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Application for Certificate of Environmental Compatibility

L-21254A-23-0184-00222

Obed Meadow Generation Tie-Line Project



JUN 23 2023

DOCKETED BY

JM

Prepared for



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June 2023

AVANGRID RENEWABLES
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Introduction

Pursuant to Arizona Revised Statutes (A.R.S.) §40-360, *et seq.*, Aurora Solar LLC (Aurora Solar) (Applicant), a wholly owned subsidiary of Avangrid Renewables LLC (Avangrid), seeks approval from the Arizona Power Plant and Transmission Line Siting Committee and the Arizona Corporation Commission of two separate Certificates of Environmental Capability (CECs) for a proposed 230-kilovolt (kV) alternating current generation transmission tie-in line (Gen-Tie Line) and associated substation facilities (collectively, "Project") located in unincorporated Navajo County, Arizona. The proposed Project will interconnect directly into the Arizona Public Service Company (APS) owned 230-kV Cholla Substation located at the Cholla Power Plant. Two CECs are required to address ownership of separate portions of the Gen-Tie Line. The Applicant will own the portion of the Gen-Tie Line from the generation source to the fence/property line of the Cholla Substation ("CEC-1"). APS will own the portion of the Gen-Tie Line inside the fence/property line of the Cholla Substation ("CEC-2").

The Project will deliver electricity from the Applicant's planned Obed Meadow Solar Project (Solar Facility), an up to 200-megawatt (MW) nameplate capacity solar photovoltaic power plant that may be paired with an optional 200-MW battery energy storage system. Although the Solar Facility is mentioned in this CEC application, the Applicant seeks a CEC only for the gen-tie and associated substation facilities.

Aurora Solar LLC is a wholly owned subsidiary of Avangrid. Avangrid is one of the leading providers of clean, renewable power in the U.S., operating across 24 states, and have built 8.7 gigawatts of renewable energy capacity.

Project Overview

The Project consists of a collection substation (the Collector Substation), which will convert electricity generated by the Solar Facility from 34.5 kV to 230 kV, and the Gen-Tie Line, which will deliver the electricity to the regional transmission grid via the Cholla Substation. CEC-1 for the Project will originate at the Collector Substation and will terminate at the point of ownership change immediately outside of the APS-owned Cholla Substation fence or APS property line, a distance of approximately 2.54 miles. CEC-2 for the Project will originate at the Cholla Substation fence/property line and will terminate at the Point of Interconnection (POI) at the APS-owned Cholla Substation, a distance of approximately 0.25 miles. The Project will be located in unincorporated Navajo County, Arizona. Please refer to Figures 1 and 2 for more detail on the proposed Project location.

Gen-Tie Line

The Gen-Tie Line will be approximately 2.8 miles in length and will require a 150-foot right-of-way. In total, the Gen-Tie Line right-of-way will encompass approximately 43.5 acres of private land sited within the requested 1,000-foot-wide corridor (CEC-1) and CEC-2 will be sited within the approximately 147-acre requested corridor on APS property. The Gen-Tie Line will be either steel monopole or steel H-frame structures, with three-phases of 230 kV with a single conductor per phase. The estimated structure count for the Project is 25 structures, which is subject to

change pending detailed design. The structures are expected to range in aboveground height from 80 to 100 feet and will be spaced 600 to 815 feet apart. The final design of the Gen-Tie Line will be subject to environmental constraints, topography, and siting variances.

The Gen-Tie Line route will originate at the Collector Substation, which will be located within the Solar Facility boundary's southeastern corner in unincorporated Navajo County, Arizona. The Gen-Tie Line route will total approximately 2.8 miles in length and will run east from the Solar Facility boundary for approximately 1.5 miles (approximately 0.3 miles east of Obed Road), then continue in a northeast direction for approximately 1.1 mile towards the Little Colorado River to a point of ownership change just outside the Cholla Substation fence/property line (CEC-1, totaling approximately 2.54 miles), and continue approximately 0.25 miles until it terminates at the Cholla Substation (CEC-2). No alternative Gen-Tie Line route is proposed as the easement for CEC-1 has been acquired for the Gen-Tie Line route.

Project Substation

The Collector Substation will occupy an area of approximately five acres and will be located within the Solar Facility boundary at the southeast corner of the facility. The Collector Substation will consist of two main power transformers with two 230kV circuit breakers, twelve 34.5kV feeder breakers, switches, a control house, and a substation structure within an approximately 7-foot-tall fenced enclosure.

Proposed Corridor

The Applicant has included proposed corridors being requested for the Gen-Tie Line as part of this CEC application. For the portion of the Gen-Tie Line identified as CEC-1, the Applicant is requesting a corridor 1,000 feet wide, encompassing approximately 327 acres. The CEC-1 corridor encompasses existing APS transmission line ROWs on private property and provides area on either side of the APS ROWs to safely site and construct the Gen-Tie Line. For the portion of the Project identified as CEC-2, the Applicant is seeking an expanded corridor, approximately 147 acres in size, within the APS-owned property to provide the flexibility to safely accommodate requests from APS as part of interconnecting into the Cholla Substation. This may be through the construction of new Gen-Tie Line pole structures, or modification to existing APS transmission line pole structures.

Project Purpose and Need

The purpose of this CEC application is to secure approval of the Project that would connect the Solar Facility to the transmission grid at the existing Cholla Substation. The Project is needed so that the Solar Facility can deliver clean-renewable power to the transmission grid for use by electric customers. The Project is compatible with the existing rangeland and industrial uses of the surrounding area and will provide increased property tax revenue to the local community. It will also provide Arizona with a renewable energy resource to help meet its clean energy goals.

Environmental Studies and Public Outreach Overview

The Gen-Tie Line route was selected to minimize environmental impacts and co-exist with existing land uses in the area. The Gen-Tie Line route will cross the Little Colorado River and the Burlington Northern Santa Fe (BNSF) Railway, which are both located adjacent to the

Cholla Substation on APS property. The existing transmission line infrastructure in the area also crosses both the Little Colorado River and the BNSF Railway. The Applicant will survey the Little Colorado River and associated floodplain in compliance with applicable law and determine the configuration and pole structure locations for the Gen-Tie Line that would have minimal impact on the river and the Railway. The Applicant will consult with the BNSF Railway company to ensure coordination throughout the continued development and construction process.

The Applicant applied for a Navajo County Special Use Permit (SUP) on May 4, 2022, to construct the Solar Facility. The application was considered by the Navajo County Planning and Zoning Commission at a duly noticed public hearing on July 21, 2022. The SUP was approved and adopted by the Navajo County Board of Supervisors at a public hearing held on September 13, 2022. In addition to the public hearings related to the SUP, the Applicant provided notice of the Project to the Arizona Game and Fish Department (AZGFD) as requested by Navajo County.

As part of the County permitting process, and in anticipation of the filing of the CEC Application, the Applicant has developed and maintained a Project website, Project email account, and Project hotline. In addition, the Applicant has provided social media advertisements, newspaper public notices and informational mailings to various persons and entities. The Applicant held a virtual community meeting on April 12, 2022, and a public open house on April 24, 2023, for the Gen-Tie Project to understand potential concerns of the local community and receive feedback. A Project informational mailing was sent to key stakeholders in the local community, County, and Arizona state government, soliciting feedback and comments. The informational mailing directed key stakeholders to the Project website, email address, and hotline. The public outreach materials and comments received are described in Exhibit J. Other entities have also been consulted during the Project design phase (see Exhibit J for additional information).

Summary of Environmental Compatibility

Based on the criteria in A.R.S. §40-360.06, the Applicant respectfully submits that the Gen-Tie Project will be environmentally compatible. As described herein, the Applicant has diligently surveyed and mitigated environmental impacts associated with the Project and will continue to pursue development of the Project in a responsible manner. The Project is necessary to connect the associated Solar Facility to the regional transmission grid and will provide Arizona with a renewable resource to help meet its clean energy goals.

Conclusion

This application provides the information relevant to the Project as specified by Arizona Administrative Code Rule R14-3-219. The Applicant will develop the Project in a responsible manner and will minimize the environmental impacts associated with the Project. Aurora Solar LLC, therefore, respectfully requests that the Arizona Power Plant and Transmission Line Siting Committee grant, and the Arizona Corporation Commission approve, CEC-1 and CEC-2 for the construction of the Project.

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ACRONYMS AND ABBREVIATIONS

°F	Fahrenheit
A.R.S.	Arizona Revised Statutes
AASHTO	American Association of State Highway and Transportation Officials
ACC	Arizona Corporation Commission
ACEC	Areas of Critical Environmental Concern
ADOA	Arizona Department of Agriculture
AM	amplitude modulation
APLIC	Avian Power Line Interaction Committee
Applicant	Aurora Solar LLC, a wholly owned subsidiary of Avangrid Renewables LLC
APS	Arizona Public Service
ARHP	Arizona Register of Historic Places
ASM	Arizona State Museum
Aurora Solar	Aurora Solar LLC
Avangrid	Avangrid Renewables LLC
AZGFD	Arizona Game and Fish Department
AZSITE	online GIS database
BGEPA	Bald and Golden Eagle Treaty Act
BLM	Bureau of Land Management
BMP	Best Management Practice
BNSF	Burlington-Northern Santa Fe (Railway)
CEC	Certificate of Environmental Capability
CEC-1	CEC for Project that encompasses the Collector Substation and the Gen-Tie Line that runs from the Collector Substation to the fence/property line of APS-owned Cholla substation
CEC-2	CEC for Project that encompasses the Gen-Tie Line that runs from the fence/property line of APS-owned Cholla Substation to Cholla Substation Point of Interconnection
CFR	Code of Federal Regulations
Collector Substation	Obed Meadow Switching Station
dBA	decibels measured on an A-weighted scale
EMF	electromagnetic fields
ESA	Endangered Species Act
ft	feet
FM	frequency modulation
Gen-Tie Line	generation-tie transmission line
GIS	Geographic Information System
GLO	Arizona General Land Office
Hz	Hertz
IEC	International Electrotechnical Commission

IPaC	Information for Planning and Consulting
KOP	Key Observation Point
kV	kilovolt
MBTA	Migratory Bird Treaty Act
mG	milliGauss
MHz	megaHertz
MW	megawatt
NRHP	National Register of Historic Places
PNC	Peebles Navajo Cactus
POI	Point of Interconnection
Project	A proposed 230- kV alternating current Gen-Tie Line and associated Collector Substation
Research Area	1-mile buffer around the Project
ROW	Right-of-way
SGCN	Species of Greatest Conservation Need
Siting Committee	Arizona Power Plant and Transmission Line Siting Committee
Solar Facility	Obed Meadow Solar Project
Study Area	All areas within a two-mile buffer of the Gen-Tie Line route
SUP	Special Use Permit
U.S.C.	United States Code
UHF	ultra-high frequency
USFWS	US Fish and Wildlife Service
VHF	very high frequency

Application For Certificate of Environmental Compatibility

1. Name and address of the applicant, or in the case of a joint project, the applicants.

Aurora Solar LLC, a wholly owned subsidiary of Avangrid Renewables LLC
2701 NW Vaughn Street, Suite 300
Portland, OR 97210

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

Tyler Hoffbuhr, Senior Business Developer
2701 NW Vaughn Street, Suite 300
Portland, OR 97210
503-956-0315

3. State each date on which applicant has filed a ten-year plan in compliance with A.R.S. §40-360.02 and designate each such filing in which the facilities for which this application is made were described. If they have not been previously described in a ten-year plan, state the reasons therefore.

Aurora Solar LLC filed a Ten-Year Plan describing the Project on January 31, 2023, in Docket E-99999A-21-0009.

4. Description of the proposed facility, including:

a. With respect to an electric generation plant:

The Project does not include an electrical generating plant as defined in A.R.S. §40-360(9).

b. With respect to 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 Project is 230kV alternating current, single circuit.

2. Description of proposed structures:

The Gen-Tie Project will be constructed using either steel monopole or steel H-frame structures and three phases of a single conductor. The structures are expected to range in aboveground height from 80 to 100 feet and will be spaced apart anywhere from 600 to 815 feet. The estimated structure count for this Project is 25 structures, which is subject to change pending detailed design. Conceptual drawings of the anticipated structures are shown in Exhibit G.

3. Description of proposed switchyards and substations:

The approximately five-acre Collector Substation will step up electricity generated by the Solar Facility from 34.5 kV to 230 kV. The Collector Substation will consist of two main power transformers with two 230kV circuit breakers, twelve 34.5kV feeder breakers, switches, a control house, and a substation structure within an approximately 7-foot-tall fenced enclosure. Please see Figure G-2 for a conceptual general arrangement of the proposed Collector Substation.

4. Purpose of constructing said transmission line:

The purpose of the Project is to deliver power from the new 200-MW Solar Facility to the regional transmission grid for customer use. The Project will provide Arizona with a new clean, renewable energy resource.

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 application is made.

1. Description of geographic points between which the transmission line will run:

The Collector Substation is proposed to be in the southeast corner of Navajo County Tax Parcel No. 107-05-031D in the southeast corner of Section 29, Township 18 North, Range 19 East. The Gen-Tie Line route will originate at the Collector Substation, route east for approximately 1.5 miles to a point approximately 0.3-mile east of Obed Road; then continue in a northeast direction for approximately 1.1 mile (towards the Little Colorado River) to a point of ownership change at the APS property line (CEC-1). The route will continue on APS property for approximately 0.25 miles until it terminates at the existing Cholla Substation (CEC-2).

2. Straight-line distance between such points:

The straight-line distance between the Collector Substation and the POI at the Cholla Substation is approximately 2.4 miles.

3. Length of the transmission line for the alternative route:

Not applicable, no alternative is proposed.

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 require a 150-foot Right-of-Way (ROW), within a requested variable width corridor for the entirety of the transmission line alignment. The corridor is being requested to allow for minor adjustments to the location of structures to achieve site-specific mitigation objectives or meet site-specific engineering requirements.

2. Nominal length of spans:

The typical span length between structures will vary depending on terrain, constraints, and other factors, but will generally range from 600 to 815 feet.

3. Maximal height of structures above ground:

The maximum height of the structures is anticipated to be approximately 100 feet.

4. Minimum height of conductor above ground:

The minimum height of conductor above the existing grade will be 27 feet at maximum operating temperature.

iv. To the extent available, the estimated costs of the 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 estimated cost for the Gen-Tie Line is approximately \$4.5 million, depending upon the final design and routing on APS-owned property.

The estimated cost of the Collector Substation is approximately \$12 million.

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).

The proposed Gen-Tie Line route and Collector Substation are generally described in (ii) above and shown in Figures 1 through 4.

The Collector Substation is proposed to be in the southeast corner of Navajo County Tax Parcel No. 107-05-031D in the southeast corner of Section 29, Township 18 North, Range 19 East. The Gen-Tie Line route will originate at the Collector Substation, route east for approximately 1.5 miles to a point approximately 0.3-mile east of Obed Road; then continue in a northeast direction for 1.1 mile (towards the Little Colorado River) to a point of ownership change at the APS property line (CEC-1). The route will continue on APS property for approximately 0.25 miles until it terminates at the existing Cholla Substation (CEC-2). Total length of approximately 2.8 miles.

Description of alternative route and switchyard locations:

Not applicable, no alternative Gen-Tie Line route or Collector Substation is proposed.

- 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.).***

Not applicable, no alternative is proposed.

- 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 Line Project is on land within Navajo County's jurisdiction. The Applicant submitted a Special Use Permit (SUP) Application to Navajo County on April 28, 2022. The application was considered by the Navajo County Planning and Zoning Commission at a duly noticed public hearing on July 21, 2022. The SUP was approved and adopted by the Navajo County Board of Supervisors at a public hearing held on September 13, 2022. Under Navajo County's Zoning Ordinance, Section 402(6) Article 4 and Section 802 Article 8, the Collector Substation and the Gen-Tie Line route are permitted uses within all parcels.

- 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 available secondary data and field data related to biological resources, visual resources, cultural resources, recreational resources, land use, noise levels, and communication signals in order to assess the potential impacts that may result from the construction, operation, and maintenance of the Gen-Tie Line Project. These evaluations are included in Exhibits B, C, D, E, F, H, and I to this application.

Aurora Solar LLC

Tyler Hoffbuhr
Digitally signed by Tyler Hoffbuhr
Date: 2023.06.20 12:21:05 -07'00'

By Tyler Hoffbuhr, Senior Business Developer

I HEREBY CERTIFY that on this twenty-third day of June 2023, I have delivered to the Arizona Corporation Commission twenty-five (25) copies of this Application for a Certificate of Environmental Compatibility.



Figure 1. Project Vicinity

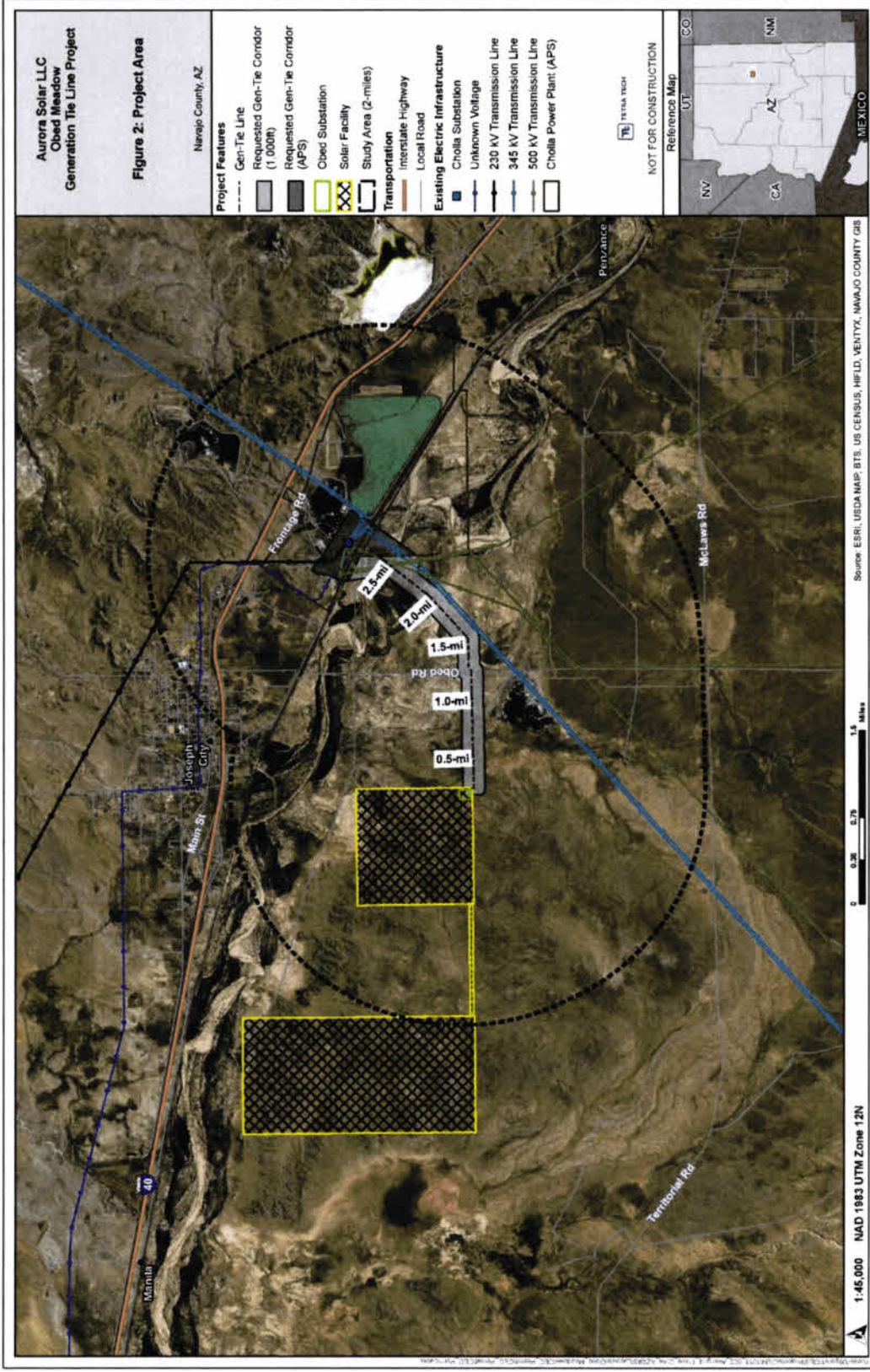


Figure 2. Project Area

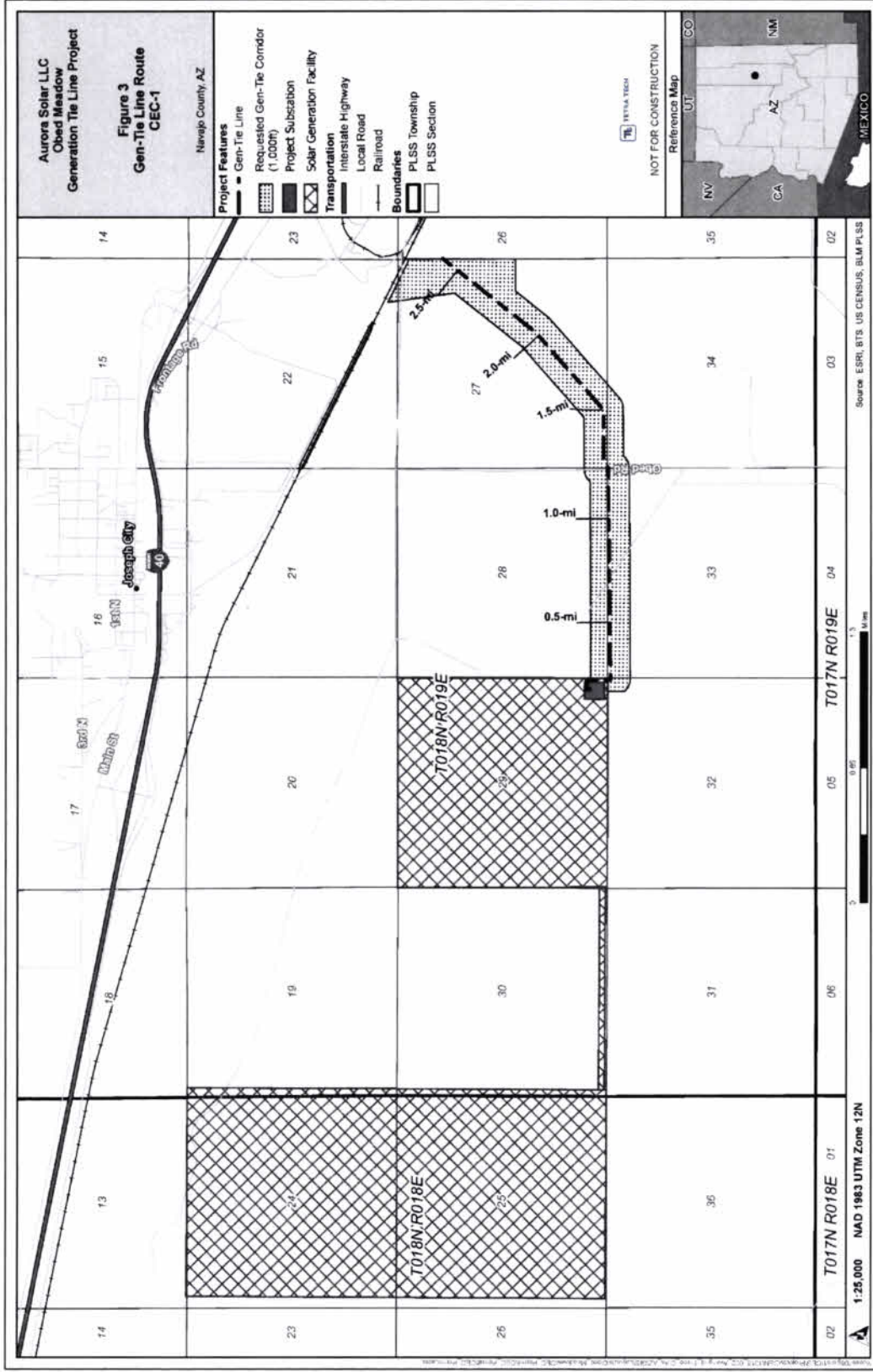


Figure 3. Gen-Tie Line Route (CEC-1)



Figure 3a. Gen-Tie Line Route Aerial (CEC-1)



Figure 4. Substation Interconnection (CEC-2)

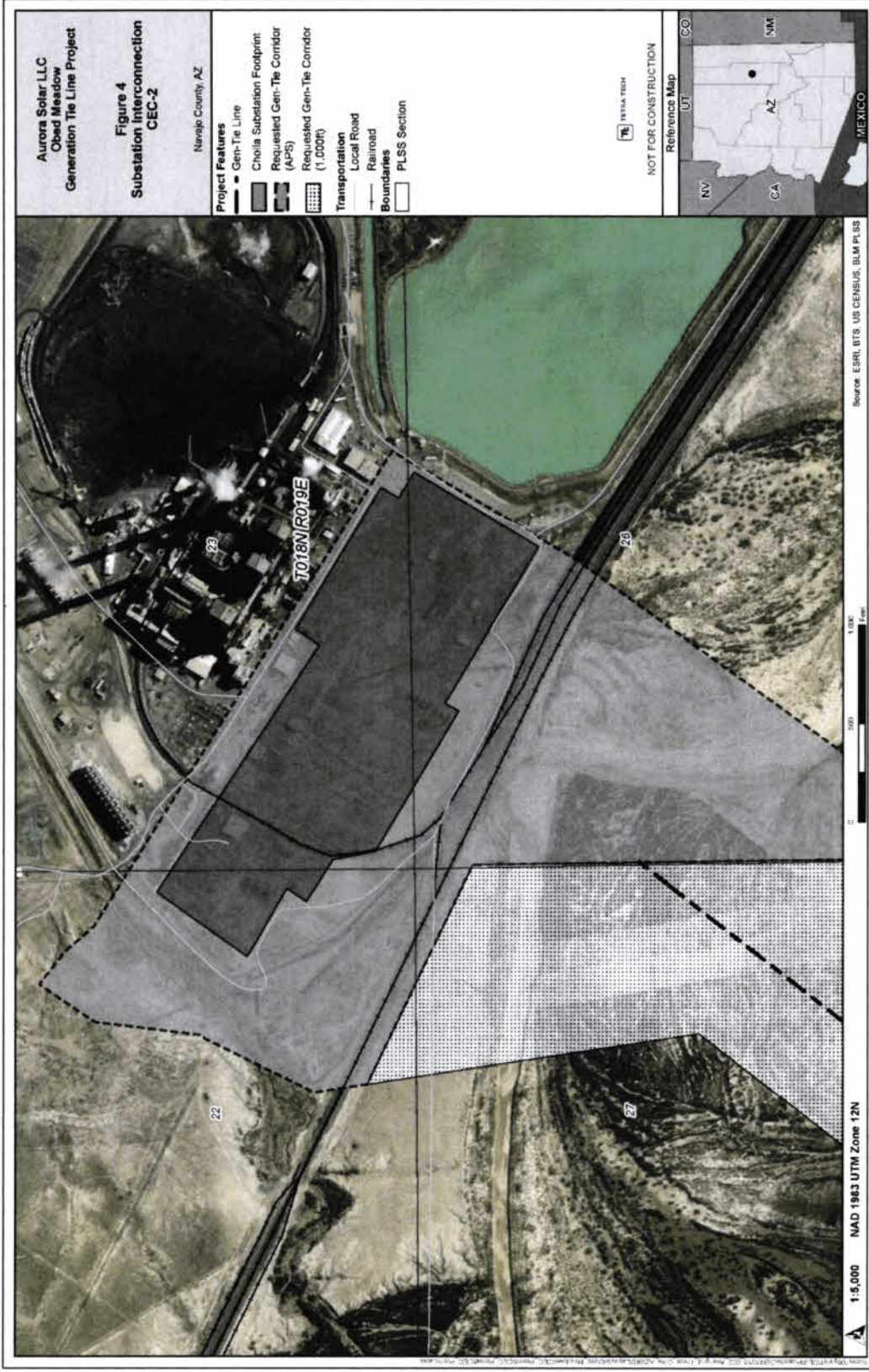


Figure 4a. Substation Interconnection Aerial (CEC-2)

Exhibit A. Location Map and Land Use Information

Arizona Revised Statutes (A.R.S.) §40-360 et seq. established the Arizona Power Plant and Transmission Line Siting Committee (Siting Committee) in 1971. A.R.S. §40-360.06(A)(I) stipulates “existing plans of the state, local government and private entities for other developments at or in the vicinity of the proposed site” are among the factors the Siting Committee must consider in reviewing Certificate of Environmental Compatibility (CEC) applications. The ACC Rules of Practice and Procedure R 14-3-219 that implement A.R.S. §40-360 et seq. stipulate that the applicant provides the following location maps and land use information:

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.

Where commercially available, a topographic map. 1:62,500 scale, of each proposed transmission line route of more than 50 miles in length 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.

This topographic map is provided as Figure A-1 at the 1:62,500 scale.

A.1 Introduction

The Project Study Area is defined as all areas within a two-mile radius of the proposed Gen-Tie Line route alignment (see Figure A-1). The Project corridor is defined as the land within which the Gen-Tie Line route and the Collector Substation will be constructed, consisting of a combination of parcels owned by Aztec Land Company LLC (parcels 107-05-034, 107-05-031D, 107-05-024, and 107-05-031A) and APS (parcels 107-22-003C, 107-21-013A, 107-21-013B, 107-21-011, 107-21-010B, 107-05-042, and 107-05-018A).

The Gen-Tie Line Project will originate at the Collector Substation and will terminate at the point of ownership change immediately outside of the APS-owned Cholla Substation fence/property line, a distance of approximately 2.54 miles (CEC-1). CEC-2 for the Gen-Tie Line will originate at the point of ownership change of the Cholla Substation fence/property line and will terminate at the Point of Interconnection (POI) at the APS-owned Cholla Substation, a distance of approximately 0.25 miles. The approximately 2.8-mile Gen-Tie Line route and the Collector Substation are sited on private and APS-owned land within proximity to the APS 345-kV ROW, which has been previously disturbed. The Gen-Tie Line route will be designed to cross over the Little Colorado River and the Burlington Northern Santa Fe (BNSF) Railway before entering the Cholla Substation.

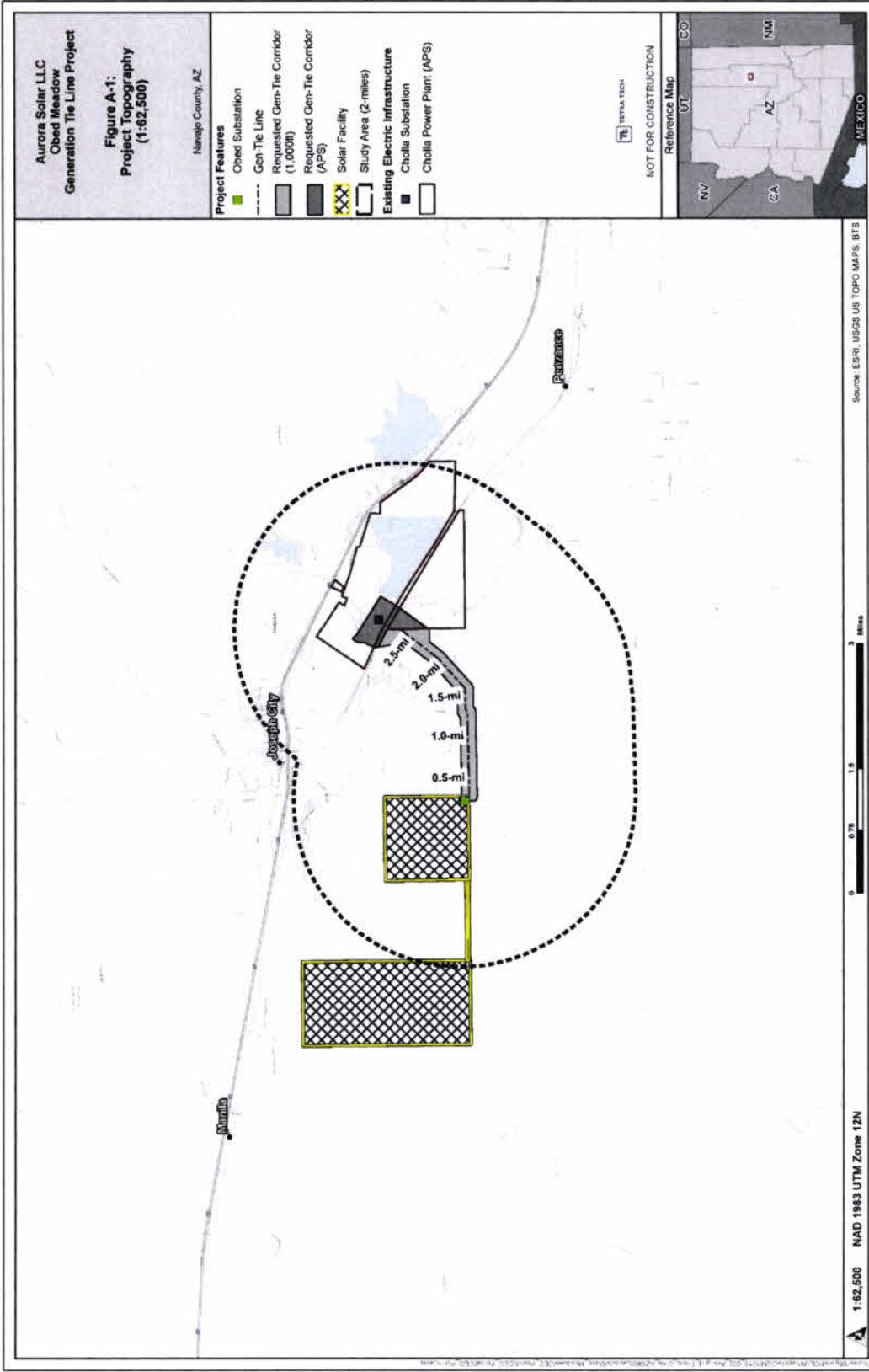


Figure A-1. Project Topographic Map

A.2 Land Use Overview

The following required figures are included to support the land use studies conducted for this application:

- Figure A-2 illustrates land ownership and surface jurisdiction within the Study Area.
- Figure A-3 illustrates existing land uses within the Study Area.
- Figure A-4 illustrates future land uses within the Study Area.

Figures A-3 and A-4 illustrate the data collected for the land use study. The following describes the inventory methods and impact assessment results of the land use study for the Study Area.

A.2.1 Inventory

A land use inventory, including existing and future land uses, was completed to identify and map land uses in the Study Area. Methods used for the land use inventory included review and interpretation of maps, aerial imagery, comprehensive plans, general plans, and other documents. In addition, this inventory included reviewing current and recent projects from Navajo County (2022).

A.2.2 Jurisdiction and Land Ownership

The Project is located on privately owned property under the jurisdiction of Navajo County. In addition, portions of the Study Area include Arizona State Land Department–administered lands and Bureau of Land Management–administered lands (Figure A-2).

A.2.3 Existing Land Use

Existing land uses within the Study Area are mapped on Figure A-3 and include agricultural, commercial, public institutions, utilities, cemeteries, residences, and vacant land. Overall, the vicinity of the Project is land used for ranching with existing utility and ranching infrastructure and most of the industrial, residential, and commercial uses in the north and northeast portion of the Study Area are associated with Joseph City, Arizona. Industrial and utility development is clustered around the Cholla Power Plant. The existing land uses identified in Figure A-3 are described below.

A.2.3.1 Agricultural

The agricultural land uses in the Study Area are located in the northern portion of the Study Area in the southwestern portion of Joseph City, Arizona, immediately south of Interstate 40 (I-40). An aerial review of these uses suggest they are active agricultural areas used for growing crops. Agricultural land use makes up a small portion of the Study Area and the Project does not include any agricultural land use.

A.2.3.2 Commercial

The commercial land uses in the Study Area are located in the northern portion of the Study Area towards the central and eastern portion of Joseph City, Arizona, immediately north of I-40. The commercial uses in the Study Area include the Love's Travel Stop and various smaller commercial facilities located along Main Street in Joseph City, Arizona.

A.2.3.3 Public Institution

The public institution land use in the Study Area is located in the northern portion of the Study Area towards the eastern portion of Joseph City, Arizona, north of I-40. The public institution land use is the Joseph City Junior/Senior High School and associated facilities.

A.2.3.4 Utilities

The utility land uses in the Study Area are located in the eastern portion of the Study Area towards the southeastern portion of Joseph City, Arizona, south of I-40. The utility land uses include the Cholla Power Plant and vacant utility land.

A.2.3.5 Cemetery

The cemetery land use in the Study Area is located in the northern portion of the Study Area towards the eastern portion of Joseph City, Arizona, north of I-40. The cemetery is called the Joseph City Community Cemetery.

A.2.3.6 Residences

The residence land uses in the Study Area are located primarily in the northern and northeastern portion of the Study Area, with some use in the southeastern portion of the Study Area. The residences are mainly associated with Joseph City, Arizona, and are both north and south of I-40.

A.2.3.7 Vacant

The majority of the land use in the Study Area is vacant land and occurs throughout the Study Area. These lands were determined to be vacant by reviewing the Navajo County Assessor Department records for these parcels and conducting an aerial verification via Google Earth to ensure these lands are not part of some other land use.

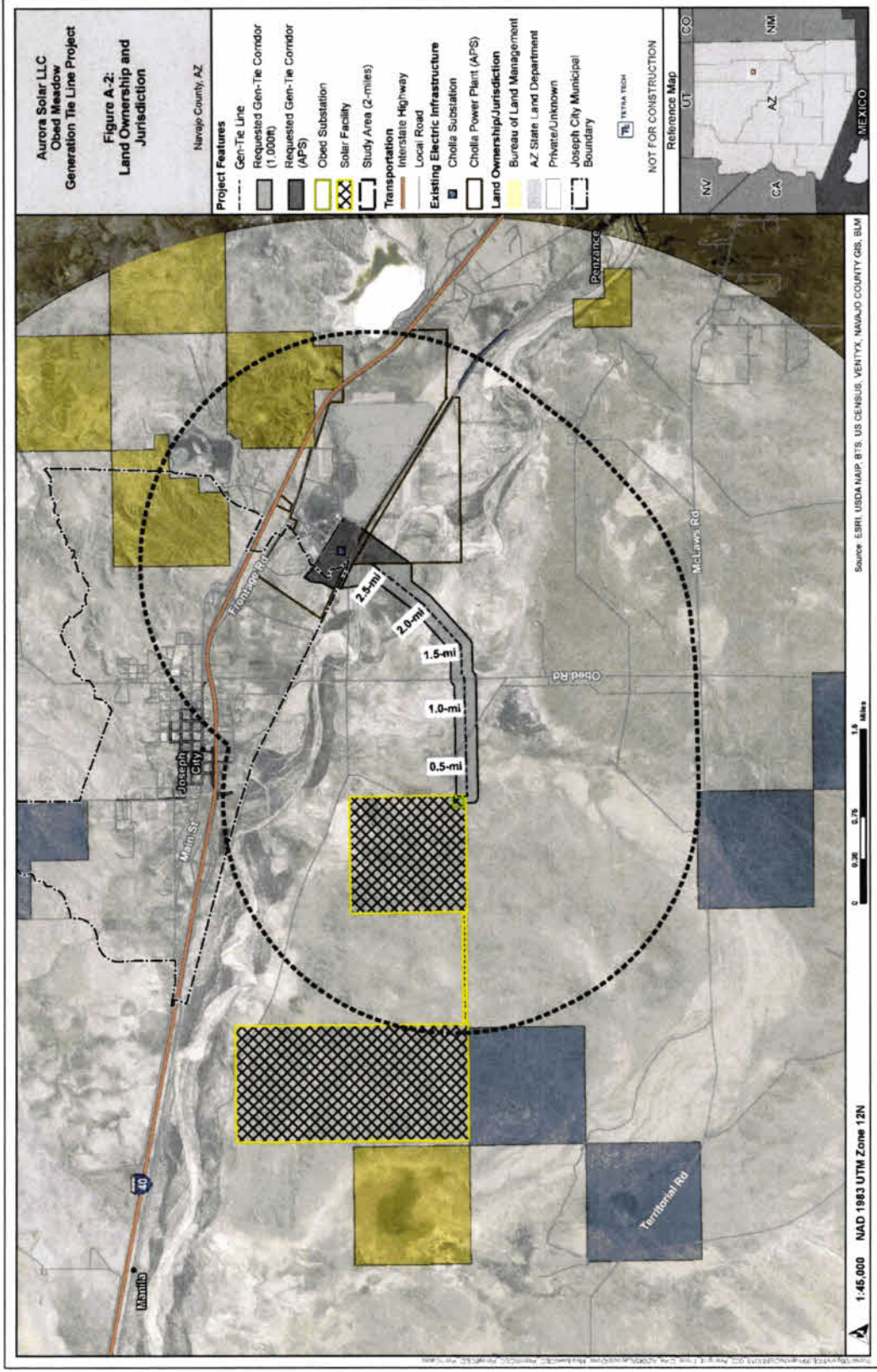


Figure A-2 Land Ownership and Jurisdiction

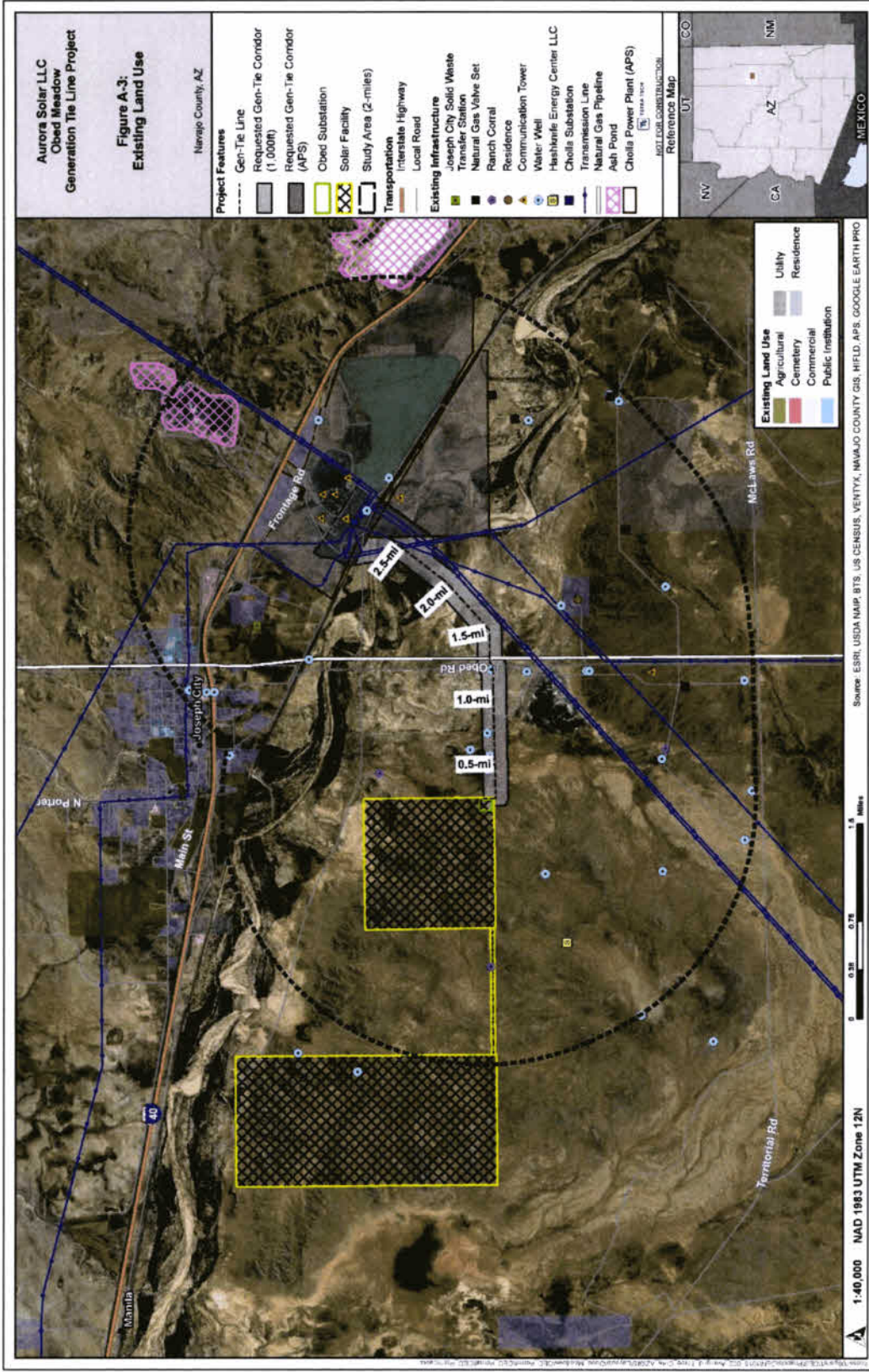


Figure A-3. Existing Land Use



Figure A-4. Future Land Use

A.2.4 Future Land Use

Future land uses are illustrated in Figure A-4. The data were derived from the following plans:

- Navajo County Approved Comprehensive Plan (2011a)
- Navajo County Character Areas Map (2003)
- Navajo County Aztec Area Plan (2011b)

The Approved Comprehensive Plan and Aztec Area Plan present a series of policies and recommendations for Navajo County. The policies and recommendations listed within each plan establish a basic direction and approach to guide future growth and development in Navajo County.

The Project is located in unincorporated Navajo County within an area designated as Range Land by the Navajo County Character Areas Map (2003) and the Navajo County Approved Comprehensive Plan (2011a). The Project parcels and the parcels immediately adjacent to it are currently zoned Rural Zoning District Twenty (RU-20) and Rural District One (RU-1). Under Navajo County's Zoning Ordinance, Section 402(6) Article 4 and Section 802 Article 8, the Collector Substation and Gen-Tie Line route are permitted uses within all of the parcels and the Solar Facility is a permitted special use.

The Applicant submitted a Special Use Permit (SUP) Application to Navajo County on April 28, 2022, for the Solar Facility. The application was considered by the Navajo County Planning and Zoning Commission at a duly noticed public hearing on July 21, 2022. The SUP was passed and adopted by the Navajo County Board of Supervisors at a public hearing held on September 13, 2022.

Designated future land uses within the Study Area include:

- Range Land
- Community Village
- Rural Ranch

A.2.5 Impact Assessment and Results

Land use impacts may be defined primarily as restrictions on a land use that would result from the construction or operation of the Project, or incompatibility with existing land use plans. Typically, restrictions on a land use would result from ROW or easement acquisition across a property.

In order to minimize land use impacts, the Project was located in an area with existing adjacent industrial/utility compatible land uses. The Gen-Tie Line route was sited to minimize the required distance by placing the Collector Substation within proximity to APS's Cholla Power Plant. The Collector Substation will replace approximately five acres of disturbed private range land, and the Gen-Tie Line route will replace approximately 43.5 acres of disturbed private range land and utilizes approximately 5.9 acres of disturbed industrial/utility land uses. The Project is located on land owned by Aztec Land Company LLC, who supports the Project.

The Project is located on parcels leased by the Applicant or within the existing APS Cholla Power Plant with existing range land and industrial/utility land uses. Impacts to these existing land uses resulting from the Project are expected to be negligible. The Navajo County Comprehensive Use Plan designates the land use crossed by the Project as Range Land. The Project is consistent with the goal under Section 2.2 of the Comprehensive Use Plan to enable access to incident solar energy for all character areas and will coexist with minimal intrusion on adjacent property. Additionally, as stated in the Navajo County Comprehensive Use Plan, "A 'development' may occur in any zoning district within the character area, provided it complies with the subdivision regulations." The Applicant is ensuring that the Project is complying with the zoning district because, under Navajo County's Zoning Ordinance, Section 402(6) Article 4 and Section 802 Article 8, the Collector Substation and Gen-Tie Line route are permitted uses within all parcels and the Solar Facility is a permitted special use.

A.3 References

Navajo County. 2003. Character Areas Map. Available online at:

<https://www.navajocountyaz.gov/Portals/0/Departments/Planning%20and%20Zoning/Documents/CharacterAreasMap.pdf>. Accessed March 2022 and May 2023.

Navajo County. 2011a. Approved Comprehensive Plan. Available online at:

https://www.navajocountyaz.gov/Portals/0/Departments/Planning%20and%20Zoning/Documents/Comprehensive%20Plan-NavajoCounty-AdoptedMay_24_2011.pdf. Accessed March 2022 and May 2023.

Navajo County. 2011b. Aztec Area Plan. Available online at:

<https://www.navajocountyaz.gov/Portals/0/Departments/Planning%20and%20Zoning/Documents/Aztec%20Area%20Plan%20-%20as%20Adopted%20by%20the%20BOS%20on%20May%2024,%202011.pdf>. Accessed March 2022 and May 2023.

Navajo County. 2022. Project Information. Available online at:

<https://www.navajocountyaz.gov/Departments/Planning-and-Zoning/Project-Information>. Accessed March 2022 and May 2023.

Exhibit B. Environmental Studies

A.R.S. §40-360 et seq. established the Siting Committee in 1971. A.R.S. §40-360.06(A)(6) stipulates “the total environment of the area” are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in ACC 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 part of this exhibit.

Supplemental environmental studies are included as reports in the following appendices:

- Appendix B-1: *Biological Resources Assessment: Obed Meadow Generation Tie-Line Project, Navajo County, Arizona*
- Appendix B-2: *Cultural Resources Inventory for the Obed Meadow Generation Tie-Line Project, Navajo County, Arizona*
- Appendix B-3: *Wetlands and Other Waters of the United States Findings: Obed Meadow Generation Tie-Line Project, Navajo County, Arizona*

As part of the Special Use Permitting Process for Navajo County, the Applicant consulted with the AZGFD (described in Exhibit J). The U.S. Fish and Wildlife Service was notified of the Project and the Arizona State Historic Preservation Office (described in Exhibit J) was consulted as part of the CEC application process.

APPENDIX B-1
**Biological Resources Assessment: Obed Meadow
Generation Tie-Line Project, Navajo County, Arizona**

Biological Resources Assessment

Obed Meadow Generation-Tie Line Project Navajo County, Arizona



Prepared for:



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April 1, 2022; updated June 8, 2023

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LIST OF ABBREVIATIONS

ACEC	Areas of Critical Environmental Concern
ADOA	Arizona Department of Agriculture
A.R.S.	Arizona Revised Statute
Avangrid	Avangrid Renewables
AGFD	Arizona Game and Fish Department
BBS	Breeding Bird Survey
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
CBC	Christmas Bird Counts
CFR	Code of Federal Regulation
°F	degrees Fahrenheit
ESA	Endangered Species Act
gen-tie	generation-tie
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NGEWM	Nongame and Endangered Wildlife Management
NLCD	National Land Cover Dataset
NRCS	Natural Resources Conservation Service
NWR	National Wildlife Refuges
SERI	Species of Economic and Recreational Importance
SGCN	Species of Greatest Conservation Need
SUP	Special Use Permit
Tetra Tech	Tetra Tech, Inc.
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey

1 INTRODUCTION

Aurora Solar LLC, a wholly owned subsidiary of Avangrid Renewables LLC (Avangrid) contracted Tetra Tech, Inc. (Tetra Tech) to conduct a Biological Resource Assessment for the proposed Obed Meadow Generation-Tie Line Project located south of Interstate 40 and approximately 1 mile south of Joseph City in Navajo County, Arizona. The Project would be located on approximately 48.5 acres of private land. The Project is associated with the Obed Meadow Solar Facility with an optional battery energy storage system and associated ancillary facilities including a collector substation (Figure 1). The Project includes an approximate 2.8-mile long overhead 230-kilovolt generation-tie (gen-tie) transmission line that would connect to the Cholla Substation owned by Arizona Public Service (APS).

The gen-tie line would require steel monopole structures measuring up to 100 feet in height. It would require a 150-foot wide right-of-way (totaling 43.5 acres) on private lands. The collector substation would be located on approximately 5 acres of privately owned land and would be constructed adjacent to or within the Obed Meadow Solar Facility. To comply with state requirements prohibiting members of the public from accessing the electrical equipment, the collector substation would be enclosed by a 7-foot-tall fenced enclosure.

This Biological Resources Assessment discusses the applicable laws and policies associated with Arizona species and biological resources, characterizes the environmental setting of the Project Area, and evaluates the potential for occurrence of special-status species within the Project Area based on available habitat. To assess the potential for occurrences of special-status species within the Project Area, the following publicly available information were reviewed:

- Arizona Game and Fish Department (AGFD) Online Environmental Review Tool (HabiMap)
- AGFD Nongame and Endangered Wildlife Program Species Abstracts
- Arizona Native Plant Society Arizona Rare Plant Field Guide
- Google Earth Aerial Imagery
- Online species profiles and distribution information
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) online tool
- USFWS Critical Habitat Portal
- U.S. Environmental Protection Agency Ecoregion Downloads

Tetra Tech has conducted prior surveys and prepared a Biological Resources Assessment report dated April 1, 2022, in support of the Project. Additional biological surveys were conducted on April 28, 2023. This Biological Resources Assessment incorporates findings from both survey events.

2 REGULATORY FRAMEWORK

The proposed Project Area would be developed on private lands. A summary of potentially applicable federal, state, and local regulations related to biological resources is provided below.

2.1 Applicable Federal Regulations

Endangered Species Act

The Endangered Species Act (ESA) directs the USFWS to identify and protect endangered and threatened species and their critical habitat, and to provide a means to conserve their ecosystems. Among its other provisions, the ESA requires the USFWS to assess civil and criminal penalties for violations of the ESA or its regulations. Section 9 of the ESA makes it unlawful to knowingly violate the “take” provisions of the ESA. “Take” is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct” 16 United States Code (U.S.C.) 1532. Significant modification or degradation of listed species’ habitats where the modification kills or injures wildlife by significantly impairing essential behavioral patterns is considered “harm” under ESA regulations. Projects without a federal nexus work directly with USFWS to avoid adversely impacting listed species and their critical habitats. This Project has no assumed federal nexus at this time.

Bald and Golden Eagle Protection Act

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are afforded legal protection under authority of the Bald and Golden Eagle Protection Act (BGEPA; 16 U.S.C. 668–668d). The BGEPA prohibits the take, sale, purchase, offer of sale, purchase or barter, transport, export or import, at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof, 16 U.S.C. 668. The BGEPA also defines take to include “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb,” 16 U.S.C. 668c, and includes criminal and civil penalties for violating the statute (see 16 U.S.C. 668). The term “disturb” is defined as agitating or bothering an eagle to a degree that causes, or is likely to cause, injury to an eagle, or either a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior, 50 Code of Federal Regulations (CFR) Section 22.3.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements the United States’ obligations under four international treaties for the protection of migratory birds that includes more than 1,000 species (Federal Register; 50 CFR 10 and 21), including the bald eagle and golden eagle. The MBTA is administered by the USFWS and prohibits “take” of migratory birds—their parts, eggs, or nests “at any time, by any means.” “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.” There has been varying guidance on the prohibition of incidental take under the MBTA. Rulemaking, that was effective December 3, 2021, clarified that the USFWS considers incidental take as prohibited under the MBTA, subject to outstanding court rulings.

2.2 Applicable State Regulations

Arizona Game and Fish Department Regulations

Arizona State Statutes and AGFD Commission Policies have been established to conserve, protect, restore, and enhance fish and wildlife populations and their habitats. Although these

policies are primarily related to hunting, fishing, trapping, etc. of wildlife, some may be relevant to solar energy projects. Project proponents should be familiar with these statutes and policies to ensure their projects are consistent with the intent of these laws and policies.

- Arizona Revised Statute (A.R.S.) 17-309 states that it is unlawful to “take, possess, transport, release, buy, sell or offer or expose for sale wildlife except as expressly permitted by this title.” According to A.R.S. 17-101, “Take” is defined as “pursuing, shooting, hunting, fishing, trapping, killing, capturing, snaring or netting wildlife or the placing or using of any net or other device or trap in a manner that may result in the capturing or killing of wildlife.”
- A.R.S. § 17-235 authorizes the Arizona Game and Fish Commission to regulate the taking of migratory birds in accordance with the MBTA, described above.
- Under A.R.S. § 17-236(A), “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”.
- No state or federal lands can be closed to hunting or fishing without the consent of AGFD, and no person may lock a gate blocking access to state lands pursuant to A.R.S. § 17-304 and Arizona Administrative Code R12-4-110. Permittees should contact the AGFD Ombudsman at AGFD headquarters for information regarding filing a petition with the Arizona Game and Fish Commission where a project requires the closure of state or federal lands to hunting or fishing.

The Arizona Game and Fish Department’s Arizona Wildlife Conservation Strategy (AGFD 2022) identifies Species of Greatest Conservation Need (SGCN). SGCN are wildlife species that have been evaluated in terms of their conservation needs and vulnerability and have been determined to be at risk (i.e., vulnerable). AGFD’s SGCN list includes endangered and threatened species as well as special-status species that have been identified as needing additional protection due to declining populations.

The Nongame and Endangered Wildlife Management (NGEWM) subprogram of AGFD is responsible for the protection, restoration, preservation, and maintenance of nongame and endangered wildlife as part of the natural diversity of Arizona and to provide opportunities for the public to enjoy nongame and endangered wildlife. “Nongame wildlife” is all wildlife except game mammals, game birds, furbearing animals, predatory animals and game fish. “Endangered wildlife” are those species listed by the AGFD as Tier 1A of SGCN or by the USFWS as endangered, threatened, or a candidate for such status. The AGFD’s SGCN list identifies 18 Tier 1A species within Navajo County.

Native Plant Law, A.R.S. § 3-901-907

Many of Arizona’s native plants are protected by the Arizona Native Plant Law in A.R.S. Title 3. The Arizona Native Plant Law was enacted to protect rare plant species and to protect some species from being over-harvested. These protected plants may not be removed from any lands, whether private or public, without the permission of the landowner and a permit from the Arizona Department of Agriculture (ADOA).

Private landowners have the right to destroy or remove plants growing on their land, but 20 to 60 days prior to the destruction of any protected native plants, landowners are required to notify

ADOA. The landowner also has the right to sell or give away any plants growing on the land. However, protected native plants may not be legally possessed, taken, or transported from the growing site without a permit from the ADOA.

Regulated and Restricted Noxious Weeds, Arizona Administrative Code R3-4-244

The A.R.S. in the Arizona Administrative Code R3-4-244 regulates and restricts noxious weeds to prevent further infestation or contamination. Noxious weeds include any of the plant species listed as “Regulated pest” or “Restricted pest” by the ADOA. “Regulated pest” species may be controlled to prevent further infestation or contamination. “Restricted pest” species shall be quarantined to prevent further infestation or contamination. Administrative Code R3-4-244 further outlines the required reporting and remediation for activities in areas with noxious weeds.

2.3 Applicable Local Regulations

Navajo County Zoning Ordinance – Article 20

In Navajo County, a Special Use Permit (SUP) is required for all land uses in zoning districts from which they are otherwise prohibited. It is understood that a photovoltaic solar power generation facility, along with its supporting infrastructure, may be allowed under the existing zoning district by obtaining an SUP pursuant to requirements outlined in Article 20. While there are no specific requirements to include biological resource information within the SUP application, the application generally includes an explanation of how the Project will conform with the intent of the Navajo County Comprehensive Plan, which includes assessment of impacts to the “natural environment”. Navajo County currently does not require review or approval by AGFD or other resource agencies for solar development projects.

3 ENVIRONMENTAL SETTING

3.1 Ecoregion

The Project Area lies within the Arizona/New Mexico Plateau Level III Ecoregion. Local relief in the region varies from a few feet on plains and mesa tops, to well over 1,000 feet along tableland side slopes. The region extends across northern Arizona, northwestern New Mexico, and into the San Luis Valley of Colorado. Within the Arizona/New Mexico Plateau, the Project Area lies within the Little Colorado Valley/Painted Desert Level IV ecoregion. This ecoregion is lower, drier, and warmer than surrounding regions and has more desert scrub. Elevations are typically below 5,000 feet, ranging from 4,200 to 5,700 feet. Average annual rainfall ranges from 5 to 9 inches and temperatures reach an average low of 20 degrees Fahrenheit (°F) in January to an average high of 94°F in July. Land cover in the region is characterized by a mix of shale badlands, greasewood flats, sand shrubland, and semi-desert grassland. Vegetation for this ecoregion typically includes mound saltbush (*Atriplex obovata*), fourwing saltbush (*Atriplex canescens*), shadscale (*Atriplex confertifolia*), Mormon tea (*Ephedra nevadensis*), narrowleaf yucca (*Yucca angustissima*), alkali sacaton (*Sporobolus airoides*), galleta (*Hilaria jamesii*), black grama (*Bouteloua eriopoda*), Indian ricegrass (*Achnatherum hymenoides*), and gyp dropseed (*Sporobolus nealleyi*). A long history of overgrazing has resulted in extensive rangeland deterioration (Griffith et al. 2014).

3.2 Soils

Soils in the northeastern portion of the Project Area above the Little Colorado River and portions of the far western end are Navajo silty clay, saline-sodic, 0-1% slopes (NRCS 2023; Figure 2). Soils along the Little Colorado River are Riverwash-Typic Torrfluvents complex, 0-5% slopes. Just above the main channel of the river is Ives fine sandy loam, wet, 0-1% slopes. Tours silty clay loam, saline-sodic, 0-1% slopes and Jocity sandy clay loam, saline-sodic, 0-1% slopes are common further south and west. Epiikom channery sandy loam, 1-12% slopes and Medisaprists, saline, 0-1% slopes occur at the far western end of the proposed line.

3.3 Land Cover and Land Use

According to the National Land Cover Database (NLCD; USGS 2023a), the dominant land cover in the is shrub/scrub with 27.7 acres of cover (57.1 percent; Table 1; Figure 3). The Project occupies undeveloped, high-desert grazing rangeland that is generally flat or gently sloping (Figure 3).

Table 1. Land Use and Land Cover Present in the Project Area

Land Use/Land Cover Description	Acres in Project Area	Percent of Project Area
Barren Land (Rock/Sand/Clay)	1.2	2.5
Developed, Low Intensity	0.2	0.4
Developed, Open Space	0.2	0.4
Grassland/Herbaceous	6.2	12.8
Shrub/Scrub	27.7	57.1
Woody Wetlands	13	26.8
Total	48.5	100.0%

3.4 Wetlands and Other Waters of the United States

Wetlands (swamps, marshes, bogs, and similar areas) and other aquatic habitats play a major role in the survival of many birds, insects, amphibians, reptiles, mammals, and plants. National Hydrographic Dataset (USGS 2023c) and USFWS National Wetlands Inventory (USFWS 2023b) data were reviewed and wetlands and waters of the U.S. features were delineated (Tetra Tech, Inc. 2023). Wetlands do occur along the Little Colorado River and are classified as R4SBA along the main channel and PSS2J in the immediate adjacent floodplain (Figure 4). The mapped 100-year floodplain of the Little Colorado River also extends well to the south of the active channel and into the Project Area. Further discussion of potentially regulated waters of the U.S. under the Clean Water Act is provided in the accompanying *Wetland and Other Waters of the United States Findings, Obed Meadows Solar Project, Navajo County, Arizona* report (Tetra Tech, Inc. 2023).

3.5 Management Areas

Federal and state agencies maintain conservation areas to help conserve habitats critical to migratory birds and other sensitive species (e.g., National Wildlife Refuges [NWRs], National Grasslands, state parks, state wildlife areas). There are no federally or state-managed conservation areas within the Project Area. The nearest Arizona Wildlife Area, Chevelon Creek, is located approximately 9.1 miles west of the Project (Figure 5). There are Arizona State Land

Trust and Bureau of Land Management (BLM) lands nearby but not within or directly adjacent to the Project.

Some species have critical habitat defined by the USFWS; however, there is no USFWS-designated critical habitat within the Project Area (USFWS 2023a). The nearest USFWS-designated critical habitat is for Colorado spinedace (*Lepidomeda vittata*) and is located approximately 9.8 miles west of the Project Area.

No AGFD-mapped Important Connectivity Zones intersect the Project Area, although some do occur within a 5-mile buffer (Figure 5). These "Important Connectivity Zones" were identified in 2006 by the Arizona's Wildlife Linkages Assessment as a tool to identify important potential wildlife zones and act as a starting point for consultation and coordination among organizations and agencies that have a role in maintaining habitat connectivity.

The BLM has designated Areas of Critical Environmental Concern (ACEC) to indicate where special management attention is needed to protect important historical, cultural, and scenic value or fish and wildlife or other natural resources (BLM 2023a). There are no ACECs within the Project or Project vicinity. The nearest ACEC, Tanner Wash, is located approximately 1.25 miles northeast of the Project (Figure 5). The BLM also designates grazing allotments and manages the land for livestock grazing (BLM 2023b). Although the Project is located on private lands, it is located within the Holbrook AZ06225 BLM-designated grazing allotment.

4 HABITAT ASSESSMENT

4.1 Field Methods

A field habitat assessment survey of parcels within and near the Project Area was conducted by Tetra Tech biologists. Surveys were conducted in spring of 2022 and an additional survey was completed on April 28, 2023. The purpose of the surveys was to ground-truth desktop assessment results and record habitat suitability for special-status species on those parcels. Data recorded included areas of suitable habitat, wildlife, and plant observations, and representative photographs (Figure 6; Appendix A).

4.2 Field Observations of the Surrounding Area

Land cover in the Project Area is predominantly high desert shrubland mixed with herbaceous grassland; there is limited plant diversity and few trees. Nearby ephemeral streams within drainages flow north toward the Little Colorado River. The upland biotic community can be considered Great Basin Desertscrub (Brown 1994). Vegetation in upland environments along and near the Gen-Tie corridor included four-wing saltbush (*Atriplex canescens*), alkali sacaton (*Sporobolus airoides*), shadscale (*Atriplex confertifolia*), tumbleweed (*Salsola tragus*), broom snakeweed (*Gutierrezia sarothrae*), Bigelow's sagebrush (*Artemisia bigelovii*), and prickly pear cactus (*Opuntia* sp.). Vegetation on more alkaline flats, in depressions, and along and near the floodplain of the Little Colorado River included tamarisk (*Tamarix chinensis*), iodinebush (*Allenrolfea occidentalis*), mound saltbush (*Atriplex obovata*), seablight (*Suaeda calceoliformis*), greasewood (*Sarcobatus vermiculatus*), Rio Grande cottonwood (*Populus deltoides* ssp *wislizeni*), and desert olive (*Forestiera neomexicana*). The biotic community along the Little

Colorado River can be considered Great Basin Riparian Wetland (Brown 1994). Wildlife and plant species observed during the on-site habitat assessment are listed in Table 2.

Table 2. Species Observed During a Habitat Assessment of the Surrounding Area

Species	Scientific Name
Wildlife	
Birds	
Black-throated sparrow	<i>Amphispiza bilineata</i>
Blue-winged teal	<i>Anas discors</i>
Common raven	<i>Corvus corax</i>
Horned lark	<i>Eremophila alpestris</i>
Lincoln's sparrow	<i>Melospiza lincolni</i>
Northern harrier	<i>Circus hudsonius</i>
Unknown Buteo sp.	<i>Buteo sp.</i>
Yellow-rumped warbler	<i>Setophaga coronate</i>
Mammals	
Bobcat (tracks)	<i>Lynx rufus</i>
Coyote (tracks)	<i>Canis latrans</i>
Desert cottontail	<i>Sylvilagus audubonii</i>
Mule deer	<i>Odocoileus hemionus</i>
Unknown mouse sp.	<i>Mus sp.</i>
Plants	
Trees	
Rio Grande cottonwood	<i>Populus deltoides ssp wislizeni</i>
Salt cedar	<i>Tamarix ramosissima</i>
Shrubs	
Bigelow sage	<i>Artemisia biglovii</i>
Broom snakeweed	<i>Gutierrezia sarothrae</i>
Camel thorn	<i>Alhagi maurorum</i>
Four-wing saltbush	<i>Atriplex canescens</i>
Iodine bush	<i>Allenrolfea occidentalis</i>
Mormon tea	<i>Ephedra species</i>
Roundleaf dunebroom	<i>Errazurizia rotundata</i>
Winterfat	<i>Krascheninnikovia lantana</i>
Shadscale	<i>Atriplex confertifolia</i>
Prickly pear cactus	<i>Opuntia sp.</i>
Grasses	
Alkali sacaton	<i>Sporobolus airoides</i>
Blue grama	<i>Bouteloua gracilis</i>
James galleta	<i>Hilaria jamesii</i>
Forbs	
Antelope-horns	<i>Asclepias asperula</i>
Russian thistle	<i>Salsola tragus</i>

5 SPECIAL-STATUS PLANTS AND OTHER PLANT SPECIES OF CONCERN

The Arizona Natural Heritage Program has identified more than 300 special-status plants; however, none of these rare plants have a state designation and they are not regulated (AGFD 2023).

According to the IPaC output for the Project (Appendix B, USFWS 2023), there are no listed plants expected to occur within the Project Area. The AGFD Online Environmental Review Tool Report (Appendix C, AGFD 2023), did identify the federally endangered Peebles Navajo Cactus (*Pediocactus peeblesianus* var. *peeblesianus*) and the BLM Sensitive Roundleaf Errazurizia (*Errazurizia rotundata*) as occurring within 3 miles of the Project.

The Arizona Natural Heritage Program has identified biotic communities as a tool to help assess the area for plants and wildlife productivity. The cottonwood-willow, sacaton grass saltbush, and shrub-grass disclimax biotic communities were identified in the vicinity of the Project. These communities do not preclude development.

5.1 Noxious Weeds

There are currently 53 species designated as noxious weeds in Arizona by the Arizona Department of Agriculture (ADOA 2023). Noxious weeds are divided into three classes: Class A, Class B, and Class C. Class A noxious weeds is defined as “a species of plant that is not known to exist or of limited distribution in the State and is a high priority pest for quarantine, control, or mitigation.” Class B noxious weed is defined as “a species of plant that is known to occur, but of limited distribution in the State and may be a high priority pest for quarantine, control or mitigation if a significant threat to a crop, commodity, or habitat is known to exist.” Class C noxious weed is defined as “a species of plant that is widespread but may be recommended for active control based on risk assessment” (A.R.S. § 3-201, A.A.C. R3-4-101, and R3-4-201). Camelthorn (*Alhagi maurorum*), a Class B noxious weed, and salt cedar (*Tamarix ramosissima*), a Class C noxious weed, were observed during the field survey of the surrounding area. Noxious weed infestations can have an adverse impact on rare and special-status plant species and native plant communities, and a noxious weed plan may be required for the Project.

6 SPECIAL-STATUS WILDLIFE AND OTHER SPECIES OF CONCERN

6.1 Federally and State-listed Species

The USFWS IPaC resource list (Appendix B, USFWS 2023c) shows two threatened (yellow-billed cuckoo, *Coccyzus americanus*, and Little Colorado spinedace, *Lepidomeda vittate*), one experimental non-essential (Mexican wolf, *Canis lupus baileyi*), and one candidate species (monarch butterfly *Danaus plexippus*) have potential to occur within the Project Area (Table 3). Experimental populations on private land are not afforded protection under ESA. There are no USFWS-designated critical habitats for any federally listed species within the Project Area (USFWS 2023a). In addition, the bald eagle, which is protected by the BGEPA, has the potential to occur.

The AGFD Online Environmental Review Tool Report (Appendix C) provides a list of USFWS federally listed species and Species of Concern, U.S. Forest Service Sensitive Species, AGFD SGCN listed species, species listed under the Arizona Native Plant Law, AGFD Species of Economic and Recreational Importance (SERI) species, and BLM Sensitive Species that have been documented within 3 miles of the Project vicinity or predicted within 3 miles of the Project vicinity based on predicted range models (AGFD 2022). Tetra Tech queried the AGFD Heritage Data Management System Environmental Online Review Tool (HGIS-19538) and determined that there were no federally listed wildlife or SGCN species documented within 3 miles of the Project (Appendix C).

The Arizona Game and Fish Department’s Arizona Wildlife Conservation Strategy (AGFD 2022) identifies the following Species of Greatest Conservation Need (SGCN) within the Great Basin Desertscrub habitat that occurs in the Project Area:

- **Amphibians:** northern leopard frog
- **Birds:** sagebrush sparrow, Brewer’s sparrow, sage thrasher, golden eagle, ferruginous hawk, prairie falcon, scaled quail, common nighthawk
- **Invertebrates:** Niobrara ambersnail
- **Mammals:** House Rock Valley chisel-toothed kangaroo rat, chisel-toothed kangaroo rat, Gunnison’s prairie dog, black-footed ferret, black-tailed jackrabbit, spotted bat, Mexican free-tailed bat, big free- tailed bat, greater western bonneted bat

While Species of Concern, SGCN species, and SERI species do not have any regulatory protection in Arizona, these species may require consideration and analysis in both the federal and state permitting process; therefore, any potential impacts to these species should also be minimized to the extent practicable using best management practices and avoidance measures.

Table 3 includes a summary of all federally and state-listed species and special-status species that were evaluated for presence within the Project Area and the status and the likelihood of occurrence within or near the Project. For the purposes of this analysis, this list only includes species listed as endangered or threatened and those that are proposed or are candidate species for such listing by USFWS under the ESA, those species protected under BGEPA, and Tier 1a fish and wildlife SGCN as identified by AGFD.

Table 3. Federally and State-listed Species Potentially Occurring within the Project Area

Common Name	Scientific Name	Federal/ State Status ¹	Likelihood of Occurrence within the Project Area ²
Mammals			
Gray wolf	<i>Canis lupus</i>	PEXPN	Low
Birds			
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA / SGCN 1A	Moderate
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Moderate
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	FT / SGCN 1A	Unlikely
Fish			
Little Colorado spinedace	<i>Lepidomeda vittata</i>	FT / SGCN 1A	Unlikely

Common Name	Scientific Name	Federal/ State Status ¹	Likelihood of Occurrence within the Project Area ²
Insects			
Monarch butterfly	<i>Danaus plexippus</i>	FC / SGCN 1A	Low

1 FC = Federal Candidate, FE = Federally Endangered, FT = Federally Threatened, FC = Federal Candidate, PEXPN = Proposed Experimental Population Non-essential, BGEPA = Bald and Golden Eagle Protection Act, SGCN = Species of Greatest Conservation Need

2 Likelihood of Occurrence: Unlikely–unsuitable habitat in Project and vicinity; Low–marginally suitable habitat in Project and vicinity; Moderate–suitable habitat present in Project, or species known to occur in habitat similar to Project; High–highly suitable habitat present in Project, or known populations exist in Project vicinity.

6.2 Migratory Birds

The USFWS IPaC report also provides a list of USFWS Birds of Conservation Concern species and other migratory bird species that may occur within the vicinity of the Project for consideration in compliance with MBTA and BGEPA regulatory requirements (Appendix B). The IPaC identified the following Birds of Conservation Concern:

- Bald eagle (*Haliaeetus leucocephalus*)
- California gull (*Larus californicus*)
- Cassin's finch (*Carpodacus cassinii*)
- Clark's grebe (*Aechmophorus clarkia*)
- Grace's warbler (*Dendroica graciae*)
- Lesser yellowlegs (*Tringa flavipes*)
- Mountain plover (*Charadrius montanus*)
- Olive-sided flycatcher (*Contopus cooperi*)
- Virginia's warbler (*Vermivora virginiae*)
- Western grebe (*Aechmophorus occidentalis*)

The National Audubon Society has identified Important Bird Areas in an effort to monitor and protect these areas for avian species and habitat conservation. Arizona currently has 47 Important Bird Areas; however, there are no Important Bird Areas located within or near the Project Area (Audubon 2023a).

A variety of data sources were reviewed to identify the avian species with potential to occur near the Project, including field guides (e.g., Sibley 2014), and results of Christmas Bird Counts (CBC; Audubon 2023b) and Breeding Bird Surveys (BBS; Sauer et al. 2017). Results of the CBCs and BBSs in the Project vicinity are discussed in Sections 6.2.1 and 6.2.2. Since the land cover for the majority of the Project is shrub/scrub and grassland/herbaceous, the avian species expected to occur within the Project are those typically associated with those land types. Birds that are associated with water (waterfowl, waterbirds, bald eagles) are expected to occur near the Little Colorado River.

6.2.1 Christmas Bird Counts

The National Audubon Society CBC is an annual bird census conducted by citizen scientists within established 15-mile diameter circular plots on a day falling between December 14 and January 5. The closest CBC location to the Project is Timber Mesa ("AZTI"), approximately 55

miles south of the Project (Audubon 2023b). A desktop review of aerial imagery shows that the landcover of the AZTI CBC differs from the Project in that the area is predominately mountain juniper/pinyon pine forest. However, scrub/shrub land and herbaceous/grasslands appear to be present as well in the lower regions of the area. Avian species observed during the CBC at the AZTI location have a low to moderate chance to occur within the Project Area.

During the AZTI CBC conducted in on 12/31/22, the participants observed a total of 81 species at the CBC location (Audubon 2023b). Waterfowl were the most abundant species group detected, with the most common species observed being the mallard (*Anas platyrhynchos*). Songbirds (passerines) were the second most commonly detected species group detected, with the American robin (*Turdus migratorius*) and red-winged blackbird (*Agelaius phoeniceus*) being the most observed species. Due to the Project proximity to the Little Colorado River, these species are expected to occur near the Project Area.

Within the raptor species group, there were five species detected during the AZTI CBC in 2022 (Audubon 2023b). The most common raptor observed was the bald eagle followed by the red-tailed hawk (*Buteo jamaicensis*).

There was one state SGCN species—golden eagle—observed during the AZTI CBC in 2022; however, there were no federally listed threatened or endangered species observed.

6.2.2 Breeding Bird Survey

The USGS BBS is a long-term avian monitoring program conducted annually during the breeding season at established 24.5-mile roadside routes across the United States and Canada (Sauer et al. 2017). The nearest BBS is the Castle Butte BBS Route (#06060), which is located approximately 23 miles north of the Project. Much of the route is situated along similar shrub/scrub and grassland/herbaceous habitat as the Project; however, there are no riparian habitats observed as those found near the Project (USGS 2023b). Similar habitat compositions indicate that species detected during the BBS could be found within the Project. Data has been collected seven times between 1992 and 2007 along the Castle Butte BBS route. During that time, 41 species have been documented as potentially breeding in the area (USGS 2023b). The most commonly detected species on the Castle Butte BBS Route are horned lark (*Eremophila alpestris*), western meadowlark (*Sturnella neglecta*), common raven (*Corvus corax*), and mourning dove (*Zenaidura macroura*). These species are common to this region of Arizona. The golden eagle has been observed two out of the seven years the survey has been conducted. No federally or state-listed species have been observed on the Castle Butte BBS Route.

6.2.3 Raptors

Based on the CBC, BBS, and range maps (Cornell Lab of Ornithology 2023), there are 22 raptors species with potential to occur within the Project Area (Table 4), including bald eagles and golden eagles. Five raptor species have been recorded in the nearest CBC location (Audubon 2023b) and six raptor species have been recorded on the nearest BBS route (USGS 2023b).

Table 4 Raptors with Potential to Occur in the Project Area

Common Name	Scientific Name	Season of Occurrence ¹					Survey ²
		Spring	Summer	Fall	Winter		
Vultures							
Turkey vulture	<i>Cathartes aura</i>	X	X	X	–	BBS	
Hawks and Eagles							
Bald eagle	<i>Haliaeetus leucocephalus</i>	X	X	X	X	CBC	
Cooper's hawk	<i>Accipiter cooperii</i>	X	X	X	X	CBC	
Ferruginous hawk	<i>Buteo regalis</i>	X	X	X	X	None	
Golden eagle	<i>Aquila chrysaetos</i>	–	–	–	X	BBS	
Northern goshawk	<i>Accipiter gentilis</i>	X	X	X	X	CBC	
Northern harrier	<i>Circus hudsonius</i>	–	–	X	X	CBC	
Osprey	<i>Pandion haliaetus</i>	–	–	X	–	None	
Red-tailed hawk	<i>Buteo jamaicensis</i>	X	X	X	X	Both	
Rough-legged hawk	<i>Buteo lagopus</i>	–	–	–	X	None	
Sharp-shinned hawk	<i>Accipiter striatus</i>	X	X	X	X	None	
Swainson's hawk	<i>Buteo swainsoni</i>	X	X	X	–	None	
Falcons							
American kestrel	<i>Falco sparverius</i>	X	X	X	X	BBS	
Merlin	<i>Falco columbarius</i>	–	–	–	X	None	
Peregrine falcon	<i>Falco peregrinus</i>	X	X	–	–	None	
Prairie falcon	<i>Falco mexicanus</i>	X	X	X	X	BBS	
Owls							
Barn owl	<i>Tyto alba</i>	X	X	X	X	None	
Burrowing owl	<i>Athene cunicularia</i>	X	X	X	–	BBS	
Great horned owl	<i>Bubo virginianus</i>	X	X	X	X	None	
Long-eared owl	<i>Asio otus</i>	X	X	X	X	None	
Northern saw-whet owl	<i>Aegolius acadicus</i>	X	X	–	–	None	
Western screech-owl	<i>Otus kennicottii</i>	X	X	X	X	None	

1 Cornell Lab of Ornithology 2023; USGS 2023b

2 Indicates local surveys where each species was seen. CBC = Christmas Bird Count, BBS = Breeding Bird Survey, Both = Christmas Bird Count and Breeding Bird Surveys. None = not seen during either survey. The absence of a bird during CBC or BBS surveys does not indicate the absence of a species; its inclusion in this list is based on geographic range.

7 MITIGATION MEASURES

- If construction cannot be completed between September 1 and January 31, and is planned during the migratory bird breeding season between February 1 and August 31, a survey for migratory birds (nests) would occur immediately prior to initiation of activity. Nests without eggs or in-active nests could be disassembled to prevent migratory birds nesting in the area. Flagging near nests or potential nest sites may also prevent nesting. If nesting birds are noted, construction activities within 100 meters of the active nest should be avoided until the nestlings have fledged.
- A presence survey of milkweed would be conducted prior to initiation of activity and if noted these plants would be flagged and avoided, as is possible.
- If construction cannot be completed between September 1 and January 31, a survey for the threatened yellow-billed cuckoo (*Coccyzus americanus*) and any active nests should

be conducted prior to any activities within the Little Colorado River 100-year floodplain. If nesting birds are noted, a USWFS biologist would be contacted for further assessment.

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FIGURES

Avangrid Renewables
Obed Meadow
Generation Tie Line Project

Figure 1
Project Location

Navajo County, AZ

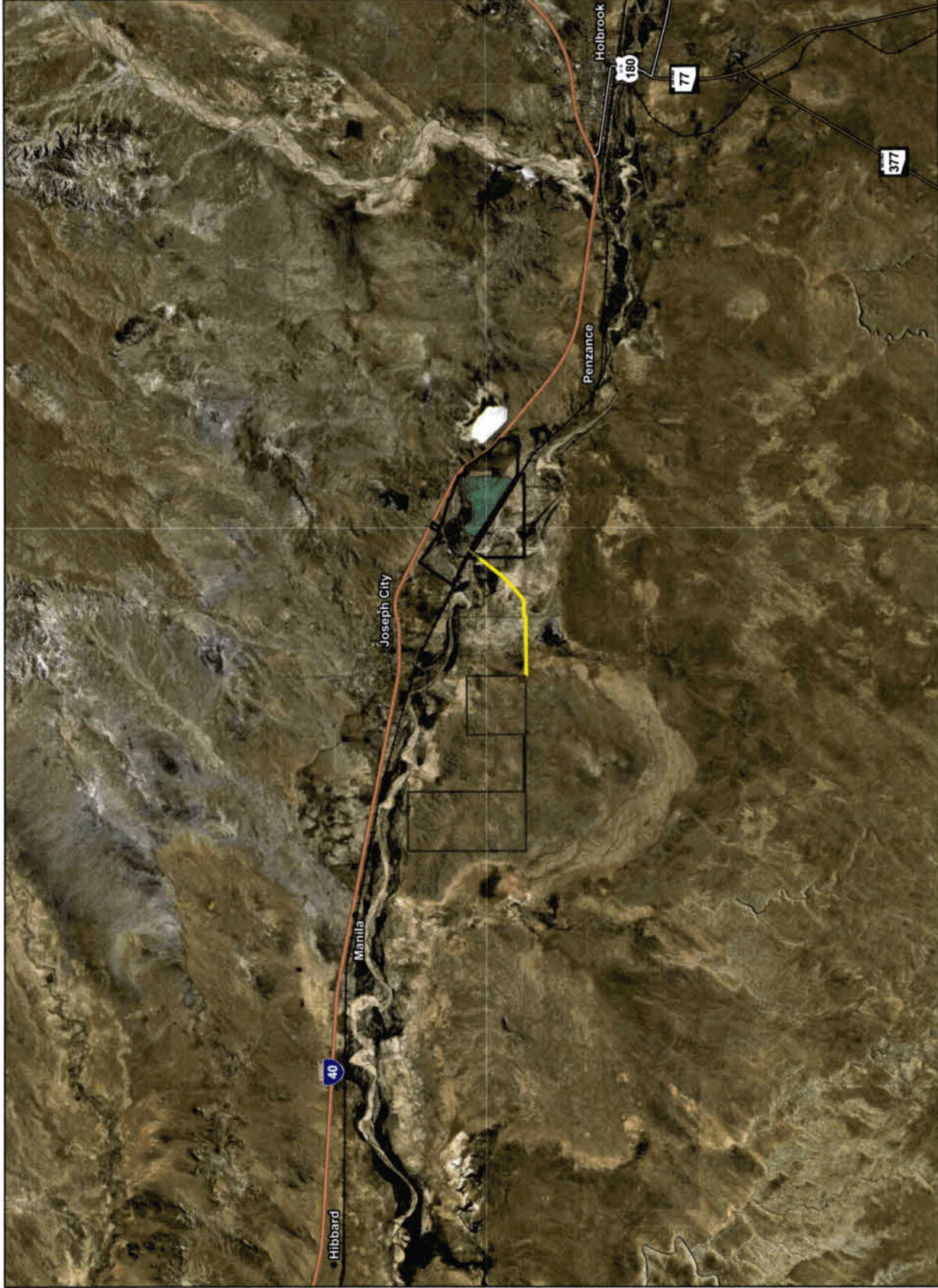
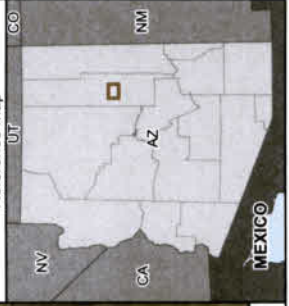
Project Features

- Temporary Gen-Tie Interconnect
 - Project Substation
 - Gen-Tie Corridor
 - Solar Generation Facility
 - APS Property
- Transportation
- Interstate Highway
 - US Highway
 - State Highway
 - Railroad



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, US Census, BTS

1:100,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet



Avangrid Renewables
Obed Meadow
Generation Tie Line Project

Figure 2
NRCS Soils

Navajo County, AZ

Project Features

- Temporary Gen-Tie Interconnect
- Project Substation
- Gen-Tie Corridor
- Gen-Tie Corridor Study Area
- APS Property Study Area
- APS Property

Transportation

- Local Road
- Railroad

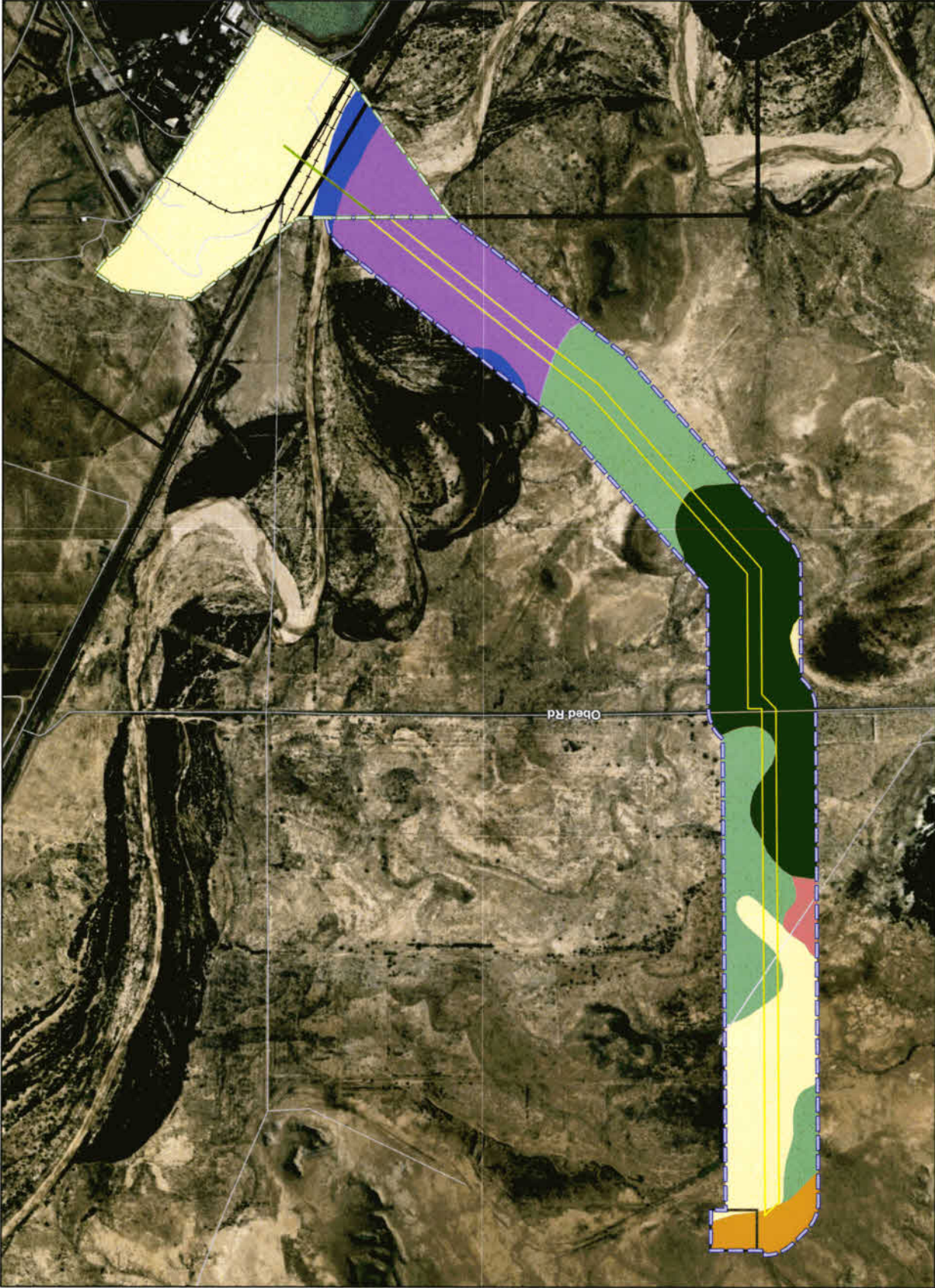
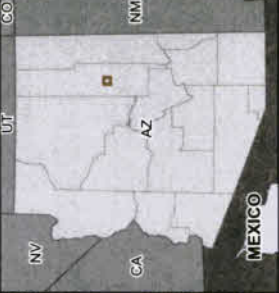
Soil Type

- Epikom channery sandy loam, 1-12% slopes
- Ives fine sandy loam, wet, 0-1% slopes
- Jocity sandy clay loam, saline-sodic, 0-1% slopes
- Medisaprists, saline, 0-1% slopes
- Navajo silty clay, saline-sodic, 0-1% slopes
- Riverwash-Typic Torrifuvents complex, 0-5% slopes
- Tours silty clay loam, saline-sodic, 0-1% slopes



NOT FOR CONSTRUCTION

Reference Map



1:12,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

Source: ESRI, USDA NAIP, US CENSUS, BTS, NRCS

Avangrid Renewables
Obed Meadow
Generation Tie Line Project

Figure 3
Land Cover

Navajo County, AZ

Project Features

- Temporary Gen-Tie Interconnect
- Project Substation
- Gen-Tie Corridor
- Gen-Tie Corridor Study Area
- APS Property Study Area
- APS Property

Transportation

- Local Road
- Railroad

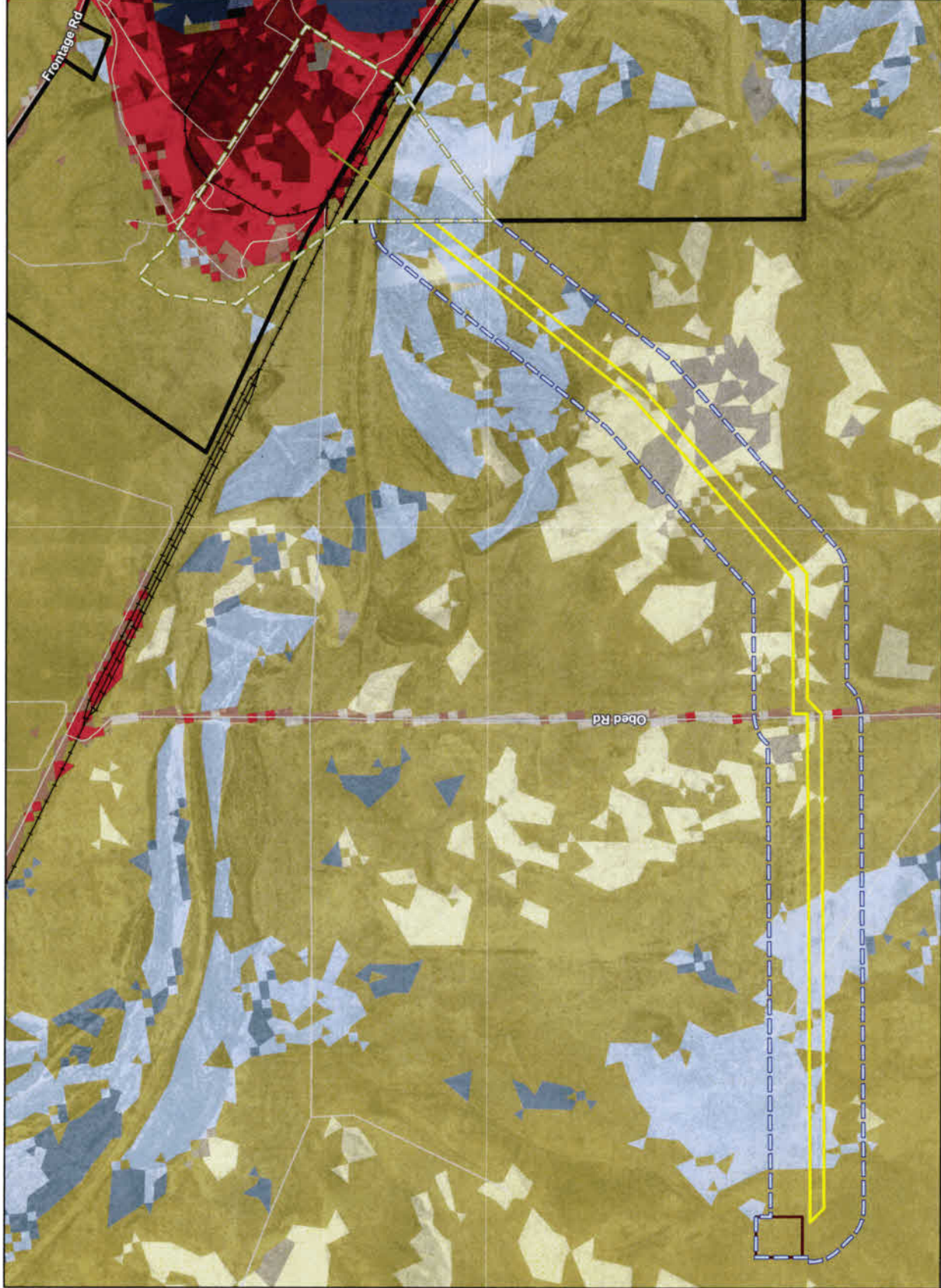
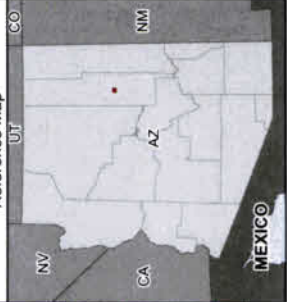
Land Cover Type

- Open Water
- Developed, Open Space
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Barren Land (Rock/Sand/Clay)
- Evergreen Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Woody Wetlands
- Emergent Herbaceous Wetlands



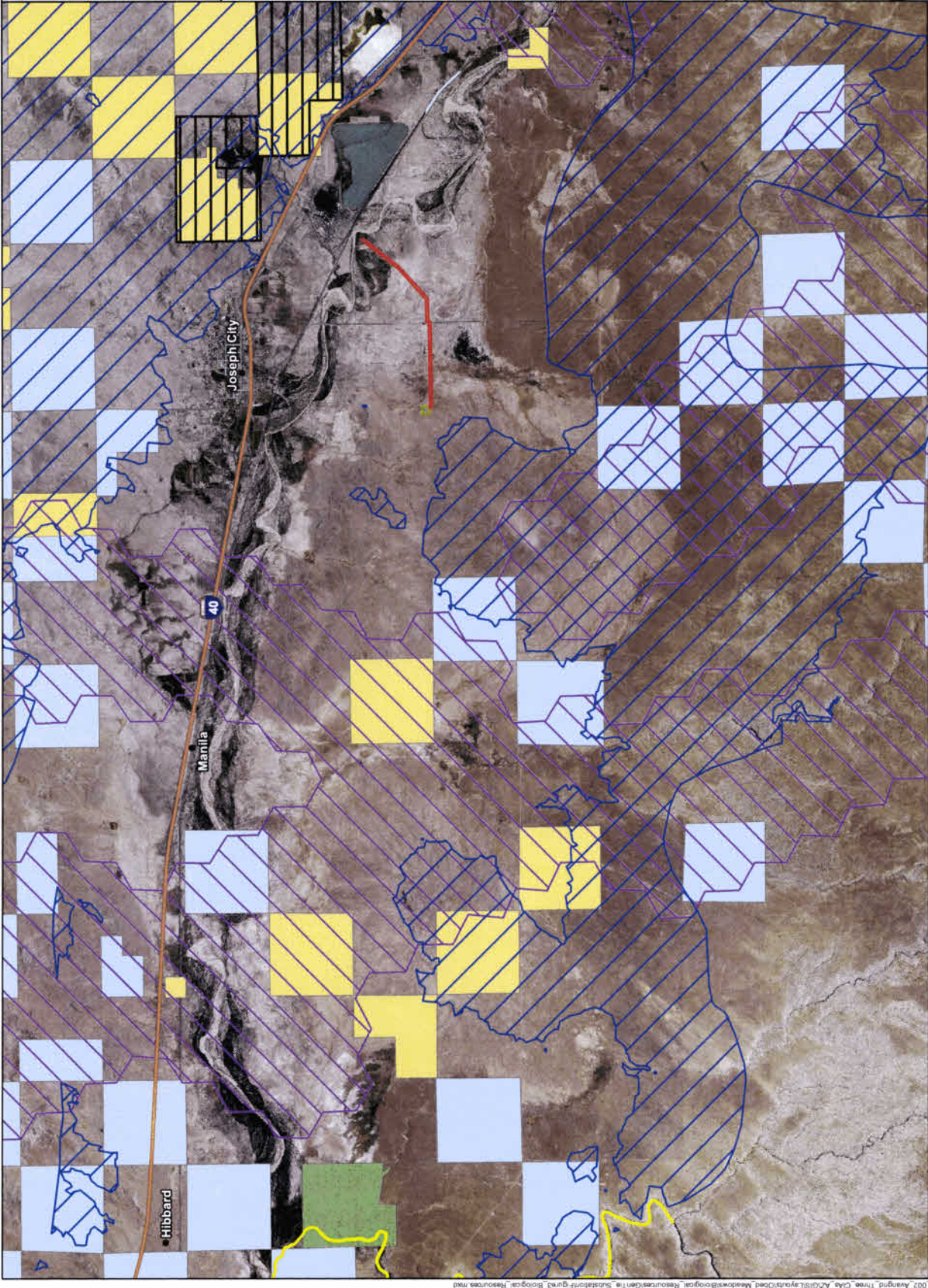
NOT FOR CONSTRUCTION

Reference Map



1:12,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

Source: ESRI, USDA NAIP, US Census, BTS, NLCD 2019



**Avangrid Renewables
Obad Meadows
Generation Tie Line Project**

**Figure 5
Biological Resources**

Navajo County, AZ

Project Features

- Collector Substation
- Generation Tie Line

Transportation

- Interstate Highway

Biological Resources and Protected Lands

- Little Colorado Spinedace Critical Habitat
- AZGFD Important Connectivity Zone
- Peebles Navajo Cactus Current Range
- Tanner Wash ACEC
- Chevelon Creek Wildlife Area
- AZ State Trust Land
- BLM National Public Lands



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, BTS, US CENSUS, PAD-US 2.1, USFWS, AZGFD



1:70,000 NAD 1983 UTM Zone 12N



APPENDIX A

Representative Photographs

Appendix A: Representative Photographs

The following are representative photographs of the Project and proximate features. Figure 6 shows the approximate location of each Photo Point.



Photo #1: Cholla Power Plant and Little Colorado River from Obed Road Bridge



Photo #2: Dense tamarisk community on the Little Colorado River floodplain



Photo #3: Cholla Power Plant and cleared vegetation under transmission line



Photo #4: Fremont cottonwood south of the Little Colorado River floodplain



Photo #5: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #6: Alkaline habitat near the Little Colorado River floodplain



Photo #7: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #8: Ephemeral drainage just to the north of the proposed corridor



Photo #9: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #10: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #11: Upland depression and tamarisk



Photo #12: Typical upland habitat dominated by four-wing saltbush



Photo #13: Upland area of dense alkali sacaton



Photo 1: Project Area. Typical shrub/scrub dominated land use mixed with grassland/herbaceous.



Photo 2: Project Area. Typical rock outcropping located within the Project Area.



Photo 3: Project Area looking north towards Joseph City and the Little Colorado River.

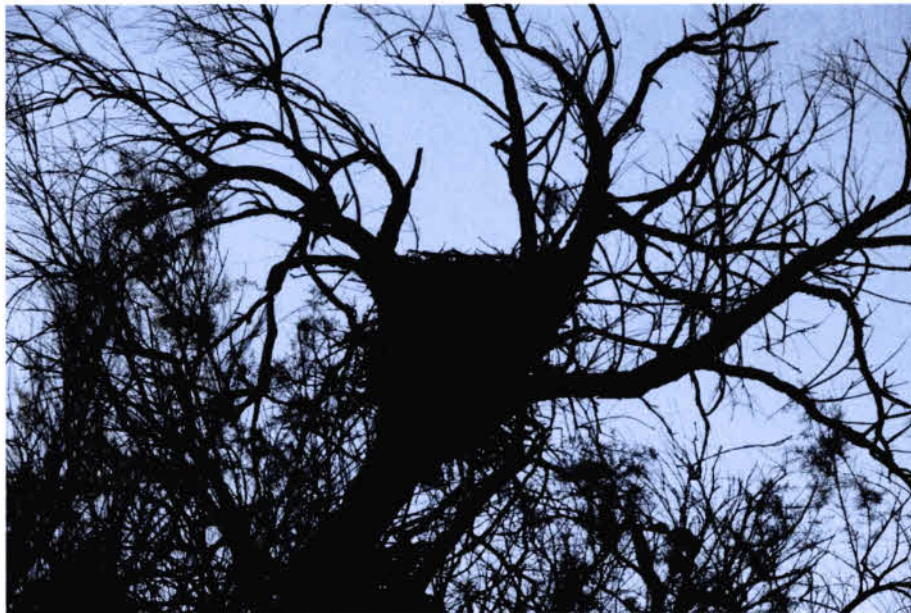


Photo 4: Likely raptor nest observed along the Little Colorado River. Nest was not active during the October 2021 site visit.



Photo 5: Northern harrier observed directly adjacent to the Project Area along the Little Colorado River.



Photo 6: Blue-winged teal observed during the October 2021 site visit.



Photo 7: Typical delineated wetland located within the eastern parcel of the Project Area.



Photo 8: Typical delineated wetland located within the western parcel of the Project Area.



Photo 9: Typical delineated ephemeral stream located within the eastern parcel of the Project Area.



Photo 10: Typical delineated ephemeral stream located within the western parcel of the Project Area.

APPENDIX B
USFWS Information for Planning and Consultation
(IPaC) Resources List

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.

Location

Navajo County, Arizona



Local office

Arizona Ecological Services Field Office

☎ (602) 242-0210

📠 (602) 242-2513

9828 North 31st Ave

#c3

Phoenix, AZ 85051-2517

NOT FOR CONSENSULTATION

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. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ 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 Fisheries²).

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

Mexican Wolf *Canis lupus baileyi* EXPN

No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/3916>

Birds

NAME STATUS

Yellow-billed Cuckoo *Coccyzus americanus* Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
<https://ecos.fws.gov/ecp/species/3911>

Fishes

NAME STATUS

Little Colorado Spinedace *Lepidomeda vittata* Threatened

Wherever found
 There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
<https://ecos.fws.gov/ecp/species/6640>

Insects

NAME

Monarch Butterfly Danaus plexippus

Wherever found

STATUS

Candidate

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

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.

You are still required to determine if your project(s) may have effects on all above listed species.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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 <https://www.fws.gov/program/migratory-birds/species>

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

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*

Breeds Dec 1 to Aug 31

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.

California Gull *Larus californicus*

Breeds Mar 1 to Jul 31

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

Cassin's Finch *Carpodacus cassinii*

Breeds May 15 to Jul 15

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

<https://ecos.fws.gov/ecp/species/9462>

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

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

Western Grebe *aechmophorus occidentalis*

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

<https://ecos.fws.gov/ecp/species/6743>

Breeds Jun 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read 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 (|)

Virginia's Warbler
BCC Rangewide (CON)



Western Grebe
BCC Rangewide (CON)



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

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

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

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

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

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

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

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

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 or migrating in my area?

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

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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.

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 (NWI)

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

[PUSIX](#)

RIVERINE

[R4SBA](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

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 tubercid 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.

APPENDIX C
**Arizona Game and Fish Department Online Heritage
Data Management System Environmental Review Tool**

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:

Obed Meadows

Project Description:

Aurora Solar LLC, a wholly-owned subsidiary of Avangrid Renewables LLC (Avangrid) contracted Tetra Tech, Inc. (Tetra Tech) to conduct a Biological Resource Assessment for the proposed Obed Meadow Generation-Tie Line Project (Project).

Project Type:

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

Contact Person:

Heatherlee Leary

Organization:

Tetra Tech, Inc.

On Behalf Of:

CONSULTING

Project ID:

HGIS-19538

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. 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**

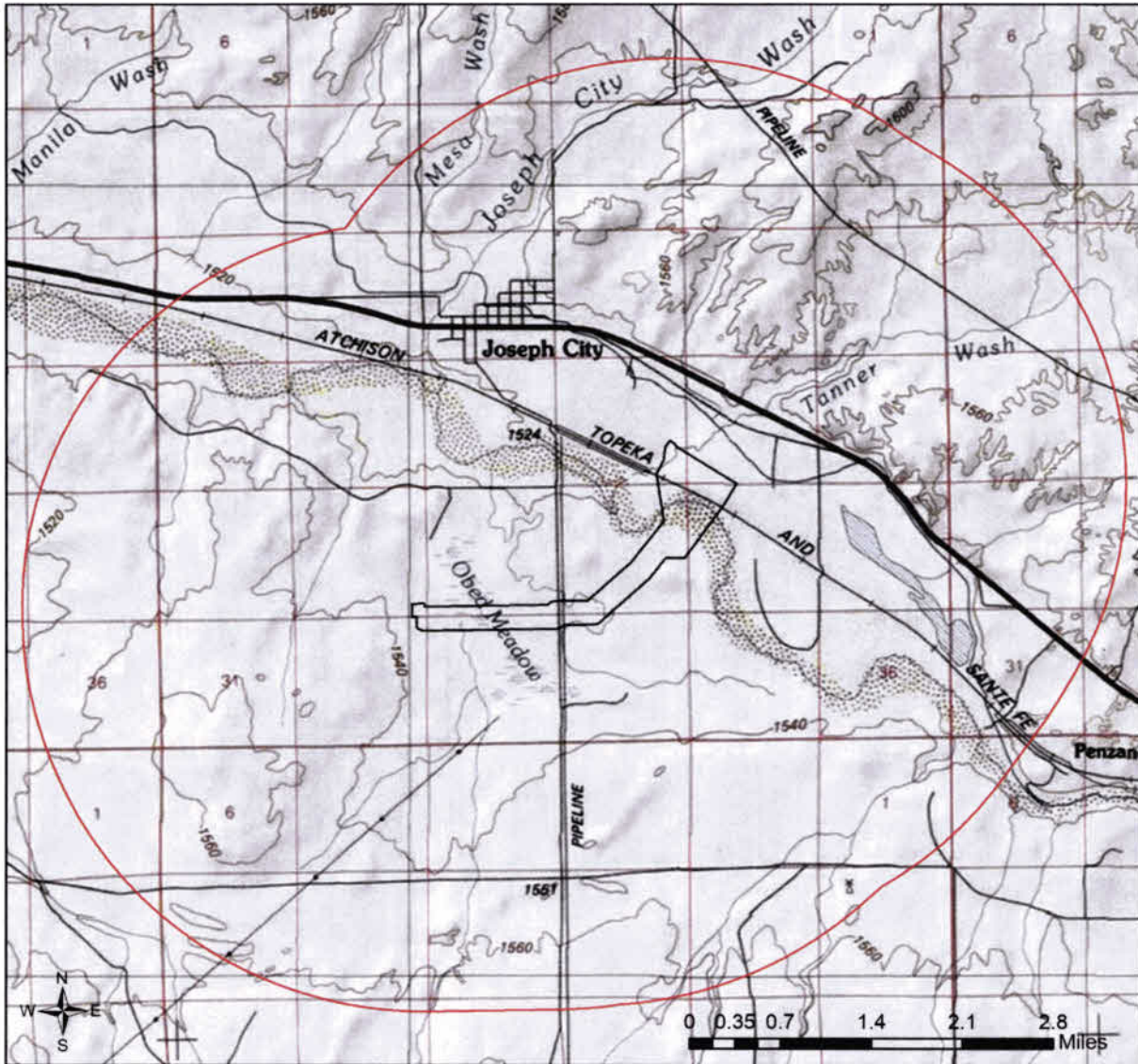
Or

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

Obed Meadows

USA Topo Basemap With Locator Map



- Buffered Project Boundary
- Project Boundary

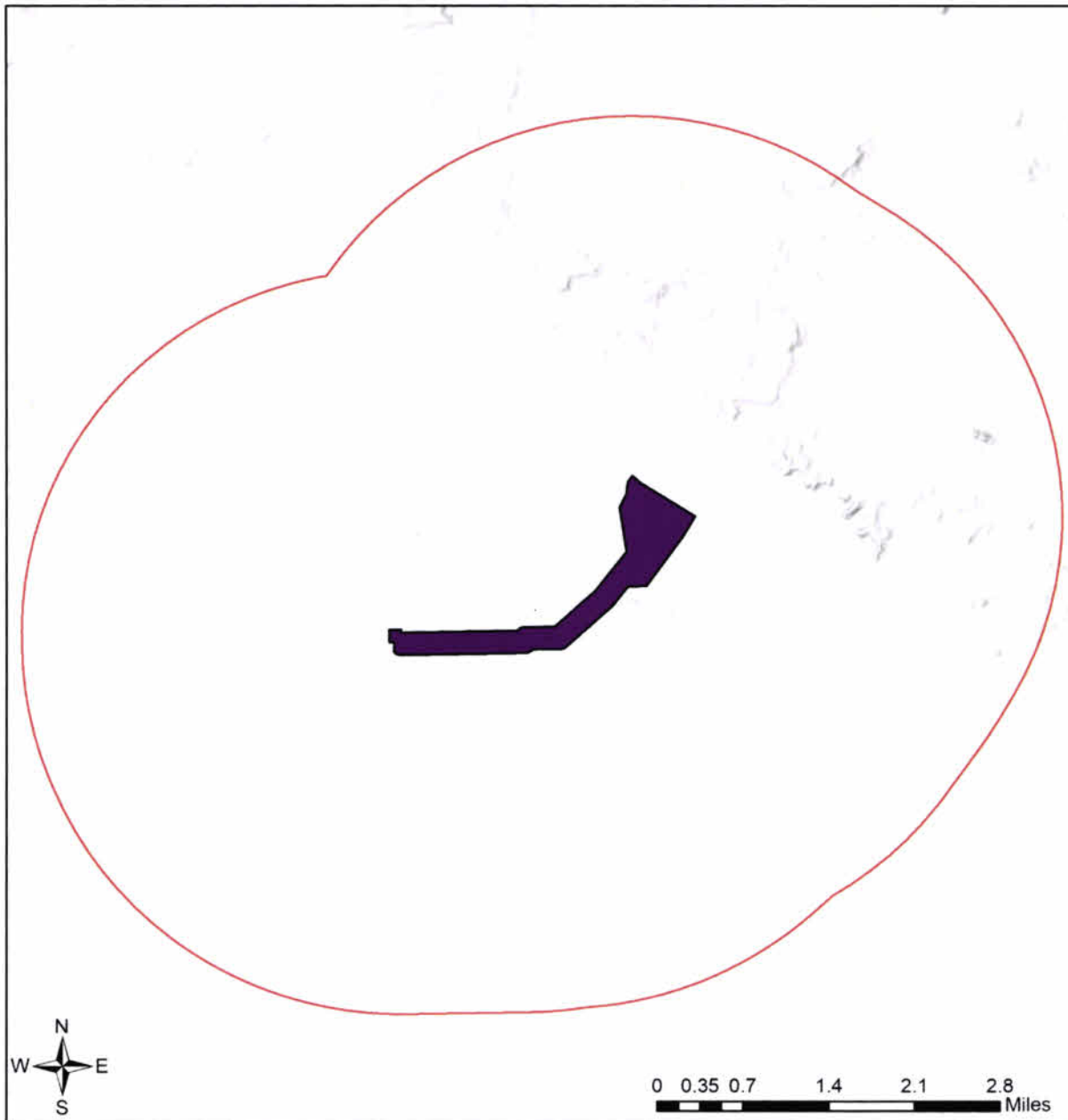
Project Size (acres): 474.14
Lat/Long (DD): 34.9304 / -110.3100
County(s): Navajo
AGFD Region(s): Pinetop
Township/Range(s): T18N, R19E
USGS Quad(s): JOSEPH CITY




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



Obed Meadows

Web Map As Submitted By User

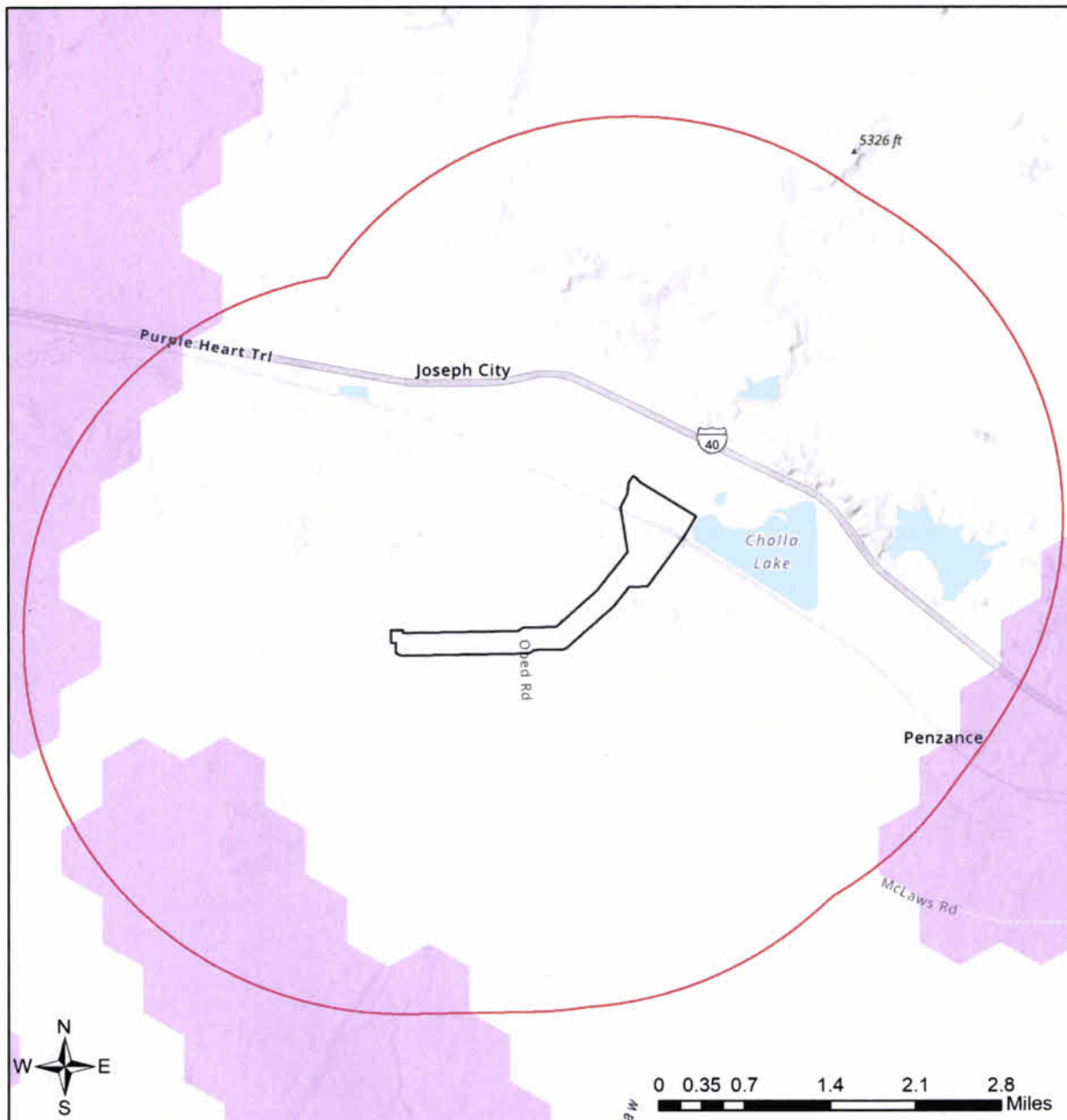


-  Project Boundary
-  Buffered Project Boundary
-  Project Boundary

Project Size (acres): 474.14
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Obed Meadows Important Areas



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

Project Size (acres): 474.14
 Lat/Long (DD): 34.9304 / -110.3100
 County(s): Navajo
 AGFD Region(s): Pinetop
 Township/Range(s): T18N, R19E
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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

Obed Meadows Township/Ranges and Land Ownership



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

Project Size (acres): 474.14
 Lat/Long (DD): 34.9304 / -110.3100
 County(s): Navajo
 AGFD Region(s): Pinetop
 Township/Range(s): T18N, R19E
 USGS Quad(s): JOSEPH CITY

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, 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
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
Little Colorado River	Apache/Navajo Counties Wildlife Movement Area - Riparian/Wash					
Lower Little Colorado River	Conservation Opportunity 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
Amsonia peeblesii	Peebles' Bluestar					
Astragalus xiphoides	Gladiator Milkvetch				SR	
Buteo swainsoni	Swainson's Hawk					2
Circus hudsonius	Northern Harrier					2
Errazurizia rotundata	Roundleaf Errazurizia			S	SR	
Pediocactus peeblesianus ssp. peeblesianus	Peebles Navajo Cactus				HS	
Rana pipiens	Northern Leopard Frog		S	S		1
Sclerocactus whipplei	Whipple's Fishhook Cactus				SR	

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
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 herpetofauna (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 (<https://azstateparks.com/>).

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 Conservation Opportunity Area (COA). While there are many areas in Arizona that present abundant conservation opportunities, COAs are specific areas on the landscape that the Department identified as having the greatest potential for conservation efforts. COAs were identified using species and habitat data, the presence of unique landscape features, and Departmental expertise. COAs range in size, scope, and focal species and/or habitats and are strictly a non-regulatory conservation tool for the public and our conservation partners to consider. For more information regarding this particular COA near your project area and the Department's suggestions for potential conservation efforts, please visit the COA profile at

<https://awcs.azgfd.com/conservation-opportunity-areas>.

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.

APPENDIX B-2
**Cultural Resources Inventory for the Obed Meadow
Generation Tie-Line Project, Navajo County, Arizona**

**STATE HISTORIC PRESERVATION OFFICE
SURVEY REPORT SUMMARY FORM**

1

1. REPORT TITLE

1a. Report Title: Cultural Resources Inventory for the Obed Meadow Generation-Tie Transmission Line (Gen-Tie Line) Project, Navajo County, Arizona

1b. Report Author(s): Deborah Huntley, PhD, RPA

1c. Date: April 12, 2022 **1d. Report No.:**

2. PROJECT REGISTRATION/PERMITS

2a. ASM Accession Number: 2022-0169

2b. AAA Permit Number: 2021-044bl

2c. ASLD Lease Application Number(s):

2d. Other Permit Number(s):

3. ORGANIZATION/CONSULTING FIRM

3a. Name: Tetra Tech, Inc.

3b. Internal Project Number: 194-1018-0025-02

3c. Internal Project Name: Obed Meadow Gen-Tie Line Project

3d. Contact Name: Deborah Huntley

3e. Contact Address: 350 Indiana Street, Suite 350, Golden CO 80401

3f. Contact Phone: 720.340.9474

3g. Contact Email: Deborah.Huntley@tetrattech.com

4. SPONSOR/LEAD AGENCY

4a. Sponsor:

4b. Lead Agency: Arizona Corporation Commission

4c. Agency Project Number(s):

4d. Agency Project Name:

4e. Funding Source(s):

4f. Other Involved Agencies:

4g. Applicable Regulations: State Historic Preservation Act, Arizona Revised Statutes Sections 41 861

5. DESCRIPTION OF PROJECT OR UNDERTAKING: Aurora Solar LLC, a wholly-owned subsidiary of Avangrid Renewables LLC (Avangrid) is proposing a 2.3-mile long 230 kilovolt (kV) Gen-Tie Line and associated collection substation (the Collector Substation and collectively, Project). The Gen-Tie Line will interconnect directly into the Arizona Public Service (APS) owned 230kV Cholla

FINAL
Cultural Resources Inventory for the
Obed Meadows Solar Project



Navajo County, Arizona

Prepared for: Avangrid Renewables
1125 NW Couch Street, Suite 700
Portland, OR, 97209

Prepared by: Tetra Tech, Inc.
350 Indiana Street, Suite 500
Golden, CO 80401

December 2021

CONTAINS SENSITIVE INFORMATION. NOT FOR PUBLIC DISTRIBUTION

FINAL
Cultural Resources Inventory for the
Obed Meadows Solar Project,
Navajo County, Arizona

By
Deborah Huntley, PhD, RPA
Wendy Cegielski, PhD, RPA
Jessica DeMaso, MA

Prepared for:
Avangrid Renewables
1125 NW Couch Street, Suite 700
Portland, OR, 97209

Prepared by:
Tetra Tech, Inc.
350 Indiana Street, Suite 500
Golden, CO 80401

December 2021

FOR OFFICIAL USE ONLY: Disclosure of site locations prohibited (43 CFR 7.18)
Information contained in this report is confidential and access to this information is restricted by the
National Historic Preservation Act of 1966 (as amended), the Archaeological Resources Protection Act of
1979 (as amended).

ABSTRACT

Aurora Solar LLC, a wholly-owned subsidiary of Avangrid Renewables LLC (Avangrid) is considering the development of a solar power facility, the Obed Meadows Solar Project (Project), located immediately south of Interstate 40 and approximately 1 mile south of Joseph City, Navajo County, Arizona. The Project Area covers approximately 2,004 acres of undeveloped private land consisting of two parcels (approximately 1,297 and 648 acres) and an approximately 3.4-mile generation tie (gen-tie) line. Potential Project components include a solar array, access roads, electric collector lines, a substation, an operations and maintenance facility, and laydown areas.

Tetra Tech, Inc. (Tetra Tech) completed a cultural resources inventory of the 2,004-acre Project Area at the request of Avangrid. In addition to the pedestrian archaeological survey, Tetra Tech conducted archival research on cultural resources in the Project Area to assist in the evaluation of newly recorded resources for listing on the National Register of Historic Places (NRHP) or Arizona Register of Historic Places.

This Project is situated on private property and there are no state or federal permit requirements. This investigation was requested by Avangrid for internal due diligence only and is not intended to meet specific county, state, or federal cultural resource management requirements. However, cultural resources investigations were conducted to comply with the Arizona State Historic Preservation Act (State Historic Preservation Act, Arizona Revised Statutes Sections 41 861) in the event that Arizona State Historic Preservation Office review is required in the future. The report includes evaluations of the potential of documented sites to be eligible for listing in the NRHP following the guidelines outlined in Section 106 of the National Historic Preservation Act (16 United States Code Section 40 et seq.), as well as site management recommendations.

Archival research and survey efforts for the proposed Project have documented six new cultural resources: three historic sites (OM-06, OM-07, OM-27) and three prehistoric sites (OM-02, OM-09, OM-25). Sites OM-9 and OM-25 are prehistoric petroglyph panels that are recommended eligible for the NRHP under Criteria A, C, and D. Tetra Tech recommends that these sites be avoided by Project activities. Sites OM-06, OM-07, OM-27, and OM02 are recommended not eligible for listing in the NRHP and no further management of these sites is necessary. Several components of a large, diffuse lithic procurement area corresponding to geological and topographic features are not considered archaeological sites. Tetra Tech did not evaluate these non-site areas for NRHP eligibility, and no further management is necessary. One previously documented site, AZ P:3:1(ASM), was not found within the Project Area. This site is unevaluated for the NRHP and is not expected to be impacted by Project activities.

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Appendices

- Appendix A Results of Pre-Field Records Search
- Appendix B Survey Findings

Acronyms and Abbreviations

A.D.	Anno Domini
ARHP	Arizona Register of Historic Places
ASM	Arizona State Museum
Avangrid	Avangrid Renewables
B.C.	Before Christ
B.P.	Before the Present
CFR	Code of Federal Regulations
gen-tie	generation tie
GIS	geographic information system
GLO	General Land Office
MLCRV	Middle Little Colorado River Valley
mm	millimeter
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
Project	Obed Meadows Solar Project, Navajo County, Arizona
Project Area	approximately 2,004 acres of private land covering two separate parcels and a gen-tie line
Research Area	the Project Area and a 1-mile buffer
SHPO	State Historic Preservation Office
Survey Area	all portions of the Project Area with the exception of steep slopes and lithic procurement areas
Tetra Tech	Tetra Tech, Inc.
USGS	U.S. Geological Survey

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1 INTRODUCTION

1.1 Project Description and Location

Avangrid Renewables (Avangrid) is considering the development of the Obed Meadows Solar Project (Project), a solar power facility located immediately south of Interstate 40 and approximately 1 mile south of Joseph City, Navajo County, Arizona. The Project area covers approximately 2,004 acres of private land (Figure 1-1). The Project comprises two distinct parcels (approximately 1,296 and 648 acres), both south of the Little Colorado River. The two parcels and generation-tie (gen-tie) line are referred to as the "Project Area," and an approximately 3.4-mile gen-tie line that connects the two parcels and extend eastward beyond the smaller (eastern) parcel. The Project appears to be in entirely undeveloped desert. Legal locations of the Project are provided in Table 1-1. Potentially, the Project could consist of a solar array and associated Project facilities such as access roads, electric collector lines, a substation, an operations and maintenance facility, and laydown areas. These construction or development activities have the potential to affect cultural resources within the Project Area.

This report documents a cultural resources inventory of the Project Area conducted by Tetra Tech, Inc. (Tetra Tech) at the request of Avangrid. In addition to the pedestrian archaeological survey, the Tetra Tech cultural resources team conducted archival research on cultural resources in the Project Area to assist in the evaluation of newly recorded resources for listing on the National Register of Historic Places (NRHP) or Arizona Register of Historic Places (ARHP).

The "Survey Area" is coincident with the Project Area; however, approximately 70 percent of the Project Area was found to consist of a prehistoric lithic procurement landscape that mostly correlated with the tops of the buttes within the Project Area and was not surveyed systematically. Instead, reconnaissance was performed on the butte tops and they were mapped as combined topographic and cultural features. The Survey Area also excludes steep slopes (greater than 30 percent) for safety reasons.

Table 1-1. Legal Description of Project Location

Baseline and Meridian	USGS Quadrangle	Township	Range	Section
1865; Gila and Salt River Meridian	Apache Butte	18N	18E	24, 25
1865; Gila and Salt River Meridian	Joseph City	18N	19E	29



Figure 1-1. Obed Meadows Solar Project Location

1.2 Regulatory Context

This Project is situated on private property, and there are no state or federal permit requirements. This investigation was requested by Avangrid for internal due diligence only and is not intended to meet specific county, state, or federal cultural resource management requirements. However, cultural resources investigations were conducted to comply with the Arizona State Historic Preservation Act (State Historic Preservation Act, Arizona Revised Statutes Sections 41-861) in the event that Arizona State Historic Preservation Office (SHPO) review is required in the future. The report includes evaluations of the potential of documented sites to be eligible for listing in the NRHP following the guidelines outlined in Section 106 of the National Historic Preservation Act (NHPA) (16 United States Code Section 40 et seq.), as well as site management recommendations.

1.3 Project Personnel

The field crew for pedestrian survey included Stephen Anderson, MA, Jessica DeMaso, MA, Nick Dungey, MA, Katelyn Frederick, MA, Jennifer Lemminger, BA, and Johnny Schaefer, MA. The crew for survey-level testing conducted in September 2021 included Stephen Anderson, Suzanne Eckert, PhD, Katelyn Frederick, MA, and Aliceia Schubert. Deborah Huntley prepared this report with the assistance of Suzanne Eckert and Jessica DeMaso. Dr. Deborah Huntley served as Principal Investigator and prepared this report with the assistance of Dr. Wendy Cegielski and Jessica DeMaso. Madison Wood managed Project geographic information system (GIS) data and prepared the report maps with the assistance of Lauren Zager.

1.4 Report Organization

This report details environmental and cultural background, research methodology, results of the pre-field literature review, field survey results, NRHP eligibility evaluations, and management recommendations for the Project. It includes two appendices that provide supporting documentation: Appendix A – Results of Pre-Field Records Search, and Appendix B – Survey Findings.

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2 METHODS

The purpose of this investigation is to establish the presence or absence of cultural resources older than 50 years within the Project Area and to evaluate the significance of those resources. This investigation included a literature review to identify the presence of previously documented archaeological sites and surveys, as well as historic structures and roads within the Project Area and a 1-mile buffer around the Project Area (the Research Area). This investigation also included pedestrian survey to identify the presence or absence of any previously undocumented archaeological sites, isolated finds, or architectural properties within the Project Area. If any significant cultural resource located within the Project Area has the potential to be adversely affected by the proposed Project, Tetra Tech recommends avoidance of the resource so as to mitigate any potential adverse impacts. Recommended management measures are intended as guidelines for Avangrid as the Project moves forward; there are no state or federal regulations that mandate avoidance of cultural resources on private land.

2.1 Background Research

Tetra Tech conducted a site records search and literature review to determine if previously recorded cultural resources are present within the Research Area. Tetra Tech staff conducted the search using the AZSITE online GIS database, which includes records of previous archaeological investigations and all previously documented cultural resources (prehistoric and historic archaeological sites and historic architectural resources) that have been registered with the Arizona State Museum (ASM) Archaeological Records Office. GIS shapefiles for previous investigations and documented cultural resources in the Research Area were provided by the AZSITE database administrator on May 18, 2021. The records research also included a review of the National Park Service's online database for properties listed on the NRHP, as well as the Arizona State Register of Cultural Properties. Tetra Tech also reviewed historic Arizona General Land Office (GLO) records to determine whether vestiges of trails, transportation routes, homesteads, or other historic resources were present in the Project Area. Results of the records search were reviewed prior to the initiation of fieldwork and incorporated into the approach for the pedestrian survey.

2.2 Field Methods

The following survey methodology was developed in accordance with *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (48 Federal Register 44716-44740; NPS 1983) and applicable protocols established by the ASM *Archaeological Site Recording Manual* (ASM 1993). Tetra Tech followed this methodology to ensure compliance with Arizona State regulations in the event that SHPO review of this Project becomes necessary in the future.

2.2.1 Pedestrian Survey

A systematic pedestrian surface survey at 15-meter interval transects was conducted to determine the presence or absence of artifacts or features visible on the surface within the Survey Area, as described in Section 1.1. Approximately 70 percent of the Project Area was found to be a large, low-density prehistoric lithic material procurement area with no diagnostic artifacts that

mostly correlated with the tops of the buttes within the Project Area. Rather than attempting to survey these lithic procurement areas systematically, the butte tops were surveyed topographically by mapping the circumference of the butte, and thus, the lithic procurement areas. These areas were designated as non-sites and should be considered conjointly as a lithic procurement landscape (see Section 2.2.2).

A tablet operating Collector for ArcGIS® with a Geode submeter receiver was used to navigate the Survey Area and document resources. GIS shapefiles for the Project Area were provided by Avangrid; the Project Area was not flagged or otherwise demarcated on the ground. Survey was conducted from October 24 – 29, 2021. The field crew consisted of Stephen Anderson (Principal Investigator and Field Supervisor), Jessica DeMaso, Nick Dungey, Katelyn Frederick, Jennifer Lemminger, and Johnny Schaefer.

2.2.2 Site Delineation

The ASM *Archaeological Site Recording Manual* defines a site as “physical remains of past human activity” that are at least 50 years old. Sites must also have at least one of the following:

- More than 30 artifacts of a single class within a 15-meter diameter area;
- At least 20 artifacts of two or more classes within a 15-meter diameter area;
- One or more archaeological features in association with artifacts; or
- Two or more archaeological features without associated artifacts.

Isolated features without associated artifacts can be recorded as sites at the discretion of the archaeologist. A site may consist of secondarily deposited materials. As discussed in Section 5.3, several large, lithic procurement areas were identified within the Project Area but are not considered sites because they do not meet the above requirements.

An isolated manifestation or isolated find, as defined by the ASM *Archaeological Site Recording Manual*, has fewer than 30 artifacts of a single class, fewer than 20 artifacts of at least two classes, or a single, undatable feature. Isolated finds are frequently found to be redeposited material lacking locational context and are not related to other nearby isolated finds or sites.

If isolated finds, artifact scatters, or features were identified during the pedestrian survey, an intensive surface survey of the area was conducted at 16- or 33-foot (5 or 10-meter) interval transects to delineate the site’s surficial boundaries. In general, a site boundary can be delineated when no artifacts can be found within 66 feet (20 meters) in any direction from the last artifact on the site periphery.

2.2.3 Site and Isolate Documentation

A Tetra Tech GIS Specialist designed a geodatabase specifically for the Project that was used to capture data in the field, as well as to manage and display features for quality control and electronic client deliverables. The geodatabase prepared by the GIS Specialist contains three feature classes for data capture: artifact, feature, and site. Additional attribute data that were built into the geodatabase are present as drop-down menus, which allow specific feature information to be gathered in the field. Within the geodatabase, various attributes were described, including

but not limited to: recorder, date, topography, vegetation cover, land use, site condition, site type, measurements, affiliation, and avoidance recommendations. Site boundaries were flagged and recorded with a sub-meter-accurate global positioning system device in Universal Transverse Mercator coordinates referenced to the 1983 North American Datum. The locations of temporally or culturally diagnostic artifacts and features were also recorded with the global positioning system and assigned Field Specimen numbers. Photographic documentation included photographs in each of the cardinal directions as well as features and/or temporally or culturally diagnostic materials in situ. Standard Tetra Tech field forms were used to adequately record sites.

Isolated finds were also documented. The information recorded for each isolated find included location, artifact or feature type, and description, as well as measurements. Isolated diagnostic artifacts and features were photographed.

2.2.4 Previous Surveys and Previously Recorded Sites

All previously recorded sites in the Project Area were redocumented in order to assess the current condition and integrity of each site. Redocumentation included updated site descriptions, in-field artifact analysis (if applicable), site mapping, and photography.

2.2.5 Assigning Cultural Affiliation

Tetra Tech assigned cultural-temporal affiliation to sites in the Project Area when possible following the *ASM Archaeological Site Recording Manual*. This was possible for unambiguous site types, such as prehistoric artifact scatters with diagnostic ceramic types. Sites with indeterminate cultural affiliation or multicomponent sites (sites with both prehistoric and historic components) were noted as such.

2.2.6 Collection Strategies

It is Tetra Tech's policy to not collect artifacts during the pedestrian survey (identification phase) of an investigation unless adequate data on the artifact cannot be collected in the field. No artifacts were collected for this Project.

2.2.7 Field Conditions

Land use, ground cover, and surface visibility were documented during the pedestrian survey. The Project Area is mostly undeveloped land, with a few roads, historic features, a collapsed structure, and the Cholla Power Plant to the east. Weather conditions in October 2021 were very dry and moderate. Ground surface visibility was excellent overall, averaging about 60 percent. A number of large buttes fill the northern half of the Project Area (Figure 2-2). The Little Colorado River is less than 1 mile north of the Project Area (Figure 2-3); in some places it is within about one-tenth mile. Vegetation tends to concentrate along arroyos. Prominent two-track roads within the private land to the west of Obed Road are frequent across the Project Area and are visible from satellite maps. The two-track roads to the east of Obed Road are restricted and were not viable options when the crew was in the field. Trash is common along the shoulders of Obed Road.



Figure 2-1. Example of Buttes in the Northern Half of the Survey Area



Figure 2-2. Southern Floodplain of the Little Colorado River in the Northern Survey Area

3 ENVIRONMENTAL AND CULTURAL SETTING

3.1 Environmental Context

A brief overview of environmental conditions (past and present) in the Project vicinity is necessary to provide a foundation for understanding past human subsistence and settlement patterns in the region. Understanding how environmental variables (e.g., availability of food, water, fuel, and tool materials) affected past decision-making processes can lead to a greater awareness of a region's cultural resources.

The Project is located within the Colorado Plateau physiographic province, an area encompassing over 150,000 square miles of the region known as The Four Corners. The Colorado Plateau is bounded on the north by the Uinta Range, on the east by the Rocky Mountains, and on the west by the Wasatch Range (Kosik 2005). The southern boundary of the Colorado Plateau is the Mogollon Rim, a steep rock wall that drops into the Transition Zone physiographic province. The portion of the Colorado Plateau located in north-central Arizona is known colloquially as Red Rock Country due to its remarkable red sandstone cliffs and sandstone spires.

Approximately 60 to 70 million years ago, the earth's tectonics pushed the Colorado Plateau up as one unit causing the Colorado River to run downhill with increasing force, resulting in the Grand Canyon. Additionally, the folding of sedimentary rock layers resulted in sharp uplifts called monoclines. The Chinle Formation, a continental, Triassic Age geological formation of fluvial, lacustrine, and palustrine to eolian deposits, forms the colorful badlands, mesas, and buttes of the Petrified Forest National Park and the Painted Desert (Kosik 2005). Presently, elevations of the Plateau range from 2,000 feet to 7,000 feet above mean sea level on plateau tops. Mountains and ancient volcanos, and plateaus interspersed with deep river canyons and dry gullies are also part of the Colorado Plateau.

The Project Area contains rocks from the Holocene (11,650 years ago to present) extending back to the Early Triassic (230 to 245 million years ago); rocks mainly consist of sedimentary rocks and surficial deposits. The oldest rocks are Early Triassic sedimentary rocks derived from sandstone, mudstone, and gypsum. These rocks were deposited on a low-relief coastal plain and now make up some of the steeper butte formations. The most-recently formed rocks are Holocene surficial deposits made up of unconsolidated sands and gravels on the river plain and in the river channels of the Little Colorado River (Richard et al. 2000).

The Project is located within the east-west running Arizona/New Mexico Plateau ecoregion, the southern region of the Colorado Plateau. The Arizona/New Mexico Plateau is characterized by a local relief that varies from a few feet to over 1,000 feet along slopes. Researchers have subdivided the Arizona/New Mexico Plateau into 16 smaller ecoregions. The Project is located within the Little Colorado Valley/Painted Desert ecoregion, an area that is lower, warmer, and drier than surrounding regions. The vegetation consists largely of desert scrub and includes mound saltbush (*Atriplex obovata*), fourwing saltbush (*Atriplex canescens* var. *angustifolia*), shadscale (*Atriplex confertifolia*), Mormon tea (*Ephedra antisiphilitica*), yucca, alkali sacaton (*Sporobolus airoides*), galleta, black grama (*Bouteloua eriopoda*), Indian ricegrass (*Achnatherum hymenoides*), and gyp dropseed (*Sporobolus nealleyi*), although rangeland deterioration from overgrazing is noticeable. Fauna present in the region includes the Gunnison prairie dog

(*Cynomys gunnisoni*) (a keystone species), burrowing owls (*Athene cunicularia*), weasels, badgers, and several species of snakes (Griffith et al. 2014).

Soils in the region consist of brownish and grayish saline and sodic soils. Saline soils contain excess levels of soluble salts in the soil water. Sodic soils have excessive levels of sodium causing poor physical soil structure. Soils range from very deep and well-drained to poorly drained and gently sloping. Purgatory-Claysprings and Badlands soils are present in the vicinity as well. These soils are moderately deep and shallow, well-drained, and loamy, loamic-gypsic, and clayey soils (USDA NRCS 2005).

The climate of the Colorado Plateau overall is arid with less than 10 inches of rain annually; Holbrook, Arizona (the major city closest to the Project) receives 9 inches of precipitation and 272 days of sun on average annually. Most of the precipitation falls in winter and summer; monsoons are common in the summer. The annual, average high temperature in Holbrook is 74 degrees Fahrenheit and the average low is 39 degrees Fahrenheit (U.S. Climate Data 2021).

The hydrology of the region is dominated by the Little Colorado River, just north of the Project Area. The Little Colorado River drainage is extensive. Currently, the river stretches 340 miles and is a wide, braided wash containing water after heavy precipitation. Important tributaries near the Project's vicinity include the Puerco River, Cottonwood Wash, and Zuni River. Archaeological remains found along the side drainages and near the river indicate that prehistoric peoples practiced floodwater farming and possibly constructed irrigation canals. Colton (1939) noted that the Little Colorado River was narrower during the 1880s compared to present conditions with cottonwood trees growing along the banks and beavers swimming in pools (Hays et al. 1991).

The paleoenvironment in the region differed from the present day in several respects. Paleoenvironmental reconstructions indicate that around 4000 years Before the Present (B.P.), the climate was like the present day with alternating periods of more or less precipitation. The years between A.D. 950 and 1150 was a period of increased moisture. However, A.D. 250 to 400, A.D. 800 to 950, and A.D. 1350 to 1500 were periods of low effective moisture, low water tables, and down-cutting with greater variability in rainfall (Euler et al. 1979; Gumerman 1988). Records indicate that a particularly severe drought occurred between A.D. 1275 and A.D. 1300 that degraded the alluvial valleys. The degradation persisted until A.D. 1475 along with extremely variable precipitation (Hays et al. 1991).

As noted above, the Little Colorado River of the past may have been narrower and supported a compliment of plant and animal species including cottonwood trees along banks and beaver colonies as well as antelope, white-tailed deer (*Odocoileus virginianus*), elk (*Cervus canadensis*), bighorn sheep (*Ovis canadensis*), bison (*Bison bison*), and waterfowl (Burton 1990; Colton 1937). Due to overgrazing, the current vegetation is sparser than it would have been in the past. Additionally, a fourth major drought period that began around A.D. 1875 combined with overgrazing and groundwater pumping may have exacerbated the draining of local springs and the eventual invasion of juniper into the grasslands (Stewart 1980).

3.2 Cultural Context

A general understanding of the history of human occupation in the Project vicinity is necessary to interpret prehistoric and historic cultural resources documented as part of this Project. This

cultural context summarizes major trends through time, beginning with the Paleoindian period and concluding with the historic period. Where possible, more detail is provided about important regional trends and local developments.

The Project is located in the Middle Little Colorado River Valley (MLCRV) of north-central Arizona on the Colorado Plateau. Archaeological research has been conducted in the area since the late 1800s, and numerous chronologies and cultural frameworks have been proposed and refined. The following summary of the culture history of the region is based upon Lange et al.'s 2011-2016 Rock Art Ranch investigations. The culture history of the region is divided into seven periods: Paleoindian (ca. 9500-7600 B.C.); Archaic (7600 B.C.-1500 B.C.); Pre-ceramic Agricultural (1500-800 B.C.); Early Agricultural (Basketmaker II) (800 B.C.-A.D. 500); Farming-Ceramic (Basketmaker III/Pueblo I-IV) (A.D. 500-1400); Post-Pueblo (Early Apache and Yavapai) (A.D. 1400-1583); Early Historic (Historic Navajo, Apache, and Yavapai) (A.D. 1583-1850); and Historic (Early Anglo Ranching) (A.D. 1850-1960). Each period is described in the following sections.

3.2.1 Paleoindian Period (ca. 9,500 to 7,600 B.C.)

Opinions vary as to the timing of the first human occupations in North America; pre-Paleoindian groups could have arrived near the Last Glacial Maximum, around 16,500 to 13,000 years ago (Goebel et al. 2008). Paleoindian sites, typically characterized by the presence of diagnostic projectile point forms found either in isolation or in association with small scatters of chipped stone artifacts, are believed to represent the earliest remains of human occupation in the American Southwest. The Pre-Clovis concept is a contentious topic in Paleoindian studies, with archaeologists today landing on either side of the debate (Adovasio and Pedler 2013; Collins et al. 2013; Fiedel 2014; Shillito et al. 2020; Waters and Stafford 2014). The Pre-Clovis concept is the hypothesis that people predating Clovis groups—with no ancestral association with Clovis—inhabited or explored the Americas before the appearance of the Clovis tradition (Kornfeld et al. 2010; Waters and Stafford 2014). Like Clovis sites, Pre-Clovis rockshelters and campsites were produced as a result of hunter-gather activities and contain faunal remains, lithics, coprolites, and botanical materials (Waters and Stafford 2014). Solid candidates for Pre-Clovis occupations include the Friedkin site in Texas and the Lindsay site in Montana (Waters and Stafford 2014); there are no verified Pre-Clovis sites in the Research Area.

The Clovis complex is characterized by the manufacture of lithic tools on or from bifacial flakes through a unique process of bifacial thinning and flake removal, as well as consistent use of high-quality raw materials (Cordell 1997). Although some researchers debate the nature of Paleoindian subsistence, most concur that Clovis subsistence primarily focused on Pleistocene megafauna supplemented with small game animals and wild plants (Cordell 1997).

The end of the Clovis period was apparently characterized by increasing aridity that resulted in an eastern retraction of grasslands after 9,000 B.C. (Haynes 1991). By the time grasslands returned westward around 8,500 B.C., *Bison antiquus* was the dominant large game species. Bison prospered under the wetter conditions that stimulated lush grasslands and formed the economic basis of the Folsom complex (Frison 1993), which dates between 9,000 and 8,000 B.C.

Paleoindian sites within the MLCRV are defined by the presence of either Clovis or Folsom points, of which an abundance exists in the region. Early evidence of activity in the area includes Clovis

points found as surface finds near Sanders, west of Winslow, and within the Petrified Forest National Park, and Folsom points found near Sanders, St. Johns, Winslow, and Springerville. Paleoindian period points often are concentrated near canyon edges suggesting exploitation of seasonal resources and easy access to permanent water sources in locations like Chevelon Canyon or shallow wells like those in Chimney and Bell Cow Canyons. Projectile points most often were made from non-local cherts or petrified wood with some utilization of local cherts and gravels (Lange et al. 2016).

3.2.2 Archaic Period (7600 B.C.–1500 B.C.)

As Huckell (1996) points out, the term "Archaic" designates both a time period and a way of life characterized by broad spectrum hunting and gathering that emphasized plant seed resources as well as both small and large game. As defined initially, the Archaic, or Desert Culture (Fowler and Jennings 1982; Jennings 1964), was characterized by subsistence strategies based on small game and wild plant resources, use of the spear and atlatl, a variety of projectile point forms, the use of milling implements, and a lack of horticulture and pottery. Irwin-Williams (1968, 1973) was one of the first researchers to differentiate regional Archaic cultural phases within the broader Desert Culture adaptation. Today, scholars apply the term Archaic, or Western Archaic (Irwin-Williams 1968:48), broadly to Southwestern aceramic sites postdating Paleoindian occupations and predating Early Agricultural occupations.

Climatic changes are a key factor in the adaptations and distributions of populations during the Archaic period (Irwin-Williams 1979; Van Devender and Spaulding 1979). During the Archaic period, subsistence strategies gradually moved away from the dependence on big game common in the Paleoindian period toward a broad-based hunting and gathering adaptation. This shift was a response to environmental changes that occurred throughout the Southwest during the post-glacial era.

Archaic period sites are represented in the Project's vicinity with sites near Petrified Forest National Park represented by excavations at Hay Hollow Valley, Little Ortega, and Laguna Salado lakes south of the park, and at sites far north and east of the park (Stewart 1980; Tagg 1987). Basin metates, basketry, bifacial tools, Bajada and Jay-style projectile point types, and a lack of pottery are considered diagnostic of the Archaic period in this region (Burton 1991; Irwin-Williams 1973). Many Archaic site assemblages in the region were initially classified as part of the Concho Complex defined from a group of 30 lithic sites near Concho, Arizona (Wendorf and Thomas 1951). Currently, these sites are thought to be part of the Pico cultural unit, an extension of the Desert Culture of the Southwest. Projectile points resemble Pinto-Gypsum, San Jose, and Cochise Culture types (Irwin-Williams 1967; Stewart 1980).

3.2.3 Pre-ceramic Agricultural (1500–800 B.C.)

A lack of ceramics and increasing evidence of sedentism and agricultural practices define the Pre-ceramic Agricultural period. Pre-ceramic sites are concentrated near the bottoms of canyons, especially Chimney and Bell Cow Canyons, to take advantage of the greatest variety of natural resources, including plants, animals, water, and lithics. Edible Indian Ryegrass grows in the regions surrounding the canyons. Features found within Pre-ceramic Agricultural period sites in Chimney Canyon either functioned as storage or had thermal uses (Lange et al. 2016). Maize is

absent from assemblages suggesting reliance on processing local grasses and other edible plants for food.

3.2.4 Early Agricultural Period (Basketmaker II) (800 B.C.–A.D. 500)

Changes in lithic reduction intensity during this period, marking a transitional shift from the production of formal biface tools to the use of expedient flake technology, indicate increasing sedentism (Burton 1991). Dwellings consist of shallow to deep pithouses with slab-lined cists located on buttes or dune ridges.

The first uses of ceramics in the region occurred during the latter portion of the Early Agricultural (Basketmaker II) period. Adamana Brown pottery and side-notched projectile points characterize Early Agricultural period sites along with small amounts of Lino Gray and Woodruff Brown pottery. Burton (1991) mentions that sites with Adamana Brown pottery are larger and may represent the initial settlement of the region or the migration of peoples who utilized paddle-and-anvil techniques from the south. Plog (1983) argues that sites with Adamana pottery are characterized by a strong normative pattern in terms of location, architecture, and ceramics reflecting possible specialization and exchange.

Sivu'ovi (AZ Q:1:114[ASM]) in Petrified Forest National Park is an example of a Basketmaker II settlement. The site contains over 45 pit structures and Adamana Brown pottery, over 2,600 flaked stone artifacts, 26 groundstone artifacts, and numerous faunal and floral remains. Burton (1991:v) states, "Lithic analysis indicates that the lithic technology, with a high percentage of formal tools and faceted platforms, shows stronger affinities with the Archaic tradition than with the later Pueblo period, while ground stone at Sivu'ovi most resembles Pueblo period types. In both respects Sivu'ovi appears to be transitional between the Archaic and Pueblo periods." Maize agriculture is indicated by pollen and floral analysis and architecture and artifact caches suggest warm-season occupation at Sivu'ovi.

3.2.5 Farming-Ceramic (Basketmaker III/Pueblo I-IV) Period (A.D. 500–1400)

The Farming-Ceramic period begins with what archaeologists have termed the Basketmaker III period to the Pueblo I period (A.D. 700-950). The first year-round villages in the form of 5 to 15 pit houses appear at approximately A.D. 700 along with the development of simple social hierarchies (Lightfoot 1981). The pit houses may possess wall niches, floor pits, and entry ramps. The presence of Kana-a Black-on-white, Kiatuthlanna Black-on-white, Woodruff Brown, and Lino Black-on-gray ceramics indicate sites from this period. Trough metates and corner-notched projectile points are common in this period (Burton 1991).

During the Pueblo II and III periods (A.D. 950-1300), corrugated pottery appears along with above-ground habitation rooms. Slab metates and side-notched projectile points were in use. Pottery types such as Holbrook Black-on-white, Puerco Black-on-white, Black Mesa Black-on-white, and Showlow Black-on-red are present throughout the Pueblo II and III periods while Walnut Black-on-white, Padre Black-on-white, Tularosa Black-on-white, Snowflake Black-on-white, and St. Johns Polychrome are present later. Great kiva sites, such as McCreery Pueblo (PEFO Site 236; Jones 1986) and the Plaza Site (Gumerman 1969) appear along with smaller sites of 8 to 15 rooms clustered around the great kiva sites. Archaeologists have noted that

between A.D. 1100 and 1250, settlements elsewhere increased in size through aggregation while in the more marginal environments of the Petrified Forest and the Hopi Buttes, aggregation is not evident (Burton 1991; Gumerman and Skinner 1968).

The Puerco Ruin, located in the Petrified Forest National Park, is situated on a small mesa overlooking the Puerco River and is an excavated example of a pueblo from the Pueblo III (and Pueblo IV) periods. Occupation of the ruin is thought to be between A.D. 1200 and A.D. 1350, qualifying it as a late Pueblo III to middle Pueblo IV occupation. The ruin consists of one-story pueblo with over 100 masonry rooms surrounding an open plaza along with a low density lithic scatter and petroglyphs. The petroglyphs, largely found on boulders, consist of 852 elements of Pueblo III and IV designs in six broad categories: anthropomorphs, kachinas, hands/tracks, zoomorphs, geometrics, and indeterminate (Burton 1990). The rock in the area during this period is part of the Palavayu rock art expression that began during the Pueblo II period and continued until approximately A.D. 1400. Tapamveni is the Hopi word for "hammered mark" or "pounded sign" and Palavayu in Hopi means "red river," a term referring to the area along the MLCRV. The function of rock art in the region is unclear, but many instances appear to mark important travel routes (McCreery and Malotki 1994).

The Pueblo IV period (A.D. 1300-1450) is characterized by considerable cultural upheaval and population migration. The introduction of the Kachina Cult, as well as the development of large sites with over 100 rooms, kivas, and plazas, are included in this time period. Rock art with piki stones and kachinas is material evidence of the Kachina Cult. Sites often contain small triangular points and ceramics such as Homol'ovi Corrugated, Black-on-red and Polychrome, Awatovi and Jeddito Black-on-yellow, Pinedale and Fourmile Polychrome, and Zuni glaze wares. Jeddito Black-on-yellow and Zuni glaze ware are considered late (Homol'ovi) phase (Colton 1939).

The Homol'ovi cluster of archaeological sites located north of Winslow, Arizona contains several pueblos or villages, including ancestral Hopi pueblos. Homol'ovi had been abandoned for a period before its thirteenth century resettlement and reorganization by Puebloan emigrants from the Hopi Mesas. Villages in the Homol'ovi cluster are large and aggregated and display evidence for the careful rebuilding and redirecting of the use of rooms (Fladd 2015). Adams (2002) notes that aggregated villages at Homol'ovi can be divided between an early phase (Tuwiuca) and a late phase (Homol'ovi) and that several material changes occurred from the early to the late phase. For example, mean village size saw a 200 percent increase, plazas were enclosed, exchange was conducted through middlemen rather than reciprocally, and upland farming appeared with shrines and field houses. Mealing rooms and piki houses appeared as well as craft production precincts. Homol'ovi II, a 1,200-room pueblo occupied between A.D. 1290 and 1400, is an example of the level of aggregation seen during the late phase (LaMotta 2006). The Homol'ovi pueblos were abandoned around A.D. 1400.

The Hopi and the Zuni may have continued to utilize the MLCRV after A.D. 1400; however, the region remained largely unsettled until occupation by the Navajo around A.D. 1750 in the Petrified Forest National Park area and by Mormon settlers at Homol'ovi in A.D. 1876 (Burton 1991; Stewart 1980).

3.2.6 Early Historic (Historic Navajo, Apache, and Yavapai) (A.D. 1583–1850)

Early Historic (aka Post-contact) refers to the period where evidence for trade in European goods exists but just prior to direct European and American contact with indigenous cultures in North America. The Navajo, Western Apache, and the Southeastern Yavapai occupied the MLCRV during the Early Historic period and into the Historic Period.

Spanish colonists entering New Mexico during the seventeenth century called the Navajo Apaches de Nabajó reflecting the shared Athapaskan language origins of the Navajo with the Apache (Brugge 1983). Archaeologists do not agree on the migration history of the Navajo in North America, however, Athapaskan-speaking peoples are thought to have migrated from the north some 1,000 years ago, either from somewhere on the High Plains or in the Rocky Mountains and arrived in the Southwest by the sixteenth century (Stewart 1980). Archaeologists suspect that the Athapaskan-speaking peoples split into two groups as they migrated down both sides of the Rocky Mountains. The group that settled in New Mexico territory, west of the northern pueblos, north of the Western Keresans and Zuni, and east of the Hopi were the predecessors of the Navajo. This group was characterized by subsistence based on hunting, fishing, and gathering, use of the sinew-backed bow, side-notched projectile points, harpoons, chute-and-pound game drives, conical houses, coiled baskets, and shamanistic religion.

By the time of the Spanish expeditions by Antonio de Espejo between 1582 and 1583 and the Spanish mission by Benavidas with accounts from A.D. 1625 and 1629, the Navajo were described as a semi-sedentary population who practiced maize agriculture, hunted at a distance from their fields, traded in meat, salt, and alum with the Puebloans, practiced polygamy, lived in subterranean rancherías, wore feathered headgear, and made arrows with stone points (Brugge 1983). After the destruction of the pueblo at Acoma in New Mexico in 1599, the Spanish relocated Puebloan fugitives with the Navajo and assigned the Navajo missionaries. The Puebloan culture eventually mixed with Athapaskan culture to produce a single, Navajo entity. Brugge (1983) notes that the horse and metal items may have been adopted by the Navajo during this time. The earliest Navajo archaeological remains are from the Navajo Reservoir area in New Mexico and include a selection of Navajo pottery types including Dineta Utility, Jemez Black-on-white, and polychromes.

By the early 1700s, the Navajo were practicing herding as their primary form of subsistence, were weaving wool, were raiding Spanish, Euro-American, and Native settlements, and were residing in relatively permanent groups of hogans occupied according to matrilineal, matrilocal extended families (Stewart 1980). The Project vicinity remained largely unsettled until occupation by the Navajo around A.D. 1750 in the Petrified Forest area. After the Long March of 1863 and after their internment by the U.S. government at Fort Sumner in De Baca County, New Mexico, the Navajo were relocated to their current reservation that extends from just west of Farmington, New Mexico in the east to approximately Cameron, Arizona, in the west, south to Leupp and Sanders, Arizona, and north to Montezuma Creek, Utah.

The Southeastern Yavapai lived in central Arizona before Euro-American expansion began in the 1860s, ranging between the San Francisco Peaks to the north, as far south as the mountains north of the Gila River, west to the mountains and lowlands along the Colorado River, and east to the Tonto Basin (Khera and Mariella 1983). The Yavapai followed a seasonal cycle harvesting

plant foods, by camping in areas where certain foods were available during a particular season. In the fall, they harvested nuts, seeds, berries, and the fruit of the banana yucca. In the summer, the Yavapai harvested agricultural crops and wild summer fruits, seeds, and berries. Often, seeds and nuts were ground on trough or concave grinding stones and stored in pots and baskets. Wild onion and wild potatoes were dug in winter (Khera and Mariella 1983). The Southeastern Yavapai were known to use caves and overhangs for shelter, food-caching, and burial (Whittlesey and Benaron 1998).

During the eighteenth and nineteenth centuries, the Yavapai occasionally visited the Spanish missions to the south of Prescott, Arizona, while Anglo-Americans visited the Yavapai during the nineteenth century (Khera and Mariella 1983). By the mid-1860s, Anglo settlers were taking Yavapai land and game and many Yavapai chose to settle, albeit temporarily, on the Colorado River Reservation in 1865. The U.S. Army forced all Yavapai onto reservations by 1873, wiping out a large band of Kewevkapaya in the process. The U.S. government relocated the Yavapai to the Apache Reservation at San Carlos in 1875.

The Western Apache likely arrived in the Southwest United States around A.D. 1400 from the north and by the mid-1600s the Apache claimed territory that extended from the Mogollon Rim across the Natanes Plateau to the Gila River (Opler 1983). Western Apacheans practiced hunting and gathering and horticulture before the seventeenth century, but then shifted toward agriculture during the seventeenth and eighteenth centuries (although mobile hunting and gathering remained the primary subsistence strategy).

Apacheans acquired the horse by the seventeenth century, increasing the geographical range of the Apache. The Western Apache were able to establish a large trade network reaching from the Hopi mesas to central Sonora. The Apache were known to have raided Spanish settlements in Arizona throughout the 1700s and Mexican settlements during the 1800s. Western Apache material culture is diverse but is commonly seen in the material record as Apache Plain ceramics that tend to be gray and possess striations or fingernail impressions and wickiups, constructed of tree branches for spring and summer shelter (Basso 1983; Seymour 2008). By the 1850s, Anglo-Americans discovered gold in Arizona, settlers swarmed into the area, and hostilities between the Western Apache and settlers increased. The U.S. government eventually forced the Western Apache onto reservations between 1874 and 1875 (San Carlos Reservation) (Basso 1983).

Western Apache sites often include campsites with the following characteristics: 1) stone rings; 2) the use of rock shelters for living space; 3) thin brown to gray, sand tempered pottery with wiping marks; 4) chipped and ground stone tools; 5) some Euromerican items; 6) sparse artifact assemblages; and 7) site locations on rocky high points.

3.2.7 Historic (Early Anglo Ranching) Period (A.D. 1850-1968)

The Historic Period largely describes the activities of Euromerican settlers related to ranching and trails and transportation. The following overview discusses these themes as they relate to the Project.

The Spanish first introduced cattle to southern Arizona in the mid to late 1500s. Spanish missionaries throughout the seventeenth and eighteenth centuries brought thousands of cattle to southern Arizona to teach the local natives ranching as a permanent livelihood. During the early

1800s, the early years of the Mexican Republic, cattle had become the subject of Native raids and the mission system had weakened. By the 1840s, most of the ranches (now Mexican) were abandoned and most of the cattle were feral (Collins 1992).

In 1848, under the Treaty of Guadalupe Hidalgo which ended the U.S.-Mexican War, the region north of the Gila River became part of the United States. Euro-American settlement increased substantially after the forced removal of the Navajo, Apache, and Yavapai during the latter half of the 1800s. The Mormons established settlements in the area surrounding the Little Colorado River between 1872 and 1875, journeying from southern Utah and using the Old Beale Wagon Road in Arizona. Lot Smith, Jessie O. Ballenger, and George Lake, and William C. Allen established Mormon settlements near modern-day Arizona towns of Joseph City and Sunset Crossing near Winslow. Lake's settlement was called Obed Camp. The Mormons built a series of dams and water control ditches to assist in agricultural irrigation. By 1876, while most of the Mormon settlers had returned to Utah, the remaining settler built stockades around their houses to protect themselves against Native attacks. Brigham City and Woodruff also were settled by the Mormons. By 1885, many of the Mormon settlements had been abandoned, except for Joseph City (Wayte 1962).

During the 1880s, with the opening of the Southern Pacific transcontinental and the Santa Fe railroads, the cattle industry boomed in Arizona (Collins 1992). In 1881, the Atlantic and Pacific Railroad laid tracks through the area of Holbrook, Arizona, establishing Holbrook as a railroad town. Holbrook served the cattle ranchers who utilized the railroad to ship cattle, sheep, and wool. The second-largest cattle ranch in the U.S. with 60,000 cattle and hundreds of cowboys in the 1880s was the Aztec Land and Cattle Company (aka the Hashknife Outfit) located in Holbrook (Wayte 1962). In addition to cattle-driving trails, other features in the region related to cattle ranching include earthen stock tanks, corrals, and dry-laid stone walls.

In 1926, U.S. Route 66 was established in Arizona as a major east-west transcontinental highway, originally running from Topock to Kingman, from Kingman to Seligman, and from Seligman through Flagstaff, Winslow, and Holbrook, Arizona. The Arizona Department of Transportation decommissioned Route 66 in 1984 with parts of the Route replaced by Interstate 40 (Sonderman 2010).

From the end of World War II to the present, tourism related to historic Route 66, Native reservations, the Painted Desert, and the Petrified National Forest Park has increased, adding to the region's economy.

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4 LITERATURE REVIEW AND RECORDS SEARCH RESULTS

The purpose of the records search and literature review is to provide a general understanding of investigations that have occurred in the Project vicinity and the cultural resources identified by these investigations. The records search was conducted for a one-mile buffer around the Project Area (the Research Area).

4.1 Previous Archaeological Investigations

Table 4-1 summarizes previous surveys within the Research Area. Locations of previous surveys and previously documented cultural resources are provided in Appendix A. A total of seven previous investigations have been conducted in the Research Area; none cover portions of the Project Area. Three of the seven previous investigations are more than 20 years old, and four investigations were conducted between 2002 and 2010. The most recent investigation occurred in 2010 and included an 11-acre survey associated with the Obed Road Bridge Project.

Both of the previously recorded cultural resources documented in the Research Area are historic sites (Table 4-2). AZ I:15:156(ASM) is a segment of the historic Route 66 within the Research Area. Route 66 no longer spans the full route from Chicago to Los Angeles, but sections of the route are still intact. One such section is the Main Street through Joseph City, Arizona segment (AZ I:15:156[ASM]). Route 66 was the main thoroughfare through the country in the mid-1900s until the modern highway system was put in place. The highway that replaced Route 66 near Holbrook, Joseph City, and Winslow, Arizona is U.S. Highway 40. NRHP eligibility varies by segment.

Table 4-1. Previous Investigations within the Research Area

Agency No.	Year	Reference	Total Acres
1978-58.ASM	1978	Hammack, Laurens C. 1978. Required Documentation for the Guidelines for Making "Adverse Effect" and "No Adverse Effect" Determination for Archaeological Resources in Accordance with 36 C.F.R. Part 800; Arizona Department of Transportation Project I 40-4(49) Joseph City Interstate Freeway, Navajo County, Arizona. Arizona State Museum, Tucson, Arizona.	132.36
1990-43.ASM	1990	Wocherl, Helga. 1999. An archaeological survey on Tucson Boulevard between Fort Lowell Road and Prince Road, and on Drexel Road between Campbell Avenue and Tucson Boulevard, Tucson, Arizona. Desert Archaeology, Inc. Project Report No. 99-146. Tucson, Arizona.	457.92
2001-427.ASM	2001	Howell, Joseph. 2001. The Pen Rob Landfill Access Road Survey: A Cultural Resources Survey of a 3.0-Mile-Long Corridor in Navajo County, Arizona. SWCA, Inc. Environmental Consultants. SWCA Cultural Resource Report No. 01-20. Tucson, Arizona.	99.78
2003-321.ASM	2003	Lonardo, Cara, Judy Breen, and Lisa S. Grafil. 2002. A Cultural Resources Survey of Four Segments of Interstate 40 and Associated Frontage Roads, Coconino, Apache, and Navajo Counties, Arizona. LSD Technical Report No. 005255-003. Tempe, Arizona.	2,507.48
2003-323.ASM	2003	Webb, David. 2002. A Cultural Resources Survey of Business 40 in Winslow, Joseph City, and West Holbrook, and of Spur 40 in Navajo County, Arizona. LSD Technical Report No. 005255c. Tempe, Arizona.	260.22
2004-527.ASM	2004	Erickson, Kirsten, Ethan Morthon, and A.E. (Gene) Rogge. 2004. Cultural Resource Survey for Verizon Wireless Telecommunications Project: AZ3 Joseph City, Navajo County, Arizona. URS Corporation. URS Cultural Resource Report 2004-11(AZ). Phoenix, Arizona.	19.29
2009-674.ASM	2009	Tremblay, Adrienne M., Theodore Roberts, and Annmarie Kmetz. 2010. Cultural Resources Survey of Approximately 11 Acres for the Obed Road Bridge Project, Joseph City, Navajo County, Arizona. Report no. 09-380. SWCA Environmental Consultants, Phoenix, Arizona.	10.61

ASM = Arizona State Museum

AZ P:3:1(ASM), the Hashknife Range (Cattle Ranch) is a historic site that appears in the AZSITE database as a very large polygon. There is very little formal documentation available for this site. The 1961 ASM Archaeological Survey form on file indicates that the site is located south of the railroad opposite the community of Joseph City, and that historic buildings can be seen in Section 28 of the 1955 15 minute U.S. Geological Survey (USGS) topographic map for Joseph City and in Section 33 of Hashknife Tank. As discussed in below, Tetra Tech was able to verify some, but not all, of this information. The Hashknife Range in the 1880s and 1890s was one of Arizona's biggest cattle spreads built on railroad land grants that extended 40 miles from the railroad. The operation was run by cowboys with the Aztec Land and Cattle Co. Currently, the Burlington Northern Santa Fe Company runs this same railroad south of Joseph City, Arizona. The AZSITE site polygon covers the eastern portion of the Project Area (see Appendix A) but apparently has not been ground-truthed. AZ P:3:1(ASM) has not been evaluated for the NRHP.

For Official Use Only: Disclosure of Site Locations Prohibited (43 CFR 7.18)
Table 4-2. Previously Documented Archaeological Resources within the Research Area

Agency No.	Site Type	Cultural-Temporal Affiliation	NRHP Eligibility
AZ P:3:1(ASM)	Hashknife Range (Cattle Ranch)	Historic (A.D. 1880s-1890s)	Not Evaluated
AZ I:15:156(ASM)	Historic Route 66	Historic (A.D. 1920-1950s)	SHPO determined various segments eligible (various dates)
ASM = Arizona State Museum; in Project Area			

4.2 State and National Register Properties

Tetra Tech conducted a review of the National Park Service's online database for properties listed in the NRHP, as well as the Arizona State Register of Cultural Properties. Historic resource AZ I:15:156(ASM), Route 66, is 0.6 mile north of the Project. The Arizona SHPO has determined various segments of this historic road to be eligible for the NRHP.

4.3 Architectural Properties

The records search determined that there are no previously documented architectural properties with extant historic buildings within the Project Area.

4.4 Historic Atlas, Map, and Aerial Photograph Review

In addition to reviewing previous surveys, as well as archaeological and architectural site forms, Tetra Tech also reviewed GLO maps, plat maps, and aerial photos to identify the presence of farmsteads, villages, towns, trails, roads, railroads, and other manmade features that may be encountered during the field survey.

Review of available historic aerials and topographic maps for the Project Area depict early and modern land use within the area and potential unrecorded cultural resources. Historic GLO Plat maps show the Project Area as undeveloped land with few roads in 1877. USGS topographic maps illustrate the Project Area as undeveloped land with one building and few roads from 1886 through 1971. Historic aerial imagery depicts the Project Area as rural agricultural land with few roads in 1943. By 1953, a building (ranch) with landscaping and a few roads are present in the Project. The Project remains primarily undeveloped agricultural land from 1970s to current times.

4.5 Resources Likely to Be Encountered in the Project Area

This section provides a general guideline for the range of cultural resources likely to be encountered during cultural resources surveys. The records search indicates that the types of prehistoric sites most likely to be encountered in the Survey Area include lithic scatters and tools, rock art, prehistoric ceramics, agricultural fields and other agricultural features, and habitation sites. Historic resources most likely to be found in the Survey Area include artifact and trash scatters, roads and trails, and irrigation features. Historic resources are likely to be archaeological, but could also have built environment components.

4.5.1 *The Tolchaco Focus*

In 1943, Katherine Bartlett proposed the Tolchaco focus to describe lithic artifacts she discovered at a series of surface sites in the Little Colorado River Valley. Bartlett states:

About eight years ago there was discovered in the valley of the Little Colorado River between Holbrook and Cameron in northern Arizona, evidence of an ancient alluvial terrace. Sand and waterworn pebbles largely derived from the Triassic Shinarump Conglomerate that once covered the area, form the deposit. The terrace which was formed by the gravels is now much dissected and remains only as the isolated flat tops of hills and ridges, the surfaces of which are covered with a desert pavement of waterworn pebbles. There are remnants also of later and lower alluvial deposits containing angular fragments of rock, of which a large proportion is made up of basaltic rocks from the San Francisco Peaks. In many places upon the desert pavement of the alluvial terrace are very crude implements roughly flaked from the pebbles, testimony of man's work at some time in the unknown past, when the pavements served as "quarries." The primitive culture represented is called the Tolchaco focus [Bartlett 1943:266].

Bartlett counted approximately 70 sites along the Little Colorado River consisting either of areas with worked pebbles and flakes or scattered implements. She interpreted the areas with scattered implements as "quarry" sites (Bartlett 1943). Bartlett also noted that the lithic artifacts were made mostly from chert pebbles, quartzite, and agatized wood. The stone tools Bartlett recorded were most commonly of one of two types: a keel-shaped scraper or a planing tool. Projectile points were absent and bifacial tools were rare.

At the time of her research, Bartlett could not determine the age of the sites but noted a resemblance to assemblages from the Lower Paleolithic of Europe. This evidence along with the crudeness of the manufacture of the lithic artifacts and a lack of associated pottery suggested a preceramic culture of origin (Bartlett 1943).

In 1976, Keller and Wilson collected a portion of a Tolchaco lithic scatter from site NA11,912 for analysis. They noted that while the gravels were thought to be primarily from the Shinarump Conglomerate, other sources including Kaibab Limestone cherts and Mogollon Rim gravels contributed to the gravels as well. Keller and Wilson (1976) also recorded artifacts not noted by Bartlett including groundstone and a projectile point. Sharrock (1966) suggested that the Tolchaco focus may have been the debris from later Ancestral Pueblo groups and that Bartlett's implements were cores, preforms, and flakes. Keller and Wilson's analysis lends support to Sharrock's

interpretation, but the dates of primary utilization of the Tolchaco areas have not been finalized at present. The Project overlaps many areas recorded as part of the Tolchaco focus.

5 RESULTS OF THE PEDESTRIAN SURVEY

During the pedestrian survey, six new cultural resources—three prehistoric sites and three historic sites—were identified in the Project Area. In addition, several non-site components of an extensive prehistoric lithic landscape were documented. No identifiable artifacts or features associated with the historic Hashknife Range (Cattle Ranch), AZ P:3:1(ASM), were found within the Project Area. Site and isolate locations are shown in Appendix B.

5.1 Previously Documented Sites

AZ P:3:1(ASM), the historic Hashknife Range (Cattle Ranch), was reportedly located in the Project vicinity. This site was documented in 1961 and appears in the AZSITE database as a very large polygon covering a large portion of the eastern Project parcel (see Appendix A). The site's NRHP eligibility has not been evaluated. Tetra Tech could find no evidence of this site in the Project Area. Based on a review of historic USGS topographic maps, ranch buildings likely were located to the east of the Project Area in Section 28 or Section 34. The buildings in Section 28 are no longer present on topographic maps by 1986, but the Section 34 buildings remain. The survey crew reporting seeing possible ranch features in the distance east of the eastern Project boundary.

5.2 Newly Discovered Sites

5.2.1 OM-02

Site OM-02 is located on a small hill with upland features to the south and an arroyo to the east. The site consists of a small prehistoric lithic flake and tool scatter containing 18 primary chert flakes, 37 secondary chert flakes, 81 tertiary chert flakes, 7 chert shatter pieces, 3 chert tested nodules, 1 secondary basalt flake, 1 tertiary basalt flake, 1 quartzite tested nodule, and 1 primary chert flake with a drill hole (FS-1). FS-1 measures 15.77 millimeters (mm) long by 13.48 mm wide and is 2.05 mm thick. The diameter of the uniconical drill hole is 6.19 mm wide and is on the ventral side of the flake where the bulb of percussion would be. This item may be a pendant. Vegetation on site consists of sagebrush, ephedra, cacti, salt brush, and various grasses. The soil consists of a light reddish brown silty loam.

5.2.2 OM-06

Site OM-06 is located on a flood plain with an ephemeral drainage running west to east and a few buttes to the west. An east to west trending two-track road runs along the north end of the site. The site consists of a historic trash scatter containing 3 blue glaze earthenware sherds, 4 blue glaze earthenware rims, 2 yellow glaze earthenware sherds, 1 white ware base, 1 sparkplug, more than 30 aqua glass shards, more than 150 amber glass shards, more than 5 amber glass bases, more than 5 amber glass necks, 4 light green glass shards, 1 light green glass base, 1 light green glass neck, 1 cobalt glass shard, more than 500 clear glass shards, more than 20 clear glass bases, more than 20 clear glass necks, 1 whole clear glass bottle, 28 milk glass shards, 1 milk glass neck, a metal drum ring, a metal spring bench seat, miscellaneous sheet metal, and 1 burning area (Feature 1). Three tertiary chert flakes were found within the site boundary, but they may have washed down from the large prehistoric Tolchaco lithic procurement area to the west.

Vegetation is concentrated around the perimeter of the site and consists of sagebrush, rabbitbrush, salt brush, yucca, and various grasses. The soil consists of a light reddish brown silty loam with approximately five percent small gravels.

5.2.3 OM-07

Site OM-07 is located on a flat sheet washed area approximately 5 meters south of an east to west trending two-track road and 50 meters north of an east to west trending ridge. The site consists of a historic domestic debris scatter containing 1 amber glass base, approximately 20 to 50 amber glass shards, 3 clear glass bases, 2 clear glass necks, approximately 100 to 150 clear glass shards, 1 clear glass bottle stopper, approximately 50 to 80 battery cores, 6 blue ceramic sherds, and 1 yellow ceramic sherd. The site is devoid of vegetation. The soil consists of a brownish red sandy silt.

5.2.4 OM-09

Site OM-09 is located on the southern face of a small butte of Moenkopi Sandstone to the south of a large prehistoric Tolchaco lithic procurement area. The site consists of a small prehistoric petroglyph panel containing a pecked snake, possible foot, small spiral, and a series of dots that curve up towards a hole (Figure 5-1). The petroglyph panel measures 10 meters long and a detailed drawing is included (Figure 5-2). Associated artifacts include some chert flakes and cores. The vegetation consists of sagebrush, rabbit brush, ephedra, and some grasses. The soil consists of a light reddish brown silty loam.



Figure 5-1. Petroglyph Panel of a Spiral, Snake, Foot, and Dots

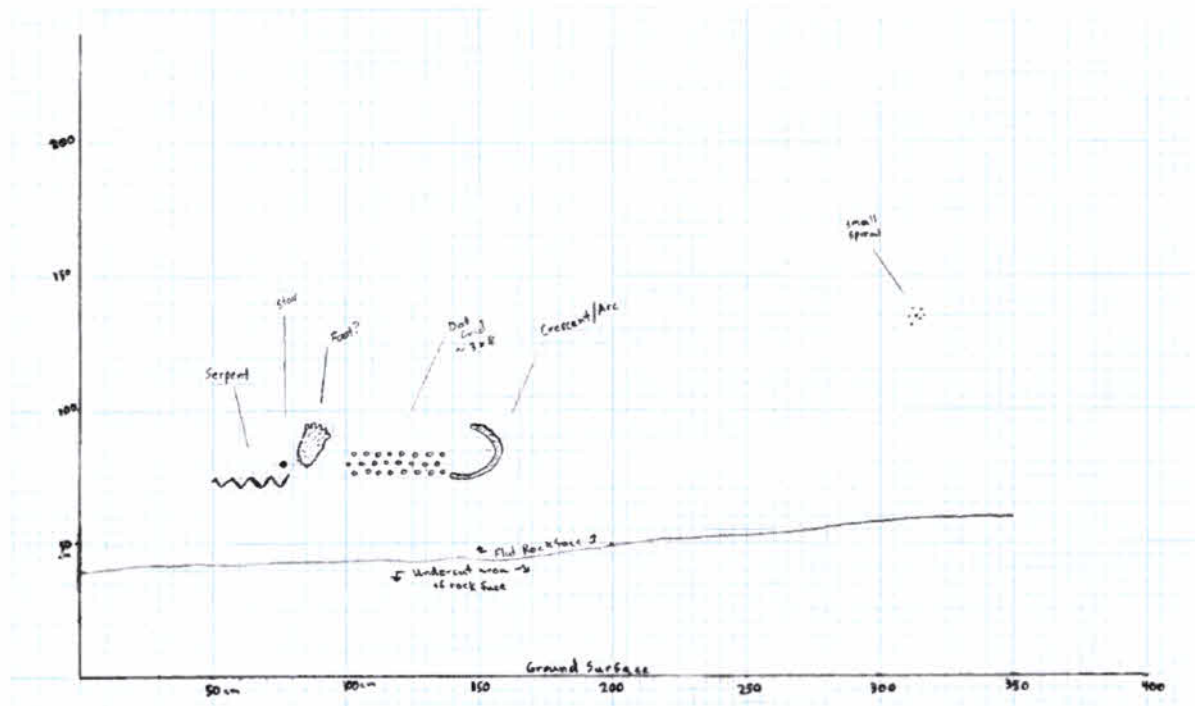


Figure 5-2. Petroglyph Panel Sketch

5.2.5 OM-25

Site OM-25 is located on the southern face of a boulder on top of a small butte of Moenkopi Sandstone approximately 800 meters south of the Little Colorado River. The site consists of a prehistoric petroglyph panel containing two spirals, a possible frog, two snakes, a big horn sheep, an anthropomorph, a hand, a foot, and numerous other undecipherable or eroding glyphs (Figure 5-3). The petroglyph panel measures 2.5 meters long and a detailed drawing is included (Figure 5-4). A small artifact pile on the eastern edge of the butte contains 5 chert cores, 1 primary chert flake, 4 secondary chert flakes, 1 chert shatter piece, 2 hammerstones, 10 tertiary chert flakes, 2 quartzite flakes, 4 Alameda Brown Ware sherds, and 1 quartzite mano (FS-1). FS-1 is nearly complete and measures 109.05 mm long by 87.23 mm wide and is 30.95 mm thick with one flake scar on its side. The north end of the butte where the petroglyph panel is located contains what appears to be a modern stacked rock enclosure with a .22 rifle cartridge casing, stacked and burnt wood. Vegetation on site consists of sagebrush, tumbleweed, jimsonweed, salt brush, ephedra, and juniper. The soil consists of a light reddish brown silty loam.



Figure 5-3. Large Petroglyph Panel with More Than a Dozen Glyphs

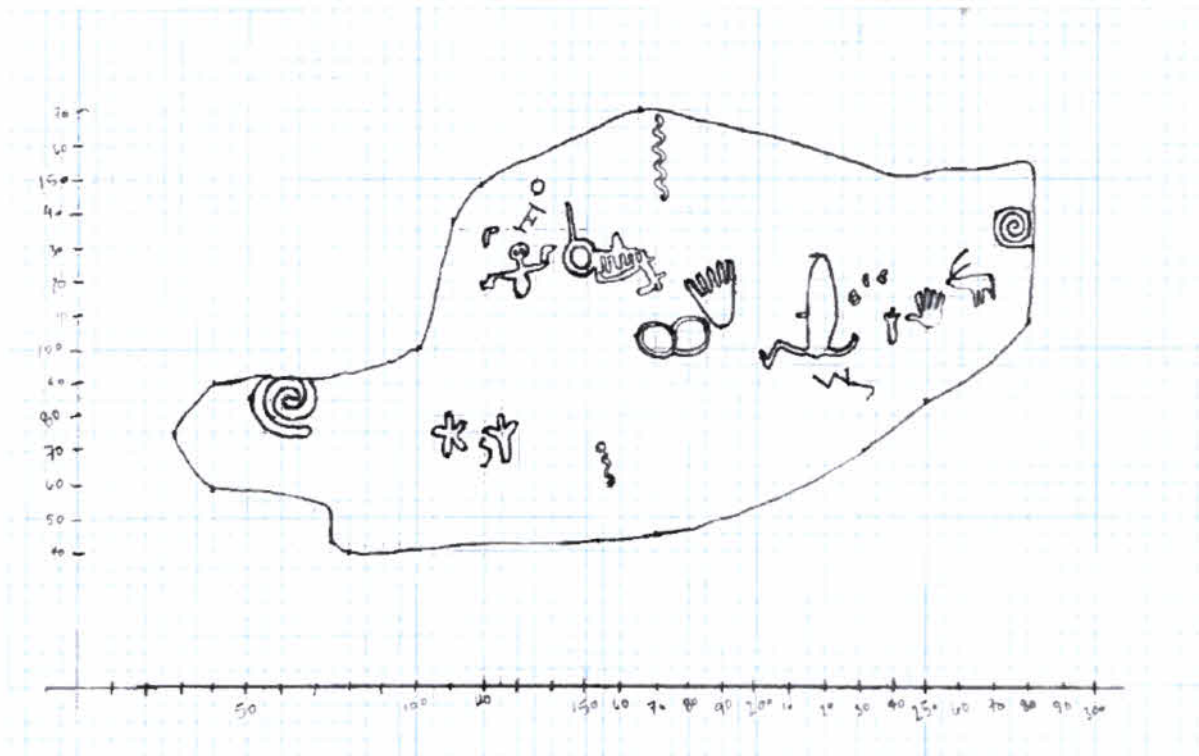


Figure 5-4. Large Petroglyph Panel Sketch

5.2.6 OM-27

Site OM-27 is located in a upland area approximately 840 meters south of the Little Colorado River and consists of a quarried landscape with three historic debris concentrations (Features 1 to 3) and sparsely scattered artifacts. A two-track road borders the north end of the site while an abandoned truck (OM-IF-06) marks the northwest corner of the site. Evidence of machine-based quarrying can be seen in cut hill sides and artificially constructed gravel piles. Feature 1 is located on the western side of the site and contains a deflated historic debris pile containing amber glass, a 4-by-4 lumber post, 6-by-2 lumber piles, a milled lumber gate, 12-by-2 lumber piles, a miscellaneous car part, a vehicle bumper, a muffler, a miscellaneous metal car seat springs, and can fragments. Feature 1 measures 25 meters long north-south by 25 meters wide east-west. Feature 2 is located on the northern side of the site near a two-track road and contains a pile of burnt ceramic and glass. Artifacts include clear glass jar fragments, complete clear glass medicine bottles, aqua glass jar fragments, amber glass jar fragments, painted porcelain plate fragments, jar lids, and sun-colored amethyst glass fragments. Feature 2 measures 6 meters long east-west by 3 meters wide north-south. Feature 3 is located in the middle of the site, within the gravel quarry and contains about 100 clear glass fragments, 2 clear glass milk bottles, about 20 aqua glass fragments, about 30 amber glass fragments, about 15 cobalt glass fragments, about 10 marbled milk glass fragments, 1 ribbed sanitary can, about 20 rotary opened sanitary cans, about 10 meat tins, 1 aerosol can, 2 external friction cans, 3 oil cans, 1 church key opened can, 1 knife opened solder dot can, 1 cone-top beer can, about 20 miscellaneous metal fragments, and 1 whiteware rim sherd. Feature 3 measures 10 meters long north-south by 8 meters wide east-west. Feature 2 and 3 both contain melted glass in various forms. Vegetation on site consists of sagebrush, rabbitbrush, saltbush, juniper, ephedra, cacti, and various grasses. The soil consists of a light reddish brown silty loam with Little Colorado River gravel deposits.

5.3 Lithic Landscape Components

A large proportion of the Project area contains ancient alluvial terrace remnants where gravels used for making stone tools occur. As discussed in Section 4.5.1, cultural materials found on these terraces have been attributed to what is termed the Tolchaco focus. In some areas of the Little Colorado River region, archaeologists have found diagnostic tools and have identified discrete site boundaries on terrace remnants. In the Project Area, however, terrace remnants contain large, low density scatters of chipped stone lacking formal tools and do not meet the criteria for archaeological sites. Nevertheless, they are nevertheless components of a landscape that was likely used for thousands of years and that probably is related to documented prehistoric sites in the area.

In order to quantify chipped stone densities at several non-site locations on the lithic landscape, survey crews placed two, 9 square meter surface sampling units and one, 100 square meter surface sampling unit in low, medium, and higher-density areas. Crews counted all artifacts within each sampling unit. The low-density lithic procurement landscape sample (OM-01) was recorded in the 100-square-meter unit and contained a total of 33 pieces of chipped stone debitage. This amounts to approximately one or two artifacts per 9 square meters. The medium-density lithic procurement landscape sample was taken from OM-23 and had a total of 13 pieces of chipped stone debitage. The high-density lithic procurement landscape sample was also taken from OM-

23, but on the southern side of the lithic procurement area, and had a total of 19 pieces of chipped stone debitage. Thus, artifact density for lithic procurement landscapes in the Project Area can be estimated as follows: 10 or fewer artifacts in a nine square meter area represent a low-density area, 10 to 15 artifacts in the same size area is a medium-density area, and more than 15 artifacts is a high-density area. It appears that most portions of the Project Area contain medium-density lithic procurement areas. Figure 5-1 shows an example of a high-density lithic procurement area.

Our interpretation of lithic procurement areas is that they are places where opportunistic collecting and limited reduction of lithic materials occurred. People hunting, gathering, camping, or traveling through the Project Area likely regularly picked up likely looking cobbles and tested their workability. If the material was desirable, they may have carried it with them to fully process elsewhere. While alluvia terrace remnants may have been visited repeatedly over hundreds or thousands of years, resulting in the accumulation of some artifacts, the terraces do not appear to have been used intensively, nor do they have features indicating more than very transitory stays.



Figure 5-1. Example of an Area with a Higher Density of Prehistoric Artifacts Compared with Others on the Lithic Landscape (OM-17)

6 ELIGIBILITY EVALUATIONS AND RECOMMENDATIONS

This chapter outlines site evaluation criteria for NRHP eligibility, as well as eligibility evaluations, and management recommendations for cultural resources in the Project Area. Tetra Tech's recommendations are based solely on surface manifestations and limited background research.

6.1 Summary of Findings

Archival research and survey efforts for the proposed Project have documented six new cultural resources: three historic sites (OM-06, OM-07, OM-27) and three prehistoric sites (OM-02, OM-09, OM-25). Additionally, the survey crew documented several components of a large, diffuse lithic procurement area that largely corresponds to geological and topographic features. This lithic procurement area is not considered an archaeological site. One previously documented site, AZ P:3:1(ASM), was not found within the Project Area.

6.2 Site Evaluation Criteria

Recommendations for NRHP eligibility are based on the following criteria codified in Title 36 CFR Part 60.4 and specified below:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in the past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possess high artistic value, or that represent a significant or distinguishable entity whose components may lack individual distinction; or that have yielded, or are likely to yield, information important in prehistory or history.
- D. that have yielded, or are likely to yield, information important in prehistory or history.

Eligibility recommendations were developed for archaeological resources based on the above criteria. Sites that are recommended as eligible for listing on to the NRHP are those that meet one or more of the criteria for eligibility. In addition, sites recommended as eligible must retain integrity of location, design, setting, materials, workmanship, feeling, and/or association. Eroded or otherwise heavily disturbed sites lacking physical integrity are generally not considered eligible. Sites recommended as not eligible for listing on the NRHP do not meet any of the eligibility criteria and/or have lost physical integrity. Sites without eligibility recommendations (undetermined) may conform to eligibility criteria but require additional data (Criteria D) to determine NRHP status. These are known or suspected prehistoric sites with suspected buried materials or where additional research is necessary to assess integrity and determine cultural importance.

6.3 Eligibility Recommendations

Two petroglyph panels, OM-09, OM-25, are located in the Project Area. Both petroglyph panels are associated with buttes of Moenkopi Sandstone and both panels depict spirals, feet, and various other pictographic elements. Tetra Tech recommends both panels as NRHP eligible under Criterion A because of their association with the Traditional Cultural Values of the Hopi and other Native American groups with cultural affiliation to the Project Area and its vicinity and as a reflection of these group's traditional beliefs and practices. Neither panel is associated with the life of a significant person of the past, thus the panels do not meet the standards of eligibility under Criterion B. Both panels could be argued to be properties possessing high artistic values as they represent the aesthetic principles of a cultural group. Both panels exhibit a high level of integrity and are likely to provide information that contributes to important research questions, including but not limited to traditional cultural beliefs, prehistoric travel and communication in the Southwest, and the reconstruction of population movements in space and time. Thus, both panels are NRHP-eligible under Criterion D. Tetra Tech recommends that petroglyph panels OM-09 and OM-25 are eligible for NRHP-listing under Criteria A, C, and D.

OM-02 consists of a prehistoric lithic scatter. The scatter has no evidence to suggest that the site is clearly associated with an event (Criterion A) or person (Criterion B) significant in Navajo County, Arizona or our nation's history. It does not embody any distinctive characteristics of an architectural site, architect, or school, nor does it exhibit high artistic value (Criterion C). Based on the apparent lack of soil deposition and subsurface cultural deposits, the site is unlikely to contribute new information concerning prehistoric occupations in the region (Criterion D). The recording of surface artifacts has likely exhausted the data potential of the site (Criterion D). The site would be undetected by the average person and due to its lack of direct association with a nearby significant prehistoric site, Tetra Tech recommends the site as not eligible for the NRHP.

Two historic refuse scatters, OM-06 and OM-07, and one historic quarry with an artifact scatter (OM-27) are located within the Project Area. None of these three sites have any evidence to suggest that they are clearly associated with an event (Criterion A) or person (Criterion B) significant in Navajo County, Arizona or our nation's history. They do not embody any distinctive characteristics of an architectural site, architect, or school, nor do they exhibit high artistic value (Criterion C). Based on the apparent lack of soil deposition and subsurface cultural deposits, these sites are unlikely to provide new information pertaining to historic activities in the region (Criterion D). The recording of surface artifacts has likely exhausted the data potential of the sites (Criterion D).

Approximately 70 percent of the Project Area is considered to be part of an extensive, opportunistic lithic procurement landscape that mostly correlates with gravel-covered butte tops. Lithic scatters in these areas were designated as non-sites and were not evaluated for NRHP eligibility.

AZ P:3:1(ASM) was not located by the Tetra Tech crew within the Project Area. The AZ P:3:1(ASM) ranch site boundary appears to be arbitrary and the site does not contain any extant features within the Project Area. Because the sites location remains unconfirmed, and because it has yet to be documented according to modern standards, AZ P:3:1(ASM) is recommended as unevaluated for NRHP listing.

6.4 Tribal Consultation

Tetra Tech did not conduct consultations with local Indian Tribes as part of the scope of work, nor formally assess effects to resources in any indirect Area of Potential Effects, such as Traditional Cultural Properties. Should a state or federal nexus arise for this project, Tribal Consultation, including identification of Traditional Cultural Properties, would likely be required.

6.5 Management Recommendations

Section 800.5(2) of 36 CFR 800, *Protection of Historic Resources*, includes a discussion of potential adverse effects on historic properties that can be used to assess potential impacts of the Project under Section 106 of NHPA. Potential effects applicable to the Project include physical destruction of or damage to all or part of the property and change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance. Effects to cultural resources are normally considered permanent as these resources are finite and disturbance of them, particularly archeological sites, cannot be reversed. However, effects on historic landscapes or the view sheds of historic or other significant areas can be temporary if projects do not permanently impact associated resources and are removed at a future date.

NRHP-eligible sites OM-09 and OM-25 are well within the Project Area, and Tetra Tech recommends placing a 50-foot buffer around each site to ensure that they are not damaged during Project activities. Tetra Tech recommends that a qualified archaeologist temporarily mark the boundaries of these sites if they are close to areas where Project activities are taking place. Tetra Tech also recommends that Avangrid educate construction team members about the importance of protecting petroglyph panels and other prehistoric sites from intentional or accidental harm.

Tetra Tech submits that thorough in-field documentation of three newly discovered historic sites (OM-06, OM-07, OM-27) and one documented prehistoric site (OM-02) have exhausted their information potential (Criterion D) and that they are recommended as not eligible under any of the other three NRHP eligibility criteria. No avoidance is necessary for these sites.

AZ P:3:1(ASM) was not located by the Tetra Tech crew within the Project Area. The AZ P:3:1(ASM) ranch site boundary appears to be arbitrary and the site does not contain any extant features within the Project Area. Thus, the site is not expected to be impacted by Project activities.

Approximately 70 percent of the Project Area is considered to be part of an extensive, opportunistic lithic procurement landscape that mostly correlates with gravel-covered butte tops. Lithic scatters in these areas were designated as non-sites and were not evaluated for NRHP eligibility. No management considerations are necessary for lithic procurement locations.

In addition, a low likelihood exists that unidentified cultural resources or human remains are present within surveyed portions of the Project Area. Human remains are protected under state law on private lands within Arizona. Tetra Tech recommends that Avangrid develop an Unanticipated Discoveries Plan in the event that previously unknown cultural resources or human remains are encountered during Project activities.

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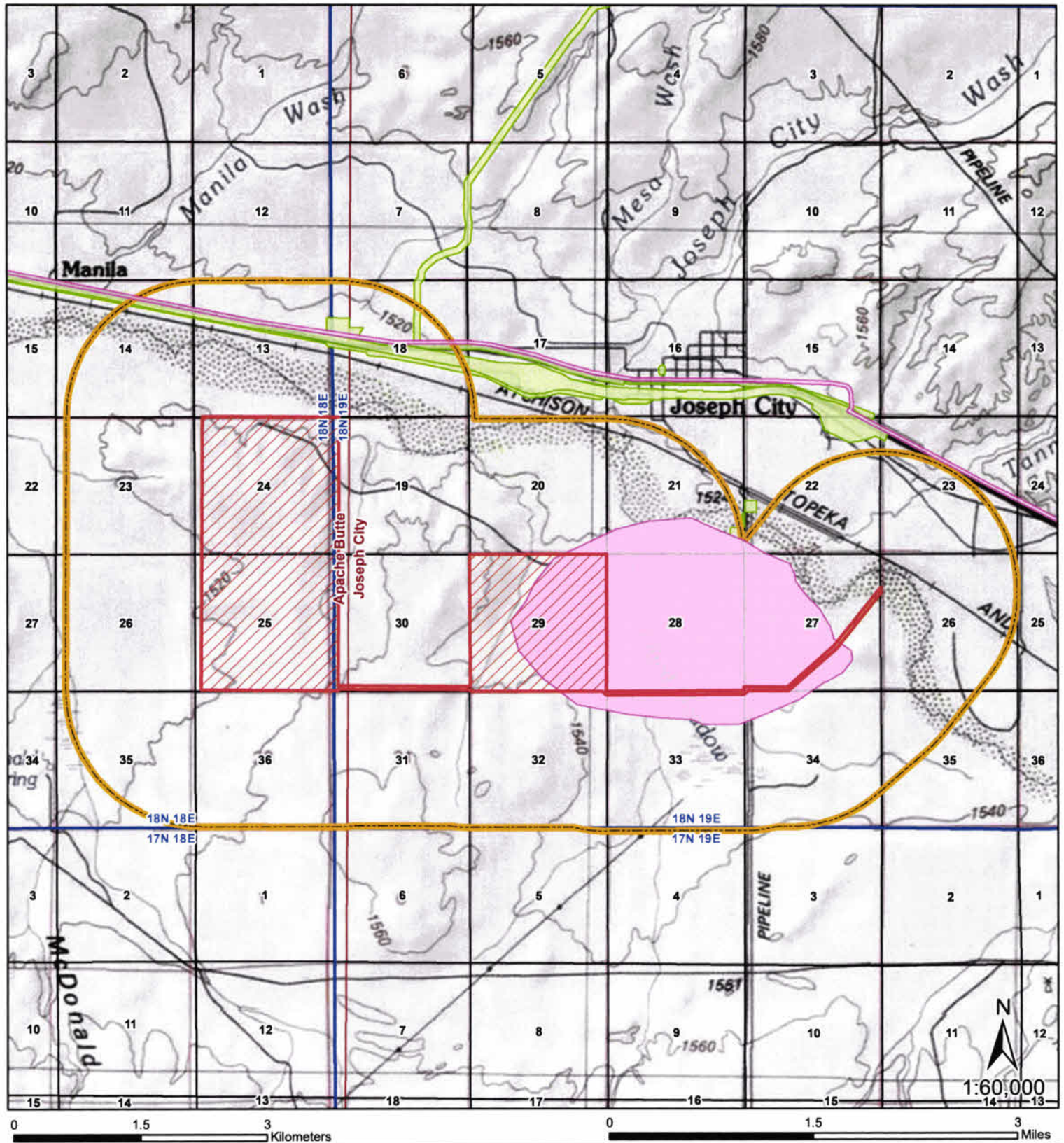
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Appendix A
Results of Pre-Field Records Search







OBED MEADOWS SOLAR PROJECT

Class I Cultural Resources




NAVAJO COUNTY, ARIZONA



Project Components

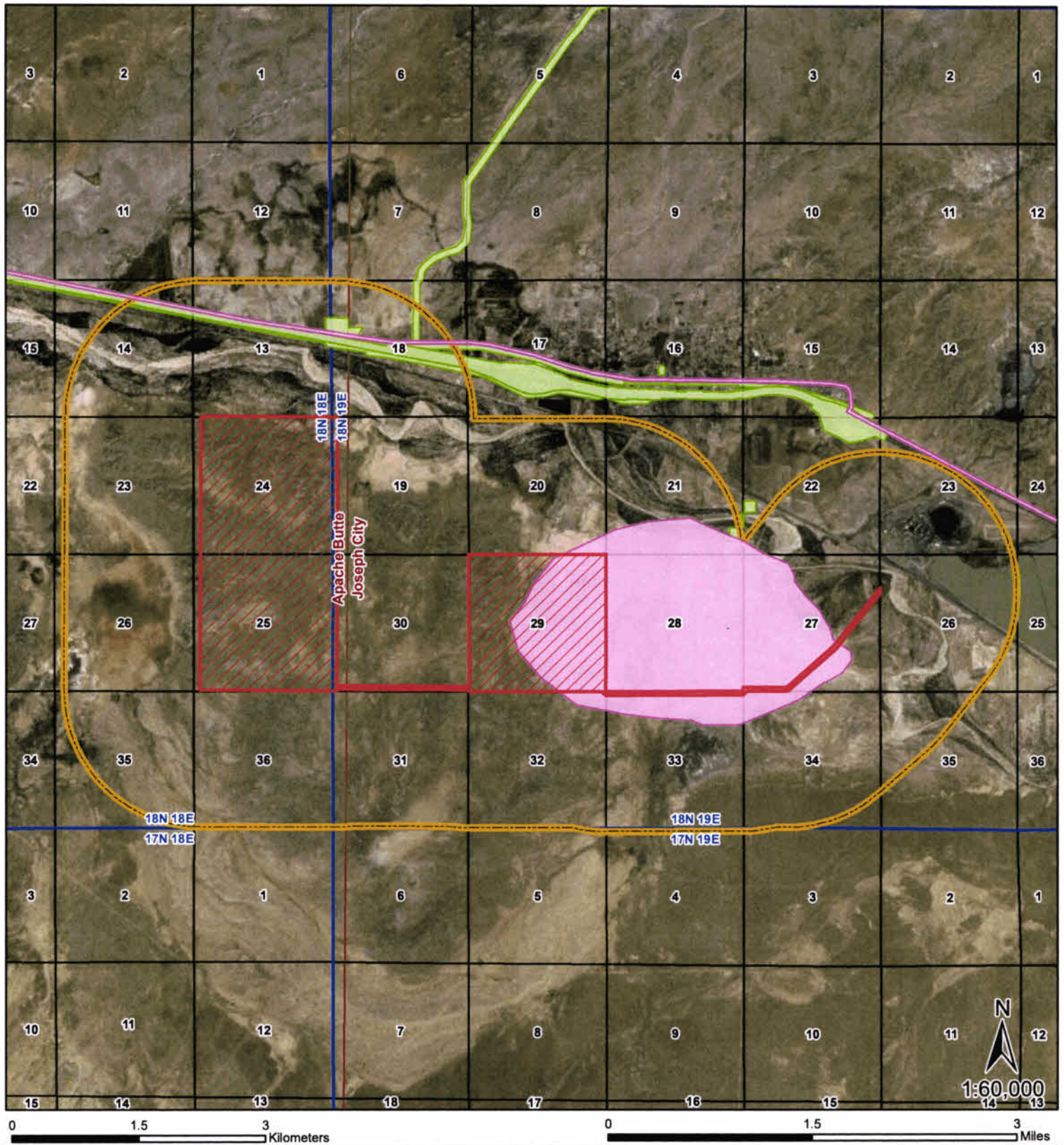
-  Project Boundary
-  Cultural Resource Avoidance
-  Research Area
-  Previously Recorded Surveys

Boundaries

-  PLSS Township
-  PLSS Section
-  USGS 7.5m Quadrangle

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OBED MEADOWS SOLAR PROJECT

Class I Cultural Resources




NAVAJO COUNTY, ARIZONA



Project Components

-  Project Boundary
-  Cultural Resource Avoidance
-  Research Area
-  Previously Recorded Surveys

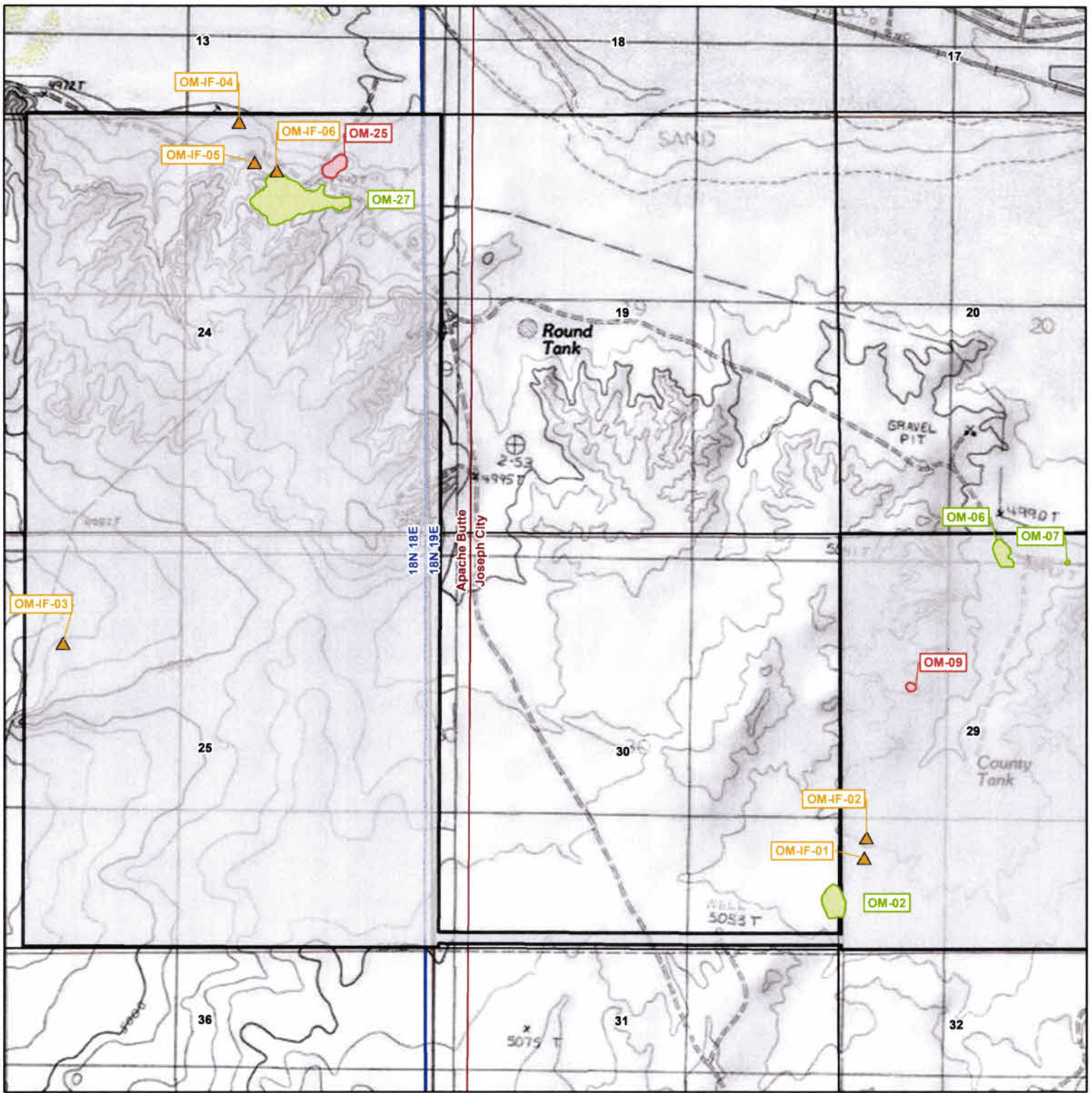
Boundaries

-  PLSS Township
-  PLSS Section
-  USGS 7.5m Quadrangle

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Appendix B
Survey Findings



Class III Resources

**AVANGRID
OBED MEADOWS
SOLAR PROJECT**

Navajo County, Arizona



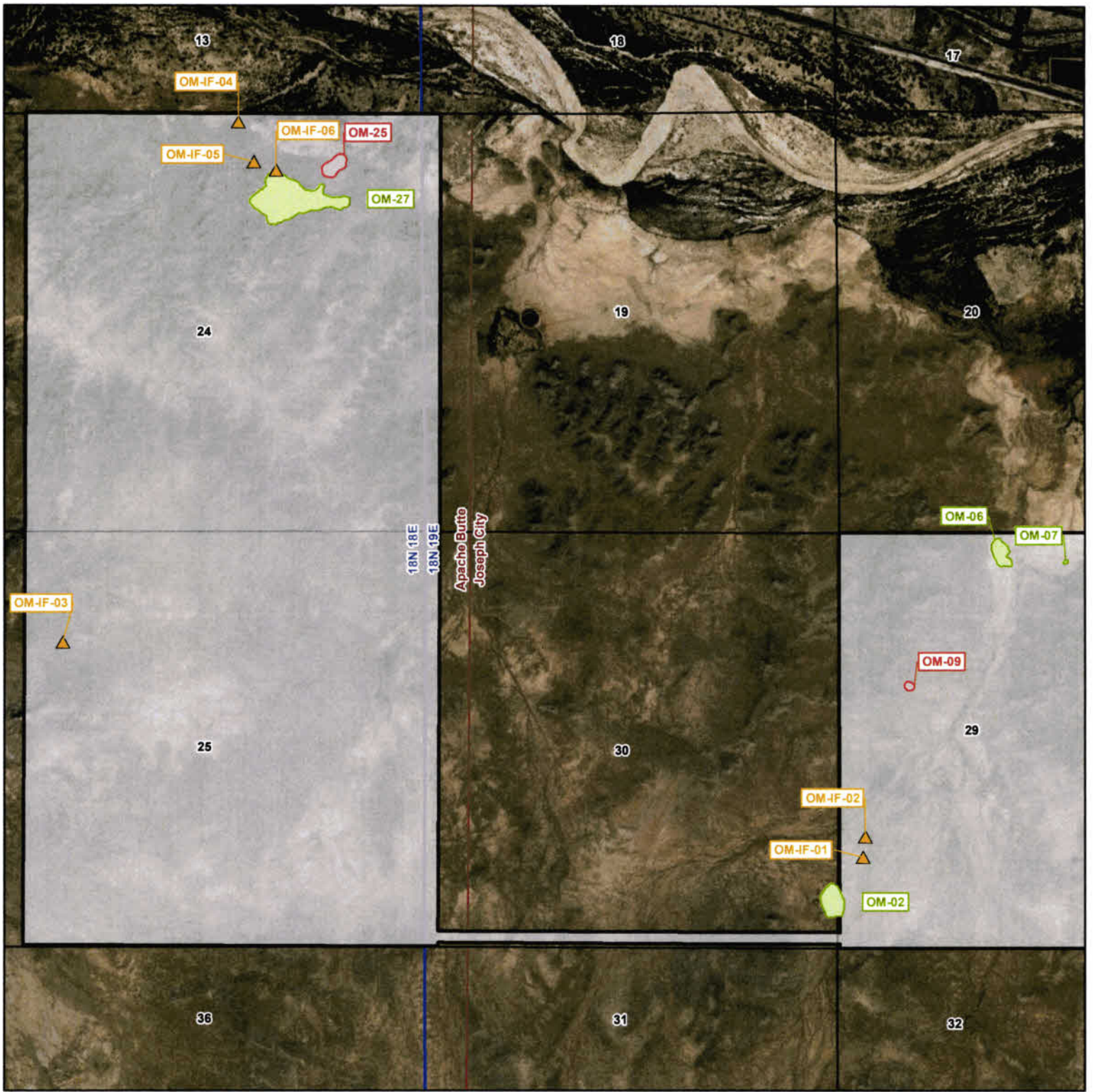
Cultural Resources

- Isolate
- Eligible Sites
- Not Eligible Sites
- Project Boundary

Boundaries

- PLSS Township
- PLSS Section
- USGS 7.5m Quadrangle
- County





Class III Resources

**AVANGRID
OBED MEADOWS
SOLAR PROJECT**

Navajo County, Arizona



Cultural Resources

- Isolate
- Eligible Sites
- Not Eligible Sites
- Project Boundary

Boundaries

- PLSS Township
- PLSS Section
- USGS 7.5m Quadrangle
- County



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Substation located at the Cholla Power Plant. The Gen-Tie Line is proposed to be 2.5-miles long, however, only the portion of the Gen-Tie Line from the Collector Substation to point of land ownership change immediately outside of the APS-owned Cholla Substation fence/property line is included in this informal consultation (2.3 miles). The remaining distance of +/- 0.20 miles from the Cholla Substation fence/property line to the point of interconnection at the APS owned Cholla Substation has not been designed yet and would be owned and operated by APS. The Project would be located on approximately 48.5 acres of private land, approximately 1 mile south of Joseph City, in Navajo County, Arizona. The Project will require a Certificate of Environmental Compatibility (CEC) from the Arizona Corporation Commission (ACC), Power Plant and Transmission Line Siting Committee.

6. PROJECT AREA/AREA OF POTENTIAL EFFECTS: The APE consists of the 2.3 mile Gen-Tie Line and 5-acre Collector Substation.

7. PROJECT LOCATION

7a. Address:

7b. Route:

7c. Mileposts Limits:

7d. Nearest City/Town: Joseph City, AZ **7e. County:** Navajo

7f. Project Locator UTM: 560,083 Easting 3,864,770 Northing **7g. NAD 83** **7h. Zone:** 12

7i. Baseline & Meridian: 1865; Gila and Salt River Meridian **7j. USGS Quadrangle(s):** Joseph City

7k. Legal Description(s): T 18N, R19E, Sections 27-29

8. SURVEY AREA

8a. Total Acres: 50

8b. Survey Area.

1. Land Jurisdiction	2. Total Acres Surveyed	3. Total Acres Not Surveyed	4. Justification for Areas Not Surveyed
Private	50	0	NA

9. ENVIRONMENTAL CONTEXTS

9a. Landform: The Project is in a relatively flat area south of the Little Colorado River known as Obed Meadow. The northeastern portion of the gen-tie line is within the Little Colorado River floodplain.

9b. Elevation: 4,990-5,010 feet amsl

STATE HISTORIC PRESERVATION OFFICE
SURVEY REPORT SUMMARY FORM

3

9c. Surrounding Topographic Features: The Project is surrounded on the north and south by low, unnamed bluffs, which demarcate the Little Colorado River floodplain.

9d. Nearest Drainage: The north end of the Gen-Tie Line is within a few hundred feet of the Little Colorado River.

9e. Local Geology: The Project contains rocks from the Holocene (11,650 years ago to present) extending back to the Early Triassic (230 to 245 million years ago); rocks mainly consist of sedimentary rocks and surficial deposits. The oldest rocks are Early Triassic sedimentary rocks derived from sandstone, mudstone, and gypsum. These rocks were deposited on a low-relief coastal plain and now make up some of the steeper butte formations. The most-recently formed rocks are Holocene surficial deposits made up of unconsolidated sands and gravels on the river plain and in the river channels of the Little Colorado River (Richard et al. 2000).

9f. Vegetation: The Project is located within the east-west running Arizona/New Mexico Plateau ecoregion, the southern region of the Colorado Plateau. The Arizona/New Mexico Plateau is characterized by a local relief that varies from a few feet to over 1,000 feet along slopes. Researchers have subdivided the Arizona/New Mexico Plateau into 16 smaller ecoregions. The Project is located within the Little Colorado Valley/Painted Desert ecoregion, an area that is lower, warmer, and drier than surrounding regions. The vegetation consists largely of desert scrub and includes mound saltbush (*Atriplex obovata*), fourwing saltbush (*Atriplex canescens* var. *angustifolia*), shadscale (*Atriplex confertifolia*), Mormon tea (*Ephedra antisyphilitica*), yucca, alkali sacaton (*Sporobolus airoides*), galleta, black grama (*Bouteloua eriopoda*), Indian ricegrass (*Achnatherum hymenoides*), and gyp dropseed (*Sporobolus nealleyi*), although rangeland deterioration from overgrazing is noticeable (Griffith et al. 2014). Vegetation at the time of survey was very sparse, and limited mainly to arroyos.

9g. Soils/Deposition: Soils in the region consist of brownish and grayish saline and sodic soils. Saline soils contain excess levels of soluble salts in the soil water. Sodic soils have excessive levels of sodium causing poor physical soil structure. Soils range from very deep and well-drained to poorly drained and gently sloping. Purgatory-Claysprings and Badlands soils are present in the vicinity as well. These soils are moderately deep and shallow, well-drained, and loamy, loamic-gypsic, and clayey soils (USDA NRCS 2005).

9h. Buried Deposits: Not Likely

9i. Justification: No evidence for buried deposits was observed in the Project. The survey team examined arroyo cuts in the Project vicinity. The Project APE has been subject to regular flooding and erosion.

10. BUILT ENVIRONMENT: No built environment components.

11. INVENTORY CLASS COMPLETED

11a. Class I Inventory:

11b. Researcher(s):

11c. Class II Survey:

11d Sampling Strategy:

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11e. Class III Inventory:

12. BACKGROUND RESEARCH SOURCES

12a. AZSITE:

12b. ASM Archaeological Records Office:

12c. SHPO Inventories and/or SHPO Library:

12d. NRHP Database:

12e. ADOT Portal:

12f. GLO Maps: 1877 Original Plat

12g. Land- Managing Agency Files:

12h. Tribal Cultural Resources Files:

12i. Local Government Websites:

12j. Other: USGS topographic maps: 1886-1971; Aerial imagery 1943-1970

13. BACKGROUND RESEARCH RESULTS

13a. Previous Projects Within Study Area.

1. Project Reference Number	2. Project Name	3. Author(s)	4. Year
1974-16.ASM	Cholla-Saguaro Transmission Line	Teague, Lynn S., and Linda L. Mayro	1979
2009-196.ASM	APS On-Call Cultural Resources Surveys	Laurila, Erick M. and David E. Purcell	2011
2009-197.ASM	APS NE-2 Cholla to Show Low 69-kV Transmission Line	Walker, Jessica, and Robert A. Rowe	2012
2009-199.ASM	APS On-Call Cultural Resources Surveys	Purcell et al.	2011
2009-265.ASM	APS On-Call Cultural Resources Surveys	Laurila, Erick M. and Erin Davis	2011

13b. Previously Recorded Cultural Resources Within Study Area.

1. Site Number/Name	2. Affiliation	3. Site Type	4. Eligibility Status	5. Associated Reference(s)
AZ P:3:1(ASM)	Historic	Hashknife Range (Cattle Ranch)	Not Evaluated	None
AZ P:3:7(ASM)	Prehistoric	Lithic Quarry	Recommended Eligible	Teague and Mayro 1979; Lange 1983
AZ P:3:33(ASM)	Historic	Obed Fort	Recommended Eligible	Wilhelm and Ferg 1995
AZ P:3:111(ASM)	Historic	NE-1 Cholla-Keams Canyon Transmission Line	Recommended Eligible	Purcell et al. 2011

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AZ P:3:211(ASM)	Prehistoric	Artifact Scatter	Recommended Eligible	Hayden et al. 2016
NA14217	Prehistoric	Rockshelter and Artifact Scatter	Not Evaluated	None

13c. Historic Buildings/Districts/Neighborhoods.

1. Property Name or Address	2. Year	3. Eligibility Status
None		

14. CULTURAL CONTEXTS

14a. Prehistoric Culture: Paleoindian; Archaic: Ancestral Pueblo

14b. Protohistoric Culture: Hopi; Zuni

14c. Indigenous Historic Culture: Apache; Navajo; Yavapai

14d. Euro-American Culture: ca. 1850-present

15. FIELD SURVEY PERSONNEL

15a. Principal Investigator: Deborah Huntley

15b. Field Supervisor: Stephen Anderson

15c. Crew: Jessica DeMaso, Nick Dungey, Katelyn Frederick, Jennifer Lemminger, and Johnny Schaefer

15d. Fieldwork Date(s): October 27 – 29, 2021

16. SURVEY METHODS

16a. Transect Intervals: 15 m apart

16b. Coverage (%): 100

16c. Site Recording Criteria: ASM

16d. Ground Surface Visibility: 60%

16e. Observed Disturbances: erosion; cattle grazing; trash dumping

17. FIELD SURVEY RESULTS

17a. No Cultural Resources Identified:

17b. Historical In-Use Structures Identified: ; **Form(s) Attached:**

17c. Number of IOs Recorded:

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SURVEY REPORT SUMMARY FORM

17d. Table of IOs.

1. IO Number	2. Description	3. Date Range	4. UTM's
None			

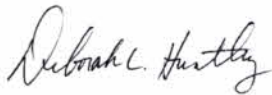
18. COMMENTS:

SECTION 19. ATTACHMENTS

- 19a. Project Location Map:
- 19b. Land Jurisdiction Map:
- 19c. Background Research Map(s):
- 19d. GLO Map(s):
- 19e. References:

SECTION 20. CONSULTANT CERTIFICATION

I certify the information provided herein has been reviewed for content and accuracy and all work meets applicable agency standards.



Signature

Principal Archaeologist, Southwest Region
Title

SECTION 21. DISCOVERY CLAUSE

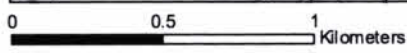
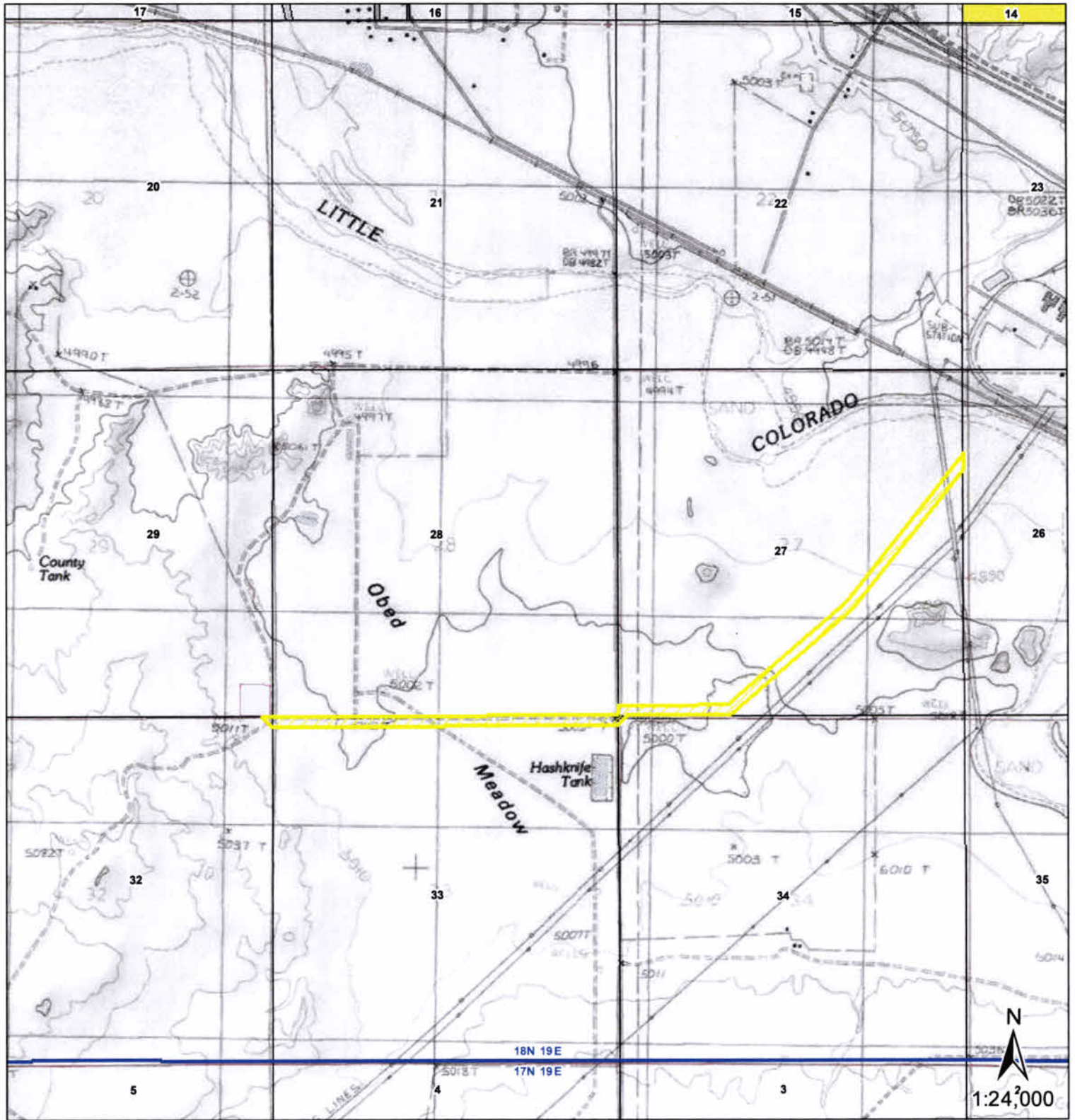
In the event that previously unreported cultural resources are encountered during ground disturbing activities, all work must immediately cease within 30 meters (100 feet) until a qualified archaeologist has documented the discovery and evaluated its eligibility for the Arizona or National Register of Historic Places in consultation with the lead agency, the SHPO, and Tribes, as appropriate. Work must not resume in this area without approval of the lead agency.

If human remains are encountered during ground-disturbing activities, all work must immediately cease within 30 meters (100 feet) of the discovery and the area must be secured. The Arizona State Museum, lead agency, SHPO, and appropriate Tribes must be notified of the discovery. All

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7

discoveries will be treated in accordance with NAGPRA (Public Law 101-601; 25 U.S.C. 3001-3013) or Arizona Revised Statutes (A.R.S. § 41-844 and A.R.S. § 41-865), as appropriate, and work must not resume in this area without authorization from ASM and the lead agency.





OBED MEADOW SOLAR PROJECT

Class I Cultural Resources


NAVAJO COUNTY, ARIZONA





Project Components

-  Substation
-  Gen-Tie Line

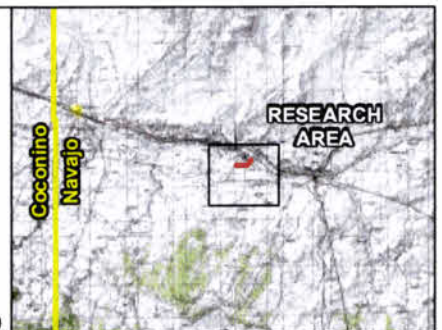
Land Jurisdiction

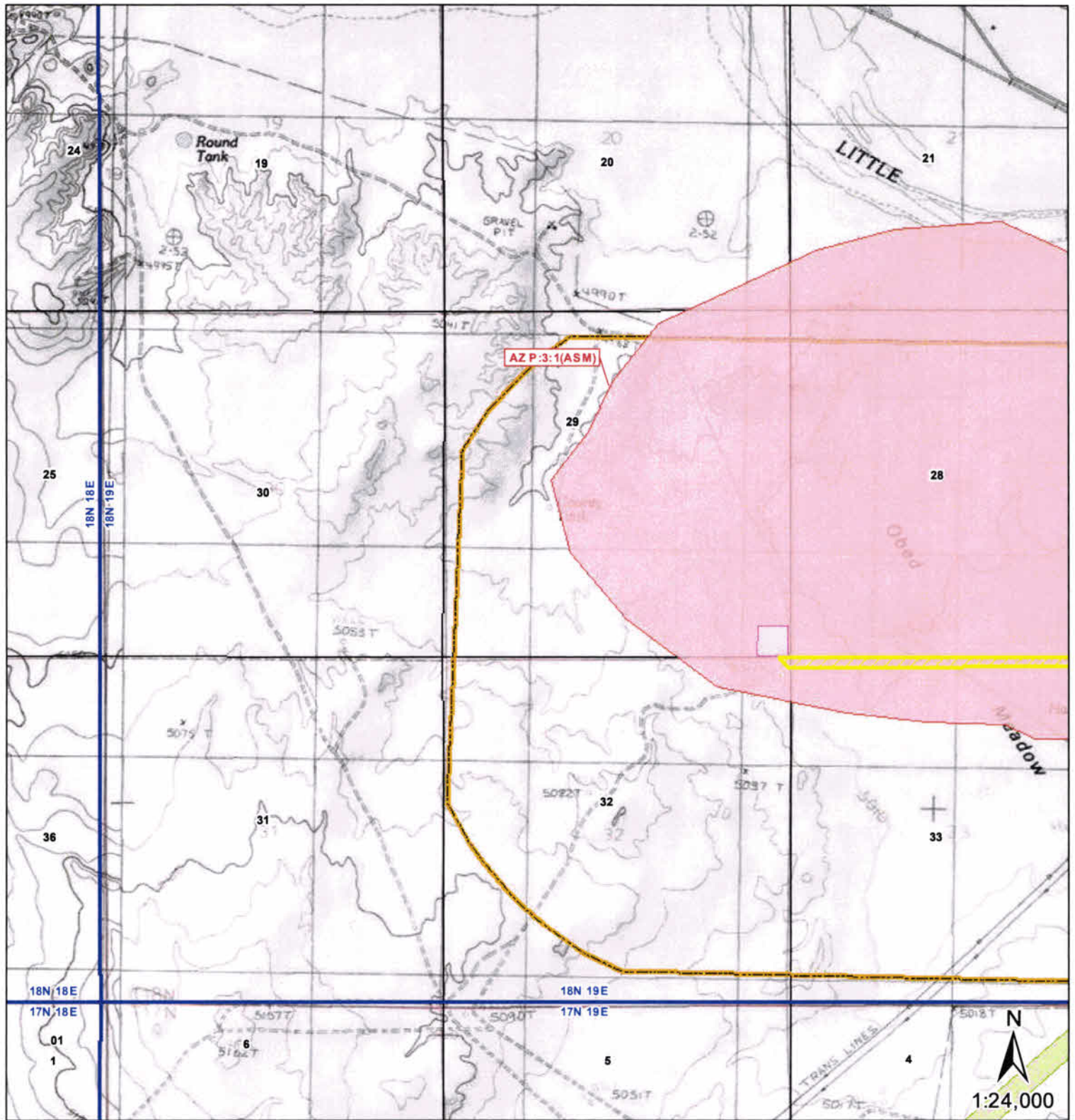
-  BLM
-  Private (Hollow)

Boundaries

-  PLSS Township
-  PLSS Section

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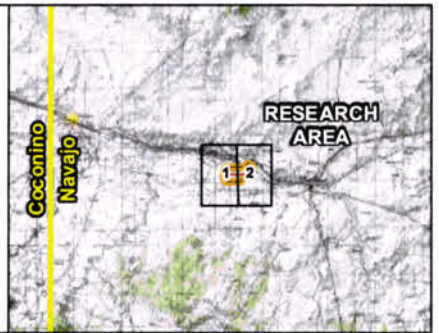


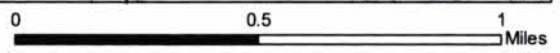
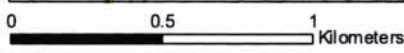
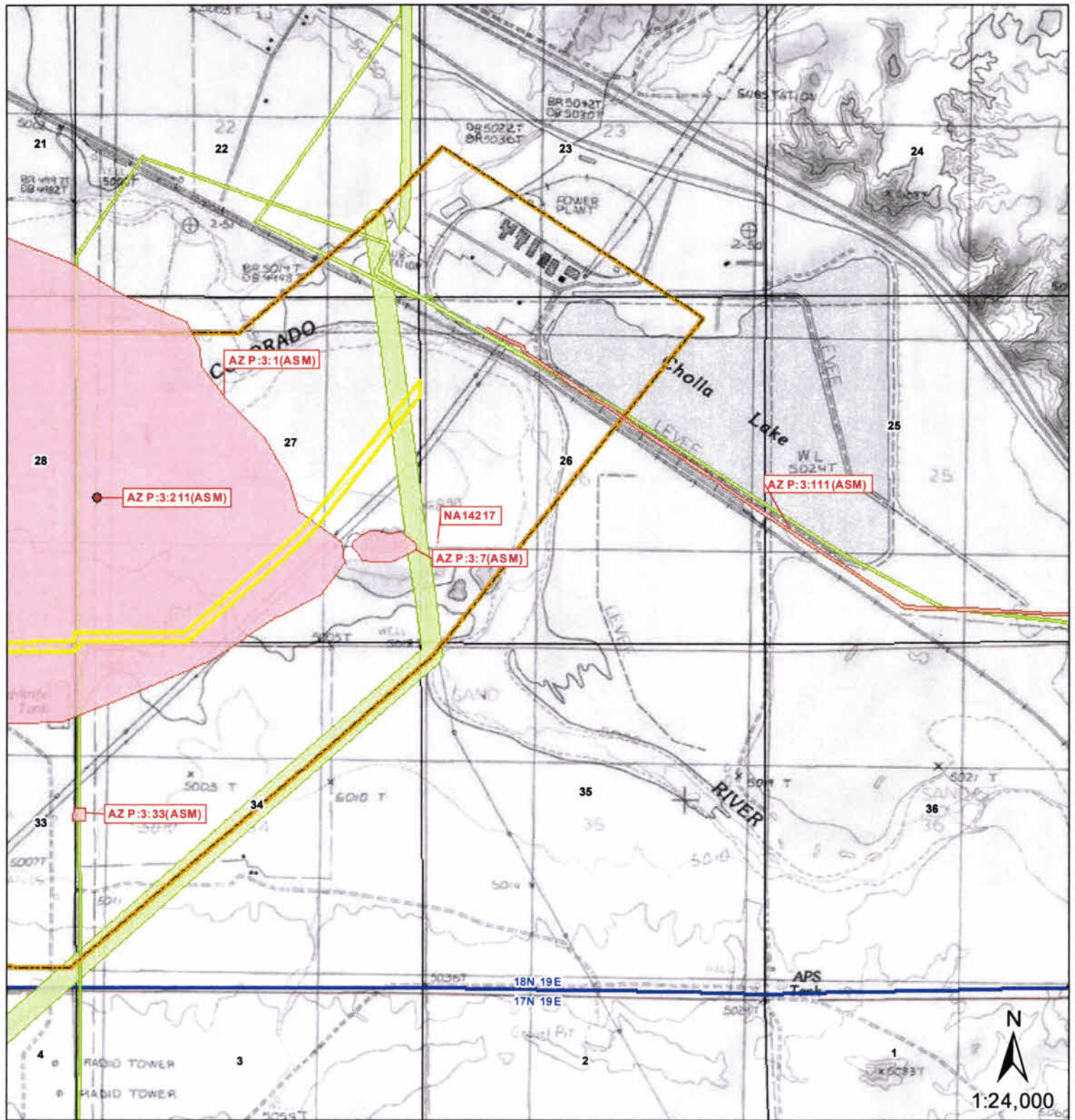


OBED MEADOW SOLAR PROJECT
 Class I Cultural Resources
 NAVAJO COUNTY, ARIZONA
 Page 1 of 2

<p>Project Components</p> <ul style="list-style-type: none"> Substation Gen-Tie Line Research Area <p>Cultural Resources</p> <ul style="list-style-type: none"> Previously Recorded Sites Previously Conducted Surveys 	<p>Boundaries</p> <ul style="list-style-type: none"> PLSS Township PLSS Section
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OBED MEADOW SOLAR PROJECT

Class I Cultural Resources
 NAVAJO COUNTY, ARIZONA

Page 2 of 2



Project Components

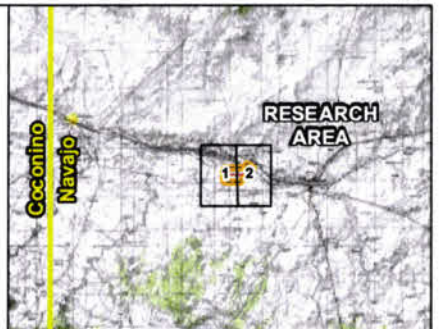
- Substation
- Gen-Tie Line
- Research Area

Cultural Resources

- Previously Recorded Sites
- Previously Conducted Surveys

Boundaries

- PLSS Township
- PLSS Section



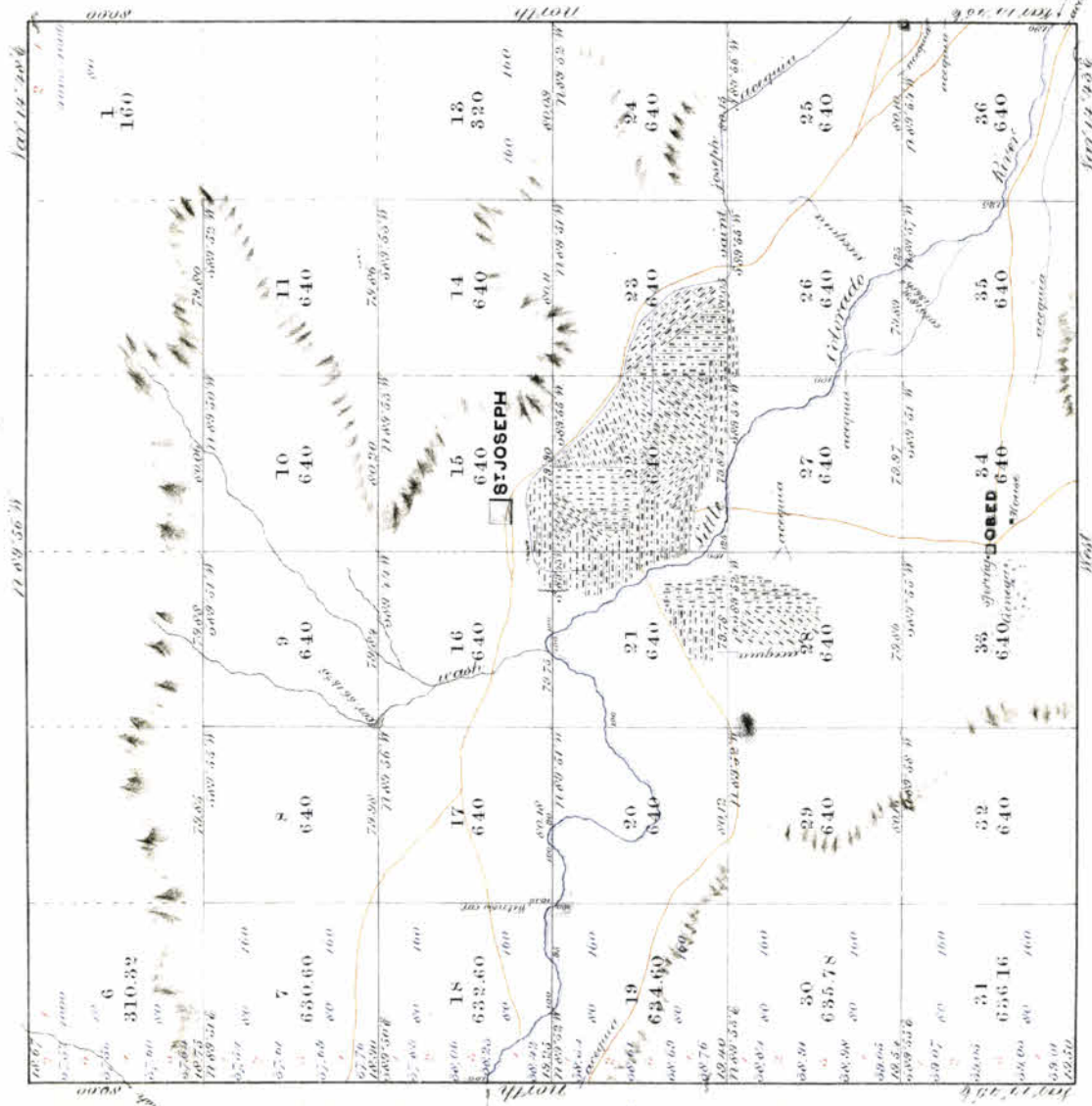
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Township No. 18 North Range No. 19 East Gila and Salt River Meridian.

OC783

See note on page 2 of 2-10 in
 This file for information in 1945.

OFFICIALLY FILED 1-8-1980



Aggregate area of Public Land Survey: 18,680.06
 acres
 Estimated area of Public Land Unsurveyed: 4,359.84
 Total: 23,040.00

Subdivision lines run at a variation of 14' 45" East.

Survey Designated.	By Whom Surveyed.	Date of Contact.	Amount of Survey, Ac. U.S. L.S.	When Surveyed.
Township Lines		1878		1878
Township Lines	J.L. HARRIS	April 28	25.78 17	July 14 63
Subdivisions	do	do	52.75 26	July 16 31

The above Map of Township No. 18 North of Range No. 19 East of Gila and Salt River Meridian, Arizona, is duly professional & the field notes of the survey filed on file in this office, which have been examined and approved by Survey General's Office, Tucson, Arizona, 8th Dec. 1878.

Geo. You.

19e. References:

Griffith, G.E., J.M Omernik, C.B. Johnson, and D.S Turner

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Lange, Richard C.

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Laurila, Erick M. and David E. Purcell

2011 Cultural Resources Survey of 5.81 Miles (35.21 Acres) of State Land for the Arizona Public Service NE-4 (Cholla-Winslow) 69-kV Transmission Line, Navajo County, Arizona. Logan Simpson Design, Tempe, Arizona.

Laurila, Erick M. and Erin Davis

2011 A Cultural Resources Survey of 21.40 Miles (389.00 Acres) of State and Federal Land for the Arizona Public Service Company 230-1 Coconino-Cholla 230-kV Transmission Line between the Coconino Substation in Flagstaff and Cholla Power Plant near Joseph City, Coconino and Navajo Counties, Arizona. Logan Simpson Design, Tempe, Arizona.

Purcell, David E. , J. Scott Courtright, F. Micheal O'Hara III, Grant Fahrni, and Jessica Walker

2011 A Cultural Resources Survey of 8.57 Miles (51.94 Acres) of State and Federal Land for the Arizona Public Service NE-1 (Cholla-Keams Canyon) 69-kV Transmission Line, Navajo County, Arizona. Logan Simpson Design, Tempe, Arizona.

Richard, S M., S.J. Reynolds, J.E, Spencer, and P.A Pearthree

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APPENDIX B-3
Wetlands and Other Waters of the United States
Findings: Obed Meadow Generation Tie-Line Project,
Navajo County, Arizona

Wetland and Other Waters of the United States Findings

Obed Meadows Solar and Gen-Tie Project Navajo County, Arizona



Prepared for:



**AVANGRID
RENEWABLES**

1125 NW Couch Street, Suite 700
Portland, OR 97209

November 30, 2021

Updated April 28, 2023

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LIST OF ABBREVIATIONS

Avangrid	Avangrid Renewables
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
gen-tie	generation-tie
NHD	National Hydrography Dataset
NWI	National Wetland Inventory
NWPR	Navigable Waters Protection Rule
OBL	obligate
OHWM	ordinary high-water mark
PEM	palustrine emergent
PFO	palustrine forested
Project Area	the approximately 1,945 acres of private lands where the Project would be located.
Project	Obed Meadows Solar Project
PSS	palustrine shrub scrub
Tetra Tech	Tetra Tech, Inc.
TOB	top of bank width
UPL	upland
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WOTUS	waters of the United States

1 Project Description

Aurora Solar LLC, a wholly-owned subsidiary of Avangrid Renewables LLC (Avangrid) is proposing the Obed Meadows Solar Project (Project), a solar energy generation farm in the U.S. Environmental Protection Agency's (EPA) Arizona/New Mexico Plateau Level III Ecoregion. This Project would be located within approximately 1,945 acres of private lands (Project Area; Figure 1 and Figure 2). There is a collection line of approximately 1 mile connecting the eastern and western parcels of the Project, and there is also an approximately 2.3-mile generation-tie (gen-tie) line corridor leaving the Project Area to the east.

The Project Area lies within the Little Colorado Valley/Painted Desert Level IV ecoregion (Griffith et al. 2014). This region is lower in elevation, drier, and warmer than the surrounding regions, and has more desert scrub. The vegetation cover typically includes Vegetation for this ecoregion typically includes mound saltbush (*Atriplex obovate*), fourwing saltbush (*Atriplex canescens*), shadscale (*Atriplex confertifolia*), Mormon tea (*Ephedra nevadensis*), narrowleaf yucca (*Yucca angustissima*), alkali sacaton (*Sporobolus airoides*), galleta (*Hilaria jamesii*), black grama (*Bouteloua eriopoda*), Indian ricegrass (*Achnatherum hymenoides*), and gyp dropseed (*Sporobolus nealleyi*). The elevation in the Project Area is approximately 4,200 to 5,700 feet above mean sea level. An abundance of overgrazing has resulted in the deterioration of the rangeland areas.

The Project Area was dominated by four-wing salt bush (*Atriplex canescens*), alkali sacaton (*Sporobolus airoides*), shadscale, Russian thistle tumbleweed (*Salsola tragus* (*Salsola Kali*), and broom snakeweed (*Gutierrezia sarothrae*) in the uplands. In the wetlands and floodplain of the Little Colorado River, iodinebush (*Allenrolfea occidentalis*), seablight (*Suaeda calceoliformis*), and tamarix (*Tamarix chinensis*) tended to dominate.

2 Desktop Analysis Results

Tetra Tech, Inc. (Tetra Tech) conducted a desktop analysis of the Project Area to identify potential jurisdictional wetlands and other waters of the United States (WOTUS) features that may be present. The desktop analysis was based on the following sources of information:

- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) dataset (USFWS 2021)
- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) (USGS 2021)
- Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (FEMA 2020)

2.1 National Wetland Inventory

The NWI dataset identifies wetlands and waterbodies using high altitude imagery in conjunction with other data sources and field surveys (USFWS 2021). The data is remotely sensed and inconsistent when ground-truthed. Therefore, it is used only as a guide for the location of likely wetlands. In the center of the eastern parcel, there is one mapped NWI feature described as a freshwater pond, and in the western parcel, there are two riverine wetlands mapped along the corridor of two NHD features (Appendix A). During the field survey, it was determined that none

of these NWI features met the criteria necessary for wetlands. NWI mapped a total of 3.13 acres of wetlands and waterbodies within the Project Area (Table 1).

Table 1. NWI Mapped Wetland and Waters in the Project Area

NWI Attribute	Wetland/Water Type	Acres
PUSAh	Freshwater Pond	0.26
R4SBC	Riverine - Intermittent	1.33
R4SBC	Riverine - Intermittent	1.54
TOTAL		3.13

Source: USFWS (2021)

2.2 National Hydrography Dataset

The NHD dataset identifies surface water and surface water flow locations as mapped at a 1:24,000 scale (USGS 2021). Like NWI data, the data is inconsistent and therefore is used only as a guide for the location of other WOTUS. The results of the desktop analysis of the NHD dataset identified one pond overlapping the NWI pond feature in the eastern parcel and two NHD-mapped intermittent streams in the western parcel that flow north from the center of the parcel to the 100-year floodplain on the northern portion of the Project (Table 2).

Table 2. NHD Mapped Waters in the Project Area

NHD Waters Name	NHD FCode	Waterbody Type	Acres / Feet
Unnamed	46007	Stream/River - ephemeral	0.00 acres / 2,915 ft
Unnamed	46007	Stream/River - ephemeral	0.00 acres / 3,382 ft
Unnamed	Lake/Pond	Lake/Pond - intermittent	0.17 acres / 104 ft
TOTAL			0.17 acres / 6,401 ft

Source: USGS (2021)

2.3 Floodplains

The Project extends across FEMA Flood Insurance Rate Map (FIRM) Panels 04017C3300E, 04017C3303E, 04017C3315E, and 0417C3312E (all effective on September 26, 2008) (FEMA 2020). According to the FEMA panel and the floodplain information portal, Zone AE or Zone A flood hazard areas occur in the northern portion of the Project in both the west and east parcels and in a large portion of the gen-tie line.

3 Wetland Delineation Methods

Tetra Tech conducted a wetland delineation and preliminary WOTUS investigation/determination within the Project Area between October 19 and 21, 2021. Additionally, a gen-tie corridor survey was conducted on April 28, 2023. The results of this survey are added as an addendum to the overall Project's Wetland Delineation Report.

Wetland delineation followed the methods described in the Corps of Engineers *Wetland Delineation Manual* (U.S. Army Corps of Engineers [USACE] 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West* (Version 2.0) (USACE 2008). The delineation process was used to document dominant vegetation, soils, and hydrology in the areas of interest (i.e., areas with potential intersections between the Project Area and potential wetland ecosystems). For a site to be considered a wetland, there must be positive indication of dominance by hydrophytic vegetation, hydric soils, and characteristic wetland hydrology. In

normal conditions, if a sample plot lacks any one of these three criteria, it is considered upland. To determine these three variables, the qualified wetland scientist designated paired sample plots placed at discrete distances (typically less than 25 feet) from one another—one to represent wetland conditions and the other to represent uplands. Each sample plot featured a hand-dug soil pit up to 16 inches in depth; however, the depth was often less due to the presence of shallow, hardpan soil that prevented digging deeper.

3.1 Hydrophytic Vegetation

A Tetra Tech wetland scientist keyed the dominant vegetation at each sample plot to species level and assigned each species a wetland indicator status using the National Wetland Plant List (Lichvar 2018). Hydrophytic vegetation, or plants that are indicators of wetlands, include those species designated obligate (OBL), facultative wetland (FACW), or facultative (FAC). As a general rule, hydrophytes dominate a sample plot when greater than 50 percent of the evaluated species are OBL, FACW, or FAC. Upland plants include those listed with facultative upland (FACU) or upland (UPL) status. Table 3 provides descriptions of these indicators.

Table 3. Wetland Indicator Status

Indicator Status	Occurrence in Wetlands
Obligate (OBL)	Almost always occur in wetlands under natural conditions (estimated probability >99%).
Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67%–99%), but occasionally found in non-wetlands (estimated probability 1%–33%).
Facultative (FAC)	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%–66%).
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67%–99%), but occasionally found in wetlands (estimated probability 1%–33%).
Upland (UPL)	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%–66%).
Not Listed (NL)	Usually occur in non-wetlands (estimated probability 67%–99%), but occasionally found in wetlands (estimated probability 1%–33%).

Source: Lichvar (2018)

3.2 Wetland Soils

Soil from each soil pit was evaluated for hue, value, and chroma in each observable horizon using Munsell Soil Color Charts (Munsell Soil Color 2009). Each soil horizon was also checked for texture and for the presence of redoximorphic features, depleted matrix, saturation, and other specific criteria used to document hydric conditions.

3.3 Wetland Hydrology

Hydrology was analyzed for primary and secondary wetland indicators including saturation, surface soil cracks, salt crust, presence of reduced iron, water marks, and FAC-neutral test. Once dug, the soil pits were left open a sufficient amount of time to allow the apparent high-water table, if present, to stabilize.

3.4 Assessment of other WOTUS

It is important to assess and map non-wetland WOTUS. For this Project, other WOTUS included ephemeral and intermittent waterways.

3.5 Wetland and WOTUS Mapping

Once vegetation, soils, and hydrology had been assessed, a delineation was conducted to identify the zone of transition between the WOTUS feature and upland conditions. The wetland scientist accomplished the delineation by walking the outer limit of the visibly identifiable WOTUS feature with a handheld global positioning system unit. In instances where waterways were being delineated, the wetland scientist collected a series of points at the ordinary high-water mark (OHWM) identified by changes in soil texture, dominant vegetation, and bank shelving, in addition to other visual cues that ultimately create a polygon representing the WOTUS waterway. Photographs were taken of each feature delineated during the survey.

4 Wetland Delineation Results

NWI mapping and hydric soils data were reviewed prior to beginning field efforts to identify locations of potential wetland areas that required field verification. Antecedent hydrologic conditions were also considered in the desktop review; the 2021 growing season exhibited wetter than normal precipitation according to data gathered from the NOAA Regional Climate Centers. Gaps in numbering are due to wetlands being delineated in the field that, after further review of the data, failed to meet the criteria for hydric soil under the red parent material indicator for problematic hydric soil.

During the wetland delineation of the full Project Area, four individual wetlands were identified within the Project Area totaling approximately 22.08 acres (Table 4). Vegetation, soils, and hydrology indicators were documented at each sample plot location and recorded on data forms (refer to Appendix B). Wetland boundaries are shown on the sheet maps provided in Appendix A. The wetlands were not fully delineated in instances where they extended beyond the Project Area boundary to the Little Colorado River to the north. Narratives for the different types of wetlands within the delineated wetland boundary are provided in the following subsections. Representative photographs of the wetlands are provided in Appendix C.

Results of the April 28, 2023, wetland delineation of the gen-tie corridor identified no wetland resources within the gen-tie corridor.

4.1 Wetland OM-WET-02 and OM-WET-02a

Wetland OM-WET-02 is a palustrine emergent (PEM) wetland with a nearby wetland pocket with similar vegetation cover, hydrology, and soils separated by a subtle upland berm (Appendix A). The herbaceous stratum for sample plot OM-WET-02 is dominated by seablite (*Suaeda calceoliformis*, FACW). No trees, shrubs, or woody vines were observed within the sample plot. Soils feature a layer zero to 7 inches (2.5YR 3/4) with 10 percent redox concentrations (2.5YR 4/8). Soils were silty clay and met the red parent material indicator for problematic hydric soils. Hydrology indicators observed surface soil cracks, salt crust, and FAC-neutral test. The complete data sheets are included in Appendix B.

4.2 Wetland OM-WET-04

Wetland OM-WET-04 is a palustrine shrub scrub (PSS) wetland (Appendix A). The shrub stratum for sample plot OM-WET-04 is dominated by iodine-bush (*Allenrolfea occidentalis*, FACW). The

herbaceous stratum is dominated by seablite (FACW). No trees or woody vines were observed within the sample plot. Soils feature a layer zero to 6 inches (2.5YR 3/4) with 10 percent redox concentrations (2.5YR 6/6). Soils were silty clay and met the red parent material indicator for problematic hydric soils. Hydrology indicators observed surface soil cracks, salt crust, and FAC-neutral test. The complete data sheets are included in Appendix B.

4.3 Wetland OM-WET-05

Wetland OM-WET-05 is a PSS wetland (Appendix A). The shrub stratum for sample plot OM-WET-05 is dominated by iodine-bush (FACW). No trees, herbs, or woody vines were observed within the sample plot. Soils feature a layer zero to 6 inches (2.5YR 3/4) with 10 percent redox concentrations (2.5YR 6/6). Soils were silty clay and met the red parent material indicator for problematic hydric soils. Hydrology indicators observed surface soil cracks, salt crust, and FAC-neutral test. The complete data sheets are included in Appendix B.

4.4 Wetland OM-WET-06

Wetland OM-WET-06 is a PSS and palustrine forested (PFO) wetland (Appendix A). The tree stratum for sample plot OM-WET-06 is dominated by tamarix (*Tamarix chinensis*, FAC). The herbaceous stratum is also dominated by tamarix (FAC) and iodine-bush (FACW). No trees, herbs, or woody vines were observed within the sample plot. Soils feature a layer zero to 7 inches (2.5YR 3/4) with 5 percent redox concentrations (2.5YR 6/2). Soils were silty clay and met the red parent material indicator for problematic hydric soils. Hydrology indicators observed surface soil cracks, salt crust, and FAC-neutral test. The complete data sheets are included in Appendix B.

Table 4. Field Delineated Wetlands in the Project Area

Wetland ID	Wetland Type	Acres	Approximate Length (feet)	Approximate Width (feet)
OM-WET-02	PEM	6.806	830	520
OM-WET-02A	PEM	0.036	60	40
OM-WET-04	PSS	3.636	810	230
OM-WET-05	PSS	2.328	565	240
OM-WET-06	PSS/FO	9.274	650	930
TOTAL		22.080		

Source: Tetra Tech (2021)

5 Other Waterway Results

The wetland scientists mapped eight stream reaches within the Project Area totaling 7.267 acres, or 15,321 linear feet (Table 5). An additional seven waterways were identified during a desktop review totaling 2.797 acres, or 6,719 linear feet; for a Project total of 10.064 acres or 22,040 linear feet (Table 5). All mapped waterway features may be considered jurisdictional due to their proximity and/or potential connectivity to wetlands within the Little Colorado River floodplain; however, a Jurisdictional Determination would be necessary to confirm this. Because of the similarity among the streams in the Project Area, an Arid West Ephemeral and Intermittent Streams OHWM Datasheet has been provided in Appendix D that applies to all streams delineated. Representative photos of the mapped stream reaches are provided in Appendix C.

Results of the April 28, 2023, wetland and other waters delineation of the gen-tie corridor identified two ephemeral streams/washes and the Little Colorado River within the gen-tie corridor. Surveys were not conducted on APS property. The crossing of the Little Colorado River occurs on APS property and has been digitized using recent aerial imagery to identify the OHWM. Results of the gen-tie delineation have been added to Table 5 and figures are provided in Appendix A.

5.1 OM-ST-01

Waterway OM-ST-01 has a top of bank width (TOB) of 38 feet, a TOB height of 34 inches, an OHWM width of 12.5 feet, and a OHWM height of 16 inches. Vegetation in the channel includes alkali sacaton, camel-thorn (*Alhagi camelorum*), four-wing saltbush, and iodine-bush. The bed material is saturated and consisted of sandy silt. Soil cracks, drift lines, and alkali precipitate were observed, and the channel had no current flow.

5.2 OM-ST-02

Waterway OM-ST-02 has a TOB width of 12.5 feet, a TOB height of 21 inches, an OHWM width of 10 feet, and a OHWM height of 5 inches. Vegetation in channel includes alkali sacaton, camel-thorn, Russian thistle, galleta grass, and seablight. There was no flow in the channel, and the sediment was moist consisting of sandstone, bedrock, and fine sands. Drift lines and alkali precipitate were observed. There was no flow within the channel.

5.3 OM-ST-03

Waterway OM-ST-03 has a TOB width of 15 feet, a TOB height of 39 inches, an OHWM width of 10 feet, and a OHWM height of 15 inches. Vegetation included camel-thorn, broom snakeweed, Russian thistle, bursage, galleta grass, and alkali sacaton. No flow was present at time of assessment, but drift lines were abundant.

5.4 OM-ST-04

Waterway OM-ST-04 has a TOB width of 17.5 feet, a TOB height of 28 inches, an OHWM width of 10 feet, and an OHWM height of 5 inches. Vegetation includes galleta grass and broom snakeweed. The channel has no flow, with sandy substrate, exposed bedrock, cobbles and boulders and is sparsely vegetated.

5.5 OM-ST-05

Waterway OM-ST-05 has a TOB width of 8 feet 9 inches, a TOB height of 14 inches, an OHWM width of 50 inches, and an OHWM height of 4 inches. The channel is sparsely vegetated with galleta grass, lacked any observed flow, and had a bed consisting of sandy substrate with some gravel.

5.6 OM-ST-06

Waterway OM-ST-06 has a TOB width of 7 feet, a TOB height of 11 inches, an OHWM width of 58 inches, and a OHWM height of 6 inches. The channel is dry with no flow, sandy substrate with some gravel, and unvegetated. Drift lines were observed at time of assessment.

5.7 OM-ST-07

Waterway OM-ST-07 has a TOB width of 6 feet, a TOB height of 13 inches, a OHWM width of 33 inches, and a OHWM height of 3 inches. There was no flow observed at the time of assessment. The channel bed consisted of sand and some gravel bank.

5.8 OM-ST-08

Waterway OM-ST-08 has a TOB width of 15 feet, a TOB height of 34 inches, an OHWM of 7.5 feet, and an OHWM height of 9 inches. The channel consisted of sandy substrate and is vegetated by camel thorn.

5.9 Gen-Tie-S1

Waterway Gen-Tie-S1 has a TOB width of approximately 8-10 feet, a TOB height of 15 inches, an OHWM of 5 feet, and an OHWM height of 6 inches. The channel consisted of sandy and gravelly substrate and is unvegetated. The channel ends prior to crossing the gen-tie line easement.

5.10 Gen-Tie-S2

Waterway Gen-Tie-S2 has a TOB width of approximately 6-8 feet, a TOB height of 15 inches, an OHWM of approximately 3 feet, and an OHWM height of 6 inches. The channel consisted of sandy and gravelly substrate and is unvegetated. This channel extends onto APS property as was digitized due to access restrictions.

5.11 Little Colorado River

The Little Colorado River, an intermittent stream, crosses the gen-tie corridor on APS property. The channel's OHWM was digitized due to access restrictions. The centerline, or low-flow channel, was digitized using recent aerial imagery. The stream channel occupies approximately 7.35 acres of the gen-tie APS study boundary and 0.17 acres of the gen-tie 1,000-foot buffer on private parcels.

Table 5. Field Delineated Waters in the Project Area

Waters ID	Water Type	Acres	Length (feet)	OHWM Width (feet)
OM-ST-01	Ephemeral Stream	1.874	3,827	12.5
OM-ST-01A	Ephemeral Stream	0.155	353	12.5
OM-ST-02	Ephemeral Stream	0.243	773	10
OM-ST-03	Ephemeral Stream	0.755	1,062	10
OM-ST-04	Ephemeral Stream	0.986	2,162	10
OM-ST-05	Ephemeral Stream	1.178	2,578	4.1
OM-ST-06	Ephemeral Stream	0.148	338	4.9
OM-ST-07	Ephemeral Stream	1.734	3,790	2.75
OM-ST-08	Ephemeral Stream	0.194	438	7.5
OM-DST-01	Ephemeral Stream	0.095	412	12
OM-DST-02	Ephemeral Stream	0.064	268	10
OM-DST-03	Ephemeral Stream	0.348	734	20
OM-DST-04	Ephemeral Stream	0.355	1,079	20
OM-DST-05	Ephemeral Stream	0.268	892	13

Waters ID	Water Type	Acres	Length (feet)	OHWB Width (feet)
OM-DST-06	Ephemeral Stream	0.738	1,487	20
OM-DST-07	Ephemeral Stream	0.929	1,847	20
Gen-Tie-S1	Ephemeral Stream	0.076	663	5
Gen-Tie-S2	Ephemeral Stream	0.069	1,008	3
Little Colorado River	Intermittent Stream	7.523	1,891	190
TOTAL		17.732	25,602	

Source: Tetra Tech (2021)

6 Discussion and Recommendations

Four wetlands and eight waterways were observed and mapped within the Project. There were an additional seven waterways delineated via desktop methods. This resulted in the delineation of a total of 32.144 acres (including 22.080 acres of wetlands and 10.064 acres from approximately 22,040 linear feet of waterways). Two additional waterways and the Little Colorado River were added to the original surveys during the April 28, 2023, survey of the gen-tie corridor. The streams within the gen-tie corridor and APS study area total 3,562 linear feet and approximately 7.668 acres; for a Project total of 22.080 acres of wetlands, 17.732 acres of waterways from approximately 25,602 linear feet of waterways. All discharges of dredged or fill material that result in permanent or temporary losses of jurisdictional WOTUS are regulated by the USACE under Section 404 of the Clean Water Act (CWA).

The Navigable Waters Protection Rule (NWPR) that was introduced in January 2020 by the EPA and USACE has been vacated as a result of a U.S. District Court order, *Pascua Yaqui Tribe v. U.S. Environmental Protection Agency*. The U.S. District Court Judge found that there were “fundamental, substantive flaws that cannot be cured without revising or replacing the NWPR’s definition.” Although the ruling was determined in the District of Arizona, the EPA and USACE have halted the implementation of the NWPR definition nationwide. In light of this decision, the EPA and USACE are interpreting WOTUS in accordance with pre-2015 regulatory regime until further notice. The EPA and USACE are currently interpreting WOTUS as the following (40 Code of Federal Regulations [CFR] 230.3(s); EPA 2021):

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

- c. Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

6.1 Recommendations

Based on the current CWA regulations, isolated potential WOTUS features will be assessed as federally jurisdictional features on a case-by-case basis. Given that these wetlands may have a nexus to the Little Colorado River to the north, these features may be jurisdictional and, therefore, subject to regulations under Section 404 of the CWA. However, to make that determination, an approved jurisdictional determination will need to be submitted to USACE.

Tetra Tech recommends avoidance of the WOTUS features, as practicable. In the event that the Project can avoid all impacts to wetlands or other WOTUS, then no coordination with USACE or CWA permitting will be necessary. Impacts to wetlands or other WOTUS totaling less than one-tenth acre can be undertaken without coordination with USACE, but must still adhere to the general and regional conditions for nationwide permits (NWP) included as Appendix E. If predicted impacts cannot be kept to less than one-tenth acre, then Tetra Tech recommends an approved jurisdictional determination be submitted to USACE to determine if the potentially impacted features are jurisdictional and subject to regulations under Section 404 of the CWA.

7 References

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APPENDIX A
Map of Wetlands and Waterways Survey Results

Avangrid Renewables
Obed Meadow Solar Project

Figure 1
Project Overview

Navajo County, AZ

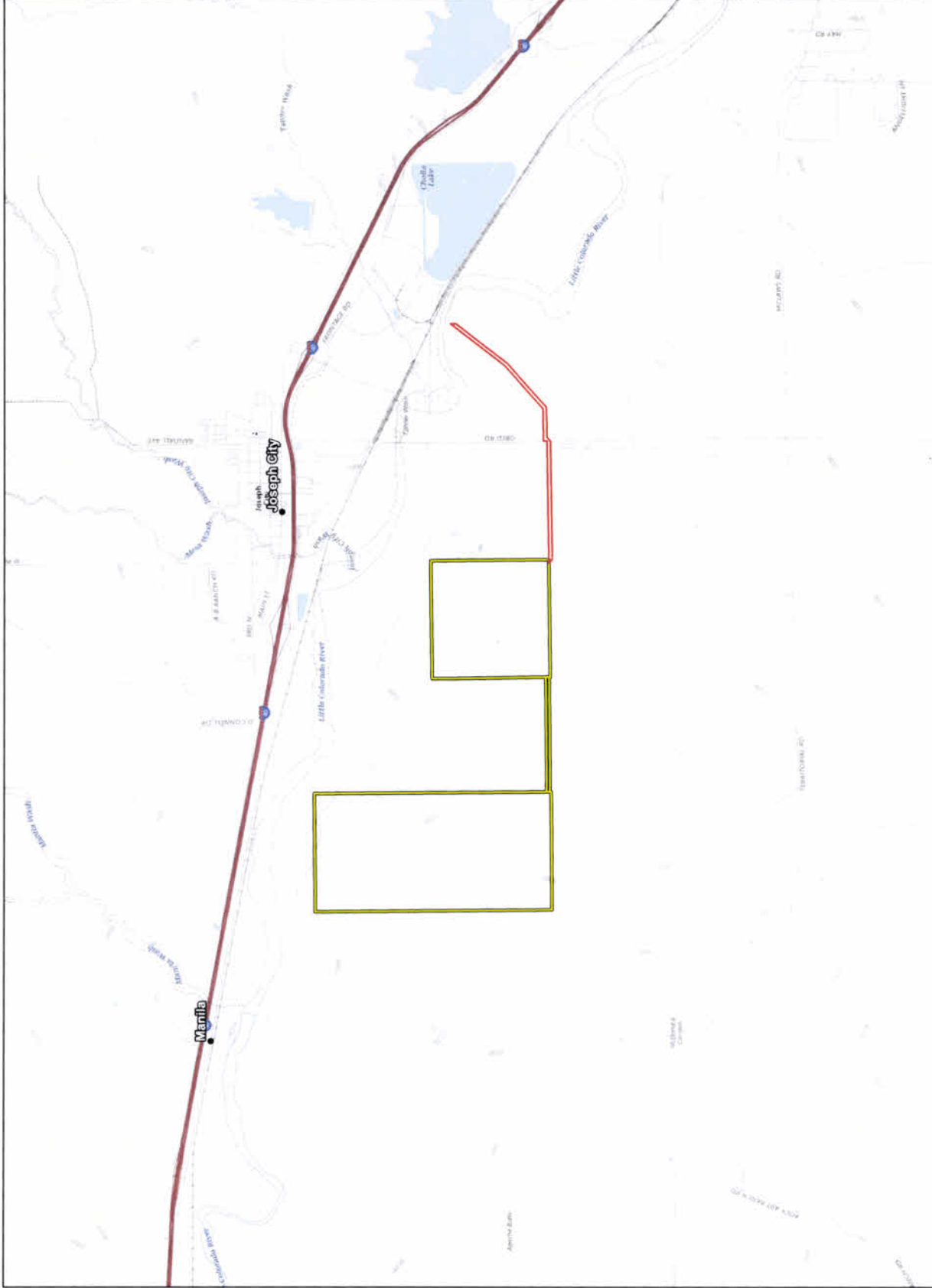
Project Features

- Collector Substation
- Gen-Tie Line (Preferred)
- Solar Facility



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USGS US TOPO MAPS, BTS

1:50,000 NAD 1983 UTM Zone 12N



Avangrid Renewables
Obed Meadow Solar Project

Figure 2
Project Parcels

Navajo County, AZ

Project Features

Gen-Tie Line (Preferred)

Solar Facility

Transportation

Interstate Highway

Local Road

Boundaries

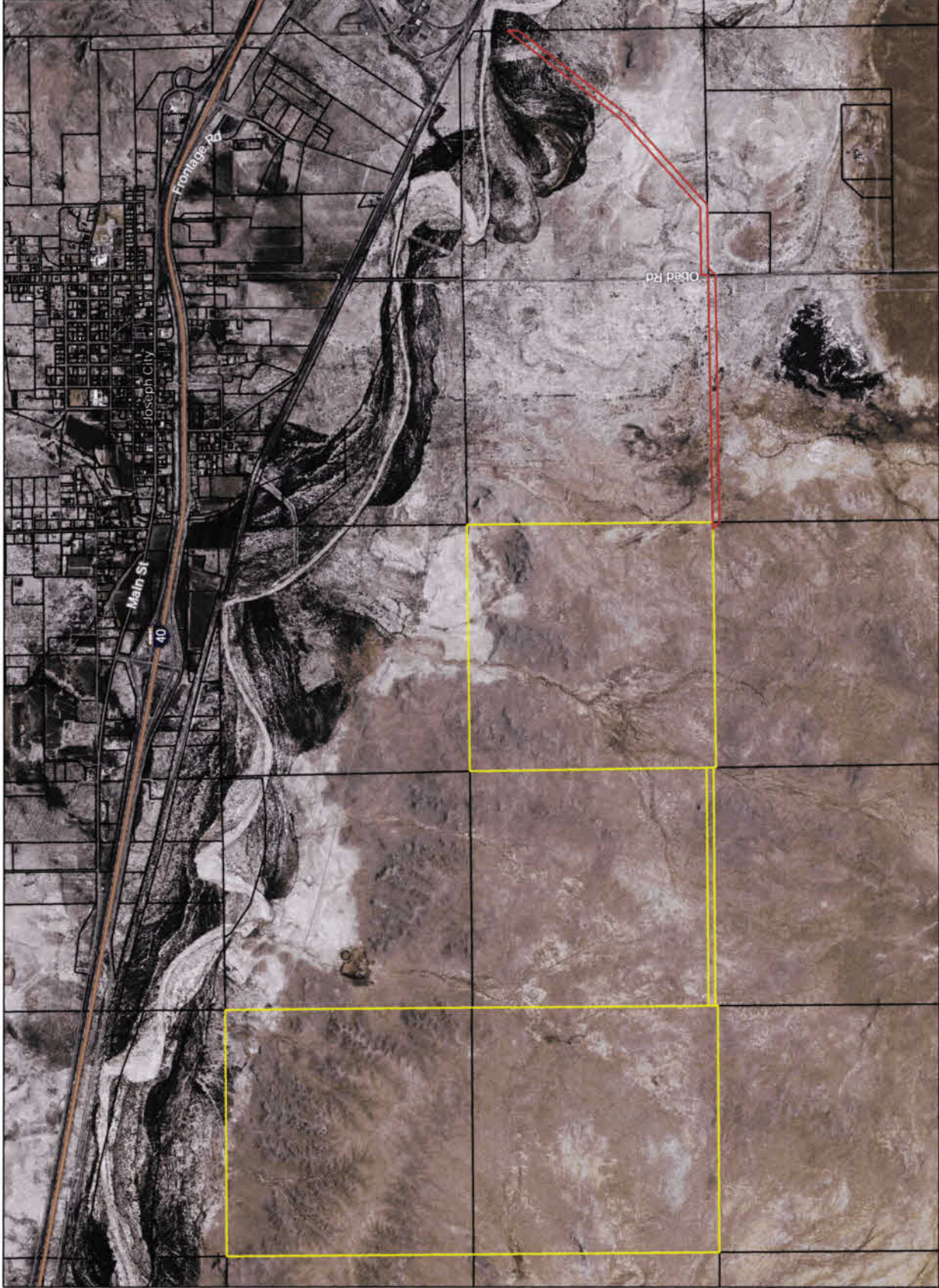
Navajo County Parcel*

*Some Navajo County parcels may be missing due to county parcel shapefile being incomplete.



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NIP, BTS, US CENSUS, NAVAJO COUNTY GIS

0 0.25 0.5 1 Miles

1:24,000 NAD 1983 UTM Zone 12N



Avangrid Renewables
Obed Meadow Solar Project

Figure 3
Wetlands Survey Results
Map 1 of 5

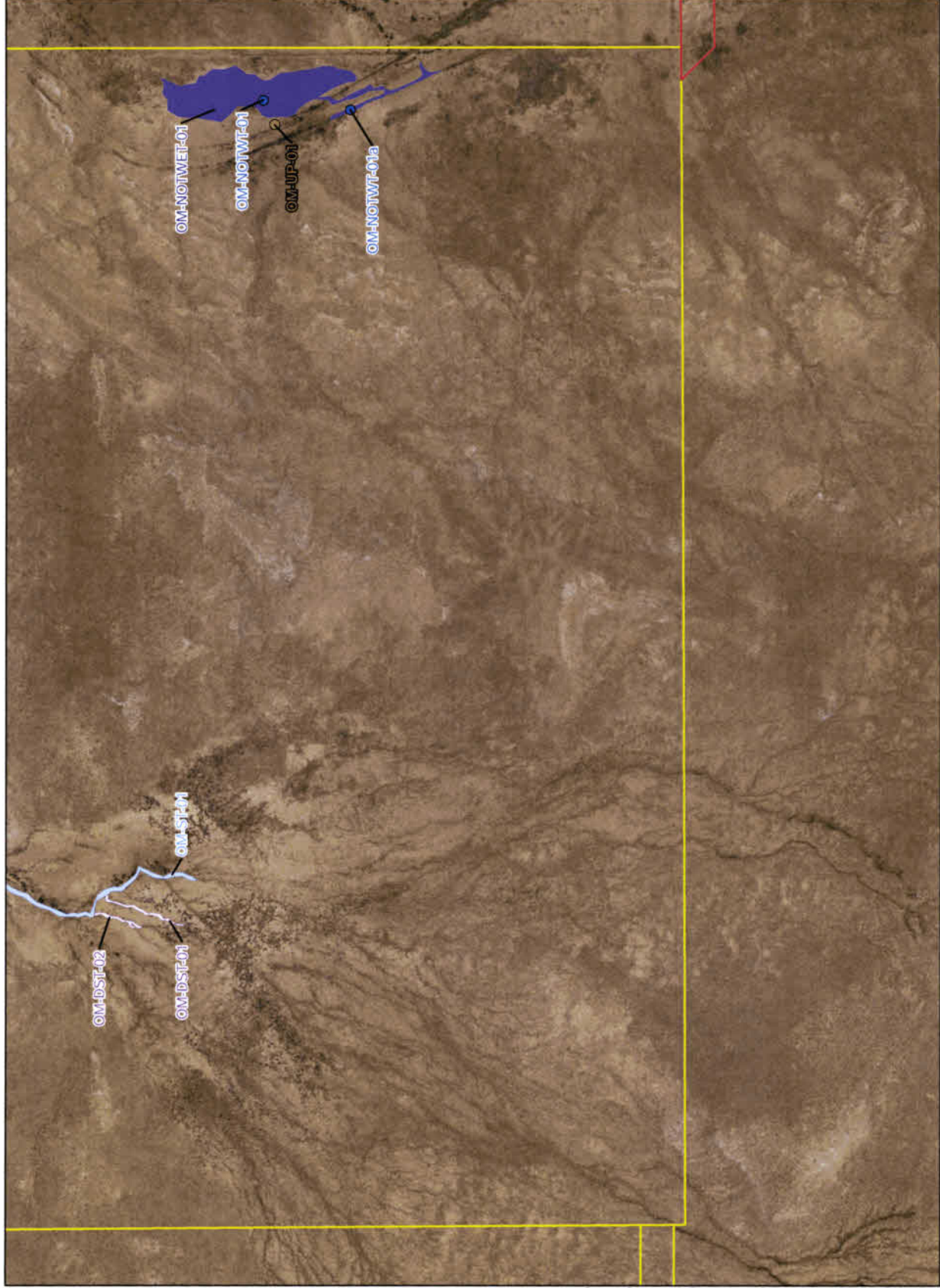
Navajo County, AZ

- Project Features**
- Gen-Tie Corridor
 - Project Area
- Wetlands Survey Results**
- Upland Test Pit
 - Wetland Test Pit
 - Desktop Delineated Stream
 - Field Delineated Stream
 - Field Delineated Wetland -
 - Does Not Meet Criteria*



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH



1:5,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

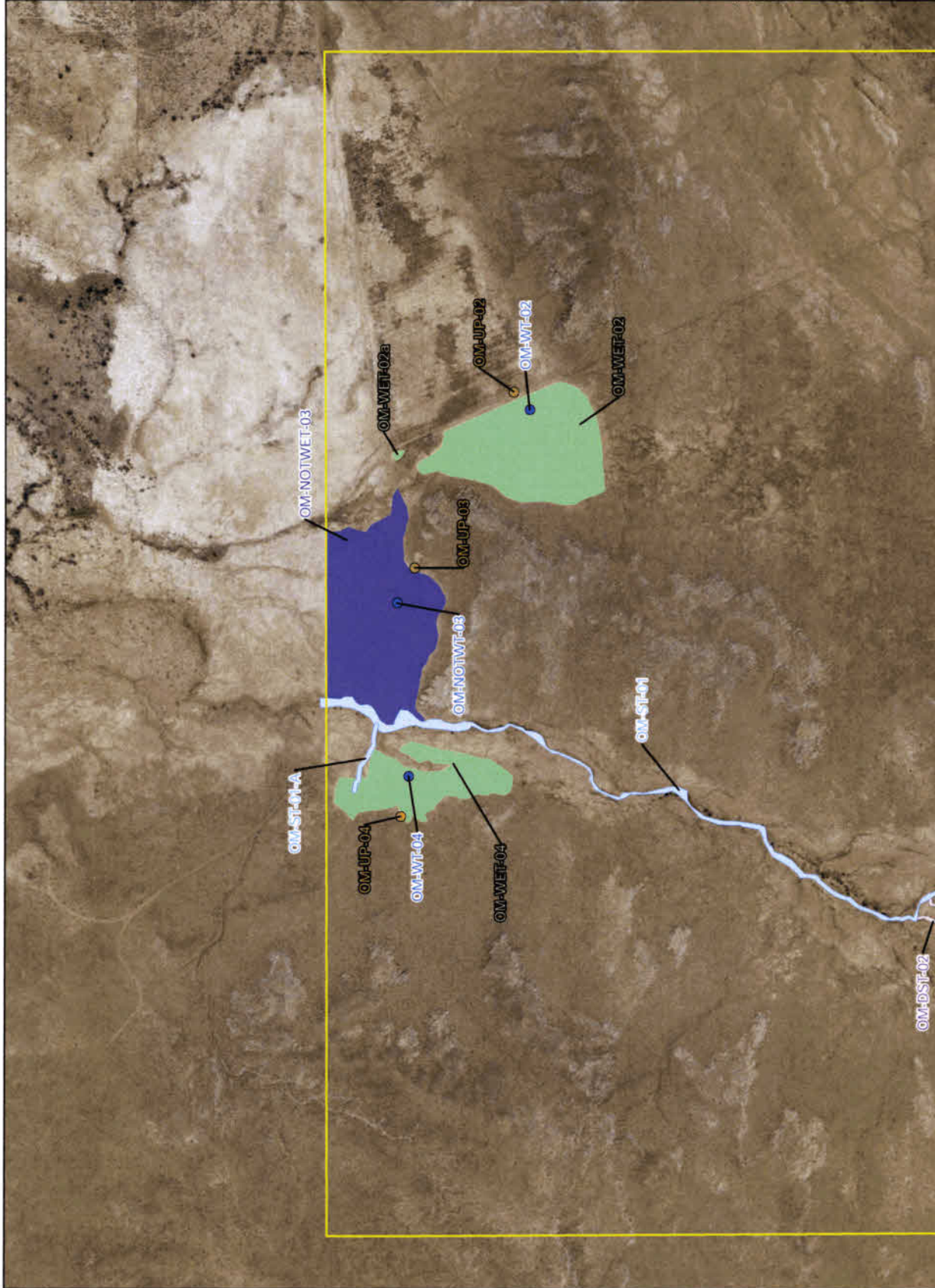
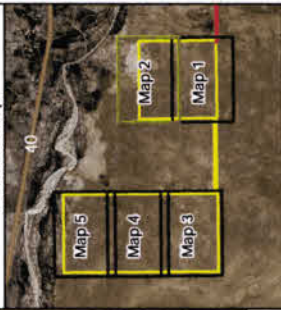


- Project Features**
- Project Area
- Wetlands Survey Results**
- Upland Test Pit
 - Wetland Test Pit
 - Desktop Delineated Stream
 - Field Delineated Stream
 - Field Delineated Wetland - Does Not Meet Criteria*
 - Field Delineated Wetland



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH

1:5,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

1:5,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet



Avangrid Renewables
Obed Meadow Solar Project

Figure 3
Wetlands Survey Results
Map 3 of 5

Navajo County, AZ

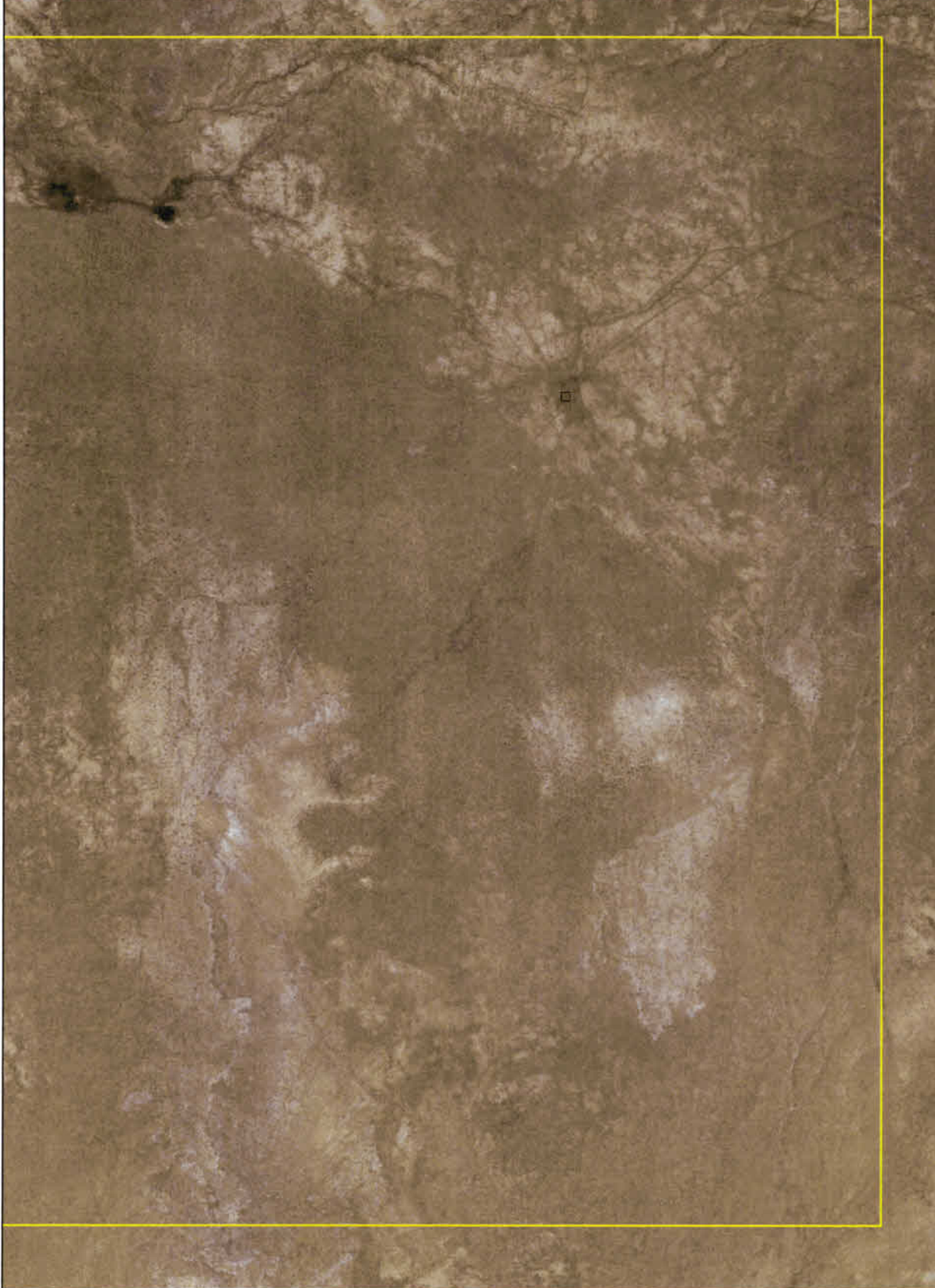
Project Features

- Project Area
- Wetlands Survey Results
- AZGFD Water Well



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH



1:5,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet




Avangrid Renewables
Obed Meadow Solar Project

Figure 3
Wetlands Survey Results
Map 4 of 5

Navajo County, AZ

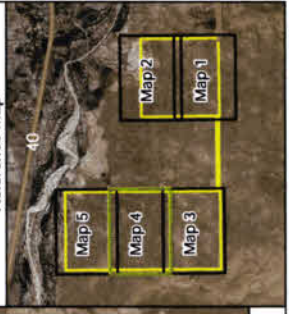
Project Features

 Project Area



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH



1:5,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

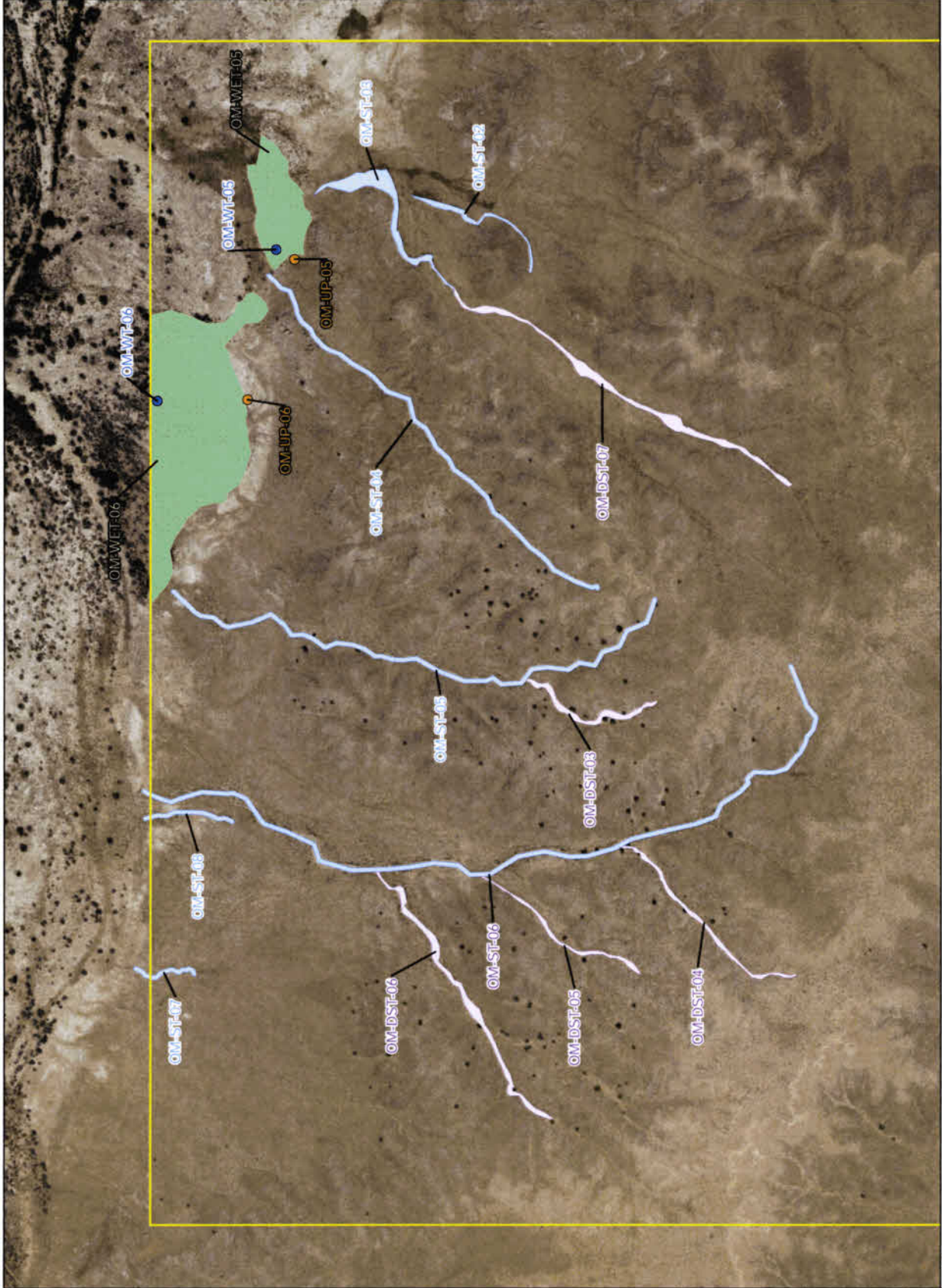
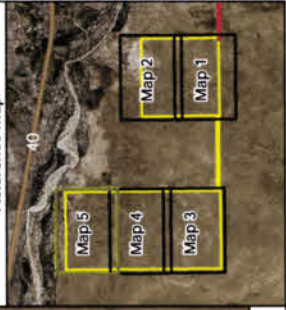


- Project Features**
- Project Area
 - Wetlands Survey Results**
 - Upland Test Pit
 - Wetland Test Pit
 - Desktop Delineated Stream
 - Field Delineated Stream
 - Field Delineated Wetland



NOT FOR CONSTRUCTION

Reference Map



Source: ESRI, USDA NAIP, BTS, US CENSUS, TETRA TECH



1:5,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet



**Avangrid Renewables
Obed Meadow
Generation Tie Line Project**

**Figure 2
Land Cover**

Navajo County, AZ

Project Features

- Temporary Gen-Tie Interconnect
- Project Substation
- Gen-Tie Corridor
- Gen-Tie Corridor Study Area
- APS Property Study Area
- APS Property

Transportation

- Local Road
- Railroad

Land Cover Type

- Open Water
- Developed, Open Space
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Barren Land (Rock/Sand/Clay)
- Evergreen Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Woody Wetlands
- Emergent Herbaceous Wetlands



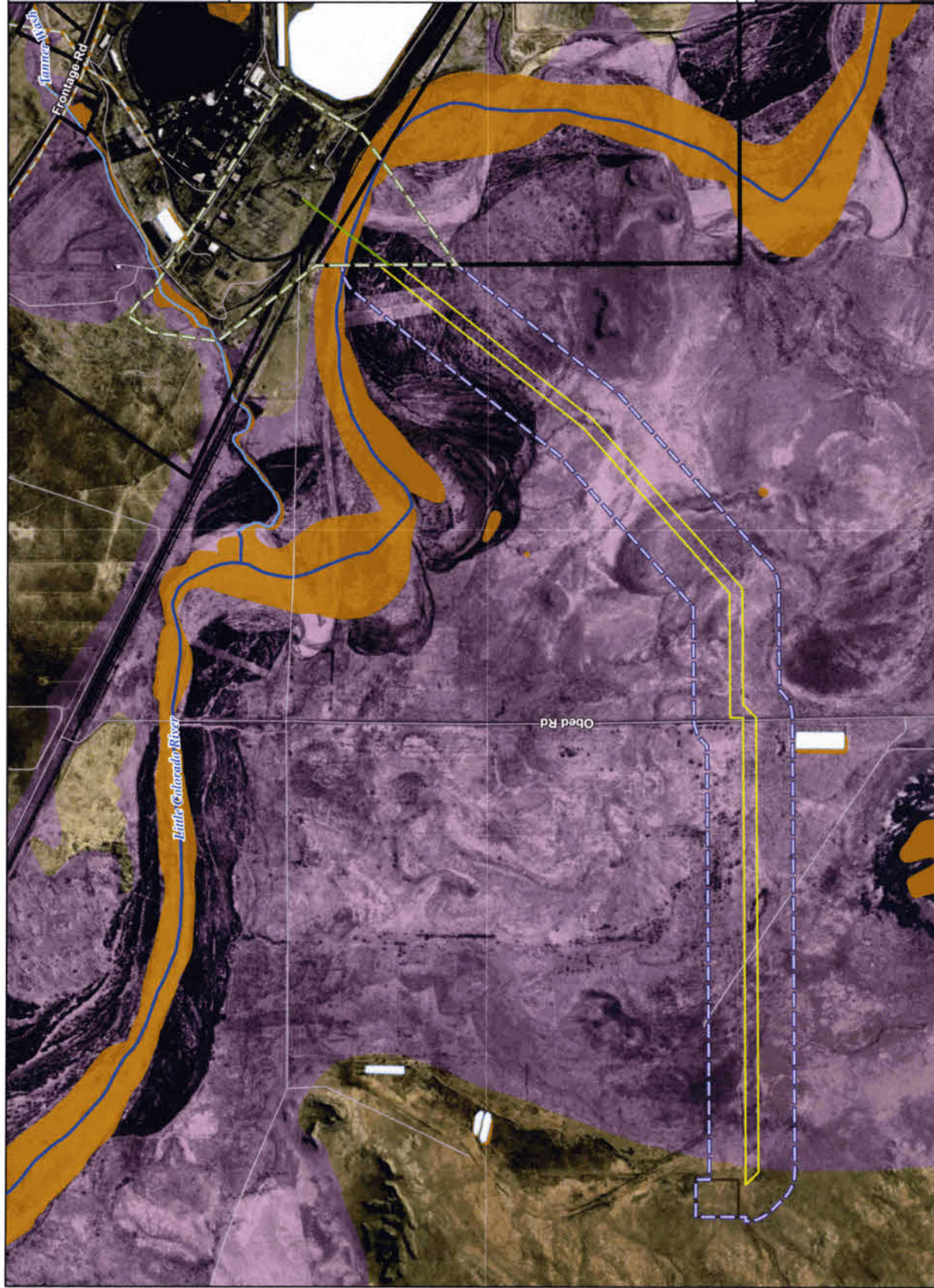
NOT FOR CONSTRUCTION

Reference Map



1:12,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

Source: ESRI, USDA NAIP, US CENSUS, BTS, NLCD 2019



**Avangrid Renewables
Obed Meadow
Generation Tie Line Project**

**Figure 3
Floodplains, Wetlands, and
Water Resources**

Navajo County, AZ

- Project Features**
- Temporary Gen-Tie Interconnect
 - Project Substation
 - Gen-Tie Corridor
 - Gen-Tie Corridor Study Area
 - APS Property Study Area
 - APS Property
- Transportation**
- Local Road
 - Railroad
- Floodplains, Wetlands, and Water Resources**
- Canal/Ditch
 - Intermittent Stream/River
 - Perennial Stream/River
 - NHD Waterbody
 - NWI Wetland
 - 100-year Floodplain



NOT FOR CONSTRUCTION

Reference Map



1:13,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

Source: ESRI, USDA NAIP, US CENSUS, BTS, NHD, NWI, FEMA

\\w070gblh1\GIS\Projects\CDN\1918_002_Avagridd\Obed Meadow\Center Wetlands Bo. 2023\Center Tie Wetlands Bo. 2023.aprx

Avangrid Renewables
Obed Meadow
Generation Tie Line Project

Figure 4
NRCS Soils

Navajo County, AZ

Project Features

- Temporary Gen-Tie Interconnect
- Project Substation
- Gen-Tie Corridor
- Gen-Tie Corridor Study Area
- APS Property Study Area
- APS Property

Transportation

- Local Road
- Railroad

Soil Type

- Epikorm channery sandy loam, 1-12% slopes
- Ives fine sandy loam, wet, 0-1% slopes
- Jocity sandy clay loam, saline-sodic, 0-1% slopes
- Medisaprists, saline, 0-1% slopes
- Navajo silty clay, saline-sodic, 0-1% slopes
- Riverwash-Typic Torrifluvents complex, 0-5% slopes
- Tours silty clay loam, saline-sodic, 0-1% slopes



NOT FOR CONSTRUCTION

Reference Map



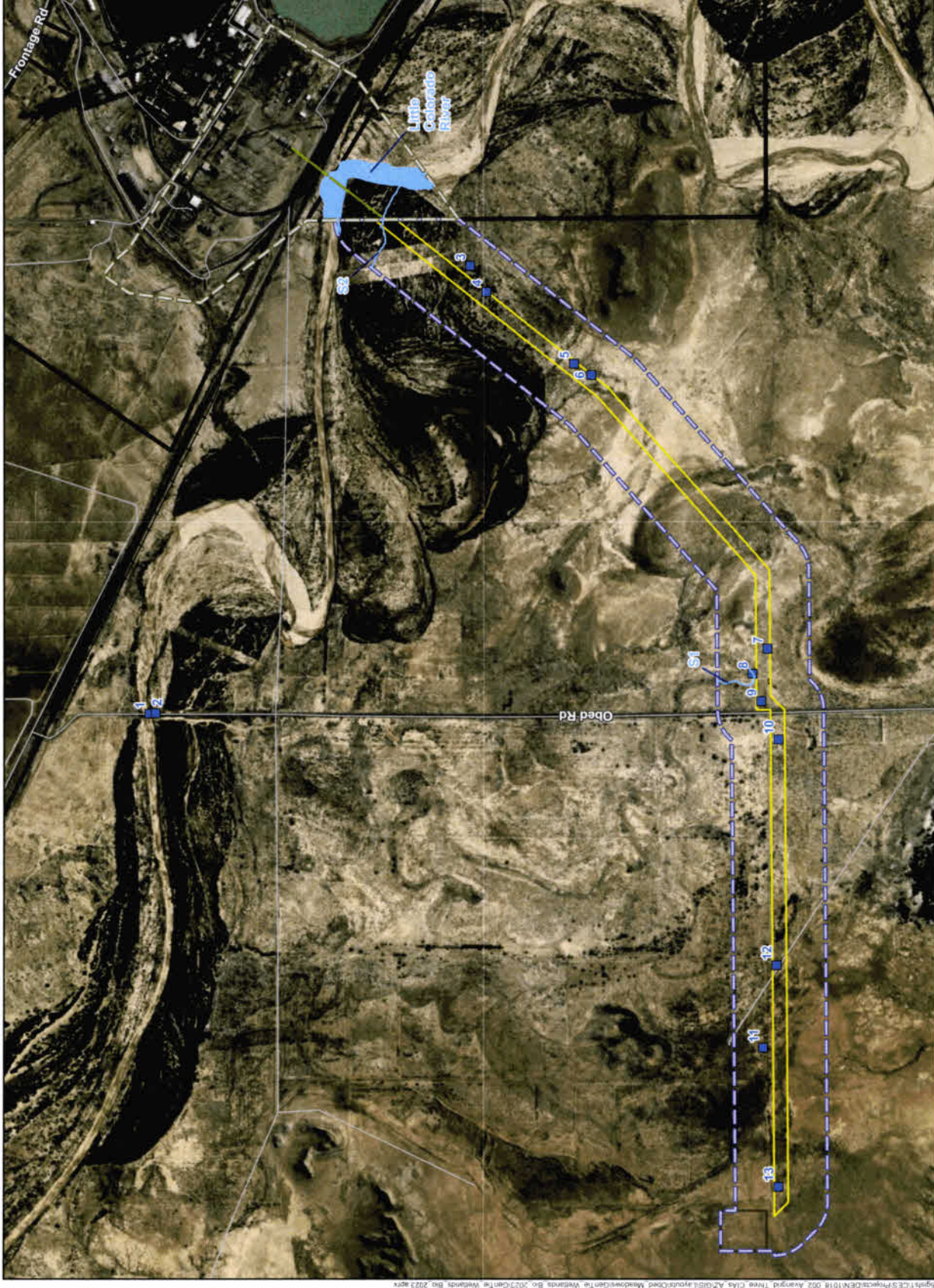
Obed Rd



Source: ESRI, USDA NAIP, US CENSUS, BTS, NRCS

1:12,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet





**Avangrid Renewables
Obed Meadow
Generation Tie Line Project**

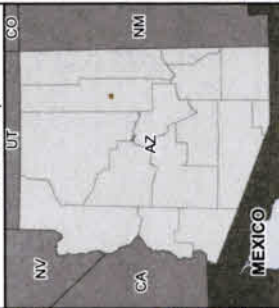
**Figure 5
Survey Results**

- Navajo County, AZ
- Project Features**
- Temporary Gen-Tie Interconnect
 - Project Substation
 - Gen-Tie Corridor
 - Gen-Tie Corridor Study Area
 - APS Property Study Area
 - APS Property
- Transportation**
- Local Road
 - Railroad
- Field Survey**
- Photo Location
 - Stream Line
 - Stream Polygon



NOT FOR CONSTRUCTION

Reference Map



1:12,000 NAD 1983 StatePlane Arizona East FIPS 0201 Feet

Source: ESRI, USDA NAIP, US CENSUS, BTS, TETRA TECH

APPENDIX B
Wetland Delineation Data Form

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 19, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-WT-02

Investigator(s): Steve Yarbrough , Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Alkaline flat Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): D Lat: -110 20.8111 Long: 34 56.1142 Datum: 1984

Soil Map Unit Name: Tours silty clay loam, saline-sodic, 0-1% slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Hydic Soil Present? Yes <input checked="" type="checkbox"/> No _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
----------------------------------------------------------------------------------	----------------------------------------------------------------------	-----------------------------------------------------------------------------	----------------------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>15</u> x 2 = <u>30</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>15</u> (A) <u>30</u> (B) Prevalence Index = B/A = <u>2</u>
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	_____	_____	_____	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)	_____	_____	_____	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input checked="" type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Suaeda calceoliformis</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>15</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u>)	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>85</u> % Cover of Biotic Crust _____				

Remarks:
 Dominant vegetation is adapted to live in alkaline conditions.

SOIL

Sampling Point: OM-WT-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	2.5YR 3/4	90	2.5YR 4/8	10	C	M	silty clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (**LRR C**)
- 1 cm Muck (A9) (**LRR D**)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (**LRR C**)
- 2 cm Muck (A10) (**LRR B**)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: hardpan clay
 Depth (inches): 7 inches

Hydric Soil Present? Yes No

Remarks:

The soil matrix meets the red parent material criteria for value and chroma of 4 or less. In this case the value is 3, and the chroma is 4.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (**Nonriverine**)
- Sediment Deposits (B2) (**Nonriverine**)
- Drift Deposits (B3) (**Nonriverine**)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

- Water Marks (B1) (**Riverine**)
- Sediment Deposits (B2) (**Riverine**)
- Drift Deposits (B3) (**Riverine**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 19, 2021
 Applicant/Owner: Avangrid State: AZ Sampling Point: OM-UP-02
 Investigator(s): Steve Yarbrough, Nick Chiaro Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Shoreline Local relief (concave, convex, none): convex Slope (%): 10
 Subregion (LRR): D Lat: -110 20.9488 Long: 34 56.1811 Datum: 1984
 Soil Map Unit Name: _____ NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.5</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Atriplex canescens</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>25</u> x 3 = <u>75</u>
5. _____	_____	_____	_____	FACU species <u>10</u> x 4 = <u>40</u>
_____ = Total Cover				UPL species <u>5</u> x 5 = <u>25</u>
				Column Totals: <u>40</u> (A) <u>140</u> (B)
				Prevalence Index = B/A = <u>3.5</u>
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Sporobolus airoides</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Hilaria jamesii</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>70</u> % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
Remarks:				

SOIL

Sampling Point: OM-UP-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-13	2.5YR 3/6	100					loamy sa	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Vernal Pools (F9)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:
No indicators for hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No evidence of characteristic wetland hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 20, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-WT-04

Investigator(s): Steve Yarbrough, Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Alkaline flat Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): D Lat: -110 21.1368 Long: 34 56.1859 Datum: 1984

Soil Map Unit Name: Tours silty clay loam, saline-sodic, 0-1% slopes NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: _____	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Allenrolfea occidentalis</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	Prevalence Index worksheet: <table style="width:100%; border: none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>Facu species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>15</u> (A)</td> <td><u>30</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>0</u>	x 3 = <u>0</u>	Facu species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>15</u> (A)	<u>30</u> (B)	Prevalence Index = B/A = <u>2</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>15</u>	x 2 = <u>30</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
Facu species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>15</u> (A)	<u>30</u> (B)																			
Prevalence Index = B/A = <u>2</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Suaeda calceoliformis</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input checked="" type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
_____ = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>85</u> % Cover of Biotic Crust _____																				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____																				
Remarks: Dominant vegetation is adapted to live in alkaline conditions.																				

SOIL

Sampling Point: OM-WT-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	2.5YR 3/4	90	2.5YR 6/6	10	C	M	silty clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: hardpan clay
 Depth (inches): 6 inches

Hydric Soil Present? Yes No

Remarks:

The soil matrix meets the red parent material criteria for value and chroma of 4 or less. In this case the value is 3, and the chroma is 4.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 20, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-UP-04

Investigator(s): Steve Yarbrough, Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Playa margin Local relief (concave, convex, none): convex Slope (%): 5

Subregion (LRR): D Lat: -110 21.1757 Long: 34 56.1955 Datum: 1984

Soil Map Unit Name: _____ NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.25</u> (A/B)	
4. _____	_____	_____	_____		
_____ = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:	
1. <u>Atriplex canescens</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Salsola tragus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	OBL species <u>0</u> x 1 = <u>0</u>	
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>	
4. _____	_____	_____	_____	FAC species <u>15</u> x 3 = <u>45</u>	
5. _____	_____	_____	_____	FACU species <u>15</u> x 4 = <u>60</u>	
<u>15</u> = Total Cover				UPL species <u>5</u> x 5 = <u>25</u>	
				Column Totals: <u>35</u> (A) <u>130</u> (B)	
				Prevalence Index = B/A = <u>3.71</u>	
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:	
1. <u>Halogeton glomeratus</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>		
2. <u>Sporobolus airoides</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	___ Prevalence Index is ≤3.0 ¹	
3. _____	_____	_____	_____	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
4. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
<u>20</u> = Total Cover					
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>80</u>		% Cover of Biotic Crust _____			
Remarks:					

SOIL

Sampling Point: OM-UP-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	5YR 4/4	100					fine sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:
No indicators for hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:	Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No evidence of characteristic wetland hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 20, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-WT-05

Investigator(s): Steve Yarbrough, Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Alkaline flat Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): D Lat: -110 22.7653 Long: 34 57.0338 Datum: 1984

Soil Map Unit Name: Tours silty clay loam, saline-sodic, 0-1% slopes NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input checked="" type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)				
1. <u>Allenrolfea occidentalis</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum</u> (Plot size: <u>5'</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	Remarks: Dominant vegetation is adapted to live in alkaline conditions.
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>85</u>	% Cover of Biotic Crust _____			

Remarks:

Dominant vegetation is adapted to live in alkaline conditions.

SOIL

Sampling Point: OM-WT-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	2.5YR 4/4	95	2.5YR 7/2	5	D	M	silty clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: hardpan clay
 Depth (inches): 7 inches

Hydric Soil Present? Yes No

Remarks:

The soil matrix meets the red parent material criteria for value and chroma of 4 or less. In this case the value is 4, and the chroma is 4 and there are 5% depletions in the matrix.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 20, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-UP-05

Investigator(s): Steve Yarbrough , Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): convex Slope (%): 3

Subregion (LRR): D Lat: -110 22.7753 Long: 34 57.0146 Datum: 1984

Soil Map Unit Name: Gypsiorthids-Torriorthents association, 5-60% slopes NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Hydic Soil Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>		
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.667</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Suaeda calceoliformis</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Salsola tragus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Sporobolus airoides</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	_____ = Total Cover
5. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	_____ = Total Cover
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	_____ = Total Cover
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>80</u>		% Cover of Biotic Crust _____		

Remarks:

SOIL

Sampling Point: OM-UP-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	2.5YR 4/6	100					loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:
No indicators for hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No evidence of characteristic wetland hydrology.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 20, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-WT-06

Investigator(s): Steve Yarbrough, Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Alkaline flat Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): D Lat: -110 22.9026 Long: 34 57.1178 Datum: 1984

Soil Map Unit Name: Tours silty clay loam, saline-sodic, 0-1% slopes NWI classification: PFO/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Tamarix chinensis</u>	<u>20</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
2. _____																				
3. _____																				
4. _____																				
_____ = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Allenrolfea occidentalis</u>	<u>20</u>	Yes	FACW	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>60</u> (A)</td> <td><u>160</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.667</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>60</u> (A)	<u>160</u> (B)	Prevalence Index = B/A = <u>2.667</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>60</u> (A)	<u>160</u> (B)																			
Prevalence Index = B/A = <u>2.667</u>																				
2. <u>Tamarix chinensis</u>	<u>20</u>	Yes	FAC																	
3. _____																				
4. _____																				
5. _____																				
<u>10</u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. _____				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input checked="" type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
<u>5</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____																				
_____ = Total Cover																				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____																

Remarks:
Dominant vegetation is adapted to live in alkaline conditions.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Obed Meadows City/County: Navajo Sampling Date: Oct. 20, 2021

Applicant/Owner: Avangrid State: AZ Sampling Point: OM-UP-06

Investigator(s): Steve Yarbrough , Nick Chiaro Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Footslope Local relief (concave, convex, none): convex Slope (%): 3

Subregion (LRR): D Lat: -110 22.9021 Long: 34 57.496 Datum: 1984

Soil Map Unit Name: Gypsiorthids-Torriorthents association, 5-60% slopes NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____

Are Vegetation _____, Soil , or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
<u>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</u>				
1. <u>Suaeda calceoliformis</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Salsola tragus</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u>Herb Stratum (Plot size: <u>5'</u>)</u>				
1. <u>Sporobolus airoides</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Hilaria jamesii</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
<u>Woody Vine Stratum (Plot size: <u>30'</u>)</u>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>90</u>		% Cover of Biotic Crust _____		

Remarks:

SOIL

Sampling Point: OM-UP-06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	2.5YR 5/6	100					loamy sa	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

No indicators for hydric soil present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No evidence of characteristic wetland hydrology.

APPENDIX C
Photograph Log

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-02

Photo Type: Wetland

Photo Description: Wetland Facing Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-02

Photo Type: Wetland

Photo Description: OM-WT-02 Sample Pit

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021
Associated Feature: OM-WET-02
Photo Type: Wetland
Photo Description: Wetland Bounday

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-02

Photo Type: Wetland

Photo Description: Facing Wetland From Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log

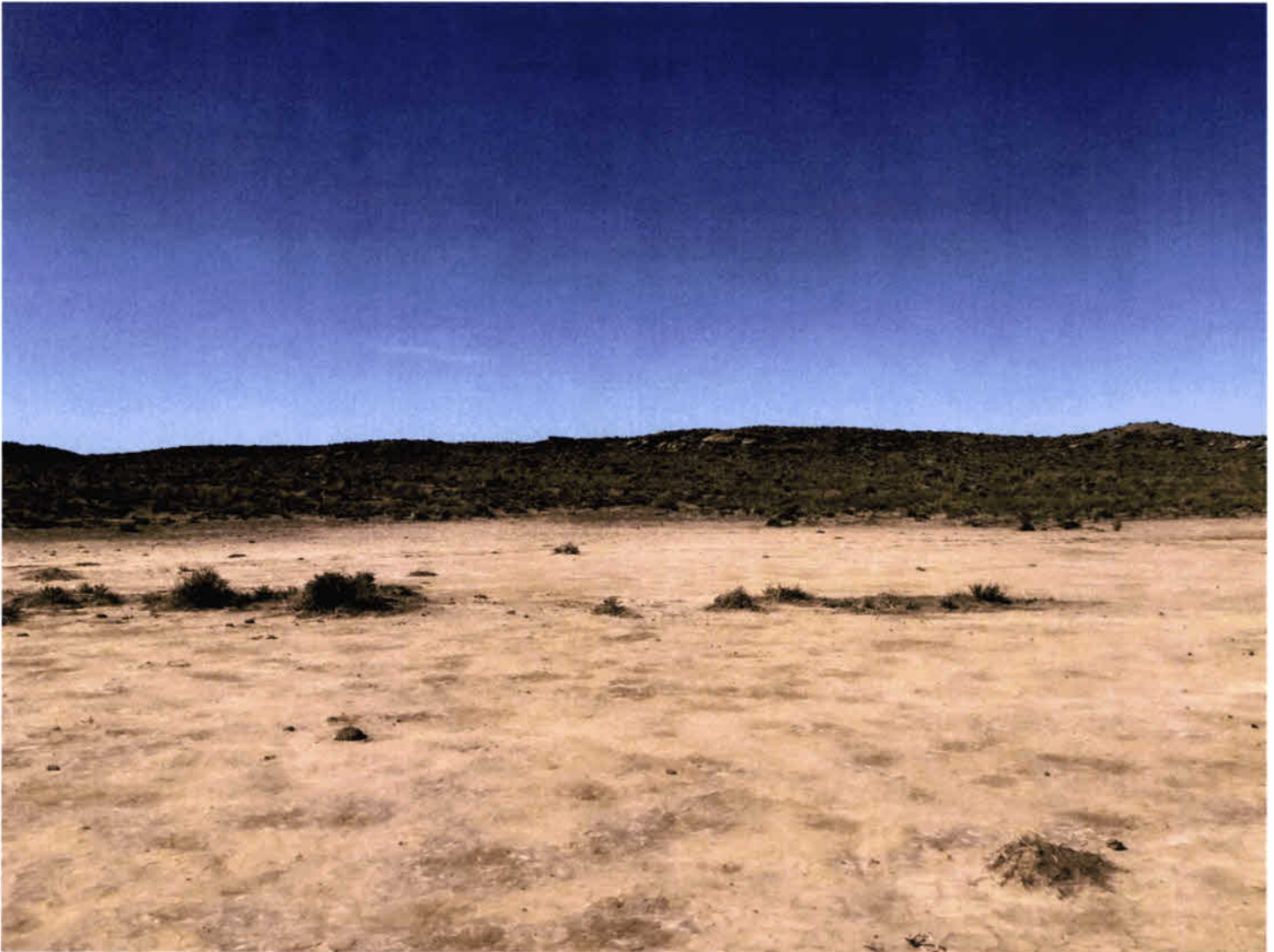


Photo Date: October 20, 2021
Associated Feature: OM-WET-04
Photo Type: Wetland
Photo Description: Wetland Facing Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-04

Photo Type: Wetland

Photo Description: Wetland Boundary

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-04

Photo Type: Wetland

Photo Description: Facing Wetland From Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-04

Photo Type: Wetland

Photo Description: OM-UP-04 Sample Pit

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-05

Photo Type: Wetland

Photo Description: OM-WT-05 Sample Pit

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-05

Photo Type: Wetland

Photo Description: Wetland Facing Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-05

Photo Type: Wetland

Photo Description: Wetland Boundary

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-05

Photo Type: Wetland

Photo Description: Facing Wetland From Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-06

Photo Type: Wetland

Photo Description: Wetland Facing Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-06

Photo Type: Wetland

Photo Description: Wetland Boundary

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-06

Photo Type: Wetland

Photo Description: OM-UP-06 Sample Pit

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021

Associated Feature: OM-WET-06

Photo Type: Wetland

Photo Description: Facing Wetland From Upland

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021
Associated Feature: OM-ST-01
Photo Type: Waterway
Photo Description: Facing Upstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021
Associated Feature: OM-ST-01
Photo Type: Waterway
Photo Description: Bed Material

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021
Associated Feature: OM-ST-01
Photo Type: Waterway
Photo Description: Facing Downstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021
Associated Feature: OM-ST-02
Photo Type: Waterway
Photo Description: Facing Upstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 20, 2021
Associated Feature: OM-ST-03
Photo Type: Waterway
Photo Description: Facing Downstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 21, 2021
Associated Feature: OM-ST-04
Photo Type: Waterway
Photo Description: Facing Downstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 21, 2021
Associated Feature: OM-ST-05
Photo Type: Waterway
Photo Description: Facing Upstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 21, 2021
Associated Feature: OM-ST-06
Photo Type: Waterway
Photo Description: Facing Upstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 21, 2021
Associated Feature: OM-ST-07
Photo Type: Waterway
Photo Description: Facing Upstream

Avangrid Obed Meadows Wetland and Waterways Photo Log



Photo Date: October 21, 2021

Associated Feature: OM-ST-08

Photo Type: Waterway

Photo Description: Facing Upstream



Photo #1: Cholla Power Plant and Little Colorado River from Obed Road Bridge



Photo #2: Dense tamarisk community on the Little Colorado River floodplain



Photo #3: Cholla Power Plant and cleared vegetation under transmission line



Photo #4: Fremont cottonwood south of the Little Colorado River floodplain



Photo #5: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #6: Alkaline habitat near the Little Colorado River floodplain



Photo #7: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #8: Ephemeral drainage just to the north of the proposed corridor



Photo #9: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #10: Typical upland habitat of alkali sacaton and four-wing saltbush



Photo #11: Upland depression and tamarisk



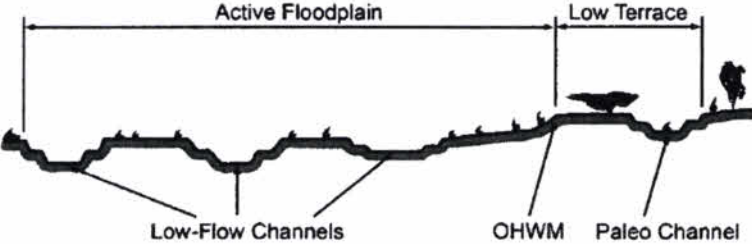
Photo #12: Typical upland habitat dominated by four-wing saltbush



Photo #13: Upland area of dense alkali sacaton

APPENDIX D
Arid West Ephemeral and Intermittent Stream OHWM
Datasheet

Arid West Ephemeral and Intermittent Streams OHW M Datasheet

Project: Obed Meadows Project Number: 194-1018-0025-02 Stream: OM-ST-01 Through OM-ST-08 Investigator(s): Steve Yarbrough and Nick Chiaro	Date: October 20, 2021 Time: 11:30 Town: Joseph City State: Arizona Photo begin file#: Photo end file#: See Attachment D for photos				
Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Do normal circumstances exist on the site? Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Is the site significantly disturbed?	Location Details: Approx. 1.5 miles southwest of Joseph City, AZ. Projection: NAD 83 Datum: Coordinates: See figure A				
Potential anthropogenic influences on the channel system: The property actively grazed by cattle. There are also two-track paths crossing the channel.					
Brief site description: The Site is located in Arizona's high desert and divided into two parcels connected by a gen-tie corridor on the southern end of both parcels. The central and southern portions of the Site predominately consist of rolling hills, and the northern portion gently slopes to form a portion of the Little Colorado River floodplain.					
Checklist of resources (if available): <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Aerial photography Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event </td> </tr> </table>		<input checked="" type="checkbox"/> Aerial photography Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event		
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Hydrogeomorphic Floodplain Units 					
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHW M: <ol style="list-style-type: none"> 1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. <ol style="list-style-type: none"> a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHW M and record the indicators. Record the OHW M position via: <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Mapping on aerial photograph</td> <td><input checked="" type="checkbox"/> GPS</td> </tr> <tr> <td><input type="checkbox"/> Digitized on computer</td> <td><input type="checkbox"/> Other:</td> </tr> </table> 		<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS	<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:
<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS				
<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:				

194-1018-0025-02

October 20, 2021

Project ID:

Cross section ID: OM-ST-01

Date:

Time:

Cross section drawing:

October 20, 2021



OHWM

GPS point: See Attachment A

Indicators:

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: _____
- Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: See Attachment A

Characteristics of the floodplain unit:

Average sediment texture: Silt
Total veg cover: 50 % Tree: % Shrub: 30 % Herb: 20 %

Community successional stage:

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

Indicators:

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: _____
- Other: _____
- Other: _____

Comments:

Exhibit C. Special Status Species and Species of Concern

A.R.S. §40-360 et seq. established the Siting Committee in 1971. A.R.S. §40-360.06(A)(2) stipulates “fish, wildlife, and plant life and associated forms of life on which they are dependent” are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in ACC 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 the effects, if any, the proposed facilities will have thereon.

C.1 Introduction

Exhibit C addresses species protected by federal or state laws and policies because of their conservation status. Exhibit C also addresses whether any areas protected for conservation purposes are present in or within the two-mile Study Area of the Project. Some databases used to review existing data in the region do not return results based strictly on a two-mile radius. For example, the AZGFD utilizes the Project area plus a 5-mile buffer. Exhibit C addresses the complete results of those database queries and discusses whether identified species or protected areas may be present or affected by the Project.

Note that Exhibit C summarizes the results presented in Exhibit B, Appendix B-1: *Biological Resources Assessment: Obed Meadow Generation Tie-Line Project, Navajo County, Arizona*. Please see Exhibit B, Appendix B-1 for full results of the biological resource assessment conducted for the Project.

C.2 Regulatory Framework

The proposed Project would be developed on private lands. A summary of potentially applicable federal, state, and local regulations related to biological resources is provided below.

C.2.1 Federal Regulations Summary

C.2.1.1 Endangered Species Act

The Endangered Species Act of 1973 (ESA) directs the U.S. Fish and Wildlife Service (USFWS) to identify and protect endangered and threatened species and their critical habitat, and to provide a means to conserve their ecosystems. Among its other provisions, the ESA requires the USFWS to assess civil and criminal penalties for violations of the ESA or its regulations. Section 9 of the ESA makes it unlawful to knowingly violate the “take” provisions of the ESA. Projects without a federal nexus work directly with USFWS to avoid adversely impacting listed species and their critical habitats. This Project has no assumed federal nexus at this time; therefore, the Applicant will work directly with the USFWS.

C.2.1.2 Bald and Golden Eagle Protection Act

Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are afforded legal protection under authority of the Bald and Golden Eagle Protection Act (BGEPA; 16 United States Code [U.S.C.] 668–668d). The BGEPA prohibits the take, sale, purchase, offer of sale, purchase or barter, transport, export or import, at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof (16 U.S.C. 668). The BGEPA also defines “take” to include “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb” (16 U.S.C. 668c), and includes criminal and civil penalties for violating the statute (see 16 U.S.C. 668).

C.2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements the United States’ obligations under four international treaties for the protection of migratory birds that includes more than 1,000 species (Federal Register; 50 CFR 10 and 21), including the bald eagle and golden eagle. The MBTA is administered by the USFWS and prohibits “take” of migratory birds—their parts, eggs, or nests “at any time, by any means.” Over the years there has been varying guidance on the prohibition of incidental take under the MBTA. Rulemaking, effective December 3, 2021, clarified that USFWS considers incidental take as prohibited under the MBTA, subject to outstanding court rulings.

C.2.2 State Regulations Summary

C.2.2.1 Arizona Game and Fish Department (AZGFD) Regulations

Arizona State Statutes and AZGFD Commission Policies have been established to conserve, protect, restore, and enhance fish and wildlife populations and their habitats. Although these policies are primarily related to hunting, fishing, trapping, etc. of wildlife, some may be relevant to solar energy projects.

The Arizona Game and Fish Department’s Arizona Wildlife Conservation Strategy (AZGFD 2022) identifies Species of Greatest Conservation Need (SGCN). SGCN are wildlife species that have been evaluated in terms of their conservation needs and vulnerability and have been determined to be at risk (i.e., vulnerable). AZGFD’s SGCN list includes endangered and threatened species as well as special-status species that have been identified as needing additional protection due to declining populations.

The Nongame and Endangered Wildlife Management (NGEWM) subprogram of AZGFD is responsible for the protection, restoration, preservation, and maintenance of nongame and endangered wildlife as part of the natural diversity of Arizona and to provide opportunities for the public to enjoy nongame and endangered wildlife. “Nongame wildlife” is all wildlife except game mammals, game birds, furbearing animals, predatory animals and game fish. “Endangered wildlife” are those species listed by the AZGFD as Tier 1A of SGCN or by the USFWS as endangered, threatened, or a candidate for such status. The AGFD’s SGCN list identifies 18 Tier 1A species within Navajo County.

C.2.2.2 Native Plant Law, A.R.S. § 3-901-907

Native plants in Arizona are managed by the Arizona Department of Agriculture (ADOA), which regulates harvest, salvage, and transport of plants. Many of Arizona's native plants are protected by the Arizona Native Plant Law in A.R.S. Title 3. Protected native plants may not be removed from any lands, whether private or public, without the permission of the landowner and a permit from the ADOA. Plants listed in a Highly Safeguarded category may only be taken or salvaged for scientific or conservation purposes. No Highly Safeguarded plant species, or any other rare plant species, are present in the Project.

Although private landowners may manage vegetation on their property, ADOA requires that notice be provided prior to clearing native vegetation on private lands. The landowner also has the right to sell or give away any plant growing on their land. However, protected native plants may not be legally possessed, taken, or transported from the growing site without a permit from the ADOA.

C.2.2.3 Regulated and Restricted Noxious Weeds, Arizona Administrative Code R3-4-244

There are currently 53 species designated as noxious weeds in Arizona by the ADOA (ADOA 2022). Noxious weeds are divided into three classes: Class A, Class B, and Class C. Class A noxious weeds is defined as "a species of plant that is not known to exist or of limited distribution in the State and is a high priority pest for quarantine, control, or mitigation." Class B noxious weed is defined as "a species of plant that is known to occur, but of limited distribution in the State and may be a high priority pest for quarantine, control or mitigation if a significant threat to a crop, commodity, or habitat is known to exist." Class C noxious weed is defined as "a species of plant that is widespread but may be recommended for active control based on risk assessment" (A.R.S. § 3-201, A.A.C. R3-4-101, and R3-4-201).

C.3 Inventory Methods

To assess the potential for occurrences of special-status species within the Project, the following publicly available information was reviewed:

- AZGFD Online Environmental Review Tool (HabiMap)
- AZGFD Nongame and Endangered Wildlife Program Species Abstracts
- Arizona Native Plant Society Arizona Rare Plant Field Guide
- Google Earth Aerial Imagery
- Online species profiles and distribution information
- USFWS Information for Planning and Consultation (IPaC) online tool
- USFWS Critical Habitat Portal
- U.S. Environmental Protection Agency Ecoregion Downloads

A habitat reconnaissance survey of the Project was conducted by Tetra Tech biologists in 2022, with a follow up survey being conducted for the Project on April 28, 2023. Reconnaissance

included ground-based (pedestrian and windshield) surveys to identify and document the vegetative communities, potential foraging resources, topography, and other habitat features to evaluate potential wildlife usage within the Project. The purpose of the surveys was to ground-truth the desktop assessment results and assess whether there is suitable habitat for federally listed and other special-status species within the Project. Data recorded included areas of potentially suitable habitat, wildlife, and plant observations, and representative photographs.

C.4 Results

C.4.1 General Field Observations

Land cover in the Project is predominantly high desert shrubland mixed with herbaceous grassland; there is limited plant diversity and few trees. Nearby ephemeral streams within drainages flow north toward the Little Colorado River. The upland biotic community can be considered Great Basin Desertscrub (Brown 1994). Vegetation in upland environments along and near the Gen-Tie corridor included four-wing saltbush (*Atriplex canescens*), alkali sacaton (*Sporobolus airoides*), shadscale (*Atriplex confertifolia*), tumbleweed (*Salsola tragus*), broom snakeweed (*Gutierrezia sarothrae*), Bigelow's sagebrush (*Artemisia bigelovii*), and prickly pear cactus (*Opuntia* sp.). Vegetation on more alkaline flats, in depressions, and along and near the floodplain of the Little Colorado River included tamarisk (*Tamarix chinensis*), iodinebush (*Allenrolfea occidentalis*), mound saltbush (*Atriplex obovata*), seablight (*Suaeda calceoliformis*), greasewood (*Sarcobatus vermiculatus*), Rio Grande cottonwood (*Populus deltoides* ssp *wislizeni*), and desert olive (*Forestiera neomexicana*). The biotic community along the Little Colorado River can be considered Great Basin Riparian Wetland (Brown 1994). Wildlife and plant species observed are listed in Exhibit B, Appendix B-1: *Biological Resources Assessment: Obed Meadow Generation Tie-Line Project, Navajo County, Arizona*.

C.4.2 Management Areas

Federal and state agencies maintain conservation areas to help conserve habitats critical to migratory birds and other sensitive species (e.g., National Wildlife Refuges [NWRs], National Grasslands, state parks, state wildlife areas). There are no federally or state-managed conservation areas within the Project. The nearest Arizona Wildlife Area, Chevelon Creek, is located approximately 9.1 miles west of the Project.

Some species have critical habitat defined by USFWS; however, there is no USFWS-designated critical habitat within the Project (USFWS 2022). The nearest USFWS-designated critical habitat is for Colorado spinedace (*Lepidomeda vittata*) and is located approximately 6.5 miles west of the Project.

No AZGFD-mapped Important Connectivity Zones intersect the Project, although some do occur within a 5-mile buffer. These "Important Connectivity Zones" were identified in 2006 by Arizona's Wildlife Linkages Assessment as a tool to identify important potential wildlife zones and act as a starting point for consultation and coordination among organizations and agencies that have a role in maintaining habitat connectivity. These "Important Connectivity Zones" were identified by a broad range of stakeholders representing organizations and interests to identify and map areas with the aim to encourage strategies for conservation that result in land-use decisions

(AZGFD 2013). The AZGFD was consulted (Exhibit J) and provided recommendations for the Project to avoid washes and corridor buffers. The Applicant will continue coordination with AZGFD as the Project develops.

The Bureau of Land Management (BLM) has designated Areas of Critical Environmental Concern (ACEC) to indicate where special management attention is needed to protect important historical, cultural, and scenic value or fish and wildlife or other natural resources (BLM 2022). There are no ACECs within the Project or Project vicinity. The nearest ACEC, Tanner Wash, is located approximately 1.25 miles northeast of the Project.

C.4.3 Special Status Species

According to the USFWS IPaC resources list for the Project, two threatened and one candidate species, along with the bald eagle and golden eagle which are protected by the BGEPA have the potential to occur within the Project (Table C-1). A proposed experimental population for a non-essential species, gray wolf (*Canis lupus*) is also identified by the IPaC. Experimental populations on private land are not afforded protection under ESA. There are no USFWS-designated critical habitats for any federally listed species within the Project (USFWS 2022).

The Arizona Natural Heritage Program Online Environmental Review Tool Report, provides a list of USFWS federally listed species and Species of Concern, U.S. Forest Service Sensitive Species, AZGFD SGCN-listed species, species listed under the Arizona Native Plant Law, AZGFD Species of Economic and Recreational Importance species, and BLM Sensitive Species that have been documented within 5 miles of a site vicinity or predicted within 5 miles of a site vicinity based on predicted range models (AZGFD 2022). Tetra Tech queried the AZGFD Heritage Data Management System Environmental Online Review Tool with respect to the Project and determined that there were no federally listed or SGCN species documented within 5 miles of the Project (AZGFD 2022).

Table C-1 includes a summary of all federally and state-listed species and special-status species that were evaluated for presence within the Project and the status and the likelihood of occurrence within the Project. For the purposes of this analysis, this list only includes species listed as endangered or threatened and those that are proposed or are candidate species for such listing by USFWS under the ESA, those species protected under BGEPA, and Tier 1a fish and wildlife SGCN as identified by AZGFD.

Table C-1. Federally and State-listed Species Potentially Occurring within the Project

Common Name	Scientific Name	Federal/State Status a/	Likelihood of Occurrence within the Project b/
Mammals			
Gray wolf	<i>Canis lupus</i>	PEXPN	Low
Birds			
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA / SGCN 1A	Moderate
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA	Moderate
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	FT / SGCN 1A	Unlikely

Common Name	Scientific Name	Federal/State Status a/	Likelihood of Occurrence within the Project b/
Fish			
Little Colorado spinedace	<i>Lepidomeda vittata</i>	FT / SGCN 1A	Unlikely
Insects			
Monarch butterfly	<i>Danaus plexippus</i>	FC / SGCN 1A	Low

Notes

a/ FC = Federal Candidate, FE = Federally Endangered, FT = Federally Threatened, PEXPN = Proposed Experimental Population, SGCN = Species of Greatest Conservation Need

b/ Likelihood of Occurrence: Unlikely—unsuitable habitat in Project and vicinity; Low—marginally suitable habitat in Project and vicinity; Moderate—suitable habitat present in Project, or species known to occur in habitat similar to Project; High—highly suitable habitat present in Project, or known populations exist in Project vicinity.

C.4.4 Migratory Birds

The USFWS IPaC report also provides a list of USFWS Birds of Conservation Concern species and other migratory bird species that may occur within the vicinity of the Project for consideration in compliance with MBTA and BGEPA regulatory requirements. The IPaC identified the following Birds of Conservation Concern:

- Bald eagle (*Haliaeetus leucocephalus*)
- California gull (*Larus californicus*)
- Cassin's finch (*Carpodacus cassinii*)
- Clark's grebe (*Aechmophorus clarkia*)
- Grace's warbler (*Dendroica graciae*)
- Lesser yellowlegs (*Tringa flavipes*)
- Mountain plover (*Charadrius montanus*)
- Olive-sided flycatcher (*Contopus cooperi*)
- Virginia's warbler (*Vermivora virginiae*)
- Western grebe (*Aechmophorus occidentalis*)

The National Audubon Society has identified Important Bird Areas in an effort to monitor and protect these areas for avian species and habitat conservation. Arizona currently has 47 Important Bird Areas; however, there are no Important Bird Areas located within or near the Project (Audubon 2023a).

A variety of data sources were reviewed to identify the avian species with potential to occur near the Project, including field guides (e.g., Sibley 2014), and results of Christmas Bird Counts (CBC; Audubon 2023b) and Breeding Bird Surveys (BBS; Sauer et al. 2017). Results of the CBCs and BBSs in the Project vicinity are discussed in Sections 6.2.1 and 6.2.2. Since the land cover for the majority of the Project is shrub/scrub and grassland/herbaceous, the avian species expected to occur within the Project are those typically associated with those land types. Birds

that are associated with water (waterfowl, waterbirds, bald eagles) are expected to occur near the Little Colorado River.

C.4.5 Summary of Potential Impacts

C.4.5.1 Mammals

The special-status mammal that has the potential to occur in the Project (gray wolf) is part of an experimental, non-essential population that was proposed in Arizona and New Mexico. It was designated as the "Blue Range Wolf Recovery Area" that includes all of the Apache National Forest and all of the Gila National Forest in east-central Arizona and west-central New Mexico (USFWS 1998). The Project is outside of the Apache National Forest and the Gila National Forest; therefore, the Project would have no impact to this species.

C.4.5.2 Birds

Substrate and vegetation exist for passerine species' nests to occur in the Project (see Section C.4.1). The Applicant will conduct a pre-construction biological survey to identify any active nests (including western burrowing owl [*Athene cunicularia*] nests) to ensure compliance with the Migratory Bird Treaty Act. This includes avoiding any active nests until they are no longer active.

The effects of exposure to electromagnetic fields (EMF) by birds nesting near power lines is largely unknown. Transmission lines pose a risk of collisions and electrocution for birds, particularly eagles and other raptors. To minimize that risk, the Avian Power Line Interaction Committee (APLIC) *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* (APLIC 2006) and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* will be incorporated into the design (APLIC 2012). When these practices are incorporated, the risk of electrocution for large birds, including all special-status species in the Project is very minimal.

The special-status birds that have the potential to occur in the Project (bald eagle, golden eagle, and yellow-billed cuckoo) are not likely to nest in the Project. The IPaC identified the following Birds of Conservation Concern:

- Bald eagle (*Haliaeetus leucocephalus*)
- California gull (*Larus californicus*)
- Cassin's finch (*Carpodacus cassinii*)
- Clark's grebe (*Aechmophorus clarkia*)
- Grace's warbler (*Dendroica graciae*)
- Lesser yellowlegs (*Tringa flavipes*)
- Mountain plover (*Charadrius montanus*)
- Olive-sided flycatcher (*Contopus cooperi*)
- Virginia's warbler (*Vermivora virginiae*)
- Western grebe (*Aechmophorus occidentalis*)

No special-status birds or Birds of Conservation Concern were observed during the biological surveys conducted for the Project. The National Audubon Society has identified Important Bird Areas in an effort to monitor and protect these areas for avian species and habitat conservation. Arizona currently has 47 Important Bird Areas; however, there are no Important Bird Areas located within Project Study Area (Audubon 2023a).

No special-status birds are regularly dependent on the habitat present in the Project. Although some ground disturbances and vegetation removal would occur from the Project, this is not likely to have a detectable effect on any special-status bird species. Because of the abundance of similar habitat in the surrounding area, the impacts on the bird populations that would utilize the habitat types within the proposed Project is low.

C.4.5.3 Reptiles

The USFWS IPaC and the AZGFD Environmental Online Review Tool Report did not identify any special-status or SGCN reptile species with potential to occur within or near the Project. Therefore, there are no impacts anticipated to special-status or SGCN reptile species by the Project.

C.4.5.4 Fish

There is one special-status fish species that has the potential to occur in the Project; the Little Colorado River spinedace. This is due to the Project's proximity to the Little Colorado River. Neither the aquatic habitat in the Little Colorado River nor any species associated with that habitat will be affected by the Project. Like other existing transmission structures in the Project's vicinity, the Gen-Tie Line route will span the Little Colorado River above the riverbed and no ground disturbance will take place in or near the river. Standard best management practices (BMPs) will be employed during construction to prevent contamination of stormwater runoff from the Project.

C.4.5.5 Insects

There is one special-status insect species that has the potential to occur in the Project; the Monarch butterfly (*Danaus plexippus*), which is a federal candidate species. Monarch butterflies feed on milkweed species (*Asclepias* spp.); however, no milkweed was observed during the reconnaissance surveys of the Project, therefore, this species is unlikely to occur in the Project.

C.4.5.6 Plants

No special-status plant species were observed during the field reconnaissance. The AZGFD has mapped the current range for the Peebles Navajo cactus (*Pediocactus peeblesianus*), which does occur within the Study Area, however, this species range is not crossed by the Project (Figure C-1). This cactus was federally listed as Endangered under the ESA in 1979. This species prefers weakly alkaline, gravelly soils where the host gravel can occur on a variety of substrates, including but not limited to the Shinarump conglomerate of the Chinle Formation. This soil type is not present in the Project. Note that plants are not protected under the ESA unless there is a federal nexus. Since the Project has no assumed federal nexus at this time, this species is not protected under the ESA for this Project. Habitat degradation and destruction

from livestock grazing and recreation practices pose the main threats and reason for the species' decline. The Peebles Navajo cactus is endemic to the immediate vicinity of Joseph City and Holbrook, Arizona, and is restricted to specialized and localized soils (USFWS 2008).

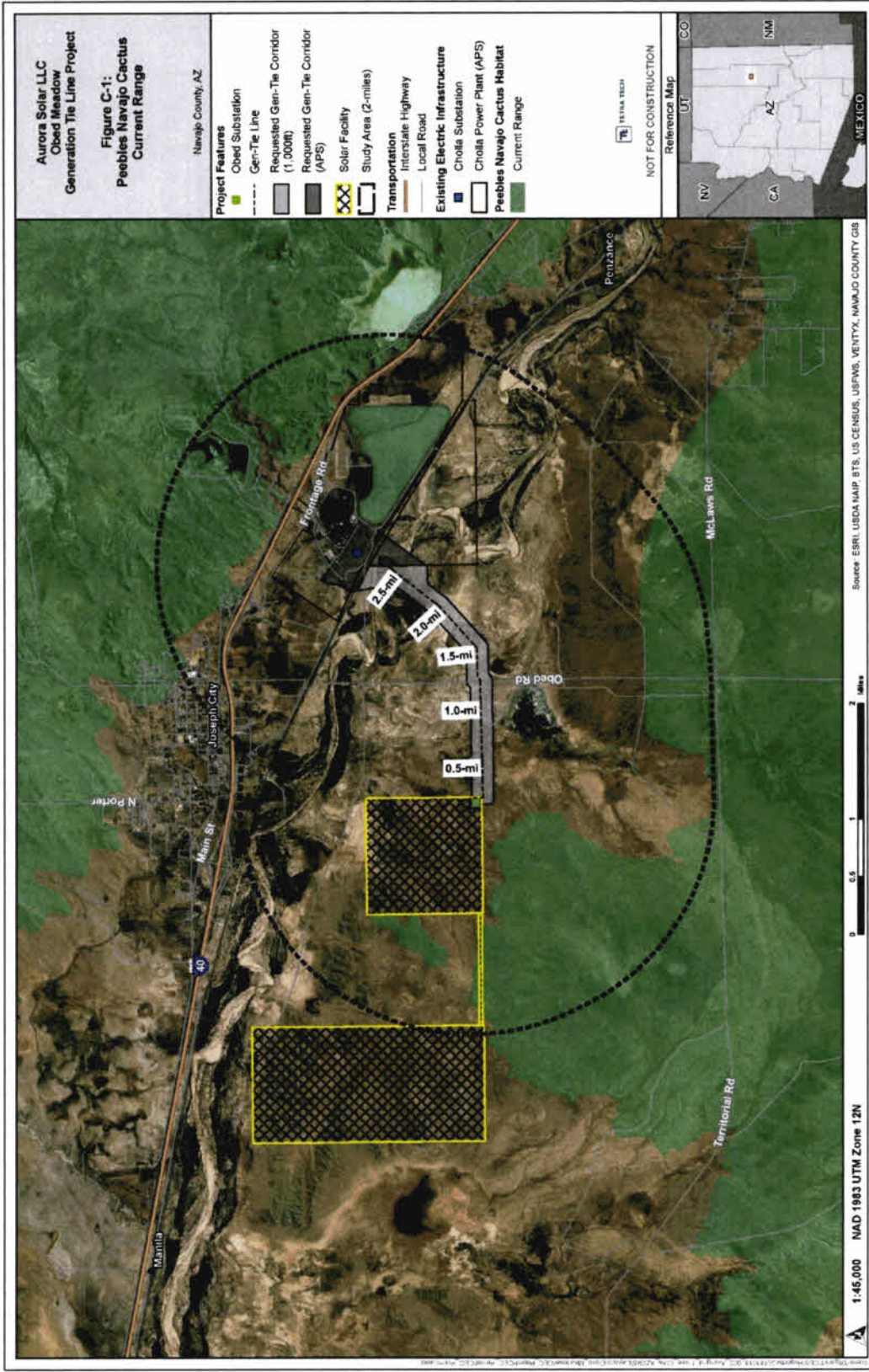


Figure C-1. Mapped Peebles Navajo Cactus Habitat in the Study Area

As stated by the USFWS:

Two core, high-density population areas are known for this species in Navajo County, Arizona. The larger population is approximately one mile east of Joseph City and the other, approximately 1.5 miles west-northwest of Holbrook. Scattered individuals occur with decreasing density within the immediate vicinity of these core populations.

The population closest to Joseph City occurs on U.S. Bureau of Land Management (BLM) lands although individuals may also occur on Arizona State Trust lands. Joseph City monitoring plots occur in areas of high species density and are fenced (USFWS 2008).

In 1989, the BLM created the 4,650-acre Tanner Wash ACEC to help protect several populations of PNC. The ACEC is comprised by 950 acres of Federal land, 1,280 acres of State Trust land, and 2,420 acres of private land. Encompassing all known PNC occupied habitat on Federal land (USFWS 2008).

The Project is outside of the Tanner Wash ACEC and the core population areas, has no mapped habitat, and no fenced areas of Pebbles Navajo Cactus are in the Project. Therefore, the Project is unlikely to occupy habitat of this species.

C.4.6 Mitigation

The following mitigation measures would reduce the potential for impacts to special-status species as a result of the Project:

- If vegetation-disturbing activities are planned during the migratory bird nesting season (March-September or January-June for raptors), the Applicant will conduct a pre-construction biological survey to identify any active nests (including Western Burrowing Owl nests) to ensure compliance with the Migratory Bird Treaty Act.
- If Western burrowing owls are identified in the Project, measures to avoid any active burrows should be taken. Because some burrowing owls are year-long residents, surveys for this species should be conducted prior to initiation of ground disturbance and vegetation removal activities. Further, the AZGFD's *Burrowing Owl Project Clearance Guidance for Landowners* should be followed.
- If native plants listed under the ANPL are present in the Project, the Applicant, will notify the ADOA by submitting the Notice of Intent to Clear Land form to comply with the Arizona Native Plant Law
- The Gen-Tie Line route will span the Little Colorado River above the riverbed. No ground disturbance will take place in or near the river.
- To minimize risk to avian species, the APLIC Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) and Reducing Avian Collisions with Power Lines: The State of the Art in 2012 will be incorporated into the design (APLIC 2012).

- Standard BMPs will be employed during construction to prevent contamination of stormwater runoff from the Project.

C.4.7 Conclusion

The Project is not likely to adversely affect any special-status species. No ESA-listed species are known or expected to be present within the Project. One federally listed plant species (Peebles Navajo Cactus) has known range within the Study Area; however, the Project does not cross the known range of this species and no occurrences were observed during the field reconnaissance. No protected areas, connectivity zones, or any areas of biological wealth are within the Project.

The risk that electrical infrastructure poses to birds would be addressed by following standard guidelines as design features for the Project, and preconstruction surveys for migratory bird nests would aid in compliance with the MBTA.

The Applicant believes that the proposed mitigation measures (Section C.4.6) would sufficiently minimize impacts to special-status species.

C.4.8 Additional Information

Please see the Exhibit B, *Appendix B-1: Biological Resources Assessment: Obed Meadow Generation Tie-Line Project, Navajo County, Arizona* for the full results of the biological resource assessment conducted for the Project.

The AZGFD Online Environmental Review Tool results for the Project are included as Appendix A in Exhibit B, *Appendix B-1*, and the USFWS IPaC online tool results for the Project are included as Appendix C in Exhibit B, *Appendix B-1*.

C.5 References

- ADOA (Arizona Department of Agriculture). 2023. Noxious Weeds. Available online at: <https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds>. Accessed June 2023.
- Audubon (The Audubon Society). 2023a. Important Bird Areas. Arizona. Available online at: <https://www.audubon.org/important-bird-areas>. Accessed June 2023.
- Audubon. 2023b. 122nd Christmas Bird Count: Map of Active Circles. Available online at: <https://www.arcgis.com/apps/View/index.html?appid=ac275eeb01434cedb1c5dcd0fd3fc7b4>. Accessed June 2023.
- Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Powerlines: The State of the Art in 2006. Available online at: <https://www.nrc.gov/docs/ML1224/ML12243A391.pdf>. Accessed March 2022.
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Exhibit D. Biological Resources

A.R.S. §40-360 *et seq.* established the Power Plant and Transmission Line Siting Committee in 1971. A.R.S. §40-360.06(A)(2) stipulates "fish, wildlife, and plant life and associated forms of life on which they are dependent" are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

List the fish, wildlife, plant life and associated forms of life associated with the vicinity of the proposed sites or route and describe the effects, if any, other proposed facilities will have thereon.

Note that special-status fish, wildlife, and plant species are discussed in Exhibit C and are not included in this Exhibit.

D.1 Project Ecoregion Setting

The Project lies within the Arizona/New Mexico Plateau Level III Ecoregion. Local relief in the region varies from a few feet on plains and mesa tops, to well over 1,000 feet along tableland side slopes. The region extends across northern Arizona, northwestern New Mexico, and into the San Luis Valley of Colorado. Within the Arizona/New Mexico Plateau, the Project lies within the Little Colorado Valley/Painted Desert Level IV ecoregion. This ecoregion is lower, drier, and warmer than surrounding regions and has more desert scrub. Elevations are typically below 5,000 feet, ranging from 4,200 to 5,700 feet. Average annual rainfall ranges from 5 to 9 inches and temperatures reach an average low of 20 degrees Fahrenheit (°F) in January to an average high of 94°F in July. Land cover in the region is characterized by a mix of shale badlands, greasewood flats, sand shrubland, and semi-desert grassland. Vegetation for this ecoregion typically includes mound saltbush (*Atriplex obovata*), fourwing saltbush (*Atriplex canescens*), shadscale (*Atriplex confertifolia*), Mormon tea (*Ephedra nevadensis*), narrowleaf yucca (*Yucca angustissima*), alkali sacaton (*Sporobolus airoides*), galleta (*Hilaria jamesii*), black grama (*Bouteloua eriopoda*), Indian ricegrass (*Achnatherum hymenoides*), and gyp dropseed (*Sporobolus nealleyi*). A long history of overgrazing has resulted in extensive rangeland deterioration (Griffith et al. 2014).

D.2 Biotic Community Setting

The biotic communities present in the Project and Study Area include Great Basin Desertscrub and Plains and Great Basin Grassland (Brown 1994).

D.3 Vegetation

The Project traverses Great Basin Desertscrub and Plains and Great Basin Grassland, which is dominated by graminoids and forbs with an open shrub and tree layer. Characteristic grasses include Arizona threeawn (*Aristida arizonica*), blue grama (*Bouteloua gracilis*), sand dropseed (*Sporobolus cryptandrus*), and sixweeks threeawn (*Aristida adscensionis*). Scattered to locally dense shrubs include Bigelow sagebrush (*Artemisia bigelovii*), desert-thorn (*Lycium* sp.), fourwing saltbush (*Atriplex canescens*), Fremont's mahonia (*Mahonia fremontii*), rubber

rabbitbrush (*Ericameria nauseosa*), Stansbury cliffrose (*Purshia stansburiana*), Whipple cholla (*Cylindropuntia whipplei*), winterfat (*Krascheninnikovia lanata*), and yellow rabbitbrush (*Chrysothamnus viscidiflorus*). The tree layer is dominated by Utah juniper (*Juniperus osteosperma*) and oneseed juniper (*Juniperus monosperma*) (Brown 1994). Table D-1 lists species of plants observed during the reconnaissance survey of the Project.

Table D-1. Plant Species Observed Near the Project

Species	Scientific Name
Trees	
Rio Grande cottonwood	<i>Populus deltoides ssp wislizeni</i>
Salt cedar	<i>Tamarix ramosissima</i>
Shrubs	
Bigelow sage	<i>Artemisia biglovii</i>
Broom snakeweed	<i>Gutierrezia sarothrae</i>
Camel thorn	<i>Alhagi maurorum</i>
Four-wing saltbush	<i>Atriplex canescens</i>
Iodine bush	<i>Allenrolfea occidentalis</i>
Mormon tea	<i>Ephedra species</i>
Mound saltbush	<i>Atriplex obovata</i>
Roundleaf dunebroom	<i>Errazurizia rotundata</i>
Shadscale	<i>Atriplex confertifolia</i>
Winterfat	<i>Krascheninnikovia lanata</i>
Grasses	
Alkali sacaton	<i>Sporobolus airoides</i>
Blue grama	<i>Bouteloua gracilis</i>
James galleta	<i>Hilaria jamesii</i>
Forbs	
Antelope-horns	<i>Asclepias asperula</i>
Prickly pear cactus	<i>Opuntia sp.</i>
Russian thistle	<i>Salsola tragus</i>

Camelthorn, a Class B noxious weed, and salt cedar, a Class C noxious weed, were observed within the Project. The Applicant will instruct Project contractors on how to properly identify listed noxious weed species and to report the occurrences to the Applicant upon observation. The Applicant will remove any observed listed noxious weed species from the Project in a timely manner in the least intrusive way possible (i.e., hand or manual removal of plants). This mitigation measure will minimize the spread of noxious weed species as a result of the Project.

D.4 Wildlife

This section describes the wildlife species that may be present in the Project and the Study Area. Although the Project is largely disturbed grassland, some mobile or disturbance-tolerant wildlife species may occur within the Project and Study Area. Since the Project and Study Area are in the Great Basin Desertscrub and Plains and Great Basin Grassland biotic communities, it is anticipated that wildlife species (not already included in Exhibit C) that may occur would be those associated with these communities. The number of species, however, in any location or at any one time would be a small proportion of the species discussed below.

D.4.1 Mammals

Mammals associated with the Great Basin Desertscrub and Plains and Great Basin Grassland biotic communities include big game species such as mule deer (*Odocoileus hemionus*) and mountain lion (*Puma concolor*), and medium-sized species such as coyote (*Canis latrans*), badger (*Taxidea taxus*), gray fox (*Urocyon cinereoargenteus*), and black-tailed jackrabbit (*Lepus californicus*). Smaller species may include desert cottontail (*Sylvilagus audubonii*). Squirrel and rodent species may include woodrat (*Neotoma* sp.), kangaroo rat (*Dipodomys* sp.), ground squirrel (*Ammospermophilus* sp. and *Spermophilus* sp.), pocket gopher (*Geomys* sp.), deer mouse (*Peromyscus* sp.), pocket mouse (*Perognathus* sp.), harvest mouse (*Reithrodontomys* sp.), vole (*Microtus* sp.), shrew (*Sorex* sp.), and numerous bat species. Non-native species of rat (*Rattus* sp.) and mice (*Mus* sp.) may be present in the residential and commercial developments in the Study Area (Brown 1994). Table D-2 lists species of mammals observed during the reconnaissance survey of the Project.

Table D-2. Mammal Species Observed Near the Project

Species	Scientific Name
Bobcat (tracks)	<i>Lynx rufus</i>
Coyote (tracks)	<i>Canis latrans</i>
Desert cottontail	<i>Sylvilagus audubonii</i>
Mule deer	<i>Odocoileus hemionus</i>
Unknown mouse sp.	<i>Mus</i> sp.

D.4.2 Birds

Bird species associated with the Great Basin Desertscrub and Plains and Great Basin Grassland biotic communities include raptors such as merlin (*Falco columbarius*), northern harrier (*Circus hudsonius*), prairie falcon (*Falco mexicanus*), red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*) and great homed owl (*Bubo virginianus*). Non-raptor species include common raven (*Corvus corax*), homed lark (*Eremophila alpestris*), chestnut-collared longspur (*Calcarius ornatus*), black-throated sparrow (*Amphispiza bilineata*), cliff swallow (*Petrochelidon pyrrhonota*), rock wren (*Salpinctes obsoletus*), northern mockingbird (*Mimus polyglottos*), loggerhead shrike (*Lanius ludovicianus*), blue-gray gnatcatcher (*Polioprila caerulea*), meadowlark (*Sturnella* sp.), warblers (*Setophaga* sp.), sparrows (*Zonotrichia* sp.), vireo (*Vireo* sp.), dove, western tanager (*Piranga ludoviciana*), ash-throated flycatcher (*Mviarchus cinerascens*), western wood pee-wee (*Contopus sordidulus*), and common nighthawk (*Chordeiles minor*). Bird species that may be present near riparian habitats along the Little Colorado River include spotted sandpiper (*Actitis macularius*), northern shoveler (*Spatula clypeata*), green-tailed towhee (*Pipilo chlorurus*), black phoebe (*Sayornis nigricans*), Bewick's wren (*Thryomanes bewickii*), and flycatchers. Non-native species like European starling (*Sturnus vulgaris*) and rock dove (*Columba livia*) may be present near residential and commercial developments of the Study Area (Brown 1994). Table D-3 lists species of birds observed during the reconnaissance survey of the Project.

Table D-3. Bird Species Observed Near the Project

Species	Scientific Name
Black-throated sparrow	<i>Amphispiza bilineata</i>
Blue-winged teal	<i>Anas discors</i>
Common raven	<i>Corvus corax</i>
Horned lark	<i>Eremophila alpestris</i>
Lincoln's sparrow	<i>Melospiza lincolnii</i>
Northern harrier	<i>Circus hudsonius</i>
Unknown Buteo sp.	<i>Buteo sp.</i>
Yellow-rumped warbler	<i>Setophaga coronate</i>

D.4.3 Reptiles

Reptile species associated with the Great Basin Desertscrub and Plains and Great Basin Grassland biotic communities include snake, turtle, and lizard species such as gopher snake (*Pituophis catenifer*), glossy snake (*Arizona elegans*), striped whipsnake (*Coluber taeniatus*), com snake (*Elaphe guttata*), Chihuahuan nightsnake (*Hypsiglena jani*), common kingsnake (*Lampropeltis triangulum*), gartersnake species (*Thamnophis sp.*), milksnake (*Lampropeltis triangulum*), and rattlesnake species (*Crotalus sp.*), western box turtle (*Terrapene ornata*), collared lizard (*Crotaphytus collaris*), long-nosed leopard lizard (*Gambelia wislizenii*), common lesser earless lizard (*Holbrookia maculata*), greater short-homed lizard (*Phrynosoma hernandesi*), southwestern fence lizard (*Sceloporus cowlesi*), common sagebrush lizard (*Sceloporus graciosus*), desert spiny lizard (*Sceloporus magister*), plateau fence lizard (*Sceloporus tristichus*), ornate tree lizard (*Urosaurus ornatus*), common side-blotched lizard (*Uta stansburiana*), manylined skink (*Plestiodon multivirgatus*), Pai striped whiptail (*Aspidoscelis pai*), and plateau striped whiptail (*Aspidoscelis velox*). Non-native species of turtle (pond slider [*Trachemys scripta*] and lizard (Mediterranean gecko [*Hemidactylus turcicus*]) may be present within and adjacent to the residential and commercial developments of the Study Area (Brown 1994). No reptile species were observed during the reconnaissance survey of the Project.

D.4.4 Amphibians

Aquatic habitats that may support amphibian species within the Project and Study Area largely consists of the Little Colorado River and constructed water impoundments (such as Cholla Lake) and adjacent areas. Native amphibian species that may be present within the Project include canyon treefrog (*Hyla arenicolor*), Great Plains toad (*Anaxyrus cognatus*), red-spotted toad (*Anaxyrus punctatus*), Woodhouse's toad (*Anaxyrus woodhousii*), plains spadefoot toad (*Spea bombifrons*), Mexican spadefoot (*Spea multiplicata*), and barred tiger salamander (*Ambystoma mavortium*). Non-native species of amphibian such as American bullfrog (*Lithobates catesbeianus*) may be present throughout aquatic habitats of the Study Area (Brown 1994). No amphibian species were observed during the reconnaissance survey of the Project.

D.4.5 Fish

Aquatic habitats that may support amphibian species within the Project and Study Area largely consists of the Little Colorado River and constructed water impoundments (such as Cholla Lake). Aquatic habitats suitable for many native fish species would be limited to the Little

Colorado River. Species that may be present in aquatic habitats within the Study Area include speckled dace (*Rhinichthys osculus*), flannelmouth sucker (*Catostomus latipinnis*), and bluehead sucker (*Catostomus discobolus*). Other fish species that may be present in the aquatic habitats of the Study Area include non-native sport fishes (such as various species of trout and channel catfish [*Ictalurus punctatus*] that are stocked for recreational fishing (Brown 1994). No fish species were observed during the reconnaissance survey of the Project.

D.5 Summary of Potential Impacts

D.5.1 Potential Impacts to Non-Bat Mammals

Construction-related activity and noise may disturb species in the area and cause them to avoid or move away from the Project or temporarily alter their behavior in other ways (e.g., remain underground). Once construction is complete, it is expected that wildlife will return to the area and resume normal behavior patterns. Transmission lines do not appear to affect most wildlife movements, including those of deer (Goodwin 1975, Lee 1989, and Thompson 1977).

D.5.2 Potential Impacts to Birds

Because of the abundance of similar habitat in the Study Area, the impacts on the bird populations that would utilize those habitat types within the Project is low. The effects of exposure to EMF by birds nesting near power lines is largely unknown. Transmission lines pose a risk of collisions and electrocution for birds, particularly eagles and other raptors. To minimize that risk, the APLIC Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) and Reducing Avian Collisions with Power Lines: The State of the Art in 2012 will be incorporated into the design (APLIC 2012). When these practices are incorporated, the risk of electrocution for large birds, including all special-status species in the Project is very minimal.

Burrowing owls can use nests in disturbed areas used for livestock grazing. Burrowing owls in some cases retreat underground when alarmed rather than fly, and because their burrows are underground, they are at risk of harm from ground-disturbing activities such as those resulting from construction of the Project. No burrowing owls were observed during the reconnaissance survey but could occupy the Project prior to construction.

No birds are regularly dependent on the disturbed habitat present in the Project. Although some ground disturbances and vegetation removal would occur as a result of the Project, this is not likely to have a detectable effect on any bird species.

D.5.3 Potential Impacts to Bats

Impacts of the Project on bats are expected to be negligible because bats are well adapted to avoid stationary objects by using echolocation. During normal foraging activity, bats are actively using echolocation and are typically able to detect and avoid features such as overhead transmission lines. Ground disturbance from the Project, taking place in previously disturbed areas with little vegetation, would not appreciably affect any bat species by removing foraging habitat.

D.5.4 Potential Impacts to Reptiles

Construction-related activity and noise may disturb species in the area and cause them to avoid or move away from the Project or temporarily alter their behavior in other ways (e.g., remain underground).

D.5.5 Potential Impacts to Amphibians

Amphibian species are not expected to be affected by the Project because no ground disturbance is planned to take place in or near aquatic habitats where amphibians may occur, and no ground disturbance will take place in or near the Little Colorado River where amphibians are most likely to occur.

D.5.6 Potential Impacts to Fish

No ground disturbance will take place in or near the river. Standard BMPs will be employed during construction to prevent contamination of the Little Colorado River by stormwater runoff from the Project.

D.5.7 Potential Impacts to Vegetation

Construction within the Project will result in the long-term removal of a small amount of vegetation. Native vegetation characteristic of Great Basin Desertscrub and Plains and Great Basin Grassland biotic communities is extensive in northern Arizona, and the acreage of disturbance as a percentage of the remaining habitat is small. The removal of vegetation will not result in significant impacts to the vegetation communities as a whole. Standard BMPs will be employed during construction to minimize the introduction and spread of noxious weeds.

Removal of vegetation associated with clearing portions of the Gen-Tie Line and placement of support structures would result in a small loss of habitat that could provide nesting sites, cover, and/or forage for bird and mammal species or their prey. In temporarily disturbed areas in the Project, species composition of birds and mammals using those areas may change over time as vegetation species and structure recover. The acreage of vegetation to be cleared is minimal, particularly relative to the large amount of comparable habitat available in the Study Area. Removal of vegetation is expected to have negligible effect on wildlife species. There would be no habitat fragmentation or edge effects from clearing portions of the Project or placement of support structures.

D.6 Mitigation

Based on the impacts outlined above, the Applicant has proposed the following mitigation measures for biological resources:

- The Applicant will conduct a pre-construction biological survey to identify any active nests (including Western Burrowing Owl nests) to ensure compliance with the Migratory Bird Treaty Act.

- If native plants listed under the ANPL are present in the Project, the Applicant, will notify the ADOA by submitting the Notice of Intent to Clear Land form to comply with the Arizona Native Plant Law
- The Gen-Tie Line route will span the Little Colorado River above the riverbed. No ground disturbance will take place in or near the river.
- To minimize risk to avian species, the APLIC Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006) and Reducing Avian Collisions with Power Lines: The State of the Art in 2012 will be incorporated into the design (APLIC 2012).

D.7 Conclusion

The Project is not likely to significantly contribute to the loss of native vegetation that provides wildlife habitat or declines in any native plant or wildlife species. The Applicant has proposed mitigation measures (see Section D.6) to minimize impacts to fish, wildlife, and plant life that may occur within the Project.

D.8 References

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Exhibit E. Scenic Areas, Historic Sites and Structures, and Archaeological Sites

A.R.S. §40-360 et seq. established the Siting Committee in 1971. A.R.S. §40-360.06(A)(5) stipulates "existing scenic areas, historic sites and structures or archaeological sites at or in the vicinity of the proposed site" are among the factors the Siting Committee must consider in reviewing CEC applications. The ACC Rules of Practice and Procedure R14-3-219 that implement ARS §40-360 et seq. stipulate that applications for CECs must:

Describe any existing scenic areas, historic sites and structures or archeological sites in the vicinity of the proposed facilities and state the effects, if any, the proposed facilities will have thereon.

Exhibit E includes summaries of existing visual and cultural resources, and the potential impacts the Project may have on each one. Figures E-1 through E-3 are included in this Exhibit and illustrate the visual and cultural resources described below. Appendix E-1 includes photo simulations from Key Observation Points (KOPs) developed for the Gen-Tie Line route.

E.1 Scenic and Visual Resources

E.1.1 Overview

Exhibit E addresses the inventory and assessment of scenic areas including landscape scenery and sensitive views that may be affected by the construction and operation of the Project. The methodology for this assessment is provided below, and includes separate discussions for landscape scenery (e.g., scenic quality) and sensitive viewers. The Project would not cross lands managed by the BLM, United States Forest Service, or any other agencies that require conformance with visual resource management objectives or management guidelines. Navajo County has guidelines for managing and preserving scenic areas in their Comprehensive Plan. However, the guidelines are not directly applicable to the Project's Study Area due to the lack of existing or proposed parks, recreation, or preservation areas.

E.1.2 Methodology

The purpose of the scenic areas assessment is to identify and characterize the level of visual modification in the landscape that would result from the construction and operation of the Project. Modification of the landscape is described in levels of visual contrast, which can potentially affect both landscape scenery (i.e., scenic quality) and sensitive viewers. The methods used to conduct the visual inventory are consistent with past visual resource studies conducted for similar projects that have been approved by the Siting Committee.

The visual assessment completed within the Study Area was defined as a two-mile wide radius from the Gen-Tie Line route. Visual resource data for this assessment was developed on research including Navajo County Comprehensive Plan, Geographic Information System (GIS) data, aerial photography, and on-site field verification and photo documentation. These data were used to develop a comprehensive understanding of the existing and future visual resources in the vicinity of the Project.

Impacts to both scenic quality and sensitive viewers are determined by evaluating the visual contrast the proposed facilities (e.g., structures/pads, conductor, roads) would have with the existing landscape.

Visual contrast refers to the degree that the Project features would either match or repeat existing features in the landscape, or contrast with features of the existing landscape, including the developed areas (e.g., Cholla Power Plant and Substation). The degree of visual contrast considers the existing landforms, vegetation, and built features present in the landscape, and is described in terms of the degree of perceptible change in the basic design elements of form, line, color, and texture that would be evident by the introduction of the Project in the landscape.

The impact thresholds for this assessment are categorized as follows:

- **High:** Project features would result in a strong degree of contrast and would appear as a dominant feature within the existing landscape.
- **Moderate:** Project features would result in a modest degree of contrast and would appear as codominant features within the existing landscape.
- **Low:** Project features would result in a weak degree of contrast and would be subordinate to the features of the existing landscape.

E.1.2.1 Landscape Scenery

Landscape Scenery is a measure of the inherent aesthetic value of the landscape based on the appearance of existing landscape features, including landforms, vegetation, and built features. In general terms, the scenic quality is based on the premise that landscapes with greater diversity in landforms and vegetation are more aesthetically pleasing, and therefore hold greater value. For this analysis, impacts to scenic quality were based on comparing the inventoried quality of the scenery to the anticipated quality of the scenery considering any contrast related to construction of the Project. The scenic quality units within a two-mile radius of the Gen-Tie Line Project are identified on Figure E-1.

E.1.2.2 Sensitive Viewers

Sensitive viewer locations are those locations where viewers would be the most susceptible to the change in the landscape viewshed related to construction of the Project. Project contrast for a sensitive viewer is dependent on several other factors, including viewing distance, duration of view, viewing condition, and degree of visibility. When combined, these factors indicate the overall visual dominance of the Project within the landscape viewshed. The term viewing distance refers to the viewer's physical distance from the Project feature and is predicated on the fact that one's ability to see details dissipates over distance. The duration of view refers to the length of time that the Project would be viewed and is based on the idea that viewer attention is attracted more as the duration of the view increases. Viewing conditions refer to whether the viewer perceives the Project from a higher elevation, flat, or lower elevation. The degree of visibility refers to whether views of the Project features would be either open and unobstructed, or else partially or even fully obstructed by other features in the existing landscape (i.e., topography, vegetation, or built features). The degree of visibility also refers to

whether the Project features would be viewed against the sky or viewed against a backdrop of landforms and/or vegetation.

Potential viewer sensitivities are also discussed within the analysis, including brief discussions regarding the potential sensitivities of different types of viewers within the Study Area. Residential and recreational users are generally considered to have high sensitivities to visual changes in the landscape, while viewers on commuter travel routes are considered to have moderate sensitivities to visual changes in the landscape.

E.2 Inventory Results

E.2.1 Landscape Scenery

The Gen-Tie Line Project lies within the Arizona/New Mexico Plateau Level III Ecoregion and more specifically the Little Colorado Valley/Painted Desert Level IV Ecoregion (EPA 2011). The Little Colorado Valley/Painted Desert ecoregion is lower, drier, and warmer than surrounding regions and has more desert scrub. Elevations are typically below 5000 feet, ranging from 4,200 to 5,700 feet. Precipitation is only 5 to 9 inches annually. Some sodic and saline soils occur or have gypic horizons. A mix of shale badlands, greasewood flats, sand shrubland, and semi-desert grassland occurs in the region. Vegetation includes mound saltbush, fourwing saltbush, shadscale, Mormon tea, yucca, alkali sacaton, galleta, black grama, Indian ricegrass, and gyp dropseed. A long history of overgrazing has resulted in extensive rangeland deterioration (Griffith et al. 2014).

There are numerous high voltage transmission lines crossing through the Study Area and connecting into the Cholla Substation, as well as distribution lines connecting rural residences, water wells, and communication facilities. The large-scale transmission lines are dominant features in the landscape and detract from the scenic quality of the natural setting. This is especially true where they cross Obed Road and converge near the Little Colorado River and the Cholla Substation. Additionally, the BNSF railroad and Cholla Power Plant are dominant industrial facilities located near the Little Colorado River (Photo E-5).

Landscape Scenery in the Gen-Tie Study Area consists of five units each with distinctive physical characteristics that define the overall scenic quality within the unit (Figure E-1). Photographs representative of the scenic quality units are shown on Photos E-1 through E-5. The scenic quality units of the Gen-Tie Study Area are described in Table E-1.

Table E-1. Scenic Quality Unit Description

Scenic Quality Unit	Description
Little Colorado River Floodplain, Class A (Photo E-1)	A broad, relatively flat floodplain located on either side of the well-defined and moderately deep Little Colorado River channel. The floodplain consists of a mixture of sandy and clay soils with some areas of exposed rock, mostly of monotone tan colors. Vegetation in the floodplain included tamarisk (<i>Tamarix chinensis</i>), iodinebush (<i>Allenrolfea occidentalis</i>), mound saltbush (<i>Atriplex obovata</i>), seablight (<i>Suaeda calceoliformis</i>), greasewood (<i>Sarcobatus vermiculatus</i>), Fremont cottonwood (<i>Populus fremontii</i>), and desert olive (<i>Forestiera neomexicana</i>). The Little Colorado River is ephemeral, water is present mostly due to spring runoff and/or heavy rainfall. When present, water adds color, uniqueness, and diversity to the landscape.

Scenic Quality Unit	Description
Dissected Plateau, Class B (Photo E-2)	A rolling plateau featuring ridgelines, rock outcrops, and small ephemeral drainages cutting through the softer soils. The soils range from a diverse orange to tan colors, as well as dark brown and black colors where the rock outcrops are located. Vegetation is relatively sparse and low growing, consisting of alkali sacaton (<i>Sporobolus airoides</i>) and four-wing saltbush (<i>Atriplex canescens</i>) shrubs that add contrasting color and texture to the soils.
Salt Desert Shrubland, Class C (Photo E-3)	Typically flat to rolling terrain with tan to reddish-brown soils interspersed with a low to moderate dense cover of grasses and shrubs, adding contrasting color and texture.
Meadowland, Class C (Photo E-4)	Flat areas with tan to reddish-brown alkali soils with a moderately dense to dense cover of alkali sacaton grasses, adding contrasting color and texture.
Developed, Class D (Photo E-5)	Cholla Power Plant/Substation, associated existing transmission lines, paved and unpaved dirt roads, each exhibiting structures which contribute colors, textures, uniqueness to the landscape.

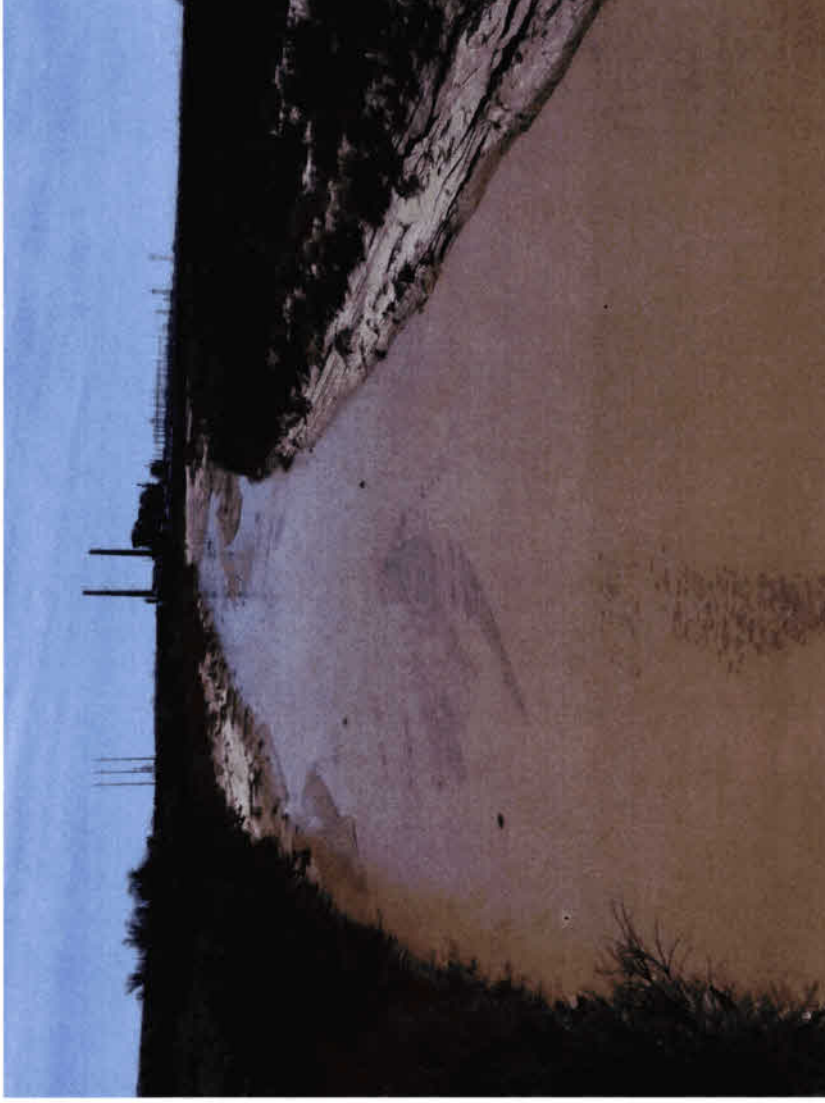
E.2.2 Sensitive Viewers

There are two primary sensitive viewer types in vicinity of the Gen-Tie Line Study Area including residences and travel routes. Two rural residential viewers are located within one mile of the Gen-tie Line route (Figure E-2). The nearest residence occurs approximately 3,410 feet (0.64 mile) south of the route (Figure E-2). The next nearest residence occurs approximately 5,170 feet (0.98 mile) northwest of the Project and Cholla Substation. Views of the Project from these residences are partially screened due to existing foreground vegetation along the Little Colorado River and due to existing transmission lines, the Cholla Substation, and railroad bed. Views of the Project from the nearest residence, south of the Gen-Tie Line route, would be through three existing high voltage transmission lines, one of which is in the foreground closest to the residence, approximately 400 feet (0.08-mile) from the residence.

Travel routes include 1-40, Obed Road, and McLaws/Territorial Road. Views from Obed Road range from approximately 0 - 1 miles away from the Project route as Obed Road travels underneath the gen-tie line route. A visual simulation of the Project at this location is provided in Appendix E-I. Views from 1-40 would be approximately 0.7 - 2+ miles away from the Project route where they connect into the existing Cholla Substation. Views of the Project route from McLaws/Territorial Road are approximately 2+ miles away and would be through three existing high voltage transmission lines.

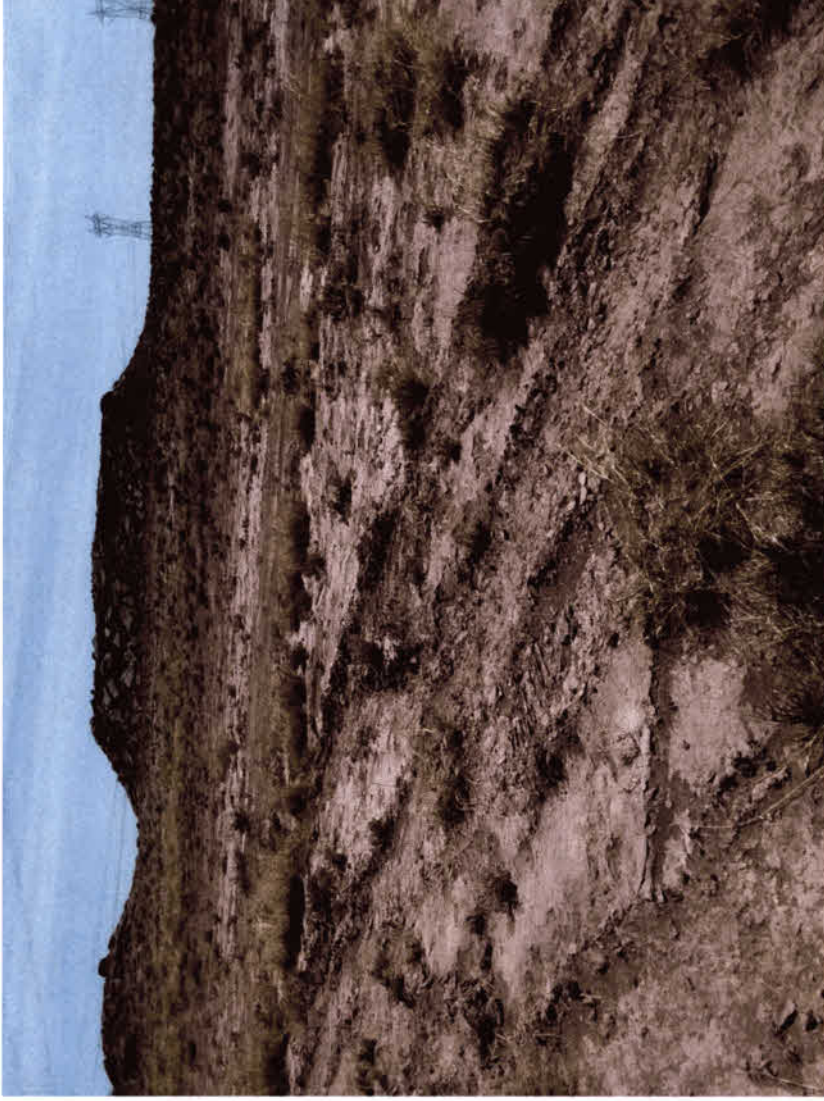
There are also less defined sensitive viewers associated with dispersed recreation uses such as hiking, hunting, all-terrain vehicle, and equestrian activities. These activities are relatively low volume due to the absence of public lands; however, these activities could potentially occur in areas where views of the proposed Project route would be within approximately 0 - 1+ miles, for example along the Little Colorado River.

Photo E-1. Little Colorado River Floodplain Scenic Quality Unit



Cholla Power Plant and Little Colorado River and associated floodplain from Obed Road Bridge, photo acquired April 28, 2023.

Photo E-2. Dissected Plateau Scenic Quality Unit



Typical dissected plateau and alkali sacaton grassland, photo acquired April 28, 2023.

Photo E-3. Salt Desert Shrubland Scenic Quality Unit



Typical desert salt shrubland consisting of four-wing saltbush and alkali sacaton grassland, photo acquired April 28, 2023.

Photo E-4. Meadowland Scenic Quality Unit



Typical flat meadowland consisting of alkali sacaton grassland, photo acquired April 28, 2023.

Photo E-5. Developed Scenic Quality Unit



Cholla Power Plant/Substation and associated transmission lines, photo acquired April 28, 2023.

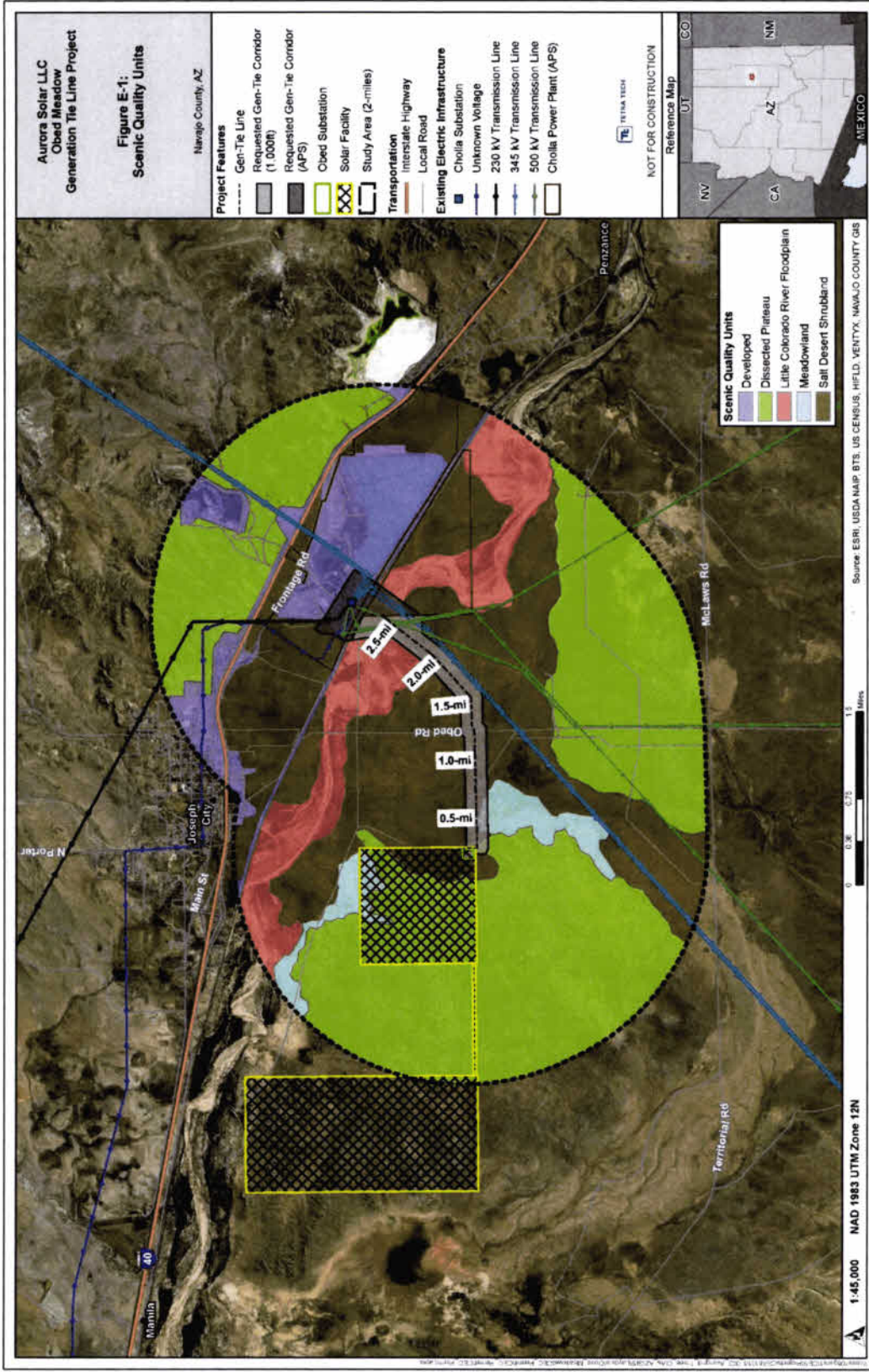


Figure E-1. Scenic Quality Units

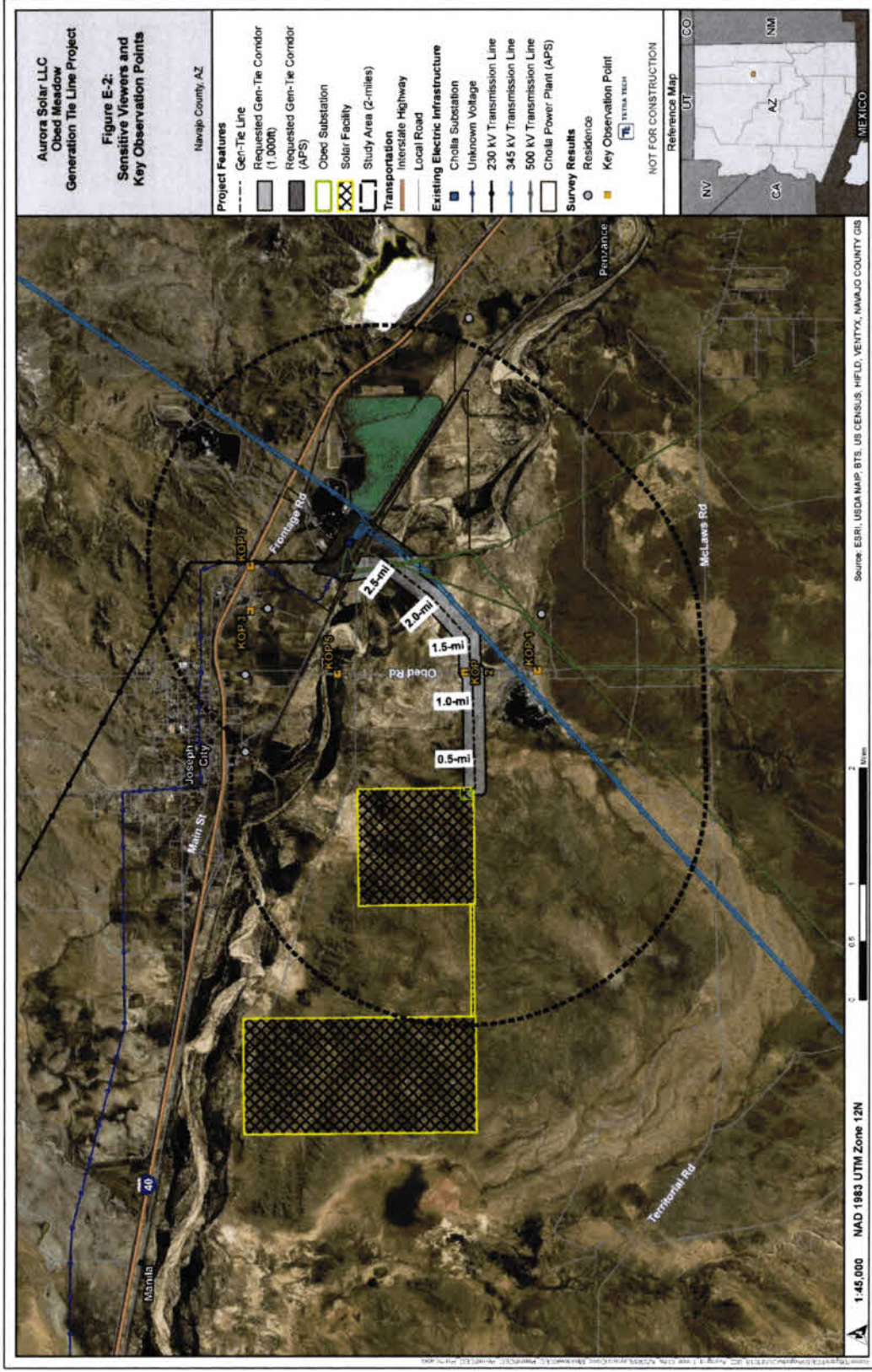


Figure E-2. Study Area Sensitive Viewers and Simulation Viewpoint

E.3 Impact Assessment Results

The potential impacts on landscape scenery and sensitive viewers based on the construction and operation of the Project are described below. Overall, visual impacts associated with the Project are expected to be minimal because of the rural landscape setting and low number of sensitive viewers who would see the Project, as well as the dominance of existing high voltage transmission lines and the Cholla Power Plant/Substation that are visibly prominent features in the landscape throughout the Gen-Tie Line Study Area.

E.3.1 Landscape Scenery

Impacts to the Little Colorado River floodplain (Scenic Quality Class A) landscape would occur at approximately milepost 2.3 to 2.7. The visual impacts are expected to be low-to-moderate along the proposed gen-tie line route where the crossing would be co-located with existing transmission lines; however, the crossing would be a new location for structures in the area. The presence of other high voltage transmission lines crossing the Little Colorado River co-located at the proposed gen-tie location and the adjacent railroad would reduce the overall level of visual contrast in the landscape in this location. Additionally, the Cholla Power Plant and Substation are located immediately north of the railroad and dominates the visual character of the landscape at the proposed gen-tie line crossing.

Impacts to the dissected plateau (Scenic Quality Class B) landscape would occur near the Project Collector Substation; approximately mileposts 0.0 - 0.2. The visual impacts are expected to be low due to existing disturbances related to livestock grazing and the existing access road.

Impacts to the salt desert shrubland (Scenic Quality Class C) landscape would occur from approximately milepost 0.2 to 2.3. The visual impacts are expected to be low due to existing disturbances related to livestock grazing and existing access roads, the Obed Road right-of-way, and the co-location of the Project with existing high voltage transmission lines.

Impacts to the meadowland (Scenic Quality Class C) landscape would occur from approximately milepost 0.4 to 0.5. The visual impacts are expected to be low due to existing disturbances related to livestock grazing and the existing access road.

The Project is not anticipated to negatively affect the visual quality of the developed (Scenic Quality Class D) landscape.

E.3.2 Sensitive Viewers

Impacts to the two residential viewer locations within a 1-mile distance of the gen-tie line route are expected to be low for both residences. The nearest residence occurs approximately 0.6-mile south of the Project. The view from this residence of the Project infrastructure is obscured by three existing high voltage transmission lines, the nearest being within approximately 400 feet of the residence. A visual simulation of the Project from the vantage point of Obed Road, near this residence, has been prepared (KOP #1, Appendix E-1). The visual simulation identifies the Project infrastructure is not easily recognizable (i.e., difficult to determine visual change in the landscape) due to the prominence of the existing transmission line infrastructure and the distance

from the vantage point. The other residence within a 1-mile distance of the Project occurs approximately 0.98-mile north of the Project. The view from this residence of the Project infrastructure is obscured by the Cholla Power Plant and Substation, the railroad bed, the Little Colorado River floodplain vegetation, and the existing vegetation screening around the residence. All other residences occur more than 1-mile from the Project. Visual impacts to these few residences are expected to be *de minimus* due to the relatively long viewing distances and partial screening from foreground vegetation and dominance of existing transmission infrastructure.

Impacts to viewers traveling on Obed Road would be expected at a moderate level at or near the gen-tie line crossing of Obed Road at approximately milepost 1.3 of the gen-tie line route. The gen-tie extends from Obed Road to the west for a distance of 1.3 miles across relatively flat desert shrublands that are utilized for cattle grazing. Impacts to the viewshed in a westerly direction from Obed Road are expected to be low-to-moderate due to existing disturbances attributable to the cattle grazing land use. The gen-tie extends from Obed Road to the east and northeast for a distance of approximately 0.9-mile before entering into the Little Colorado River floodplain vegetation. For the majority of this distance, the Project is co-located adjacent to two existing high voltage transmission lines and is therefore expected to have a low impact on viewers using Obed Road. A visual simulation of the Project from the vantage point of Obed Road, near the Project's crossing location of Obed Road, has been prepared (KOP #2, Appendix E-1). The visual simulation identifies the Project infrastructure is visible from Obed Road, at or near the crossing location, however, the Project is expected to have a low impact on viewers as the visual contrast of the Project with respect to the existing transmission line structures would be low. A second visual simulation of the Project from the vantage point of Obed Road, near the crossing of the Little Colorado River, has been prepared (KOP #5, Appendix E-1). This visual simulation identifies the Project's gen-tie line is obscured from viewers using Obed Road when crossing above the floodplain vegetation. Impacts at distances beyond 1-mile would be negligible because of increased viewing distance and presence of existing transmission lines.

Impacts to views from I-40 approximately 0.7 to 1+ mile north of the Project would be low to negligible due to viewing the gen-tie line route adjacent to existing high voltage transmission line corridors near the interconnection point at the Cholla Power Plant/Substation. Impacts to views from McLaws/Territorial Road would be low to negligible due to viewing the gen-tie line route in an existing high voltage transmission line corridor from a distance 2+ miles away. A visual simulation of the Project from the vantage point of I-40 travelers has been prepared (KOP #7, Appendix E-1). The visual simulation identifies the Project infrastructure is not easily recognizable (i.e., difficult to determine visual change in the landscape) due to the prominence of existing transmission line infrastructure, the Cholla Power Plant/Substation, and the distance from I-40.

Impacts to views from the Joseph City Cemetery approximately 1.0 to 1+ mile northwest of the Project would be low to negligible due to viewing the gen-tie line route beyond and adjacent to existing high voltage transmission line corridors and the Cholla Power Plant/Substation. A visual simulation of the Project from the vantage point of the cemetery has been prepared (KOP #3, Appendix E-1). The visual simulation identifies the Project infrastructure is not viewable from the cemetery due to vegetation screening around the cemetery and the vegetation in the foreground.

E.4 Historic Sites and Structures, and Archeological Sites

As required by the ACC Rules of Practice and Procedure R14-3-219, the potential effects of the proposed Project on historic sites and structures and archaeological sites were assessed. The assessment was also prepared to support ACC 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 listing in the Arizona Register of Historic Places (ARHP), and to provide the State Historic Preservation Office an opportunity to review and comment on actions that affect such historic properties.

To be eligible for the ARHP, a property must be at least 50 years old (less, if they have special significance) and have national, state, or local significance in American history, architecture, archeology, engineering, or culture. They 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.

E.4.1 Methodology

Tetra Tech conducted a site records search and literature review to determine if previously recorded cultural resources are present within a 1-mile buffer around the Project (the Research Area). The search included a review of the AZSITE online GIS database, which includes records of previous archaeological investigations and all previously documented cultural resources (prehistoric and historic archaeological sites and historic architectural resources) that have been registered with the Arizona State Museum (ASM) Archaeological Records Office. GIS shapefiles for previous investigations and documented cultural resources in the Research Area were provided by the AZSITE database administrator on May 18, 2021, and on April 14, 2022. The records research also included a review of the National Park Service's online database for properties listed on the ARHP, as well as the National Register of Historic Places (NRHP). Tetra Tech also reviewed historic Arizona General Land Office (GLO) records to determine whether vestiges of trails, transportation routes, homesteads, or other historic resources were present in the Project. Figure E-3 shows the Project, Research Area, and survey areas.

This investigation also included a systematic pedestrian surface survey at 15-meter interval transects within the Project. GIS shapefiles for the Project were provided by Avangrid; the Project was not flagged or otherwise demarcated on the ground. Survey methodology followed protocols established by the ASM Archaeological Site Recording Manual (ASM 1993). A tablet operating Collector for ArcGIS® with a Geode submeter receiver was used to navigate the Project and document resources. Photographic documentation included photographs in each of the cardinal directions as well as features and/or temporally or culturally diagnostic materials in situ. Standard

Tetra Tech field forms were used to adequately record sites. Isolated finds were also documented. The information recorded for each isolated find included location, artifact or feature type, and description, as well as measurements. Isolated diagnostic artifacts and features were photographed.



Figure E-3. Map of Research Area

E.4.2 Historic Sites

There are three historic cultural resource sites within the Research Area: the Hashknife Range cattle ranch, the remains of Obed Fort, and the NE-1 Cholla-Keams Canyon Transmission Line. The Hashknife Range cattle ranch, AZ P:3:1 (ASM), was recorded in 1961 with a recommendation for additional information until a formal recommendation could be made on its eligibility. The ASM indicates that the boundary for this site is approximate and appears to have been based on archival research. The Obed Fort, site AZ P:3:33 (ASM), served as one of the earliest Mormon settlements in the Little Colorado River Valley and, for a while, the original headquarters for the Hashknife Range cattle ranch. The fort was subjected to limited testing in 1995 by the Arizona Archaeological Society and was recommended for listing in the NRHP (Wilhelm and Ferg 1995). Lastly, AZ P:3:111(ASM) is the historic NE-1 Cholla-Keams Canyon Transmission Line, which has been recommended for eligible listing in the NRHP (Purcell et al. 2011).

E.4.3 Historic Structures

No standing historic structures have been previously recorded within the Research Area.

E.4.4 Archaeological Sites

There are three known prehistoric archaeological sites in the Research Area. One site, AZ P:3:7(ASM), is a lithic quarry that has been recommended for eligible listing in the NRHP (Lange 1983; Teague and Mayro 1979). The second site, AZ P:3:211(ASM), is an artifact scatter that has been recommended for eligible listing in the NRHP (Hayden et al. 2016). The third site, NA14217, is described as a rockshelter and artifact scatter. This site has a Museum of Northern Arizona number (NA) and is currently unevaluated for the NRHP. Its recording date is unknown.

E.4.5 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 if for listing in the ARHP or NRHP. Effects are adverse when they diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects of historic properties include but are not limited to:

- physical destruction 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 which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe; and
- 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.

E.4.5.1 Direct Effects

Direct effects would include the areas that would be disturbed by construction and operation of the proposed Project, including transmission structure locations and any access roads.

The only direct effect area that could be categorized as a historic site, structure, or an archaeological site is the Hashknife Range cattle ranch; however, no evidence of the site remains today, or confirmation of the exact location of the site as the initial listing was based solely on archival research, therefore, it would not be directly affected by the Project (see Appendix B-2 for additional information).

E.4.5.2 Indirect Effects

The remaining two historic sites, and three archaeological sites are outside the area of direct effects for the Project. Although the construction of the Project would indirectly introduce a visual element to the Research Area, it would be restricted to the vicinity of the existing transmission lines, which are much larger in scale, so it would not significantly diminish the visual integrity of the overall viewshed. Moreover, there are existing transmission lines in the Research Area that have already impacted the overall viewshed.

E.4.6 Conclusion

Based on the information stated in Exhibit E, the Project is not expected to directly or indirectly affect historic sites, structures, or archaeological sites.

E.4.7 References

ASM (Arizona State Museum). 1993. Archaeological Site Recording Manual. Arizona State Museum, The University of Arizona, Tucson.

U.S. Environmental Protection Agency. 2011. Level III and IV ecoregions of the continental United States. U.S. EPA, National Health and Environmental Effects Research Laboratory, Corvallis, Oregon, Map scale 1:3,000,000. Available online at: <https://www.epa.gov/eco-research/level-iii-and-iv-ecoregions-continental-united-states>.

Griffith, G.E., Omernik, J.M., Johnson, C.B., and Turner, D.S. 2014. Ecoregions of Arizona (poster): U.S. Geological Survey Open-File Report 2014–1141, with map, scale 1:1,325,000, <http://dx.doi.org/10.3133/ofr20141141>

Hayden, Caitlin, S. Jerome Hesse, and Adrienne M. Tremblay. 2016. Archaeological Survey of El Paso Natural Gas Line No. 2217 from Milepost 13.6 to Milepost 37.8 in Navajo County, Arizona. SWCA Cultural Resource Report No. 16-65. SWCA Environmental Consultants, Tucson.

Lange, Richard C. 1983. Letter Report to a Mr. Robert Hesse Regarding State Land Application 27-83542/R7840. Arizona State Museum, Tucson.

Purcell, David E., J. Scott Courtright, F. Micheal O'Hara III, Grant Fahrni, and Jessica Walker. 2011. A Cultural Resources Survey of 8.57 Miles (51.94 Acres) of State and Federal Land for the Arizona Public Service NE-1 (Cholla-Keams Canyon) 69-kV Transmission Line, Navajo County, Arizona. Logan Simpson Design, Tempe, Arizona.

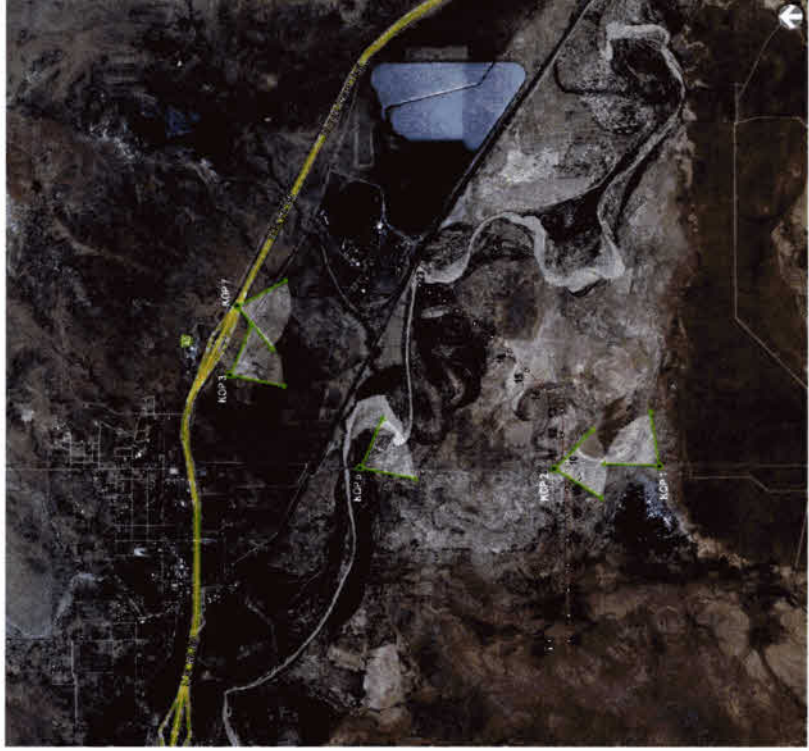
Teague, Lynn S., and Linda L. Mayro. 1979. An Archaeological Survey of the Cholla-Saguaro Transmission Line Corridor. Arizona State Museum Archaeological Series No. 135. 2 vols. Arizona State Museum, Tucson, Arizona.

Wilhelm, Karen, and Alan Ferg. 1995. Obed, A.T., A Report on the Test Excavations of October 7 and 8, 1995. Springerville, AZ.

APPENDIX E-1
Photo Simulations

Visual Simulations

KOP MAP



KOP 1

PHOTOGRAPH INFORMATION
Time of photograph: 5:44 p.m.
Date of photograph: 07/11/2022
Weather condition: Partly Cloudy
Viewing direction: Northeast

Latitude: 34.914794° N
Longitude: -110.323507° W
Camera Model/Make: Nikon Z 6
Focal Length: 50mm

Distance to object pole:
3,560 feet

Existing Condition



Simulated Condition



Visual Simulations

Print Color Proof Notes:
This sheet should be printed at 36 by 48 inches. All size
with no scaling, and viewed at 22 inches. If viewed on a
computer monitor, the maximum resolution should be scaled to 100
percent and viewed at 22 inches.

KOP 2

PHOTOGRAPH INFORMATION
Time of photograph: 11:07 a.m.
Date of photograph: 06/16/2022
Weather condition: Partly Cloudy
Viewing direction: South

Latitude: 34.6238743° N
Longitude: -110.323743° W
Camera Model Make: Nikon Z 6
Focal Length: 50mm

Distance to closest pole:
353 feet

Existing
Condition



Simulated
Condition



KOP 3

PHOTOGRAPH INFORMATION
Time of photograph: 10:39 a.m.
Date of photograph: 06/16/2022
Weather condition: Partly Cloudy
Viewing direction: Southeast

Latitude: 34.6206677° N
Longitude: -110.3141237° W
Camera Model Make: Nikon Z 6
Focal Length: 50mm

Distance to closest pole:
6,857 feet (1.2 miles)

Existing
Condition



Simulated
Condition



Visual Simulations

This Color Photo is a simulation. The sheet shall be printed at 36 by 48 inches, full size with no scaling, and viewed at 22 inches. If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at 22 inches.

KOP 5

PHOTOGRAPH INFORMATION
Time of photograph: 5:19 p.m.
Date of photograph: 07/11/2022
Weather condition: Partly Cloudy
Viewing direction: Southeast

Latitude: 34.6208771 N
Longitude: -110.3238531 W
Camera Model/Make: Nikon Z 6
Focal Length: 50mm

Distance to closest pole:
6,990 feet (1.3 miles)

Existing Condition



Simulated Condition



KOP 7

PHOTOGRAPH INFORMATION
Time of photograph: 10:00 a.m.
Date of photograph: 07/12/2022
Weather condition: Partly Cloudy
Viewing direction: Southwest

Latitude: 34.6208771 N
Longitude: -110.3095701 W
Camera Model/Make: Nikon Z 6
Focal Length: 50mm

Distance to closest pole:
6,169 feet (1.16 miles)

Existing Condition



Simulated Condition



KOP 1 - Existing Condition



KOP 1 - Simulated Condition (3,560 ft to nearest pole)



KOP 2 - Existing Condition



KOP 2 - Simulated Condition (353 ft to nearest pole)



KOP 3 - Existing Condition



KOP 3 - Simulated Condition (6,657 ft to nearest pole)



KOP 5 - Existing Condition



KOP 5 - Simulated Condition (5,590 ft to nearest pole)



KOP 7 - Existing Condition



KOP 7 - Simulated Condition (6,169 ft to nearest pole)



Exhibit F. Recreational Purposes and Aspects

A.R.S. §40-360 et seq. established the Power Plant and Transmission Line Siting Committee in 1971. A.R.S. §40-360.06(A)(4) stipulates "the proposed availability of the site to the public for recreational purposes, consistent with safety considerations and regulations" are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in ACC Rules of Practice and Procedure R14-3-219:

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.

Currently, there are no existing, developed recreational resources within the Study Area. In addition, there are no known plans to develop recreational facilities within the Study Area.

The Navajo County Character Areas Map (Navajo County 2003) has certain areas designated as recreational; however, the closest area is over 25 miles southwest of the Study Area. There are opportunities for people to recreate in the Study Area including cycling on the existing road network, dispersed hunting, and hiking. The public can also use the existing road network to travel to recreational areas outside of the Study Area. The Project will not prohibit or interfere with any of these activities.

In addition, there are two existing RV parks to the north in Joseph City, Norma's RV Park and McTribe RV Park. There are also several parks in the Towns of Winslow, approximately 18 miles west of Joseph City, and Holbrook, approximately 6 miles east of Joseph City.

Due to the distance from the Project to existing recreational uses, the Project is not expected to impact any existing or planned recreational opportunities.

F.1 References

Navajo County. 2003. Character Areas Map. Available online at:
<https://www.navajocountyaz.gov/Portals/0/Departments/Planning%20and%20Zoning/Documents/CharacterAreasMap.pdf>. Accessed May 2023.

Exhibit G. Conceptual Drawings of Typical Facilities and Transmission Facilities

A.R.S. §40-360 et seq. established the Power Plant and Transmission Line Siting Committee in 1971. A.R.S. §40-360.06(A)(7) stipulates "the technical practicability of achieving a proposed objective and the previous experience with equipment and methods available for achieving a proposed objective" are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

Attach any artist's or architect's conception of the proposed plant or transmission line structures and switchyards, which applicant believes may be informative to the Commission.

The illustrations on the following pages represent conceptual design information for the Gen-Tie Line and the Collector Substation.

- Figure G-1: Collector Substation Switching One-Line Diagram
- Figure G-2: Collector Substation General Arrangement
- Figure G-3: Typical Single Circuit 230kV Steel Monopole Structure
- Figure G-4: Typical 230kV Steel H-Frame Tangent Pole (Galvanized)

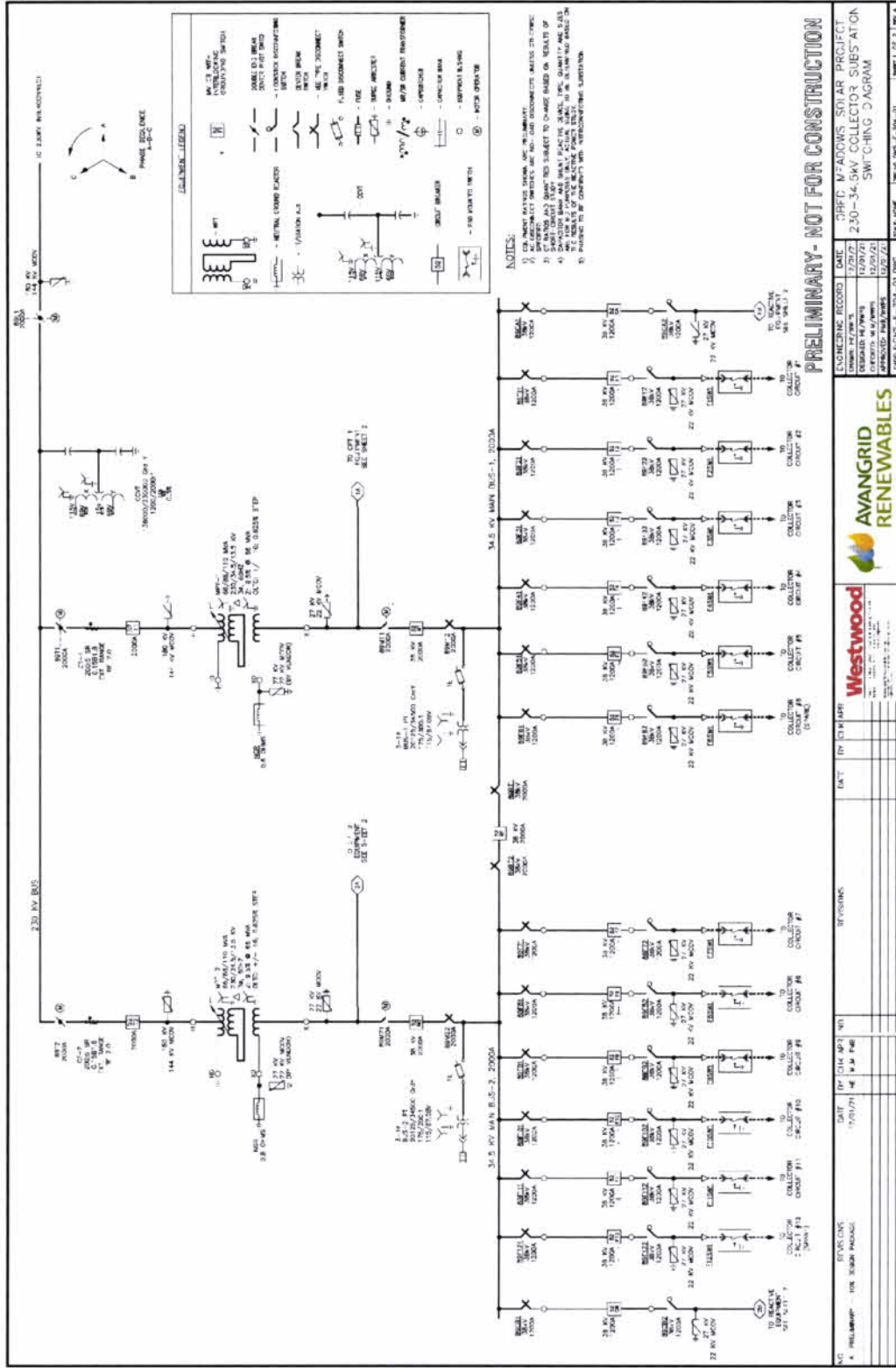
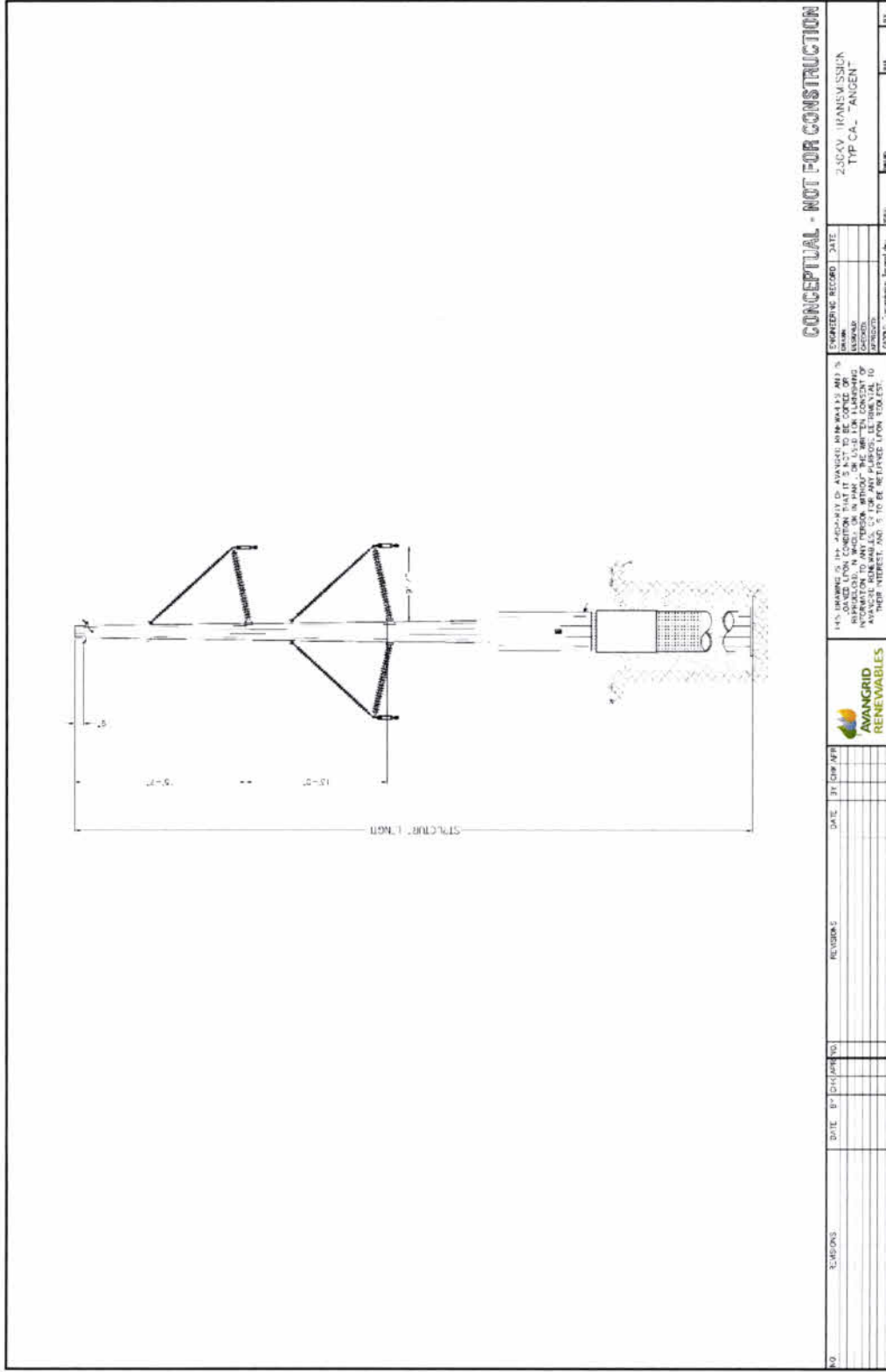


Figure G-1. Collector Substation Switching One-Line Diagram



REVISIONS		DATE	BY	APP'D	REVISIONS	DATE	BY	APP'D

14% DRAWING IS THE PROPERTY OF AVANGRID RENEWABLES AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFIC TO WHICH IT IS ISSUED. IT IS NOT TO BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF AVANGRID RENEWABLES. USE FOR ANY PURPOSES OTHER THAN TO WHICH IT IS ISSUED IS TO BE REFUSED FOR LEGAL AND ETHICAL REASONS.		230KV TRANSMISSION TYPICAL ANGEN
ENGINEERING RECORD	DATE	230KV TRANSMISSION TYPICAL ANGEN
DRAWN	DATE	230KV TRANSMISSION TYPICAL ANGEN
CHECKED	DATE	230KV TRANSMISSION TYPICAL ANGEN
APPROVED	DATE	230KV TRANSMISSION TYPICAL ANGEN

Figure G-3. Typical Single Circuit 230kV Steel Monopole Structure

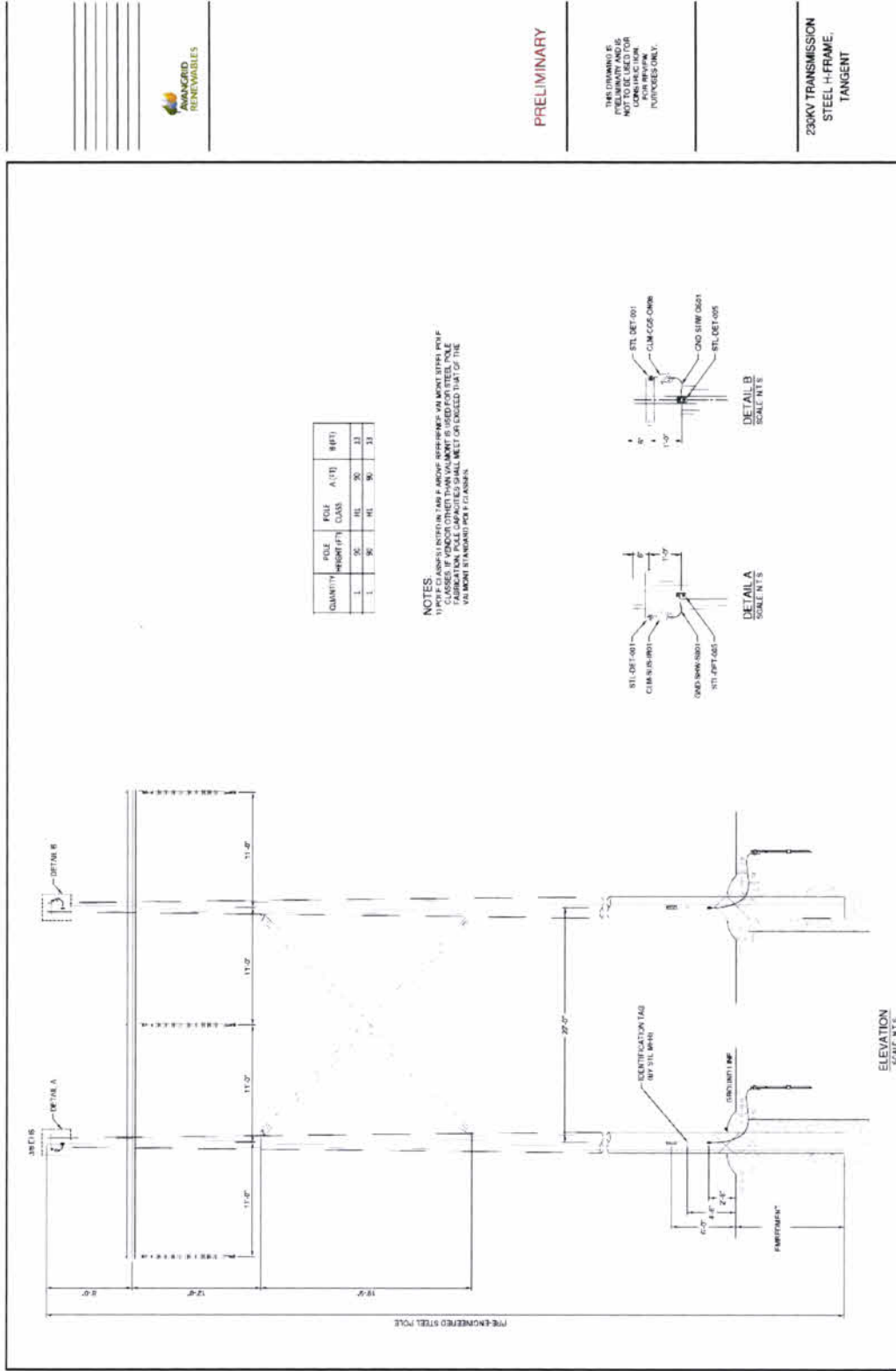


Figure G-4. Typical 230kV Steel H-Frame Tangent Pole (Galvanized)

Exhibit H. Existing Plans

A.R.S. §40-360 et seq. established the Power Plant and Transmission Line Siting Committee in 1971. A.R.S. §40-360.06(A)(I) stipulates "existing plans of the state, local government and private entities for other developments at or in the vicinity of the proposed site" are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in ACC 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.

H.1 Existing Plans Overview

Land uses are mapped in Exhibit A, specifically in Figures A-3 and A-4 and discussed accordingly. As part of the land use study, any general and specific plans that were available were gathered for the Study Area from Navajo County. Representatives from Navajo County were also invited to participate in the open house meetings associated with the County's Special Use Permit process for the related solar facility site, as well as the public open house for the Gen-tie Line Project. The purpose of this representation was to ensure consistency with the plans and to identify potential issues throughout the environmental and public outreach planning process.

During the planning process, the Applicant also met with representatives from Navajo County, as well as private landowners within the Study Area on several occasions (Table H-1). There are two main landowners that make up the Project, being Aztec Land Company LLC and APS. The Applicant engaged these landowners early in the planning process and will continue to do so throughout the life of the Project. Some key interactions that have occurred or that will occur are listed below in Table H-1.

Discussions with these stakeholders offered the opportunity to provide Project information, discuss the Gen-Tie Line route, and request new or additional information on plans or planned developments. Stakeholder letters are available in Appendix H-1.

Table H-1. Stakeholder Engagements

Event	Date
Navajo County Pre-Application Meeting for Special Use Permit	December 9, 2021
Public Virtual Open House for Navajo County Special Use Permit	April 12, 2022
Navajo County Emergency Management and Preparedness Department Consultation	April 14, 2022
Navajo County Planning and Zoning Hearing for Special Use Permit	July 21, 2022
Navajo County Board of Supervisors Hearing for Special Use Permit	September 13, 2022
AZGFD Consultation – Project Evaluation Program	December 30, 2021 – January 31, 2022
SHPO Consultation	April 12, 2022
Public Open House for Gen-Tie Line Project	April 24, 2023
Key Stakeholder Informational Mailing	June 1, 2023
Tribal Outreach Informational Mailing	June 19, 2023

Construction and operation of the Project would neither affect nor be affected by other development plans in the vicinity. No changes in land ownership or jurisdiction would result from construction of the Project. The presence of the Gen-Tie Line would not affect ranching or livestock grazing, which is the principal use for most of the land within the Study Area.

APPENDIX H-1
Stakeholder Letter and Mailing List

Obed Meadow Gen Tie Project



This map is a graphic and may not show exact locations.

Project Overview

The Obed Meadow Solar Project is a planned 200-megawatt solar power generation facility and 2.5 mile 230-kilovolt generation tie line with an optional battery energy storage system and additional associated facilities near Joseph City, Arizona.

Construction is expected to begin in late 2024 and continue for about 12 months. The facility is expected to be in service by the end of 2025 and will have an operational lifespan of about 40 years.

Opportunity to Provide Comment

We invite you to reach out to the Project team with any questions and concerns regarding the Obed Meadow Gen Tie Project.

Hotline: 602.384.2470

Email: obedmeadowsolar@avangrid.com

Website: www.obedmeadowsolar.com

We want to hear from you!

602.384.2470 | obedmeadowsolar@avangrid.com | www.obedmeadowsolar.com



Account Number	APN	Owner Name	Owner C/O	Mailing Address	Mailing City	Mailing State	Mailing ZIP	Site Address	Site City
R000021216	107-18-021F	PALMER ALAN & VICKY (CPRS)		PO BOX 357	JOSEPH CITY	AZ	86032-0357	4431 3rd North Avenue	JOSEPH CITY
R000021079	107-15-010	GC RICE M LLC		PO BOX 5	JOSEPH CITY	AZ	86032-0005	4542 Main Street	JOSEPH CITY
R000020866	107-09-008C	SERNA ORLANDO		PO BOX 295	JOSEPH CITY	AZ	86032-0295	8235 Porter Avenue	JOSEPH CITY
R000020877	107-18-022C	STANDIFORD ROBERT C & JUDIA JT		PO BOX 71	JOSEPH CITY	AZ	86032	4437 3rd North Avenue	JOSEPH CITY
R000020877	107-09-008V	ROGERS MILFORD D & JENNIFER L (JT)		PO BOX 479	JOSEPH CITY	AZ	860320479		JOSEPH CITY
R000021142	107-16-018	RANDALL DOYLE S & JACQUELINE (JT)		PO BOX 1458	SAINT JOHNS	AZ	85936	4528 3rd South Avenue	JOSEPH CITY
R000020999	107-13-010	GREENTREE INVESTORS LLC		1933 E VIEW POINT DR	SAINT GEORGE	UT	847906366	4525 Main Street	JOSEPH CITY
R000021044	107-14-021D	BUSHMAN ANDREW K & REBECCA N (CPRS)		PO BOX 96	JOSEPH CITY	AZ	860320096	8175 Shelley Avenue	JOSEPH CITY
R000021359	107-25-003	PENROD JOHNNY C & SHIRLEY A JT		2909 E FLOWER ST	GILBERT	AZ	85298-5752	4612 1st North Avenue	JOSEPH CITY
R000021171	107-18-001G	MILLER TONY J (BD)		PO BOX 653	JOSEPH CITY	AZ	860320653	4419 Fish Lane	JOSEPH CITY
R000020697	107-07-002W	GC RICE RL4 LLC		PO BOX 5	JOSEPH CITY	AZ	86032-0005		JOSEPH CITY
R000021052	107-14-029A	AVION IRREVOCABLE TRUST		PO BOX 132	JOSEPH CITY	AZ	860320132	8165 Roberson Avenue	JOSEPH CITY
R000020994	107-13-005G	LENTS JAMES E & ANA E (CPRS)		PO BOX 328	JOSEPH CITY	AZ	86032-0328	4504 3rd South Avenue	JOSEPH CITY
R000020763	107-07-050A	MILLER JEREMY & JENNIE (JT)MILLER NELSON & KAREN		PO BOX 318	JOSEPH CITY	AZ	86032-0318	8181 Allen Drive	JOSEPH CITY
R000020780	107-08-002A	POWERS PATRICK & MEGAN D (CPRS)		PO BOX 722	JOSEPH CITY	AZ	860320722	4590 3rd North Avenue	JOSEPH CITY
R000020996	107-13-005I	WARNER JUSTINE & WILLIAM L (CPRS)		8105 S HANSEN AVE	JOSEPH CITY	AZ	86032	8105 S Hansen Avenue	JOSEPH CITY
R000021328	107-21-027	NAVAJO COUNTY		PO BOX 668	HOLBROOK	AZ	86025-0668	7975 South Richards Avenue	JOSEPH CITY
R000021016	107-13-025A	CLIFFORD JULIE H		PO BOX 111	JOSEPH CITY	AZ	86032-0111	8128 Hansen Avenue	JOSEPH CITY
R000020670	107-05-038	HUNT FAMILY TRUST		PO BOX 42	JOSEPH CITY	AZ	860320042		JOSEPH CITY
R000020936	107-11-001	ROBERSON WILLIAM R & RHONDA L		PO BOX 467	JOSEPH CITY	AZ	86032-0467	8161 Despain Avenue	JOSEPH CITY
R000021156	107-17-007C	MIDWAY JC LLC		PO BOX 5	JOSEPH CITY	AZ	860320005	4573 MAIN ST	JOSEPH CITY
R000020840	107-08-035	US BANK		55 BEATTIE PL STE 110	GREENVILLE	SC	296015115	4564 4th North Avenue	JOSEPH CITY
R000021089	107-15-018B	CHAMBER OF COMMERCE (JOSEPH CITY)		PO BOX 36	JOSEPH CITY	AZ	86032	4560 Main Street	JOSEPH CITY
R0010018791	107-18-040F	FULLMER JAMES S & ASHLEY N (JT)		PO BOX 13	JOSEPH CITY	AZ	860320013	4414 A B Ranch Road	JOSEPH CITY
R000020921	107-10-019B	ROGERS AARON M		PO BOX 185	JOSEPH CITY	AZ	860320185	4520 Main Street	JOSEPH CITY
R000021012	107-13-021B	NEFF RONALD & MARTI (JT)		3349 N WALKER ST	FLAGSTAFF	AZ	86004-2029		JOSEPH CITY
R000020924	107-10-021	GARRIDO PEDRO & DONDY S JT		PO BOX 415	JOSEPH CITY	AZ	86032-0415	4510 1st North Avenue	JOSEPH CITY
R000021036	107-14-015B	MCLAUGHLIN KELLY		PO BOX 349	JOSEPH CITY	AZ	860320349	8168 Roberson Avenue	JOSEPH CITY
R000021330	107-22-002C	HANSEN GARY & RUTH (CPRS)		PO BOX 502	JOSEPH CITY	AZ	860320502	4651 Cholla Lake Road	JOSEPH CITY
R000021166	107-18-001B	NICHOLS MICHAEL G & MILDRED E (CPRS)		PO BOX 118	JOSEPH CITY	AZ	860320118	4443 Fish Lane	JOSEPH CITY
R000021344	107-24-004	FARNES MITCHELL & SARAH A (CPRS)		PO BOX 319	JOSEPH CITY	AZ	860320319	4560 4th North Avenue	JOSEPH CITY
R000021240	107-18-035	JOSEPH CITY SANITARY DISTRICT		GENERAL DELIVERY	JOSEPH CITY	AZ	86032-9999		JOSEPH CITY
R000021125	107-15-042	HALBISON JAMES C		PO BOX 516	JOSEPH CITY	AZ	86032-0516	8159 Westover Street	JOSEPH CITY
R000020680	107-06-004C	RICE CAROLYN PORTER TRUSTEE		PO BOX 437	JOSEPH CITY	AZ	86032-0005		JOSEPH CITY
R000021421	107-27-010B	COLLIGAN BRIAN & DREW J		PO BOX 5	JOSEPH CITY	AZ	860320005	4438 Fish Lane	JOSEPH CITY
R000021238	107-18-033A	BUSHMAN VIRGIL A JR & KARILYN S TRUSTEES		PO BOX 28	JOSEPH CITY	AZ	860320028	8200 Porter Avenue	JOSEPH CITY
R000021115	107-15-033C	PARRISH STEPHEN L		PO BOX 612	JOSEPH CITY	AZ	860320612	4537 3rd North Avenue	JOSEPH CITY
R0000213403	107-13-014C	ROGERS DALE F & DOROTHY A DE JESUS WETTTE T (ALL JT)		PO BOX 194	JOSEPH CITY	AZ	86032-0194	8132 Richards Avenue	JOSEPH CITY
R000021277	107-20-008B	HANSEN GALE E & ANNA S (CPRS)		PO BOX 220	JOSEPH CITY	AZ	860320220		JOSEPH CITY
R000021024	107-14-003A	SAMBRANO PETER P & ANAULIA (JT)		PO BOX 112	JOSEPH CITY	AZ	86032-0112	4576 Main Street	JOSEPH CITY
R000021117	107-15-034	KENNEDY HEATHER		PO BOX 514	JOSEPH CITY	AZ	860320514	8172 Tanner Avenue	JOSEPH CITY
R000020746	107-07-041	WREN JERRY A & PATRICIA L (JT)		PO BOX 397	JOSEPH CITY	AZ	86032-0397	4618 3rd North Avenue	JOSEPH CITY
R000020912	107-10-012	KUHSE DEV		PO BOX 2	JOSEPH CITY	AZ	860320002	8144 Richards Avenue	JOSEPH CITY
R000021247	107-18-042A	BALOO RAYMOND & MARLETHA (CPRS)		PO BOX 657	JOSEPH CITY	AZ	860320657	8234 Porter Avenue	JOSEPH CITY
R000021183	107-18-008E	NAEVE THOMAS A & ELLEN L (JT)		PO BOX 613	JOSEPH CITY	AZ	86032-0613		JOSEPH CITY
R000021296	107-18-017	MILLER J LAYNE & TAMZYN		PO BOX 177	JOSEPH CITY	AZ	86032-0177		JOSEPH CITY
R000021082	107-15-013	GC RICE M LLC		PO BOX 5	JOSEPH CITY	AZ	86032-0005	4544 Main Street	JOSEPH CITY
R000021137	107-16-011	DOBELL PAUL S		PO BOX 527	JOSEPH CITY	AZ	86032-0527	4529 Main Street	JOSEPH CITY
R000020965	107-12-009	TURLEY RICHARD J & SUSAN L (CPRS)		PO BOX 549	JOSEPH CITY	AZ	860320110	4485 Main Street	JOSEPH CITY
R000021297	107-20-028	ROY RICHARD D & CARA-LYNN E (JT)		2087 N CORONADO CT	CASA GRANDE	AZ	851226328		JOSEPH CITY
R000021366	107-25-010	VAN HEMERT ROLAND J & MARY K (CPRS) (BD)		PO BOX 465	JOSEPH CITY	AZ	86032-0465	4626 1st North Avenue	JOSEPH CITY
R000021393	107-26-006	TUCKFIELD CHRISTINE D		PO BOX 7	JOSEPH CITY	AZ	86032-0007	4438 Boyce Drive	JOSEPH CITY
R000020607	107-01-009B	AZTEC EAST JEFFERS LLC		4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000020847	107-08-039	BALDWIN KENT L & JULIE A (CPRS)		490 N 1ST AVE	THATCHER	AZ	855525429		JOSEPH CITY
R000021143	107-16-019	DOWNS DEREK C & JANELLE C (CPRS)		1380 HILLSIDE DR	SNOWFLAKE	AZ	859375608	8102 Frontage Road	JOSEPH CITY
R0000209687	107-07-002A	BRAY DALE & KAREN (CPRS)		PO BOX 393	JOSEPH CITY	AZ	86032-0393	8185 Randall Avenue	JOSEPH CITY
R000021023	107-14-002C	RUDISILL DONALD E & BARBARA J (TRUST)		PO BOX 64	JOSEPH CITY	AZ	86032	4572 Main Street	JOSEPH CITY
R000020893	107-09-018D	REYNOLDS LEROY E & JOYCE (JT)		PO BOX 122	JOSEPH CITY	AZ	86032-0122	8215 Porter Avenue	JOSEPH CITY
R000021341	107-24-001E	FARR NEAL & STEPHANIE		PO BOX 70	JOSEPH CITY	AZ	86032-0070	4548 4th North Avenue	JOSEPH CITY
R000021003	107-13-012	JOSEPH CITY FIRE DEPARTMENT/JOSEPH CITY VOLUNTEER FIRE DEPT.		PO BOX 72	JOSEPH CITY	AZ	86032-0072	4513 Main Street	JOSEPH CITY

C/O MYRA A ROGERS

R001001814	107-18-0211	PALMER ALAN J & VICKY K (CPRS)	PO BOX 357	JOSEPH CITY	AZ	860320357	3RD NORTH AVE	JOSEPH CITY
R000020822	107-08-0308	MONTOYA BERNARDO & JILL M CPRS	PO BOX 576	JOSEPH CITY	AZ	86032-0576	4530 4th North Avenue	JOSEPH CITY
R000021180	107-18-0074	JOHNSON DALE M JOHNSON BRITANNY JT	PO BOX 536	JOSEPH CITY	AZ	86032-0536	4382 3rd North Avenue	JOSEPH CITY
R000212624	107-09-0204	BAIRD BRANTLEY TRUSTEE	PO BOX 224	JOSEPH CITY	AZ	860320224	4510 4th North Avenue	JOSEPH CITY
R0010021093	110-15-001H	BUSHMAN ANDREW K & REBECCA N (CPRS)	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000020733	107-07-0308	BUZMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096	8201 Randall Avenue	JOSEPH CITY
R000021197	107-18-014C	JOSEPH CITY UTILITIES	PO BOX 147	JOSEPH CITY	AZ	86032-0147		JOSEPH CITY
R000021317	107-21-0138	ARIZONA PUBLIC SERVICE	PO BOX 53999 MS 9565	PHOENIX	AZ	850723940	4717 Frontage Road	JOSEPH CITY
R000020711	107-07-0128	PIERCE LEROY & DORA (JT)	PO BOX 242	JOSEPH CITY	AZ	86032-0242	8149 Randall Avenue	JOSEPH CITY
R000020870	107-09-008N	RIGHT JOHN M	PO BOX 161	JOSEPH CITY	AZ	860320161	4469 Ravine Trail	JOSEPH CITY
R000020934	107-10-032	ROBERSON WILLIAM R & RHONDA L	PO BOX 467	JOSEPH CITY	AZ	86032-0467	4484 1st North Avenue	JOSEPH CITY
R000021386	107-25-032	HANCOCK GENE & DIANE (CPRS)	1433 FRENCH RD	WINSLOW	AZ	86047-2879	4645 1st North Avenue	JOSEPH CITY
R000020945	107-11-013	ROBERSON WILLIAM R & RHONDA L CPRS	PO BOX 467	JOSEPH CITY	AZ	86032		JOSEPH CITY
R000020720	107-07-021	CHOLLA MOBILE HOME PARK LLC	PO BOX 182	SAN CLEMENTE	CA	920740182	8157 Allen Drive	JOSEPH CITY
R000021231	107-18-029C	HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220		JOSEPH CITY
R000021164	107-17-013	NEAL THOMAS R & KATHRYN	501 W IOWA ST	HOLBROOK	AZ	860252439	4569 Main Street	JOSEPH CITY
R000020891	107-09-017	HARRIS DONNA K	PO BOX 266	JOSEPH CITY	AZ	86032-0266	8190 Edwards Avenue	JOSEPH CITY
R000021087	107-15-017C	PETERSEN BARY & SHARON	PO BOX 547	JOSEPH CITY	AZ	86032-0108		JOSEPH CITY
R000021091	107-15-020	ROGERS DON K	PO BOX 519	JOSEPH CITY	AZ	86032-0519	8158 Shelley Avenue	JOSEPH CITY
R000020765	107-07-051	S & F INVESTMENT LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240	8137 Randall Avenue	JOSEPH CITY
R000021343	107-24-003	JOHNSTUN SAMUEL JAMES & DANA LYNN (JT)	PO BOX 384	JOSEPH CITY	AZ	86032		JOSEPH CITY
R000021286	107-20-016	HANSEN DOYLE L & SONIA H TRUST	PO BOX 66	JOSEPH CITY	AZ	86032-0066	4556 4th North Avenue	JOSEPH CITY
R000021133	107-16-006	INTERNATIONAL CHURCH OF FOURSQUARE GOSPE	1910 W SUNSET BLVD #200	LOS ANGELES	CA	90026	4543 Main Street	JOSEPH CITY
R000020899	107-09-023	TOLAND GARY & KARAN JT	3245 BYER RD	BYRON	CA	945141505	4475 Ravine Trail	JOSEPH CITY
R000204662	107-27-005E	ROGERS GEORGE C & SUE ANN JT	PO BOX 336	JOSEPH CITY	AZ	86032-0336	4390 Fish Lane	JOSEPH CITY
R000021260	107-19-003J	PEN-ROB INC	PO BOX 1450	CHICAGO	IL	60690-1450		JOSEPH CITY
R000021001	107-13-011C	HANSENS AUTO LLC	PO BOX 206	JOSEPH CITY	AZ	860320206		JOSEPH CITY
R000020744	107-07-029	INGUO CORPORATION JAMES JACKSON	809 W RIORDAN RD STE 100 # 168	FLAGSTAFF	AZ	86001-0810	8177 Trotter Avenue	JOSEPH CITY
R000020731	107-07-029	BEVAN W & FAYE E HENRIE FAMILY TRUSTBREVAN & FAYE HENRIE TRUSTEES	PO BOX 294	JOSEPH CITY	AZ	86032	8209 Randall Avenue	JOSEPH CITY
R000020808	107-08-021A	FISH GLENN V	PO BOX 215	JOSEPH CITY	AZ	860320215	8185 Roberson Avenue	JOSEPH CITY
R000021085	107-15-016	PETERSEN SHARON	PO BOX 547	JOSEPH CITY	AZ	86032-0108	4554 Main Street	JOSEPH CITY
R000020834	107-08-031W	MILLER TYSON H & ANDREA S (CPRS)	PO BOX 601	JOSEPH CITY	AZ	860320601	8206 Westover Street	JOSEPH CITY
R000021108	107-15-030	JOSEPH CITY SCHOOL DISTRICT #2	PO BOX 8	JOSEPH CITY	AZ	86032-0008	8176 Westover Street	JOSEPH CITY
R000020696	107-07-002V	BROWNSTONE REMODEL & DESIGN LLC	501 W IOWA ST	HOLBROOK	AZ	860252439	4625 6th North Avenue	JOSEPH CITY
R000020916	107-10-016A	O'CONNELL RYAN	PO BOX 379	JOSEPH CITY	AZ	86032-0379	8147 Richards Avenue	JOSEPH CITY
R000021134	107-16-007	ROBERSON WALLACE JR & LUCY TRUST	1320 W BUFFALO	HOLBROOK	AZ	86025	4545 Main Street	JOSEPH CITY
R000021032	107-14-012A	HUNT RYAN L & ERICKA L CPRS	PO BOX 330	JOSEPH CITY	AZ	860320330	4594 1st North Avenue	JOSEPH CITY
R000021161	107-17-010C	ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	860320324	8112 South Ladd	JOSEPH CITY
R000021154	107-17-006C	S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240	4575 MAIN ST	JOSEPH CITY
R000021173	107-18-002D	BUSHMAN RALPH E & JANET L TRUSTEES	PO BOX 926	SAINT JOHNS	AZ	859360926		JOSEPH CITY
R000021141	107-16-017	ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	860320324	4571 Frontage Road	JOSEPH CITY
R000020897	107-09-021	ROBERSON WILLIAM & RHONDA (JT)	PO BOX 467	JOSEPH CITY	AZ	86032-0467	8245 PORTER AVE	JOSEPH CITY
R000021249	107-18-0438	HADDOX RONALD M	PO BOX 260	JOSEPH CITY	AZ	860320260	4426 Boyce Drive	JOSEPH CITY
R000020919	107-10-0188	O'CONNELL RYAN	PO BOX 379	JOSEPH CITY	AZ	86032-0379	8143 Richards Avenue	JOSEPH CITY
R000021123	107-15-040	TAYLOR TERRANCE W & LORRAINE M JT	PO BOX 254	JOSEPH CITY	AZ	86032	4564 2nd North Avenue	JOSEPH CITY
R000020855	107-09-004B	LEE IVIN C & LAPRILL T	PO BOX 173	JOSEPH CITY	AZ	86032-0173		JOSEPH CITY
R000020726	107-07-0268	CRABTREE BUDDY E & KIMBERLY K	25 J R DR	LINCOLN	ME	044571104	8174 Trotter Avenue	JOSEPH CITY
R000021314	107-21-0128	BAKER JERRY O	128 PAYSEE ST	BUHL	ID	833161316	8025 Rogers Avenue	JOSEPH CITY
R000021310	107-21-008D	FIELDS ESTHER J	PO BOX 701	JOSEPH CITY	AZ	860320701	4591 Frontage Road	JOSEPH CITY
R000020867	107-09-008D	WARNER JOSHUA ISHAW KAITLYN R CPRS	PO BOX 461	JOSEPH CITY	AZ	86032-0461	8227 Porter Avenue	JOSEPH CITY
R000021218	107-18-022E	PALMER ALAN J & VICKY K CPRS	PO BOX 357	JOSEPH CITY	AZ	86032-0357		JOSEPH CITY
R000021272	107-20-002	SMITH JOSEPH & DEANNE JT	PO BOX 175	JOSEPH CITY	AZ	86032-0175	4597 Frontage Road	JOSEPH CITY
R000020865	107-09-007	ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	860250668		JOSEPH CITY
R000021043	107-14-021C	BLEAK DANIEL R & AUDRIAN D (CPRS)	614 E BAKER DR	SAN TAN VALLEY	AZ	851404354	8173 Shelley Avenue	JOSEPH CITY
R000021046	107-14-023A	MILLER JACK K	PO BOX 127	JOSEPH CITY	AZ	86032-0127	8173 Ladd Avenue	JOSEPH CITY
R000021112	107-15-032	MILLER ERIC J & AMY D CPRS	PO BOX 430	JOSEPH CITY	AZ	86032-0430	8169 Westover Street	JOSEPH CITY
R000021334	107-23-002	FLORENCE BO LLC	115 S 48TH ST	TEMPE	AZ	852812312		JOSEPH CITY
R000021327	107-21-026	NEAL THOMAS R & KATHRYN A	PO BOX 219	JOSEPH CITY	AZ	860320219	8044 Rogers Avenue	JOSEPH CITY
R000021064	107-14-039F	OLIVER JEFF & DENISE (CPRS)	PO BOX 255	JOSEPH CITY	AZ	86032-0255	4587 2nd North Avenue	JOSEPH CITY
R000020890	107-09-016D	WEBSTER SAMUEL T & LEOLA M CPRS	PO BOX 36	JOSEPH CITY	AZ	86032	8191 Edwards Avenue	JOSEPH CITY
R000020796	107-08-013A	PETERSON THOMAS & SANDRA CPRS	PO BOX 581	JOSEPH CITY	AZ	86032-0581	4545 4th North Avenue	JOSEPH CITY
R000021377	107-25-023	HENDRICKS JASON & KOURTNEY JT	PO BOX 219	JOSEPH CITY	AZ	86032-0219	4619 1st North Avenue	JOSEPH CITY
R000021029	107-14-007B	STATES JOHN W & JOAN C TRUSTEES	22330 E DESERT SPOON DR	QUEEN CREEK	AZ	851421234	8150 Roberson Avenue	JOSEPH CITY
R000021400	107-26-013	GOODMAN-HENRY MARLENE	PO BOX 2031	KAIBETO	AZ	860520311	4443 Boyce Drive	JOSEPH CITY
R000202044	107-26-001A	NELSON SAMUEL & ALEXIA (JT)	PO BOX 317	JOSEPH CITY	AZ	860320317	4448 Boyce Drive	JOSEPH CITY
R000021233	107-18-030A	HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220		JOSEPH CITY

ATTENTION: BRANDON KEYS NUINES

ATTN: CRE-3544
C/O JOSEPH & MARI HANSEN

DON FISCHER

R000020712	107-07-013	YOUNG JACK L	854 N 6TH AVE	HOLBROOK	AZ	86025-2416	8181 Randall Avenue	JOSEPH CITY
R000021211	107-18-0201	HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220	4409 3RD NORTH	JOSEPH CITY
R000020658	107-05-017	AZTEC EAST JEFFERIS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		
R0010021616	107-13-005P	NEAL THOMAS R & KATHRYN S TRUSTEES	294 N VALLEY RD	PAYSON	AZ	855413888	8103 S Hansen Avenue	JOSEPH CITY
R000021152	107-17-009A	RANDALL DONALD S & JACQUELINE	PO BOX 1458	SAINT JOHNS	AZ	85936-1458	4573 Frontage Road	JOSEPH CITY
R000021059	107-14-002B	RUDISILL DONALD E & BARBARA J (TRUST)	PO BOX 64	JOSEPH CITY	AZ	86032	4568 Main Street	JOSEPH CITY
R000021048	107-14-024	BRATT RICHARD N & MARY ANN (JT)	2120 EASY ST	WINSLOW	AZ	86047	8172 Roberson Avenue	JOSEPH CITY
R000021236	107-18-031B	JOSEPH CITY SANITATION DISTRICT	PO BOX 147	JOSEPH CITY	AZ	86032		
R000021304	107-21-004A	PERKINS JACKSON D & FRANCES M (JT)	46216 N BLACK CANYON HWY	NEW RIVER	AZ	850877029		JOSEPH CITY
R000021103	107-15-028F	TUCKFIELD CHRISTINE DOBELL	PO BOX 7	JOSEPH CITY	AZ	86032-0007	4534 1st North Avenue	JOSEPH CITY
R000021362	107-25-006	YOUNG BRENT R WALL DEBBIE (JT)	337 BREEZY RD	PRESCOTT	AZ	863016586	4618 1st North Avenue	JOSEPH CITY
R000021157	107-17-007D	S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240	4575 Main Street	JOSEPH CITY
R000020735	107-07-032	BEGAY MILES	PO BOX 3627	INDIAN WELLS	AZ	860313627	8193 Randall Avenue	JOSEPH CITY
R000020613	107-02-001	SHAFF CAROL A TRUSTEE	PO BOX 309	JOSEPH CITY	AZ	860320309		
R000021144	107-16-021	TOUIDHI MEHDI & DONNA (JT)	PO BOX 2236	JOSEPH CITY	AZ	863016236		JOSEPH CITY
R000020785	107-08-004	BITSOIE RAYMOND & SUSIE (JT)	7217 W IRWIN AVE	LAVERN	NJ	853397040	4574 3rd North Avenue	JOSEPH CITY
R000021010	107-13-018	BAIRD THOMAS OTIS & STORMY NIGHT	PO BOX 1449	GLOBE	AZ	85532	8130 Richards Avenue	JOSEPH CITY
R000207662	107-18-003D	BUSHMAN ANDREW & REBECCA	PO BOX 96	JOSEPH CITY	AZ	860320096	8196 Porter Avenue	JOSEPH CITY
R000020824	107-08-031G	LEGG DAVID R	PO BOX 533	JOSEPH CITY	AZ	86032-0533	4520 4th North Avenue	JOSEPH CITY
R000020718	107-07-020B	BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096	4638 3rd North Avenue	JOSEPH CITY
R000021180	107-18-007A	JOHNSON DALE MJOHNSON BRITTANY JT	PO BOX 536	JOSEPH CITY	AZ	86032-0536	4382 3rd North Avenue	JOSEPH CITY
R000021078	107-15-008	LEE FRANCES VICTORY	PO BOX 542	JOSEPH CITY	AZ	860320542	8143 Westover Street	JOSEPH CITY
R000020993	107-10-031	ROBERSON WILLIAM R & RHONDA L JT	PO BOX 467	JOSEPH CITY	AZ	86032	4490 1st North Avenue	JOSEPH CITY
R000020793	107-08-011A	CHURCH OF JESUS CHRIST OF LDS.	50 EAST NORTH TEMPLE RM 2225	SALT LAKE CITY	UT	84150-0022	8181 Westover Street	JOSEPH CITY
R000021254	107-19-002A	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325	4294 Old U.S. 66	JOSEPH CITY
R000021193	107-18-013E	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325		
R000021306	107-21-007	FIELDS BRYAN J & JULIE A JT	PO BOX 416	JOSEPH CITY	AZ	86032-0416		
R000021076	107-15-007	BROWNING ALBERT O	PO BOX 404	JOSEPH CITY	AZ	86032-0404	4534 Main Street	JOSEPH CITY
R000021083	107-15-014	YARRISON IRENE L	PO BOX 297	JOSEPH CITY	AZ	86032-0297	4548 Main Street	JOSEPH CITY
R000020966	107-12-010	TUCKFIELD NORMA	PO BOX 157	JOSEPH CITY	AZ	86032-0157	4489 Main Street	JOSEPH CITY
R000021069	107-14-042A	DAVIS JULIANNA DAVIS DARLENE J (JT)	PO BOX 583	JOSEPH CITY	AZ	860320583	4582 1st North Avenue	JOSEPH CITY
R000021419	107-27-009	BLOSSER RONNIE G JR	PO BOX 214	JOSEPH CITY	AZ	860320214	8254 Porter Avenue	JOSEPH CITY
R000020975	107-12-021	FOUNTAIN RODNEY W & CAROLYN J (JT)	PO BOX 145	JOSEPH CITY	AZ	860320145	4485 Nielson Avenue	JOSEPH CITY
R000020950	107-11-018A	DREAMCATCHER LLC	PO BOX 627	JOSEPH CITY	AZ	86032-0627	4470 Main Street	JOSEPH CITY
R000021293	107-20-025C	TARAMTO ALLISON B	5745 GIRLS RANCH RD	FLAGSTAFF	AZ	860045477	4551 3rd South Avenue	JOSEPH CITY
R000021013	107-13-022	NEFF RONALD H & MARTI G JT	3349 N WALKER ST	FLAGSTAFF	AZ	86004-7029	4491 Main Street	JOSEPH CITY
R000021189	107-18-012	POGUE PATRICIA	PO BOX 3	JOSEPH CITY	AZ	86032-0003	4346 Old U.S. 66	JOSEPH CITY
R000020898	107-09-022	BIELEFELD DANIEL & JAQUELYN (CPRS)	PO BOX 313	JOSEPH CITY	AZ	860320313	8249 Porter Avenue	JOSEPH CITY
R000020925	107-10-022	BUSHMAN KAREN M TRUSTEE	PO BOX 92	JOSEPH CITY	AZ	86032-0092	4514 1st North Avenue	JOSEPH CITY
R000021242	107-18-037B	SMITH ANTHONY J & TIFFANY C (CPRS)	PO BOX 778	JOSEPH CITY	AZ	860320778	8228 Porter Avenue	JOSEPH CITY
R000020701	107-07-004	FUENTES CHARLES H & EVELYN R (JT)	PO BOX 523	JOSEPH CITY	AZ	860320523	8167 Randall Avenue	JOSEPH CITY
R000020969	107-12-013	COPELAND DANA J	801 N WILLIAMSON AVE	WINSLOW	AZ	860473734	4467 Main Street	JOSEPH CITY
R000020882	107-09-010	KISSUNG MERLE J & BEVERLY	PO BOX F	JOSEPH CITY	AZ	86032-0226	8179 Porter Avenue	JOSEPH CITY
R000021042	107-14-021B	BLEAK DANIEL R & AUDRIAN D (CPRS)	614 E BAKER DR	SAN TAN VALLEY	AZ	851404354	4569 3rd North Avenue	JOSEPH CITY
R000020811	107-08-022A	SMITH JOSEPH & DEANNE (CPRS)	PO BOX 175	JOSEPH CITY	AZ	86032-0175	4582 4th North Avenue	JOSEPH CITY
R000020911	107-10-011	ROGERS ARLIN T & BONNIE	1041 LOLLY RD	WINSLOW	AZ	860478715	4510 Main Street	JOSEPH CITY
R000020829	107-08-031Q	WESTOVER RUSTY & IVETTE (CPRS)	PO BOX 449	JOSEPH CITY	AZ	860320449	4544 Rusty Avenue	JOSEPH CITY
R000021209	107-18-020B	SOLOMON DELWIN H & EVELYN CPRS	PO BOX 314	JOSEPH CITY	AZ	86032-0314	4415 3rd North Avenue	JOSEPH CITY
R000020810	107-08-021C	JOHNSTUN SAMUEL A & TERRY D (JT)	BOX 454	JOSEPH CITY	AZ	86032	8182 Randall Avenue	JOSEPH CITY
R000021019	107-13-027B	HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032	8131 Richards Avenue	JOSEPH CITY
R000021315	107-21-012C	MILLET DONALD G & DONNA S JTBAKER JERRY O	128 PANSSEE ST	BUHL	ID	833161316	8015 Rogers Avenue	JOSEPH CITY
R000021391	107-26-004	GARDNER GEORGE A & MIKAL (CPRS)	PO BOX 441	JOSEPH CITY	AZ	860320441	4442 Boyce Drive	JOSEPH CITY
R000021111	107-15-031B	GARDNER BRIAN & LYDIA J CPRS	PO BOX 441	JOSEPH CITY	AZ	86032-0441	8165 Westover Street	JOSEPH CITY
R000021038	107-14-018	THREAD ELLA P	PO BOX 398	JOSEPH CITY	AZ	86032-0398	4574 2nd North Avenue	JOSEPH CITY
R000020614	107-02-002	SHAFF CAROL A TRUSTEE	PO BOX 309	JOSEPH CITY	AZ	860320309	3600 Jackrabbit Road	JOSEPH CITY
R000020686	107-07-001B	ARIZONA STATE OF	PO BOX 688	HOLBROOK	AZ	860250688		
R000020655	107-05-015F	HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	860230502		
R000020963	107-12-008A	MARTINEAU ROBERT & KAREN	PO BOX 213	JOSEPH CITY	AZ	860320213		
R000021281	107-20-009A	LARSEN JAN U & KATHERINE (JT)	9838 N 101ST AVE	SUN CITY	AZ	853514544		
R000020838	107-08-033	SPIROS KENT T & BACHEL P (CPRS)	PO BOX 347	JOSEPH CITY	AZ	860320347	4542 4th North Avenue	JOSEPH CITY
R000020761	107-07-049	S & F INVESTMENT LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240	4684 Main Street	JOSEPH CITY
R000020993	107-13-005F	NEAL THOMAS R & KATHRYN S TRUSTEES	294 N VALLEY RD	PAYSON	AZ	855413888	4500 3rd South Avenue	JOSEPH CITY
R000021205	107-18-017E	REYNOLDS RUSSEL R & KUHSE DEV	PO BOX 2	JOSEPH CITY	AZ	860320002	4391 3rd North Avenue	JOSEPH CITY
R000021287	107-20-018	BALDWIN LARRY E & AVA R (CPRS)	PO BOX 774	JOSEPH CITY	AZ	860320774	7498 Obed Road	JOSEPH CITY
R000021322	107-21-021	SHIRLEY NATALIE R FAMILY TRUST	1046 LOVELL AVE	CAMPBELL	CA	95008-5916	8031 Rogers Avenue	JOSEPH CITY
R0010019750	107-25-020A	TEIGH MICHAEL R JR	751 N 3RD ST	HOLBROOK	AZ	860252707	4631 1st North Avenue	JOSEPH CITY

C/O JOHN HORAK

TAX ADM DIV 509-8882

R000020706	107-07-007	FIELDS BRYAN & JULIE JT	PO BOX 416	JOSEPH CITY	AZ	86032-0416	4611 Frontage Road	JOSEPH CITY
R000021207	107-18-017G	PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 496	JOSEPH CITY	AZ	860320496	4341 Old U.S. 66	JOSEPH CITY
R000021151	107-17-003B	SPURLOCK ROBERT H & LORRAINE M (CPRS)	PO BOX 12	JOSEPH CITY	AZ	860320012	4387 FRONTAGE RD	JOSEPH CITY
R0000212365	107-05-035D	DESPAINS LX RANCH LLC	PO BOX 104	JOSEPH CITY	AZ	860320104		
R000021050	107-14-026A	POGUE PATRICIA	PO BOX 3	JOSEPH CITY	AZ	86032-0003	8151 Roberson Avenue	JOSEPH CITY
R000021363	107-25-007	WOFFORD JASON B & STEPHANIE M CPRS	PO BOX 718	JOSEPH CITY	AZ	860320718	4620 1st North Avenue	JOSEPH CITY
R000020667	107-05-034	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		
R000209631	107-20-024A	DESRAIN SANDRA K & RUSSELL J	PO BOX 520	JOSEPH CITY	AZ	86032-0520	8082 South Ladd	JOSEPH CITY
R000020790	107-08-008	KOR LINDA	PO BOX 671	JOSEPH CITY	AZ	860320671	4554 3rd North Avenue	JOSEPH CITY
R000020964	107-12-008B	WARREN WANDA C	PO BOX 436	JOSEPH CITY	AZ	86032-0436	4485 Frontage Road	JOSEPH CITY
R000021073	107-15-005	ROGERS GEORGE C & SUE ANN JT	PO BOX 336	JOSEPH CITY	AZ	86032-0336	4530 Main Street	JOSEPH CITY
R000210118	107-15-002B	ESTHERS DINER LLC	PO BOX 496	JOSEPH CITY	AZ	860320496	4526 Main Street	JOSEPH CITY
R0010022379	107-08-049A	FISH TIMOTHY C & DESHREE CPMS	PO BOX 5	JOSEPH CITY	AZ	860320005	8220 A Randall Avenue	JOSEPH CITY
R000021203	107-18-017C	KUHSE DEV	PO BOX 2	JOSEPH CITY	AZ	860320002		
R000021399	107-26-012	COMBS DARCY	PO BOX 268	JOSEPH CITY	AZ	86032-0268	4441 Boyce Drive	JOSEPH CITY
R0000211671	107-14-009D	BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096	4569 2nd North Avenue	JOSEPH CITY
R000020759	107-07-047	HENDRICKS JASON & KOURTNEY CPMS	PO BOX 219	JOSEPH CITY	AZ	86032	4612 Main Street	JOSEPH CITY
R000021107	107-15-029D	DECROSS KIMBERLY D	PO BOX 35	JOSEPH CITY	AZ	86032-0035		
R000021163	107-17-011	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325	4593 Frontage Road	JOSEPH CITY
R000020666	107-05-032	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		
R000021397	107-26-010	WOODY ANDREW & YAZDIE ERICA B (CPRS)	PO BOX 674	JOSEPH CITY	AZ	860320674	4437 Boyce Drive	JOSEPH CITY
R000021345	107-24-005	HANSEN CLINT L & RACHELLE L CPMS	PO BOX 566	JOSEPH CITY	AZ	86032	8214 Randall Avenue	JOSEPH CITY
R000020665	107-05-031D	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		
R000021371	107-25-015	TISSAW RICHARD W & JANET CPMS	PO BOX 535	JOSEPH CITY	AZ	86032-0535	4636 1st North Avenue	JOSEPH CITY
R000021228	107-18-027A	HANSEN DOYLE L & SONJA TRUSTEES	PO BOX 66	JOSEPH CITY	AZ	86032	4444 Main Street	JOSEPH CITY
R000021323	107-21-022	SAGAN LOUIS	8919 E ALBANY ST	MESA	AZ	852078727		
R000020884	107-09-012B	SHAW CLIFFORD B	PO BOX 303	JOSEPH CITY	AZ	86032-0303	8174 Edwards Avenue	JOSEPH CITY
R000213231	107-20-026A	JOHNSON VERNON WAYNE & IDON (JT)	PO BOX 282	JOSEPH CITY	AZ	86032		
R000021163	107-08-001A	LARSON PETER & PERIA (CPRS)	PO BOX 33	JOSEPH CITY	AZ	860320033	4598 3rd North Avenue	JOSEPH CITY
R000020779	107-25-026	TANNER RONALD C	PO BOX 674	JOSEPH CITY	AZ	860320674	4435 Boyce Drive	JOSEPH CITY
R000021396	107-26-009	WOODY ANDREW & YAZDIE ERICA B (CPRS)	PO BOX 5	JOSEPH CITY	AZ	860320005	4555 Frontage Road	JOSEPH CITY
R000021140	107-16-016	GC RICE 3N LLC	PO BOX 206	JOSEPH CITY	AZ	860320206	4517 Main Street	JOSEPH CITY
R000021000	107-13-011B	HANSENS AUTO LLC	611 WASHINGTON ST	WINSLOW	AZ	860474248	4581 2nd North Avenue	JOSEPH CITY
R000021068	107-14-041	THOMAS AARON P II & GABRIELLE A (CPRS)	PO BOX 761	JOSEPH CITY	AZ	86032-0761	4613 1st North Avenue	JOSEPH CITY
R000021380	107-25-026	TANNER RONALD C	PO BOX 133	JOSEPH CITY	AZ	86032-0133	8177 Ladd Avenue	JOSEPH CITY
R000020784	107-08-003D	BALDWIN LANCE & LYNETTE CPMS	PO BOX 12	JOSEPH CITY	AZ	860320012	8199 Westtower Street	JOSEPH CITY
R000021337	107-24-001A	SPURLOCK ROBERT H & LORRAINE M (CPRS)	PO BOX 215	JOSEPH CITY	AZ	86032-0215	8186 Roberson Avenue	JOSEPH CITY
R000020806	107-08-020A	FISH GLENN V	PO BOX 521	JOSEPH CITY	AZ	86032-0521	4580 Main Street	JOSEPH CITY
R000021026	107-14-004	SMITH JIM D & GAYLA JO (CPRS)	1467 W LOBO TRL	SNOWFLAKE	AZ	859375465	4461 3rd North Avenue	JOSEPH CITY
R0010019377	107-11-010A	WESTOVER MATTHEW & AMANDA L (CPRS)	PO BOX 5	JOSEPH CITY	AZ	86032-0005		
R000021300	107-21-002D	GC RICE A LLC	PO BOX 664	JOSEPH CITY	AZ	860320664	4429 3rd North Avenue	JOSEPH CITY
R0010019183	107-18-021H	HUBBARD MERNA (TRUSTEE)	PO BOX 156	TAYLOR	AZ	85939-0156	4479 Main Street	JOSEPH CITY
R000201323	107-12-025A	NFB PROPERTIES LLC	PO BOX 124	JOSEPH CITY	AZ	86032-0124	4529 1st North Avenue	JOSEPH CITY
R000021072	107-15-003	MOSIER DONALD R & KAREN N JT	PO BOX 523	JOSEPH CITY	AZ	860320523		
R0010018645	107-18-020S	FUENTES EVELYN R	PO BOX 623	JOSEPH CITY	AZ	86032	8145 Mcclaws Avenue	JOSEPH CITY
R000020952	107-11-020	POUDRIER TIMOTHY D & LILLIAN D (CPRS)	PO BOX 1458	SAINT JOHNS	AZ	85936		
R000021153	107-17-006B	RANDALL DOYLE S & JACQUELINE A (JT)	BOX 234	JOSEPH CITY	AZ	86032	4561 3rd North Avenue	JOSEPH CITY
R000021121	107-15-038	YOUNG JOHN D JR & CLAIRE S (JT)	937 E LINDA LN	GILBERT	AZ	852345904	4668 Main Street	JOSEPH CITY
R000020769	107-07-055	FULLER JAYNE 25% WATKINS LEE ANN 25% RANDALL ROGER 25% RANDALL LYNN 25%	PO BOX 220	JOSEPH CITY	AZ	86032-0220	8179 Baird Avenue	JOSEPH CITY
R000020713	107-07-014B	HANSEN GALE E & ANNA S (JT)	PO BOX 349	JOSEPH CITY	AZ	860320349	4582 2nd North Avenue	JOSEPH CITY
R000021059	107-14-036	MCLAUGHLIN KELLY & JILL L CPMS	1600 SMITHSON DR	HOLBROOK	AZ	860251918	4596 Main Street	JOSEPH CITY
R000021057	107-14-033	THOMAS STEVEN HOWARD & LEAH DIANA (JT)	PO BOX 313	JOSEPH CITY	AZ	86032-0313	4509 1st North Avenue	JOSEPH CITY
R000020914	107-10-013B	REYNOLDS MARK A & LORE E (JT)	GENERAL DELIVERY	JOSEPH CITY	AZ	86032-9999		
R000020789	107-20-010	JOSEPH CITY SEWER SYSTEM	PO BOX 25	JOSEPH CITY	AZ	860320025	4562 3rd North Avenue	JOSEPH CITY
R000020789	107-08-007	ROGERS ORSON W	PO BOX 194	JOSEPH CITY	AZ	860320194	4570 4th North Avenue	JOSEPH CITY
R000020820	107-08-029B	ROGERS DALE F & DOROTHY A	114 E PARK AVE	GILBERT	AZ	852345713	8148 Mcclaws Avenue	JOSEPH CITY
R0010018744	107-11-017C	DESKINS RAYMOND E & DIXIE D (CPRS)	PO BOX 324	JOSEPH CITY	AZ	860320324	8108 S LAOD	JOSEPH CITY
R000021290	107-20-023	ROGERS MILFORD F	PO BOX 427	JOSEPH CITY	AZ	860320427	4648 1st North Avenue	JOSEPH CITY
R000021384	107-25-030	LARGO-BEGAY LORETTA	PO BOX 482	JOSEPH CITY	AZ	860320482	8036 Rogers Avenue	JOSEPH CITY
R000021318A	107-21-017	FISH RUSSELL B & AMBER S TRUSTEES	PO BOX 336	JOSEPH CITY	AZ	86032	4439 Fish Lane	JOSEPH CITY
R000021167	107-18-001C	ROGERS GEORGE & SUE ANN TRUSTEES	PO BOX 491	JOSEPH CITY	AZ	860320491	4464 4th North Avenue	JOSEPH CITY
R0010021759	107-09-016E	HANSEN MICHAEL S & BRITTANY E	PO BOX 448	JOSEPH CITY	AZ	86032-0448	4634 1st North Avenue	JOSEPH CITY
R000021370	107-25-014	BRIDKAW RAE D	PO BOX D	JOSEPH CITY	AZ	860320015	4627 1ST NORTH AVE	JOSEPH CITY
R000021376	107-25-022A	GONZALES LEO JR & AMBER (CPRS)	PO BOX 511	JOSEPH CITY	AZ	860320511		
R000020764	107-07-050B	FLAKE DAYTON & SARA E (JT)	PO BOX 33	JOSEPH CITY	AZ	86032-0033	4573 3rd North Avenue	JOSEPH CITY
R000021045	107-14-022	BALDWIN LIVING TRUST	PO BOX 502	JOSEPH CITY	AZ	860320502		
R000020652	107-05-014	HANSEN GARY & RUTH (CPRS)						

C/O MANDIE SHAW

R000020716	107-07-018	JOSEPH CITY SCHOOL DISTRICT #2	PO BOX 8	JOSEPH CITY	AZ	86032-0008	4629 3rd North Avenue	JOSEPH CITY
R000021379	107-25-025	HENDRICKS JASON & KOURTNEY (CPRS)	PO BOX 219	JOSEPH CITY	AZ	860320219	4615 1st North Avenue	JOSEPH CITY
R000021255	107-19-028	BAKER NANCY L ESTATE	202 W IOWA ST	HOLBROOK	AZ	86025-2559	4275 Old U.S. 66	JOSEPH CITY
R000021261	107-19-003K	ROGERS HOSS W & MYRA A JT	PO BOX 185	JOSEPH CITY	AZ	86032-0185		JOSEPH CITY
R000020918	107-10-018	PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 496	JOSEPH CITY	AZ	860320496	4516 Main Street	JOSEPH CITY
R000021132	107-16-005	ROBERSON WALLACE JR & LUCY TRUST	1320 W BUFFALO	HOLBROOK	AZ	86025		JOSEPH CITY
R000021124	107-15-041	ORTEGA ISMAEL F & ESTHER D (CPRS)	PO BOX 98	JOSEPH CITY	AZ	86032	8164 Westover Street	JOSEPH CITY
R000212408	107-05-035E	DESPIANS LX RANCH LLC/O JR DESPAIN	PO BOX 104	JOSEPH CITY	AZ	86032-0104	7504 Obed Ranch Road	JOSEPH CITY
R000021169	107-18-001E	PRICE BOB	PO BOX 602	JOSEPH CITY	AZ	86032-0602	4427 Fish Lane	JOSEPH CITY
R000020874	107-09-008S	ROBERSON WILLIAM & RHONDA (JT)	PO BOX 467	JOSEPH CITY	AZ	86032-0467		JOSEPH CITY
R000020814	107-08-024	HANSEN CLINT L & RACHELLE L	PO BOX 566	JOSEPH CITY	AZ	860320566	4592 5th North Avenue	JOSEPH CITY
R000021182	107-18-008D	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613	4362 A B Ranch Road	JOSEPH CITY
R000020968	107-12-012	MCLAWS DELROY W & PAMELA ALL JT	PO BOX 551	JOSEPH CITY	AZ	860320551	4471 Main Street	JOSEPH CITY
R000020986	107-12-031	SEMAS JO ANN & JOHN III TRUSTEES	1554 LITINA DR	ALAMO	CA	945071013		JOSEPH CITY
R000021037	107-14-016A	THOMPSON RICHARD JAY	PO BOX 251	JOSEPH CITY	AZ	86032-0251	4588 2nd North Avenue	JOSEPH CITY
R0010020528	107-18-011B	ZABADAL JOSEPH M & MARCI A (CPRS)	PO BOX 656	JOSEPH CITY	AZ	860320656	4332 Old U.S. 66	JOSEPH CITY
R000020951	107-11-019	MCGRAW JERRY J & DOLORES	PO BOX 211	JOSEPH CITY	AZ	86032-0211	4476 Main Street	JOSEPH CITY
R000021394	107-26-007	BROOKS BRIAN P & LAURA M (CPRS)	PO BOX 382	JOSEPH CITY	AZ	86032	4436 Boyce Drive	JOSEPH CITY
R000019771	107-13-005K	NEAL FAMILY LIMITED PARTNERSHIP	294 N VALLEY RD	PAYSON	AZ	85541	8107 South Richards Avenue	JOSEPH CITY
R000021139	107-16-014	BERGE RACHEL	PO BOX 279	JOSEPH CITY	AZ	860320279	4561 Main Street	JOSEPH CITY
R000021301	107-21-002E	RANDALL DOYLE S & JACQUELINE A JT	PO BOX 1458	SAINT JOHNS	AZ	85936		JOSEPH CITY
R000021126	107-15-043	ORTEGA ISMAEL F & ESTHER D (CPRS)	PO BOX 98	JOSEPH CITY	AZ	86032	8160 Westover Street	JOSEPH CITY
R000020894	107-09-019B	BUSHMAN ALLEN J & TERRI D	1011 DUSTY LN	SHOW LOW	AZ	859013923	8207 Porter Avenue	JOSEPH CITY
R000020830	107-08-031R	SATKO JOSHUA P & BRITTNEY D (CPRS)	PO BOX 374	JOSEPH CITY	AZ	860320374	4543 Rusty Avenue	JOSEPH CITY
R000021067	107-14-040	BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096	4577 2nd North Avenue	JOSEPH CITY
R000021086	107-15-017B	PETERSEN BARY K & SHARON	PO BOX 547	JOSEPH CITY	AZ	860320108		JOSEPH CITY
R0010018789	107-18-040D	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613	4413 Fish Lane	JOSEPH CITY
R000021066	107-14-039H	MCLAUGHLIN KELLY D & JILL L CPRS	PO BOX 349	JOSEPH CITY	AZ	86032	4591 2nd North Avenue	JOSEPH CITY
R000021357	107-25-001	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325	4606 1st North Avenue	JOSEPH CITY
R000021415	107-27-005B	ELDRIDGE DANIEL A & BEVERLY J TRUSTEES	PO BOX 428	GRAPELAND	TX	758440428		JOSEPH CITY
R000021284	107-20-013	HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R000020880	107-09-082Z	EDWARDS JAMES D & JENI D (CPRS)	PO BOX 407	JOSEPH CITY	AZ	860320407	8199 Porter Avenue	JOSEPH CITY
R000021054	107-14-030	UNITED STATES POSTAL SERVICE	8055 S TUFTS AVE STE 400	DENVER	CO	80237-2755	4592 Main Street	JOSEPH CITY
R000021232	107-18-029D	PALMER ALAN & VICKY (CPRS)	PO BOX 357	JOSEPH CITY	AZ	860320357		JOSEPH CITY
R000021104	107-15-028G	MILLER J LAYNE & TAMZYN	PO BOX 177	JOSEPH CITY	AZ	86032-0177	4532 1st North Avenue	JOSEPH CITY
R000020669	107-05-037	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021226	107-18-025B	RUSH DAVID W & KAY H (JT)	PO BOX 532	JOSEPH CITY	AZ	86032-0532		JOSEPH CITY
R000021305	107-21-006	LAZY BAR CATTLE COMPANY LLC	PO BOX 219	JOSEPH CITY	AZ	860320219		JOSEPH CITY
R000020991	107-13-005B	FRALEY RICHARD DWIGHT & CAROLYN SUE JT	PO BOX 299	JOSEPH CITY	AZ	86032	8111 S Hansen Avenue	JOSEPH CITY
R000021155	107-17-007B	ROGERS DIANA EROGERS M DALE (JT)	PO BOX 832	JOSEPH CITY	AZ	860320832	4577 Main Street	JOSEPH CITY
R000021404	107-27-001B	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613		JOSEPH CITY
R000020818	107-08-028	PUGH ROBERT M & TONNIE R (JT)	PO BOX 296	JOSEPH CITY	AZ	86032-0296	4578 4th North Avenue	JOSEPH CITY
R000021095	107-15-024A	KING WILLIAM & DIANA CPRS	PO BOX 56	JOSEPH CITY	AZ	86032-0056	8158 Tanner Avenue	JOSEPH CITY
R000020725	107-07-026A	CORONADO JOSEPH JIMAXWELL TORI C (JT)	8176 TROTTER AVE	JOSEPH CITY	AZ	86032	8176 Trotter Avenue	JOSEPH CITY
R000021129	107-16-002A	WENGER RACHEL T (BERGE)	PO BOX 279	JOSEPH CITY	AZ	860320279	4559 Main Street	JOSEPH CITY
R000020707	107-07-008	FESPERMAN SUSAN	1055 OAK TREE RD	SEQUIN	TX	781558919	4627 Frontage Road	JOSEPH CITY
R000021303	107-21-003A	JOSEPH CITY CEMETERY CORP	PO BOX 540	JOSEPH CITY	AZ	86032-0540	4721 Frontage Road	JOSEPH CITY
R000020736	107-07-033	GC RICE RL4 LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005	8189 Randall Avenue	JOSEPH CITY
R000020784	107-07-031	BALDWIN LANCE S & LYNETTE	PO BOX 133	JOSEPH CITY	AZ	860320133	8197 Randall Avenue	JOSEPH CITY
R000021152	107-17-003C	GRIFFIN SHAWN M & TAMMY L (CPRS)	408 SE ST	MAIDEN	IL	61337	8103 South Ladd	JOSEPH CITY
R000020705	107-07-006B	FIELDS BRYAN JACOB & JULIE ANN	PO BOX 416	JOSEPH CITY	AZ	86032-0416		JOSEPH CITY
R000021039	107-14-019	BALDWIN PERRY L & CAROL A TRUSTEES	PO BOX 33	JOSEPH CITY	AZ	860320033	8168 Ladd Avenue	JOSEPH CITY
R000020809	107-08-021B	JOHNSTUN SAMUEL A & TERRY D (JT)	BOX 454	JOSEPH CITY	AZ	86032	8196 Randall Avenue	JOSEPH CITY
R000021382	107-25-028	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325	4644 1st North Avenue	JOSEPH CITY
R000020685	107-06-010	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325		JOSEPH CITY
R000020741	107-07-036	WREN JERRY A & PATRICIA L (JT)	PO BOX 397	JOSEPH CITY	AZ	86032-0397	4622 3rd North Avenue	JOSEPH CITY
R000020603	107-01-006B	AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000020837	107-08-032	MCLAUGHLIN BRANDON E	PO BOX 349	JOSEPH CITY	AZ	860320349	4566 4th North Avenue	JOSEPH CITY
R000020802	107-08-018B	JAFEK JULIA ASHRUM BRIAN TRUSTEES	PO BOX 326	JOSEPH CITY	AZ	860320326	8186 Ladd Avenue	JOSEPH CITY
R000020791	107-08-009	JAQUEZ ROSE LEE	PO BOX 123	JOSEPH CITY	AZ	86032-0123	4550 3rd North Avenue	JOSEPH CITY
R000021077	107-15-008	WESTOVER MARLENE	PO BOX 171	JOSEPH CITY	AZ	86032-0171	8149 Westover Street	JOSEPH CITY
R000021056	107-14-032	MILLER NELSON H & KAREN H	PO BOX 233	JOSEPH CITY	AZ	86032-0233	4588 Main Street	JOSEPH CITY
R000123232	107-20-026B	DOWNS SANDY C & JEANIE CPRS	PO BOX 631	JOSEPH CITY	AZ	86032	8100 S Hansen Avenue	JOSEPH CITY
R0010021089	108-04-001F	AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000020928	107-10-025	BUSHMAN JEFFREY A & WENDY E TRUSTEES	7100 W DEVONWOOD DR	BOISE	ID	837145132	4520 2nd North Avenue	JOSEPH CITY
R000020786	107-08-005A	FLANE KAMSTEN & KELLIE (CPRS)	PO BOX 459	JOSEPH CITY	AZ	860320459	4570 3rd North Avenue	JOSEPH CITY

C/O KEITH GROSS

R000020618	107-02-006	SANCHEZ MARIO E	1450 ALVARADO DR	CO	COLORADO SPRINGS	809101602	3488 Jackrabbit Road	JOSEPH CITY	JOSEPH CITY
R000020797	107-08-014A	HARRISON ANABELLE	PO BOX 244	AZ	JOSEPH CITY	860320244	8183 Tanner Avenue	JOSEPH CITY	JOSEPH CITY
R000020908	107-10-007	KUHSE DEV	PO BOX 2	AZ	JOSEPH CITY	860320002	4504 Main Street	JOSEPH CITY	JOSEPH CITY
R000020920	107-10-019A	PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 496	AZ	JOSEPH CITY	860320496	8146 Bushman Avenue	JOSEPH CITY	JOSEPH CITY
R000020985	107-09-012C	SHAW SUSAN K	PO BOX 329	AZ	JOSEPH CITY	86032-0329	8178 Edwards Avenue	JOSEPH CITY	JOSEPH CITY
R000020984	107-06-009D	PEN-ROB INC	PO BOX 1450	IL	CHICAGO	60690-1450			
R000021420	107-27-010A	FLAKE KARSTEN & KELLIE (CPRS)	PO BOX 459	AZ	JOSEPH CITY	860320459	4634 Fish Lane	JOSEPH CITY	JOSEPH CITY
R000020792	107-08-010	HULSEY RW & LINDA J (CPRS)	PO BOX 126	AZ	JOSEPH CITY	860320126	4546 3rd North Avenue	JOSEPH CITY	JOSEPH CITY
R000020976	107-12-022A	WILBANKS WILLIAM A & DOMINIQUE JT	PO BOX 307	AZ	JOSEPH CITY	86032	4494 Nielson Avenue	JOSEPH CITY	JOSEPH CITY
R000021063	107-14-039E	BUSHMAN ANDREW K & REBECCA A (CPRS)	PO BOX 96	AZ	JOSEPH CITY	860320096	4585 2nd North Avenue	JOSEPH CITY	JOSEPH CITY
R000021004	107-13-013	RAYLINE INSTALLATIONS INC	PO BOX 219	AZ	JOSEPH CITY	860320219	4509 Main Street	JOSEPH CITY	JOSEPH CITY
R000020974	107-12-020	RIDGWAY ADAM	PO BOX 773	AZ	JOSEPH CITY	860320773	4489 Nielson Avenue	JOSEPH CITY	JOSEPH CITY
R000021338	107-24-001B	GALLUCCI PAUL	8195 WESTOVER ST	AZ	JOSEPH CITY	86032	8195 Westover Street	JOSEPH CITY	JOSEPH CITY
R000021179	107-18-005	LEE VINN C & LAPRILL TEE BO DREE ALL JT	PO BOX 173	AZ	JOSEPH CITY	86032-0173	8180 Porter Avenue	JOSEPH CITY	JOSEPH CITY
R0010020528	107-18-011A	ZABADAL JOSEPH M & MARCI A (CPRS)	PO BOX 656	AZ	JOSEPH CITY	860320656	4332 Old U.S. 66	JOSEPH CITY	JOSEPH CITY
R000021373	107-25-017A	WILLIAMS W FLOYD & CHRISTINE E CPRS	PO BOX 470	AZ	JOSEPH CITY	86032	8144 Allen Drive	JOSEPH CITY	JOSEPH CITY
R000021265	107-19-007	GC RICE A.L.C.	PO BOX 5	AZ	JOSEPH CITY	860320005	4285 Old U.S. 66	JOSEPH CITY	JOSEPH CITY
R000020781	107-08-002B	RANDELS DEREK & AMBER C (CPRS)	PO BOX 360	AZ	JOSEPH CITY	860320360	4590 ROBERSON AVE	JOSEPH CITY	JOSEPH CITY
R000021288	107-20-019	AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	AZ	PHOENIX	850183347			
R000021081	107-15-012	ROGERS DON K & EILEEN D CPRS	PO BOX 519	AZ	JOSEPH CITY	86032-0519	4545 1st North Avenue	JOSEPH CITY	JOSEPH CITY
R000020715	107-07-017	MCTRIE PROPERTIES LLC	PO BOX 349	AZ	JOSEPH CITY	860320349	8159 Randall Avenue	JOSEPH CITY	JOSEPH CITY
R000020942	107-08-036B	AVON IRREVOCABLE TRUST	PO BOX 132	AZ	JOSEPH CITY	860320132	8178 Ladd Avenue	JOSEPH CITY	JOSEPH CITY
R000020989	107-13-002	S & F INVESTMENTS LLC	PO BOX A	AZ	JOSEPH CITY	86032-0240	8114 S Hansen Avenue	JOSEPH CITY	JOSEPH CITY
R000021368	107-25-012B	BIELEFLOTT GERRIANNE (BO)	PO BOX 755	AZ	JOSEPH CITY	860320755	4630 1ST NORTH	JOSEPH CITY	JOSEPH CITY
R000021234	107-18-030B	PALMER ALAN & VICKY (CPRS)	PO BOX 357	AZ	JOSEPH CITY	860320357			
R000021101	107-15-028C	ORTEGA ISMAEL F & ESTHER D (CPRS)	PO BOX 98	AZ	JOSEPH CITY	860320098	8158 Westover Street	JOSEPH CITY	JOSEPH CITY
R000020910	107-10-010	ROGERS ARLIN T & BONNIE	1041 LOLLY RD	AZ	WINSLOW	860478715	4508 Main Street	JOSEPH CITY	JOSEPH CITY
R000021097	107-15-025	DORSEY EDWARD G	PO BOX 126	AZ	JOSEPH CITY	860320126	8163 Westover Street	JOSEPH CITY	JOSEPH CITY
R000020807	107-08-020B	FISH KEVIN V & BRENDA LEE M (CPRS)	PO BOX 505	AZ	JOSEPH CITY	86032	8182 Roberson Avenue	JOSEPH CITY	JOSEPH CITY
R000021084	107-08-047	BUSHMAN ANDREW & REBECCA JT	PO BOX 96	AZ	JOSEPH CITY	86032-0096	4514 4th North Avenue	JOSEPH CITY	JOSEPH CITY
R000021100	107-15-027C	MARTINEZ JOHN D & RENNIE (JT)	PO BOX 683	AZ	JOSEPH CITY	860320683	4542 1st North Avenue	JOSEPH CITY	JOSEPH CITY
R000020788	107-08-006	SEDILLO RITA A	PO BOX 250	AZ	JOSEPH CITY	860320250	4566 3rd North Avenue	JOSEPH CITY	JOSEPH CITY
R000020737	107-07-034	LOVE'S TRAVEL STOPS & COUNTRY STORES INC	15 W 6TH ST STE 2400	OK	TULSA	741195417	4724 Main Street	JOSEPH CITY	JOSEPH CITY
R000020826	107-08-031J	BUSHMAN ANDREW & REBECCA JT	PO BOX 96	AZ	JOSEPH CITY	86032-0096	4522 4th North Avenue	JOSEPH CITY	JOSEPH CITY
R000021239	107-18-033B	BUSHMAN IVAN D & CARROLL P TRUSTEES	1405 N BEL AIR DR	AZ	MESA	852012503	8210 Porter Avenue	JOSEPH CITY	JOSEPH CITY
R000021221	107-18-022H	PALMER ALAN J & VICKY K CPRS	PO BOX 357	AZ	JOSEPH CITY	86032-0357			
R000020892	107-09-018C	DREWITT DAROLYN MARIE	PO BOX 446	AZ	JOSEPH CITY	86032-0446	8217 Porter Avenue	JOSEPH CITY	JOSEPH CITY
R000020917	107-10-017A	LARSEN ROBERT & KAREN (CPRS)	PO BOX 53	AZ	JOSEPH CITY	860320053	4512 Main Street	JOSEPH CITY	JOSEPH CITY
R000025799	110-15-008	AZTEC LAND CO LLC	4647 N 32ND ST # 240	AZ	PHOENIX	850183347			
R000213932	107-10-023A	TUBBS LYLE & TERRI D JT	PO BOX 480	AZ	JOSEPH CITY	86032-0480	4522 1st North Avenue	JOSEPH CITY	JOSEPH CITY
R000020900	107-09-024	BALDWIN LANCE & LYNETTE CPRS	PO BOX 133	AZ	JOSEPH CITY	86032-0133			
R000021116	107-15-033D	BALDA ROBERT A	PO BOX 771	AZ	JOSEPH CITY	860320771	8173 Westover Street	JOSEPH CITY	JOSEPH CITY
R000020970	107-12-014	SEMAS JO ANN & JOHN III TRUSTEES	1554 LATINA DR	CA	ALAMO	94507	8128 McLaws Avenue	JOSEPH CITY	JOSEPH CITY
R000021365	107-25-009	BLAKE TRESSA A	PO BOX 331	AZ	JOSEPH CITY	860320331	4624 1st North Avenue	JOSEPH CITY	JOSEPH CITY
R000020854	107-09-002A	CHAPMAN WINSTON L & SONYA M (CPRS)	PO BOX 82	AZ	JOSEPH CITY	860320082	8177 Porter Avenue	JOSEPH CITY	JOSEPH CITY
R000020944	107-11-012	HANSEN EUGENE C & ELEANOR F	PO BOX 111	AZ	JOSEPH CITY	86032-0111	8159 Porter Avenue	JOSEPH CITY	JOSEPH CITY
R000021278	107-20-008C	NESLEN BYRON	3025 W SOLANO DR S	AZ	PHOENIX	850172546			
R000021679	107-18-022K	STANDIFORD ROBERT C & JUDITH A (JT)	PO BOX 71	AZ	JOSEPH CITY	86032	4443 3rd North Avenue	JOSEPH CITY	JOSEPH CITY
R000020962	107-12-007A	SOLOMON FAMILY TRUSTS SOLOMON DELWIN H & EVELYN R TRUSTEES	PO BOX 314	AZ	JOSEPH CITY	86032-0314			
R000021275	107-20-006	FREDERICK GARY AFREDERICK MARIETTA	7135 N 23RD LN	AZ	PHOENIX	85021-7607			
R000020787	107-08-005B	FLAKE KARSTEN	PO BOX 459	AZ	JOSEPH CITY	860320459	8179 Shelley Avenue	JOSEPH CITY	JOSEPH CITY
R000021340	107-24-001D	BALDWIN KENT L & JULIE A (JT)	490 N 1ST AVE	AZ	THATCHER	855255429			
R000020967	107-12-011A	HAYDOUKOVICH REVA	PO BOX 261	AZ	JOSEPH CITY	860320261	8134 McLaws Avenue	JOSEPH CITY	JOSEPH CITY
R0010021760	107-09-016F	HANSEN MICHAELS & BRITTANY E	PO BOX 491	AZ	JOSEPH CITY	860320491	4465 4th North Avenue	JOSEPH CITY	JOSEPH CITY
R000021190	107-18-013A	CHRISTENSEN WAYNE A & JANET L (JT)	15200 59 1/2 RD	CO	COLLBRAN	816249701	4302 Old U.S. 66	JOSEPH CITY	JOSEPH CITY
R000020839	107-08-034C	MORRIS FREDERICK & BEVERLY J	PO BOX 236	AZ	JOSEPH CITY	86032-0236	4524 4th North Avenue	JOSEPH CITY	JOSEPH CITY
R000021002	107-13-011D	HANSENS AUTO LLC	PO BOX 206	AZ	JOSEPH CITY	860320206	4521 Main Street	JOSEPH CITY	JOSEPH CITY
R000020709	107-07-011	SHAW MANDIE	PO BOX 303	AZ	JOSEPH CITY	86032-0303	8163 Randall Avenue	JOSEPH CITY	JOSEPH CITY
R000021395	107-26-008	BROOKS BRIAN P & LAURA M (CPRS)	PO BOX 382	AZ	JOSEPH CITY	86032	4434 Boyce Drive	JOSEPH CITY	JOSEPH CITY
R000021093	107-15-022	POGUE PATRICIA	PO BOX 3	AZ	JOSEPH CITY	86032-0003	8162 Shelley Avenue	JOSEPH CITY	JOSEPH CITY
R000020817	107-08-027	SMITH JOSEPH & DEANNE JT	PO BOX 175	AZ	JOSEPH CITY	86032-0175	5TH NORTH AVE	JOSEPH CITY	JOSEPH CITY
R000021422	107-27-011	SUTTON ROBERT F & VICKI M JT	PO BOX 87	AZ	JOSEPH CITY	86032-0087	8250 Porter Avenue	JOSEPH CITY	JOSEPH CITY
R000020732	107-07-030A	SCOTT CASEY L & AMANDA D (CPRS)	PO BOX 423	AZ	JOSEPH CITY	860320423	8205 Randall Avenue	JOSEPH CITY	JOSEPH CITY
R000025800	110-15-011	ARIZONA PUBLIC SERVICE CO 62.77PACIFICORP 37.23	PO BOX 53999 MS 9565	AZ	PHOENIX	850723940			
R000212177	107-10-020B	TUBBS DONOVAN BEAU & JESSICA ERIN JT	PO BOX 480	AZ	JOSEPH CITY	860320480	8156 Bushman Avenue	JOSEPH CITY	JOSEPH CITY
R000210119	107-15-002C	ROGERS AARON M	PO BOX 185	AZ	JOSEPH CITY	860320185	8147 Bushman Avenue	JOSEPH CITY	JOSEPH CITY

ATTN: CRE-3544

C/O JONNY D ANGEL

ATTENTION: BRANDON KEYS NUINES
C/O TERRI TUBBS
C/O MYRA A ROGERS

R000021122	107-15-039	QUELLET AUDREY LYNETTE (PERKINS)	PO BOX 237	JOSEPH CITY	AZ	860320237	8174 Shelley Avenue	JOSEPH CITY
R000020844	107-08-037A	DAVIS RUSSELLCRIBBS-DAVIS AMANDA (CPRS)	PO BOX 351	JOSEPH CITY	AZ	860320351	8179 Roberson Avenue	JOSEPH CITY
R000021181	107-18-007B	DEETS DANIEL & ALICIA G (CPRS)	PO BOX 480	JOSEPH CITY	AZ	860320480	4396 3rd North Avenue	JOSEPH CITY
R000020614	107-02-002	SHAFF CAROL A TRUSTEE	PO BOX 309	JOSEPH CITY	AZ	860320309	3600 Jackrabbit Road	JOSEPH CITY
R000020657	107-05-016	SANTA FE PACIFIC RAILROAD NEWMONT MINING CORP	6363 S FIDDLERS GREEN CIR STE 800	GREENWOOD VILLAGE	CO	80111-5011		JOSEPH CITY
R000020819	107-08-029A	ROGERS DALE & DOROTHY (CPRS)	PO BOX 194	JOSEPH CITY	AZ	860320194	4574 4th North Avenue	JOSEPH CITY
R0010020719	107-18-003G	BUSHMAN ANDREW & REBECCA JT	PO BOX 96	JOSEPH CITY	AZ	860320096		JOSEPH CITY
R000021058	107-14-035	BAIRD BRANTLEY TRUSTEE	PO BOX 224	JOSEPH CITY	AZ	860320224	8144 Randall Avenue	JOSEPH CITY
R000020984	107-12-029	TURLEY RICHARD J & SUSAN JT	PO BOX 549	JOSEPH CITY	AZ	860320549		JOSEPH CITY
R000021268	107-14-020C	MCLAUGHLIN KELLY D & JILL L (CPRS)	PO BOX 349	JOSEPH CITY	AZ	860320349	8165 Shelley Avenue	JOSEPH CITY
R000020719	107-07-020C	FISH RUSSELL B & AMBER S TRUSTEES	PO BOX 482	JOSEPH CITY	AZ	860320482	4636 3rd North Avenue	JOSEPH CITY
R000020608	107-01-010	GILBERT MARTIN O & GWEN M TRUSTEES	17200 W BELL RD LOT 2106	SURPRISE	AZ	85374-9873	3610 Territorial Road	JOSEPH CITY
R000020723	107-07-024A	OCONNELL SAM	17501 BROOKLYN RD	BROOKLYN	MI	492308304	8182 TROTTER AVE	JOSEPH CITY
R000020682	107-06-009B	HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R0000213743	107-18-015G	PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 496	JOSEPH CITY	AZ	860320496	4331 Old U.S. 66	JOSEPH CITY
R000020848	107-08-040	HANCOCK STEPHEN & LUANNE (CPRS)	PO BOX 458	JOSEPH CITY	AZ	860320458		JOSEPH CITY
R0000207070	107-07-056	FULLER JAYNE 25% WATKINS LEE ANN 25% RANDALL ROGER 25% RANDALL LYNN 25%	937 E LINDA LN	GILBERT	AZ	852345904	4664 1st North Avenue	JOSEPH CITY
R000214027	107-07-067	PAULSELL JOHN CESTUOILLO DANIELLE R (JT)	PO BOX 418	JOSEPH CITY	AZ	860320418	4615 6th North Avenue	JOSEPH CITY
R000021028	107-14-006	NARANJO ROBERT B	612 N 2ND ST	HOLBROOK	AZ	860253041	8149 Roberson Avenue	JOSEPH CITY
R000020972	107-12-018A	HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	AZ	860320220	4451 Main Street	JOSEPH CITY
R000021148	107-17-002	S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	860320240	4593 Main Street	JOSEPH CITY
R000021271	107-20-001	RANDALL DOYLE S & JACQUELINE	PO BOX 1458	SAINT JOHNS	AZ	85936-1458		JOSEPH CITY
R000021118	107-15-035	CHASE ALBERT B	PO BOX 452	JOSEPH CITY	AZ	860320452	8166 Tanner Avenue	JOSEPH CITY
R000020804	107-08-018D	SCHNITZLER NATHAN E	PO BOX 368	JOSEPH CITY	AZ	860320368	8182 Ladd Avenue	JOSEPH CITY
R000020935	107-10-033	ROBERSON W CRAWFORD & PATRICIA TRUSTEES	PO BOX 1016	TONTO BASIN	AZ	85553	8146 Richards Avenue	JOSEPH CITY
R000021168	107-18-001D	BROOKS BRIAN H	PO BOX 805	JOSEPH CITY	AZ	860320805	4433 Fish Lane	JOSEPH CITY
R000020938	107-11-005	GC RICE P LLC	PO BOX 5	JOSEPH CITY	AZ	860320005	8171 Porter Avenue	JOSEPH CITY
R000020922	107-10-019C	SMITH LUCY D	PO BOX 94	JOSEPH CITY	AZ	860320094	4519 1st North Avenue	JOSEPH CITY
R000021128	107-16-001A	CLINE COUGAR & ANDRIA (JT)	PO BOX 463	JOSEPH CITY	AZ	860320463	4563 Main Street	JOSEPH CITY
R000021182	107-18-008D	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613	4362 A B Ranch Road	JOSEPH CITY
R000020869	107-09-008B	ROGERS MILFORD & JENNIFER	PO BOX 479	JOSEPH CITY	AZ	860320479	4459 Windy Road	JOSEPH CITY
R000020904	107-10-003	BUCHANAN JIMMY (BUCHANAN MARTHA A JT)	PO BOX 249	JOSEPH CITY	AZ	860320249	4501 1st North Avenue	JOSEPH CITY
R000020813	107-08-023	HANSEN CLINT L & MACHELLE L (CPRS)	PO BOX 566	JOSEPH CITY	AZ	860320566	8206 Randall Avenue	JOSEPH CITY
R000021094	107-15-023	ROGERS TERRIL DANE	PO BOX 243	JOSEPH CITY	AZ	860320243	8157 Tanner Avenue	JOSEPH CITY
R000021383	107-25-029	HANCOCK GENE & DIANE (CPRS)	1433 FRENCH RD	WINSLOW	AZ	86047-2879	4646 1st North Avenue	JOSEPH CITY
R000021287	107-20-018	BALDWIN LARRY E & AVA R (CPRS)	PO BOX 774	JOSEPH CITY	AZ	860320774	7498 Obed Road	JOSEPH CITY
R000212408	107-05-035E	DESPAINS LX RANCH LLC/O JR DESPAIN	PO BOX 104	JOSEPH CITY	AZ	860320104	7504 Obed Ranch Road	JOSEPH CITY
R000021369	107-25-013A	BLOOMER JANICE	PO BOX 412	JOSEPH CITY	AZ	860320412	4632 1ST NORTH	JOSEPH CITY
R000020982	107-12-027	MARTINEAU ROBERT & KAREN JT	PO BOX 213	JOSEPH CITY	AZ	860320213	4490 Nielson Avenue	JOSEPH CITY
R000021051	107-14-027	BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096	4595 1st North Avenue	JOSEPH CITY
R000201962	107-18-020R	SOLOMON DELWIN B & JOAN TRUSTEE	PO BOX 540	JOSEPH CITY	AZ	860320540	4421 3rd North Avenue	JOSEPH CITY
R000021294	107-20-025D	WOUTERS MITCHEL F & EMMA L (CPRS)	PO BOX 662	JOSEPH CITY	AZ	860320662	4533 3rd South Avenue	JOSEPH CITY
R000020702	107-07-005	CHURCH OF JESUS CHRIST OF LDS.	50 EAST NORTH TEMPLE RM 2225	SALT LAKE CITY	UT	84150-0022	4626 1st North Avenue	JOSEPH CITY
R000021053	107-14-029B	PADDOCK SISTA	PO BOX 3598	INDIAN WELLS	AZ	860313598	8169 Roberson Avenue	JOSEPH CITY
R000021223	107-18-024C	HANSEN DERRON C & CATHARINA J (JT)	PO BOX 534	JOSEPH CITY	AZ	860320534		JOSEPH CITY
R000020988	107-13-001A	WILBANKS BILL W & MARY L (JT)	133 W MAHONEY ST	WINSLOW	AZ	86047-2629	8110 S Hansen Avenue	JOSEPH CITY
R000020946	107-11-014A	HANSEN DERRON C & CATHARINA J	PO BOX 534	JOSEPH CITY	AZ	860320534	8145 Porter Avenue	JOSEPH CITY
R000021065	107-14-039G	MCLAUGHLIN KELLY D & JILL L (JT)	PO BOX 349	JOSEPH CITY	AZ	860320349	4593 2nd North Avenue	JOSEPH CITY
R000021417	107-27-007	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613		JOSEPH CITY
R000021041	107-14-020B	HANSEN DERRON CHANSEN CATHARINA J-CPRS	PO BOX 534	JOSEPH CITY	AZ	860320534	8169 Shelley Avenue	JOSEPH CITY
R000020901	107-10-001	ROBERSON WILLIAM R & RHONDA JT	PO BOX 467	JOSEPH CITY	AZ	860320467	8148 Hansen Avenue	JOSEPH CITY
R000021008	107-13-017A	CARLISLE MARTHA	PO BOX 247	JOSEPH CITY	AZ	860320247		JOSEPH CITY
R000020901	107-08-017	MCLAUGHLIN MORGAN L	PO BOX 349	JOSEPH CITY	AZ	860320349	8187 Shelley Avenue	JOSEPH CITY
R000021251	107-18-044B	BUSHMAN ANDREW & REBECCA (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096		JOSEPH CITY
R000020714	107-07-015	JAMES ROSITA	PO BOX 421	JOSEPH CITY	AZ	860320421	8177 Randall Avenue	JOSEPH CITY
R0010018791	107-18-040F	FULLMER JAMES S & ASHLEY N (JT)	PO BOX 13	JOSEPH CITY	AZ	860320013	4414 A B Ranch Road	JOSEPH CITY
R000211670	107-14-009C	FLANE DAYTON & SARAH EUFAUN (CPRS)	PO BOX 511	JOSEPH CITY	AZ	860320511	4571 2nd North Avenue	JOSEPH CITY
R000020679	107-06-003	GC RICE A LLC	PO BOX 5	JOSEPH CITY	AZ	860320005		JOSEPH CITY
R000020903	107-10-002B	MILLER STEVEN KENT & ELIZABETH (JT)	1308 WESTOVER	HOLBROOK	AZ	86025	4492 Main Street	JOSEPH CITY
R000020983	107-12-028	SEMAS JO ANN & JOHN III TRUSTEES	1554 ULTIMA DR	ALAMO	CA	945071013	8130 McInaws Avenue	JOSEPH CITY
R000021088	107-15-018A	TUCKFIELD CHRISTINE	PO BOX 7	JOSEPH CITY	AZ	860320007	4558 Main Street	JOSEPH CITY
R000021319	107-21-018	RZCZS LLC	3310 E EVA ST	PHOENIX	AZ	850284912	8024 Rogers Avenue	JOSEPH CITY
R000020717	107-07-020A	FISH RUSSELL B & AMBER S (JT)	PO BOX 482	JOSEPH CITY	AZ	860320482	4632 3rd North Avenue	JOSEPH CITY
R000020878	107-09-008X	BALDWIN LANCE S & LYNETTE (CPRS)	PO BOX 133	JOSEPH CITY	AZ	860320133		JOSEPH CITY
R000020609	107-01-012	HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R000021170	107-18-001F	STRAW LUCAS P	PO BOX 431	JOSEPH CITY	AZ	860320431	4423 Fish Lane	JOSEPH CITY

C/O STEVEN SPURGEON

TAX ADM DIV 512-0322

R0000212220	107-09-004N	HARDY RAFIELD	PO BOX 591	JOSEPH CITY	AZ	860320691	4476 4th North Avenue	JOSEPH CITY
R0000206664	107-05-031C	AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021258	107-19-003F	KING DONALD R	5 DODRA AVE	VALLEJO	CA	945907328	8245 O'CONNELL LANE J C	JOSEPH CITY
R000021402	107-26-015	PERKINS AUDREY	9130 S 258TH LN	BUCKEYE	AZ	853265346	4447 Boyce Drive	JOSEPH CITY
R000020947	107-11-015	DREAMCATCHER LLC	PO BOX 692	JOSEPH CITY	AZ	860320692	4462 Main Street	JOSEPH CITY
R000020799	107-08-015	LEE BO & KAY (JT)	704 E FLORIDA ST	HOLBROOK	AZ	860252726	8184 Shelley Avenue	JOSEPH CITY
R000021047	107-14-023B	RUSHMAN LARRY D & JESSI C (CPRS)	PO BOX 608	JOSEPH CITY	AZ	860320608	8171 Ladd Avenue	JOSEPH CITY
R000020998	107-13-007	MCCAMAHAN JON & ASHLEY	20780 E DARTMOUTH DR	AURORA	CO	800138445	8115 South Richards Avenue	JOSEPH CITY
R000020783	107-08-003C	GRANT BENJAMIN & ASHLEY (CPRS)	PO BOX 833	JOSEPH CITY	AZ	860320833	4584 3rd North Avenue	JOSEPH CITY
R000021120	107-11-011A	ASHENFELDER MICHAEL W & SHEILA P JT	PO BOX 584	JOSEPH CITY	AZ	86032	8173 Tanner Avenue	JOSEPH CITY
R000021361	107-15-037	JORDAN FERREMASIAE	1025 W BUFFALO ST	HOLBROOK	AZ	860252327	4616 1st North Avenue	JOSEPH CITY
R000021213	107-18-020N	LAMPASA JARROD D & LISA (CPRS)	PO BOX 52	JOSEPH CITY	AZ	860320052	4425 3rd North Avenue	JOSEPH CITY
R000021358	107-25-002	BRIMHALL LARRY N	PO BOX 794	SNOWFLAKE	AZ	859370794	4605 1st North Avenue	SNOWFLAKE
R000020943	107-11-011A	HANSEN DERRON CHANSEN CATHARINA J-CPRS	PO BOX 534	JOSEPH CITY	AZ	860320534	8161 Porter Avenue	JOSEPH CITY
R000020929	107-10-026	ROBERSON WILLIAM R & RHONDA L (JT)	PO BOX 467	JOSEPH CITY	AZ	86032	8164 Richards Avenue	JOSEPH CITY
R000020985	107-12-030	MCLAWS DELROY W & PAMELA JT	PO BOX 551	JOSEPH CITY	AZ	860320551		JOSEPH CITY
R0010018745	107-11-017D	SOSEMAN DONNA M	PO BOX 306	JOSEPH CITY	AZ	860320306	8150 Midlows Avenue	JOSEPH CITY
R000020740	107-07-035D	PARKER GUY D	PO BOX 460	JOSEPH CITY	AZ	860332-0460	4624 3rd North Avenue	JOSEPH CITY
R000021092	107-15-021	ROGERS AARON M	PO BOX 185	JOSEPH CITY	AZ	860320185	4562 1st North Avenue	JOSEPH CITY
R000020748	107-07-044	SAGAN LOUIS	8919 E ALBANY ST	MESA	AZ	852078727	4700 Main Street	JOSEPH CITY
R000020805	107-08-019	TUCKFIELD ROBERT W SR TRUSTEE	PO BOX 67	JOSEPH CITY	AZ	860320067	8185 Ladd Avenue	JOSEPH CITY
R000029862	107-20-024B	DESPAIN SANDRA K & RUSSELL J	PO BOX 520	JOSEPH CITY	AZ	86032-0520	8080 South Ladd	JOSEPH CITY
R000021105	107-15-029B	DECROSS KIMBERLY D	PO BOX 35	JOSEPH CITY	AZ	860332-0035	4530 1st North Avenue	JOSEPH CITY
R000027502	107-18-004A	HANSEN SAMUEL T & KELSEE (JT)	PO BOX 502	JOSEPH CITY	AZ	860320502	8186 Porter Avenue	JOSEPH CITY
R000020845	107-08-037B	DAVIS RUSSELL G & CRIBBS AMANDA M JT	PO BOX 351	JOSEPH CITY	AZ	86032	4594 3rd North Avenue	JOSEPH CITY
R000021292	107-20-004B	MCLAWS ALONZO N & SHARI JT	PO BOX 394	JOSEPH CITY	AZ	86032-0394	4533 3rd South Avenue	JOSEPH CITY
R000020747	107-07-043	LOVES TRAVEL STOPS & COUNTRY STORES INC	15 W 6TH ST STE 2400	TULSA	OK	741195417	4703 Main Street	JOSEPH CITY
R000020978	107-12-023	MARTINEAU ROBERTMARTINEAU JASON D	PO BOX 213	JOSEPH CITY	AZ	86032-0213	4484 Nielson Avenue	JOSEPH CITY
R000020930	107-10-027	ROBERSON WILLIAM R & RHONDA L	PO BOX 467	JOSEPH CITY	AZ	86032-0467	8156 Richards Avenue	JOSEPH CITY
R000021307	107-21-008A	FIELDS BRYAN JACOB & JULIE ANN CPRS	PO BOX 416	JOSEPH CITY	AZ	86032	4597 FRONTAGE RD	JOSEPH CITY
R000020768	107-07-054	FULLER JAYNE 25% WATKINS LEE ANN 25% RANDALL ROGER 25% RANDALL LYNN 25%	937 E LINDA LN	GILBERT	AZ	852345904		JOSEPH CITY
R000020681	107-06-004D	PEN-ROB INC	PO BOX 1450	CHICAGO	IL	60690-1450		JOSEPH CITY
R000021130	107-16-003	BERGE RACHELTALLON VICKI (JT)	PO BOX 279	JOSEPH CITY	AZ	860320279	4555 Main Street	JOSEPH CITY
R000021061	107-14-038	MCTRIBE PROPERTIES LLC	PO BOX 349	JOSEPH CITY	AZ	860320349	4574 1st North Avenue	JOSEPH CITY
R0010021781	107-09-005A	WILKINSON RICHARD C	PO BOX 259	JOSEPH CITY	AZ	860320259	8165 Despain Avenue	JOSEPH CITY
R000021248	107-18-043A	NOCKIDENEH BRUCE	PO BOX 651	JOSEPH CITY	AZ	86032-0651	4430 Boyce Drive	JOSEPH CITY
R000021055	107-14-031	BROOKS BRIANTRASK MARSHA JT	PO BOX 382	JOSEPH CITY	AZ	860320382	4584 Main Street	JOSEPH CITY
R0010020718	107-18-003F	LIV HERITAGE LLC	PO BOX 28	JOSEPH CITY	AZ	860320028	8192 Porter Avenue	JOSEPH CITY
R000021075	107-15-006F	NORRIS WAYNEORRIS (LITTELL) SHIRLEY JT	PO BOX 281	JOSEPH CITY	AZ	86032-0281	8148 Westover Street	JOSEPH CITY
R000021326	107-21-025	RANDALL DOYLE S & JACQUELINE A 1/2 INTITLEY THOMAS N & SANDRA 1/2 INT	PO BOX 1458	SANIT JOHNS	AZ	85936		JOSEPH CITY
R000021017	107-13-026	NESLEN MICHAEL	26514 N 51ST DR	PHOENIX	AZ	850831274	8131 Hansen Avenue	JOSEPH CITY
R000020600	107-01-004	HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R000020815	107-08-025	HANSEN CLINT & RACHELLE CPRS	PO BOX 566	JOSEPH CITY	AZ	86032-0566	4588 5th North Avenue	JOSEPH CITY
R000020881	107-09-009	FROST DORAFROST CLIFFORD H ESTATE	PO BOX 26	JOSEPH CITY	AZ	86032-0026	8191 Porter Avenue	JOSEPH CITY
R000020887	107-09-014	HANSEN DAVID R & JANEEN A (JT)	1160 E 7TH PL	MESA	AZ	85203-6410	4467 4th North Avenue	JOSEPH CITY
R000021320	107-21-019	CLUCK MATTHEW R & MITZI N (JT)	PO BOX 483	JOSEPH CITY	AZ	860320483	8043 Rogers Avenue	JOSEPH CITY
R000021225	107-18-025A	RUSH DAVID W & KAY JT	PO BOX 532	JOSEPH CITY	AZ	86032-0532	8156 PORTER RD JOSEPH CITY	JOSEPH CITY
R000020671	107-05-040	WESTOVER KURT L & WESTOVER KENNETH L & WESTOVER RUSTY L TRUSTEES	PO BOX 682	JOSEPH CITY	AZ	860320682		JOSEPH CITY
R000021099	107-15-027A	FARR NEAL C & STEPHANIE JT	PO BOX C	JOSEPH CITY	AZ	86032-0546	8153 Westover Street	JOSEPH CITY
R000021131	107-16-004	ROBERSON WALLACE JR & LUCY TRUST	1320 W BUFFALO	HOLBROOK	AZ	86025	4551 Main Street	JOSEPH CITY
R000020800	107-08-016	HUTTON KIRK D & CYNTHIA J (CPRS)	PO BOX 765	JOSEPH CITY	AZ	860320765	8183 Shelley Avenue	JOSEPH CITY
R000021106	107-15-029C	PARISOT KIMBERLY D (DECROSS)	PO BOX 35	JOSEPH CITY	AZ	86032-0035	4526 1st North Avenue	JOSEPH CITY
R000020905	107-10-004	BUCHANAN JIMMY JBUCHANAN MARTHA A JT	PO BOX 249	JOSEPH CITY	AZ	86032-0249	8147 Hansen Avenue	JOSEPH CITY
R000021269	107-14-020D	FORD STEVEN L	405 NAVAJO BLVD	HOLBROOK	AZ	860252638	4570 2nd North Avenue	JOSEPH CITY
R000021222	107-18-024B	HANSEN FLOYD B TRUSTEE	980 W 2520 S	PENNY	UT	843024144	4447 3rd North Avenue	JOSEPH CITY
R000021014	107-13-023	INUJOKU ANDREW	PO BOX 66922	PHOENIX	AZ	85082-6922		JOSEPH CITY
R000020906	107-10-005G	4500 MAIN STREET LLC	PO BOX 129	JOSEPH CITY	AZ	86032-0129	4500 Main Street	JOSEPH CITY
R000021296	107-20-027	JAMES BYRNES A & CHLOA L JT	PO BOX 468	JOSEPH CITY	AZ	86032-0468	4493 3rd South Avenue	JOSEPH CITY
R000020939	107-11-006E	HUMPHREY DAVID G JR & MAUREEN B (CPRS)	PO BOX 130	JOSEPH CITY	AZ	860320130	8169 Porter Avenue	JOSEPH CITY
R000021027	107-14-005A	MCLAUGHLIN KELLY D	PO BOX 349	JOSEPH CITY	AZ	86032-0349	4585 1st North Avenue	JOSEPH CITY
R000021267	107-19-008B	QUALITY READY MIX INC RINKER MATERIALS CORP	1501 BELVEDERE RD	WEST PALM BEACH	FL	33406-1501		JOSEPH CITY
R000020812	107-08-022B	SMITH JOSEPH & DEANNE (CPRS)	PO BOX 175	JOSEPH CITY	AZ	86032-0175	4590 4th North Avenue	JOSEPH CITY
R000021119	107-15-036	EISEN JULIA (FAIRBANKS)	PO BOX 494	JOSEPH CITY	AZ	86032-0494	8165 Tanner Avenue	JOSEPH CITY
R000021214	107-18-021D	HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	860320220	4436 Main Street	JOSEPH CITY
R000021034	107-14-014A	GOHL LOUISE A TRUSTEE	PO BOX 248	JOSEPH CITY	AZ	860320248	4598 2nd North Avenue	JOSEPH CITY
R000021276	107-20-007	NIELS ROBERT LARSEN KAREN K	PO BOX 528	JOSEPH CITY	AZ	860320528	4509 3rd South Avenue	JOSEPH CITY

C/O MYRA A ROGERS

ATTN: CRE-3544

C/O STACY THOMPSON

MOBILE HOME PARK: SMITH JD

R000020742	107-07-037	RICHARDS ABE L & DIANA H S (JT)	PO BOX 409	JOSEPH CITY	AZ	86032-0409	8185 Trotter Avenue	JOSEPH CITY
R000020841	107-08-036A	AVON IRREVOCABLE TRUST	PO BOX 132	JOSEPH CITY	AZ	860320132	4578 3rd North Avenue	JOSEPH CITY
R000020883	107-09-011	FROST DORA (EDWARDS)	PO BOX 26	JOSEPH CITY	AZ	86032-0026	8185 Porter Avenue	JOSEPH CITY
R000021102	107-15-028E	LEWIS WANDA L	2290 MIRA MAR AVE	LONG BEACH	CA	90815-2509	8156 Westover Street	JOSEPH CITY
R000020745	107-07-040	INGUZ CORPORATION JAMES JACKSON	809 W RIORDAN RD STE100 # 168	FLAGSTAFF	AZ	86001-0801	8173 Trotter Avenue	JOSEPH CITY
R000021044	107-18-037C	BUTLER ZACHARY R & KOURTNEY D	PO BOX 952	PINEDALE	AZ	859340952	8218 Porter Avenue	JOSEPH CITY
R000020743	107-07-038	RICHARDS ABE L & DIANA H S (JT)	PO BOX 409	JOSEPH CITY	AZ	86032-0409	8181 Trotter Avenue	JOSEPH CITY
R000021254	107-19-002A	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325	4294 Old U.S. 66	JOSEPH CITY
R000021253	107-19-001	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613		JOSEPH CITY
R000021269	107-19-010	MANISCALCO MARIO & BETH	6819 YELLOWWOOD LN	DEFORREST	WI	535322465		JOSEPH CITY
R000020977	107-12-022B	MARQUEZ DAVID A	PO BOX 791	JOSEPH CITY	AZ	860320791	8106 S Hansen Avenue	JOSEPH CITY
R000021090	107-15-019	HANCOCK SHAWN & LINDSAY (CPRS)	PO BOX 1656	TAYLOR	AZ	859391656	8154 Shelley Avenue	JOSEPH CITY
R000021083	107-08-046	BUSHMAN ANDREW & REBECCA JT	PO BOX 96	JOSEPH CITY	AZ	86032-0096	4516 4th North Avenue	JOSEPH CITY
R000021280	107-20-008E	HANSEN CLARENCE & TRINA (CPRS)	PO BOX 343	JOSEPH CITY	AZ	86032-0343	4501 3rd South Avenue	JOSEPH CITY
R000021273	107-20-003A	DESPLAIN RUSSELL J & SANDRA K (CPRS)	PO BOX 520	JOSEPH CITY	AZ	860320520		JOSEPH CITY
R000021243	107-18-039A	POGUE SAMUEL & JULIA (CPRS)	PO BOX 162	JOSEPH CITY	AZ	86032-0162	4397 3rd North Avenue	JOSEPH CITY
R000021262	107-19-003L	THELMANN ROY A	PO BOX 65	JOSEPH CITY	AZ	86032-0065	8245 Lacy Lane	JOSEPH CITY
R000021062	107-14-039D	RICE FAMILY TRUSTICE GARY FRANK & CAROLYN P TRUSTEES	PO BOX 5	JOSEPH CITY	AZ	86032-0005	4583 2nd North Avenue	JOSEPH CITY
R000020949	107-11-017B	PERKINS CHARLIE A	PO BOX 450	JOSEPH CITY	AZ	860320450	4473 1st North Avenue	JOSEPH CITY
R000021289	107-20-022	JOE DAVID L & SUSIE B	PO BOX 408	JOSEPH CITY	AZ	86032-0408	8075 South Richards Avenue	JOSEPH CITY
R0000210082	107-08-045	BUSHMAN ANDREW & REBECCA JT	PO BOX 96	JOSEPH CITY	AZ	86032-0096	4518 4th North Avenue	JOSEPH CITY
R000021387	107-25-033	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325	4643 1st North Avenue	JOSEPH CITY
R000021114	107-15-033B	MILLER ERIC J & AMY D (CPRS)	PO BOX 430	JOSEPH CITY	AZ	86032-0430		JOSEPH CITY
R000021194	107-18-013F	ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	950604325		JOSEPH CITY
R000021340A	107-13-014D	ROGERS DALE F & DOROTHY A DE JESUS WETTET (ALL JT)	PO BOX 194	JOSEPH CITY	AZ	86032-0194	8134 Richards Avenue	JOSEPH CITY
R000020858	107-09-004F	HENRY MARY ANN	9157 E CHIRCO PL	TUCSON	AZ	857103130	4468 4th North Avenue	JOSEPH CITY
R000021342	107-24-002	JOHNSTUN SAMUEL JAMES & DANA LYN (JT)	PO BOX 384	JOSEPH CITY	AZ	86032-0384	4552 4th North Avenue	JOSEPH CITY
R000021160	107-17-010A	RANDALL DOYLE S & JACQUELINE A JT	PO BOX 1458	SAINT JOHNS	AZ	85936-1458	4579 Frontage Road	JOSEPH CITY
R000021015	107-13-024	IWUAIJOKU ANDREW	PO BOX 71	PHOENIX	AZ	85932-6922		JOSEPH CITY
R0000211678	107-18-022J	STANDIFORD ROBERT C & JUDITH A JT	PO BOX 343	JOSEPH CITY	AZ	86032-0343		JOSEPH CITY
R000020849	107-08-041	HALL JODY	320 ANITA DR	HOLBROOK	AZ	86025-2006	4441 3rd North Avenue	JOSEPH CITY
R0000212176	107-10-020A	JANSEN CORNELIS E & KRISTI J (CPRS)	16423 E FAIRVIEW ST	GILBERT	AZ	852952014	8162 Bushman Avenue	JOSEPH CITY
R0000201943	107-18-020Q	FROST CLIFFORD B & BROOKE (CPRS)	PO BOX 26	JOSEPH CITY	AZ	860320026	4427 3rd North Avenue	JOSEPH CITY
R000021074	107-15-006A	WARNER RICHARD E	PO BOX 37	JOSEPH CITY	AZ	860320037	4532 Main Street	JOSEPH CITY
R000020990	107-13-004	FRALEY RICHARD D & CAROLYN S (CPRS)	PO BOX 299	JOSEPH CITY	AZ	86032-0299	8115 S Hansen Avenue	JOSEPH CITY
R000021279	107-20-008D	HANSEN CLARENCE & TRINA (CPRS)	PO BOX 343	JOSEPH CITY	AZ	86032-0343		JOSEPH CITY
R000020827	107-08-031N	MOSSER JOHNNY DONALD R JT	PO BOX 311	JOSEPH CITY	AZ	86032-0311		JOSEPH CITY
R0010021617	107-13-005Q	SPURLOCK MICHAEL R & SHARON M (JT)	PO BOX 315	JOSEPH CITY	AZ	860320315	8107 S Hansen Avenue	JOSEPH CITY
R000020937	107-11-002	ROBERSON WILLIAM R & RHONDA L JT	PO BOX 467	JOSEPH CITY	AZ	86032-0147	4477 1st North Avenue	JOSEPH CITY
R000020907	107-10-006	JOSEPH CITY WATER SYSTEM	PO BOX 147	JOSEPH CITY	AZ	860320147	4497 1st North Avenue	JOSEPH CITY
R000021025	107-14-003B	MCTRIE PROPERTIES LLC	PO BOX 349	JOSEPH CITY	AZ	860320349	4573 1st North Avenue	JOSEPH CITY
R000021009	107-13-017B	KOR TALAINAIGOR LINDA J (JT)	PO BOX 671	JOSEPH CITY	AZ	860320671	W MAIN ST	JOSEPH CITY
R000020829	107-08-031Q	WESTOVER RUSTY & IVETTE (CPRS)	PO BOX 449	JOSEPH CITY	AZ	860320449	4544 Rusty Avenue	JOSEPH CITY
R000021325	107-21-024	NATALIE R SHIRLEY FAMILY TRUST 1/2ROY FABER TRUST 1/2 INT	1046 LOVELL AVE	CAMPBELL	CA	95008	8055 Rogers Avenue	JOSEPH CITY
R000021398	107-26-011	MAY HOWARD & CARROL	PO BOX 103	JOSEPH CITY	AZ	86032-0103	4439 Boyce Drive	JOSEPH CITY
R000021021	107-13-029	GREENTREE INVESTORS LLC	1933 E VIEW POINT DR	SAINT GEORGE	UT	847906366		JOSEPH CITY
R0010021874	107-18-044C	GC RICE L LLC	8162 N DESPAIN BOX 5	JOSEPH CITY	AZ	86032-0219	4617 1st North Avenue	JOSEPH CITY
R000021378	107-25-024	HENDRICKS JASON & KOURTNEY JT	PO BOX 219	JOSEPH CITY	AZ	850183347		JOSEPH CITY
R000020662	107-05-031A	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	860320651	4459 Main Street	JOSEPH CITY
R000020971	107-12-017A	MCLAWS DELROY W & PAMELA	PO BOX 551	JOSEPH CITY	OK	741195417	4691 Main Street	JOSEPH CITY
R000020760	107-07-048	LOVES TRAVEL STOPS & COUNTRY STORES INC	15 W 6TH ST STE 2400	TULSA	OK	741195417	4691 Main Street	JOSEPH CITY
R000020803	107-08-018C	ROES R ALAN & ROXIE L JT	816 N 5TH AVE	HOLBROOK	AZ	86054-7427	8169 Ladd Avenue	JOSEPH CITY
R000021065	107-14-037	HAVILAND JAMES	PO BOX 7427	SHONTO	AZ	860320096		JOSEPH CITY
R000021175	107-18-002F	BUSHMAN ANDREW & REBECCA (CPRS)	PO BOX 96	JOSEPH CITY	AZ	86032-0096		JOSEPH CITY
R0000213173	107-11-022A	GC RICE G LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005	8168 Despain Avenue	JOSEPH CITY
R000020915	107-10-015	BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	860320096	8151 Richards Avenue	JOSEPH CITY
R000021096	107-15-024B	KING WILLIAM E	PO BOX 56	JOSEPH CITY	AZ	86032-0056	8150 Tanner Avenue	JOSEPH CITY
R000021127	107-15-044A	WINNER ROBERT H JR & LESLEY A (JT)	BOX 41	JOSEPH CITY	AZ	86032-0041	4556 Main Street	JOSEPH CITY
R000021098	107-15-026	MILLER RICHARD Q & LINDA L JT	PO BOX 203	JOSEPH CITY	AZ	86032-0203	8155 Westover Street	JOSEPH CITY
R000021070	107-15-001	RICHARDS JOSEPH G & ELLEN T (BD)	PO BOX 14	JOSEPH CITY	AZ	86032-0014	4525 1st North Avenue	JOSEPH CITY
R000021309	107-21-008C	SMITH JOSEPH & DEANNE JT	PO BOX 175	JOSEPH CITY	AZ	86032-0175		JOSEPH CITY
R000020821	107-08-030A	RICE ROBERT M SR & REBECCA (CPRS)	PO BOX 529	JOSEPH CITY	AZ	86032-0529	4534 4th North Avenue	JOSEPH CITY
R000021184	107-18-008F	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	860320613	4363 A B Ranch Road	JOSEPH CITY
R000021313	107-21-012A	MILLET DONALD G & DONNA TRUSTEES	1824 E ELMWOOD	MTESA	AZ	85203		JOSEPH CITY
R000021252	107-18-045	KINDIG GLORIA J	PO BOX 40	JOSEPH CITY	AZ	860320040	4403 3rd North Avenue	JOSEPH CITY
R000021298	107-20-029	LEE RONALD D & SHARON D (CPRS)	PO BOX 673	JOSEPH CITY	AZ	86032-0673	4505 3rd South Avenue	JOSEPH CITY

C/O JIM GAMBLE

R000021011	107-13-021A	OSTERTAG NATHAN L	4495 MAIN ST	AZ	JOSEPH CITY	86032	4495 MAIN ST	JOSEPH CITY
R000020659	107-05-018B	HANSEN GARY & RUTH (CPRS)	PO BOX 502	AZ	JOSEPH CITY	860320502	4490 4th North Avenue	JOSEPH CITY
R000020857	107-09-004E	HANSEN JOSEPH C & MARI JOE (JT)	PO BOX 206	AZ	JOSEPH CITY	86032	4552 Main Street	JOSEPH CITY
R000021084	107-15-015	LONG VELINITA NEWTON	PO BOX 287	AZ	JOSEPH CITY	86032-0287		WOODRUFF
R000020678	107-06-001	EVENSEN MERLENE P TRUSTEE	1236 E DARTMOUTH ST	AZ	PHOENIX	852036508		
R000025793	110-15-001A	AZTEC LAND CO LLC	4647 N 32ND ST # 240	AZ	PHOENIX	850183347	7678 MCLAWS RD	
R000021186	107-18-010	BARNER ANNA B & SMITH BESSIE B	9559 LA AMAPOLA AVE	CA	FOUNTAIN VALLEY	92708-5130		
R000204642	107-27-005D	ROGERS GEORGE C & SUE ANN JT	PO BOX 336	AZ	JOSEPH CITY	86032-0336	4378 Fish Lane	JOSEPH CITY
R000021110	107-15-031A	GARDNER BRIAN & LYDIA J CPRS	PO BOX 441	AZ	JOSEPH CITY	86032-0441	4552 2nd North Avenue	JOSEPH CITY
R000021270	107-19-012	ARIZONA STATE OF	PO BOX 668	AZ	HOLBROOK	860250668	4279 Frontage Road	JOSEPH CITY
R000020724	107-07-025	ALLEN COY L	PO BOX 97	AZ	JOSEPH CITY	860320097	8178 Trotter Avenue	JOSEPH CITY
R0010021875	107-18-044D	JOHNSON DALE MSJIFER SANDRA & YOUNG NANCY ALL JT	PO BOX 536	AZ	JOSEPH CITY	860320536		
R000021007	107-13-016	FORREE ANDREW M	PO BOX 721	AZ	JOSEPH CITY	860320721	4505 Main Street	JOSEPH CITY
R000020902	107-10-002A	BEATTY DANIEL & KRISTEN CPRS	PO BOX 131	AZ	JOSEPH CITY	86032-0131	4494 Main Street	JOSEPH CITY
R000021162	107-17-010D	ROGERS MILFORD F	PO BOX 324	AZ	JOSEPH CITY	860320324	8108 South Ladd	JOSEPH CITY
R000020886	107-09-013	KINLICHEENIE KOVACSIC SR KINLICHEENIE TAWNYA K CPRS	PO BOX 445	AZ	JOSEPH CITY	86032-0445	4471 4th North Avenue	JOSEPH CITY
R000209631	107-20-024A	DESPAIN SANDRA K & RUSSELL J	PO BOX 520	AZ	JOSEPH CITY	86032-0520	8082 South Ladd	JOSEPH CITY
R000020795	107-08-013	PETERSON AARON J	PO BOX 263	AZ	JOSEPH CITY	860320263	8182 Tanner Avenue	JOSEPH CITY
R000020987	107-12-032	SEMAS JO ANN & JOHN III TRUSTEES	1554 LATINA DR	CA	ALAMO	94507		
R000021405	107-27-001F	NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	AZ	JOSEPH CITY	860320613		
R000021333	107-22-009B	ARIZONA PUBLIC SERVICE CO	PO BOX 53999 MS 9565	AZ	PHOENIX	850723940	4658 Old U.S. 66	JOSEPH CITY
R0010021087	107-01-009D	AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	AZ	PHOENIX	850183347		
R000020960	107-12-004B	LARSEN ELDON L MARTINEAU ROBERT	PO BOX 53	AZ	JOSEPH CITY	860320053		JOSEPH CITY
R000021268	107-19-009	HANSEN GARY & RUTH (CPRS)	PO BOX 502	AZ	JOSEPH CITY	860320502		JOSEPH CITY
R000021364	107-25-008	BLAKE TRESSA	PO BOX 331	AZ	JOSEPH CITY	860320331	4622 1st North Avenue	JOSEPH CITY
R000021192	107-18-013D	ACME LUMBER COMPANY	419 WASHINGTON ST	CA	SANTA CRUZ	950604325		
R000021311	107-21-009A	BALDWIN LARRY E & AVA R (CPRS)	PO BOX 774	AZ	JOSEPH CITY	860320774		
R000021031	107-14-010	SOLOMON RICHARD W & RHONA G (CPRS)	PO BOX 332	AZ	JOSEPH CITY	860320332	8159 Shelley Avenue	JOSEPH CITY
R000020738	107-07-035B	BAIRD TEDDI L TRUSTEE	PO BOX 231	AZ	JOSEPH CITY	860320231	8180 Allen Drive	JOSEPH CITY
R000021466	107-18-041	GC RICE L LLC	8162 N DESPAIN BOX 5	AZ	JOSEPH CITY	86032		
R000021302	107-21-002F	SAGAN LOUIS	8919 E ALBANY ST	AZ	JOSEPH CITY	860320347		
R000020772	107-07-057B	BAIRD RANDY LEE & WENDY (JT)	PO BOX 550	AZ	JOSEPH CITY	860320774		
R000021020	107-13-028	HANSEN GALE E & ANNA (JT)	PO BOX 220	AZ	JOSEPH CITY	860320220	4770 Frontage Road	JOSEPH CITY
R000020722	107-07-023	CHURCH OF JESUS CHRIST OF LDS.	50 EAST NORTH TEMPLE RM 2225	UT	SALT LAKE CITY	84150-0022	4608 3rd North Avenue	JOSEPH CITY
R000021091	108-04-002F	AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	UT	PHOENIX	850183347		
R000021316	107-21-012D	MILLET DONALD G & DONNA S JT BAKER JERRY O	128 PAVSEE ST	ID	BUHL	831611316	8019 Rogers Avenue	JOSEPH CITY
R000020979	107-12-024	NEFF SAM K & CAROL L (CPRS)	1800 W STRATTON	AZ	SHOW LOW	859015616	4488 Nielson Avenue	JOSEPH CITY
R000021321	107-21-020	RICE GARY & CAROL	PO BOX 5	AZ	JOSEPH CITY	86032-0005	8067 Rogers Avenue	JOSEPH CITY
R000021292	107-20-025A	TARANTO ALLISON B	5745 GIRLS RANCH RD	AZ	FLAGSTAFF	860045477		
R000212091	107-20-004A	GARONER BRIAN R & JANE (CPRS)	PO BOX 441	AZ	JOSEPH CITY	86032-0441	4541 3rd South Avenue	JOSEPH CITY
R000020997	107-13-006	IWAJOKU ANDREW	PO BOX 66922	AZ	PHOENIX	850826922	4516 3rd South Avenue	JOSEPH CITY
R000020913	107-10-013A	REYNOLDS MARK REYNOLDS JAQUELYN JT	PO BOX 313	AZ	JOSEPH CITY	86032-0313	4505 1st North Avenue	JOSEPH CITY
R000020704	107-07-006A	SMITH JOSEPH & DEANNE JT	PO BOX 175	AZ	JOSEPH CITY	86032-0175	4605 Frontage Road	JOSEPH CITY
R000020862	107-09-004L	HENRY MARY ANN	9157 E CHIRCO PL	AZ	TUCSON	857103130	4470 4th North Avenue	JOSEPH CITY
R000021390	107-26-003	MCINTYRE JOSHUA A & QETURAH (CPRS)	PO BOX 91	AZ	JOSEPH CITY	860320091	4444 Boyce Drive	JOSEPH CITY
R000020816	107-08-026	HUTCHENS DANIEL & HAILEE (CPRS)	PO BOX 158	AZ	JOSEPH CITY	860320158	4580 5th North Avenue	JOSEPH CITY
R000021195	107-18-014A	POGUE ELAINE(DORS)	PO BOX 221	AZ	JOSEPH CITY	86032-0221	4303 Old U.S. 66	JOSEPH CITY
R000020958	107-12-002	ARIZONA STATE OF	PO BOX 668	AZ	HOLBROOK	860250668	4455 Frontage Road	JOSEPH CITY
R000021186	107-18-010	BARNER ANNA B & SMITH BESSIE B	9559 LA AMAPOLA AVE	CA	FOUNTAIN VALLEY	92708-5130		
R000020846	107-08-038	HANSEN CLINT L & RACHELLE L (CPRS)	PO BOX 566	AZ	JOSEPH CITY	86032	4596 5th North Avenue	JOSEPH CITY
R000021147	107-17-001B	FIELDS BRYAN JACOB & JULIE ANN	PO BOX 416	AZ	JOSEPH CITY	86032-0416		
R000020957	107-12-001A	HANSEN GARY & RUTH (CPRS)	PO BOX 502	AZ	JOSEPH CITY	860320502	4451 Frontage Road	JOSEPH CITY
R000021385	107-25-031	SMITH TYSON & DEIDRA (CPRS)	PO BOX 453	AZ	JOSEPH CITY	860320453	4647 1st North Avenue	JOSEPH CITY
R000021165	107-18-001A	YOUNG RANDY L & JUDY A JT	PO BOX 476	AZ	JOSEPH CITY	86032-0476	4449 Fish Lane	JOSEPH CITY
R000021367	107-25-011	GONZALES LEO JR & AMBER (CPRS)	PO BOX 713	AZ	JOSEPH CITY	860320713	4628 1st North Avenue	JOSEPH CITY
R000021069	107-14-025	PERKINS BARRETTA K	PO BOX 192	AZ	JOSEPH CITY	86032-0192	8173 Roberson Avenue	JOSEPH CITY
R000020739	107-07-035C	BAIRD TEDDI L TRUSTEE	PO BOX 231	AZ	JOSEPH CITY	860320231	4628 3rd North Avenue	JOSEPH CITY
R000020856	107-09-004D	DARRIS KENT & CAMMY CPRS	101 BLUE SAGE ST	AZ	HOLBROOK	860251834	4481 4th North Avenue	JOSEPH CITY
R000021018	107-13-027A	HANSEN GALE E & ANNA (JT)	PO BOX 220	AZ	JOSEPH CITY	86032-0220	8131 RICHARDS AVE	JOSEPH CITY
R000020931	107-10-028	ROGERS MERLIN VROGERS WILLIAM D JT	5212 S MONTE VISTA ST	AZ	CHANDLER	85249-3336	4508 1st North Avenue	JOSEPH CITY
R000020953	107-11-021	DOBBS TAJURA	PO BOX 734	AZ	JOSEPH CITY	860320734	8167 Porter Avenue	JOSEPH CITY
R000020502	110-15-013	ARIZONA PUBLIC SERVICE CO 62.779PACIFICORP 37.23	PO BOX 53999 MS 9565	AZ	PHOENIX	850723940		
R000020959	107-12-003A	LARSEN ELDEN & CAROL (CPRS)	PO BOX 53	AZ	JOSEPH CITY	86032-0053	4459 Frontage Road	JOSEPH CITY
R000021150	107-17-003A	SPURLOCK ROBERT & LORRAINE	PO BOX 12	AZ	JOSEPH CITY	860320012	4587 Frontage Road	JOSEPH CITY
R000020831	107-08-0315	CLICK MATTHEW R & MITZI JT	PO BOX 483	AZ	JOSEPH CITY	86032-0483	4565 Rusty Avenue	JOSEPH CITY
R000021138	107-16-012	ROGERS MILFORD F	PO BOX 324	AZ	JOSEPH CITY	860320324	4563 Frontage Road	JOSEPH CITY

C/O DONALD BARNER

ATTENTION: BRANDON KEYS NUINES

TAX ADM DIV 514-4809

C/O DONALD BARNER

ATTENTION: BRANDON KEYS NUINES

R0010021782	107-09-0058	GC RICE D LLC	107-13-005N	HANSEN GARY R & RUTH B	PO BOX 5	JOSEPH CITY	860320005	8169 Despain Avenue	JOSEPH CITY
R0010019773	107-13-005N	HANSEN GARY R & RUTH B	107-17-008	MCLAUGHLIN KELLY D	PO BOX 502	JOSEPH CITY	860320502	8108 South Richards Avenue	JOSEPH CITY
R000021158	107-07-009	PERKINS JACKSON D & FRANCES M (JT)	107-16-010A	SPURLOCK VINCENT P & GLENNA E (CPRS)	PO BOX 349	JOSEPH CITY	860320349	4567 Main Street	JOSEPH CITY
R000020708	107-09-006	ROGERS TERRILL D	107-18-032	JOSEPH CITY WATER SYSTEM INC	46216 N BLACK CANYON HWY	NEW RIVER	850877029	4647 Frontage Road	JOSEPH CITY
R000020864	107-18-032	HANSEN GALE & ANNA (CPRS)	107-18-0298	HANSEN GALE & ANNA (CPRS)	PO BOX 457	JOSEPH CITY	86032-0243	4533 Main Street	JOSEPH CITY
R000021237	107-18-0298	HANSEN GALE & ANNA (CPRS)	107-25-027	BEST SHELBY C	PO BOX 243	JOSEPH CITY	86032-0147	4512 2nd North Avenue	JOSEPH CITY
R000021230	107-25-027	BEST SHELBY C	107-14-0098	FISH CASEY B & DEBRA G TRUSTEES	PO BOX 147	JOSEPH CITY	86032-0220	4434 Main Street	JOSEPH CITY
R000021381	107-14-0098	FISH CASEY B & DEBRA G TRUSTEES	107-18-0240	HANSEN DERRON C & CATHARINA J (JT)	PO BOX 220	JOSEPH CITY	86032-0220	4434 Main Street	JOSEPH CITY
R0000210167	107-18-0240	HANSEN DERRON C & CATHARINA J (JT)	107-07-012A	LORENC RALPH MICHAEL & MARILYN M (CPRS)	5159 GRASSE CT	LENA	541399005	4611 1st North Avenue	JOSEPH CITY
R000021274	107-07-012A	LORENC RALPH MICHAEL & MARILYN M (CPRS)	107-14-015A	ROSSER MICHAEL DWOUTERS-ROSSER JERRIE (JT)	PO BOX 52408	AMARILLO	791592408	4573 2nd North Avenue	JOSEPH CITY
R000020710	107-14-015A	ROSSER MICHAEL DWOUTERS-ROSSER JERRIE (JT)	107-10-009	KUHSE DEV	PO BOX 534	JOSEPH CITY	86032	8166 Porter Avenue	JOSEPH CITY
R000021035	107-10-009	KUHSE DEV	107-25-004	HENDRICKS THOMAS JINIGUEZ ALEJANDRA (CPRS)	PO BOX 345	JOSEPH CITY	86032	8151 Rumball Avenue	JOSEPH CITY
R000021360	107-25-004	HENDRICKS THOMAS JINIGUEZ ALEJANDRA (CPRS)	110-15-012	ARIZONA PUBLIC SERVICE CO 62.77RACIFICORP 37.23	PO BOX 444	JOSEPH CITY	860320044	4592 2nd North Avenue	JOSEPH CITY
R000021801	110-15-012	ARIZONA PUBLIC SERVICE CO 62.77RACIFICORP 37.23	107-22-0038	ARIZONA PUBLIC SERVICE	PO BOX 2	JOSEPH CITY	860320002	4506 Main Street	JOSEPH CITY
R000021403	107-22-0038	ARIZONA PUBLIC SERVICE	107-25-016	DIXON JEFFREY & KASSIE (CPRS)	PHOENIX	PHOENIX	852073940	4614 1st North Avenue	JOSEPH CITY
R000021392	107-25-016	DIXON JEFFREY & KASSIE (CPRS)	107-26-005	CHANCE MICHAEL C	BUCKEYE	BUCKEYE	853265346	4449 Boyce Drive	JOSEPH CITY
R0000210245	107-26-005	CHANCE MICHAEL C	107-18-037D	RAEL DEMETRIOS & REBECCA (CPRS)	PO BOX 383	PHOENIX	850723940	4449 Boyce Drive	JOSEPH CITY
R000020895	107-18-037D	RAEL DEMETRIOS & REBECCA (CPRS)	107-09-019E	GREEN GREGORY D	PO BOX 27	PHOENIX	860320383	4640 1st North Avenue	JOSEPH CITY
R000021401	107-09-019E	GREEN GREGORY D	107-26-014	LUERAS BERNAL A & MONA	22077 W PINA ST	BUCKEYE	853268647	8222 Porter Avenue	JOSEPH CITY
R000021080	107-26-014	LUERAS BERNAL A & MONA	107-15-011	ROGERS LYNN AULSON (JT)CRANDELL DONNA LYNETTE	405 E THIRD ST	WINSLOW	860473903	8203 Porter Avenue	JOSEPH CITY
R000021080	107-15-011	ROGERS LYNN AULSON (JT)CRANDELL DONNA LYNETTE	107-08-012	JOSEPH CITY SCHOOL DISTRICT #2	259 HEBER ST	LOS LUNAS	87031-8193	4445 Boyce Drive	JOSEPH CITY
R000020794	107-08-012	JOSEPH CITY SCHOOL DISTRICT #2	107-07-052	LOVES TRAVEL STOPS& COUNTRY STORES INC	PO BOX 351	CLAY SPRINGS	859230351	8146 Tanner Avenue	JOSEPH CITY
R000021656	107-07-052	LOVES TRAVEL STOPS& COUNTRY STORES INC	107-13-015A	BLOOMER JANICE	PO BOX 8	JOSEPH CITY	86032-0008	8176 Westover Street	JOSEPH CITY
R000021006	107-13-015A	BLOOMER JANICE	107-09-015	MCLAWS ALONZO & SHARI (CPRS)	15 W 6TH ST STE 2400	TULSA	741195417	4679 Main Street	JOSEPH CITY
R000020888	107-09-015	MCLAWS ALONZO & SHARI (CPRS)	107-21-023	SAGAN LOUIS	11250 E STATE RT 69 LOT 1122	DEWEY	86327	4507 Main Street	JOSEPH CITY
R000021374	107-21-023	SAGAN LOUIS	107-20-014	HANSEN DOYLE L & SONIA H TRUST	PO BOX 394	JOSEPH CITY	860320394	8173 Edwards Avenue	JOSEPH CITY
R000021285	107-20-014	HANSEN DOYLE L & SONIA H TRUST	107-27-001G	PEN-ROB INC	8919 E ALBANY ST	MESA	852078727	8173 Edwards Avenue	JOSEPH CITY
R000021406	107-27-001G	PEN-ROB INC	107-08-0148	GARDNER EMILY W & JASON B (CPRS)	PO BOX 66	JOSEPH CITY	86032-0066	86032-0066	JOSEPH CITY
R000020798	107-08-0148	GARDNER EMILY W & JASON B (CPRS)	108-04-008	ARIZONA STATE OF	PO BOX 1450	CHICAGO	60690-1450	8060 Rogers Avenue	JOSEPH CITY
R000211770	108-04-008	ARIZONA STATE OF	107-01-022	NZ JOSEPH CITY LLC	PO BOX 172	JOSEPH CITY	860320172	4555 4th North Avenue	JOSEPH CITY
R000020612	107-01-022	NZ JOSEPH CITY LLC	107-01-022	NZ JOSEPH CITY LLC	PO BOX 668	HOLBROOK	860250668	860250668	JOSEPH CITY
R000020612	107-01-022	NZ JOSEPH CITY LLC	107-21-0028	NEAL THOMAS R & KATHRYN A	PO BOX 2649	SNOWFLAKE	859372649	859372649	JOSEPH CITY
R000021259	107-21-0028	NEAL THOMAS R & KATHRYN A	107-01-0058	AZTEC LAND & CATTLE CO LTD	PO BOX 2649	SNOWFLAKE	859372649	859372649	JOSEPH CITY
R000020602	107-01-0058	AZTEC LAND & CATTLE CO LTD	108-04-001B	AZTEC LAND & CATTLE CO LTD	PO BOX 219	SNOWFLAKE	860320219	8060 Rogers Avenue	JOSEPH CITY
R000021438	108-04-001B	AZTEC LAND & CATTLE CO LTD	107-18-031A	HANSEN GARY & RUTH (CPRS)	4647 N 32ND ST # 240	PHOENIX	850183347	850183347	JOSEPH CITY
R000021235	107-18-031A	HANSEN GARY & RUTH (CPRS)	107-19-006	NZ JOSEPH CITY LLC	4647 N 32ND ST # 240	PHOENIX	850183347	850183347	JOSEPH CITY
R000021235	107-19-006	NZ JOSEPH CITY LLC	107-18-020H	HANSEN GALE & ANNA (CPRS)	PO BOX 502	JOSEPH CITY	860320502	860320502	JOSEPH CITY
R000021174	107-18-020H	HANSEN GALE & ANNA (CPRS)	107-18-002E	BUSHMAN DAN J & JESSICA E	PO BOX 502	JOSEPH CITY	860320502	860320502	JOSEPH CITY
R000021174	107-18-002E	BUSHMAN DAN J & JESSICA E	107-01-020	HANSEN GARY & RUTH (CPRS)	PO BOX 741	JOSEPH CITY	860320741	8206 Porter Avenue	JOSEPH CITY
R000021174	107-01-020	HANSEN GARY & RUTH (CPRS)	107-19-006	NZ JOSEPH CITY LLC	PO BOX 502	JOSEPH CITY	860320502	860320502	JOSEPH CITY
R000020610	107-19-006	NZ JOSEPH CITY LLC	107-19-006	NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	859372649	4230 Old U.S. 66	JOSEPH CITY
R000021264	107-19-006	NZ JOSEPH CITY LLC	107-19-006	NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	859372649	4230 Old U.S. 66	JOSEPH CITY
R000021264	107-19-006	NZ JOSEPH CITY LLC	107-05-063	USAUSDA FOREST SERVICES	PO BOX 2649	SNOWFLAKE	859372649	4230 Old U.S. 66	JOSEPH CITY
R000211829	107-05-063	USAUSDA FOREST SERVICES	107-05-063	USAUSDA FOREST SERVICES	517 GOLD AVE SW	ALBUQUERQUE	87102-3117	87102-3117	JOSEPH CITY
R000211829	107-05-063	USAUSDA FOREST SERVICES	107-18-028	HANSEN GALE E & ANNA S (CPRS)	517 GOLD AVE SW	ALBUQUERQUE	87102-3117	87102-3117	JOSEPH CITY
R000021229	107-18-028	HANSEN GALE E & ANNA S (CPRS)	107-18-028	HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	860320220	4445 Main Street	JOSEPH CITY
R000021229	107-18-028	HANSEN GALE E & ANNA S (CPRS)	110-15-001D	AZTEC LAND CO LLC	PO BOX 220	JOSEPH CITY	860320220	4445 Main Street	JOSEPH CITY
R000025796	110-15-001D	AZTEC LAND CO LLC	110-15-001D	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	850183347	7399 OBED RD	JOSEPH CITY
R000025796	110-15-001D	AZTEC LAND CO LLC	110-15-001D	AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	850183347	7399 OBED RD	JOSEPH CITY
R000025796	110-15-001D	AZTEC LAND CO LLC	107-18-0148	JOSEPH CITY UTILITIES	PO BOX 147	JOSEPH CITY	86032-0147	4672 Old U.S. 66	JOSEPH CITY
R000021199	107-18-0148	JOSEPH CITY UTILITIES	107-22-002A	HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	860320502	4672 Old U.S. 66	JOSEPH CITY
R000021199	107-22-002A	HANSEN GARY & RUTH (CPRS)	107-18-020H	HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	86032-0220	4672 Old U.S. 66	JOSEPH CITY
R000021210	107-18-020H	HANSEN GALE & ANNA (CPRS)	107-17-001A	SMITH JOSEPH & DEANNE JT	PO BOX 220	JOSEPH CITY	86032-0220	4672 Old U.S. 66	JOSEPH CITY
R000021210	107-17-001A	SMITH JOSEPH & DEANNE JT	107-19-008A	GC RICE S LLC	PO BOX 175	JOSEPH CITY	86032-0175	4599 Frontage Road	JOSEPH CITY
R000021146	107-19-008A	GC RICE S LLC	107-18-017H	HANSEN DOYLE L & SONIA H TRUST	PO BOX 5	JOSEPH CITY	860320005	4599 Frontage Road	JOSEPH CITY
R000021266	107-18-017H	HANSEN DOYLE L & SONIA H TRUST	107-18-017H	HANSEN DOYLE L & SONIA H TRUST	PO BOX 66	JOSEPH CITY	86032-0066	86032-0066	JOSEPH CITY
R000021266	107-18-017H	HANSEN DOYLE L & SONIA H TRUST	107-01-005A	AZTEC LAND & CATTLE CO LTD	PO BOX 66	JOSEPH CITY	86032-0066	86032-0066	JOSEPH CITY
R0000212994	107-01-005A	AZTEC LAND & CATTLE CO LTD	107-02-003	NAVALO TRIBE	PO BOX 66	JOSEPH CITY	86032-0066	86032-0066	JOSEPH CITY
R000020601	107-02-003	NAVALO TRIBE	107-18-015F	PATTERSON JENNY	PO BOX 66	JOSEPH CITY	86032-0066	86032-0066	JOSEPH CITY
R000213742	107-18-015F	PATTERSON JENNY	107-18-015F	PATTERSON JENNY	4647 N 32ND ST # 240	PHOENIX	850183347	4672 Old U.S. 66	JOSEPH CITY
R000213742	107-18-015F	PATTERSON JENNY	107-18-015F	PATTERSON JENNY	PO BOX 2249	WINDOW ROCK	86515-2249	4323 OLD US 66	JOSEPH CITY
R000213742	107-18-015F	PATTERSON JENNY	107-18-015F	PATTERSON JENNY	PO BOX 496	JOSEPH CITY	860320496	4323 OLD US 66	JOSEPH CITY
R000213742	107-18-015F	PATTERSON JENNY	107-18-015F	PATTERSON JENNY	PO BOX 496	JOSEPH CITY	860320496	4323 OLD US 66	JOSEPH CITY

TITLE RECORDS & APPRAISAL SECTION

R000021742	107-18-015F	PATTERSON JENNY	107-18-015F	PO BOX 496	JOSEPH CITY	AZ	860320496	4323 OLD US 66	JOSEPH CITY
R000021283	107-20-011	ARIZONA STATE OF	107-20-011	PO BOX 668	HOLBROOK	AZ	860250668		JOSEPH CITY
R000020683	107-06-009C	HANSEN GARY & RUTH (CPRS)	107-06-009C	PO BOX 668	HOLBROOK	AZ	860250668		JOSEPH CITY
R000020596	107-06-009C	HANSEN GARY & RUTH (CPRS)	107-06-009C	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R0010021086	107-01-001B	NAVAJO TRIBE	107-01-001B	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R0010021086	107-01-009C	AZTEC LAND & CATTLE CO LTD	107-01-009C	PO BOX 2249	WINDOW ROCK	AZ	86515-2249		JOSEPH CITY
R0010021086	107-01-009C	AZTEC LAND & CATTLE CO LTD	107-01-009C	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R0010019143	107-19-003N	S & F INVESTMENTS LLC	107-19-003N	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000020683	107-19-003N	S & F INVESTMENTS LLC	107-19-003N	PO BOX A	JOSEPH CITY	AZ	86032-0240	4250 Old U.S. 66	JOSEPH CITY
R000025803	110-15-014	ARIZONA PUBLIC SERVICE CO 62.77PACIFICORP 37.23	110-15-014	PO BOX A	JOSEPH CITY	AZ	86032-0240	4250 Old U.S. 66	JOSEPH CITY
R000021263	107-19-004	ROBERSON WILLIAM R & RHONDA L (CPRS)	107-19-004	PO BOX 53999 IMS 9565	PHOENIX	AZ	850723940		JOSEPH CITY
R000021263	107-19-004	ROBERSON WILLIAM R & RHONDA L (CPRS)	107-19-004	PO BOX 467	JOSEPH CITY	AZ	860320467	4270 Old U.S. 66	JOSEPH CITY
R000021263	107-19-004	ROBERSON WILLIAM R & RHONDA L (CPRS)	107-19-004	PO BOX 467	JOSEPH CITY	AZ	860320467	4270 Old U.S. 66	JOSEPH CITY
R000021202	107-18-016A	HANSEN GALE E & ANNA S (JT)	107-18-016A	PO BOX 467	JOSEPH CITY	AZ	86032-0240	4270 Old U.S. 66	JOSEPH CITY
R000021336	107-23-005	HUNT FAMILY TRUST	107-23-005	PO BOX 220	JOSEPH CITY	AZ	86032-0220		JOSEPH CITY
R000021336	107-23-005	HUNT FAMILY TRUST	107-23-005	PO BOX 42	JOSEPH CITY	AZ	860320042		JOSEPH CITY
R000021828	107-05-062	ARIZONA STATE OF	107-05-062	PO BOX 42	JOSEPH CITY	AZ	860320042		JOSEPH CITY
R000021827	107-01-026	USAUSDA FOREST SERVICES	107-01-026	PO BOX 668	HOLBROOK	AZ	860250668	8991 Porter Avenue	JOSEPH CITY
R000020661	107-05-024	AZTEC LAND CO LLC	107-05-024	517 GOLD AVE SW	ALBUQUERQUE	NM	87102-3117		JOSEPH CITY
R0010021088	108-04-001E	AZTEC LAND & CATTLE CO LTD	108-04-001E	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021208	107-18-018	BARNETT JERRY & YVONNE LIVING TRUST	107-18-018	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021208	107-18-018	BARNETT JERRY & YVONNE LIVING TRUST	107-18-018	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021174	107-18-002E	BUSHMAN DAN J & JESSICA E	107-18-002E	53 MONTEREY PINE DR	NEWPORT COAST	CA	926571526		JOSEPH CITY
R000020940	107-11-007	ARIZONA STATE OF	107-11-007	53 MONTEREY PINE DR	NEWPORT COAST	CA	926571526		JOSEPH CITY
R000020956	107-01-008	AZTEC LAND & CATTLE CO LTD	107-01-008	PO BOX 741	JOSEPH CITY	AZ	860320741	8206 Porter Avenue	JOSEPH CITY
R000020605	107-01-008	AZTEC LAND & CATTLE CO LTD	107-01-008	PO BOX 741	JOSEPH CITY	AZ	860320741	8206 Porter Avenue	JOSEPH CITY
R000020611	107-01-021	NAVAJO TRIBE	107-01-021	PO BOX 741	JOSEPH CITY	AZ	860320741	8206 Porter Avenue	JOSEPH CITY
R000020611	107-01-021	NAVAJO TRIBE	107-01-021	PO BOX 741	JOSEPH CITY	AZ	860320741	8206 Porter Avenue	JOSEPH CITY
R000020956	107-11-024A	GC RICE GJ LLC	107-11-024A	PO BOX 668	HOLBROOK	AZ	860250668		JOSEPH CITY
R000020956	107-11-024A	GC RICE GJ LLC	107-11-024A	PO BOX 668	HOLBROOK	AZ	860250668		JOSEPH CITY
R000211824	107-01-023	ARIZONA STATE OF	107-01-023	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021299	107-21-002B	NEAL THOMAS R & KATHRYN A	107-21-002B	4647 N 32ND ST # 240	PHOENIX	AZ	850183347		JOSEPH CITY
R000021033	107-14-013	SCARBRO LESLIE LSCARBRO BYMAN C ESTATE	107-14-013	PO BOX 2249	WINDOW ROCK	AZ	86515-2249		JOSEPH CITY
R000021033	107-14-013	SCARBRO LESLIE LSCARBRO BYMAN C ESTATE	107-14-013	PO BOX 5	JOSEPH CITY	AZ	86032-0005	4457 3rd North Avenue	JOSEPH CITY
R000021332	107-22-009A	HANSEN GARY & RUTH (CPRS)	107-22-009A	PO BOX 5	JOSEPH CITY	AZ	86032-0005	4457 3rd North Avenue	JOSEPH CITY
R000021332	107-22-009A	HANSEN GARY & RUTH (CPRS)	107-22-009A	PO BOX 668	HOLBROOK	AZ	860250668		JOSEPH CITY
R000021135	107-16-009	SORGEN EDWIN F	107-16-009	PO BOX 219	JOSEPH CITY	AZ	860320219	8060 Rogers Avenue	JOSEPH CITY
R000021135	107-16-009	SORGEN EDWIN F	107-16-009	896 E RACQUET CLUB RD	PALM SPRINGS	CA	922622258	4595 2nd North Avenue	JOSEPH CITY
R000020868	107-09-008H	REYNOLDS LEROY E & JOYCE	107-09-008H	896 E RACQUET CLUB RD	PALM SPRINGS	CA	922622258	4595 2nd North Avenue	JOSEPH CITY
R000020868	107-09-008H	REYNOLDS LEROY E & JOYCE	107-09-008H	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX 502	JOSEPH CITY	AZ	860320502		JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX D	JOSEPH CITY	AZ	86032-0015	4539 Main Street	JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX D	JOSEPH CITY	AZ	86032-0015	4539 Main Street	JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX 122	JOSEPH CITY	AZ	86032-0122		JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX 122	JOSEPH CITY	AZ	86032-0122		JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX 220	JOSEPH CITY	AZ	86032-0220		JOSEPH CITY
R000021201	107-18-015D	HANSEN GALE E & ANNA S (JT)	107-18-015D	PO BOX 220	JOSEPH CITY	AZ	86032-0220		JOSEPH CITY

TITLE RECORDS & APPRAISAL SECTION

ATTENTION: BRANDON KEYS NUINES

TITLE RECORDS & APPRAISAL SECTION

TITLE RECORDS & APPRAISAL SECTION

Account Number	APN	Owner Name	Owner C/O	Mailing Address	Mailing City	Mailing State	Mailing ZIP	Site Address	Site City
R000021418	107-27-008	YOUNG BRENT		PO BOX 550	JOSEPH CITY	AZ	860320109	8260 Porter Avenue	JOSEPH CITY
R000212482	107-07-065	EKSTRAND TIFFANY MARIE		PO BOX 4221	PAGE	AZ	860404221		
R000020721	107-07-022	WILLIAMS KENNETH P & STEPHANIE A (CPRS)		PO BOX 246	JOSEPH CITY	AZ	86032	8229 Randall Avenue	JOSEPH CITY
R000020758	107-07-046L	PRINGLE WILLIAM A & CHRISTINA C (CPRS)		PO BOX 662	JOSEPH CITY	AZ	860320662	8248 Baird Avenue	JOSEPH CITY
R000020774	107-07-059	HUTCHENS DANIEL L		PO BOX 11	JOSEPH CITY	AZ	86032-0011	8209 Baird Avenue	JOSEPH CITY
R000021411	107-27-004A	STRONG JEFFREY A		PO BOX 561	JOSEPH CITY	AZ	86032-0561	8282 Porter Avenue	JOSEPH CITY
R000021416	107-27-006	DEWITT DILLON W & ANNA B (CPRS)		PO BOX 143	JOSEPH CITY	AZ	860320143	8256 Porter Avenue	JOSEPH CITY
R000020754	107-07-046G	WESTOVER MARLENE		PO BOX 171	JOSEPH CITY	AZ	860320171	4642 8th North Avenue	JOSEPH CITY
R000020698	107-07-002X	GC RICE RL4 LLC		PO BOX 5	JOSEPH CITY	AZ	86032-0005	4609 6th North Avenue	JOSEPH CITY
R000204582	107-07-045A	MILLER JEREMY K & JENNIE (CPRS)		PO BOX 318	JOSEPH CITY	AZ	860320318	4647 Coyote Path	JOSEPH CITY
R000020753	107-07-046F	JOSEPH CITY DOMESTIC WATER SYSTEM INC		PO BOX 147	JOSEPH CITY	AZ	86032		
R000020771	107-07-057A	BALDA ROBERT EDWARD & SHARON MARGARET BEVAN W & FAYE E HENRIE FAMILY TURST	KELLEN ROBERSON	PO BOX 267	JOSEPH CITY	AZ	86032	4627 8th North Avenue	JOSEPH CITY
R000020729	107-07-028B	BEVAN & FAYE HENRIE TRUSTEES		PO BOX 294	JOSEPH CITY	AZ	86032	8215 Randall Avenue	JOSEPH CITY
R000208502	107-07-045C	MILLER NELSON H & KAREN H		PO BOX 233	JOSEPH CITY	AZ	86032-0233		
R000020750	107-07-046B	JOHNSON JOHNNY		PO BOX 63	JOSEPH CITY	AZ	86032-0063	4630 8th North Avenue	JOSEPH CITY
R000020690	107-07-002G	MOSIER DARREL F & KYRA J (JT)		PO BOX 321	JOSEPH CITY	AZ	86032-0321	8225 Morris Avenue	JOSEPH CITY
R000204622	107-27-005C	ROGERS GEORGE C & SUE ANN JT		PO BOX 336	JOSEPH CITY	AZ	86032-0336	4384 Fish Lane	JOSEPH CITY
R000020695	107-07-002T	BAIN PAULA (WILLIAMS)		PO BOX 396	JOSEPH CITY	AZ	86032-0396	8210 Baird Avenue	JOSEPH CITY
R000020728	107-07-028A	HUNSAKER STEVE J & HEIDI CPRS		PO BOX 6	JOSEPH CITY	AZ	86032-0006	8223 Randall Avenue	JOSEPH CITY
R000020756	107-07-046J	WESTOVER KENNETH & JENNIFER (CPRS)		PO BOX 487	JOSEPH CITY	AZ	860320487	4622 8th North Avenue	JOSEPH CITY
R000020727	107-07-027	DIXON BOBBY D & SONDRAM M (CPRS)		PO BOX 492	JOSEPH CITY	AZ	860320492	8241 Randall Avenue	JOSEPH CITY
R000020777	107-07-062	EVANS DAVID L & MARY (CPRS)		PO BOX 116	JOSEPH CITY	AZ	860320116	8205 Morris Avenue	JOSEPH CITY
R000208542	107-07-045E	MILLER JERRY N & CHARLYSE V TRUSTEES		PO BOX 513	JOSEPH CITY	AZ	86032-0513	4670 Coyote Path	JOSEPH CITY
R000021348	107-24-008A	MOSIER JOANN & HERSHEL		PO BOX 311	JOSEPH CITY	AZ	86032-0311	8224 Randall Avenue	JOSEPH CITY
R000020833	107-08-031U	MOSIER JOANN		PO BOX 311	JOSEPH CITY	AZ	86032-0311		
R000021409	107-27-003B	JOE JERRY		PO BOX 23	JOSEPH CITY	AZ	86032-0023	4379 Desert Rose Lane	JOSEPH CITY
R000212481	107-07-064	EKSTRAND COREY		PO BOX 2466	PAGE	AZ	860402466	8215 Baird Avenue	JOSEPH CITY
R000020852	107-08-044	SOLOMON DELWIN D & JOAN R TRUSTEES		PO BOX 540	JOSEPH CITY	AZ	86032		
R000208542	107-07-045E	MILLER JERRY N & CHARLYSE V TRUSTEES		PO BOX 513	JOSEPH CITY	AZ	86032-0513		
R000020850	107-08-042	BALDWIN LANCE & LYNETTE CPRS		PO BOX 133	JOSEPH CITY	AZ	86032-0133		
R000020773	107-07-058	YAZZIE JEANETTE		PO BOX 491	JOSEPH CITY	AZ	86032-0491	8214 Morris Avenue	JOSEPH CITY
R000212483	107-07-066	HERRANDEZ CATHERINE & JAMES D (CPRS)		1000 LEE ST	WINSLOW	AZ	860472245	4624 7th North Avenue	JOSEPH CITY
R000021353	107-24-014	BUSHMAN ANDREW & REBECCA (JT)		PO BOX 96	JOSEPH CITY	AZ	860320096	8236 Randall Avenue	JOSEPH CITY
R000021349	107-24-010A	ABERNATHY EARL D		PO BOX 506	JOSEPH CITY	AZ	860320506	8228 Randall Avenue	JOSEPH CITY
R000020752	107-07-046E	LEE ADAM		PO BOX 433	MONTECELLO	UT	845350433	8243 Baird Avenue	JOSEPH CITY
R000021356	107-24-017	COOKSEY JAMES & CONSTANCE (CPRS)		PO BOX 575	JOSEPH CITY	AZ	860320575	8248 Randall Avenue	JOSEPH CITY
R000021354	107-24-015	BUSHMAN ANDREW & REBECCA (JT)		PO BOX 96	JOSEPH CITY	AZ	860320096	8240 Randall Avenue	JOSEPH CITY
R000020730	107-07-028C	HUNSAKER DORIS H TRUSTEE PENROD FAMILY REVOCABLE TRUST		PO BOX 524	JOSEPH CITY	AZ	860320524	8219 Randall Avenue	JOSEPH CITY
R000021407	107-27-002A	PENROD THOMAS E & GLENDA S JT TRUSTEES		PO BOX 495	JOSEPH CITY	AZ	86032-0495	4361 Desert Rose Lane	JOSEPH CITY
R000020688	107-07-002C	STERKOWITZ MICHAEL ANDREW		PO BOX 301	JOSEPH CITY	AZ	86032-0301	4618 6th North Avenue	JOSEPH CITY
R000020775	107-07-060	FENN ROBIN & WENDY J (CPRS)		PO BOX 582	JOSEPH CITY	AZ	86032-0582	4612 6th North Avenue	JOSEPH CITY
R000021346	107-24-006	LOEWENHAGEN JERALD & ELIZABETH J		PO BOX 204	JOSEPH CITY	AZ	860320204	8218 Randall Avenue	JOSEPH CITY
R000020757	107-07-046K	WESTOVER KENNY		PO BOX 487	JOSEPH CITY	AZ	86032-0487	BAIRD AVE	JOSEPH CITY
R000021347	107-24-007	EDWARDS JOHN D		PO BOX 83	JOSEPH CITY	AZ	860320083	8220 Randall Avenue	JOSEPH CITY

R000208522	107-07-045D	MILLER CODY & KYLIE	PO BOX 652	JOSEPH CITY	AZ	86032-0652	4669 Coyote Path	JOSEPH CITY
R000021412	107-27-004B	BUSHMAN PETER & ADRIANE C. (CPRS)	PO BOX 458	JOSEPH CITY	AZ	860320458	4387 Desert Rose Lane	JOSEPH CITY
R000204582	107-07-045A	MILLER JEREMY K & JENNIE (CPRS)	PO BOX 318	JOSEPH CITY	AZ	860320318	4647 Coyote Path	JOSEPH CITY
R000020751	107-07-046D	VOIZ BILL & HEIDI	PO BOX 264	JOSEPH CITY	AZ	86032-0264	4610 8th North Avenue	JOSEPH CITY
R000020851	107-08-043	DEWITT ALEXIS D & JOEL H	9008 W SLATE MOUNTAIN TRL	BELLEMONT	AZ	860155138	4580 Rusty Avenue	JOSEPH CITY
R000208502	107-07-045C	MILLER NELSON H & KAREN H	PO BOX 233	JOSEPH CITY	AZ	86032-0233		
R000021352	107-24-013A	MCTRIBE PROPERTIES LLC	PO BOX 349	JOSEPH CITY	AZ	860320349	8234 Randall Avenue	JOSEPH CITY
R000021408	107-27-003A	WILLIAMS DEBORAH	PO BOX 693	JOSEPH CITY	AZ	860320693	8274 Porter Avenue	JOSEPH CITY
R000020778	107-07-063	EWING BRENDA C	1921 W THIRD ST APT W	WINSLOW	AZ	860472164	8213 Morris Avenue	JOSEPH CITY
R000021355	107-24-016	COOKSEY JAMES & CONSTANCE (CPRS)	PO BOX 575	JOSEPH CITY	AZ	860320575	8244 Randall Avenue	JOSEPH CITY
R000020692	107-07-002K	HUTCHENS DANIEL & CARA (CPRS)	PO BOX 11	JOSEPH CITY	AZ	860320011	4612 7th North Avenue	JOSEPH CITY
R000020776	107-07-061	GALLUCCI PAUL	PO BOX 9	JOSEPH CITY	AZ	86032-0009	8202 Baird Avenue	JOSEPH CITY

Exhibit I. Anticipated Noise/Interference with Communication Signals

A.R.S. §40-360 et seq. established the Power Plant and Transmission Line Siting Committee in 1971. A.R.S. §40-360.06(A)(3) stipulates "noise emission levels and interference with communication signals" are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in ACC 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.

The following analysis describes typical audible noise emissions and radio noise levels during construction and operation of the Gen-Tie Line Project, and generally acceptable thresholds for emissions and radio levels. Typical television broadcast level (in megaHertz [MHZ]) compatibility is also evaluated.

I.1 Existing Sound Levels

Ambient noise in the Study Area, is typical of rural areas where grazing activities are the most common use. The Study Area is primarily comprised of privately owned land as well as a few parcels administered by the Arizona State Land Department and the Bureau of Land Management (see Figure A-2). The Study Area includes industrial, utilities, agricultural, rangeland, residential, commercial, recreation, transportation, education, and vacant land uses. Overall, the Study Area is a semi-developed rural area primarily used for grazing with existing utility infrastructure, scattered agricultural uses and residential uses centered in and around Joseph City. Industrial and utility development is clustered around the Cholla Power Plant.

Typical sound levels in rural areas range from 50 to 60 dBA (daytime averages) (AASHTO 1993). Noise-producing activities in the Study Area include traffic along Interstate 40, noise emissions from the existing Cholla Power Plant, and noise emissions from residential and commercial development.

Table I-1 contains definitions of acoustic terms used in this report, and Table I-2 provides example sound levels that a human may encounter.

Table I-1. Definitions of Acoustical Terms

Term	Definition
Sound	Describes wave-like variations in air pressure that, when within a particular range of frequencies stimulate receptors in the inner ear and are interpreted by the human brain as sound. The audible frequency range for the human ear is 20 Hz to 20 kHz (Purves et al. 2001).
Noise	Implies the cumulative presence of sound from various sources, but also implies a response to sound: noise is often defined as unwanted or unpleasant sound.
Ambient noise level	The composite of noise from all sources near and far for a given location, i.e., the normal or existing level of environmental noise at a given location.
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the measured pressure to the reference pressure, which is 20 micropascals.

Term	Definition
A weighted sound pressure level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighted filter deemphasizes the very low and the very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Hertz (Hz)	A unit of measure of frequency, the number of cycles per second of a periodic waveform
Infrasound	According to the International Electrotechnical Commission (IEC) 1994, infrasound is acoustic oscillations whose frequency is below the low-frequency limit of audible sound (about 16 Hz). However, this definition is incomplete as infrasound at high enough levels is audible at frequencies below 16 Hz. (IEC 1994)
Low-frequency sound	Sound in the frequency range that overlaps the higher infrasound frequencies and the lower audible frequencies, it is typically considered as 10 Hz to 200 Hz but is not precisely defined.

Source: International Electrotechnical Commission 1994

Table I-2. Common outdoor and indoor noise levels

Common outdoor noise levels	Noise level (dBA)	Common indoor noise levels
-	110	Rock Band
Jet flyover at 350 meters	100	-
Gas lawn mower at 1 meter, diesel truck at 15 meters	90	Food blender at 1 meter
Noisy urban daytime	80	Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70	Shouting at 1 meter, vacuum cleaner at 3 meters
Commercial area	60	Normal speech at 1 meter
Quiet urban daytime	50	Large business office, dishwasher next door
Quiet urban nighttime	40	Small theater; large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural nighttime	20	Concert hall (background)
-	10	Broadcast and recording studio
-	0	Threshold of hearing

Source: American Association of State Highway and Transportation Officials 1993

I.2 Anticipated Noise During Construction and Operation

During construction, equipment used for assembly and erection of structures, wire pulling and splicing will generate noise. Noise from construction activities would be audible to nearby users; however, because the Project is surrounded by rural private property, users in the area are limited to a small number of people, and because construction would only occur during daytime hours when tolerance to noise is higher, it would not be considered a major impact. Noise from construction would be temporary, lasting only between 12 to 18 months long.

Anticipated noise associated with the Collector Substation and the Gen-Tie Line routes would primarily be temporary and construction related. However, certain electromagnetic effects are inherently associated with substations and overhead transmission facilities. The primary effect of electric and magnetic fields is corona discharge. Corona effects are manifest as audible noise, radio interference, and television interference. These particular effects are minimized by line location, line design, and construction practices.

I.2.1 Corona

Under certain conditions, the localized electric field near an energized conductor can be sufficiently concentrated to produce a tiny electric discharge that can ionize air close to the conductors. This partial discharge of electrical energy is called corona discharge, or corona. This physical manifestation can transform and discharge energy into very small amounts of sound, radio noise, heat, and chemical reactions of the air components. Several factors, including conductor voltage, shape, diameter, and surface irregularities such as scratches, nicks, and dust, can affect a conductor's electrical surface gradient and its corona performance (EPRI 1982).

I.2.2 Audible Noise

Audible noise would be created by corona discharge at the Collector Substation and along the Gen-Tie Line route. As a result, the amount of audible noise is directly related to the amount of corona, which is in turn affected by meteorological conditions (most notably precipitation, which increases corona discharge). Transmission line audible noise is categorized into broadband high-frequency tones, which are best described as humming sounds.

Because power loss is uneconomical and noise is undesirable, corona on transmission lines has been studied by engineers since the early part of the last century. Historical measurements along transmission corridors of similar makeup to the Project (open desert) have shown typical ambient audible noise levels in the range of 43 to 52 dBA with an average value of 50 dBA (EPRI 1982). Steps to minimize corona for extra high-voltage transmission lines of 345 to 765kV are one of the major factors in transmission line design. However, audible noise levels for corona are considered low for the Project (typically 50 dBA) and is usually not a design issue for power lines rated at 230kV and lower (Parmar 2014; PG&E 2005).

I.2.3 Radio Interference

There are five radio stations within close listening range of Joseph City (Radio Locator 2023). Two of the five radio stations are FM frequencies that are broadcast from the cities of Holbrook and Heber. No interference of these two stations is expected. Three AM stations are within listening range of Joseph City. These stations are broadcast from the cities of Holbrook and Winslow.

Overhead transmission lines do not, as a general rule, interfere with normal radio or TV reception. There are two potential sources of interference: corona and gap discharges. Gap discharges cause short pulses of voltage and current to be propagated along the transmission line, resulting in radio frequency noise in the vicinity of the line. Gap discharges are different from corona and can occur in low-voltage distribution lines. Gap discharges are most commonly caused by loose hardware and comprise a large percentage of all interference problems but are easily remedied through routine maintenance of the transmission line (EPRI 1982).

If corona-generated radio interference is an issue, it is most likely to affect the amplitude modulation (AM) radio broadcast band (535 to 1,605 kilohertz); frequency modulation (FM) radio is rarely affected. FM radio receivers usually do not pick up interference from transmission lines, because corona-generated radio frequency noise currents decrease in magnitude with

increasing frequency and are quite small in the FM broadcast band (88 to 108 megahertz). In addition, the excellent interference rejection properties inherent in FM radio systems make them virtually immune to amplitude-type disturbances. There should be little to no FM radio interference from the Project; only AM receivers that are tuned to a weak station and are located very near to transmission lines have the potential to be affected by radio interference. An example of this type of interference is the humming noise on an AM radio that happens when the radio is near a power line, but this diminishes as the radio moves away from the line. Since the nearest residence to the Project is located approximately 3,300 feet away and since this is a typical 230kV transmission line (i.e., interference levels will be non-detectable), the Project is not anticipated to cause interference to AM radio broadcasts for residences (EPRI 1982). Additionally, there are 500kV and 345kV transmission lines that occur between the Project and the nearest residence.

I.2.4 Television Interference

There are six internet providers and two satellite television providers available in Joseph City (Best Neighborhood 2023).

Traditional television broadcasts occur in three ranges: 54 to 88 MHz (Channel 2-6), 174 to 216 MHz (Channels 7-13), and 470 to 890 MHz (Channels 14-83). Transmission line interference reduces with increasing frequency above 100 MHz. Consequently, television interference only affects the lower very high frequency (VHF) band (Channels 2-6) and no interference will be experienced in the upper VHF (Channels 7-13) and ultrahigh frequency (UHF) bands (Channels 14-83) even during foul weather. Where transmission line-generated television interference has been found to be a problem, it is generally the result of induced voltage on fences, conductors, and hardware that are adjacent to the ROW. In these situations, the interference can be easily corrected by grounding the objects, or by realigning, relocating, or providing higher-gain television antennas. However, with the increasingly popularity of digital technologies (such as cable and satellite television), transmission line television interference problems warranting any sort of corrective action are especially unlikely (EPRI 1982).

I.2.5 Electromagnetic Fields

Electromagnetic Fields (EMF) are produced by power lines, and these fields would induce voltages and currents on nearby conductive objects. Electric fields are produced whenever a conductor is connected to a source of electrical voltage in a circuit; for example, the plugging of a lamp into a wall outlet in a home. When the lamp is plugged in, a voltage is induced in the cord to the lamp, which causes an electric field to be created around the cord. Magnetic fields are produced whenever an electrical current flows in a conductor. In the lamp example, if the lamp is turned on (allowing electricity to flow to the lamp), a magnetic field is created around the lamp cord and the filament, in addition to the electric field. These fields exist around overhead and underground power lines, house wiring, computers, power tools, appliances, and anything that carries or uses electricity. Table I-3 demonstrates examples of EMF levels from various electrical sources and Figure I-1 depicts EMF levels from transmission lines, including 230kV transmission lines.

Table I-3. EMF Strength of Various Electrical Sources at Various Distances

EMF Source a/	Distance	Strength	Distance	Strength	Distance	Strength
Microwave Oven	0.5 ft	200 mG	1.0 ft	4 mG	4.0 ft	2 mG
Vacuum Cleaner	0.5 ft	300 mG	1.0 ft	60 mG	4.0 ft	1 mG
Hair Dryer	0.5 ft	300 mG	1.0 ft	1 mG	4.0 ft	0 mG
Electric Shaver	0.5 ft	100 mG	1.0 ft	20 mG	4.0 ft	0 mG
230 kV Transmission Line	0 ft	57.5 mG	100 ft	7.1 mG	200 ft	1.8 mG

Notes

a/ Appliance magnetic field strengths are median values in milliGauss (mG) for typical 60 Hz electrical current (source: U.S. National Institute of Environmental Health Sciences and the National Institute of Health 2002).

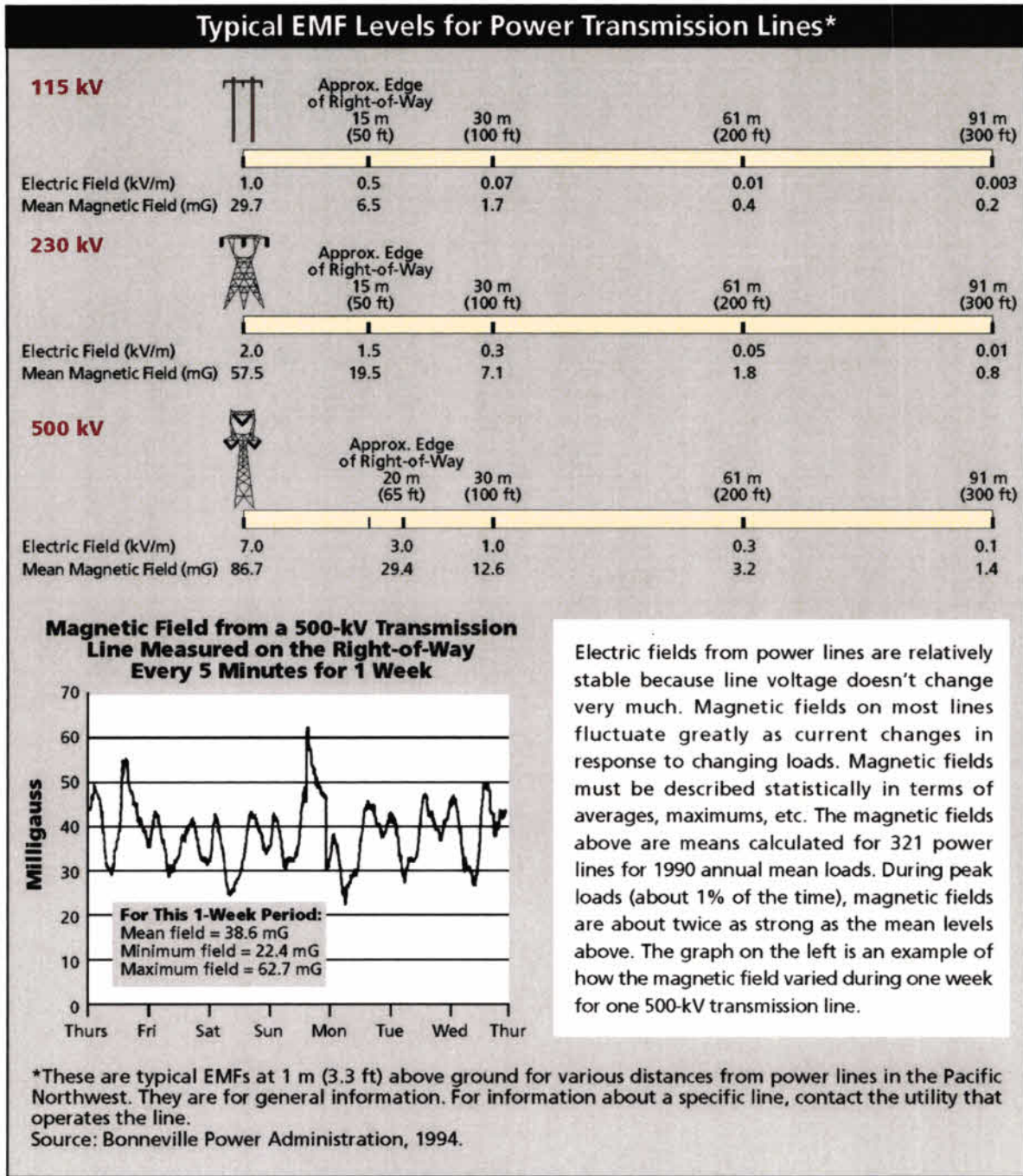


Figure I-1. Typical EMF Levels for Power Transmission Lines

Source: U.S. National Institute of Environmental Health Sciences and the National Institute of Health 2002

Notes

m = meters

ft = feet

I.2.6 Potential Effects

I.2.6.1 Construction

Table I-4 presents typical noise levels of construction equipment at a distance of 45 feet (15 meters). These values assume that the equipment is operating at maximum capacity.

Table I-4. Typical Noise Levels of Construction Equipment

Equipment Category	Noise Level at 45 feet (15 meters) (dBA)
Dump Truck	88
Portable Rock Drill	88
Concrete Mixer Truck	85
Pneumatic Tool	85
Grader	85
Backhoe	81
Dozer	78

Source: Crocker and Kessler 1982

The data presented in Table I-4 indicates that there would be a temporary increase in ambient noise within 45 feet of construction activities occurring within the Project. The nearest residence to the Project is located 3,300 feet (0.63 mile), therefore, residents in the Study Area are likely to hear minimal construction noise from the Project. Many environmental factors need to be considered when determining the distance that noise travels, such as terrain, density of vegetation, temperature, and the amount of moisture in the air. Since there is intervening vegetation between the Project construction noise sources and residential areas in the Study Area, it likely that any construction noise heard would be less than typical noise levels such as those shown in Table I-4. Additionally, these construction noises would be limited to daytime hours and cease after construction, which is approximately 12 to 18 months long.

I.2.6.2 Operation

Figure I-I presents EMF levels associated with transmission lines. Interference levels for power lines rated at 230kV and lower, both in fair weather and in rain, dissipate quickly and typically are nondetectable at the ROW edge (65 feet [25 meters]), and will usually meet or exceed reception guidelines of the Federal Communications Commission (PG&E 2005). Because this is a typical 230kV transmission line, interference levels will be non-detectable, and the proposed facilities will not cause operational impacts to communication systems that may be located in the Study Area.

In addition to impacts to communication systems, coronas also produce an audible noise. The highest calculated audible noise levels from the transmission design during foul weather (rain) may reach 55.9 decibels measured on an "A" weighted (dBA) scale at the edge of the Gen-Tie. During fair weather, the audible noise at the edge of the Project is significantly reduced with a maximum value of 35.9 dBA.

As previously mentioned, the nearest residence is located over 3,300 feet away and existing 500kV and 345kV transmission lines already traverse the Study Area. Noise from operation of

the Gen-Tie Line would have a negligible increase on noise levels and would not be noticeable either outside or within the nearest residence, therefore, no impacts to nearby residences are anticipated by the operation of these facilities.

Satellite television signals are much higher frequency than transmission line frequencies and are unlikely to be affected by the Gen-Tie Line operation or corona. Cable television service is likewise unaffected. Specific instances of broadcast television reception interference are nearly always related to spark-gap discharges due to loose, worn, or defective hardware. No significant impacts to radio or television reception are anticipated as a result of constructing and operating the Gen-Tie Line and the Collector Substation. Cellular phone antennae and microwave receivers are commonly mounted on transmission structures to take advantage of the added height afforded by the structures, which demonstrates that transmission lines do not interfere with cellular phone tower operations or microwave communication paths (EPRI 1982).

For these reasons, noise and communication signal interference associated with operation of the Project is not anticipated.

I.3 References

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Exhibit J. Special Factors

ARS §40-360 et seq. established the Power Plant and Transmission Line Siting Committee in 1971. ARS §40-360.06(A)(9) stipulates "any additional factors that require consideration under applicable federal and state laws pertaining to any such site" are among the factors the Siting Committee must consider in reviewing CEC applications. As stated in ACC 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.

J.1 Public Involvement Process

J.1.1 Goals and Objectives

The Applicant developed a multimodal public outreach approach aimed at providing stakeholders with information about the Gen-Tie Line Project and the related Solar Facility and advising them of opportunities to provide feedback. Information about this public outreach approach is included as part of this Project's CEC application.

The Applicant's public outreach goals included:

- Providing factual and up-to-date Project information to stakeholders.
- Informing stakeholders about Project permitting requirements, including the CEC process.
- Identifying, tracking, and responding to stakeholder feedback in a timely manner.
- Providing advance notification of informational public meetings, including the Siting Committee's hearing, to stakeholders.

Outreach efforts began in Q1 2022 and will continue through approval of the Applicant's CEC application.

J.1.2 Public Outreach Methodologies, Schedule, and Results

The Applicant employed a multimodal public outreach approach. Initial communications began in Q1 2022 and will continue through the approval of the Applicant's CEC application. The public outreach methodologies undertaken, and their results, follow.

J.1.2.1 Dedicated Project Channels of Communication

The Applicant established, maintained, and monitored a dedicated Project website, email address and telephone hotline with voicemail inbox for stakeholders to leave comments and feedback about the Project. The channels of communication were established in Q1 2022 and will be maintained through the approval of the CEC application.

The relevant website information (Table J-1), email information (Table J-2), hotline information (Table J-3), and comments received from these sources (Table J-4) are provided below.

Table J-1. Project Website Information

Website: obedmeadowsolar.com				
Established: March 16, 2022				
Updated: April 13, 2022; April 10, 2023				
Website Statistics for March 16, 2022, through June 20, 2023				
Unique Visitors	Via Direct Link	Via social media	Total Visits	Avg. Visit Length
784	373	513	1,366	27 sec.

Table J-2. Project Email Information

Email: obedmeadowsolar@avangrid.com	
Established: March 16, 2022	
Email Statistics for March 16, 2022, through June 20, 2023	
Number of Unique Visitors: 5	
Number of Emails Received: 5	

Table J-3. Project Hotline Information

Hotline: 602-384-2470	
Established: March 9, 2022	
Updated: March 18, 2022; April 13, 2022; April 10, 2023	
Hotline Statistics for March 16, 2022, through June 20, 2023	
Number of Unique Visitors: 6	
Number of hotline messages received: 6	

Table J-4. Project Website, Email, and Hotline Comments and Feedback

Date	Comment	Response and/or Notes
3/30/22	Yes, I got your letter about the renewable and Joseph County. And so I would love a callback we're the (REDACTED) the phone number is (REDACTED). Thanks.	The Stakeholder owns a 10-acre parcel in Joseph City. Based on the flyer, they thought Avangrid was interested in leasing their property for the solar project. They "love solar and love the idea of building a solar project in this area". They are sorry that their property is not part of the Project.
3/30/22	Yes, this is (REDACTED), if you could give me a call back on this project, (REDACTED).	It was nice speaking with you today. As discussed, our Project is located south of the Little Colorado River. I have highlighted your property in red below so you can see where it is located in relation to the Project (black outline). You can also stay up to date on our Project by visiting the Project website at http://obedmeadowsolar.com/ . Please don't hesitate to reach out to me with any questions or concerns.

Date	Comment	Response and/or Notes
4/1/22	Other than the construction jobs... how many people will be employed by this new plant?	Thanks for your question regarding the Obed Meadow Solar Project. Construction will employ about 350 to 400 employees, the majority of whom would live in the surrounding area throughout construction, increasing economic activity at local hotels, restaurants, stores, and gas stations. The Project will create up to three additional permanent full-time O&M positions. Please let me know if you have any more questions.
4/1/22	Please send me the link or address so I can attend the meeting.	I got your request for the meeting information for our Virtual meeting next week. The meeting will be held at 6pm on Tuesday, April 12th. The presentation will be streamed live on our website at https://www.obedmeadowsolar.com/ . Alternatively, you can click here for a direct link to the virtual meeting interface. If you aren't by a computer, you can also call in to the meeting by dialing 833-946-1546. Let me know if you have any more questions.
4/1/22	Yes, this is (REDACTED). I have a ranch over here by where you're putting these solar panels. And I tried to call this 833-946-1546 number and I didn't get nobody. I called it three times. It's, I don't know, it must not be in service or something, I don't know. But I just called. I was wondering where this Community meeting was gonna be. You don't you don't have anything down on the where it's going to be held at my number is (REDACTED). Thank you.	Stakeholder is a neighbor of the Project to the south and had a question about how solar panels are disposed of. We also spoke about the Project in general.
4/4/22	This is (REDACTED) at the (REDACTED) ranch up here in Joseph City. And I would like hard copies sent before the presentation if you would call me back and I'll give you the address and stuff. Thank you.	I saw your request come through for the presentation material. I have asked that it be sent to your PO Box once it is finalized. Materials were mailed Thurs., 4/8/22.
4/4/22	Hi, I'm wondering how this project will affect me or the town of Joseph City. (REDACTED)	Thank you for your message. If approved for construction, the Obed Meadow Solar Project would be sited approximately 1 mile south of Joseph City. Construction activities would not take place within Joseph City, and direct impacts to your community would be limited to an increase in traffic on local highways and on

Date	Comment	Response and/or Notes
		<p>county roads used to access the Project site.</p> <p>Additionally, following construction you would see a new 2.5-mile generation tie transmission line near Arizona Public Service's Cholla Power Plant when travelling towards Holbrook, AZ. This line would connect the solar power generation facility with the power grid.</p> <p>The Project would have a positive economic impact in Joseph City and Navajo County through increased property tax revenues collected over its lifespan. These could be used to support county operations including schools, water districts and fire protection. The Project would also employ about 350 to 400 individuals during construction, and would create up to three additional permanent, full-time operations and maintenance positions.</p> <p>In general, solar projects have minimal impacts on nearby resources, and Avangrid Renewables has a long history of responsible environmental stewardship. We've studied potential impacts this Project could have on public health and safety and on the environment, and would minimize them using a Project-specific, comprehensive Health and Safety Risk Policy.</p> <p>Thank you again for your message. Should you have additional questions or concerns, please do not hesitate to contact us.</p>
4/11/22	We are interested in having solar on our land as well. Please contact us.	Spoke with stakeholder on the phone. He expressed interest in leasing 5,000+ acres that he owns across the interstate for Solar development. This is unrelated to the Obed Meadow Solar Project. If Avangrid Renewables is interested, it would be considered for a future project.
5/3/22	Hi. My name is (REDACTED) I wasn't able to make the meeting. I was wondering if you could send me like an information packet. My address is (REDACTED). Or you can call me at (REDACTED). Thank you.	Applicant provided the individual an information packet sent via USPS.

Date	Comment	Response and/or Notes
9/5/22	<p>Hi, my name is (REDACTED) and I'm calling regarding your Obed Meadows project. We are the adjacent landowner and are selling some of our property that is located immediately east of and APS Cholla plant. And I just sent an e-mail to your generic e-mail address obedmeadowsolar@avangrid.com and with the details of the property that we are selling. And we believe that based on reports that we have seen that our land is adjacent to an APS substation that has already been approved for interconnection. So I would like to speak to the project manager or the deal maker who is in charge of land acquisition. We also have property that is adjacent to the (REDACTED) property that we believe you have under contract. I can be reached at area code (REDACTED), again, (REDACTED). Thank you.</p>	<p>Thank you for reaching out regarding your property. Our Project is located about four miles west of your property (see screenshot below) and we don't have any plans at this time to develop west of the Cholla power plant. Please let me know if you have any questions. (PROJECT LOCATION MAP)</p>
11/21/2022	<p>I have a house for rent and I wanted to know if you are looking for housing for workers. Thank you.</p>	<p>Thank you for reaching out regarding your house for rent. We will keep your contact information on file and will notify our contractors when we near construction activities. Thank you.</p>
4/11/2023	<p>Please ensure you bring food to the meeting. It will make community relationships much better.</p>	<p>Applicant provided food and drinks for the attendees of the public open house that was conducted the evening of April 24, 2023. Leftovers from the event were donated to the teachers of Joseph City Elementary School and delivery was coordinated following the close of the public open house meeting.</p>

J.1.2.2 Informational Mailings

The Applicant prepared 8.5" x 11" full-color flyers including a Project description, overview of permitting and development steps, a milestone schedule, contact information, opportunities to provide feedback, and information about either the virtual community meeting (Appendix J-1) or in-person community meeting (Appendix J-2) depending on the occasion.

The flyers were mailed to landowners within two miles of the Project. This area was marginally expanded to include all residences and businesses within Joseph City, the nearest community.

The mailing list also included key stakeholders, such as government officials, jurisdictions and agencies, and local community groups. The mailing list (Appendix J-3) was identical for each flyer mailed and included approximately 850 recipients.

The flyer in support of the virtual community meeting held April 12, 2022, was mailed on March 23, 2022. The flyer was delivered beginning on or around March 29, 2022.

The flyer in support of the in-person community meeting held April 24, 2023, was mailed on April 7, 2023. The flyer was delivered beginning on or around April 11, 2023.

J.1.2.3 Newspaper and Social Media Advertisements

The Applicant designed, produced, and coordinated the publication of black-and-white informational advertisements in The Tribune of Holbrook. Informational advertisements were published for two consecutive weeks in advance of the virtual community meeting, in-person community meeting, Navajo County SUP hearings, or Committee hearing, depending on the occasion.

Informational advertisements in support of the virtual community meeting held April 12, 2022, were published in the March 30, 2022, and April 6, 2022, editions of The Tribune of Holbrook (Appendix J-4).

Informational advertisements in support of the in-person community meeting held April 24, 2023, were published in the April 12, 2023, and intended to be published in the April 19, 2023 editions of The Tribune of Holbrook. Due to an error on part of the newspaper, the informational advertisement was not published in the April 19, 2023 edition of The Tribune of Holbrook. (Appendix J-5).

The Applicant also designed, produced, and published geotargeted social media advertisements on Facebook and Instagram redirecting to the Project website. Social media advertisements were scheduled to run for approximately two consecutive weeks in advance of the virtual community meeting or in-person community meeting depending on the occasion.

Social media advertisements in support of the virtual community meeting held April 12, 2022, were initially published on March 30, 2022, and ended on April 12, 2022 (Appendix J-6). The advertisement was viewed by 3,304 unique individuals, and engaged with (i.e., "liked," shared, or clicked) 270 times.

Social media advertisements in support of the in-person community meeting held April 24, 2023, were initially published on April 10, 2023 and ended on April 24, 2023 (Appendix J-7). The advertisement was viewed by 16,860 unique individuals. In total, social media advertisements were viewed by 20,164 unique individuals.

J.1.2.4 Virtual Community Meeting

The Applicant planned, scheduled, advertised, and executed a virtual community meeting utilizing Broadnet, a meeting facilitation platform that allows access via phone, internet, or a combination of both. The virtual community meeting consisted of a formal presentation outlining

the Project (Appendix J-8), followed by a question-and-answer session during which participants were enabled to ask their individual questions.

The Applicant sent an informational flyer, published newspaper advertisements, and published notifications on social media in advance of the virtual community meeting.

The virtual community meeting was held on April 12, 2022, from 6:00 P.M. to 6:45 P.M. 8 people attended. Three questions were asked, and responses were given for each question (Table J-5).

Table J-5. Project Virtual Community Meeting Questions and Responses

Comment	Response
<p>Will the project allow for cattle and wildlife grazing in the enclosure?</p>	<p>The facilities will be surrounded by a chain-link fence. This is not only for the protection of the assets, but also for security and safety reasons. Cattle are curious animals, and it would not be safe to have them near the panels or any electrical wiring associated with the facility. The entire facility will be fenced so livestock would not be allowed in the Project. That being said, we try to minimize the footprint of the facility in the lease area and any land outside of the Project can continue to be used as the landowner sees fit. Therefore, if that landowner is using it for grazing and it is outside of the chain-link fence, it can continue to be used for grazing.</p>
<p>Can you give the legal description of the properties involved in the project?</p>	<p>The Project legal description is in two Townships: Township 18 North, Range 18 East, Sections 24 and 25 Township 18 North, Range 19 East, Section 29.</p> <p>The Gen-Tie facility will run from the southern edge of Section 28 across Obed Road and then follow the existing APS line into the Cholla Power Plant.</p>
<p>Do any of the landowners live in the local area? If not there would not be any economic benefit for the area as all of the lease income would be going elsewhere.</p>	<p>The landowners live in Arizona, but not in the local area. The landowners have a lot of land in this area and employ a lot of people in this area. The landowner compensation will, at least indirectly, go back into the local area. The better benefit from an economic standpoint will likely come from the new permanent jobs as well as the temporary construction jobs and the influx of money into the local area. This will likely be a better economic benefit for the community as well as the tax revenues.</p>

J.1.2.5 Stakeholder Informational Mailing

The Applicant prepared 8.5" x 11" full-color flyers including a Project description, overview of permitting and development steps, a milestone schedule, contact information, opportunities to provide feedback, and Project website and dedicated email address.

The flyers were mailed to key stakeholders for Joseph City, Navajo County, and Arizona State government officials, jurisdictions, and agencies. The key stakeholder mailing list (Appendix J-9) included 36 recipients.

The flyer providing opportunity to provide feedback from key stakeholders was mailed May 30, 2023. The flyer was delivered beginning on or around June 2, 2023.

As of the date of this filing, June 23, 2023, no comments from key stakeholders have been received. Comments received, if any, and responses provided will be included in Table J-6.

Table J-6. Stakeholder Comments and Responses

Comment	Response

All stakeholder informational mailing supporting materials are presented in Appendix J-9.

J.1.2.6 In-Person Community Meeting

The Applicant planned, scheduled, advertised, and executed an in-person community meeting held at the Joseph City Elementary School in Joseph City, AZ on April 24, 2023 from 5:00 P.M. to 7:00 P.M. The community meeting was presented in an open-house format, allowing attendees to attend at their leisure, walk around the meeting room and review Project information, talk with Avangrid Project team representatives and provide feedback and comments, and have questions answered by Project subject matter experts on an individual basis. No formal presentation was given. Upon entering the meeting facility, attendees were asked to sign-in and were provided with a comment form, Project map figures, and a Project business card which contained website and contact information. The meeting room was setup with 10 poster boards (36"x48" each) for attendees to review including 1) Project Overview and Project Milestones Schedule, 2) Project Location, 3) Gen-Tie Line Project Location 4) About Avangrid Renewables, 5) Project Permitting Requirements, 6) Project Benefits, 7) Project Safety and Decommissioning, 8) Visual Simulation KOP #1 and map figure identifying locations of KOP's presented, 9) KOPs #2 and #3, and 10) KOPs #5 and #7. Project team members were available throughout the evening to address questions and concerns from the attendees.

The applicant mailed an informational flyer, published newspaper advertisements, updated Project website information, and published notifications on social media for a period of two weeks in advance of the in-person community meeting.

Attendees - There were a total of 18 people in attendance according to the sign-in sheet. There were also a few individuals who did not sign-in upon entering. The total amount of attendees was estimated to be 20, which included private property owners, and members of Joseph City

community organizations, as well as a candidate for Arizona State House of Representatives. The Project team included three Avangrid employees and one consultant from Tetra Tech. Two written comments were received, and responses were given for each comment (Table J-7). Examples of questions asked by the public and other topics of conversation included:

- Will the Project create any new permanent jobs?
- What is the timeline for the Project’s construction?
- How will the site be accessed?
- Who benefits from the power generated?
- Will you work with the local landowners as the Project progresses?
- Will there be any lighting of the facility?

Table J-7. Project In-Person Community Meeting Written Questions and Responses

Comment	Response
I'm the president of the Joseph City Chamber of Commerce. We would appreciate any information about upcoming jobs so that we can provide that information to our community. We would appreciate if you hire as many local contractors/workers as possible. Would also appreciate any more information regarding property tax. Please keep us updated.	The Applicant will provide Joseph City’s Chamber of Commerce information on job opportunities and property tax information. The Applicant will communicate the anticipated construction schedule, timing, and duration of construction to the Chamber of Commerce.
I would like to see the Environmental Impact Statement and be informed of the date of the local meeting on environmental issues which I was told would be in August. Will that information be on your Facebook or email? I understand you have a relationship with AZ Fish and Game and with State and County certifying agencies. My other concern is about employment opportunities and training opportunities for workers and youth in our local community over the current 40-year span of this project. Qualified management from outside and contract or otherwise people who already have skills will not feed our community.	The Applicant has provided the commenting individual the dates and location of the CEC hearing, scheduled for August 7 th through 11 th , 2023. The CEC hearing schedule and location is also provided on the Project’s website and proper notification of the hearing will be conducted by the Applicant prior to the hearing.

All supporting in-person community meeting materials are presented in Appendix J-10.

J.1.2.7 Special Use Permit Public Hearings

The Applicant submitted a SUP Application for the related Solar Facility to Navajo County on April 28, 2022. The application was considered by the Navajo County Planning and Zoning Commission at a duly noticed public hearing on July 21, 2022. The SUP was passed and

adopted by the Navajo County Board of Supervisors at a public hearing held on September 13, 2022.

J.1.2.8 Tribal Outreach

The Applicant initiated communications with Tribes on June 19, 2023, via letter requesting comments within 30 days. The letter was sent to representatives of the following eight tribes that might have an interest in the Project:

- Kaibab Band of the Paiute
- Navajo Nation
- Paiute Tribe of Utah
- San Carlos Apache Tribe
- White Mountain Apache Tribe
- Hopi Tribe
- Las Vegas Tribe of the Paiute
- Moa pa Band of the Paiute

As of the date of the filing, June 23, 2023, the Applicant has received no responses from the Tribes.

Tribal outreach informational mailing and mailing list are presented in Appendix J-11.

J.1.2.9 Arizona Game and Fish Department Consultation

The Applicant consulted with AZGFD and received correspondence from AZGFD on January 31, 2022 (Exhibit J). The AZGFD provided recommendations to conduct preconstruction surveys and monitoring as referenced in the AZGFD *Guidelines for Solar Development in Arizona* (AZGFD 2010). The AZGFD also recommended the Applicant conduct focused surveys for the Peebles Navajo Cactus and breeding burrowing owls. The Applicant will conduct the recommended surveys and adhere to the Guidelines for Solar Development in Arizona (AZGFD 2010). The Applicant will continue coordination with AZGFD as the Project develops.

J.1.2.10 Burlington Northern Sante Fe Railway

The Gen-Tie Line route will cross over a section of railroad owned by BNSF adjacent to the Cholla Substation. The location of the Gen-Tie Line route on the adjacent APS properties will be determined through coordination with APS upon receipt of the APS System Impact Study. The Applicant will contact the BNSF General Director of Right-of-Way and Real Estate Management and provide BNSF an application for a Wire Line Crossing Permit.

APPENDIX J-1
Virtual Community Meeting Informational Mailing

Obed Meadows Generation Tie Transmission Line Project



You're Invited to a Virtual Community Meeting

Virtual Community Meeting

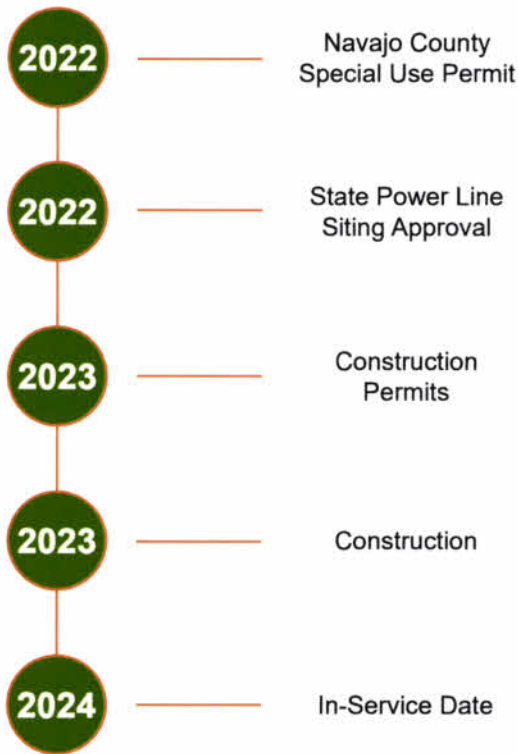
We will host a virtual community meeting to provide information about a planned generation-tie transmission line ("gen-tie line" or "Project") near Joseph City, Arizona. You have the option of joining via a web interface available on our Project website or by phone.

WHEN:	Tuesday, April 12, 2022 6:00pm - 7:00pm
JOIN BY WEB:	website.com
JOIN BY PHONE:	(303) 333-3333

Project team members will present information about the Project followed by a question-and-answer session. If you're unable to attend, a recording of the session as well as copies of materials will be posted on our website following the presentation.

If you'd like us to send you hard copies of the presentation materials in advance of the meeting, please contact us.

Milestone Schedule



Overview

The Project is a 4.3-mile 230-kilovolt gen-tie line running east from a planned solar power generation facility to Arizona Public Service's Cholla Substation. The Project will be constructed above ground and will be supported by steel monopole structures up to 100 feet in height.

The Project will be located on easements on private property about 1 mile south of Joseph City, and will connect a planned 200-megawatt (MW) solar power generation facility with an optional 200-MW battery energy storage system to the Arizona electrical grid.

Permitting

We are coordinating with jurisdictions and agencies to obtain permits for Project construction.

We are working with Navajo County to obtain a Special Use Permit (SUP). We are also working with the Arizona Corporation Commission's Transmission Line Siting Commission to obtain a Certificate of Environmental Compatibility (CEC).

Once we obtain the SUP and CEC, we will work with Navajo County to obtain necessary building permits. We plan to begin construction in 2023.

Questions or comments? We want to hear from you!
(303) 333-3333 | info@website.com | website.com

APPENDIX J-2
In-Person Community Meeting Informational Mailing

Obed Meadow Solar Project Community Meeting



This map is a graphic and may not show exact locations.

Overview

Avangrid Renewables will host a community meeting to provide information about a planned 2.5-mile generation tie electric transmission line associated with the Obed Meadow Solar Project (Project) near Joseph City, Arizona.

The Project is a planned 200-megawatt solar power generation facility and 2.5 mile 230-kilovolt generation tie line with an optional battery energy storage system and additional associated facilities near Joseph City, Arizona.

Construction is expected to begin in late 2024 and continue for about 12 months. The facility is expected to be in service by the end of 2025 and will have an operational lifespan of about 40 years.

Join Our Community Meeting

We invite you to join the Project team for a community meeting to learn more about the Project.

Monday, April 24 2023

5:00 to 7:00 p.m.

**Joseph City Elementary School
Cafeteria**

**8176 Westover Way
Joseph City, AZ 86032**

Can't make it? Please contact us for hard copies of the presentation materials!

Questions or comments? We want to hear from you!

602.384.2470 | obedmeadowsolar@avangrid.com | www.obedmeadowsolar.com



APPENDIX J-3
Informational Mailing List

Owner 1	Owner 2	Address 1	Address 2	City	State	ZIP
PALMER ALAN & VICKY (CPRS)		PO BOX 357		JOSEPH CITY	AZ	86032-0357
GC RICE M LLC		PO BOX 5		JOSEPH CITY	AZ	86032-0005
SERNA ORLANDO		PO BOX 295		JOSEPH CITY	AZ	86032-0295
STANDIFORD ROBERT C & JUDIA JT		PO BOX 71		JOSEPH CITY	AZ	86032
ROGERS MILFORD D & JENNIFER L (JT)		PO BOX 479		JOSEPH CITY	AZ	86032-0479
RANDALL DOYLE S & JACQUELINE (JT)		PO BOX 1458		SAINT JOHNS	AZ	85936
GREENTREE INVESTORS LLC		1933 E VIEW POINT DR		SAINT JOHNS	UT	84790-6366
BUSHMAN ANDREW K & REBECCA N (CPRS)		PO BOX 96		JOSEPH CITY	AZ	86032-0096
PENROD JOHNNY C & SHIRLEY A JT		2909 E FLOWER ST		GILBERT	AZ	85298-5752
MILLER TONY J (BD)		PO BOX 653		JOSEPH CITY	AZ	86032-0653
GC RICE RL4 LLC		PO BOX 5		JOSEPH CITY	AZ	86032-0005
AVION IRREVOCABLE TRUST		PO BOX 132		JOSEPH CITY	AZ	86032-0132
LENTS JAMES E & ANA E (CPRS)		PO BOX 328		JOSEPH CITY	AZ	86032-0328
MILLER JEREMY & JENNIE (JT) MILLER NELSON & KAREN		PO BOX 318		JOSEPH CITY	AZ	86032-0318
POWERS PATRICK & MEGAN D (CPRS)		PO BOX 722		JOSEPH CITY	AZ	86032-0722
WARNER JUSTINE & WILLIAM L (CPRS)		8105 S HANSEN AVE		JOSEPH CITY	AZ	86032
NAVAJO COUNTY		PO BOX 668		HOLBROOK	AZ	86025-0668
CLIFFORD JULIE H		PO BOX 111		JOSEPH CITY	AZ	86032-0111
HUNT FAMILY TRUST		PO BOX 42		JOSEPH CITY	AZ	86032-0042
ROBERSON WILLIAM R & RHONDA L		PO BOX 467		JOSEPH CITY	AZ	86032-0467
MIDWAY JC LLC		PO BOX 5		JOSEPH CITY	AZ	86032-0005
US BANK		55 BEATTIE PL STE 110		GREENVILLE	SC	29601-5115
CHAMBER OF COMMERCE (JOSEPH CITY)		PO BOX 36		JOSEPH CITY	AZ	86032
FULLMER JAMES S & ASHLEY N (JT)		PO BOX 13		JOSEPH CITY	AZ	86032-0013
ROGERS AARON M		PO BOX 185		JOSEPH CITY	AZ	86032-0185
NEFF RONALD & MARTI (JT)	C/O MYRA A ROGERS	3349 N WALKER ST		FLAGSTAFF	AZ	86004-2029
GARRIDO PEDRO & DONDY S JT		PO BOX 415		JOSEPH CITY	AZ	86032-0415
FRALEY RICHARD D & CAROLYN S CPRS		PO BOX 299		JOSEPH CITY	AZ	86032-0299
SHELLEY CURTIS K & DIANA L		PO BOX 464		JOSEPH CITY	AZ	86032-0464
FISH LAZELLE V & JUNE (JT)		PO BOX 433		JOSEPH CITY	AZ	86032-0433
LOVES TRAVEL STOPS & COUNTRY STORES INC		15 W 6TH ST STE 2400		TULSA	OK	74119-5417
MILLER SARAH M TRUSTEE HANSEN ROSS FAMILY TRUST		PO BOX 55		JOSEPH CITY	AZ	86032-0055
MCLAUGHLIN KELLY		PO BOX 349		JOSEPH CITY	AZ	86032-0349
HANSEN GARY & RUTH (CPRS)		PO BOX 502		JOSEPH CITY	AZ	86032-0502
NICHOLS MICHAEL G & MILDRED E (CPRS)		PO BOX 118		JOSEPH CITY	AZ	86032-0118
FARNES C MITCHELL & SARAH A (CPRS)		PO BOX 319		JOSEPH CITY	AZ	86032-0319
JOSEPH CITY SANITARY DISTRICT		GENERAL DELIVERY		JOSEPH CITY	AZ	86032-9999
HALBISON JAMES C		PO BOX 516		JOSEPH CITY	AZ	86032-0516
RICE CAROLYN PORTER TRUSTEE		PO BOX 5		JOSEPH CITY	AZ	86032-0005
COLLIGAN BRIAN & DREW J		PO BOX 437		JOSEPH CITY	AZ	86032-0437
BUSHMAN VIRGIL A JR & KARILYN S TRUSTEES		PO BOX 28		JOSEPH CITY	AZ	86032-0028
PARRISH STEPHEN L		PO BOX 612		JOSEPH CITY	AZ	86032-0612
ROGERS DALE F & DOROTHY A DE JESUS YVETTE T (ALL JT)		PO BOX 194		JOSEPH CITY	AZ	86032-0194
HANSEN GALE E & ANNAS S (CPRS)		PO BOX 220		JOSEPH CITY	AZ	86032-0220
SAMBRANO PETER P & AMALIA (JT)		PO BOX 112		JOSEPH CITY	AZ	86032-0112
KENNEDY HEATHER		PO BOX 514		JOSEPH CITY	AZ	86032-0514
WREN JERRY A & PATRICIA L (JT)		PO BOX 397		JOSEPH CITY	AZ	86032-0397
KUHSE DEV		PO BOX 2		JOSEPH CITY	AZ	86032-0002
BALOO RAYMOND & MARLETHA (CPRS)		PO BOX 657		JOSEPH CITY	AZ	86032-0657
NAEVE THOMAS A & ELLEN L (JT)		PO BOX 613		JOSEPH CITY	AZ	86032-0613
MILLER J LAYNE & TAMZYN		PO BOX 177		JOSEPH CITY	AZ	86032-0177
GC RICE M LLC		PO BOX 5		JOSEPH CITY	AZ	86032-0005
DOBELL PAUL S		PO BOX 527		JOSEPH CITY	AZ	86032-0527
TURLEY RICHARD J & SUSAN L (CPRS)		PO BOX 549		JOSEPH CITY	AZ	86032-0549
ROY RICHARD D & CARA-LYNN E (JT)		2087 N CORONADO CT		CASA GRANDE	AZ	85122-6328
VAN HEMERT ROLAND J & MARY K (CPRS) (BD)		PO BOX 465		JOSEPH CITY	AZ	86032-0465
TUCKFIELD CHRISTINE D		PO BOX 7		JOSEPH CITY	AZ	86032-0007
AZTEC EAST JEFFERS LLC		4647 N 32ND ST # 240		PHOENIX	AZ	85018-3347

BALDWIN KENT L & JULIE A (CPRS)	490 N 1ST AVE	THATCHER	AZ	85552-5429
DOWNES DEREK C & JANELLE C (CPRS)	1380 HILLSIDE DR	SNOWFLAKE	AZ	85937-5608
BRAY DALE & KAREN CPRS	PO BOX 393	JOSEPH CITY	AZ	86032-0393
RUDISILL DONALD E & BARBARA J (TRUST)	PO BOX 64	JOSEPH CITY	AZ	86032
REYNOLDS LEROY E & JOYCE (JT)	PO BOX 122	JOSEPH CITY	AZ	86032-0122
FARR NEAL & STEPHANIE	PO BOX 70	JOSEPH CITY	AZ	86032-0070
JOSEPH CITY FIRE DEPARTMENT JOSEPH CITY VOLUNTEER FIRE DEF	PO BOX 72	JOSEPH CITY	AZ	86032-0072
PALMER ALAN J & VICKY K (CPRS)	PO BOX 357	JOSEPH CITY	AZ	86032-0357
MONTROYA BERNARDO & JILL M CPRS	PO BOX 576	JOSEPH CITY	AZ	86032-0576
JOHNSON DALE M JOHNSON BRITTANY JT	PO BOX 536	JOSEPH CITY	AZ	86032-0536
BAIRD BRANTLEY TRUSTEE	PO BOX 224	JOSEPH CITY	AZ	86032-0224
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	86032-0096
JOSEPH CITY UTILITIES	PO BOX 147	JOSEPH CITY	AZ	86032-0147
ARIZONA PUBLIC SERVICE	PO BOX 53999 MS 9565	PHOENIX	AZ	85072-3940
PIERCE LEROY & DORA (JT)	PO BOX 242	JOSEPH CITY	AZ	86032-0242
RIGHI JOHN M	PO BOX 161	JOSEPH CITY	AZ	86032-0161
ROBERSON WILLIAM R & RHONDA L	PO BOX 467	JOSEPH CITY	AZ	86032-0467
HANCOCK GENE & DIANE (CPRS)	1433 FRENCH RD	WINSLOW	AZ	86047-2879
ROBERSON WILLIAM R & RHONDA L CPRS	PO BOX 467	JOSEPH CITY	AZ	86032
CHOLLA MOBILE HOME PARK LLC	PO BOX 182	SAN CLEMENTE	CA	92074-0182
HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
NEAL THOMAS R & KATHRYN	501 W IOWA ST	HOLBROOK	AZ	86025-2439
HARRIS DONNA K	PO BOX 266	JOSEPH CITY	AZ	86032-0266
PETERSEN BARY & SHARON	PO BOX 547	JOSEPH CITY	AZ	86032-0108
ROGERS DON K	PO BOX 519	JOSEPH CITY	AZ	86032-0519
S & F INVESTMENT LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240
JOHNSTUN SAMUEL JAMES & DANA LYN (JT)	PO BOX 384	JOSEPH CITY	AZ	86032
HANSEN DOYLE L & SONIA H TRUST	PO BOX 66	JOSEPH CITY	AZ	86032-0066
INTERNATIONAL CHURCH OF FOURSQUARE GOSPEL	1910 W SUNSET BLVD #200	LOS ANGELES	CA	90026
TOLAND GARY & KARAN JT	3245 BYER RD	BYRON	CA	94514-1505
ROGERS GEORGE C & SUE ANN JT	PO BOX 336	JOSEPH CITY	AZ	86032-0336
PEN-ROB INC	PO BOX 1450	CHICAGO	IL	60690-1450
HANSENS AUTO LLC	PO BOX 206	JOSEPH CITY	AZ	86032-0206
INGUZ CORPORATION JAMES JACKSON	809 W RIORDAN RD STE 100 # 168	FLAGSTAFF	AZ	86001-0810
BEVAN W & FAYE E HENRIE FAMILY TRUST BEVAN & FAYE HENRIE T	PO BOX 294	JOSEPH CITY	AZ	86032
FISH GLENN V	PO BOX 215	JOSEPH CITY	AZ	86032-0215
PETERSEN SHARON	PO BOX 547	JOSEPH CITY	AZ	86032-0108
MILLER TYSON H & ANDREA S (CPRS)	PO BOX 601	JOSEPH CITY	AZ	86032-0601
JOSEPH CITY SCHOOL DISTRICT #2	PO BOX 8	JOSEPH CITY	AZ	86032-0008
BROWNSTONE REMODEL & DESIGN LLC	501 W IOWA ST	HOLBROOK	AZ	86025-2439
O'CONNELL RYAN	PO BOX 379	JOSEPH CITY	AZ	86032-0379
ROBERSON WALLACE JR & LUCY TRUST	1320 W BUFFALO	HOLBROOK	AZ	86025
HUNT RYAN L & ERICKA L CPRS	PO BOX 330	JOSEPH CITY	AZ	86032-0330
ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	86032-0324
S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240
BUSHMAN RALPH E & JANET L TRUSTEES	PO BOX 926	JOSEPH CITY	AZ	85936-0926
ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	86032-0324
ROBERSON WILLIAM & RHONDA (JT)	PO BOX 467	JOSEPH CITY	AZ	86032-0467
HADDOX RONALD M	PO BOX 260	JOSEPH CITY	AZ	86032-0260
O'CONNELL RYAN	PO BOX 379	JOSEPH CITY	AZ	86032-0379
TAYLOR TERRANCE W & LORRAINE M JT	PO BOX 254	JOSEPH CITY	AZ	86032
LEE IVIN C & LAPRILL T	PO BOX 173	JOSEPH CITY	AZ	86032-0173
CRABTREE BUDDY E & KIMBERLY K	25 J R DR	LINCOLN	ME	04457-1104
BAKER JERRY O	128 PAYSEE ST	BUHL	ID	83316-1316
FIELDS ESTHER J	PO BOX 701	JOSEPH CITY	AZ	86032-0701
WARNER JOSHUA J SHAW KAITLYN R CPRS	PO BOX 461	JOSEPH CITY	AZ	86032-0461
PALMER ALAN J & VICKY K CPRS	PO BOX 357	JOSEPH CITY	AZ	86032-0357
SMITH JOSEPH & DEANNE JT	PO BOX 175	JOSEPH CITY	AZ	86032-0175

ARIZONA STATE OF	PO BOX 668	AZ	86025-0668
BLEAK DANIEL R & AUDRIAN D (CPRS)	614 E BAKER DR	AZ	85140-4354
MILLER JACK K	PO BOX 127	AZ	86032-0127
MILLER ERIC J & AMY D CPRS	PO BOX 430	AZ	86032-0430
FLORENCE 80 LLC	115 S 48TH ST	AZ	85281-2312
NEAL THOMAS R & KATHRYN A	PO BOX 219	AZ	86032-0219
OLIVER JEFF & DENISE (CPRS)	PO BOX 255	AZ	86032-0255
WEBSTER SAMUEL T & LEOLA M CPRS	PO BOX 36	AZ	86032
PETERSON THOMAS & SANDRA CPRS	PO BOX 581	AZ	86032-0581
HENDRICKS JASON & KOURTNEY JT	PO BOX 219	AZ	86032-0219
STATES JOHN W & JOAN C TRUSTEES	22330 E DESERT SPOON DR	AZ	85142-1234
GOODMAN-HENRY MARLENE	PO BOX 2031	AZ	86032-2031
NELSON SAMUEL & ALEXIA (JT)	PO BOX 317	AZ	86032-0317
HANSEN GALE & ANNA (CPRS)	PO BOX 220	AZ	86032-0220
HANSEN GALE & ANNA (CPRS)	854 N 6TH AVE	AZ	86025-2416
HANSEN GALE & ANNA (CPRS)	PO BOX 220	AZ	86032-0220
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	AZ	85018-3347
NEAL THOMAS R & KATHRYN S TRUSTEES	294 N VALLEY RD	AZ	85541-3888
RANDALL DOYLES & JACQUELINE	PO BOX 1458	AZ	85936-1458
RUDISILL DONALD E & BARBARA J (TRUST)	PO BOX 64	AZ	86032
BRATT RICHARD N & MARY ANN (JT)	2120 EASY ST	AZ	86047
JOSEPH CITY SANITATION DISTRICT	PO BOX 147	AZ	86032
PERKINS JACKSON D & FRANCES M (JT)	46216 N BLACK CANYON HWY	AZ	85087-7029
TUCKFIELD CHRISTINE DOBELL	PO BOX 7	AZ	86032-0007
YOUNG BRENT RYALL DEBBIE (JT)	337 BREEZY RD	AZ	86301-6586
S & F INVESTMENTS LLC	PO BOX A	AZ	86032-0240
BEGAY MILES	PO BOX 3627	AZ	86031-3627
SHAFF CAROL A TRUSTEE	PO BOX 309	AZ	86032-0309
TOUHIDI MEHDI & DONNA (JT)	PO BOX 2236	NJ	07010-6236
BITSOIE RAYMOND & SUSIE (JT)	7217 W IRWIN AVE	AZ	85339-7040
BAIRD THOMAS OTIS & STORMY NIGHT	PO BOX 1449	AZ	85532
BUSHMAN ANDREW & REBECCA	PO BOX 96	AZ	86032-0096
LEGG DAVID R	PO BOX 533	AZ	86032-0533
BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	AZ	86032-0096
JOHNSON DALE MJOHNSON BRITTANY JT	PO BOX 536	AZ	86032-0536
LEE FRANCES VICTORY	PO BOX 542	AZ	86032-0542
ROBERSON WILLIAM R & RHONDA L JT	PO BOX 467	AZ	86032
CHURCH OF JESUS CHRIST OF LDS.	50 EAST NORTH TEMPLE RM 2225	UT	84150-0022
ACME LUMBER COMPANY	419 WASHINGTON ST	CA	95060-4325
ACME LUMBER COMPANY	419 WASHINGTON ST	CA	95060-4325
FIELDS BRYAN J & JULIE A JT	PO BOX 416	AZ	86032-0416
BROWNING ALBERT O	PO BOX 404	AZ	86032-0404
YARRISON IRENE L	PO BOX 297	AZ	86032-0297
TUCKFIELD NORMA	PO BOX 157	AZ	86032-0157
DAVIS JULIANNADAVIS DARLENE J (JT)	PO BOX 583	AZ	86032-0583
BLOSSER RONNIE G JR	PO BOX 214	AZ	86032-0214
FOUNTAIN RODNEY W & CAROLYN J (JT)	PO BOX 145	AZ	86032-0145
DREAMCATCHER LLC	PO BOX 627	AZ	86032-0627
TARANTO ALLISON B	5745 GIRLS RANCH RD	AZ	86004-5477
NEFF RONALD H & MARTI G JT	3349 N WALKER ST	AZ	86004-2029
POGUE PATRICIA	PO BOX 3	AZ	86032-0003
BIELEFELD DANIEL & JAQUELYN (CPRS)	PO BOX 313	AZ	86032-0313
BUSHMAN KAREN M TRUSTEE	PO BOX 92	AZ	86032-0092
SMITH ANTHONY J & TIFFANY C (CPRS)	PO BOX 778	AZ	86032-0778
FUENTES CHARLES H & EVELYN R (JT)	PO BOX 523	AZ	86032-0523
COPELAND DANA J	801 N WILLIAMSON AVE	AZ	86047-3734
KISSLING MERLE J & BEVERLY	PO BOX F	AZ	86032-0226
BLEAK DANIEL R & AUDRIAN D (CPRS)	614 E BAKER DR	AZ	85140-4354
SMITH JOSEPH & DEANNE (CPRS)	PO BOX 175	AZ	86032-0175

DON FISCHER

C/O JOHN HORAK

TAX ADM DIV 509-8882

ROGERS ARLIN T & BONNIE	1041 JOLLY RD	WINSLOW	AZ	86047-8715
WESTOVER RUSTY & IVETTE (CPRS)	PO BOX 449	JOSEPH CITY	AZ	86032-0449
SOLOMON DELVIN H & EVELYN CPRS	PO BOX 314	JOSEPH CITY	AZ	86032-0314
JOHNSTON SAMUEL A & TERRY D (JT)	BOX 454	JOSEPH CITY	AZ	86032
HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032
MILLET DONALD G & DONNA S JTBAKER JERRY O	128 PAYSEE ST	BUHL	ID	83316-1316
GARDNER GEORGE A & MIKAL (CPRS)	PO BOX 441	JOSEPH CITY	AZ	86032-0441
GARDNER BRIAN & LYDIA J CPRS	PO BOX 441	JOSEPH CITY	AZ	86032-0441
THREAD ELLA P	PO BOX 398	JOSEPH CITY	AZ	86032-0398
SHAFF CAROL A TRUSTEE	PO BOX 309	JOSEPH CITY	AZ	86032-0309
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86023-0502
MARTINEAU ROBERT & KAREN	PO BOX 213	JOSEPH CITY	AZ	86032-0213
LARSEN JAN U & KATHERINE (JT)	9838 N 101ST AVE	SUN CITY	AZ	85351-4544
SPIROS KENT T & RACHEL P (CPRS)	PO BOX 347	JOSEPH CITY	AZ	86032-0347
S & F INVESTMENT LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240
NEAL THOMAS R & KATHRYN S TRUSTEES	294 N VALLEY RD	PAYSON	AZ	85541-3888
REYNOLDS RUSSEL R & KUHSE DEV	PO BOX 2	JOSEPH CITY	AZ	86032-0002
BALDWIN LARRY E & AVA R (CPRS)	PO BOX 774	JOSEPH CITY	AZ	86032-0774
SHIRLEY NATALIE R FAMILY TRUST	1046 LOVELL AVE	CAMPBELL	CA	95008-5916
TEIGH MICHAEL R JR	751 N 3RD ST	HOLBROOK	AZ	86025-2707
FIELDS BRYAN & JULIE JT	PO BOX 416	JOSEPH CITY	AZ	86032-0416
PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 496	JOSEPH CITY	AZ	86032-0496
SPURLOCK ROBERT H & LORRAINE M (CPRS)	PO BOX 12	JOSEPH CITY	AZ	86032-0012
DESPAIN LX RANCH LLC	PO BOX 104	JOSEPH CITY	AZ	86032-0104
POGUE PATRICIA	PO BOX 3	JOSEPH CITY	AZ	86032-0003
WOFFORD JASON B & STEPHANIE M CPRS	PO BOX 718	JOSEPH CITY	AZ	86032-0718
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
DISPAIN SANDRA K & RUSSELL J	PO BOX 520	JOSEPH CITY	AZ	86032-0520
KOR LINDA	PO BOX 671	JOSEPH CITY	AZ	86032-0671
WARREN WANDA C	PO BOX 436	JOSEPH CITY	AZ	86032-0436
ROGERS GEORGE C & SUE ANN JT	PO BOX 336	JOSEPH CITY	AZ	86032-0336
ESTHERS DINER LLC	PO BOX 496	JOSEPH CITY	AZ	86032-0496
FISH TIMOTHY C & DESIREE CPRS	PO BOX 5	JOSEPH CITY	AZ	86032-0005
KUHSE DEV	PO BOX 2	JOSEPH CITY	AZ	86032-0002
COMBS DARCY	PO BOX 268	JOSEPH CITY	AZ	86032-0268
BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	86032-0096
HENDRICKS JASON & KOURTNEY CPRS	PO BOX 219	JOSEPH CITY	AZ	86032
DECROSS KIMBERLY D	PO BOX 35	JOSEPH CITY	AZ	86032-0035
ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	95060-4325
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
WOODY ANDREW & YAZZIE ERICA B (CPRS)	PO BOX 674	JOSEPH CITY	AZ	86032-0674
HANSEN CLINT L & RACHELLE L CPRS	PO BOX 566	JOSEPH CITY	AZ	86032
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
HANSEN RICHARD W & JANET CPRS	PO BOX 535	JOSEPH CITY	AZ	86032-0535
HANSEN DOYLE L & SONIA TRUSTEES	PO BOX 66	JOSEPH CITY	AZ	86032
SAGAN LOUIS	8919 E ALBANY ST	MESA	AZ	85207-8727
SHAW CLIFFORD B	PO BOX 303	JOSEPH CITY	AZ	86032-0303
JOHNSON VERNON WAYNE & IDON (JT)	PO BOX 282	JOSEPH CITY	AZ	86032
LARSON PETER & PERIA (CPRS)	PO BOX 33	JOSEPH CITY	AZ	86032-0033
WOODY ANDREW & YAZZIE ERICA B (CPRS)	PO BOX 674	JOSEPH CITY	AZ	86032-0674
GC RICE 3N LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
HANSENS AUTO LLC	PO BOX 206	JOSEPH CITY	AZ	86032-0206
THOMAS AARON P II & GABRIELLE A (CPRS)	611 WASHINGTON ST	WINSLOW	AZ	86047-4248
TANNER RONALD C	PO BOX 761	JOSEPH CITY	AZ	86032-0761
BALDWIN LANCE & LYNETTE CPRS	PO BOX 133	JOSEPH CITY	AZ	86032-0133
SPURLOCK ROBERT H & LORRAINE M (CPRS)	PO BOX 12	JOSEPH CITY	AZ	86032-0012
FISH GLENN V	PO BOX 215	JOSEPH CITY	AZ	86032-0215
SMITH JIM D & GAYLA JO (CPRS)	PO BOX 521	JOSEPH CITY	AZ	86032-0521

C/O MANDIE SHAW

WESTOVER MATTHEW & AMANDA L (CPRS)	1147 W LOBO TRL	SNOWFLAKE	AZ	859375465
GC RICE A LLC	PO BOX 5	JOSEPH CITY	AZ	86037-0005
HUBBARD MERMA (TRUSTEE)	PO BOX 664	JOSEPH CITY	AZ	86037-0664
NFB PROPERTIES LLC	PO BOX 156	TAYLOR	AZ	85939-0156
MOSIER DONALD R & KAREN N JT	PO BOX 124	JOSEPH CITY	AZ	86037-0124
FUENTES EVELYN R	PO BOX 523	JOSEPH CITY	AZ	86037-0523
POUDRIER TIMOTHY D & LILLIAN D (CPRS)	PO BOX 623	JOSEPH CITY	AZ	86032
RANDALL DOYLE S & JACQUELINE A (JT)	PO BOX 1458	SAINT JOHNS	AZ	85936
YOUNG JOHN D JR & CLAIRE S (JT)	BOX 234	JOSEPH CITY	AZ	86032
FULLER JAYNE 25% WATKINS LEE ANN 25% RANDALL ROGER 25% F	937 E LINDA LN	GILBERT	AZ	85234-5904
HANSEN GALE E & ANNA S (JT)	PO BOX 220	JOSEPH CITY	AZ	86037-0220
MCLAUGHLIN KELLY & JILL L CPRS	PO BOX 349	JOSEPH CITY	AZ	86037-0349
THOMAS STEVEN HOWARD & LEAH DIANA (JT)	1600 SMITHSON DR	HOLBROOK	AZ	86025-1918
REYNOLDS MARK A & LORI E (JT)	PO BOX 313	JOSEPH CITY	AZ	86037-0313
JOSEPH CITY SEWER SYSTEM	GENERAL DELIVERY	JOSEPH CITY	AZ	86037-9999
ROGERS ORSON W	PO BOX 25	JOSEPH CITY	AZ	86037-0025
ROGERS DALE F & DOROTHY A	PO BOX 194	JOSEPH CITY	AZ	86037-0194
DESKINS RAYMOND E & DIXIE D (CPRS)	114 E PARK AVE	GILBERT	AZ	85234-5713
ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	86037-0324
LARGO-BEGAY LORETTA	PO BOX 427	JOSEPH CITY	AZ	86037-0427
FISH RUSSELL B & AMBER S TRUSTEES	PO BOX 482	JOSEPH CITY	AZ	86037-0448
ROGERS GEORGE & SUE ANN TRUSTEES	PO BOX 336	JOSEPH CITY	AZ	86032
HANSEN MICHAEL S & BRITTANY E	PO BOX 491	JOSEPH CITY	AZ	86037-0491
BROKAW RAE D	PO BOX 448	JOSEPH CITY	AZ	86037-0448
GONZALES LEO JR & AMBER (CPRS)	PO BOX D	JOSEPH CITY	AZ	86037-0015
FLAKE DAYTON & SARA E (JT)	PO BOX 511	JOSEPH CITY	AZ	86037-0511
BALDWIN LIVING TRUST	PO BOX 33	JOSEPH CITY	AZ	86037-0033
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86037-0502
JOSEPH CITY SCHOOL DISTRICT #2	PO BOX 8	JOSEPH CITY	AZ	86037-0008
HENDRICKS JASON & KOURTNEY (CPRS)	PO BOX 219	JOSEPH CITY	AZ	86037-0219
BAKER NANCY L ESTATE	202 W IOWA ST	HOLBROOK	AZ	86025-2559
ROGERS ROSS W & MYRA A JT	PO BOX 185	JOSEPH CITY	AZ	86037-0185
PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 496	JOSEPH CITY	AZ	86037-0496
ROBERSON WALLACE JR & LUCY TRUST	1320 W BUFFALO	HOLBROOK	AZ	86025
ORTEGA ISMAEL F & ESTHER D (CPRS)	PO BOX 98	JOSEPH CITY	AZ	86032
DESPAINS LX RANCH LLC/O JR DESPAIN	PO BOX 104	JOSEPH CITY	AZ	86037-0104
PRICE BOB	PO BOX 602	JOSEPH CITY	AZ	86037-0602
ROBERSON WILLIAM & RHONDA (JT)	PO BOX 467	JOSEPH CITY	AZ	86037-0467
HANSEN CLINT L & RACHELLE L	PO BOX 566	JOSEPH CITY	AZ	86037-0566
NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86037-0613
MCLAWS DELROY W & PAMELA ALL JT	PO BOX 551	JOSEPH CITY	AZ	86037-0551
SEMAS JO ANN & JOHN III TRUSTEES	1554 LUTINA DR	ALAMO	CA	94507-1013
THOMPSON RICHARD JAY	PO BOX 251	JOSEPH CITY	AZ	86037-0251
ZABADAL JOSEPH M & MARCI A (CPRS)	PO BOX 656	JOSEPH CITY	AZ	86037-0656
MCGRAW JERRY J & DOLORES	PO BOX 211	JOSEPH CITY	AZ	86037-0211
BROOKS BRIAN P & LAURA M (CPRS)	PO BOX 382	JOSEPH CITY	AZ	86032
NEAL FAMILY LIMITED PARTNERSHIP	294 N VALLEY RD	PAYSON	AZ	85541
BERGE RACHEL	PO BOX 279	JOSEPH CITY	AZ	86037-0279
RANDALL DOYLE S & JACQUELINE A JT	PO BOX 1458	SAINT JOHNS	AZ	85936
ORTEGA ISMAEL F & ESTHER D (CPRS)	PO BOX 98	JOSEPH CITY	AZ	86032
BUSHMAN ALLEN J & TERRI D	1011 DUSTY LN	SHOW LOW	AZ	85901-3923
SATKO JOSHUA P & BRITTNEY D (CPRS)	PO BOX 374	JOSEPH CITY	AZ	86037-0374
BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	86037-0096
PETERSEN BARY K & SHARON	PO BOX 547	JOSEPH CITY	AZ	86037-0108
NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86037-0613
MCLAUGHLIN KELLY D & JILL L CPRS	PO BOX 349	JOSEPH CITY	AZ	86032
ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	95060-4325
ELDRIDGE DANIEL A & BEVERLY J TRUSTEES	PO BOX 428	GRAPELAND	TX	75844-0428
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86037-0502

C/O KEITH GROSS

EDWARDS JAMES D & JERI D (CPRS)	PO BOX 407	JOSEPH CITY	AZ	86032-0407
UNITED STATES POSTAL SERVICE	8055 E TUFTS AVE STE 400	DENVER	CO	80237-2755
PALMER ALAN & VICKY (CPRS)	PO BOX 357	JOSEPH CITY	AZ	86032-0357
MILLER J LAYNE & TAMZYN	PO BOX 177	JOSEPH CITY	AZ	86032-0177
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
RUSH DAVID W & KAY H (JT)	PO BOX 532	JOSEPH CITY	AZ	86032-0532
LAZY BAR CATTLE COMPANY LLC	PO BOX 219	JOSEPH CITY	AZ	86032-0219
FRALRY RICHARD DWIGHT & CAROLYN SUE JT	PO BOX 299	JOSEPH CITY	AZ	86032
ROGERS DIANA EROGERS M DALE (JT)	PO BOX 832	JOSEPH CITY	AZ	86032-0832
NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86032-0613
PUGH ROBERT M & TONNIE R (JT)	PO BOX 296	JOSEPH CITY	AZ	86032-0296
KING WILLIAM & DIANA CPRS	PO BOX 56	JOSEPH CITY	AZ	86032-0056
CORONADO JOSEPH JMAXWELL TORI C (JT)	8176 TROTTER AVE	JOSEPH CITY	AZ	86032
WENGER RACHEL T (BERGE)	PO BOX 279	JOSEPH CITY	AZ	86032-0279
FESPERMAN SUSAN	1055 OAK TREE RD	SEQUIN	TX	78155-8919
JOSEPH CITY CEMETERY CORP	PO BOX 540	JOSEPH CITY	AZ	86032-0540
GC RICE RL4 LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
BALDWIN LANCE S & LYNETTE	PO BOX 133	JOSEPH CITY	AZ	86032-0133
GRIFFIN SHAWN M & TAMMY L (CPRS)	408 SE ST	MAIDEN	IL	61337
FIELDS BRYAN JACOB & JULIE ANN	PO BOX 416	JOSEPH CITY	AZ	86032-0416
BALDWIN PERRY L & CAROL A TRUSTEES	PO BOX 33	JOSEPH CITY	AZ	86032-0033
JOHNSTUN SAMUEL A & TERRY D (JT)	BOX 454	JOSEPH CITY	AZ	86032
ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	95060-4325
ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	95060-4325
WHEN JERRY A & PATRICIA L (JT)	PO BOX 397	JOSEPH CITY	AZ	86032-0397
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
MCLAUGHLIN BRANDON E	PO BOX 349	JOSEPH CITY	AZ	86032-0349
JAFEEK JULIA ASHRUM BRIAN TRUSTEES	PO BOX 326	JOSEPH CITY	AZ	86032-0326
JAQUEZ ROSE LEE	PO BOX 123	JOSEPH CITY	AZ	86032-0123
WESTOVER MARLENE	PO BOX 171	JOSEPH CITY	AZ	86032-0171
MILLER NELSON H & KAREN H	PO BOX 233	JOSEPH CITY	AZ	86032-0233
DOWNES SANDY C & JEANIE CPRS	PO BOX 631	JOSEPH CITY	AZ	86032
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
BUSHMAN JEFFREY A & WENDY E TRUSTEES	7100 W DEVONWOOD DR	BOISE	ID	83714-5132
FLAKE KARSTEN & KELLIE (CPRS)	PO BOX 459	JOSEPH CITY	AZ	86032-0459
SANCHEZ MARIO E	1450 ALVARADO DR	COLORADO SPRINGS	CO	80910-1602
HARRISON ANABELLE	PO BOX 244	JOSEPH CITY	AZ	86032-0244
KUHSE DEV	PO BOX 2	JOSEPH CITY	AZ	86032-0002
SHAW SUSAN K	PO BOX 496	JOSEPH CITY	AZ	86032-0496
PEN-ROB INC	PO BOX 329	JOSEPH CITY	AZ	86032-0329
FLAKE KARSTEN & KELLIE (CPRS)	PO BOX 1450	CHICAGO	IL	60690-1450
HULSEY RW & LINDA J CPRS	PO BOX 459	JOSEPH CITY	AZ	86032-0459
WILBANKS WILLIAM A & DOMINIQUE JT	PO BOX 126	JOSEPH CITY	AZ	86032-0126
BUSHMAN ANDREW K & REBECCA A (CPRS)	PO BOX 307	JOSEPH CITY	AZ	86032
RAYLINE INSTALLATIONS INC	PO BOX 96	JOSEPH CITY	AZ	86032-0096
RIDGWAY ADAM	PO BOX 219	JOSEPH CITY	AZ	86032-0219
GALLUCCI PAUL	PO BOX 723	JOSEPH CITY	AZ	86032-0723
LEE IVIN C & LAPRILL TLEE BO DREE ALL JT	8195 WESTOVER ST	JOSEPH CITY	AZ	86032-0723
ZABADAL JOSEPH M & MARCI A (CPRS)	PO BOX 173	JOSEPH CITY	AZ	86032-0173
WILLIAMS W FLOYD & CHRISTINE E CPRS	PO BOX 656	JOSEPH CITY	AZ	86032-0656
GC RICE A LLC	PO BOX 470	JOSEPH CITY	AZ	86032
RANDES DEREK & AMBER C (CPRS)	PO BOX 5	JOSEPH CITY	AZ	86032-0005
AZTEC EAST JEFFERS LLC	PO BOX 360	JOSEPH CITY	AZ	86032-0360
ROGERS DON K & EILEEN D CPRS	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
MCTRIBE PROPERTIES LLC	PO BOX 519	JOSEPH CITY	AZ	86032-0519
AVION IRREVOCABLE TRUST	PO BOX 349	JOSEPH CITY	AZ	86032-0349
S & F INVESTMENTS LLC	PO BOX 132	JOSEPH CITY	AZ	86032-0132
BIELEFELDT GERRIANNE (BD)	PO BOX A	JOSEPH CITY	AZ	86032-0240
	PO BOX 755	JOSEPH CITY	AZ	86032-0755

ATTN: CRE-3544

C/O JONNY D ANGEL

PALMER ALAN & VICKY (CPRS)	PO BOX 357	JOSEPH CITY	AZ	86037-0357
ORTEGA ISMAEL F & ESTHER D (CPRS)	PO BOX 98	JOSEPH CITY	AZ	86037-0098
ROGERS ARLIN T & BONNIE	1041 JOLLY RD	WINSLOW	AZ	86047-8715
DORSEY EDWARD G	PO BOX 126	JOSEPH CITY	AZ	86037-0126
FISH KEVIN V & BRENDA LEE M (CPRS)	PO BOX 505	JOSEPH CITY	AZ	86037-0096
BUSHMAN ANDREW & REBECCA JT	PO BOX 96	JOSEPH CITY	AZ	86037-0683
MARTINEZ JOHN D & RENNIE (JT)	PO BOX 683	JOSEPH CITY	AZ	86037-0250
SEDILLO RITA A	PO BOX 250	JOSEPH CITY	AZ	74119-5417
LOVE'S TRAVEL STOPS & COUNTRY STORES INC	15 W 6TH ST STE 2400	TULSA	OK	86037-0096
BUSHMAN ANDREW & REBECCA JT	PO BOX 96	JOSEPH CITY	AZ	86037-0096
BUSHMAN IVAN D & CARROLL P TRUSTEES	1405 N BEL AIR DR	MESA	AZ	85201-2503
PALMER ALAN J & VICKY K CPRS	PO BOX 357	JOSEPH CITY	AZ	86037-0357
DEWITT DAROLYN MARIE	PO BOX 446	JOSEPH CITY	AZ	86037-0446
LARSEN ROBERT & KAREN (CPRS)	PO BOX 53	JOSEPH CITY	AZ	86037-0053
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
TUBBS LYLE & TERRI D JT	PO BOX 480	JOSEPH CITY	AZ	86037-0480
BALDWIN LANCE & LYNETTE CPRS	PO BOX 133	JOSEPH CITY	AZ	86037-0133
BALDA ROBERT A	PO BOX 771	JOSEPH CITY	AZ	86037-0771
SEMAS JO ANN & JOHN III TRUSTEES	1554 LATINA DR	ALAMO	CA	94507
BLAKE TRESSA A	PO BOX 331	JOSEPH CITY	AZ	86037-0331
CHAPMAN WINSTON L & SONYA M (CPRS)	PO BOX 82	JOSEPH CITY	AZ	86037-0082
HANSEN EUGENE C & ELEANOR F	PO BOX 111	JOSEPH CITY	AZ	86037-0111
NESLEN BYRON	3025 W SOLANO DR S	PHOENIX	AZ	85017-2546
STANDIFORD ROBERT C & JUDITH A (JT)	PO BOX 71	JOSEPH CITY	AZ	86037-0314
SOLOMON FAMILY TRUSTS SOLOMON DELWIN H & EVELYN R TRUST	PO BOX 314	JOSEPH CITY	AZ	86037-0314
FREDERICK GARY FREDERICK MARIETTA	7135 N 23RD LN	PHOENIX	AZ	85021-7607
FLAKE KARSTEN	PO BOX 459	JOSEPH CITY	AZ	86037-0459
BALDWIN KENT L & JULIE A (JT)	490 N 1ST AVE	THATCHER	AZ	85552-5429
HAYDUKOVICH REVA	PO BOX 261	JOSEPH CITY	AZ	86037-0261
HANSEN MICHAEL S & BRITTANY E	PO BOX 491	JOSEPH CITY	AZ	86037-0491
CHRISTENSEN WAYNE A & JANET L (JT)	15200 59 1/2 RD	COLLBRAN	CO	81624-9701
MORRIS FREDERICK & BEVERLY J	PO BOX 236	JOSEPH CITY	AZ	86037-0236
HANSENS AUTO LLC	PO BOX 206	JOSEPH CITY	AZ	86037-0206
SHAW MANDIE	PO BOX 303	JOSEPH CITY	AZ	86037-0303
BROOKS BRIAN P & LAURA M (CPRS)	PO BOX 382	JOSEPH CITY	AZ	86037-0382
POGUE PATRICIA	PO BOX 3	JOSEPH CITY	AZ	86037-0003
SMITH JOSEPH & DEANNE JT	PO BOX 175	JOSEPH CITY	AZ	86037-0175
SUTTON ROBERT F & VICKI M JT	PO BOX 87	JOSEPH CITY	AZ	86037-0087
SCOTT CASEY L & AMANDA D (CPRS)	PO BOX 423	JOSEPH CITY	AZ	86037-0423
ARIZONA PUBLIC SERVICE CO 62.77PACIFICORP 37.23	ATTENTION: BRANDON KEYS NUNES	PHOENIX	AZ	85072-3940
TUBBS DONOVAN BEAU & JESSICA ERIN JT	PO BOX 53999 MS 9565	PHOENIX	AZ	86037-0480
ROGERS AARON M	PO BOX 480	JOSEPH CITY	AZ	86037-0185
OUELLET AUDREY LYNETTE (PERKINS)	PO BOX 185	JOSEPH CITY	AZ	86037-0237
DAVIS RUSSELLCRIBBS-DAVIS AMANDA CPRS	PO BOX 237	JOSEPH CITY	AZ	86037-0351
DEETS DANIEL & ALICIA G (CPRS)	PO BOX 351	JOSEPH CITY	AZ	86037-0480
SHAFF CAROL A TRUSTEE	PO BOX 480	JOSEPH CITY	AZ	86037-0309
SANTA FE PACIFIC RAILROAD NEWMONT MINING CORP	PO BOX 309	JOSEPH CITY	AZ	80111-5011
ROGERS DALE & DOROTHY (CPRS)	6363 S FIDDLERS GREEN CIR STE 800	GREENWOOD VILLAGE	CO	86037-0194
BUSHMAN ANDREW & REBECCA JT	PO BOX 194	JOSEPH CITY	AZ	86037-0096
BAIRD BRANTLEY TRUSTEE	PO BOX 96	JOSEPH CITY	AZ	86037-0224
TURLEY RICHARD J & SUSAN L JT	PO BOX 224	JOSEPH CITY	AZ	86037-0224
MCLAUGHLIN KELLY D & JILL L (CPRS)	PO BOX 549	JOSEPH CITY	AZ	86037-0110
FISH RUSSELL B & AMBER S TRUSTEES	PO BOX 349	JOSEPH CITY	AZ	86037-0349
GILBERT MARTIN O & GWEN M TRUSTEES	PO BOX 482	JOSEPH CITY	AZ	86037-0482
O'CONNELL SAM	17200 W BELL RD LOT 2106	SURPRISE	AZ	85374-9873
HANSEN GARY & RUTH (CPRS)	12501 BROOKLYN RD	BROOKLYN	MI	49330-8304
PATTERSON WILLIAM J & ESTHER L TRUSTEES	PO BOX 502	JOSEPH CITY	AZ	86037-0502
HANCOCK STEPHEN & LUANNE CPRS	PO BOX 496	JOSEPH CITY	AZ	86037-0496
FULLER JAYNE 25% WATKINS LEE ANN 25% RANDALL ROGER 25% F	PO BOX 458	JOSEPH CITY	AZ	86037-0458
	937 E LINDA LN	GILBERT	AZ	85234-5904

PAULSELL JOHN CESTUDILLO DANIELLE R (JT)	PO BOX 418	JOSEPH CITY	AZ	86032-0418
MARANIO ROBERT B	612 N 2ND ST	HOLBROOK	AZ	86025-3041
HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240
RANDALL DOYLE S & JACQUELINE	PO BOX 1458	SAINT JOHNS	AZ	85936-1458
CHASE ALBERT B	PO BOX 452	JOSEPH CITY	AZ	86032-0452
SCHNITZLER NATHAN E	PO BOX 368	JOSEPH CITY	AZ	86032-0368
ROBERSON W CRAWFORD & PATRICIA TRUSTEES	PO BOX 1016	TONTO BASIN	AZ	85553
BROOKS BRIAN H	PO BOX 805	JOSEPH CITY	AZ	86032-0805
GC RICE P LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
SMITH LUCY D	PO BOX 94	JOSEPH CITY	AZ	86032-0094
CLINE COUGAR & ANDRIA (JT)	PO BOX 463	JOSEPH CITY	AZ	86032-0463
NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86032-0613
ROGERS MILFORD & JENNIFER	PO BOX 479	JOSEPH CITY	AZ	86032-0479
BUCHANAN JIMMY /BUCHANAN MARTHA A JT	PO BOX 249	JOSEPH CITY	AZ	86032-0249
HANSEN CLINT L & RACHELLE L (CPRS)	PO BOX 566	JOSEPH CITY	AZ	86032
ROGERS TERRIL DANE	PO BOX 243	JOSEPH CITY	AZ	86032-0243
HANCOCK GENE & DIANE (CPRS)	1433 FRENCH RD	WINSLOW	AZ	86047-2879
BALDWIN LARRY E & AVA R (CPRS)	PO BOX 774	JOSEPH CITY	AZ	86032-0774
DESPAINS LX RANCH LLC/O JR DESPAIN	PO BOX 104	JOSEPH CITY	AZ	86032-0104
BLOOMER JANICE	PO BOX 412	JOSEPH CITY	AZ	86032-0412
MARTINEAU ROBERT & KAREN JT	PO BOX 213	JOSEPH CITY	AZ	86032-0213
BUSHMAN ANDREW K & REBECCA N (CPRS)	PO BOX 96	JOSEPH CITY	AZ	86032-0096
SOLOMON DELWIN B & JOAN TRUSTEE	PO BOX 540	JOSEPH CITY	AZ	86032-0540
WOUTERS MITCHEL F & ENMMA L (CPRS)	PO BOX 662	JOSEPH CITY	AZ	86032-0662
CHURCH OF JESUS CHRIST OF LOS.	50 EAST NORTH TEMPLE RM 2225	SALT LAKE CITY	UT	84150-0022
PADDOCK SISTA	PO BOX 3598	INDIAN WELLS	AZ	86031-3598
HANSEN DERRON C & CATHARINA J (JT)	PO BOX 534	JOSEPH CITY	AZ	86032-0534
WILBANKS BILL W & MARY L (JT)	123 W MAHONEY ST	WINSLOW	AZ	86047-2629
HANSEN DERRON C & CATHARINA J	PO BOX 534	JOSEPH CITY	AZ	86032-0534
MCLAUGHLIN KELLY D & JILL L (JT)	PO BOX 349	JOSEPH CITY	AZ	86032
NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86032-0613
HANSEN DERRON CHANSEN CATHARINA J-CPRS	PO BOX 534	JOSEPH CITY	AZ	86032-0534
ROBERSON WILLIAM R & RHONDA L JT	PO BOX 467	JOSEPH CITY	AZ	86032
CARLISLE MARTHA	PO BOX 247	JOSEPH CITY	AZ	86032-0247
MCLAUGHLIN MORGAN L	PO BOX 349	JOSEPH CITY	AZ	86032-0349
BUSHMAN ANDREW & REBECCA (CPRS)	PO BOX 96	JOSEPH CITY	AZ	86032-0096
JAMES ROSITA	PO BOX 421	JOSEPH CITY	AZ	86032-0421
FULLMER JAMES S & ASHLEY N (JT)	PO BOX 13	JOSEPH CITY	AZ	86032-0013
FLAKE DAYTON & SARAH EUPAUN CPRS	PO BOX 511	JOSEPH CITY	AZ	86032
GC RICE A LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
MILLER STEVEN KENT & ELIZABETH (JT)	1308 WESTOVER	HOLBROOK	AZ	86025
SEMAS JO ANN & JOHN III TRUSTEES	1554 LITINA DR	ALAMO	CA	94507-1013
TUCKFIELD CHRISTINE	PO BOX 7	JOSEPH CITY	AZ	86032-0007
RZCZS LLC	3310 E EVA ST	PHOENIX	AZ	85028-4912
FISH RUSSELL B & AMBER S (JT)	PO BOX 482	JOSEPH CITY	AZ	86032-0482
BALDWIN LANCE S & LYNETTE CPRS	PO BOX 133	JOSEPH CITY	AZ	86032-0133
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
STRAW LUCAS P	PO BOX 431	JOSEPH CITY	AZ	86032-0431
HARDY RAFIELD	PO BOX 591	JOSEPH CITY	AZ	86032-0591
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
KING DONALD R	S IDORA AVE	VALLEJO	CA	94590-7328
PERKINS AUDREY	9130 S 258TH LN	BUCKEYE	AZ	85326-5346
DREAMCATCHER LLC	PO BOX 692	JOSEPH CITY	AZ	86032-0692
LEE BO & KAY (JT)	704 E FLORIDA ST	HOLBROOK	AZ	86025-2726
BUSHMAN LARRY D & JESSI C (CPRS)	PO BOX 608	JOSEPH CITY	AZ	86032-0608
MCCLANAHAN JON & ALLIE	20780 E DARTMOUTH DR	AURORA	CO	80013-8445
GRANT BENJAMIN & ASHLEY (CPRS)	PO BOX 833	JOSEPH CITY	AZ	86032-0833
ASHENFELDER MICHAEL W & SHEILA P JT	PO BOX 584	JOSEPH CITY	AZ	86032

TAX ADM DIV 512-0322

JORDAN JERRIEMASHAE	1025 W BUFFALO ST	HOLBROOK	86025-2327
LAMPISA JARROD D & LISA (CPRS)	PO BOX 52	JOSEPH CITY	86032-0052
BRIMHALL LARRY N	PO BOX 794	SNOWFLAKE	85937-0794
HANSEN DERRON CHANSEN CATHARINA J-CPRS	PO BOX 534	JOSEPH CITY	86032-0534
ROBERSON WILLIAM R & RHONDA L (JT)	PO BOX 467	JOSEPH CITY	86032
MCLAWS DELROY W & PAMELA JT	PO BOX 551	JOSEPH CITY	86032-0551
SOSEMAN DONNA M	PO BOX 306	JOSEPH CITY	86032-0306
PARKER GUY D	PO BOX 460	JOSEPH CITY	86032-0460
ROGERS AARON M	PO BOX 185	JOSEPH CITY	86032-0185
SAGAN LOUIS	8919 E ALBANY ST	MESA	85207-8727
TUCKFIELD ROBERT W SR TRUSTEE	PO BOX 67	JOSEPH CITY	86032-0067
DESPAIN SANDRA K & RUSSELL J	PO BOX 520	JOSEPH CITY	86032-0520
DECROSS KIMBERLY D	PO BOX 35	JOSEPH CITY	86032-0035
HANSEN SAMUEL T & KELSEE (JT)	PO BOX 502	JOSEPH CITY	86032-0502
DAVIS RUSSELL G & CRIBBS AMANDAM JT	PO BOX 351	JOSEPH CITY	86032
MCLAWS ALONZO N & SHARI JT	PO BOX 394	JOSEPH CITY	86032-0394
LOVES TRAVEL STOPS & COUNTRY STORES INC	15 W 6TH ST STE 2400	TULSA	74119-5417
MARTINEAU ROBERTMARTINEAU JASON D	PO BOX 213	JOSEPH CITY	86032-0213
ROBERSON WILLIAM R & RHONDA L	PO BOX 467	JOSEPH CITY	86032-0467
FIELDS BRYAN JACOB & JULIE ANN CPRS	PO BOX 416	JOSEPH CITY	86032
FULLER JAYNE 25% WATKINS LEE ANN 25% RANDALL ROGER 25% F	937 E LINDA LN	GILBERT	85234-5904
PEN-ROB INC	PO BOX 1450	CHICAGO	60690-1450
BERGE RACHELTALLOON VICKI (JT)	PO BOX 279	JOSEPH CITY	86032-0279
MCTRIBE PROPERTIES LLC	PO BOX 349	JOSEPH CITY	86032-0349
WILKINSON RICHARD C	PO BOX 259	JOSEPH CITY	86032-0259
NOCKIDENEH BRUCE	PO BOX 651	JOSEPH CITY	86032-0651
BROOKS BRIANTRASK MARSHA JT	PO BOX 382	JOSEPH CITY	86032-0382
LIV HERITAGE LLC	PO BOX 28	JOSEPH CITY	86032-0028
NORRIS WAYNENORRIS (LITTELL) SHIRLEY JT	PO BOX 281	JOSEPH CITY	86032-0281
RANDALL DOYLE S & JACQUELINE A 1/2 INTTETLEY THOMAS N & S	PO BOX 1458	SAINT JOHNS	85936
NESELEN MICHAEL	26514 N 51ST DR	PHOENIX	85083-1274
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	86032-0502
HANSEN CLINT & RACHELLE CPRS	PO BOX 566	JOSEPH CITY	86032-0566
FROST DORAFROST CLIFFORD H ESTATE	PO BOX 26	JOSEPH CITY	86032-0026
HANSEN DAVID R & JANEEN A (JT)	1160 E 7TH PL	MESA	85203-6410
CLICK MATTHEW R & MITZI N (JT)	PO BOX 483	JOSEPH CITY	86032-0483
RUSH DAVID W & KAY JT	PO BOX 532	JOSEPH CITY	86032-0532
WESTOVER KURT L & WESTOVER KENNETH L & WESTOVER RUSTY I	PO BOX 682	JOSEPH CITY	86032-0682
FARR NEAL C & STEPHANIE JT	PO BOX C	JOSEPH CITY	86032-0546
ROBERSON WALLACE JR & LUCY TRUST	1320 W BUFFALO	HOLBROOK	86025
HUTTON KIRK D & CYNTHIA J (CPRS)	PO BOX 765	JOSEPH CITY	86032-0765
PARISOT KIMBERLY D (DECROSS)	PO BOX 35	JOSEPH CITY	86032-0035
BUCHANAN JIMMY /BUCHANAN MARTHA A JT	PO BOX 249	JOSEPH CITY	86032-0249
FORD STEVEN L	405 NAVAJO BLVD	HOLBROOK	86025-2638
HANSEN FLOYD B TRUSTEE	980 W 2520 S	PERRY	84302-4144
IWUAJOKU ANDREW	PO BOX 66922	PHOENIX	85082-6922
4500 MAIN STREET LLC	PO BOX 129	JOSEPH CITY	86032-0129
JAMES BYRNS A & CHLOA L JT	PO BOX 468	JOSEPH CITY	86032-0468
HUMPHREY DAVID G JR & MAUREEN B (CPRS)	PO BOX 130	JOSEPH CITY	86032-0130
MCLAUGHLIN KELLY D	PO BOX 349	JOSEPH CITY	86032-0349
QUALITY READY MIX INC RINKER MATERIALS CORP	1501 BELVEDERE RD	WEST PALM BEACH	33406-1501
SMITH JOSEPH & DEANNE (CPRS)	PO BOX 175	JOSEPH CITY	86032-0175
ELSEN JULIA (FAIRBANKS)	PO BOX 494	JOSEPH CITY	86032-0494
HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	86032-0220
GOHL LOUISE A TRUSTEE	PO BOX 248	JOSEPH CITY	86032-0248
NIELS ROBERT LARSEN KAREN K	PO BOX 528	JOSEPH CITY	86032-0528
RICHARDS ABE L & DIANA H S (JT)	PO BOX 409	JOSEPH CITY	86032-0409
AVION IRREVOCABLE TRUST	PO BOX 132	JOSEPH CITY	86032-0132
FROST DORA (EDWARDS)	PO BOX 26	JOSEPH CITY	86032-0026

C/O MYRA A ROGERS

ATTN: CRE-3544

C/O STACY THOMPSON

MOBILE HOME PARK: SMITH JD

NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86032-0613
MILLETT DONALD G & DONNA TRUSTEES	1824 E ELMWOOD	MESA	AZ	85203
KINDIG GLORIA J	PO BOX 40	JOSEPH CITY	AZ	86032-0040
LEE RONALD D & SHARON D CPRS	PO BOX 673	JOSEPH CITY	AZ	86032-0673
OSTERTAG NATHAN L	4495 MAIN ST	JOSEPH CITY	AZ	86032
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	860320502
HANSEN JOSEPH C & MARI JOE (JT)	PO BOX 206	JOSEPH CITY	AZ	86032
LONG VELNITA NEWTON	PO BOX 287	JOSEPH CITY	AZ	86032-0287
EVENSEN MERLENE P TRUSTEE	1236 E DARTMOUTH ST	MESA	AZ	85203-6508
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
BARNER ANNA B & SMITH BESSIE B	9559 LA AMAPOLA AVE	FOUNTAIN VALLEY	CA	92708-5130
ROGERS GEORGE C & SUE ANN JT	PO BOX 336	JOSEPH CITY	AZ	86032-0336
GARDNER BRIAN & LYDIA J CPRS	PO BOX 441	JOSEPH CITY	AZ	86032-0441
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
ALLEN COY L	PO BOX 97	JOSEPH CITY	AZ	86032-0097
JOHNSON DALE MSLIFER SANDRA & YOUNG NANCY ALL JT	PO BOX 536	JOSEPH CITY	AZ	86032-0536
FOREE ANDREW M	PO BOX 721	JOSEPH CITY	AZ	86032-0721
BEATTY DANIEL & KRISTEN CPRS	PO BOX 131	JOSEPH CITY	AZ	86032-0131
ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	860320324
KINLUICHEENIE KOVACSIC SRKINLUICHEENIE TAMWYA K CPRS	PO BOX 445	JOSEPH CITY	AZ	86032-0445
DESPAIN SANDRA K & RUSSELL J	PO BOX 520	JOSEPH CITY	AZ	86032-0520
PETERSON AARON J	PO BOX 263	JOSEPH CITY	AZ	86032-0263
SEMAS JO ANN & JOHN III TRUSTEES	1554 LATINA DR	ALAMO	CA	94507
NAEVE THOMAS A & ELLEN L (JT)	PO BOX 613	JOSEPH CITY	AZ	86032-0613
ARIZONA PUBLIC SERVICE CO	PO BOX 53999 MS 9565	PHOENIX	AZ	85072-3940
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
LARSEN ELDON LMARTINEAU ROBERT	PO BOX 53	JOSEPH CITY	AZ	86032-0053
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
BLAKE TRESSA	PO BOX 331	JOSEPH CITY	AZ	86032-0331
ACME LUMBER COMPANY	419 WASHINGTON ST	SANTA CRUZ	CA	95060-4325
BALDWIN LARRY E & AVA R (CPRS)	PO BOX 774	JOSEPH CITY	AZ	86032-0774
SOLOMON RICHARD W & RHONA G (CPRS)	PO BOX 332	JOSEPH CITY	AZ	86032-0332
BAIRD TEDDI L TRUSTEE	PO BOX 231	JOSEPH CITY	AZ	86032-0231
GC RICE L LLC	8162 N DESPAIN BOX 5	JOSEPH CITY	AZ	86032
SAGAN LOUIS	8919 E ALBANY ST	MESA	AZ	85207-8727
BAIRD RANDY LEE & WENDY (JT)	PO BOX 550	JOSEPH CITY	AZ	86032-0109
HANSEN GALE E & ANNA (JT)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
CHURCH OF JESUS CHRIST OF LDS.	50 EAST NORTH TEMPLE RM 2225	SALT LAKE CITY	UT	84150-0022
AZTEC EAST JEFFERS LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
MILLETT DONALD G & DONNA S JTBAKER JERRY O	128 PAYSEE ST	BUHL	ID	83316-1316
NEFF SAM K & CAROL L (CPRS)	1800 W STRATTON	SHOW LOW	AZ	85901-5616
RICE GARY & CAROL	PO BOX 5	JOSEPH CITY	AZ	86032-0005
TARBANTO ALLISON B	5745 GIRLS RANCH RD	FLAGSTAFF	AZ	86004-5477
GARDNER BRIAN R & JANE (CPRS)	PO BOX 441	JOSEPH CITY	AZ	86032-0441
IWUAJOKU ANDREW	PO BOX 66922	PHOENIX	AZ	85082-6922
REYNOLDS MARKREYNOLDS JAQUELYN JT	PO BOX 313	JOSEPH CITY	AZ	86032-0313
HENRY MARY ANN	PO BOX 175	JOSEPH CITY	AZ	86032-0175
SMITH JOSEPH & DEANNE JT	9157 E CHIRCO PL	TUCSON	AZ	85710-3130
MCINTYRE JOSHUA A & QETURAH (CPRS)	PO BOX 91	JOSEPH CITY	AZ	86032-0091
HUTCHENS DANIEL & HAILEE (CPRS)	PO BOX 158	JOSEPH CITY	AZ	86032-0158
POGUE ELAINE(DORIS)	PO BOX 221	JOSEPH CITY	AZ	86032-0221
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
BARNER ANNA B & SMITH BESSIE B	9559 LA AMAPOLA AVE	FOUNTAIN VALLEY	CA	92708-5130
HANSEN CLINT L & RACHELLE L (CPRS)	PO BOX 566	JOSEPH CITY	AZ	86032
FIELDS BRYAN JACOB & JULIE ANN	PO BOX 416	JOSEPH CITY	AZ	86032-0416
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
SMITH TYSON & DEIDRA (CPRS)	PO BOX 453	JOSEPH CITY	AZ	86032-0453
YOUNG RANDY L & JUDY A JT	PO BOX 476	JOSEPH CITY	AZ	86032-0476
GONZALES LEO JR & AMBER (CPRS)	PO BOX 713	JOSEPH CITY	AZ	86032-0713

PERKINS BARRETTA K	PO BOX 192	JOSEPH CITY	AZ	86032-0192
BAIRD TEDDI L TRUSTEE	PO BOX 231	JOSEPH CITY	AZ	86032-0231
DARRIS KENT & CAMMY CPRS	101 BLUE SAGE ST	HOLBROOK	AZ	86025-1834
HANSEN GALE E & ANNA (JT)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
ROGERS MERLIN VROGERS WILLIAM D JT	5212 S MONTE VISTA ST	CHANDLER	AZ	85249-3336
DOBBS TAURA	PO BOX 734	JOSEPH CITY	AZ	86032-0734
ARIZONA PUBLIC SERVICE CO 62.77PACIFICORP 37.23	ATTENTION: BRANDON KEYS NUNES	PHOENIX	AZ	85072-3940
LARSEN ELDEN & CAROL (CPRS)	PO BOX 53	JOSEPH CITY	AZ	86032-0053
SPURLOCK ROBERT & LORRAINE	PO BOX 12	JOSEPH CITY	AZ	86032-0012
CLICK MATTHEW R & MITZI JT	PO BOX 483	JOSEPH CITY	AZ	86032-0483
ROGERS MILFORD F	PO BOX 324	JOSEPH CITY	AZ	86032-0324
GC RICE D LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
HANSEN GARY R & RUTH B	PO BOX 502	JOSEPH CITY	AZ	86032-0502
MCLAUGHLIN KELLY D	PO BOX 349	JOSEPH CITY	AZ	86032-0349
PERKINS JACKSON D & FRANCES M (JT)	46216 N BLACK CANYON HWY	NEW RIVER	AZ	85087-7029
SPURLOCK VINCENT P & GLEENNA E (CPRS)	PO BOX 457	JOSEPH CITY	AZ	86032
ROGERS TERRILL D	PO BOX 243	JOSEPH CITY	AZ	86032-0243
JOSEPH CITY WATER SYSTEM INC	PO BOX 147	JOSEPH CITY	AZ	86032-0147
HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
BEST SHELBY C	5259 GRASSE CT	LENA	WI	54139-9005
FISH CASEY B & DEBRA G TRUSTEES	PO BOX 52408	AMARILLO	TX	79159-2408
HANSEN DERRON C & CATHARINA J (JT)	PO BOX 534	JOSEPH CITY	AZ	86032
LORENC RALPH MICHAEL & MARIYLN M (CPRS)	PO BOX 345	JOSEPH CITY	AZ	86032-0444
ROSSER MICHAEL DWOUTERS-ROSSER JERRIE (JT)	PO BOX 444	JOSEPH CITY	AZ	86032-0002
KUHSE DEV	PO BOX 2	JOSEPH CITY	AZ	85204-6038
HENDRICKS THOMAS JINGUIEZ ALEJANDRA (CPRS)	1927 E HAMPTON AVE UNIT 232	MESA	AZ	85072-3940
ARIZONA PUBLIC SERVICE CO 62.77PACIFICORP 37.23	ATTENTION: BRANDON KEYS NUNES	PHOENIX	AZ	85326-5346
PERKINS AUDREY	9130 S 258TH LN	BUCKEYE	AZ	85072-3940
ARIZONA PUBLIC SERVICE	ATTENTION: BRANDON KEYS NUNES	PHOENIX	AZ	86032-0383
DIXON JEFFREY & KASSIE (CPRS)	PO BOX 383	JOSEPH CITY	AZ	86032-0027
CHANCE MICHAEL C	PO BOX 27	JOSEPH CITY	AZ	85326-8647
RAEL DEMETRIOS & REBECCA (CPRS)	22077 W PIMA ST	BUCKEYE	AZ	86047-3903
GREEN GREGORY D	405 E THIRD ST	WINSLOW	AZ	87031-8193
LUEBAS BERNAL A & MONA	259 HEBER ST	LOS LUNAS	NM	85923-0351
ROGERS LYNN AUSON (JT)CRANDELL DONNA LYNETTE	PO BOX 351	CLAY SPRINGS	AZ	86032-0008
JOSEPH CITY SCHOOL DISTRICT #2	PO BOX 8	JOSEPH CITY	AZ	74119-5417
LOVES TRAVEL STOPS& COUNTRY STORES INC	15 W 6TH ST STE 2400	TULSA	OK	86327
BLOOMER JANICE	11250 E STATE RT 69 LOT 1122	DEWEY	AZ	86032-0394
MCLAWS ALONZO & SHARI (CPRS)	PO BOX 394	JOSEPH CITY	AZ	85207-8727
SAGAN LOUIS	8919 E ALBANY ST	MESA	AZ	86032-0066
HANSEN DOYLE L & SONIA H TRUST	PO BOX 66	JOSEPH CITY	AZ	60690-1450
PEN-ROB INC	PO BOX 1450	CHICAGO	IL	86032-0172
GARDNER EMILY W & JASON B (CPRS)	PO BOX 172	JOSEPH CITY	AZ	86025-0668
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	85937-2649
NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	AZ	85937-2649
NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	AZ	86032-0219
NEAL THOMAS R & KATHRYN A	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	86032-0502
AZTEC LAND & CATTLE CO LTD	PO BOX 502	JOSEPH CITY	AZ	86032-0741
HANSEN GARY & RUTH (CPRS)	PO BOX 741	JOSEPH CITY	AZ	86032-0741
HANSEN DAN J & JESSICA E	PO BOX 741	JOSEPH CITY	AZ	86032-0502
BUSHMAN DAN J & JESSICA E	PO BOX 502	JOSEPH CITY	AZ	85937-2649
HANSEN GARY & RUTH (CPRS)	PO BOX 2649	SNOWFLAKE	AZ	85937-2649
NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	AZ	87102-3117
NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	AZ	
NZ JOSEPH CITY LLC	PO BOX 2649	SNOWFLAKE	AZ	
USAUSDA FOREST SERVICES	517 GOLD AVE SW	ALBUQUERQUE	NM	
USAUSDA FOREST SERVICES	517 GOLD AVE SW	ALBUQUERQUE	NM	

HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
HANSEN GALE E & ANNA S (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
JOSEPH CITY UTILITIES	PO BOX 147	JOSEPH CITY	AZ	86032-0147
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
HANSEN GALE & ANNA (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
SMITH JOSEPH & DEANNE JT	PO BOX 175	JOSEPH CITY	AZ	86032-0175
SMITH JOSEPH & DEANNE JT	PO BOX 175	JOSEPH CITY	AZ	86032-0175
GC RICE S LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
GC RICE S LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
HANSEN DOYLE L & SONIA H TRUST	PO BOX 66	JOSEPH CITY	AZ	86032-0066
HANSEN DOYLE L & SONIA H TRUST	PO BOX 66	JOSEPH CITY	AZ	86032-0066
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
NAVAJO TRIBE.	TITLE RECORDS & APPRAISAL SECTIO PO BOX 2249	WINDOW ROCK	AZ	86515-2249
PATTERSON JENNY	PO BOX 496	JOSEPH CITY	AZ	86032-0496
PATTERSON JENNY	PO BOX 496	JOSEPH CITY	AZ	86032-0496
PATTERSON JENNY	PO BOX 496	JOSEPH CITY	AZ	86032-0496
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
NAVAJO TRIBE.	TITLE RECORDS & APPRAISAL SECTIO PO BOX 2249	WINDOW ROCK	AZ	86515-2249
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240
S & F INVESTMENTS LLC	PO BOX A	JOSEPH CITY	AZ	86032-0240
ARIZONA PUBLIC SERVICE CO 62.77PACIFICORP 37.23	ATTENTION: BRANDON KEYS NUNES PO BOX 53999 MS 9565	PHOENIX	AZ	85072-3940
ROBERSON WILLIAM R & RHONDA L (CPRS)	PO BOX 467	JOSEPH CITY	AZ	86032-0467
ROBERSON WILLIAM R & RHONDA L (CPRS)	PO BOX 467	JOSEPH CITY	AZ	86032-0467
ROBERSON WILLIAM R & RHONDA L (CPRS)	PO BOX 467	JOSEPH CITY	AZ	86032-0467
ROBERSON WILLIAM R & RHONDA L (CPRS)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
HANSEN GALE E & ANNA S (JT)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
HANSEN GALE E & ANNA S (JT)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
HUNT FAMILY TRUST	PO BOX 42	JOSEPH CITY	AZ	86032-0042
HUNT FAMILY TRUST	PO BOX 42	JOSEPH CITY	AZ	86032-0042
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
USALUSDA FOREST SERVICES	517 GOLD AVE SW	ALBUQUERQUE	NM	87102-3117
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND CO LLC	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
BARNETT JERRY & YVONNE LIVING TRUST	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
BARNETT JERRY & YVONNE LIVING TRUST	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
BUSHMAN DAN J & JESSICA E	53 MONTEREY PINE DR	NEWPORT COAST	CA	92657-1526
BUSHMAN DAN J & JESSICA E	53 MONTEREY PINE DR	NEWPORT COAST	CA	92657-1526
ARIZONA STATE OF	PO BOX 741	JOSEPH CITY	AZ	86032-0741
ARIZONA STATE OF	PO BOX 741	JOSEPH CITY	AZ	86032-0741
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
AZTEC LAND & CATTLE CO LTD	PO BOX 668	HOLBROOK	AZ	86025-0668
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
AZTEC LAND & CATTLE CO LTD	4647 N 32ND ST # 240	PHOENIX	AZ	85018-3347
NAVAJO TRIBE.	TITLE RECORDS & APPRAISAL SECTIO PO BOX 2249	WINDOW ROCK	AZ	86515-2249
NAVAJO TRIBE.	TITLE RECORDS & APPRAISAL SECTIO PO BOX 2249	WINDOW ROCK	AZ	86515-2249
GC RICE GJ LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
GC RICE GJ LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
ARIZONA STATE OF	PO BOX 668	HOLBROOK	AZ	86025-0668
NEAL THOMAS R & KATHRYN A	PO BOX 219	JOSEPH CITY	AZ	86032-0219
SCARBRO LESLIE LSCARBRO BYRAN C ESTATE	896 E RACQUET CLUB RD	PALM SPRINGS	CA	92262-2258
SCARBRO LESLIE LSCARBRO BYRAN C ESTATE	896 E RACQUET CLUB RD	PALM SPRINGS	CA	92262-2258
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502
HANSEN GARY & RUTH (CPRS)	PO BOX 502	JOSEPH CITY	AZ	86032-0502

SORGEN EDWIN F	PO BOX D	JOSEPH CITY	AZ	86032-0015
SORGEN EDWIN F	PO BOX D	JOSEPH CITY	AZ	86032-0015
REYNOLDS LEROY E & JOYCE	PO BOX 122	JOSEPH CITY	AZ	86032-0122
REYNOLDS LEROY E & JOYCE	PO BOX 122	JOSEPH CITY	AZ	86032-0122
HANSEN GALE E & ANNA S (JT)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
HANSEN GALE E & ANNA S (JT)	PO BOX 220	JOSEPH CITY	AZ	86032-0220
YOUNG BRENT	PO BOX 550	JOSEPH CITY	AZ	86032-0109
EKSTRAND TIFFANY MARIE	PO BOX 4221	PAGE	AZ	86040-4221
WILLIAMS KENNETH P & STEPHANIE A (CPRS)	PO BOX 246	JOSEPH CITY	AZ	86032
PRINGLE WILLIAM A & CHRISTINA C (CPRS)	PO BOX 662	JOSEPH CITY	AZ	86032-0662
HUTCHENS DANIEL L	PO BOX 11	JOSEPH CITY	AZ	86032-0011
STRONG JEFFREY A	PO BOX 561	JOSEPH CITY	AZ	86032-0561
DEWITT DILLON W & ANNA B (CPRS)	PO BOX 143	JOSEPH CITY	AZ	86032-0143
WESTOVER MARLENE	PO BOX 171	JOSEPH CITY	AZ	86032-0171
GC RICE RL4 LLC	PO BOX 5	JOSEPH CITY	AZ	86032-0005
MILLER JEREMY K & JENNIE (CPRS)	PO BOX 318	JOSEPH CITY	AZ	86032-0318
JOSEPH CITY DOMESTIC WATER SYSTEM INC	PO BOX 147	JOSEPH CITY	AZ	86032
BALDA ROBERT EDWARD & SHARON MARGARET	PO BOX 267	JOSEPH CITY	AZ	86032
BEVAN W & FAYE E HENRIE FAMILY TURST				
BEVAN & FAYE HENRIE TRUSTEES				
MILLER NELSON H & KAREN H	PO BOX 294	JOSEPH CITY	AZ	86032
JOHNSON JOHNNY	PO BOX 233	JOSEPH CITY	AZ	86032-0233
MOSIER DARREL F & KYRA J (JT)	PO BOX 63	JOSEPH CITY	AZ	86032-0063
ROGERS GEORGE C & SUE ANN JT	PO BOX 321	JOSEPH CITY	AZ	86032-0321
BAIN GARY L CPRS	PO BOX 336	JOSEPH CITY	AZ	86032-0336
BAIN PAULA (WILLIAMS)				
HUNSAKER STEVE J & HEIDI CPRS	PO BOX 396	JOSEPH CITY	AZ	86032-0396
WESTOVER KENNETH & JENNIFER (CPRS)	PO BOX 6	JOSEPH CITY	AZ	86032-0006
DIXON BOBBY D & SONDRRA M (CPRS)	PO BOX 487	JOSEPH CITY	AZ	86032-0487
EVANS DAVID L & MARY (CPRS)	PO BOX 492	JOSEPH CITY	AZ	86032-0492
MILLER JERRY N & CHARLSYE V TRUSTEES	PO BOX 116	JOSEPH CITY	AZ	86032-0116
MOSIER JOANN & HERSHEL	PO BOX 513	JOSEPH CITY	AZ	86032-0513
JOE JERRY	PO BOX 311	JOSEPH CITY	AZ	86032-0311
EKSTRAND COREY	PO BOX 23	JOSEPH CITY	AZ	86032-0023
SOLOMON DELWIN D & JOAN R TRUSTEES	PO BOX 2466	PAGE	AZ	86040-2466
MILLER JERRY N & CHARLSYE V TRUSTEES	PO BOX 540	JOSEPH CITY	AZ	86032
BALDWIN LANCE & LYNETTE CPRS	PO BOX 513	JOSEPH CITY	AZ	86032-0513
YAZZIE JEANETTE	PO BOX 133	JOSEPH CITY	AZ	86032-0133
HERNANDEZ CATHERINE & JAMES D (CPRS)	PO BOX 491	JOSEPH CITY	AZ	86032-0491
BUSHMAN ANDREW & REBECCA (JT)	1000 LEE ST	WINSLOW	AZ	86047-2245
ABERNATHY EARL D	PO BOX 96	JOSEPH CITY	AZ	86032-0096
LEE ADAM	PO BOX 506	JOSEPH CITY	AZ	86032-0506
COOKSEY JAMES & CONSTANCE (CPRS)	PO BOX 433	MONTICELLO	UT	84535-0433
BUSHMAN ANDREW & REBECCA (JT)	PO BOX 575	JOSEPH CITY	AZ	86032-0575
HUNSAKER DORIS H TRUSTEE	PO BOX 96	JOSEPH CITY	AZ	86032-0096
PENROD FAMILY REVOCABLE TRUST	PO BOX 524	JOSEPH CITY	AZ	86032-0524
PENROD THOMAS E & GLENDA S JT TRUSTEES				
STERKOWITZ MICHAEL ANDREW	PO BOX 495	JOSEPH CITY	AZ	86032-0495
FENN ROBIN & WENDY J (CPRS)	PO BOX 301	JOSEPH CITY	AZ	86032-0301
LOEWENHAGEN JERALD & ELIZABETH J	PO BOX 582	JOSEPH CITY	AZ	86032-0582
WESTOVER KENNY	PO BOX 204	JOSEPH CITY	AZ	86032-0204
EDWARDS JOHN D	PO BOX 487	JOSEPH CITY	AZ	86032-0487
MILLER CODY & KYLIE	PO BOX 83	JOSEPH CITY	AZ	86032-0083
BUSHMAN PETER & ADRIANE C (CPRS)	PO BOX 652	JOSEPH CITY	AZ	86032-0652
MILLER JEREMY K & JENNIE (CPRS)	PO BOX 458	JOSEPH CITY	AZ	86032-0458
VOIZ BILL & HEIDI	PO BOX 318	JOSEPH CITY	AZ	86032-0318
DEWITT ALEXIS D & JOEL H	PO BOX 264	JOSEPH CITY	AZ	86032-0264
MILLER NELSON H & KAREN H	9008 W SLATE MOUNTAIN TRL	BELLEMONT	AZ	86015-5138
	PO BOX 233	JOSEPH CITY	AZ	86032-0233

C/O KELLEN ROBERSON

MCTRIBE PROPERTIES LLC	PO BOX 349	JOSEPH CITY	AZ	86032-0349
WILLIAMS DEBORAH	PO BOX 693	JOSEPH CITY	AZ	86032-0693
EWING BRENDA C	1921 W THIRD ST APT W	WINSLOW	AZ	86047-2164
COOKSEY JAMES & CONSTANCE (CPRS)	PO BOX 575	JOSEPH CITY	AZ	86032-0575
HUTCHENS DANIEL & CARA (CPRS)	PO BOX 11	JOSEPH CITY	AZ	86032-0011
GALLUCCI PAUL	PO BOX 9	JOSEPH CITY	AZ	86032-0009
Glenn Kephart, County Manager	100 E Code Talkers Dr	Holbrook	AZ	86025
Bryan Layton, Asst. County Manager	100 E Code Talkers Dr	Holbrook	AZ	86025
Paul Watson, Economic and Workforce Development Director	100 E Code Talkers Dr	Holbrook	AZ	86025
John Osgood, Public Works Director	100 E Code Talkers Dr	Holbrook	AZ	86025
Supervisor Fern Benally	100 E Code Talkers Dr	Holbrook	AZ	86025
Supervisor Jason Whitting	100 E Code Talkers Dr	Holbrook	AZ	86025
Sheriff David Clouse	100 Carter Rd	Holbrook	AZ	86025
Chief Lale Hatch	120 E Buffalo St	Holbrook	AZ	86025
Chief Dan Brown	115 East Second St	Winslow	AZ	86047
Chief Rusty DeSpain	4513 Main St	Joseph City	AZ	86032
Assistant Chief Jeff Dixon	4513 Main St	Joseph City	AZ	86032
Donna Soseman	4513 Main St	Joseph City	AZ	86032
Superintendent of Schools Jalyn Gerlich	P.O. Box 8	Joseph City	AZ	86032
Rodeo Trash Horse Club	4513 Main St	Joseph City	AZ	86032
Winslow 4-H Wranglers	1894 Prosperity Ave	Winslow	AZ	86047
Seba Dalkai Frontiers	Hwy 87 N of Winslow	Winslow	AZ	86047
Brendan Neal	10305 Dover Street, #916	Westminster	CO	80021

APPENDIX J-4
Virtual Community Meeting Newspaper
Advertisements

MEETING NOTICE

Avangrid Renewables will host a virtual community meeting to provide information about a planned solar power generation facility and generation tie line ("Project") near Joseph City, Arizona.

You can join the virtual community meeting by phone or by using a web interface on our website.

WHAT: Virtual Community Meeting to learn about Obed Meadow Solar Project

WHEN: April 12, 2022

6 to 7 P.M.

JOIN VIA WEB: obedmeadowsolar.com

JOIN VIA PHONE: (833) 946-1546

If you'd like us to send you hard copies of the presentation materials in advance of the meeting, please contact us at (602) 384-2470, at obedmeadowsolar@avangrid.com, or by visiting obedmeadowsolar.com.

APPENDIX J-5
In-Person Community Meeting Newspaper
Advertisements

MEETING NOTICE

Avangrid Renewables will host a community meeting to provide information about a planned solar power generation facility and associated 2.5-mile generation tie line located near Joseph City, Arizona.

WHAT: Community Meeting to learn about Obed Meadow Solar Project

WHEN: Monday, April 24, 2023

5:00 to 7:00 p.m.

WHERE: Joseph City Elementary School Cafeteria

8176 Westover Ave.

Joseph City, AZ 86032

If you have questions or comments, please contact us at 602.384.2470 or at obedmeadowsolar@avangrid.com.

APPENDIX J-6
Virtual Community Meeting Social Media
Advertisements

Obed Meadows Generation-Tie Transmission Line Project

Tues., 4/12/2022 Virtual Community Meeting

Social Media Advertisements

Note: Text content varies slightly by platform. This is to accommodate platform-specific limitations on "preview" text (i.e., text that appears by default, without a user needing to "uncollapse" a specific post).

Facebook

Mon., 4/4/2022

Join us on Tues., April 12, 2022, at 6pm for a virtual community meeting!

We will host a virtual community meeting to provide information about a planned 4.3-mile generation-tie transmission line near Joseph City, Arizona. Project team members will present information about the project followed by a question-and-answer session.

For more information, including how to join the meeting, visit <WEBSITE URL>.

Mon., 4/11/2022

Join us tomorrow, Tues., April 12, 2022, at 6pm for a virtual community meeting!

We will host a virtual community meeting to provide information about a planned 4.3-mile generation-tie transmission line near Joseph City, Arizona. Project team members will present information about the project followed by a question-and-answer session.

For more information, including how to join the meeting, visit <WEBSITE URL>.

Instagram

Mon., 4/4/2022

Join us Tues., 4/12, 2022 at 6pm for a virtual community meeting!

We will provide information and answer your questions about our planned 4.3-mile generation-tie transmission line near Joseph City, Arizona.

For more information, including how to join the meeting, visit <WEBSITE URL>.

Mon., 4/11/2022

Join us tomorrow, Tues., 4/12/2022 at 6pm for a virtual community meeting!

We will provide information and answer your questions about our planned 4.3-mile generation-tie transmission line near Joseph City, Arizona.

For more information, including how to join the meeting, visit <WEBSITE URL>.

APPENDIX J-7
In-Person Community Meeting Social Media
Advertisements

Obed Meadow Solar Project

Monday, April 24, 2023, Community Meeting

Social Media Advertisements

Note: Text content varies slightly by platform. This is to accommodate platform-specific limitations on "preview" text (i.e., text that appears by default, without a user needing to "uncollapse" a specific post).

Facebook

Mon., 4/10/2023

Join us on Monday, April 24, 2023, between 5:00 p.m. and 7:00 p.m. at Joseph City Elementary School (8176 Westover Way, Joseph City, AZ 86032) for a community meeting!

We will host a community meeting to provide information about a planned solar power facility and a 2.5-mile generation-tie line near Joseph City, Arizona. Project team members will present to provide project information and answer questions.

For more information, visit obedmeadowsolar.com.

Mon., 4/17/2022

Join us on Monday, April 24, 2023, between 5:00 p.m. and 7:00 p.m. at Joseph City Elementary School (8176 Westover Way, Joseph City, AZ 86032) for a community meeting!

We will host a community meeting to provide information about a planned solar power facility and a 2.5-mile generation-tie line near Joseph City, Arizona. Project team members will present to provide project information and answer questions.

For more information, visit obedmeadowsolar.com.

Instagram

Mon., 4/10/2023

Join us on Monday, April 24, 2023, between 5:00 p.m. and 7:00 p.m. at Joseph City Elementary School (8176 Westover Way, Joseph City, AZ 86032) for a community meeting!

We will host a community meeting to provide information about a planned solar power facility and a 2.5-mile generation-tie line near Joseph City, Arizona. Project team members will present to provide project information and answer questions.

For more information, visit obedmeadowsolar.com.

Mon., 4/17/2022

Join us on Monday, April 24, 2023, between 5:00 p.m. and 7:00 p.m. at Joseph City Elementary School (8176 Westover Way, Joseph City, AZ 86032) for a community meeting!

We will host a community meeting to provide information about a planned solar power facility and a 2.5-mile generation-tie line near Joseph City, Arizona. Project team members will present to provide project information and answer questions.

For more information, visit obedmeadowsolar.com.

APPENDIX J-8
Virtual Community Meeting PowerPoint Presentation



Obed Meadow

Virtual Community Meeting

April 12, 2022

Welcome!

How to Participate:

- If joining online via a web browser, type your questions or comments into the comment area in the web interface.
- If joining via phone, dial *3 at any time during the presentation to be connected with a screener who will take your question or comment.



Agenda

- Meet the Project Team
- About Avangrid Renewables
- Obed Meadow Solar Project
 - Project Overview
 - Project Location
 - Anticipated Milestone Schedule
 - Permitting
 - Project Studies
 - Solar Power Benefits
 - Solar Power Safety
 - Project Decommissioning
- Question-and-Answer Session

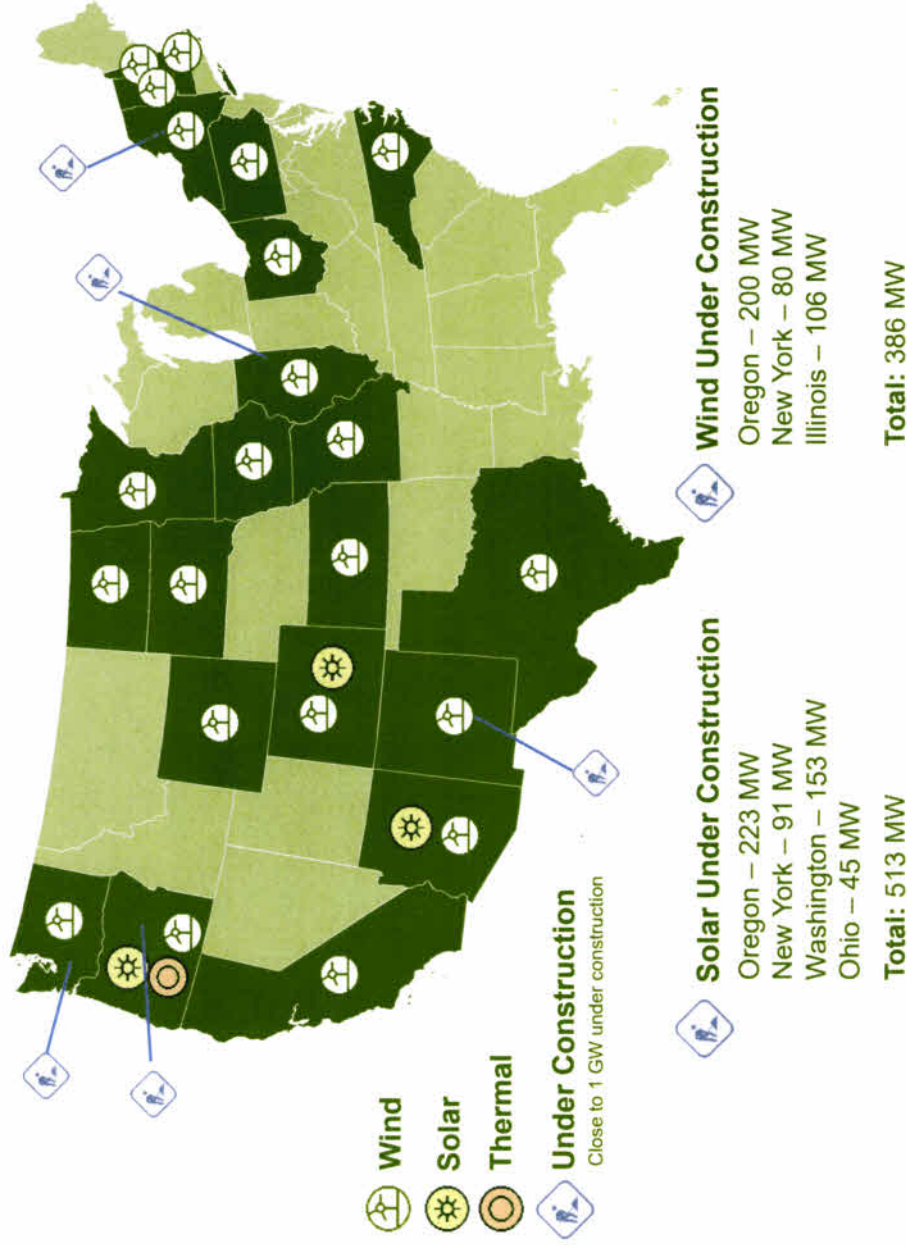
Meet the Team

Meet the Team

Tyler Hoffbuhr	Business Developer Avangrid Renewables
Kristen Goland	Western Regional Permit Manager Avangrid Renewables
Mark Stacy	Director, Business Development Avangrid Renewables
Darryl Aldrich	EHS Manager, U.S. Operations and Maintenance Avangrid Renewables
Nick DeCristofaro	EHS Specialist Avangrid Renewables
Jeff Pigg	Regional Fire Protection Avangrid
Alan Scales	Senior Manager, Fire Protection Avangrid
Brendan Neal	Meeting Moderator Tetra Tech

About Avangrid Renewables and Avangrid, Inc.

- One of the **largest wind operators** in the U.S. with ~8 GW of owned and controlled **wind and solar generation across 22 states**.
- **Stable owner/operator** with commitment to the communities where we operate.
- **AVANGRID, INC. (NYSE: AGR)** is a **diversified energy and utility company with \$38 billion in assets and operations in 24 states**.



Obed Meadow Solar Project Overview

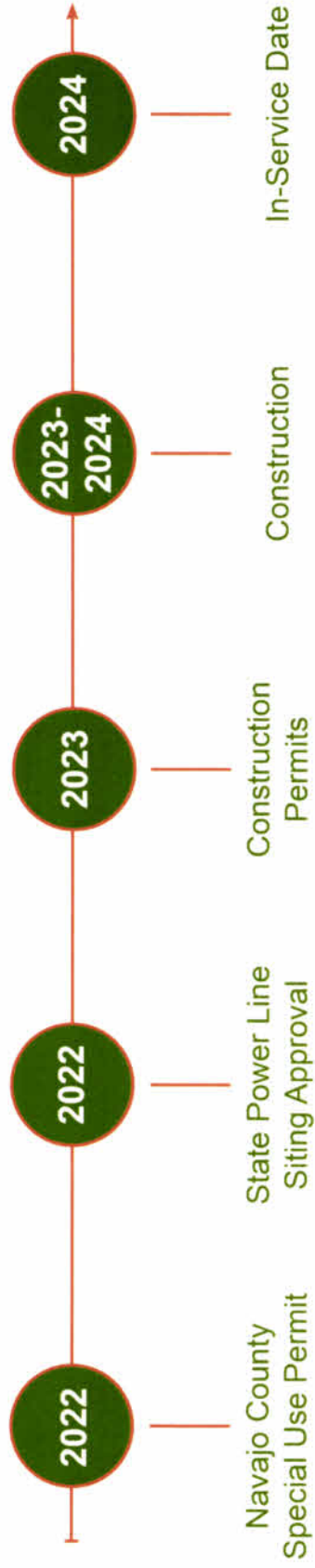
- Planned 200-megawatt (MW) solar power generation facility.
- Optional 200-MW battery energy storage system (BESS).
- 2.5-mile, 230-kilovolt (kV) generation-tie transmission line (gen-tie line).
- Additional facilities including access roads, an operations and maintenance building, and a collector substation.



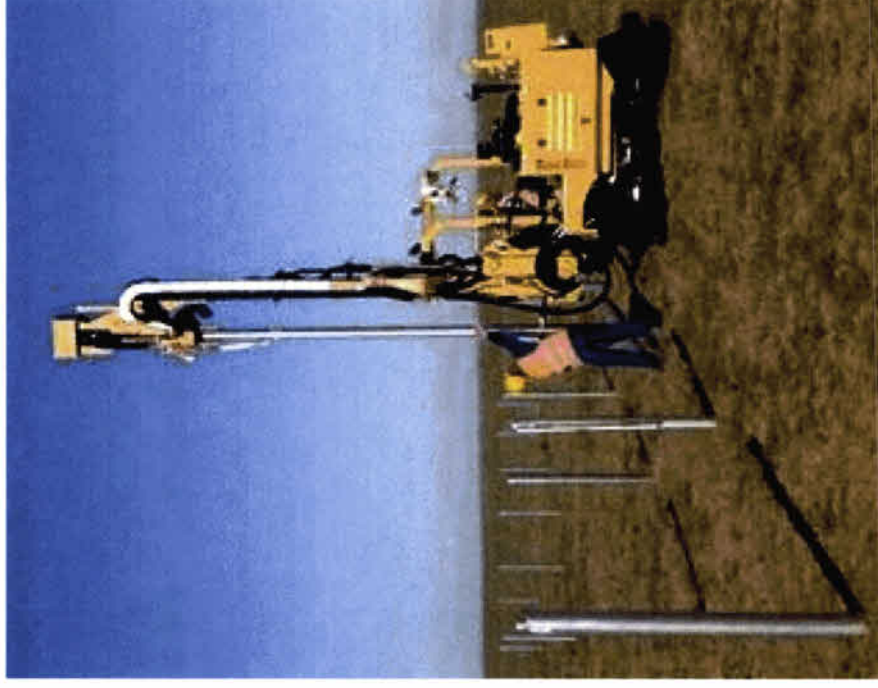
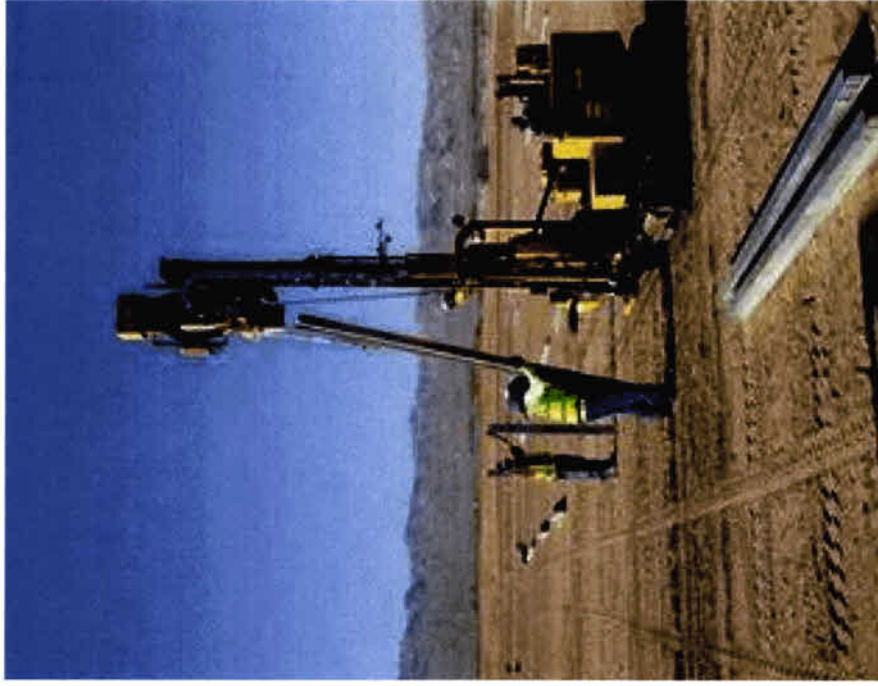
Project Location



Anticipated Milestone Schedule



Construction – Site Preparation and Pile Installation



Construction – Tracking System Installation



Construction – Panel Installation and Wiring



Project Potential Permits

Agency	Permits
Arizona Corporation Commission Transmission Line Siting Committee	<ul style="list-style-type: none">• Certificate of Environmental Compatibility
Arizona Department of Transportation	<ul style="list-style-type: none">• Encroachment Permit• Class C Permit
Arizona Department of Environmental Quality	<ul style="list-style-type: none">• National Pollution Discharge Elimination System Permit
Navajo County, AZ	<ul style="list-style-type: none">• Special Use Permit• Floodplain Permit• Commercial Right-of-Way Permit• Commercial Building Permits

Project Studies

Completed Studies

- **Biological Studies**
 - Federally and State-listed Species
 - Migratory Birds
 - Noxious Weeds
 - Management Areas
 - Arizona Game and Fish Consultation

- **Cultural Studies**

- Cultural Resources Inventory

- **Wetlands Studies**

- Wetlands and Waters of the United States

Forthcoming Studies

- **Biological Studies**
 - 2022 Raptor Nest Check



Project Benefits

Tax Revenue

- Property tax revenues generated for Navajo County over the life of the Project.
 - Revenues can be used to support county operations, schools, water districts, fire protection.
-

Jobs

- Construction will employ 350 to 400 people who will largely live, shop locally for the duration.
 - Project will create up to three permanent, competitive operations and maintenance positions.
-

Public Health and Environment

- Improved air and water quality through reduced reliance on fossil fuels.
 - No odors emitted and little to no noise produced.
 - No water consumed or discharged for energy production.
-

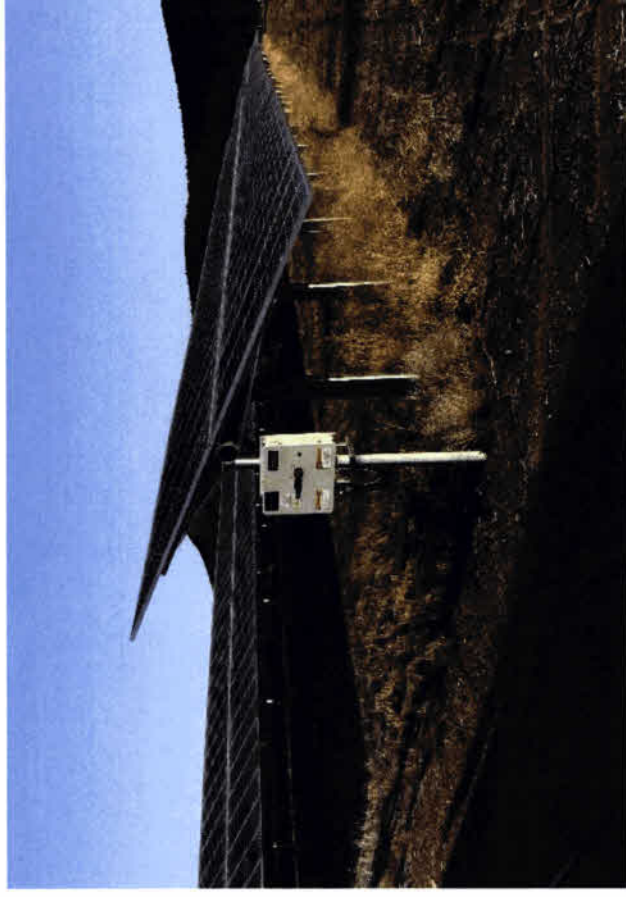
Solar Power Safety



- Operational solar projects have a very low risk of environmental contamination or fire.
- We have a well-developed and Project-tested hazardous materials management program.
 - Includes facility design, worker training, well-understood strategies and contingency plans.
- Project area will be secured with a 6-foot-high chain-link fence topped with 1 foot of barbed wire.

Project Decommissioning

- Components are removed, reused, recycled or disposed of at the end of the Project's life (~40 years).
- Project site can be restored to its prior use or to another use based on landowner wishes.



Public Outreach

- If you have questions, comments, or concerns, we want to hear from you:
 - **Call:** (602) 384-2470
 - **Email:** obedmeadowsolar@avangrid.com
 - **Visit:** obedmeadowsolar.com
- We plan to host an additional, in-person open house in Joseph City or Holbrook later this year.
- You will be able to provide feedback to the Transmission Line Siting Committee during our hearing.



How to Participate:

- If joining online via a web browser, type your questions or comments into the comment area in the web interface.
- If joining via phone, dial *3 at any time during the presentation to be connected with a screener who will take your question or comment.

Wrap-Up

Thank you for attending this meeting!

Call: (602) 384-2470

Email: obedmeadowsolar@avangrid.com

Visit: obedmeadowsolar.com

APPENDIX J-9
Key Stakeholder Informational Mailing and Mailing
List

Obed Meadow Gen Tie Project



This map is a graphic and may not show exact locations.

Project Overview

The Obed Meadow Solar Project is a planned 200-megawatt solar power generation facility and 2.5 mile 230-kilovolt generation tie line with an optional battery energy storage system and additional associated facilities near Joseph City, Arizona.

Construction is expected to begin in late 2024 and continue for about 12 months. The facility is expected to be in service by the end of 2025 and will have an operational lifespan of about 40 years.

Opportunity to Provide Comment

We invite you to reach out to the Project team with any questions and concerns regarding the Obed Meadow Gen Tie Project.

Hotline: 602.384.2470

Email: obedmeadowsolar@avangrid.com

Website: www.obedmeadowsolar.com

We want to hear from you!

602.384.2470 | obedmeadowsolar@avangrid.com | www.obedmeadowsolar.com



Owner 1	Owner 2	Address 1	Address 2	City	State	ZIP
Glenn Kephart, County Manager		100 E Code Talkers Dr	South Highway 77 P.O. Box 668	Holbrook	AZ	86025
Bryan Layton, Asst. County Manager		100 E Code Talkers Dr	South Highway 77 P.O. Box 668	Holbrook	AZ	86025
Paul Watson, Economic and Workforce Development Director		100 E Code Talkers Dr	South Highway 77 P.O. Box 668	Holbrook	AZ	86025
Madhav Mundle, Public Works Director		100 E Code Talkers Dr	South Highway 77 P.O. Box 668	Holbrook	AZ	86025
Supervisor Fern Benally		100 E Code Talkers Dr	South Highway 77 P.O. Box 668	Holbrook	AZ	86025
Supervisor Jason Whiting		100 E Code Talkers Dr	South Highway 77 P.O. Box 668	Holbrook	AZ	86025
Sheriff David Clouse		100 Carter Rd	PO Box 970	Holbrook	AZ	86025
Chief Nathan Christensen		465 N. 1st Ave		Holbrook	AZ	86025
Chief Dan Brown		115 East Second St		Winslow	AZ	86047
Chief Rusty DeSpain		4513 Main St	P.O. Box 72	Joseph City	AZ	86032
Battalion Chief Jeff Dixon		4513 Main St	P.O. Box 72	Joseph City	AZ	86032
Secretary Donna Soseman		4513 Main St	P.O. Box 72	Joseph City	AZ	86032
Superintendent of Schools Jalyn Gerlich		P.O. Box 8	8176 Westover	Joseph City	AZ	86032
Rodeo Trash Horse Club	C/O Rusty DeSpain	4513 Main St		Joseph City	AZ	86032
Winslow 4-H Wranglers	C/O Stephanie Westover	1894 Prosperity Ave		Winslow	AZ	86047
Seba Dalkai Frontiers	C/O Sherry Duffy	Hwy 87 N of Winslow		Winslow	AZ	86047
Navajo County Planning and Zoning		P.O. Box 668	100 Public Works Drive	Holbrook	AZ	86025
Tom Chenal, Transmission Line Siting Commission		1200 W. Washington St		Phoenix	AZ	85007
Director Jeff Grant, AZ Dept. of Agriculture		1688 W. Adams		Phoenix	AZ	85007
Director Misael Cabrera, AZ Dept. of Environmental Quality		1110 W. Washington St	Suite 310	Phoenix	AZ	85007
Director John Halikowski, AZ Dept. of Transportation		206 S. 17th Ave	Mail Drop 100A	Phoenix	AZ	85007
Director Thomas Buschatzke, AZ Dept. of Water Resources		1110 W. Washington St	Suite 310	Phoenix	AZ	85007
State Forester Thomas Torres, AZ Forestry and Fire Management		1110 W. Washington St	Suite 500	Phoenix	AZ	85007
Director Ty Gray, AZ Game and Fish Department		5000 W. Carefree Highway		Phoenix	AZ	85007
Executive Director David Breeckner, AZ Historical Society		949 E. 2nd St		Tucson	AZ	85719
Director Sean Burke, AZ Land Department		1110 W. Washington St		Phoenix	AZ	85007
Interim Director Sandra Watson, AZ Office of Economic Opportunity		100 N. 7th Ave	Suite 400	Phoenix	AZ	85007
Arizona Public Services		4801 Frontage Rd		Phoenix	AZ	85007
Executive Director Robert Broscheid, AZ State Parks and Trails		1110 W. Washington St	Suite 100	Joseph Cty	AZ	86032
Executive Director Ed Gerak, AZ Power Authority		1810 W. Adams St		Phoenix	AZ	85007
Joseph City Utilities		4504 1st N. Ave		Phoenix	AZ	85007
Arizona Highway Patrol		2222 W. Encanto Blvd		Joseph City	AZ	86032
New Life Center		4543 Main St		Phoenix	AZ	85009
The Church of Jesus Christ of Latter-day Saints		8181 Westover Ave		Joseph City	AZ	86032
Max Pivonka		2170 N. Franklin St	Apt 201	Denver	CO	80205

APPENDIX J-10
In-Person Community Meeting Presentation Materials
and Summary Report

Obed Meadow Solar Gen Tie Project

Community Meeting
 Monday, April 24, 2023, 5:00 p.m. to 7:00 p.m.
 Joseph City Elementary School Cafeteria

Page _____ of _____



Name	Address	City, State, ZIP	Phone Number	Email Address
Bob Sutton	8250 p Fort Ave	Joseph City, AZ 86032	928-386-5825	RSUTTON@MSA.COM
Rich Miller	8155 Westover St.	" " "	928-288-3684	RALLMILLER@MSA.COM
Ruth Hansen	8108 South Richards Ave #3	" " "	850-209-7353	garyruthhansen@hotmail.com
Linda Ker	804554 Tund N.	Joseph City	928 386 5445	linda@yourtrib.com
Dennis Hunt	7754 Hunt Road	Joseph City AZ	928-386-1214	
Julie Randall	8169 Porter Ave.	Joseph City, AZ	928-587-2150	Julie@jeusd.org
Tom Penrod	4361 DESERT ROSE LN	JOSEPH CITY, AZ	928-699-1155	QUANTERPAINT@GMAIL.COM
Steve Blomly	AZ REG LAND & GATINE CO 46417 N 32ND ST #240 DUM	PHX 85018	623/792-6722	5810PMD@AZREGLAND.CO.COM
JACK MILLER		JC, AZ		
John Rodriguez		Joe City, AZ	503-537-2813	



Obed Meadow Solar Gen Tie Project

Community Meeting
 Monday, April 24, 2023, 5:00 p.m. to 7:00 p.m.
 Joseph City Elementary School Cafeteria

Page _____ of _____

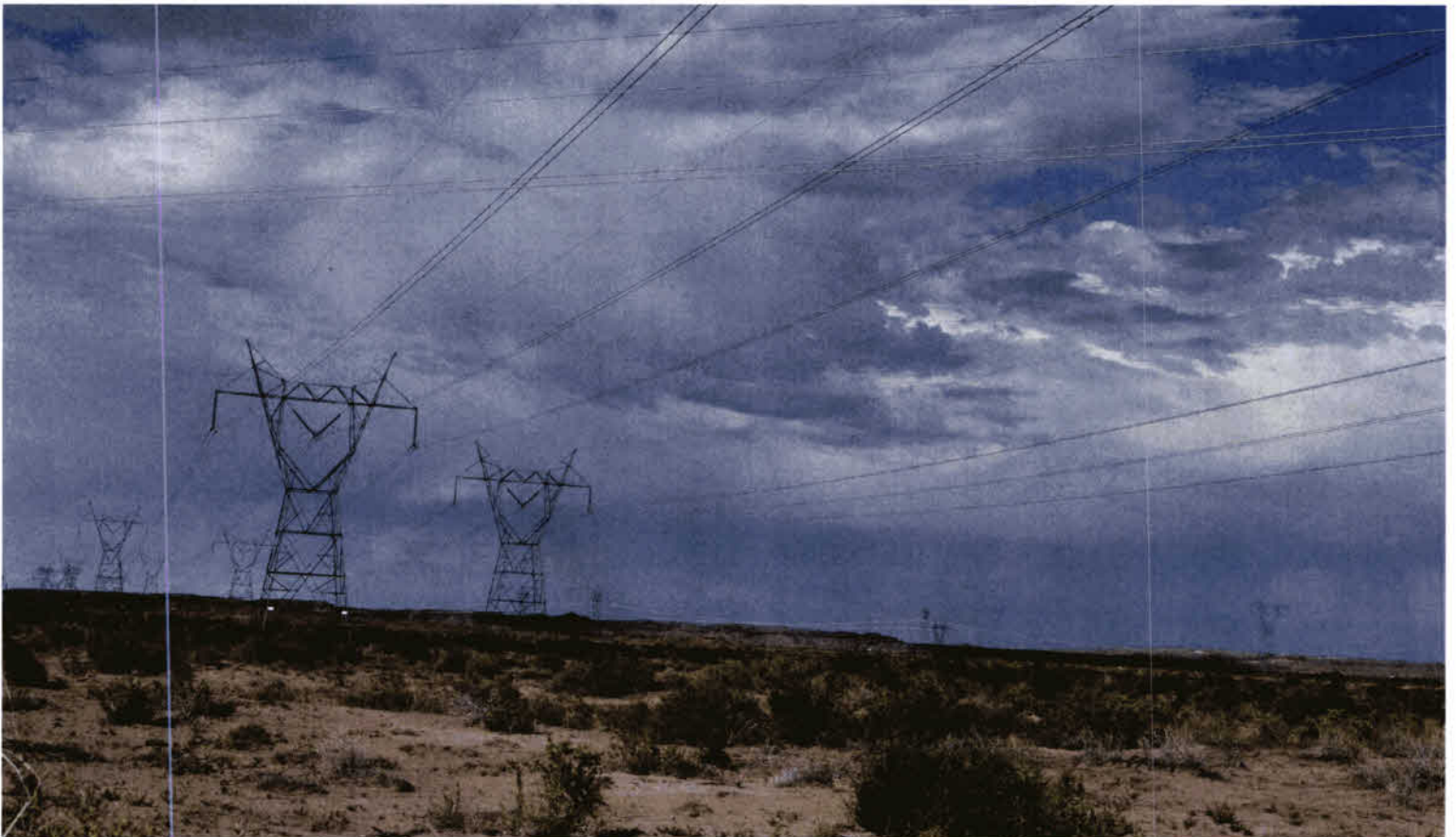
Name	Address	City, State, ZIP	Phone Number	Email Address
Derron Hanson	P.O. Box 534 JOSEPH CITY AZ 86032	JOSEPH CITY AZ 86032	928-587-1800	heyderron_@outlook.com
A + Shari Alonzo Melars	PO Box 344 Joseph city AZ	Joseph City AZ 86032	928-587-7687	christina@djcusd.org
Christina Rodriguez Ag Science Teacher	PO Box 608 JOSEPH CITY, AZ	JOSEPH CITY, AZ 86032	928-587-2271	larrydbushman@gmail.com
LARRY Bushman	219 ENCANTO DR HOPKINS AZ 86035	HOPKINS AZ 86025	928-297-8757	lloyd@lloydjohnson4az.com
Lloyd Johnson		Joseph City AZ 86032	785-215-3075	ottexamine@gmxil.com
Sally F. Fransman-Cecil	4630 P. Eighth Ave PO Box 63	Joseph City, AZ 86032	928-587-1499	johnsonville7@m51.com
Kemi Johnson				



Obed Meadow Solar Project

2023 Community Meeting and Public Outreach Summary

May 2023



Prepared for
Avangrid Renewables, LLC

Prepared by
Tetra Tech, Inc.
1560 Broadway, Ste. 1400
Denver, Colorado 80202



1 Introduction

Avangrid Renewables is planning the Obed Meadow Solar Power Generation Facility and Generation Tie (gen tie) Electric Transmission Line Project (Project) near Joseph City in Navajo County, Arizona.

The Project is a planned 200-megawatt solar power generation facility and 2.5 mile 230-kilovolt gen tie line with an optional battery energy storage system and additional associated facilities. The gen tie line will be constructed above ground and will be supported by steel monopole structures up to 100 feet in height, which is consistent with existing transmission infrastructure in vicinity of the Project.

The Project will be sited approximately 1 mile south of Joseph City on approximately 1,965 acres of privately owned land and would interconnect with the power grid at Arizona Public Service's (APS) Cholla Substation. Once operational, the Project will provide additional solar-powered electricity and deliver clean, renewable energy to Arizona customers.

Avangrid Renewables held a public Community Meeting in Joseph City on Monday, April 24, 2023, from 5:00 to 7:00 p.m., to provide an opportunity for the community to learn more about the Project, provide opportunity for the local residents to provide comments or concerns about the Project, and to share information regarding planned construction activities. This public outreach summary describes the public outreach approach and the materials used leading up to and during the event.

2 Public Outreach

Outreach efforts are designed to provide general Project information as well as to create opportunities for customers to ask questions and provide feedback. Initial outreach activities for the Project took place in 2022. Figure 1 shows the solar power generation facility and gen-tie work areas, and Figure 2 shows the gen tie work areas.



Obed Meadow Figure 1: Project Work Areas



Obed Meadow Figure 2: Gen Tie Project Work Areas

2.1 Project Communications Channels

A Project website, hotline and email address are available to provide customers with general information about the Project and updates on progress. Communication channels were launched in 2022 (Table 1) and will continue to be monitored through Project completion.

Customer inquiries received via the communication channels are copied or transcribed into a Correspondence Tracking Log. The Log is updated regularly to include responses sent to customers and any other follow-up.

Table 1. Project Communications Channels

Channel	Description
Website	obedmeadowsolar.com The website provides an interactive web map of work areas, detailed information about the Project, a section about public participation and a contact form. Contact form submittals are monitored twice each business day and are generally responded to within one to three business days. The website was established on March 16, 2022, updated on May 10, 2023, and has had 751 unique visitors and 4,167 total visits through May 14, 2023.
Hotline	602-384-2470 The hotline is accessible 24/7 and has a voicemail box recording that provides information on current activities. The inbox is monitored twice each business day and voicemails that request follow-up are generally responded to within one to three business days.
Email Address	obedmeadowsolar@avangrid.com The email inbox is set up to receive messages from customers and has an auto-reply message that advises a message has been received and that a staff member will contact the customer once able. The inbox is monitored twice each business day and voicemails that request follow-up are generally responded to within one to three business days.

2.2 Community Meeting Notifications

Avangrid Renewables utilized several communication methods to notify customers about the community meeting. Notifications sent to customers included a Project overview, map, community meeting information and Project contact information. The methodologies used are summarized in Table 2.

Table 2. Community Meeting Notifications

Communication	Description	Appendix
Communication Channels	The Project website and hotline were updated on April 10, 2023, to provide information regarding the community meeting. The Project website and hotline were updated again following the public open house event on April 26.	A-1 and A-2
Direct Mail	A flyer was mailed to approximately 850 landowners within 2 miles of the Project Area. This area was marginally expanded to include all residences and businesses within Joseph City, the nearest community. The mailing list also included key stakeholders, such as government officials, jurisdictions and agencies and local community groups.	B
Newspaper Advertisements	The Tribune of Holbrook published one informational advertisement in advance of the community meeting on April 12, 2023. Publication was scheduled for two weeks (on April 12, 2023 and April 19, 2023) but due to an error on part of the newspaper, it was only published on April 12, 2023.	C
Digital Advertisements	Digital social media advertisements were placed on the Facebook and Instagram on April 10, 2023, to redirect visitors to the Project website. Social media advertisements ran for two consecutive weeks in advance of the community meeting.	D

3 Community Meeting

The community open house meeting in Joseph City was held on Monday, April 24, 2023. The meeting provided an in-person platform for landowners and residents to learn about the Project. The community meeting was presented in an open-house format, allowing attendees to attend at their leisure, review Project information, provide feedback and comments, and have questions answered by Project subject matter experts on an individual basis. The community meeting was held in the cafeteria of Joseph City Elementary School from 5 p.m. to 7 p.m. Eighteen stakeholders attended the meeting; their information is included in Appendix E-1.

The public open house included 10 informational display boards which were presented throughout the meeting room. In addition, printed copies of the informational display boards and Project maps, were made available for attendees to take home with them. Comment forms, contact business cards, and a sign-in sheet were available at the entrance to the cafeteria. Attendees were asked to sign in before being directed to the informational display boards or the Project team member best suited to answer their questions. Images of the public open house event are available in Appendix E-2.

Public open house materials were made available on the website following the event for stakeholders who were unable to attend in person. Public open house materials are described in greater detail in Table 3.

Table 3. Public Open House Meeting Materials

Materials	Description	Appendix
Informational Display Boards	Ten informational display boards printed on foam core were displayed on easels around the event space. Informational display boards included a Project overview, location map, permitting overview, benefits summary, safety and decommissioning, about Avangrid Renewables, and Project Gen Tie visual simulations. 8.5-inch-by-11-inch copies of the Informational Display Boards were made available for customers to take home.	E-3
Project Maps	11-inch-by-17-inch Project maps highlighting Project work areas were made available for customers to take home.	E-4
Contact Cards	Business cards containing Project contact information were made available for customers to take home.	E-5

Project team members from various disciplines attended the public open house to provide subject matter expertise that would best address customers concerns. Project team members and their areas of expertise are described in Table 4.

Table 4: Project Team Members in Attendance

Representative	Company	Area of Expertise
Tyler Hoffbuhr	Avangrid Renewables	Project Development
Kristin Goland	Avangrid Renewables	Environmental Project Management
Trey Hadley	Avangrid Renewables	Project Management
Justin Miner	Tetra Tech, Inc.	Project Management

APPENDICES

Appendix A: Communication Channels

A-1: Pre-Community Meeting Update

Website Update

Project Update

Monday, April 10, 2023

We invite you to join us for a community meeting where we will provide information about a planned 2.5-mile generation tie electric transmission line associated with the Obed Meadow Solar Project near Joseph City, AZ.

**Monday, April 24, 2023
5:00 to 7:00 p.m.
Joseph City Elementary School Cafeteria
8176 Westover Ave.
Joseph City, AZ 86032**

Can't make it? Please contact us at obedmeadowsolar@avangrid.com or (602) 384-2470 for hard copies of the community meeting materials. We will also post copies to the website following the event.

Hotline Update

Hello. You've reached Avangrid Renewables. This is the hotline for the Obed Meadow Solar Facility and Generation Tie Line Project near Joseph City, Arizona.

We invite you to join us for a community meeting where we will provide information about a planned 2.5-mile generation tie electric transmission line associated with the Obed Meadow Solar Project.

Please join us on Monday, April 24, 2023 between 5 and 7 p.m. at the Joseph City Elementary School Cafeteria. 8176 Westover Ave., Joseph City, AZ 86032.

If you are unable to attend, copies of the meeting materials will be available on our website at **obedmeadowsolar.com** after the meeting

If you have a question or comment, leave us a message, and we will contact you in the coming days.

Thank you.

Appendix A: Communication Channels

A-2: Post-Community Meeting Update

Website Update

Project Update

Wednesday, April 26, 2023

Thank you to everyone who was able to attend our Community Meeting on Monday, April 24, 2023. The Community Meeting allowed interested community members to learn more about the Project's planned 2.5-mile generation tie electric transmission line, ask questions and provide comment.

[View the Presentation Display Boards](#)

We held a Virtual Community Meeting on Tuesday, April 12, 2022. The project team provided an informational presentation, followed by a question-and-answer session.

[View a Recording of the Presentation](#)
[View the PowerPoint Presentation](#)

Have questions or comments? Please contact us using the comment form below, or at obedmeadowsolar@avangrid.com or [602.384.2470](tel:602.384.2470)

Hotline Update

Hello. You've reached Avangrid Renewables. This is the hotline for the Obed Meadow Solar Facility and Generation Tie Line Project near Joseph City, Arizona.

Thank you to everyone who was able to attend our Community Meeting on Monday, April 24, 2023.

If you are unable to attend, copies of the meeting materials are available on our website at obedmeadowsolar.com.

If you have a question or comment, leave us a message and we will contact you in the coming days.

Thank you.

Appendix B: Direct Mail Flyer

Community Meeting Flyer

Obed Meadow Solar Project Community Meeting



This map is a graphic and may not show exact locations.

Overview

Avangrid Renewables will host a community meeting to provide information about a planned 2.5-mile generation tie electric transmission line associated with the Obed Meadow Solar Project (Project) near Joseph City, Arizona.

The Project is a planned 200-megawatt solar power generation facility and 2.5 mile 230-kilovolt generation tie line with an optional battery energy storage system and additional associated facilities near Joseph City, Arizona.

Construction is expected to begin in late 2024 and continue for about 12 months. The facility is expected to be in service by the end of 2025 and will have an operational lifespan of about 40 years.

Join Our Community Meeting

We invite you to join the Project team for a community meeting to learn more about the Project.

Monday, April 24 2023
5:00 to 7:00 p.m.
Joseph City Elementary School
Cafeteria
8176 Westover Way
Joseph City, AZ 86032

Can't make it? Please contact us for hard copies of the presentation materials!

Questions or comments? We want to hear from you!

602.384.2470 | obedmeadowsolar@avangrid.com | www.obedmeadowsolar.com



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Community Meeting Mailing Envelope



APPENDICES

Appendix C: Print Advertisement

Community Meeting Newspaper Advertisement

COMMUNITY

By The Associated Press



Photo courtesy of the Obed Middle School.

Tea with Zaza to be performed at La Posada

The With Zaza, the Obed Middle School, will be performing a play titled "Tea with Zaza" at La Posada. The play is a comedy about a young girl who is determined to have a tea party with her friends. The play is written by the Obed Middle School students and will be performed on the stage of La Posada on Saturday, April 22, at 2:00 p.m. Tickets are \$5.00. For more information, contact the Obed Middle School at 800-555-1234.

WUSD to partner with Sheriff's Office to enhance school safety

Washoe Unified School District (WUSD) is partnering with the Sheriff's Office to enhance school safety. The partnership will involve the Sheriff's Office providing security services to WUSD schools. The Sheriff's Office will be responsible for providing security services to WUSD schools, including conducting security assessments, providing security training, and providing security services during school events. The partnership will be implemented starting in the fall of 2023.

APS to host customer open house today and tomorrow

Avangrid Renewables (APS) is hosting a customer open house today and tomorrow. The open house will be held at the Avangrid Renewables office in Las Vegas. The open house will provide an opportunity for customers to meet with APS representatives and learn more about the Obed Meadow Solar Project. The open house will be held on Thursday, April 20, and Friday, April 21, from 10:00 a.m. to 5:00 p.m. For more information, contact APS at 800-555-1234.

Holbrook Chamber Business Break set tomorrow

The Holbrook Chamber of Commerce is hosting a business break tomorrow. The business break will be held at the Holbrook Chamber of Commerce office. The business break will provide an opportunity for business owners to meet with each other and discuss business opportunities. The business break will be held on Thursday, April 20, from 10:00 a.m. to 12:00 p.m. For more information, contact the Holbrook Chamber of Commerce at 800-555-1234.

Senior yoga

Senior yoga is a gentle form of yoga that is suitable for older adults. It focuses on stretching and strengthening the body, and improving balance and flexibility. Senior yoga is a great way for older adults to stay active and healthy. Senior yoga classes are held at the Holbrook Chamber of Commerce office. For more information, contact the Holbrook Chamber of Commerce at 800-555-1234.

Healthy Holbrook Clean-Up Day set

The city of Holbrook is hosting a clean-up day. The clean-up day will be held on Saturday, April 22, from 8:00 a.m. to 12:00 p.m. The clean-up day will provide an opportunity for residents to help clean up the city and improve the environment. The clean-up day will be held at the intersection of Main Street and 1st Street. For more information, contact the City of Holbrook at 800-555-1234.



Photo courtesy of the Obed Middle School.

ICMC to provide free testing May 12

The Interagency Council on Mining (ICMC) will provide free testing on May 12. The testing will be for lead and copper. The testing will be provided at the ICMC office in Las Vegas. The testing will be free of charge. For more information, contact the ICMC at 800-555-1234.

MEETING NOTICE

Avangrid Renewables will host a community meeting to provide information about a proposed 2.0-megawatt generation electricity transmission line associated with the Obed Meadow Solar Project near Joseph City, Arizona.

WHAT: Community Meeting for Obed Meadow Solar Project
WHEN: Monday, April 24, 2023
 5:00 to 7:00 p.m.
WHERE: Joseph City Community School Cafeteria
 8216 Wagon Wheel
 Joseph City, AZ 86032

If you have questions or comments, please contact us at 800-555-2470 or at chad@avangrid.com

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Appendix D: Digital Advertisements

Community Meeting Digital Advertisements

Social Media Advertisement

Obed Meadow Solar Project
April 17 at 1:50 PM

Join us on Monday, April 24, 2023, between 5:00 p.m. and 7:00 p.m. at Joseph City Elementary School (8176 Westover Ave., Joseph City, AZ 86032) for a community meeting!

We will host a community meeting to provide information about a planned solar power facility and a 2.5-mile generation-tie line near Joseph City, Arizona. Project team members will present to provide project information and answer questions.

For more information, visit

OBEDMEADOWSOLAR.COM
OBED MEADOW SOLAR PROJECT - Obed Meadow Solar Project [Contact us](#)
Project Overview Jump To: Project Overview Project Map Public Participation ...

Social Media Advertisement Campaign Statistics





APPENDICES

Appendix E: Community Meeting Materials

E-1: Attendee Information

Community Meeting Attendee Information	
<p>Bob Sutton 8250 N Porter Avenue Joseph City, AZ 86032 928-386-5925 rvsutton@msn.com</p>	<p>Rich Miller 8155 Westover Street Joseph City, AZ 86032 928-288-3684 rqlmiller@msn.com</p>
<p>Ruth Hansen 8108 South Richards Avenue #3 Joseph City, AZ 86032 850-209-7353 garyruthhansen@hotmail.com</p>	<p>Linda Ker 4554 Third N Joseph City, AZ 86032 928-386-5445 linda@yourtrib.com</p>
<p>Dennis Hunt 7754 Hunt Road Joseph City, AZ 86032 928-386-1214</p>	<p>Julie Randall 8159 Porter Avenue Joseph City, AZ 86032 928-587-2750 juliec@jcusd.org</p>
<p>Tom Penrod 4361 Desert Rose Lane Joseph City, AZ 86032 928-699-1155 quarterpaintranch@q.com</p>	<p>Steve Brophy 4647 N 32nd Street #240 Phoenix, AZ 88018 623-772-6222 sbrohpy@azreclondco.com</p>
<p>Jack Miller Joseph City, AZ 86032</p>	<p>John Rodrigues Joseph City, AZ 86032 503-539-2813</p>
<p>Derron Hansen P.O. Box 534 Joseph City, AZ 86032 928-587-1800 heyderron_@outlook.com</p>	<p>Alonzo & Shari McLaws P.O. Box 394 Joseph City, AZ 86032 928-587-7681</p>
<p>Christina Rodrigues Joseph City, AZ 86032 541-829-1547 christinar@jcusd.org</p>	<p>Larry Bushman P.O. Box 608 Joseph City, AZ 86032 928-587-7241 larrycbushman@gmail.com</p>
<p>Lloyd Johnson 219 Encanto Drive Holbrook, AZ 86025 928-297-8757 lloyd@lloydjohnson4az.com</p>	<p>Sally F. Fronsman-Cecil Joseph City, AZ 86032 785-215-3075 otteramie@gmail.com</p>
<p>Kerri Johnson 4630 N 8th Avenue P.O. Box 63 Joseph City, AZ 86032 928-587-1499 johnsonville7@msn.com</p>	

Appendix E: Community Meeting Materials

E-2: Community Meeting Images

Image 1: Community Meeting Space



Image 2: Community Meeting Sign-In Table



Image 3: Community Meeting Refreshments, Boards and Maps



Appendix E: Public Open House Materials


E-3: Informational Display Boards

Board 1: Overview


Overview

Facility Overview


The Obed Meadow Solar Project (Project) is a planned 200-megawatt solar power generation facility and 2.5 mile 230-kilovolt (kV) generation tie electric transmission line (gen-tie line) with an optional battery energy storage system and additional associated facilities near Joseph City, Arizona.



Anticipated Milestone Schedule



Year	Milestone
2022	Navajo County Special Use Permit Approved
2023	State Power Line Siting Approval
2023-2024	Construction Permits
2024-2025	Construction
2025	In-Service Date

 **Obed Meadow Solar Gen Tie Project** obedmeadowsolar.com

Board 2: Project Location

Project Location

Location Map



Site Photo



The Project will be sited 1 mile south of Joseph City in Navajo County on approximately 1,965 acres of privately owned land. The Project has been permitted by Navajo County.

Attributes of the site are ideal for the Project, including its proximity to existing electric infrastructure. The Project will interconnect with the power grid at Arizona Public Service's Cholla Substation via a 2.5-mile, 230-kV gen-tie line. A hearing for approval of the gen-tie line is scheduled before Arizona's Transmission Line Siting Committee for Aug. 7 - 11, 2023.



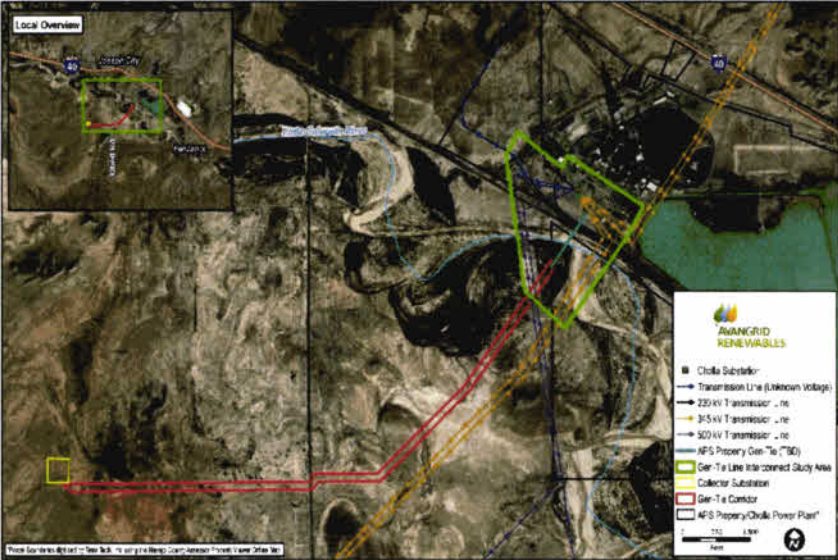
Obed Meadow Solar Gen Tie Project

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Board 3: Generation Tie Line

Generation Tie Line

Location Map



The 2.5-mile gen-tie line will be above ground and will be supported by steel monopole structures up to 100-feet in height. This is consistent with other transmission infrastructure in the area.

The gen-tie line will proceed east from the Obed Meadow Solar facility toward Arizona Public Service's Cholla Substation, and will interconnect with the grid at a yet to be determined location.



Obed Meadow Solar Gen Tie Project

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Board 4: Project Permitting

Project Permitting

Permits

We are committed to working with the State of Arizona and Navajo County to obtain the necessary permits prior to starting construction.

Jurisdictions and Agencies	Permits Required
Arizona Corporation Commission Transmission Line Siting Committee	<ul style="list-style-type: none"> • Certificate of Environmental Compatibility
Arizona Department of Transportation	<ul style="list-style-type: none"> • Encroachment Permit • Class C Oversize/Overweight Permit
Arizona Department of Environmental Quality	<ul style="list-style-type: none"> • National Pollution Discharge Elimination System Permit
Navajo County, AZ	<ul style="list-style-type: none"> • Special Use Permit (approved Sept. 13, 2022) • Floodplain Permit • Commercial Right-of-Way Permit • Commercial Building Permits

Board 5: Project Benefits

Project Benefits

Anticipated Benefits

Our Project, and solar power generation facilities in general, will come with a wide range of benefits for the Joseph City community.

Tax Revenue



Benefits County
Operations, Schools,
Water Districts,
and Fire Protection

New Jobs



350 - 400
Construction Jobs

3 Permanent Jobs

Community Benefits



Improved Air &
Water Quality

No Odors or Noise

Minimal Water Use



Obed Meadow Solar Gen Tie Project

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Board 6: Project Safety & Decommissioning

Project Safety & Decommissioning



Safety

- Solar power generation facilities and associated infrastructure, including gen tie lines, are very safe and have a low risk of fire or environmental contamination.
- We coordinate with local emergency responders to further reduce risks associated with the Project construction and operation.
- We operate a comprehensive health and safety program, which helps ensure emergency contingency plans and strategies are well understood, and which dictates elements of facility design and employee training.

Decommissioning

- At the end of the Project's commercial operation, we may remove above-ground and underground Project components, including:
 - solar arrays,
 - inverters,
 - transformers,
 - transmission structures, cabling and collection systems,
 - and other associated facilities.
- Once components are removed, we restore properties by rehabilitating soil and reseeded the area to promote revegetation with native plants.



Obed Meadow Solar Gen Tie Project

obedmeadowsolar.com

Board 7: About Avangrid Renewables

About Avangrid Renewables

Avangrid Renewables is one of the largest renewable energy operators in the United States, with about 8 gigawatts (GW) of owned and controlled wind and solar generation in 22 states.

Avangrid, Inc., (NYSE: AGR) is a diversified energy and utility company with \$38 billion in assets and operations in 24 states.



Wind and Solar Facilities Under Construction	
Wind Facilities Under Construction	512 MW
Oregon	223 MW
New York	91 MW
Washington	153 MW
Ohio	45 MW
Solar Facilities Under Construction	386 MW
Oregon	200 MW
New York	80 MW
Illinois	106 MW




Obed Meadow Solar Gen Tie Project

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Board 8: Gen Tie Simulations


Gen Tie Simulations

Key Observation Points (KOPs)





KOP 1

Existing Condition 07/11/2022 3,580' to closest pole







Simulated Condition 07/11/2022 3,580' to closest pole




 **Obed Meadow Solar Gen Tie Project** obedmeadowsolar.com

Board 9: Gen Tie Simulations





Gen Tie Simulations


KOP 2	KOP 3
 <p>Existing Condition 07/11/2022 353' to closest pole</p>	 <p>Existing Condition 07/11/2022 5,557' to closest pole</p>
 <p>Simulated Condition 07/11/2022 353' to closest pole</p>	 <p>Not Visible Simulated Condition 07/11/2022 5,557' to closest pole</p>

 Obed Meadow Solar Gen Tie Project obedmeadowsolar.com

Board 10: Gen Tie Simulations

Gen Tie Simulations

KOP 5	KOP 7
 <p>Existing Condition 07/11/2022 6,590' to closest pole</p>	 <p>Existing Condition 07/11/2022 6,168' to closest pole</p>
 <p>Simulated Condition 07/11/2022 5,590' to closest pole</p>	 <p>Simulated Condition 07/11/2022 6,168' to closest pole</p>

Obed Meadow Solar Gen Tie Projectoobedmeadowsolar.com

Appendix E: Community Meeting Materials

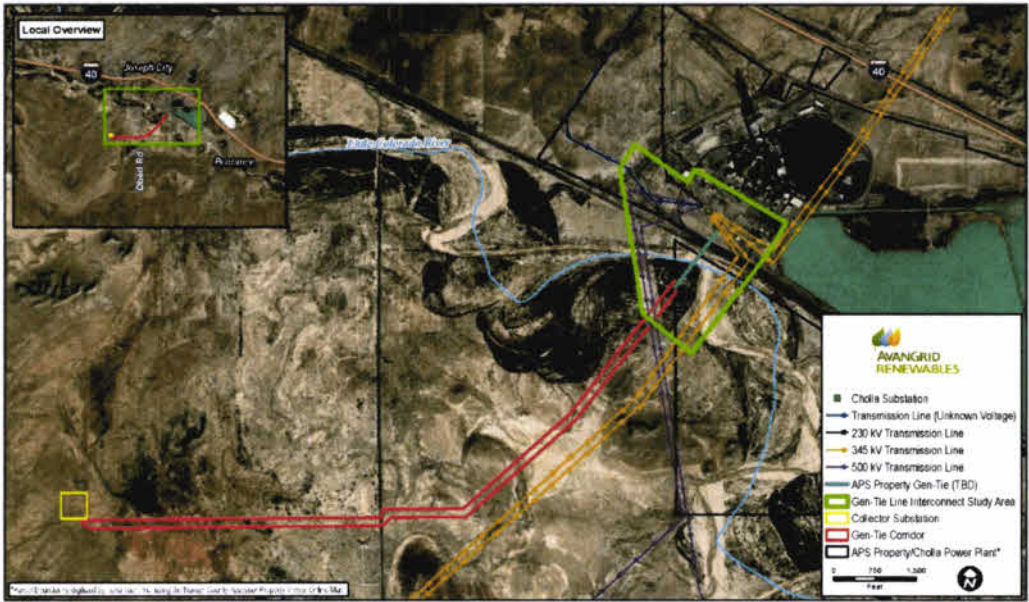
E-4: Project Maps

Project Maps

Work Area Map



Gen Tie Work Area Map



Appendix E: Public Open House Materials

E-5: Contact Cards

Contact Cards

Contact Card – Front



Contact Card – Back



APPENDIX J-11
Tribal Outreach Informational Mailing and Mailing List



Avangrid Renewables
2701 NW Vaughn Street
Suite 300
Portland, OR 97210

<Tribe Contact>

June 19th, 2023

RE: Obed Meadows Generation-Tie Transmission Line Project

Dear <NAME>,

Aurora Solar LLC, a wholly owned subsidiary of Avangrid Renewables LLC (Avangrid), is seeking approval from the Arizona Corporation Commission of a Certificate of Environmental Capability for a proposed 230-kilovolt (kV) alternating current generation-tie transmission line (Gen-Tie Line) and associated substation facilities (collectively, "Project"). The proposed Project will connect our planned 200-megawatt Obed Meadows solar energy generation and storage facility with the electrical grid at the Arizona Public Service Cholla Substation located at the Cholla Power Plant near Joseph City in Navajo County, Arizona. The Gen-Tie Line will be approximately 2.8 miles in length and will require a 150-foot right-of-way. The Collector Substation will occupy an area of approximately five acres and will be located within the solar facility boundary (Figures 1 and 2).

Avangrid welcomes you to visit the Project website at www.obedmeadowsolar.com for more information. The Project website includes project maps, community meeting display boards, a recording of the virtual public meeting presentation, and copies of presentation materials. A cultural study and survey has been conducted but due to the sensitive nature of cultural resources, the information will not be available on the website. The website also provides opportunity to contact the Project staff to provide comments, feedback, or to ask questions of the Project team.

A public hearing for the Arizona Corporation Commission review of the Certificate of Environmental Capability will be held beginning August 7th, 2023, at 1:00 p.m. in Flagstaff, Arizona at the Little America Hotel. We welcome your attendance at the public hearing.

Please contact us at www.obedmeadowsolar.com or obedmeadowsolar@avangrid.com with questions, feedback, or if you'd like us to send you hard copies of presentation materials in advance of the hearing. Avangrid respectfully requests review of the proposed Project Area and seeks your comments or feedback about the Project. Please provide your comments within 30 days of the date of this letter.

Sincerely,

Avangrid Renewables, LLC

Tribe	Contact Name	Title	Address	Protocol
Pueblo of Zuni	Mr. Arden Kucate, Governor Kurt Dongoske, Director, THPO Richard Begay	Governor Director, THPO THPO, NNHPD Director	PO Box 339, Zuni, NM 87327 Navajo Nation DNR, P.O. Box 9000 Window Rock, AZ 86515	Original letter, no enclosures via mail Copy of original letter via email Address original letter and enclosures to THPO, via email
Navajo Nation	W. Mike Halona Timothy L. Nuwangaoma Stewart Koyiyumptewa	Executive Director, Division of Natural Resources Chairman THPO	P. O. Box 123, Kykotsmovi, AZ 86039	Copy of letter via mail, no enclosures Original letter, no enclosures via mail Copy of original letter via email, with enclosures Original letter via mail
Hopi Tribe	Mr. Curtis Anderson Mr. Kenny Anderson	Chairman Cultural Committee Chairperson	One Paiute Drive, Las Vegas, NV 89106 Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony One Paiute Drive, Las Vegas, NV 89106	Copy of original letter via email, with enclosures Original letter via mail Copy of original letter via mail
Las Vegas Tribe of Paiute Indians of the Las Vegas	Ms. Ramona Salazar Ms. Ona Segundo Daniel Bulletts	Cultural Committee Member Chairwoman Cultural Resources Director	HC 65, Box 2, Tribal Affairs Bldg., Fredonia, AZ 86022	Copy of original letter via mail Original letter, no enclosures, via mail Copy of the original letter, via mail
Kalbab Band of the Paiute	Corinna Bow Ms. Dorena Martineau Mr. Terry Rambler	Chairwoman Cultural Resources Director Chairman	440 N Paiute Drive, Cedar City, UT 84721	Original letter via mail, with enclosures Copy of the original letter, with enclosures, via mail Original letter via mail, no enclosures, via mail
Paiute Tribe of Utah	Ms. Vernelda Grant Kasey Velasquez	THPO Chairman	P.O. Box 0, San Carlos, AZ 85550 P.O. Box 700, Whiteriver, AZ 85941	Copy of original letter, with enclosures, via mail Original letter, no enclosures, via mail
San Carlos Apache Tribe	Mr. Mark Altaha	THPO	Historic Preservation Office, P.O. Box 1032, Fort Apache, AZ 85926	Copy of original letter, enclosures, via mail
White Mountain Apache Tribe				

APPENDIX J-12
Public Notice Signage Materials

