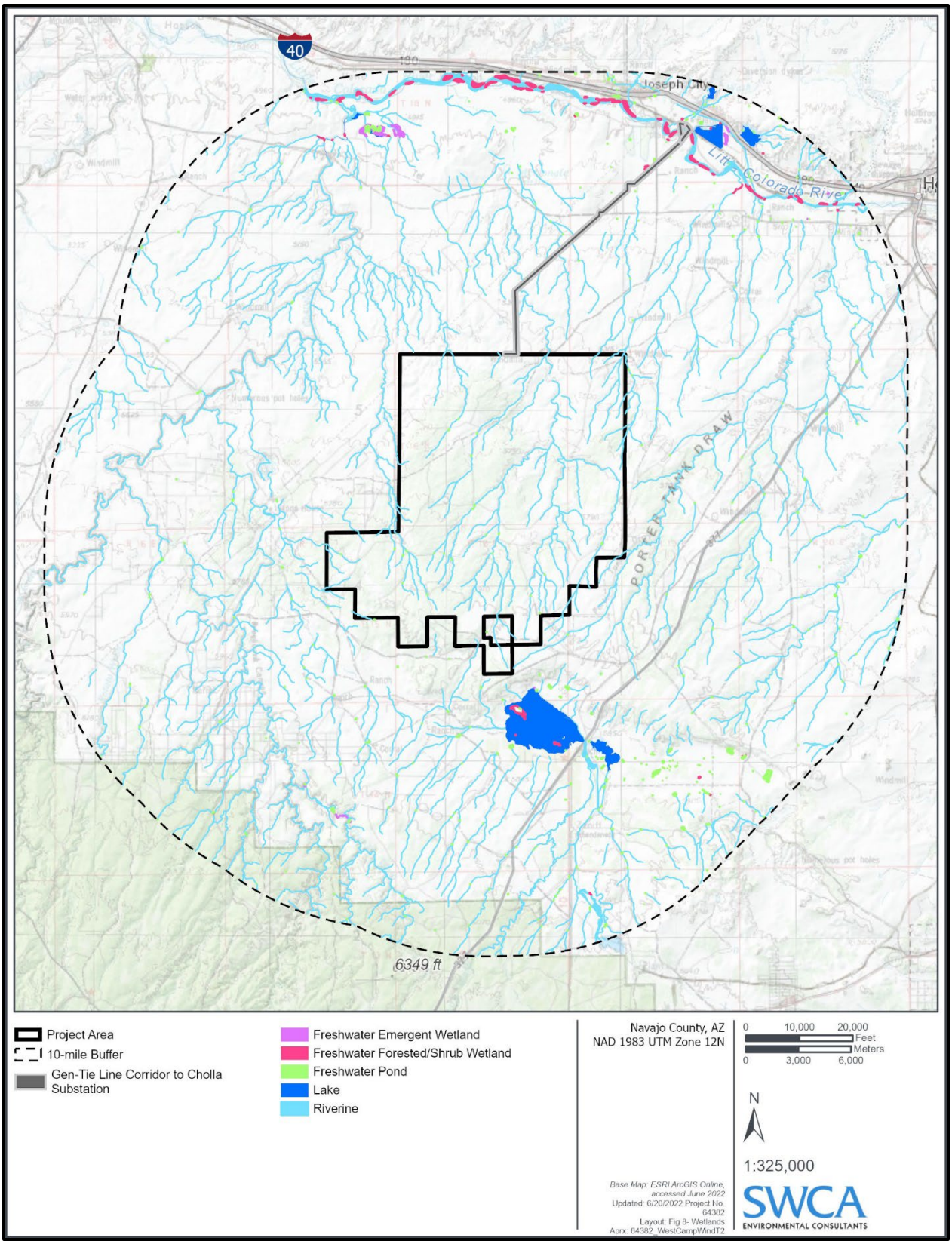

Figure 7. National Wetlands Inventory wetlands within 10 miles of the project area.

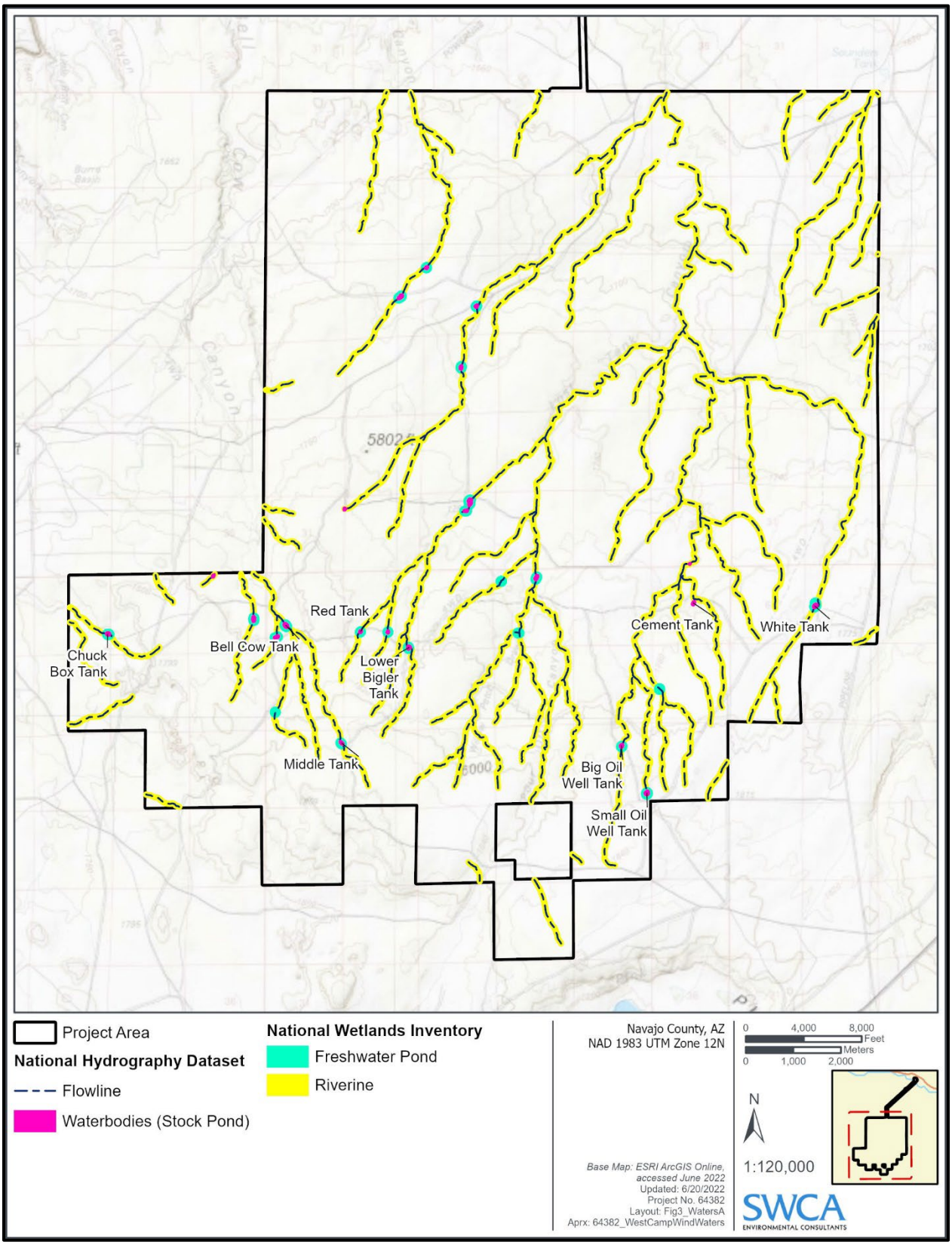

Figure 8. National Wetlands Inventory wetlands, project area detail.

3.1.5 *Special-Status Species Occurrence Determinations*

3.1.5.1 FEDERALLY LISTED SPECIES

Nine species/subspecies (three birds, one amphibian, one insect, one mammal, one reptile, one fish, and one flowering plant) were listed in the official species list for the project (Project Code: 2022-0049201; USFWS 2022a; see Appendix A). Their federal and state status, range/habitat requirements, potential for occurrence in the project area and/or gen-tie, and nearest records, if known, are presented below and in Table 5 and in Section 3.1.5.1.1. The project area is within the geographical/elevational ranges and contains appropriate habitat conditions that could support one of the nine species/subspecies: monarch butterfly (*Danaus plexippus*), a candidate species. The gen-tie may support two of the nine species/subspecies: monarch butterfly, and the endangered Peebles Navajo cactus. Species descriptions for monarch butterfly and Peebles Navajo cactus are provided below.

Both federally protected eagle species (bald eagle [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*]) are known to occur within the project area and may occur within the gen-tie. Their range and habitat requirements are also presented in Table 5. Their potential temporal and spatial use of the project area is presented in Section 3.4.

In addition to eagles and those species on the project's official species list (see Table 5; see Appendix A), the following federally listed species were also evaluated for their potential to occur within the project area because they appear on the Navajo County list (USFWS 2022b) and/or the AGFD (2022a, 2022b) reports (see Appendix B): Apache trout (*Oncorhynchus apache*), black-footed ferret (*Mustela nigripes*), jaguar (*Panthera onca*), Navajo sedge, New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), southwestern willow flycatcher (*Empidonax traillii extimus*), Welsh's milkweed, and Zuni bluehead sucker (*Catostomus discobolus yarrowi*). We confirmed[4] that the project area and gen-tie lack appropriate habitat associations and/or is well outside of the range of these species.

[4] Sources reviewed included AGFD (2022c, 2022d), Brennan (2012), SEINet (2022), and USFWS (2022h).

Table 5. Occurrence Status of Relevant Federally Listed and Eagle Act Species

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Amphibians				
Chiricahua leopard frog (*Rana chiricahuensis*)	T w/ CH	SGCN (1A)	Permanent or semi-permanent springs, stock tanks, lakes, streams, and rivers free of or containing low densities of non-native predators at elevations between 3,200 and 8,900 feet. Emergent and perimeter vegetation provide substrate for egg deposition, thermoregulation, and invertebrate fauna for foraging. The species is often excluded from ephemeral habitats. The species current and/or historical range includes central, east-central, and southeastern portions of Arizona.	**Unlikely to occur.** Project area and gen-tie are outside of the species' predicted range. The project area stock tanks are temporally flooded, contain muddy banks, and are mostly devoid of vegetation cover; such features are marginally suitable for the species. One check dam on-site (within Lost Tank Canyon) has been observed containing emergent vegetation. Nearest species records are approximately 18 miles east-southeast and 18 miles west-southwest of the project area. Critical habitat for the species is located in the Crouch, Gentry, and Cherry Creeks, and Parallel Canyon Unit, approximately 42 miles southwest of the project area.
Birds				
Bald eagle (*Haliaeetus leucocephalus*)	Eagle Act	SGCN (1A)	See description below.	**Known to occur,** species has been documented during project preconstruction surveys. See description below.
California condor *(Gymnogyps californianus*)	E w/ CH EXPN	SGCN (1A)	Nests in caves and ledges of steep rocky terrain or in cavities and broken tops of old-growth conifers in isolated scrubby chaparral and forested montane regions. Presence of adequate food supplies in open, accessible areas, with reliable air movements is an important habitat attribute; foraging occurs over vast expanses in these open habitats. Roosts on rock cliffs, snags, or in live conifer stands. The 10(j) nonessential experimental population (NEP) area is defined by Interstate 40 on the south, U.S. Highway 191 on the east, Interstate 70 on the north, and Interstate 15 to U.S. Highway 93 on the west. While condors comprising the NEP flock maintain a well-established primary range within the NEP area—in southern Utah (Zion National Park Kolob Plateau) and northern Arizona (Kaibab and Paria Plateaus and the Colorado River corridor west of Marble Canyon)—individuals are known to make occasional long-distance forays outside of the area. Condors that leave the NEP area are treated as endangered species under section 9 of the ESA.	**Unlikely to occur.** The project area and gen-tie are 10 miles and directly south of the 10(j) NEP boundary, respectively; however, based on current knowledge of the species' primary range and movements, the species is not expected to occur in the project area or gen-tie (personal communication, Tim Hauck, Condor Reintroduction Program Director, Peregrine Fund, with Allen Graber, Ecologist, SWCA, February 7, 2022). Nearest species records are approximately 70 miles to the northwest (in Flagstaff and vicinity [e.g., Sedona, Williams, Wupatki National Monument]). Critical habitat for this species is located in southern California.

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Golden eagle (*Aquila chrysaetos*)	Eagle Act	SGCN (1B)	See description below.	**Known to occur**, species has been documented during project preconstruction surveys. See description below.
Mexican spotted owl (*Strix occidentalis lucida*)	T w/ CH	SGCN (1A)	Nests and roosts in high-elevation (4,000–10,000 feet) mature mixed conifer forests with uneven-aged tree stands, multi-storied canopy, moderate to high canopy closure, downed logs, and snags or incised rocky canyon habitats with a perennial water source often containing small clumps or stringers of conifer or riparian forests. Foraging, juvenile dispersal, and wintering habitats are more diverse and include a wide variety of forest conditions (including pinyon-juniper), canyon bottoms, cliff faces, tops of canyon rims, and riparian areas. Wintering owls will also use mountain-shrub habitat. In Arizona, subspecies has fragmented distribution in northern, central, east-central, and southern portions of the state.	**Unlikely to occur.** The western portion of the project area is on the edge of the subspecies' predicted, fragmented Mogollon Rim range. Because nearest records are 20 miles to the southwest, and the project area contains only limited, marginally suitable juvenile dispersal and wintering habitats (i.e., fragmented pinyon-juniper) which are regionally ubiquitous, the subspecies is unlikely to occur. The gen-tie, where it extends north of the project area, is outside of the subspecies' predicted range. Critical habitat for the subspecies is located approximately 15 miles west southwest of the project area in Chevelon Canyon, Apache-Sitgreaves National Forests.
Yellow-billed cuckoo (*Coccyzus americanus*)‡	T w/ CH	SGCN (1A)	Nests in low- to moderate-elevation (usually below 6,600 feet) riparian woodlands with native broadleaf trees and shrubs that are 50 acres or more in extent. Most associated with cottonwood/willow-dominated vegetation cover, but composition of dominant riparian vegetation can vary across range. Has not been found nesting in isolated patches (1–2 acres) or narrow, linear riparian habitats less than 10 to 20 m wide; migrant cuckoos have been detected in these habitats. During migration, uses a wider array of forest and shrub habitats but is rarely observed away from riparian habitats.	**Unlikely to occur.** The project area and gen-tie are outside of the species' predicted range. The project area does not contain riparian habitats. The riparian habitats where the gen-tie would span the Little Colorado River are sparse (isolated pockets or narrow stringers of tamarisk [*Tamarix* spp.]) and unlikely to support migrating individuals. Nearest occurrences are approximately 11 miles northeast of the project area, 6 miles east of the gen-tie. Critical habitat for the species is located approximately 64 miles west of the project area (Beaver Creek, Arizona).

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Fishes				
Little Colorado spinedace (*Lepidomeda vittata*)	T w/ CH	SGCN (1A)	Pools with water flowing over fine gravel and silt-mud substrates of medium to small streams at elevations between 4,000 and 8,000 feet. Four populations exist in Arizona: the mainstem of the Little Colorado River, Nutrioso Creek, Clear Creek, and Chevelon Creek.	**Unlikely to occur.** The project area and gen-tie are outside of the species' AGFD predicted range and USFWS current habitat. Nearest current habitat is along Chevelon Creek, approximately 4 miles northwest of the project area (7 miles west of the gen-tie). The species has been documented within 10 miles of the project area, but not within 3 miles of the gen-tie. This known occurrence is likely from Chevelon Creek. Critical habitat for this species is located in Chevelon Creek, 5 miles northwest of the project area (7 miles west-northwest of the gen-tie) (see Figure 9).
Flowering Plants				
Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*)	E	HS	See description below.	**May occur in the northern extreme of the gen-tie only (adjacent to the Little Colorado River)**, documented within 10 miles of the project area; within 3 miles of the gen-tie. See description below.
Insects				
Monarch butterfly (*Danaus plexippus*)	C	–	See description below.	**May occur**, see description below.
Mammals				
Gray wolf (Mexican wolf population; *Canis lupus baileyi*)†	Proposed EXPN†	SGCN (1A)	Inhabits evergreen pine-oak woodlands, and mixed-conifer mountainous forests inhabited by elk, deer, and cattle above 4,000 feet. The Mexican Wolf Recovery (or Non-Essential Experimental Population) Area (MWEPA) encompasses Arizona and New Mexico from Interstate 40 south to Mexico. Wolves living in the MWEPA are designated as NEP (treated as proposed for listing under section 9 of the ESA).	**Unlikely to occur**. The project area and gen-tie are within MWEPA management area Zone 2, where the species is allowed to naturally disperse. The project area and gen-tie contain suitable, albeit limited, pinyon-juniper woodlands inhabited by elk and cattle; however, because the subspecies current occupied range is 20 miles to the southeast and 27 miles to the west, including canyons and highways in between, it is unlikely young may disperse from core areas to the project area or gen-tie. Historically, the species has not been documented within 10 miles of the project area. The nearest recent recorded sighting of a Mexican wolf was a member of the Owl Canyon pack in May 2022, 38 miles southeast of the project area (near Show Low, Arizona).

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Reptiles				
Northern Mexican gartersnake (*Thamnophis eques megalops*)	T w/ CH	SGCN (1A)	Riparian obligate. Lotic and lentic habitats that include cienegas and stock tanks (earthen impoundments), and rivers containing pools and backwaters. Most frequently found between 3,000 and 5,000 feet but may occur up to approximately 8,500 feet. Use adjacent terrestrial habitats for foraging, thermoregulation, gestation, shelter, immigration, emigration, and brumation. Found in areas of high native prey (fish and leopard frogs) concentration. Core population areas in Arizona include mid/upper Verde River drainage, mid/lower Tonto Creek, and the San Rafael Valley.	**Unlikely to occur**. The project area is outside of the subspecies' predicted range and extant populations. Nearest subspecies occurrences are approximately 15 miles northeast of the project area (6 miles northeast of the gen-tie). Critical habitat for the subspecies is located approximately 60 miles southwest of the project area (Tonto Creek).

Note: Table includes Eagle Act species and those species listed in USFWS 2022a). Notes regarding documentation within 10 miles of the project area and 3 miles of the gen-tie are from AGFD (2022a, 2022b). Additional sources: AGFD (2022c, 2022d), Brennan (2012), eBird (2022a), Finkelstein et al. (2020), Gutierrez et al. (2020), Southwest Condor Working Group (2017), USFWS (2004, 2007a, 2015, 2022a, 2022f, 2022g, 2022h).

* Federal Status Definitions

C = Candidate. Species for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. Candidate species are not protected by take prohibitions of section 9 of the ESA.

CH = Designated critical habitat.

E = Endangered. Species which are in danger of extinction throughout all or a significant portion of their range. Endangered species are protected by take prohibitions of section 9 of the ESA.

EXPN = Experimental population, non-essential.

T = Threatened. Species likely to become endangered within the foreseeable future throughout all or a significant portion of their range. Threatened species are protected by take prohibitions of section 9 of the ESA.

State Status Definitions

HS = Highly safeguarded. Those species of native plants and parts of plants, including the seeds and fruit, whose prospects for survival in Arizona are in jeopardy or which are in danger of extinction throughout all or a significant portion of their ranges

SGCN = Species of Greatest Conservation Need. Species identified by AGFD (2012b) as having conservation priority. Tier 1A species are those categorized by AGFD (2012b) as "highest priority vulnerable" species. Tier 1B species are those categorized as "vulnerable" but not fitting the Tier 1A criteria for highest priority.

3.1.5.1.1 Occurrence Justifications – Federally Listed and Eagle Act Species That May Occur within the Project Area or Gen-Tie

The following federally listed and Eagle Act species may occur within the project area or gen-tie.

Bald Eagle

The bald eagle is protected under the MBTA and Eagle Act and is an SGCN 1A species. Nests are generally placed in large deciduous or coniferous trees or cliffs, with a commanding view of the area, less than 1 mile from appropriate aquatic foraging conditions (e.g., perennial rivers or lakes containing fish) (Buehler 2000). The species communally roosts in the winter in large (15–60 m in height) deciduous or coniferous trees which tend to be located near aquatic foraging sites (<50 m) but may be located >6 miles from aquatic foraging sites, particularly in areas sheltered from adverse weather conditions with unusually high prey or carcass availability (AGFD 2022c; Buehler 2000; USFWS 2007b, 2013). Wintering/non-breeding individuals and juveniles are typically associated with breeding habitats; however, they may range widely in search of food, shelter, and reduced human presence (Buehler 2000).

The project area and gen-tie are within the non-breeding and limited breeding ranges of the species and may provide foraging resources (see Section 3.4). They do not contain characteristic nesting or roosting habitats. Nearest documented nesting areas are approximately 20 miles to the southwest (Chevelon Canyon Lake) and 30 miles to the southeast (Silver Creek) (Southwestern Bald Eagle Management Committee 2022). The species has been documented within the project area during project-specific surveys, and is known to occur throughout the region, particularly from late summer through winter. Information on the nearest known breeding areas and potential spatial and temporal use of the site by the species is provided in Sections 3.3.2.6 and 3.4.

Golden Eagle

The golden eagle is protected under the MBTA and Eagle Act and is an SGCN 1B species. The species requires large open hunting grounds adjacent to mountainous canyonland and rimrock terrain of open desert, grassland, and forested areas (Katzner et al. 2020; Marzluff et al. 1997). Presence of sizeable shrub (e.g., sagebrush/ rabbitbrush) patches is an essential component of golden eagle home ranges (Marzluff et al. 1997). Nests are placed in rugged terrain (e.g., cliffs); less often in forested areas (e.g., ponderosa pine [*Pinus ponderosa*], Fremont cottonwood [*Populus fremontii*]) and on human-made structures (e.g., transmission towers) (Katzner et al. 2020). Wintering/non-breeding individuals and juveniles are typically associated with breeding habitats; however, they may range widely in search of food (Katzner et al. 2020).

The project area and gen-tie are within the golden eagle's year-round range and contain appropriate foraging (i.e., open grassland and steppe-like vegetation communities; Kochert et al. 2002) and limited, marginal nesting habitats. The species breeds throughout the region, including within 10 miles of the project area (see Section 3.3.2.6). The species has been documented within the project area during project-specific surveys. Information on the nearest known breeding areas and potential spatial and temporal use of the site by the species is provided in Sections 3.3.2.6 and 3.4.

Monarch Butterfly

The monarch butterfly is a candidate species. There are no statutory protections under the ESA for candidate species, but USFWS encourages opportunities to conserve the species. Populations in western North America (including most of Arizona) migrate either to California or Mexico for the winter (USFWS 2020b) or may overwinter in the low deserts in California or Arizona (Morris et al. 2015). In middle elevations of Arizona, the species may occur as early as late March and early April, becoming

more abundant in late July and August. Peak fall migration is from September through mid-October (Morris et al. 2015). In the southwestern United States, migrating monarchs often occur near water sources, such as rivers, creeks, riparian corridors, roadside ditches, or irrigated gardens. Multiple generations of the butterflies are produced each year. Their larvae are obligate feeders on plants in the Asclepiadaceae family, primarily species of milkweeds. They are found in a variety of habitats. During fall migration in Arizona, monarchs favor nectar from native plants, including sunflowers (*Helianthus* spp.), rabbitbrush (*Ericameria* spp.), thistles (Family Asteraceae), milkweeds, and a variety of other native and garden plants (Morris et al. 2015).

The project area and gen-tie are within the species expansive breeding and migration range (USFWS 2022g). The project area contains, and the gen-tie may contain, appropriate blooming nectar resources: broadleaf milkweed plants (flower from June–September) and other nectar plant species have been observed in the project area during preconstruction wildlife surveys. Nearest adult sightings and breeding records are approximately 40 miles to the northwest and southwest, respectively (Western Monarch Milkweed Mapper 2022).

Peebles Navajo Cactus

The Peebles Navajo cactus is federally listed as endangered and an ANPL Highly Safeguarded native plant; no critical habitat has been designated for the species. The species is a narrow endemic (having a 1 mile-wide × 7-mile-long distribution) extending northwest to southeast within the immediate vicinity of Joseph City and Holbrook, north of the Little Colorado River. It is restricted to specialized and localized soils that are shallow to deep, well to extremely well drained, and that formed in mixed alluvium belonging to the Gypsiorthids-Torriorthents-Haplargids Association occurring between 5,100 and 5,650 feet (Phillips and Phillips 1995 as cited in USFWS 2008; USFWS 2008). Specific soil conditions are further described as weakly alkaline, Little Colorado paleochannel gravel deposits, eroding from or "uncomfortably on top of" underlying Shinarump conglomerate of the Chinle formation (Taylor 2008, as cited in AGFD 2009; personal communication, Barbara Phillips, Botanist, former U.S. Forest Service, Coconino National Forest, with Dorothy House, Technical Writer, SWCA, May 6, 2022). It occurs on gentle—5 to 60 percent—slopes on all facing aspects.

The species has been documented within 10 miles of the project area (AGFD 2022a), and within 3 miles of the gen-tie (AGFD 2022b). The project area is outside of the species' range and does not contain appropriate habitat conditions. The USFWS (2022h) indicates the northern extent of the gen-tie is within the species' range; however, the species is not known to occur in that area. That northern extreme of the gen-tie does not appear to contain appropriate soil conditions (i.e., Chinle formation, Gypsiorthids-Torriorthents-Haplargids Association, gravelly soils), as mapped by the NRCS's (2019) Web Soil Survey. However, due to the proximity of appropriate soil conditions (2 miles northwest of the gen-tie [south of the Little Colorado River]) and the known population (approximately 1 mile north of the gen-tie terminus), and that appropriate soil conditions may be present locally (at a finer scale than the NRCS mapping), the species' occurrence may not be entirely ruled out at the northern extent of the gen-tie line. Site specific soil typing and surveys for the species may be used to inform gen-tie line siting to avoid impacting the species.

3.1.5.2 OTHER SPECIAL-STATUS SPECIES

Table 6 presents the range/habitat requirements and nearest records, if known, and potential for occurrence determinations for 1) SGCN 1A and 1B species provided by AGFD (2022a, 2022b), 2) select BCC species listed for BCR 16 (USFWS 2021), and 3) special-status plant species documented within 10 miles of the project area (AGFD 2022a) and/or 3 miles of the gen-tie (AGFD 2022b). BCCs were excluded from Table 6 if they were not SGCN 1A or 1B species provided by AGFD (2022a) and it was

determined that the project area lacks appropriate habitat associations and/or is outside of the species' range. Among these select BCCs, SGCN 1C status is noted in the table if relevant.

Table 6. Occurrence Status of Other Relevant Special-Status Species

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Amphibians				
Arizona toad (*Ananxyrus microscaphus*)	–	SGCN (1B)	Riparian habitats containing shallow, flowing, permanent water over sandy or rocky substrates, typically in river canyons or foothill streams below 8,000 feet. Range in Arizona extends northwest to southeast through central portions of the state, including below the Mogollon Rim.	**Unlikely to occur**. Although Dry Lake, approximately 1.5 miles south of the project area, is within the species' predicted range, the project area does not contain appropriate habitat associations for this species. The Little Colorado River, where the gen-tie would span the river, is also within the species' predicted range, but is ephemeral along that stretch. Nearest record is approximately 22 miles south-southwest of the project area.
Northern leopard frog (*Lithobates pipiens*)	–	SGCN (1A)	Variety of habitats usually in permanent waters with rooted aquatic vegetation from sea level to 11,000 feet. In Arizona, limited to stock tanks, wildlife waters, and a lake. Range includes northern and central portions of the state.	**May occur, particularly in western side of project area**. Western portion of the project area is within the predicted range for this species and contains limited habitat associations (ephemeral stock tanks). The gen-tie, where it would span the Little Colorado River, is outside of the species' predicted range. Historical element occurrences are north of the project area near the Little Colorado River, approximately 2 miles east of the gen-tie northern terminus.
Birds				
Bendire's thrasher (*Toxostoma bendirei*)	BCC	SGCN (1C)	Desert habitats: open grassland, shrubland, or woodland with scattered shrubs or trees from sea level to approximately 6,000 feet. Breeding range includes northern two-thirds of Arizona; year-round range includes southern third of the state.	**Known to occur.** The project area and gen-tie are within the breeding range and contain appropriate habitat associations. This species has been documented during project preconstruction surveys.
Black-chinned sparrow (*Spizella atrogularis*)	BCC	SGCN (1C)	Arid brushlands on slopes of chapparal, sagebrush, and pinyon-juniper from sea level to 9,000 feet. Breeding range includes northwestern, central, and east-central portions of Arizona. Non-breeding range includes southeastern and southwestern portions of the state.	**May occur.** The project area and gen-tie are on the northern edge of the breeding range within east-central Arizona and contain sloped pinyon-juniper and shrub habitats. Nearest record is near Holbrook, approximately 6 miles east of the gen-tie northern terminus.
Broad-tailed hummingbird (*Selasphorus platycercus*)	BCC	--	Open woodland, especially pine, pine-oak, pinyon-juniper, and conifer-aspen associations, brushy hillsides, montane scrub, and thickets. Breeding range fragmented throughout Arizona expect for southwestern extreme of the state.	**Known to occur.** The project area and gen-tie are within the fragmented breeding range and contain appropriate habitat associations. This species was documented during project preconstruction surveys.
Cassin's finch (*Haemorhous cassinii*)	BCC	--	Open coniferous forests across broad elevational range including ponderosa pine and pinyon pine associations. Non-breeding range includes central, east-central, and southeastern portions of Arizona; year-round range includes north-central and northeastern portions of the state.	**May occur.** The project area and gen-tie are within the species' non-breeding range and contain appropriate habitat associations. Nearest record is approximately 10 miles north of the project area, 2 miles east of the gen-tie northern terminus.

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Clark's nutcracker (*Nucifraga columbiana*)	BCC	--	Breeding habitat includes coniferous forest from montane to subalpine zones, including pinyon-juniper woodland, pinyon pine, ponderosa pine, and Douglas fir, and mixed coniferous subalpine communities. The species' year-round range includes the northeastern portion of Arizona.	**May occur.** The project area and gen-tie are within the species' year-round range and contains appropriate habitat associations. Nearest record is approximately 10 miles northeast of the project area, 7 miles east-southeast of the gen-tie northern terminus.
Common nighthawk (*Chordeiles minor*)	–	SGCN (1B)	Variety of open habitats, including sagebrush and desert grassland, prairies and plains, open forests, croplands, rock outcrops, and gravel rooftops. Breeding range includes northeastern and southeastern portions of Arizona.	**Known to occur.** The project area and gen-tie within the species' breeding range and contains appropriate habitat associations. This species has been documented during preconstruction wildlife surveys within the project area.
Evening grosbeak (*Coccothraustes vespertinus*)	BCC	SGCN (1B)	Mixed-conifer and spruce-fir forests; less common in pine-oak, pinyon-juniper, ponderosa pine, and aspen forests. In winter, flocks typically observed in pinyon-juniper and ponderosa pine ecotone. Year-round (scarce) range includes northeastern Arizona; non-breeding (scarce) range includes central, west-central, northwestern, and southeastern portions of the state.	**May occur.** The project area and gen-tie are within the non-breeding (scarce) range, the western edge of the year-round (scarce) range and contain pinyon-juniper woodlands. Nearest record is approximately 10 miles northeast of the project area, 7 miles east-southeast of the gen-tie northern terminus.
Ferruginous hawk (*Buteo regalis*)	–	SGCN (1B)	Grasslands, shrub-steppe, pinyon-juniper, sparse riparian forests, and canyon areas with cliffs and rock outcrops. Year-round range includes roughly northern half of Arizona; wintering range includes roughly southern half of the state.	**Known to occur.** The project area and gen-tie are within the species' year-round range and contain appropriate habitat associations. This species has been documented during preconstruction wildlife surveys within the project area.
Lewis's woodpecker (*Melanerpes lewis*)	BCC	SGCN (1C)	Ponderosa pine and open riparian forests dominated by cottonwood with brushy understory and dead or downed woody material; may also use oak, pinyon-juniper, and pine-fir woodlands, and nut and fruit orchards. Year-round range includes northern portion of Arizona. Non-breeding range includes northwestern, central, and southeastern portions of the state.	**May occur.** The project area and gen-tie are on the boundary of the year-round and non-breeding ranges and contain pinyon-juniper habitats. Nearest record is 8 miles northwest of the project area (9 miles west of the gen-tie) (Chevelon Canyon).
Lincoln's sparrow (*Melospiza lincolnii*)	–	SGCN (1B)	Uses shrub-dominated habitats, particularly riparian sites, but also brushy forest edges and weedy fields during migration. Non-breeding range includes southwest half and east-central portion of Arizona. Migration range includes northeastern Arizona. Isolated breeding locations are known in north-central and east-central portions of the state.	**May occur**. The project area and gen-tie are within the migration range for this species and contains shrubby/brushy habitats. Nearest records are 6 miles southeast of the project area (near Dry Lake) and directly adjacent to the gen-tie northern terminus (in association with Little Colorado River).

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Long-eared owl (*Asio otus*)	BCC	SGCN (1C)	Open forests and dense vegetation adjacent to grasslands or shrublands. Rare breeding and wintering range in Arizona.	**May occur**. The project area and gen-tie are within the species' year-round (rare) range and contain appropriate habitat conditions. The species is known to nest in the region. Nearest species record is approximately 6 miles southeast of the project area (near Dry Lake).
Mountain plover (*Charadrius montanus*)	BCC	SGCN (1B)	Short-grass prairie dominated by blue grama; also, fallow or recently tilled agricultural fields. Often associated with prairie dog colonies. In migration, can use alkaline or mud soils. Wintering range includes central and southern portions of Arizona.	**Unlikely to occur**. The project area and gen-tie contain blue grama grassland but are outside of the species' breeding and non-breeding ranges. Nearest record is approximately 30 miles northwest of the project area and gen-tie.
Olive-sided flycatcher (*Contopus cooperi*)	BCC	SGCN (1C)	Openings or edges of coniferous forests, particularly burned ponderosa forests in Arizona; also, coniferous-deciduous forests and forested edges of wetlands. In migration use greater diversity of habitats including substantially more riparian and nonconiferous forests Breeding range includes northeastern half of Arizona; migration range includes southwestern half of the state.	**May occur, particularly at the northern end of the gen-tie**. Project area is on the edge of the species' breeding and migration ranges and contains limited habitat associations. Species more likely to occur, particularly as migrant, where the gen-tie would span the Little Colorado River than within the project area. Nearest species records are approximately 10 miles north of the project area (just east of the gen-tie northern terminus).
Pacific wren (*Troglodytes pacificus*)	–	SGCN (1B)	Wide range of habitats from sea level to 12,000 feet, particularly riparian conditions with various-age stands in old-growth and mature conifer forests. Breeding range in Arizona includes linear strip from north-central to east-central portions of the state (Mogollon Rim). Non-breeding range includes the Arizona-California border.	**Unlikely to occur**. Project area and gen-tie are just outside (northeast) of the species' breeding range and do not contain appropriate habitat conditions. Nearest species record is approximately 30 miles southwest of the project area.
Peregrine falcon, American peregrine falcon (*Falco peregrinus anatum*)	–	SGCN (1A)	Variety of biomes; generally associated with cliffs and open landscapes. Year-round range includes most of Arizona except for east-central portion of the state. Breeding and migration range includes north-central portion of the state.	**Known to occur**. The project area and gen-tie are within the subspecies' year-round range and contain appropriate habitat conditions. This species has been documented during project preconstruction surveys.
Pinyon jay (*Gymnorhinus cyanocephalus*)	BCC	SGCN (1B)	Pinyon-juniper woodland; also found in sagebrush, scrub oak, and chaparral. Year-round range includes northern half of Arizona.	**Known to occur.** The project area is within the species' year-round range and contains appropriate habitat associations. This species has been documented during project preconstruction surveys.
Snowy plover (*Charadrius nivosus*)	BCC	SGCN (1B)	Inland habitats include wastewater and salt-evaporation ponds, alkaline and saline lakes, reservoirs, and riverine sand bars. Migrates throughout Arizona except eastern edge of the state. Isolated breeding locations in southern portion of the state.	**Unlikely to occur.** The project area and gen-tie are within the species' migration range; however, appropriate habitat associations are not present. Nearest records are 3 miles south of the project area (Dry Lake), and 6 miles east of the gen-tie northern terminus (Hidden Cove Golf Course, Holbrook).

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Virginia's warbler (*Leiothlypis virginiae*)	BCC	SGCN (1C)	Breeds in a variety of scrub-woodlands with dense understory vegetation, including oak, pinyon-juniper, and mixed conifer forests. Commonly seen in pine habitats and riparian corridors during spring and fall migration. Migration range includes southeastern and central portions of the state; breeding range includes fragmented locations through the state except for southwestern Arizona.	**May occur.** Project is within the species' fragmented breeding range of east-central Arizona and contains appropriate habitats. Nearest species records are 5 miles south (near Dry Lake), 10 miles west (Chevelon Canyon), and 10 miles north of the project area (adjacent to the gen-tie northern terminus).
Yellow-headed blackbird (*Xanthocephalus xanthocephalus*)	BCC	--	Nests in emergent vegetation of deep-water palustrine wetlands in prairie wetlands, mountain meadows, and arid regions. Forages in wetlands and surrounding grasslands, croplands, or savanna. Migrates and overwinters in agricultural areas. In Arizona, breeding range includes north-central and east-central portion of the state; non-breeding range includes southeastern Arizona. Migrates throughout the western and northern portions of the state.	**May occur.** The project area and gen-tie are on the edge of the species' breeding and non-breeding ranges and contains appropriate habitat associations to support foraging and migrating individuals. Nearest records are 4 miles south of the project area and at the northern terminus of the gen-tie.
Yellow warbler (Sonoran; *sonorana* ssp.; *Setophaga petechia* ssp. *sonora*)	–	SGCN (1B)	Wet, deciduous thickets, especially those dominated by willows, and in disturbed and early successional habitats. Migration habitat includes scrub/shrub and semi-open, second-growth forest, often associated with wetlands. Migrates through most of Arizona. Breeds in central, east-central, and south-central portions of the state; breeding (scarce) range includes northern portion of the state.	**May occur.** The project area and gen-tie are within the species' breeding range for this species. Habitat associations are limited in extent and marginally suitable: the species may occur on the edges of project area stock tanks, or along the Little Colorado River (where the gen-tie would span the river), particularly during migration. Nearest records are 10 miles north of the project area and directly adjacent to the gen-tie northern terminus.
Bivalve				
California floater (*Anodonta californiensis*)	–	SGCN (1A)	Shallow areas of unpolluted lakes, reservoirs, and perennial streams with relatively stable water levels of low velocity flow regime from 4,000 to 8,700 feet. In Arizona, found in east-central portion of the state.	**Unlikely to occur**. The project area and gen-tie do not contain suitable habitat associations. Nearest record is approximately 10 miles west of the project area (Chevelon Creek).
Fishes				
Little Colorado sucker (*Catostomus* sp. 3)	–	SGCN (1A)	Pools and riffles of creeks, small rivers, and impoundments from 670 to 7,400 feet. Endemic to the upper portion of the Little Colorado River and its north-flowing tributaries in Coconino, Navajo, and Apache Counties.	**Unlikely to occur.** Documented with 10 miles of the project area; but not within 3 miles of the gen-tie. The species' predicted range includes Chevelon Creek (west of the project area) and a portion of the Little Colorado River west of the gen-tie. The project area and gen-tie, including where the gen-tie would span the Little Colorado River, lack appropriate habitats. Nearest species' records are 8 miles northwest of the project area (9 miles west of the gen-tie) (Chevelon Creek).

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Roundtail chub (*Gila robusta*)	–	SGCN (1A)	Pools adjacent to swifter riffles and runs of cool to warm mid-elevational streams and rivers from 1,200 to 7,200 feet. In Arizona, occurs in two tributaries of the Little Colorado River (Chevelon and East Clear Creeks), several tributaries of the Bill Williams River basin, the Salt River and four of its tributaries, Aravaipa Creek, and Eagle Creek.	**Unlikely to occur.** Documented within 10 miles of the project area, but not within 3 miles of the gen-tie. The species predicted range includes Chevelon Creek (west of the project area). The project area and gen-tie, including where the gen-tie would span the Little Colorado River, lack appropriate habitats. Nearest records approximately 5 miles west-northwest of the project area (Chevelon Creek).
Flowering Plants				
Grama-grass cactus; paperspine fishhook cactus (*Sclerocactus papyracanthus*)	--	SR	Grasslands and pinyon-juniper woodland communities, especially in red, sandy soils with a calcareous or gypseous component, on open flats or gentle slopes from 5,000-7,500 feet. Associated with blue grama and dropseed grasses. In Arizona, occurs in east-central portion of the state.	**Known to occur.** The project area and gen-tie are within the species' geographic range and contain appropriate habitat associations. This species has been documented in the project area during project preconstruction surveys.
Roundleaf errazurizia; roundleaf dunebroom (*Errazurizia rotundata*)	--	SR	Dunes, sandy soils in red or white sandstone, deep alluvial cinders in sandstone breaks, gravelly soils in calcareous outcrops, and hard red sandstone pavement from 4,600 to 5,200 feet. Associated with desert-scrub with widely spaced shrubs. Species found near Tuba City, Winslow, Holbrook, and Wupatki National Monument.	**May occur.** The project area and gen-tie are within the species' geographic range and contain appropriate habitat associations. Documented within 10 miles of the project area and within 3 miles of the gen-tie. Nearest species' records approximately 8 miles north and northeast of the project area, just east of the northern terminus of the gen-tie.
Whipple's fishhook cactus (*Sclerocactus whipplei*)	--	SR	Gravelly or sandy hills, canyon rims and mesas, of desert grasslands, sagebrush or saltbrush flats, and pinyon-juniper woodlands, from 5,000 to 6,000 feet. In Arizona, found in northeastern portion of the state in the vicinity of the Little Colorado River drainage and near Tuba City.	**May occur.** The project area and gen-tie are within the species' geographic range and contain appropriate habitat associations. Documented within 10 miles of the project area and within 3 miles of the gen-tie. Nearest species' records approximately 8 miles north and northeast of the project area, just east of the northern terminus of the gen-tie.
Mammals				
American beaver (*Castor canadensis*)	–	SGCN (1B)	Permanent water sources. Prefers low-gradient streams, ponds, and small-bottomed lakes with dammable outlets. Found throughout Arizona except south-central portion of the state.	**Unlikely to occur.** The project area and gen-tie do not contain permanent waters. Nearest records are approximately 75 miles west of the project area and gen-tie.
Arizona myotis (*Myotis occultus*)	–	SGCN (1B)	Day roosts and maternity colonies in tree cavities and crevices; maternity colonies also in buildings and bridges; winter roost records from mines. Riparian areas and ponderosa pine and oak-pine woodland near water below 8,600 feet. Also found along permanent water. In Arizona range includes central band from east to west and north-central portions of the state.	**May occur**. Project area and gen-tie are within the species' geographic range. Habitat associations are not present; however, the species may generally move through the area. Nearest species records are in the vicinity (just southwest of) of the project area.

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Brazilian free-tailed bat (*Tadarida brasiliensis*)	–	SGCN (1B)	Wide variety of habitats from desert communities through pinyon-juniper woodlands and pine-oak forests at elevations up to approximately 9,000 feet. Maternity colonies and roosts found in limestone caves, abandoned mines, bridges, buildings, and hollow trees. Range throughout Arizona.	**May occur.** The project area and gen-tie are within the species' geographic range and contain appropriate habitat associations. Documented within 10 miles of the project area; nearest records appear to be directly adjacent to the east and southeast of the project area.
Gunnison's prairie dog (*Cynomys gunnisoni*)	–	SGCN (1B)	Gently sloping grasslands and semi-desert and montane shrublands between 4,600 and 12,000 feet. In Arizona, range includes central and northeastern portions of the state.	**May occur.** The project area and gen-tie are within the species' geographic range and contain appropriate vegetative community conditions. The project area's sandy substrates may not be favorable for the species establishment. The species has not been detected during preconstruction surveys (October 2019–November 2021). Nearest record is approximately 14 miles to the southeast.
Kit fox (*Vulpes macrotis*)	–	SGCN (1B)	Open desert, shrubby, or shrub-grass habitat. In Arizona occurs in much of state except for a narrow band extending from east-central through central and north-central portions of the state.	**May occur.** The project area and gen-tie are within the species' predicted range and contain appropriate shrub-grass habitats. Nearest species record is approximately 75 miles to the west.
Mexican vole (*Microtus mexicanus*)	–	SGCN (1B)	Meadows of grasses, sedges, and forbs within ponderosa forests on steep mountain slopes from 3,100 to 8,400 feet. May also associate with drier sites where groundcover is suitable and in pinyon-juniper and pine-oak associations. In Arizona, fragmented range from east-central, central, northwestern, and northeastern portions of the state.	**Unlikely to occur.** The project area is outside of the species' predicted range and habitat associations are only marginally suitable. Nearest record is approximately 17 miles southwest of the project area.
Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)	–	SGCN (1B)	Day roosts and maternity and hibernation colonies in caves, mines, or buildings. Night roosts may include caves, buildings, and tree cavities. Associated with mesic forested habitats but occupies a broad range of habitats, including arid scrub, pine forest, pinyon-juniper, and wooded canyons between 500 and 8,400 feet. Range throughout Arizona.	**May occur.** The project area and gen-tie are within the subspecies' geographic range and contains appropriate habitat associations. Nearest record is approximately 7 miles southeast of the project area.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	–	SGCN (1B)	Rugged canyons and rocky outcroppings below 7,500 feet. Associated with water sources in low deserts, desert scrub, and pine-oak forests, including large and small water tanks and ephemeral pools. Day roosts in rock crevices in cliffs and shallow caves and may roost in buildings or under roof tiles. In Arizona, found in roughly the southern half of the state.	**Unlikely to occur**. Documented within 10 miles of the project area. The project area and gen-tie are outside of the species' predicted range.

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Pronghorn, American pronghorn (*Antilocapra americana americana*)	–	SGCN (1B)	Grasslands, sagebrush plains, deserts, and foothills. In Arizona, scattered populations throughout the state. Subspecies range includes narrow band from east central through north-central, and northwestern portions of the state. Small, fragmented range in southeastern portion of the state.	**Known to occur.** The project area and gen-tie are within the species' geographic range and contain appropriate habitat associations. This species has been documented in the project area during project preconstruction surveys
Spotted bat (*Euderma maculatum*)	–	SGCN (1B)	Roosts in crevices and cracks of cliff faces; sometimes roosts in caves or in buildings near cliffs. Variety of habitats, including low to high deserts, riparian areas, ponderosa, and spruce-fir forests below 10,600 feet. Range throughout Arizona.	**May occur**. Project area and gen-tie are within the species' geographic range. Nearest species record is approximately 80 miles southeast of the project area.
Springerville pocket mouse (*Perognathus flavus goodpasteri*)	–	SGCN (1B)	Plains-like short grasslands interspersed with volcanic rock or other sparsely vegetated grasslands at elevations from 5,200 to 7,000 feet. In Arizona, found in grasslands of eastern end of Mogollon Plateau near Springerville, Snowflake, south of Holbrook, and on the south side of plateau along Nash Creek.	**May occur.** Documented within 10 miles of the project area. The project area and gen-tie are within the subspecies' geographic range and contain appropriate habitat associations. Nearest records are 10 miles east and northeast of the project area; 7 miles east of the gen-tie.
Stephen's woodrat (*Neotoma stephensi*)	–	SGCN (1B)	Rocky areas in pinyon-juniper woodlands. In Arizona, found roughly in north half of state.	**May occur.** The project area and gen-tie are within the geographic range and contains appropriate habitat associations. Nearest records are approximately 18 miles southwest and 18 miles east of the project area.
Western red bat (*Lasiurus blossevillii*)	–	SGCN (1B)	Roosts in trees, particularly cottonwoods. Associated with broad-leaf deciduous riparian forests and woodlands from 1,900 to 7,200 feet. In Arizona, range includes northwestern through southeastern portions of the state.	**Unlikely to occur.** The project area and gen-tie are just outside of the species' geographic range and do not contain appropriate habitat conditions. Nearest species record is approximately 60 miles west-southwest of the project area.
Yuma myotis (*Myotis yumanensis*)	–	SGCN (1B)	Roosts in caves, mines, cliff crevices, buildings, bridges, and similar structures. Nursery colonies in buildings, caves, mines, and bridges. Associated with wide variety of upland and lowland habitats (within wide range of elevations: sea level to 11,000 feet), including riparian, desertscrub, moist woodlands, and forests where they prefer cliffs and rocky walls near water. In Arizona, ranges throughout except south-central portion of the state.	**May occur**. Project area and gen-tie are within the species' geographic range. Nearest species' records are just south of the project area.

Common Name (*Scientific Name*)	Status*		Range/Habitat Requirements	Occurrence Status
	Federal	State		
Reptiles				
Pai striped whiptail (*Aspidoscelis pai*)	–	SGCN (1B)	Grasslands, chapparal, conifer woodlands, and ponderosa pine parklands from approximately 4,800 to 7,600 feet. Populations scattered across the Colorado Plateau of northern Arizona and in the Mazatzal Mountains of central Arizona.	**May occur.** The project area and gen-tie are on the edge of the species' geographic range and contains appropriate habitat associations. Nearest record is approximately 27 miles east of the project area.

Note: Table includes those Tier 1A and 1B species listed in AGFD (2022a, 2022b), BCCs for BCR 16 that either may occur or are unlikely to occur but were Tier 1A and 1B species listed in AGFD (2022a, 2022b), and Arizona Native Plant Law-protected species listed in AGFD (2022a, 2022b). SGCN Tier 1C status is noted for those BCCs included in the table, if relevant. Notes regarding nearest species records are from AGFD (2022c) and eBird (2022a). Range or habitat requirement information and potential occurrence justification from Ammerman et al. (2012), AGFD (2022c), Bat Conservation International (2022), Billerman et al. (2022), Brennan (2012), Corman and Wise-Gervais (2005), eBird (2022a), NatureServe (2022), Reid (2006), SEINet (2022), and USFWS (2022g).

* Federal Status Definitions

BCC = Bird of Conservation Concern

State Status Definitions

SGCN = Species of Greatest Conservation Need; species identified by AGFD (2012b) as having conservation priority. Tier 1A species are those categorized by AGFD (2012b) as "highest priority vulnerable" species. Tier 1B species are those categorized as "vulnerable" but not fitting the Tier 1A criteria for highest priority. Tier 1C species are those for which existing data were insufficient to score one or more vulnerability criteria.

3.1.5.2.1 Species of Greatest Conservation Need

Twenty-one species categorized as SGCN 1A or 1B may occur or are known to occur within the project area or gen-tie (see Tables 5 and 6), including 10 mammals, 9 birds, 1 amphibian, and 1 reptile. Seven of these species are known to occur, having been documented during preconstruction wildlife surveys in the project area—1A species: bald eagle, golden eagle, peregrine falcon (*Falco peregrinus*); 1B species: common nighthawk (*Chordeiles minor*), ferruginous hawk (*Buteo regalis*), pinyon jay (*Gymnorhinus cyanocephalus*), and pronghorn.

3.1.5.2.2 Birds of Conservation Concern

Twelve BCCs may occur or are known to occur within the project area or gen-tie (see Table 6). Three are known to occur, having been documented during preconstruction wildlife surveys in the project area: Bendire's thrasher (*Toxostoma bendirei*), broad-tailed hummingbird (*Selasphorus platycercus*), and pinyon jay.

3.1.6 *Plant Communities of Concern*

The project area is either clearly beyond the known geographic or elevational range of federally listed plant species or it does not contain habitat conditions known to support these species, or both (see Section 3.1.5). Peebles Navajo cactus (federally endangered, ANPL Highly Safeguarded native plant) could be present along the northern extreme of the gen-tie, adjacent to the Little Colorado River; however, the area appears to lack appropriate soil conditions (based on NRCS [2019] soil mapping efforts) and is outside of (south of) the known species' occurrences (see Section 3.5.1.1.1).

As observed during the January 27, 2022, site visit, and during preconstruction wildlife surveys, other protected native plants classified by the ANPL are known to occur in the project area including banana yucca, grama-grass cactus, kingcup cactus, plains prickly pear, tulip pricklypear, and Whipple cholla, which are Salvage Restricted native plants. Others may occur (see, for example, Table 6). Tamarisk, a Class C noxious weed, was observed at the Little Colorado River bridge crossing, approximately 1 mile west of the gen-tie terminus and appears to be present where the gen-tie would span the river (Google Earth aerial imagery).

3.1.7 *Critical Habitats*

There are no critical habitats within the project area or gen-tie. The nearest critical habitat—for Little Colorado spinedace—is Chevelon Creek, 4.5 miles north-northwest of the project area and 6 miles northwest of the gen-tie (Figure 9).

3.2 Other Special Area Designations

There are no IBAs (Audubon 2022), WHSRN sites (WHSRN 2019), Wetlands of International Importance (Ramsar sites) (Ramsar 2014), National Wildlife Refuges (USFWS 2022d), Wilderness Areas (AGFD 2022c), Wild and Scenic Rivers (National Wild and Scenic Rivers System 2022), National Trails (National Park Service 2022), BLM Areas of Critical Environmental Concern (ACECs) (BLM 1989), tribal lands (AGFD 2022c), or state parks (Arizona State Parks 2022) within the project area or gen-tie. Of these special designation areas, the Tanner Wash ACEC is located within 10 miles of the project area (1 mile northeast of the gen-tie) (see Figure 9). This ACEC was designated in 1989; it is managed to protect and promote recovery of the Peebles Navajo cactus (BLM 1988).

Other nearby special designation areas include Homolovi State Park, located 18 miles northwest of the project area (and gen-tie); Petrified Forest National Wilderness Area, 29 miles to the east of the project area (27 miles east-southeast of the gen-tie); and the Mogollon Rim Snow Melt Draw IBA, located 31 miles southwest of the project area (27 miles southwest of the gen-tie). Nearest tribal lands (Navajo Nation) are 21 miles north of the project area (12 miles north of the gen-tie).

Presence of wildlife corridors are described below (see Section 3.3.1).

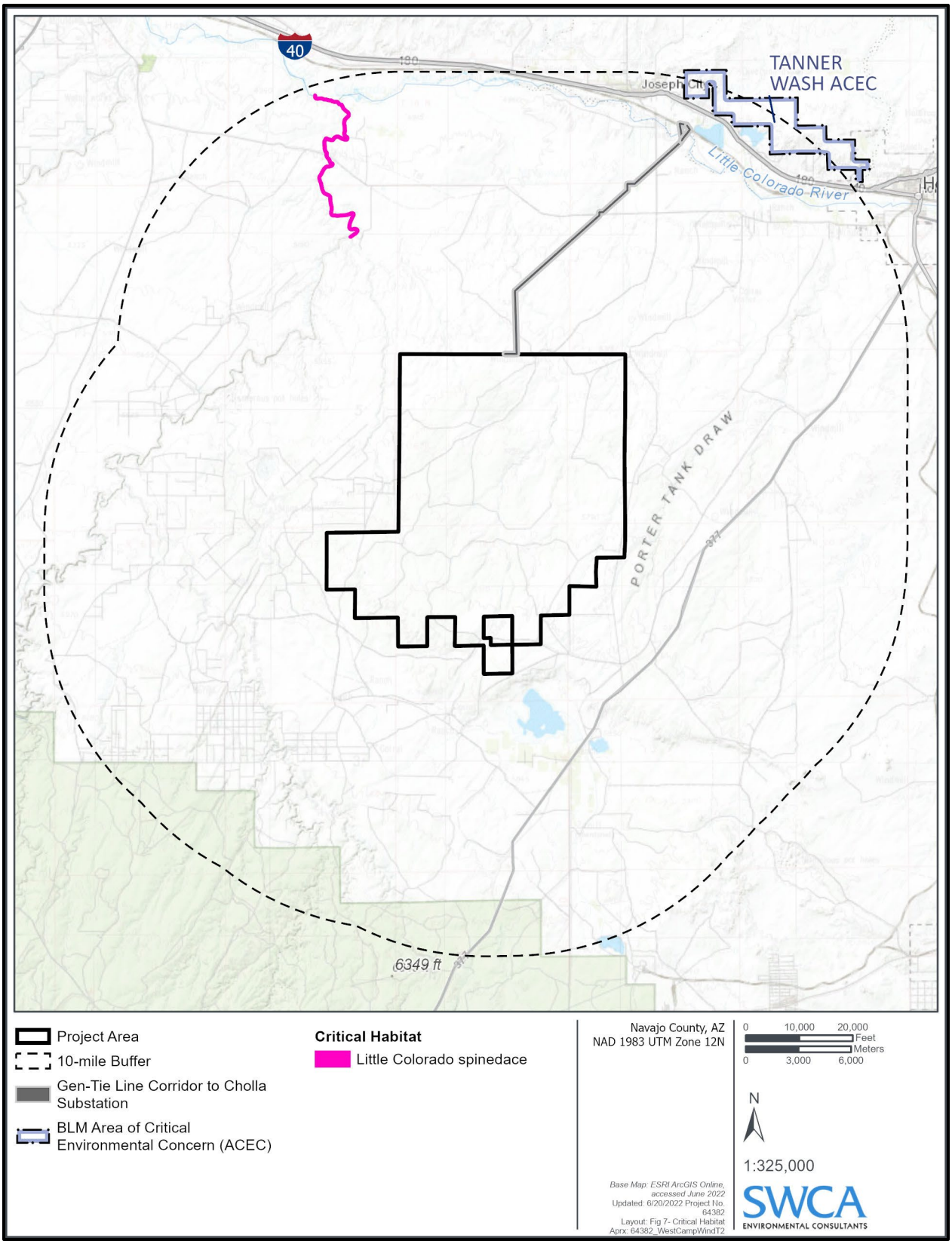

Figure 9. Special designation areas within 10 miles of the project.

3.3 Areas of Wildlife Congregation/Importance

3.3.1 *Wildlife Corridors/Unfragmented Habitats*

In Arizona, the AWLW (2006) identified habitat blocks (areas determined to be important wildlife habitats expected to remain wild) and potential wildlife linkage zones (areas determined to be critical to wildlife movement). County-level stakeholder workshops (e.g., Apache and Navajo Counties workshops held in 2010 and 2011 in Pinetop) and associated assessments (AGFD 2013) later identified linkages at a finer scale that may have been overlooked by the AWLW effort. The county-level assessments categorized wildlife linkages into four categories: diffuse movement areas, where animals move within a habitat block across a broad area rather than through a well-defined linkage; crossing areas, where animals move across barriers, such as major roads; landscape movement areas, where animals move between habitat blocks across a broad area or through a well-defined linkage; and riparian movement areas, where terrestrial and aquatic animals move along riparian or xeroriparian habitats. A subset of priority areas highlighted in the AWLW (2006) assessment, and the county-level assessments have also been developed into detailed modeled corridors (i.e., Arizona missing linkages) (AGFD 2022c; CorridorDesign 2013). These linkage designs identify multi-species corridors between blocks, as well as connectivity associated with certain planning and road mitigation measures. A statewide wildlife connectivity assessment (Perkl 2013), which identified Important Connectivity Zones (ICZs)—general areas throughout the landscape that contribute the most to permeability of the whole landscape—was also completed and meant to complement the AWLW and county-level assessments. These habitat blocks and linkages represent approximate locations of wildlife movements on the landscape and can serve to inform early project planning.

The project area and gen-tie are within the multi-species Mogollon Rim/Navajo Nation potential linkage zone, as identified by AWLW (2006) (Figure 10). A habitat block has also been identified within 10 miles of the project area; approximately 9 miles to the southwest (Apache-Sitgreaves National Forests) (see Figure 10). Portions of the project area and gen-tie are within a county-level assessment diffuse movement area, which has been identified as important for pronghorn (AGFD 2013, 2022c) (Figure 11). A multi-species riparian movement area has also been identified where the gen-tie would cross the Little Colorado River (AGFD 2013, 2022c) (Figure 11). ICZs also bisect the project area and gen-tie (AGFD 2022a, 2022b, 2022c) (see Figure 11). The nearest linkage design (Munds Mountain – Black Hills Linkage Design) is located 70 miles west of the project area.

The WAFWA (2020) CHAT, which measures crucial habitats using a six-level prioritization scheme (1 = “most crucial,” 6 = “least crucial”), based on an aggregate of data layers incorporating such layers as unfragmented habitats and wildlife corridors, indicates that the majority of the project area and gen-tie is classified as level 4, with small areas of the western and southwestern portions of the project area classified as level 3, and where the gen-tie would cross the Little Colorado River classified as level 2 (Figure 12). AGFD (2012b, 2022b) also categorizes unfragmented areas in the state based on wildlife movement barriers, vegetation diversity, and importance (relative to its occurrence in the state) of the vegetation community. The project area is within an area considered to have moderate to high value.

Habitat fragmentation is of particular concern for species requiring large habitat blocks for activities such as breeding, foraging, and sheltering. Arizona’s SWAP (AGFD 2012b) identifies species for which fragmentation has resulted in isolated populations. Among those species evaluated in Section 3.1.5 that may or are known to occur within the project area or gen-tie, six have been identified by AGFD (2012b) as species of habitat fragmentation concern: bald eagle, ferruginous hawk (*Buteo regalis*), Gunnison’s prairie dog (*Cynomys gunnisoni*), kit fox (*Vulpes macrotis*), pronghorn (*Antilocapra americana*), and yellow warbler (*Setophaga petechia*).

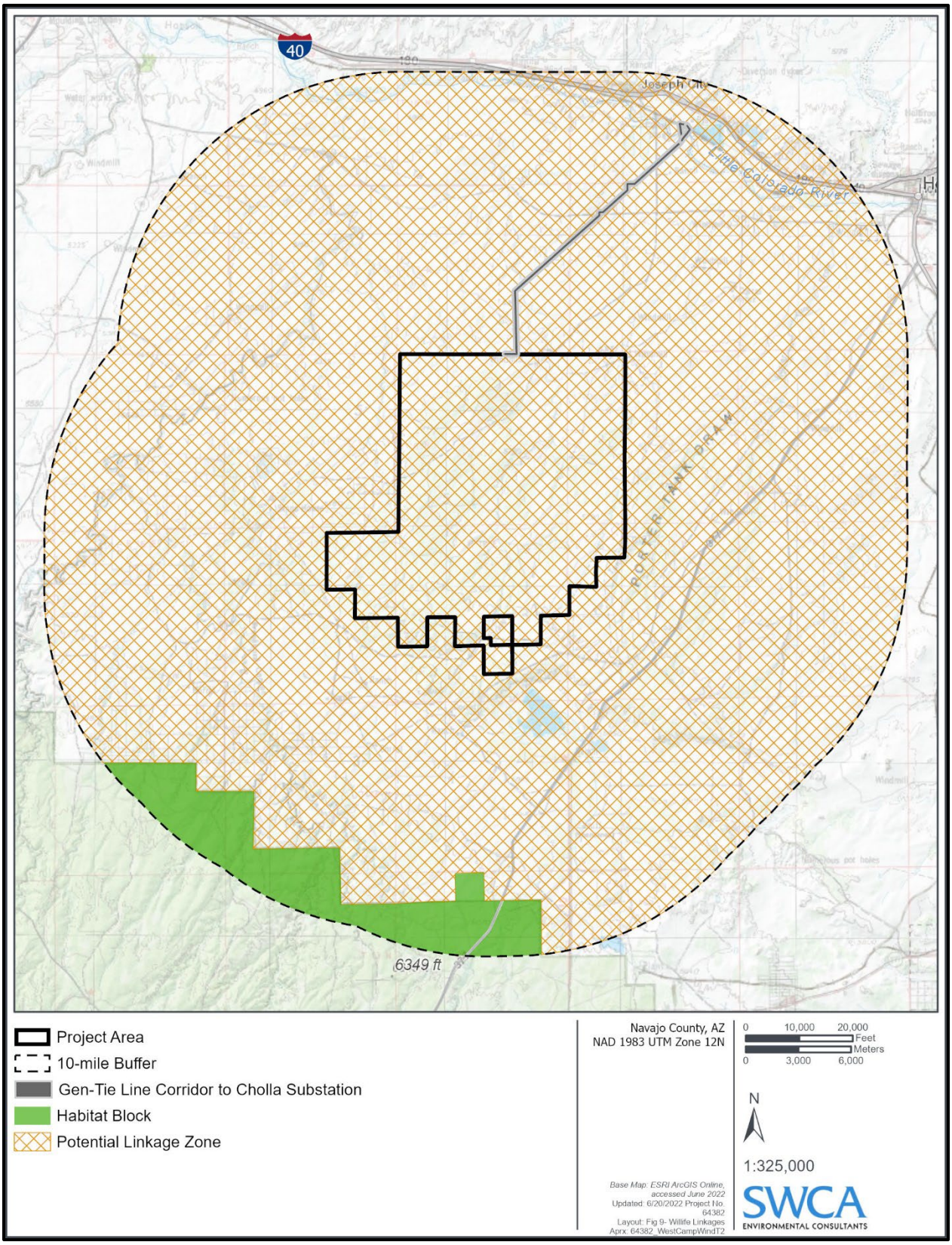

Figure 10. Potential important wildlife linkage zones and habitat blocks within 10 miles of the project area.

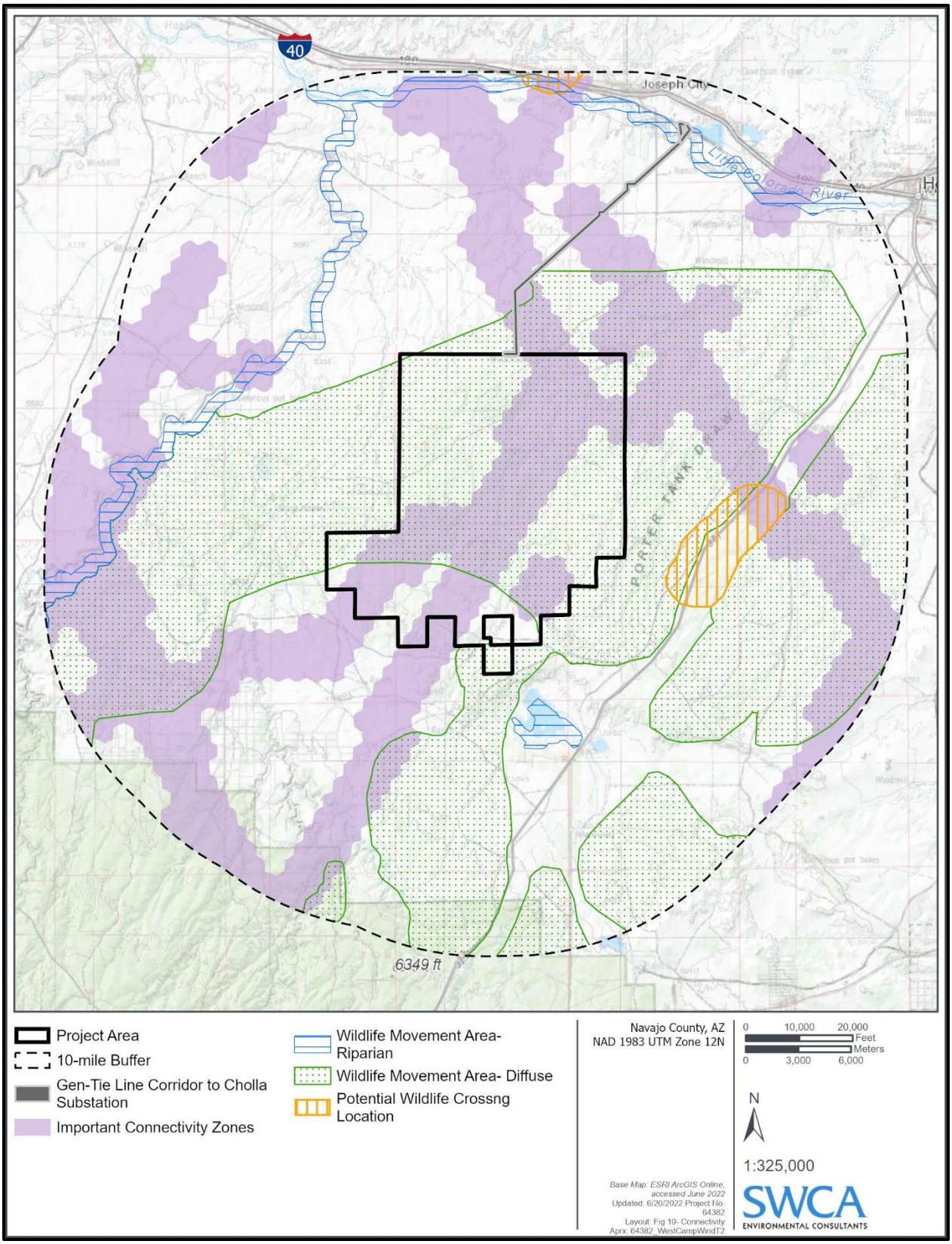

Figure 11. Arizona Important Connectivity Zones and county-level assessment linkages within 10 miles of the project area.

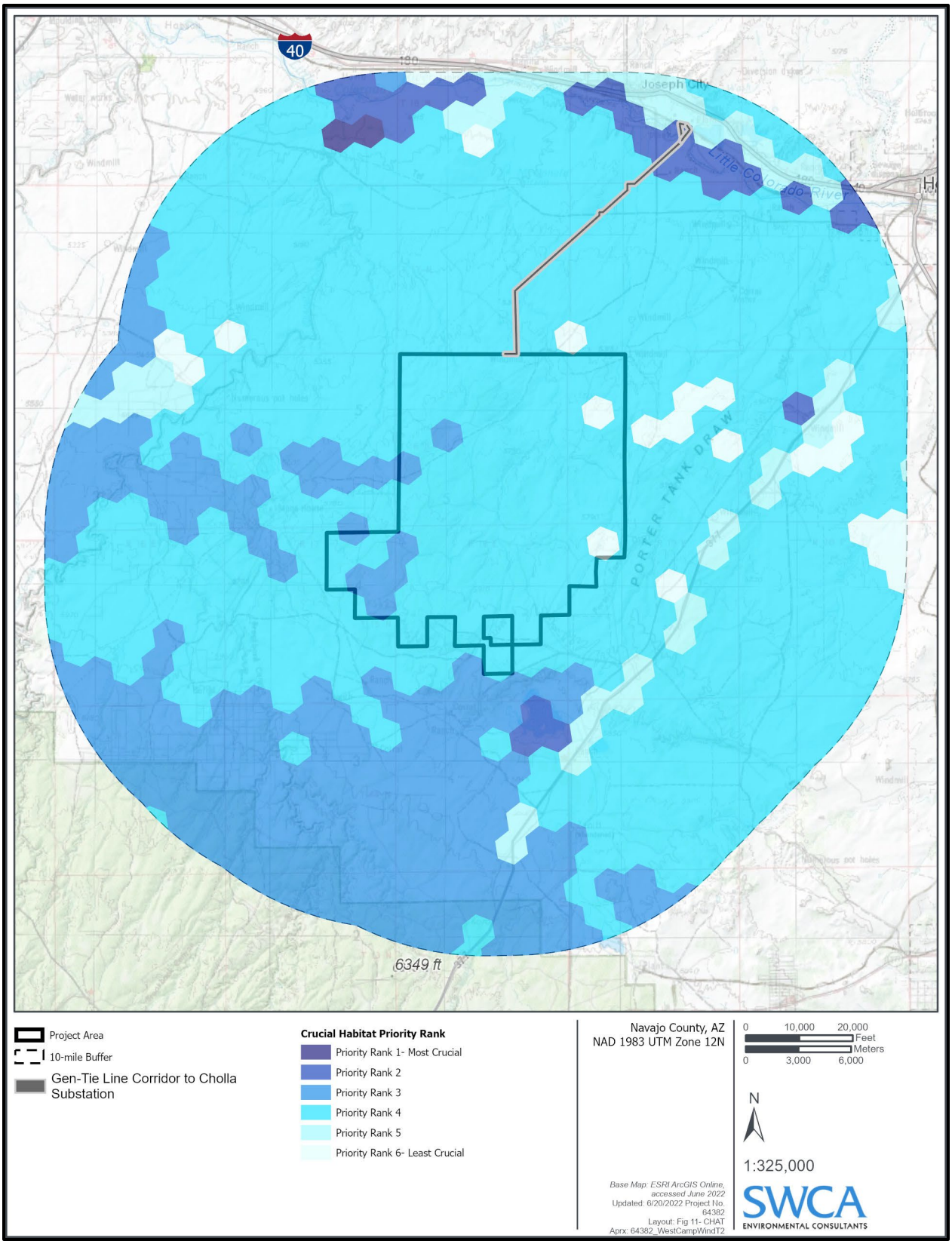

Figure 12. CHAT crucial habitats within 10 miles of the project area.

3.3.2 *Areas of Seasonal Importance*

3.3.2.1 BAT ROOSTS, ROOSTING HABITAT, HIBERNACULA, MIGRATORY ROUTES, AND STOPOVERS

Bat roosting sites may vary by species, season, and time of day (e.g., day—roosts used for rest and raising young; night—roosts used for ingesting food, resting, and avoiding inclement weather or predators). Bats roost singly, in small groups, or in large numbers in naturally occurring and human-made structures including caves, rock crevices, birds' nests, most parts of trees (e.g., inside cavities or hollow logs, under loose bark, inside furled leaves, on branches), mines, buildings, bridges, and culverts (Ammerman et al. 2012). Many bats raise their young in spring-season nursery or maternity roosts; site fidelity at these sites is highly variable (Ammerman et al. 2012; Lewis 1995). Hibernacula sites—commonly caves and abandoned mines—are typically restricted to those with relatively stable temperatures and relative humidity (Ammerman et al. 2012).

There are no known bat colonies within 10 miles of the project area; however, this may be because of a lack of surveys rather than a lack of presence. The nearest known bat colony is 11 miles to the northeast, north of the Little Colorado River near Holbrook (AGFD 2022d). Within the general region, there are multiple capture records for migratory tree bats, including hoary bat (*Lasiurus cinereus*) and silver-haired bat (*Lasionycteris noctivagans*), and free-tailed bats, including Brazilian free-tailed bat (*Tadarida brasiliensis*) and big free-tailed bat (*Nyctinomops macrotis*), which have been discovered as fatalities at the nearby[5] Dry Lake I and II wind energy facility (personal communication, Angie McIntire, AGFD Bat Specialist, with Allen Graber, Ecologist, SWCA, November 13, 2018). As part of the May 18, 2022, wildlife agency coordination meeting for the project, AGFD raised concern for turbine collision risk to high-flying bats (e.g., big free-tailed bat and greater bonneted bat [*Eumops perotis*]), particularly in reference to technological advances that increase turbine heights and rotor-swept areas being implemented at contemporary sites. While few published studies have shown contradictory findings regarding the effects of increased turbine height on fatality rates of birds, bat fatalities have shown a positive correlation with tower height (Allison et al. 2019). However, further analysis of this relationship, particularly with larger datasets, is needed (Allison et al. 2019).

Migratory routes or stopover areas for bats in the region have not been identified; predicting such areas remains tenuous (AGFD 2012a; Baerwald and Barclay 2011; Baerwald et al. 2009; Bennett and Hale 2018; Fleming and Eby 2003; Froidevaux et al. 2014). Though edge habitats and water sources are generally recognized as important habitats for certain commuting or foraging bats (Bennett and Hale 2018; Jantzen and Fenton 2013), studies have not demonstrated a clear relationship between perceived resources or pre-construction bat activity and bat fatalities at wind facilities (Bennett and Hale 2018; Solick et al. 2020). Wind energy facility siting decisions have focused on identifying important resources for bats such as hibernacula and maternity colonies and potential movement corridors (direct routes) between these important sites and quality foraging habitat patches (Arnett and Baerwald 2013; Bennett and Hale 2018; Hein et al. 2013).

3.3.2.2 BIRD STAGING AREAS, STOPOVERS, AND MIGRATION CORRIDORS

The proposed wind development area does not contain bird staging areas, stopovers, or migration concentration sites defined as follows:

- *Staging areas* are those with abundant, predictable food resources where birds prepare for an energetic challenge (typically a long flight over a geographic barrier) requiring substantial

[5] The Dry Lake I and II wind energy facility is located approximately 5 miles southeast of the project area.

food stores (Warnock 2010). Such staging areas are seen for birds such as waterfowl, cranes, shorebirds, and songbirds. Examples of staging sites include Delaware Bay, Delaware and New Jersey; Copper River Delta, Alaska; Platte and North Platte Rivers, Nebraska; Mono Lake, California; Great Salt Lake, Utah; and the Yucatan peninsula. Some smaller, lesser-known interior sites that do not meet WHSRN numeric criteria but provide consistent water availability and quality may also be important to some shorebird species that migrate in small flocks (Robinson and Warnock 1996).

- The terms *stopover* and *staging area* are often used interchangeably. Stopover sites may be defined more broadly as sites where birds rest and feed during migration to refuel or avoid adverse conditions (Warnock 2010). Though most species migrate on broad fronts and stopover strategies among and within species are complex, fragments of forested areas and riparian corridors (i.e., oases relative to the surrounding landscape) often provide important stopover habitats. Migration "hotspots" are mapped by eBird (2022b).
- Raptor *migration concentration sites* are associated with negative barriers, such as large bodies of water, or mountain ridges that offer energy-efficient flight via updrafts.

Within the project area and gen-tie, the grassland, juniper savanna, and pinyon-juniper habitats are abundant habitats relative to the surrounding region. The seasonally inundated earthen stock tanks and check dams which are located sparsely in the project area, are small, and except for one of the check dams, devoid of emergent vegetation. These wetland features would not concentrate large numbers of migrating shorebirds or waterfowl. The Little Colorado River, where the northern end of the gen-tie would span the river, may provide limited stopover riparian habitats (patchy tamarisk) for migrant birds. The river and shallow canyons within and proximal to the project area would not concentrate migrant raptors relative to known migration concentration sites. These features are also unlikely to act as a conduit for resident and/or migrant raptor use relative to more prominent topographic features in the region.

Nearby Chevelon Creek (4 miles northwest of the project area), Dry Lake (1.5 miles south of the project area), and Cholla Lake (near the gen-tie's northern terminus) may provide stopover habitats for migrant birds. Chevelon Canyon may also act as a conduit for resident and/or migrant raptor use.

The nearest known migration "hotspots" (eBird 2020b) are Cholla Lake and agricultural fields just adjacent to (south of) Dry Lake. Other nearby hotspots include the Hidden Cove Golf Course and adjacent water treatment plant in Holbrook approximately 11 miles northeast of the project area (6 miles east of the gen-tie), the Joseph City Water Treatment approximately 9 miles north of the project area (3 miles west of the gen-tie), and McHood Park (Clear Creek Reservoir) approximately 14 miles northwest of the project area (and gen-tie).

The nearest known raptor migration concentration sites are in the Grand Canyon (Lipan and Yaki Points) located approximately 115 miles northwest of the project area and gen-tie (Hawk Migration Association of North America 2022). The project area and gen-tie are also outside of known avian species-specific migration corridors (e.g., sandhill crane [*Antigone canadensis*] flyways) (Pacific Flyway Council and Central Flyway Council 2016; Pacific Flyway Council 2017).

3.3.2.3 LEKS

The project is not within the range of any lekking species (e.g., grouse, sage-grouse, prairie chicken; Galliformes>Phasianidae>Tetraoninae), which are species that form seasonal aggregations characterized by male display.

3.3.2.4 WINTER RANGES

For winter flocking species such as waterfowl, sandhill cranes, and select small birds (e.g., pinyon jays and horned larks), AGFD (2012b) highlights the importance of grassland and pinyon/juniper woodlands, particularly where they are near open bodies of water.

Within the project area, the seasonally inundated stock tanks and check dams may generally concentrate certain small birds (e.g., pinyon jays and horned larks). Because of their size, these features would not concentrate large numbers of wintering waterfowl. They may generally be used by small groups of these species, and, as a result, provide limited foraging resources for eagles (see Section 3.4).

Nearest wintering areas for sandhill cranes are far from the site (180 miles to the south [Willcox Playa, Arizona] and 180 miles to the southwest [Gila Bend] (Pacific Flyway Council and Central Flyway Council 2016; Pacific Flyway Council 2017).

Nearby Dry Lake (1.5 miles south of the project area) and Cholla Lake (near the gen-tie's northern terminus) may concentrate wintering waterfowl.

3.3.2.5 BIG GAME HUNTING, BREEDING, AND CALVING SEASONS

The project area and gen-tie are within AGFD Game Management Unit 4B. Primary game species and hunting months in the unit are pronghorn in August and September, mule deer (*Odocoileus hemionus*) in August and November, and elk (*Cervus elaphus*) from September to December (AGFD 2022e).

Breeding and fawning in pronghorn occur from August–September and May–June, respectively (AGFD 2022f). Important seasonal periods for elk include breeding (September–October), restoring depleted body fat (November), and calving (late May and June) (AGFD 2022f; New Mexico Department of Game and Fish 2018). Mule deer breed in the winter (November–December) and birth young from June–August (AGFD 2022f).

During the May 18, 2022, coordination meeting, the AGFD raised potential concern over potential impacts to pronghorn fawning (mid-May to mid-June) during the project's construction phase. This population, though apparently stable (AGFD 2022e), is bounded by Chevelon Canyon and Highway 377, a 17-mile-wide span, within which the project area is approximately 9 miles across. Pronghorn primarily use openings in the pinyon-juniper and desert grassland habitats in the region (AGFD 2022e), seeking areas with greater than average shrub cover and height for fawning (Howard 1995). Little is known on the effect of wind energy development on ungulates, including pronghorn reproductive success. Responses of ungulates to other forms of energy development, including oil and gas, have generally been overwhelmingly negative, including decreased reproductive success, or altered behavior and displacement (Sawyer et al. 2017, 2019). Milligan et al. (2021), one of the few studies of pronghorn interactions with wind energy development, did not find consistent negative effects to pronghorn space use and habitat selection, generally concluding that wind energy development may have less severe and more intermittent effects on the species than oil and gas development has had on other ungulates. However, the study did find a trend toward increased displacement over time, and behavioral avoidance by some individuals during construction of turbines, associated with increased human presence.

3.3.2.6 BIRD NESTING SITES

3.3.2.6.1 Raptor Nests

Year 1 raptor nest inventory and occupancy surveys were conducted by SWCA on February 23 (Survey 1) and March 27 and 28, 2021 (Survey 2). The timing aligned with golden eagle peak laying

(Survey 1) and early hatching (Survey 2) dates, as reported by McCarty et al. (2021). Survey 1 included a habitat-focused golden eagle nest inventory and occupancy survey within 2 miles of the project area. Survey 2 included golden eagle nest occupancy revisits within the 2-mile survey area, and a transect-based survey for non-eagle raptor nests and common raven (*Corvus corax*) within the project area. Methods and results are presented in *Eagle and Other Raptor Species Nest Surveys for the Proposed West Camp Wind Farm 2021 Nesting Season* (SWCA 2021). Survey preparation included 1) delineating potentially suitable golden eagle nesting habitats (i.e., rugged terrain, rock faces, large trees and snags, and transmission towers) within the 2-mile survey area, and 2) acquiring AGFD's previously identified golden eagle breeding areas (4 × 4–mile areas)— where eagle nests or large eagle-size nest structures have been identified during past survey efforts—within 5 miles of the project area.

SWCA delineated 4,118 acres of possible golden eagle nesting habitats within the 113,890-acre 2-mile survey area. Specific habitat features include transmission towers located in the northwestern portion of the survey area and relatively shallow canyons (e.g., Bell Cow Canyon, Porter Tank Draw, and Lost Canyon) in the northwestern, central, and southeastern portions of the survey area. For this site characterization report, we also delineated possible golden eagle nesting habitats—an additional 38,048 acres—within 2 to 10 miles of the site (Figure 13). In this larger area, the majority of possible habitats are rock faces associated within Chevelon Canyon (4–10 miles northwest and west of the project area) and Black Canyon and Brookbank Canyon (approximately 8 miles to the southwest).

Bald eagle nesting habitats (i.e., large trees, snags, and cliffs < 2 kilometers [1.2 miles] from fish-bearing waters) are not present; however, the Year 1 surveyors kept an eye out for bald eagle nests within the possible golden eagle nesting habitats delineated in the 2-mile survey area.

Figure 13 illustrates two previously identified golden eagle breeding areas provided by AGFD: Chevelon Rock (a known breeding area, 5 miles northwest of the project area) and Porter Tank (a possible breeding area [i.e., containing a large eagle-sized nest structure], 2.5 miles east of the project area) (see Figure 13). Figures 13 and 14 present the eagle, possible eagle, and non-eagle raptor and raven nests recorded during the 2021 surveys (see SWCA [2021] for additional detail]).

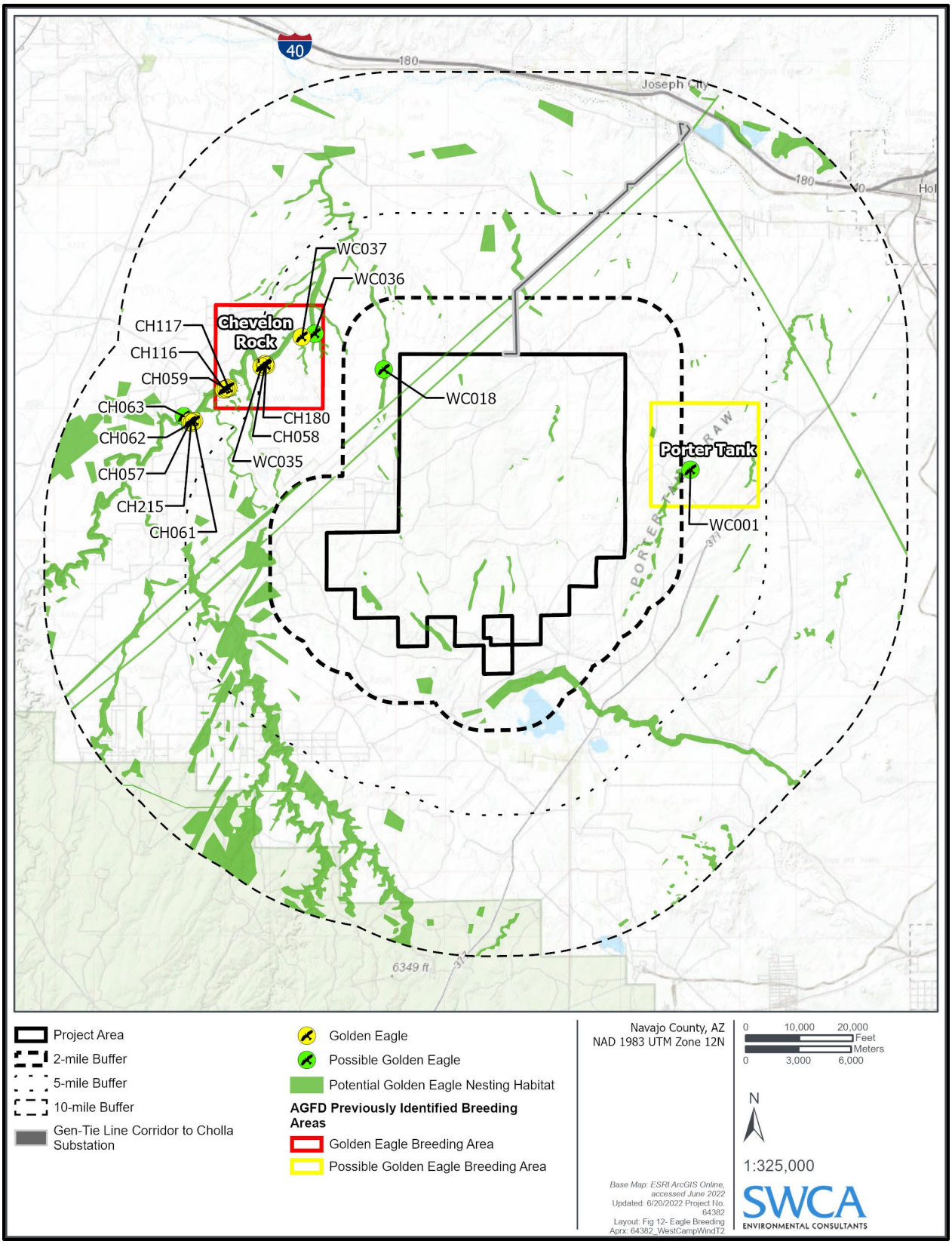

Figure 13. Eagle and possible eagle breeding areas previously identified by the AGFD, and possible eagle nesting habitats mapped by SWCA.

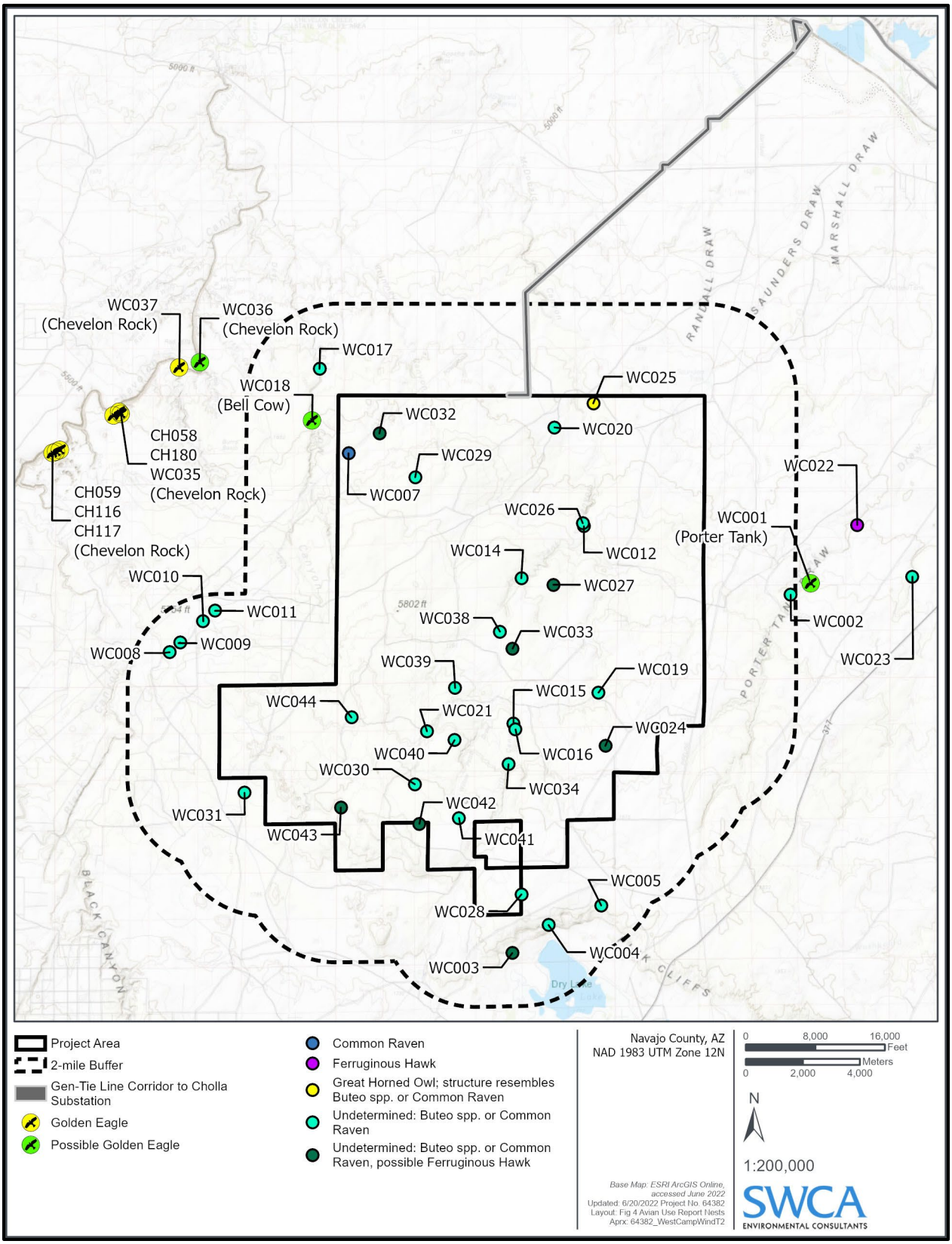

Figure 14. Nest survey results, 2021.

3.3.2.6.2 Other Migratory Bird Treaty Act Species' Nests

Other MBTA-protected species may nest in the site's grassland, shrub, treed, and cliff habitats. Table 6 provides information on which special-status birds may occur and nest within the site (12 species).

3.4 Potential Eagle Use of the Site

3.4.1 *Anticipated Seasonal Use*

The project area and gen-tie are within the golden eagle's year-round range and contain appropriate foraging (i.e., open grassland and steppe-like vegetation communities; Katzner et al. 2020) and marginally suitable nesting habitats.

Golden eagles exhibit complex migration and nomadic movement patterns dependent on factors such as nesting status, age, and food availability (Katzner et al. 2020). Because individuals from areas north of Arizona winter in the state from October through April (reaching peak numbers from December–February), generally, more golden eagles may be expected regionally during the fall through early spring seasons (AGFD 2022d; Katzner et al. 2020). Other factors that may influence temporal use of the site by the species include whether breeding areas proximal to the site (see Section 3.3.2.6; see Figure 13) are used by individuals during the breeding season (winter through early summer) and the extent to which foraging activities increase on-site based on seasonal fluctuations in food availability (e.g., offal piles left by hunters August through December; see Section 3.4.2.1).

The project area and gen-tie are within the bald eagle's non-breeding and limited breeding ranges and may provide secondary foraging resources (see Section 3.4.2.2).

Like golden eagles, bald eagles exhibit complex migration and nomadic movements; generally, more individuals may be expected regionally from late August through February, when wintering northern birds and returning juveniles are present (Corman and Wise-Gervais 2005). Given the lack of bald eagle nesting, roosting, and foraging habitats within the site, use of the site by the species would most likely be occasional, particularly from late summer through winter when appropriate food items (e.g., large mammal carrion; see Section 3.4.2.2) are present.

3.4.2 *Eagle Prey Concentrations*

3.4.2.1 GOLDEN EAGLE PREY ITEMS

Potential golden eagle main prey items within the project site may include rabbits (e.g., desert cottontail [*Sylvilagus audubonii*], black-tailed jackrabbit [*Lepus californicus*]) and sciurids (e.g., rock squirrel [*Otospermophilus variegatus*]). Secondary prey items may include large mammal carrion (e.g., cattle, elk, pronghorn, mule deer), live ungulates (e.g., pronghorn), cattle, mesocarnivores (e.g., coyote [*Canis latrans*], American badger [*Taxidea taxus*], bobcat [*Lynx rufus*]), large birds, and offal piles left by hunters (Katzner et al. 2020).

No Gunnison's prairie dogs, a favored, spatially predictable, and reliable prey item, or their burrows, have been detected on-site during preconstruction wildlife surveys (October 2019–November 2021) or during the January 27, 2022, site reconnaissance visit. Potential prey concentration areas include stock tanks and check dams, which are small, ephemeral features that may attract small numbers of waterfowl, and therefore, a limited source of prey, particularly from October–February (wintering waterfowl season).

3.4.2.2 BALD EAGLE PREY ITEMS

Secondary bald eagle prey items on-site may include carrion, especially in winter, birds (e.g., waterfowl), and terrestrial mammals (e.g., rabbits) (Buehler 2000); however, the species seeks out aquatic foraging habitats and prefers fish. Chevelon Creek (4 miles northwest of the project area and gen-tie) may provide appropriate preferred foraging conditions. Other major bodies of water and their proximity to the site are described above (see Section 3.1.4).

3.4.2.3 BALD EAGLE ROOSTING SITES

Bald eagle roost sites are not known or expected to occur within 10 miles of the project area or gen-tie (see Section 3.1.5.1.1).

3.4.3 *Important Eagle Use Areas or Migration Concentration Sites*

At this time, no important eagle use areas or migration concentration sites have been identified within or immediately adjacent to the project area or gen-tie.

Chevelon Canyon (4 miles northwest of the project area and gen-tie) may act as a conduit for resident or migrant eagles or non-eagle raptor movement but does not exhibit characteristics of a concentration site (e.g., mountain ridges, prominent north-south topography).

An *important eagle use area* is defined by the USFWS (2009) as "an eagle nest, foraging area, or communal roost site that eagles rely on for breeding, sheltering, or feeding, and the landscape features surrounding such nest, foraging area, or roost site that are essential for the continued viability of the site for breeding, feeding, or sheltering eagles." The term refers to specific areas within a broader landscape where eagles are more likely to be disturbed by an activity because of the higher probability of interference with breeding, feeding, or sheltering behaviors. In practice, important eagle use areas are defined by buffering occupied eagle nests within an appropriate avoidance setback and documenting concentrated use within a site (i.e., overlapping eagle flight paths).

Important golden eagle use areas are known within 10 miles of the project area and gen-tie, the nearest being the Chevelon Rock breeding area, 5 miles to the northwest (see Figures 13 and 14). Whether important golden eagle use areas exist closer to the project area will continue to be evaluated as eagle flight paths from the October 2019—September 2021 avian surveys are evaluated, and additional nest surveys take place in 2023. Nearby potential golden eagle nest sites, WC001 and WC018 (2.3 miles east and 0.5-mile northwest of the project area, respectively; see Figure 14), will be reassessed for activity and species' diagnostic characteristics during the 2023 breeding season. Overlapping golden eagle flight paths, if present, will be presented in a future avian survey report. Comprehensive identification and avoidance strategies of such areas will be accomplished through the tiered decision-making process.

There are no known communal eagle roost sites—generally associated with bald eagles—within or proximal to the project area.

3.4.4 *Summary of Potential Areas of Wildlife Congregation/ Seasonal Importance*

Macro- and micro-siting of a wind energy facility (and related infrastructure) may be informed by identifying areas of high conservation value, such as wetlands, spatially predictable food resources, unique or rare natural communities, major avian migratory routes, or critical habitat for endangered species.

Based on our current knowledge of potential wildlife use and habitat conditions, the following is a summary of features within and adjacent to the project area that may attract species of concern:

- Ephemeral stock tanks and check dams used by wintering waterfowl (October–February) may provide limited, concentrated (spatially predictable) prey for eagles. These features may also be used as stopovers for migrating birds and by commuting or foraging bats.
- The Little Colorado River, where the gen-tie would span the river, and nearby Dry Lake, may be used by migrating birds or by commuting or foraging bats.
- Pinyon-juniper/grassland edge habitats, canyon drainages, and sinkholes within the project area may be used by commuting or foraging bats.
- At the northern terminus of the gen-tie, mixed alluvium soils belonging to the Gypsiorthids-Torriorthents Association may support Peebles Navajo cactus. These soils are further described as weakly alkaline, Little Colorado paleochannel gravel deposits, eroding from or "uncomfortably on top of" underlying Shinarump conglomerate of the Chinle formation.
- Milkweed plants within the project area may be used by breeding or migrating monarch butterflies, particularly for nectar resources June–September.

3.5 Eagle Conservation Plan Guidance Site Categorization at This Stage

Because eagle risk site categorization is determined through an iterative process—informed by proximity of the project's footprint to important eagle-use areas (ECPG Stages 1, 2, and 4) and project-specific annual eagle fatality estimates as they pertain to the LAP size (ECPG Stages 2–4)—categorization at this stage is preliminary (USFWS 2013). Initial evidence at this stage indicates that the proposed project is a Category 2 site—meaning there is high or moderate risk to eagles with opportunity to mitigate impacts. This preliminary evidence includes the following:

- No eagle migration concentration sites are known within the project area or its vicinity.
- Known golden eagle nesting areas are present within 10 miles of the project area but not within the project's footprint. Additional surveys will take place in 2023.
- Other important eagle-use areas (i.e., concentrated flight paths) are not known but will be evaluated in a future survey report. Opportunities to avoid these areas, if present, will be evaluated through the tiered decision-making process.

3.6 Framework for Determining Bat and Bird Study Effort

USFWS (2016) codified specific minimum standards for eagle use surveys, including that the surveys should be conducted for 2 years for applicants seeking an incidental eagle take permit. USFWS (2013) similarly recommends that occupancy surveys of eagle nests be conducted for two breeding seasons. AGFD (2012a) recommends preconstruction wildlife surveys be conducted for 1 to 3 years based on certain criteria (e.g., presence of certain habitat associations and special area designations, information from nearby operational wind farms) used to inform anticipated impacts to wildlife (see Section 2.5). This project falls within Category 1–3 criteria, meaning there is opportunity to avoid, minimize, or mitigate potential impacts to wildlife, and 1 to 2 years of study is recommended.

AES is committed to conducting two full years of avian and bat surveys prior to construction. These surveys have taken place from October 2019–November 2021 and will continue in 2023 (SWCA 2022).

4 KEY FINDINGS AND NEXT STEPS

4.1 Answers to Tiers 1 and 2 Questions

The following is a summary of the answers to USFWS's (2012, 2013) and AGFD's (2012a) site characterization questions (see Section 1):

- Thirty-six special-status wildlife and plant species may occur within the project area or gen-tie, of which three are federally protected: the endangered (and ANPL Highly Safeguarded native plant) Peebles Navajo cactus, and both eagle species. A fourth, monarch butterfly, is a candidate species, for which there are no statutory protections under the ESA, but USFWS encourages opportunities to conserve the species.
- The Peebles Navajo cactus may exist at the northern terminus of the gen-tie, adjacent to the Little Colorado River. However, appropriate soil conditions do not appear to be present (based on mapped soil layers), and known species occurrences are north of U.S. Route 40 (north of the gen-tie). Additional ANPL-protected Salvage Restricted plants are known to occur within the project area (e.g., banana yucca, grama-grass cactus, plains pricklypear, and Whipple cholla).
- Critical habitat for the Little Colorado spinedace and a BLM ACEC—managed to protect and promote recovery of the Peebles Navajo cactus—is present within 10 miles but not within the project area or gen-tie. No other special area designations are present.
- The project area and gen-tie are generally considered to have moderate to high value with respect to unfragmented habitats evaluated statewide. Areas representing approximate wildlife movements on the landscape—including a potential wildlife linkage zone, county-level wildlife movement areas, and ICZs—are defined within the project area and bisecting the gen-tie. Among species that may or are known to occur within the project area or gen-tie, AGFD's SWAP (AGFD 2012b) identifies six species of habitat fragmentation concern: bald eagle, ferruginous hawk, Gunnison's prairie dog, kit fox, pronghorn, and yellow warbler. Of these six species, AGFD has raised specific concern over potential impacts of project construction activities to pronghorn fawning (mid-May to mid-June).
- There are no known *critical* areas of wildlife congregation. Areas of seasonal importance and that may attract wildlife, generally, relative to the surrounding landscape include the following:
    - Project area stock tanks and check dams that may support limited wintering (October–February) waterfowl use and, therefore, limited, concentrated (spatially predictable) prey for eagles. Commuting or foraging bats and migrating birds may generally use these features, as well as the Little Colorado River corridor, where the gen-tie would span the river.
    - Pinyon-juniper/grassland edge habitats and canyon drainages within the project area may be used by commuting or foraging bats.
    - Milkweed plants within the project area may be used by breeding or migrating monarch butterflies, particularly for nectar resources June–September.
    - Hunting would occur primarily from August through December (elk: September–December; mule deer: August and November; pronghorn: August and September).
- No important eagle use areas or migration concentration sites have been identified within 2 miles of the project area. However, a possible eagle nest is located 0.5 mile northwest of the project area, and whether concentrated eagle flight paths are present within the project area will be evaluated during future preconstruction surveys and reporting.

- With respect to USFWS's (2013) eagle risk site categorization, the site may be preliminarily categorized as a Category 2 site (opportunity to mitigate potential impacts) based on the lack of migration sites within or near the project, the fact that known nesting sites are within 10 miles of the project area but outside the project footprint, and the fact that other important use areas, if discovered during future surveys and reporting, may be avoided. With respect to AGFD's (2012a) *Framework for Determining Bat and Bird Study Effort*, the site may be categorized as Category 1–3 (opportunity to mitigate potential impacts) based on the habitat associations present and the lack of special designation areas near the site.

The following remains unclear at this stage; clarity will be obtained via additional agency coordination and ongoing site-specific surveys and reporting:

- The extent to which special-status species are present.
- The extent to which important golden eagle use areas (e.g., occupied eagle nests that may be newly discovered in 2023, or concentrated flight paths indicating areas that the species would rely on for breeding, feeding, or sheltering activities) are present within or near the project footprint.
- Location and characterization of other areas of seasonal importance (e.g., bat maternity colonies or hibernacula sites, raptor nests).
- Specific baseline bird and bat species composition and use (temporal and spatial).
- Compensation requirements associated with ANPL-protected species in areas of State lands planned for development.
- Whether there would be significant adverse impacts to special-status species, considering the design of the project.

4.2 Next Steps in the Wildlife Guidelines Tiered Process

As a next step, AES requests an AGFD recommendation letter, which will be used during the County and ACC CEC permitting processes.

AES will continue to follow state and federal wind energy guidelines, including the tiered decision-making process—which aims to identify potential threats to species thought to be at risk:

- This Tiers 1 and 2 site characterization report provides an initial landscape-scale screening and site-level characterization that addresses potential risk the project would pose to species of concern and their habitats.
- Tier 3 site-specific data will provide quantitative and qualitative assessments used to determine 1) whether a project should be developed or abandoned, 2) avoidance and minimization measures, 3) compensatory mitigation measures if adverse impacts cannot acceptably be avoided, and 4) the duration and level of effort of post-construction monitoring. Specific to eagles, the surveys 1) generate Stage 3 predictions of the mean number of annual eagle fatalities, 2) identify important eagle use areas or migration concentration sites that could be affected by the project, and 3) inform the likelihood of disturbance risk. In addition to the avian and bat surveys completed from October 2019–November 2021 (as outlined in the project's wildlife survey plan [SWCA 2022]; and see Section 2.5), additional bat acoustic surveys (March–November) and nest surveys (February and March) are planned in 2023. Survey findings will be provided later in 2022, following the nest survey in 2023, and following the bat acoustic surveys in early 2024.
- Tier 4 post-construction fatality monitoring is designed to estimate collision-related impacts.

- Tier 5 studies are not necessary for most wind energy projects; they are aimed at understanding and adaptively rectifying potentially significant impacts identified in Tier 4.

Table 7 summarizes the project's wildlife survey plan (SWCA 2022) and outcome.

Table 7. Recommended Wildlife Surveys for the Project

Survey Type	Time Frame	Outcome
Avian use surveys. Survey plots were distributed to cover 30% of the project's footprint.	Each plot was surveyed 1 hour per month for 2 years. These surveys were conducted from October 2019–September 2021 at 34 plots.	Surveys will document species composition and patterns of activity of detected birds using the project area. Eagle-specific data will include eagle-minutes (to inform fatality predictions) and flight paths (to document spatial use of the site).
Bat acoustic surveys. Stationary bat acoustic stations with high- and low-microphones.	March–November for 1 year. Three stations (four bat detectors) were deployed in 2021; three stations (4 detectors) will be deployed in 2023.	Surveys will document species composition and patterns of activity of detected bats using the airspace within the project area.
Golden eagle and non-eagle raptor nest surveys. Because potential golden eagle nesting habitats are present, survey for golden eagle nests within 2 miles of the project area (surveys are typically conducted by helicopter) per USFWS (2020a) guidelines. Surveys of non-eagle raptor nests are typically conducted within the project area.	During each of two seasons, conduct 2 surveys to document eagle nest occupancy: Survey 1: mid–late February; Survey 2: mid–late March. Non-eagle raptor nest surveys are conducted during Survey 2 in either year 1 or 2. Eagle and non-eagle raptor nest surveys were conducted in 2021; a follow-up eagle and special-status species raptor nest survey is planned in 2023.	Data may inform siting decisions, ECPG site categorization, and construction compliance focal areas.
Incidental data recorded during other site-specific surveys include locations of eagle prey concentrations (e.g., waterfowl, prairie dog colonies) and presence of special-status species.	During all Tier 3/Stage 2 surveys.	Data may inform siting decisions and construction compliance focal areas.
Inventory native plants on state lands in the project disturbance footprint where the project would be sited on State lands, as needed, per Arizona State Land Department guidelines.*	No specific seasonal timeframe.	Surveys inform in-lieu fees, if required, for protected native plants disturbed by the project. A Notice of Intent to Clear Land Form is required to be sent to Arizona Department of Agriculture 60 days prior to vegetation clearing activities regardless of land ownership.
Peebles Navajo cactus habitat assessment and/or surveys at the northern terminus of the gen-tie, if that gen-tie option is selected.*	Species flowers April–May. Species are notoriously difficult to locate due to their size (2-6.5 x 1.5-5.5 cm). A field-based habitat assessment may be warranted in lieu of species-specific surveys.	Surveys may inform line siting decisions.
Compliance Surveys Immediately Prior to Construction		
If vegetation clearing is expected to occur during the MBTA nesting season, conduct a clearance survey within 48 hours to 1 week prior to vegetation clearing activities. Evaluation area is typically within 30–150 feet (for small birds) and 400 feet to 0.5 mile (for non-eagle raptors) of planned disturbance activities.*	Non-eagle raptor nesting season: February 1–August 15; non-raptor nesting season: March 1–August 31.	Surveys inform avoidance and/or nest management measures. AGFD has not published specific buffering prescription recommendations but may provide guidance; typical avoidance buffers may be found in Colorado Parks and Wildlife (2008), as well as other sources.

* Survey type was not presented in the project's wildlife survey plan (SWCA 2022) because implementation will depend on project design and construction timing considerations.

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APPENDIX A

Official Species and Critical Habitats List for the Project, U.S. Fish and Wildlife Service Information for Planning and Consultation System

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:
Project Code: 2022-0049201
Project Name: West Camp Wind Farm

June 02, 2022

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

To Whom It May Concern:

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: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.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/birds/management/project-assessment-tools-and-guidance/guidance-documents/eagles.php and https://www.fws.gov/birds/management/managed-species/eagle-management.php).

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/birds/management.php. 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/migratorybirds/pdf/management/usfwscommtowerguidance2016update.pdf.

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 https://www.fws.gov/southwest/refuges/ 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/planning/projevalprogram/).

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 928/556-2157 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/

Mark A. Lamb
Acting Field Supervisor
Attachment

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- 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".

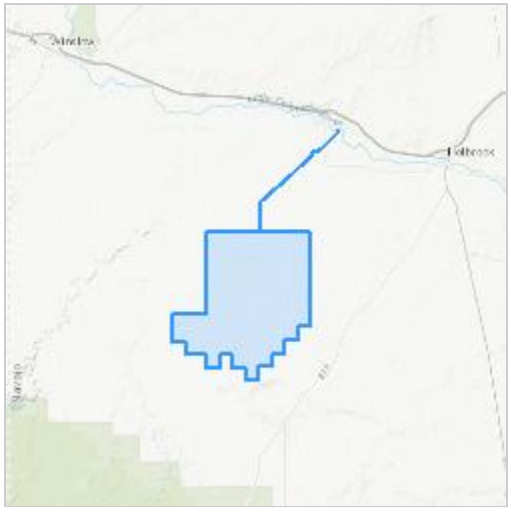
This species list is provided by:

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

Project Summary

Project Code: 2022-0049201
Event Code: None
Project Name: West Camp Wind Farm
Project Type: Department of Energy Operations
Project Description: proposed wind farm and gen-tie south of Joseph City, AZ
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.7390574,-110.4139906629986,14z



Counties: Navajo County, Arizona

Endangered Species Act Species

There is a total of 10 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.

Mammals

NAME	STATUS
Gray Wolf *Canis lupus* Population: Mexican gray wolf, EXPN population No critical habitat has been designated for this species.	Proposed Experimental Population, Non-Essential

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Condor *Gymnogyps californianus* Population: U.S.A. (specific portions of Arizona, Nevada, and Utah) There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Experimental Population, Non-Essential
Mexican Spotted Owl *Strix occidentalis lucida* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8196	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Northern Mexican Gartersnake *Thamnophis eques megalops* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7655	Threatened

Amphibians

NAME	STATUS
Chiricahua Leopard Frog *Rana chiricahuensis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1516	Threatened

Fishes

NAME	STATUS
Little Colorado Spinedace *Lepidomeda vittata* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6640	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Peebles Navajo Cactus *Pediocactus peeblesianus ssp. peeblesianus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/8245

Critical habitats

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

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.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

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

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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)

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

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

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* 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/1626	Breeds Dec 1 to Aug 31
Bendire's Thrasher *Toxostoma bendirei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9435	Breeds Mar 15 to Jul 31

NAME	BREEDING SEASON
Cassin's Finch *Carpodacus cassinii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Grace's Warbler *Dendroica graciae* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 20 to Jul 20
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Mountain Plover *Charadrius montanus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3638	Breeds Apr 15 to Aug 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Pinyon Jay *Gymnorhinus cyanocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
Virginia's Warbler *Vermivora virginiae* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31

Probability Of Presence Summary

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week

months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

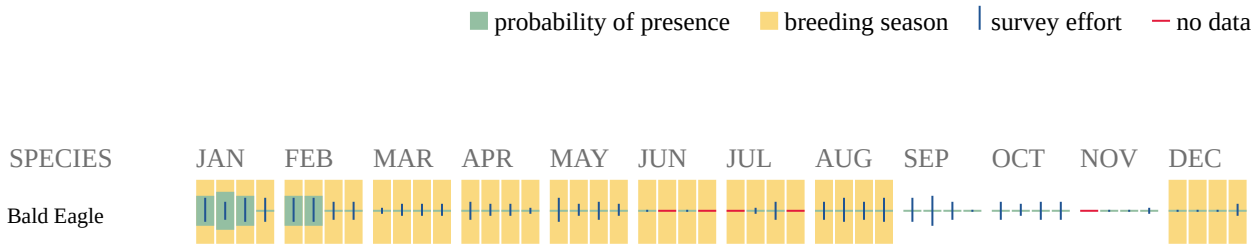
1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

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

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

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



Additional information can be found using the following links:

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

Migratory Birds FAQ

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

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding

in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

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

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

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

should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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.

FRESHWATER POND

- Palustrine

RIVERINE

- Riverine

IPaC User Contact Information

Agency: County of Navajo
Name: Allen Graber
Address: 1645 S. Plaza Way
City: Flagstaff
State: AZ
Zip: 86001
Email agraber@swca.com
Phone: 9286075161

APPENDIX B

Arizona Environmental Online Review Tool Reports for the Project

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.

Project Name:
West Camp Wind Farm

User Project Number:
64382

Project Description:
proposed wind farm south of Joseph City

Project Type:
Energy Storage/Production/Transfer, Energy Production (generation), wind power facility (new)

Contact Person:
Allen Graber

Organization:
SWCA

On Behalf Of:
PRIVATE

Project ID:
HGIS-16450

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

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.
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   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
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   Fax Number: (623) 236-7366
   Or
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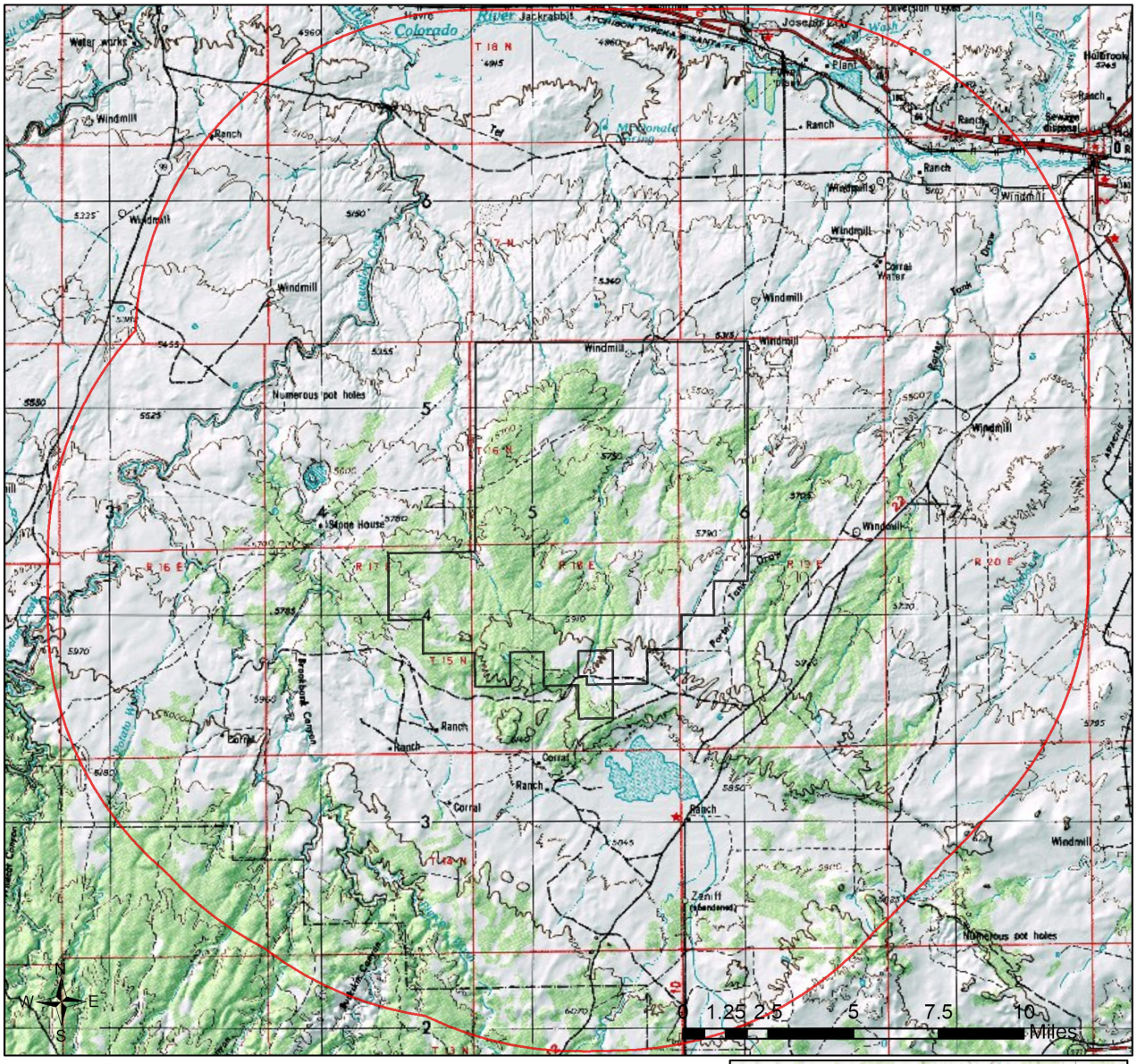
West Camp Wind Farm

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 52,529.37

Lat/Long (DD): 34.7482 / -110.4246

County(s): Navajo

AGFD Region(s): Pinetop

Township/Range(s): T15N, R17E; T15N, R18E; T15N, R19E +

USGS Quad(s): CHIMNEY CANYON; DRY LAKE NE +

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

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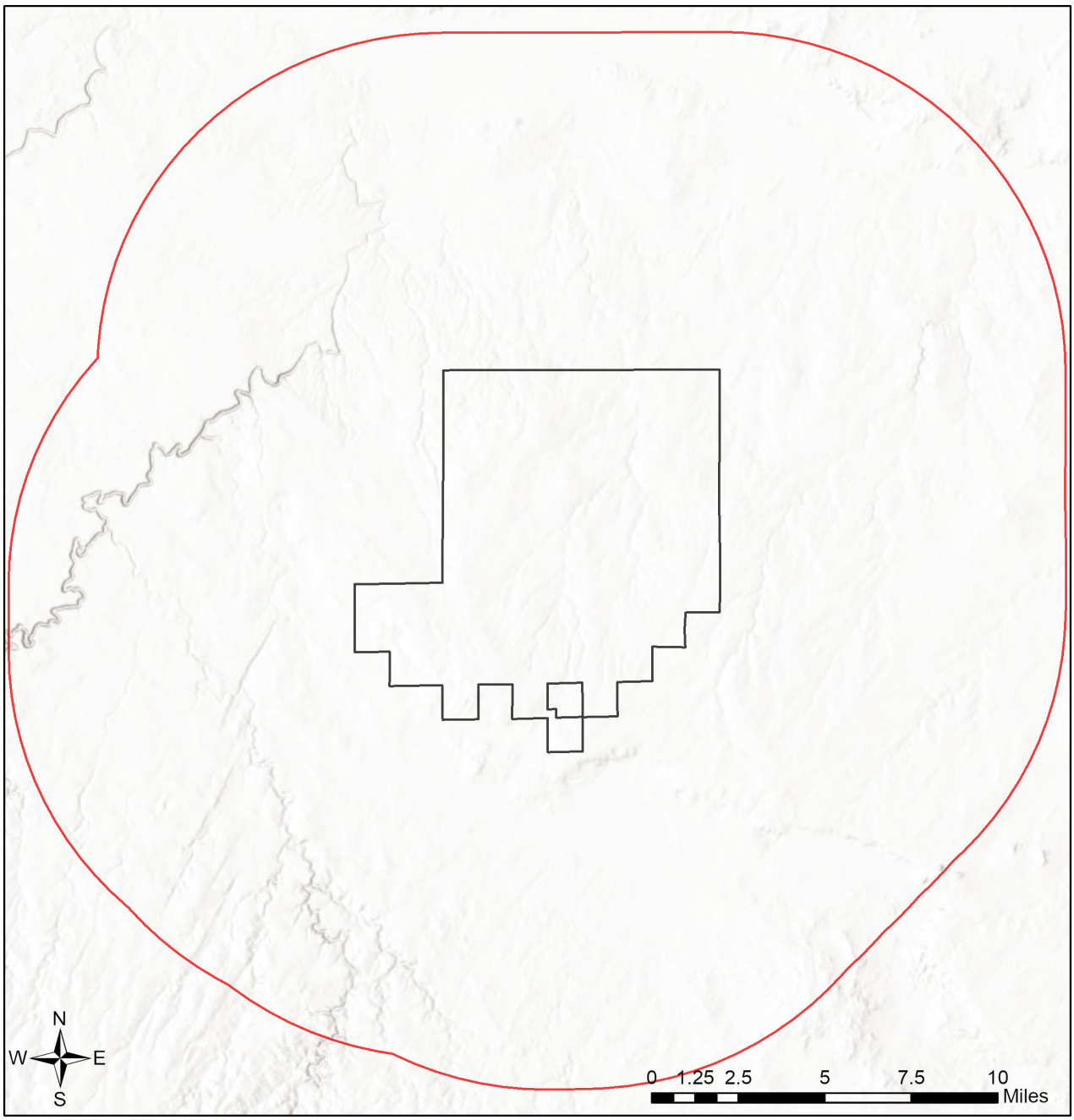

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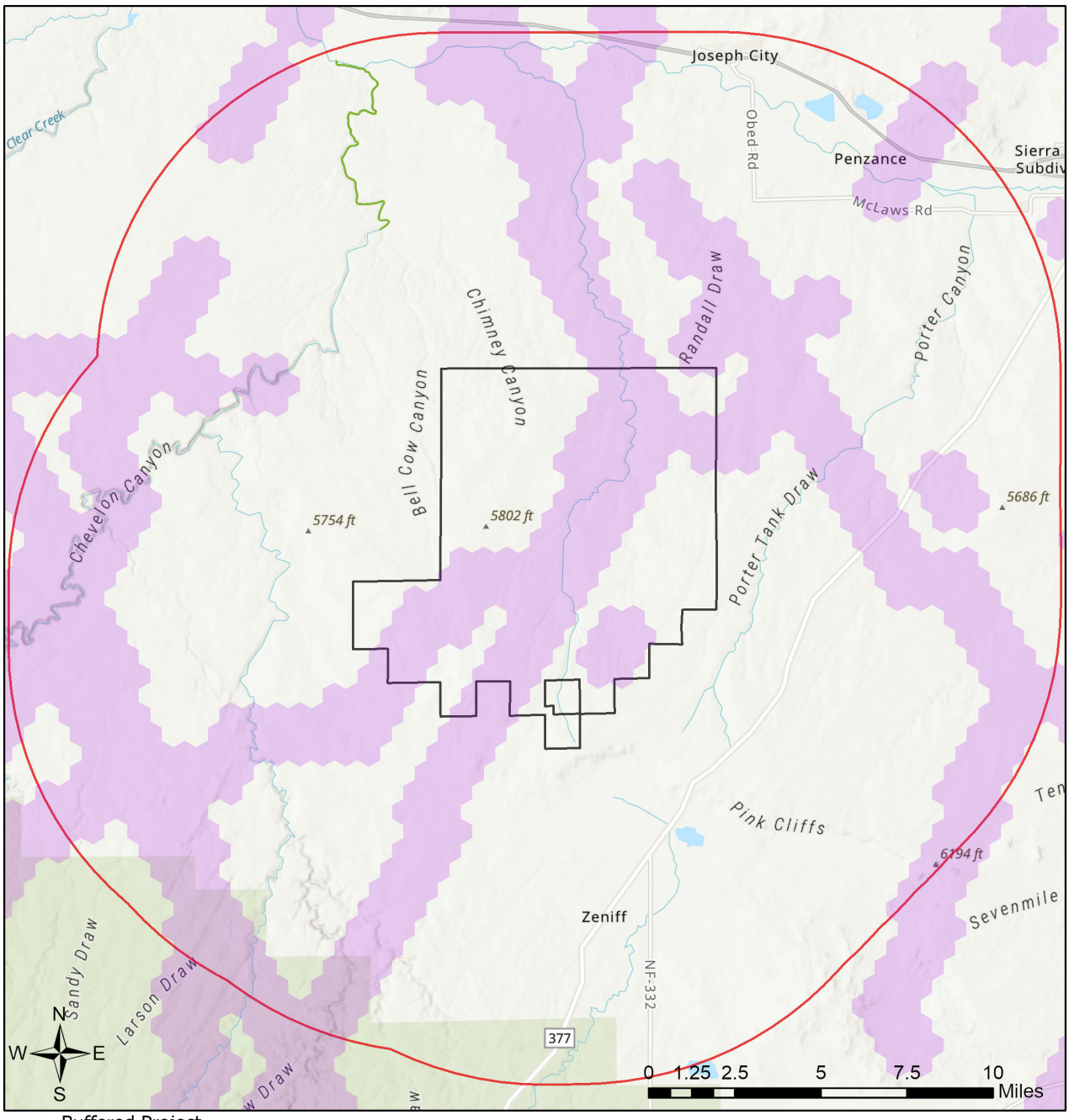
Important Areas



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- Project Boundary
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- Critical Habitat
- Important Connectivity Zones
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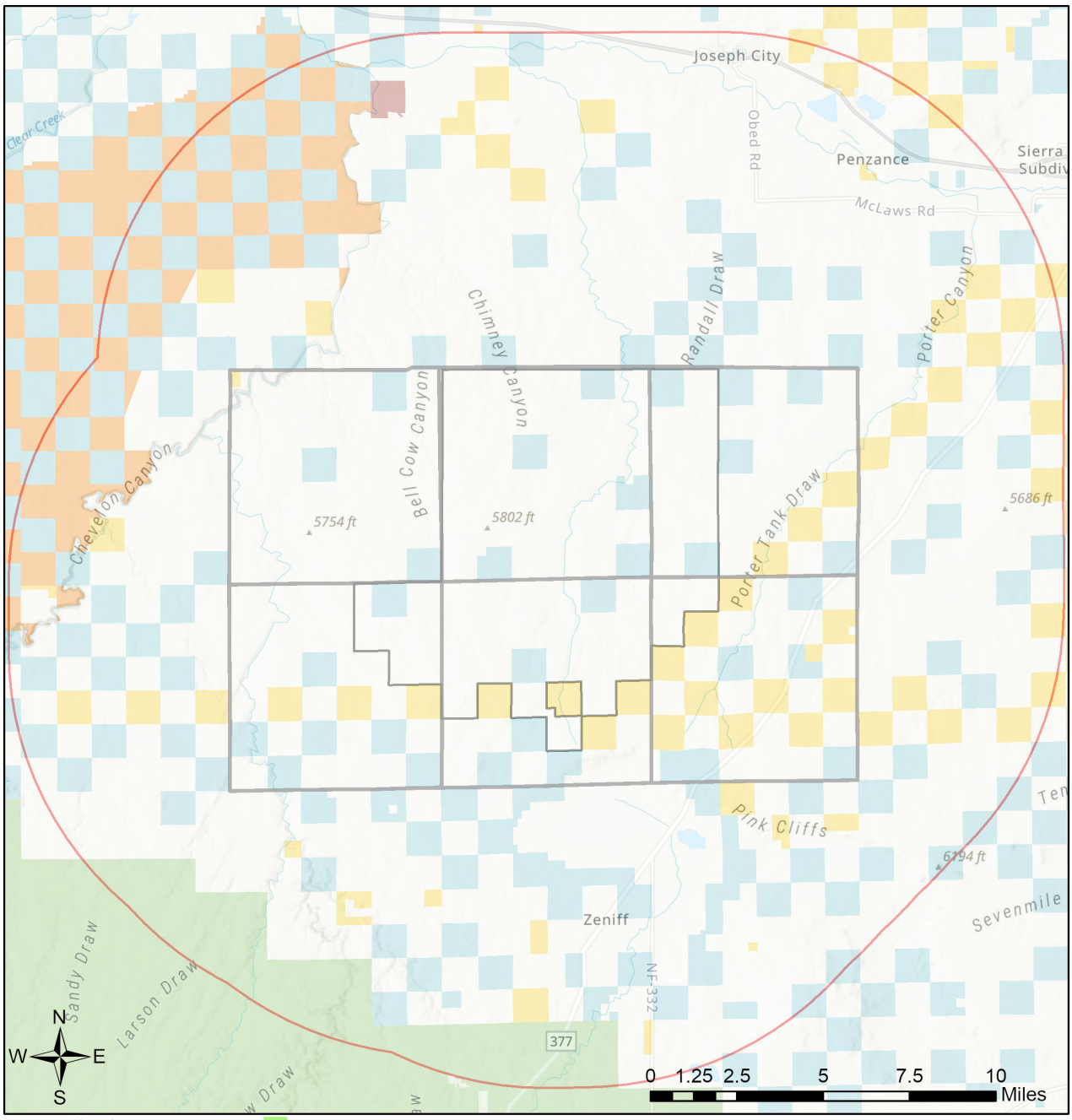
West Camp Wind Farm

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

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Special Status Species Documented within 10 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Anodonta californiensis	California Floater	SC	S			1A
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Bat Colony						
Buteo regalis	Ferruginous Hawk	SC		S		1B
Catostomus sp. 3	Little Colorado Sucker	CCA	S	S		1A
Errazurizia rotundata	Roundleaf Errazurizia			S	SR	
Gila robusta	Roundtail Chub	SC	S	S		1A
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S		1A
Lepidomeda vittata	Little Colorado Spinedace	LT				1A
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Nyctinomops macrotis	Big Free-tailed Bat	SC				
Pediocactus peeblesianus ssp. peeblesianus	Peebles Navajo Cactus	LE			HS	
Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC	S			1B
Sclerocactus papyracanthus	Grama-grass Cactus	SC			SR	
Sclerocactus whipplei	Whipple's Fishhook Cactus				SR	
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Important Connectivity Zone	Wildlife Connectivity					
N/A	Apache/Navajo Counties Wildlife Movement Area - Diffuse					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

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
Anaxyrus microscaphus	Arizona Toad	SC		S		1B
Antilocapra americana americana	American Pronghorn					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Aspidoscelis pai	Pai Striped Whiptail					1B
Baeolophus ridgwayi	Juniper Titmouse					1C
Buteo regalis	Ferruginous Hawk	SC		S		1B
Buteo swainsoni	Swainson's Hawk					1C
Callipepla squamata	Scaled Quail					1C

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
Castor canadensis	American Beaver					1B
Chordeiles minor	Common Nighthawk					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Cynomys gunnisoni	Gunnison's Prairie Dog	SC		S		1B
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE				1A
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gymnorhinus cyanocephalus	Pinyon Jay			S		1B
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Lasiurus blossevillii	Western Red Bat		S			1B
Lithobates pipiens	Northern Leopard Frog		S	S		1A
Melospiza lincolnii	Lincoln's Sparrow					1B
Microtus mexicanus	Mexican Vole					1B
Mustela nigripes	Black-footed Ferret	LE,XN				1A
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Neotoma stephensi	Stephen's Woodrat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Panthera onca	Jaguar	LE				1A
Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC	S			1B
Rallus limicola	Virginia Rail					1C
Setophaga petechia	Yellow Warbler					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Spizella breweri	Brewer's Sparrow					1C
Strix occidentalis lucida	Mexican Spotted Owl	LT				1A
Sturnella magna	Eastern Meadowlark					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Troglodytes pacificus	Pacific Wren					1B
Vireo vicinior	Gray Vireo		S			1C
Vulpes macrotis	Kit Fox	No Status				1B

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					1B
Cervus elaphus	Elk					
Odocoileus hemionus	Mule Deer					

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida macroura	Mourning Dove					

Project Type: Energy Storage/Production/Transfer, Energy Production (generation), wind power facility (new)

Project Type Recommendations:
Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

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 should be contained within important 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. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

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. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

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/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. 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.

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

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

The effects of wind development projects on wildlife, in particular birds and bats, are well documented. The Department recommends conducting raptor nest, general avian, and threatened and endangered species surveys during the appropriate breeding/migration seasons within 10 miles of the project site to determine the location of active nests, migratory pathways, and associated species potentially disturbed by project activities. Effects that should be minimized or mitigated may include direct habitat loss from the wind plant footprint, including turbine base, access road, and substation construction; indirect habitat loss from increased human presence and/or turbine operation noise; habitat alteration, such as soil erosion and construction of migration-hindering obstacles; mortality by powerline electrocution; and mortality by collision with structures, turbine blades or guy wires. The Department has developed guidelines for wind energy development which can be found on the Wildlife Friendly Guideline on our Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/. We also recommend referring to the USFWS Land-based Wind Energy Guidelines, http://www.fws.gov/windenergy/. We encourage the project proponent to coordinate directly with the Project Evaluation Program to identify and develop mitigation measures for these projects.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (https://www.fws.gov/office/arizona-ecological-services).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

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

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

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

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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.

Project Name:
West Camp Wind Gen-Tie

User Project Number:
64382

Project Description:
Proposed gen-tie

Project Type:
Energy Storage/Production/Transfer, Energy Transfer, Power line/electric line (new)

Contact Person:
Allen Graber

Organization:
SWCA

On Behalf Of:
CONSULTING

Project ID:
HGIS-16601

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

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West Camp Wind Gen-Tie

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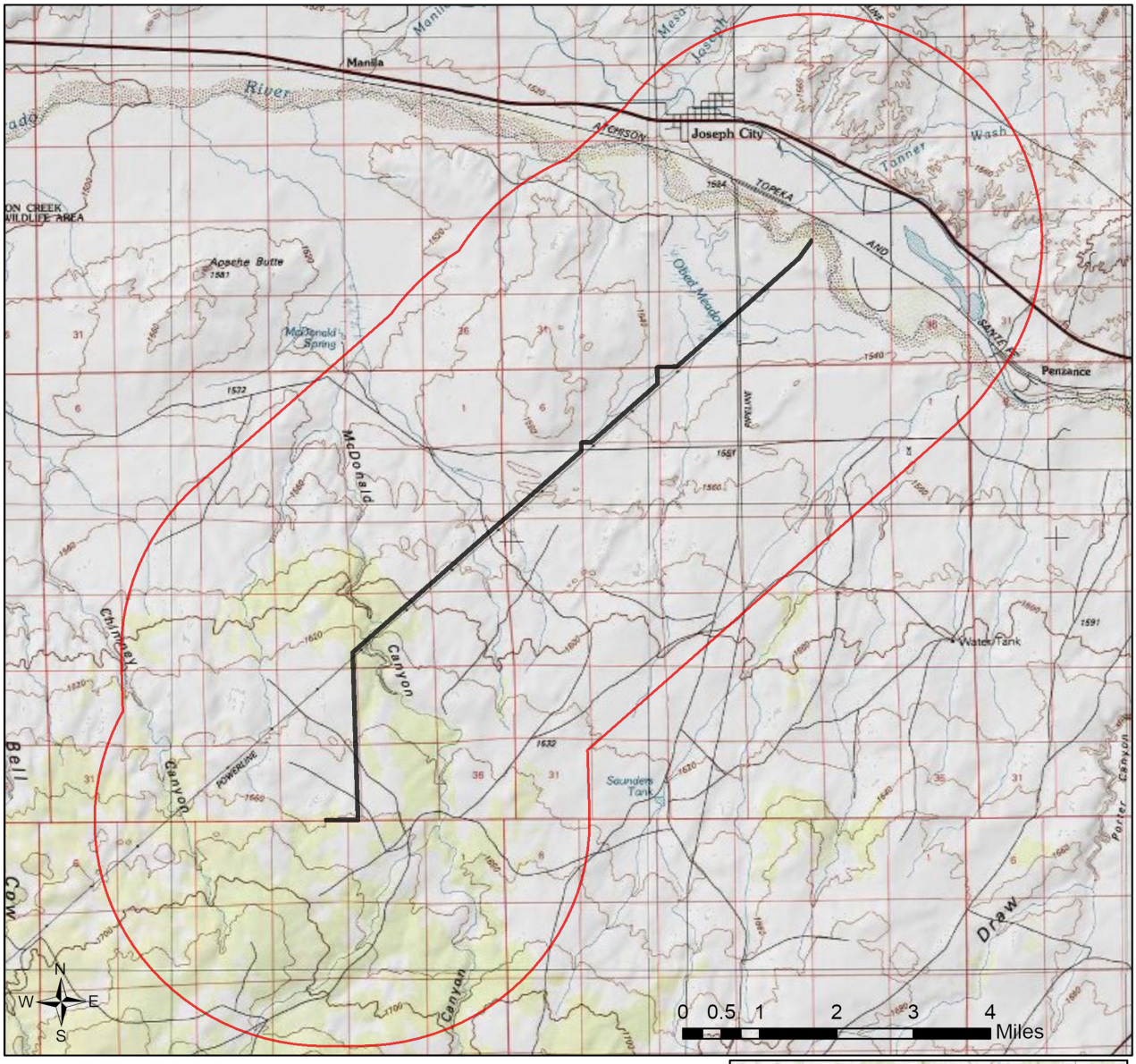

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Project Boundary

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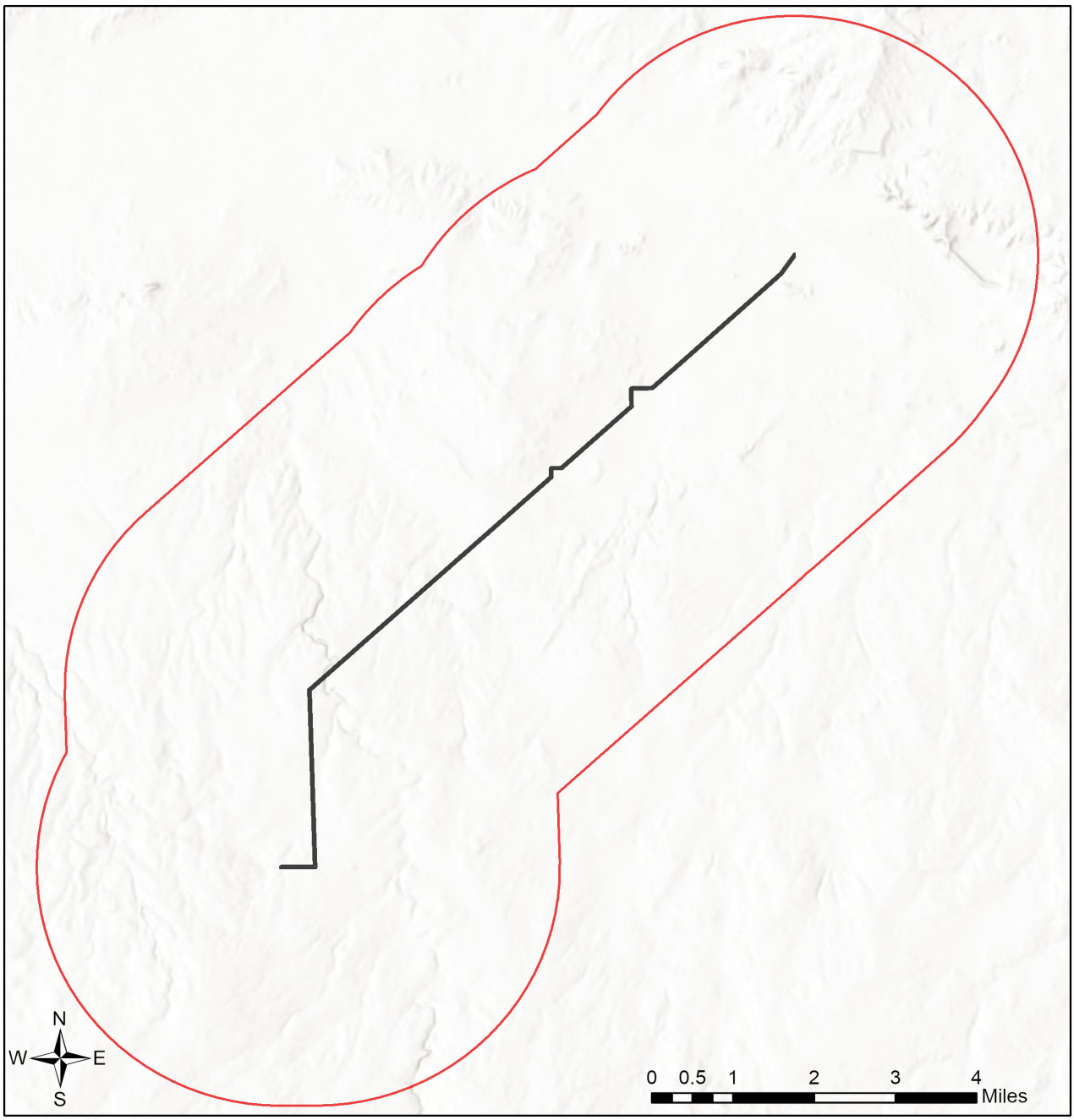
West Camp Wind Gen-Tie

Web Map As Submitted By User



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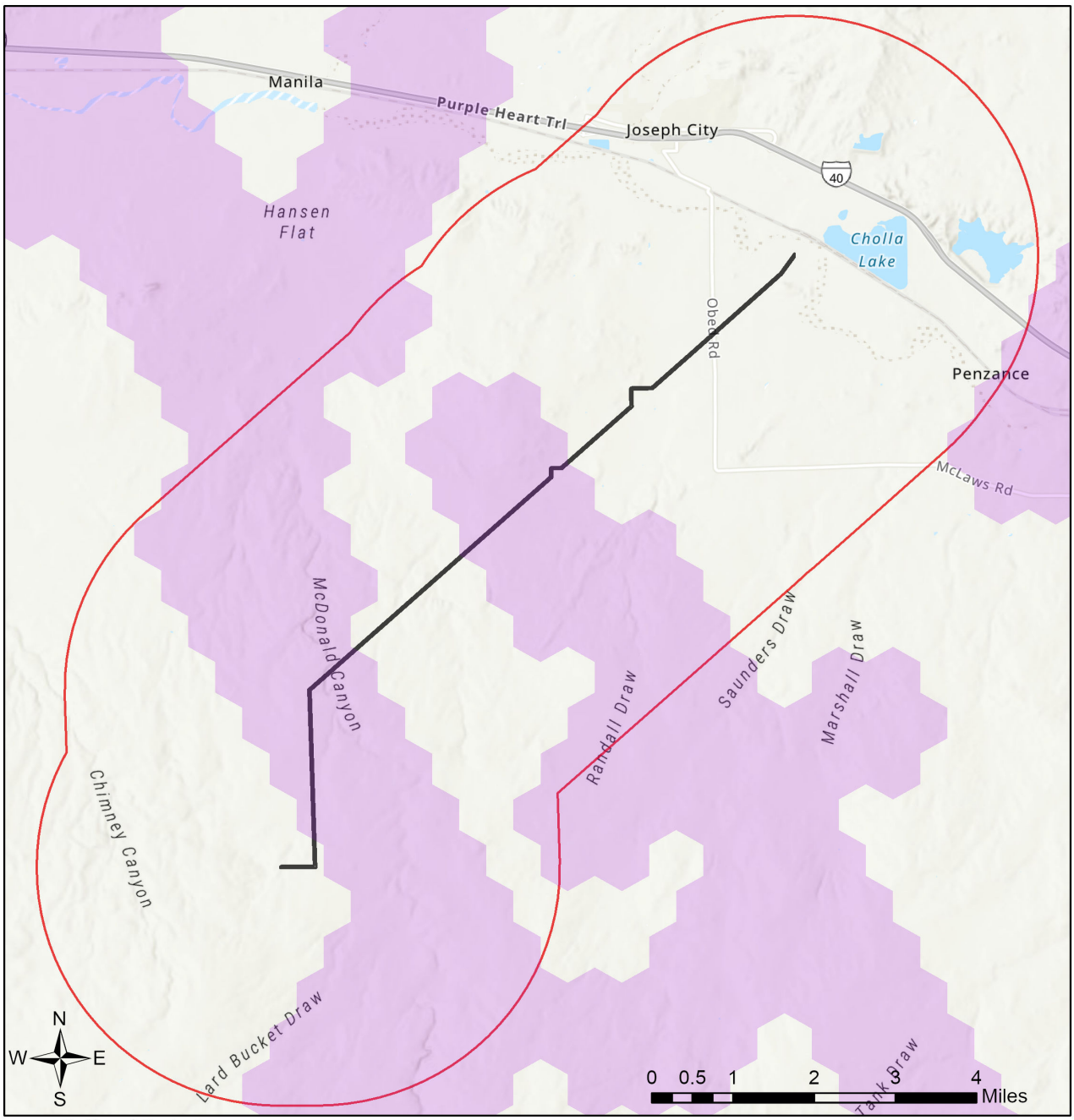

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AGFD Region(s): Pinetop

Township/Range(s): T16N, R18E; T17N, R18E; T17N, R19E +

USGS Quad(s): APACHE BUTTE; CHIMNEY CANYON +

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Buteo regalis	Ferruginous Hawk	SC		S		1B
Errazurizia rotundata	Roundleaf Errazurizia			S	SR	
Pediocactus peeblesianus ssp. peeblesianus	Peebles Navajo Cactus	LE			HS	
Sclerocactus whipplei	Whipple's Fishhook Cactus				SR	

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Important Connectivity Zone	Wildlife Connectivity					
Little Colorado River	Apache/Navajo Counties Wildlife Movement Area - Riparian/Wash					
N/A	Apache/Navajo Counties Wildlife Movement Area - Diffuse					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

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
Anaxyrus microscaphus	Arizona Toad	SC		S		1B
Anodonta californiensis	California Floater	SC	S			1A
Antilocapra americana americana	American Pronghorn					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Aspidoscelis pai	Pai Striped Whiptail					1B
Baeolophus ridgwayi	Juniper Titmouse					1C
Buteo regalis	Ferruginous Hawk	SC		S		1B
Buteo swainsoni	Swainson's Hawk					1C
Callipepla squamata	Scaled Quail					1C
Castor canadensis	American Beaver					1B
Chordeiles minor	Common Nighthawk					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Cynomys gunnisoni	Gunnison's Prairie Dog	SC		S		1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gymnorhinus cyanocephalus	Pinyon Jay			S		1B
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A

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
Lasiurus blossevillii	Western Red Bat		S			1B
Lithobates pipiens	Northern Leopard Frog		S	S		1A
Melospiza lincolnii	Lincoln's Sparrow					1B
Mustela nigripes	Black-footed Ferret	LE,XN				1A
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Neotoma stephensi	Stephen's Woodrat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC	S			1B
Rallus limicola	Virginia Rail					1C
Setophaga petechia	Yellow Warbler					1B
Spizella breweri	Brewer's Sparrow					1C
Sturnella magna	Eastern Meadowlark					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Troglodytes pacificus	Pacific Wren					1B
Vireo vicinior	Gray Vireo		S			1C
Vulpes macrotis	Kit Fox	No Status				1B

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					1B
Cervus elaphus	Elk					
Odocoileus hemionus	Mule Deer					
Puma concolor	Mountain Lion					
Zenaida macroura	Mourning Dove					

Project Type: Energy Storage/Production/Transfer, Energy Transfer, Power line/electric line (new)

Project Type Recommendations:
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/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. 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.

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

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (https://www.fws.gov/office/arizona-ecological-services).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement 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

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **Statewide Wildlife Connectivity Assessment's Important Connectivity Zones** (ICZs) represent general areas throughout the landscape which contribute the most to permeability of the whole landscape. ICZs may be used to help identify, in part, areas where more discrete corridor modeling ought to occur. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://s3.amazonaws.com/azgfd-portal-wordpress/azgfd.wp/wp-content/uploads/0001/01/23120719/ALIWCA_Final_Report_Perkl_2013_lowres.pdf.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

APPENDIX C

Photographs

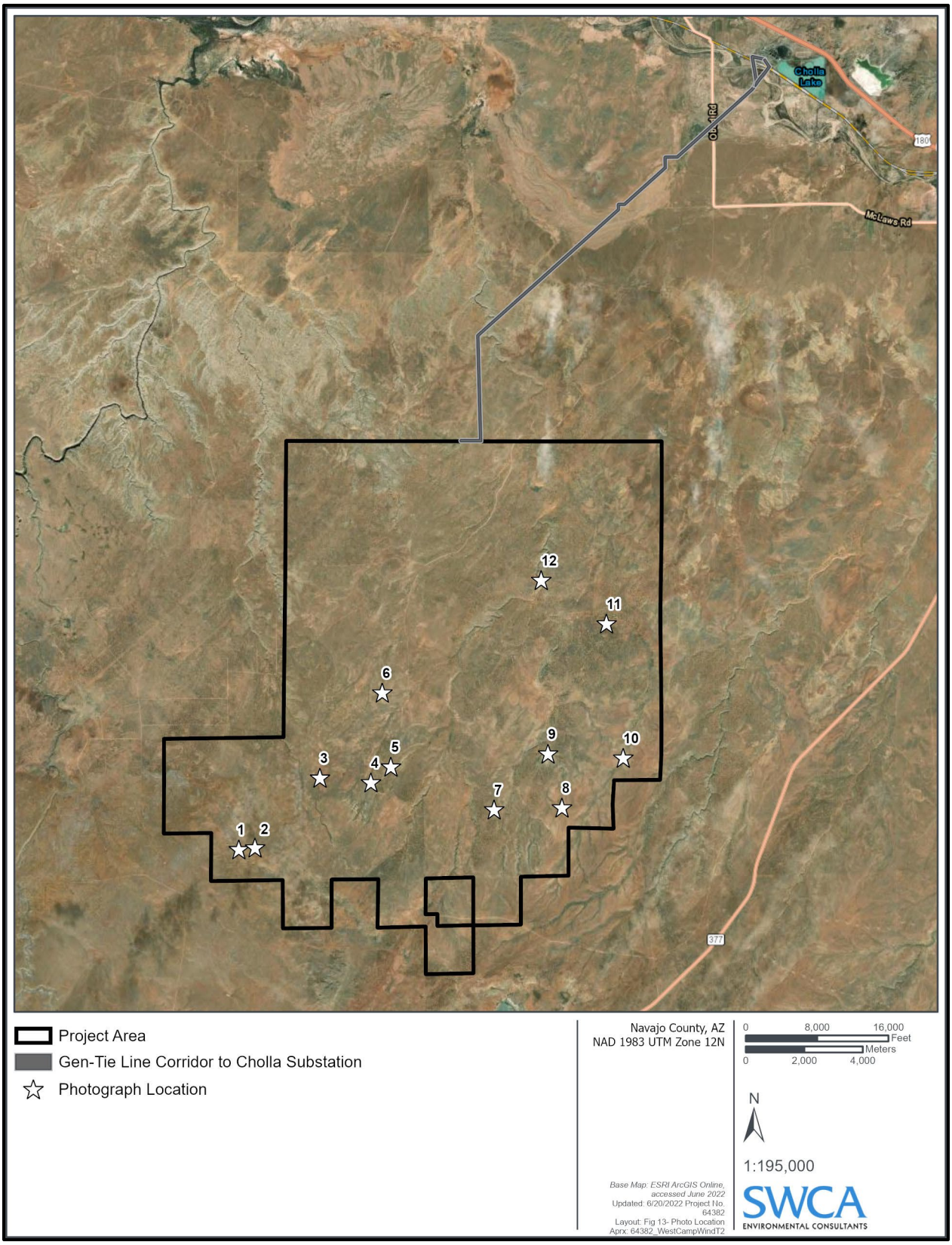

Figure C-1. Key to Appendix C site photographs (below).

Photograph C-1. Sinkhole; southwest corner of the project area (see Point 1, Figure C-1), facing east, January 27, 2022.

Photograph C-2. Semi-desert grassland habitat; view from the southwest corner of the project area (see Point 2, Figure C-1), facing east, January 27, 2022.

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Photograph C-5. Transition to denser pinyon-juniper from juniper savanna; view from the central portion of the project area (see Point 5, Figure C-1), facing west, January 27, 2022.

Photograph C-6. Pinyon-juniper savanna; view from west-central portion of the project area (see Point 6, Figure C-1), facing south, August 28, 2021.

Photograph C-7. Juniper savanna habitat; view from the south-central portion of the project area (see Point 7, Figure C-1), facing north, January 27, 2022.

Photograph C-8. Semi-desert grassland/shrub-steppe habitat; view from the southeast portion of the project area (see Point 8, Figure C-1), facing north, August 28, 2021.

Photograph C-9. Cement Tank (check dam) containing emergent vegetation; view from the southeast portion of the project area (see Point 9, Figure C-1), facing northwest, January 27, 2022.

Photograph C-10. White Tank; view from southeast portion of the project area (see Point 10, Figure C-1), facing west, August 28, 2021.

Photograph C-11. Pinyon-juniper habitat, illustrating sandy substrate; view from the eastern portion of the project area (see Point 11, Figure C-1), facing west, January 27, 2022.

Photograph C-12. Lost Tank Canyon; view from the northeast portion of the project area (see Point 12, Figure C-1), facing north, March 10, 2021.

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Tier 1 Preliminary Site Evaluation and Tier 2 Site Characterization Report, Hot Air Wind Energy Project, Navajo County, Arizona

DECEMBER 2021

PREPARED FOR

Pattern Energy Wind Development, LLC

PREPARED BY

SWCA Environmental Consultants

TIER 1 PRELIMINARY SITE EVALUATION AND TIER 2 SITE CHARACTERIZATION REPORT, HOT AIR WIND ENERGY PROJECT, NAVAJO COUNTY, ARIZONA

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SWCA Project No. 63977

December 2021

EXECUTIVE SUMMARY

Pattern Energy Wind Development, LLC (Pattern Energy) is proposing to develop a wind energy facility in an unincorporated area approximately 6 miles south of Holbrook, Navajo County, Arizona. The Hot Air Wind Energy Project (project) is located on privately owned Aztec Land and Cattle Company lands within an approximately 35,369-acre project area.

SWCA Environmental Consultants prepared this report to provide an initial landscape-scale screening and site-level characterization of the proposed project. This report addresses the U.S. Fish and Wildlife Service's *Land-Based Wind Energy Guidelines* Tiers 1 and 2 (preliminary site evaluation and site characterization) and *Eagle Conservation Plan Guidance: Module 1–Land-based Wind Energy, Version 2* Stage 1 (site assessment) and the Arizona Game and Fish Department's *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona*.

The objectives of this evaluation were addressed through a desktop evaluation of publicly available information and a site visit completed in May 2021. A summary of findings is presented in Section 4 of this report.

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1 INTRODUCTION

Pattern Energy Wind Development, LLC (Pattern Energy) is proposing to develop the Hot Air Wind Energy Project (project), a proposed maximum 300- to 350-megawatt wind energy facility. The project would be located on privately owned Aztec Land and Cattle Company lands within an approximately 35,369-acre project area approximately 6 miles south of Holbrook, in Navajo County, Arizona (Figure 1). The proposed project is located in Township 15 North, Range 19 East, Sections 1, 3, 9–11, 15, 17, and 21; Township 15North, Range 20East, Sections 1, 3, 7, 10, 11, 13–15, 18, 23, and 27; Township 16 North, Range 19 East, Sections 1, 10–15, 21–23, 25, 27, 28, and 35; and Township 16 North, Range 20 East, Sections 1, 5–7, 9–11, 13, 15, 17, 19–22, 25–27, 29–31, and 35, Gila and Salt River Base Line and Meridian.

The objective of this report is to assess the habitat and physical landscape characteristics of the project area as related to potential use by sensitive species and other wildlife, including any sensitive habitat designations, and verify habitat types determined from aerial imagery and the U.S. Geological Survey (USGS) Southwest Regional Gap Analysis Project (SWReGAP) land cover database (USGS 2016). This site evaluation and characterization assessment follows the recommendations of the U.S. Fish and Wildlife Service (USFWS) *Land-Based Wind Energy Guidelines* (WEG) (USFWS 2012a), *Eagle Conservation Plan Guidance: Module 1–Land-based Wind Energy, Version 2* (ECPG) (USFWS 2013a), and the Eagle Rule (USFWS 2016), combining Tier 1 (preliminary site evaluation) and Tier 2 (site characterization) from the WEG with Stage 1 of the ECPG, and provides information needed to address questions posed under Tier 1 and Tier 2 of the WEG. Additionally, site evaluation and characterization screening methods follow the Arizona Game and Fish Department (AGFD) *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* (AGFD 2012a).

1.1 Wind Energy Guidelines Tiers 1 and 2 Approach

As described in the WEG, Tier 1 questions may be addressed by desktop evaluation alone, or Tiers 1 and 2 questions may be combined to adequately evaluate these questions after one or repeated site visits. In both approaches, the developer evaluates potential risk to species of concern and their habitats related to multiple possible sites or a single site within a landscape context. Combining the two provides a preliminary assessment of site-specific information. In this document, a single site is evaluated using the Tiers 1 and 2 combined approach. ECPG Stage 1 and AGFD's (2012a) preliminary site screening questions have also been incorporated into this evaluation.

1.2 Applicable Statutes, Policies, and Regulations

The results of wildlife and habitat evaluations, aimed at determining which, if any, species may be affected by design, construction, operation, and decommissioning of the project, are meant to inform efforts to achieve compliance with appropriate jurisdictional statutes.

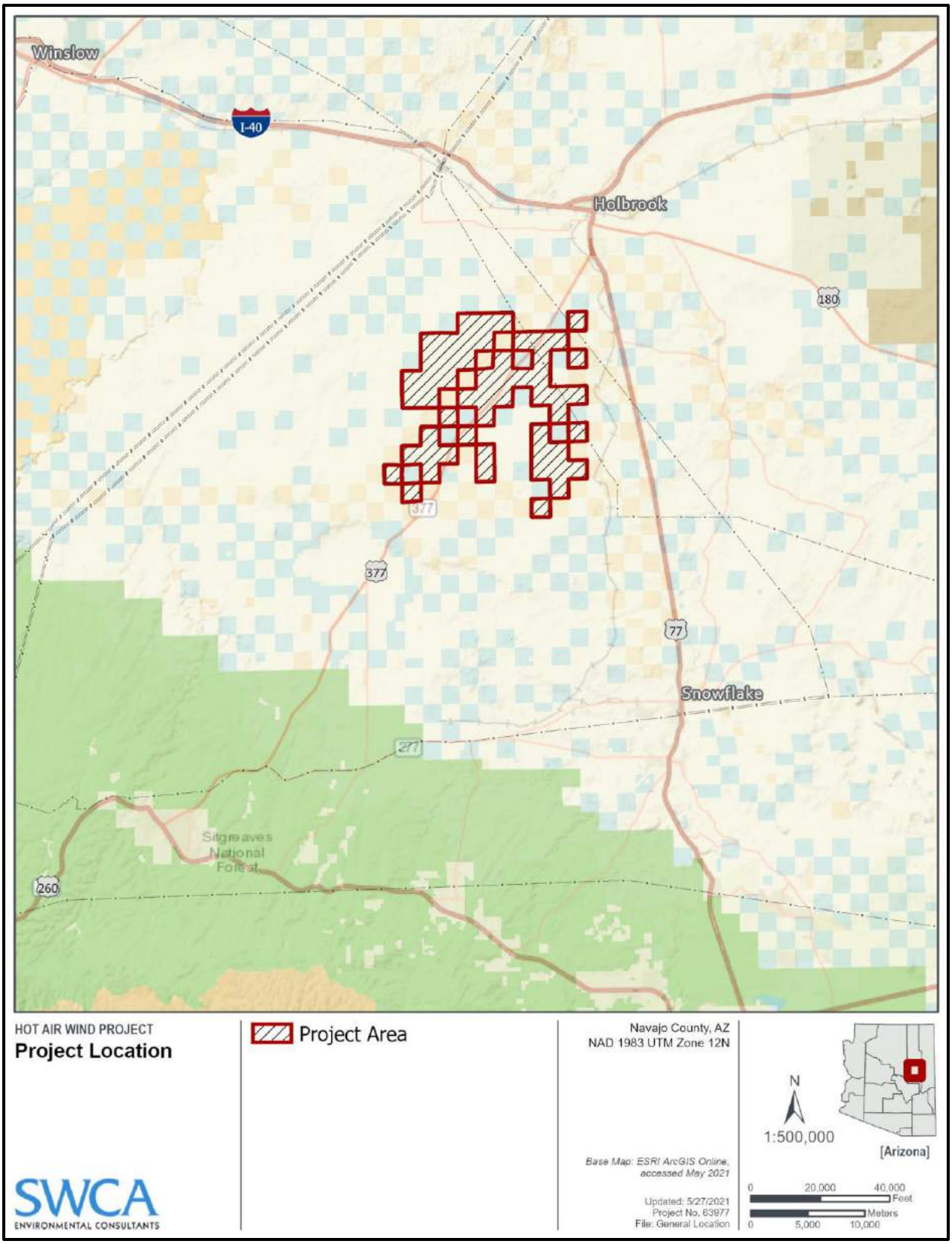

Figure 1. Project area location.

1.2.1 Federal

1.2.1.1 ENDANGERED SPECIES ACT

The Endangered Species Act of 1973, as amended (ESA), protects imperiled (threatened and endangered) species and their habitats, prohibiting anyone without a permit to "take" these species; permits are generally available for conservation and scientific purposes. Section 9 of the ESA makes it unlawful for any person—including private and public entities—to take individuals of an endangered animal species. These prohibitions have been extended, by regulation, to threatened species. *Take* is defined by the ESA as "to harass, harm, pursue, hunt shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Harm may include significant habitat modification or degradation that results in killing or injuring listed species by significantly impairing essential behavioral patterns. These actions, referred to as take prohibitions, apply to any person, organization, or entity.

1.2.1.2 MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act of 1918, as amended (MBTA), prohibits incidental take of migratory birds—more than 1,000 species (50 Code of Federal Regulations [CFR] 10 and 21)—their parts, eggs, or nests. *Take* is defined by the MBTA as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." An MBTA violation can result in fines and/or imprisonment; however, the USFWS focuses its enforcement resources on project proponents that fail to identify and implement appropriate and practicable mitigation measures to avoid bird injury or mortality. In February 2020, the USFWS announced that it intended to codify the U.S. Department of the Interior Office of the Solicitor's M-Opinion (M-37050, also referred to as the Jorjani Opinion) in December 2017 that the MBTA's criminal provisions do not apply to incidental take. But in August 2020, the U.S. District Court for the Southern District of New York vacated the opinion; the ruling is being appealed by the current administration.

Relevant to construction and operations activities, Section 1 of the Interim Empty Nest Policy of USFWS Region 2 states that if an MBTA-protected species nest is completely inactive at the time of destruction or movement, a permit is not required for compliance.

1.2.1.3 BALD AND GOLDEN EAGLE PROTECTION ACT

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits anyone without a permit from taking eagles, their parts, eggs, or nests. *Take* is defined by the Eagle Act as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb"; the Eagle Act'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."

In 2009, the USFWS promulgated regulations that established two new permit types authorizing 1) purposeful take (removal, relocation, or destruction) of eagle nests under limited circumstances, and 2) incidental take (USFWS 2009). In 2016, the USFWS revised the regulations for eagle incidental take permits, allowing developers to voluntarily obtain a 30-year permit subject to mitigation and monitoring, among other requirements (USFWS 2016). The 2016 rule also removed the distinction between standard (to address one-time effects from projects) and programmatic (to authorize recurring take from projects) permit types and modified the preservation standard definition; any authorized take must be "consistent

with the goals of maintaining stable or increasing breeding populations in all eagle management units and the persistence of local populations throughout the geographic range of each species."

1.2.1.4 BIRDS OF CONSERVATION CONCERN

USFWS Birds of Conservation Concern (BCC) are migratory and non-migratory bird species, beyond those designated as federally threatened or endangered, that represent the USFWS's highest conservation priorities. The list does not govern take; rather, it is intended to proactively prevent or remove the need for additional ESA bird listings by promoting greater study and protection of the habitats and ecological communities upon which these species depend.

1.2.2 State

Pursuant to Arizona Revised Statutes (ARS) 17-102, wildlife is the property of the state and can be taken only as authorized by the Arizona Game and Fish Commission. Violations can result in criminal prosecution and/or civil liability. Other state statutes and commission policies pertinent to wind energy projects are described in AGFD (2012a).

1.2.2.1 STATE OF ARIZONA SPECIAL-STATUS SPECIES

Arizona's State Wildlife Action Plan: 2012–2022 (AGFD 2012b) identifies Species of Greatest Conservation Need (SGCN): vertebrate, crustacean, and mollusk species that are indicative of the diversity and health of the state's wildlife, including low and declining populations, warranting heightened attention. AGFD (2012b) prioritized SGCN species into three tiers: 1A, 1B, and 1C. Tier 1A species are those for which AGFD has entered into an agreement or has legal or other contractual obligations or which warrant the protection of a closed season. Tier 1B represents the remainder of the species meeting vulnerability criteria. Tier 1C species are those representing priority research and information needs due to their unknown status. Species identified as vulnerable (1A and 1B species) are evaluated in this report.

1.2.2.2 ARIZONA DEPARTMENT OF AGRICULTURE ARIZONA NATIVE PLANT LAW

The Arizona Native Plant Law (ARS 3-904) (ANPL) states that protected plants shall not be taken, transported, or possessed from any land without permission and a permit from the Arizona Department of Agriculture (ADA); it also requires notification prior to land clearing even if the plants will be destroyed. Highly Safeguarded native plants are those species for which removal is not allowed except with an ADA scientific permit; no collection of these plants is allowed. Salvage Restricted native plants are those plants for which a salvage permit is required; collection is allowed only with a permit. The Salvage Assessed category includes those plants for which a salvage permit is required for removal. Plants in the Harvest Restricted category are protected because they are subject to excessive harvesting or overcutting as a result of the intrinsic value of their by-products, fiber, or woody parts, and a harvest permit is required.

1.2.2.3 ARIZONA DEPARTMENT OF AGRICULTURE NOXIOUS WEED REGULATIONS

The ADA maintains a list of noxious weeds that may be controlled or quarantined to prevent further infestation or contamination as well as those that are prohibited from entering the state.

2 METHODS

SWCA Environmental Consultants (SWCA) completed the preliminary site assessment and site characterization using a combination of existing information obtained from publicly available sources, including reports, published literature, online agency databases, geographic information system data, and field reconnaissance.

2.1 Landscape Scales Considered

This document considers the presence of natural resources (e.g., critical habitats and special designations, eagle breeding areas, wildlife corridors) within broad landscape and project scales defined by the USFWS and AGFD. Generally, the area within 10 miles of the project area is evaluated for consistency with AGFD's Environmental Online Review Tool Report (AGFD 2021a) and the USFWS (2013a) definition of an eagle nesting population area. Where relevant, we consider specific resources in the context of the larger region. For example, specific to potential species' occurrence determinations, the habitat conditions within the project area are considered; nearest records of these species within the region are presented when known. With regards to eagle nesting pairs, the USFWS suggests that based on eagle ranging behavior around nests, eagles nesting within 2 miles of a project may be subject to disturbance or lethal take (USFWS 2020).

2.2 Potential for Occurrence of Special-Status Species and Their Habitats

This document evaluates potential for occurrence of 1) federally protected (endangered and threatened) species and their critical habitats (USFWS 2021a), 2) Eagle Act–protected species, 3) State SGCN 1A and 1B species[1] (AGFD 2012b, 2021a), and 4) BCCs (USFWS 2021b). The potential for occurrence of each species was based on 1) documented records, 2) existing information on distribution, and 3) qualitative comparisons of the habitat requirements of each species with vegetation communities or landscape features in the project area.

Potential for occurrence categories are as follows:

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

2.3 Data Sources Reviewed

SWCA reviewed the following environmental and biological data sources to collect existing data for the project area:

- A project area–specific species and critical habitats list via the USFWS Information for Planning and Consultation (IPaC) system (USFWS 2021a; Appendix A)

[1] 1A and 1B species are those defined as "vulnerable" under specific criteria in *Arizona's State Wildlife Action Plan: 2012–2022* (AGFD 2012b).

- The project area–specific *Arizona Environmental Online Review Tool Report, Hot Air Wind Energy Facility* (AGFD 2021a; Appendix B)
- Biotic Communities of the Southwest (Brown and Lowe 1982 [digital representation by The Nature Conservancy in 2004])
- The National Wetlands Inventory (NWI) (USFWS 2021c)
- SWReGAP data (USGS 2016)
- *Arizona's Wildlife Linkages Assessment* (Arizona Department of Transportation [ADOT] 2006)
- AGFD's Online Environmental Review Tool map (AGFD 2021b), which provides landscape-level spatial data, such as wildlife corridors, unfragmented areas, wilderness areas, wildlife waters, and special-status species range models, for purposes of land use and conservation planning
- *Arizona's State Wildlife Action Plan: 2012–2022* (AGFD 2012b)
- Audubon's Important Bird Areas (IBAs) (Audubon 2021)
- eBird and Birds of the World's bird species' range maps (Billerman et al. 2020; eBird 2021)
- National Wildlife Refuges (USFWS 2021d)
- Species-specific migration corridors (e.g., sandhill crane [*Antigone canadensis*] flyways) (Pacific Flyway Council 2017; Pacific Flyway Council and Central Flyway Council 2016)
- State parks (Arizona State Parks 2021)
- USFWS critical habitats (USFWS 2021e)
- Western Hemisphere Shorebird Reserve Network (WHSRN) sites (WHSRN 2021)
- Wetlands of International Importance (Ramsar 2021)
- Wild and Scenic Rivers (National Wild and Scenic Rivers System 2021)

2.4 Site Reconnaissance

An initial reconnaissance visit to the site was conducted by an SWCA biologist with expertise in the ecology of special-status species in the region on May 18 and 19, 2021. The objective of this visit was to ground-truth available desktop information to effectively evaluate species habitat associations and WEG Tiers 1 and 2 questions.[2]

[2] The WEG recommends at least one site visit by a knowledgeable biologist to evaluate Tiers 1 and 2 questions.

3 RESULTS

3.1 Potential for Occurrence of Special-Status Species and Their Habitats

3.1.1 Environmental Setting

The project area is approximately 30 miles north of the Mogollon Rim within the Grand Canyon section of the Colorado Plateau physiographic province (Fenneman and Johnson 1946) in northern Arizona. The Little Colorado River is approximately 5 miles north of the project area. The terrain at the site is generally characterized as flat to rolling, with more prominent hills, ridges, and sinks present in the southern portion. Elevation ranges from 5,400 feet above mean sea level (amsl) in the north to 6,040 feet amsl in the southwestern portion of the project area.

There are no natural perennial surface water sources within the project area, although several well-fed cattle drinkers are present that provide water to livestock. There are ephemeral washes and earthen cattle tanks present within the project area, with water availability depending on local precipitation. The washes and a few of the earthen livestock tanks support small patchy areas of low, shrubby vegetation, and some have small tamarisk (*Tamarix chinensis*) trees present along the perimeter.

Soils on the project area contain sandy loams, fine sandy loams, clay loams, silty clay loams, silty loams, and loamy sand (Natural Resources Conservation Service [NRCS] 2021). These soils are classified as well drained or excessively drained; none of the soils meet hydric criteria (NRCS 2021). A considerable amount of soil disturbance has occurred as a result of decades of agricultural practices (cattle ranching) over the entire project area. Existing modifications within the project area include facilities associated with ranching (i.e., access roads, dirt tanks, fencing, and corrals).

3.1.2 Land/Vegetation Cover

The project area is within the Plains and Great Basin Grassland biotic community, with a small portion of the southern end of the project area falling into the Great Basin Conifer Woodland biotic community (Brown 1994). One dominant land/vegetation cover type is mapped by the USGS (2016) within the project area: Inter-Mountain Basins Semi-Desert Grassland (Table 1; Figure 2). Twelve other land/vegetation cover types are also mapped by the USGS (2016) within the project area (see Table 1; see Figure 2).

Table 1. SWReGAP Land/Vegetation Cover Types within the Project Area

Land/Vegetation Cover Type	Acres (%)
Inter-Mountain Basins Semi-Desert Grassland	15,639 (44.2)
Colorado Plateau Mixed Low Sagebrush Shrubland	6,140 (17.4)
Inter-Mountain Basins Juniper Savanna	5,842 (16.5)
Inter-Mountain Basins Semi-Desert Shrub Steppe	4,258 (12.0)
Colorado Plateau Pinyon-Juniper Woodland	1,559 (4.4)
Inter-Mountain Basins Greasewood Flat	900 (2.5)
Colorado Plateau Blackbrush-Mormon-tea Shrubland	529 (1.5)
Southern Colorado Plateau Sand Shrubland	166 (0.5)

Land/Vegetation Cover Type	Acres (%)
Inter-Mountain Basins Mixed Salt Desert Scrub	156 (0.4)
Colorado Plateau Mixed Bedrock Canyon and Tableland	143 (0.4)
Inter-Mountain Basins Big Sagebrush Shrubland	34 (0.1)
Open Water	1 (<0.1)
Inter-Mountain Basins Shale Badland	1 (<0.1)

Source: USGS (2016)

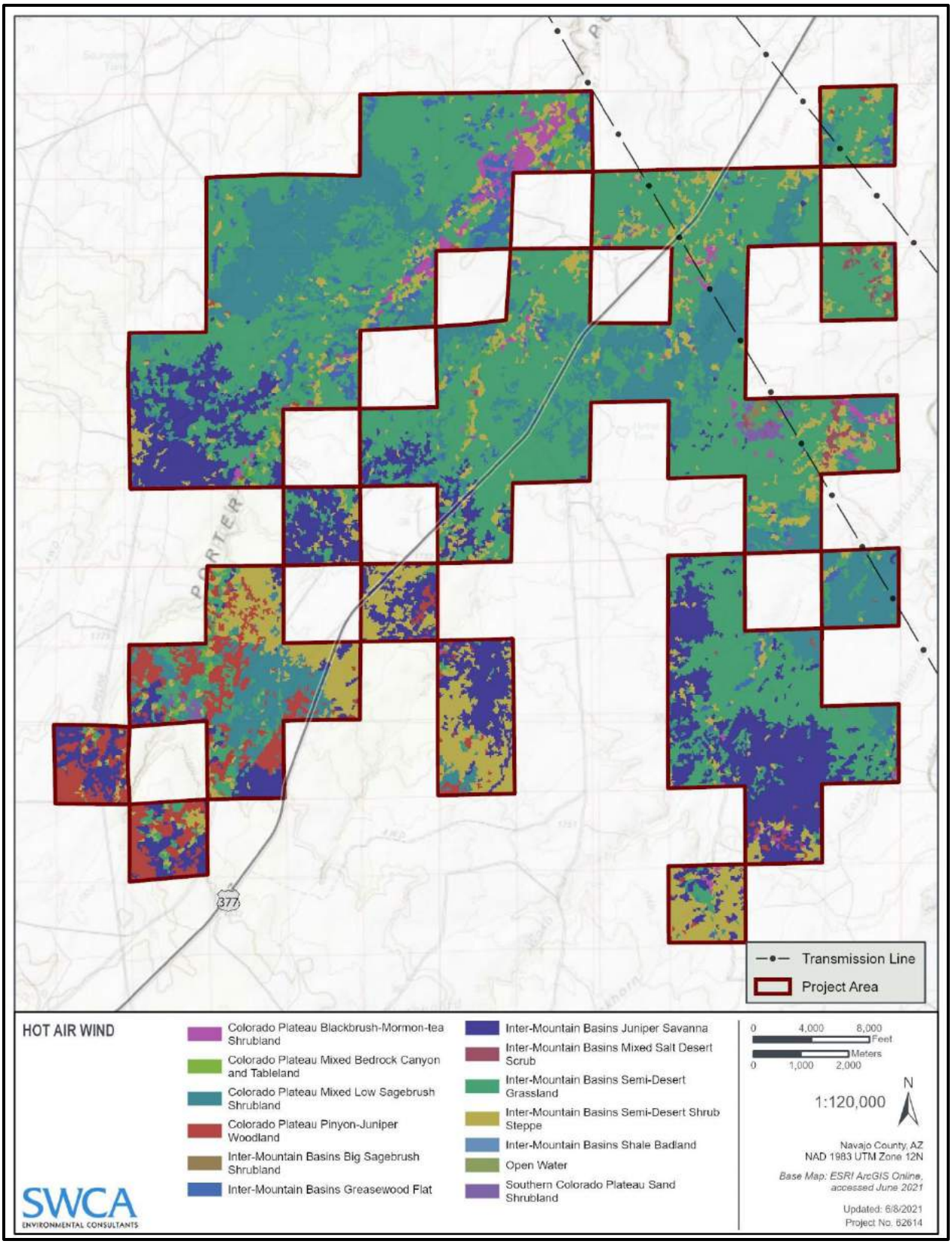

Figure 2. Land and vegetation covers within the project area.

3.1.3 Special-Status Species Occurrence Determinations

3.1.3.1 FEDERALLY LISTED SPECIES

One mammal species (Mexican wolf [*Canis lupus baileyi*]), two bird species or subspecies (Mexican spotted owl [*Strix occidentalis lucida*] and yellow-billed cuckoo [*Coccyzus americanus*]), one reptile species (northern Mexican gartersnake [*Thamnophis eques megalops*]), one amphibian species (Chiricahua leopard frog [*Rana chiricahuensis*]), two fish species (Little Colorado spinedace [*Lepidomeda vittata*] and roundtail chub [*Gila robusta*]), and one insect species (monarch butterfly [*Danaus plexippus*]) were listed in IPaC for the project area (USFWS 2021a; see Appendix A) (Table 2). The project area is within the geographical/elevational range and contains appropriate habitat conditions that could support the monarch butterfly and Chiricahua leopard frog. Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*) was not listed in the IPaC report, but the project area is within the known elevational range for the species and the species has been documented within 10 miles of the project area. The range/habitat requirements and nearest records, if known, of these eight species are presented in Appendix C, Table C-1.

Table 2. Occurrence Status of Relevant Federally Listed Species

Common Name (Scientific Name)	Status*		Occurrence Status
	Federal	State	
Mammals			
Mexican wolf (*Canis lupus baileyi*)	E, EXPN	SGCN 1A	Unlikely to occur
Birds			
Mexican spotted owl (*Strix occidentalis lucida*)	T, CH	SGCN 1A	Unlikely to occur
Yellow-billed cuckoo (*Coccyzus americanus*)	T, CH BCC	SGCN 1A	Unlikely to occur
Reptiles			
Northern Mexican gartersnake (*Thamnophis eques megalops*)	T, CH	SGCN 1A	Unlikely to occur
Amphibians			
Chiricahua leopard frog (*Rana chiricahuensis*)	T, CH	SGCN 1A	May occur
Fishes			
Little Colorado spinedace (*Lepidomeda vittata*)	T, CH	SGCN 1A	Unlikely to occur
Roundtail chub (*Gila robusta*)	C	–	Unlikely to occur
Insects			
Monarch butterfly (*Danaus plexippus*)	C	–	May occur
Flowering Plants			
Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*)	E	HS	May occur

Note: Table includes those species listed in USFWS (2021a). Notes regarding documentation within 10 miles of the project area are from AGFD (2021a).

** Federal Status Definitions*

BCC = Bird of Conservation Concern

C = Candidate. Species for which the USFWS has on file sufficient information on biological vulnerability and threats to support proposals to list as endangered or threatened under the ESA.

CH = Designated critical habitat

E = Endangered. Endangered species are those in danger of extinction throughout all or a significant portion of their range.

EXPN = Experimental population, non-essential

PCH = Proposed critical habitat

T = Threatened. Threatened species are those likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

State Status Definitions

HS = highly safeguarded. Those species of native plants and parts of plants, including the seeds and fruit, whose prospects for survival in Arizona are in jeopardy or which are in danger of extinction throughout all or a significant portion of their ranges.

SGCN = Species of Greatest Conservation Need; wildlife species identified by AGFD (2012b) as having conservation priority. Tier 1A species are those categorized by AGFD (2012b) as "highest priority vulnerable" species.

Chiricahua Leopard Frog

Chiricahua leopard frog is a federally listed threatened species. They grow to approximately 4.3 inches long and can be green or brown with small dark spots (Brennen 2012). The species requires permanent or semipermanent water of cienegas, springs, pools, stock tanks, lakes, reservoirs, streams, and rivers free of or containing low densities of non-native predators (USFWS 2012b). Emergent and perimeter vegetation provide substrate for egg deposition, thermoregulation, and invertebrate fauna for foraging (USFWS 2007). The species has an increasingly narrow realized niche, as it is often excluded from ephemeral habitats, which may not provide surface moisture requirements for adult survival and larval development, and perennial habitats, where harmful non-native species are more prevalent (USFWS 2007).

Peebles Navajo Cactus

The Peebles Navajo cactus is a federally listed endangered species. It is a very small cactus that grows to 1 inch tall and about 0.74 inch in diameter. Stems are usually solitary, lack central spines, and have radial spines that form a twisted cross. The yellow to yellow-green flowers appear in spring (USFWS 2021f). This species may occur on a variety of substrates, primarily weakly alkaline, gravelly soils of the Shinarump conglomerate of the Chinle Formation found in Little Colorado River paleochannels. This species is found at elevations ranging from 5,400 to 5,600 feet; associated plant species are sparsely scattered, low shrubs and grasses of the Navajo Desert (USFWS 2021f).

Monarch Butterfly

The monarch butterfly is large and bright orange in color; it has black wing borders and veins, and there are two rows of white spots on the wing borders. Populations in Arizona can migrate either to California or Mexico for the winter (USFWS 2021f) or may overwinter in the low deserts in California or Arizona (Morris et al. 2015). In the southwestern United States, migrating monarchs often occur near water sources, such as rivers, creeks, riparian corridors, roadside ditches, or irrigated gardens. Multiple generations of the butterflies are produced each year, with populations in the eastern and western United States being migratory. Their larvae are obligate feeders on plants in the Asclepiadaceae family, primarily species of milkweeds. They are found in a variety of habitats. During fall migration in Arizona, monarchs favor nectar from native plants, including sunflowers (*Helianthus* spp.), rabbitbrush (*Ericameria* spp.), thistles (Family Asteraceae), milkweeds, and a variety of other native and garden plants (Morris et al. 2015). The monarch butterfly is listed as a candidate species under consideration for official listing but is not currently afforded federal protection (USFWS 2021a).

3.1.3.1.1 Other Special-Status Species

Table C.2 presents the range/habitat requirements and nearest records, if known, for both Eagle Act–protected species, SGCN 1A and 1B species that are known to occur within 10 miles of the project area or that may occur within the vicinity based on predicted range models (AGFD 2021a), and BCC-listed species for Bird Conservation Regions (BCR) 16 (USFWS 2021b). Table 3 presents the species, of those evaluated in Table C-2, that may occur within the project area.

Eagles

The project area is within the year-round range for golden eagle (*Aquila chrysaetos*) and the wintering range for bald eagle (*Haliaeetus leucocephalus*) (see Table 3). Golden eagles have been documented within 10 miles of the project area (AGFD 2021a). Additionally, an eagle-size nest structure was identified in 2017 during past survey efforts in the area (Figure 3) (AGFD unpublished data). The nest was empty at that time. The ECPG goal at this stage is to begin to assess the spatiotemporal extent and type of eagle use the site receives or is likely to receive; this assessment is provided in Sections 3.3.5 and 3.4.

State-Listed Species

Twenty-eight wildlife species categorized as SGCN 1A or 1B may occur within the project area (see Tables 2 and 3): 12 birds, 14 mammals (including seven bats), one mollusk, and one reptile. Among these species, four are known to occur (i.e., they have been observed by SWCA during site visits) within the project area: golden eagle, ferruginous hawk (*Buteo regalis*), pinyon jay (*Gymnorhinus cyanocephalus*), and pronghorn (*Antilocapra americana*).

Birds of Conservation Concern

The project area is within BCR 16, Southern Rockies (USFWS 2021b). Seventeen BCC species may occur within the project area (see Table 3). Among these species, four are known to occur: golden eagle, ferruginous hawk, pinyon jay, and broad-tailed hummingbird (*Selasphorus platycercus*).

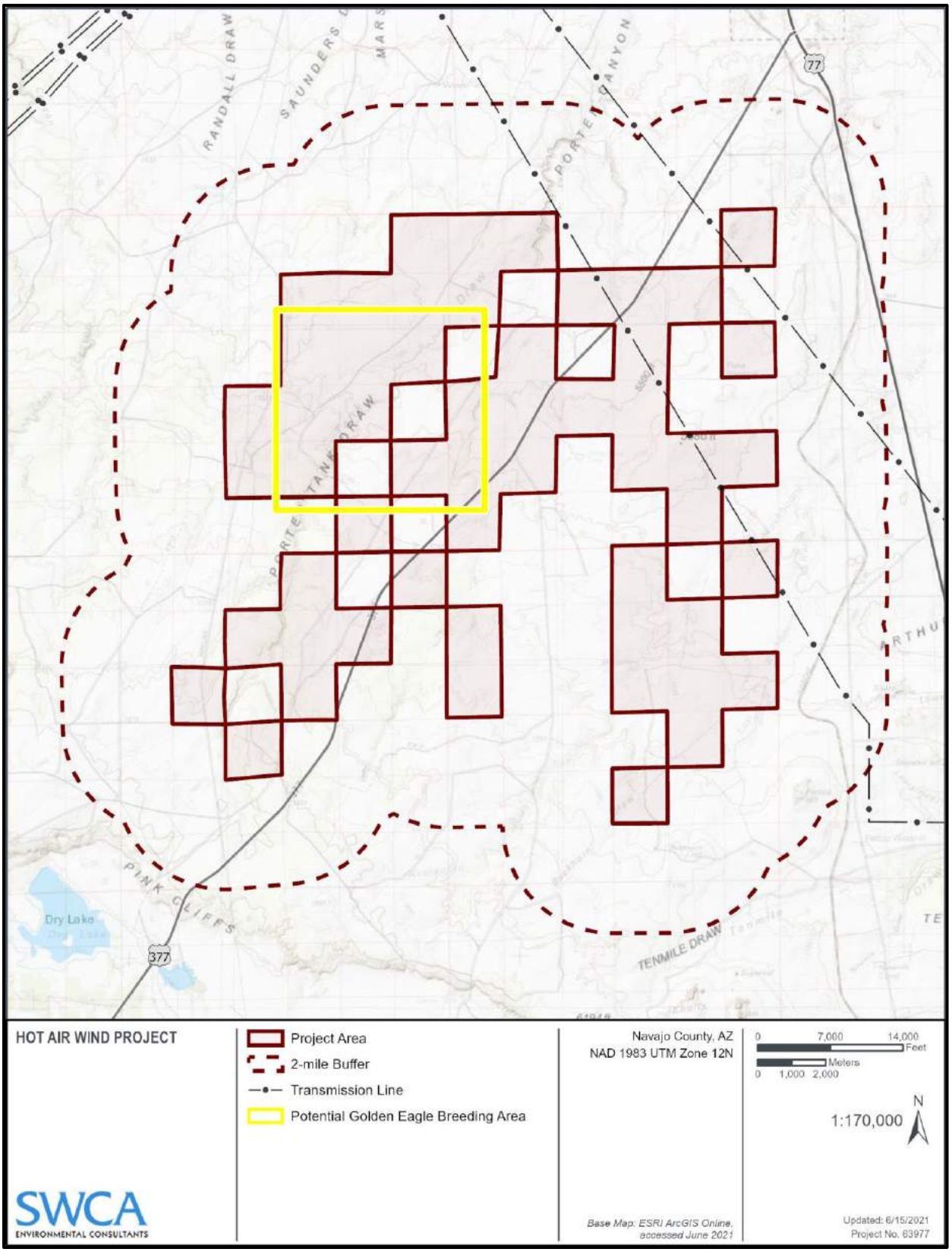

Figure 3. Location of 3 × 3–mile breeding block area where an unoccupied eagle-size nest was identified in 2017.

Table 3. Birds of Conservation Concern and Other Special-Status Species That May Occur in the Project Area[*]

Common Name (Scientific name)	Status		Occurrence Status
	Federal[†]	State[‡]	
Birds			
American peregrine falcon (*Falco peregrinus anatum*)	FS-S, BLM-S BCC	SGCN 1A	May occur
Bald eagle (*Haliaeetus leucocephalus*)	Eagle Act, FWS-SC, BLM-S BCC	SGCN 1A	May occur; documented within 10 miles
Bendire's thrasher (*Toxostoma benderei*)	BCC	SGCN 1C	May occur
Black-chinned sparrow (*Spizella atrogularis*)	BCC	SGCN 1C	May occur
Brewer's sparrow (*Spizella breweri*)	BCC	SGCN 1C	May occur
Broad-tailed hummingbird (*Selasphorus platycercus*)	BCC	–	Known to occur; documented during site visit
California gull (*Larus californicus*)	BCC	–	May occur
Cassin's finch (*Haemorhous cassinii*)	BCC	–	May occur
Clark's grebe (*Aechmophorus clarkia*)	BCC	–	May occur
Clark's nutcracker (*Nucifraga columbiana*)	BCC	–	May occur
Common nighthawk (*Chordeiles minor*)	–	SGCN 1B	May occur
Evening grosbeak (*Coccothraustes vespertinus*)	BCC	–	May occur
Ferruginous hawk (*Buteo regalis*)	FWS-SC, BLM-S	SGCN 1B	Known to occur; documented during site visit
Golden eagle (*Aquila chrysaetos*)	Eagle Act, BLM-S BCC	SGCN 1B	Known to occur; documented within 10 miles
Lewis's woodpecker (*Melanerpes lewis*)	BCC	–	May occur
Lincoln's sparrow (*Melospiza lincolnii*)	–	SGCN 1B	May occur
Long-eared owl (*Asio otus*)	BCC	–	May occur
Pacific wren (*Troglodytes pacificus*)	–	SGCN 1B	May occur
Pinyon jay (*Gymnorhinus cyanocephalus*)	BCC, BLM-S	SGCN 1B	Known to occur; documented during site visit
Virginia's warbler (*Leiothlypis virginiae*)	BCC	–	May occur
Yellow-headed blackbird (*Xanthocephalus xanthocephalus*)	BCC	–	May occur
Yellow warbler (*Setophaga petechia*)	–	SGCN 1B	May occur

Common Name (Scientific name)	Status		Occurrence Status
	Federal[†]	State[‡]	
Non-Bat Mammals			
American beaver (*Castor canadensis*)	–	SGCN 1B	Unlikely to occur
American pronghorn (*Antilocapra americana americana*)	–	SGCN 1B	Known to occur; documented during site visit
Black-footed ferret (*Mustela nigripes*)	FWS-LE, FWS-XN	SGCN 1A	Unlikely to occur
Gunnison's prairie dog (*Cynomys gunnisoni*)	FWS-SC, BLM-S	SGCN 1B	May occur; documented within 10 miles
Kit fox (*Vulpes macrotis*)	–	SGCN 1B	May occur
Mexican vole (*Microtus mexicanus*)	–	SGCN 1B	May occur
Northern rock deermouse (*Peromyscus nasutus*)	–	SGCN 1B	May occur
Springerville pocket mouse (*Perognathus flavus goodpasteri*)	FS-S	SGCN 1B	May occur; documented within 10 miles
Stephen's woodrat (*Neotoma stephensi*)	–	SGCN 1B	May occur
Bats			
Arizona myotis (*Myotis occultus*)	FWS-SC, BLM-S	SGCN 1B	May occur; documented within 10 miles
Big free-tailed bat *(Nyctinomops macrotis*)	FWS-SC	–	May occur; documented within 10 miles
Brazilian free-tailed bat (*Tadarida brasiliensis*)	–	SGCN 1B	May occur; documented within 10 miles
Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)	FS-S, BLM-S	SGCN 1B	May occur
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	–	SGCN 1B	May occur; documented within 10 miles
Spotted bat (*Euderma maculatum*)	FS-S, BLM-S	SGCN 1B	May occur
Yuma myotis (*Myotis yumanensis*)	–	SGCN 1B	May occur
Reptiles			
Pai striped whiptail (*Aspidoscelis pai*)	–	SGCN 1B	May occur
Fish			
Little Colorado spinedace (*Lepidomeda vittata*)	FWS-LT	SGCN 1A	Unlikely to occur; documented within 10 miles[§]
Little Colorado sucker (*Catostomus sp. 3*)	FS-S, BLM-S	SGCN 1A	Unlikely to occur; documented within 10 miles[§]
Mollusks			
California floater (*Anodonta californiensis*)	FS-S	SGCN 1A	May occur

Common Name (Scientific name)	Status		Occurrence Status
	Federal†	State‡	
Plants¶			
Gladiator milkvetch (*Astragalus xiphoides*)	FWS-SC	SR	May occur; documented within 10 miles
Roundleaf errazurizia (*Errazurizia rotundata*)	BLM-S	SR	May occur; documented within 10 miles
Grama-grass cactus (*Sclerocactus papyracanthus*)	–	SR	May occur; documented within 10 miles
Whipple's fishhook cactus (*Sclerocactus whipplei*)	–	SR	May occur; documented within 10 miles

Sources: AGFD (2021a); USFWS (2021b). Notes regarding documentation within 10 miles of the evaluation area are from the AGFD (2021a) Online Environmental Review Tool report.

* Animals designated as SGCN 1C were excluded from the table unless they also had a federal status designation.

† *Federal Status Definitions*: BLM-S = BLM Sensitive; FS-S = USDA Forest Service Species of Conservation Concern; FWS-LE = USFWS Listed Endangered; FWS-LT = USFWS Listed Threatened; FWS-SC = USFWS Species of Concern; FWS-XN = USFWS Experimental, Non-essential Population

‡ SGCN 1A = species for which AGFD has entered into an agreement or has legal or other contractual obligations or species that warrant the protection of a closed season; SGCN 1B = remainder of species meeting vulnerable criteria.

HS = highly safeguarded; SR = salvage restricted Arizona native plant.

§ There is no permanent aquatic habitat within the project area that could support fish species. The documented observations within 10 miles are likely from the Little Colorado River, approximately 5 miles or more away, where these species are known to occur.

¶ Plant names are referred to by the nomenclature used in the AGFD (2021a) Online Environmental Review Tool report.

3.1.4 Plant Communities of Concern

The project area is adjacent to the known geographic range and is within the elevational range of one federally listed plant species (Peebles Navajo cactus) and contains landscape features known to support this species (see Section 3.1.3.1 and Table C-1). Protected native plants classified under the ANPL are present in the project area (e.g., banana yucca [*Yucca baccata*] {Harvest Restricted native plant} and Whipple cholla [*Cylindropuntai whipplei*] {Salvage Restricted native plant}). One noxious weed listed by the Arizona Department of Agriculture, camelthorn (*Alhagi maurorum*), was observed in the project area during the May 18 and 19, 2021, site visit.

3.1.5 Critical Habitats

There are no critical habitats within the project area.

3.2 Other Special Designations

There are no Important Bird Areas (Audubon 2021), WHSRN sites (WHSRN 2021), Wetlands of International Importance (Ramsar sites) (Ramsar 2021), National Wildlife Refuges (USFWS 2021c), Wilderness Areas (AGFD 2021b), Wild and Scenic Rivers (National Wild and Scenic Rivers System 2021), or state parks (Arizona State Parks 2021) within 10 miles of the project area.

3.3 Potential Areas of Wildlife Congregation

3.3.1 Bat Roosts, Roosting Habitat, and Hibernacula

Bat roosting sites may vary by species, season, and time of day (e.g., day—roosts used for rest and raising young; night—roosts used for ingesting food, resting, and avoiding inclement weather or predators). Bats roost singly, in small groups, or in large numbers in naturally occurring and human-made structures,

including caves, rock crevices, birds' nests, most parts of trees (e.g., inside cavities or hollow logs, under loose bark, inside furled leaves, on branches), mines, buildings, bridges, and culverts (Ammerman et al. 2012). Many bats raise their young in spring-season nursery or maternity roosts; site fidelity at these sites is highly variable (Ammerman et al. 2012). Hibernacula sites—commonly caves and abandoned mines—are typically restricted to those with relatively stable temperatures and relative humidity (Ammerman et al. 2012).

There are no known bat roosts within 10 miles of the project area; however, this may be because of a lack of surveys rather than a lack of presence.

3.3.2 Wetlands/Riparian Areas

Notable water features within the region include the Little Colorado River south of Holbrook, approximately 5 miles north of the project area, and Silver Creek, approximately 7 miles to the east. Dry Lake is approximately 3 miles southwest of the project area. Wetlands within the project area (Figure 4) include earthen stock tanks and ephemeral drainages. The NWI (USFWS 2021c) classifies the stock tanks as human-made, nontidal wetlands with unconsolidated shores and less than 30% areal cover of vegetation. These features are determined to be temporarily, seasonally, or intermittently flooded freshwater ponds (see Figure 4). Most drainages in the project area are classified as "riverine: intermittently or seasonally flooded" (USFWS 2021c; see Figure 4). During the May 18 and 19, 2021, site visit, SWCA observed that all earthen water features except one stock tank were dry. Those features observed as dry were noted as lacking emergent wetland and shrub/tree riparian vegetation, while the stock tank containing water was ringed with several medium-size tamarisk trees.

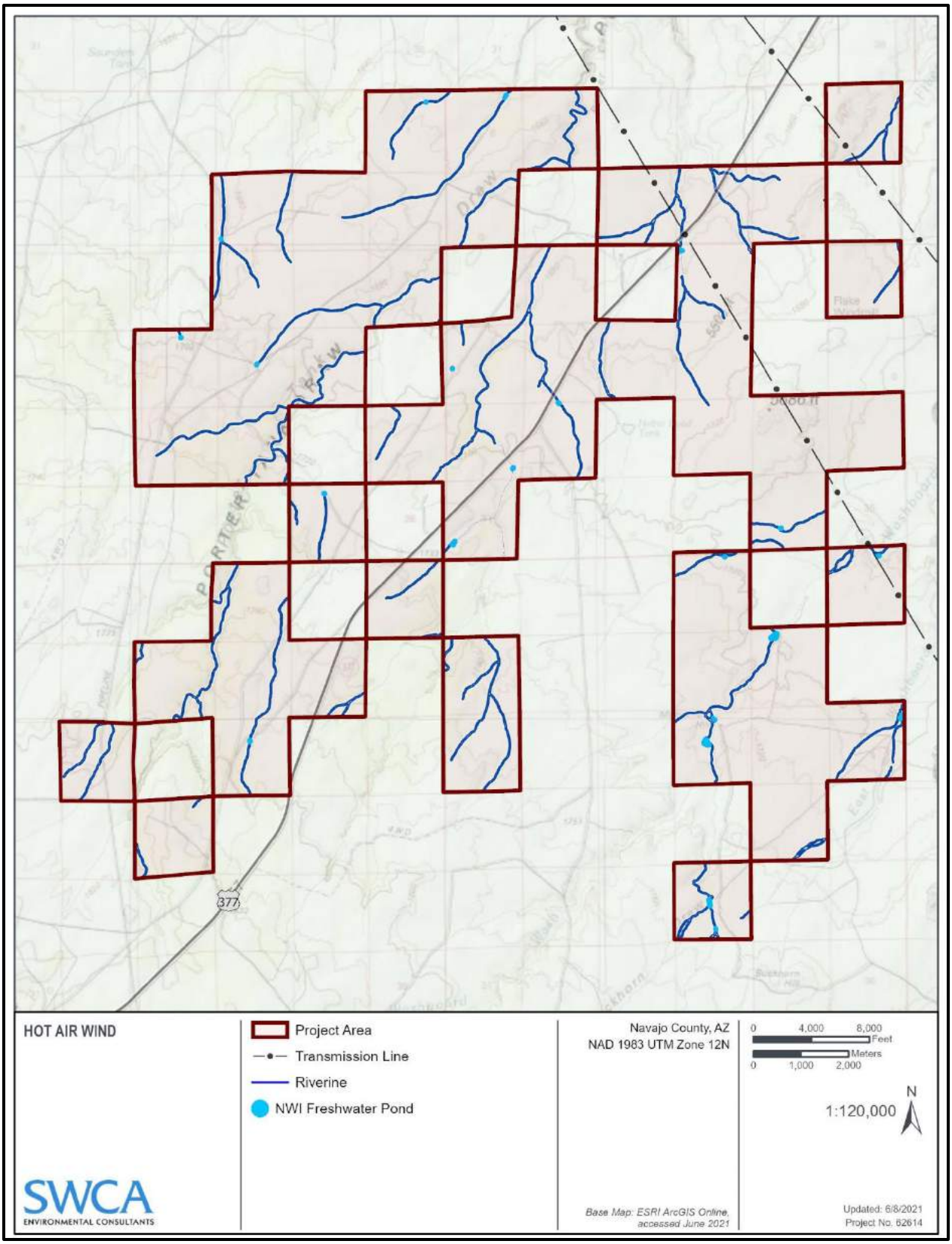

Figure 4. National Wetlands Inventory wetlands within the project area.

3.3.3 Staging Areas, Migration Stopovers, and Corridors

3.3.3.1 STAGING AREAS

Staging areas are those with abundant, predictable food resources where, for example, birds prepare for an energetic challenge (typically a long flight over a geographic barrier) requiring substantial food stores (Warnock 2010). Such staging areas are seen for birds such as waterfowl, cranes, shorebirds, and songbirds. Examples of staging sites include Delaware Bay; the Copper River Delta, Alaska; the Platte and North Platte Rivers, Nebraska; Mono Lake, California; Great Salt Lake, Utah; and the Yucatan Peninsula. Some smaller, lesser-known interior sites that do not meet WHSRN numeric criteria but provide consistent water availability and quality may also be important to some shorebird species that migrate in small flocks (Robinson and Warnock 1996). The project area stock tanks, playas/depressions, and drainages do not provide consistent water availability or predictable food resources (e.g., as seen in coastal mudflats) characteristic of important staging areas.

3.3.3.2 STOPOVERS AND AVIAN/BAT MIGRATION CORRIDORS

The terms *stopover* and *staging area* are often used interchangeably. Stopover sites may be defined more broadly as sites where birds rest and feed during migration to refuel or avoid adverse conditions (Warnock 2010). Although most species migrate on broad fronts and stopover strategies among and within species are complex, fragments of forested areas and riparian corridors (i.e., oases relative to the surrounding landscape) often provide important stopover habitats. The project area does not contain habitats that would concentrate migrant birds. The juniper woodlands and grasslands are abundant habitats relative to the surrounding region.

There are no prominent north-south topographical features present within the project area that could funnel migrant raptors. Other negative barriers, such as large bodies of water or mountain ridges that offer energy-efficient flight via updrafts, are not present in the project area or vicinity. The project area is also outside of any known avian species-specific migration corridors (e.g., sandhill crane flyways) (Pacific Flyway Council 2017; Pacific Flyway Council and Central Flyway Council 2016).

Bat migratory routes and stopover areas are poorly known (AGFD 2012a; Baerwald and Barclay 2011; Baerwald et al. 2009; Fleming and Eby 2003; Froidevaux et al. 2014). Emerging guidelines for preconstruction surveys have focused on identifying important wildlife habitat for bats such as hibernacula and maternity colonies (see Section 3.3.1) and potential movement corridors between these important sites (Arnett and Baerwald 2013; Bennett and Hale 2018; Hein et al. 2013).

3.3.3.3 OTHER WILDLIFE CORRIDORS

The project area overlaps a diffuse wildlife movement area, as well as a wildlife crossing area, as identified by Apache and Navajo Counties (AGFD 2012c). Diffuse movement areas are a type of wildlife linkage in which animals move within a habitat block across a relatively broad area rather than between habitat blocks through a well-defined linkage. Diffuse movement areas A1 and A4 of the Apache and Navajo Counties wildlife linkages are found within the project area, which have been identified as important for elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), and pronghorn (AGFD 2012a, 2021a). The State Route 377 Milepost 21 crossing area is within the project area and has been identified as important for pronghorn.

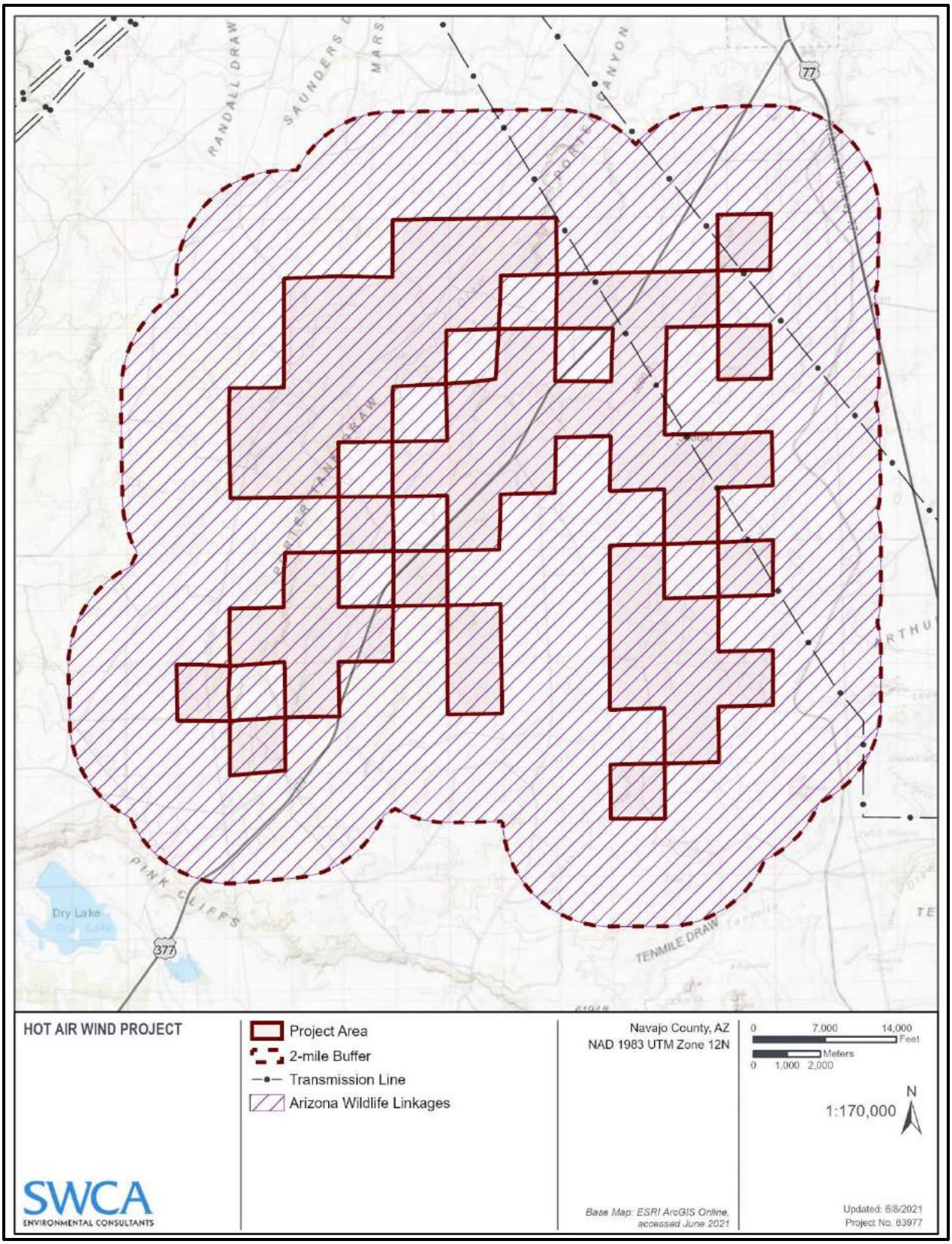

Figure 5. Arizona wildlife linkages within 2 miles of the project area.

3.3.4 Leks, Winter Ranges, or Other Areas of Seasonal Importance

Tables C.1 and C.2 provide information regarding potential seasonal use of the project area by special-status species.

3.3.4.1 LEKS

The project area is not within the range of any lekking species (e.g., grouse, sage-grouse, prairie chicken; Galliformes>Phasianidae>Tetraoninae), which are species that form seasonal aggregations characterized by male display.

3.3.4.2 WINTER RANGES

The WEG (USFWS 2012) suggests evaluating the importance of winter ranges with respect to big game species. The project area is within the predicted range for elk, pronghorn, and mule deer (AGFD 2021a). SWCA documented pronghorn within the project area during the May 18 and 19, 2021, site visit, and elk were noted in the vicinity. Breeding and calving in pronghorn occur in August–September and May–June, respectively (AGFD 2019). Important seasonal periods for elk include breeding (September–October), restoring depleted body fat (November), and calving (late May and June) (AGFD 2019; New Mexico Department of Game and Fish 2018). Mule deer breed in the winter (November–December) and birth young in June–August (AGFD 2019).

Because of their size and water availability, project area stock tanks are not expected to support large concentrations of migrating/wintering waterfowl or shorebirds. Baseline avian use will be quantified during WEG Tier 3/ECPG Stage 2.

Potential eagle use of the site, including potential for bald eagle winter roosts, is reviewed in Section 3.4.

3.3.4.3 AREAS OF SEASONAL IMPORTANCE

At this stage, specific areas of seasonal importance have not been identified within the project area or its vicinity. The following is a summary of project area features that may attract species of interest to the site:

- Non-eagle raptor nesting sites (if present, typically active between February and July)
- Gunnison's prairie dog (*Cynomys gunnisoni*) colonies; prairie dogs are typically active in the region from March through October (peak activity in June–July)
    - Colonies may provide concentrated (spatially predictable) prey for raptor species (e.g., golden eagle, ferruginous hawk). SWCA has observed some small burrow-concentration areas on-site; their occupancy status is unknown. Larger burrow concentration areas may be present within 2 miles of the project area.
    - Burrowing owls (*Athene cunicularia*) may also occupy prairie dog burrows for breeding between March and mid-July.
- Stock tanks containing waterfowl (wintering waterfowl period: October–February)
    - Stock tanks may provide concentrated (spatially predictable) prey for eagles.
- Bat resources (colonial roosting period: May–August [AGFD 2012a]; typical season of concern for bats is late summer and early fall migration
    - Important bat roosts within the project area vicinity have not been identified at this stage.

3.3.5 Eagle Nesting Sites

One potential eagle nesting site is present within the project area (see Figure 3) and is located on rock substrates associated with short cliffs. No additional nesting areas are known within the 2-mile disturbance buffer of the project area (AGFD unpublished data).

3.4 Potential Eagle Use of the Site

3.4.1 Anticipated Potential Seasonal Use

The project area is within the golden eagle's year-round range and may be broadly categorized as golden eagle foraging habitat (i.e., open grassland and steppe-like vegetation communities) (Katzner et al. 2020). Golden eagles breed throughout the region. Nests are placed in rugged terrain (e.g., cliffs), less often in forested areas (e.g., ponderosa pine [*Pinus ponderosa*], Fremont cottonwood [*Populus fremontii*]) and on human-made structures (e.g., transmission towers). Figure 3 illustrates a 3 × 3–mile potential eagle breeding area block provided by AGFD that is found within the project area. It indicates the general location where the large, unoccupied eagle-size nest structure was identified in 2017.

Potential golden eagle prey items and likely use areas within the project area described in Sections 3.3.4.3 and 3.4.2.1. Golden eagles exhibit complex migration and nomadic movement patterns dependent on factors such as nesting status, age, and food availability (Katzner et al. 2020). Because individuals from areas north of Arizona winter in the state in October–April (reaching peak numbers in December–February), generally more golden eagles may be expected regionally during the fall through early spring seasons (AGFD 2002; Katzner et al. 2020). Other factors that may influence temporal use of the site by the species include whether breeding areas proximal to the site (see Section 3.3.5) are used by individuals during the breeding season (winter through early summer) and the extent to which foraging activities increase on-site based on seasonal fluctuations in food availability (e.g., offal piles left by hunters September–November; Gunnison's prairie dogs, a main food item, would be active, if present, on-site from March through October; see Section 3.4.2.1).

The project area is within the bald eagle's non-breeding and limited breeding ranges. It does not contain characteristic habitats for nesting (cliffs or trees near appropriate foraging conditions), foraging (aquatic), or roosting (trees 15–60 meters in height) (Buehler 2020; Stalmaster 1987). Nests are generally placed in large trees or cliffs less than 2 kilometers from water containing appropriate foraging conditions (e.g., rivers or reservoirs containing fish) (Buehler 2020). Wintering/non-breeding individuals and juveniles are typically associated with breeding habitats; however, they may range widely in search of food (see Section 3.4.2.2). Like golden eagles, bald eagles exhibit complex migration and nomadic movements; generally, more individuals may be expected regionally from late August until February, when wintering northern birds and returning juveniles are present (Corman and Wise-Gervais 2005). Given the lack of nesting, roosting, and foraging habitats within and proximal to the project area, use of the site by the species would most likely be occasional, particularly from late summer through winter when appropriate food items (e.g., large mammal carrion; see Section 3.4.2.2) are present.

3.4.2 Eagle Prey Concentrations

3.4.2.1 GOLDEN EAGLE PREY ITEMS

Potential golden eagle main prey items within the project area may include rabbits (e.g., desert cottontail [*Sylvilagus audubonii*], black-tailed jackrabbit [*Lepus californicus*]) and sciurids (e.g., rock squirrel [*Otospermophilus variegatus*], Gunnison's prairie dog). Secondary prey items may include waterfowl,

large mammal carrion (e.g., cattle, elk, pronghorn, mule deer), live ungulates (e.g., pronghorn), cattle, mesocarnivores (e.g., coyote [*Canis latrans*], American badger [*Taxidea taxus*], bobcat [*Lynx rufus*]), large birds, and offal piles left by hunters (Katzner et al. 2020).

Potential prey concentration areas within the project area include stock tanks potentially containing waterfowl (see Section 3.3.4.3).

3.4.2.2 BALD EAGLE PREY ITEMS

Potential bald eagle prey items within the project area may include carrion and waterfowl (Buehler 2020). Preferred bald eagle prey items—fish—are not present within the project area. The nearest major bodies of water and their proximity to the site are described above (see Section 3.3.2). Winter use of stock tanks by bald eagles would likely be infrequent because the species tends to prefer traditional waterfowl concentration areas with heightened hunter-induced mortality (Griffin et al. 1982).

3.4.3 Important Eagle Use Areas or Migration Concentration Sites

At this stage, no important eagle use areas or migration concentration sites have been identified within the project area or vicinity.

Eagle migration concentration sites are associated with negative barriers, such as large bodies of water, or mountain ridges that offer energy-efficient flight via updrafts. The nearest known raptor migration sites are along the south rim of the Grand Canyon, over 125 miles northwest of the project area (Hawk Migration Association of North America 2021). An *important eagle use area* is defined by the USFWS (2009) as "an eagle nest, foraging area, or communal roost site that eagles rely on for breeding, sheltering, or feeding, and the landscape features surrounding such nest, foraging area, or roost site that are essential for the continued viability of the site for breeding, feeding, or sheltering eagles."

There are no known communal eagle roost sites—generally associated with bald eagles—within or proximal to the project area. As described in Section 3.1.3.1.1, one potential golden eagle breeding block has been documented within the project area.

3.4.4 USFWS Eagle Use Category Ranking

One golden eagle breeding block has been documented within the project area (see Figure 3). Surveys will be conducted to determine if this breeding block contains an occupied nest during the breeding season. If so, project design will be modified to provide a 2-mile buffer between the active nest and any wind turbines. Additionally, potential eagle food resources are available within the project area (see Section 3.4.2). These findings suggest the eagle use category for the project per the USFWS (2016) is Category 2, high or moderate risk to eagles, with the opportunity to mitigate impacts.

4 KEY FINDINGS/SUMMARY

This report evaluates all questions suggested for WEG Tiers 1 and 2, ECPG Stage 1, and AGFD (2012a) preliminary site screening. The following is a summary of findings:

- Two federally listed species, Chiricahua leopard frog and Peebles Navajo cactus, and one candidate species for listing, monarch butterfly, may occur within the project area. Based on habitat associations and range requirements, projected use in the project area by both species is expected to be occasional/rare.

- Thirty wildlife species designated as SGCN 1A/1B, BCC and/or protected under the Eagle Act may occur within the project area.
- ANPL native plants have been observed in the project area; one ADA noxious weed occurs within the vicinity of the project area with the potential for other species to occur.
- Wetlands within the project area include earthen stock tanks, playas/depressions, and ephemeral drainages. The NWI classifies the stock tanks and playas/depressions as human-made, nontidal wetlands with unconsolidated shores and less than 30% areal cover of vegetation. They are classified as either temporarily, seasonally, or intermittently flooded freshwater ponds. All wetland features lack emergent wetland vegetation, and only one has tamarisk trees representing shrub/tree riparian vegetation.
- There are no critical habitats or other special designation areas within the project area.
- At this stage, there are no known bat roosts or movement corridors within the project area or vicinity.
- There are no bird staging areas, species-specific flyways, or other negative barriers (e.g., large bodies of water and mountain ridges) that would funnel migrant raptors within the project area or vicinity.
- One diffuse wildlife movement area and one wildlife crossing area are found within the project area (AWLW 2006).
- There are no lekking species in the region.
- At this stage, other areas of seasonal importance have not been identified. Features such as raptor nesting sites, prairie dog colonies, stock tanks, topographic features, and bat resources will continue to be evaluated through the tiered decision-making process as to their presence and value.
- Golden eagles may occur within the project area year-round. Bald eagle use of the project area is expected to be occasional, particularly from December through February.
- Findings suggest the eagle use category for the project per the USFWS (2016) is Category 2, high or moderate risk to eagles, with the opportunity to mitigate impacts.

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APPENDIX A

Federal Species and Critical Habitats List for the Project Area, U.S. Fish and Wildlife Service Information for Planning and Consultation

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

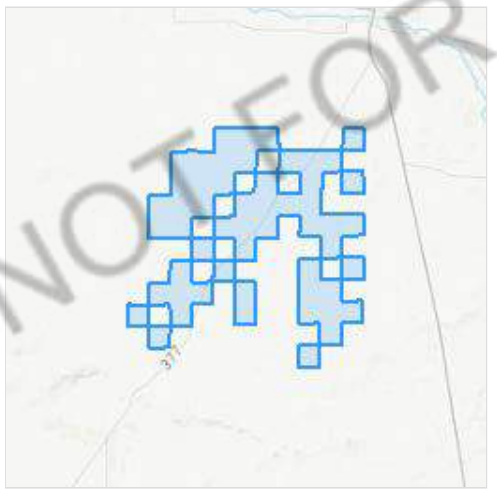
Project information

NAME

Hot Air Wind Energy Facility, project-specific

LOCATION

Navajo County, Arizona



DESCRIPTION

Some(New wind energy facility.)

Local office

Arizona Ecological Services Field Office

(602) 242-0210
(602) 242-2513

9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517

http://www.fws.gov/southwest/es/arizona/
http://www.fws.gov/southwest/es/EndangeredSpecies_Main.html

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. 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.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

NOT FOR CONSULTATION

Gray Wolf Canis lupus — PEXPN
No critical habitat has been designated for this species.

Birds

NAME	STATUS
Mexican Spotted Owl Strix occidentalis lucida Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8196	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Northern Mexican Gartersnake Thamnophis eques megalops Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7655	Threatened

Amphibians

NAME	STATUS
Chiricahua Leopard Frog Rana chiricahuensis Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1516	Threatened

Fishes

NAME	STATUS
Little Colorado Spinedace Lepidomeda vittata Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/6640	Threatened

NOT FOR CONSULTATION

NAME	STATUS
Roundtail Chub Gila robusta No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2782	Candidate

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

NOT FOR CONSULTATION

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

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

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on

this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

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

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bendire's Thrasher Toxostoma bendirei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9435	Breeds Mar 15 to Jul 31
Pinyon Jay Gymnorhinus cyanocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15

NOT FOR CONSULTATION

Probability of Presence Summary

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be

used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

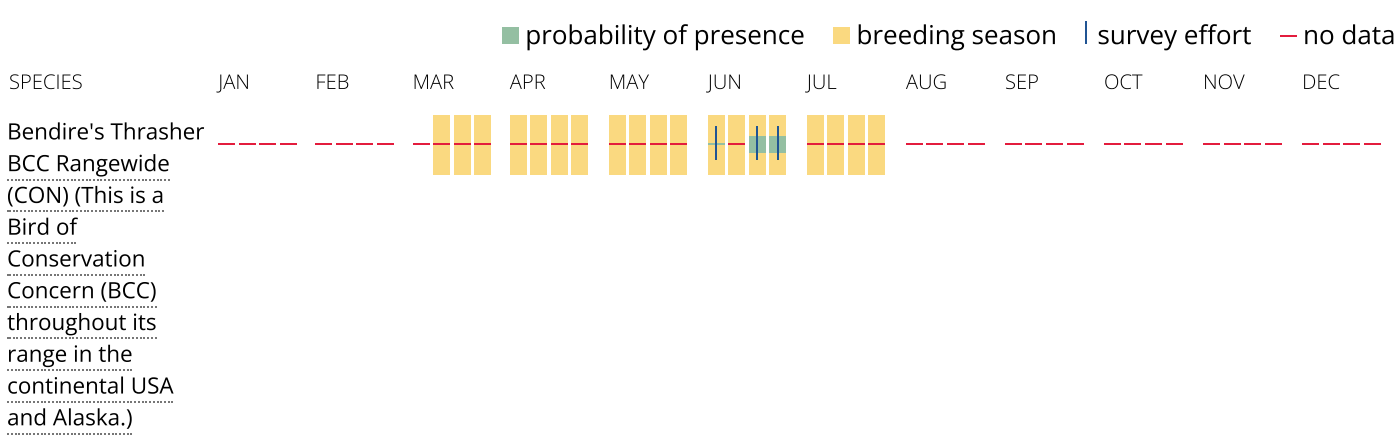
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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

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



NOT FOR CONSULTATION

Pinyon Jay BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

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

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

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

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

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

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

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

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

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

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What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

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

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Facilities

National Wildlife Refuge lands

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 AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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.

This location overlaps the following wetlands:

FRESHWATER POND

- PUSJh
- PUSAh
- PUSCh

RIVERINE

- R4SBC
- R4SBJ
- R5UBH

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

NOT FOR CONSULTATION

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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APPENDIX B

Arizona Game and Fish Environmental Online Review Tool Report for the Project Area

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.

Project Name:
Hot Air Wind Energy Facility

User Project Number:
63977

Project Description:
New wind energy generating facility.

Project Type:
Energy Storage/Production/Transfer, Energy Production (generation), wind power facility (new)

Contact Person:
Corina Anderson

Organization:
SWCA Environmental Consultants

On Behalf Of:
PRIVATE

Project ID:
HGIS-13649

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

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. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), 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.

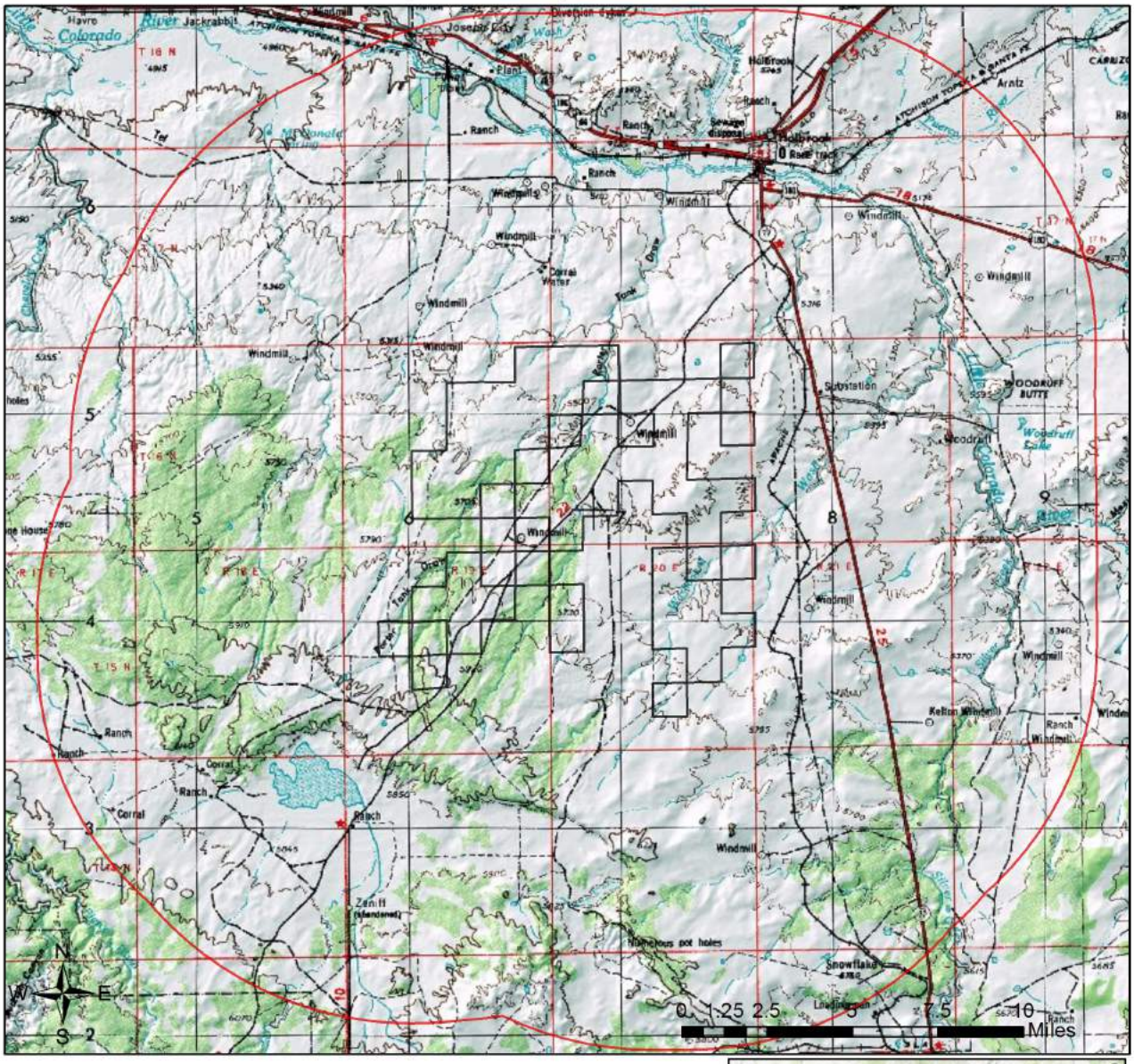
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

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

Hot Air Wind Energy Facility

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 35,369.07

Lat/Long (DD): 34.7510 / -110.2564

County(s): Navajo

AGFD Region(s): Pinetop

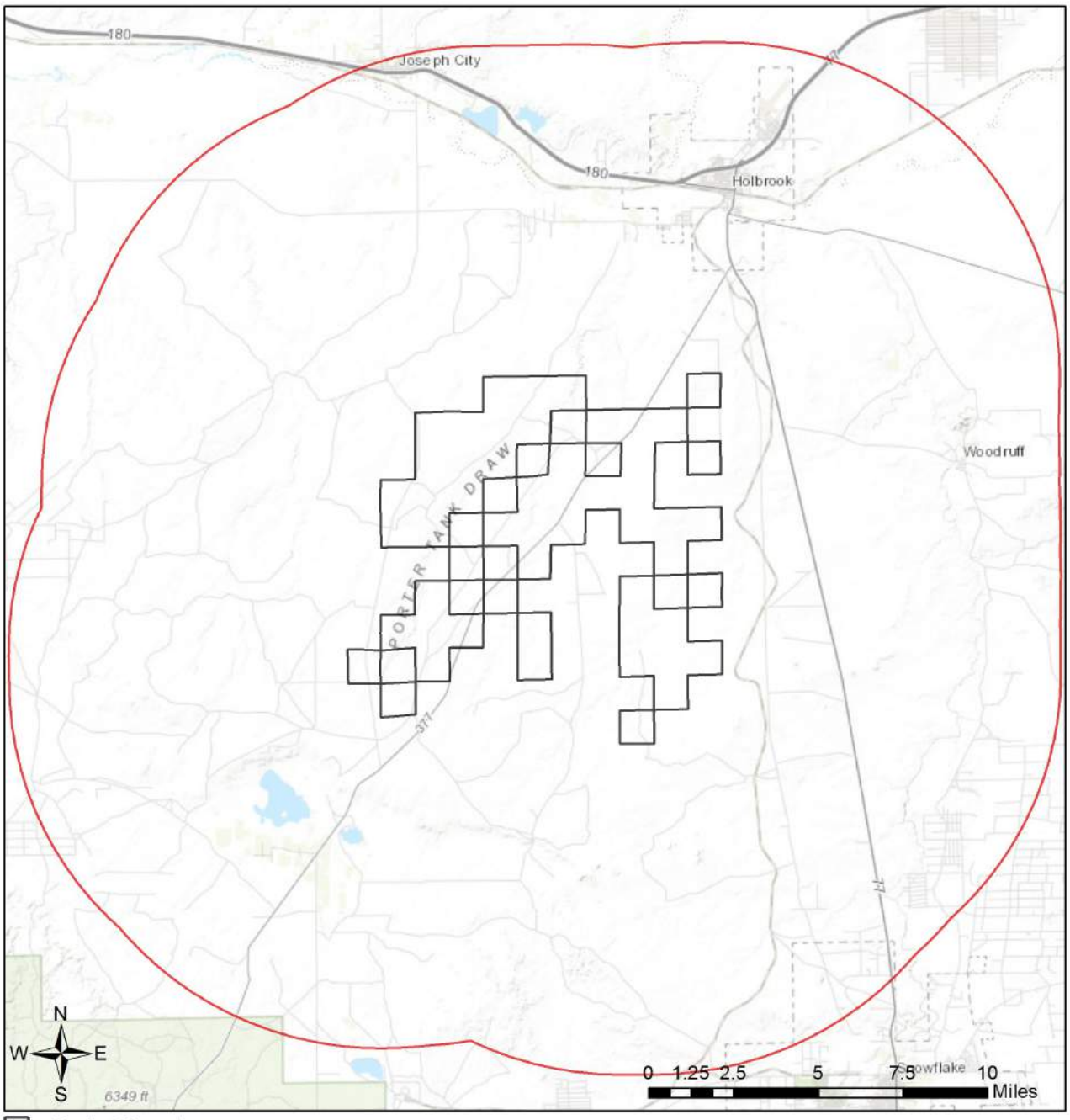
Township/Range(s): T15N, R19E; T15N, R20E; T15N, R21E +

USGS Quad(s): DRY LAKE NE; FLATTOP HILL +

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap

Hot Air Wind Energy Facility

Web Map As Submitted By User



Project Boundary

Buffered Project Boundary

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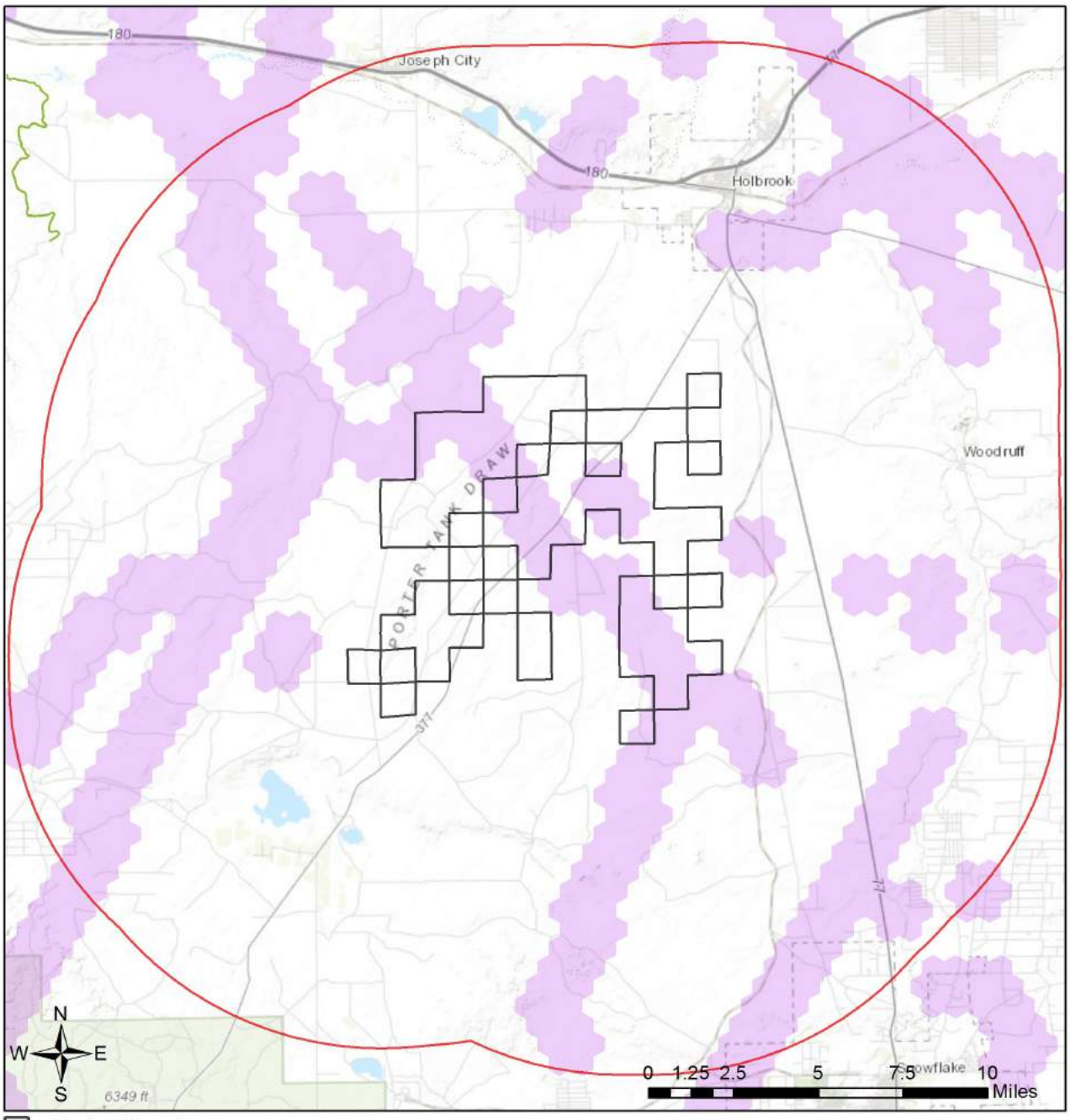
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Hot Air Wind Energy Facility

Important Areas



- Project Boundary
- Buffered Project Boundary
- Wildlife Connectivity
- Important Connectivity Zones
- Critical Habitat
- Important Bird Areas

Project Size (acres): 35,369.07

Lat/Long (DD): 34.7510 / -110.2564

County(s): Navajo

AGFD Region(s): Pinetop

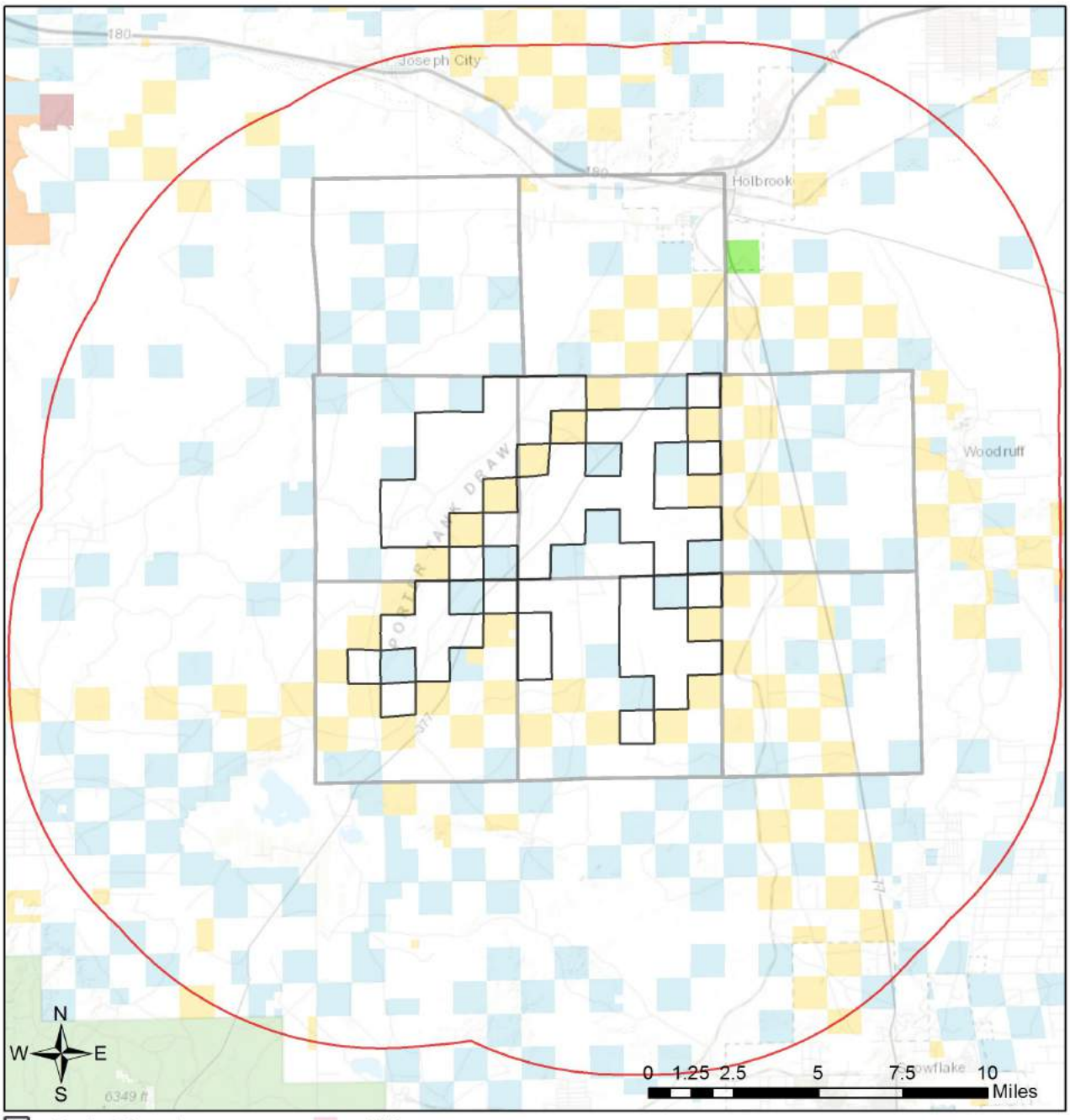
Township/Range(s): T15N, R19E; T15N, R20E; T15N, R21

USGS Quad(s): DRY LAKE NE; FLATTOP HILL +

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Hot Air Wind Energy Facility

Township/Ranges and Land Ownership



- Project Boundary
- Buffered Project Boundary
- Township/Ranges

Land Ownership

- 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

Project Size (acres): 35,369.07

Lat/Long (DD): 34.7510 / -110.2564

County(s): Navajo

AGFD Region(s): Pinetop

Township/Range(s): T15N, R19E; T15N, R20E; T15N, R21

USGS Quad(s): DRY LAKE NE; FLATTOP HILL +

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 10 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Astragalus xiphoides	Gladiator Milkvetch	SC			SR	
Bat Colony						
Buteo regalis	Ferruginous Hawk	SC		S		1B
Catostomus sp. 3	Little Colorado Sucker	CCA	S	S		1A
Cynomys gunnisoni	Gunnison's Prairie Dog	SC		S		1B
Errazurizia rotundata	Roundleaf Errazurizia			S	SR	
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S		1A
Lepidomeda vittata	Little Colorado Spinedace	LT				1A
Myotis occultus	Arizona Myotis	SC		S		1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Nyctinomops macrotis	Big Free-tailed Bat	SC				
Pediocactus peeblesianus ssp. peeblesianus	Peebles Navajo Cactus	LE			HS	
Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC	S			1B
Sclerocactus papyracanthus	Grama-grass Cactus	SC			SR	
Sclerocactus whipplei	Whipple's Fishhook Cactus				SR	
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Important Connectivity Zone	Wildlife Connectivity					
N/A	Apache/Navajo Counties Wildlife Movement Area - Diffuse					
State Route 377: MP 21	Apache/Navajo Counties Wildlife Crossing Area					

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

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
Anodonta californiensis	California Floater	SC	S			1A
Antilocapra americana americana	American Pronghorn					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Aspidoscelis pai	Pai Striped Whiptail					1B
Baeolophus ridgwayi	Juniper Titmouse					1C

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
Buteo regalis	Ferruginous Hawk	SC		S		1B
Buteo swainsoni	Swainson's Hawk					1C
Callipepla squamata	Scaled Quail					1C
Castor canadensis	American Beaver					1B
Chordeiles minor	Common Nighthawk					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Cynomys gunnisoni	Gunnison's Prairie Dog	SC		S		1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Gymnorhinus cyanocephalus	Pinyon Jay			S		1B
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Melospiza lincolnii	Lincoln's Sparrow					1B
Microtus mexicanus	Mexican Vole					1B
Mustela nigripes	Black-footed Ferret	LE,XN				1A
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Neotoma stephensi	Stephen's Woodrat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC	S			1B
Peromyscus nasutus	Northern Rock Deermouse					1B
Rallus limicola	Virginia Rail					1C
Setophaga petechia	Yellow Warbler					1B
Spizella breweri	Brewer's Sparrow					1C
Sturnella magna	Eastern Meadowlark					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Troglodytes pacificus	Pacific Wren					1B
Vireo vicinior	Gray Vireo		S			1C
Vulpes macrotis	Kit Fox	No Status				1B

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					1B
Cervus elaphus	Elk					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida macroura	Mourning Dove					

Project Type: Energy Storage/Production/Transfer, Energy Production (generation), wind power facility (new)

Project Type Recommendations:
Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

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 should be contained within important 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. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

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. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

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/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. 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.

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

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herptefauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

The effects of wind development projects on wildlife, in particular birds and bats, are well documented. The Department recommends conducting raptor nest, general avian, and threatened and endangered species surveys during the appropriate breeding/migration seasons within 10 miles of the project site to determine the location of active nests, migratory pathways, and associated species potentially disturbed by project activities. Effects that should be minimized or mitigated may include direct habitat loss from the wind plant footprint, including turbine base, access road, and substation construction; indirect habitat loss from increased human presence and/or turbine operation noise; habitat alteration, such as soil erosion and construction of migration-hindering obstacles; mortality by powerline electrocution; and mortality by collision with structures, turbine blades or guy wires. The Department has developed guidelines for wind energy development which can be found on the Wildlife Friendly Guideline on our Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/. We also recommend referring to the USFWS Land-based Wind Energy Guidelines, http://www.fws.gov/windenergy/. We encourage the project proponent to coordinate directly with the Project Evaluation Program to identify and develop mitigation measures for these projects.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (http://www.fws.gov/southwest/es/arizona/).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

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

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

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 http://www.fws.gov/southwest/es/arizona/ 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

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **Statewide Wildlife Connectivity Assessment's Important Connectivity Zones** (ICZs) represent general areas throughout the landscape which contribute the most to permeability of the whole landscape. ICZs may be used to help identify, in part, areas where more discrete corridor modeling ought to occur. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://s3.amazonaws.com/azgfd-portal-wordpress/azgfd.wp/wp-content/uploads/0001/01/23120719/ALIWCA_Final_Report_Perkl_2013_lowres.pdf.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

APPENDIX C

Special-Status Species Reviewed for Their Potential to Occur in the Project Area

Table C-1. Federally Listed Species Reviewed for Their Potential to Occur in the Project Area

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Mammals					
Mexican wolf (*Canis lupus baileyi*)	E, EXPN	–	Areas with sufficient prey populations, such as deer and elk, and where human-induced mortality is controlled. Current populations typically associated with evergreen pine-oak woodlands, pinyon juniper woodlands, and mixed-conifer montane forests above 4,000 feet. The Mexican Wolf Recovery Experimental Population Area (MWEPA) encompasses Arizona and New Mexico from Interstate 40 south to Mexico.	Unlikely to occur. Although the project area is located inside the MWEPA within Mexican Wolf Management Zone 2, the project area does not contain suitable habitat parameters. The dominant vegetation type in the project area is grassland. There are patches of pinyon-juniper woodland on the west side of the project area but they are fragmented and adjacent to State Route 377, a busy local highway. Cattle and elk may be present, but only intermittently. The species has not been documented within 10 miles of the project area. The nearest recent recorded sighting of a Mexican wolf was a member of the Saffel pack on July 11, 2021, east of Greer, Arizona, approximately 64 miles to the southeast.	Year-round; dens April through May
Birds					
Mexican spotted owl (*Strix occidentalis lucida*)	T, CH	SGCN 1A	Nests and roosts primarily in high-elevation (4,000–10,000 feet) old growth forests: mixed conifer dominated by Douglas-fir, pine, or true fir and pine-oak forests dominated by ponderosa pine and Gambel oak. Secondarily, in steep, narrow canyons with cliffs and perennial water. Breeding and roosting habitats typically include steep slopes with high canopy closure, high basal area, many snags, and many downed logs. Foraging, juvenile dispersal, and wintering habitats are more diverse and include a wide variety of forest conditions (including pinyon-juniper), canyon bottoms, cliff faces, tops of canyon rims, and riparian areas. Wintering owls will also use mountain-shrub habitat. Known or believed to occur in 13 Arizona counties, including Navajo County.	Unlikely to occur. The project area does not contain suitable nesting and roosting habitat for this species. There are no old-growth pine-oak forests present within the project area, nor are there any steep, narrow canyons with perennial water. This species has not been documented within 10 miles of the project area. Critical habitat for this species is located approximately 19 miles west in Apache-Sitgreaves National Forest.	Year-round; occasional foray
Yellow-billed cuckoo (*Coccyzus americanus*)	T, CH	SGCN 1A	Nests in low- to moderate-elevation (usually below 6,600 feet) riparian woodlands with native broadleaf trees and shrubs that are 50 acres or more in extent. Most commonly associated with cottonwood/willow-dominated vegetation cover, but composition of dominant riparian vegetation can vary across range. Has not been found nesting in isolated patches (1–2 acres) or narrow, linear riparian habitats less than 10 to 20 meters wide; migrant cuckoos have been detected in these habitats. During migration uses a wider array of forest and shrub habitats but is rarely observed away from riparian habitats. Known or believed to occur in 15 Arizona counties, including Navajo County.	Unlikely to occur. AGFD predicted that range models did not include the project area, but the project area is within the general range of the species. The project area does not contain riparian habitats and the species has not been documented within 10 miles of the project area. Designated critical habitat for the species is located approximately 86 miles southwest of the project area along Tonto Creek above Roosevelt Lake, Unit 12: AZ-10 Tonto Creek, in Gila County, Arizona.	Breeding; migration

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Flowering Plants					
Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*)	E	ANPL	Weakly alkaline, gravelly soils of the Shinarump conglomerate of the Chinle formation at elevations between 5,400 and 5,600 feet. Associated vegetation community includes sparsely scattered low shrubs and grasses. The species is found in central Navajo County near Holbrook, Arizona.	May occur. The project area is within the known elevational range of this species and there are documented occurrences within 10 miles of the project area.	Flowers in April to early May
Reptiles					
Northern Mexican gartersnake (*Thamnophis eques megalops*)	T, CH	SGCN 1A	Riparian obligate. Lotic and lentic habitats include cienegas and stock tanks (earthen impoundments), and rivers containing pools and backwaters. Most frequently found between 3,000 and 5,000 feet but may occur up to approximately 8,500 feet. Uses adjacent terrestrial habitats for foraging, thermoregulation, gestation, shelter, immigration, emigration, and brumation. Found in areas of high native prey (fish and leopard frogs) concentration. Prey include leopard frogs and native fish, and, secondarily, non-native larval and juvenile bullfrogs and soft-rayed fish. Core population areas in Arizona include mid/upper Verde River drainage, mid/lower Tonto Creek, and the San Rafael Valley. Known or believed to occur in 11 Arizona counties, including Navajo County.	Unlikely to occur. Earthen impoundment stock tanks within the project area contain water seasonally but are far from riparian habitats; thus, movements associated with foraging, thermoregulation, gestation, shelter, immigration, emigration, and brumation would be unlikely. This species has not been documented within 10 miles of the project area. There is critical habitat for this species in Unit 2: Tonto Creek, approximately 76 miles to the southwest.	Year-round; generally surface active between March and November
Amphibians					
Chiricahua leopard frog (*Rana chiricahuensis*)	T, CH	SGCN 1A	Permanent or semi-permanent springs, livestock tanks, and streams in the upper portions of watersheds at elevations between 3,000 and 9,000 feet. Often do not coexist with nonnative species (e.g., bullfrogs, nonnative fishes, crayfish). In Arizona, may occur in east-central and southeastern portions of the state. Known or believed to occur in 11 Arizona counties, including Navajo County.	May occur. The very southern portion of the project area is within the species' known geographic distribution. The project area stock tanks are temporally flooded, contain muddy banks, and are mostly devoid of vegetation cover; such features are marginally suitable for the species. There is critical habitat for this species in the Crouch, Gentry, and Cherry Creeks, and Parallel Canyon Unit, approximately 49 miles to the southwest. The nearest record for this species is approximately 11 miles to the southeast of the project area.	Year-round

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Fishes					
Little Colorado spinedace (*Lepidomeda vittata*)	T, CH	SGCN 1A	Pools with water flowing over fine gravel and silt-mud substrates of medium to small streams. Four populations exist in Arizona: the mainstem of the Little Colorado River, Nutrioso Creek, Clear Creek, and Chevelon Creek. Known or believed to occur in three Arizona counties, including Navajo County.	Unlikely to occur. Although the species has been documented within 10 miles of the project area, this observation is likely from the Little Colorado River, approximately 5 miles north of the project area, where this species is known to occur. There is no perennial aquatic habitat in the project area. There is designated critical habitat for this species in lower East Clear Creek, approximately 12 miles northeast of the project area.	Year-round
Roundtail chub (*Gila robusta*)	C	–	Cool to warm water over a wide elevational range in rivers and streams throughout the Colorado River basin. Often occupying open areas of the deepest pools and eddies of mid-sized to larger streams. Frequently associated with areas of cover in the form of boulders, overhanging cliffs, undercut banks, or vegetation.	Unlikely to occur. There is no perennial aquatic habitat in the project area. The Little Colorado River, where this species is known to occur, is approximately 5 miles north of the project area.	Year-round
Insects					
Monarch butterfly (*Danaus plexippus*)	C	–	A migratory species found in a variety of habitats. Monarchs require milkweed for breeding. Populations in Arizona can migrate either to California or Mexico for winter or may overwinter in the low deserts in California or Arizona. In the southwestern United States, migrating monarchs often occur near water sources such as rivers, creeks, riparian corridors, roadside ditches, and irrigated gardens.	May occur. This species may be present as transients during migration or as occasional individuals passing through the project site in route to larval food plants or nectar resources. Nectar sources are available for foraging and milkweed species may occur in or adjacent to the project area for reproduction use.	Breeding; migration

Notes: Species provided in this table include those listed in the project-specific list of threatened and endangered species that may occur (USFWS 2021a) and federally listed species listed in the project-specific AGFD (2021a) environmental online review tool report. Range or habitat requirement information and potential occurrence justification are from AGFD (2021b), Billerman et al. (2020), Brennan (2012), eBird (2021), Morris et al. (2015), Natural Resources Conservation Service (2021), USFWS (2013b, 2014, 2021f)

* Federal Status Definitions

CH = Designated critical habitat

E = Endangered. Endangered species are those in danger of extinction throughout all or a significant portion of their range.

EXPN = Experimental population, non-essential

PCH = Proposed critical habitat

T = Threatened. Threatened species are those likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

State Status Definitions

ANPL = Protected by the Arizona Native Plant Law

SGCN = Species of Greatest Conservation Need; species identified by AGFD (2012b) as having conservation priority. Tier 1A species are those categorized by AGFD (2012b) as “highest priority vulnerable” species.

Table C-2. Other Special-Status Species Reviewed for Their Potential to Occur in the Project Area

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Birds					
Bald eagle (*Haliaeetus leucocephalus*)	Eagle Act	SGCN 1A	Aquatic habitats with open water or Southwest arid regions with available food and roost sites. Non-breeding eagles range throughout Arizona except for the south-central portion of the state; breeding eagles occur in limited, fragmented locations of central, east-central, and west-central portions of the state.	May occur; the project area is within the wintering range and may provide foraging resources such as waterfowl and carrion. Nearest record is approximately 7 miles east of the project area.	Breeding; non-breeding
Bendire's thrasher (*Toxostoma benderei*)	BCC	SGCN 1C	Desert habitats: grassland, shrubland, or woodland from sea level to approximately 6,000 feet. Breeding range includes northern two-thirds of Arizona; year-round range includes southern third of the state.	May occur; the project area is within the breeding range and contains appropriate habitat associations. Nearest record is approximately 4 miles north of the project area.	Breeding
Black rosy-finch (*Leucosticte atrata*)	BCC	–	Mountainous areas (alpine tundra and high open parks and valleys), thinly vegetated lowlands, and high deserts of shadscale, greasewood, sagebrush, rabbitbrush, and open pinyon-juniper. Winter movements dependent on snow depth and weather conditions. May winter in north-central extreme of Arizona (one or twice per decade; including as far south as Flagstaff).	Unlikely to occur; the project area is outside (south and west) of species' wintering range. Nearest record is approximately 76 miles northwest of the project area.	Non-breeding; transient
Black-chinned sparrow (*Spizella atrogularis*)	BCC	SGCN 1C	Arid brushlands of chapparal, sagebrush, and pinyon-juniper on slopes from sea level to 9,000 feet. Breeding range includes northwestern, central, and east-central portions of Arizona. Non-breeding range includes southeastern portions of the state.	May occur; project area is on the northern edge of the breeding range within east-central Arizona and contains sloped pinyon-juniper and shrub habitats. Nearest record is approximately 6 miles north of the project area.	Breeding
Black swift (*Cypseloides niger*)	BCC	–	Breeding sites include sea cliffs, waterfalls, and caves with ledges. Additional habitat parameters include flowing water, clear aerial access, shade, availability of nesting material, and wetlands capable of producing insects for foraging.	Unlikely to occur; the project area is well outside the species' breeding range. Nearest record is approximately 72 miles north northeast.	Transient
Broad-tailed hummingbird (*Selasphorus platycercus*)	BCC	–	Breeds in open woodland with meadows and scrub. Found in ponderosa pine, oaks, Douglas fir, spruce, and fir throughout eastern and northern Arizona.	Known to occur; the project area is within the breeding range and contains appropriate habitat associations. This species was documented during the site visit.	Breeding

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Brewer's sparrow (*Spizella breweri*)	–	SGCN 1C	Shrublands dominated by big sagebrush. May occur in desert scrub, large openings in pinyon-juniper, or large parklands with coniferous forests. Breeding range includes northern Arizona. Non-breeding range includes west-central portion and southern half of the state.	May occur; the project area is within the breeding range for the species and contains pinyon-juniper woodland and low sagebrush shrublands. Nearest record is approximately 3 miles north of the project area.	Breeding
Brown-capped rosy-finch (*Leucosticte australis*)	BCC	–	Open areas including alpine tundra, high parks, meadows, and open grasslands/shrublands. Non-breeding range outside of Arizona: includes southern Wyoming through Colorado and north-central New Mexico.	Unlikely to occur; the project area is well outside (southwest) of the species' non-breeding range. Nearest records are approximately 170 miles northeast of the project area.	Non-breeding
California gull (*Larus californicus*)	BCC	–	Open habitat from sea level to over 9,000 feet. Breeding colonies nearly always on islands on natural lakes, rivers, or reservoirs.	May occur; the project area is along eastern edge of the known migration route. Nearest record is approximately 6 miles north of the project area.	Migration
Cassin's finch (*Haemorhous cassinii*)	BCC	–	Open coniferous forests. Occasionally found in open sagebrush (*Artemisia tridentata*) shrubsteppe with scattered junipers.	May occur; the project area is within the non-breeding range and contains appropriate habitat associations. Nearest record is approximately 4 miles north of the project area.	Non-breeding
Clark's grebe (*Aechmophorus clarkia*)	BCC	–	Fresh water lakes and marshes with extensive areas of open water bordered by emergent vegetation.	May occur; the project area is within the breeding range for the species. Nearest record is approximately 6 miles north of the project area.	Breeding
Clark's nutcracker (*Nucifraga columbiana*)	BCC	–	Breeding habitat includes coniferous forest from montane to subalpine zones. Forest Communities used for nesting include pinyon-juniper woodland, ponderosa pine, Douglas fir, Jeffrey pine, grand fir, and mixed coniferous subalpine communities.	May occur; the project area is within the year-round range of this species and contains appropriate habitat associations. Nearest record is approximately 4 miles north of the project area.	Year-round
Common nighthawk (*Chordeiles minor*)	–	SGCN 1B	Variety of open habitats including sagebrush and desert grassland, prairies and plains, open forests, croplands, rock outcrops, and gravel rooftops. Breeding range includes northeastern and southeastern portions of throughout Arizona.	May occur; the project area is within the breeding range of this species and contains appropriate habitat associations. Nearest record is approximately 4 miles north of the project area.	Breeding
Evening grosbeak (*Coccothraustes vespertinus*)	BCC	–	Mixed-conifer and spruce-fir forests; less common in pine-oak, pinyon-juniper, ponderosa pine, and aspen forests. In winter, flocks typically observed in pinyon-juniper and ponderosa pine ecotone. Year-round (scarce) range includes northeastern Arizona; non-breeding (scarce) range includes central, west-central, northwestern, and southeastern portions of the state.	May occur; project area is within the non-breeding (scarce) range, is on the western edge of the year-round (scarce) range, and contains pinyon-juniper woodlands. Nearest record is approximately 4 miles north of the project area.	Non-breeding (scarce); year-round (scarce)

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Ferruginous hawk (*Buteo regalis*)	–	SGCN 1B	Grasslands, shrub-steppe, pinyon-juniper, sparse riparian forests, and canyon areas with cliffs and rock outcrops. Year-round range includes roughly north half of Arizona; wintering range includes roughly south half of the state.	Known to occur; the project area is within the year-round range and contains appropriate habitat associations. This species was observed during the site visit.	Year-round
Flammulated owl (*Psiloscops flammeolus*)	BCC	SGCN 1C	Open, mature ponderosa pine or other forest (e.g., dry montane conifer, aspen) with similar features often with oak, dense saplings, or other brushy understory. Breeding range includes central to east-central Arizona and fragmented locations of southeastern and northwestern portions of the state.	Unlikely to occur; the project area is within the breeding range but does not contain appropriate habitat associations. Nearest records are approximately 26 miles southwest of the project area.	Breeding
Golden eagle (*Aquila chrysaetos*)	Eagle Act	SGCN 1B	Mountainous canyon land, rimrock terrain of open desert, grassland, and forested areas. Year-round range includes all of Arizona.	Known to occur; the project area is within the year-round range and contains appropriate habitat associations. One potential nesting area is present within the project area.	Year-round
Grace's warbler (*Setophaga graciae*)	BCC	SGCN 1C	Pine, pine-oak, and spruce-fir forest. Breeds throughout Arizona except for southwestern portion of the state.	Unlikely to occur; the project area is within the breeding range but does not contain appropriate habitat associations. Nearest record is approximately 6 miles north of the project area.	Breeding
Lesser yellowlegs (*Tringa flavipes*)	BCC	–	Wetland habitats from large permanent water bodies to small ephemeral pools; typical wetland features shallow, vegetation-filled ponds with adjacent open mud flats.	Unlikely to occur; the project area is well outside of both the species' breeding and non-breeding range. Nearest record is approximately 6 miles north of the project area.	Migration
Lewis's woodpecker (*Melanerpes lewis*)	BCC	SGCN 1C	Ponderosa pine and open riparian forests with brushy understory and dead or downed woody material; may also use oak, pinyon-juniper, and pine-fir woodlands, and nut and fruit orchards. Year-round range includes northern portion of Arizona. Non-breeding range includes northwestern, central, and southeastern portions of the state.	May occur; the project area is on the boundary of the year-round and non-breeding ranges and contains pinyon-juniper habitats. Nearest record is approximately 14 miles southwest of the project area.	Year-round; non-breeding

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Lincoln's sparrow (*Melospiza lincolnii*)	–	SGCN 1B	Breeds in willow-, sedge-, and moss-dominated habitats, mixed-deciduous wood groves, and black spruce-tamarisk bogs. Uses shrub-dominated habitats, particularly riparian sites, but also brushy forest edges and weedy fields during migration. Uses pine-oak forests, freshwater habitats, coniferous forests, and brushy fields in winter. Non-breeding range includes southwest half and east-central portion of Arizona. Migration range includes northeastern Arizona. Isolated breeding locations are known in north-central and east-central portions of the state.	May occur; the project area is along the boundary of migration and non-breeding ranges for this species and contains shrubby/brushy habitats. Nearest record is approximately 4 miles north of the project area.	Migration
Long-eared owl (*Asio otus*)	BCC	–	Dense or brushy vegetation adjacent to grasslands or shrublands; also open forests. Year-round range includes most of Arizona except the very southwest corner.	May occur; the project area is within the year-round range for this species and contains shrubby/brushy habitats. Nearest record is approximately 13 miles south of the project area.	Year-round
Mountain plover (*Charadrius montanus*)	BCC	SGCN 1B	Shortgrass prairie dominated by blue grama; also, fallow or recently tilled agricultural fields. Often associated with prairie dog colonies. In migration, can use alkaline or mud soils. Wintering range includes central and southern portions of Arizona.	Unlikely to occur; the project area is outside of the breeding and wintering ranges. Nearest records are approximately 10 miles north northwest of the project area.	Migration
Olive-sided flycatcher (*Contopus cooperi*)	BCC	–	Forest edges near natural openings such as meadows or canyons. Breeding range includes northeastern Arizona.	Unlikely to occur; the project area is within the breeding range but does not contain appropriate habitat associations. Nearest record is approximately 5 miles north of the project area.	Breeding
Pinyon jay (*Gymnorhinus cyanocephalus*)	BCC	SGCN 1B	Pinyon-juniper woodland; also found in sagebrush, scrub oak, and chaparral. Year-round range includes northern half of Arizona.	Known to occur; the project area is within the year-round range for this species and contains appropriate habitat associations. This species was documented during the site visit.	Year-round
Short-eared owl (*Asio flammeus*)	BCC	–	Open country supporting cyclic small mammals (voles, lemmings), typically large expanses of prairie and coastal grasslands, heathlands, shrub-steppe, and tundra. Wintering range includes all of Arizona.	Unlikely to occur; the project area is within the non-breeding range but habitat associations are only marginally suitable. Nearest record is approximately 64 miles west of the project area.	Non-breeding
Snowy plover (*Charadrius nivosus*)	BCC	SGCN 1B	Inland habitats include wastewater and salt-evaporation ponds, alkaline and saline lakes, reservoirs, and riverine sand bars. Migrates throughout Arizona except eastern edge of the state. Isolated breeding locations in southern portion of the state.	Unlikely to occur; the project area is within the species' migration range; however, appropriate habitat associations are not present. Nearest record is approximately 3 miles southwest of the project area.	Migration

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Virginia's warbler (*Leiothlypis virginiae*)	BCC	–	Pinyon-juniper and oak woodlands with large amounts of scrubby vegetation. Scattered, isolated breeding locations throughout Arizona.	May occur; the project area is within the breeding range and contains appropriate habitat associations. Nearest record is approximately 4 miles north of the project area.	Breeding
Western grebe (*Aechmophorus occidentalis*)	BCC	–	Fresh water lakes and marshes with extensive areas of open water bordered by emergent vegetation. Breeding range includes only the very western portion of Arizona along the Colorado River.	Unlikely to occur; the project area is outside the breeding and non-breeding ranges for this species and does not contain appropriate habitat associations. Nearest record is approximately 5 miles north of the project area.	Migration
Yellow-headed blackbird (*Xanthocephalus xanthocephalus*)	BCC	–	Open agricultural areas: harvested grain fields, plowed fields, meadows, and pastures. Forages within wetlands and surrounding grasslands, croplands, or savanna. Breeding range includes east-central Arizona, non-breeding range includes southeastern Arizona. Migrates throughout the rest of the state.	May occur; the project area is within the breeding and non-breeding ranges and contains appropriate habitat associations. Nearest record is approximately 5 miles north of the project area.	Breeding; non-breeding
Yellow warbler (Sonoran; *sonorana* ssp.; *Setophaga petechia* ssp. *sonora*)	BCC	SGCN 1B	Wet, deciduous thickets, especially those dominated by willows, and in disturbed and early successional habitats. Migration habitat includes scrub/shrub and semi-open, second-growth forest, often associated with wetlands. Migrates through most of Arizona. Breeds in central, east-central, and south-central portions of the state; breeding (scarce) range includes northern portion of the state.	Unlikely to occur; the project area is within the breeding and migration ranges for this species but does not contain appropriate habitat associations. Nearest record is approximately 4 miles north northeast of the project area.	Breeding; migration
Flowering Plants[†‡]					
Gladiator milkvetch (*Astragalus xiphoides*)	SC	SR	Chinle and Moenkopi formations, generally associated with badlands of broken sandstone and clay bluffs, also grasslands. At approximately 5,000 to 6,000 feet in elevation.	May occur; the project area is within the known geographic range and contains appropriate habitat associations. Documented within 10 miles of the project area.	Perennial; flowers April to June; can also flower in August
Grama-grass cactus (*Sclerocactus papyracanthus*)	SC	SR	Found in grasslands and pinyon-juniper woodland communities, especially in sandy soils, from 5,000-7,500 feet in elevation.	May occur: the project area is within the known geographic range and contains appropriate habitat associations Documented within 10 miles of the project area.	Perennial; flowers April to June
Roundleaf errazurizia (*Errazurizia rotundata*)	BLM-S	SR	Red or white sandstone pavement and ledges, in sandy crevices among rocks, or in loose, drifted sand. Found in desertscrub from 4,800 to 5,200 feet in elevation.	May occur: the project area is within the known geographic range and contains appropriate habitat associations Documented within 10 miles of the project area.	Perennial; flowers late April to early May

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Mammals					
American beaver (*Castor canadensis*)	–	SGCN 1B	Permanent water sources. Prefer low gradient streams, ponds, and small-bottomed lakes with dammable outlets. Found throughout Arizona except south-central portion of the state.	Unlikely to occur; the project area does not contain permanent waters. Nearest records are approximately 79 miles west of the project area.	Year-round
Arizona myotis (*Myotis occultus*)	–	SGCN 1B	Day roosts and maternity colonies in tree cavities and crevices; maternity colonies also in buildings and bridges; winter roost records from mines. Riparian areas and in ponderosa pine and oak-pine woodland near water below 8,600 feet. Also found along permanent water. In Arizona, range includes central band from east to west and north-central portions of the state.	Unlikely to occur; the project area is within the geographic range but does not contain appropriate habitat associations. Documented within 10 miles of the project area.	Year-round; may migrate locally
Big free-tailed bat (*Nyctinomops macrotis*)	SC	–	Rugged, rocky country from 1,810 to 8,475 feet in elevation. Roosts in rock crevices (vertical or horizontal) in cliffs, caves, buildings, and occasionally tree holes. Also found in riparian areas.	May occur; the project area is within the geographic range and contains appropriate habitat associations. Documented within 10 miles of the project area.	Fall, spring, summer
Black-footed ferret (*Mustela nigripes*)	E, EXPN	SGCN 1A	Grassland plains and prairies in association with prairie dogs below 10,500 feet.	Unlikely to occur; there are no known populations of reintroduced ferrets in or near the project area. The nearest known reintroduced population of ferrets is on Espee Ranch, approximately 131 miles to the northwest. It is suspected that this population has been extirpated due to plague.	Year-round; nocturnal; crepuscular
Brazilian free-tailed bat (*Tadarida brasiliensis*)	–	SGCN 1B	Wide variety of habitats from desert communities through pinyon-juniper woodlands and pine-oak forests at elevations up to approximately 9,000 feet. Maternity colonies and roosts found in limestone caves, abandoned mines, bridges, buildings, and hollow trees. Range is throughout Arizona.	May occur; the project area is within the geographic range and contains appropriate habitat associations. Documented within 10 miles of the project area.	Fall, spring, summer
Gunnison's prairie dog (*Cynomys gunnisoni*)	–	SGCN 1B	Gently sloping grasslands and semidesert and montane shrublands between 4,600 and 12,000 feet. In Arizona, range includes central and northeastern portions of the state.	May occur; the project area is within the species' geographic range and contains appropriate habitat associations. Documented within 10 miles of the project area.	Year-round; hibernates from October to mid-February/late April

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Mexican vole (*Microtus mexicanus*)	–	SGCN 1B	Meadows of grasses, sedges, and forbs within ponderosa pine forests on steep mountain slopes from 3,100 to 8,400 feet. May also be associated with drier sites where groundcover is suitable and in pinyon-juniper and pine-oak associations. In Arizona, fragmented range from east-central, central, northwestern, and northeastern portions of the state.	Unlikely to occur; the project area is outside the geographic range and habitat associations are only marginally suitable. Nearest record is approximately 23 miles southwest of the project area.	Year-round
Northern rock deermouse (*Peromyscus nasutus*)	–	SGCN 1B	Higher elevations above 7,000 feet in rocky outcrops and talus slopes in the pinyon-oak-juniper zone.	Unlikely to occur; the project area is below the known elevational range and does not contain suitable habitat associations. Nearest records are approximately 79 miles west of the project area.	Year-round; nocturnal
Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)	–	SGCN 1B	Day roosts and maternity and hibernation colonies in caves, mines, or buildings. Night roosts may include caves, buildings, and tree cavities. Associated with mesic forested habitats but occupies a broad range of habitats, including arid scrub, pine forest, pinyon-juniper, and wooded canyons between 500 and 8,400 feet. Range is throughout Arizona.	May occur; the project area is within the geographic range and contains appropriate habitat associations. Nearest record is within approximately 5 miles of the project area's southern boundary.	Year-round; may migrate locally
Pronghorn (*Antilocapra americana*)	–	SGCN 1B	Grasslands, sagebrush plains, deserts, and foothills. In Arizona, scattered populations throughout the state. *A. americana* range includes narrow band from east-central through north-central and northwestern portions of the state. Small, fragmented range in southeastern portion of the state.	Known to occur; the project area is within the geographic range and contains appropriate habitat associations. This species was documented during the site visit.	Year-round; may move seasonally
Spotted bat (*Euderma maculatum*)	–	SGCN 1B	Roosts in crevices and cracks of cliff faces; sometimes roosts in caves or in buildings near cliffs. Variety of habitats, including low to high deserts, riparian areas, ponderosa, and spruce-fir forests below 10,600 feet. Range is throughout Arizona.	May occur; the project area is within the predicted range. Nearest record is approximately 77 miles southeast of the project area.	Year-round; may migrate locally by elevation
Springerville pocket mouse (*Perognathus flavus goodpasteri*)	–	SGCN 1B	Plains-like short grasslands interspersed with volcanic rock or other sparsely vegetated grasslands at elevations from 5,200 to 7,000 feet. In Arizona, found in grasslands of eastern end of Mogollon Plateau near Springerville, Snowflake, south of Holbrook, and on the south side of plateau along Nash Creek.	May occur; the project area is within the geographic range and contains appropriate habitat associations. Nearest records are in the vicinity of the project area.	Year-round; nocturnal
Stephen's woodrat (*Neotoma stephensi*)	–	SGCN 1B	Rocky areas in pinyon-juniper woodlands. In Arizona, found roughly in north half of the state.	May occur; the project area is within the geographic range and contains appropriate habitat associations. Nearest record is approximately 7 miles east of the project area.	Year-round; nocturnal

Common Name (Scientific Name)	Status*		Range/Habitat Requirements	Potential for Occurrence in Project Area	Season/Life History Information Relevant to Project Area
	Federal	State			
Yuma myotis (*Myotis yumanensis*)	–	SGCN 1B	Roosts in caves, mines, cliff crevices, buildings, bridges, and similar structures. Nursery colonies in buildings, caves, mines, and bridges. Associated with wide variety of upland and lowland habitats (within wide range of elevations: sea level to 11,000 feet), including riparian, desertscrub, moist woodlands, and forests, where they prefer cliffs and rocky walls near water. In Arizona, ranges throughout except for the south-central portion of the state.	May occur; the project area is within the predicted range. Nearest records are approximately 14 miles southwest of the project area.	Year-round; may migrate to warmer regions in winter
Reptiles					
Pai striped whiptail (*Aspidoscelis pai*)	–	SGCN 1B	Grasslands, chapparal, conifer woodlands, and ponderosa pine parklands from approximately 4,500 to 7,600 feet. Populations scattered across the Colorado Plateau of northern Arizona and in the Mazatzal Mountains of central Arizona.	May occur; the project area is within the species' predicted range and contains appropriate habitat associations. Nearest record is approximately 16 miles east of the project area.	Year-round; hibernates in winter and late fall
Mollusks					
California floater (*Anodonta californiensis*)	–	SGCN 1A	Pools near channel banks and in sedge-occupied substrates less than 2 meters deep in unpolluted lakes, reservoirs, and perennial streams.	Unlikely to occur; the project area does not contain suitable habitat associations. Nearest record is approximately 18 miles west of the project area.	Year-round

Notes: Species include Eagle Act species, SGCN Tier 1A and 1B species listed in the project area-specific AGFD (2021a) Online Environmental Review Tool report, special-status plants listed in the project area-specific AGFD (2021a) Online Environmental Review Tool report, and Birds of Conservation Concern (BCC) for Bird Conservation Region 16. SGCN Tier 1C species were included if they were also BCC. Range or habitat requirement information and potential occurrence justification from Ammerman et al. (2012), AGFD (2021b),Arizona Rare Plant Field Guide (2001) Bat Conservation International (2021), Billerman et al. (2020), Brennan (2012), Corman and Wise-Gervais (2005), eBird (2021), NatureServe (2021), Reid (2006), and USFWS (2021g).

* *Federal Status Definitions*

BCC = Bird of Conservation Concern

BLM-S = BLM Sensitive

E = USFWS Listed Endangered

EXPN = Experimental population, non-essential

State Status Definitions

SGCN = Species of Greatest Conservation Need; species identified in AGFD (2012b) as having conservation priority. Tier 1A, 1B, and 1C species are those categorized by AGFD (2012b) as "highest priority vulnerable" species, "vulnerable" but not fitting the Tier 1A criteria for highest priority, and species for which existing data were insufficient to score one or more vulnerability criteria, respectively.

† Plant species protected under the Arizona Native Plant Law are present within the project area; such species will be evaluated during site-specific surveys at a later date.

‡Plant names are referred to by the nomenclature used in the AGFD (2021a) Online Environmental Review Tool report.

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EXHIBIT B – ATTACHMENT B-3

Preconstruction Wildlife Survey Plans for the West Camp Wind Farm and Hot Air Wind (West Camp 2 Wind Farm), Navajo County, Arizona

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Preconstruction Wildlife Survey Plan for the West Camp Wind Farm, Navajo County, Arizona

APRIL 2022

PREPARED FOR

AES Clean Energy

PREPARED BY

SWCA Environmental Consultants

PRECONSTRUCTION WILDLIFE SURVEY PLAN FOR THE WEST CAMP WIND FARM, NAVAJO COUNTY, ARIZONA

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SWCA Project No. 64382

April 2022

EXECUTIVE SUMMARY

AES Clean Energy (AES) is proposing to develop the West Camp Wind Farm (project). The project would be located on private lands, and possibly on state lands, within a 53,000-acre project area approximately 10 miles southwest of Joseph City, Navajo County, Arizona. AES initiated preconstruction wildlife surveys following state and federal wind energy guidelines in May 2020. Those surveys were a continuation of surveys that had been completed by a different developer who had initiated their surveys in October 2019.

The purpose of this plan is to describe the previously completed and future proposed site-specific preconstruction wildlife survey methods and timelines, in preparation for agency coordination. This plan includes the following surveys:

- Avian use surveys
- Eagle and other raptor species nest surveys
- Bat acoustic surveys

This plan also includes a description of the incidental wildlife observations that have been and will continue to be recorded during the surveys.

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1 INTRODUCTION

AES Clean Energy (AES) is proposing to develop the West Camp Wind Farm (project). The project would be located on private lands, and possibly state lands, within a 53,000-acre project area approximately 10 miles southwest of Joseph City, Navajo County, Arizona (Figures 1 and 2). The point of interconnection (Cholla Substation) would be 2 miles southeast of Joseph City (10 miles northeast of the project area).

The project was considered by a different developer, who initiated monthly avian use surveys on-site from October 2019 through March 2020. AES then continued those surveys from May 2020 through September 2021. In 2021, AES also implemented one season (March through November) of bat acoustic surveys and raptor nest surveys (in February and March). All surveys were performed by SWCA Environmental Consultants (SWCA). The purpose of this plan is to describe the site-specific preconstruction wildlife survey methods of the previously conducted surveys and those planned in the future. This plan is being submitted prior to initial agency coordination, which is anticipated to take place in the second quarter of 2022. Project permitting—a Navajo County Special Use Permit and an Arizona Corporation Commission Certificate of Environmental Compatibility—will be pursued in the third and fourth quarters of 2022.

The surveys have been designed to meet state and federal wind energy guidelines.[1] Survey data will provide quantitative and qualitative assessments used to sufficiently evaluate wildlife risk, avoidance and minimization measures, and compensatory mitigation measures if adverse impacts cannot acceptably be avoided. The *Wildlife Site Characterization for the Proposed West Camp Wind Farm* report (SWCA 2022) will cover WEG Tiers 1 and 2 (Preliminary Site Evaluation and Site Characterization), ECPG Stage 1 (Site Assessment), and AGFD's *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* Chapter 2 objectives (AGFD 2012).

This plan describes the following surveys:

- avian use surveys
- eagle and other raptor species nest surveys
- bat acoustic surveys

The plan also includes a description of the incidental wildlife observations that have and will continue to be recorded during all preconstruction wildlife surveys. The plan excludes native plant surveys, aquatic resources delineation, and Migratory Bird Treaty Act construction compliance surveys, specificity for which will be formulated later, informed by a future, more advanced project design (including whether any project infrastructure will be on state lands and construction timing once known).

[1] Pertinent wind energy guidelines specific to preconstruction field studies include the U.S. Fish and Wildlife Service's (USFWS's) Eagle Rule (USFWS 2016), *Land-Based Wind Energy Guidelines* (WEG) Tier 3 – Field Studies to Document Site Wildlife and Habitat and Predict Project Impacts (USFWS 2012), *Eagle Conservation Plan Guidance* (ECPG) Stage 2 – Site Specific Surveys and Assessment (USFWS 2013), and Arizona Game and Fish Department's (AGFD's) *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* Chapter 3 (AGFD 2012).

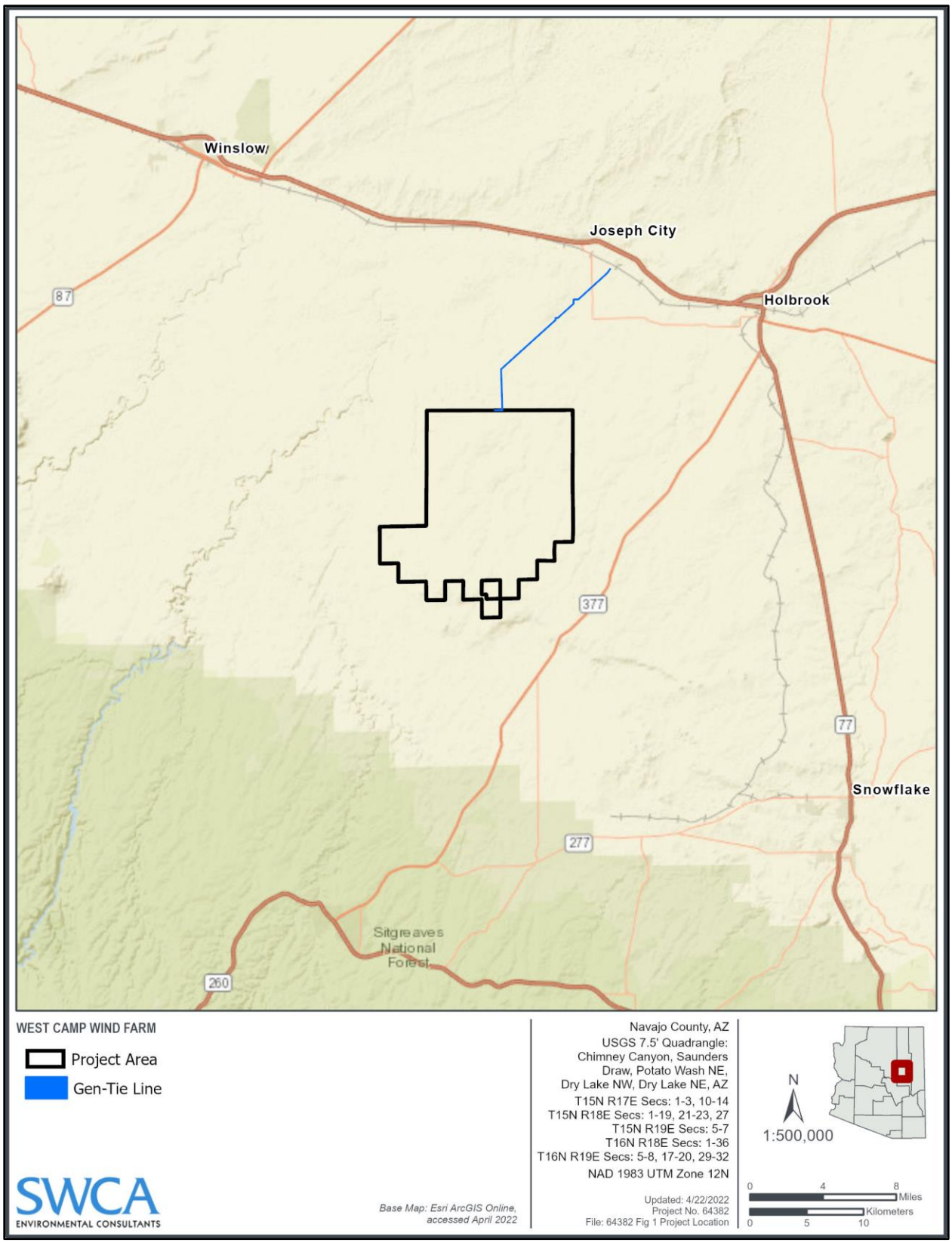

Figure 1. Project location.

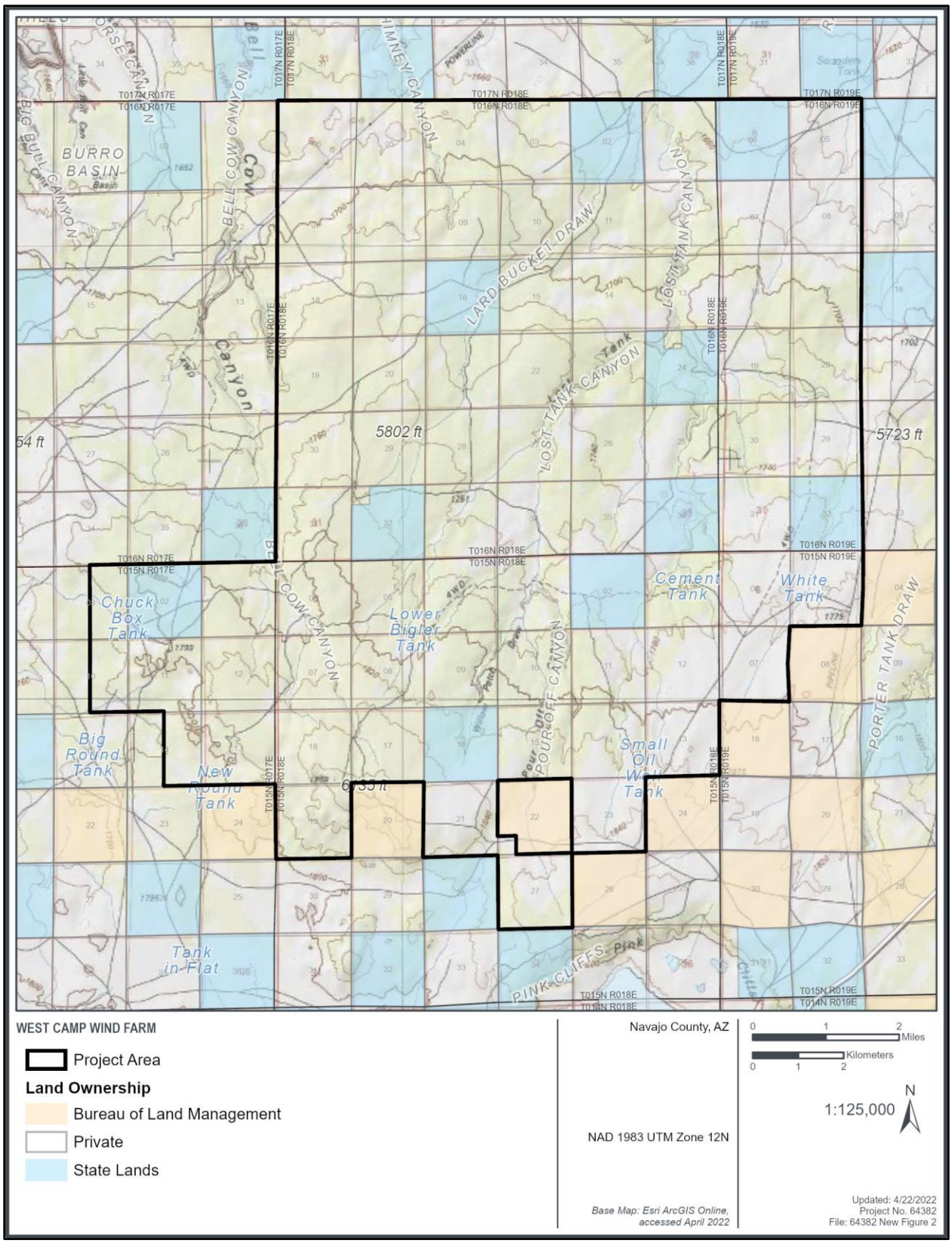

Figure 2. Project area detail.

2 PRECONSTRUCTION WILDLIFE SURVEY SCHEDULE

Table 1 presents the previously conducted wildlife survey effort and the proposed schedule for future surveys.

Table 1. Preconstruction Wildlife Survey Schedule for the Project

Survey Type	Time Frame
Avian (small bird and large bird, including eagle) use surveys	October 2019–March 2020, May 2020–September 2021; surveys conducted monthly
Raptor nest surveys	February and March 2021 and 2023; two surveys during each of the 2021 and 2023 breeding seasons
Bat acoustic surveys	March–November 2021 (i.e., spring through fall seasons) and March–November 2023; units record data daily
Incidental wildlife observations	Conducted during all wildlife-related fieldwork

3 AVIAN USE SURVEYS

3.1 Eagle and Other Large Bird Use Surveys

The avian use surveys took place for 2 years, monthly, from October 2019 through March 2020 and May 2020 through September 2020 (Year 1, 11 survey periods) and from October 2020 through September 2021 (Year 2, 12 survey periods). The surveys were designed in accordance with the Eagle Rule (USFWS 2016), which codified specific minimum survey standards, WEG (USFWS 2012), ECPG (USFWS 2013), and AGFD's guidelines (AGFD 2012).

Thirty-one 800-m-radius plots were initially established to cover at least 30% of the project's footprint[2] (i.e., turbine array design) alternatives. In December 2020, the survey effort was increased to 34 plots (by adding plots 32–34; Figures 3 and 4) when the project area boundary was expanded to the northeast. Then, in January 2021, the effort was reduced to 32 plots (by removing plots 13 and 14) based on a maximum turbine array design being considered at that time. That 32-plot effort continued through September 2021. Of these 32 plots, 29 are within or overlap with the project footprint (i.e., turbine array design) being considered at this early planning stage, covering 36% of that area (see Figures 3 and 4).

The survey plots were distributed to represent the site spatially and to represent the habitat conditions (i.e., plots represented grassland/shrub steppe and pinyon-juniper habitats, water, and topographic features). Within those parameters, the plots were micro-sited in the field to maximize views of the surrounding airspace.

[2] The Eagle Rule (USFWS 2016) defines the project's footprint as the minimum-convex polygon that encompasses the wind-project area inclusive of the hazardous area around all turbines and any associated utility infrastructure, roads, etc.

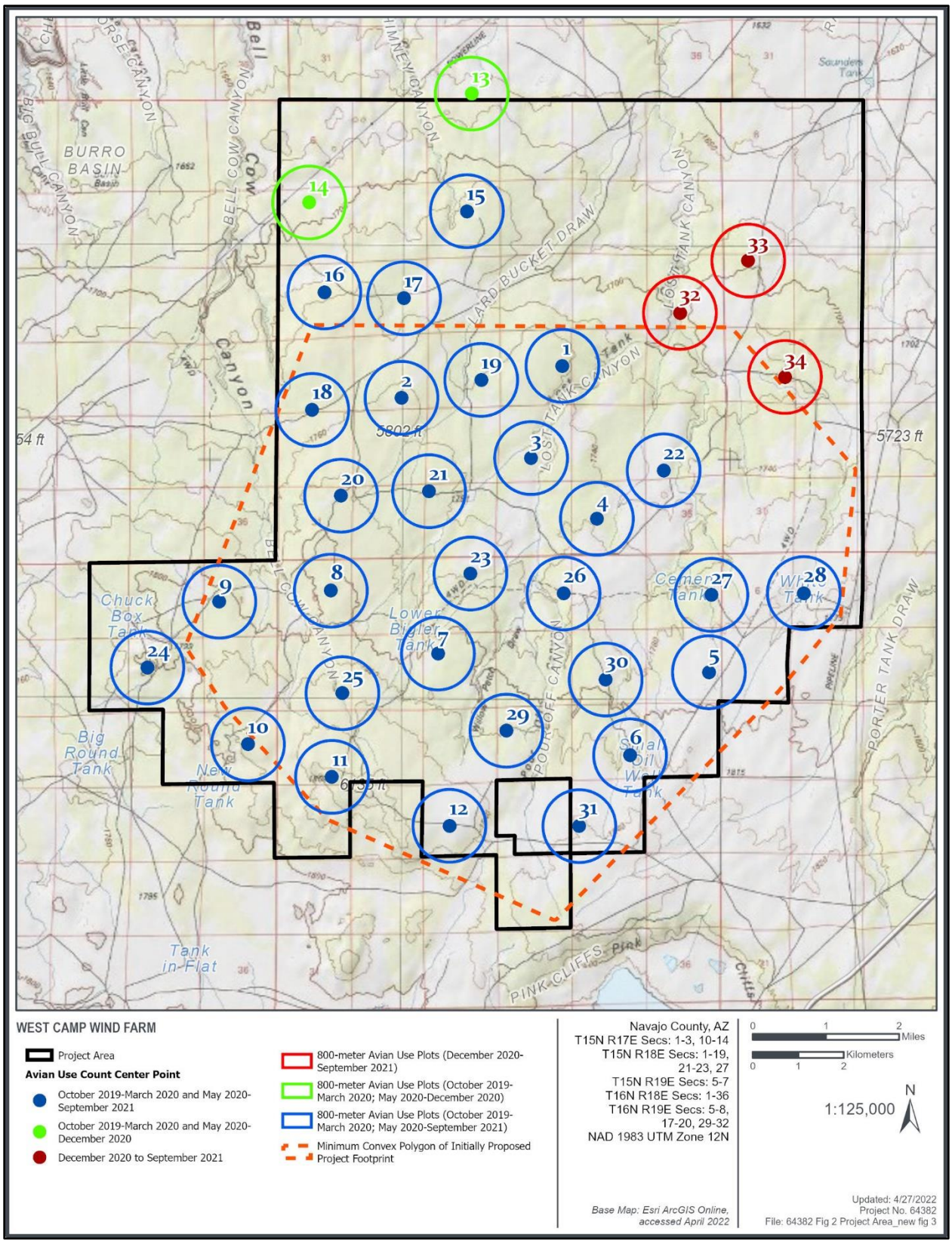

Figure 3. Avian use count locations, topographic background.

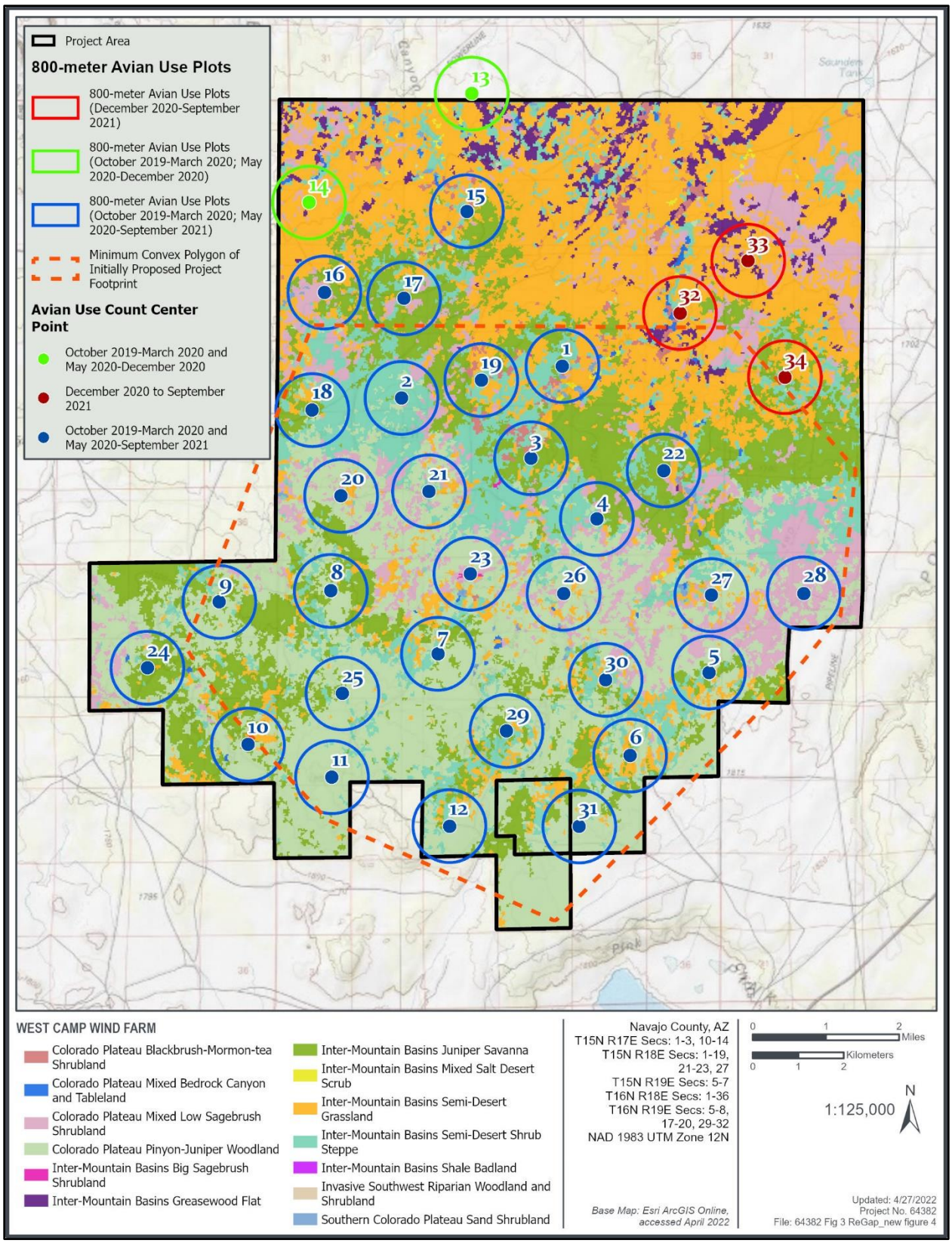

Figure 4. Avian use count locations in relation to U.S. Geological Survey–mapped landcover data (2016).

Each plot was surveyed for 1 hour once per month. Start times represented all daylight hours, and surveyors alternated between morning (i.e., before 10:00 a.m.) and late morning/afternoon time slots, per plot, in consecutive survey periods. Surveyors adhered to the schedule as logistics, weather, and safety issues (e.g., lightning, visibility)[3] allowed. From the center point of each plot, surveyors scanned for eagles and other large birds—at any height within the 800-m-radius plot—by alternating use of binoculars and unaided eye. Large birds were roughly defined as those of more than 12.5 inches [31.8 cm] in length and of more than 14 ounces,[4] including the following:

- birds of prey and vultures (Accipitriformes, Falconiformes, Strigiformes)
- large corvids (e.g., ravens; Passeriformes > Corvidae > *Corvus*)
- waterfowl (ducks, geese, and swans; Anseriformes)
- other large waterbirds (e.g., bitterns, coots, cranes, egrets, grebes, herons; Gruiformes, Podicipediformes, Pelecaniformes)
- large upland gamebirds (e.g., grouse, turkey; Galliformes)

For each large bird/bird group seen or heard (within the 800-m-radius plot), surveyors recorded start and end times (to the nearest second), species, number of birds per observation, distance from the observer (estimated to the nearest meter), flight height (estimated to the nearest meter), and behavior. Distance and height measurements were recorded when a bird/bird group was first observed (Reynolds et al. 1980, as cited in USFWS 2012). If a given bird/bird group was initially detected above 200 m, surveyors also recorded whether the bird/bird group flew below 200 m (i.e., risk zone). Observations of perched birds were distinguished from observations of those in flight. To limit double-counting of individuals, individuals were tracked (to the extent practicable), as, for example, they left the plot and then re-entered.

To estimate horizontal and vertical distances, surveyors used a rangefinder, accurate to a maximum distance of 914 m; digital topographic maps depicting 100-, 200-, 400-, 600-, and 800-m concentric circles; a digital (tablet) measuring tool; and vertical landmarks (e.g., meteorological towers and trees of known height). Specific behavioral activities included soaring flight, unidirectional flapping-gliding, kiting-hovering, stooping/diving at prey, undulating/territorial flight, and perching (USFWS 2013).

For any eagles observed within the 800-m-radius × 200-m-high cylinder[5], surveyors recorded data attributes by eagle-minute (i.e., eagles in flight are partitioned into 1-minute intervals). Data attributes included distance, height, behavior, the bearing to the bird, flight direction, and sex and age class (if known) (USFWS 2013). Perched eagles and those observed outside of the cylinder were also recorded but were distinguished from eagles flying within the cylinder (USFWS 2013). All eagle flight paths and perch locations, in and outside of the cylinder, were mapped on the digital topographic maps.

During each count, surveyors recorded wind direction and speed, cloud cover, precipitation, and temperature (USFWS 2013).

[3] Per the ECPG, surveys were not conducted when visibility is less than 800 m horizontally and less than 200 m vertically.

[4] Exceptions to this rough length and weight definition include small birds of prey (e.g., American kestrel [*Falco sparverius*], merlin [*Falco columbarius*]), nightjars (e.g., common nighthawk [*Chordeiles minor*]), and large shorebirds (e.g., American avocet [*Recurvirostra americana*]), because those species are easier to detect using the large bird versus small bird survey technique (see Section 3.2) and/or match the large bird surrogate definition used for postconstruction fatality surveys.

[5] Eagle minutes were recorded using a traditional 200-m height cutoff. Because the Eagle Rule (USFWS 2016) specifies that the cylinder's height will either be 200 m or 25 m above the maximum blade reach, whichever is greater, final turbine specifications will be reviewed and an appropriate post-hoc analysis solution will be implemented if warranted.

3.2 Small Bird Use Surveys

The small bird surveys were conducted for 10 minutes within a 100-m survey radius (Matsuoka et al. 2014; Ralph et al. 1993; Ralph et al. 1995; Reynolds et al. 1980) immediately prior to the large bird/eagle use counts at the same points (see Section 3.1 and Figures 3 and 4).[6] Small birds were roughly defined as those of less than 12.5 inches in length and of less than 14 ounces, including the following:

- passerines (Passeriformes)
- doves (Columbiformes)
- hummingbirds (Apodiformes)
- small corvids (e.g., jays; Passeriformes > Corvidae > *Aphelocoma, Cyanocitta, Gymnorhinus*)
- small shorebirds (Charadriiformes)
- woodpeckers (Piciformes)

For each small bird/bird group seen or heard (within the 100-m-radius plot), surveyors recorded species, number of birds per observation, distance from the observer (estimated to the nearest meter), and flight height (estimated to the nearest meter). Distance and height measurements were estimated using a rangefinder and vertical landmarks.

3.3 Data Interpretation/Analyses

Avian use count data are used to estimate the annual number of eagle collision fatalities, to identify important eagle (and other avian species of concern) use or migration concentration areas, and to estimate relative abundance of diurnal birds using the project area over space and time (USFWS 2012, 2013).

Each eagle observed flying within the sampling area will be summarized in number of minutes, rounded to the next highest integer (e.g., an eagle observed flying within the cylinder for a given minute equals 1 exposure minute; two eagles in flight in the cylinder in a given minute [or the same eagle in flight continuing into a second 1-minute interval] equals 2 exposure minutes). The spatial and temporal distribution of eagle minutes will be summarized. Eagle minutes and total survey minutes recorded among relevant avian use counts will be used to inform a posterior probability distribution of eagle exposure to develop model-based predictions of annual eagle fatalities (Bayesian method) (USFWS 2013, 2016). All eagle flight paths will be presented on a final map, with those recorded during use surveys distinguished from those recorded incidentally (see Section 6) to account for spatial bias (USFWS 2013).

Other compilations of the data will include species/species group composition, total detections, relative abundance, frequency of occurrence, and mean use. These terms are defined as follows:

- Species/species group composition: a list of species or species groups. Results will distinguish those species detected incidentally on-site from those detected during the formal counts. Species groups will include, for example, diurnal birds of prey, doves, hummingbirds, nightjars, owls, passerines, shorebirds, vultures, waterfowl/waterbirds, and woodpeckers.
- Detections (also often referred to as "abundance"): the number of unique observations of individual birds by species or species group; during a given count, surveyors took care to avoid double-counting individuals to the extent possible (see Section 3.1).

[6] The ECPG (USFWS 2013) and AGFD (2012) recommend that the small bird counts be conducted exclusive of those for eagles and other large birds.

- Relative abundance: number of observed detections of a species or species group / number of total detections of all species or species groups combined × 100 (expressed as a percentage)
- Frequency of occurrence: number of surveys during which a species or species group was recorded / number of total surveys × 100 (expressed as a percentage)
- Mean use: number of detections of a species or species group / the number of total surveys (i.e., detections per unit time [1-hour period for large birds, 10-minute period for small birds]).

Use data will be grouped by season, plot, habitat type, and flight height categories to characterize baseline bird activity patterns of the project area. Seasons will be defined as spring (March through May), summer (June through August), fall (September through November), and winter (December through February).

4 RAPTOR NEST SURVEYS

In accordance with USFWS's (2020) *Technical Update to Eagle Nest Survey Protocols*, WEG (USFWS 2012), ECPG (USFWS 2013), and AGFD's (2012) guidelines, raptor nest surveys were conducted during the 2021 nesting season. These surveys included 1) two habitat-focused bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) nest inventory and nest occupancy[7] surveys in and within a 2-mile buffer of the project area (2-mile survey area), and 2) one transect-based survey for non-eagle raptor and common raven (*Corvus corax*) nests within the project area. The latter was conducted in conjunction with the second eagle nest survey. The survey timing focused on golden eagle peak laying (Survey 1) and early hatching (Survey 2) dates, as reported by McCarty et al. (2021), to maximize detection of nest occupancy as follows:

- Survey 1 (inventory and early nest occupancy): late February, when most nesting eagles were expected to have initiated courtship and nest maintenance/ornamentation, and a subset of nesting eagles was expected to be engaged in incubation activities.
- Survey 2 (continued inventory and late nest occupancy): late March, when all nesting eagles were expected to have initiated nesting activities.

The timing prioritized eagle nest occupancy over that of most[8] other raptor species and common raven, which exhibit peak nest initiation in April, after Survey 2 was completed.

The surveys were conducted by helicopter (Bell 206L-series "Long Ranger"), which allowed for efficient coverage of vast, rugged landscapes and for a close (typically 40–100 m), above-nest approach to accurately determine nest contents.

Survey 1 involved a full inventory of potential golden eagle nesting habitats within the 2-mile survey area. In Survey 2, all nests categorized as golden eagle or possible golden eagle nest structures in Survey 1 were revisited to document nest contents. During this second survey, surveyors thoroughly investigated appropriate nesting substrates near the previously identified nests to document any newly built nests or nests that may have been missed during Survey 1. During both surveys, surveyors recorded any non-eagle raptor or common raven nests found within the surveyed eagle nesting habitats.

[7] The term *nest occupancy* is defined as a nest in which one or more of the following occur: 1) young are raised; 2) eggs are laid; 3) an adult is observed sitting, presumably in incubation or brooding posture, in the nest; 4) two adults are observed perched on or near the nest; 5) an adult and a bird in immature plumage are observed on or near the nest and mating behavior was observed (e.g., display flights, copulation); or 6) recent repairs (e.g., fresh greenery, sticks with fresh breaks), mute (i.e., whitewash), or feathers are visible at or near the nest (Driscoll 2010; Postupalsky 1974; Steenhof and Newton 2007).

[8] An exception is great horned owl (*Bubo virginianus*), which is an early (January–February) layer.

The project area–focused non-eagle raptor nest inventory and nest occupancy surveys involved transect and strategic searches as described below. During this survey, surveyors also revisited non-eagle raptor and common raven nest structures that were previously discovered in Survey 1 within the project area to document nest occupancy status.

4.1 Eagle Nest Surveys

Survey preparation involved 1) delineating possible golden eagle nesting habitats within the 2-mile survey area, and 2) acquiring AGFD's previously identified golden eagle breeding areas (4 × 4–mile areas) within 5 miles of the project area. Figure 5 and Appendix A (Figure A-1) illustrate golden eagle and potential golden eagle breeding areas provided by AGFD and potential golden eagle nesting habitats mapped by SWCA. An SWCA biologist qualified as an experienced helicopter eagle nest surveyor (Pagel et al. 2010)[9] delineated the possible golden eagle nesting habitats (i.e., rugged terrain, rock faces, large trees and snags, and transmission towers) and led the survey effort. The habitats were manually digitized using a combination of aerial imagery (National Agriculture Imagery Program) and U.S. Geological Survey topographic maps viewed at 1:12,000 and 1:24,000 scales in ArcGIS. Bald eagle nesting habitats (i.e., large trees, snags, and cliffs less than 2 km [1.2 miles] from fish-bearing waters) were not present; however, surveyors kept an eye out for bald eagle nests within the possible golden eagle nesting habitats during the surveys. The breeding area blocks and associated past occupancy/activity[10] data (Appendix A) provided useful focal areas to streamline survey efforts and to inform expectations (e.g., the data provided a general understanding of the number of nests and nest structure condition recorded during past surveys).

Survey methods generally followed those outlined by Pagel et al. (2010). The surveys were sensitive to local nesting chronologies and disturbance at nests and were conducted during weather conditions favorable for aerial surveys. To ensure full coverage of the 2-mile survey area during the golden eagle nest inventories, surveyors—guided by the desktop delineation layer—identified additional golden eagle nesting habitats while in the air and, conversely, limited surveys in areas that did not exhibit appropriate characteristics once observed. During refueling, the surveyors and pilot evaluated survey coverage and updated the plan for the remainder of the surveys to achieve full coverage of potential nesting habitats.

For each nest found, surveyors recorded the date and time of the observation, a nest identification number, nest substrate (i.e., cliff, tree, transmission tower), nest condition and contents, and species (if known). "Undetermined species" nests included any nests that were too deteriorated to be confidently identified to species or that exhibited qualities characteristic of several species. For these nests, surveyors recorded an informed opinion regarding which species or species group was most likely to use the nest based on nest structure and placement (e.g., "undetermined: resembles *Buteo* spp. or golden eagle," or "undetermined: resembles *Buteo* spp. or common raven"). Species determinations were also noted for nests being used by species that presumably did not construct them (i.e., several species are known to use heterospecific nest structures; some species, such as great horned owl [*Bubo virginianus*], do not construct their own nests). A species determination for a given nest could change after a subsequent visit if surveyors observed species activity or nest contents or observed the nest structure under different conditions (e.g., distance, lighting).

[9] Pagel et al. (2010) recommend that aerial golden eagle nest surveys be conducted by raptor specialists who have at least 3 field seasons' experience in helicopter-borne raptor surveys around cliff ecosystems.

[10] An *active* nest is one in which an egg or eggs are laid and/or young are raised (Driscoll 2010; Postupalsky 1974).

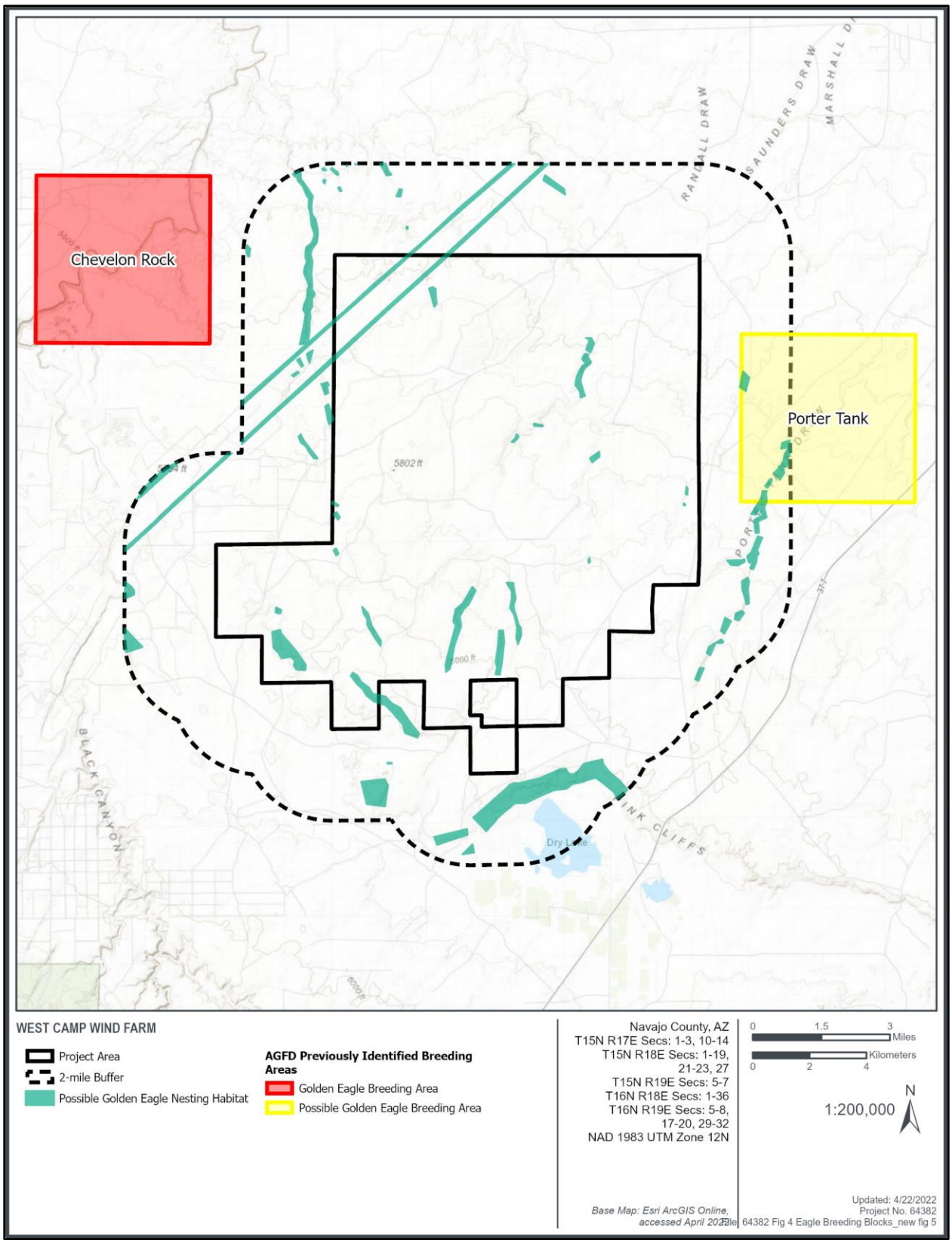

Figure 5. Eagle nest inventory and occupancy 2-mile survey area.

The following nest conditions/contents were recorded: 1) sticks – intact, 2) sticks – deteriorating, 3) greenery/ornamentation, 4) adult in incubation/brooding posture, or 5) number of egg(s)/nestling(s). Surveyors noted specific nest structure characteristics and diagramed specific nests within nest clusters to aid re-location of nests during subsequent visits. All nests were photographed using a full-frame digital single-lens reflex camera with a 200- to 500-mm lens. Following the surveys, photographs of each nest were thoroughly examined to accurately determine species and nest contents.

4.2 Non-eagle Species Nest Surveys

To inventory non-eagle raptor species and common raven nests within the project area, surveyors used a combination of transect (e.g., in densely treed habitats) and strategic (e.g., in lightly treed habitats) searches. North-south transects were spaced at 500-m intervals. In lightly treed habitats, and where certain habitats and features (e.g., treed drainages, cliff walls, transmission towers) required closer inspection, the surveyors directed the pilot to veer off transects.

Surveyors recorded the same data fields as those described in Section 4.1.

4.3 Year 2 Nest Surveys

Figure 6 presents the nest locations (n = 52) recorded in 2021, which included one possible golden eagle nest within the 2-mile survey area and five possible ferruginous hawk (*Buteo regalis*) nests (an AGFD species of greatest conservation concern) within the project area (SWCA 2021). Year 2 nest surveys will be conducted in 2023. These surveys will involve nest occupancy revisits of the possible golden eagle nest and a second inventory of all potential eagle nesting habitats within the 2-mile survey area. Surveyors will also revisit the five possible ferruginous hawk nests within the project area.

4.4 Data Interpretation/Analyses

Nest data will be used to estimate the number of nesting raptor pairs and their specific nest locations within the project area (AGFD 2012; USFWS 2012) and to identify nesting pairs of eagles that might be disturbed or subject to potential lethal take (USFWS 2013, 2020). The data may be used to identify avoidance or minimization options. Other compilations of the data will include nest occupancy/activity status (grouped by eagle territory) and the number of nests of each species grouped by focal area (i.e., within and outside of the project area).

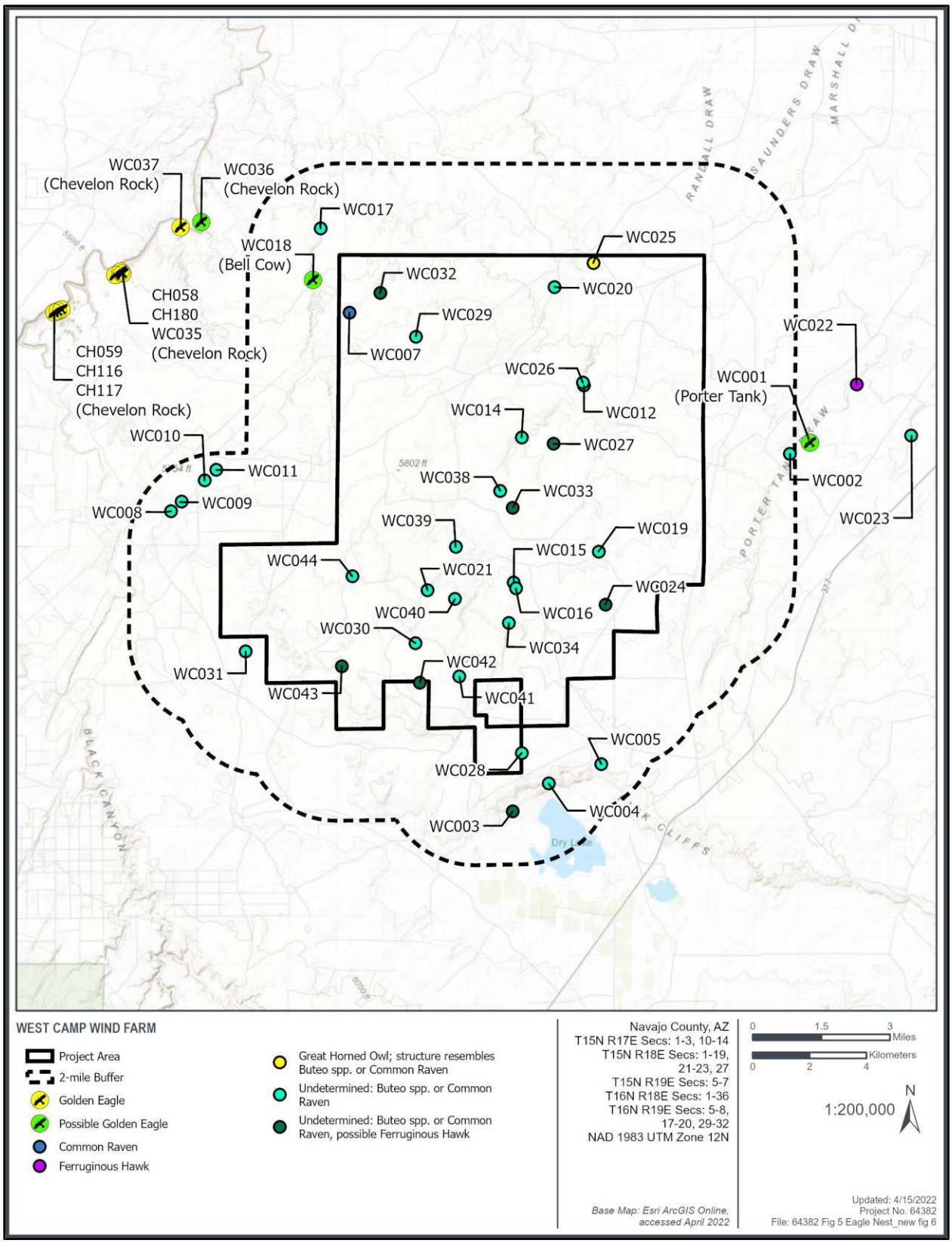

Figure 6. 2021 nest survey results.

5 BAT ACOUSTIC SURVEYS

5.1 Survey Plan

5.1.1 *Monitoring Stations*

To monitor bat activity, in March 2021 (the beginning of the spring season), four bat acoustic detectors were installed at three stations within the project area (Figure 7). Two of the stations were placed in areas that could attract certain commuting or foraging bats (Lower Bigler Tank [an ephemeral stock tank] and Lost Tank Canyon [a low-profile canyon/ephemeral drainage]). The third station was installed at a project meteorological (MET) tower. This MET tower station consisted of a high (45-m) and low (5-m) omnidirectional microphone each attached to a Song Meter SM4BAT FS (Wildlife Acoustics, Inc.) full- spectrum acoustic data collection device. The other two stations each consisted of a low (5-m) mount attached to the same detector type. Together, the stations represented the site's spatial (horizontal and vertical) and habitat conditions.

The units recorded bat activity daily, 30 minutes after sunset and 30 minutes before sunrise, through November 2021 (i.e., the end of the fall season). The units were set[11] to the following audio settings:

- Gain: 0 decibel
- 16k high filter: off
- Sample rate: 384 kilohertz (kHz)
- Minimum duration (noise scrubber): 2.0 milliseconds (ms)
- Maximum duration (noise scrubber): 500 ms
- Minimum trigger frequency: 8 kHz
- Trigger level: 24 decibels
- Trigger window: 2 seconds
- Maximum file length: 5 seconds

Surveyors collected data cards and replaced batteries at least once per month through November 2021.

5.2 Year 2 Bat Acoustic Surveys

Because the bat rigging supporting the high microphone at the MET tower failed in September 2021 (during the bat migration season), a second year of bat acoustic data will be collected in 2023. Figure 7 illustrates the proposed five unit, three station locations: a high- and low-microphone pairing at each of two newly installed MET towers, and the Lost Tank Canyon location.

[11] Specific settings were based on regional expert guidance (personal communication, Janet Tyburec, Bat Survey Solutions, LLC, April 2018).

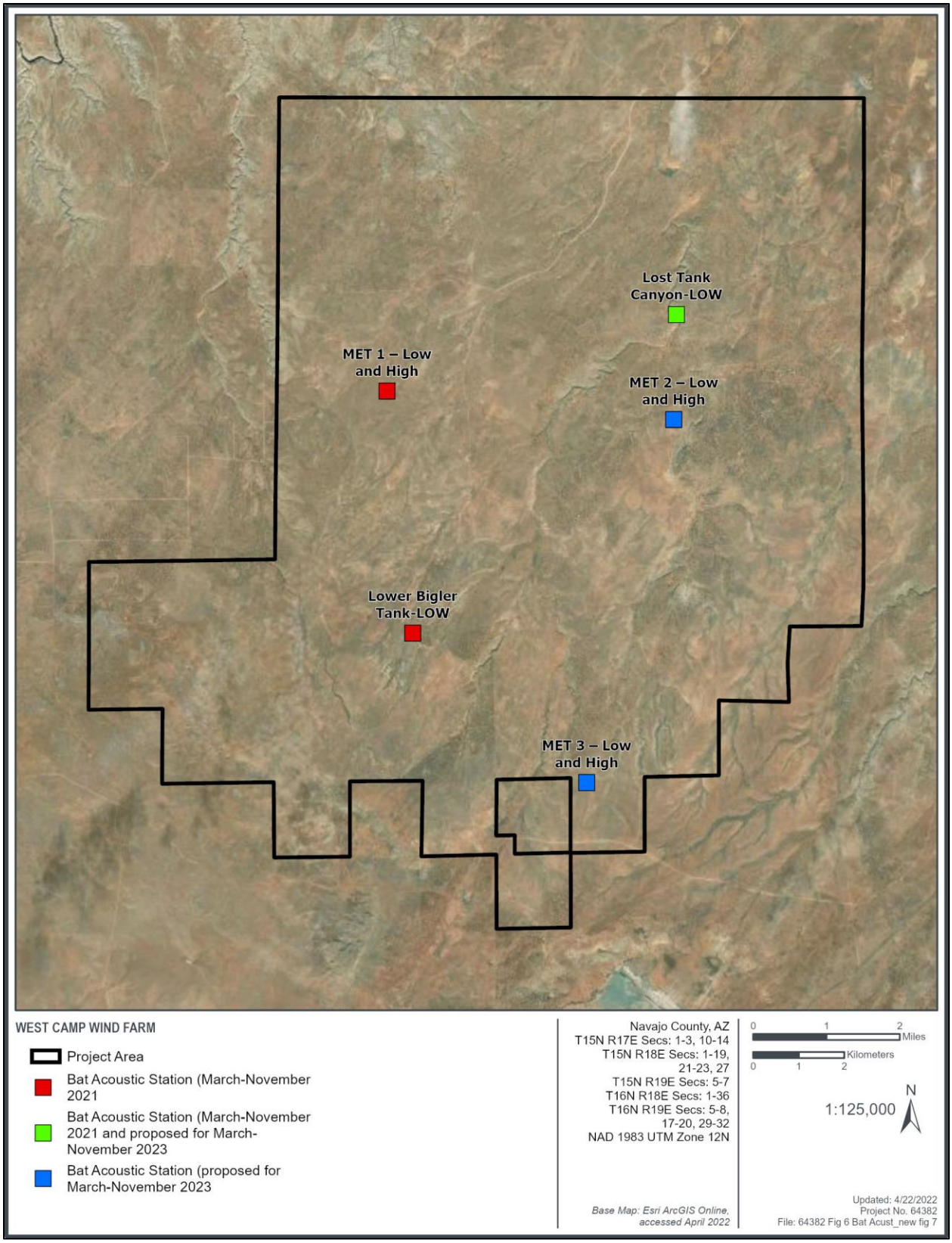

Figure 7. Bat acoustic station locations.

5.3 Data Interpretation/Analysis

The basic unit of measurement for assessing bat activity is the number of bat passes per species (or species group) per unit time (night). A bat pass is defined as one or more echolocation calls recorded on a given sound recording file (i.e., recorded within the predefined 2-second trigger window and 5- second maximum file length) (Kerbiriou et al. 2019; Lausen et al. 2010).

Automated species identification will involve three steps: 1) noise scrubbing, 2) auto-identification, and 3) manual vetting. All files will be processed using Kaleidoscope Pro. The software allows the user to perform noise scrubbing and auto-identification tasks in a single batch operation. To identify and separate non-bat extraneous noise files from those with bat echolocation calls, files will be scrubbed using the following signal parameters:[12]

- Frequency range: 8–120 kHz
- Call duration range: 2–500 ms
- Minimum number of pulses: 2
- Maximum inter-syllable gap: 1,000 ms
- Advanced signal processing: on

To limit species misclassifications resulting from the automated identification process, an experienced SWCA biologist will manually vet the data. This qualitative vetting will attempt to ensure that the auto- dentification classifier has not misclassified files based on poor recording quality, non-search phase components of calls, or echolocation calls from species other than the classifier-suggested species (Reichert et al. 2018). Manual vetting will eliminate noise sequences and verify probable presence of each species identified by the classifier.

Bat passes will be identified to species, when possible. Call ambiguity or quality (defined by files containing fewer than eight total call pulses and having a match ratio of less than 0.66) require that some passes be assigned to an appropriate phonic group (rather than to species). Phonic group categories will be based on the average characteristic frequency of each file calculated by the software and will generally align with foraging and morphology guilds (Müller et al. 2012; Roemer et al. 2017).

Compilations of the data will include bat passes per detector-night and relative passes, grouped spatially and temporally by species, species groups, and frequency groups. Seasons will be defined as described in Section 3.3. A relative pass is defined as the number of passes of a species or species group divided by the total number of passes of all species or species groups multiplied by 100 (expressed as a percentage).

6 INCIDENTAL WILDLIFE OBSERVATIONS

In an effort to collect data pertinent to potential eagle use and general wildlife use of the site, surveyors traveling on-site while conducting the above tasks have recorded and will continue to record:

- eagle flight paths and perch locations (for eagles detected while surveyors are conducting activities unrelated to eagle/large bird use counts [e.g., driving/hiking on-site]);[13]

[12] Signal parameters are based on manufacturer recommendation and regional expert guidance (personal communication, Janet Tyburec, Bat Survey Solutions, LLC, April 2018).

[13] Eagle flight paths will also be mapped during the standardized eagle and other large bird use surveys; they are distinguished from those recorded incidentally.

- burrowing owl (*Athene cunicularia*) locations and active/potentially active owl burrows;
- concentrated golden eagle prey (i.e., active prairie dog locations and occupied burrows);
- large carrion (e.g., dead cows, dead elk [*Cervus elaphus*]);
- bird nests (small bird nests or raptor/raven nests discovered prior to or missed during helicopter surveys);
- bird concentrations (i.e., flocks, migration events, waterfowl use of the site's water features); and
- a running list of bird species seen and heard.

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APPENDIX A

Eagle Breeding Area Data Provided by Arizona Game and Fish Department

Table A-1. Eagle Breeding Area Data Attributes Provided by AGFD, January 19, 2021.

Golden Eagle Breeding Area and Nest Data Near Proposed West Camp Wind Project, 2021.		
ID	Breeding Area	Occupancy
1	Chevelon Rock	Found in 2012; Active 2012; Unoccupied 2014, 2018, 2019. 9 nests
2	Porter Tank	Found in 2017. Potential nesting site with medium-large nest.
3	Bald Eagle Winter Count Route	0-3 Bald Eagles and 0-1 Golden eagles on annual 1 day counts.
4	Hopi Interest Lands	Due to proximity, coordination with Hopi advised.

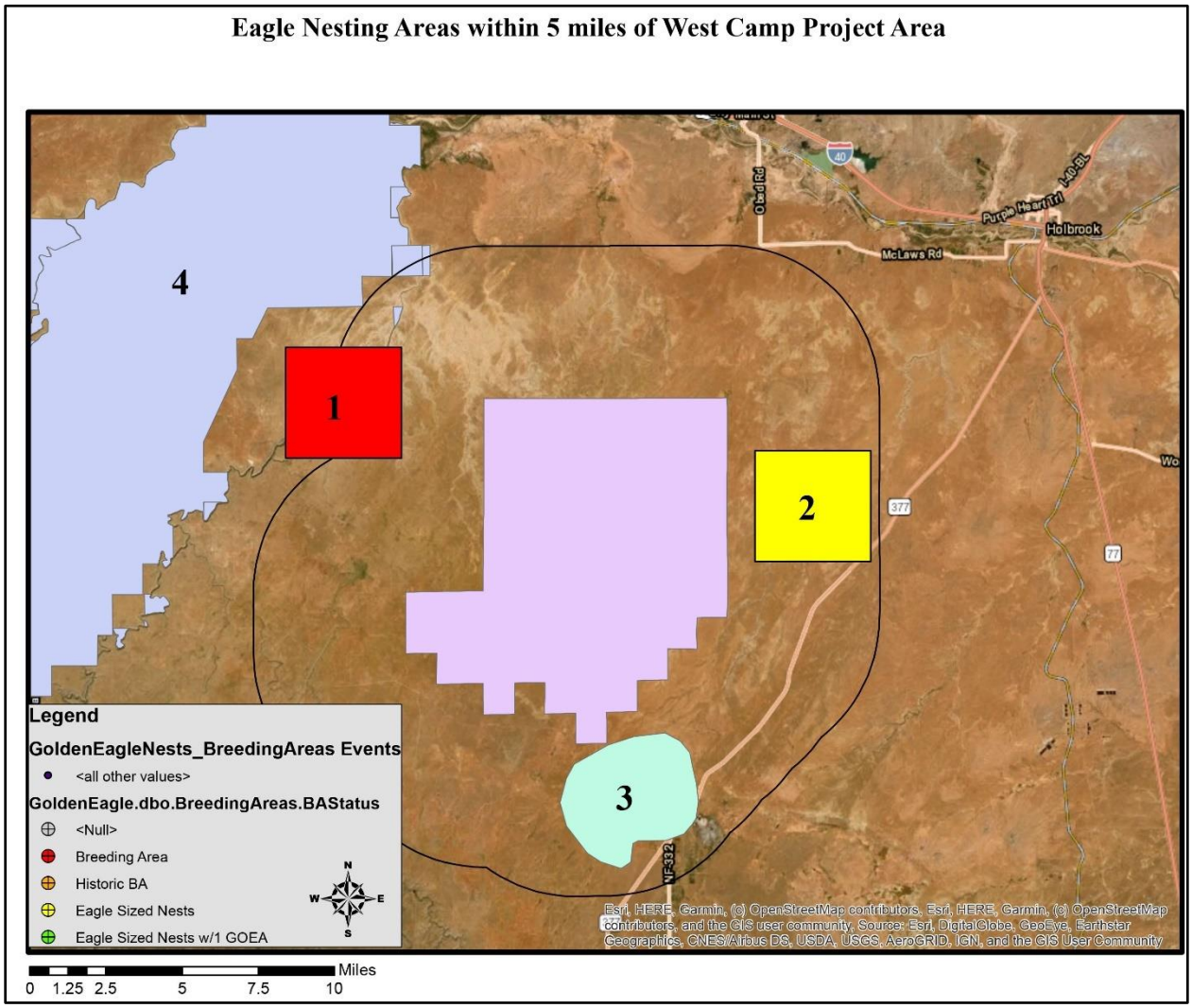

Figure A-1. Eagle breeding area spatial data provided by AGFD, January 19, 2021.

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Pre-Construction Wildlife Survey Plan for the Proposed Hot Air Wind Energy Project

MAY 2021

PREPARED FOR

Pattern Energy Wind Development LLC

PREPARED BY

SWCA Environmental Consultants

Sample

PRE-CONSTRUCTION WILDLIFE SURVEY PLAN FOR THE PROPOSED HOT AIR WIND ENERGY PROJECT

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SWCA Project No. 63977

EXECUTIVE SUMMARY

Pattern Energy Wind Development, LLC contracted SWCA Environmental Consultants in April 2021 to develop this pre-construction wildlife survey plan for the proposed Hot Air Wind Energy Project, a proposed maximum 300- to 350-megawatt wind energy facility. The project would be located on privately-owned Aztec Land and Cattle Company lands within an approximately 35,369-acre project area approximately 6 miles south of Holbrook, in Navajo County, Arizona. The purpose of this plan is to describe the preconstruction survey methods that will be used to collect the environmental and biological information needed to assess the use by wildlife within the project area, incorporating the latest agency guidance.

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Table 1. Proposed Pre-Construction Wildlife Survey Schedule for the Project 1

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1 INTRODUCTION

Pattern Energy Wind Development, LLC (Pattern) is proposing to develop the Hot Air Wind Energy Project (project), a proposed maximum 300- to 350-megawatt wind energy facility. The project would be located on privately-owned Aztec Land and Cattle Company lands within an approximately 35,369-acre project area approximately 6 miles south of Holbrook, in Navajo County, Arizona. (Figure 1).

The purpose of this plan is to describe the preconstruction survey methods that will be used to collect the environmental and biological information needed to assess the use by wildlife within the project area, incorporating the latest agency guidance. The surveys described herein are intended to meet the U.S. Fish and Wildlife Service's (USFWS's) Eagle Rule (USFWS 2016), *Land-Based Wind Energy Guidelines* (WEG) Tier 3 field studies (USFWS 2012), *Eagle Conservation Plan Guidance* (ECPG) Stage 2 field studies (USFWS 2013), and Arizona Game and Fish Department's (AGFD's) *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* Chapter 3 objectives (AGFD 2012).

Field surveys further described below include:

- avian (eagle, other large bird, and small bird) use surveys;
- eagle and other raptor species nest surveys;
- bat acoustic surveys; and
- incidental wildlife observations.

2 PRE-CONSTRUCTION WILDLIFE SURVEY SCHEDULE

Table 1 presents the wildlife survey schedule.

Table 1. Proposed Pre-Construction Wildlife Survey Schedule for the Project

Survey Type	Timeframe
Tier 1 Preliminary Site Evaluation and Tier 2 Site Characterization	May 2021
Eagle, large bird, and small bird use surveys	Approx. start May 2021–May 2023 (2 full years); in Year 1, surveys conducted twice per month per plot; in Year 2, small bird use surveys excluded, and eagle/large bird use surveys conducted once per month per plot
Eagle and other raptor species nest surveys; surveys will build upon the eagle nest survey data set collected by the Arizona Game and Fish Department	Feb–March; two aerial surveys during each of the 2022 and 2023 breeding seasons (2 years of survey)
Bat acoustic surveys	March–November 2021 (i.e., spring through fall seasons); units record data daily
Incidental wildlife observations	Conducted during all wildlife-related fieldwork

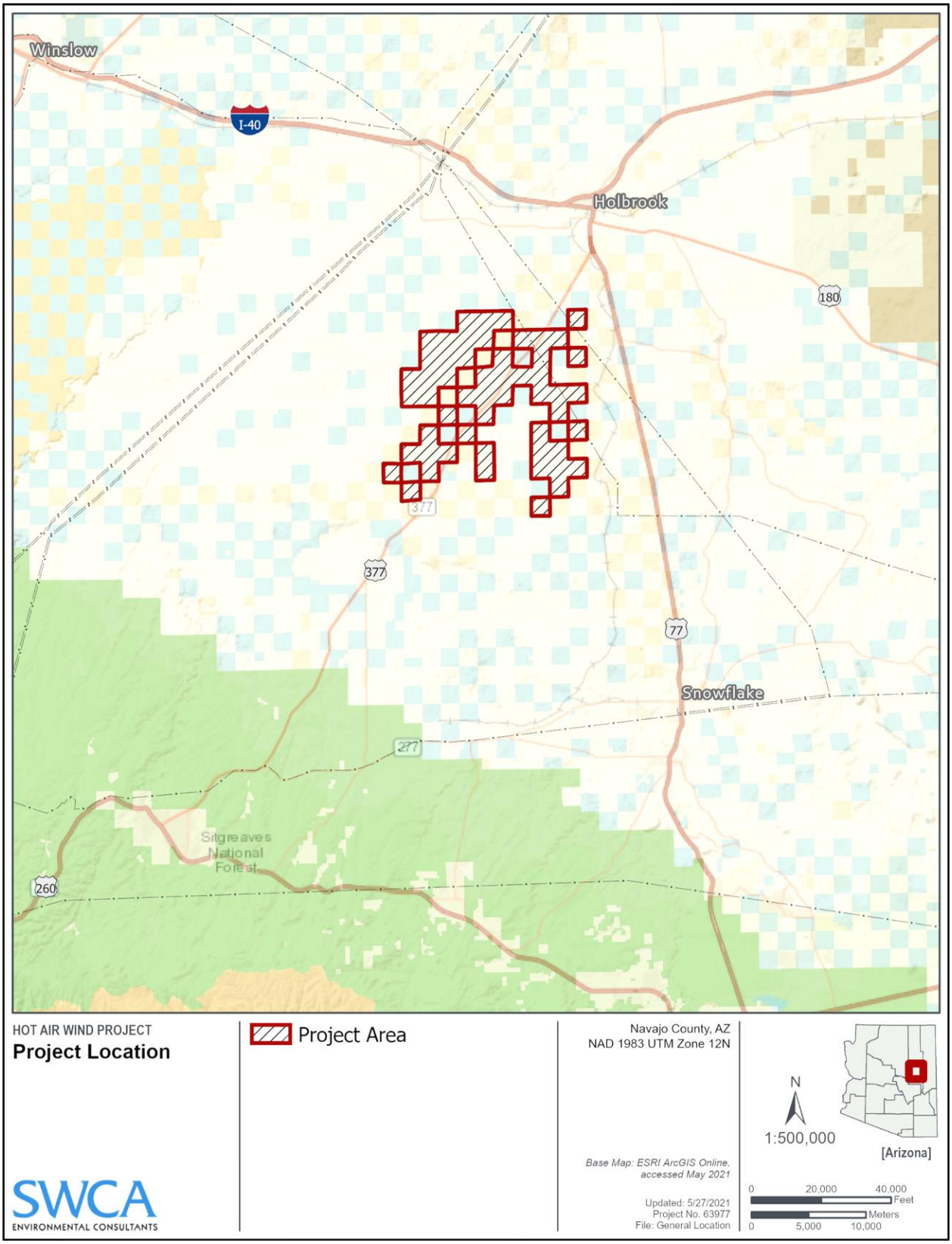

Figure 1. Project location.

3 TIER 1 PRELIMINARY SITE EVALUATION AND TIER 2 SITE CHARACTERIZATION

The objective of site evaluation and characterization is to assess the habitat and physical landscape characteristics of the development area as related to potential use by sensitive species and other wildlife, including any sensitive habitat designations, and verify habitat types determined from aerial imagery and the U.S. Geological Survey Southwest Regional Gap Analysis Program land cover database (USGS 2016). The site evaluation and characterization assessment will follow recommendations of the USFWS's WEG (USFWS 2012), ECPG (USFWS 2013), and Eagle Rule (USFWS 2016), combining Tier 1 (Preliminary Site Evaluation) and Tier 2 (Site Characterization) from the WEG with Stage 1 of the ECPG, providing information needed to address questions posed under Tier 1 and Tier 2 of the WEG. Additionally, site evaluation and characterization methods will follow AGFD's *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona* (AGFD 2012).

As described in the WEG, Tier 1 and Tier 2 questions will be addressed by desktop analyses combined with site reconnaissance surveys. Using both approaches, potential risk to species of concern and their habitats will be evaluated within a landscape context. ECPG Stage 1 and AGFD's preliminary site screening questions will also be incorporated into the site evaluation and characterization.

4 AVIAN USE SURVEYS

4.1 Eagle and Large Bird Survey Plan

Avian use surveys will commence in May 2021 and will be conducted for a full 2 years. The surveys have been designed in accordance with the Eagle Rule, which codified specific minimum standards, WEG, and ECPG.

Avian sampling plots will be comprised of 800-meter (m)-radius plots established to cover 30% of the area within 1 kilometer (km) of the turbine array design. The survey plots will be distributed to represent 1) the site spatially and 2) the varying habitat conditions (i.e., plots represent grassland/shrub-steppe and juniper (*Juniperus* sp.) habitats, water and topographic features, and potential eagle use areas [e.g., prairie dog (*Cynomys* sp.) colonies]). Within those parameters, plots will be micro-sited in the field to maximize views of the surrounding airspace.

In Year 1, each plot will be surveyed for 1 hour twice per month[1](24 sampling periods). Start times will represent all daylight hours, with each plot assigned a morning (i.e., before 10:00 a.m.) and a late morning/afternoon time slot per month. Surveyors will adhere to the schedule as logistics/weather/safety issues (e.g., lightning, visibility)[2] allow. Surveyors will scan for eagles and other large birds by alternating use of binoculars and unaided eye.

From the central point of each plot, surveyors will record the following data corresponding to each bird/bird group seen or heard (data form provided in Appendix A):

[1] The Eagle Rule calls for each plot to be surveyed for at least 1 hour, once per month. The ECPG recommends 1 or 2 hours per plot per month, depending on site characterization (i.e., expected eagle use). In this plan each plot will be surveyed for 1 hour twice per month in year-1 to ensure precision when calculating eagle take estimates and to account for avian use variability within survey months.

[2] Per the ECPG, surveys are not conducted when visibility is <800 m horizontally and <200 m vertically.

- Start and end time (in seconds; HH:MM:SS format) for each bird or group of birds entering/leaving the plot
- Species
- Number of birds per observation
- Distance from the observer to each bird/bird group (estimated to the nearest meter)
- Flight height (estimated to the nearest meter)
- Behavior

For each non-eagle large bird/bird group, surveyors will record distance and height measurements when first observed in the 800-m-radius plot (Reynolds et al. 1980 as cited in USFWS 2012). If a given bird/bird group is initially detected above 200 m, surveyors will also record whether the bird/bird group flew below 200 m (risk zone). For any eagles observed within the 800-m-radius × 200-m-height cylinder, surveyors will record distance, height, and behavior data by eagle-minute (i.e., eagle detection data will be partitioned into 1-minute intervals, including total flight seconds per observation)[3]. Perched eagles and those observed outside of the cylinder (incidental observations) will also be recorded but will distinguished from eagles flying within the cylinder (USFWS 2013). The same data recorded for eagles observed within sampling cylinders will be recorded for incidentals.

Surveyors will use a rangefinder, accurate to more than 800 m; printed topographic maps zoomed to each plot depicting 100-, 200-, 400-, 600-, and 800-m concentric circles; and vertical landmarks (e.g., meteorological towers and trees of known height) to estimate horizontal and vertical distances. Specific behavioral activities to be recorded will include soaring flight, unidirectional flapping-gliding, kiting-hovering, stooping/diving at prey, undulating/territorial flight, and perching (USFWS 2013). For each eagle detected, surveyors will also record the bearing to the bird, its flight direction, and sex and age class (if known) (USFWS 2013). All eagle flight paths and perch locations, in and outside of the cylinder, will be mapped on the plot-specific topographic maps and, as needed, on larger-scale site overview maps.

Surveyors will record the following weather data during each count (USFWS 2013):

- Wind direction and speed
- Cloud cover
- Precipitation
- Temperature

Surveyors will follow the same methods in Year 2; however, each plot will be surveyed once per month (12 sampling periods). To ensure start times represent all daylight hours, surveys at a given plot will alternate from morning (i.e., before 10:00 a.m.) to late morning/afternoon times, or vice versa, during successive survey periods. The project will continue to review the plot survey effort as turbine array design iterations are developed and as needed, ensuring 30% coverage of the final proposed design.

4.2 Eagle and Large Bird Data Interpretation/Analyses

Avian use count data are used to estimate the annual number of eagle collision fatalities, identify important eagle (and other species of concern) use or migration concentration areas, and, generally,

[3] Per the Eagle Rule, the height above ground level must be either 200 m or 25 m above the maximum blade reach, whichever is greater; therefore, the sampling cylinder height may be adjusted based on turbine height prior to initiation of surveys.

to estimate the spatial distribution and relative frequency of diurnal birds using the project area (USFWS 2012, 2013).

Each eagle observed flying within the sampling area will be summarized in number of minutes, rounded to the next highest integer (e.g., an eagle observed flying within the cylinder for a given minute equals 1 exposure minute; two eagles in flight in the cylinder in a given minute [or the same eagle in flight continuing into a second 1-minute interval] equals 2 exposure minutes). The spatial and temporal distribution of eagle minutes will be summarized. Eagle minutes and total survey minutes recorded among relevant avian use counts will be used to inform a posterior probability distribution of eagle exposure to develop model-based predictions of annual eagle fatalities (Bayesian method; USFWS 2013, 2016). All eagle flight paths will be presented on a final map, with those recorded during use surveys distinguished from incidental observations.

Other compilations of the data will include:

- species composition (species list);
- relative occurrence (number of detections per guild/species in relation to total number of observations); and
- frequency (use; number of observations by group [e.g., species, guild, large bird group]/unit time [e.g., 20-minute period, 30-minute period, 1-hour period]).

Frequency data will be grouped by season, plot/group of plots (i.e., spatial distribution), and/or by risk zone (<200 m), as needed, to evaluate baseline bird activity patterns.

4.3 Small Bird Survey Plan

Small bird surveys will be conducted for one full year in Year 1, immediately prior to the large bird/eagle use counts at the same large bird/eagle plots.[4] Small bird surveys will be excluded from the Year 2 preconstruction survey effort. The small bird surveys will be conducted for 10 minutes within a 100-m survey radius (AGFD 2012; Matsuoka et al. 2014; Ralph et al. 1995; Ralph et al. 1993; Reynolds et al. 1980). Surveyors will record the following data corresponding to each bird/bird group seen or heard:

- Species
- Number of birds per observation
- Distance from the observer to each bird/bird group (estimated to the nearest meter)
- Flight height (estimated to the nearest meter)

Distance and height measurements will be estimated using a rangefinder and vertical landmarks.

4.4 Small Bird Data Interpretation/Analyses

Compilations of the data for small bird use surveys will be similar to those reported for non-eagle large birds. Frequency data (i.e., number of observations by group/10-minute period) will be grouped by season, habitat type, plot/group of plots (i.e., spatial distribution), and/or by risk zone (<200 m), as needed, to evaluate baseline bird activity patterns.

[4] The ECPG and AGFD (2012) recommend that the small bird counts be conducted exclusive of those for eagles and other large birds.

5 EAGLE AND OTHER RAPTOR SPECIES NEST SURVEYS

5.1 Nest Survey Plan

Two breeding season (2022 and 2023), eagle-focused nest inventory and occupancy[5] aerial surveys will be conducted. The two surveys will be timed as follows to maximize detection of eagle nest occupancy data for all eagle and potential eagle nests identified within 2 miles (USFWS 2020) of the project area:

- Survey 1 (inventory and early nest occupancy): mid/late February, when early-nesting eagles are expected to have initiated courtship, nest maintenance/ornamentation, and incubation activities
- Survey 2 (continued inventory and late nest occupancy): late March/early April, when all nesting eagles are expected to have initiated nesting activities

As part of the second eagle nest survey in Year 2 (2023), a project proximity-focused aerial survey of non-eagle raptor species nests within 1 mile[6] of the proposed project will be completed. The timing of the survey will be selected to maximize species identification and detection of nest occupancy of non-eagle raptor species nests. In inventorying non-eagle raptor species' nests, surveyors will use a combination of transect (in densely treed habitats, north-south transects spaced at 200-meter intervals) and strategic/targeted searches (in lightly treed habitats; e.g., searching specific trees within grassland-dominated habitats).

Coordination with AGFD will provide general areas (4 × 4–mile blocks) and associated past occupancy/activity[7] data for known, historical,[8] and potential eagle breeding areas/territories[9] (hereafter, territory/territories) that were previously identified during state-wide surveys. These data will provide focal areas to streamline survey effort and inform expectations (e.g., the data provide a general understanding of number of nests and nest structure condition recorded during past surveys). Project surveyors and AGFD will also coordinate in real time during the surveys to ensure that all specific known nest structures will be located.

Eagle nest survey methods will generally follow Pagel et al. (2010). The surveys will be sensitive to local nesting chronologies and disturbance at nests and will be conducted during weather conditions favorable to aerial surveys. A Bell 206L-series "Long Ranger" helicopter will be used, which allows for close approach to accurately determine nest contents (Phillips et al. 1984). The surveyors will use both a laptop with a built-in GPS unit and a handheld GPS unit to record survey tracks and nest locations. During refueling, the surveyors and pilot will further evaluate survey coverage and logistics for completing survey objectives. During all surveys, surveyors will thoroughly investigate appropriate nesting substrates in proximity to known nests and nest clusters to identify any newly built nests or nests that may have been

[5] The term *nest occupancy* is defined as a nest in which one or more of the following occur: 1) young are raised, 2) eggs are laid, 3) an adult is observed sitting, presumably in incubation or brooding posture, in the nest, 4) two adults are observed perched on or near the nest, 5) an adult and a bird in immature plumage is observed on or near the nest, if mating behavior was observed (e.g., display flights, copulation), and/or 6) recent repairs (e.g., fresh greenery, sticks with fresh breaks), mute (i.e., whitewash), or feathers are visible at or near the nest (Driscoll 2010; Postupalsky 1974; Steenhof and Newton 2007).

[6] USFWS (2012) recommends surveys for raptor nests within at least 1 mile of wind turbines.

[7] An *active* nest is one in which an egg or eggs are laid and/or young are raised (Driscoll 2010; Postupalsky 1974).

[8] Historical breeding areas/territories are those that have not been occupied by eagles in the last 10 years or more.

[9] A *territory or breeding area* is an area that contains, or historically contained, one or more nests within the home range of a mated pair: a confined locality where nests are found, usually in successive years, and where no more than one pair is known to have bred at any one time (Steenhof and Newton 2007). The number of unique territories in a given area can be refined over multiple years of survey and may vary from year to year.

missed during previous surveys. Surveyors will focus on locating and recording eagle nests while completing the 2-mile-radius eagle inventory surveys; however, other species' nests will be recorded incidentally.

For each nest found, surveyors recorded:

- date and time of observation;
- nest identification number;
- nest substrate (i.e., cliff, tree, transmission tower);
- nest condition and contents; and
- species, if known.

"Undetermined species" nests will include any nests that are too deteriorated to confidently identify species or that exhibit qualities characteristic of several species. For these nests, surveyors will record an informed opinion regarding which species are most likely to use the nest based on nest structure and placement (e.g., "undetermined: resembles *Buteo* spp. or golden eagle," or "undetermined: resembles *Buteo* spp. or common raven"). Species determinations will also be noted for nests being used by species that presumably did not construct them (i.e., several species are known to use heterospecific nest structures; some species, such as great horned owls do not construct their own nests). A species determination for a given nest may change after surveyors observe nest structure, contents, and species activity during repeated visits under different conditions (e.g., lighting).

The following nest conditions/contents will be recorded: 1) sticks-intact, 2) sticks-deteriorating, 3) greenery/ornamentation, 4) adult in incubation/brooding posture, and 5) number of egg(s)/nestling(s). Surveyors will photograph nests using a DSLR camera with a 100–500 mm lens and note specific nest structure characteristics and proximity of nearby nests. Following the surveys, photographs of each nest will be thoroughly examined to confirm species determinations and record evidence of nest occupancy and specific nest contents that may have been overlooked or were unclear during the aerial surveys. In accordance with Pagel et al. (2010), all recommended data fields (e.g., USFWS naming convention, territory status, nest elevation, hatch date, fledge date) for each nest will be entered into a Microsoft Access database.

In Year 2, each of the eagle and potential eagle nests identified in Year 1 will again be revisited twice (i.e., two survey periods) to document nest occupancy. The two Year 2 surveys will, again, be timed to maximize nest occupancy data. During these surveys, surveyors will again take care to thoroughly investigate appropriate nesting substrates in proximity to known nests and nest clusters to identify any newly built nests or nests that may have been missed during previous surveys.

6 BAT ACOUSTIC SURVEYS

6.1 Monitoring Stations

To monitor bat activity, four acoustic bioacoustics monitoring stations will be installed in February 2021 within the project area. Monitoring stations will record data from early March (i.e., the beginning of the spring season) through November 30, 2021 (i.e., the end of the fall season). Two MET tower stations will include both a high/low (45-m/5-m) ultrasonic microphone pairing. At these stations, the high microphones will be installed at approximately 45 m using a K-Bat acoustic rigging system (KB Energy), or similar. The low microphones will be installed at approximately 9 m to the base of the MET towers.

Each of the four microphones will be attached to a Song Meter SM4BAT FS (Wildlife Acoustics, Inc.) full-spectrum acoustic data collection device. Together, the stations will represent varying use by bats at the site. Surveyors conducting avian use counts will collect data cards and replace batteries approximately twice per month throughout the monitoring period.

6.2 Bat Data Interpretation/Analysis

Calls will be analyzed using bat call identification software (Kaleidoscope) for filtering and analyzing full-spectrum bat call data. Compilations of the data will include:

- species or species/bat frequency (e.g., 25 kilohertz [kHz], 40 kHz) group composition (species/frequency group list);
- bat passes per detector-night (index of activity) by group (i.e., species, frequency group); and
- percentage of species/species group activity (bat passes by species/species group in relation to total number).

A bat pass is defined as at least one echolocation pulse separated by more than 1 second from the next pulse. This index of activity will be grouped by hour and season (i.e., temporal distribution) and monitoring station (i.e., vertical and horizontal spatial distribution), as needed, to evaluate baseline patterns of bat activity.

7 INCIDENTAL WILDLIFE OBSERVATIONS

In an effort to collect data pertinent to potential eagle use and general wildlife use of the site, surveyors traveling on-site while conducting the above tasks, while conducting turbine micro-siting activities, and other project surveys (e.g., cultural resources surveys) have and will continue to record:

- eagle flight paths and perch locations (for eagles detected while conducting activities [e.g., driving on site] unrelated to eagle use counts);[10]
- active prairie dog locations and occupied burrows;
- burrowing owl locations and active/potentially active owl burrows;
- large carrion (e.g., dead cows, dead elk [*Cervus elaphus*]);
- pronghorn (*Antilocapra americana*) and elk;
- bird nests
- bird concentrations (i.e., flocks, migration events, waterfowl use of the site's water features); and
- a running list of bird species seen and heard.

[10] Eagle flight paths will also be mapped during the standardized eagle and other large bird use surveys; they are distinguished from those recorded incidentally (see Section 3.2).

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APPENDIX A

Example Avian Use Count Data Forms and Example Eagle Flight Path Map

SWCA ENVIRONMENTAL CONSULTANTS

1-Hour Large Bird/Eagle Use Count - Data Form

Page ____ of ____

Database entry:
Name:_____
Date:_____

Location: Long Point

Date: _____ Observer: _____ Start Time: _____ End Time: _____

Weather Data (*taken at end of each 10 min small bird count/beginning of each raptor/eagle count*)

Cloud Cover (%)	Wind Speed (mph)	Wind Direction	Temp (F)	Precipitation

Wind Direction (direction from which it originates): E, ENE, SW etc. **Precip codes**: 0 = None 1 = Light Drizzle 2 = Rain 3 = Snow 4 = Fog

**All measurements (distance, flight height, etc.) are when first observed in 800 m plot (but record all behaviors observed within cylinder). Record separate line for all perched observations and each instance individual returns to the plot.

Same (#)	Time Start (HH:MM:SS)	Time End (HH:MM:SS)	Species Code	# of Birds	Distance to Bird (m)	Flight Height (m)	Observed <200 m?	Behavior	Notes

Eagle-Specific Data: ****Record separate lines for each eagle-minute (in 1-minute intervals). Record separate lines for all perched eagles and eagles outside cylinder (>800 m >200m). Remember to map all flight paths.**

Same (#)	Time Start (HH:MM:SS)	Time End (HH:MM:SS)	Species Code	# of Birds	Distance to Bird (m)	Flight Height (m)	Behavior	Bearing to Bird (°)	Flight Direction	Sex	Age	Notes

# of Birds: only flocks/kettles **Flight Height Category (circle one):** Below (≤20m), Within (>20 ≤ 200m), Above (>200m) Rev: 10/24/19gc

Same?: record a unique number for each individual/group i.e, 1, 2, 3 **Flight Direction:** N, NE, NW, SE

Age: J = juvenile (1st year) S = immature or subadult (2nd-4th yr) A = adult (≥5th yr) U = unknown

Behavior Codes (circle dominant if more than one): SO = soaring flight FL = Unidirectional flapping-gliding KI = kiting-hovering PR = stooping/diving at prey AG = stooping/diving Agonistic UN = undulating/territorial flight PE = perched OT = other (specify)

Additional Notes (*e.g., brief weather events, notable behavior (esp. hunting, prey capture, carrying nest material), describe observations of same birds, etc.*)

SWCA ENVIRONMENTAL CONSULTANTS

10-Min Small Bird Use Count - Data Form

Page ____ of ____

Database entry:
Name:_____
Date:_____

Location: Long Point

Date: _____ Observer: _____ Start Time: _____ End Time: _____

Weather Data (*taken at end of each 10 min count/beginning of each raptor/eagle count*)

Cloud Cover (%)	Wind Speed (mph)	Wind Direction	Temp (F)	Precipitation

Wind Direction (direction from which it originates): E, ENE, NE etc. **Precip codes:** 0 = None 1 = Light Drizzle 2 = Rain 3 = Snow 4 = Fog

Species Code	# of Individuals	Distance to Bird (m)	Flight Height (m)	Notes

Additional Notes (*e.g., brief weather events, notable behavior, etc.*)

Rev: 10/24/19gc

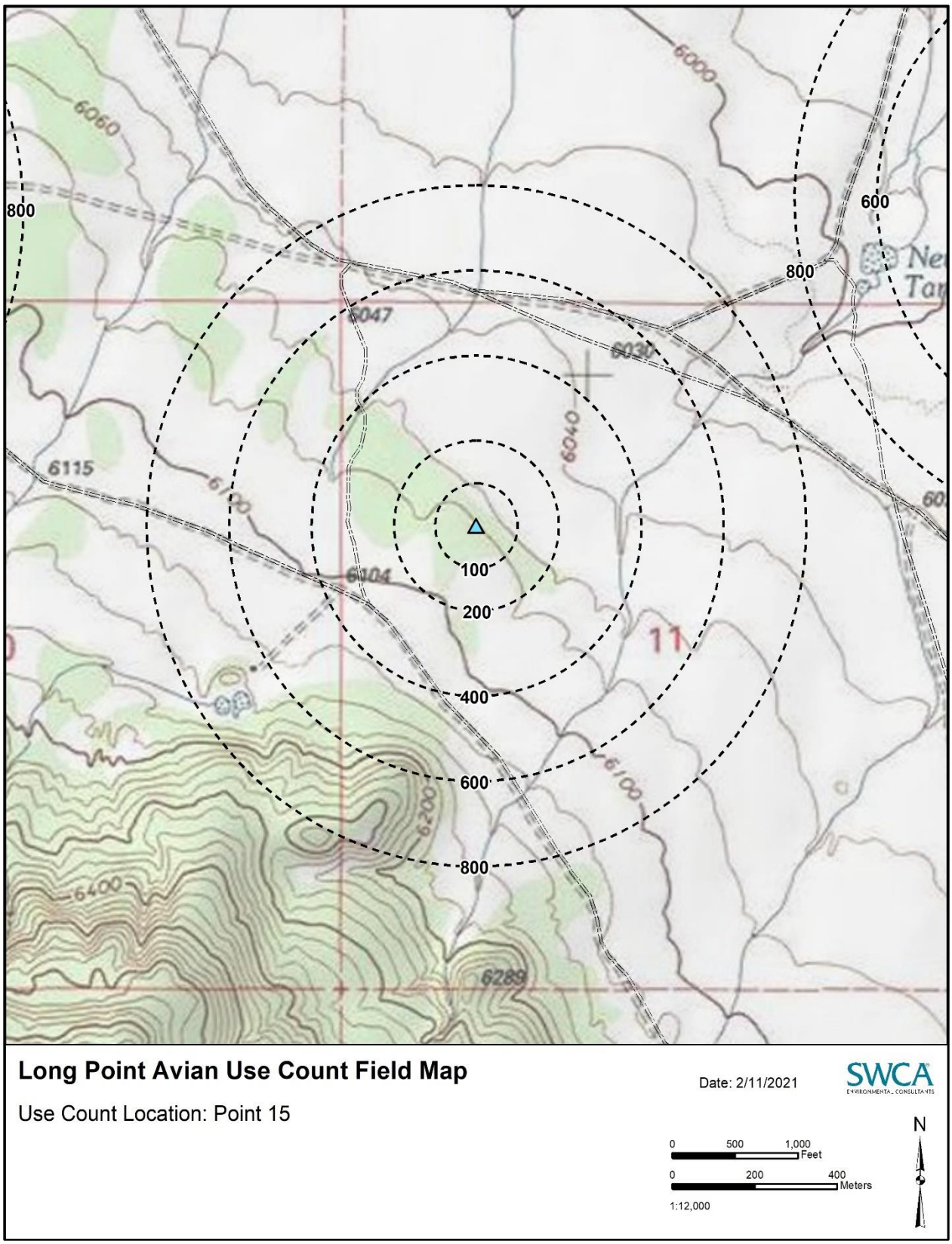

Figure A-1. Example eagle flight path map.

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EXHIBIT C

Areas of Biological Wealth

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EXHIBIT C. AREAS OF BIOLOGICAL WEALTH

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *Describe any areas in the vicinity of the proposed site or route which are unique because of biological wealth or because they are habitats for rare and endangered species. Describe the biological wealth or species involved and state effects, if any, the proposed facilities will have thereon.*

Introduction

Areas of biological wealth are areas within a broader landscape that are habitats for rare and endangered species (also referred to as special-status species herein) or that provide important, unique, or concentrated resources for other wildlife or plants. Examples include designated critical habitat, areas of wildlife congregation or of seasonal importance (e.g., riparian corridors, wetlands, major avian migratory routes, leks, and plant communities of concern), and priority conservation areas (e.g., conservation opportunity areas, wildlife linkages, important bird areas, areas of critical environmental concern, national refuges, state and national parks, and wetlands of international importance). Such areas are more likely to be disturbed by an activity because of the higher probability of adverse impacts to species or habitats of concern.

Areas of biological wealth and rare and endangered species that may occur in the Certificate of Environmental Compatibility (CEC) Corridor were identified through a biotic resource review conducted by SWCA Environmental Consultants (SWCA). The data sources consulted for the review include the following:

- An official project-specific species and critical habitats list via the U.S. Fish and Wildlife Service (USFWS) online Information for Planning and Consultation (IPaC) tool (USFWS 2025a) (Attachment C-1).
- A project-specific Arizona Environmental Review Tool (ERT) report (Arizona Game and Fish Department [AZGFD] 2025a) (Attachment C-2).
- The USFWS Environmental Conservation Online System (USFWS 2025b).
- The AZGFD ERT map of areas of biological wealth and species' predicted ranges (AZGFD 2025b).
- Land cover, elevation data, maps and descriptions of areas of biological wealth, and species ranges and descriptions from a variety of sources.
- Communications with wildlife agency representatives, including a meeting with the AZGFD and USFWS on May 29, 2025. A June 25, 2025, letter from the AZGFD regarding the West Camp 2 Wind Farm and West Camp 2 Gen-Tie Project (Gen-Tie Project) and a response to that letter from the Applicant dated August 20, 2025, is appended to this exhibit (Attachments C-3 and C-4).

Rare and endangered species considered in this review include 1) Endangered Species Act–listed endangered, threatened, or proposed species; 2) other special-status species, including species protected under the Bald and Golden Eagle Protection Act (BGEPA); 3) Arizona Species of Greatest Conservation

Need[1] (SGCN) Tier 1 and 2 species (AZGFD 2022, 2025a); 4) USFWS Birds of Conservation Concern (BCC)[2] for bird conservation region 16 (USFWS 2021a); and 5) state-protected native plant species.[3] The potential for occurrence of each species was based on 1) documented records, 2) existing information on distribution, and 3) qualitative comparisons of the habitat requirements of each species with vegetation communities or landscape features in the CEC Corridor.

This review is also informed by a reconnaissance visit to the CEC Corridor on May 19 and 20, 2025, and the following preconstruction wildlife site characterization and wildlife survey reports for the West Camp Wind Farm and West Camp 2 Wind Farm:

- Wildlife site characterization reconnaissance visits for the West Camp 2 Wind Farm site on May 18 and 19, 2021 (SWCA 2021) and the West Camp Wind Farm site on January 27, 2022 (SWCA 2022a).
- Two years of avian use surveys conducted monthly at fixed points distributed throughout the West Camp Wind Farm site from October 2019 through March 2020 and May 2020 through September 2021, as well as an additional year of monthly surveys at fixed points in the northeastern portion of the site from September 2023 through September 2024 and in November 2024. The large bird survey areas for three of the points and the small bird survey areas for two of the points intersect the CEC Corridor, informing known occurrences for some of the bird species (SWCA 2023a, 2025a).
- Three years of avian use surveys conducted monthly at fixed points distributed throughout the West Camp 2 Wind Farm site from May 2021 through April 2024. The large bird survey areas for nine of the points and the small bird survey areas for three of the points intersect the CEC Corridor, informing known occurrences for some of the bird species (SWCA 2025b).
- Raptor nest surveys within 2 miles of the West Camp Wind Farm site conducted in February and March 2021 and March 2023 (SWCA 2023b).
- Raptor nest surveys within 2 miles of the West Camp 2 Wind Farm site conducted in February and March 2022 and March 2023 (SWCA 2023c).
- Bat acoustic surveys at fixed stations at the West Camp Wind Farm site from March through November 2021 and March through December 2023 (SWCA 2025c).
- Bat acoustic surveys at fixed stations at the West Camp 2 Wind Farm site from March through November 2021 (SWCA 2022b).

Survey reports are not included as attachments to this application as they total hundreds of pages, and reports conducted for the West Camp Wind Farm contain some results that are outdated and/or not applicable to the CEC Corridor.

[1] SGCN are species identified in AZGFD's Arizona Wildlife Conservation Strategy as wildlife species most in need of conservation actions (AZGFD 2022). AZGFD (2022) prioritizes SGCN species into three tiers. Tier 1 and 2 species are those categorized by AZGFD (2022) as vulnerable. Tier 3 species are those representing priority research and information needs because of their unknown status.

[2] BCCs are migratory and non-migratory bird species, beyond those designated as federally threatened or endangered, that represent USFWS's highest conservation priorities (USFWS 2021a). The list does not govern "take;" rather, it is intended to proactively prevent or remove the need for additional ESA bird listings by promoting greater study and protection of the habitats and ecological communities upon which these species depend.

[3] The Arizona Native Plant Law (Arizona Revised Statute 3-904) prohibits taking, transporting, or possessing protected plants from any land without permission and a permit issued by the Arizona Department of Agriculture; it requires notification and compensation prior to land clearing (destruction) or removal. Protected plants are categorized as Highly Safeguarded, Salvage Restricted, Salvage Assessed, and Harvest Restricted.

During all preconstruction natural resources surveys, surveyors were instructed to record incidental wildlife observations, adding to the understanding of rare and endangered species presence, as well as areas of biological wealth.

Results

Ecological Setting

The CEC Corridor is in a rural setting. Land use in the vicinity is primarily cattle ranching but also includes wind energy generation, energy transfer (electrical energy transmission and distribution infrastructure), and road transportation (State Route 377 [SR-377]). The corridor is characterized by flat to rolling terrain at elevations between 5,200 and 5,700 feet and is within the Arizona/New Mexico Plateau ecoregion (U.S. Environmental Protection Agency 2011). Prominent landforms in the vicinity include Chevelon Canyon, the Little Colorado River, the Pink Cliffs, and Dry Lake, which are 3.5 miles west-northwest, 4.5 miles north, 9.5 miles south, and 10.5 miles south of the CEC Corridor, respectively.

The CEC Corridor is in the Plains and Great Basin Grassland biotic community (Brown 1994; Brown and Lowe 1982). According to U.S. Geological Survey (USGS) (2016) the CEC Corridor is composed primarily of four land/vegetation cover types: Inter-Mountain Basins Semi-Desert Grassland (57%), Colorado Plateau Mixed Sagebrush Shrubland (18%), Inter-Mountain Basins Greasewood Flat (9%), and Inter-Mountain Basins Semi-Desert Shrub Steppe (9%). As observed during the May 19 and 20, 2025, reconnaissance visit, vegetation in the CEC Corridor transitions from a mix of semi-desert grassland, shrub steppe, and juniper savanna in the eastern and central portions of the CEC Corridor to juniper savanna and patches of dense juniper in the western third of the CEC Corridor. Characteristic grasses include alkali sacaton (*Sporobolus airoides*), blue grama (*Bouteloua gracilis*), mesa dropseed (*Sporobolus flexuosus*), and sand dropseed (*Sporobolus cryptandrus*). Scattered to locally dense shrubs and subshrubs include Bigelow sage (*Artemisia bigelovii*), broom snakeweed (*Gutierrezia sarothrae*), fourwing saltbush (*Atriplex canescens*), jointfir (*Ephedra* spp.), rubber rabbitbrush (*Ericameria nauseosa*), sand sagebrush (*Artemisia filifolia*), Stansbury cliffrose (*Purshia stansburiana*), and winterfat (*Krascheninnikovia lanata*). The tree layer, where present, is oneseed juniper (*Juniperus monosperma*).

Sparsely distributed earthen and metal or rubber stock tanks, few shallow draws and canyon drainages (i.e., Chimney Canyon, Lost Tank Canyon, and Lard Bucket Draw), and one incised canyon drainage (i.e., Porter Canyon) provide an ephemeral (seasonal) water source for wildlife. The drainages transect the CEC Corridor, flowing south to north. No riparian zones are present in the corridor (AZGFD 2025b); however, a very small number of isolated riparian or xeroriparian trees (cottonwood [*Populus* sp.], netleaf hackberry [*Celtis laevigata* var. *reticulata*], and tamarisk [*Tamarix* sp.]) are adjacent to some of the earthen stock tanks or in some of the canyons, or both.

Areas of Biological Wealth

Three areas of biological wealth have been identified within the CEC Corridor: Porter Canyon, where golden eagle (*Aquila chrysaetos*) (BGEPA, SGCN Tier 2) nests are known to be present, and two County stakeholder–assessed diffuse wildlife movement areas[4] (Figure C-1). These areas are described below.

[4] The County stakeholder–assessments (AZGFD 2013) characterized wildlife linkages into four categories: diffuse movement areas, where animals move within a habitat block across a broad area rather than through a well-defined linkage; crossing areas, where animals move across barriers, such as major roads; landscape movement areas, where animals move between habitat blocks across a broad area or through a well-defined linkage; and riparian movement areas, where terrestrial and aquatic animals move along riparian or xeroriparian habitats. The areas are displayed on the AZGFD ERT map (AZGFD 2025b).

No designated or proposed critical habitats, important bird areas, national wildlife refuges, wetlands of international importance, wilderness areas, or areas of critical environmental concern are within the CEC Corridor (AZGFD 2025b; SWCA 2021, 2022a). No riparian zones, bird staging areas or migration concentration sites, or lekking species have been identified in the CEC Corridor or its vicinity (AZGFD 2025b; SWCA 2021, 2022a). The nearest designated critical habitat is for the Little Colorado spinedace (*Lepidomeda vittata*; listed threatened) 5.8 miles northwest of the CEC Corridor within Chevelon Creek.

Areas of Biological Wealth in the CEC Corridor

Porter Canyon / Golden Eagle Nests

Two golden eagle nests (see Figure C-1) have been identified by SWCA (2023c) in the CEC Corridor. These two nests (HA004 and HA006) are within a golden eagle nesting territory called Porter Canyon. One of the nests (HA006) was *active* (or *in-use*)[5] in 2022 and the other (HA004) was active in 2023 (SWCA 2023c). The canyon has not been identified as a migration concentration site but may generally act as a conduit for certain migrating birds or roosting, commuting, or foraging bats, including some of the species described in this exhibit.

Wildlife Movement Areas

County stakeholder–assessed diffuse movement areas are where animals move within a habitat block across a broad area (i.e., an approximate location of wildlife movements on the landscape) rather than through a well-defined linkage. The two County stakeholder–assessed diffuse wildlife movement areas overlapping the CEC Corridor (see Figure C-1; AZGFD 2025b) have been identified as important for elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), and pronghorn (*Antilocapra americana*) (AZGFD 2013).

Areas of Biological Wealth in Proximity to the CEC Corridor

The nearest plant community of concern—the current range for the Peebles Navajo cactus (*Pediocactus peeblesianus* var. *peeblesianus*; listed endangered with no designated or proposed critical habitat)—is approximately 1 mile north of the CEC Corridor.

In addition to the diffuse wildlife movement areas overlapping the CEC Corridor, the nearest special designation areas include a County stakeholder–assessed wildlife crossing area 1.1 miles south of the CEC Corridor and two conservation opportunity areas (COAs): 1) the Chevelon Canyon – Horse Canyon upstream to Chevelon Crossing COA and 2) the Lower Little Colorado River COA, 3 miles northwest and 3.2 miles north of the CEC Corridor, respectively (AZGFD 2025b). The County stakeholder–assessed wildlife crossing area, where animals move across barriers, south of the CEC Corridor has been identified as an important crossing area for pronghorn (SGCN Tier 2) (AZGFD 2013). COAs are areas with high conservation value where conservation actions will most likely lead to substantial improvements for wildlife and their habitats. The Chevelon Canyon – Horse Canyon upstream to Chevelon Crossing COA supports low numbers of native fish (AZGFD 2022). The Lower Little Colorado River COA provides habitat for aquatic, riparian dependent species, and migratory birds generally, as well as connectivity between other COAs (AZGFD 2022).

[5] An *active* nest is one in which an egg or eggs are laid or young are raised, or both (Driscoll 2010; Postupalsky 1974). An *in-use* nest is a bald eagle or golden eagle nest that contains one or more viable eggs or dependent young, or, for golden eagles only, has had adult eagles on the nest within the past 10 days during the breeding season (USFWS 2024a).

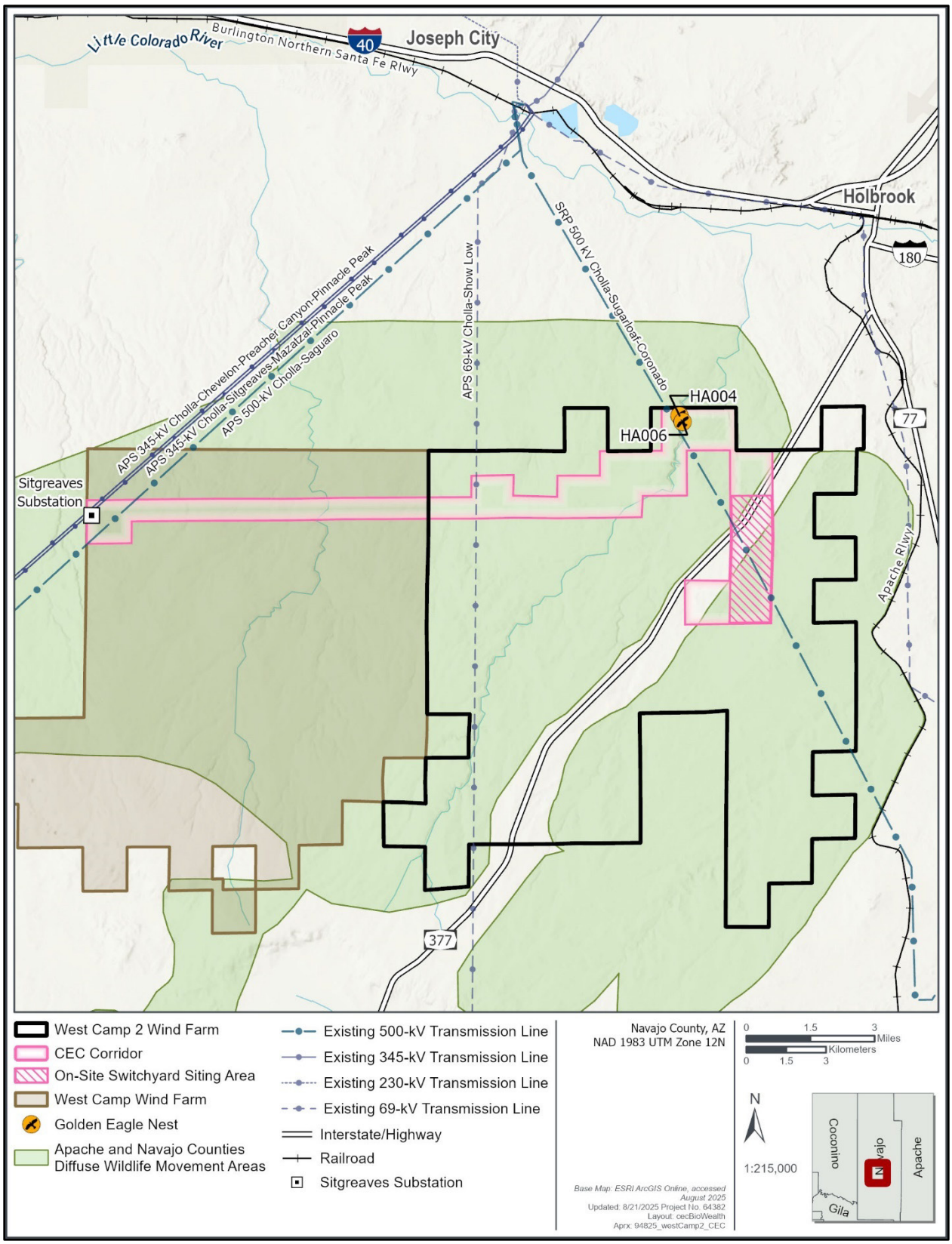

Figure C-1. Areas of biological wealth in the CEC Corridor and its vicinity.

Rare and Endangered Species

The potential for occurrence of special-status wildlife species and their habitats in the CEC Corridor and its vicinity is reviewed in two sections below: 1) Endangered Species Act (ESA)–listed and proposed species and 2) other special-status species. SWCA evaluated 84 special-status wildlife species with the potential to occur in the CEC Corridor. Seventy-three of the evaluated special-status species are known to or may occur in the CEC Corridor, including 46 bird, one invertebrate, seven plant, and 19 mammal species.

Endangered Species Act Threatened, Endangered, and Proposed Species

Six ESA-listed species, proposed species, or nonessential experimental populations were identified by the USFWS in its official species list for the Gen-Tie Project (USFWS 2025a; see Attachment C-1). The CEC Corridor is within the geographical/elevational range and contains appropriate habitat conditions for two of the six species: monarch butterfly (*Danaus plexippus*) and Mexican wolf (*Canis lupus baileyi*). The other four species are unlikely to occur (Table C-1).

Monarch Butterfly

On December 12, 2024, the USFWS proposed listing the monarch butterfly under the ESA as a threatened species with a 4(d) rule for take exceptions (USFWS 2024b). There is proposed critical habitat on the western populations' wintering grounds in coastal California. There are no statutory protections under the ESA for proposed species, but USFWS encourages opportunities to conserve the species.

Populations in western North America (including most of Arizona) migrate either to California or Mexico for the winter (USFWS 2024c) or may overwinter in the low deserts in California or Arizona (Morris et al. 2015). In middle elevations of Arizona, the species may occur as early as late March and early April, becoming more abundant in late July and August. Peak fall migration is from September through mid-October (Morris et al. 2015). In the southwestern United States, migrating monarchs often occur near water sources, such as rivers, creeks, riparian corridors, roadside ditches, or irrigated gardens. Multiple generations of the butterflies are produced each year. Their larvae are obligate feeders on plants in the Asclepiadaceae family, primarily species of milkweeds (*Asclepias* spp.). Adult monarchs during breeding (mid-June through September in higher elevations of the state) and migration (September through as late as November) require a diversity of blooming nectar resources (USFWS 2024c). During fall migration in Arizona, monarchs favor nectar from native plants, including sunflowers (*Helianthus* spp.), rabbitbrush (*Ericameria* spp.), thistles (family Asteraceae), milkweeds, and a variety of other native and garden plants (Morris et al. 2015).

The CEC Corridor is within the species' expansive breeding and migration range (Morris et al. 2015; USFWS 2024c). Broadleaf milkweed (*Asclepias latifolia*; flowers from June–September) has been documented approximately 2 miles south of the CEC Corridor, within Lost Tank Canyon, during preconstruction surveys for the West Camp Wind Farm. Milkweed plants may be present in the CEC Corridor, particularly along drainages and near stock tanks, but were not documented during the May 19 and 20, 2025, reconnaissance visit. Other nectar-bearing plant species (e.g., rubber rabbitbrush) are present in the CEC Corridor. The nearest adult sightings are approximately 30 miles to the northeast and southeast (Western Monarch Milkweed Mapper 2025). The nearest breeding record is approximately 42 miles to the southwest (Western Monarch Milkweed Mapper 2025).

Table C-1. ESA-Listed and Proposed Species Reviewed for Their Potential to Occur in the CEC Corridor

Common Name (Scientific Name)	Status*		Range or Habitat Requirements	Potential for Occurrence in CEC Corridor
	Federal	State		
Birds				
Southwestern willow flycatcher (*Empidonax traillii extimus*)	E	SGCN Tier 1	Breeds in dense, mesic riparian habitats at scattered, isolated sites along rivers and streams, reservoirs, cienegas, and other wetlands from near sea level to over 8,500 feet. Nesting habitat is typically dense riparian thickets that are greater than 9.8 feet high, more than 1 to 2 trees wide, with or without an overstory layer, where surface water or soil moisture is high enough to maintain appropriate vegetation characteristics. During migration, the species uses a wider array of forest and shrub habitats, although riparian vegetation may still be a preferred migration habitat type. Breeding flycatchers in the state are predominantly found along major perennial drainages below 4,000 feet but also occur at 8,500 feet along the upper Little Colorado and San Francisco Rivers.	**Unlikely to occur.** The CEC Corridor is outside the flycatchers' predicted range and does not contain riparian conditions. The subspecies has not been recorded within 3 miles of the CEC Corridor; the nearest record is 46 miles to the southwest (Tonto Creek). The nearest critical habitat is 65 miles to the southeast (Little Colorado River) and southwest (Tonto Creek).
Yellow-billed cuckoo (*Coccyzus americanus*)	T	SGCN Tier 1	Nests in low- to moderate-elevation (usually below 6,600 feet) riparian woodlands with native broadleaf trees and shrubs that are 50 acres or more in extent. Most associated with cottonwood (*Populus* spp.)/willow (*Salix* spp.) dominated vegetation cover, but composition of dominant riparian vegetation can vary across range. Has not been found nesting in isolated patches (1–2 acres) or narrow, linear riparian habitats less than 32.8 to 65.6 feet wide; migrant cuckoos have been detected in these habitats. During migration and foraging, uses a wider array of forest and shrub habitats but is rarely observed away from riparian habitats. These sites may be similar to breeding sites, but may be smaller, narrower patches and may lack understory vegetation.	**Unlikely to occur.** The CEC Corridor is within the species' predicted range but does not contain suitable habitat conditions. The species has not been recorded within 3 miles of the CEC Corridor; the nearest record is 38 miles to the northeast (Puerco River). The nearest critical habitat is 70 miles to the west-southwest (Wet Beaver Creek).
Fish				
Little Colorado spinedace (*Lepidomeda vittata*)	T	SGCN Tier 1	Variety of habitats of mountain streams and lower-gradient streams and rivers at elevations between 4,000 and 8,000 feet. Most common in slow to moderate water currents, over fine gravel bottoms. During dry periods, retreats to residuals pools and springs. Current range includes disjunct locations within the East Clear Creek Watershed, Chevelon Creek, and the upper Little Colorado River, including Nutrioso and Rudd Creeks.	**Unlikely to occur.** The CEC Corridor is outside the species' predicted range and does not contain suitable habitat conditions. The species has not been recorded within 3 miles of the CEC Corridor; the nearest record and critical habitat is 6 miles to the northwest (Chevelon Creek).
Insects				
Monarch butterfly (*Danaus plexippus*)	PT	–	See description below.	Though the species has not been recorded within 3 miles of the CEC Corridor, it **may occur**. See below for details.

Common Name (Scientific Name)	Status*		Range or Habitat Requirements	Potential for Occurrence in CEC Corridor
	Federal	State		
Suckley's cuckoo bumble bee (*Bombus suckleyi*)	PE	–	Historically found in various habitat types including prairies, grasslands, meadows, urban and agricultural areas, and woodlands up to 10,500 feet. This bumble bee is an obligate social parasite entirely dependent on social bumble bee hosts (*Bombus* spp., primarily western bumble bees [*Bombus occidentalis*]) to collect pollen to rear young. Suckley's cuckoo bumble bee has not been observed in the United States since 2016, despite widespread historic occurrence records and increased sampling effort for bumble bees.	**Unlikely to occur.** Species has not been observed in the United States since 2016. No critical habitat has been proposed for this species.
Mammals				
Mexican wolf (*Canis lupus baileyi*)	EXPN, XN	SGCN Tier 1	See description below.	Though the wolf has not been recorded within 3 miles of the CEC Corridor, it **may occur**. See below for details.

Note: Table includes species listed in USFWS (2025a). Potential occurrence determinations and habitat descriptions were based on information from the AZGFD (2025b, 2025c), Corman and Wise-Gervais (2005), Finch et al. (2000), Halterman et al. (2015), Hughes (2020), Sogge and Marshall (2000), Sogge et al. (2010), and the USFWS (2002, 2021b, 2023a, 2024a, 2025a, 2025b, 2025d). Table excludes pinyon jay (*Gymnorhinus cyanocephalus*; under review for listing; the review process is expected to conclude with a 12-month finding in 2028) and black-footed ferret (*Mustela nigripes*; EXPN, XN) because they were not included in the USFWS (2025a) list; these species, along with BGEPA-protected species, are evaluated in Table C-2.

* Federal status definitions

E = Endangered, species is in danger of extinction throughout all or a significant portion of their range; EXPN, XN = Experimental population, nonessential; PE = Proposed for listing as endangered under ESA; PT = Proposed for listing as threatened under ESA; T = Threatened species likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

* State status definitions

SGCN = Species of Greatest Conservation Need; wildlife species identified by AZGFD as having conservation priority (AZGFD 2022). Tier 1 species are those that are federally listed under the ESA; were recently removed from the ESA and currently require post-delisting monitoring; are species for which AZGFD has entered into an agreement or has legal or other contractual obligations; or warrant the protection of a closed season.

Mexican Wolf

Wolves living in the Mexican Wolf Experimental Population Area, the geographic area within Arizona and New Mexico south of Interstate 40, are designated as experimental population, nonessential (i.e., treated as proposed for listing) (USFWS 2017, 2022). There are no statutory protections under the ESA for nonessential experimental populations, but the USFWS encourages opportunities to conserve the species, and the wolf is also categorized by the AZGFD (2022) as an SGCN Tier 1 species. It inhabits evergreen pine-oak woodlands, pinyon-juniper woodlands, and mixed-conifer montane forests inhabited by elk, deer (family Cervidae), and livestock above 4,000 feet (USFWS 2015). Pups are born from March through May in dens, which are under rock ledges off the slopes of canyon walls or hills (AZGFD 2025c).

The CEC Corridor is within Mexican Wolf Experimental Population Area management area Zone 2, where the species is allowed to naturally disperse and may be translocated (USFWS 2015). It is within the wolf's occupied range (USFWS 2025c) and contains suitable juniper woodlands inhabited by elk, deer, and livestock. The AZGFD (2025a) indicates that the wolf has not been documented within 3 miles of the CEC Corridor. The nearest recent wolf location is approximately 40 miles southwest of the site within the Apache-Sitgreaves National Forests (USFWS 2025c). In 2023, the nearest uncollared wolf and home range were approximately 40 miles southwest and 40 miles southeast of the CEC Corridor, respectively (USFWS 2023b). Individuals, particularly dispersing young, may disperse from core areas over hundreds of miles (Packard 2003, as cited in USFWS 2017).

Other Special-Status Species

Bald and Golden Eagle Protection Act Species

Both bald eagles (*Haliaeetus leucocephalus*) and golden eagles are known to occur in the CEC Corridor and its vicinity (Table C-2). As described above, two golden eagle nests have been identified within the CEC Corridor where it crosses Porter Canyon. The CEC Corridor is within the golden eagle's year-round range and provides appropriate foraging habitat (i.e., open grassland and steppe-like vegetation communities) in addition to nesting substrates. The CEC Corridor is within the nonbreeding and limited breeding ranges of the bald eagle. It does not contain characteristic nesting or roosting habitats for bald eagles but may provide secondary foraging resources (e.g., carrion). No bald eagle nests have been identified within the CEC Corridor. The nearest bald eagle nest is approximately 15 miles southeast of the CEC Corridor near Silver Creek (McCarty et al. 2024).

Birds of Conservation Concern and Species of Greatest Conservation Need

In total, 69 SGCN Tier 1 and 2 species were evaluated for the CEC Corridor. Of these species, 20 are known to occur based on the May 2025 reconnaissance visit and preconstruction surveys conducted for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2022b, 2023a, 2025b, 2025c). Forty-two SGCN Tier 1 and 2 species may occur in the CEC Corridor because the area falls within the species' predicted range and contains suitable habitat. The remaining seven SGCN Tier 1 and 2 species are unlikely to occur. In total, 11 BCC species were identified as potentially occurring in the CEC Corridor. Of these, two are known to occur and nine may occur in the CEC Corridor (see Table C-2).

State-Protected Native Plant Species

During the May 2025 reconnaissance visit, six Salvage Restricted species were observed within the CEC Corridor (see Table C-2). One additional Salvage Restricted species is known to occur within 3 miles of the CEC Corridor (AZGFD 2025a) and was observed during preconstruction surveys for the West Camp Wind Farm (SWCA 2023a) and, therefore, may occur within the CEC Corridor (see Table C-2).

No Harvest Restricted, Salvage Assessed, or Highly Safeguarded species were observed within the CEC Corridor during preconstruction site visits.

Potential Effects

Potential impacts to rare and endangered wildlife and areas of biological wealth can be grouped into two categories: direct impacts (i.e., collision, electrocution, and injury or death from ground- or vegetation-disturbing activities) and indirect impacts (i.e., habitat-based).

Bird electrocutions may occur due to a combination of biological, environmental, and electrical design factors, including habitat type, bird species, body size, behavior, distribution, abundance, and prey availability. Most electrocutions are of raptors, particularly golden eagles (Loss et al. 2014). Electrocutions occur primarily at distribution lines (small power lines with voltages < 60 kilovolts) when a bird completes a circuit by touching fleshy parts (e.g., wrist, feet, bill) to two energized parts or an energized and grounded part (Avian Power Line Interaction Committee [APLIC] 2006, 2025; Lehman 2001; Lehman et al. 2007). Electric power lines of 69 kilovolts and above pose a very low risk of electrocution because the lines are designed with sufficient spacing between conductors (electric wires or lines) such that phase to phase or phase to ground contact is not generally possible (APLIC 2006). APLIC provides electric utilities, wildlife agencies, and other stakeholders with suggested practices, guidance, and recommendations for reducing electrocutions by using retrofitting measures or implementation of bird-safe standards at new construction. By adopting these recommendations, the potential risk of electrocution posed to birds by operation of the Gen-Tie Project will be minimized (see Minimization Measures).

Most collisions with overhead lines involve large birds with less maneuverability (e.g., waterfowl and other large waterbirds); however, passerines and raptors may also be susceptible (APLIC 2012). Most overhead line collisions occur with the smallest diameter wire, which is typically the shield (or static) wire located above the phase conductors on transmission lines or the phase conductor and neutral wire on distribution lines (APLIC 2012). Power line spans in collision risk areas may be marked with diverters to reduce the risk (APLIC 2012, 2025). One collision risk area has been identified for the Gen-Tie Project: Porter Canyon. By implementing bird diverters at the crossing, collision risk will be reduced (see Minimization Measures).

Direct impacts to birds and other wildlife could occur during construction and operation activities through vehicle collision, trench or hole entrapment, or active nest/burrow destruction. These potential impacts will be minimized by enforcing slow driving speeds, limiting open trenches, installing escape ramps where relevant and feasible, and performing preconstruction surveys in compliance with the Migratory Bird Treaty Act (MBTA) (see Minimization Measures).

Indirect impacts may include displacement of individuals from suitable habitat and demographic effects due to habitat fragmentation, habitat modification (e.g., changes to prey resource availability), or disturbance from construction. Construction activities would result in increased noise, human disturbance, and vehicle traffic. These indirect impacts would be localized, short term, and minor for most of the species evaluated in this review because of infrequent presence, lack of unique species-specific habitats, and the relatively short construction time frame. Construction activities may discourage pronghorn movements, as well as foraging and fawning (mid-May–mid-June), and may disturb a golden eagle nesting territory (from January–July, if in use). Minimization measures for potential indirect impacts, including those to pronghorn and golden eagles, are described below.

Areas of Biological Wealth

Porter Canyon / Golden Eagle Nests

Two golden eagle nests within the same nesting territory have been identified within 1 mile of planned construction activities. These nests may be subject to disturbance (USFWS 2024d) if they are in use during construction. Birds and bats using the canyon may also collide with the lines. These potential impacts will be mitigated by implementing seasonal restrictions for any in-use golden eagle nest or obtaining a disturbance permit and by marking the line or lines with bird diverters at the canyon crossing (see Minimization Measures).

Wildlife Movement Areas

The County stakeholder–assessed diffuse movement areas intersecting the CEC Corridor have been identified as important for elk, mule deer, and pronghorn. In their letter dated June 25, 2025 (see Attachment C-3), the AZGFD identified concern for movement of multiple herds of elk and pronghorn in the region and SR-377 (which crosses the CEC Corridor) being a barrier to pronghorn movements, as well as potential impacts to pronghorn fawning (mid-May–mid-June). The AZGFD requested coordination prior to construction activities to exchange information on elk and pronghorn use and ways to enhance crossings. As described in a response letter from the Applicant to the AZGFD dated August 20, 2025 (see Attachment C-4), the Applicant will endeavor to coordinate with the AZGFD as the project progresses. That coordination will include development of a wildlife conservation strategy for the West Camp 2 Wind Farm and Gen-Tie Project, which will summarize measures the Applicant will take to avoid and minimize potential adverse impacts to non-bird and non-bat wildlife.

Construction activities (e.g., increased noise, human disturbance, and vehicle traffic) may discourage ungulate movements, foraging, and pronghorn fawning (mid-May–mid-June) activities within the CEC Corridor during construction. These impacts would be short term and localized. They will be minimized by phasing construction activities to the extent practicable, implementing best management practices to promote ungulate permeability, and coordinating with the AZGFD prior to construction to identify areas of use and movement (see Minimization Measures). The project will be permeable in the long term, given less than 1% of the CEC Corridor will be permanently disturbed, and structures will be generously spaced (typically 1,000 feet apart).

Endangered Species Act–Listed and Proposed Species

Mexican Wolf

Like ungulates, dispersing Mexican wolves may experience displacement or corridor impermeability during construction. Such effects are expected to be minor because the CEC Corridor is outside the species' core range, and construction activities would not preclude individuals from using adjacent habitats. Essential breeding activities would not be affected. The project will be permeable in the long term, given less than 1% of the CEC Corridor will be permanently disturbed, and structures will be generously spaced (typically 1,000 feet apart).

Monarch Butterfly

Milkweed and nectar plants potentially used by monarch butterflies may be temporarily or permanently removed during ground-disturbing activities at construction sites. Considering water sources and drainages (where migrating monarchs often occur) will be spanned, the amount of milkweed and nectar plants potentially lost would amount to an insignificant reduction in the abundance of such plants in the

general area. Construction and operation activities would not preclude monarchs from migrating through the CEC Corridor or foraging in adjacent areas.

If the species is listed in the future, the Applicant will evaluate relevance for additional effects analysis associated with new USFWS guidance, including applicable survey needs, minimization measures, or permitting needs at that time.

Other Special-Status Species

Excluding the Mexican wolf and monarch butterfly, which are discussed above, other special-status species that may or are known to occur in the CEC Corridor include 46 birds, seven plants, and 18 mammal species (see Table C-2).

Birds – Birds may be disturbed or displaced during construction activities; however, the activities would not preclude birds from using adjacent ubiquitous habitats. In their letter dated June 25, 2025, the AZGFD raises specific concern for breeding pinyon jays (*Gymnorhinus cyanocephalus*; under review for ESA-listing; SGCN Tier 2) and Bendire's thrasher (*Toxostoma bendirei*; SGCN Tier 2). These species and other ground-, shrub-, and tree-nesting birds could be disturbed during construction and their nests, eggs, or young destroyed. Preconstruction surveys in compliance with the MBTA will be conducted prior to ground-disturbing activities to avoid impacts to these and other nesting birds (see Minimization Measures). Potential bird collision and raptor electrocution will be mitigated by implementing APLIC guidance (see Minimization Measures). Indirect impacts will be further minimized by enforcing slow driving speeds (see Minimization Measures).

Mammals – Potential effects and minimization measures for pronghorn are described above and below (see Wildlife Movement Areas and Minimization Measures).

Ground-dwelling mammals (e.g., Stephen's woodrat [*Neotoma stephensi*; SGCN Tier 2], Gunnison prairie dog [*Cynomys gunnisoni;* SGCN Tier 1]) in areas of ground disturbance could be injured or killed during construction. To minimize this risk, the Applicant will avoid occupied mammalian nests or burrows identified by biologists conducting preconstruction surveys in compliance with the MBTA. Direct impacts will also be minimized by enforcing slow driving speeds, limiting open trenches, and installing escape ramps where relevant and feasible (see Minimization Measures).

Any bat movements will be from sunset to sunrise (outside of diurnal construction activities); therefore, potential impacts to bats during construction activities would be limited to bats roosting nearby. The nearest known colony is 5 miles northeast of the CEC Corridor. Bats may also be impacted by collision with the lines; however, the etiology of bat-wire collisions and efficacy of minimization measures is not well studied (Manville 2016).

Plants – Potential impacts to state-protected plant species include direct removal during vegetation-clearing activities or crushing by heavy equipment and vehicles. In accordance with the Arizona Native Plant Law requirements on state and private lands, the Arizona Department of Agriculture will be notified 60 days before plants are destroyed. The Arizona State Land Department (ASLD) requires that a Native Plant Inventory be conducted in areas of ground disturbance on state lands. This includes counting ASLD-valued species, most of which are also Arizona Native Plant Law–protected species. A Native Plant Inventory will be conducted on state lands in accordance with ASLD requirements (see Minimization Measures).

Minimization Measures

To minimize impacts to rare and endangered species and areas of biological wealth, the Applicant will incorporate the minimization measures discussed below.

BGEPA, 2024 Eagle Rule Revision Guidance

Because the USFWS (2024d, 2025e) recommends a 1-mile buffer for human activities, such as construction activities, that may disturb an active golden eagle nest, the Applicant will implement the following measure:

- To avoid disturbance take of nesting golden eagles, implement seasonal restrictions (golden eagle nesting season: January–July) within a 1-mile buffer of any in-use golden eagle nest during planned construction activities or pursue an eagle disturbance take specific permit.

Wildlife Agency Coordination

The Applicant will implement measures relevant to the CEC Corridor as described in the Applicant's August 20, 2025, response (see Attachment C-4) to the recommendations provided in the AZGFD's June 25, 2025, letter (see Attachment C-3) to minimize impacts to rare and endangered species and areas of biological wealth.

CEC Conditions for the West Camp Gen-Tie Project

The Applicant will implement the following measures relevant to rare and endangered species and areas of biological wealth that were conditions of approval for the West Camp Gen-Tie Project.

- Comply with AZGFD guidance for handling protected animal species should any be encountered during construction and operation of the project and consult with AZGFD and/or USFWS, as appropriate, on other issues concerning wildlife.
- Comply with the notice and salvage requirements of the Arizona Native Plant Law and, to the extent feasible, minimize the destruction of native plants during the construction and operation of the Gen-Tie Project.
- Train all field personnel involved in the project as to proper ingress, egress, and on-site working protocol for environmentally sensitive areas and activities. Contractors employing such field personnel shall maintain records documenting personnel training.
- Design the project to incorporate reasonable measures to minimize impacts to avian species. Such measures will be accomplished through compliance with APLIC's guidelines set forth in the current versions of *Suggested Practices for Avian Protection on Power Lines* and *Reducing Avian Collisions with Power Lines* manuals.

Additional Measures Identified by the Applicant

- Instruct project personnel, including contractors and site visitors, to drive at low speeds (less than 25 miles per hour) and be alert for wildlife, especially in low-visibility conditions. Instruct project personnel to avoid harassing or disturbing wildlife, particularly during reproductive (e.g., courtship and nesting) seasons.

Table C-2. Other Special-Status Species Reviewed for their Potential to Occur in the CEC Corridor

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Amphibians				
Northern leopard frog (*Lithobates [Rana] pipiens*)	–	SGCN Tier 1	Variety of habitats usually in permanent waters with rooted aquatic vegetation from sea level to 11,000 feet. In Arizona, limited to stock tanks, wildlife waters, and a lake below the Mogollon Rim on the Coconino National Forest. Historic range includes northern and central portions of the state.	**Unlikely to occur.** The CEC Corridor does contain limited habitat associations (ephemeral stock tanks) but is outside the species' current range. The nearest record is approximately 25 miles to the southwest near the Mogollon Rim.
Birds				
American kestrel (*Falco sparverius*)	–	SGCN Tier 2	Variety of open to semi-open habitats including grasslands, deserts, open parkland, and agricultural fields. Year-round range includes all of Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit and during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b).
American pipit (*Anthus rubescens*)	–	SGCN Tier 2	Breeds in alpine meadows. During migration and nonbreeding seasons, uses a variety of open habitats, including marshes, pastures, mudflats, river courses, and the edges of water bodies. Breeds in isolated locations in north-central and southeastern portions of the state. Non-breeding range includes most of Arizona. Migrants may occur throughout Arizona.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b). The CEC Corridor is within the species' non-breeding range and contains stock tanks that may support wintering or migrating individuals.
Bald eagle (*Haliaeetus leucocephalus*)	BGEPA	SGCN Tier 1	Found in areas with open water or, in arid regions, areas with available secondary prey (small birds, rodents, and carrion) and roost sites. Nests are placed in large coniferous trees or cliffs typically less than 1 mile from appropriate aquatic foraging conditions. Winter roosts are in large trees which tend to be near aquatic foraging sites. Non-breeding eagles range throughout Arizona except for the south-central portion of the state; breeding eagles occur in limited, fragmented locations of central, east-central, and west-central portions of the state.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b). Nesting and roosting habitats are not present within the CEC Corridor. The nearest known bald eagle nest is approximately 15 miles southeast of the CEC Corridor near Silver Creek (McCarty et al. 2024).
Bendire's thrasher (*Toxostoma bendirei*)	BCC	SGCN Tier 2	Desert habitats: open grassland, shrubland, or woodland with scattered shrubs or trees from sea level to approximately 6,000 feet. Breeding range includes northern two-thirds of Arizona; year-round range includes southern third of the state.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Black-chinned sparrow (*Spizella atrogularis*)	BCC	SGCN Tier 2	Arid brushlands on slopes of chaparral, sagebrush (*Artemesia* spp.), and pinyon-juniper from sea level to 9,000 feet. Breeding range includes northwestern, central, and east-central portions of Arizona. Non-breeding range includes southeastern and southwestern portions of the state.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Black-throated gray warbler (*Setophaga nigrescens*)	–	SGCN Tier 2	Open coniferous or mixed coniferous-deciduous woodland with brushy undergrowth, pinyon (*Pinus* spp.)-juniper (*Juniperus* spp.) and pine (*Pinus* spp.)-oak (*Quercus* spp.) associations, and oak scrub. Breeding range includes northern and eastern Arizona. Migrants may occur throughout Arizona.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains habitat associations that may support migrating individuals.
Brewer's blackbird (*Euphagus cyanocephalus*)	–	SGCN Tier 2	Range of biotic communities from sea level to 12,000 feet; prefers open human-modified habitats. Year-round range includes northeastern quadrant of the state; the remainder of the state is in the species' non-breeding range.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor is within the species' year-round range and contains appropriate habitat associations.
Brewer's sparrow (*Spizella breweri*)	–	SGCN Tier 2	Shrublands dominated by big sagebrush. May occur in desert scrub, large openings in pinyon-juniper, or large parklands with coniferous forests. Breeds in northern Arizona. Non-breeding range includes west-central and southern portions of the state. Migrants may occur throughout Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit and during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Broad-tailed hummingbird (*Selasphorus platycercus*)	BCC	SGCN Tier 2	Breeds in open woodland, especially pine, pine-oak, pinyon-juniper, and conifer-aspen (*Populus* spp.) associations, brushy hillsides, montane scrub, and thickets. Breeding range fragmented throughout Arizona except for the southwestern extreme of the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains habitat associations that may support migrating individuals.
Bullock's oriole (*Icterus bullockii*)	–	SGCN Tier 2	Most common in riparian cottonwoods (*Populus* spp.) mixed with willows (*Salix* spp.); also in sycamores (*Platanus* spp.), walnuts (*Juglans* spp.), ashes (*Fraxinus* spp.), pinyon-juniper, and evergreen oak woods. Breeds in eastern and northern portions of the state. Migrants may occur throughout Arizona.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains habitat associations that may support migrating individuals.
Burrowing owl, western burrowing owl (*Athene cunicularia hypugaea*)	–	SGCN Tier 2	Open, gently sloping, treeless areas within sparsely vegetated grassland, steppe, and desert biomes. Often associated with high densities of burrowing mammals such as prairie dogs (*Cynomys* spp.). Year-round range includes south half of Arizona; breeding range includes north half of the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys at the West Camp 2 Wind Farm (SWCA 2025b). The CEC Corridor is within the species' breeding range and contains habitat associations that may support breeding individuals.
Canyon towhee (*Melozone fusca*)	–	SGCN Tier 2	Desert grasslands with scattered, dense shrubs; riparian mesquite (*Prosopis* spp.) bosques; pinyon-juniper-oak; and pine-oak. Year-round range includes west-central, central, and eastern portions of Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm (SWCA 2023a).

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Cassin's finch (*Haemorhous cassinii*)	BCC	SGCN Tier 2	Open coniferous forests across broad elevational range, including ponderosa pine (*Pinus ponderosa*) and pinyon pine associations and occasionally open sagebrush with scattered juniper. The year-round range includes north-central and northeastern portions of the state. Non-breeding range includes central, east-central, and southeastern portions of Arizona.	**May occur.** The CEC Corridor is within the species' non-breeding range and contains habitat associations that may support wintering or migrating individuals. The nearest record is 4 miles north of the CEC Corridor in Holbrook.
Chestnut-collared longspur (*Calcarius ornatus*)	–	SGCN Tier 2	Frequents desert grasslands dominated by low grasses and forbs; flocks around isolated water sources. Tends to be more abundant in habitat where prairie dog colonies are present. Non-breeding range includes east half of Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Common nighthawk (*Chordeiles minor*)	–	SGCN Tier 2	Found in a variety of open habitats, including sagebrush and desert grassland, prairies and plains, open forests, croplands, rock outcrops, and gravel rooftops. Breeding range includes northeastern and southeastern Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Evening grosbeak (*Coccothraustes vespertinus*)	BCC	SGCN Tier 2	Mixed-conifer and spruce (*Picea* spp.)-fir (*Abies* spp.) forests; less common in pine-oak, pinyon-juniper, ponderosa pine, and aspen forests. In winter, flocks typically observed in pinyon-juniper and ponderosa pine ecotone in Arizona but occasionally uses juniper woodlands in portions of non-breeding range. Year-round (scarce) range includes northeastern Arizona; non-breeding (scarce) range includes central, west-central, northwestern, and southeastern portions of the state.	**May occur.** The CEC Corridor is within the species' year-round (scarce) range and contains juniper woodland habitat. The nearest record is 4 miles north of the CEC Corridor in Holbrook.
Ferruginous hawk (*Buteo regalis*)	–	SGCN Tier 2	Inhabits grasslands, shrub steppe, pinyon-juniper, sparse riparian forests, and canyon areas with cliffs and rock outcrops. Year-round range includes roughly the north half of Arizona; non-breeding range includes roughly the south half of the state.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Golden eagle (*Aquila chrysaetos*)	BGEPA	SGCN Tier 2	Mountainous canyon land, rimrock terrain of open desert, grassland, and forested areas. Nests are placed in rugged terrain (e.g., cliffs); less often in forested areas (e.g., tall trees), and on human-made structures (e.g., transmission towers). Year-round range includes all of Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). Two golden eagle nests are within the CEC Corridor in Porter Canyon (SWCA 2022b).
Gray flycatcher (*Empidonax wrightii*)	–	SGCN Tier 2	Open woodlands and shrub steppe including pinyon-juniper, sagebrush, and saltbush (*Atriplex* spp.) associations. Breeding range includes north-central and northeastern Arizona. Non-breeding range includes a small portion of southeastern Arizona. Migrants may occur throughout Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit and during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Gray vireo (*Vireo vicinior*)	–	SGCN Tier 2	Mixed pinyon-juniper and oak scrub associations and/or chaparral. Typically breeds in relatively arid, open vegetative communities containing juniper in Arizona, often on sloping terrain. Breeding range includes northern, central, and eastern Arizona; non-breeding range includes south-central portion of the state.	**May occur.** The CEC Corridor is within the species' breeding range and contains juniper woodlands. The nearest record is 4 miles north of the CEC Corridor in Holbrook.

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	Federal	State		
Horned lark (*Eremophila alpestris*)	–	SGCN Tier 2	Ubiquitous species of open grassland, shrub steppe, and agricultural fields. Prefers bare ground and low vegetation, avoids forests. Year-round range includes all of Arizona. Occurs in large groups in winter.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit and during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b).
Killdeer (*Charadrius vociferus*)	–	SGCN Tier 2	Open areas especially sandbars, mudflats, heavily grazed pastures, and human-modified habitats such as stock tanks, cultivated fields, airports, and parking lots. Year-round resident throughout Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Lark bunting (*Calamospiza melanocorys*)	–	SGCN Tier 2	Grasslands, shrub steppe of the high plains, and agricultural areas. Non-breeding and migration habitat includes grasslands and areas dominated by forbs with stands of shrubs. Non-breeding range includes central and southern portions of the state. Migrants known to occur in the eastern portion of the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b). The CEC Corridor is within the migration range of the species and contains habitat associations that may support migrating individuals.
Lesser yellowlegs (*Tringa flavipes*)	BCC	–	Migration and non-breeding habitats range from permanent water bodies to small ephemeral pools. Migration-only throughout Arizona.	**May occur.** The CEC Corridor is within the species' migration range and contains ephemeral waters that may support migrating individuals. Nearest records are 6 miles northeast of the CEC Corridor (Holbrook wastewater treatment plant).
Lincoln's sparrow (*Melospiza lincolnii*)	–	SGCN Tier 2	Uses shrub-dominated habitats, particularly riparian sites, but also brushy forest edges and weedy fields during migration. Isolated breeding locations are known in north-central and east-central portions of the state. Non-breeding range includes south half of Arizona and north-central and northwestern portions of the state. Migrants may occur throughout Arizona.	**May occur.** The CEC Corridor is within the species' migration range and contains habitat associations that may support migrating individuals. Nearest records are 4 miles northeast of the CEC Corridor.
Loggerhead shrike (*Lanius ludovicianus*)	–	SGCN Tier 2	Open country with short vegetation: pastures with fence rows, agricultural fields, riparian areas, and open woodlands. Year-round range includes all of Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b).
Long-eared owl (*Asio otus*)	BCC	SGCN Tier 2	Open forests and dense vegetation adjacent to grasslands or shrublands. Rare breeding and non-breeding range in Arizona. Migrants may occur throughout Arizona.	**May occur.** The CEC Corridor is within species' non-breeding (rare) and migration ranges and contains appropriate habitat conditions that may support migrating individuals. The nearest records are within 15 miles of the CEC Corridor.
Mountain plover (*Anarhynchus montanus*)	BCC	SGCN Tier 2	Short-grass prairie dominated by blue grama; also, fallow or recently tilled agricultural fields. Often associated with prairie dog colonies. In migration, can use alkaline or mud soils. Non-breeding range includes central and southern portions of Arizona.	**May occur.** The CEC Corridor contains appropriate habitat associations that may support migrating individuals. Nearest species record approximately 10 miles north of the CEC Corridor (Joseph City wastewater treatment plant).

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	Federal	State		
Northern harrier (*Circus hudsonius*)	–	SGCN Tier 2	Occurs in open wetlands and dry uplands, including prairies, grasslands, and shrub steppes. Breeding range includes northern Arizona; non-breeding range includes southern Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b).
Olive-sided flycatcher (*Contopus cooperi*)	BCC	SGCN Tier 2	Openings or edges of coniferous forests, particularly burned ponderosa forests in Arizona; also, coniferous-deciduous forests and forested edges of wetlands. Very infrequent in pinyon-juniper habitats. In migration use greater diversity of habitats including substantially more riparian and non-coniferous forests. Breeding range includes central band following the Mogollon Rim of Arizona. Migrants may occur throughout Arizona.	**May occur.** The CEC Corridor is within the species' migration range and contains habitat associations that may support migrating individuals. The nearest record is 4 miles north of the CEC Corridor in Holbrook.
Pectoral sandpiper (*Calidris melanotos*)	BCC	–	Outside of breeding season, uses lakes, bays, floodplains, and wet grasslands; rarely on mudflats. Migrates throughout Arizona.	**May occur.** Migration records in the region are from lakes, stock tanks, and playa wetlands. The CEC Corridor stock tanks may support the species during migration. Nearest records are approximately 6 miles northeast (Holbrook wastewater treatment plant) and 10 miles north (Joseph City wastewater treatment plan) of the CEC Corridor.
Peregrine falcon, American peregrine falcon (*Falco peregrinus anatum*)	–	SGCN Tier 1	Found in a variety of biomes; generally associated with cliffs and open landscapes. Year-round range includes all but the very northern portion of Arizona.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains habitat associations that may support breeding individuals.
Pinyon jay (*Gymnorhinus cyanocephalus*)	UR, BCC	SGCN Tier 2	Breeding flocks use pinyon-juniper woodland most extensively, but may also use sagebrush, scrub oak (*Quercus* spp.), and chaparral communities. Year-round home ranges can comprise several thousand acres and include various vegetation types, mainly pinyon pine woodland, sparse and dense pinyon-juniper woodlands, juniper woodland and savanna, sagebrush shrubland, and ponderosa pine woodland.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor is within the species' year-round range and contains appropriate breeding habitat conditions.
Prairie falcon (*Falco mexicanus*)	–	SGCN Tier 2	Open shrub steppe desert, grasslands, mixed shrub and grasslands, and alpine tundra containing cliffs or bluffs for nesting. Year-round resident throughout Arizona except for non-breeding range on southwestern border of the state.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Red-winged blackbird (*Agelaius phoeniceus*)	–	SGCN Tier 2	Marshes, sedge meadows, alfalfa fields, and old fields. Year-round range throughout Arizona except for non-breeding range on southwestern border of the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b). The CEC Corridor does not contain breeding habitat but does contain habitat associations that may support migrating individuals.

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Sage thrasher (*Oreoscoptes montanus*)	–	SGCN Tier 2	Shrub steppe dominated by big sagebrush. Migrates and winters in arid shrublands, grassland with scattered shrubs, and open pinyon-juniper. Breeds in the northeastern portion of the state. Non-breeding range includes central, west-central, and southern portions of the state. Migrants may occur throughout Arizona.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains habitat associations that may support migrating individuals.
Savannah sparrow (*Passerculus sandwichensis*)	–	SGCN Tier 2	Open, grassy meadows, cultivated fields, grazed pastures, and roadsides. The species' breeding range includes northeastern Arizona; the remainder of the state is within its non-breeding range.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b). The CEC Corridor contains habitat associations that may support migrating individuals.
Scaled quail (*Callipepla squamata*)	–	SGCN Tier 2	Mixed desert grasslands and shrublands, often interspersed with agricultural areas. Also found in disturbed areas having an abundance of annual forbs. Year-round range includes southeastern Arizona and a disjunct patch in east-central Arizona.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b). The CEC Corridor is within the species' year-round range and contains appropriate habitat associations.
Scott's oriole (*Icterus parisorum*)	–	SGCN Tier 2	Live-oak foothills, high elevation grasslands, and pinyon pine; closely associated with yucca (*Yucca* spp.) in Arizona. Breeding range includes northern, western, southern, and portions of eastern Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Swainson's hawk (*Buteo swainsoni*)	–	SGCN Tier 2	Grasslands, sparse shrublands, open woodlands, and agricultural landscapes. Migrates and breeds throughout Arizona.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Townsend's solitaire (*Myadestes townsendi*)	–	SGCN Tier 2	Coniferous forest with various dominant species of pines (e.g., ponderosa pines), hemlocks (*Tsuga* spp.), firs, and spruces from 1,000 to 12,000 feet. Less common in mixed coniferous-deciduous forests. Primary non-breeding habitats are juniper and pinyon-juniper woodlands. Year-round range includes northeastern Arizona. Non-breeding range includes northwestern, central, and southeastern portions of the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor is in the species' non-breeding range and contains appropriate habitat associations.
Vesper sparrow (*Pooecetes gramineus*)	–	SGCN Tier 2	Dry, open grasslands and shrublands including semi-desert grasslands, sagebrush steppe, old fields, and woodland edges. Breeding range includes north half of the state. Non-breeding range includes south half of the state.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Western screech-owl (*Megascops kennicottii*)	–	SGCN Tier 2	Diverse array of woodlands, especially riparian habitats, deciduous trees. In Arizona, found in mesquite washes, pinyon-juniper, ponderosa pine, and other woodland types. Year-round range includes all of Arizona.	**May occur.** The CEC Corridor is within the species' year-round range and contains appropriate habitat associations. The nearest record is 20 miles southeast of the CEC Corridor (confluence of Cottonwood Wash and Silver Creek).

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Western wood-pewee (*Contopus sordidulus*)	–	SGCN Tier 2	Woodlands and forests, especially forest edge and riparian zones from sea level to 9,800 feet. In Arizona, sycamores, cottonwoods, ponderosa pine forest, and pine-oak-juniper habitat. Uses a wider variety of habitat during migration. Migrates and breeds throughout the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm (SWCA 2023a). The CEC Corridor contains habitat associations that may support migrating individuals.
White-crowned sparrow, mountain west white-crowned sparrow (*Zonotrichia leucophrys oriantha*)	–	SGCN Tier 2	Non-breeding individuals flock in grain fields, near roadsides, and near shrubs, brush, and dense weeds. Less reliant on standing water in non-breeding season than during breeding season. In Arizona, breeds only in north-central and east-central portions of the state; non-breeding range throughout the state.	**Known to occur.** Species documented within the CEC Corridor during preconstruction avian use surveys for the West Camp 2 Wind Farm (SWCA 2025b).
Woodhouse's scrub-jay (*Aphelocoma woodhouseii*)	–	SGCN Tier 2	Woodland (especially pinyon, juniper, and oak associations) and scrub habitats, also riparian woodland, and gardens. Year-round range includes all but southwestern and west-central portions of the state.	**May occur.** Species documented outside of the CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains appropriate habitat associations.
Invertebrates				
California floater (*Anodonta californiensis*)	–	SGCN Tier 1	Shallow areas of unpolluted lakes, reservoirs, and perennial streams with relatively stable water levels of low velocity flow regime from 4,000 to 8,700 feet. In Arizona, found in east-central portion of the state.	**Unlikely to occur.** The CEC Corridor is within the species' range but does not contain appropriate habitat associations (i.e., perennial water sources).
Diablo mountainsnail (*Oreohelix houghi*)	–	SGCN Tier 2	Other than being terrestrial, habitat requirements apparently not described. Other *Oreohelix* species in the region are found on steep slopes with cool microclimate and moist soils. The Diablo mountainsnail is known from Canyon Diablo on the Navajo Nation and the Yaeger Canyon/Diablo Canyon area near Meteor Crater.	**Unlikely to occur.** The CEC Corridor is outside the known range of the species.
Flowering Plants				
Banana yucca (*Yucca baccata*)	–	SR	Slopes and flats in a variety of soil types from 3,000 to 8,000 feet. Associated with pinyon-juniper, semi-desert grasslands with black grama (*Bouteloua eriopoda*), and desertscrub with creosote bush (*Larrea tridentata*) and shadscale (*Atriplex confertifolia*). Widespread throughout the state.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Grama-grass cactus; paperspine fishhook cactus (*Sclerocactus papyracanthus*)	–	SR	Grasslands and pinyon-juniper woodland communities, especially in red, sandy soils with a calcareous or gypseous component, on open flats or gentle slopes from 5,000 to 7,500 feet. Associated with blue grama (*Bouteloua gracilis*) and dropseed grasses (*Sporobolus* spp.). In Arizona, occurs in east-central portion of the state.	**May occur.** Species documented within 3 miles of the CEC Corridor (AZGFD 2025a) and outside of the CEC Corridor during preconstruction surveys for the West Camp Wind Farm (SWCA 2023a). The CEC Corridor contains appropriate habitat associations.

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Narrowleaf yucca (*Yucca angustissima*)	–	SR	Desert flats and mesas, often in sandy habitats or sandstone outcrops from 3,000 to 7,500 feet. Associated with semi-desert, foothills, woodlands, canyons, and openings. Range includes northeastern Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Pale desert-thorn (*Lycium pallidum*)	–	SR	Variety of habitats on sandy or rocky soils between 2,500 and 7,500 feet. Widespread in Arizona above 2,500 feet.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Plains pricklypear (*Opuntia polyacantha*)	–	SR	Variety of habitats including semi-desert and foothill associations from 2,000 to 8,000 feet. Range includes northeastern, west-central, and southeastern portions of the state.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Scarlet hedgehog cactus (*Echinocereus coccineus*)	–	SR	Pinyon-juniper woodland and desert grassland communities on rocky slopes, ledges, and on canyon rims from 2,000 to 9,500 feet. Widespread across northern Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Whipple cholla (*Cylindropuntia whipplei*)	–	SR	Desert and plain grasslands, juniper woodlands, oak, pinyon, or pine forests, and sagebrush from 4,000 to 7,800 feet. Often in deep soils. Found in northern and southeastern Arizona.	**Known to occur.** Species documented within the CEC Corridor during May 2025 site visit.
Mammals				
Allen's big-eared bat, Allen's lappet-browed bat (*Idionycteris phyllotis*)	–	SGCN Tier 2	Associated with cliffs, boulder piles, and lava flows of ponderosa pine, pinyon-juniper, Mexican woodland, and riparian areas; also in non-forested, arid habitats. Elevations from 1,300 to 9,800 feet. Day roosts include trees, rock shelters, caves, and mines. Ranges throughout Arizona except the southwestern portion of the state. Seasonal movements and winter whereabouts are unknown.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2022b, 2025c).
Big free-tailed bat (*Nyctinomops macrotis*)	–	SGCN Tier 2	Rugged, rocky country. Roosts in rock crevices in cliffs, caves, and buildings, and occasional tree cavities. Associated with sage grassland, ponderosa pine-juniper, pine forest, desert scrub, and riparian habitats from 1,800 to 8,500 feet. Range includes all of Arizona; northern populations are migratory (winter in southern Arizona).	**May occur.** Big free-tailed bat or pocketed free-tailed bat, or both, were detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp 2 Wind Farm (the species were lumped in the analysis; SWCA 2025c).
Black-footed ferret (*Mustela nigripes*)‡	EXPN, XN	SGCN Tier 1	Grassland plains on mountain basins in association with prairie dogs. The Southwest Nonessential Experimental Population Area (SWEPA) for this species occurs over a large area of northern and central Arizona, primarily north of the Mogollon Rim. Black-footed ferrets have been reintroduced at two sites in Arizona: Aubrey Valley/Double O Ranch (1996) and Espee Ranch (2007). The Espee Ranch introduction site population is currently unknown but likely extirpated due to plague. The Aubrey Valley/Double O Ranch reintroduction site contains the only known ferrets currently occurring in the SWEPA.	**Unlikely to occur.** Although the CEC Corridor is within the SWEPA, the Aubrey Valley/Double O Ranch reintroduction site is more than 150 miles west-northwest of the CEC Corridor (USFWS 2023c).

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Brazilian free-tailed bat (*Tadarida brasiliensis*)	–	SGCN Tier 2	Wide variety of habitats from desert communities through pinyon-juniper woodlands and pine-oak forests at elevations up to approximately 9,000 feet. Widespread in large numbers. Maternity colonies and roosts found in limestone caves, abandoned mines, bridges, buildings, and hollow trees. Range throughout Arizona. In winter, only found in the south half of the state.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2022b, 2025c).
Cave myotis (*Myotis velifer*)	–	SGCN Tier 2	Evergreen or pine-oak forest and pine forest at mid and high elevations, also at lower elevations in riparian habitats near desert scrub. Roosts in caves, tunnels, mines, and buildings within a few miles of water. Range includes south half of Arizona and portions of central and northwestern Arizona. Some populations hibernate, others migrate.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp 2 Wind Farm (SWCA 2025c).
Fringed myotis (*Myotis thysanodes*)	–	SGCN Tier 2	Variety of habitats from desert scrub, grasslands, and woodlands; common in oak, pinyon, and juniper woodlands at middle elevations. Roosts in caves, mines, buildings, large snags, and exfoliating bark. Range includes all of Arizona. Migratory, but little known about movements or destinations. Winter range in Arizona shifts to western and southern portions of the state.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2022b, 2025c).
Gray-collared chipmunk (*Neotamias* [*Tamias*] *cinereicollis*)	–	SGCN Tier 2	Ponderosa pine and spruce-fir forests from 6,400 to 11,200 feet. Range includes central to east-central Arizona, roughly following the Mogollon Rim.	**Unlikely to occur.** The CEC Corridor is outside the species' known range and does not contain appropriate habitat associations. The nearest record is approximately 40 miles southwest of the CEC Corridor.
Greater bonneted bat, greater western mastiff bat (*Eumops perotis*)	–	SGCN Tier 2	Open areas of desert scrub near rocky canyons, and cliffs with abundant crevices at 200 to 8,500 feet. Roosts in horizontal crevices. Year-round resident of Arizona in all but east-central and northeastern portions of the state.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the adjacent wind farms (SWCA 2022b, 2025c).
Gunnison's prairie dog (*Cynomys gunnisoni*)	–	SGCN Tier 1	Gently sloping grasslands and semi-desert and montane shrublands between 4,600 and 12,000 feet. In Arizona, range includes central and northeastern portions of the state.	**May occur.** Species or their sign have been detected during construction monitoring at the adjacent West Camp Wind Farm and during preconstruction surveys at the adjacent West Camp 2 Wind Farm. The CEC Corridor contains appropriate habitat associations.
Hoary bat (*Lasiurus cinereus*)	–	SGCN Tier 2	Deciduous and coniferous forests and woodlands from 500 to 9,900 feet. Roost in foliage of trees. Range throughout Arizona. Winters in Southern California, southeastern U.S., Mexico, and Central America.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2022b, 2025c).
Least chipmunk (*Neotamias* [*Tamias*] *minimus*)	–	SGCN Tier 2	Prefers montane coniferous forest but also occurs in sagebrush desert, dry scrub, sand dunes, meadows, and aspen groves usually from 7,000 to 12,000 feet. Range includes small portions of east-central and north-central Arizona.	**Unlikely to occur.** The CEC Corridor is outside the known range of the species. The nearest record is approximately 55 miles southeast of the CEC Corridor.

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	–	SGCN Tier 2	Rugged canyons and rocky outcroppings below 7,500 feet. Associated with water sources in low deserts, desert scrub, and pine-oak forests, including large and small water tanks and ephemeral pools. Day roosts in rock crevices in cliffs and shallow caves and may roost in buildings or under roof tiles. In Arizona, found in roughly the south half of the state.	**May occur.** Big free-tailed bat or pocketed free-tailed bat, or both, were detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp 2 Wind Farm (the species were lumped in the analysis; SWCA 2025c).
Pronghorn, American pronghorn (*Antilocapra americana americana*)	–	SGCN Tier 2	Grasslands, sagebrush plains, deserts, and foothills. In Arizona, scattered populations throughout the state. Subspecies range includes narrow band from east-central through north-central, and northwestern portions of the state. Small, fragmented range in southeastern portion of the state.	**May occur.** Species documented outside CEC Corridor during preconstruction avian use surveys for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2023a, 2025b). The CEC Corridor contains the appropriate habitat associations.
Pale Townsend's big-eared bat, Townsend's big-eared bat (*Corynorhinus townsendii*)	–	SGCN Tier 1	Day roosts and maternity and hibernation colonies in caves, mines, or buildings. Night roosts may include caves, buildings, and tree cavities. Associated with mesic forested habitats but occupies a broad range of habitats, including arid scrub, pine forest, pinyon-juniper, and wooded canyons between 500 and 8,400 feet. Range throughout Arizona.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp 2 Wind Farm (SWCA 2025c).
Southwestern myotis (*Myotis auriculus*)	–	SGCN Tier 2	Variety of habitats. Primarily found in ponderosa pine forests and other semi-arid woodlands; also found in desert scrub and desert grasslands. Roosts in building, mines, and caves. Range includes central and southeastern portions of the state. Winters in Chiricahua and Huachuca Mountains.	**May occur.** Southwestern myotis or long-eared myotis, or both, were detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp Wind Farm and West Camp 2 Wind Farm (the species were lumped in the analyses; SWCA 2022b, 2025c).
Spotted bat (*Euderma maculatum*)	–	SGCN Tier 2	Roosts in crevices and cracks of cliff faces; sometimes roosts in caves or in buildings near cliffs. Variety of habitats, including low to high deserts, riparian areas, ponderosa, and spruce-fir forests below 10,600 feet. Range throughout Arizona.	**May occur.** The CEC Corridor is within the known range for the species and contains appropriate habitat associations. The nearest record is approximately 84 miles southeast of the CEC Corridor.
Springerville pocket mouse (*Perognathus flavus goodpasteri*)	–	SGCN Tier 2	Found year-round in plains-like short grasslands interspersed with volcanic rock or other sparsely vegetated grasslands at elevations from 5,200 to 7,000 feet above mean sea level. In Arizona, found in grasslands of the eastern end of the Mogollon Plateau near Springerville and Snowflake, south of Holbrook, and on the south side of the plateau above Nash Creek, south of Fort Apache, Arizona.	**May occur.** Species has been documented within 3 miles of the CEC Corridor (AZGFD 2025a). The CEC Corridor is within the known range for the species and contains appropriate habitat associations.
Stephen's woodrat (*Neotoma stephensi*)	–	SGCN Tier 2	Rocky areas in pinyon-juniper woodlands. In Arizona, found roughly in the north half of the state.	**May occur.** The CEC Corridor is within the known range for the species and contains appropriate habitat associations. The nearest record is approximately 9 miles east of the CEC Corridor.

Common Name (Scientific Name)	Status*		Habitat/Range Requirements	Potential for Occurrence in CEC Corridor†
	Federal	State		
Western red bat, desert red bat (*Lasiurus frantzii*)	–	SGCN Tier 2	Riparian and wooded areas. Roosts in trees, particularly cottonwoods. Associated with broadleaf deciduous riparian forests and woodlands from 1,900 to 7,200 feet. In Arizona, range includes narrow band from northwestern through southeastern portions of the state. Migration and hibernation behavior is complex.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp 2 Wind Farm (SWCA 2025c).
Western yellow bat (*Lasiurus xanthinus*)	–	SGCN Tier 2	Roosts in trees, often among dead fronds of fan palms, sometimes in hackberry (*Celtis* spp.), sycamore, and cottonwood. Often associated with riparian woodlands up to 6,000 feet; also, in oak or pinyon-juniper woodland, mesquite scrub, agricultural areas, and urban/suburban areas. In Arizona, the species' range includes southern and western portions of the state.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp 2 Wind Farm (SWCA 2025c).
Yuma myotis (*Myotis yumanensis*)	–	SGCN Tier 2	Roosts in caves, mines, cliff crevices, buildings, bridges, and similar structures. Nursery colonies in buildings, caves, mines, and bridges. Associated with wide variety of upland and lowland habitats (within wide range of elevations: sea level to 11,000 feet), including riparian, desert scrub, moist woodlands, and forests where they prefer cliffs and rocky walls near water. Ranges throughout Arizona except for the south-central portion of the state. Winters in Lower Colorado River area.	**May occur.** Species was detected via passive bat acoustic surveys as part of preconstruction investigations for the West Camp Wind Farm and West Camp 2 Wind Farm (SWCA 2022b, 2025c).

Notes: Includes BCCs for Bird Conservation Region 16 that are known to occur or that may occur (USFWS 2021a), Salvage Restricted plants that are known to occur (SWCA unpublished data from May 2025 site visit), Arizona SGCN Tier 1 and 2 species listed in the AZGFD (2025a) Online ERT report, and species documented within the adjacent wind farms in preconstruction surveys (SWCA 2022b, 2023a, 2025b, 2025c). Arizona SGCN Tier 3 species are only included if they are also a BCC species.

Range or habitat requirement information and potential occurrence justification from Ammerman et al. (2012), AZGFD (2023, 2025c), Billerman et al. (2025), Corman and Wise-Gervais (2005), Hoffmeister (1986), and Reid (2006).

* Federal Status Definitions

BCC = Bird of Conservation Concern; BGEPA = Bald and Golden Eagle Protection Act; EXPN, XN = Experimental population, nonessential; UR = Under Review for listing under the ESA.

* State Status Definitions

SGCN = Species of Greatest Conservation Need; wildlife species identified by AZGFD as having conservation priority (AZGFD 2022). Tier 1 and 2 species are those categorized by AZGFD (2022) as vulnerable. Tier 3 species have an "unknown" status and are priority species for additional research.

SR = Salvage Restricted; plant species identified by the Arizona Department of Agriculture as being at risk of theft and removal.

† Bat species detections are based on analysis of bat acoustic data presented in SWCA (2022b, 2025c). Accuracy rates of species identification from bat acoustic data may range between 75% and 90% at best (Fraser et al. 2020).

‡ Species that are listed or experimental, nonessential populations included in this table were included in AZGFD (2025a) but were not included in the official species list for the proposed Gen-Tie Project (USFWS 2025a) and therefore were not included in Table C-1.

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EXHIBIT C – ATTACHMENT C-1

U.S. Fish and Wildlife Service
Information for Planning and Consultation (IPaC) System
Official Species List for the Gen-Tie Project

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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: 06/26/2025 21:27:47 UTC
Project Code: 2025-0114889
Project Name: West Camp II GenTie

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

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".

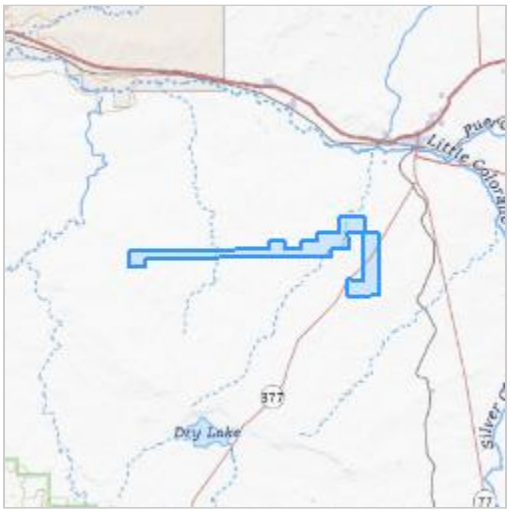
This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2025-0114889
Project Name: West Camp II GenTie
Project Type: Distribution Line - New Construction - Above Ground
Project Description: 345 kV generation-tie transmission line
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.8011392,-110.36941681775863,14z



Counties: Navajo 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.

MAMMALS

NAME	STATUS
Mexican Wolf *Canis lupus baileyi* Population: U.S.A. (portions of AZ and NM)see 17.84(k) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3916	Experimental Population, Non-Essential

BIRDS

NAME	STATUS
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
Little Colorado Spinedace *Lepidomeda vittata* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6640	Threatened

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
Suckley's Cuckoo Bumble Bee *Bombus suckleyi* Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed 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.

IPAC USER CONTACT INFORMATION

Agency:	Private Entity
Name:	Peter Motyka
Address:	1750 S Woodlands Village Blvd
Address Line 2:	Suite 200
City:	Flagstaff
State:	AZ
Zip:	86001
Email	peter.motyka@swca.com
Phone:	9735343006

EXHIBIT C – ATTACHMENT C-2

Arizona Game and Fish Department
Arizona Online Environmental Review Tool
Report for the Gen-Tie Project

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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:
West Camp II GenTie

Project Type:
Energy Production/Storage/Transfer, Energy Transfer, Power line/electric line (new)

Project ID:
HGIS-25462

User Project Number:
94825

Project Description:
West Camp II GenTie

Contact Person:
Peter Motyka

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.

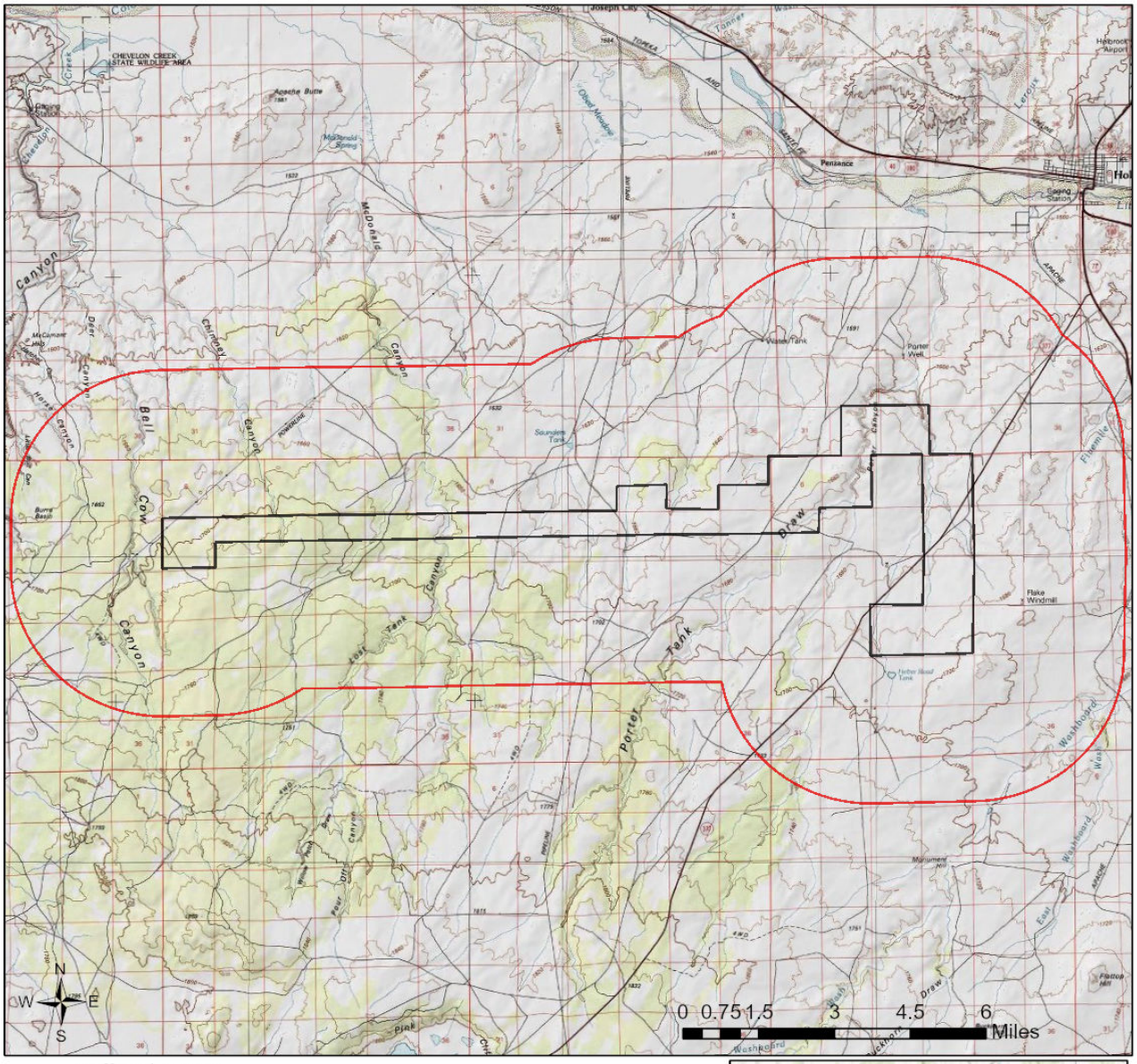
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

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.

West Camp II GenTie

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 10,966.74

Lat/Long (DD): 34.8015 / -110.2940

County(s): Navajo

AGFD Region(s): Pinetop

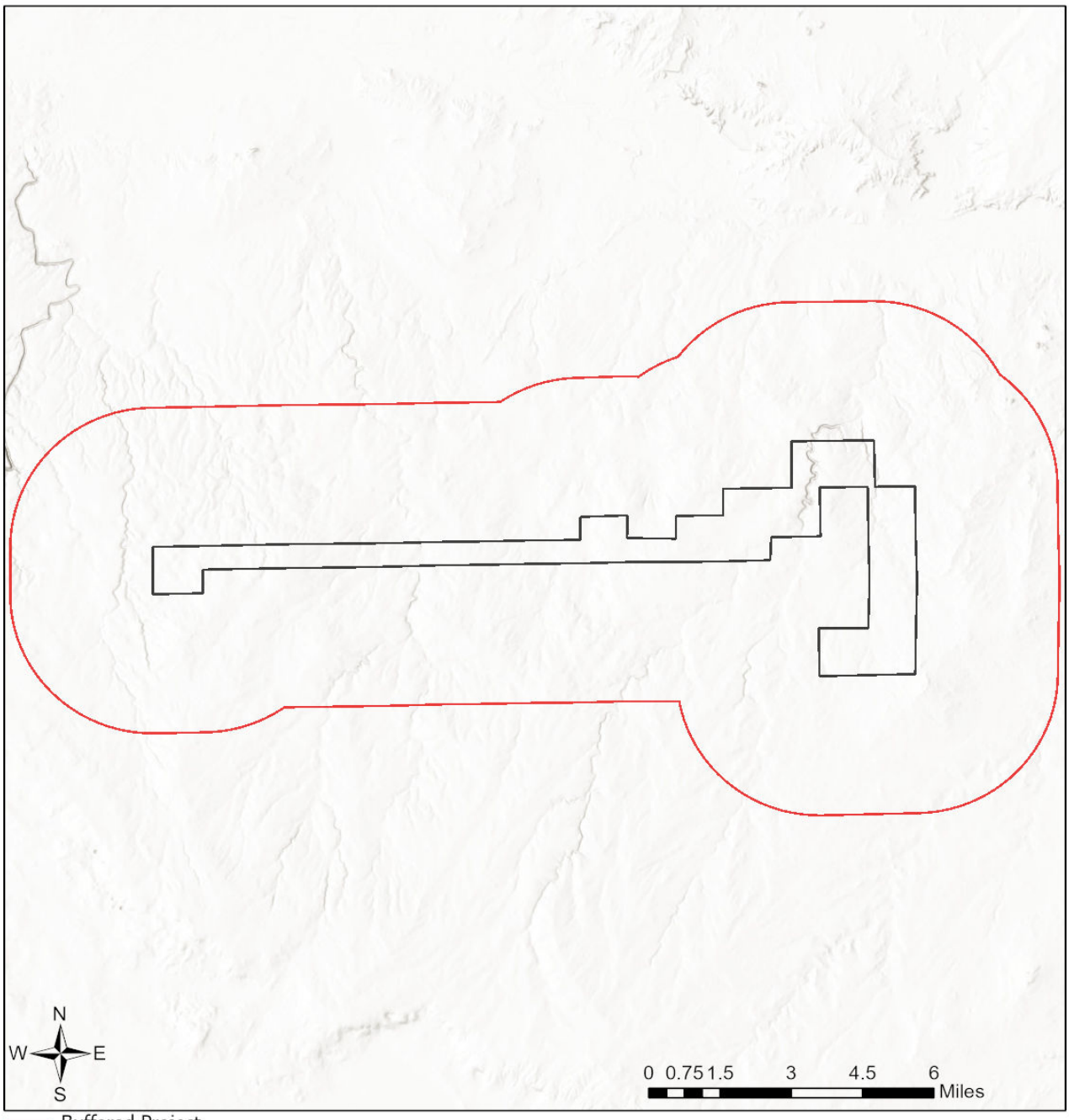
Township/Range(s): T16N, R18E; T16N, R19E; T16N, R20E +

USGS Quad(s): CHIMNEY CANYON; PORTER CANYON +

County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS

West Camp II GenTie

Web Map As Submitted By User



Buffered Project Boundary

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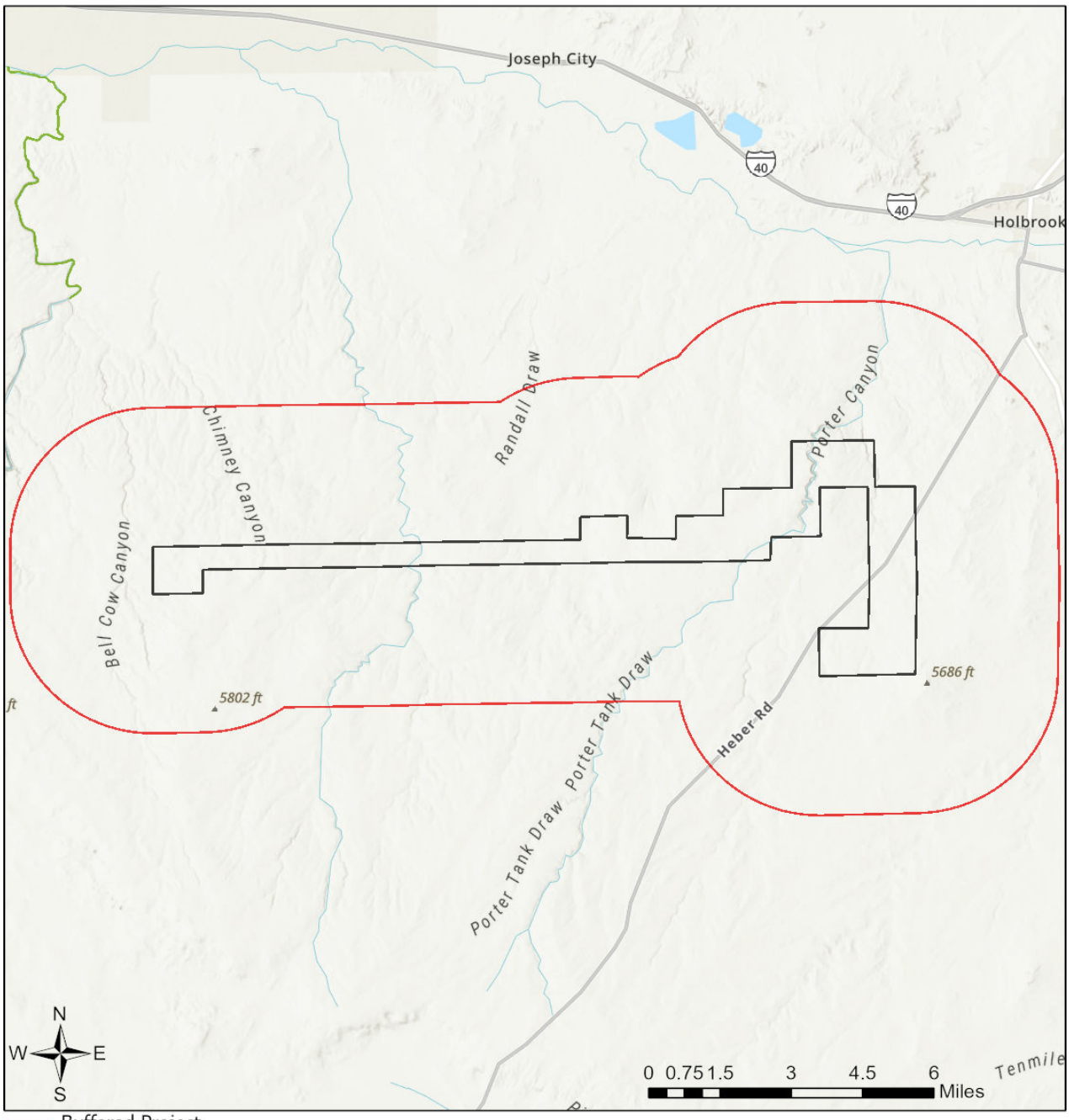
USGS Quad(s): CHIMNEY CANYON; PORTER CANYON +

Esri, NASA, NGA, USGS

West Camp II GenTie

Important Areas



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

Project Size (acres): 10,966.74

Lat/Long (DD): 34.8015 / -110.2940

County(s): Navajo

AGFD Region(s): Pinetop

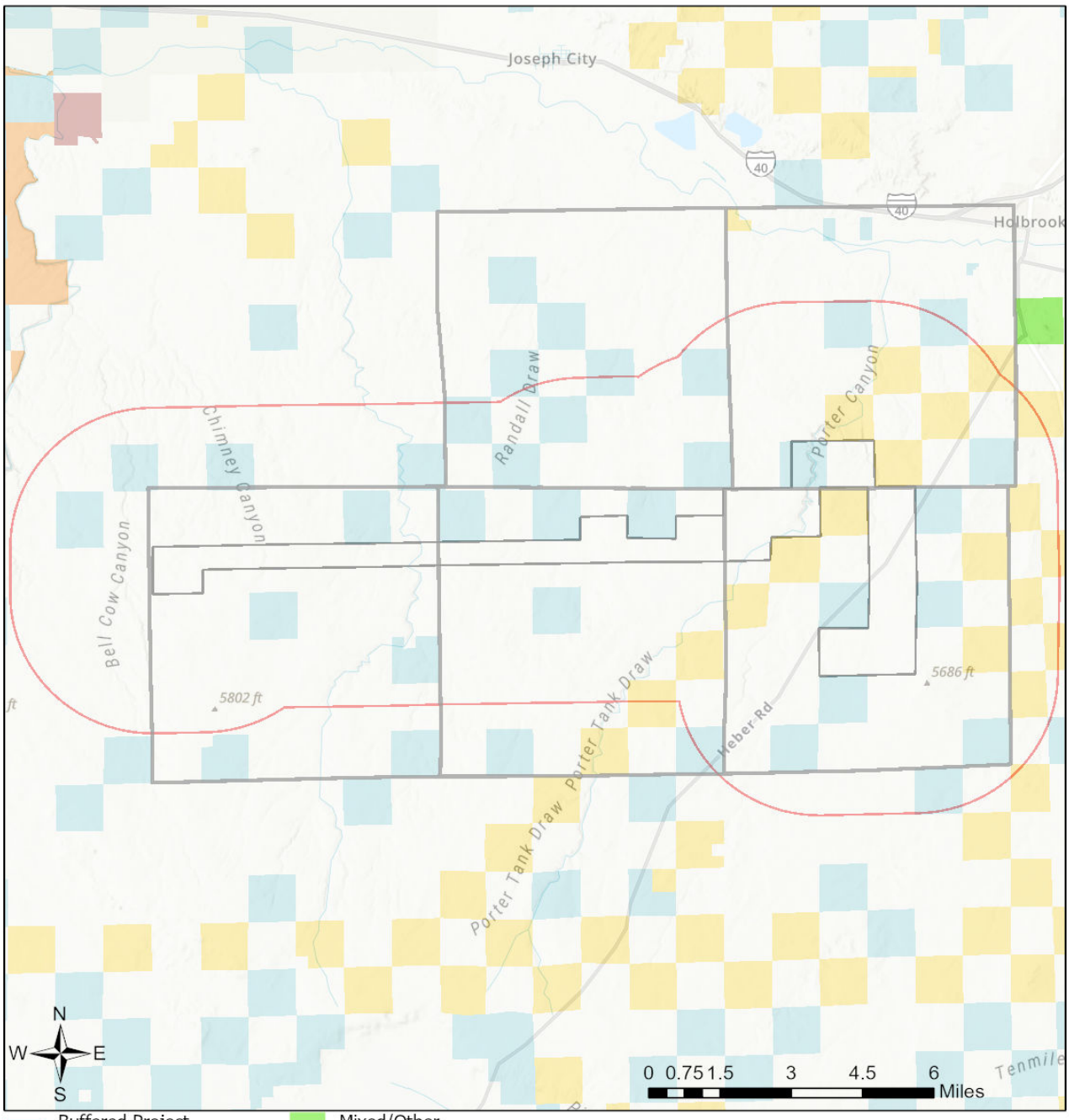
Township/Range(s): T16N, R18E; T16N, R19E; T16N, R20E +

USGS Quad(s): CHIMNEY CANYON; PORTER CANYON +

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

West Camp II GenTie

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): 10,966.74

Lat/Long (DD): 34.8015 / -110.2940

County(s): Navajo

AGFD Region(s): Pinetop

Township/Range(s): T16N, R18E; T16N, R19E; T16N, R20E +

USGS Quad(s): CHIMNEY CANYON; PORTER CANYON +

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

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Buteo regalis	Ferruginous Hawk	SC		S		2
Perognathus flavus goodpasteri	Springerville Pocket Mouse	SC	S			2
Sclerocactus papyracanthus	Grama-grass Cactus	SC			SR	

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/.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
N/A	Apache/Navajo Counties Wildlife Movement Area - Diffuse					

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/.

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
Anodonta californiensis	California Floater		S			1
Antilocapra americana americana	American Pronghorn					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Asio otus	Long-eared Owl					2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Baeolophus ridgwayi	Juniper Titmouse					3
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Chordeiles minor	Common Nighthawk					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Cynomys gunnisoni	Gunnison's Prairie Dog			S		1
Empidonax wrightii	Gray Flycatcher					2
Euderma maculatum	Spotted Bat		S	S		2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gymnorhinus cyanocephalus	Pinyon Jay	UR		S		2
Haemorhous cassinii	Cassin's Finch					2
Icterus bullockii	Bullock's Oriole					2
Lanius ludovicianus	Loggerhead Shrike					2
Lasiurus cinereus	Hoary Bat					2

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
Megascops kennicottii	Western Screech-owl					2
Melospiza lincolnii	Lincoln's Sparrow					2
Mustela nigripes	Black-footed Ferret	LE,XN				1
Myotis thysanodes	Fringed Myotis					2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Neotamias minimus	Least Chipmunk		S			2
Neotoma stephensi	Stephen's Woodrat					2
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Oreohelix houghi	Diablo Mountainsnail					2
Oreoscoptes montanus	Sage Thrasher					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus flavus goodpasteri	Springerville Pocket Mouse		S			2
Pooecetes gramineus	Vesper Sparrow					2
Rallus limicola	Virginia Rail					3
Rana pipiens	Northern Leopard Frog		S	S		1
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2
Vireo vicinior	Gray Vireo		S			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					
Cervus elaphus	Elk					
Odocoileus hemionus	Mule Deer					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Transfer, Power line/electric line (new)

Project Type Recommendations:
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.

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

Analysis indicates that your project is located in the vicinity of an identified ***wildlife habitat connectivity feature***. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/.
Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.

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EXHIBIT C – ATTACHMENT C-3

Arizona Game and Fish Department Letter, dated June 25, 2025, for the West Camp 2 Wind Farm and Gen-Tie Project

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June 25, 2025

Tom Koronkiewicz
Environmental Specialist/Senior Project Manager
SWCA Environmental Consultants
1750 S Woodlands Village Blvd, Suite 200
Flagstaff, AZ 86001

Electronically submitted to: tkoronkiewicz@swca.com

RE: West Camp 2 Wind Farm Project

Dear Mr. Koronkiewicz:

The Arizona Game and Fish Department (Department) appreciates the reintroduction and opportunity to review the West Camp 2 Wind Farm Project (Project), formerly known as Hot Air Wind, and its associated reports: Avian Use Survey Report, May 2021-April 2024; Bat Acoustic Surveys, September 2022; Eagle and Other Raptor Species Nest Surveys; and the Technical Memoranda for the 2022 and 2023 Nesting Seasons (Reports). The Department understands that AES Corporation (AES) proposes to construct a 500MW capacity wind farm, featuring up to 144 wind turbines, on approximately 58,200 acres of private and state land near Holbrook in Navajo County, Arizona. The facility will be located 6 miles southwest of Holbrook in the Little Colorado Basin on primarily undeveloped semi-desert grasslands, shrublands, pinyon-juniper savannas, and xeric riparian habitats. The 20-mile 34.5kV generation intertie (gen-tie) transmission line will likely connect the facility to an existing Arizona Public Service Company transmission system switching station, Cholla Substation, and line tap within the AES's adjacent West Camp Wind Farm project area to the west. Other planned components include access roads, an operation and maintenance building, and a potential battery energy storage system facility (BESS). The Department appreciates the coordination meeting held by AES and SWCA Environmental Consultants (SWCA) on May 29, 2025, and looks forward to continued coordination on this project.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

GOVERNOR: KATIE HOBBS COMMISSIONERS: CHAIRMAN CLAY HERNANDEZ, TUCSON | MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA
JAMES E. GOUGHNOUR, PAYSON | KURT KERR, PINETOP DIRECTOR: TOM P. FINLEY DEPUTY DIRECTOR: JOSHUA W. HURST

The Department recognizes the importance of planning efforts to develop renewable energy locations that contribute to regional and state economic growth needs and would like to work closely with AES and SWCA during the planning and development of this facility. The Department also recognizes that appropriate siting, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during the development and operation of the facilities. For your consideration, the Department provides the following comments based on the agency's authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation.

Arizona has recently seen an increase in the number of proposed and in-development renewable energy generation projects and associated infrastructure. A number of renewable energy projects have been built, are currently under construction, or proposed within the vicinity of this project, including, but not limited to, West Camp, Dry Lake I and II, and Chevelon Butte. Although each of these projects individually may have a minimal impact on the broader landscape, these projects cumulatively could impact bird and bat populations, contribute to habitat loss and degradation, and affect wildlife-related recreation. It is important to consider these cumulative effects and to evaluate this project in association with other projects in the area. Department staff are available to assist in identifying potential cumulative impacts to wildlife and associated voluntary conservation measures that can be implemented for the project.

The Department appreciates that all planned pre-construction biological surveys have been completed and encourages AES and SWCA to conduct the following surveys:

- The Department recommends conducting surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season. The vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA). If it is anticipated that the project will not be in compliance with the MBTA, the Department recommends contacting the U.S. Fish and Wildlife Service[1] (USFWS) for technical assistance.
- The pinyon jay, a petitioned species for listing under the Endangered Species Act (ESA), was documented in Table 10. Since pinyon jays were detected within the project area, the Department recommends surveys for breeding colony locations be conducted prior to construction, particularly if the construction period coincides with the nesting season, as outlined in the Arizona Pinyon Jay Project-Level Protocol[2]. If breeding colony surveys can not be conducted before construction, the Department suggests avoiding areas where pinyon jays were observed during the breeding bird surveys until the nesting season concludes. The nesting season generally runs from mid-February through the end of May, but may begin earlier in unusually warm winters or last longer in unusually cold springs.
- During the coordination meeting, SWCA mentioned that no large Gunnison's prairie dog colonies were observed onsite, and there were no plans to conduct perimeter mapping of colonies to inform turbine design. The Department recommends surveys to delineate all potential colonies where prairie dogs have been detected within the project area to further

[1] https://www.fws.gov/office/arizona-ecological-services/contact-us
[2] https://partnersinflight.org/wp-content/uploads/2019/10/Arizona-Project-level-protocol-for-Pinyon-Jay-colony-clearance-and-discovery-surveys.pdf

minimize the potential for golden eagle fatalities post-construction. The Department encourages considering the avoidance of both occupied and unoccupied colonies as prairie dog populations expand and contract over time, depending on habitat and disease constraints.

- Please ensure the project complies with Arizona Native Plant Law[3] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are protected under the Arizona Native Plant Law. There is one federally listed species within five miles of the project area, Peebles Navajo Cactus (*Pediocactus peeblesianus ssp. peeblesianus)*. Consultation with the USFWS is required if this species is detected and if its removal is deemed necessary for the project.

The Department provides the following recommendations for consideration during site selection and design phases of the project:

- The Department recommends installing turbines specifically designed to feather blades when wind speeds fall below manufacturer-specified levels for energy production and increasing cut-in speeds during key periods of wildlife activity, such as fall bat migration (August - October). Additionally, it is recommended that cut-in speeds are increased any time bat fatalities per MW exceed the median for bat fatality estimates in the southwest (3.0 bats per MW per year), as reported by the American Wind Wildlife Information Institute (AWWIC)[4].
- The Department recommends maintaining a 2-mile buffer around eagle nests, including those that were not active during the survey period, and maintaining a 0.5-mile buffer around ferruginous hawk and other raptor nests during turbine siting plan development.
- The Department also recommends that the turbine siting plan avoid water features (e.g., washes and earthen tanks) and associated densely vegetated areas that attract birds and bats to the greatest extent feasible.

Based on the information provided during the coordination meeting, the Department offers the following recommendations to reduce potential impacts to wildlife and habitat during the construction and operation of the facility:

- Bendire's thrasher, a Species of Greatest Conservation Need (SGCN), was documented in Table 10. Since Bendire's thrasher was detected within the project area, the Department recommends implementing timing restrictions and avoiding construction in areas where Bendire's thrashers were observed during the breeding bird surveys until the breeding season concludes. The breeding season generally runs from June to mid-August.
- The Department recommends that construction be implemented in phases to reduce the disturbance to pronghorn during construction and to reduce the amount of area being disturbed at any given time. Additionally, to help minimize potential impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June) and requests coordination prior to construction activities to exchange information on current pronghorn use in the project area.

[3] https://agriculture.az.gov/plantsproduce/native-plants
[4] https://rewi.org/wp-content/uploads/2020/11/2nd-Edition-AWWIC-Bat-Report-11-24-2020.pdf

- During the coordination meeting, SWCA mentioned that only a few big game species were documented within the project area and indicated that it is likely not a significant wildlife movement area. The Department would like to emphasize that this region is occupied by multiple herds of elk and pronghorn that are actively managed by the Department. The Department has many ongoing projects within the vicinity of the project and maintains several years of wildlife movement data within the region. Department staff are available to assist in identifying areas of wildlife use and movement within the project area and request that this information be taken into consideration during all phases of project planning and implementation.
- The Department has identified Highway 377 as a potential barrier for pronghorn movement within the vicinity of the proposed project; the Department has not documented crossings of collared pronghorn during an ongoing research project in Game Management Units 3A and 4B. Reduced connectivity can impact population sizes, reduce genetic diversity, increase the risk of local extirpation, and limit the opportunity for populations to re-establish. The Department understands that the proposed project will be constructed along both sides of Highway 377; if AES identifies the need to develop a plan to work within the right-of-way of HWY 377 to accommodate increased traffic, the Department would like to work with AES to identify opportunities to enhance those crossings to facilitate the safe movement of wildlife across the highway to adjacent habitat.
- The Department has concerns regarding the potential impact to airspace over the project area, specifically staff's ability to safely conduct routine aerial population surveys. The Department understands that during the construction phase of the project, AES may limit access due to liability and safety concerns; however, the Department would like to continue discussions with the landowner and AES to secure access during all phases of the project so that the Department can continue to collect wildlife distribution and abundance information via ground surveys in place of aerial surveys that will no longer be feasible within the project area.
- There are a number of stock tanks and drinkers within the project footprint and in the immediate vicinity that not only provide water for livestock grazing activities but also serve as water sources for wildlife. These are especially important in times of low precipitation and high temperatures when wildlife rely on established and maintained sources of water. The Department recommends incorporating setbacks from sites that congregate avian and other wildlife species, and is available to discuss and assist AES in identifying appropriate setbacks and developing strategies that retain water sources and access to water for wildlife on the landscape.
- If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 90 meters in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface; ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.

- The Department encourages AES to develop a decommissioning plan prior to project construction. The plan consists of steps by which the components of the wind project would be discarded and/or recycled. While the Department understands that decommissioning might not occur for at least 30 years, developing a plan in the earlier stages of the project allows for further collaboration between AES and relevant stakeholders. Since technologies are constantly advancing, the Department recommends that decommissioning plans be made flexible in order to adequately adapt to any changes or updates to current technologies.

Thank you for the opportunity to provide input on the West Camp 2 Wind Farm Project. The Department encourages AES to maintain communication with the Department and other appropriate entities, including adjacent entities such as the Bureau of Land Management. For further coordination, please contact Maeghan Miller at mmiller@azgfd.gov or 928-532-3681.

Sincerely,

Aaron Hartzell
Regional Supervisor - Region 1

cc: Callie Cavalcant - Habitat, Evaluation, and Lands Branch Chief

AZGFD #M25-05200819

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EXHIBIT C – ATTACHMENT C-4

Applicant Response to Arizona Game and Fish Department Letter, dated August 20, 2025, for the West Camp 2 Wind Farm and Gen-Tie Project

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August 20, 2025

Aaron Hartzell
Regional Supervisor – Region 1
Arizona Game and Fish Department

Electronically submitted to: ahartzell@azgfd.gov, ccavalcant@azgfd.gov, jpotter@azgfd.gov, mmiller@azgfd.gov, ejohnston@azgfd.gov, gritter@azgfd.gov, pep@azgfd.gov

Re: AES Responses to the Arizona Game and Fish Department's June 25, 2025, Letter (M25-05200819) Regarding the West Camp 2 Wind Farm

Dear Mr. Hartzell:

AES Clean Energy (AES) appreciates the Arizona Game and Fish Department's ongoing coordination regarding the West Camp 2 Wind Farm. In response to your June 25, 2025, letter (M25-05200819), we are attaching responses to the recommendations received. You will see that several of the recommendations will continue to be evaluated as the project progresses. In our responses, requests for additional information have been marked in bold.

We look forward to continued coordination with your team through all stages of development and operations.

Sincerely,

Corinne Lytle Bonine, PMP
Director, Environmental Permitting

AES Reponses to the Arizona Game and Fish Department's June 25, 2025, Letter (M25-05200819) Regarding the West Camp 2 Wind Farm

Arizona Game and Fish Department Comment (6/25/25)	AES Response (8/20/25)
The Department recommends conducting surveys for nesting birds prior to vegetation removal and/or construction activities that occur during the breeding season. The vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA). If it is anticipated that the project will not be in compliance with the MBTA, the Department recommends contacting the U.S. Fish and Wildlife Service (USFWS) for technical assistance.	AES will continue to implement best management practices and avoidance and minimization measures during all project construction in accordance with all applicable laws, ordinances, standards, and regulations. Necessary construction clearance surveys will be conducted to ensure compliance with the MBTA.
The pinyon jay, a petitioned species for listing under the Endangered Species Act (ESA), was documented in Table 10. Since pinyon jays were detected within the project area, the Department recommends surveys for breeding colony locations be conducted prior to construction, particularly if the construction period coincides with the nesting season, as outlined in the Arizona Pinyon Jay Project-Level Protocol. If breeding colony surveys cannot be conducted before construction, the Department suggests avoiding areas where pinyon jays were observed during the breeding bird surveys until the nesting season concludes. The nesting season generally runs from mid-February through the end of May but may begin earlier in unusually warm winters or last longer in unusually cold springs.	During formal avian counts, surveyors recorded two observations of pinyon jays, both during the breeding season. The species was also observed on three occasions incidentally, two of which were during the breeding season. Concentrations, nesting, or roosting sites were not observed, and the few observations were spatially biased (based on the locations of the avian counts). As discussed above, AES implements best management practices and avoidance and minimization measures during project construction in a manner that is consistent with all laws, ordinances, standards, and regulations, including implementing the necessary preconstruction surveys to comply with the MBTA. Avoidance associated with water features may also benefit the species (which can congregate near water in the winter). AES will continue to remain current on the species' listing and comply with any avoidance or survey guidelines.
During the coordination meeting, SWCA mentioned that no large Gunnison's prairie dog colonies were observed onsite, and there were no plans to conduct perimeter mapping of colonies to inform turbine design. The Department recommends surveys to delineate all potential colonies where prairie dogs have been detected within the project area to further minimize the potential for golden eagle fatalities post-construction. The Department encourages considering the avoidance of both occupied and unoccupied colonies as prairie dog populations expand and contract over time, depending on habitat and disease constraints.	Through our coordination on the adjacent West Camp Project, AES understands that prairie dog colonies in the area are small and uncommon, soil substrates may be unsuitable to support large colonies, and the species may be slowly bouncing back from plague. One prairie dog burrow (which was active) was observed incidentally during past avian surveys within the project area. AES will review whether performing a delineation of that colony and avoidance during construction will be feasible.
Please ensure the project complies with Arizona Native Plant Law regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are protected under the Arizona Native Plant Law. There is one federally listed species within five miles of the project area, Peebles Navajo Cactus (Pediocactus peeblesianus ssp. peeblesianus). Consultation with the USFWS is required if this species is detected and if its removal is deemed necessary for the project.	AES plans to comply with the Arizona Native Plant Law, including conducting a Native Plant Inventory for the Arizona State Land Department right-of-way for the project, and submitting a Notice of Intent to Clear Land form for land clearing activities on private land and state land within 60 days of vegetation clearing or grading. The known geographic and elevational ranges of the Peebles Navajo cactus are outside (north) of the project area; however, because a very small portion of the project area contains potentially suitable soils (alkaline, cobbly soils derived from the Shinarump Member of the Chinle Formation), the presence of the species cannot be ruled out. Biologists conducting the Native Plant Inventory will evaluate whether appropriate conditions for the species are present.

Arizona Game and Fish Department Comment (6/25/25)	AES Response (8/20/25)
The Department recommends installing turbines specifically designed to feather blades when wind speeds fall below manufacturer-specified levels for energy production and increasing cut-in speeds during key periods of wildlife activity, such as fall bat migration (August - October). Additionally, it is recommended that cut-in speeds are increased any time bat fatalities per MW exceed the median for bat fatality estimates in the southwest (3.0 bats per MW per year), as reported by the American Wind Wildlife Information Institute (AWWIC).	No threatened or endangered bat species occur in the project area, and due to a lack of information regarding bat population sizes (and, therefore, population-level consequences), AES believes requesting up-front reductions in power loss is premature. Further, the practice of feathering turbines and identifying manufacturer cut-in speeds is technology-dependent and can only be evaluated once a specific turbine technology is selected. AES will prepare a bird and bat conservation strategy to outline avoidance and minimization strategies and guide collection of project-specific fatality data during postconstruction monitoring. Based on the results of this monitoring, AES will incorporate appropriate adaptive management strategies, which may include increasing cut-in speeds.
The Department recommends maintaining a 2-mile buffer around eagle nests, including those that were not active during the survey period, and maintaining a 0.5-mile buffer around ferruginous hawk and other raptor nests during turbine siting plan development.	Consistent with the 2024 Eagle Rule, AES intends to apply a 2-mile turbine avoidance buffer around all currently known golden eagle nests, regardless of activity status, and a 1-mile construction avoidance buffer around in-use golden eagle nests for other project infrastructure. **Regarding the 0.5-mile buffer request for ferruginous hawk and other raptor nests, the AZGFD previously recommended a 0.25-mile buffer for the adjacent West Camp Project; thus, AES kindly requests additional information as to why this change was made.** Regardless, AES will evaluate the feasibility of a 0.5-mile buffer when designing the project. If avoidance is not feasible prior to and during construction, nests will be removed when inactive to reduce future collision risk and construction delays, in compliance with MBTA standards and ARS 17-236.
The Department also recommends that the turbine siting plan avoid water features (e.g., washes and earthen tanks) and associated densely vegetated areas that attract birds and bats to the greatest extent feasible.	Like West Camp, AES will evaluate the feasibility of various buffer distances from these water features during the design stage. The specific avoidance strategies will be presented in the project's wildlife conservation strategy and/or bird and bat conservation strategy.
There are a number of stock tanks and drinkers within the project footprint and in the immediate vicinity that not only provide water for livestock grazing activities but also serve as water sources for wildlife. These are especially important in times of low precipitation and high temperatures when wildlife rely on established and maintained sources of water. The Department recommends incorporating setbacks from sites that congregate avian and other wildlife species and is available to discuss and assist AES in identifying appropriate setbacks and developing strategies that retain water sources and access to water for wildlife on the landscape.	See above.
Bendire's thrasher, a Species of Greatest Conservation Need (SGCN), was documented in Table 10. Since Bendire's thrasher was detected within the project area, the Department recommends implementing timing restrictions and avoiding construction in areas where Bendire's thrashers were observed during the breeding bird surveys until the breeding season concludes. The breeding season generally runs from June to mid-August.	As discussed above, AES implements best management practices and avoidance and minimization measures during project construction in a manner that is consistent with all laws, ordinances, standards, and regulations, including conducting the construction clearance surveys necessary to comply with the MBTA.
The Department recommends that construction be implemented in phases to reduce the disturbance to pronghorn during construction and to reduce the amount of area being disturbed at any given time. Additionally, to help minimize potential impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June) and requests coordination prior to construction activities to exchange information on current pronghorn use in the project area.	Like West Camp, AES will develop a wildlife conservation strategy that includes a plan to reduce construction disturbances during pronghorn fawning. The plan will include phasing construction to reduce the area disturbed at any one time. Halting construction entirely from mid-May through June will not be economically or logistically feasible.

Arizona Game and Fish Department Comment (6/25/25)	AES Response (8/20/25)
During the coordination meeting, SWCA mentioned that only a few big game species were documented within the project area and indicated that it is likely not a significant wildlife movement area. The Department would like to emphasize that this region is occupied by multiple herds of elk and pronghorn that are actively managed by the Department. The Department has many ongoing projects within the vicinity of the project and maintains several years of wildlife movement data within the region. Department staff are available to assist in identifying areas of wildlife use and movement within the project area and request that this information be taken into consideration during all phases of project planning and implementation.	AES became aware of concerns regarding pronghorn and elk in the area through coordination with the AZGFD on the adjacent West Camp Project and during the development of a wildlife conservation strategy for the project. However, we have not yet seen AZGFD's comprehensive collar data for the West Camp 2 site. AES is familiar with AZGFD's request for West Camp to phase construction during the fawning season so that construction activities are concentrated in certain areas of the project area from mid-May to June. The plan for phasing will be addressed in the future wildlife conservation strategy. Wind projects are generally permeable to big game species, although displacement may occur during construction activities. Fencing will be kept to a minimum, limited to areas with human safety concerns (i.e., the project substation). **AES requests additional information regarding AZGFD's collar data, movement areas within and adjacent to the project area, and additional clarity on how this information may be used to inform potential minimization measures.**
The Department has identified Highway 377 as a potential barrier for pronghorn movement within the vicinity of the proposed project; the Department has not documented crossings of collared pronghorn during an ongoing research project in Game Management Units 3A and 4B. Reduced connectivity can impact population sizes, reduce genetic diversity, increase the risk of local extirpation, and limit the opportunity for populations to re-establish. The Department understands that the proposed project will be constructed along both sides of Highway 377; if AES identifies the need to develop a plan to work within the right-of-way of HWY 377 to accommodate increased traffic, the Department would like to work with AES to identify opportunities to enhance those crossings to facilitate the safe movement of wildlife across the highway to adjacent habitat.	We understand that Highway 377 has been identified as a county-assessed linkage, with the main threat being increased traffic. While traffic will increase during construction, it is expected to return to current levels afterward. If any roadwork or fence modifications on either side of the highway are required during construction, AES will consider implementing wildlife-friendly fence designs, if allowable by the relevant jurisdiction. **If the AZGFD is considering other options to enhance permeability, we would appreciate additional information.**
The Department has concerns regarding the potential impact to airspace over the project area, specifically staff's ability to safely conduct routine aerial population surveys. The Department understands that during the construction phase of the project, AES may limit access due to liability and safety concerns; however, the Department would like to continue discussions with the landowner and AES to secure access during all phases of the project so that the Department can continue to collect wildlife distribution and abundance information via ground surveys in place of aerial surveys that will no longer be feasible within the project area.	AES understands this concern and will work with the AZGFD and the landowners regarding any site access concerns after construction. Foot access will ultimately be at the discretion of the landowners.
If trenching or digging of large holes will occur, the Department recommends that trenching/digging and backfilling crews work together to minimize the number of open holes/trenches at any given time. Where trenches/holes cannot be backfilled immediately, the Department recommends escape ramps be constructed in each hole and at least every 90 meters in trenches. Escape ramps can be short lateral trenches or wooden planks sloping to the surface; ramp slopes should be less than 45 degrees (1:1). Trenches or holes that have been left open should be inspected for animals and animals removed prior to backfilling.	AES and our construction contractor will minimize open holes/trenches and implement escape ramps to the extent practicable. Specific additional measures, or updates, will be provided in the project's wildlife conservation strategy.

Arizona Game and Fish Department Comment (6/25/25)	AES Response (8/20/25)
The Department encourages AES to develop a decommissioning plan prior to project construction. The plan consists of steps by which the components of the wind project would be discarded and/or recycled. While the Department understands that decommissioning might not occur for at least 30 years, developing a plan in the earlier stages of the project allows for further collaboration between AES and relevant stakeholders. Since technologies are constantly advancing, the Department recommends that decommissioning plans be made flexible in order to adequately adapt to any changes or updates to current technologies.	AES will be developing a decommission plan, which is required by Navajo County and the landowners.

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EXHIBIT D

Biological Resources

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EXHIBIT D. BIOLOGICAL RESOURCES

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *List the fish, wildlife, plant life, and associated forms of life in the vicinity of the proposed site or route and describe the effects, if any, the proposed facilities will have thereon.*

Introduction

To identify the wildlife and plant species that may occur in the Certificate of Environmental Compatibility (CEC) Corridor, SWCA Environmental Consultants (SWCA) consulted publicly available data sources, including the following:

- Topographic maps and aerial photographs (Google Earth 2025)
- Southwest Regional Gap Analysis Project land cover dataset (U.S. Geological Survey 2016)
- Arizona Game and Fish Department (AZGFD) Online Environmental Review Tool (AZGFD 2025)
- *Biotic Communities: Southwestern United States and Northwestern Mexico* (Brown 1994)
- Regional checklists, reports, and publications (e.g., AZGFD 2023; eBird 2025; Hoffmeister 1986)

SWCA also completed wildlife site characterizations for the West Camp Wind Farm (SWCA 2022a) and the West Camp 2 Wind Farm (formerly Hot Air Wind) (SWCA 2021), which, together, encompass all but the northernmost parcels in the CEC Corridor (17N-20E Section 32 and 33 and 16N-20E Section 03). Survey reports are not included as attachments to this application as they total hundreds of pages, and reports conducted for the West Camp Wind Farm contain some results that are outdated and/or not applicable to the CEC Corridor.

To ground truth available desktop information and evaluate habitat associations and wildlife site characterization objectives, an SWCA biologist with expertise in the ecology of the regional wildlife community conducted a reconnaissance visit to the CEC Corridor on May 19 and 20, 2025. This visit was in addition to prior preconstruction wildlife surveys in the vicinity, which included the following:

- Two years of avian use surveys conducted monthly[1] at fixed points distributed throughout the West Camp Wind Farm site from October 2019 through March 2020 and May 2020 through September 2021, and an additional year of monthly surveys were conducted at fixed points in the northeastern portion of the site from September 2023 through September 2024 and in November 2024. The large bird survey areas for three of the points and the small bird survey area for two of the points intersect the CEC Corridor (SWCA 2023a, 2025a).
- Three years of avian use surveys conducted monthly at fixed points distributed throughout the West Camp 2 Wind Farm site from May 2021 through April 2024; the large bird survey areas for nine of the points and the small bird survey area for three of the points intersect the CEC Corridor (SWCA 2025b).
- Raptor nest surveys within 2 miles of the West Camp Wind Farm site conducted in February and March 2021 and March 2023 (SWCA 2023b).

[1] Avian use surveys were conducted every month in the 2-year span except in March 2020.

- Raptor nest surveys within 2 miles of the West Camp 2 Wind Farm site conducted in February and March 2022 and March 2023 (SWCA 2023c).
- Bat acoustic surveys at fixed stations at the West Camp Wind Farm site from March through November 2021 and March through December 2023 (SWCA 2025c).
- Bat acoustic surveys at fixed stations at the West Camp 2 Wind Farm site from March through November 2021 (SWCA 2022b).

Wildlife and plant species observed during these site visits are noted in the species lists provided in this exhibit.

Results

Vegetation Communities

The CEC Corridor is in the Plains and Great Basin Grassland biotic community (Brown 1994; Brown and Lowe 1982). According to the U.S. Geological Survey (2016), the CEC Corridor is composed primarily of four land/vegetation cover types: Inter-Mountain Basins Semi-Desert Grassland (57%), Colorado Plateau Mixed Sagebrush Shrubland (18%), Inter-Mountain Basins Greasewood Flat (9%), and Inter-Mountain Basins Semi-Desert Shrub Steppe (9%). As observed during the May 19 and 20, 2025, reconnaissance visit, vegetation in the CEC Corridor transitions from a mix of semi-desert grassland, shrub steppe, and juniper (*Juniperus* spp.) savanna in the eastern and central portions of the CEC Corridor to juniper savanna and patches of dense juniper in the western third of the CEC Corridor.

Plant Species

As observed during the May 19 and 20, 2025, reconnaissance visit, vegetation in the CEC Corridor transitions from a mix of semi-desert grassland, shrub steppe, and juniper savanna in the eastern and central portions of the CEC Corridor to juniper savanna and patches of dense juniper in the western third of the CEC Corridor. Characteristic grasses include alkali sacaton (*Sporobolus airoides*), blue grama (*Bouteloua gracilis*), mesa dropseed (*Sporobolus flexuosus*), and sand dropseed (*Sporobolus cryptandrus*). Scattered to locally dense shrubs and subshrubs include Bigelow sage (*Artemisia bigelovii*), broom snakeweed (*Gutierrezia sarothrae*), fourwing saltbush (*Atriplex canescens*), jointfir (*Ephedra* spp.), rubber rabbitbrush (*Ericameria nauseosa*), sand sagebrush (*Artemisia filifolia*), Stansbury cliffrose (*Purshia stansburiana*), and winterfat (*Krascheninnikovia lanata*). The tree layer, where present, is oneseed juniper (*Juniperus monosperma*). One Arizona Department of Agriculture–recognized Class B noxious weed (camelthorn [*Alhagi maurorum*]) and two Class C noxious weeds (red brome [*Bromus rubens*] and tamarisk [*Tamarisk* sp.]) were documented in the CEC Corridor during the May 19 and 20, 2025, reconnaissance visit.

Wildlife Species

Wildlife species that may occur or are known to occur in the CEC Corridor are listed in Table D-1 (amphibians and reptiles), Table D-2 (birds), and Table D-3 (mammals), though no mammal species have been documented in the CEC Corridor (see Table C-2 of Exhibit C). The CEC Corridor does not span any rivers or open water; therefore, no fish species will be affected by construction, and they are not discussed in this exhibit.

Bird species observed in the CEC Corridor during SWCA's site visits are marked with an asterisk in Table D-2; no amphibian, reptile, or mammal species were observed. Species were considered for their potential to occur as follows:

- Reptiles and amphibians evaluated in this exhibit are those species with the potential to occur based on range and vegetation community as described in the online field guide to the amphibians and reptiles of Arizona (AZGFD 2023).
- Bird species evaluated in this exhibit are those documented within and adjacent to the CEC Corridor during preconstruction avian surveys for the West Camp Wind Farm (SWCA 2023a) and West Camp 2 Wind Farm (SWCA 2025b); those documented during the May 19 and 20, 2025, reconnaissance visit; and typical bird species of the Plains and Great Basin Grassland biotic community whose ranges overlap the CEC Corridor (Billerman et al. 2025; Brown 1994; eBird 2025).
- Mammal species evaluated in this exhibit consist of those typical of the Plains and Great Basin Grassland biotic community, as described in *Biotic Communities: Southwestern United States and Northwestern Mexico* (Brown 1994), and whose ranges overlap the CEC Corridor, as described in *Mammals of Arizona* (Hoffmeister 1986). Bat species considered include those detected via bat acoustic surveys for the West Camp Wind Farm (SWCA 2025c) and the West Camp 2 Wind Farm (SWCA 2022b).

Some of the species in the following tables are evaluated in Exhibit C and have therefore been omitted from discussion in this exhibit.

Table D-1. Representative Amphibian and Reptile Species that May Occur or are Known to Occur in the CEC Corridor

Common Name (*Scientific Name*)	Common Name (*Scientific Name*)
Amphibians	
Barred tiger salamander (*Ambystoma mavortium*)	Plains spadefoot (*Spea bombifrons*)
Canyon treefrog (*Dryophytes arenicolor*)	Red-spotted toad (*Anaxyrus punctatus*)
Great plains toad (*Anaxyrus cognatus*)	Woodhouse's toad (*Anaxyrus woodhousii*)
Mexican spadefoot (*Spea multiplicata*)	
Lizards	
Common lesser earless lizard (*Holbrookia maculata*)	Many-lined skink (*Plestiodon multivirgatus*)
Common sagebrush lizard (*Sceloporus graciosus*)	Ornate tree lizard (*Urosaurus ornatus*)
Common side-blotched lizard (*Uta stansburiana*)	Plateau fence lizard (*Sceloporus tristichus*)
Desert spiny lizard (*Sceloporus magister*)	Plateau striped whiptail (*Aspidoscelis velox*)
Eastern collared lizard (*Crotaphytus collaris*)	Pai-striped whiptail (*Aspidoscelis pai*)
Greater short-horned lizard (*Phrynosoma hernandesi*)	Southwestern fence lizard (*Sceloporus cowlesi*)
Long-nosed leopard lizard (*Gambelia wislizenii*)	
Snakes	
Chihuahuan nightsnake (*Hypsiglena jani*)	Prairie rattlesnake (*Crotalus viridis*)
Eastern kingsnake (*Lampropeltis getula*)	Ring-necked snake (*Diadophis punctatus*)
Glossy snake (*Arizona elegans*)	Striped whipsnake (*Coluber taeniatus*)
Gophersnake (*Pituophis catenifer*)	Terrestrial gartersnake (*Thamnophis elegans*)

Common Name (*Scientific Name*)	Common Name (*Scientific Name*)
Milk snake (*Lampropeltis triangulum*)	

Table D-2. Representative Bird Species that May Occur or are Known to Occur in the CEC Corridor

Common Name (*Scientific Name*)	Common Name (*Scientific Name*)
American kestrel (*Falco sparverius*)*	House finch (*Haemorhous mexicanus*)*
American robin (*Turdus migratorius*)*	Juniper titmouse (*Baeolophus ridgwayi*)*
Ash-throated flycatcher (*Myiarchus cinerascens*)*	Killdeer (*Charadrius vociferus*)*
Bald eagle (*Haliaeetus leucocephalus*)*	Lark sparrow (*Chondestes grammacus*)*
Barn swallow (*Hirundo rustica*)	Loggerhead shrike (*Lanius ludovicianus*)*
Bendire's thrasher (*Toxostoma bendirei*)*	Merlin (*Falco columbarius*)*
Bewick's wren (*Thryomanes bewickii*)*	Mountain bluebird (*Sialia currucoides*)*
Black-chinned hummingbird (*Archilochus alexandri*)*	Mourning dove (*Zenaida macroura*)*
Black-chinned sparrow (*Spizella atrogularis*)*	Northern flicker (*Colaptes auratus*)*
Black-throated sparrow (*Amphispiza bilineata*)*	Northern harrier (*Circus hudsonius*)*
Brewer's sparrow (*Spizella breweri*)*	Northern mockingbird (*Mimus polyglottos*)*
Blue-gray gnatcatcher (*Polioptila caerulea*)*	Northern rough-winged swallow (*Stelgidopteryx serripennis*)*
Brown-headed cowbird (*Molothrus ater*)	Peregrine falcon, American peregrine falcon (*Falco peregrinus anatum*)
Burrowing owl, western burrowing owl (*Athene cunicularia hypugaea*)	Pinyon jay (*Gymnorhinus cyanocephalus*)
Bushtit (*Psaltriparus minimus*)*	Prairie falcon (*Falco mexicanus*)*
Canyon towhee (*Melozone fusca*)*	Red-tailed hawk (*Buteo jamaicensis*)*
Canyon wren (*Catherpes mexicanus*)*	Rock wren (*Salpinctes obsoletus*)*
Cassin's kingbird (*Tyrannus vociferans*)*	Sage thrasher (*Oreoscoptes montanus*)
Chestnut-collared longspur (*Calcarius ornatus*)*	Sagebrush sparrow (*Artemisiospiza nevadensis*)*
Chihuahuan meadowlark (*Sturnella lilianae*)	Say's phoebe (*Sayornis saya*)*
Chipping sparrow (*Spizella passerina*)*	Scott's oriole (*Icterus parisorum*)*
Cliff swallow (*Petrochelidon pyrrhonota*)*	Sharp-shinned hawk (*Accipiter striatus*)*
Common nighthawk (*Chordeiles minor*)*	Swainson's hawk (*Buteo swainsoni*)*
Common raven (*Corvus corax*)*	Turkey vulture (*Cathartes aura*)*
Cooper's hawk (*Accipiter cooperii*)*	Vesper sparrow (*Pooecetes gramineus*)*
Crissal thrasher (*Toxostoma crissale*)*	Violet-green swallow (*Tachycineta thalassina*)
Dark-eyed junco (*Junco hyemalis*)*	Western kingbird (*Tyrannus verticalis*)*
European starling (*Sturnus vulgaris*)	Western meadowlark (*Sturnella neglecta*)*
Ferruginous hawk (*Buteo regalis*)*	White-crowned sparrow, mountain west white-crowned sparrow (*Zonotrichia leucophrys oriantha*)*
Golden eagle (*Aquila chrysaetos*)*	White-throated swift (*Aeronautes saxatalis*)*
Gray flycatcher (*Empidonax wrightii*)*	Woodhouse's scrub-jay (*Aphelocoma woodhouseii*)
Great horned owl (*Bubo virginianus*)	Yellow-rumped warbler (*Setophaga coronata*)
Greater roadrunner (*Geococcyx californianus*)	Zone-tailed hawk (*Buteo albonotatus*)*

Common Name (*Scientific Name*)	Common Name (*Scientific Name*)
Horned lark (*Eremophila alpestris*)*	

Note: Table excludes several rare/uncommon species unless observed during preconstruction surveys.

* Species observed by SWCA in the CEC Corridor during site visits.

Table D-3. Representative Mammal Species that May Occur in the CEC Corridor

Common Name (*Scientific Name*)	Common Name (*Scientific Name*)
Allen's big-eared bat, Allen's lappet-browed bat (*Idionycteris phyllotis*)	Merriam's shrew (*Sorex merriami*)
American badger (*Taxidea taxus*)	Mexican woodrat (*Neotoma mexicana*)
Arizona myotis (*Myotis occultus*)	Mountain lion (*Puma concolor*)
Big brown bat (*Eptesicus fuscus*)	Mule deer (*Odocoileus hemionus*)
Big free-tailed bat (*Nyctinomops macrotis*)	North American deermouse (*Peromyscus maniculatus*)
Black-tailed jackrabbit (*Lepus californicus*)	Northern grasshopper mouse (*Onychomys leucogaster*)
Bobcat (*Lynx rufus*)	Ord's kangaroo rat (*Dipodomys ordii*)
Botta's pocket gopher (*Thomomys bottae*)	Pallid bat (*Antrozous pallidus*)
Brazilian free-tailed bat (*Tadarida brasiliensis*)	Piñon mouse (*Peromyscus truei*)
Brush mouse (*Peromyscus boylii*)	Pronghorn, American pronghorn (*Antilocapra americana americana*)
Bushy-tailed woodrat (*Neotoma cinerea*)	Raccoon (*Procyon lotor*)
California myotis (*Myotis californicus*)	Rock squirrel (*Otospermophilus variegatus*)
Canyon bat (*Parastrellus hesperus*)	Silver-haired bat (*Lasionycteris noctivagans*)
Cave myotis (*Myotis velifer*)	Spotted bat (*Euderma maculatum*)
Cliff chipmunk (*Neotamias dorsalis*)	Spotted ground squirrel (*Xerospermophilus spilosoma*)
Coyote (*Canis latrans*)	Springerville pocket mouse (*Perognathus flavus goodpasteri*)
Crawford's gray shrew (*Notiosorex crawfordi*)	Stephens's woodrat (*Neotoma stephensi*)
Desert cottontail (*Sylvilagus audubonii*)	Striped skunk (*Mephitis mephitis*)
Elk (*Cervus elaphus*)	Townsend's big-eared bat (*Corynorhinus townsendii*)
Fringed myotis (*Myotis thysanodes*)	Western harvest mouse (*Reithrodontomys megalotis*)
Golden-mantled ground squirrel (*Callospermophilus lateralis*)	Western red bat, desert red bat (*Lasiurus frantzii*)
Gray fox (*Urocyon cinereoargenteus*)	Western small-footed myotis (*Myotis ciliolabrum*)
Greater bonneted bat, greater western mastiff bat (*Eumops perotis*)	Western yellow bat (*Lasiurus xanthinus*)
Gunnison's prairie dog (*Cynomys gunnisoni*)	Western spotted skunk (*Spilogale gracilis*)
Hoary bat (*Lasiurus cinereus*)	White-footed mouse (*Peromyscus leucopus*)
Kit fox (*Vulpes macrotis*)	White-tailed antelope squirrel (*Ammospermophilus leucurus*)
Long-eared myotis (*Myotis evotis*)	White-throated woodrat (*Neotoma albigula*)
Long-legged myotis (*Myotis volans*)	Yuma myotis (*Myotis yumanensis*)

Summary of Potential Effects

Plant Species

Less than 1% of the CEC Corridor will be permanently disturbed. Native vegetation characteristic of the semi-desert grassland and shrub steppe communities is extensive in northern Arizona, and the acreage of disturbance as a percentage of the existing habitat is very small. The removal of vegetation will not result in landscape-level impacts to any single plant species or vegetation communities. Construction of the Gen-Tie Project may result in an increase of fugitive dust, which may coat plants near the area of active ground disturbance and decrease photosynthetic activity. However, the amount of dust that must accumulate to result in a measurable effect on plant productivity is far greater than what is typically observed under normal conditions (Thompson et al. 1984).

Noxious weeds have been documented within the CEC Corridor. Ground disturbance from construction and increased vehicle and foot traffic may enable the spread of existing weeds to new locations or introduce new species. Standard best management practices will be employed during construction to minimize the introduction and spread of noxious weeds.

Wildlife Species

Amphibians and Reptiles

Construction activities could cause injury or death to amphibians and reptiles that may not be able to flee from heavy equipment or vehicular traffic, and ground-disturbing activities could crush or bury individuals. Fossorial species and individuals that are inactive from heat or cold would have a higher chance of injury or death than would individuals that are more mobile. Construction activities could cause individuals to move away from increased noise, vibration, or human presence, and individuals may be displaced into adjacent areas as the result of vegetation removal or ground disturbance. Individuals are expected to flee or hide, depending on the life history of the species, which could increase depredation, decrease foraging success, reduce reproductive success, or result in loss of fitness for that individual. Species near the Gen-Tie Project could experience increased predation because of the increase in available perches for avian predators.

Mammals

Ground-dwelling mammals (e.g., ground squirrels [family Sciuridae], kit fox [*Vulpes macrotis*]) in areas of ground disturbance could be injured or killed during construction. To minimize this risk, the Applicant will avoid occupied mammalian nests or burrows identified by biologists conducting preconstruction surveys in compliance with the Migratory Bird Treaty Act (MBTA). Direct impacts will also be minimized by enforcing slow driving speeds, limiting open trenches, and installing escape ramps where relevant and feasible (see Minimization Measures).

Any bat movements will be from sunset to sunrise (outside of diurnal construction activities); therefore, potential impacts to bats during construction activities would be limited to bats roosting nearby. The nearest known colony is 5 miles northeast of the CEC Corridor. Bats may also be impacted by collision with the lines; however, the etiology of bat-wire collisions and efficacy of minimization measures is not well studied (Manville 2016).

Birds

Birds may be disturbed or displaced during construction activities; however, the activities would not preclude birds from using adjacent ubiquitous habitats. Ground-, shrub-, and tree-nesting birds could be disturbed during construction and their nests, eggs, or young destroyed. Preconstruction surveys in compliance with the MBTA will be conducted prior to ground-disturbing activities to avoid impacts to nesting birds (see Minimization Measures). Potential bird collision and raptor electrocution will be mitigated by implementing Avian Power Line Interaction Committee (APLIC) guidance (see Minimization Measures). Direct impacts will be further minimized by enforcing slow driving speeds (see Minimization Measures).

Minimization Measures

To minimize impacts to biological resources, the Applicant will incorporate the following minimization measures.

Wildlife Agency Coordination

The Applicant will implement measures relevant to the CEC Corridor, as described in the Applicant's August 20, 2025, response to the recommendations provided in the AZGFD's June 25, 2025, letter to minimize impacts to rare and endangered species and areas of biological wealth (see Attachments C-3 and C-4 in Exhibit C).

CEC Conditions for the West Camp Gen-Tie Project

The Applicant will implement the following measures relevant to biological resources, which were conditions of approval for the West Camp Gen-Tie Project.

- Comply with the AZGFD guidance for handling protected animal species should any be encountered during construction and operation of the project and consult with the AZGFD or the U.S. Fish and Wildlife Service, as appropriate, on other issues concerning wildlife.
- Comply with the notice and salvage requirements of the Arizona Native Plant Law and, to the extent feasible, minimize the destruction of native plants during the construction and operation of the Gen-Tie Project.
- Train all field personnel involved in the project as to proper ingress, egress, and on-site working protocol for environmentally sensitive areas and activities. Contractors employing such field personnel shall maintain records documenting personnel training.
- Design the project to incorporate reasonable measures to minimize impacts to avian species. Such measures will be accomplished through compliance with APLIC's guidelines set forth in the current versions of *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006) and *Reducing Avian Collisions with Power Lines* (APLIC 2012) manuals.

Additional Measures Identified by the Applicant

- Instruct project personnel, including contractors and site visitors, to drive at low speeds (less than 25 miles per hour) and be alert for wildlife, especially in low-visibility conditions. Instruct project personnel to avoid harassing or disturbing wildlife, particularly during reproductive (e.g., courtship and nesting) seasons.

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EXHIBIT E

Scenic Areas, Historic Sites and Structures, and Archaeological Sites

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EXHIBIT E. SCENIC AREAS, HISTORIC SITES AND STRUCTURES, AND ARCHAEOLOGICAL SITES

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *Describe any existing scenic areas, historic sites and structures or archaeological sites in the vicinity of the proposed facilities and state the effects, if any, the proposed facilities will have thereon.*

Introduction

The proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) will be primarily sited on private lands, all of which are within the jurisdiction of Navajo County; a small portion of the infrastructure may be sited on Arizona State Trust lands managed by the Arizona State Land Department (ASLD) (see maps in Exhibit A), approximately 5 miles southwest of Holbrook, Arizona.

Scenic Areas

This section of Exhibit E addresses the inventory of and potential impacts to scenic and/or visual resources in relation to construction and operation of the proposed Gen-Tie Project. This section analyzes a Conceptual Gen-Tie Route located within the Certificate of Environmental Compatibility (CEC) Corridor; the final alignment may be located anywhere within that corridor. To accurately describe existing conditions and potential impacts to scenic and/or visual resources, a 1-mile buffer around the CEC Corridor was defined as the Study Area based on the results of a viewshed analysis, which concluded that a 1-mile buffer encompasses areas within the surrounding landscape from which viewers could potentially see any part of the Gen-Tie Project. The methodology description is followed by a discussion of the results of the inventory and contrast assessment, which address both landscape character and sensitive viewers within the context of the Study Area. Finally, an assessment of conformance with non-federal management plans is presented.

Methodology

The analysis documented within this exhibit was undertaken by SWCA Environmental Consultants and consisted of the following actions:

- A desktop review was conducted to identify any sites in the Study Area that meet the following definition of "scenic area" provided in the Arizona Administrative Code at R17-3-701(A)(1)(i):

  > *. . . any area of particular scenic beauty or historical significance as determined by the federal, state, or local officials having jurisdiction thereof, and includes interests in land which have been acquired for the restoration, preservation, and enhancement of scenic beauty.*

- Scenic areas so defined would include such sites as national or state parks and monuments, designated scenic overlooks, and wild and scenic river segments. There are no designated scenic areas as defined by the Arizona Administrative Code at R17-3-701(A)(1)(i) within the Study Area.

- A field visit to the Study Area was conducted to gain an understanding of the characteristic landscape that would potentially be affected by construction of the Gen-Tie Project.
- The affected environment was described by evaluating the existing landscape character within the Study Area to identify impacts from the introduction of Gen-Tie Project components within the landscape.
- An evaluation of potential visual impacts was conducted based on photo-realistic simulations from key observation points (KOPs) and a visual contrast analysis.
- Impacts to visual resources were assessed by 1) evaluating the visual contrast of the Gen-Tie Project with the character of the existing landscape as viewed from each KOP and 2) assessing the impact visual contrasts may have on sensitive viewers.

Visual resource information and data for this analysis were developed based on desktop research, available geographic information system (GIS) data, aerial photography, and on-site field verification and photographic documentation. Data were collected for all land within the Study Area, regardless of jurisdiction, and used to develop a comprehensive understanding of the existing landscape conditions and associated scenic and visual resources.

Existing Conditions

Landscape Character

Landscape character refers to the overall visual and cultural impression of the landscape based on the distinct landscape attributes that exist throughout an area. Landscape character is a product of both natural and human influences on the landscape, including unique landforms, variable vegetation, and built features. In general terms, the scenic quality is based on the premise that landscapes with greater diversity and visual variety in landforms and vegetation are more aesthetically pleasing and therefore hold greater value.

Landscape Character Inventory

The Study Area lies southwest of Holbrook, Arizona. The landscape in the Study Area is characterized by flat open areas with minor undulations in topography. Vegetation consists mainly of large areas of light-colored (sage and light green) perennial grasses, forbs, and shrubs interspersed with dense, extensive sagebrush (*Artemisia* spp.) flats. Pinyon (*Pinus* spp.)–juniper (*Juniperus* spp.) forests exist within the Study Area and dot the landscape with irregularity. There are minor drainages and minor canyon landforms within the area.

The most notable scenic area in the vicinity of the Study Area is the Hopi Buttes, which are north of Joseph City (approximately 8.4 miles north of the Study Area). These dark, jagged volcanic formations rise to an elevation of 6,480 feet above sea level and stand out prominently in the broad, gently rolling terrain. The buttes are covered with low, indistinct grasses and scattered pinyon-juniper woodlands. The light, vibrant exposed soils create a stark contrast with the dark grey basalt.

There are no residences within the CEC Corridor or Study Area. The nearest residences are 1.4 miles to the west and 1.4 miles to the southwest of the western extreme of the CEC Corridor (and thus, 0.4 mile beyond the Study Area). Just outside of the Study Area is the sparsely developed Chevelon Canyon Ranch Subdivision. In discussions with Navajo County planning staff, development in the Chevelon Canyon Ranch Subdivision consists of both legal residences and unpermitted structures, including mobile homes and recreation vehicles. The Chevelon Canyon Ranch Subdivision is the nearest cluster of residences to the Study Area.

Several improved roadways exist within the CEC Corridor and Study Area, including Arizona State Route 377 (SR-377) and Arizona State Route 77, which are primary transportation thoroughfares for southwestern states. Unimproved local dirt roads also exist within the CEC Corridor and Study Area. Other development within the Study Area includes five existing transmission lines, the Arizona Public Service (APS) 500-kilovolt (kV) Cholla-Saguaro transmission line, the APS 345-kV Cholla-Sitgreaves-Mazatzal-Pinnacle Peak transmission line, the APS 345-kV Cholla-Chevelon-Preacher Canyon-Pinnacle Peak transmission line, the APS 69-kV Cholla-Show Low distribution line, and the Salt River Project (SRP) 500-kV Cholla-Sugarloaf-Coronado transmission line, as well as the West Camp Wind Farm, which includes wind turbines, a 345-kV gen-tie line, and the APS Sitgreaves Substation. Additional human modification to the landscape includes range improvements, such as property fencing, consisting of posts and barbed wire, scattered earthen and metal stock tanks, corrals, and ranch outbuildings, as cattle ranching is a predominant land use within the area. With the presence of the existing 345- and 500-kV transmission infrastructure and existing West Camp Wind Farm turbines, the overall character of the landscape can be considered rural rangeland, with scattered areas of utility/energy infrastructure development.

Key Observation Point Selection

The term "sensitive viewers" as used in this analysis refers to specific user groups associated with various land uses who have a sensitivity to landscape change and therefore could be adversely affected by the Gen-Tie Project. The visual contrast analysis presents a qualitative discussion of anticipated changes in contrast between the existing landscape and the proposed Gen-Tie Project activities and facilities. Factors taken into consideration for such an analysis include the distance of the proposed Gen-Tie Project elements from the viewer, duration of view, angle of view, degree of visibility, and the level of perceived contrast between the Gen-Tie Project and the existing landscape. For the purposes of this study, the distance to the Conceptual Gen-Tie Route (in miles) was used to identify viewing distance, with a particular focus on the foreground distance zone. The following distance zones were used for evaluating impacts from each KOP.

- **Immediate Foreground:** 0 to 0.25 mile from the Conceptual Gen-Tie Route
- **Foreground:** 0.25 to 0.5 mile from the Conceptual Gen-Tie Route
- **Middle Ground/Background:** 0.5 to 1 mile from the Conceptual Gen-Tie Route and beyond

The level of perceived contrast and subsequent impacts between the Gen-Tie Project and the existing landscape character is classified using the following definitions:

- None: The contrast is not visible or perceived.
- Weak: The element contrast can be seen but does not attract attention.
- Moderate: The element contrast begins to attract attention and begins to dominate the characteristic landscape.
- Strong: The element contrast demands attention, would not be overlooked, and is dominant in the landscape.

Four KOPs were selected to simulate the Gen-Tie Project, as described in Table E-1 and shown on Figure E-1. Visual simulations to support each KOP depict a Conceptual Gen-Tie Route within the CEC Corridor and are included in Attachment E-1.

Table E-1. Selected KOP Locations

KOP Number	KOP Name	Location Latitude, Longitude	Distance from Project*	Selection Rationale
1	West Camp Access Road	View facing northwest from recreational dirt road. 34°46'58.65"N, 110°28'31.62"W	0.9 mile	Representative of views from a two-track access roadway to the West Camp Wind Farm and Sitgreaves Substation.
2	Private Ranch Road	View facing northeast from recreational dirt road. 34°48'20.78"N, 110°16'54.53"W	0.5 mile*	Representative of views from a two-track access road.
3	Arizona SR-377 Southbound	View facing southwest from SR-377. 34°49'4.20"N, 110°11'51.90"W	1.2 miles	Representative of typical vehicular traveler views from SR-377 looking southwest toward the Gen-Tie Project.
4	Arizona SR-377 Northbound	View facing northeast from SR-377. 34°47'30.36"N, 110°13'9.13"W	0.6 mile	Representative of typical vehicular traveler views from SR-377 looking northeast toward the Gen-Tie Project.

* Indicates approximate distance to the Conceptual Gen-Tie Route

KOPs 1 and 2 were selected and located to represent views of the Gen-Tie Project from areas that would have limited viewers and that are representative of the existing wind energy development in the Study Area. Viewers within these areas would typically be operation and maintenance workers within the West Camp Wind Farm, livestock grazing operators, and dispersed recreationists (typically hunters). There are no residences within the Study Area, and these roadways would not typically be used by through travelers. These KOPs have long, panoramic views of the surrounding landscape.

KOPs 3 and 4 located along SR-377, which is a major north-south travel corridor between Holbrook and Heber-Overgaard, were selected to represent typical views for travelers on the main roadway within the Study Area. SR-377, which consists of a two-lane asphalt roadway with panoramic views of the surrounding landscape, bisects the eastern portion of the CEC Corridor and On-Site Switchyard Siting Area. The Conceptual Gen-Tie Route crosses SR-377 approximately 0.5 mile northeast of the point the existing SRP 500-kV Cholla-Sugarloaf-Coronado transmission line (lattice tower structures) crosses SR-377.

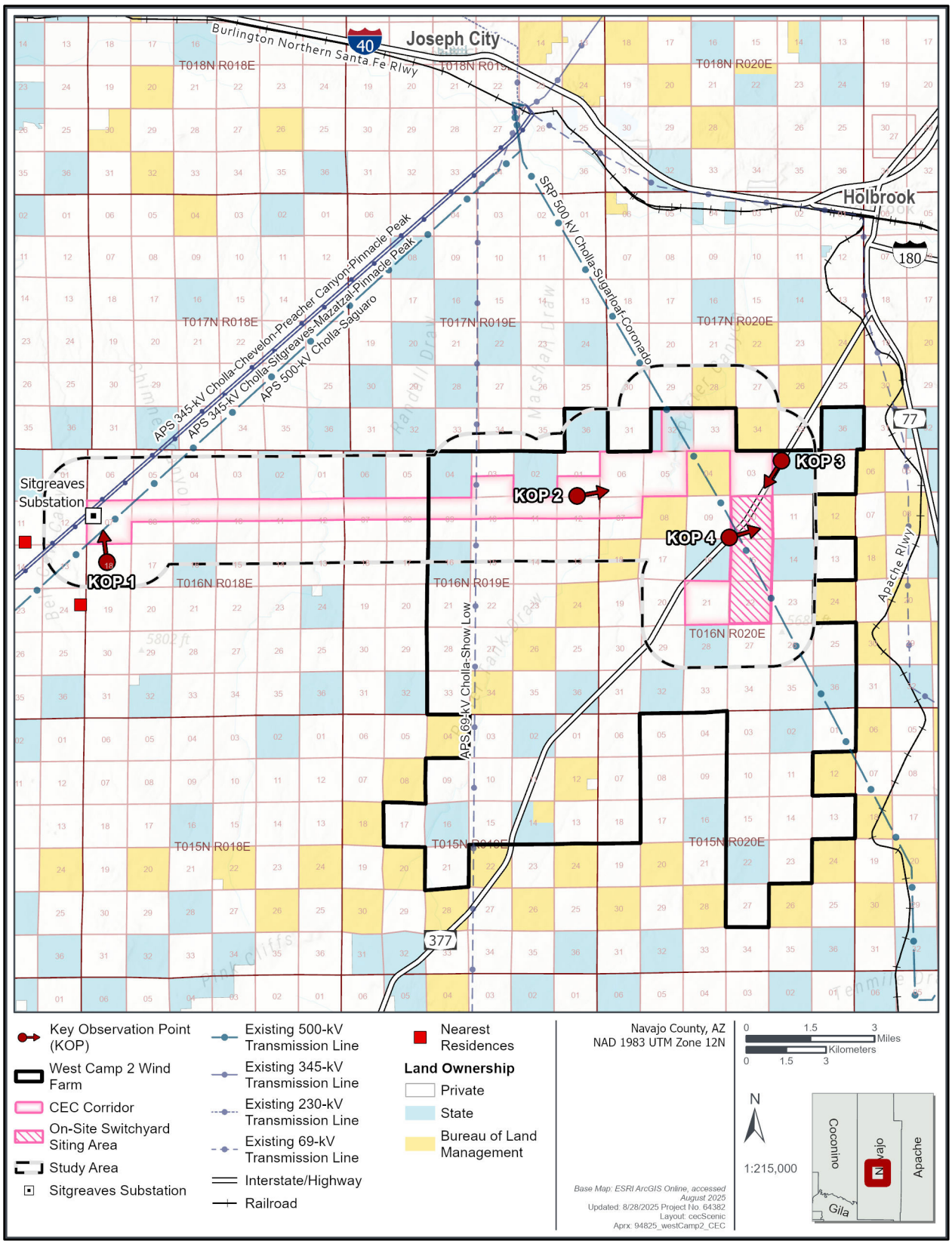

Figure E-1. Gen-Tie Project KOPs.

Results

Effects on Landscape Character

Construction activities associated with the installation of the Gen-Tie Project would introduce temporary visual contrasts to the form, line, color, and texture of the existing characteristic landscape. During construction, contrasts would result from ground disturbance, removal of vegetation, temporary storage of equipment and materials, and fugitive dust. In addition, construction equipment would be temporarily visible during construction activities. Areas of temporary disturbance would be reclaimed after construction activities are completed. The Gen-Tie Line will consist of transmission poles or towers capable of supporting up to six conductor cables (depending on single-circuit vs. double-circuit applications), plus two lightning protection and communication cables, suspended between the structures. The structures are expected to range from approximately 115 feet to no more than 195 feet tall and will be spaced approximately 1,000 feet apart. Specific structure types will be selected closer to construction but may consist of any combination of steel monopoles, H-frames, steel lattice towers, or tubular steel structures (see Exhibit G for a complete list). Steel monopole transmission structures along the Conceptual Gen-Tie Route were used for the analysis described in this exhibit, and deviation from the analyzed structure type may cause variability in the degree of visual impact to the existing landscape character and visual contrast to sensitive viewers. In general, where the Gen-Tie Project is visible, temporary contrasts related to construction would range from weak to strong depending upon the distance, intervening topography, and viewing angle.

Except where the existing transmission lines, highway development, existing wind turbines associated with the West Camp Wind Farm, and Sitgreaves Substation are readily visible, the Gen-Tie Project would create contrast with the existing landscape through the introduction of the regular geometric forms (i.e., horizontal and vertical lines) associated with the Gen-Tie Project. These human-made structures would create additional contrast by introducing additional forms, lines, and colors into the irregular, organic forms and colors of the existing natural landforms and vegetation. In the immediate foreground and foreground areas (within 0.5 mile of the Gen-Tie Project), visual impacts would be greatest. Long-term views (experienced by viewers over a long period of time) in the immediate foreground and foreground areas would present moderate to strong contrast with the existing natural landscape character due to proximity and the potential temporary-to-long-term impacts from limited localized vegetation removal and any necessary earthwork during construction, as well as long-term impacts from any potential new access roads. However, views near roadways have already been impacted by existing development, and no residences exist within the immediate foreground and foreground areas. Contrast within the middleground and background would range from moderate to weak, depending on the distance and viewing angle; short-duration views (near roadways) are anticipated to experience lesser visual impacts. Impacts on middleground and background views would decrease as distance from the Gen-Tie Project increases. Overall, the level of change to the characteristic landscape would range from weak to moderate.

Effects on Sensitive Viewers

Visual Contrast Analysis and Potential Effects to Key Observation Points

Impacts to sensitive viewers were determined by examining the simulated condition and evaluating the degree of change in landscape character (i.e., degree to which Gen-Tie Project elements contrast with existing conditions) as observed by sensitive viewers, which would result from the construction and operation of the Gen-Tie Project, as represented by the Conceptual Gen-Tie Route. Table E-2 summarizes the viewer sensitivity and anticipated degree of contrast for each KOP. Following the table, impacts to viewers are summarized by KOP.

Table E-2. Contrast and Impact Results Summary

KOP Number	KOP Name	Level of Sensitivity	Level of Contrast
1	West Camp Access Road	Low	Weak
2	Private Ranch Road	Low	Moderate
3	Arizona SR-377 Southbound	Low	Weak to moderate
4	Arizona SR-377 Northbound	Low	Weak to moderate

KOP 1 represents views from an existing access road (West Camp Access Road) oriented northwest, looking southwest of the East Fork Tank. Based on simulation of the Conceptual Gen-Tie Route, viewers would have unobstructed views of the Gen-Tie Project (see Attachment E-1), which would be in the middleground/background (approximately 0.9 mile to the Conceptual Gen-Tie Route) and extend into the background. Changes to the landscape from development of the Gen-Tie Project would result in a weak contrast to the existing landscape, as the changes introduced would be similar in form, line, color, texture, and scale to the extensive existing transmission line and substation infrastructure visible at this KOP. Further, the Gen-Tie Line would be skylined (the project component would be positioned so that its silhouette would stand out against the sky, resulting in the project component being easily visible) like existing development visible at this location. Gen-Tie Project elements would introduce form, line, color, texture, or scale common in the landscape but would be visually subordinate and not attract attention.

KOP 2 represents views from an existing access road (Private Ranch Road) looking northeast toward the Gen-Tie Project. Based on simulation of the Conceptual Gen-Tie Route, viewers would have unobstructed views of the Gen-Tie Project (see Attachment E-1). The Gen-Tie Project would be in the foreground (approximately 0.5 mile to the Conceptual Gen-Tie Route). The lines, forms, and textures of the Gen-Tie Project would be similar to those of the existing transmission line but would appear larger in scale due to the closer proximity to viewers than the existing transmission infrastructure visible at this KOP (the 500-kV SRP Cholla-Sugarloaf-Coronado line would be visible at this KOP, 3 miles to the north-northeast). Changes to the landscape from development of the Gen-Tie Project would result in a moderate to strong contrast with the existing landscape—because the changes introduced would begin to dominate the visual setting since the new structures would be skylined—at a closer proximity than existing transmission development visible at this location.

KOP 3 represents typical southbound vehicular traveler views from SR-377 looking southwest toward the Gen-Tie Project. Based on the simulation of the Conceptual Gen-Tie Route, travelers would have a partially obstructed view of the Gen-Tie Project due to vegetation and topography (see Attachment E-1). The Gen-Tie Project would be in the middleground/background (approximately 1.2 miles to the Conceptual Gen-Tie Route). Travelers at this location would have a short-duration view of the Gen-Tie Project, as they travel toward and pass underneath the Gen-Tie Line. The Gen-Tie Line would then diverge away from the road and be visible in the peripheral view of travelers. The primary focus of travelers at this KOP along SR-377 would be the roadway itself, the strong linear horizon, and the white linear forms of the existing West Camp Wind Farm turbines skylined against the horizon. The lines, forms, and textures of the Gen-Tie Project would be similar to those of the existing transmission line infrastructure (i.e., the SRP 500-kV Cholla-Sugarloaf-Coronado transmission line would be visible at this KOP to the southwest crossing over SR-377). Changes to the landscape from development of the Gen-Tie Project would result in a weak to moderate degree of contrast, because the Gen-Tie Project would introduce form, line, color, and texture common in the landscape. Additionally, the Gen-Tie Project would be more visually dominant than the existing West Camp Wind Farm turbines but visually subordinate to the existing 500-kV SRP transmission line and strong expansive horizon line visible at this KOP.

The potential On-Site Switchyard (not simulated in this exhibit; to be included in virtual gen-tie flyover simulation) may be visible from this KOP depending on final siting. The On-Site Switchyard would occupy up to 30 acres within the On-Site Switchyard Siting Area and would be similar in appearance to a substation. The On-Site Switchyard is anticipated to introduce a moderate to strong contrast with the existing landscape, as it would introduce new forms, lines, and a scale of disturbance not typical in the On-Site Switchyard Siting Area. Visual impact on viewers at this KOP would vary depending on final siting, distance from viewers, viewer perspective, duration of views (when traveling along SR-377), intervening topography, screening from vegetation, and proximity to existing infrastructure (such as the SRP 500-kV Cholla-Sugarloaf-Coronado transmission line).

KOP 4 represents typical northbound vehicular traveler views from SR-377 looking northeast toward the Gen-Tie Project. Based on the simulation of the Conceptual Gen-Tie Route, travelers would have an unobstructed view of the Gen-Tie Project (see Attachment E-1). The Gen-Tie Project would be in the middleground/background (approximately 0.6 mile to the Conceptual Gen-Tie Route). Travelers at this location would have a short-duration view of the Gen-Tie Project, which would be directly in front of them, as they travel toward and pass underneath the Gen-Tie Line. The Gen-Tie Line would then diverge away from the road and be visible in the peripheral view of travelers. The primary focus of travelers at this KOP along SR-377 would be the roadway itself, the strong horizon line, and the existing steel lattice transmission line towers. Changes to the landscape from development of the Gen-Tie Project would result in a weak degree of contrast, because the Gen-Tie Project would introduce line, color, and texture common on the landscape, but the forms of the Gen-Tie Project monopole structures would differ from the forms of the existing steel lattice towers. The Gen-Tie Project would be visually subordinate to the existing development visible at this KOP and the strong horizon line.

As with KOP 3, the potential On-Site Switchyard (not simulated in this exhibit; to be included in virtual gen-tie flyover simulation) may be visible from this KOP and would introduce moderate to strong contrast with the existing landscape, depending on a variety of factors related to final siting.

Effects on Sensitive Viewer Types

Residents: Residential viewers would experience prolonged views of the Gen-Tie Project. The extent to which the Gen-Tie Project facilities are visible depends on their distance from homes and the surrounding landscape features, such as terrain and vegetation. As described in the Landscape Character Inventory section above, the nearest residences are 0.4 mile beyond the Study Area. Based on the Conceptual Gen-Tie Route, views of the Gen-Tie Project would be limited due to vegetation, and only the western portion of the Gen-Tie Project would be visible from these residences. The western portion of the Gen-Tie Line would occur near the existing Sitgreaves Substation and the West Camp Wind Farm Gen-Tie Line; therefore, the degree of contrast to these residential viewers would be weak to none.

Recreational users: Recreational users would experience a variety of impacts depending on their exact location. There are limited opportunities for recreation within the area, but recreational users would experience visual contrasts similar to those described for KOP 1 and KOP 2.

Vehicular travelers: Vehicular travelers would experience a variety of impacts depending on their exact location, speed, and direction of travel. Contrast experienced by vehicular travelers along SR-377 would be similar to the degree of contrast described for KOPs 3 and 4. Contrast experienced by vehicular travelers who may be recreating along the Private Ranch Road (KOP 2) or the West Camp Access Road (KOP 1) would experience a similar degree of contrast as described for those KOPs; however, public travel on these private roads is restricted.

Cultural Resources (Historic Sites and Structures and Archaeological Sites)

As stipulated by the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, the potential effects of the Gen-Tie Project on historic sites and structures and archaeological sites were assessed. The assessment was also prepared to support Arizona Corporation Commission compliance with the State Historic Preservation Act (Arizona Revised Statutes 41-861 through 41-864), which requires state agencies to consider impacts of their programs on historic properties listed in or eligible for the Arizona Register of Historic Places (ARHP) and to provide the State Historic Preservation Office (SHPO) an opportunity to review and comment on the actions that affect such historic properties. The consultation letter sent to SHPO on September 3, 2025, is included as Attachment E-2; SHPO's response will be provided in the supplemental filing.

To be eligible for the ARHP, a property must be at least 50 years old (less, if it has special significance) and have national, state, or local significance in American history, architecture, archaeology, engineering, or culture. It should also possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet at least one of the four following criteria:

- Criterion (a): Be associated with significant historical events or trends
- Criterion (b): Be associated with historically significant persons
- Criterion (c): Have distinctive characteristics of a style or type, or have artistic value, or represent a significant entity whose components may lack individual distinction
- Criterion (d): Have yielded or have potential to yield important information concerning history or prehistory

Records Review

To assess the potential effects of the Gen-Tie Project on historic sites and structures and archaeological sites, the following record sources were reviewed for the Study Area:

- Aerial photographs
- Archaeological Records Office (ARO) at the University of Arizona
- AZSITE database
- Geological maps
- Historic General Land Office plats
- Historic U.S. Geological Survey (USGS) topographic quadrangle maps
- National Archaeological Database reports
- National Register of Historic Places (NRHP)
- tDAR – the Digital Archaeological Record database

The records review identified 53 historic sites, historic structures, and archaeological sites in the Study Area. These are listed in Table E-3 and discussed below.

Table E-3. Historic Sites, Structures, and Archaeological Sites within the Study Area

Name/ID	Type	Age	Description	ARHP Status	CEC Corridor	1-Mile Buffer
SR-377	Highway	Historic	Highway	Unevaluated	X	
AZ P:3:10(ASM)	Archaeological Site	Prehistoric	Artifacts	Unevaluated	X	
AZ P:3:15(ASM)	Archaeological Site	Prehistoric	Habitation	Considered eligible		X
AZ P:3:27(ASM)	Archaeological Site	Prehistoric	Artifacts	Eligible		X
AZ P:3:28(ASM)	Archaeological Site	Prehistoric	Habitation	Eligible		X
AZ P:3:155(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:163(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:164(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:165(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:166(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:167(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:168(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:186(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:197(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:201(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:3:239(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:3:240(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:4:35(ASM)	Archaeological Site	Prehistoric	Habitation	Eligible		X
AZ P:4:36(ASM)	Archaeological Site	Prehistoric	Habitation	Eligible		X
AZ P:4:37(ASM)	Archaeological Site	Prehistoric	Habitation	Eligible		X
AZ P:4:71(ASM)	Historic Site	Historic	Trash	Considered ineligible		X
AZ P:4:72(ASM)	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
AZ P:4:73(ASM)	Historic Site	Historic	Trash	Considered ineligible		X
AZ P:4:74(ASM)	Historic Site	Historic	Trash	Considered ineligible		X
AZ P:4:75(ASM)	Historic Site	Historic	Trash	Considered ineligible		X
AZ P:4:76(ASM)	Historic Site	Historic	Trash	Considered ineligible		X
AZ P:4:77(ASM)	Historic Site	Historic	Trash	Considered ineligible		X
AZ P:4:78(ASM)	Archaeological Site	Prehistoric	Habitation	Unevaluated		X
AZ P:4:83(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:4:84(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:4:85(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:4:86(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:4:87(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
AZ P:4:88(ASM)	Archaeological Site	Unknown	Unknown	Unknown		X
AZ P:4:89(ASM)	Archaeological Site	Unknown	Unknown	Unknown	X	
NA3212	Archaeological Site	Prehistoric	Habitation	Unevaluated		X
NA3213	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA3217	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X

Name/ID	Type	Age	Description	ARHP Status	CEC Corridor	1-Mile Buffer
NA9045	Archaeological Site	Prehistoric	Habitation	Unevaluated		X
NA14198	Archaeological Site	Prehistoric	Quarry	Unevaluated		X
NA14200	Archaeological Site	Prehistoric	Artifacts	Unevaluated	X	
NA14201	Archaeological Site	Prehistoric	Habitation	Unevaluated	X	
NA14202	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA14203	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA14204	Archaeological Site	Archaic	Artifacts	Unevaluated	X	
NA14205	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA14206	Archaeological Site	Prehistoric	Artifacts	Unevaluated	X	
NA14207	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA14208	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA14209	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X
NA14210	Archaeological Site	Prehistoric	Artifacts	Unevaluated	X	
NA14211	Archaeological Site	Prehistoric	Artifacts	Unevaluated	X	
NA14212	Archaeological Site	Prehistoric	Artifacts	Unevaluated		X

Historic Sites

Six historic sites are documented within the Study Area but lie outside the CEC Corridor. All are early-twentieth-century trash scatters that are considered ineligible for the ARHP.

Historic Structures

One historic structure intersects the CEC Corridor: SR-377, which was built in 1971. A review of historic maps indicates that several different alignments of unimproved roads or trails connected Holbrook and Heber since at least 1886, following the same general corridor as SR-377. Recent USGS maps depict SR-377, beginning in 1971.

Archaeological Sites

There are 46 known archaeological sites within the Study Area, 15 of which are within the CEC Corridor. Seven of the 15 archaeological sites in the CEC Corridor were recorded in the 1970s, and their NRHP status is considered unevaluated. They consist of one Ancestral Puebloan artifact scatter dating between AD 725 and 1125; four Native American artifact scatters and one habitation site, all dating between AD 200 and 1500; and one Native American artifact scatter of indeterminate age. The other eight archaeological sites in the CEC Corridor were recently recorded, and no information is available in the AZSITE database other than their location; no NRHP recommendations or determinations are available for these sites at this time, and they must be considered unevaluated pending more information from AZSITE and SHPO.

Of the 31 sites in the Study Area outside the CEC Corridor, 12 are Native American sites not attributed to a specific cultural affiliation (three habitation, eight artifact scatters, and one flaked stone quarry), four are affiliated with the Ancestral Puebloan culture (two habitation sites and two artifact scatters), and four are identified as having an Ancestral Puebloan and/or Mogollon cultural affiliation (three habitation sites and one artifact scatter). The remaining 11 sites are registered as newly recorded, and the AZSITE database

contains limited information on these. Ten of the sites were documented during the Arizona State Museum's 2012–2013 Rock Art Ranch Field School. One site was recorded during a survey by PaleoWest Archaeology, Inc., for the Apache Natural Resources Conservation District. The ARO has not fully processed and curated the materials from these two surveys, and the full site data are not currently available.

The AZSITE database indicates that the Arizona SHPO determined five of the archaeological sites within the Study Area outside the CEC Corridor are eligible for the NRHP; however, no eligibility criteria are listed. Since they are prehistoric Native American habitation sites and artifact scatters, they would likely be eligible for the NRHP under Criterion D. Sixteen other sites in the Study Area remain unevaluated for the NRHP. The remaining 10 sites in Study Area were recently recorded, and the AZSITE database holds no information other than the locations of the sites; SHPO consultation on these sites has not been finalized, and their NRHP status must be considered unevaluated.

No obvious patterns of land use or occupation are evident from the site distribution—sites are densely clustered in the few areas that have been subject to systematic archaeological survey. Other areas are devoid of sites, likely only because they have not been surveyed to date. Based on the available data, site density in the region ranges between seven and 25 sites per square mile.

Assessment of Effects

A project can have direct and/or indirect effects on historic sites and structures and archaeological sites when it alters the characteristics that qualify it for the ARHP. Effects are adverse when they diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to, the following:

- Physical destruction of or damage to all or part of the property
- Removal of the property from its historic location
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic characteristics
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe
- Transfer, lease, or sale of property out of government ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

Direct effects would include the areas that would be disturbed by construction and operation of the proposed transmission line, including transmission structure locations, staging/work areas, and access roads. Indirect effects would include areas that would be indirectly affected by the transmission line and potential On-Site Switchyard, primarily through visual intrusions.

Direct Effects

Sixteen historic sites, structures, or archaeological sites are in the CEC Corridor and may be subjected to direct effects. Five previous archaeological pedestrian surveys are believed to intersect the CEC Corridor; the AZSITE database yielded spatial data for only three of these. The three surveys covered less than 0.01% (98.25 acres) of the CEC Corridor (10,975 acres). Previous survey coverage of the 1-mile buffer

surrounding the CEC Corridor was equally low, with an estimated 0.03% (1,285 acres) coverage of the Study Area (42,200 acres). These surveys were conducted between 14 and 51 years ago, and survey coverage of the CEC Corridor is inadequate to assess the cultural resources present. An archaeological survey, consistent with SHPO and Navajo County ordinances, will be conducted prior to commencement of construction of the Gen-Tie Project. The archaeological survey for the Gen-Tie Project will be based on the outcomes of consultation with SHPO regarding the Gen-Tie Project.

Indirect Effects

Although the construction of the Gen-Tie Project would introduce a visual element to the area, there are already six transmission lines that intersect the CEC Corridor: the APS 500-kV Cholla-Saguaro transmission line, the APS 345-kV Cholla-Sitgreaves-Mazatzal-Pinnacle Peak transmission line, the APS 345-kV Cholla-Chevelon-Preacher Canyon-Pinnacle Peak transmission line, the APS 69-kV Cholla-Show Low distribution line, the SRP 500-kV Cholla-Sugarloaf-Coronado transmission line, and the West Camp Wind Farm 345-kV gen-tie line. Due to the presence of these existing utilities and transportation-related facilities, the Gen-Tie Project is not likely to significantly diminish the visual setting. Because ARHP-eligible sites in the area are assumed to be significant under criterion (d), for their information potential, these sites are not visually sensitive.

Conclusion

An archaeological survey, consistent with SHPO and Navajo County ordinances, will be conducted prior to commencement of construction of the Gen-Tie Project. The archaeological survey for the Gen-Tie Project will be based on the outcomes of consultation with SHPO regarding the Gen-Tie Project.
The indirect effects of the Gen-Tie Project on historic structures, historic sites, and archaeological sites are not substantial, since the visual integrity in the CEC Corridor is diminished by existing high-voltage transmission lines and because previously recorded sites are not visually sensitive.

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EXHIBIT E – ATTACHMENT E-1

West Camp 2 Gen-Tie Project Visual Simulations

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AES West Camp 2 Wind Farm

Sun and Weather

Sunny

Date: **6-26-25**

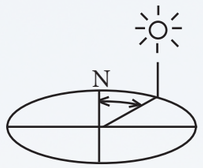
Photo Time: **9:05 am**

Visibility:

Good — Poor

Air Quality: Good

Sun Azimuth (degrees): **83.23**



Sun Angle (degrees): **33.25**

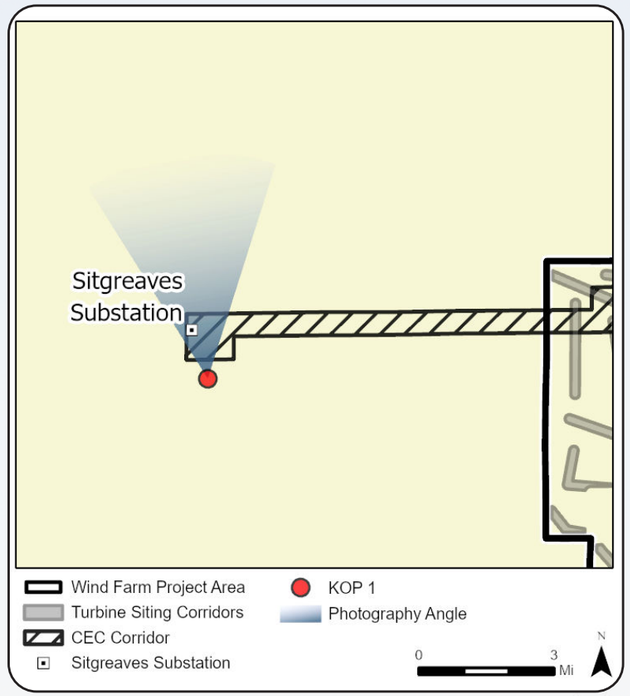
Lighting Angle on Project: **Side**

Wind: **5 mph**

Cloud Cover: **0 %**

Temperature (°F): **80° F**

Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

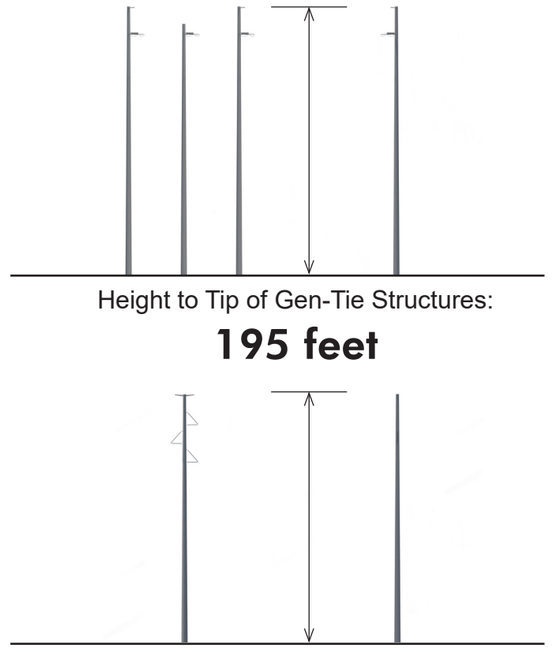


Approximate Distance to Gen-Tie: **0.9 mile**

KOP Location and Visible Elements

Height to Tip of 3 Pole Structures: **195 feet**

Height to Tip of Gen-Tie Structures: **195 feet**



Structure Diagram

KOP 1 - West Camp Access Road

Base Photographic Documentation

Latitude, Longitude (degrees):
34.78296, -110.475451

Viewpoint Elevation (feet):
5,685

Camera Height (meters):
1.5

Camera Heading (degrees):
350

Camera Make & Model:
Canon EOS 5D Mark IV

Camera Sensor Size (mm):
36 x 24 Full Frame

Lens Make & Model:
AF-P Nikkor

Lens Focal Length (mm):
50

Image Size (pixels):
6720 x 4480

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 1: View toward Sitgreaves Substation from West Camp Access Road looking northwest - Existing Condition

KOP 1: View toward Sitgreaves Substation from West Camp Access Road looking northwest - Simulated Condition

AES West Camp 2 Wind Farm

Sun and Weather

Sunny

Date: **6-26-25**

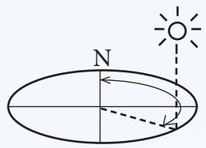
Photo Time: **10:25 am**

Visibility:

Good — Poor

Air Quality: Good

Sun Azimuth (degrees): **127.18**



Sun Angle (degrees): **25.89**

Lighting Angle on Project: **Side**

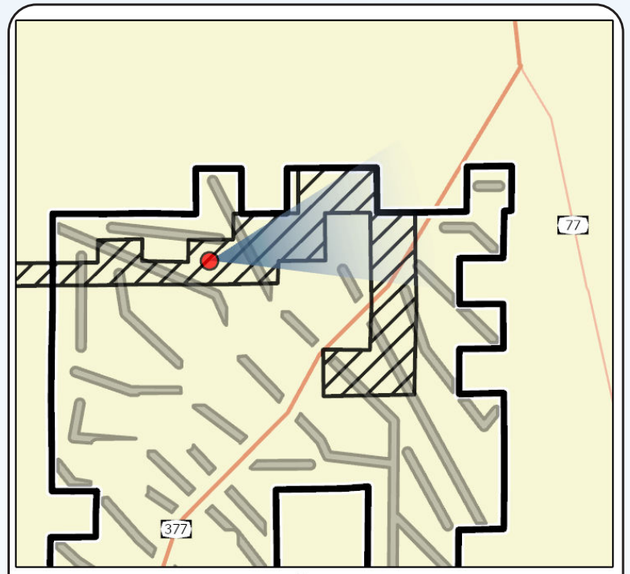
Wind: **5 mph**

Cloud Cover: **0 %**

Temperature (°F): **85° F**

Turbines facing 205 degrees southwest

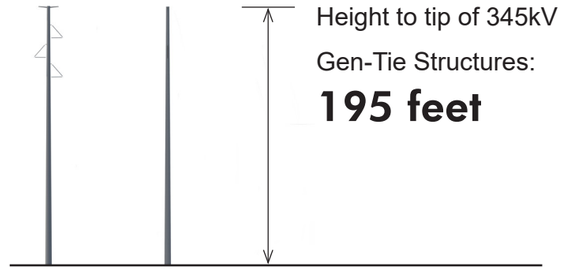
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.



Approximate Distance to Gen-Tie: **0.5 mile**

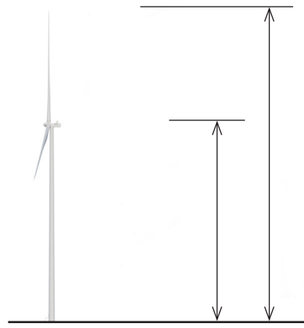
Approximate Distance to Nearest Turbine: **1 mile**

KOP Location and Visible Elements



Height to tip of 345kV Gen-Tie Structures: **195 feet**

Height to tip of 345kV 3 Pole Structures: **115 feet**



Vestas V172

Height to Tip of Blade: **774 feet**

Rotor Radius: **282 feet**

Height to Nacelle: **492 feet**

Structure Diagram

KOP 2 - Private Ranch Road

Base Photographic Documentation

Latitude, Longitude (degrees): **34.805772, -110.281815**

Viewpoint Elevation (feet): **5,485**

Camera Height (meters): **1.5**

Camera Heading (degrees): **75**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 2: View from Private Ranch Road looking northeast - Existing Condition

KOP 2: View from Private Ranch Road looking northeast - Simulated Condition

AES West Camp 2 Wind Farm

Sun and Weather

Sunny

Date: **6-27-25**

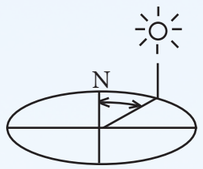
Photo Time: **9:45 am**

Visibility:

Good — Poor

Air Quality: Good

Sun Azimuth (degrees): **88.69**



Sun Angle (degrees): **41.57**

Lighting Angle on Project: **Side**

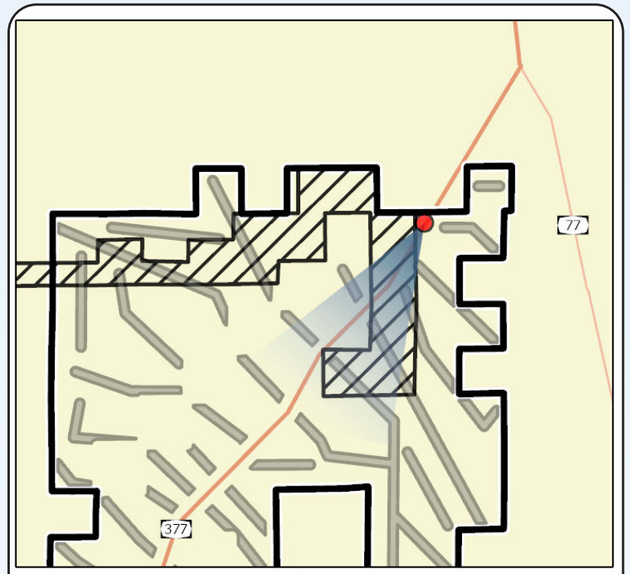
Wind: **5 mph**

Cloud Cover: **0 %**

Temperature (°F): **80° F**

Turbines facing 205 degrees southwest

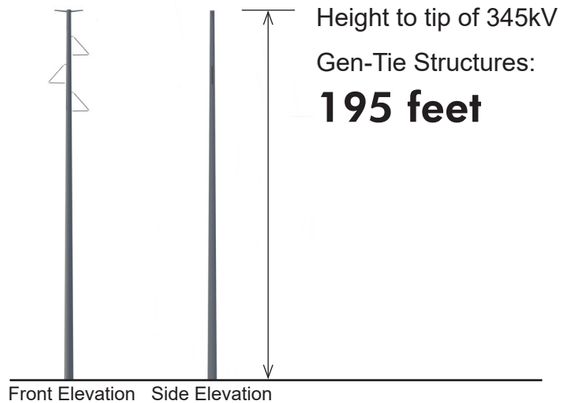
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.



Approximate Distance to Gen-Tie: **1.2 miles**

Approximate Distance to Nearest Turbine: **1.7 miles**

KOP Location and Visible Elements



Height to tip of 345kV Gen-Tie Structures: **195 feet**

Vestas V172

Height to Tip of Blade: **774 feet**

Rotor Radius: **282 feet**

Height to Nacelle: **492 feet**

Structure Diagram

KOP 3 - Arizona State Route 377 Southbound

Base Photographic Documentation

Latitude, Longitude (degrees): **34.817834, -110.197749**

Viewpoint Elevation (feet): **5,430**

Camera Height (meters): **1.5**

Camera Heading (degrees): **210**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 3: View from Arizona State Route 377 Southbound looking southwest - Existing Condition

KOP 3: View from Arizona State Route 377 Southbound looking southwest - Simulated Condition

AES West Camp 2 Wind Farm

Sun and Weather

Sunny

Date: **6-27-25**

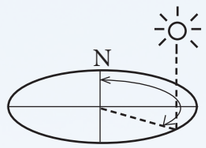
Photo Time: **11:05 am**

Visibility:

Good — Poor

Air Quality: Good

Sun Azimuth (degrees): **135.7**



Sun Angle (degrees): **31.89**

Lighting Angle on Project: **Side**

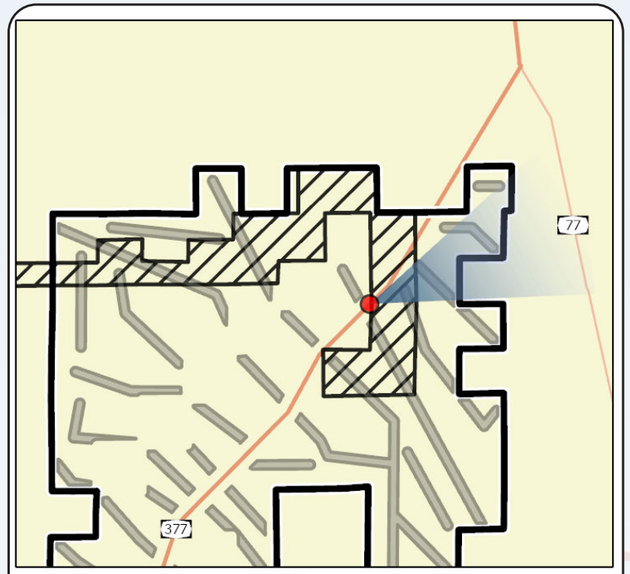
Wind: **10 mph**

Cloud Cover: **0 %**

Temperature (°F): **90° F**

Turbines facing 205 degrees southwest

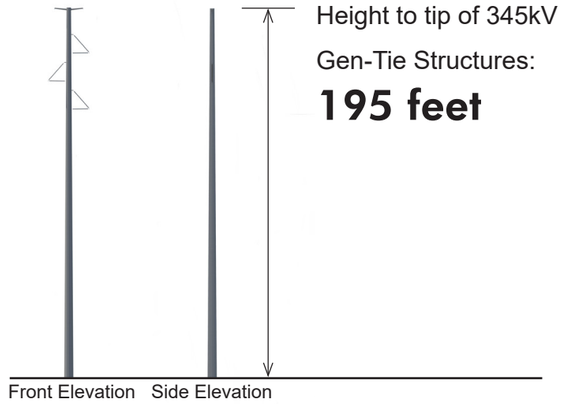
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.



Approximate Distance to Gen-Tie: **0.6 mile**

Approximate Distance to Nearest Turbine: **0.7 mile**

KOP Location and Visible Elements



Height to tip of 345kV Gen-Tie Structures: **195 feet**

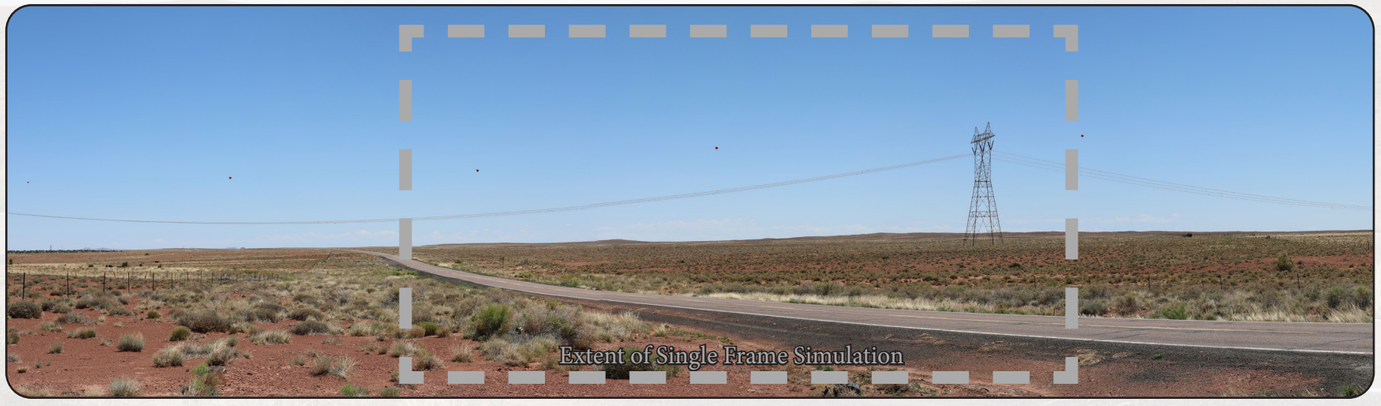
Vestas V172

Height to Tip of Blade: **774 feet**

Rotor Radius: **282 feet**

Height to Nacelle: **492 feet**

Structure Diagram



KOP 4 - Arizona State Route 377 Northbound

Base Photographic Documentation

Latitude, Longitude (degrees): **34.791766, -110.219203**

Viewpoint Elevation (feet): **5,435**

Camera Height (meters): **1.5**

Camera Heading (degrees): **65**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 4: View from Arizona State Route 377 Northbound looking northeast - Existing Condition

KOP 4: View from Arizona State Route 377 Northbound looking northeast - Simulated Condition

EXHIBIT E – ATTACHMENT E-2

West Camp 2 State Historic Preservation Office Consultation Letter (September 3, 2025)

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September 3, 2025

Kathryn Leonard, State Historic Preservation Officer
1110 West Washington Street, #100
Phoenix, Arizona 85007
Submitted via email to: azshpo@azstateparks.gov and cklebacha@azstateparks.gov

Re: Request for Consultation – West Camp 2 Gen-Tie Project Certificate of Environmental Compatibility

Dear Kathryn Leonard:

Pursuant to Arizona Revised Statutes 40-360 et seq., West Camp Wind Farm II, LLC (Applicant), an indirect subsidiary of The AES Corporation (AES), seeks approval of a Certificate of Environmental Compatibility (CEC) for a 345-kilovolt (kV) or 500-kV generation-tie transmission line (Gen-Tie Line) and up to one 500-kV interconnection switching station and line tap (On-Site Switchyard). The two interconnection options are: Option A) an up to 25-mile-long, 345- or 500-kV transmission line to the existing Arizona Public Service (APS) Sitgreaves Substation, and Option B) an up to 10-mile-long 500-kV transmission line to a new switchyard and line tap on the existing Salt River Project (SRP) 500-kV Cholla-Sugarloaf-Coronado transmission line. The two interconnection options are collectively referred to in this application as the Gen-Tie Project. The Gen-Tie Project, for which the Applicant seeks authorization under the CEC, will support the Applicant's proposed West Camp 2 Wind Farm, a maximum 500-megawatt (MW) wind energy generation facility and 500-MW battery storage facility on an approximately 58,283-acre area. The planned West Camp 2 Wind Farm is approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. The Gen-Tie Project will be sited within the CEC Corridor.

This letter contains information about the Gen-Tie Project in accordance with the State Historic Preservation Office's September 2022 "ACC-SHPO Consultation Checklist for Compliance with the State Historic Preservation Act" (Attachment 1). On behalf of the Applicant, we respectfully request that the SHPO review and provide comment on the Gen-Tie Project to support the Arizona Corporation Commission's compliance with the State Historic Preservation Act (Arizona Revised Statutes 41-861 through 41-864).[1]

[1] The State Historic Preservation Act requires state agencies to consider impacts of their programs on historic properties listed in or eligible for listing in the Arizona Register of Historic Places (ARHP), and to provide the State Historic Preservation Office an opportunity to review and comment on the actions that affect such historic properties.

GENERAL PROJECT INFORMATION

- *Project name:* West Camp 2 Gen-Tie Project
- *Project location (legal description and UTMs)*:

CEC Corridor

- Section 7 and the north halves of Sections 8, 9, 10, 11, and 12 of Township 16 North, Range 18 East (i.e., T16N-R18E)
- The south halves of Sections 1 and 3, and the north halves of Sections 7, 8, 9, 10, 11, and 12 of T16N-R19E
- The north half of Section 7 and Sections 3, 5, 6, 10, 15, 21, and 22 of T16N-R20E
- The eastern three-quarters of Section 32 and Section 33 of T17N-R20E

Sitgreaves Substation

- Section 7 of T16N-R18E

On-Site Switchyard Siting Area

- Sections 10, 15, and 22 of T16N-R20E

Currently two interconnection options are under consideration:

Option A

The eastern terminus of Option A will be at a newly constructed substation, with a conceptual potential location in the east half of Section 21, T16N, R20E, Navajo County, Arizona used to approximate the eastern terminus coordinates below.

The western terminus of Option A would be at the existing APS Sitgreaves Substation, in the northwest quarter of Section 7 of T16N-R18E, Navajo County, Arizona (Figure 2-1 in Attachment 2).

- Approximate Eastern terminus coordinates, Option A1: (571201 Easting, 3847772 Northing, Universal Transverse Mercator [UTM] Zone 12 South [S])
- Western terminus coordinates, Option A: (574450 Easting, 3850750 Northing, UTM Zone 12S)

Option B

The eastern terminus of Option B will be at a newly constructed 500-kV switchyard in Sections 10, 15, and/or 22 of T16N-R20E, Navajo County, Arizona. The switchyard will tie into the existing SRP 500-kV Cholla-Sugarloaf-Coronado transmission line.

The western terminus of Option B will be at a newly constructed substation, with a conceptual potential location in the northeast quarter of Section 10 of T16N-R19E, Navajo County, Arizona used to approximate the western terminus coordinates below.

- Approximate Eastern terminus coordinates, Option B: (572365 Easting, 3848475 Northing, UTM Zone 12S)
- Approximate Western terminus coordinates, Option B: (563140 Easting, 3851450 Northing, UTM Zone 12S)

- *Funding source*: Private (no state, federal, or other public funding sources)

PROJECT AREA INFORMATION

- *Project Area*: The Project Area consists of the CEC Corridor as described in project location. The Gen-Tie Line will be within a right-of-way measuring 150 feet wide by up to 25 miles long for Option A or up to 10 miles long for Option B, which will be entirely within the CEC Corridor (see Figures 2-1 and 2-2). Figures 2-1 and 2-2 also show land jurisdiction in the CEC Corridor and its vicinity.
- *Total Area*: Up to 10,975 acres
- *Landownership (all involved; acres by land jurisdiction)*: The CEC Corridor is on private lands and State Trust Lands administered by the Arizona State Land Department (ASLD) (Table 1).

Option A

Under Option A, the Gen-Tie Line will traverse an up to 25-mile route, from the existing APS Sitgreaves Substation in the west, to a newly constructed substation in the east end of the CEC Corridor.

Under Option A, the Gen-Tie Line may pass through

- Section 7 and the north halves of Sections 8, 9, 10, 11, and 12 of T16N-R18E;
- the south halves of Sections 1 and 3, and the north halves of Sections 7, 8, 9, 10, 11, and 12 of T16N-R19E;
- the north half of Section 7 and Sections 3, 5, 6, 10, 15, 21, and 22 of T16N-R20E; and
- the eastern three-quarters of Section 32 and Section 33 of T17N-R20E.

Option B

Under Option B, the Gen-Tie Line will traverse an up to 10-mile route, between a newly constructed substation in the west to a newly constructed 500-kV switchyard in the east.

Under Option B, the Gen-Tie Line may pass through

- the south halves of Section 1 and 3, and the north halves of Sections 9, 10, 11, and 12 of T16N-R19E;
- the north half of Section 7 and Sections 3, 5, 6, 10, 15, 21, and 22 of T16N-R20E; and
- the eastern three-quarters of Section 32 and Section 33 of T17N-R20E.

The newly constructed 500-kV switchyard will be built somewhere within Sections 10, 15, and/or 22 of T16N-R20E.

Table 1. CEC Corridor by Land Jurisdiction

Jurisdiction	Area (acres)	Percent of Total
Private	10,492	95.6%
ASLD	483	4.4%

SCOPE OF WORK

The Applicant plans to file an application for a CEC for the Gen-Tie Project. The proposed Gen-Tie Project entails the construction, operation, and maintenance of a 345- or 500-kV Gen-Tie Line and up to one 500-kV On-Site Switchyard. The two interconnection options are described in the introduction of this letter. The Gen-Tie Project will support the Applicant's proposed West Camp 2 Wind Farm, a maximum 500-MW wind energy generation facility and 500-MW battery storage facility. Specific structure types will be selected closer to construction but may consist of any combination of steel monopoles, H-frames, three-frame structures, steel lattice towers, or tubular steel structures. The flexibility requested regarding infrastructure within the CEC Corridor and the two voltage and interconnection options is needed to ensure the West Camp 2 Wind Farm can be constructed to meet different customer energy requirements and deliverability needs.

SUMMARY OF PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS WITHIN THE PROJECT AREA

The records review identified three prior cultural resources surveys that have been conducted within a 1-mile buffer of the CEC Corridor (Study Area). These projects took place from 1974 to 2011 in support of transmission lines, juniper reduction, gas pipelines, road improvements, and energy development projects. These three cultural surveys intersect the CEC Corridor and cover approximately 98.25 acres (0.01%) of the CEC Corridor (Table 2).

The Arizona State Museum (ASM) put forth a policy that data collected from surveys conducted more than 10 years ago are insufficient as erosion and other processes may have exposed new discoveries since then and advancements in archaeological knowledge have been made; therefore, "areas subject to survey on city, county, or state lands that were last surveyed more than 10 years ago must be resurveyed" (ASM 2024:1) The three surveys intersecting the CEC Corridor were conducted more than 10 years ago (1974-016.ASM, 2009-197.ASM, and 2011-474.ASM), and as the CEC Corridor crosses lands managed by the ASLD, the ASM policy would take effect for the entire CEC Corridor. Under the ASM policy, these surveys cannot be relied upon for current inventory purposes (Howell et al. 2012; Teague et al. 1979; Walker and Rowe 2012).

Table 2. Previous Cultural Resources Projects Intersecting the CEC Corridor

Agency Number	Project Name	Organization	Year
1974-016.ASM	Cholla-Saguaro Transmission Line	Arizona State Museum	1979
2009-197.ASM	APS NE-2 Cholla to Show Low 69-kV Transmission Line	Logan Simpson Design, Inc.	2012
2011-474.ASM	Navajo County Survey	Tierra Right of Way Services, Ltd.	2012

IDENTIFICATION OF CULTURAL RESOURCES WITHIN THE PROJECT AREA

Historic-era Sites

The records review identified six historic-era sites within the Study Area, none of which intersect with the CEC Corridor (Table 3). The six sites are twentieth-century trash scatters without features. The sites have been recommended ineligible for listing in the National Register of Historic Places (NRHP) and the Arizona Register of Historic Places (ARHP).

Table 3. Previously Recorded Historic-era Sites within the Study Area

Site Number	Cultural/Temporal Affiliation	Site Type	NRHP/ARHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
AZ P:4:71(ASM)	Euro-American; 1920–1964	Trash scatter	Considered ineligible	Howell et al. 2012	0.18
AZ P:4:73(ASM)	Euro-American; 1944–present	Trash scatter	Considered ineligible	Howell et al. 2012	0.16
AZ P:4:74(ASM)	Euro-American; 1900–1950	Trash scatter	Considered ineligible	Howell et al. 2012	0.37
AZ P:4:75(ASM)	Euro-American; 1900–1950	Trash scatter	Considered ineligible	Howell et al. 2012	0.33
AZ P:4:76(ASM)	Euro-American; 1900–1950	Trash scatter	Considered ineligible	Howell et al. 2012	0.49
AZ P:4:77(ASM)	Euro-American; 1900–1950	Trash scatter	Considered ineligible	Howell et al. 2012	0.37

Historic-era In-Use Structures

One in-use historic structure is within the Study Area (Table 4): State Route 377.

Table 4. Previously Recorded Historic-Era In-Use Structures within the Study Area

Name	Cultural/Temporal Affiliation	Site Type	NRHP/ARHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
State Route 377	Euro-American / pre-1950s–present	Transportation	Not evaluated	–	0.0

SWCA consulted the following historic maps to identify historic properties and structures that may not be identified as archaeological sites:

- The General Land Office (GLO) survey plat map of T16N, R18E, approved in 1884, does not depict any historical resources within the Study Area.
- The GLO survey plat map of T16N, R18E, approved in 1884, depicts a CABIN within the Study Area, in the SW¼ of the NE¼ of Section 11.
- The GLO survey plat map of T16N, R19E, approved in 1884, does not depict any historical resources within the Study Area.
- The GLO survey plat map of T16N, R20E, approved in 1884, depicts a CABIN within the Study Area, in the NW¼ of the NE¼ of Section 10.
- The GLO survey plat map of T17N, R19E, approved in 1884, does not depict any historical resources within the Study Area.
- The GLO survey plat map of T17N, R20E, approved in 1880, does not depict any historical resources within the Study Area.
- The 1886 U.S. Geological Survey (USGS) Holbrook, Arizona 1:250,000-scale map depicts an unnamed road between Holbrook and Heber; this road lies 2.35 miles northwest of the current alignment of State Route 377.
- The 1955 USGS Joseph City, Arizona, 1:62,500-scale map depicts at least eight cattle TANKS within the Study Area, a network of unimproved roads within the CEC Corridor and Study Area connecting the TANKS, and an unlabeled WINDMILL in the Study Area (0.78 mile from the CEC Corridor).

- The 1957 USGS Holbrook, Arizona 1:250,000-scale map depicts three WINDMILLS in the Study Area and several unimproved roads in the CEC Corridor.
- The 1970 USGS McCauley Sinks, Arizona 1:24,000-scale map depicts three unimproved roads and a transmission line in the Study Area.
- The 1970 USGS Flattop Hill, Arizona 1:24,000-scale map depicts two unimproved roads in the Study Area.

The NRHP website (National Park Service [NPS] 2024a) and the National Scenic and National Historic Trails website (NPS 2024b) do not indicate any historic resources in the CEC Corridor.

Archaeological Sites

There are 46 previously recorded archaeological sites within the Study Area, 15 of which intersect the CEC Corridor (Table 5 and Figures 3-1 through 3-6 in Attachment 3). Seven of the 15 archaeological sites in the CEC Corridor were recorded in the 1970s and their NRHP/ARHP status is considered unevaluated. The seven sites consist of one Ancestral Puebloan artifact scatter dating between AD 725 and 1125; four Native American artifact scatters and one habitation site, all dating between AD 200 and 1500; and one Native American artifact scatter of indeterminate age. The other eight archaeological sites in the CEC Corridor were recently recorded, and no information is available in the AZSITE database other than their location. No NRHP/ARHP recommendations or determinations are available for these eight sites at this time, and they must be considered unevaluated pending more information from AZSITE and SHPO.

Table 5. Previously Recorded Archaeological Sites within the Study Area

Site Number	Cultural/Temporal Affiliation	Site Type	NRHP/ARHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
AZ P:3:10(ASM)	Ancestral Puebloan; AD 725–1125	Artifact scatter	Unevaluated	Teague et al. 1979	0.0
AZ P:3:15(ASM)	Native American; Prehistoric	Habitation	Considered eligible (D)	Teague et al. 1979	0.91
AZ P:3:27(ASM)	Mogollon/Ancestral Puebloan; AD 1000–1300	Artifact scatter	Eligible (D)	Not applicable (N/A)	0.96
AZ P:3:28(ASM)	Ancestral Puebloan; AD 1040–1150	Habitation	Eligible (D)	N/A	0.80
AZ P:3:155(ASM)	Unknown	Unknown	Unknown	N/A	0.82
AZ P:3:163(ASM)	Unknown	Unknown	Unknown	N/A	0.86
AZ P:3:164(ASM)	Unknown	Unknown	Unknown	N/A	0.51
AZ P:3:165(ASM)	Unknown	Unknown	Unknown	N/A	0.79
AZ P:3:166(ASM)	Unknown	Unknown	Unknown	N/A	0.70
AZ P:3:167(ASM)	Unknown	Unknown	Unknown	N/A	0.91
AZ P:3:168(ASM)	Unknown	Unknown	Unknown	N/A	0.90
AZ P:3:186(ASM)	Unknown	Unknown	Unknown	N/A	0.41
AZ P:3:197(ASM)	Unknown	Unknown	Unknown	N/A	0.87
AZ P:3:201(ASM)	Unknown	Unknown	Unknown	N/A	0.98
AZ P:3:239(ASM)	Unknown	Unknown	Unknown	N/A	0.0

Site Number	Cultural/Temporal Affiliation	Site Type	NRHP/ARHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
AZ P:3:240(ASM)	Unknown	Unknown	Unknown	N/A	0.0
AZ P:4:35(ASM)	Mogollon/Ancestral Puebloan; AD 1040–1200	Habitation	Eligible (D)	N/A	0.44
AZ P:4:36(ASM)	Mogollon/Ancestral Puebloan; AD 1000–1150	Habitation	Eligible (D)	N/A	0.42
AZ P:4:37(ASM)	Mogollon/Ancestral Puebloan; AD 1055–1200	Habitation	Eligible (D)	N/A	0.30
AZ P:4:72(ASM)	Native American; AD 200–1500	Artifact scatter	Unevaluated	Howell et al. 2012	0.24
AZ P:4:78(ASM)	Native American; Prehistoric	Habitation	Unevaluated	Howell et al. 2012	0.42
AZ P:4:83(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.0
AZ P:4:84(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.0
AZ P:4:85(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.0
AZ P:4:86(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.0
AZ P:4:87(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.0
AZ P:4:88(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.05
AZ P:4:89(ASM)	Unknown	Unknown	Unknown	Klebacha and Graff 2017	0.0
NA3212	Ancestral Puebloan; AD 750–1150	Habitation	Unevaluated	N/A	0.44
NA3213	Ancestral Puebloan; AD 1150–1300	Artifact scatter	Unevaluated	N/A	0.49
NA3217	Ancestral Puebloan; AD 900–1150	Artifact scatter	Unevaluated	N/A	0.18
NA9045	Native American; AD 750–800, 1200+	Habitation	Unevaluated	Museum of Northern Arizona 1965	0.58
NA14198	Native American; Prehistoric	Quarry	Unevaluated	Brook 1977	0.04
NA14200	Native American; AD 200–1500	Artifact scatter	Unevaluated	Brook 1977	0.0
NA14201	Native American; AD 200–1500	Habitation	Unevaluated	Brook 1977	0.0
NA14202	Native American; Prehistoric	Artifact scatter	Unevaluated	Brook 1977	0.46
NA14203	Native American; AD 200–1500	Artifact scatter	Unevaluated	Brook 1977	0.28
NA14204	Native American; possibly Mid-Late Archaic period	Artifact scatter	Unevaluated	Brook 1977	0.0
NA14205	Native American; Prehistoric	Artifact scatter	Unevaluated	Brook 1977	0.50
NA14206	Native American; AD 200–1500	Artifact scatter	Unevaluated	Brook 1977	0.0
NA14207	Native American; AD 200–1500	Artifact scatter	Unevaluated	Brook 1977	0.07
NA14208	Native American; Prehistoric	Artifact scatter	Unevaluated	Brook 1977	0.16

Site Number	Cultural/Temporal Affiliation	Site Type	NRHP/ARHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
NA14209	Native American; Prehistoric	Artifact scatter	Unevaluated	Brook 1977	0.25
NA14210	Native American; AD 200–1500	Artifact scatter	Unevaluated	Brook 1977	0.0
NA14211	Native American; AD 200–1500	Artifact scatter	Unevaluated	Brook 1977	0.0
NA14212	Native American; Prehistoric	Artifact scatter	Unevaluated	Brook 1977	0.10

Note: Shaded rows indicate sites that intersect the CEC Corridor.

SUMMARY AND ASSESSMENT OF EFFECTS

To ensure that other potential historic properties will not be impacted within the CEC Corridor, the Applicant will have a qualified firm perform a cultural resources inventory of the final design of the CEC Corridor. The cultural resources inventory will be conducted prior to any ground disturbance associated with the Gen-Tie Project and will identify and evaluate cultural resources that may be present, including revisiting known cultural resources. If any historic properties are encountered, the inventory report would provide recommendations to the Applicant on how to avoid, minimize and/or mitigate adverse effects on those historic properties.

The records review identified that less than 0.01% of the CEC Corridor has been previously surveyed for cultural resources. The NRHP/ARHP status of the 15 archaeological sites in the CEC Corridor remains unevaluated or unknown. Any of the previously identified archaeological sites in the final design of the CEC Corridor that are relocated during the cultural resources inventory and cannot be avoided by the Gen-Tie Project would be evaluated for inclusion in the NRHP/ARHP before recommendations to mitigate adverse effects to the sites can be made. In addition to the previously recorded sites, several unrecorded cultural resources are depicted as intersecting the CEC Corridor on GLO plat and historic USGS topographic maps.

The proposed Gen-Tie Project is expected to introduce varying degrees of visual contrast depending on the key observation points included in the visual analysis (see Exhibit E of the full CEC application). Four key observation points were analyzed: 1) West Camp Access Road (weak level of contrast with low sensitivity); 2) Private Ranch Road (moderate to strong level of contrast with low sensitivity); 3) State Route 377 Southbound (weak to moderate level of contrast with low sensitivity); and 4) State Route 377 Northbound (weak to moderate level of contrast with low sensitivity). These visual impacts would not diminish the integrity of the known archaeological sites or historic properties.

Please feel free to contact me at jeff.charest@swca.com should you have any questions.

Sincerely,

Jeffrey P. Charest, M.A.
Cultural Resources Team Lead, SWCA Environmental Consultants

REFERENCES CITED/LITERATURE CITED

Arizona State Museum (ASM). 2024. Policy and Procedures Regarding the Use of Previous Archaeological Survey Data. Available at: https://statemuseum.arizona.edu/sites/default/files/2024-03/Policy%20and%20Procedures%20Regarding%20the%20Use%20of%20Previous%20Survey%20Data.pdf. Accessed August 2025.

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Howell, Joseph, Jeffrey T. Jones, and Chance Copperstone. 2012. *A Class III Cultural Resources Inventory of the Aztec, New Lake, Phoenix Park Wash, and Porter Canyon Units in the Navajo County Cultural Survey Project Area, Navajo County, Arizona*. Archaeological Report No. 2011-210. Tierra Right of Way Services, Ltd., Tucson, Arizona.

Klebacha, Caroline, and Emily Graff. 2017. *Class III Cultural Resources Survey of 626.05 Acres in Advance of Brush Clearing Activities South of Holbrook, Navajo County, Arizona*. Technical Report No. 17-48. PaleoWest, LLC, Phoenix, Arizona.

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Teague, Lynn S., Linda L. Mayro, Neal W. Ackerly, Richard Ciolek-Torrello, Gary T. Cummins, David A. Gregory, Richard C. Lange, Susan D. Morton, John F. Robertson, Michelle Behr, Carol A. Coe, and Alan H. Simmons. 1979. *An Archaeological Survey of the Cholla-Saguaro Transmission Line Corridor Volume 1.* Archaeological Series No. 135, Vol. 1. Cultural Resource Management Section, Arizona State Museum, University of Arizona, Tucson.

Walker, Jessica, and Robert A. Rowe. 2012. *A Cultural Resources Survey of the Arizona Public Service Company's 56.88 Mile Long (344.72 Acre) NE-2 and 58.14 Mile Long (352.36 acre) NE-3 (Cholla to Show Low) 96-kV Transmission Lines on Federal, State, and County Land in Navajo County, Arizona*. Logan Simpson Design, Tempe, Arizona.

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ATTACHMENT 1

ACC-SHPO Consultation Checklist for Compliance with the State Historic Preservation Act

ACC-SHPO CONSULTATION CHECKLIST
FOR COMPLIANCE WITH THE STATE HISTORIC PRESERVATION ACT
(September 2022)

Projects requiring a Certificate of Environmental Compatibility are subject to the Arizona State Historic Preservation Act and consultation with the Arizona State Historic Preservation Officer. All submissions must include a letter on letterhead, addressed to:

Kathryn Leonard, State Historic Preservation Officer
1110 W. Washington St., #100
Phoenix, AZ 85007

The letter should be one or two pages (as needed) and include:

- ☐ Project Name
- ☐ Project location (please include legal description and UTMs)
- ☐ Funding source for the project, and/or the state or federal agency or program, as applicable
- ☐ Project Area description (project area dimensions, and include all alternatives, access roads, gen-tie connections, staging areas, etc)
- ☐ Total Acres in Project Area
- ☐ Landownership (all involved; provide acres by land jurisdiction)
- ☐ Scope of work (detailed description of the project)
- ☐ Summary of previous archaeological investigations within the Project Area
- ☐ Identification of cultural resources within the Project Area (brief description of site and eligibility status)
- ☐ Request for SHPO review and comment

Attachments should include:

- ☐ Location map showing where the project area is located and land jurisdiction
- ☐ Map(s) showing Class I research results for projects and cultural resources

Email to: azshpo@azstateparks.gov (no hard copies accepted)
Additional questions: cklebacha@azstateparks.gov

ATTACHMENT 2

CEC Corridor and Land Jurisdiction Maps

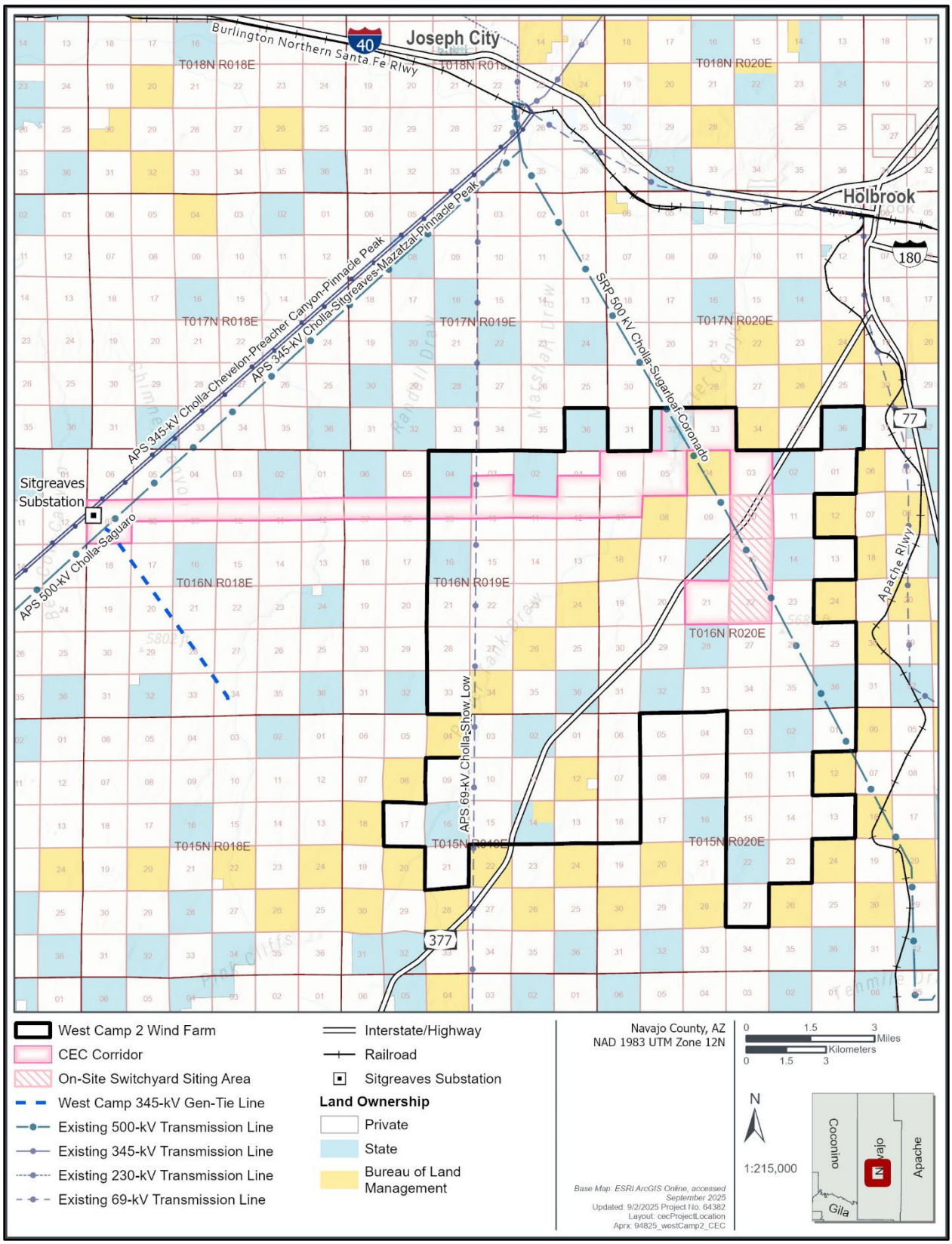

Figure 2-1. Gen-Tie Project overview and land jurisdiction.

ATTACHMENT 3

Class 1 Previous Research Maps

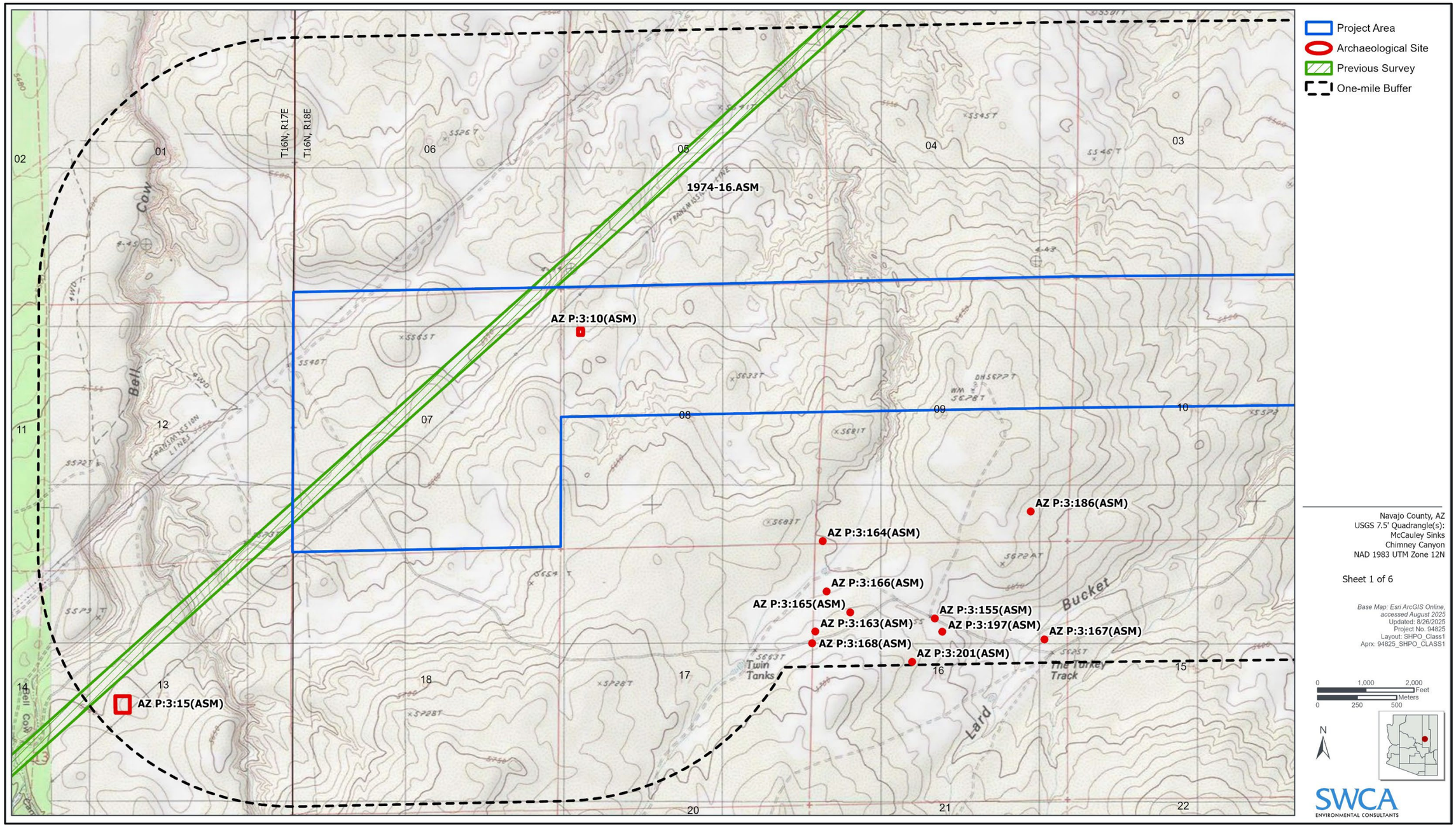

Figure 3-1. Class I previous research map (1 of 6).

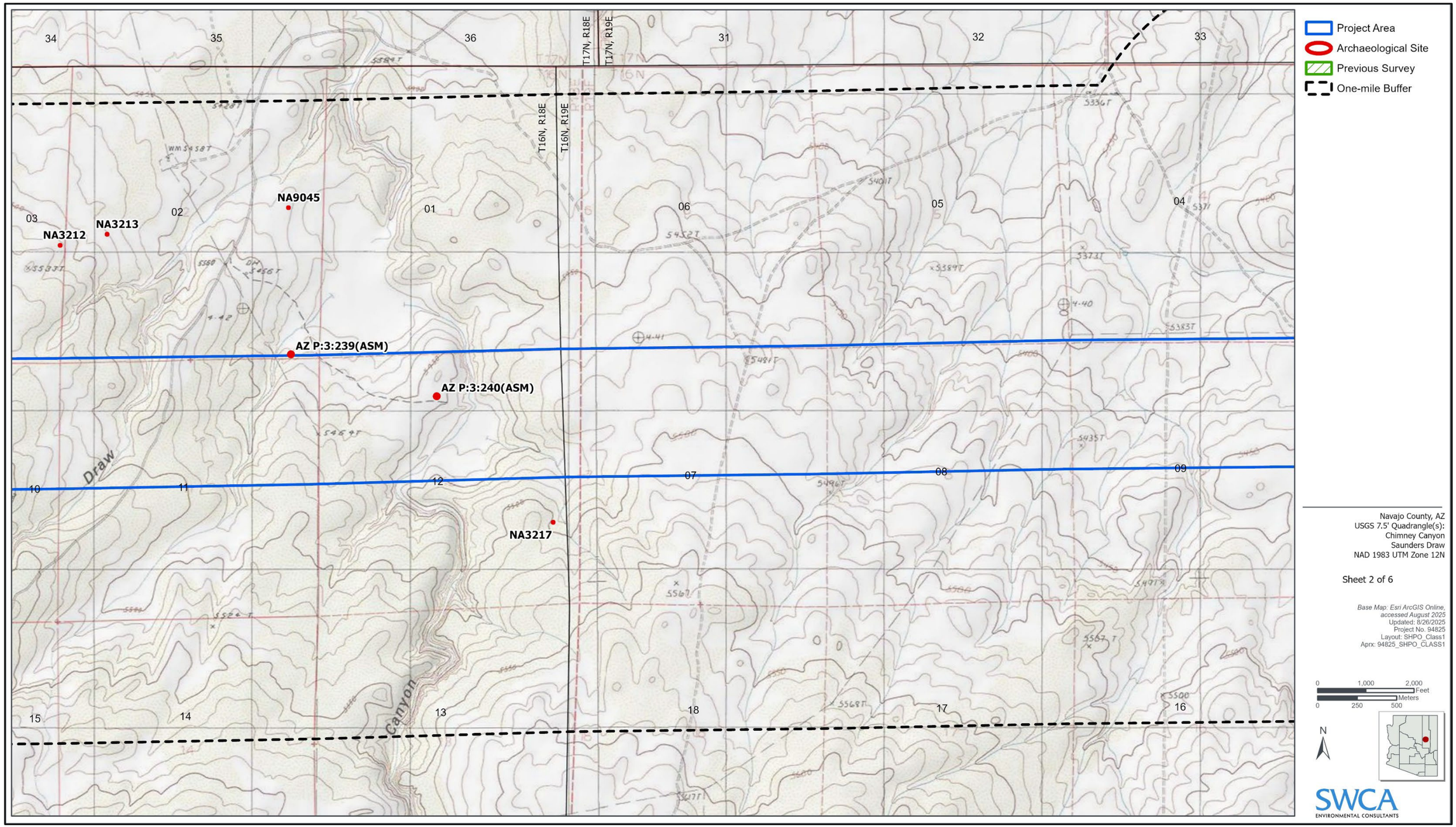

Figure 3-2. Class I previous research map (2 of 6).

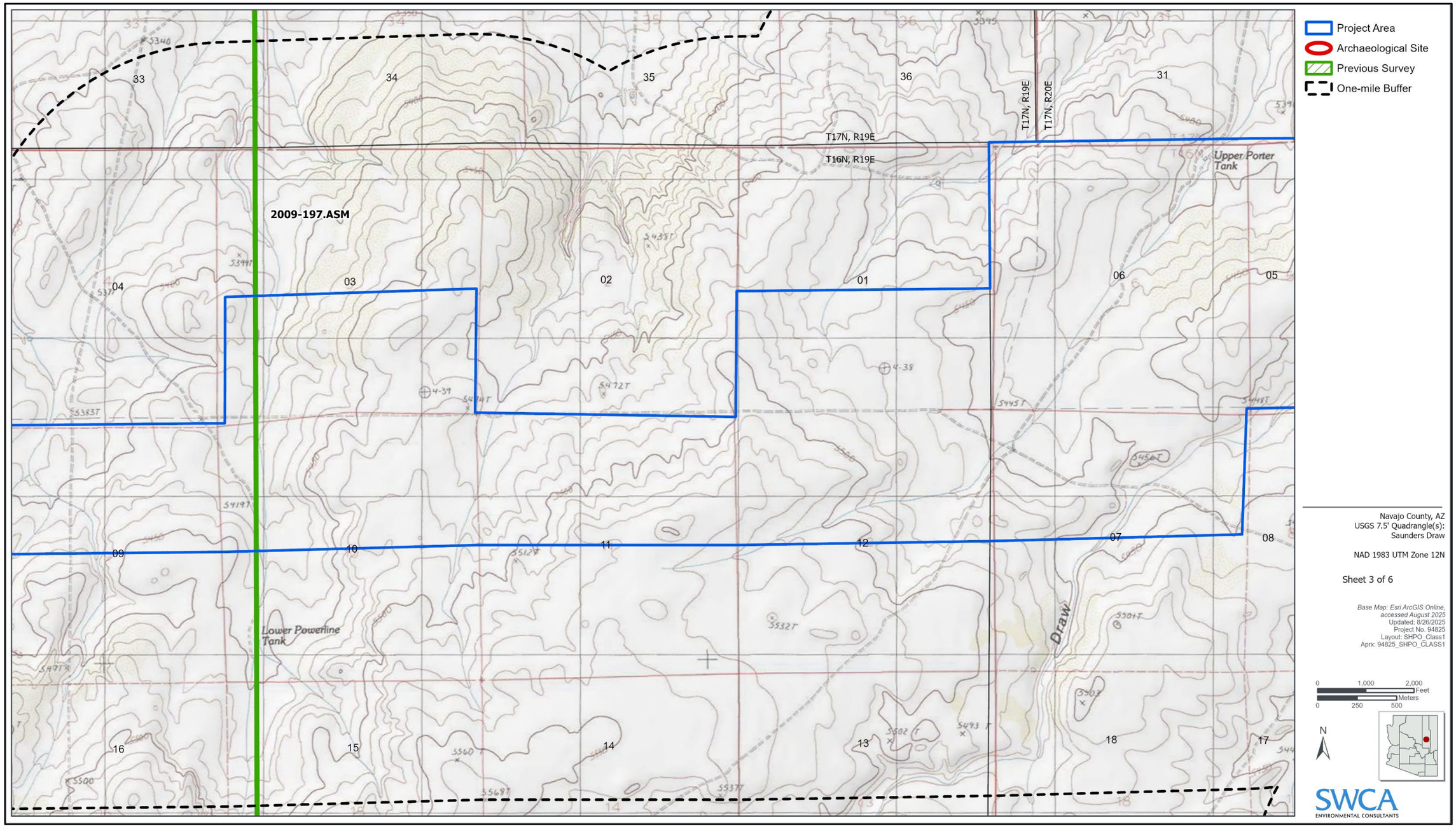

Figure 3-3. Class I previous research map (3 of 6).

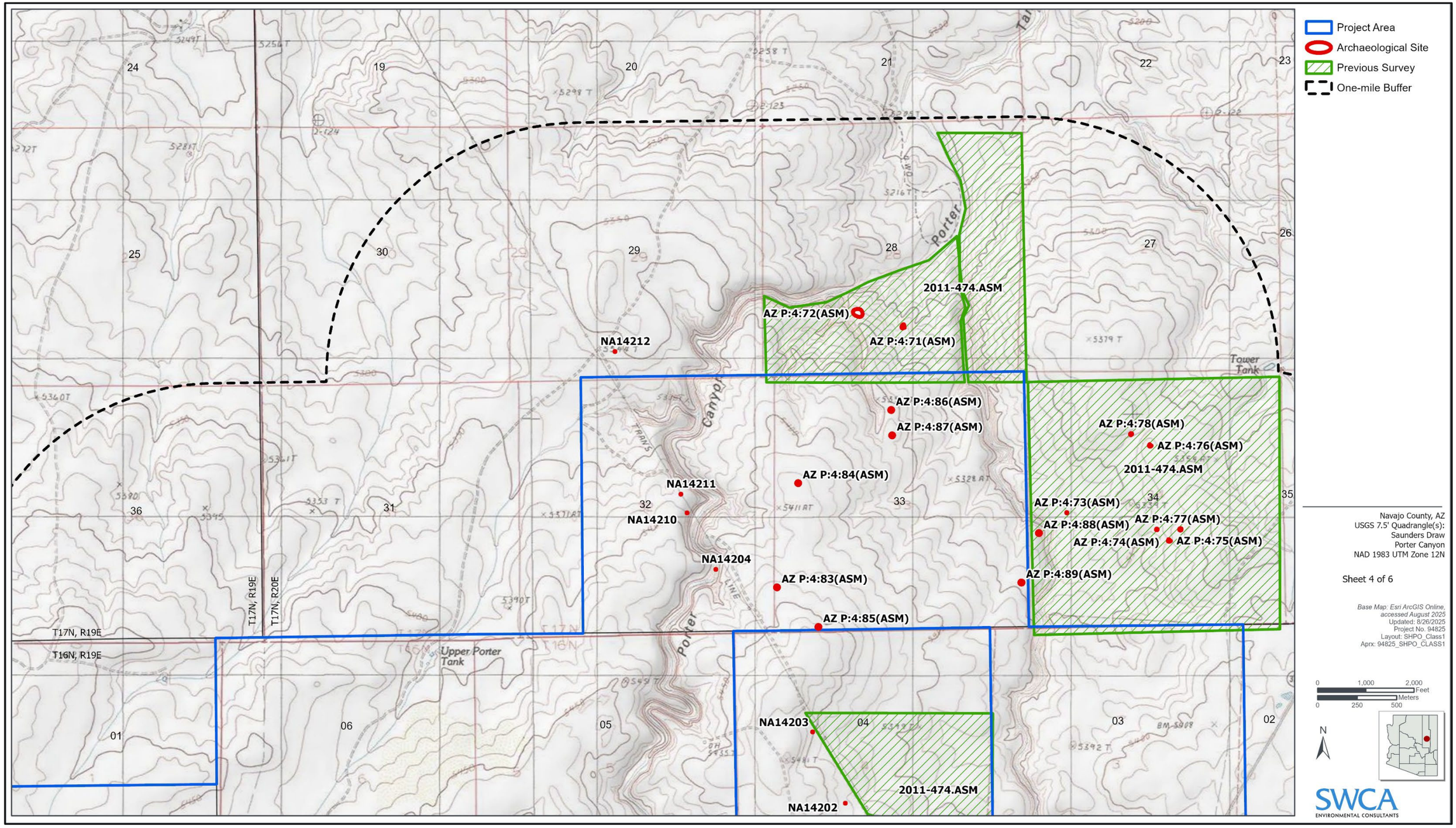

Figure 3-4. Class I previous research map (4 of 6).

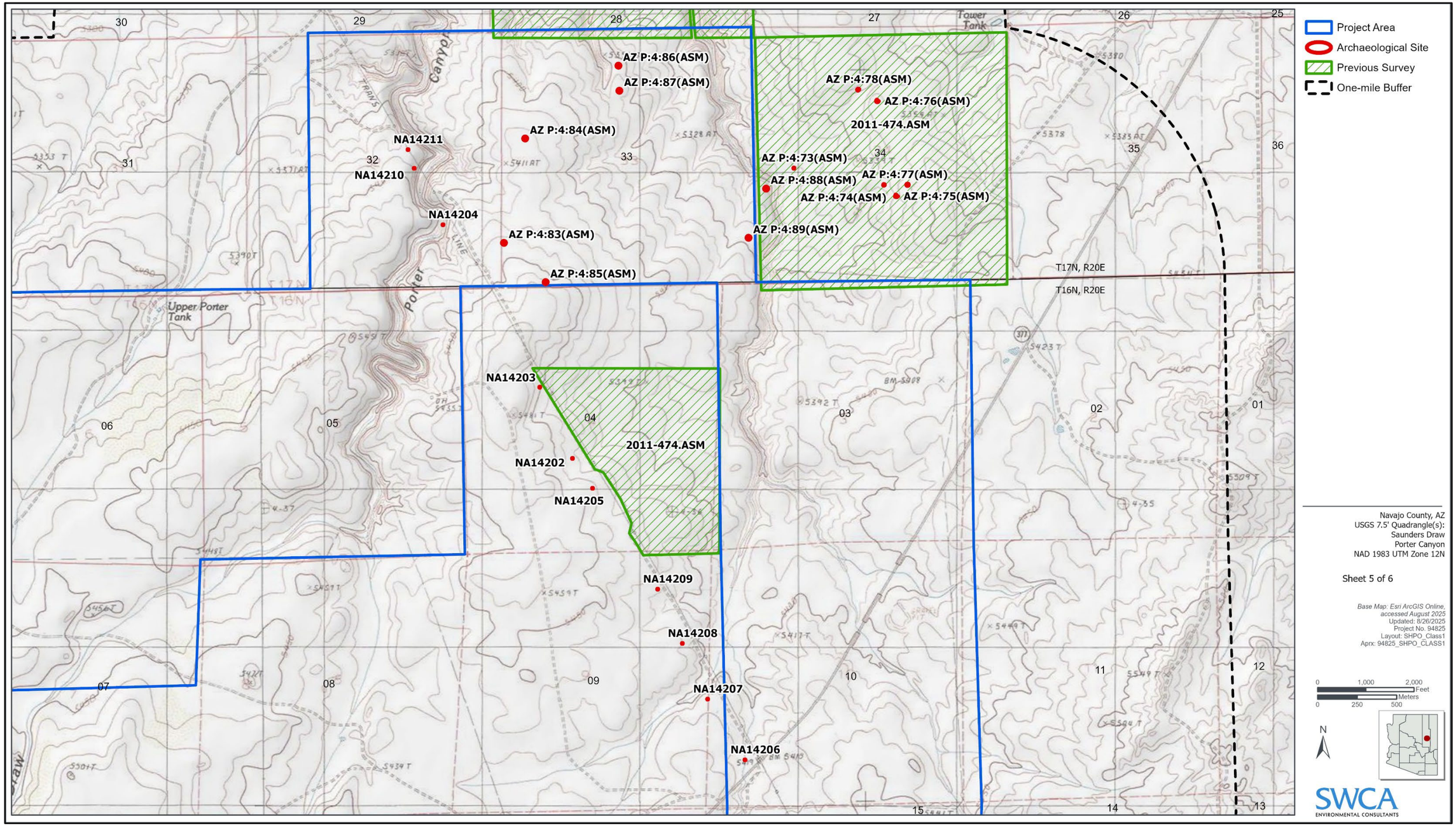

Figure 3-5. Class I previous research map (5 of 6).

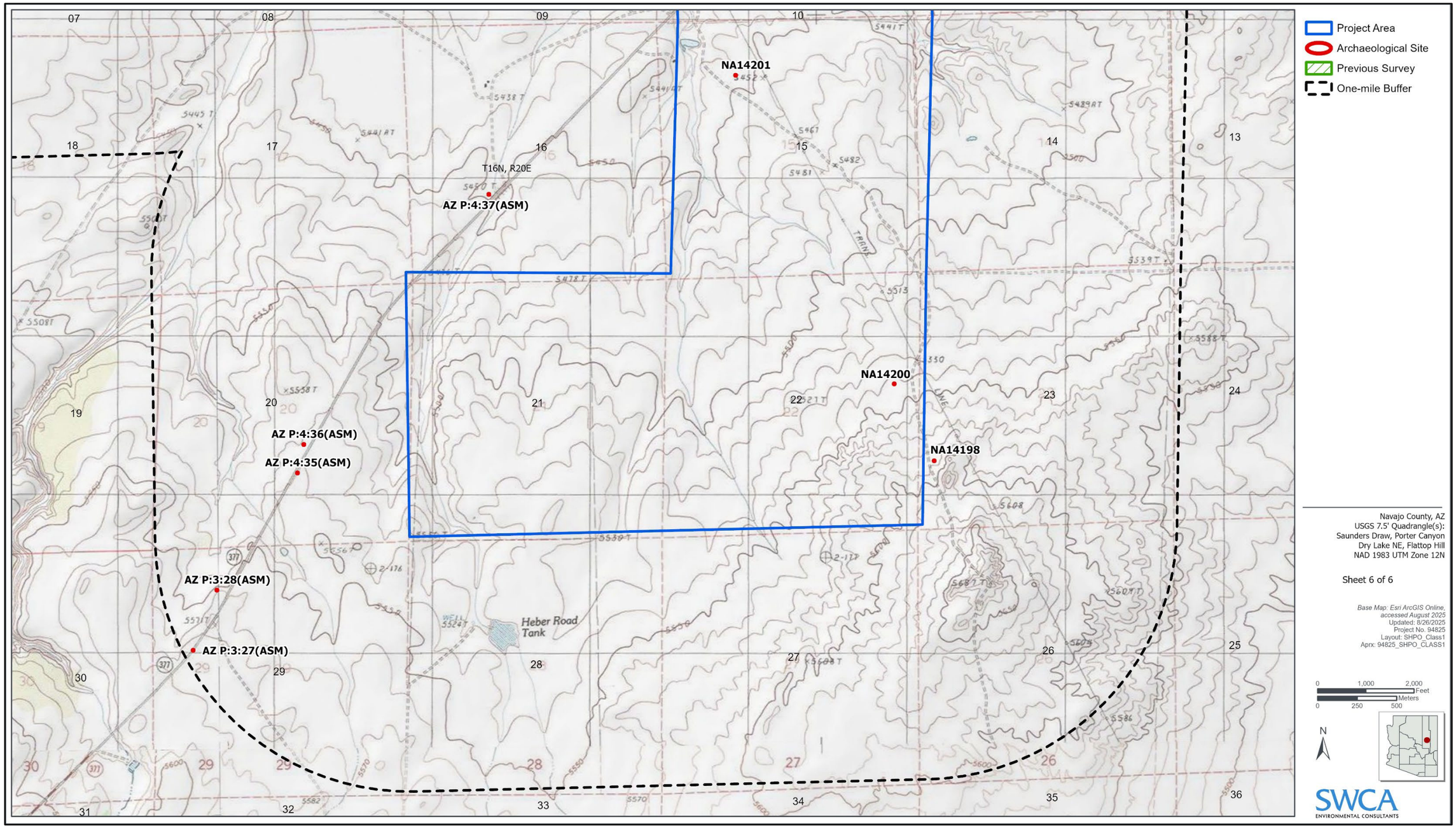

Figure 3-6. Class I previous research map (6 of 6).

EXHIBIT F

Recreation

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EXHIBIT F. RECREATION

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-Exhibit 1, the intent of this exhibit is to:

> *State the extent, if any, the proposed site or route will be available to the public for recreational purposes, consistent with safety considerations and regulations and attach any plans the applicant may have concerning the development of the recreational aspects of the proposed site or route.*

Introduction

The proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) will be located primarily on private land, all of which is within the jurisdiction of Navajo County; a small portion of infrastructure may be sited on Arizona State Trust lands managed by the Arizona State Land Department (ASLD). Private lands, Arizona State Trust lands, and federal lands managed by the Bureau of Land Management (BLM) are adjacent to the Certificate of Environmental Compatibility (CEC) Corridor (see maps in Exhibit A).

Private lands within the CEC Corridor are entirely owned by Aztec Land and Cattle Company, Limited (Aztec) and are not open to the public for recreational use. The ASLD land in the CEC Corridor is entirely surrounded by private parcels that are also owned by Aztec, and therefore, is not legally accessible to the public.

There are no preserves, designated trails, or other designated recreation sites within the CEC Corridor or its vicinity. The nearest designated trails are over 15 miles to the southeast of the CEC Corridor near the Town of Snowflake, Arizona (Trailforks 2025). Recreational vehicle parks are in Joseph City, approximately 10 miles north of the CEC Corridor, and in Holbrook, approximately 9 miles northeast of the CEC Corridor. Public access and dispersed recreation opportunities may also occur on private and BLM- or ASLD-administered lands adjacent to the CEC Corridor; however, there are no designated BLM recreation sites or facilities in the vicinity of the CEC Corridor (BLM 2025). Silver Creek, a popular catch-and-release fishery, is approximately 6 miles east of the CEC Corridor (ASLD 2025). Petrified Forest National Park is approximately 17 miles east of the CEC Corridor.

Hunting for big game (i.e., pronghorn [*Antilocapra americana*], black bear [*Ursus americanus*], elk [*Cervus elaphus*], mountain lion [*Puma concolor*], mule deer [*Odocoileus hemionus*]) is managed by the Arizona Game and Fish Department (AZGFD) and is one of the primary recreational activities within the vicinity of the CEC Corridor, which lies within Game Management Unit (GMU) 4B and GMU 3A (AZGFD 2025a, 2025b). Merriam's wild turkey (*Meleagris gallopavo merriami*) and tree squirrel (*Sciurus* spp.) are also pursued in GMU 4B, and mourning dove (*Zenaida macroura*) hunting is popular in GMU 3A (AZGFD 2025a, 2025b).

Other general dispersed recreational uses within the vicinity of the CEC Corridor include walking, cycling, horseback riding, off-roading, and other recreational activities typical of Arizona rangelands. However, the majority of the CEC Corridor is surrounded by Aztec-owned private land that is not open to the public for recreation.

Future Availability of the Proposed CEC Corridor for Recreational Purposes

The CEC Corridor is not available for public recreation, and the Applicant has no plans to develop the recreational aspects of the CEC Corridor.

Literature Cited

Arizona Game and Fish Department (AZGFD). 2025a. *GMU 4B Expanded Hunt Information*. Available at: https://live-azgfd-main.pantheonsite.io/wp-content/uploads/2022/06/GMU4B-usingPdfTemplate.pdf. Accessed May 2025.

———. 2025b. *GMU 3A Expanded Hunt Information*. Available at: https://live-azgfd-main.pantheonsite.io/wp-content/uploads/2023/04/GMU3A.pdf. Accessed May 2025.

Arizona State Land Department (ASLD). 2025. ASLD Parcel Viewer Web Application. Available at: http://gis.azland.gov/webapps/parcel/?loc=-110.2382,34.6335,11&layers=3,2,4. Accessed May 2025.

Bureau of Land Management (BLM). 2025. BLM Recreational Opportunities Web Application. Available at: https://webmaps.blm.gov/program_apps/BLM_Natl_Recreation_Opportunities/. Accessed May 2025.

Trailforks. 2025. Interactive Map Web Application. Available at: https://www.trailforks.com/trails/map/?nearby=1. Accessed May 2025.

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EXHIBIT G

Concepts of Proposed Facilities

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EXHIBIT G. CONCEPTS OF PROPOSED FACILITIES

As stipulated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-Exhibit 1, the intent of this exhibit is to:

> *Attach any artist's or architect's conception of the proposed plan or transmission line structures and switchyards, which applicant believes may be informative to the committee.*

List of Illustrations

The following illustrations (structures, circuits, and electrical layouts) for the proposed West Camp 2 Gen-Tie Project are provided in this exhibit:

Figure G-1. Conceptual 345-kV substation general arrangement.

Figure G-2. Typical single-circuit 345-kV tangent pole.

Figure G-3. Typical single-circuit 345-kV turning structure.

Figure G-4. Typical single-circuit 345-kV dead-end structure.

Figure G-5. Typical double-circuit 345-kV tangent structure.

Figure G-6. Typical double-circuit 345-kV turning structure.

Figure G-7. Typical double-circuit 345-kV dead-end structure.

Figure G-8. Conceptual 500-kV substation general arrangement.

Figure G-9. Typical single-circuit 500-kV tangent structure.

Figure G-10. Typical single-circuit 500-kV turning structure.

Figure G-11. Typical single-circuit 500-kV dead-end structure.

Figure G-12. Conceptual 500-kV on-site switchyard general arrangement.

Figure G-13. Single-circuit 345-kV or 500-kV lattice structure.

Figure G-14. Single-circuit 345-kV or 500-kV tangent monopole structure (delta configuration).

Figure G-15. Single-circuit 345-kV or 500-kV tangent monopole structure (vertical configuration).

Figure G-16. Double-circuit 345-kV or 500-kV tangent monopole structure.

Figure G-17. Single-circuit 345-kV or 500-kV dead-end monopole structure.

Figure G-18. Double-circuit 345-kV or 500-kV dead-end monopole structure.

Figure G-19. Double-circuit 345-kV or 500-kV tubular structure.

Figure G-20. Single-circuit 345-kV or 500-kV three-pole structure.

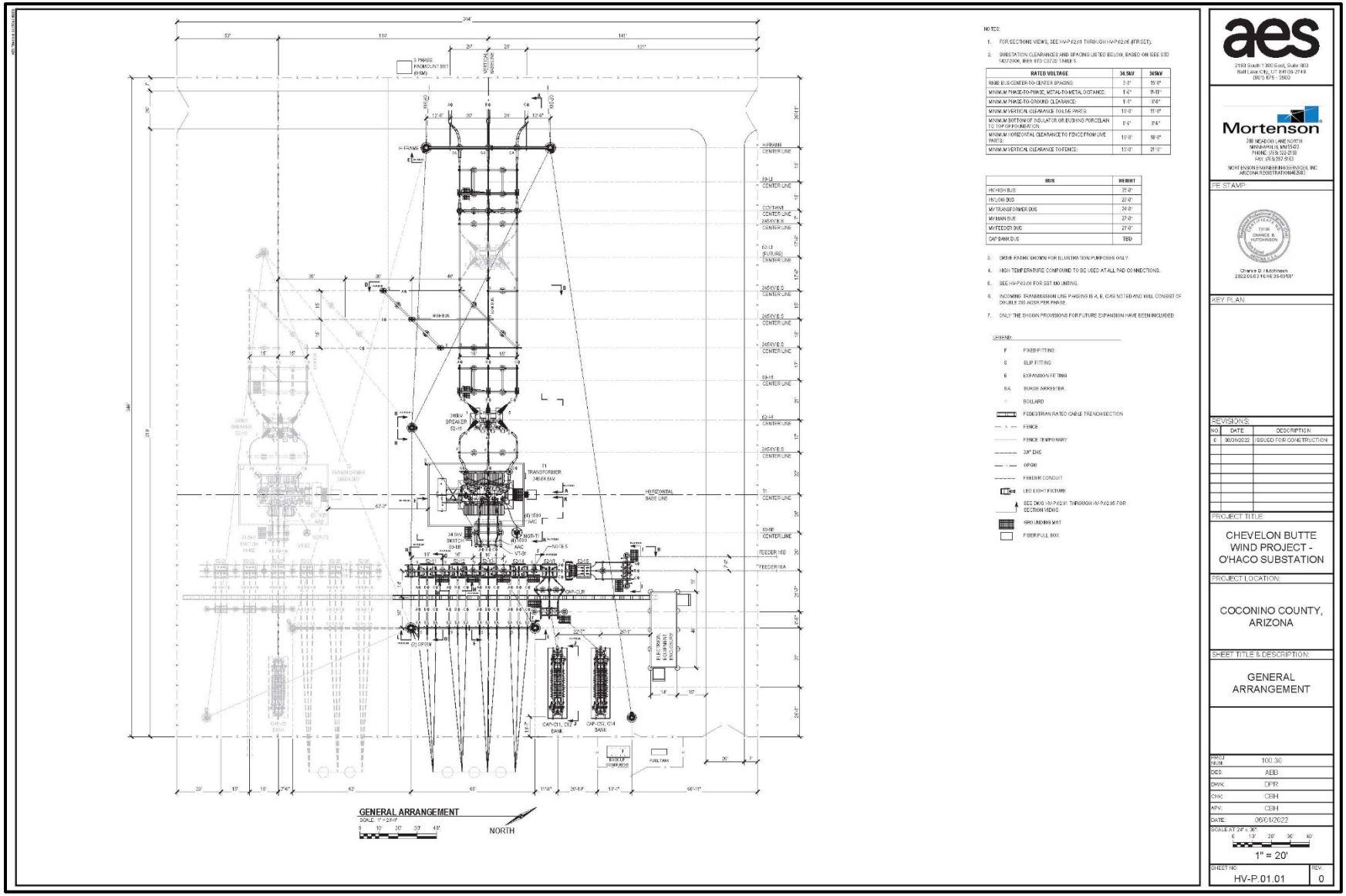


Figure G-1. Conceptual 345-kV substation general arrangement.

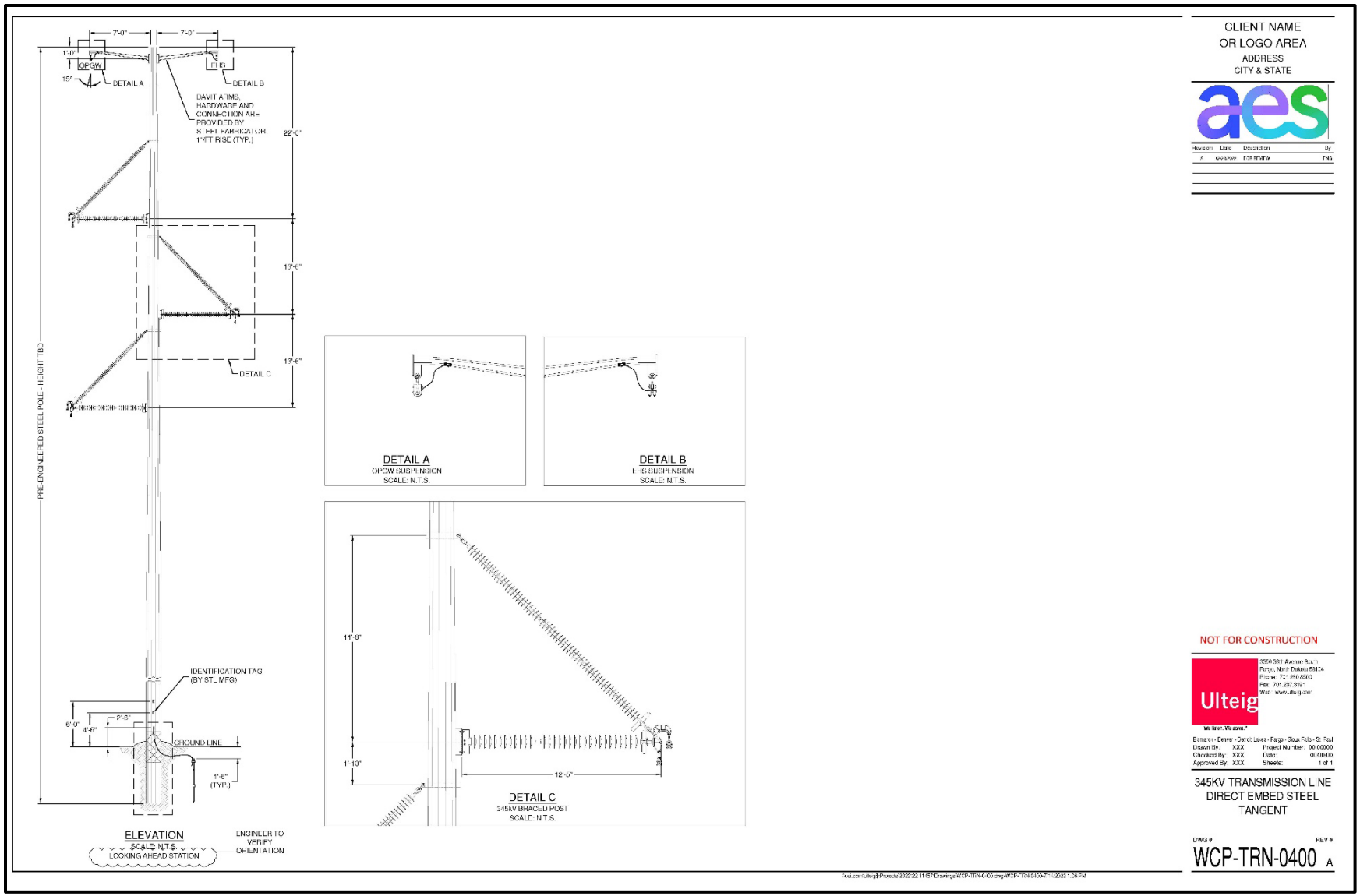


Figure G-2. Typical single-circuit 345-kV tangent pole.

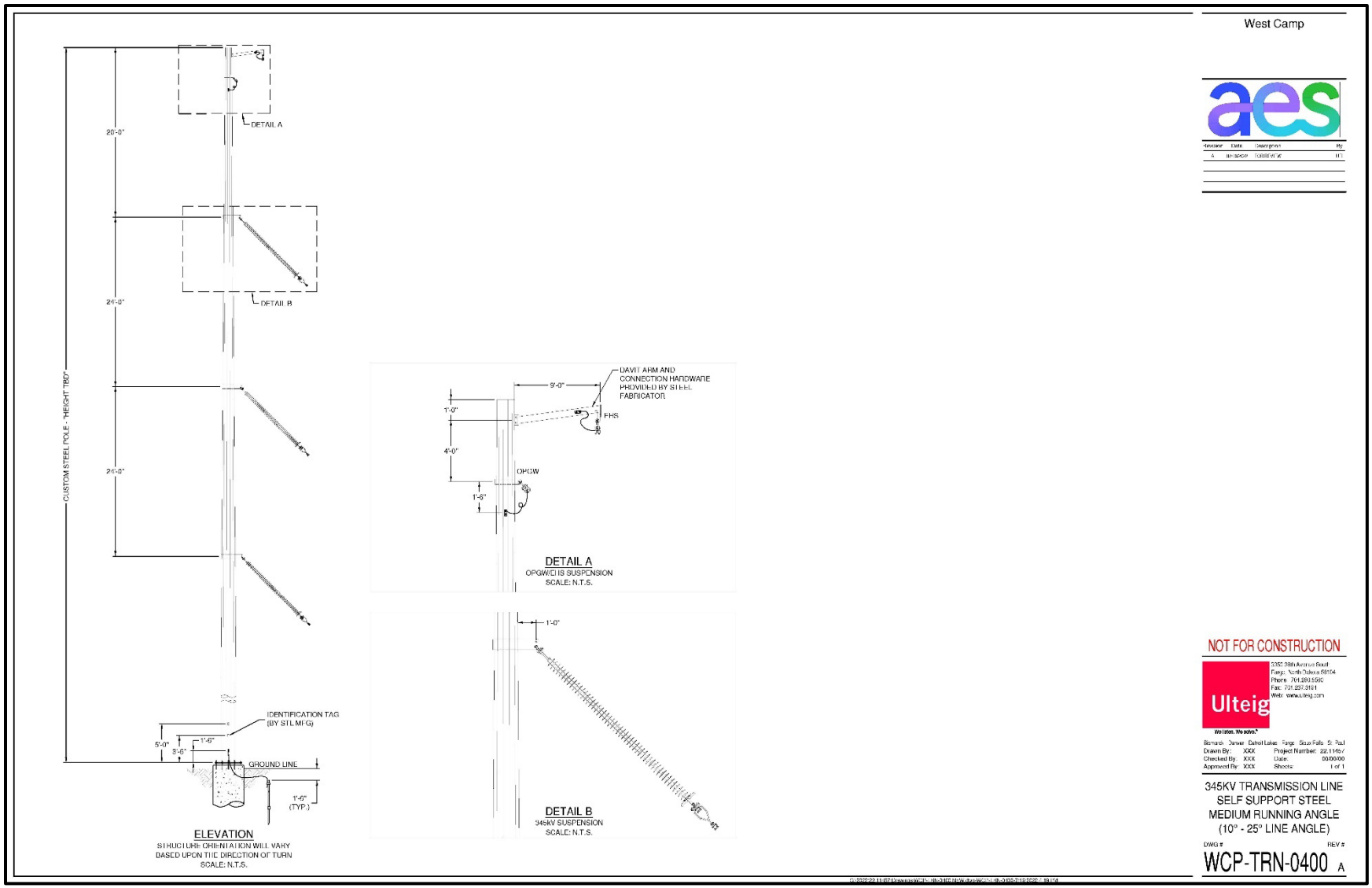


Figure G-3. Typical single-circuit 345-kV turning structure.

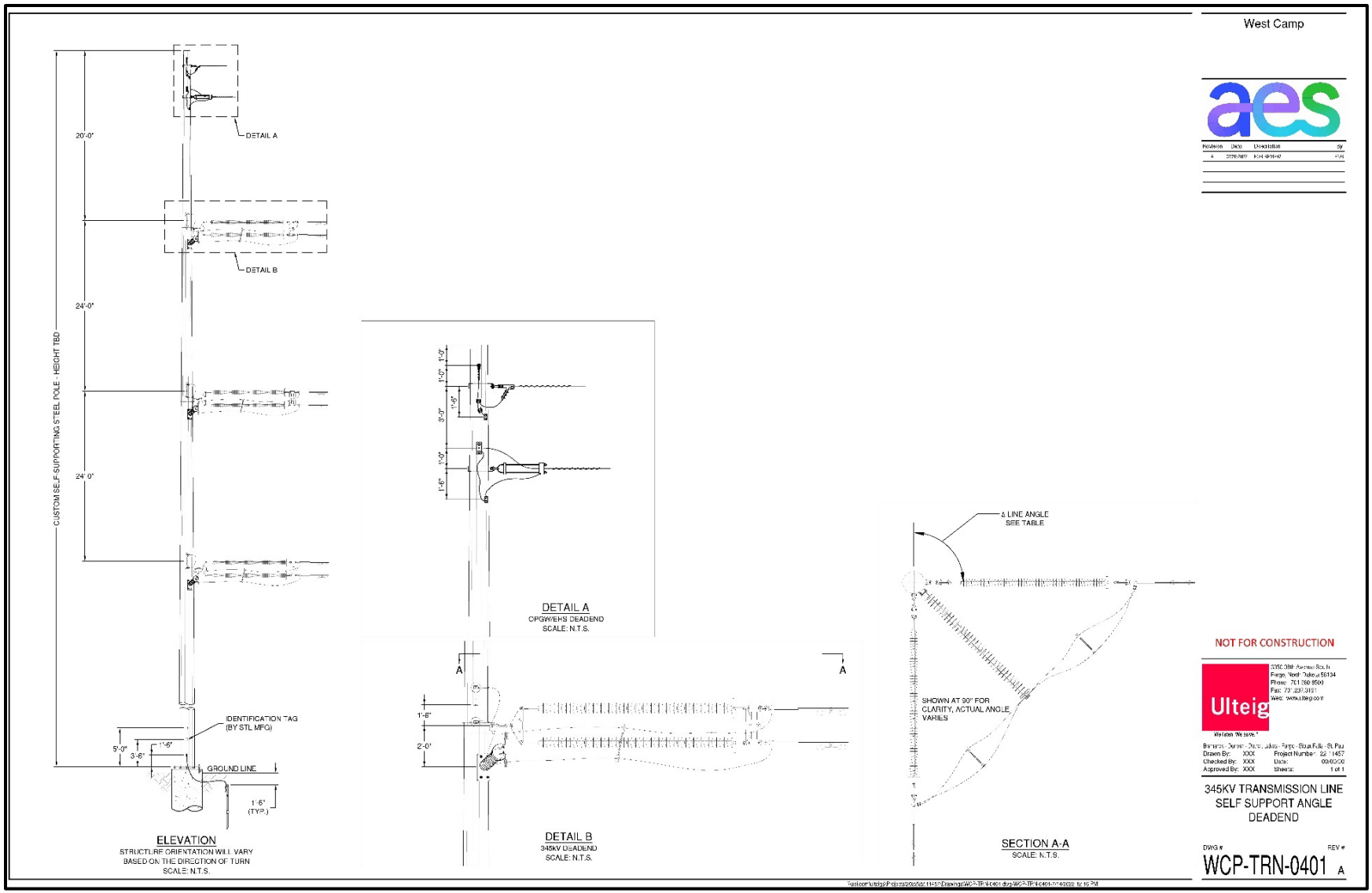


Figure G-4. Typical single-circuit 345-kV dead-end structure.

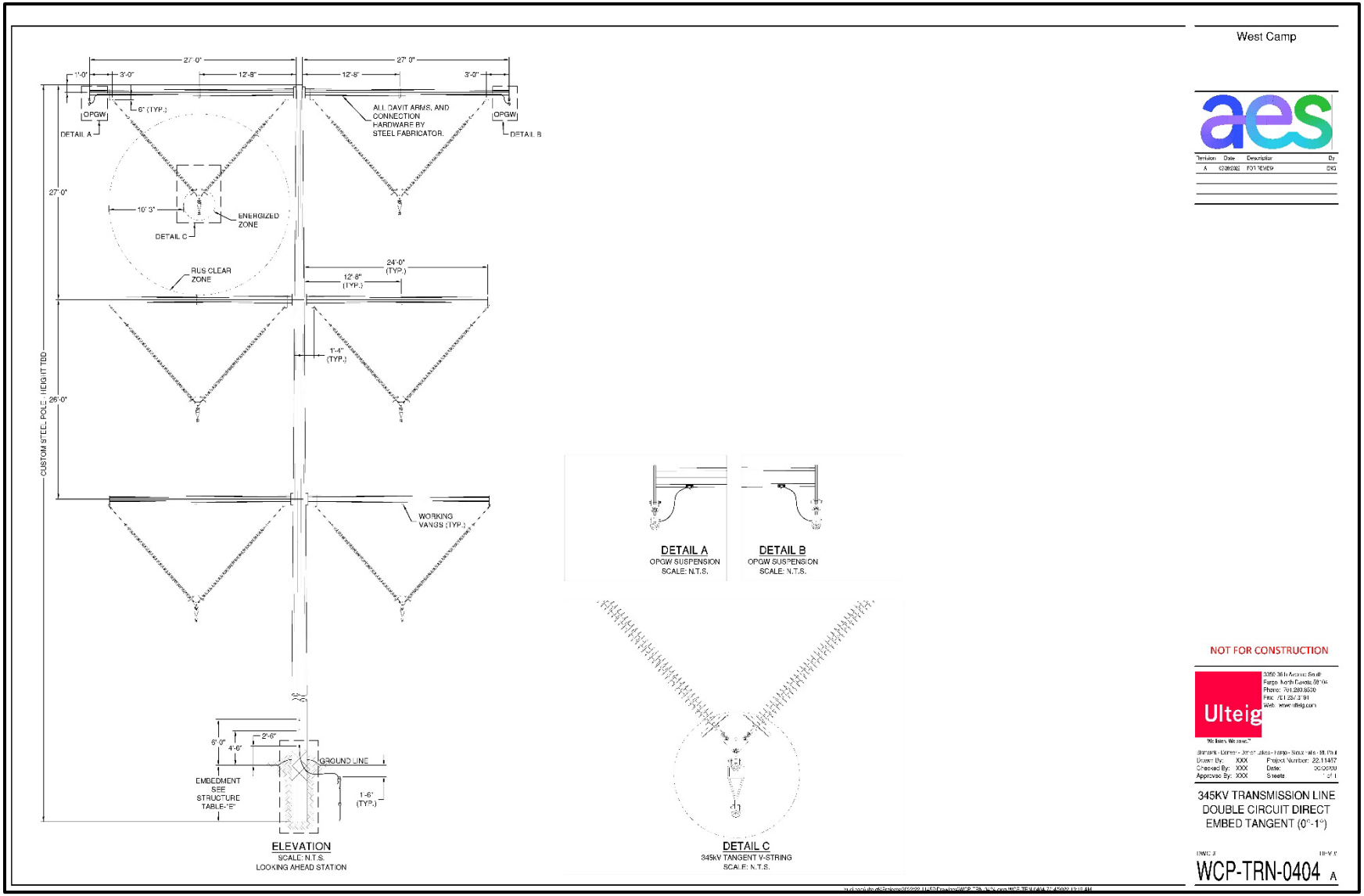


Figure G-5. Typical double-circuit 345-kV tangent structure.

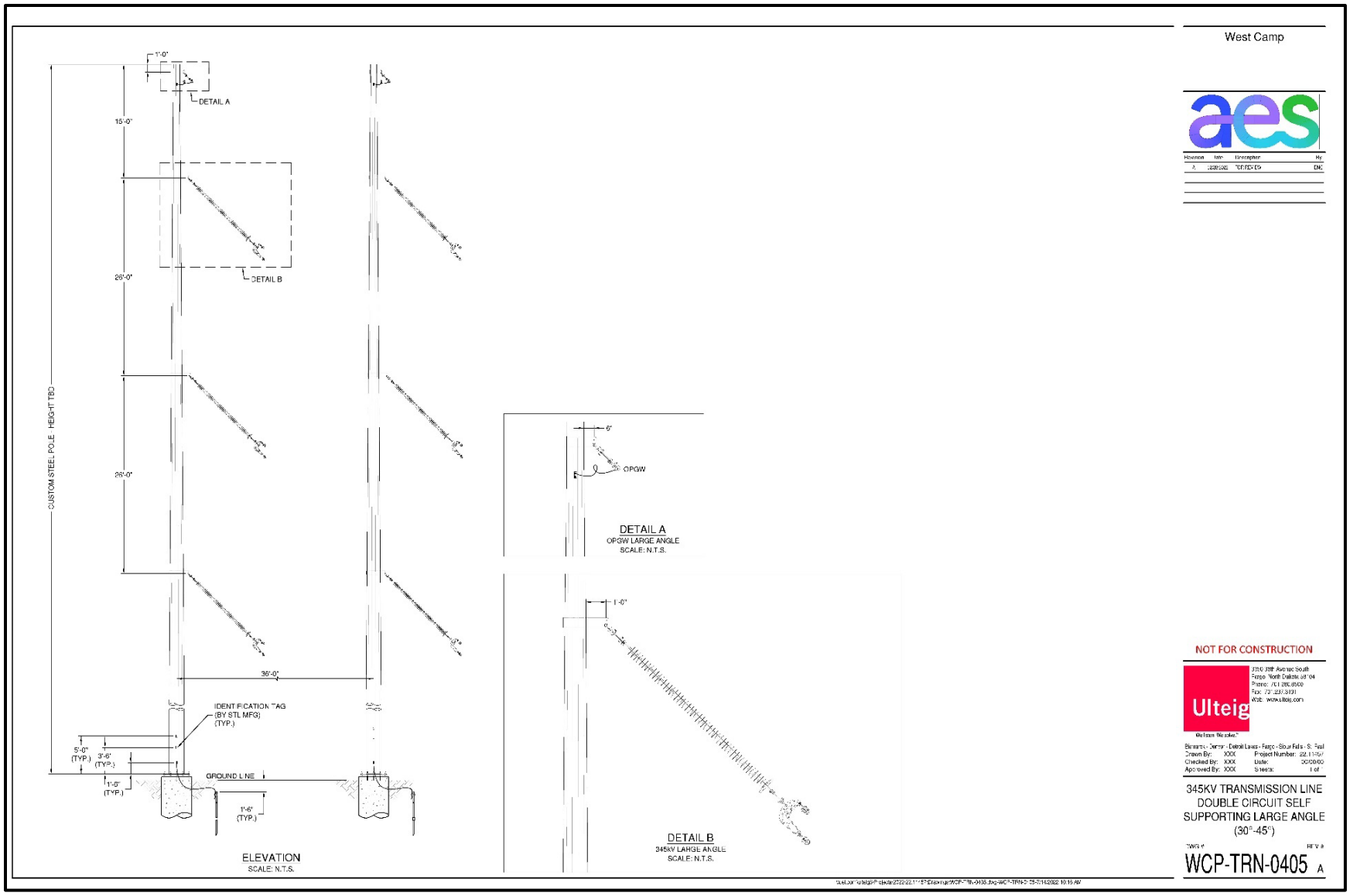


Figure G-6. Typical double-circuit 345-kV turning structure.

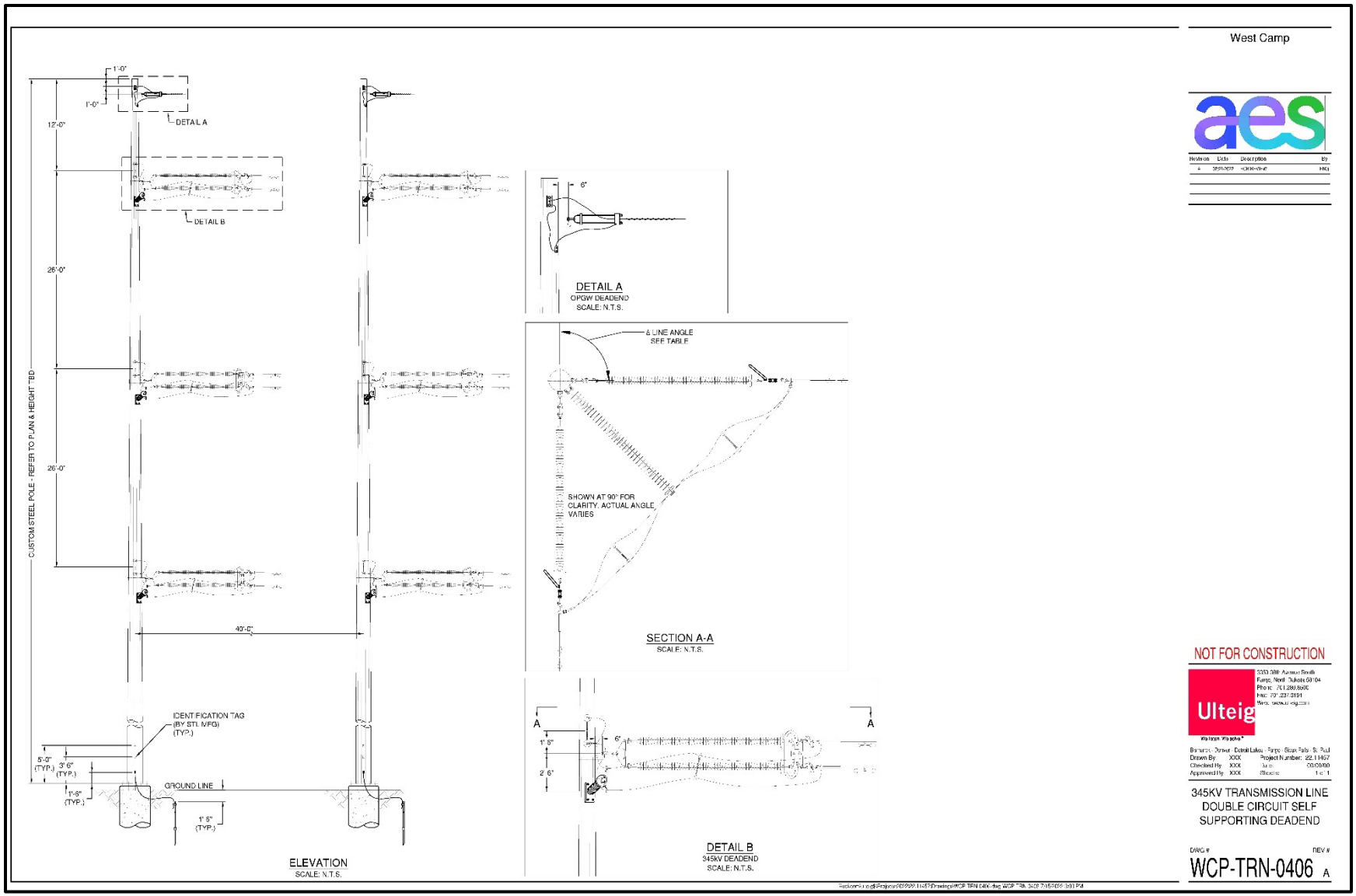


Figure G-7. Typical double-circuit 345-kV dead-end structure.

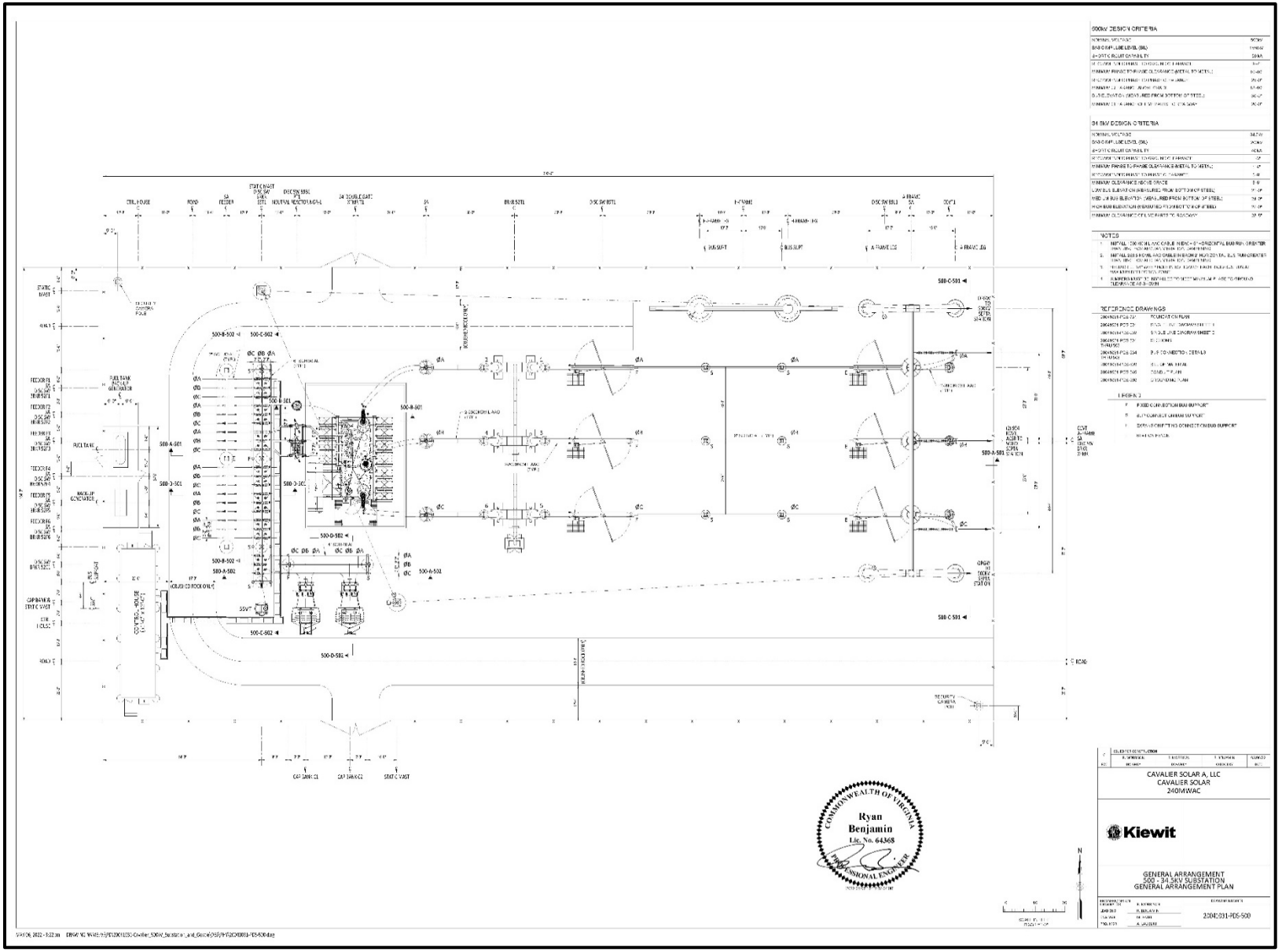


Figure G-8. Conceptual 500-kV substation general arrangement.

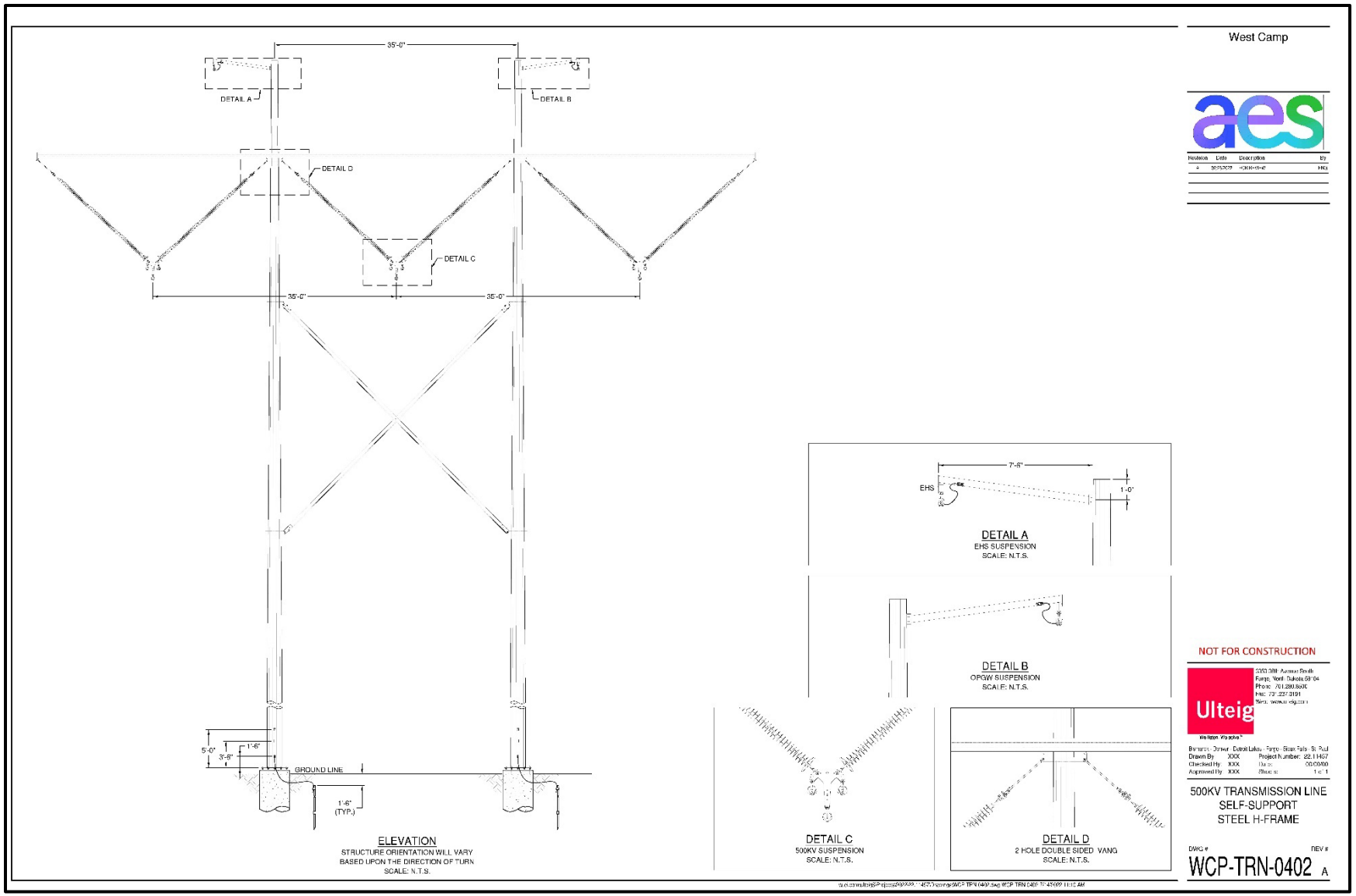


Figure G-9. Typical single-circuit 500-kV tangent structure.

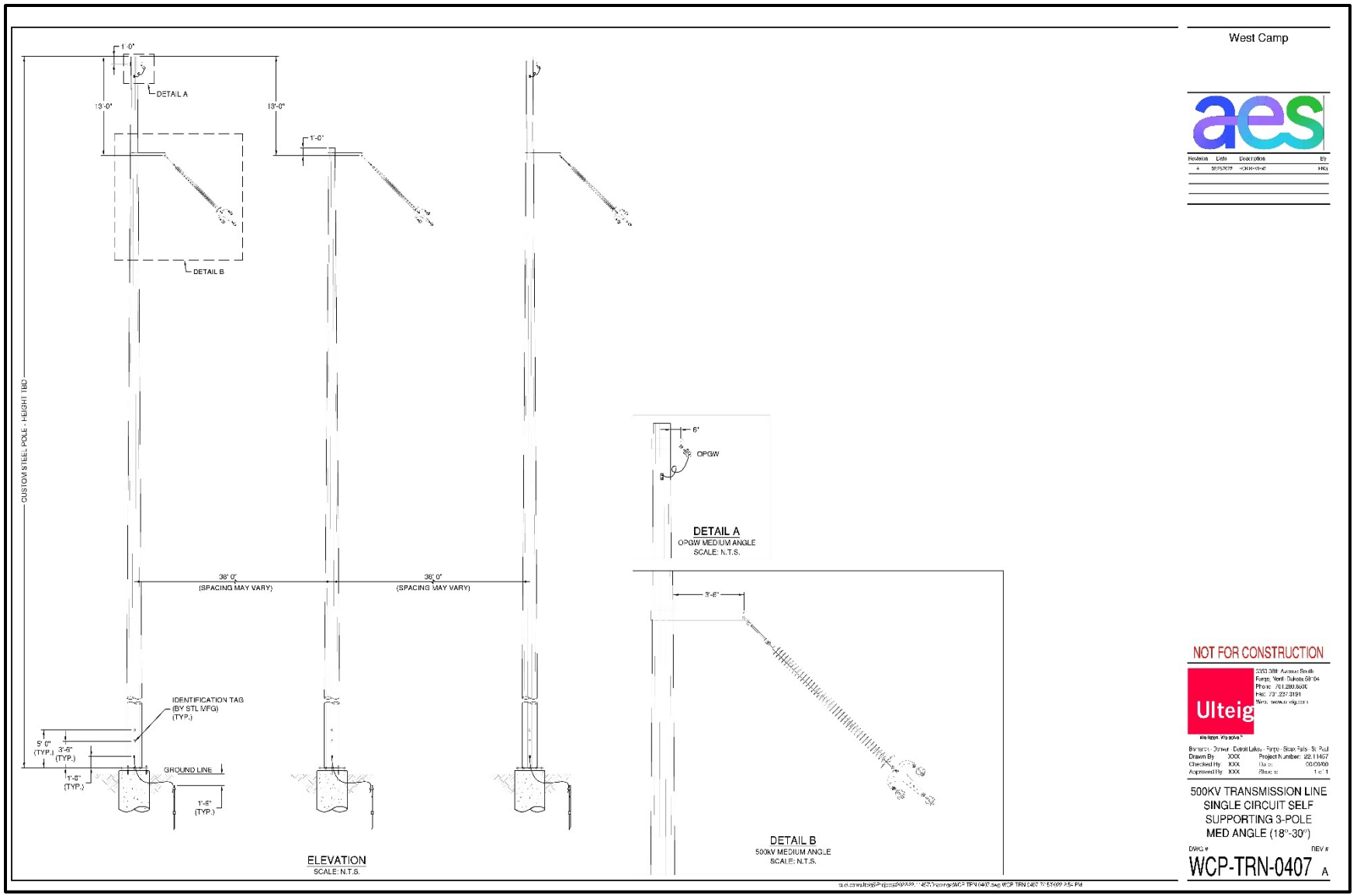


Figure G-10. Typical single-circuit 500-kV turning structure.

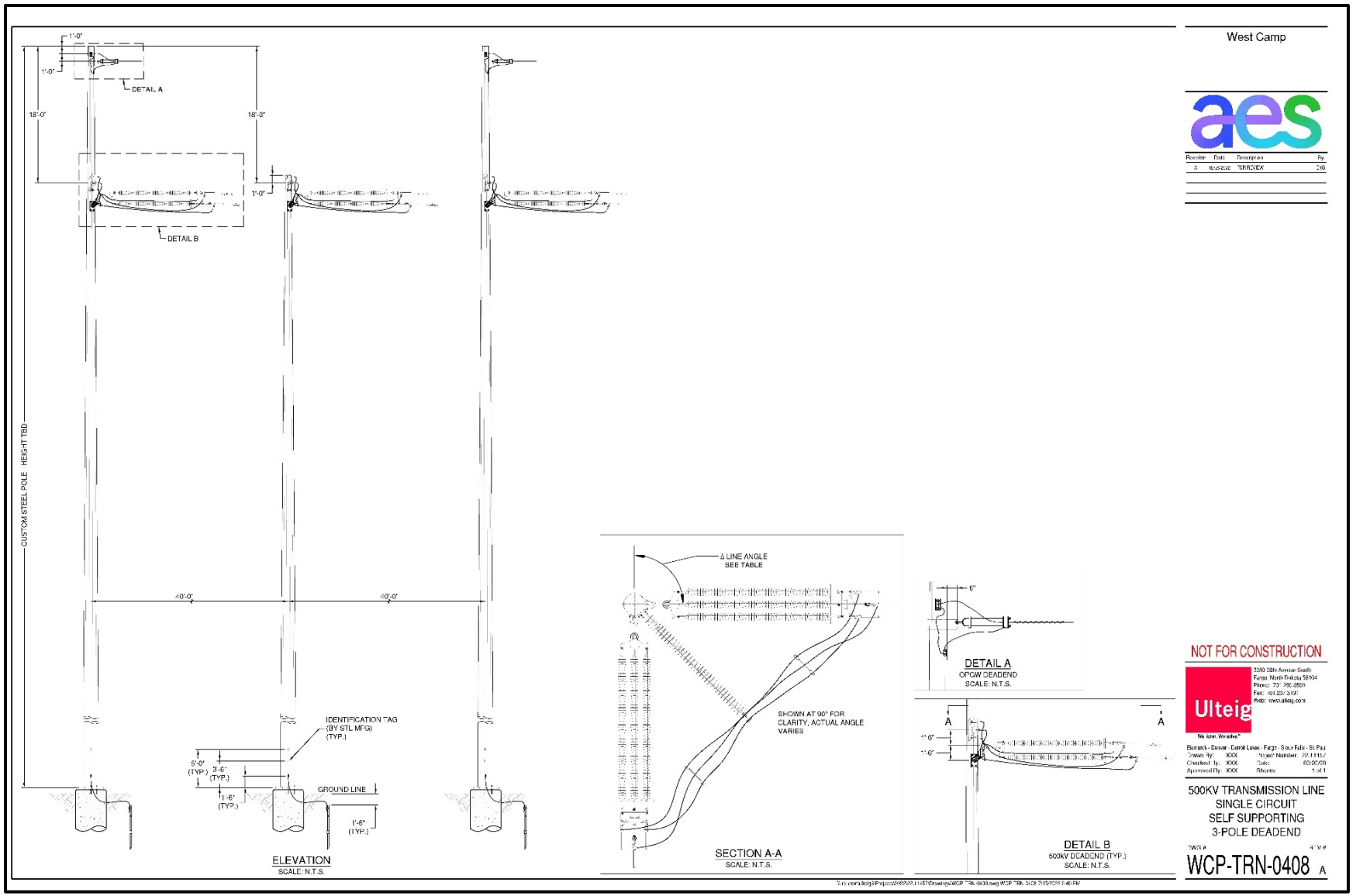


Figure G-11. Typical single-circuit 500-kV dead-end structure.

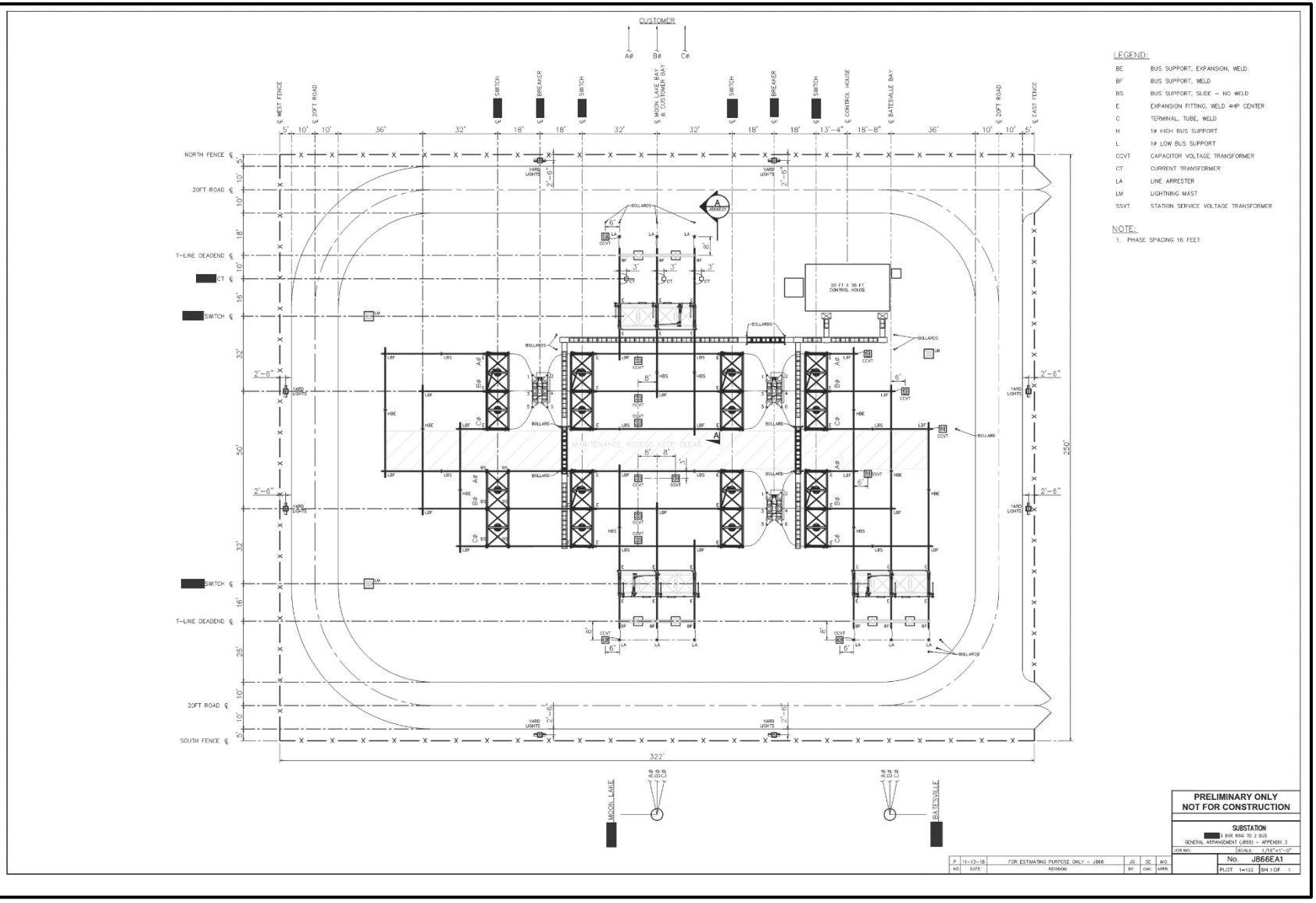


Figure G-12. Conceptual 500-kV on-site switchyard general arrangement.

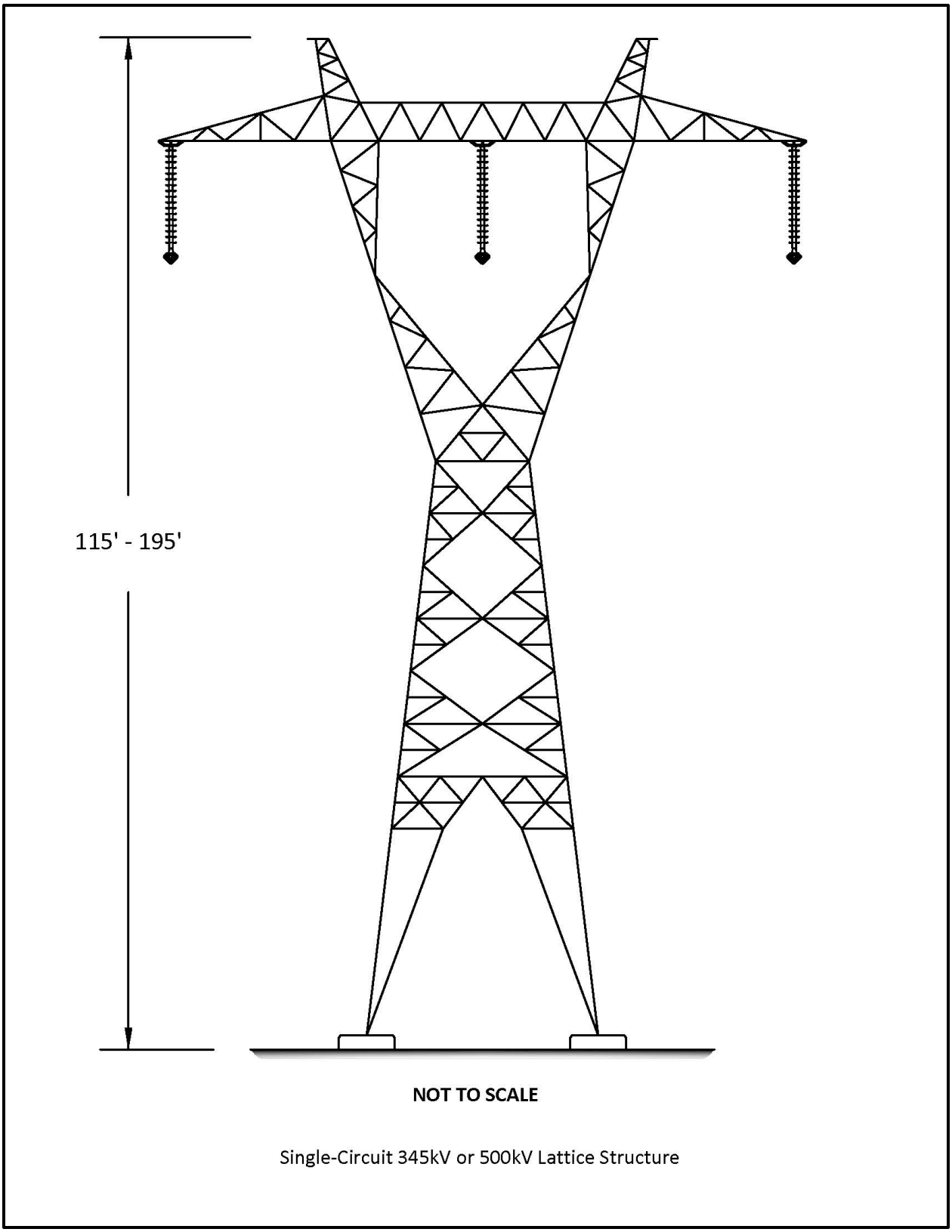


Figure G-13. Single-circuit 345-kV or 500-kV lattice structure.

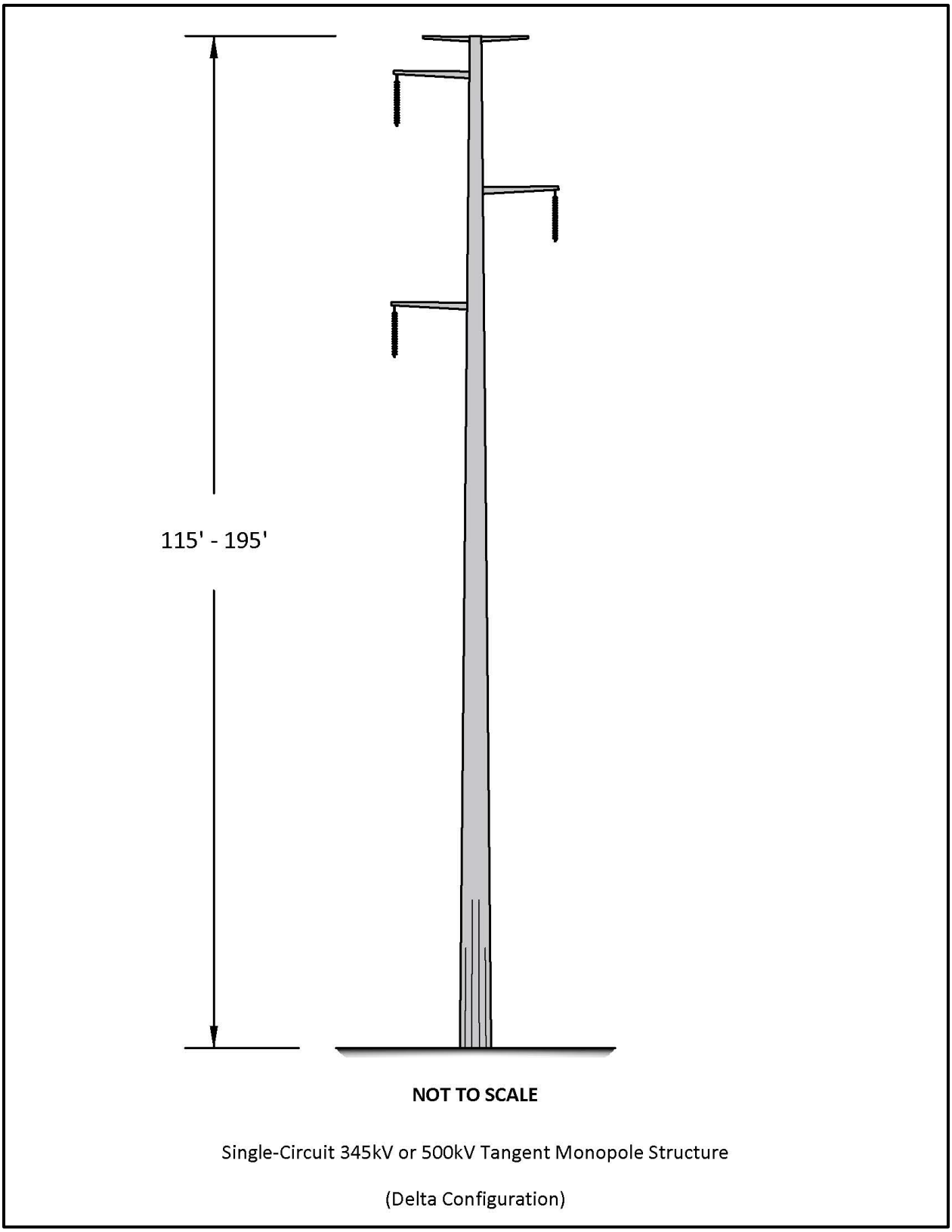


Figure G-14. Single-circuit 345-kV or 500-kV tangent monopole structure (delta configuration).

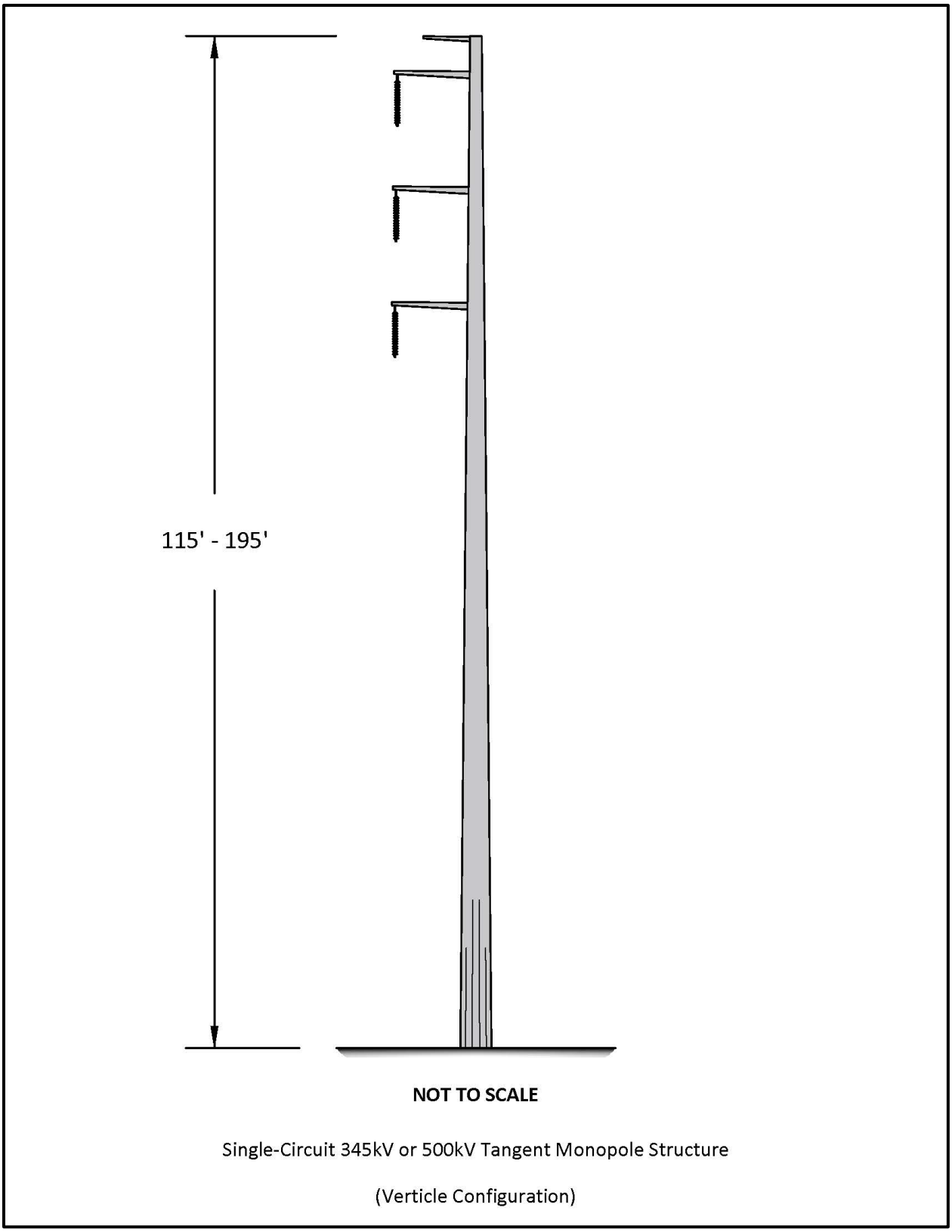


Figure G-15. Single-circuit 345-kV or 500-kV tangent monopole structure (vertical configuration).

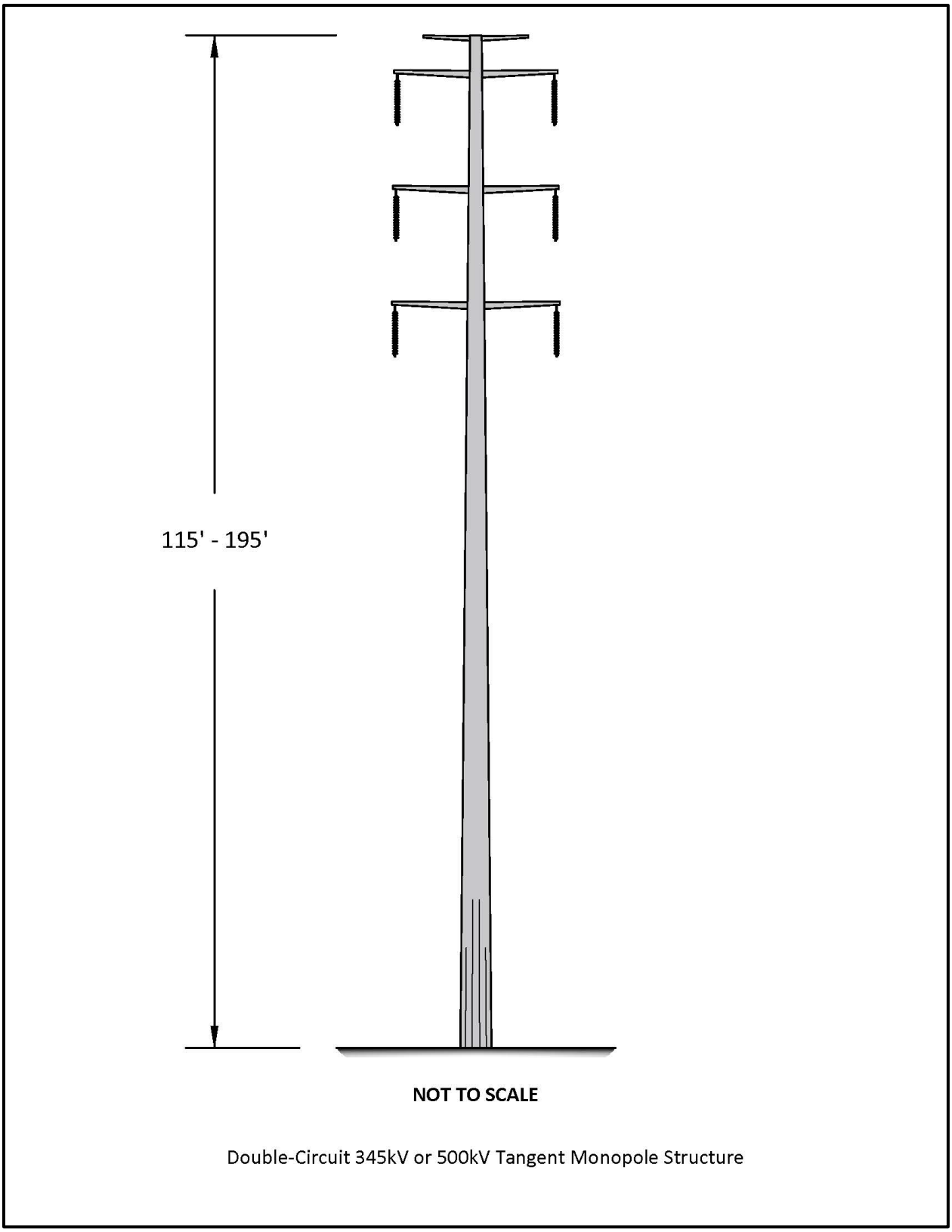


Figure G-16. Double-circuit 345-kV or 500-kV tangent monopole structure.

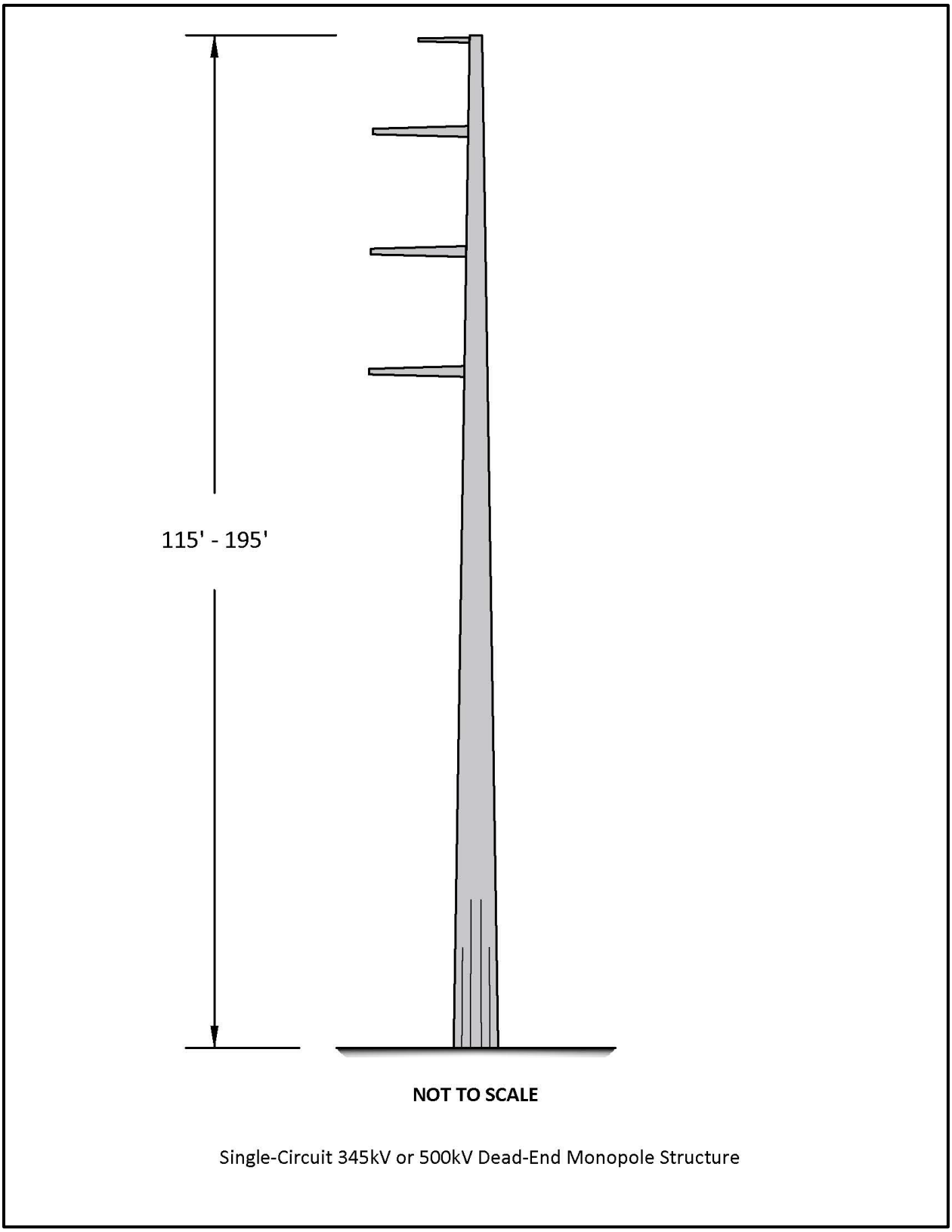


Figure G-17. Single-circuit 345-kV or 500-kV dead-end monopole structure.

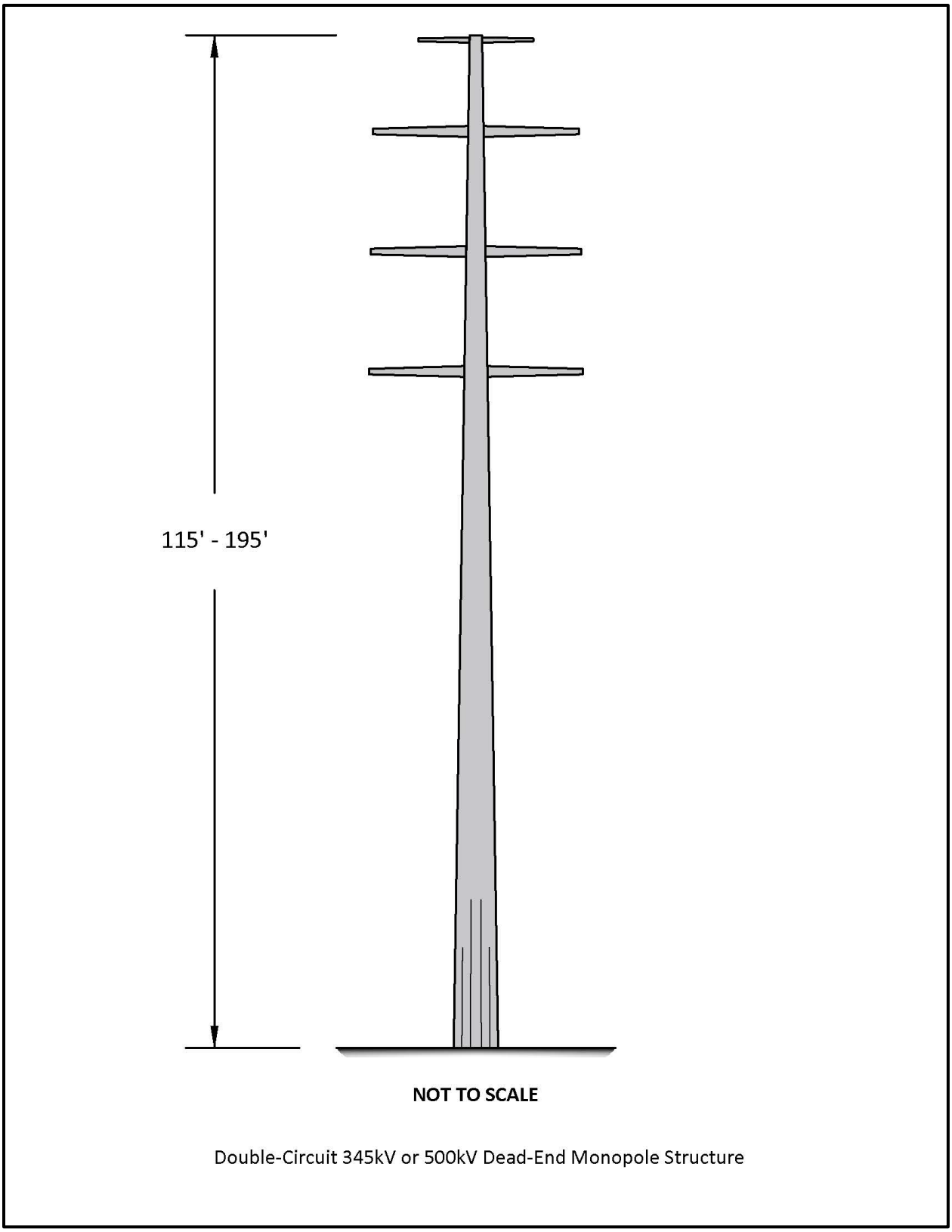
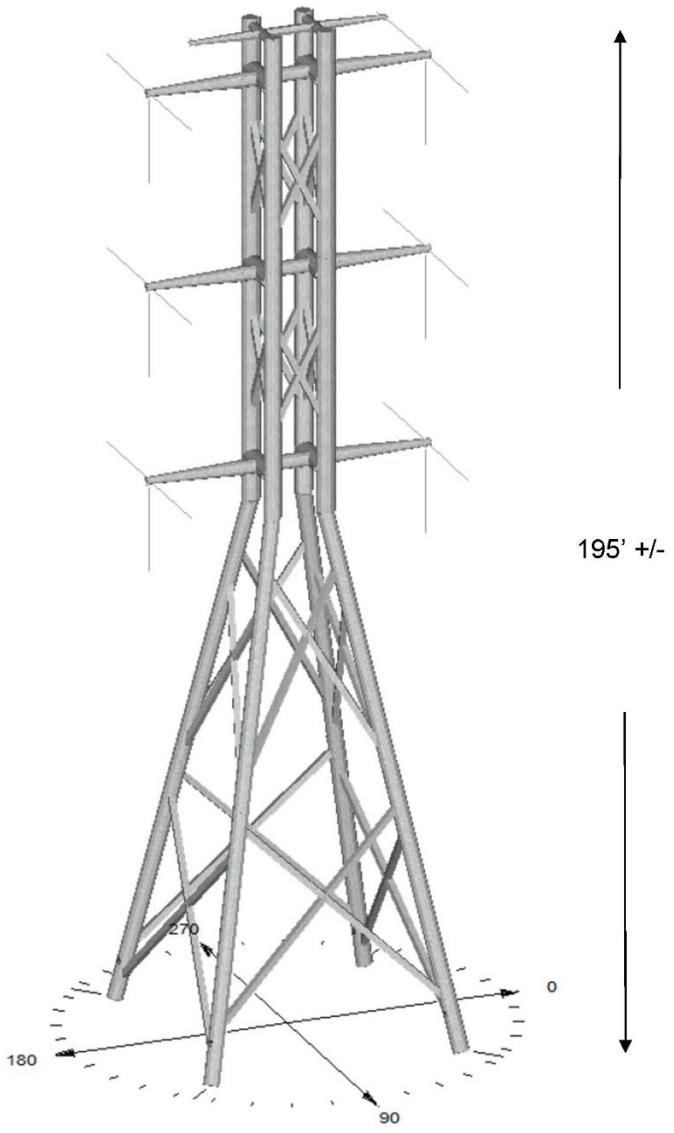


Figure G-18. Double-circuit 345-kV or 500-kV dead-end monopole structure.



NOT TO SCALE

Double-Circuit 345kV or 500kV Tubular

Structure

Figure G-19. Double-circuit 345-kV or 500-kV tubular structure.

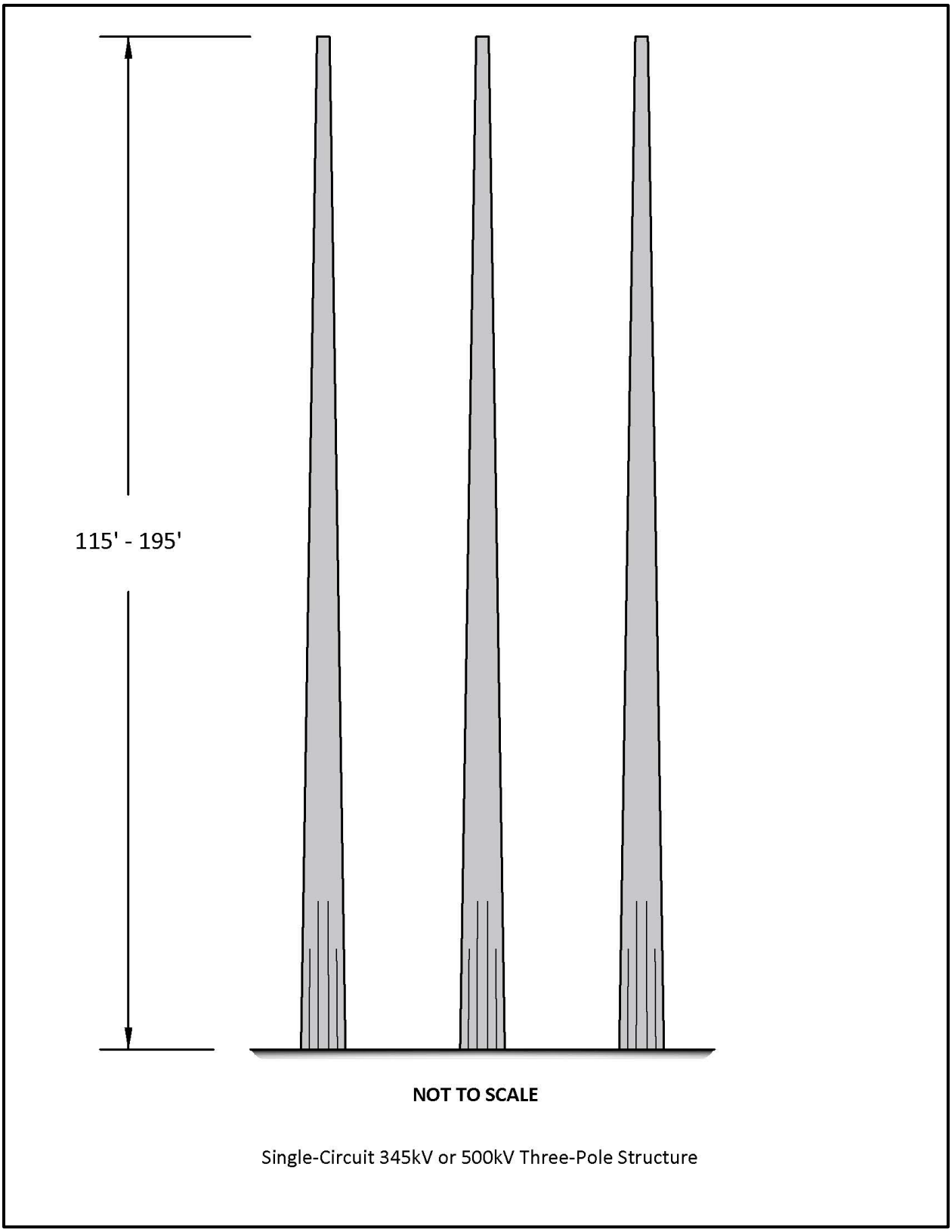


Figure G-20. Single-circuit 345-kV or 500-kV three-pole structure.

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EXHIBIT H

Existing Plans

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EXHIBIT H. EXISTING PLANS

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

Introduction

The proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) will be located almost entirely on private lands, all of which is within the jurisdiction of Navajo County; a small portion of the infrastructure may be sited on Arizona State Trust lands managed by the Arizona State Land Department. Private lands, Arizona State Trust lands, and federal lands managed by the Bureau of Land Management (BLM) exist in the vicinity of the Certificate of Environmental Compatibility (CEC) Corridor (see Figure A-1 of Exhibit A).

To identify existing plans for other developments at or in the vicinity of the CEC Corridor, letters requesting information about planned projects were mailed on July 28, 2025, to the entities listed in Table H-1. Copies of the letters are provided in Attachment H-1. The City of Holbrook and the Arizona Game and Fish Department (AZGFD) responded regarding other planned developments in the area; their letters are provided in Attachment H-2. An online search for existing plans and other developments was conducted as well.

Table H-1. Entities that Received Letters with Gen-Tie Project Information

Contact Name	Title	Agency/Organization
Ginger Ritter	Project Evaluation Supervisor	AZGFD
Susan Russell	Right-of-Way Project Leader	Arizona State Land Department
Ron Peru	Land Tenure Lead	BLM, Safford Field Office
Lisa Hunt	City Clerk	Holbrook City Clerk's Office
Sandra Phillips	Assistant Public Works Director	Navajo County Planning and Zoning Department

Existing Plans for Other Developments

In their response, the City of Holbrook identified two plans for development within 5 miles of the CEC Corridor; both are related to motor sports (motor cross, drag racing) and are in Section 13 of Township 17 North, Range 20 East, approximately 3 miles northeast of the CEC Corridor. The response did not provide an anticipated time frame for construction. In their response, the AZGFD confirmed they do not have any plans for development within 5 miles of the CEC Corridor at this time.

Three planned development projects requiring state, local, or federal permits were identified within 5 miles of the CEC Corridor: the Hashknife Solar Energy Center, the Snowflake Solar Complex, and the Lark Point Solar Project. These three developments are utility-scale renewable energy projects, all of which are expected to interconnect with the Arizona Public Service Cholla Substation.

The Hashknife Solar Energy Center, a county-approved 475-megawatt (MW) solar project, is approximately 1.6 miles south of Joseph City. In January 2021, the Hashknife Energy Center 500-kilovolt (kV) Transmission Line Project received CECs (Decision Nos. 77888 and 77889) from the Arizona Corporation Commission (ACC) for its 500-kV transmission line (ACC 2025a). Construction of the first phase of the Hashknife Solar Energy Center began in 2024, and the first 275-MW phase is expected to begin commercial operations in 2026. Construction of the second 200-MW phase is anticipated to begin in 2025, with commercial operations beginning in 2027 (Invenergy 2025).

The Snowflake Solar Complex, a county-approved 1,250-MW solar project, is approximately 6 miles northeast of Holbrook. In February 2025, the ACC approved two CECs (Decision Nos. 79717 and 79718) for the project's 500-kV transmission line. The project is anticipated to be constructed in two phases over 2 to 3 years beginning in late 2025 (ACC 2025b).

The Lark Point Solar Project, a county-approved 450-MW solar and battery storage project, is approximately 4 miles southwest of Joseph City. Construction of the project was anticipated to begin in late 2025 with commercial operations beginning in mid-2027 (Lark Point Solar 2024), but no public updates on the project's progress following County approval in 2024 could be found.

Literature Cited

Arizona Corporation Commission (ACC). 2025a. Docket Details L-21126A-20-0300-00187. Available at: https://edocket.azcc.gov/search/docket-search/item-detail/25507. Accessed July 2025.

———. 2025b. Docket Details L-21330A-24-0241-00240. Available at: https://edocket.azcc.gov/search/docket-search/item-detail/29379. Accessed August 2025.

Invenergy. 2025. Hashknife Solar Energy Center. Available at: https://hashknifeenergycenter.invenergy.com/. Accessed July 2025.

Lark Point Solar. 2024. Special Use Permit Request for the Lark Point Solar Project. Available at: https://destinyhosted.com/navajdocs/2024/PZ/20240815_304/4210%5FLark%5FPoint%5FSolar%5FApplication%5FPackage%5F06.06.2024%5F%283%29.pdf. Accessed August 2025.

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EXHIBIT H – ATTACHMENT H-1

Agency Outreach Letters

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West Camp Wind Farm II, LLC
282 Century Place
Suite 2000
Louisville, CO 80027

July 28, 2025

Lisa Hunt, City Clerk
Holbrook City Clerk's Office
465 1st Avenue / P.O. Box 970
Holbrook, AZ 86025

Re: Request for information regarding existing plans for developments in the vicinity of the proposed West Camp 2 Gen-Tie Project in Navajo County

Dear Lisa Hunt:

I am writing you to request information related to an application being prepared by West Camp Wind Farm II, LLC, for submittal to the Arizona Corporation Commission for a Certificate of Environmental Compatibility (CEC) regarding a proposed electrical transmission line project to support a wind energy facility.

West Camp Wind Farm II, LLC ("Applicant"), an indirect subsidiary of The AES Corporation, is proposing to construct the West Camp 2 Wind Farm ("Wind Farm"), a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. The Wind Farm will interconnect with the regional transmission grid via a generation-tie transmission line ("Gen-Tie Line"). The Gen-Tie Line is subject to a CEC from the Arizona Corporation Commission, and the Applicant intends to file a CEC application in September 2025.

The Applicant is evaluating two Gen-Tie Line options to interconnect the Wind Farm to the regional transmission system. The Gen-Tie Line will interconnect either at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long, 345- or 500-kilovolt (kV) Gen-Tie Line or at the Salt River Project 500-kV Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long Gen-Tie Line within the Wind Farm project area (collectively, the "Gen-Tie Project"). The on-site substation(s) and potential on-site switchyard infrastructure will be sited within the Wind Farm project area. All Gen-Tie Project infrastructure will be located within the CEC Gen-Tie Corridor (see attached figure), with precise locations pending detailed electrical engineering and design.

The Gen-Tie Project will be sited primarily on private lands and is co-located to the greatest extent feasible with existing electrical infrastructure. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

The Applicant is requesting any information you may have regarding other planned development within a 5-mile buffer of the CEC Gen-Tie Corridor. The requested information is required by the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, which states:

> *To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

If you are aware of any development plans within the identified buffer area that you can share with us and the Arizona Corporation Commission, we will be very appreciative. Email correspondence can be sent to westcamp@aes.com, and the mailing address for hardcopy correspondence is:

West Camp 2 Wind Farm
c/o SWCA
1750 South Woodlands Village Boulevard, Suite 200
Flagstaff, Arizona 86001

Sincerely,

Jordan Ramljak

Jordan Ramljak
Manager, Western Wind Development

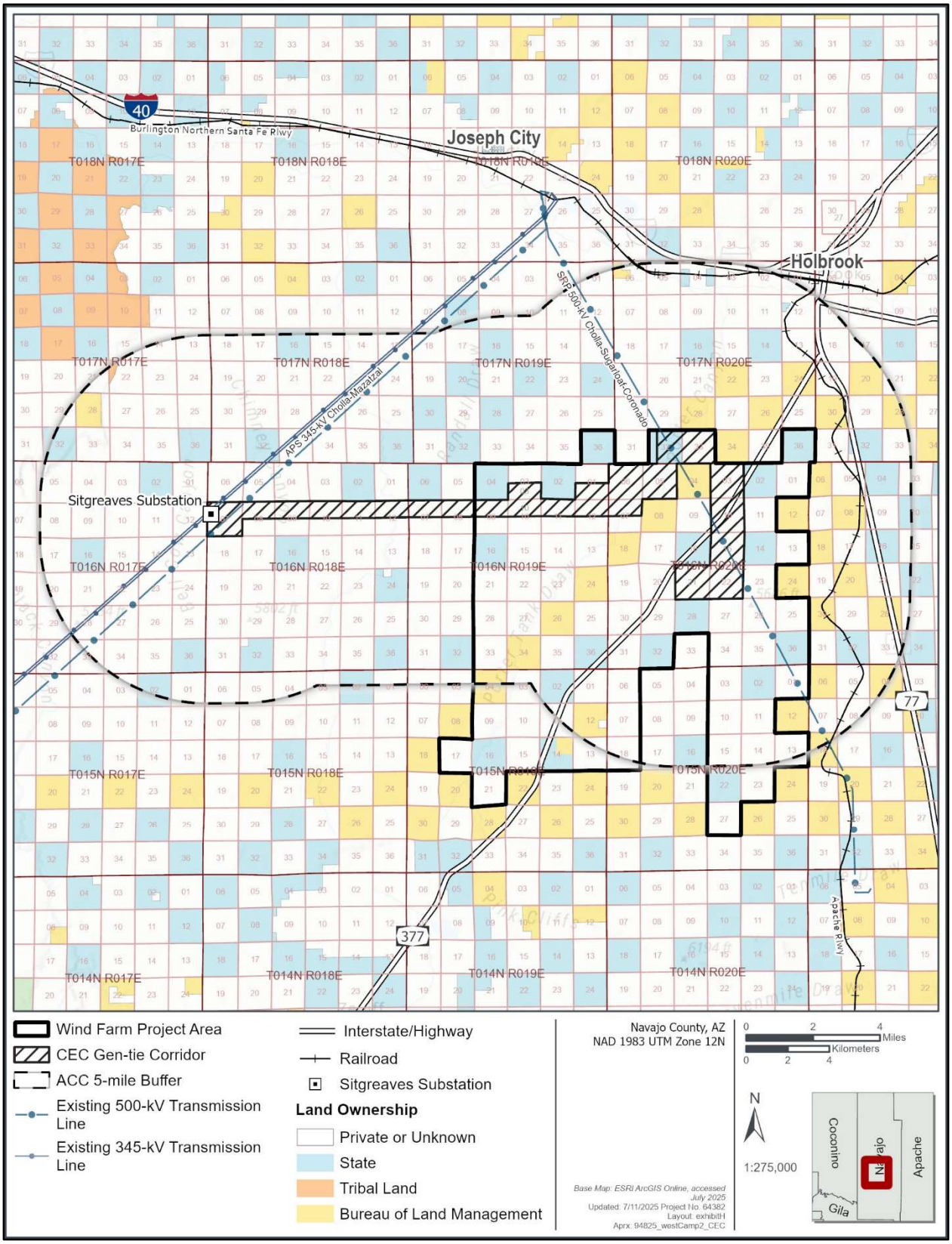

Figure 1. Map of the Project Area and a 5-mile Buffer.

West Camp Wind Farm II, LLC
282 Century Place
Suite 2000
Louisville, CO 80027

July 28, 2025

Ron Peru, Land Tenure Lead
Bureau of Land Management, Safford Field Office
711 14th Avenue
Safford, AZ 85546

Re: Request for information regarding existing plans for developments in the vicinity of the proposed West Camp 2 Gen-Tie Project in Navajo County

Dear Ron Peru:

I am writing you to request information related to an application being prepared by West Camp Wind Farm II, LLC, for submittal to the Arizona Corporation Commission for a Certificate of Environmental Compatibility (CEC) regarding a proposed electrical transmission line project to support a wind energy facility.

West Camp Wind Farm II, LLC ("Applicant"), an indirect subsidiary of The AES Corporation, is proposing to construct the West Camp 2 Wind Farm ("Wind Farm"), a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. The Wind Farm will interconnect with the regional transmission grid via a generation-tie transmission line ("Gen-Tie Line"). The Gen-Tie Line is subject to a CEC from the Arizona Corporation Commission, and the Applicant intends to file a CEC application in September 2025.

The Applicant is evaluating two Gen-Tie Line options to interconnect the Wind Farm to the regional transmission system. The Gen-Tie Line will interconnect either at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long, 345- or 500-kilovolt (kV) Gen-Tie Line or at the Salt River Project 500-kV Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long Gen-Tie Line within the Wind Farm project area (collectively, the "Gen-Tie Project"). The on-site substation(s) and potential on-site switchyard infrastructure will be sited within the Wind Farm project area. All Gen-Tie Project infrastructure will be located within the CEC Gen-Tie Corridor (see attached figure), with precise locations pending detailed electrical engineering and design.

The Gen-Tie Project will be sited primarily on private lands and is co-located to the greatest extent feasible with existing electrical infrastructure. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

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> *To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

If you are aware of any development plans within the identified buffer area that you can share with us and the Arizona Corporation Commission, we will be very appreciative. Email correspondence can be sent to westcamp@aes.com, and the mailing address for hardcopy correspondence is:

West Camp 2 Wind Farm
c/o SWCA
1750 South Woodlands Village Boulevard, Suite 200
Flagstaff, Arizona 86001

Sincerely,

Jordan Ramljak

Jordan Ramljak
Manager, Western Wind Development

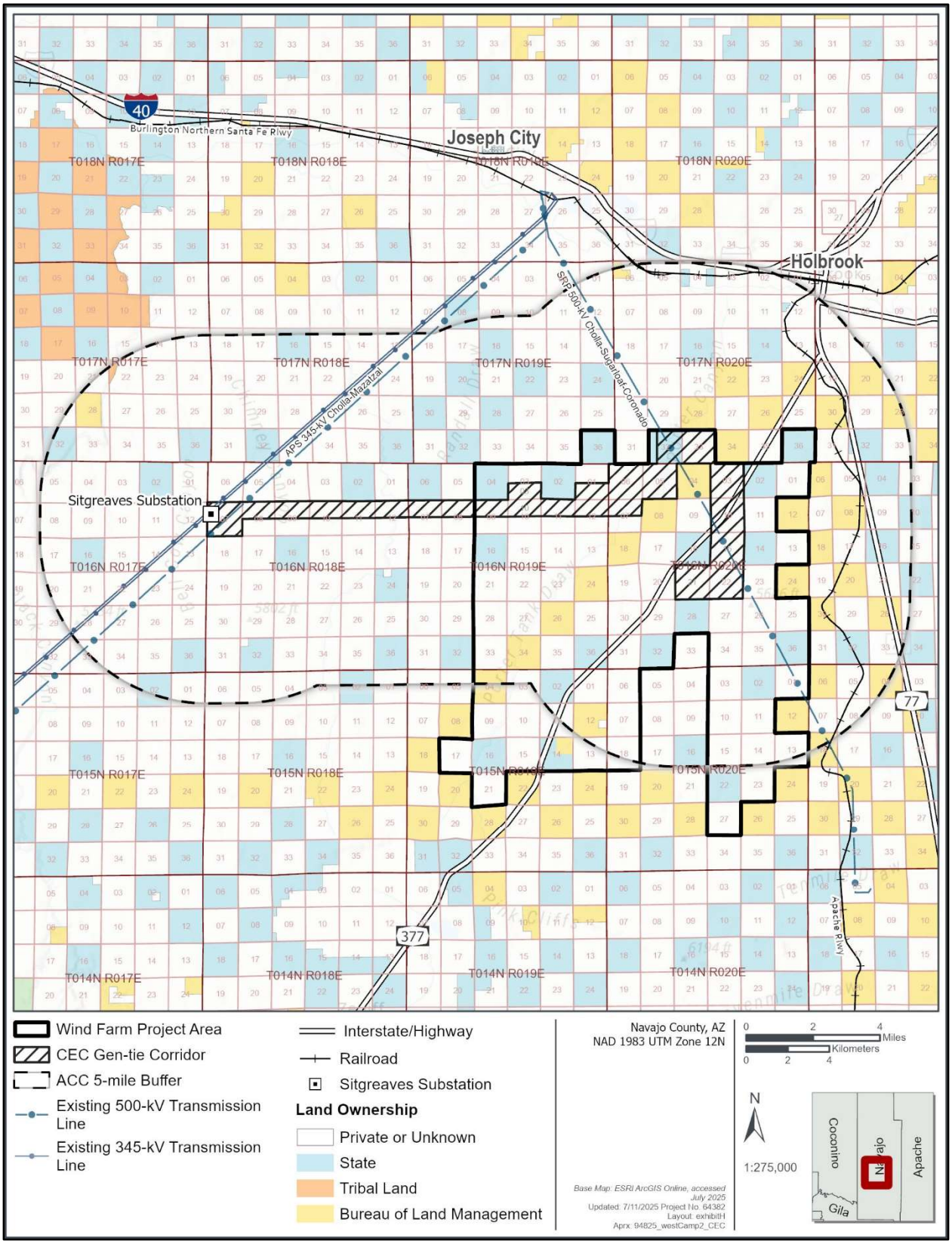

Figure 1. Map of the Project Area and a 5-mile Buffer.

West Camp Wind Farm II, LLC
282 Century Place
Suite 2000
Louisville, CO 80027

July 28, 2025

Sandra Philips, Assistant Public Works Director
Navajo County Planning and Zoning Department
P.O. Box 668
Holbrook, AZ 86025

Re: Request for information regarding existing plans for developments in the vicinity of the proposed West Camp 2 Gen-Tie Project in Navajo County

Dear Sandra Philips:

I am writing you to request information related to an application being prepared by West Camp Wind Farm II, LLC, for submittal to the Arizona Corporation Commission for a Certificate of Environmental Compatibility (CEC) regarding a proposed electrical transmission line project to support a wind energy facility.

West Camp Wind Farm II, LLC ("Applicant"), an indirect subsidiary of The AES Corporation, is proposing to construct the West Camp 2 Wind Farm ("Wind Farm"), a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. The Wind Farm will interconnect with the regional transmission grid via a generation-tie transmission line ("Gen-Tie Line"). The Gen-Tie Line is subject to a CEC from the Arizona Corporation Commission, and the Applicant intends to file a CEC application in September 2025.

The Applicant is evaluating two Gen-Tie Line options to interconnect the Wind Farm to the regional transmission system. The Gen-Tie Line will interconnect either at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long, 345- or 500-kilovolt (kV) Gen-Tie Line or at the Salt River Project 500-kV Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long Gen-Tie Line within the Wind Farm project area (collectively, the "Gen-Tie Project"). The on-site substation(s) and potential on-site switchyard infrastructure will be sited within the Wind Farm project area. All Gen-Tie Project infrastructure will be located within the CEC Gen-Tie Corridor (see attached figure), with precise locations pending detailed electrical engineering and design.

The Gen-Tie Project will be sited primarily on private lands and is co-located to the greatest extent feasible with existing electrical infrastructure. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

The Applicant is requesting any information you may have regarding other planned development within a 5-mile buffer of the CEC Gen-Tie Corridor. The requested information is required by the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, which states:

> *To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

If you are aware of any development plans within the identified buffer area that you can share with us and the Arizona Corporation Commission, we will be very appreciative. Email correspondence can be sent to westcamp@aes.com, and the mailing address for hardcopy correspondence is:

West Camp 2 Wind Farm
c/o SWCA
1750 South Woodlands Village Boulevard, Suite 200
Flagstaff, Arizona 86001

Sincerely,

Jordan Ramljak

Jordan Ramljak
Manager, Western Wind Development

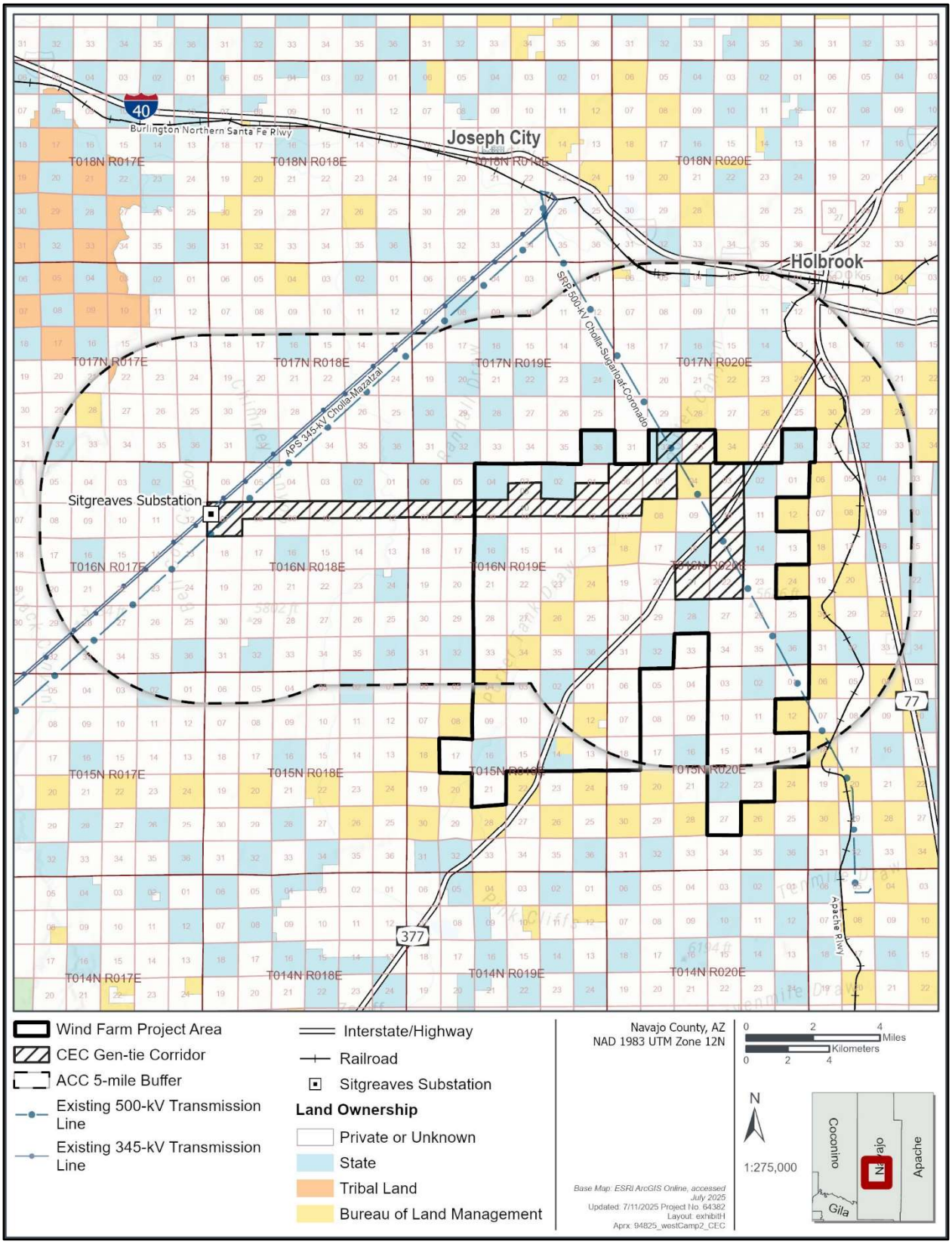

Figure 1. Map of the Project Area and a 5-mile Buffer.

West Camp Wind Farm II, LLC
282 Century Place
Suite 2000
Louisville, CO 80027

July 28, 2025

Ginger Ritter, PEP Supervisor
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, AZ 85086

Re: Request for information regarding existing plans for developments in the vicinity of the proposed West Camp 2 Gen-Tie Project in Navajo County

Dear Ginger Ritter:

I am writing you to request information related to an application being prepared by West Camp Wind Farm II, LLC, for submittal to the Arizona Corporation Commission for a Certificate of Environmental Compatibility (CEC) regarding a proposed electrical transmission line project to support a wind energy facility.

West Camp Wind Farm II, LLC ("Applicant"), an indirect subsidiary of The AES Corporation, is proposing to construct the West Camp 2 Wind Farm ("Wind Farm"), a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. The Wind Farm will interconnect with the regional transmission grid via a generation-tie transmission line ("Gen-Tie Line"). The Gen-Tie Line is subject to a CEC from the Arizona Corporation Commission, and the Applicant intends to file a CEC application in September 2025.

The Applicant is evaluating two Gen-Tie Line options to interconnect the Wind Farm to the regional transmission system. The Gen-Tie Line will interconnect either at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long, 345- or 500-kilovolt (kV) Gen-Tie Line or at the Salt River Project 500-kV Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long Gen-Tie Line within the Wind Farm project area (collectively, the "Gen-Tie Project"). The on-site substation(s) and potential on-site switchyard infrastructure will be sited within the Wind Farm project area. All Gen-Tie Project infrastructure will be located within the CEC Gen-Tie Corridor (see attached figure), with precise locations pending detailed electrical engineering and design.

The Gen-Tie Project will be sited primarily on private lands and is co-located to the greatest extent feasible with existing electrical infrastructure. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

The Applicant is requesting any information you may have regarding other planned development within a 5-mile buffer of the CEC Gen-Tie Corridor. The requested information is required by the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, which states:

> *To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

If you are aware of any development plans within the identified buffer area that you can share with us and the Arizona Corporation Commission, we will be very appreciative. Email correspondence can be sent to westcamp@aes.com, and the mailing address for hardcopy correspondence is:

West Camp 2 Wind Farm
c/o SWCA
1750 South Woodlands Village Boulevard, Suite 200
Flagstaff, Arizona 86001

Sincerely,

Jordan Ramljak

Jordan Ramljak
Manager, Western Wind Development

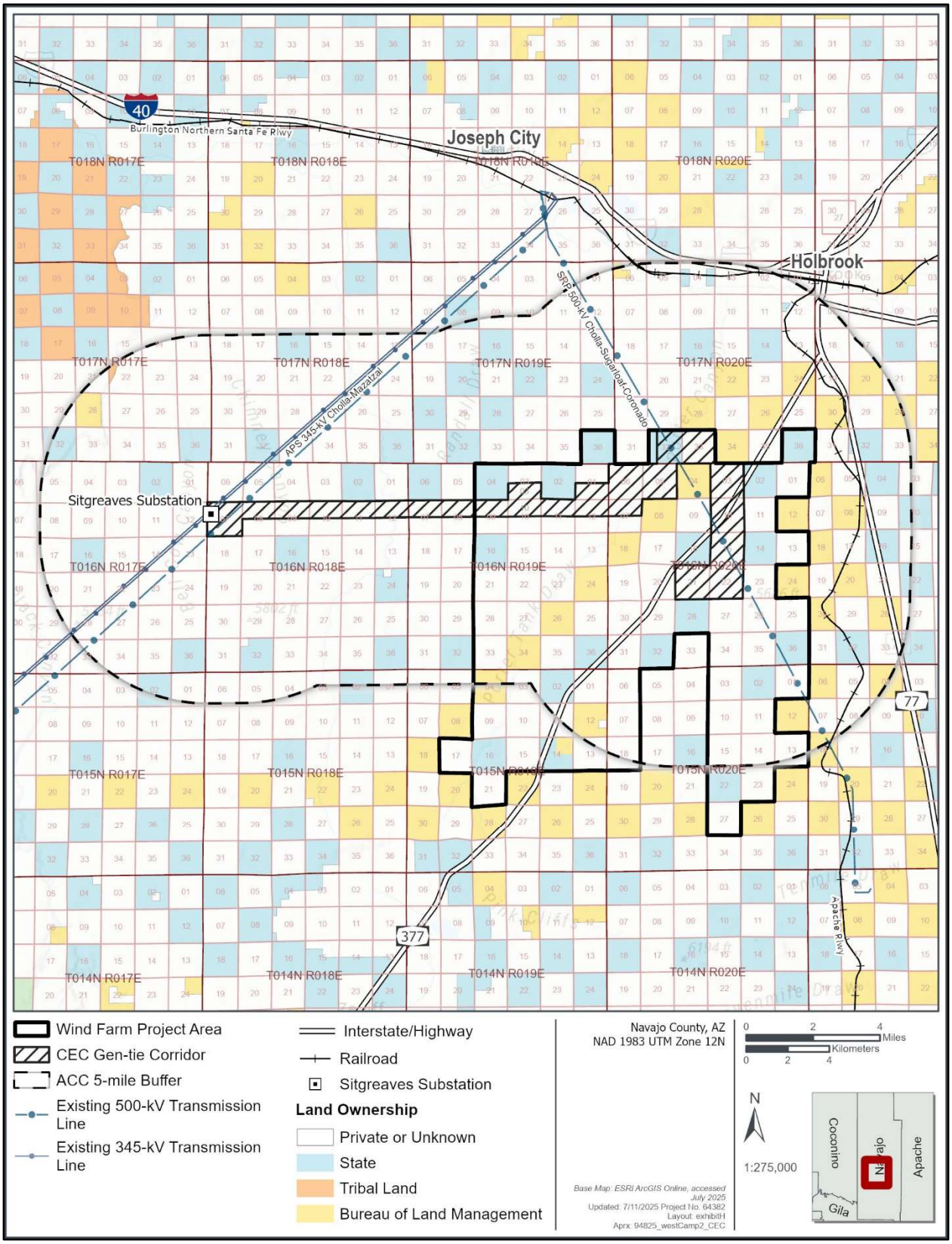

Figure 1. Map of the Project Area and a 5-mile Buffer.

West Camp Wind Farm II, LLC
282 Century Place
Suite 2000
Louisville, CO 80027

July 28, 2025

Susan Russell, ROW Project Leader
Arizona State Land Department
1616 West Adams Street
Phoenix, AZ 85007

Re: Request for information regarding existing plans for developments in the vicinity of the proposed West Camp 2 Gen-Tie Project in Navajo County

Dear Susan Russell:

I am writing you to request information related to an application being prepared by West Camp Wind Farm II, LLC, for submittal to the Arizona Corporation Commission for a Certificate of Environmental Compatibility (CEC) regarding a proposed electrical transmission line project to support a wind energy facility.

West Camp Wind Farm II, LLC ("Applicant"), an indirect subsidiary of The AES Corporation, is proposing to construct the West Camp 2 Wind Farm ("Wind Farm"), a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. The Wind Farm will interconnect with the regional transmission grid via a generation-tie transmission line ("Gen-Tie Line"). The Gen-Tie Line is subject to a CEC from the Arizona Corporation Commission, and the Applicant intends to file a CEC application in September 2025.

The Applicant is evaluating two Gen-Tie Line options to interconnect the Wind Farm to the regional transmission system. The Gen-Tie Line will interconnect either at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long, 345- or 500-kilovolt (kV) Gen-Tie Line or at the Salt River Project 500-kV Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long Gen-Tie Line within the Wind Farm project area (collectively, the "Gen-Tie Project"). The on-site substation(s) and potential on-site switchyard infrastructure will be sited within the Wind Farm project area. All Gen-Tie Project infrastructure will be located within the CEC Gen-Tie Corridor (see attached figure), with precise locations pending detailed electrical engineering and design.

The Gen-Tie Project will be sited primarily on private lands and is co-located to the greatest extent feasible with existing electrical infrastructure. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

The Applicant is requesting any information you may have regarding other planned development within a 5-mile buffer of the CEC Gen-Tie Corridor. The requested information is required by the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, which states:

> *To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

If you are aware of any development plans within the identified buffer area that you can share with us and the Arizona Corporation Commission, we will be very appreciative. Email correspondence can be sent to westcamp@aes.com, and the mailing address for hardcopy correspondence is:

West Camp 2 Wind Farm
c/o SWCA
1750 South Woodlands Village Boulevard, Suite 200
Flagstaff, Arizona 86001

Sincerely,

Jordan Ramljak

Jordan Ramljak
Manager, Western Wind Development

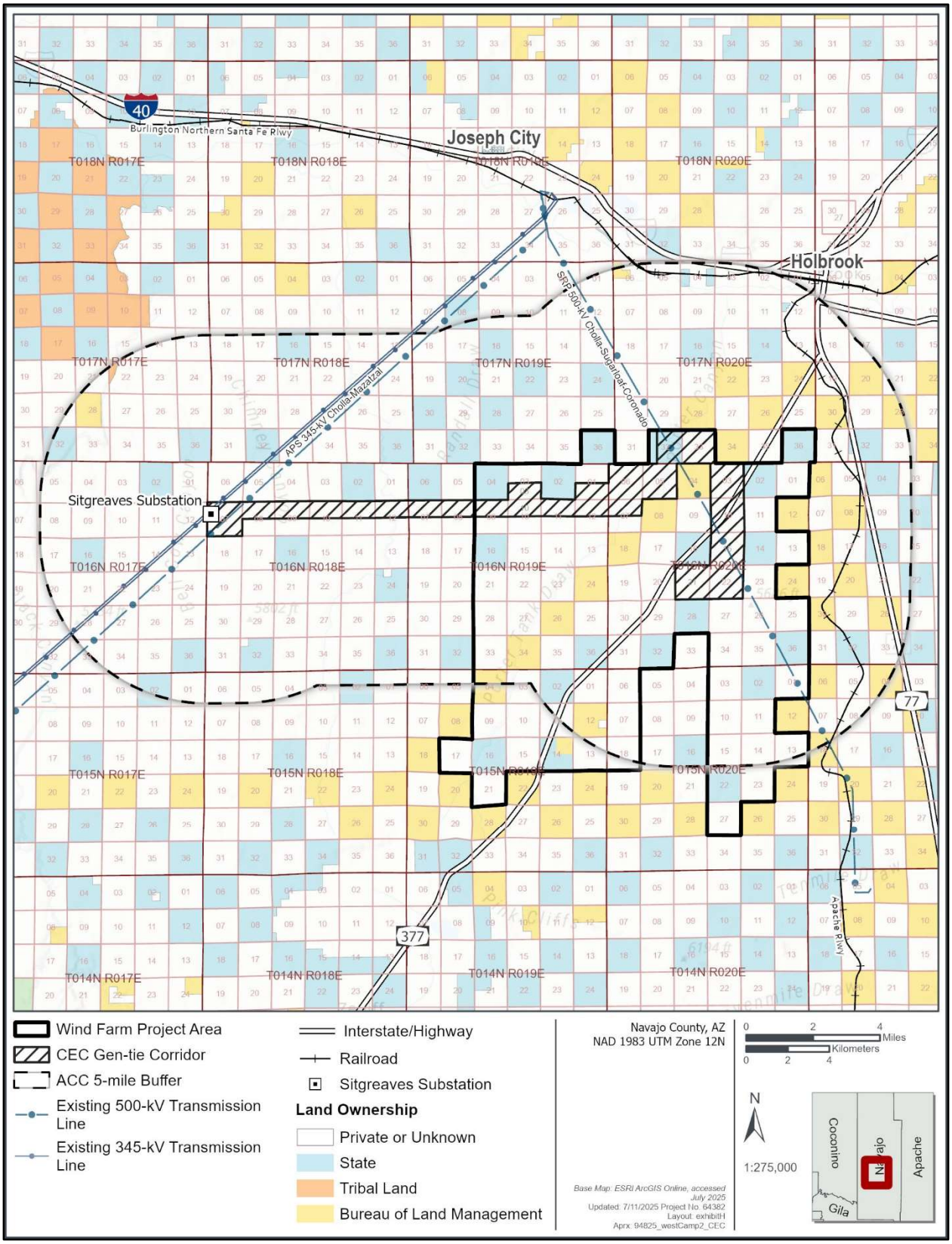

Figure 1. Map of the Project Area and a 5-mile Buffer.

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EXHIBIT H – ATTACHMENT H-2

Responses to Agency Outreach Letters

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HOLBROOK
ARIZONA

City of Holbrook
465 N. 1st Ave
Holbrook, Az 86025
928-524-6225

July 31, 2025

Re: Request for information regarding existing plans for developments in the vicinity of the proposed West Camp 2 Gen-Tie Project in Navajo County

To: Whom it may concern at West Camp Wind Farm II, LLC,

Only a small portion of the land outlined on the map provided is within the City of Holbrook.

We do have two (2) plans for development in section T017NR020E block 13.

1) Parcel #109-13-008D we have a current lease agreement between the City of Holbrook and Daniel Hutchens for a Motor Cross Arena.
2) Parcel #109-13-008C we are in the process of working with ADOT and BLM for easements so that we can enter into a lease agreement with Roadrunner Drag Race, LLC

Please let me know if there is any more information that you need.

Thank you,

Lisa Hunt
CMC, City Clerk
City of Holbrook

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August 27, 2025

West Camp 2 Wind Farm
% SWCA
1750 South Woodlands Village Blvd, Suite 200
Flagstaff, AZ 86001

Electronically submitted to: westcamp@aes.com

RE: West Camp 2 Wind Farm Certificate of Environmental Compatibility

Dear Mr. Ramljak:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the notice of intent to file an application for a Certificate of Environmental Compatibility (CEC) to the Arizona Corporation Commission for a proposed generation-tie (gen-tie) transmission line for the West Camp 2 Wind Farm. The Department understands that two alternate routes on private lands are being considered for the gen-tie from the letter dated July 28, 2025 from Western Wind Development/AES Corporation; one that would interconnect either at the Arizona Public Service Sitgreaves Substation located west of the project area via a 345- or 500-kilovolt (kV) Gen-Tie Line up to 25-mile-long, or at the Salt River Project 500-kV Challa-Sugarloaf-Coronado transmission line via a new switchyard and up to a 3-mile-long Gen-Tie Line within the Wind Farm project area.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development and operation of the facilities. For your consideration, the Department provides the following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation:

GOVERNOR: KATIE HOBBS **COMMISSIONERS:** CHAIR MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA | JAMES E. GOUGHNOUR, PAYSON
KURT KERR, PINETOP | CLAY HERNANDEZ, TUCSON **DIRECTOR:** TOM P. FINLEY **DEPUTY DIRECTOR:** JOSHUA W. HURST

- The Department requests notification of construction beginning, GPS locations for each constructed structure, and notifications once construction is completed. This information will be utilized to ensure the safety of Department staff and pilots while conducting low-level wildlife survey flights in the area.
- Bendire's thrasher, a Species of Greatest Conservation Need (SGCN), was detected within the project area. The Department recommends implementing timing restrictions and avoiding construction in areas where Bendire's thrashers were observed during the breeding bird surveys until the breeding season concludes. The breeding season for thrashers generally runs from June to mid-August.
- The pinyon jay, a candidate species for listing under the Endangered Species Act, has the potential to occur within the project area. If suitable habitat is present within the vicinity of the project, the Department recommends conducting surveys if any tree removal is scheduled during the nesting season for pinyon jay (mid-February to June); an Arizona project-level protocol[1] is available. If surveys can not be conducted, the Department recommends avoiding tree removal during nesting season.
- Additionally, other avian species that are regulated under the Migratory Bird Treaty Act (MBTA) and protected under state law may nest within the project area. The general breeding season for birds in the project vicinity is mid-March through late July. If it is anticipated that the project will not be in compliance with the MBTA, the Department recommends contacting the U.S. Fish and Wildlife Service[2] for technical assistance and compliance options. Additionally, if any nesting raptors are detected, the Department recommends planning construction activities for the non-breeding season or coordinating with the Department's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, on appropriate setbacks from active raptor nests.
- The Department 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 the 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 Department'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 Department recommends that construction be implemented in phases to reduce the disturbance to pronghorn during construction and to reduce the amount of area being disturbed at any given time. Additionally, to help minimize potential impacts on pronghorn recruitment, the Department recommends that construction activities occur outside the fawning season (mid-May to mid-June) and requests coordination prior to

[1] https://partnersinflight.org/wp-content/uploads/2023/03/Pinyon-Jay-Survey-Protocol-for-Landscape-Applications.pdf
[2] https://www.fws.gov/office/arizona-ecological-services/contact-us

construction activities to exchange information on current pronghorn use in the project area.

- Please ensure the project complies with Arizona Native Plant Law[3] regulations. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are protected under the Arizona Native Plant Law. There is one federally listed species within five miles of the project area, Peebles Navajo Cactus (*Pediocactus peeblesianus ssp. peeblesianus)*. Consultation with the USFWS is required if this species is detected and if its removal is deemed necessary for the project.
- To minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects, and pathogens, the Department encourages taking precautions to wash and/or decontaminate equipment before entering and leaving the site. See the Arizona Department of Agriculture's website[4] for a list of prohibited and restricted noxious weeds and the Arizona Native Plant Society[5] for recommendations on how to control them. To view a list of documented invasive species or to report invasive species in or near your project area, visit iMapInvasives[6], which is a national cloud-based application for tracking and managing invasive species.
- The Department 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 Department asks that the previous response letter dated June 25, 2025 be submitted with this letter to the Arizona Corporation Commission for your CEC application, and all recommendations be considered for the construction, development, and decommissioning of the project.

Per the request of Mr. Ramljak, Manager of Western Wind Development, the Department recommends reaching out to Navajo County Planning and Zoning for development information. The Department, at this time, does not have any plans for development in the area.

Thank you for the opportunity to provide input on the West Camp 2 Wind Farm gen-tie proposal. For further coordination, please contact Elizabeth Johnston at ejohnston@azgfd.gov or 928-532-3683.

Sincerely,

Aaron Hartzell
Regional Supervisor, Region I, Pinetop

[3] https://agriculture.az.gov/plantsproduce/native-plants
[4] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[5] https://aznps.com/invas
[6] https://imap.natureserve.org/imap/services/page/map.html

cc: Callie Cavalcant, Habitat, Evaluation, and Lands Branch Chief

AZGFD # M25-07313926

EXHIBIT I

Noise and Interference

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EXHIBIT I. NOISE AND INTERFERENCE

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *Describe the anticipated noise emission levels and any interference with communication signals which will emanate from the proposed facilities.*

Introduction

The proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) comprises a 345- or 500-kilovolt (kV) generation-tie transmission line (Gen-Tie Line) and up to one On-Site Switchyard. The Gen-Tie Project will carry power generated at the proposed West Camp 2 Wind Farm to either the existing Arizona Public Service (APS) Sitgreaves Substation or to the existing Salt River Project (SRP) 500-kV Cholla-Sugarloaf-Coronado transmission line within the Certificate of Environmental Compatibility (CEC) Corridor (see Figure A-1 of Exhibit A). All Gen-Tie Project components have the potential to cause noise and interfere with communication signals.

Noise

Sound is a type of energy transmitted through pressure changes that are detectable by the ears of animals and humans. In contrast, noise is any unwanted or intrusive sound that disrupts a preferred auditory environment. Sound is characterized by two primary attributes: amplitude and frequency. Amplitude refers to the energy level reaching the ear, which determines how loud a sound is perceived. Frequency describes the rate at which the sound source oscillates or cycles within a specific time frame, typically measured in hertz.

Humans typically perceive sounds within a range from 0 A-weighted decibels (dBA) to 120 dBA. A-weighted decibels adjust for the human ear's sensitivity to different frequencies, ensuring that sound measurements reflect what people hear. Sounds exceeding 120 dBA can be extremely loud and harmful, posing potential risks to the human eardrum.

Ambient Noise Levels

The CEC Corridor consists of largely open, vacant rural land that accommodates livestock grazing, related ranching activities, utility corridors, and dispersed recreation. Ambient sound levels in such areas are generally quiet, ranging from 23 to 37 dBA (mean 30 dBA) during nighttime hours and from 33 to 47 dBA (mean 40 dBA) during daytime hours (Eldred 1982).

In a preconstruction noise study conducted for the West Camp 2 Wind Farm,[1] ambient sound levels ranged from 40.0 dBA to 42.4 dBA at two monitoring stations placed adjacent to unpaved roads in a sparsely developed subdivision (SWCA Environmental Consultants [SWCA] 2025). At monitoring station LT-A, located 2.54 miles south of the CEC Corridor, the average 1-hour sound level was measured at 40.0 dBA, with a daytime average of 40.8 dBA and nighttime average of 37.9 dBA. At monitoring station LT-B, located 2.80 miles south of the CEC Corridor, the average 1-hour sound level was measured at 42.4 dBA, with a daytime average of 44.1 dBA and nighttime average of

[1] The preconstruction noise survey was conducted for the West Camp 2 Wind Farm in July 2025 to satisfy requirements for a Development Agreement from Navajo County.

34.4 dBA. A similar study conducted for the West Camp Wind Farm[2] recorded an ambient sound level of 33.6 dBA[3] at a long-term monitoring station approximately 2.75 miles southwest of the CEC Corridor requested in this application (SWCA 2022). The noise monitor was also placed adjacent to an unpaved road in the sparsely developed Chevelon Canyon subdivision. The sound levels recorded at the three monitoring stations are consistent with a rural environment and considered representative of the surrounding area (SWCA 2022, 2025).

Potential sources of noise in the vicinity of the Gen-Tie Project include the existing APS Sitgreaves Substation, vehicle traffic on State Route 377, and five high-voltage transmission lines (see Figure A-3 in Exhibit A):

- APS 345-kV Cholla-Chevelon-Preacher Canyon-Pinnacle Peak
- APS 345-kV Cholla-Sitgreaves-Mazatzal-Pinnacle Peak
- APS 500-kV Cholla-Saguaro
- SRP 500-kV Cholla-Sugarloaf-Coronado
- West Camp Wind Farm 345-kV generation-tie line

Other existing sources of noise in the CEC Corridor include ranching activities, firearm use (for hunting), lower voltage transmission lines (see Figure A-1 of Exhibit A), and light vehicle traffic on ranch roads. These sources of noise are consistent with the ambient rural environment.

Noise-Sensitive Receptors

Noise-sensitive receptors are generally defined as locations where people reside or where the presence of unwanted sound may adversely affect the existing land use. The nearest communities to the CEC Corridor are Holbrook, a city of approximately 5,000 people, approximately 5 miles to the north; Woodruff, an unincorporated community of about 200 residents, approximately 8.4 miles to the east; and Joseph City, an unincorporated community of roughly 1,900 residents, approximately 10 miles to the north. The nearest subdivision boundary of the sparsely occupied Chevelon Canyon Ranch subdivision is 2.5 miles southwest of the CEC Corridor.

There are no residences, schools, or churches within 1 mile of the CEC Corridor. The nearest noise-sensitive receptors consist of two residences that are approximately 1.4 miles west and 1.4 miles southwest of the western extreme of the CEC Corridor (see Figure A-3 of Exhibit A). These residences are also within 0.4 mile of the APS 345-kV Cholla-Chevelon-Preacher Canyon-Pinnacle Peak and Cholla-Sitgreaves-Mazatzal-Pinnacle Peak transmission lines.

The nearest noise-sensitive receptors to the On-Site Switchyard Siting Area consist of scattered residences more than 2.5 miles to the south.

Anticipated Noise During Construction

Ground-based equipment needed to construct a transmission project usually includes heavy earthmoving vehicles, cranes, compressors, generators, and various trucks. The maximum instantaneous construction noise levels from these sources typically range from 80 to 90 dBA at 50 feet from any work site (Crocker

[2] The noise impact assessment was conducted for the West Camp Wind Farm in 2022 to satisfy requirements for a Special Use Permit from Navajo County.

[3] Average 1-hour sound level of 33.6 dBA. The daytime average was measured as 35.3 dBA and the nighttime average was 27.6 dBA.

and Kessler 1982). At 1.4 miles—where the closest residences to the CEC Corridor are located—noise levels of this magnitude generated at the property line would attenuate to approximately 36.4 to 46.4 dBA,[4] which would be comparable to typical rural daytime background levels. Given these low levels, the short duration of Gen-Tie Project construction activities, and the restriction to daylight work hours, noticeable intrusion on nearby residents is expected to be minimal.

Anticipated Noise During Operation

The primary source of noise generated by high-voltage transmission lines is caused by corona discharge, which is an electrical phenomenon resulting from the ionization of nearby fluids, often air, around conductors carrying high voltage, such as those in a transmission line. Traces of corona discharge can be found in all active high-voltage transmission lines.

When corona discharge forms around an electrified conductor, it can become concentrated enough to cause small electrical discharges. These discharges can have various effects, including producing audible noise, such as faint humming or crackling sounds, causing interference in radio transmissions, generating heat, or even triggering chemical changes in the air's components.

The following several factors influence the occurrence and intensity of corona discharge:

- Voltage magnitude: The overall voltage carried by the conductor is a central factor, as corona discharge increases with voltage.
- Physical attributes of the conductor: The shape, diameter, and even small surface imperfections, such as dust accumulation, scratches, or nicks, can affect the electrical gradient on its surface and, consequently, the corona activity.
- Environmental context: Weather conditions play a significant role. Wet and humid conditions or foul weather can amplify corona discharges, whereas audible noise from corona discharge is minor and rarely noticed under dry conditions. Additionally, site elevation and air pressure can significantly impact corona discharge.
- Elevation: Corona discharge increases at higher elevations, where the density of the atmosphere is less than that at sea level.

Given the localized nature of corona discharge and its typically minor effects, it is expected that its impact will remain negligible outside the CEC Corridor.

The proposed Gen-Tie Project includes a 345- or 500-kV transmission line located within a 150-foot right-of-way (ROW). To evaluate potential corona-related audible noise generated during operation, SWCA used the Bonneville Power Administration “Corona and Field Effects” Excel-based program, which is a publicly available tool for modeling the environmental effects of high-voltage transmission lines.

This program estimates audible noise levels, electric and magnetic fields, and other corona-related parameters based on user-specified inputs, such as conductor type, voltage, spacing, and environmental conditions. The model accounts for both fair weather and wet weather scenarios and incorporates factors such as atmospheric pressure and elevation, which influence the intensity of corona effects.

Because elevation affects the density of the air and, in turn, the occurrence of corona discharge, the model includes correction factors for altitude. For example, based on the relationship A/300 (where A is elevation in feet), corona noise at a 1,968-foot elevation would be approximately double that at 984 feet

[4] Sound levels are reduced by 6 dBA with each doubling of distance from the source.

(Electric Power Research Institute 2005). The CEC Corridor lies on a broad plateau at about 5,100 feet above mean sea level. Thus, corona noise produced by the proposed line would be about five times higher than it would be at 984 feet in elevation, yet still less intense than at very high-altitude sites above 6,562 feet.

345-kV and 500-kV Impacts

Table 1 presents the Gen-Tie Line corona noise levels that were estimated using the Bonneville Power Administration program for both fair and foul weather conditions; graphical representations of noise levels are presented in Figure I-1 (345-kV) and Figure I-2 (500-kV).

Table 1. Estimated Corona Noise Levels for the Gen-Tie Project

Weather Conditions	Noise Levels (345-kV)	Noise Levels (500-kV)
Fair	26.8 dBA directly beneath line 23.1 dBA at edge of 150-foot ROW	37.1 dBA directly beneath line 33.5 dBA at edge of 150-foot ROW
Foul	51.8 dBA directly beneath line 48.1 dBA at edge of 150-foot ROW	62.2 dBA directly beneath line 58.5 dBA at edge of 150-foot ROW

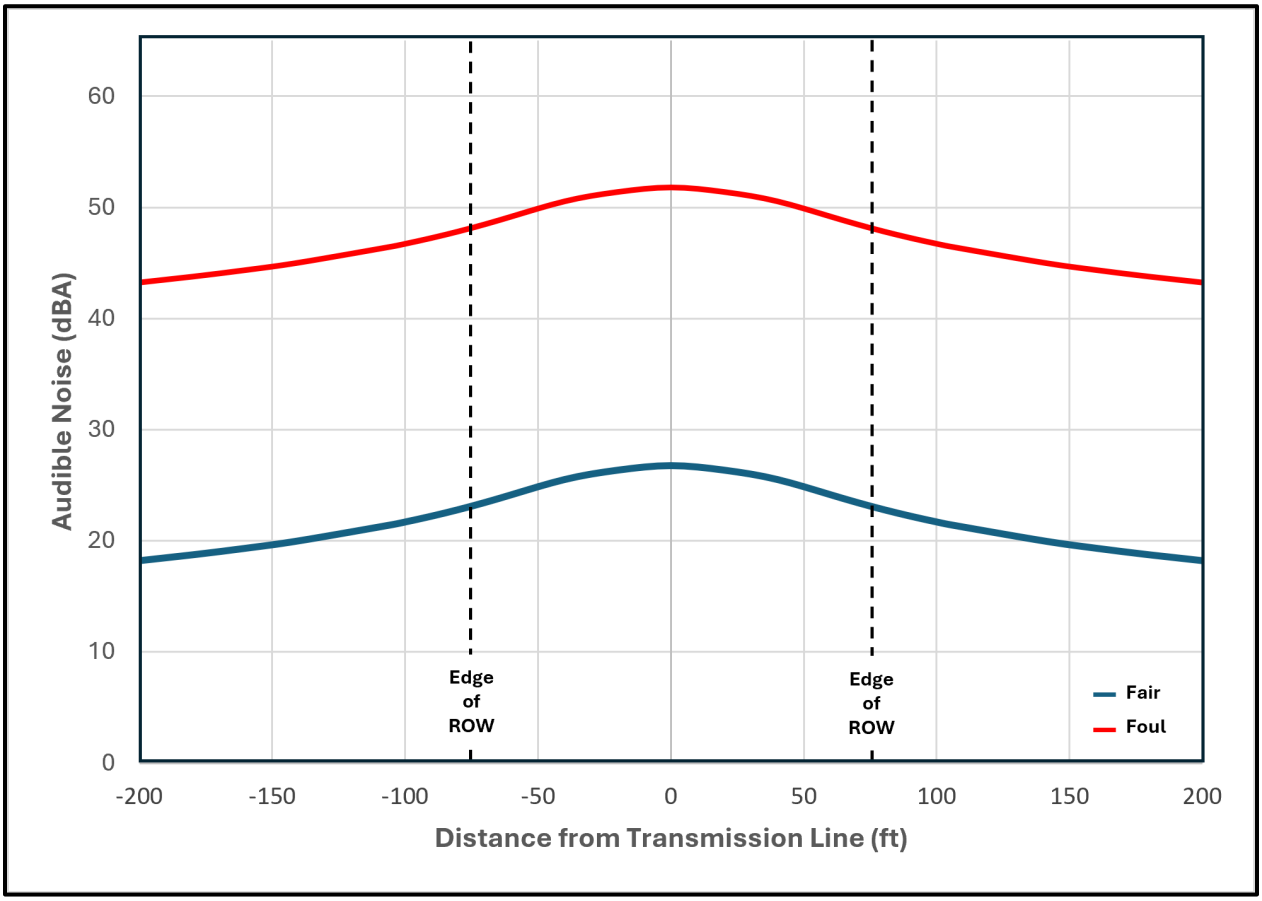

Figure I-1. Corona audible noise for 345-kV transmission line.

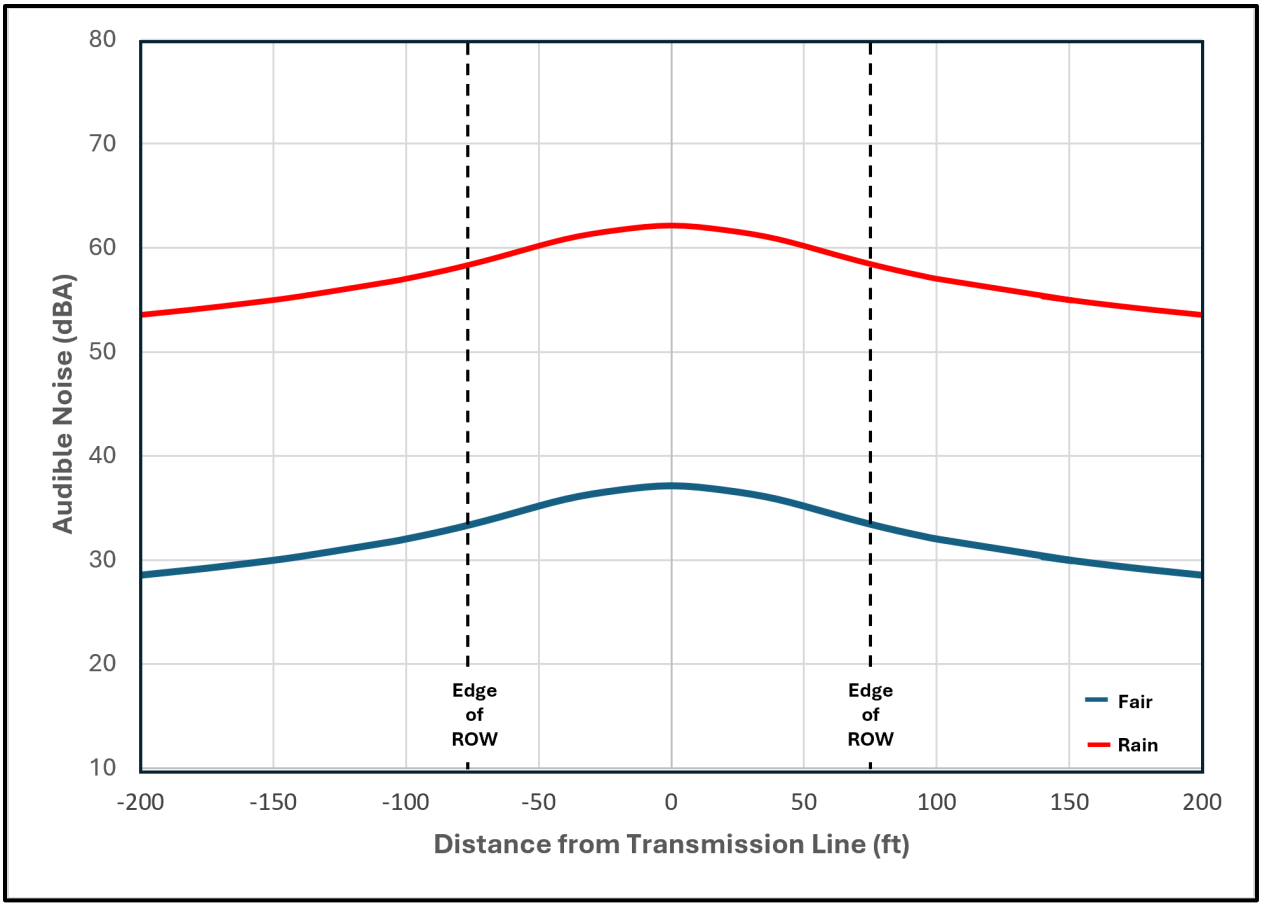

Exhibit I-2. Corona audible noise for 500-kV transmission line.

At the nearest noise-sensitive receptors—the two residences approximately 1.4 miles west and 1.4 miles southwest of the CEC Corridor—corona noise would be either inaudible or indistinguishable from ambient background levels, depending on the final alignment of the Gen-Tie Line. Although wet conditions or foul weather can temporarily increase corona activity and associated noise, environmental noise from precipitation, wind, and other meteorological activity during foul weather would further mask any audible corona effects. As a result, corona noise from the Gen-Tie Line is not expected to cause perceptible impacts at nearby noise-sensitive receptors during operation under fair or foul weather conditions.

Switchyard Impacts

If the interconnection with the SRP 500-kV Cholla-Sugarloaf-Coronado transmission line is selected, the On-Site Switchyard would employ generally quiet technology (e.g., gas circuit breakers), and the nearest noise-sensitive receptors are more than 2.5 miles from the potential On-Site Switchyard locations.

Communication Interference

Overhead transmission lines have been extensively studied for their potential impact on communication signal quality, particularly concerning radio and television reception. Generally, these lines do not interfere with standard communication signals. However, when interference does occur, it can usually be attributed to two primary sources: corona discharges and gap discharges.

Corona discharges from transmission lines can sometimes produce unintended electrical noise. The intensity of this noise diminishes with increased distance from the transmission line. For the AM radio spectrum, which operates at lower frequencies, corona discharges might cause disruptions. For instance, a humming sound, which fades as the distance from the line increases, may be heard on an AM radio near a power line.

Conversely, FM radio receptions, with their higher frequencies (88–108 megahertz), are rarely affected. The inherent interference rejection capabilities of FM systems render them virtually resistant to such disturbances. Additionally, since the Gen-Tie Line's voltage does not exceed 500 kV, TV receptions are generally not subject to corona-induced disruptions.

Unlike corona discharges, gap discharges can occur at any voltage level on power lines. They arise from small electrical separations or gaps that might form between mechanically connected metal parts. When these gaps are bridged by small electric sparks, unwanted electrical noise can be produced. The impact of this noise depends on various factors, including the quality of the received radio or TV signal and the proximity of the receiver to the power line. However, many interference complaints are often traced back to non-power line sources, such as household appliances or poor-quality antennae.

High-voltage transmission lines usually experience fewer gap discharge problems due to their structural features and maintenance standards. The design and construction of these lines play a pivotal role in minimizing such disturbances. Properly designed hardware, electrical bonding where necessary, and diligent tightening of connections during construction can help avoid most interference issues. For those rare instances of interference, they can typically be traced to specific sources, such as corroded or damaged hardware, and rectified.

Additionally, transmission lines generally do not interfere with other critical communication infrastructures. Specifically, they do not disrupt the functions of cellular phone towers or the communication pathways of microwaves. This non-interference is evident from the widespread practice of mounting cellular antennae and microwave receivers directly onto transmission structures. The height of these structures, which often enhances signal range and quality, encourages such co-use without any reported complications.

Given the distance of the nearest residential receptor to the CEC Corridor and the presence of other existing transmission lines near this residence, no measurable radio interference is anticipated. The inherent design specifications, combined with the Gen-Tie Project's adherence to construction best practices, will ensure minimal disruptions to nearby communication systems.

Literature Cited

Crocker, M.J., and F.M. Kessler. 1982. *Noise and Noise Control, Volume II*. Boca Raton, Florida: CRC Press, Inc.

Eldred, K.M. 1982. Standards and criteria for noise control; An overview. *Noise Control Engineering* 18(1):16–23.

Electric Power Research Institute. 2005. *EPRI AC Transmission Line Reference Book—200 kV and Above*. 3rd ed. December. Electric Power Research Institute, Palo Alto, California.

SWCA Environmental Consultants (SWCA). 2022. *West Camp Wind Farm Noise Impact Assessment*. Submitted to West Camp Wind Farm, LLC. Flagstaff, Arizona: SWCA Environmental Consultants.

———. 2025. *West Camp 2 Wind Farm Noise Impact Assessment*. Submitted to West Camp Wind Farm II, LLC. Flagstaff, Arizona: SWCA Environmental Consultants.

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EXHIBIT J

Special Factors

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EXHIBIT J. SPECIAL FACTORS

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

> *Describe any special factors not previously covered herein, which applicant believes to be relevant to an informed decision on its application.*

Public Involvement

This section includes information on the public involvement program that is being conducted for the proposed West Camp 2 Gen-Tie Project (Gen-Tie Project) and the West Camp 2 Wind Farm. The Applicant's public outreach efforts began in May 2025 to provide information to agencies and individuals, solicit information, and identify potential issues relative to the West Camp 2 Wind Farm and the Gen-Tie Project. Tribal coordination began in July 2025 with the outreach letters described below.

The Applicant is currently pursuing all necessary approvals from Navajo County for the West Camp 2 Wind Farm and has conducted public involvement for the Certificate of Environmental Compatibility (CEC) application concurrently with the efforts for the Navajo County permitting process. Early planning with Navajo County and wildlife agencies included project and team introductions and agreement on next steps. The Applicant prepared a Citizen Participation Plan, which was vetted by the County at the onset of the permitting process to ensure that local jurisdictions and community residents are provided with the opportunity to relay information or potential concerns. Public mailings, legal notices, a project website, and public meetings are being used to reach the affected communities. By providing the public with opportunities to access project information and relay comments, the project team can identify potential issues to address through the planning process and environmental studies.

Tribal Outreach

Despite the lack of a federal permitting nexus and Section 106 National Historic Preservation Act tribal consultation requirements, the Applicant voluntarily contacted the following eight tribal groups to inform them about the proposed West Camp 2 Wind Farm and Gen-Tie Project:

- Fort Mojave Indian Tribe
- Hopi Tribe
- Mescalero Apache Tribe
- Navajo Nation
- Pueblo of Zuni
- Salt River Pima-Maricopa Indian Community
- Tonto Apache Tribe
- White Mountain Apache Tribe

The tribal outreach letters were mailed on July 28, 2025. A copy of the tribal outreach letter is included as Attachment J-1.

Notices of Public Meetings

As of this writing, two public meetings have been held to satisfy the requirements of the Navajo County permitting process. The meetings, both of which occurred on August 27, 2025, in Holbrook, Arizona, were announced through a legal notice posted in a local newspaper, a public mailing, and the project website. The legal notice was published in *The Tribune* (serving Navajo County) on August 20, 2025, 7 days prior to the public meetings.

On July 28, 2025, public meeting notices were mailed to property owners of record within 1 mile of the proposed West Camp 2 Wind Farm (approximately 88 mailings) and to municipalities within 5 miles of the project, as required by the Navajo County Zoning Ordinance. The public meeting notices included a project description, general location and facility plan map, public meeting invitation, project website information, and contact information.

The public meeting notices were also sent to the following agencies and officials:

- Navajo County Board of Supervisors
- Navajo County Planning and Zoning Department
- Arizona Game and Fish Department (AZGFD)
- Arizona State Historic Preservation Office
- Arizona State Land Department
- Apache-Sitgreaves National Forests
- Bureau of Land Management (Safford Field Office)
- U.S. Fish and Wildlife Service (Region 2 Migratory Birds, Albuquerque Office and Arizona Ecological Services Office)
- Taylor-Snowflake Fire Department*
- Heber-Overgaard Fire Department*
- Arizona State Fire Marshal's Office*

Public Meetings

Two public meetings were held on Wednesday, August 27, 2025, at the American Legion AZ Post 37. The meetings were informal "open house" style format, allowing community members to attend at their convenience, review displays, and speak with members of the project team. All attendees were recorded on an official sign-in sheet upon entering the meeting.

Materials for presentation at the meeting included a West Camp 2 Wind Farm project fact sheet, an AES in Arizona fact sheet, and the following poster displays:

- AES company overview
- West Camp 2 Wind Farm project overview and permitting
- West Camp 2 Wind Farm agency coordination

* These entities were added to the mailing list after the July 28, 2025, mailing; the meeting notice was mailed to them on August 14, 2025.

- West Camp 2 Wind Farm site plan
- Visual simulations (10 posters)

Comment forms were provided to solicit public comments regarding the project and the information that was presented. A project information handout was also distributed when requested by attendees. Meeting notices and materials are included in Attachment J-2.

Notice of CEC Hearing

Public notification letters will be sent to the same list of property owners, municipalities, and other entities that received the public meeting notices. The notification letter will include a project description, general location and facility plan map, project website information, contact information, and details on the CEC hearing. Notices are anticipated to be mailed on September 17, 2025.

Comments Received

The comments and the Applicant's response will be provided in a supplemental filing.

The letter from the AZGFD and the response from the Applicant are provided as Attachments C-3 and C-4 in Exhibit C.

Project Website

The Applicant developed a project website that contains project description information, including information presented at the public meeting, and a mechanism for public comment submittal. The website address, which was announced in the legal notice and public mailings, provides an opportunity for persons unable to attend the public meeting to learn about the project and provide comments.

Additional Stakeholder Briefings

Project briefings with stakeholders included numerous meetings held over the last year with landowners; local, state, and federal agencies; and other local organizations. A list of the key meetings conducted to date is included in Table J-1. Note that ongoing and frequent coordination is occurring with various stakeholders and agencies and is planned to continue throughout the development, construction, and operational phases of the project.

Table J-1. Stakeholder Briefings

Date	Representative Organization or Agency	Location
February 11, 2025	Navajo County – County Supervisor and Staff meeting	Holbrook, Arizona
February 11, 2025	City of Winslow	Winslow, Arizona
March 10, 2025	Navajo County Planning and Zoning Department – informational project meeting	Show Low, Arizona
March 11, 2025	Navajo County – County Supervisor meeting	Holbrook, Arizona
March 10–11, 2025	Local businesses and environmental interest groups	Snowflake and Show Low, Arizona
March 12	Arizona State Land Department	Phoenix, Arizona
May 29, 2025	U.S. Fish and Wildlife Service Region 2 and AZGFD – wildlife survey results	Virtual
August 27, 2025	Community open house meetings	Holbrook, Arizona

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EXHIBIT J – ATTACHMENT J-1

Tribal Outreach Letter (July 28, 2025)

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July 28, 2025

[First Name Last Name, Title]
[Tribe]
[Tribal Office, if applicable]
[Address Line 1]
[Address Line 2]

Dear [First Name Last Name],

The AES Corporation (AES) is applying for a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission to construct and operate a generation-tie transmission line (gen-tie line) and associated project infrastructure for the West Camp 2 Wind Farm, a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona, as shown in the attached figure. AES is also seeking Navajo County approval to construct and operate the project.

The West Camp 2 Wind Farm would comprise up to 144 wind turbines and would include a parking area, storage facilities, an operations and maintenance building, access roads, permanent meteorological towers, and an Aircraft Detection Lighting System. The project's generated electricity would connect to the power grid at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long gen-tie line or at the Salt River Project 500-kilovolt (kV) Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long gen-tie line located within the wind farm project area. Energy generated by the wind facilities and energy stored in the battery storage facilities would be routed to up to two project substations via 34.5-kV collection lines. The wind turbine generators would have a total system height of up to 770 feet.

The project would be privately funded, and at this time there is no federal involvement that would require Tribal consultation under Section 106 of the National Historic Preservation Act. However, AES's stakeholder engagement best practices are to coordinate with Tribal communities early during project planning. The project is in the initial stages of development, and we respectfully request your input on archaeological sites or areas of cultural significance that may be present within the project footprint. Any information you provide will be restricted and confidential and will aid in site planning and development for the project and associated cultural resource studies.

We respectfully request any information you wish to provide be received by us before August 27, 2025. Should you have any questions regarding the project and information request, please contact me at jordan.ramljak@aes.com.

Sincerely,

Jordan Ramljak

Jordan Ramljak
Manager, Western Wind Development

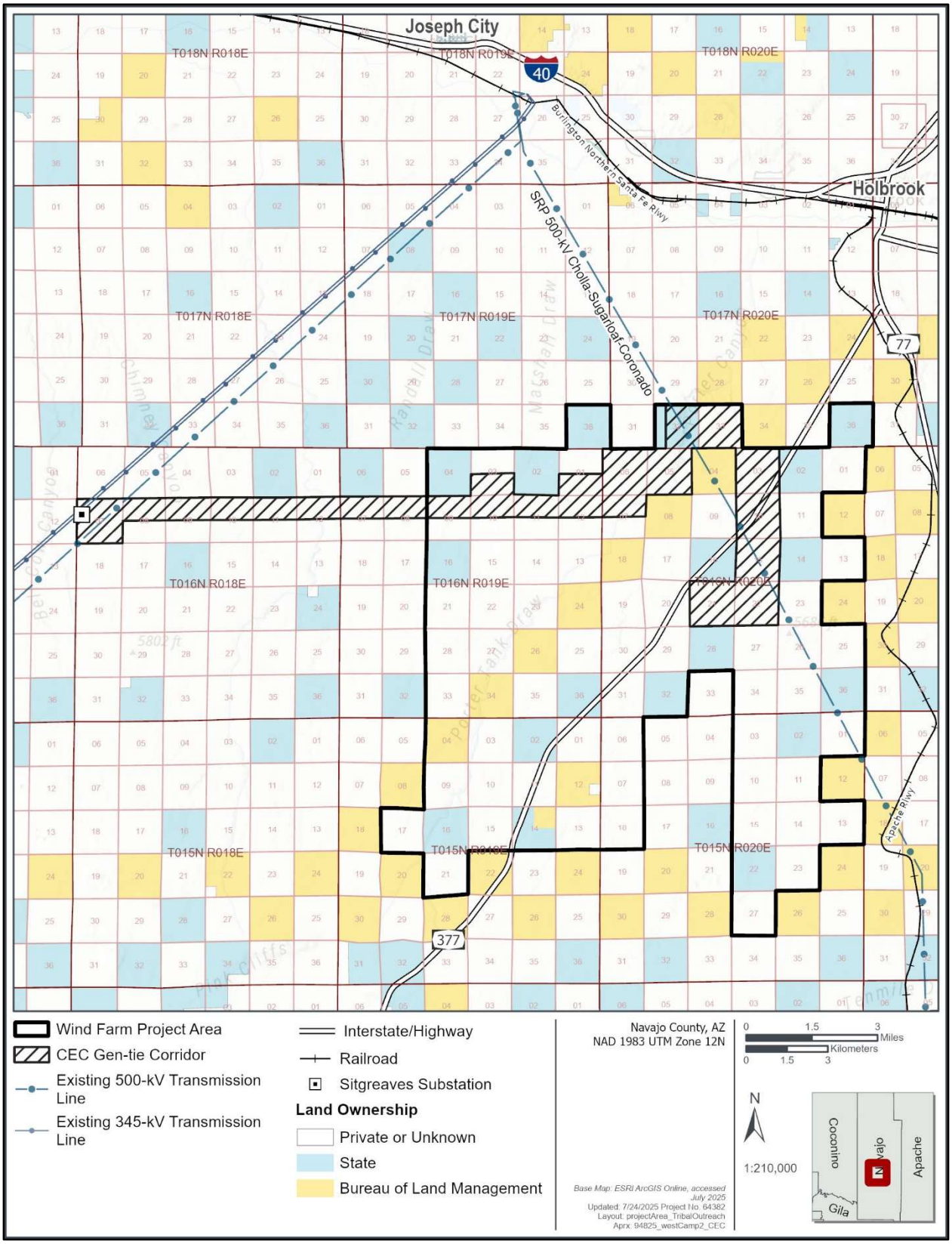


Figure 1. Map of the Project Area.

EXHIBIT J – ATTACHMENT J-2

Notice to Neighboring Landowners of Public Meetings (July 28, 2025) and Public Meeting Materials (August 27, 2025)

This page intentionally left blank.

July 28, 2025

The AES Corporation
282 Century Place
Suite 2000
Louisville, CO 80027

Dear Neighbor,

The AES Corporation (AES) is applying for a Certificate of Environmental Compatibility from the Arizona Corporation Commission to construct and operate a gen-tie line and associated project infrastructure for the West Camp 2 Wind Farm, a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona, as shown in the attached figure. AES is also seeking Navajo County approval to construct and operate the project.

The West Camp 2 Wind Farm would comprise up to 144 wind turbines and would include a parking area, storage facilities, an operations and maintenance building, access roads, permanent meteorological towers, and an Aircraft Detection Lighting System. The project's generated electricity would connect to the power grid at the Arizona Public Service Sitgreaves Substation located west of the project area via an up to 25-mile-long generation-tie line or the Salt River Project 500-kilovolt (kV) Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long generation-tie line located within the project area. Energy generated by the wind facilities and energy stored in the battery storage facilities would be routed to up to two project substations via 34.5-kV collection lines. The wind turbine generators would have a total system height of up to 770 feet.

The project is sited in a remote location and incorporates a setback from the project boundary. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

Wind energy is building a cleaner future and creating economic benefits for all Arizonans. The West Camp 2 Wind Farm would bring many local and state benefits, including:

- 500+ construction jobs and 20 to 30 full-time local positions during the 25+ year operating life at full buildout.
- Tens of millions of dollars in property taxes and other local economic benefits for Navajo County.
- Lease payments to rural ranching families.
- The project is being designed to avoid impacts to sensitive environmental and cultural resources and sited to minimize impacts to residential areas.
- At full buildout, the project will generate electricity equivalent to powering over 132,000 Arizona homes annually, with no operational air emissions or water use.
- The property will remain cattle ranchland, and the installation of wind facilities will not significantly alter existing land uses.

Public Open House
Before application submittal to Navajo County and the Arizona Corporation Commission, we are interested in receiving public input on the project and will be hosting two community open houses. The public open house meetings will be held on Wednesday, August 27, 2025. Both public meetings will be held at the American Legion Post in Holbrook, with the first meeting occurring from 12:00 p.m.–2:00 p.m. and the second meeting occurring from 5:00 p.m.–7:00 p.m. AES and project representatives will attend each meeting and will be available to answer questions from the public. We cordially invite you to attend one of the community open houses described below to learn more about the West Camp 2 Wind Farm, and to provide input.

Wednesday, August 27
12:00–2:00 p.m. and 5:00–7:00 p.m.
American Legion AZ Post 37
290 E Iowa Street, Holbrook, Arizona 86025

Submit Comments
Please submit comments on the project website at **https://www.aes.com/west-camp-2-wind**, via email at **westcamp@aes.com,** or mail comments to the address below:

West Camp 2 Wind Farm
c/o SWCA
1750 S Woodlands Village Boulevard, Suite 200
Flagstaff, Arizona 86001

More information will be posted to the project website at **https://www.aes.com/west-camp-2-wind**. The public can also utilize the project hotline at **928-404-1630** to ask for more information about the project.

About AES
AES is a Fortune 500 global energy company with 1.5 gigawatts (GW) of energy assets operating in Arizona, and 1.1 GW under construction. As a long-term owner-operator, AES is committed to supporting safe and reliable energy as we invest in our local communities

Sincerely,

Jordan Ramljak
Manager, Western Wind Development

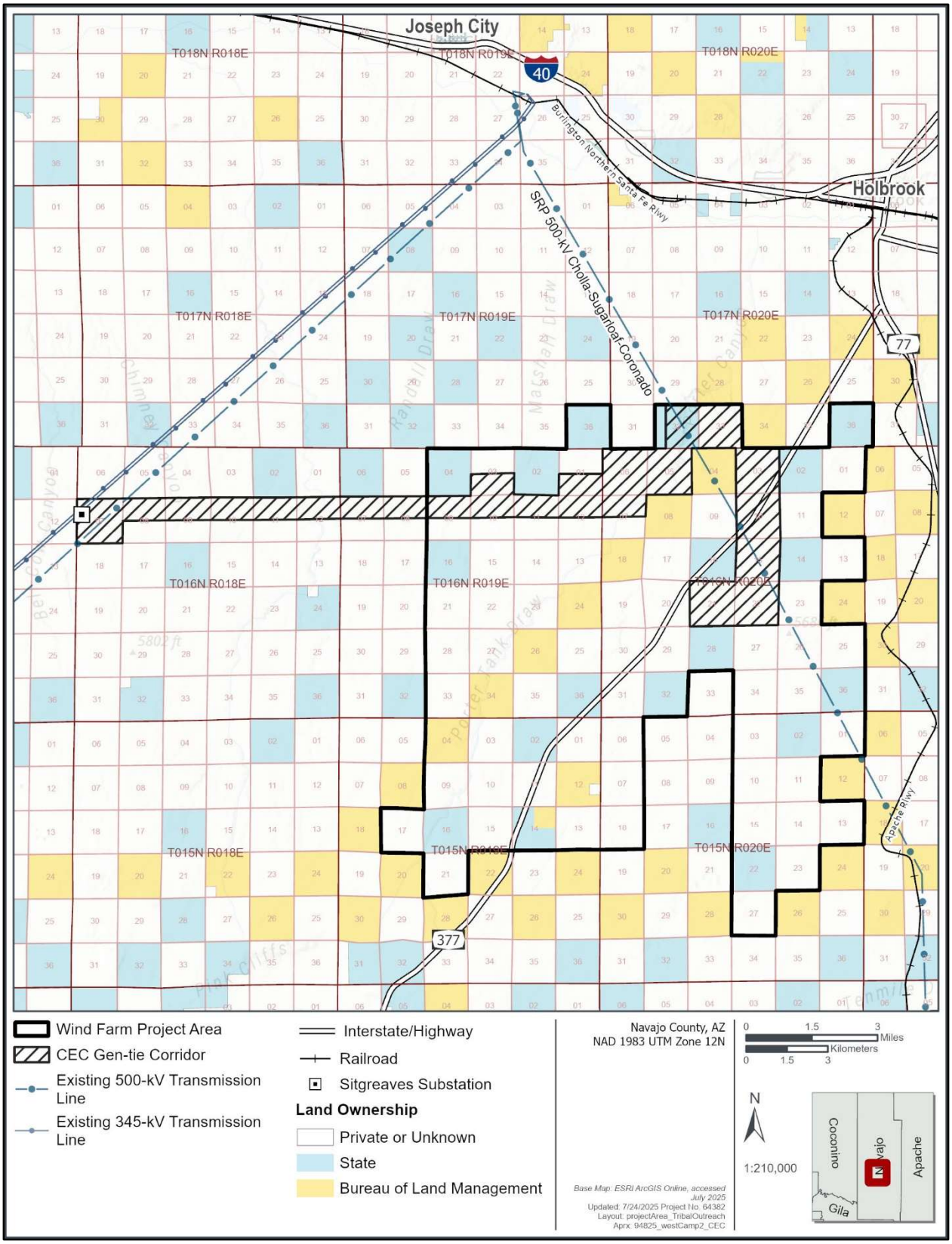


Figure 1. Map of the Project Area.

Affidavit of Publication

State of Arizona)
)ss.
County of Navajo,)

I, Matthew Barger, being duly sworn, depose and say: I am

CONSULTANT of PAINTED DESERT TRIBUNE, a newspaper of general circulation published at Holbrook, County of Navajo and State of Arizona; that

Legal Notice **Legal #9386**

attached hereto, was published in said newspaper, PAINTED DESERT TRIBUNE, for **1** issue and said notice was published in the regular and entire issue of every number of the paper during the period of the time of publication and was published in the newspaper proper and not in a supplement, the first

publication being dated **August 20, 2025**

and the last publication being dated **August 20, 2025**

Publication Dates: **8/20**

CONSULTANT

SUBSCRIBED AND SWORN TO in the State of Arizona, County of Pinal, before me this **20th** day of **August, 2025**

My commission expires **February 23, 2029**.
My commission # 681187

NOTARY PUBLIC

DEBORAH BARGER
Notary Public, State of Arizona
Pinal County
Commission # 681187
My Commission Expires
February 23, 2029

Copy of Legal Publication

LEGAL NOTICE

The AES Corporation (AES) is applying for a Certificate of Environmental Compatibility from the Arizona Corporation Commission to construct and operate a generation tie-line (gen-tie) and associated project infrastructure for the West Camp 2 Wind Farm, a maximum 500-megawatt wind energy and battery storage facility to be located almost entirely on private lands approximately 5 miles southwest of Holbrook in unincorporated Navajo County, Arizona. AES is also seeking Navajo County approval to construct and operate the project.

The West Camp 2 Wind Farm would comprise up to 144 wind turbines and would include a parking area, storage facilities, an operations and maintenance building, access roads, permanent meteorological towers, and an Aircraft Detection Lighting System. The project's generated electricity would connect to the power grid at either the Arizona Public Service Sitgreaves Substation, located west of the project area via an up to 25-mile-long gen-tie, or at the Salt River Project 500-kilovolt (kV) Cholla-Sugarloaf-Coronado transmission line via a new switchyard and up to 3-mile-long gen-tie within the project area. Energy generated by the wind facilities and energy stored in the battery storage facilities would be routed to up to two project substations via 34.5-kV collection lines. The wind turbine generators would have a total system height of up to 770 feet.

The project is sited in a remote location and incorporates a setback from the project boundary consistent with Navajo County zoning requirements. Visual simulations, cultural resource investigations, natural resource and wildlife studies, and other siting evaluations are underway, in addition to ongoing agency consultation, to identify and mitigate impacts to applicable resources.

Two public open house meetings will be held on Wednesday, August 27, 2025. Both public meetings will be held at the American Legion AZ Post 37 in Holbrook, located at 290 East Iowa Street, Holbrook, Arizona 86025. The first meeting will take place from 12:00 p.m. to 2:00 p.m., and the second meeting will take place from 5:00 p.m. to 7:00 p.m. AES and project representatives will attend each meeting and will be available to answer questions from the public. The public can submit comments on the project website (https://www.aes.com/west-camp-2-wind) and via email at westcamp@aes.com, or request more information via the project hotline at 928-404-1630.

About AES

AES is a Fortune 500 global energy company with 1.5 gigawatts (GW) of operating energy assets in Arizona, and 1.1 GW under construction. As a long-term owner-operator, AES is committed to supporting safe and reliable energy as we invest in our local communities.

9386-T8/20

PUBLIC COMMENT - WEST CAMP 2 WIND FARM

If you would like to submit a comment, please fill out this form and leave it here at the meeting or mail it to the address provided on the following page. You can also submit comments on the project website **https://www.aes.com/west-camp-2-wind**, via email at **westcamp@aes.com**, or request more information via the project hotline at 928-404-1630. Please submit comments no later than **September 10, 2025**.

COMMENT:

NAME: _____

EMAIL: _____

ADDRESS: _____

_____

Fold Here

First Class
Stamp Here

West Camp 2 Wind Farm
c/o SWCA Environmental Consultants
1750 South Woodlands Village Boulevard
Suite 200
Flagstaff, Arizona 86001

WELCOME
Please Sign In

West Camp 2 Wind Farm
Public Open House

August 27, 2025 12:00 p.m. - 2:00 p.m.
Holbrook, Arizona

Print Name	Address	Email	(V) Add my name to the mailing list
KEVIN HUNT	1902. W. 6TH ST YUMA AZ 85364	AZHUNT31@YAHOO	
CLARK	516 Hodges LN Holbrook		
STEVE BROPHY	48 N 32ND ST NO 240		

WELCOME
Please Sign In

West Camp 2 Wind Farm
Public Open House

August 27, 2025 5:00 p.m. - 7:00 p.m.
Holbrook, Arizona

Print Name	Address	Email	(V) Add my name to the mailing list
Daniel Stemp	PO Box 361 Holbrook AZ		
Casey Drossendorfa	P.O. Box 791 Holbrook, AZ		

West Camp 2 Wind Farm

Bringing reliable and affordable energy to every Arizonan

The 500 MW West Camp 2 Wind Farm will be located almost entirely on private lands about 5 miles southwest of Holbrook, Arizona. The wind farm will connect to Arizona's power grid using existing transmission infrastructure and will provide readily deployable domestic energy to support the state's projected demand growth.

The proposed facilities for the project will include some of the most advanced wind energy technology deployed to date in Arizona. In addition to the wind turbines, the proposed on-site components for the project include an operations and maintenance building, access roads, electrical collection lines, permanent meteorological towers, up to two project substations, and a high voltage gen-tie line connecting the project to the electrical grid. The site will also feature a radar-activated lighting system that enables the federally required turbine lights to turn on only when low flying aircraft are in this remote area to preserve Northern Arizona's dark sky characteristics. Energy storage and a new switchyard may also be included as part of the project's infrastructure.

The West Camp 2 facility is expected to generate tens of millions in tax revenue for the Navajo County area over the life of the project. At full project buildout, 500+ jobs supporting construction will be needed and construction of the project generates increased economic activity in the surrounding communities.

Project details

- System size: Up to 500 MWac
- Up to 144 turbines and a gen-tie transmission line
- Located in Navajo County, Arizona
- Approximately 500 jobs created during peak construction
- Powers the equivalent of 132,000 homes annually
- Estimated operation date: 2028

AES community benefits

- Contributes to Watts of Love and GRID Alternatives, with the commitment to enhance access to safe, affordable electricity and lighting for off-the-grid communities
- Supports the Willow Bend Environmental Education Center and White Mountain Nature Center on environmental and wildlife education
- Supports local events and economic development through RealAZ and the Joseph City, Holbrook, Snowflake, and Winslow Chambers of Commerce
- Adheres to the U.S. Fish and Wildlife Service's and Arizona Game and Fish Department's wind energy wildlife guidelines to identify, avoid, minimize, and compensate for potential adverse impacts to wildlife resources thought to be at risk from wind energy development
- Makes annual lease payments to rural ranching families and landowners throughout development, construction, and operations
- Designs the project thoughtfully and sustainably to avoid impacts to sensitive environmental and cultural resources and site it to minimize impacts to residential areas
- Supports long-term continuation of historic rural ranching operations and their ongoing preservation of environmental resources and wildlife corridors by minimizing operational footprint (approx. 2-3% of project acreage).

Find out more about our project at www.aes.com/west-camp-2-wind

AES in Arizona

AES is committed to supporting a safe and reliable energy future as we invest in our local communities in Arizona.

Together with our communities, partners and customers, AES is developing innovative, sustainable energy solutions to help Arizona meet its growing energy needs.

Our projects create jobs, build community partnerships, generate substantial tax revenue for local governments and schools, and protect the environment. We are dedicated to building meaningful partnerships with local nonprofits, educational institutions and local businesses to ensure our projects provide long-lasting benefits to the community.

- 60 projects
- 1.3 GW operating
- 1.25 GW under construction
- Nearly $3.6 million in local property tax and site lease/ easement payments in 2024
- >1,750 jobs created
- Nearly $23K in social impact partnership donations in Arizona in 2024

Project highlights

Chevelon Butte wind

Coconino and Navajo Counties, Arizona

454 MW wind facility

Completed 238 MW in Phase 1, ahead of Arizona's peak summer electricity demand in May of 2023 and the 216 MW Phase 2 was completed in 2024 – this project utilizes the most advanced wind energy technology to date in Arizona.

Nearly 300 jobs were created during peak construction, and an estimated 10 long-term operations and maintenance jobs.

$18 million is expected to be generated in new tax revenue for Coconino and Navajo Counties over the life of the project to support local schools, infrastructure and services. Over $21 million of payments to Arizona State Land Department (ASLD) Trust, of which millions of acres of State Trust Land are dedicated to benefiting public schools and colleges across the state of Arizona.

Central Line solar

Coolidge and Eloy, Arizona

100 MW solar facility

Completed in 2022, Central Line is one of three solar projects included in SRP's Sustainable Energy Offering, which provides customers with clean energy choices and supports the utility's decarbonization objectives.

170 jobs were created during peak construction.

$15 million expected to be generated in new tax revenue for Pinal County over the life of the project to support local schools, infrastructure and services.

Westwing energy storage

Maricopa County, Arizona

200 MW battery energy storage facility

First phase (80 MW) completed in spring of 2024 with two additional phases (total of 120 MW) under construction and scheduled for completion in 2025. Westwing will provide APS with a flexible energy resource to support a reliable and resilient power grid for Arizonans.

An estimated 150 jobs have been created for the two phases under construction, along with 4 long-term operations and maintenance jobs for the facility.

Partnering with communities for the future of energy

At AES, we understand that our success as a company is only as strong as our partnerships with the communities where we operate.

AES is a proud supporter of Willow Bend Environmental Education Center, located in Flagstaff, Arizona. The Center provides educational outreach services that build environmental awareness and an ethic of responsible stewardship of natural and cultural resources. They offer school programs to K–12 grades, along with college programs, teacher workshops, and field trips and guided tours. AES funds school programs, teacher check out kits, and much needed outdoor activities for the organization and the students it supports.

Proud members and partners of

- Arizona Chamber of Commerce & Industry
- City of Coolidge Chamber of Commerce
- City of Eloy Chamber of Commerce
- City of Winslow Chamber of Commerce
- Greater Yuma Economic Development Corporation
- Greater Phoenix Economic Council
- Holbrook Chamber of Commerce
- Joseph City Chamber of Commerce
- Pinal Partnership
- REAL AZ Economic Development Group
- Snowflake Chamber of Commerce

About AES

The AES Corporation (NYSE: AES) is a Fortune 500 global energy company accelerating the future of energy. Together with our many stakeholders, we're improving lives by delivering the greener, smarter energy solutions the world needs.

For more information, visit aes.com/arizona

communityinquiries@aes.com

AES: bringing clean energy to every Arizonan

Since 2010, AES has been delivering power from renewable sources to the state of Arizona. AES and Arizona are using the most advanced wind, solar, and energy storage technologies available. AES is a Fortune 500 company headquartered in the U.S. with a portfolio of 13.9 GW of mixed energy assets

→ 1.3 GW Operating clean energy resources

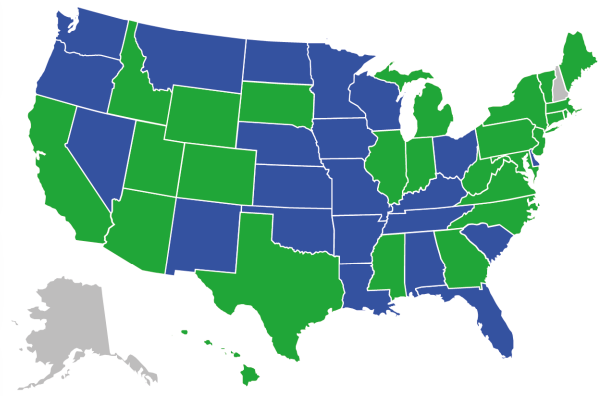
Solar | Solar + storage | Wind

→ 1.2 GW Utility-scale energy projects in construction, including the first phase of this project, the 500MW West Camp Wind Farm which is entirely located in Navajo County

AES is committed to being a good neighbor in the communities we operate in by investing in and supporting local organizations and programs. These include nonprofits, educational institutions, tribal communities, and local businesses to help ensure that the benefits of a clean energy future accrue to everyone.

AES U.S. clean energy portfolio

- 12.8 GW Operating clean energy resources (solar, storage, wind)
- 53 GW Utility-scale energy projects in development
- 1,400+ Employees
- 600+ Renewable projects
- 29 States



Project overview

- Location: Navajo County, approximately 5 miles SW of Holbrook, Arizona
- Property Info: approximately 58,200 acres consisting mostly of private land
- Zoning: Navajo County Zone A-General
- Planned Capacity: Up to 500MW
- Number of Turbines: Up to 144
- Estimated Operation Date: 2028
- Point of Interconnection: APS Sitgreaves Substation or SRP 500kV Cholla-Sugarloaf-Coronado Transmission Line
- Gen-Tie Line: up to 25-mile-long line to APS Sitgreaves Substation or up to 10-mile-long line to new switchyard within project area at SRP 500-kV transmission line

Permitting

- Wind energy generation facilities are allowed in Navajo County A-General district subject to securing a Special Use Permit or Development Agreement.
- Gen-tie infrastructure requires securing a Certificate of Environmental Compatibility from the Arizona Corporation Commission.

Community benefits

- Local Economy: $10+ million will be generated in local construction labor income and indirect spending.
- Property Tax Revenue: ~$20+ million in property tax revenue will be generated over the project lifetime, which can be utilized for essential services and programs.
- Job Creation: 500+ total construction jobs will be created during the ~1 year of peak construction with 20-30 full-time local positions over the 25+ year operating life at full buildout.

> "We've pulled in north of $50,000 since West Camp started being constructed from their employees alone. Every single night, we get customers from the wind farm." - Snowflake Smokehouse Bar & Grill

Public comments

- Website: https://www.aes.com/west-camp-2-wind or Email: westcamp@aes.com
- Mail: West Camp 2 Wind Farm, 1750 S Woodlands Village Boulevard, Suite 200, Flagstaff, Arizona 86001
- Project hotline: (928) 404-1630, which can also be used to ask for more information about the project.

Agency coordination

- Federal: (no federal permitting/National Environmental Policy Act nexus)
  U.S. Fish and Wildlife Service Region 2
  Federal Aviation AdministrationState: Arizona Game and Fish Department
- State: Arizona Game and Fish Department
  Arizona State Land Department
  Arizona Corporation Commission
- Local: Navajo County

Voluntary Tribal Outreach
Letters sent to 8 potentially interested tribes in July 2025.

Environmental Studies
Airspace: Third-party studies completed in 2020-24; FAA issued Determination of No Hazard in June 2025
Wildlife Survey Plan: Completed July 2021, consulting with AZGFD and USFWS Region 2
Wildlife Site Characterization Report: Completed December 2021
Avian Wildlife Surveys: Commenced in March 2021, including avian/eagle use counts, raptor/eagle nest surveys, and bat acoustic monitoring
Wetlands/Jurisdictional Water Surveys: Fieldwork to begin in Fall 2026
Sound Study: Baseline surveys completed August 2025
Visual Simulations: Completed August 2025

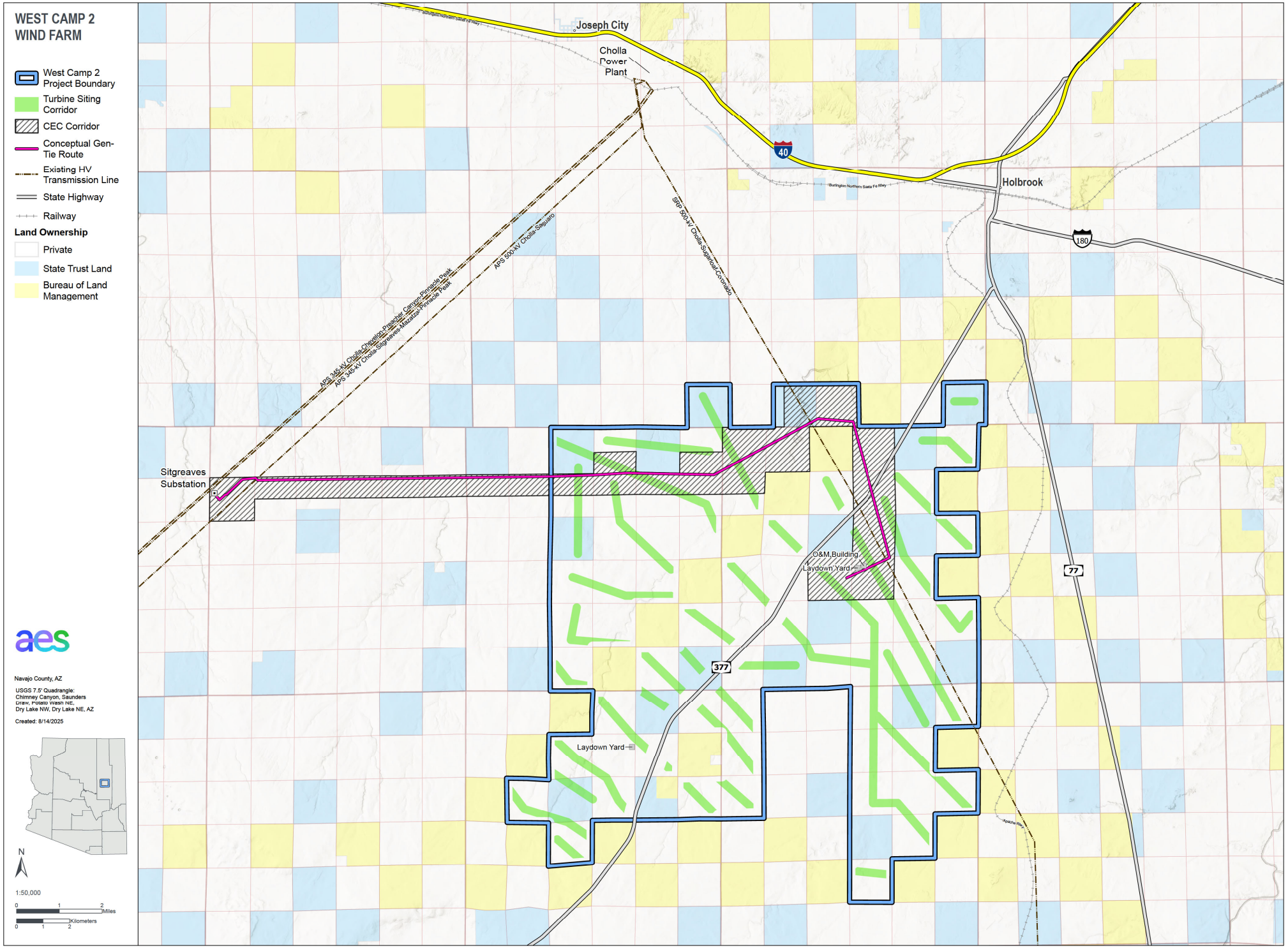
Cultural Studies
Cultural Resource Surveys: Desktop research and initial field surveys in progress

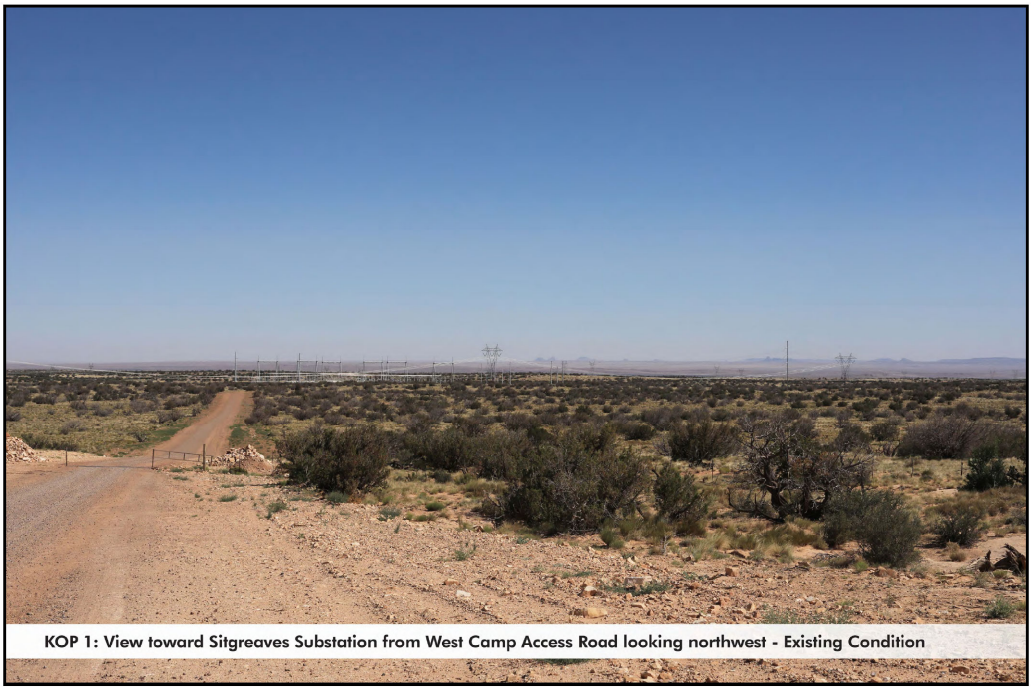
West Camp 2 Wind Farm

Public open house

Please sign in

Wednesday August 27, 2025
12:00 - 2:00 p.m / 5:00 - 7:00 pm


WEST CAMP 2
WIND FARM
West Camp 2 Project Boundary
Turbine Siting Corridor
CEC Corridor
Conceptual Gen-Tie Route
Existing HV Transmission Line
State Highway
Railway
Land Ownership
Private
State Trust Land
Bureau of Land Management
Joseph City
Cholla Power Plant
Holbrook
Sitgreaves Substation
O&M Building
Laydown Yard
Laydown Yard
APS 345-kV Cholla-Chevelon Canyon-Pinnacle Peak
APS 345-kV Cholla-Sitgreaves-Mazatzal-Pinnacle Peak
APS 500-kV Cholla-Saguaro
SRP 500-kV Cholla-Sugarloaf-Coronado
40
180
77
377
Navajo County, AZ
USGS 7.5' Quadrangle:
Chimney Canyon, Saunders
Draw, Potato Wash NE,
Dry Lake NW, Dry Lake NE, AZ
Created: 8/14/2025
N
1:50,000
0 1 2 Miles
0 1 2 Kilometers



KOP 1: View toward Sitgreaves Substation from West Camp Access Road looking northwest - Existing Condition

KOP 1: View toward Sitgreaves Substation from West Camp Access Road looking northwest - Simulated Condition

Sun and Weather

Sunny

Date: **6-26-25**

Photo Time: **9:05 am**

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): **83.23**

Sun Angle (degrees): **33.25**

Lighting Angle on Project: **Side**

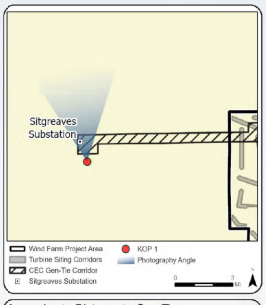
Wind: **5 mph**

Cloud Cover: **0 %**

Temperature (°F): **80° F**

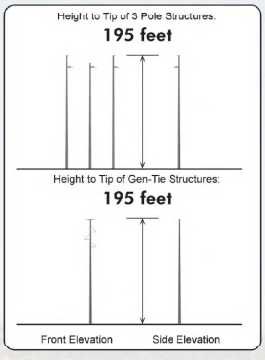
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm



Approximate Distance to Gen-Tie: **0.9 mile**

KOP Location and Visible Elements



Structure Diagram

KOP 1 - West Camp Access Road

Base Photographic Documentation

Latitude, Longitude (degrees):
34.78296, -110.475451

Viewpoint Elevation (feet):
5,685

Camera Height (meters):
1.5

Camera Heading (degrees):
350

Camera Make & Model:
Canon EOS 5D Mark IV

Camera Sensor Size (mm):
36 x 24 Full Frame

Lens Make & Model:
AF-P Nikkor

Lens Focal Length (mm):
50

Image Size (pixels):
6720 x 4480

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 2: View from Private Ranch Road looking northeast - Existing Condition

KOP 2: View from Private Ranch Road looking northeast - Simulated Condition

Sun and Weather

Sunny

Date: 6-26-25

Photo Time: 10:25 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 127.18

Sun Angle (degrees): 25.89

Lighting Angle on Project: Side

Wind: 5 mph

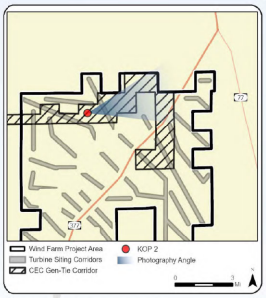
Cloud Cover: 0 %

Temperature (°F): 85° F

Turbines facing 205 degrees southwest

Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

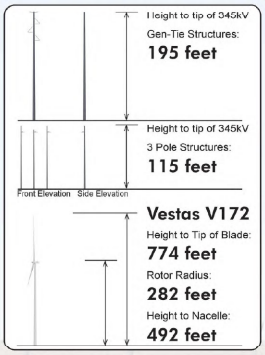
AES West Camp 2 Wind Farm



Approximate Distance to Gen-Tie: 0.5 mile

Approximate Distance to Nearest Turbine: 1 mile

KOP Location and Visible Elements



Structure Diagram

KOP 2 - Private Ranch Road

Base Photographic Documentation

Latitude, Longitude (degrees): **34.805772, -110.281815**

Viewpoint Elevation (feet): **5,485**

Camera Height (meters): **1.5**

Camera Heading (degrees): **75**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 3: View from Arizona State Route 377 Southbound looking southwest - Existing Condition

KOP 3: View from Arizona State Route 377 Southbound looking southwest - Simulated Condition

Sun and Weather

Sunny

Date: 6-27-25

Photo Time: 9:45 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 88.69

Sun Angle (degrees): 41.57

Lighting Angle on Project: Side

Wind: 5 mph

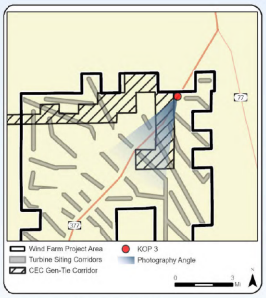
Cloud Cover: 0 %

Temperature (°F): 80° F

Turbines facing 205 degrees southwest

Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

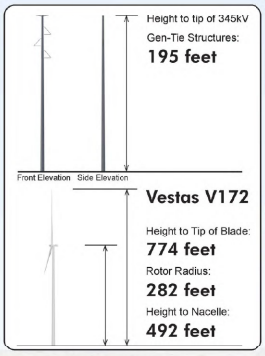
AES West Camp 2 Wind Farm



Approximate Distance to Gen-Tie: 1.2 miles

Approximate Distance to Nearest Turbine: 1.7 miles

KOP Location and Visible Elements



Structure Diagram

KOP 3 - Arizona State Route 377 Southbound

Base Photographic Documentation

Latitude, Longitude (degrees): **34.817834, -110.197749**

Viewpoint Elevation (feet): **5,430**

Camera Height (meters): **1.5**

Camera Heading (degrees): **210**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 4: View from Arizona State Route 377 Northbound looking northeast - Existing Condition

KOP 4: View from Arizona State Route 377 Northbound looking northeast - Simulated Condition

Sun and Weather

Sunny

Date: 6-27-25
Photo Time: 11:05 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 135.7

Sun Angle (degrees): 31.89

Lighting Angle on Project: Side

Wind: 10 mph

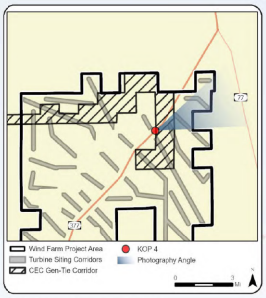
Cloud Cover: 0 %

Temperature (°F): 90° F

Turbines facing 205 degrees southwest

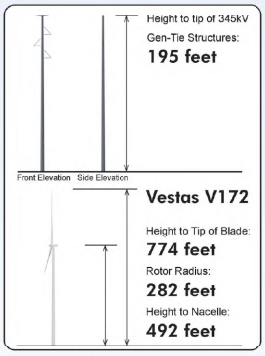
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm



Approximate Distance to Gen-Tie: 0.6 mile
Approximate Distance to Nearest Turbine: 0.7 mile

KOP Location and Visible Elements



Height to tip of 345kV Gen-Tie Structures: 195 feet

Vestas V172

Height to Tip of Blade: 774 feet
Rotor Radius: 282 feet
Height to Nacelle: 492 feet

Structure Diagram

KOP 4 - Arizona State Route 377 Northbound

Base Photographic Documentation

Latitude, Longitude (degrees): **34.791766, -110.219203**
Viewpoint Elevation (feet): **5,435**
Camera Height (meters): **1.5**
Camera Heading (degrees): **65**
Camera Make & Model: **Canon EOS 5D Mark IV**
Camera Sensor Size (mm): **36 x 24 Full Frame**
Lens Make & Model: **AF-P Nikkor**
Lens Focal Length (mm): **50**
Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 1: View from Interstate 40 Frontage Road looking southwest - Existing Condition

KOP 1: View from Interstate 40 Frontage Road looking southwest - Simulated Condition

Sun and Weather

Sunny

Date: 6-27-25

Photo Time: 7:45 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 73.4

Sun Angle (degrees): 17.38

Lighting Angle on Project: Side

Wind: 5 mph

Cloud Cover: 0 %

Temperature (°F): 75° F

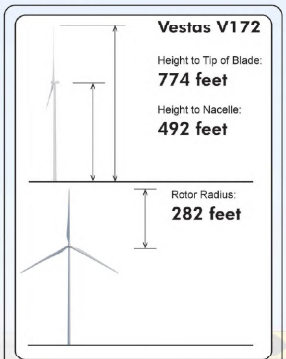
Turbines facing 205 degrees southwest

Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm

Approximate Distance to Nearest Turbine: 6.4 miles

KOP Location and Visible Elements



Vestas V172

Height to Tip of Blade: 774 feet

Height to Nacelle: 492 feet

Rotor Radius: 282 feet

Structure Diagram

KOP 1 - Interstate 40 Frontage Road

Base Photographic Documentation

Latitude, Longitude (degrees): 34.922322, -110.261024

Viewpoint Elevation (feet): 5,110

Camera Height (meters): 1.5

Camera Heading (degrees): 205

Camera Make & Model: Canon EOS 5D Mark IV

Camera Sensor Size (mm): 36 x 24 Full Frame

Lens Make & Model: AF-P Nikkor

Lens Focal Length (mm): 50

Image Size (pixels): 6720 x 4480

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 2: View from Spurlock Avenue in Holbrook looking southwest - Existing Condition

KOP 2: View from Spurlock Avenue in Holbrook looking southwest - Simulated Condition

Sun and Weather

Sunny

Date: 6-27-25

Photo Time: 11:50 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 113.63

Sun Angle (degrees): 66.43

Lighting Angle on Project: Side

Wind: 10 mph

Cloud Cover: 0 %

Temperature (°F): 90° F

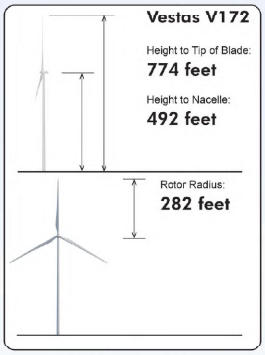
Turbines facing 205 degrees southwest

Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm

Approximate Distance to Nearest Turbine: 5.7 miles

KOP Location and Visible Elements



Structure Diagram

KOP 2 - Spurlock Avenue in Holbrook

Base Photographic Documentation

Latitude, Longitude (degrees):
34.912452, -110.169469

Viewpoint Elevation (feet):
5,205

Camera Height (meters):
1.5

Camera Heading (degrees):
190

Camera Make & Model:
Canon EOS 5D Mark IV

Camera Sensor Size (mm):
36 x 24 Full Frame

Lens Make & Model:
AF-P Nikkor

Lens Focal Length (mm):
50

Image Size (pixels):
6720 x 4480

Viewing instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 3: View from Arizona State Route 377 Southbound looking southwest - Existing Condition

KOP 3: View from Arizona State Route 377 Southbound looking southwest - Simulated Condition

Sun and Weather

Sunny

Date: 6-27-25

Photo Time: 11:25 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 106.69

Sun Angle (degrees): 61.82

Lighting Angle on Project: Side

Wind: 10 mph

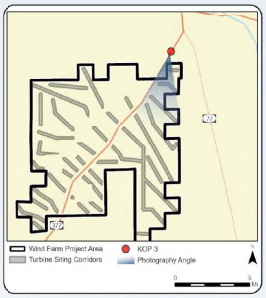
Cloud Cover: 0 %

Temperature (°F): 85° F

Turbines facing 205 degrees southwest

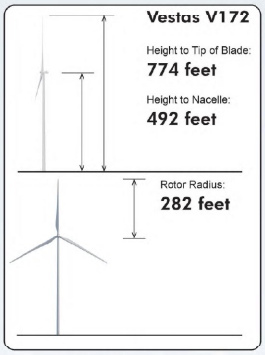
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm



Approximate Distance to Nearest Turbine: 1.3 miles

KOP Location and Visible Elements



Structure Diagram

KOP 3 - Arizona State Route 377 Southbound

Base Photographic Documentation

Latitude, Longitude (degrees): **34.847903, -110.175952**

Viewpoint Elevation (feet): **5,330**

Camera Height (meters): **1.5**

Camera Heading (degrees): **190**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

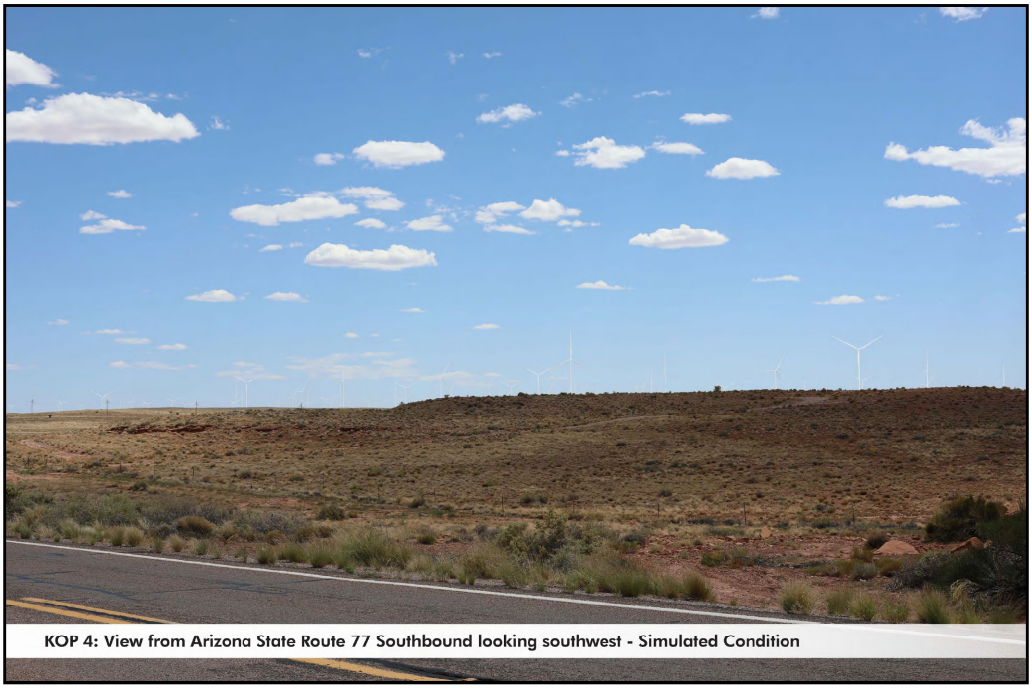
Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 4: View from Arizona State Route 77 Southbound looking southwest - Existing Condition



KOP 4: View from Arizona State Route 77 Southbound looking southwest - Simulated Condition

Sun and Weather

Sunny

Date: 6-26-25

Photo Time: 2:15 pm

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 73.4

Sun Angle (degrees): 17.38

Lighting Angle on Project: Side

Wind: 5 mph

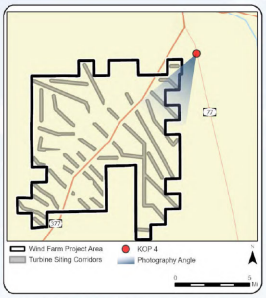
Cloud Cover: 0 %

Temperature (°F): 90° F

Turbines facing 205 degrees southwest

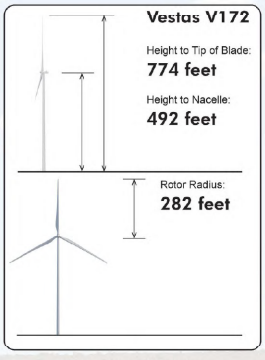
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm



Approximate Distance to Nearest Turbine: 2.5 miles

KOP Location and Visible Elements



Structure Diagram

KOP 4 - Arizona State Route 77 Southbound

Base Photographic Documentation

Latitude, Longitude (degrees):
34.841485, -110.146256

Viewpoint Elevation (feet):
5,345

Camera Height (meters):
1.5

Camera Heading (degrees):
210

Camera Make & Model:
Canon EOS 5D Mark IV

Camera Sensor Size (mm):
36 x 24 Full Frame

Lens Make & Model:
AF-P Nikkor

Lens Focal Length (mm):
50

Image Size (pixels):
6720 x 4480

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 5: View from Woodruff Road looking west - Existing Condition

KOP 5: View from Woodruff Road looking west - Simulated Condition

Sun and Weather

Sunny

Date: 6-26-25

Photo Time: 2:00 pm

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 217.06

Sun Angle (degrees): 75.75

Lighting Angle on Project: Side

Wind: 5 mph

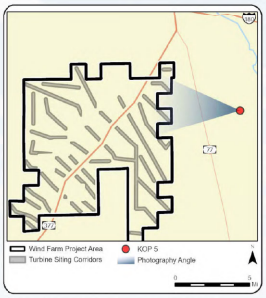
Cloud Cover: 0 %

Temperature (°F): 90° F

Turbines facing 205 degrees southwest

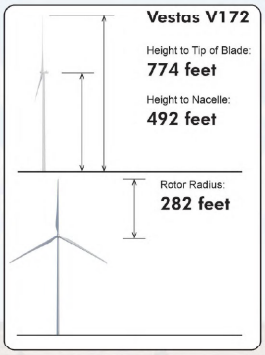
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm

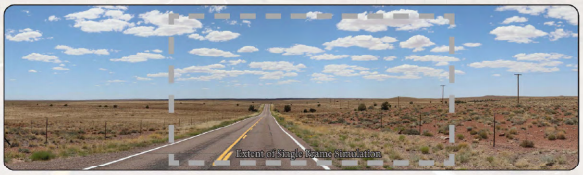


Approximate Distance to Nearest Turbine: 4.5 miles

KOP Location and Visible Elements



Structure Diagram



KOP 5 - Woodruff Road

Base Photographic Documentation

Latitude, Longitude (degrees): **34.789221, -110.085744**

Viewpoint Elevation (feet): **5,352**

Camera Height (meters): **1.5**

Camera Heading (degrees): **275**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

SWCA® ENVIRONMENTAL CONSULTANTS

KOP 6: View from Arizona State Route 377 Northbound looking northeast - Existing Condition

KOP 6: View from Arizona State Route 377 Northbound looking northeast - Simulated Condition

Sun and Weather

Sunny

Date: 6-26-25

Photo Time: 10:50 am

Visibility: Good – Poor

Air Quality: Good

Sun Azimuth (degrees): 98.85

Sun Angle (degrees): 54.68

Lighting Angle on Project: Side

Wind: 10 mph

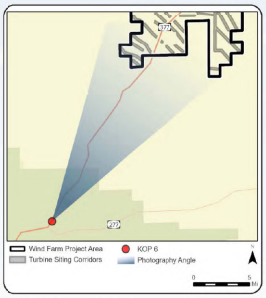
Cloud Cover: 0 %

Temperature (°F): 90° F

Turbines facing 205 degrees southwest

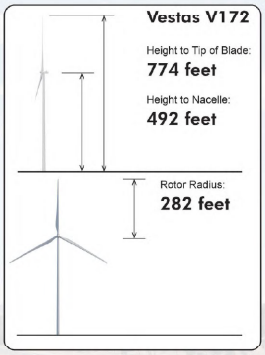
Simulation was prepared using information provided by AES. Locations, colors, and heights may vary based on final engineering and design.

AES West Camp 2 Wind Farm



Approximate Distance to Nearest Turbine: 16.1 miles

KOP Location and Visible Elements



Structure Diagram

KOP 6 - Arizona State Route 377 Northbound

Base Photographic Documentation

Latitude, Longitude (degrees): **34.471052, -110.470796**

Viewpoint Elevation (feet): **6,425**

Camera Height (meters): **1.5**

Camera Heading (degrees): **30**

Camera Make & Model: **Canon EOS 5D Mark IV**

Camera Sensor Size (mm): **36 x 24 Full Frame**

Lens Make & Model: **AF-P Nikkor**

Lens Focal Length (mm): **50**

Image Size (pixels): **6720 x 4480**

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

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