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San Juan Solar Project Gen-Tie, Collector Power Lines, and Access Roads

Environmental Assessment – DOI-BLM-NM-F010-2021-0017-EA

Applicant: San Juan Solar Project, LLC

Serial Numbers: NMNM 138513 and NMNM 138514

Farmington Field Office

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Farmington, New Mexico 87402

Total EA Cost: $21,000

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Acronyms and Abbreviations

$\mu g/m^3$	micrograms per cubic meter
AADT	average annual daily trips
ARPA	Archaeological Resources Protection Act
BLM	Bureau of Land Management
BMP	best management practices
CDP	Census Designated Place
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2-e	CO_2-equivalent
EA	environmental assessment
EO	Executive Order
FEIS	Final Environmental Impact Statement
FFO	Farmington Field Office
gen-tie	generation-intertie
GHG	greenhouse gas
H_2S	hydrogen sulfide
HCP	historic cultural property
HCPI	historic cultural property inventory
IDT	Interdisciplinary Team
IMPAN	Impact Analysis for Planning
kV	kilovolt
MMT	million metric tons
MW	megawatt
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMAAQS	New Mexico Ambient Air Quality Standards
NMCRIS	New Mexico Cultural Resources Information System
NMDOT	New Mexico Department of Transportation
NNHHPD	Navajo Nation Heritage and Historic Preservation Department
NO_2	nitrogen dioxide
NRHP	National Register of Historic Places

NTEC	Navajo Transitional Energy Company
O_3	Ozone
OSHA	Occupational Safety and Health Administration
PB	lead
PL	Public Law
PM_{25}	particulate matter less than 2.5 micrometers in diameter
PM_{10}	particulate matter less than 10 micrometers in diameter
PNM	Public Service Company of New Mexico
POD	Plan of Development
ppb	parts per billion
ppm	parts per million
PRMP	Preliminary Resource Management Plan
RMP	Resource Management Plan
ROW	right-of-way
San Juan Solar	San Juan Solar Project, LLC
SDA	Specially Designated Area
SHPO	State Historic Preservation Office
SJGS	San Juan Generating Station
SO_2	sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
TUA	temporary use area
US	United States
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	US Fish and Wildlife Service

Introduction

1.1 Background

San Juan Solar Project, LLC (San Juan Solar) plans to develop the first phase of a 598-megawatt (MW) solar facility and energy storage on private land in San Juan County, New Mexico—the San Juan Solar Project. The applicant plans to construct an overhead generation-intertie (gen-tie) and collector power lines on private, state of New Mexico, and Bureau of Land Management (BLM) managed land to connect the solar facility to the existing Public Service Company of New Mexico (PNM) substation.

This environmental assessment (EA) has been prepared to analyze and disclose the environmental consequences of the San Juan Solar Gen-tie, Collector Power Lines, and Access Roads Project (Proposed Action) as proposed by San Juan Solar. The proposed project is in the BLM Farmington Field Office (FFO) management area. San Juan Solar has applied for a right-of-way (ROW) grant NMNM 138513 with the BLM FFO to construct the gen-tie and collector power lines. In addition, San Juan Solar has also applied for ROW grant NMNM 138514 to utilize existing roads, upgrade an existing road, and construct new ingress/egress roads from existing roads to the power line ROWs. The Proposed Action would be located approximately 3 miles north of Waterflow, New Mexico (see Appendix A, Map A-1).

1.2 Purpose and Need

The BLM's purpose is to respond to San Juan Solar's application for legal use and access to BLM-managed lands to construct, operate, maintain, and eventually terminate the San Juan Solar Gen-tie, Collector Power Lines, and Access Roads connecting a solar facility and energy storage on private land to the PNM substation. The need for the action is established by the BLM's authority under the Title V of the Federal Land Policy and Management Act of 1976, as amended (43 United States Code [USC] 1761-1771), to respond to San Juan Solar's ROW applications (NMNM 138513 and NMNM 138514). The need for the action is also established by the New Mexico Renewable Energy Act (62-16-1 New Mexico Statutes Annotated 1978), which requires public utilities to include in their electric energy supply portfolios for sales to retail customers in New Mexico to meet the goal of 100 percent carbon-free energy generation by 2045.

1.3 Decision to Be Made

The BLM FFO will decide whether to approve the San Juan Solar gen-tie, collector power lines, and access roads and issue the ROWs associated with the Proposed Action and if approved, under what terms and conditions.

1.4 Land Use Plan Conformance

Pursuant to 40 Code of Federal Regulations (CFR) 1508.28 and 1502.21, this EA incorporates the information and analysis in the 2003 Farmington Preliminary Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) (BLM 2003a). The Proposed Action would conform with the oil and gas leasing and development management actions in the Resource Management Plan (RMP)/Record of Decision signed September 2003 and updated in December 2003 (BLM 2003b).

The Proposed Action is in conformance with the following RMP objective:

- The objective of the FFO lands program is to facilitate the acquisition, exchange, or disposal of public lands to provide the most efficient management of public resources. The program is responsible for processing land withdrawals, granting ROWs and easements on public lands, and acquiring easements on nonpublic lands where necessary (BLM 2003b, 2-8).

This EA addresses resources and impacts of the Proposed Action that were not specifically covered in the PRMP/FEIS. The Proposed Action would not conflict with any local, county, or state plans.

1.5 Relationship to Statutes, Regulations, Other NEPA Documents

- Antiquities Act of 1906, as amended (Public Law [PL] 52-209; 16 USC 431-433)
- American Indian Religious Freedom Act of 1978 (PL 95-431; 92 Stat. 469; 42 USC 1996)
- Archaeological Resources Protection Act of 1979 (PL 96-95; 93 Stat. 721; 16 USC § 470aa et seq.), as amended (PL 100-555; PL 100-588)
- Clean Air Act, as amended (PL 88-206; 42 USC § 7401 et seq.)
- Clean Water Act, as amended (PL 107-303; 33 USC § 1251, et seq.)
- Migratory Bird Treaty Act of 1918, as amended (16 USC §§ 703-712; 50 CFR Part 21)
- Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 104 Stat. 3048; 25 USC 3001; 43 CFR Part 10)
- National Historic Preservation Act (NHPA) of 1966 (PL 89-665; 80 Stat. 915; 16 USC 470 et seq.), as amended (implemented under regulations of the Advisory Council on Historic Preservation, 36 CFR Part 800)
- Wildlife Conservation Act (New Mexico Statute 1978 § 17-2-37 et seq.)

1.6 Public Involvement

1.6.1 External Scoping

The BLM solicited input from the public regarding the proposed project to identify key issues and define the proposed project's scope and environmental analysis. The proposed San Juan Solar gen-tie, collector power lines, and access road project was made available to the public on the BLM New Mexico E-Planning website on April 28, 2021, and included the Proposed Action and proposed location map. The BLM FFO initiated external scoping by posting the Proposed Action online for a 10-day public scoping period from April 28 to May 4, 2021.

On-site meetings were held for the Proposed Action on February 25 and 26, 2021, and were attended by representatives from the BLM FFO and Ecosphere Environmental Services, Inc. Table 1-1 lists individuals and groups invited to the on-site meeting.

Table 0-1. Individuals, Organizations, and Agencies Invited to the On-Site Meeting

Name	Tribe, Organization, or Agency	Attended On-Site
Staff	BLM FFO	Yes
Staff	San Juan Solar Project, LLC	Yes

1.6.2 Internal Scoping

As part of its review of the proposed project, the BLM FFO National Environmental Policy Act (NEPA) Interdisciplinary Team (IDT) conducted internal scoping to identify potentially affected resources and land uses. The IDT meeting was held on February 1, 2021. The IDT checklist (Appendix B) provides a list of the considered issues, and the rationale for further analysis in this EA.

1.7 Issues

The BLM developed a list of issues to analyze in detail in this EA, following the guidelines outlined in the BLM NEPA Handbook (BLM 2008). The key issues identified during internal and external scoping are summarized in Table 1-2. The impact indicators provided are used to describe the affected environment for each issue in Chapter 3, measure the change in the issue for the different alternatives, and assess impacts.

Table 0-2. Issues Identified for Detailed Analysis

Issue #	Issue Statement	Impact Indicator
Issue 1	How would the construction and operation of the Proposed Action affect the local economy?	▪ Tax revenue ▪ Jobs ▪ Labor income
Issue 2	How would increased traffic and solar energy production affect adjacent low-income and economically disadvantaged community members?	▪ Traffic daily trips ▪ Socioeconomic changes

The BLM IDT identified resources that would be impacted but not to the degree that detailed analysis is required. Table 1-3 lists the issues analyzed in brief in this EA.

Table 0-3. Issues Analyzed in Brief

Resource	Rationale for Brief Analysis
Air Quality	Construction-related emissions and fugitive dust
Greenhouse Gas (GHG) Emissions	Construction-related CO_2 emissions
Water Quality and Quantity	Amount and source of water used during construction and operation
Paleontology	The Proposed Action is located within the Pinon Mesa Fossil Area, a Specially Designated Area (SDA) identified in the 2003 FFO RMP.
Soils	Ground disturbance and compaction related impacts
Cultural Resources	Potential impacts to cultural resources.

1.7.1 Issues Identified but Eliminated from Further Analysis

Table 1-4 identifies the issues evaluated but not discussed in further detail in this EA and the reason for their elimination.

Table 0-4. Issues Identified but Eliminated from Further Analysis

Resource	Rationale for Eliminating from Further Analysis
Areas of Critical Environmental Concern	There are no Areas of Critical Environmental Concern in the proposed project area.
Lands with Wilderness Characteristics	The Proposed Action is not near any lands eligible for Lands with Wilderness Characteristics as determined by the 2016 inventory.
Wilderness	The proposed project is not near either the Bisti/De-Na-Zin or Ah-shi-sle-pah Wilderness areas.
Recreation	There are no designated recreation areas in the proposed project area. Dispersed recreation is limited since public access is restricted from the San Juan Mine and private lands.
Visual	The Proposed Action is in lands classified as Visual Resource Management III and IV. Visual Contrast Rating Worksheets completed for the Proposed Action determined that the goals of Visual Resource Management III and IV can be met by implementing design features (Section 2.1.9), such as using non-specular supports and conductors.
Fuels/Fire Management	General requirements of all projects in the area follow fire preparedness rules and do not require additional analysis.
Geology	The proposed project area does not contain geologic resources managed by the BLM FFO under the 2003 FFO RMP that would be impacted by project construction and associated surface disturbance.
Solid Minerals	The proposed project area is on or near the San Juan Mine underground coal mine owned by Westmoreland Mining, LLC. The project proponents are working with the mine during the project's planning phase, and the coal mine is expected to shut down within the next 2 years as part of the SJGS closure, so no impacts to mine operations are expected. No further analysis is needed.
Oil and Gas/Energy Production	The proposed gen-tie, collector power lines, and access roads would not impact existing oil and gas leases. No further analysis is needed.
Lands/Access	The Proposed Action would not interfere with other existing ROWs or realty actions. Any proposals for future ROW projects in the proposed project area would be reviewed on a site-specific basis. The Proposed Action would be partially situated within existing disturbance and would connect to the existing PNM Four Corners substation. No further analysis needed.
Wastes (hazardous or solid)	The Proposed Action would not result in the generation of hazardous wastes. Any solid or liquid waste produced during construction, operation, maintenance, or decommissioning would be disposed of in an approved manner according to local, state, and federal regulations.
Livestock Grazing	Fencing along active allotments and improvements would be maintained throughout project construction. The Proposed Action would result in minimal impacts to forage resources, and no further analysis is needed.
Public Land Health Standards	The Proposed Action would not affect Public Land Health Standards.
Invasive Species/Noxious Weeds	A Weed Control Plan has been developed and would be implemented to mitigate the anticipated impacts for long- and short-term disturbance. With the plan's implementation and the BLM reclamation requirements (i.e., reseeding), no further analysis is needed.
Vegetation Excluding Federally Designated Species	The Proposed Action would impact approximately 67 acres within the proposed ROWs. Not all acreage in the ROWs would be disturbed. With the implementation of the project-specific Surface Reclamation Plan no further analysis is needed.

Resource	Rationale for Eliminating from Further Analysis
Special Status Plant and Animal Species	BLM special-status species were evaluated for their potential to occur in the project area during the biological surveys of the project area in August 2020, July 2020, and April 2021. One special status plant species was identified in the project area and would be avoided during construction. The biological survey report is included in Appendix C. No further analysis is needed.
Threatened, Endangered, or Candidate Plant and Animal Species	Five federally listed species were evaluated for their potential to occur in the project area. During biological surveys of the project area in August 2020, July 2020, and April 2021, no federally listed species or habitat were observed within the proposed project area (Appendix C). ESA consultation for the project is summarized in Section 4.1. The proposed project is not located in suitable or potential habitat, as defined by the USFWS, and conforms with the 2002 Biological Assessment (and associated 2003 RMP). No further consultation is necessary.
Migratory Birds	BLM standard stipulations for migratory birds include a pre-construction nest survey if ground disturbance occurs between May 15 and July 15. If a bird nest containing eggs or young is encountered in the path of construction, the operator will cease construction and consult with BLM to determine appropriate actions. Following adherence to these migratory bird protection measures, no further analysis is needed.
Wildlife	The proposed project is not located in any designated Wildlife Area. Standard design features to minimize impacts to area wildlife are included as part of the Proposed Action in Section 2.1.9. No further analysis is needed.
Aquatic Wildlife	There are no aquatic resources present in the proposed project area. No further analysis is needed.
Wetlands/Riparian Zones	There are no wetlands/riparian zones in the proposed project area. No further analysis is needed.
Wild Horses and Burros	There are no Congressionally Designated Wild horse or burro Areas in the proposed project area. No further analysis is needed.

Notes: BLM = Bureau of Land Management; BMP = best management practice; FFO = Farmington Field Office; PNM = Public Service Company of New Mexico; RMP = Resource Management Plan; ROW = right-of-way; SJGS = San Juan Generating Station; USFWS = US Fish and Wildlife Service.

2. Alternatives

2.1 Alternative 1 - Proposed Action Alternative

The Proposed Action requests BLM ROWs for a 345-kilovolt (kV) single-circuit power line (gen-tie), a 34.5-kV power line (collector), ROWs for new and existing access roads, and three construction temporary use areas (TUAs). All proposed ROWs would be constructed and operated by San Juan Solar. The gen-tie would connect to the San Juan Switching Station at the existing PNM substation. Two collector lines are proposed that would transmit power generated from the solar facility located on private land to the gen-tie. Collector #1 would be an aboveground 34.5-kV power line. Collector #2 would also be an aboveground 34.5-kV power line but would be constructed within the proposed gen-tie 200-foot-wide ROW between Poles 38 and 46. Access to the power line ROWs and the solar facility would be via existing and proposed new access roads. The project would be located approximately 3 miles north of Waterflow, New Mexico (Appendix A, Map A-1). All proposed ROWs are depicted on Maps A-2 through A-9 in Appendix A.

This section includes a detailed description of each proposed ROW and the associated project component for which the ROW is proposed (gen-tie, collector line, roads). San Juan Solar includes design features as part of the Proposed Action. Design features are intended to lessen or eliminate impacts to resources to a level below what was disclosed in the PRMP/FEIS (BLM 2003a) and are binding once they are attached to an approved authorization. San Juan Solar's committed design features are outlined in the Plan of Development (Appendix D) and are also listed in Section 2.1.9.

2.1.1 345-kV Gen-Tie

The 345-kV power line would be installed above ground. All structures for the 345-kV gen-tie power line would be constructed with either wood H-frame structures or galvanized or weathered steel poles (with a rusty patina). Refer to Diagrams B-1 through B-5 in the Plan of Development in Appendix D for the 345-kV structure designs. Approximately 47 pole structures would be required. Poles would range from 100 to 160 feet in height with a span length of up to 1,200 feet between structures. Some structures would require three poles approximately 30 feet apart where the power lines have abrupt turns (e.g., 90 degrees) to meet safety regulations, see Diagram B-5 in the POD in Appendix D. A primary telecommunication fiber optic line would also be strung on the gen-tie structures for the length of the gen-tie. Redundant telecommunication, required by the Federal Energy Regulatory Commission, would be achieved using a microwave system located on private land.

The typical gen-tie structure construction site would be a maximum of 200 feet by 200 feet (0.92 acre). Once assembled, the footprint of the structure foundations would be 6 to 10 feet in diameter (28.3 to 78.5 square feet). Framing pads would be accessed from the existing road network, proposed roads, and along the proposed ROW. Post-construction of the gen-tie, a two-track service road within the proposed ROW would remain in place for the life of the project.

The legal description of the proposed gen-tie alignment is as follows:

New Mexico Principal Meridian
T. 30 N., R. 14 W.,
sec. 7, SW¼NW¼ and NW¼SW¼.
T. 30 N., R. 15 W.,

sec. 12, E½SE¼;
sec. 13, S½NW¼, N½NE¼ and N½E¼;
sec. 14, SW¼, W½SE¼, NE¼SE¼ and E½NE¼;
sec. 15, SW¼, SE¼;
sec. 16, SW¼ and SE¼;
sec. 17, S½NE¼, SE¼NW¼, SW¼ and N½SE¼;
sec. 20, NE¼NW¼;
sec. 22, N½NW¼.

The proposed ROW length and acreage per surface ownership for the 345-kV gen-tie are listed in Table 2-1 and shown on Maps A-2 to A-5 in Appendix A. The gen-tie would require a 200-foot-wide ROW and would comprise 101.98 acres on BLM lands. As described in Section 2.1, the Collector # 2 line would be co-located within the gen-tie ROW parallel to the gen-tie between poles 38 and 46 and would not require additional ROW (Appendix A, Maps A-3 and A-4).

Table 2-1. Proposed Gen-tie Right-of-Way Length and Acreage Per Surface Ownership

Surface Ownership	Length (feet)	Acres
Bureau of Land Management	22,212.49	101.98
State of New Mexico	2,624.33	12.05
Private	13,024.55	59.80
Total	**37,861.37**	**173.83**

2.1.2 34.5-kV Collector Lines

The 34.5-kV Collector #1 and Collector #2 power line structures would be either a single pole with or without guild wire or H-frame design. Refer to Diagrams B-6 through B-11 in the POD in Appendix D for the 34.5-kV structure designs. Structures would be constructed with either wooden or weathered steel poles (with a rusty patina). Poles would be 70 feet tall with up to a 700-foot span between structures. Some structures would require three poles approximately 15 feet apart where the power lines have abrupt turns (e.g., 90 degrees) to meet safety regulations see Diagram B-5 in Appendix D. Approximately 12 pole structures would be constructed for Collector #1 and 24 pole structures for Collector #2.

The typical collector line structure construction site would be a maximum of 50 feet by 100 feet (0.11 acre). The footprint of the structures would be 3 feet in diameter (28.3 to 78.5 square feet). Framing pads would be accessed by the existing and proposed road network and along the proposed ROWs.

The legal description of the proposed Collector #1 power line is as follows:

New Mexico Principal Meridian
T. 30 N., R. 14 W.,
sec. 4, N½NE¼ and N½NW¼.

The proposed ROW length and acreage on BLM lands for the 34.5-kV Collector #1 line is summarized in Table 2-2 and shown on Map A-6 in Appendix A. The Collector #1 would require a 200-foot-wide ROW and would comprise 24.55 acres on BLM lands. As referenced above, Collector #2 would be located

within the proposed gen-tie ROW parallel to the gen-tie between poles 38 and 46 and would not require additional ROW (Appendix A, Maps A-3 and A-4).

Table 2-2. Proposed 34.5-kV Collector #1 Right-of-Way Length and Acreage on Bureau of Land Management-Administered Land

Surface Ownership	Length (feet)	Acres
Bureau of Land Management	5,347.63	24.55

2.1.3 Access Roads

The project area would be accessed via Barker Dome Road, a dirt road that connects to County Road 6500, County Road 6800 (a paved road), other dirt roads in the existing transportation network, and along the proposed gen-tie and Collector #1 power line ROWs. The proposed access road ROWs are described in the following sections as new roads, existing (unnamed roads), and Barker Dome Road. Proposed ROW widths for the new and existing road ROWs are 30-feet wide. The ROW for Barker Dome Road improvements would be 40 feet wide.

The proposed access road lengths and acreage on BLM FFO-administered land requiring ROWs are listed in Table 2-3 and discussed further in the sections below.

Table 2-3. Proposed Access Road Length and Acreage on Bureau of Land Management-Administered Land

Type	Length (feet)	Area (acres)
New	2,777.41	1.91
Existing	52,295.81	36.02
Barker Dome Road Upgrade[1]	13,656.58	12.54
Total	68,729.80	50.47

[1]Area is based on a 40-foot-wide right-of-way.

The Access Road POD Checklist is in Appendix E and includes plats, centerline drawings, and road improvement design plans.

2.1.3.1 New Access Roads

Seven new roads with 30-foot-wide ROWs are requested to access the gen-tie power line ROW from the existing road network (refer to Maps A-7 and A-9). The purpose of these roads is to access the gen-tie and Collector #1 ROWs for construction and later for routine power line operations and maintenance. Travel along these new roads would be overland within a 14-foot-wide travel surface. As such, no construction per se is required for these new access roads. Minor blading may be needed to smooth out ruts and/or bumps within the ROW to facilitate vehicle access to the power line structures. Based on a total length of 2,777.41 feet of new access roads proposed within a 30-foot-wide ROW, 1.91 acres of BLM surface may be disturbed by new access roads.

Road maintenance, as needed, would continue until final abandonment and reclamation are completed.

The legal description of the proposed new access roads is as follows:

New Mexico Principal Meridian
T. 30 N., R. 14 W.,
sec. 4, NE¼NE¼ and NW¼NE¼.

T. 30 N., R. 15 W.,
sec. 15, SE¼SW¼;
sec. 17, SE¼NE¼, SE¼NW¼, SW¼SW¼ and NE¼SE¼.

2.1.3.2 Right-of-Ways for the Use of Existing Roads

San Juan Solar has applied for a 30-foot-wide ROW to utilize existing access roads to construct, operate, maintain, and decommission the proposed gen-tie and collector power lines. Existing roads to be permitted are shown on Maps A-6 to A-9 in Appendix A. Existing roads, other than Barker Dome Road (Section 2.1.3.3), would not be upgraded or otherwise improved, except for the installation of two 24-inch culverts in the road leading to Collector #1 (Map A-8). Culvert pipes would have a minimum slope of 2 percent to ensure drainage and a minimum cover of 18-inches. The existing roads to be utilized all have an approximately 14-foot-wide travel surface and were originally permitted to and currently used by oil and gas operators in the area.

The legal description for existing BLM roads that would be used to access the gen-tie power line is:

New Mexico Principal Meridian
T. 30 N., R. 15 W.,
sec. 13, SW¼NE¼;
sec. 15, SE¼SW¼;
sec. 17, SW¼NE¼, SW¼NW¼, SE¼NW¼, SW¼SW¼, NE¼SE¼ and NW¼SE¼;
sec. 18, SW¼NE¼, SE¼NE¼, SE¼NW¼, SW¼ and SW¼SE¼;
sec. 19, NE¼;
sec. 21, NE¼NW¼;
sec. 22, NE¼NW¼, NW¼NW¼ and SW¼NW¼;
sec. 24, SW¼SW¼;
sec. 25, NE¼NW¼, NW¼NW¼and SE¼NW¼.

The legal description for existing BLM roads that would be used to access the Collector #1 power line is as follows:

New Mexico Principal Meridian
T. 30 N., R. 14 W.,
sec. 4, NE¼NE¼, NW¼NE¼, NE¼NW¼ and NW¼NW¼;
sec. 5, SE¼NE¼;
sec. 7, NE¼SE¼;
sec. 8, SE¼NE¼, SW¼NE¼, SE¼NW¼, NE¼SW¼, NW¼SW¼ and NW¼SE¼;
sec. 9, NE¼NW¼, SW¼NW¼, SE¼NW¼ and NW¼SW¼.

2.1.3.3 Barker Dome Road

A 13,656.58-foot-long section of Barker Dome Road on BLM-managed land would be upgraded under the Proposed Action (Appendix A, Maps A-7 and A-8). The proposed upgraded portion of the road would have a 20-foot-wide travel surface within a 40-foot-wide ROW and be used to access the project area during construction and operation. Upgrades would include surfacing with rock or gravel for all-weather access and installing drainage structures (culverts or low water crossings). The gravel for the travel surface would be 3 inch minus material compacted to no less than 6 inches thick. The maximum grade of the road would be 2 to 3 percent. The road would be crowned and ditched to provide adequate drainage. Twenty-one 24-inch diameter culverts would be installed to improve stormwater drainage that currently sheet flows across the road. The road upgrade design drawings are provided in the Road POD in Appendix E.

The legal description of the existing Barker Dome Road on BLM-administered land is as follows:

New Mexico Principal Meridian
T. 30 N., R. 14 W.,
sec. 7, NE¼SW¼, NW¼SW¼ and SW¼SW¼.
T. 30 N., R. 15 W.,
sec. 12, SE¼SE¼;
sec. 13, NE¼NE¼, NW¼NE¼, SW¼NE¼ and NW¼SE¼;
sec. 24, NE¼NW¼, NW¼NW¼, SW¼NW¼, NW¼SW¼ and SW¼SW¼;
sec. 25, NW¼NW¼.

2.1.4 Temporary Use Areas

To upgrade Barker Dome Road, San Juan Solar would require three 10-foot wide TUAs (5 feet on each side) measuring 2,579.69 feet in sec. 7, 861.35 feet in sec. 12, and 3,553.14 feet in sec. 13 totaling 6,994.18 feet in length and 1.606 acres. The purpose of these TUAs is to improve drainage along the proposed 40-foot-wide permanent easement. Disturbance in these areas would be reclaimed following the project Surface Reclamation Plan (refer to POD in Appendix D) after road improvements are completed. The TUA POD Checklist is in Appendix F.

The legal description of the TUAs are:

New Mexico Principal Meridian
T. 30 N., R. 14 W.,
sec. 7, N½SW¼ and SW¼SW¼.
T. 30 N., R. 15 W.,
sec. 12, SE¼SE¼;
sec. 13, N½NE¼, SW¼NE¼ and NW¼SE¼.

2.1.5 Construction and Traffic

Construction would consist of grading, augering, and excavation for 345-kV and 34.5-kV overhead power line poles. During construction, topsoil (the top 6-inches or what is available) would be removed and stockpiled adjacent to the structure being installed for use in reclamation. The typical gen-tie structure construction site would be a maximum of 200 feet by 200 feet (0.92 acre). Once assembled, the footprint

of the structure foundations would be 6 to 10 feet in diameter (28.3 to 78.5 square feet). Following site preparation, foundations would be installed at each 345-kV power line structure location. The exact type of foundation would vary, depending on the type of structure developed in the final design. Foundations may include drilled-shaft anchor-bolted foundations, drilled-shaft embedded foundations, or vibrated steel casings. The typical collector line structure construction site would be a maximum of 50 feet by 100 feet (0.11 acre). The footprint of the structures would be 3 feet in diameter (28.3 to 78.5 square feet).

The power line structures for the gen-tie and collector lines would be delivered to the laydown yard on private land for storage and then transferred from the laydown yard to their installation location as needed. The structures would be assembled in sections on cribbing that provide for the steel members' proper alignment. Steel or wood sections would be laid out with hydraulic cranes. The pole base and top sections would be assembled at each structure site. Insulators and hardware may be placed on the structure before it is erected. Structure design diagrams are provided in the POD in Appendix D.

For both the 345-kV and 34.5-kV power lines, an auger truck or excavator would excavate a hole for each structure base or a foundation if required. If the pole will require a concrete foundation, then concrete with reinforcing steel bars and anchoring bolts would be placed to fill the hole. Vertical excavations would be made with power auguring equipment. Blasting is not anticipated. In rocky areas, holes would be excavated by drilling or by installing special rock anchors. During excavation, structure sites would be accessed by truck-mounted power augers or drill rigs, cranes, material trucks, and crew trucks. Spoil material (excavated soil) would be used for fill where suitable, and the remainder would be spread at the structure site.

A crane would be used to set the pole base sections onto each foundation. An electrical grounding crew would then install the grounding and test the ground resistance. Construction equipment could include the following:

- Backhoes
- Dozers
- Compact tractors
- Crane
- Bucket trucks
- Service trucks
- Pickup trucks
- Line trucks
- Pulling and tensioning trailers
- Heavy-duty haul trucks
- Water trucks
- Pressure digger/augers

Conductor Stringing

The cable for the gen-tie and collector power lines would be strung using conventional wire stringing using tension-stringing equipment. Conductor stringing would be done one phase at a time, with all equipment in the same operational place until all phases of that operation are strung. Approximately 10

pulling sites may be needed for construction—the actual number and location would be determined in the final design plans. The line would be hung by truck.

The sequence of conductor stringing is summarized below:

- Finger Lines – The finger line is used to pull the later pilot line through travelers installed on each davit arm. The finger line is typically a small-diameter synthetic rope that can be pulled by hand or with a crawler tractor.
- Pilot Lines – The finger line, once in place, is used to pull the pilot line, which is a larger synthetic rope or small steel line. This requires a vehicle at each side of the pulling area, a Bullwheel tensioner truck pulling the pilot line, and a drum-puller truck on the other side holding the reel.
- Conductor – Using the pilot line, the conductor is pulled through. Other activities may include offset clipping if suspension insulators are not plumb or splicing together two conductor reels. Once complete, the traveler equipment would be removed.
- Tensioning – After the conductor is completely strung through a section, the section is tensioned to comply with design specifications. Once the conductor has been tensioned or loosened to meet the appropriate sag specification given the ambient temperature, the dead-end clamps is tightened

As previously described, no construction per se is required for proposed seven new access roads. Minor blading may be needed to smooth out ruts and/or bumps and hard surfaces within these access road ROWs to facilitate vehicle access to the power line ROWs.

The only construction associated with the proposed existing road ROWs is the placement of two culverts in the road leading to Collector #1 (Map A-8). The culverts would be installed with a backhoe temporarily disturbing an area approximately 18-feet by 5-feet excavating a trench across the road to install each culvert. Construction associated with the proposed Barker Dome Road upgrades are summarized in Section 2.1.3.3 and shown in the design drawings in the Access Road POD in Appendix E.

Construction of the power lines and access roads could take approximately 3 to 6 months to complete. Construction of the solar facility on private land would take approximately 12 months to complete. The power line construction workforce would consist of laborers, craftsmen, supervisory personnel, and construction management personnel. On average, there would be approximately 450 construction workers on-site during peak construction periods. Construction would occur 5 days a week for an estimated 10 to 12 hours per day. Additional hours may be necessary to make up for schedule and weather delays.

2.1.5.1 Traffic Volumes

Traffic volumes would vary over the construction period; however, Table 2-4 lists the daily trips anticipated for a 90-day peak construction period. These estimated traffic volumes include vehicle trips to construct the Proposed Action and the traffic along the proposed road ROWs to access the solar facility construction site on private land. On-site employees would travel in light-duty vehicles. Heavy-duty trucks would deliver systems and materials.

Table 2-4. Daily Traffic Trips During Peak Construction Period

Type	AM Peak	PM Peak	Daily Trips
On-Site Employees	450	450	900
Systems/Materials Delivery			64
Total Trips			964

After construction and during operation and maintenance, there would be approximately 24 daily traffic trips to maintain and operate the power lines and the solar facility located on private land.

2.1.6 Disturbance and Reclamation

Table 2-5 lists the estimated surface disturbance resulting from the Proposed Action and the amount of long-term disturbance following interim reclamation.

A detailed construction Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Proposed Action to minimize erosion from disturbed areas and stockpiled topsoil before reclamation. Vegetation would not be removed along utility ROWs unless it is located along planned access or maintenance roads or if the area requires grading to ensure a stable or level area for power line infrastructure (i.e., structure locations).

Table 2-5. Proposed Action Long- and Short-Term Surface Disturbance

Project Feature	Surface Disturbance (acres)		Reseeded and Recontoured (acres)	
	Total	New	Interim Reclamation	Final Reclamation
Power Line Structure	45.9	45.9	45.8	0.1
New Access Roads	1.9	1.9	0	1.9
Maintenance Road[2]	9.5	9.5	0	9.5
Temporary Use Areas	1.6	1.6	1.6	0
Total	67.2	67.2	54.3	12.9

[1] Based on a 10-foot-wide construction corridor.

[2] Based on a 14-foot-wide driving surface.

Reclamation activities would follow the guidance provided in the *Farmington Field Office Bare Soil Reclamation Procedures*. These procedures are referenced in the project-specific Surface Reclamation Plan attached to the POD in Appendix D.

2.1.7 Operation and Maintenance

The power lines would be inspected once or twice a year, or as required, using a light-duty vehicle or all-terrain vehicles, or the site would be accessed on foot. Maintenance on utilities and access roads would consist of dust control; repair and upkeep of all transformers, inverters, and wiring collection systems; control systems upkeep; and maintenance of permanent stormwater controls and maintenance.

Major equipment maintenance and overhauls would be completed at intervals of approximately 5 to10 years over the 50-year life of the project. Replacement of nonfunctioning equipment may require the use of heavy haul-transport equipment and a large overhead crane.

2.1.8 Decommissioning

The project has an anticipated useful life of at least 50 years, at which time the Applicant may decommission facilities or apply for a renewal of extension of the ROW term. The Applicant would decommission and remove the facilities and complete reclamation by the expiration date of the ROW (as such date may be renewed or extended).

Decommissioning of the project would include disassembling the permanent facilities described in Sections 2.1.1 through 2.1.3. Existing roads and the Barker Dome Road would not be decommissioned. Concrete foundations would be removed to 3 feet below grade. The Applicant would attempt to salvage materials and/or recycle components for future use, as applicable and economically feasible. Unsalvageable materials would be disposed of at authorized locations. Demolition or removal of equipment and facilities would meet applicable environmental and health regulations.

Following the removal of the facilities, the site would undergo final cleanup and reclamation. Areas disturbed during the removal of facilities would be restored and rehabilitated as near as possible to their original condition and would be available for the same uses that existed before construction.

2.1.9 Design Features

All design, material, and practices pertaining to construction, operation, maintenance, and termination of the proposed power lines and access roads would follow safe and proven applicable engineering practices, codes, specifications, and standards. The following design features and BMPs would be confirmed during the project's environmental review and amended as necessary.

- A pre-construction meeting will be held where all supervisory construction personnel will be instructed on protection of cultural, paleontological, and ecological resources, and all terms, conditions, and stipulations of the ROW grant.
- All construction, operation, and maintenance activities will be required to comply with Occupational Safety and Health Administration regulations.
- Before construction, the ROW and pole locations will be marked. When applicable, BLM boundaries will be marked with station numbers at the entrance to and exit from BLM lands. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate activity limits.
- San Juan Solar would coordinate with Westmoreland San Juan Mining, LLC and notify the BLM Authorized Officer prior to any construction within the mine lease.

Air Resources

- Areas not required for facilities would be revegetated during interim reclamation.
- Dirt roads would be watered during periods of high use (magnesium chloride, organic-based compounds, and/or polymer compounds could also be used on dirt roads upon approval of the BLM).

- Limit vehicle speed on access roads to 15 miles per hour, unless posted along Barker Dome Road.
- Suspend excavation and grading during periods of high wind.
- Cover all trucks hauling soil or other loose material in and out of the project area.
- Gravel or aggregate may be used where access roads meet paved roads to limit offsite disturbance and prevent mud and dirt track-out.

Soils, Water, and Vegetation

- Any spills of industrial fluids will be properly reported to the Authorized Officer, cleaned up immediately, and removed to an approved disposal site.
- Self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped, as needed, and the contents disposed of in an approved sewage disposal facility. Toilets will be on-site during all construction operations.
- During construction, cleanup, and restoration, any hazardous materials will be properly managed. Bulk chemicals and hazardous materials are not expected to be produced or stored on-site. During cleanup and restoration, any hazardous materials (e.g., petroleum products used for equipment) would be properly managed in accordance with applicable federal, state, and local regulations.
- Reclamation would follow the guidance provided in the *Farmington Field Office Bare Soil Reclamation Procedures*. These procedures are referenced in the project-specific Surface Reclamation Plan.
- A Weed Control Plan has been developed for the Proposed Action and is attached to the POD in Appendix D. Identified noxious weeds would be treated before new surface disturbance, as determined by the BLM FFO Noxious Weed Coordinator (505-564-7600). A Pesticide Use Proposal would be submitted to and approved by the BLM FFO Noxious Weed Coordinator prior to applying any pesticide.
- A SWPPP has been developed and will be implemented. A variety of erosion control BMPs such as filter socks and silt fence, and good housekeeping practices are planned and detailed in the SWPPP located in the POD in Appendix D.
- No construction or routine maintenance activities would be performed during periods when the soil is too wet to support construction equipment adequately. If such equipment creates ruts greater than 6 inches deep, the soil shall be deemed too wet.
- Concrete washout will occur on-site, and waste shall be disposed of at an approved facility—not buried.
- Equipment fueling will take place offsite as much as possible.
- Vehicles and equipment will be washed offsite for the duration of construction. Vehicles and equipment will be washed before entering the construction site.
- A silt fence will be installed on the down slope side of pull sites and structure pads to prevent offsite sediment discharge and protect receiving waters.

Wildlife

- San Juan Solar's design and construction of the power lines would comply with Avian Power Line Interaction Committee recommendations for avian protection. San Juan Solar would conduct maintenance throughout the year on an as-needed basis. San Juan Solar would consult with the

BLM FFO if active nests discovered on the power lines during the nesting season require removal.

- Any wildlife encountered within the proposed project area would be avoided and allowed to move out of the project area. No wildlife would be intentionally harmed or harassed.
- BLM standard stipulations for migratory birds include a pre-construction nest survey if ground disturbance occurs between May 15 and July 15. If a bird nest containing eggs or young is encountered in the path of construction, the operator will cease construction and consult with BLM to determine appropriate actions.
- Should special status species be observed within the project area before or during the project, construction would cease, and the BLM FFO would be immediately contacted. The BLM FFO would then evaluate the resource. Should a discovery be evaluated as significant (protected under the Endangered Species Act, etc.), it would be protected in place until mitigation could be developed and implemented according to guidelines set by the BLM FFO.

Livestock Grazing and Rangeland Health Standards

- San Juan Solar will coordinate with BLM to determine whether notification to any BLM grazing permittees is required under 43 CFR Sec. 4110.4-2(b).
- Livestock grazing permittees in the project area would be contacted before construction.
- If livestock is present during construction, barriers would be placed to ensure that livestock do not come in contact with potential hazards. Barrier examples could include fencing of exposed ditch-type holes, covering holes when personnel are not present on-site, and containing contaminants, fluid leaks, or hazards that could cause injury to livestock.
- San Juan Solar will minimize disturbance to existing fences and other improvements on public land. San Juan Solar will promptly repair impacted improvements to at least their former state. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway before cutting the fence. No permanent gates would be installed unless approved by the Authorized Officer.

Visual Resources

- Non-specular conductors and supports will be used throughout the project to reduce visual impacts.

Public Health and Safety

- The hauling of equipment and materials on public roads would comply with New Mexico Department of Transportation (NMDOT) regulations. Any accidents involving persons or property would be reported to the BLM FFO. The Holder would notify the public of potential hazards by posting signage, having flaggers, or using lighted signs as necessary.
- The Holder would adhere to company safety policies and Occupational Safety and Health Administration (OSHA) regulations.
- Vehicles would be restricted to proposed and existing disturbance areas.
- Limit vehicle speed on access roads to 15 miles per hour, unless posted along Barker Dome Road.

Cultural Resources

- All cultural resources stipulations would be followed as indicated in the BLM Cultural Resource Records of Review and the Conditions of Approvals. These stipulations may include but are not limited to temporary or permanent fencing or other physical barriers, monitoring of earth-disturbing construction, project area reduction and/or specific construction avoidance zones, and employee education.
- All employees, contractors, and subcontractors would be informed by the project proponent that cultural sites are to be avoided by all personnel, personal vehicles, and company equipment, and that it is illegal to collect, damage, or disturb cultural resources, and that such activities on federal and tribal lands are punishable by criminal and or administrative penalties under the provisions of Archaeological Resources Protection Act (ARPA) (16 USC 470aa–mm).
- In the event of a cultural resource's discovery during construction, construction activities would immediately cease in the immediate vicinity of the discovery, and the Holder would immediately notify the archaeological monitor, if present, or the BLM. The BLM would then ensure the site is evaluated. Should a discovery be evaluated as significant (e.g., National Register of Historic Places, Native American Graves Protection and Repatriation Act of 1990, ARPA), it would be protected in place until mitigating measures can be developed and implemented according to guidelines set by the BLM.
- Known sites and sites identified during the pre-construction cultural resources inventory surveys would be avoided.

Paleontological Resources

If any paleontological resources are discovered during activities associated with the proposed project:

- The Holder would inform the BLM Authorized Officer.
- Activities in the vicinity of the discovery would be suspended or adjusted to avoid further impacts. The discovery would be protected from damage or looting.
- The Authorized Officer would ensure evaluation of the discovery as soon as possible, but no more than 10 working days after being notified.
- After consulting with the operator, the authorized officer would determine appropriate measures to mitigate adverse effects to significant paleontological resources.
- Within 10 days, the operator would be allowed to continue construction through the site or would be given the choice of either (1) following the Authorized Officer's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (2) following the Authorized Officer's instructions for mitigating impacts to the fossil resource before continuing construction through the proposed project area.

3. Affected Environment and Environmental Consequences

3.1 Introduction

This chapter describes the existing conditions relevant to the issues presented in Table 1-2 and discloses the potential impacts on those issues. Section 3.2 describes the effects of the No Action Alternative for all issues. Section 3.3 presents an overview of past, present, and reasonably foreseeable future actions considered in the analysis. Issues analyzed in brief are described in Section 3.4 and those analyzed in detail in Section 3.5.

Effects can be either long term (permanent, residual) or short term (incidental, temporary). Short-term effects are sustained for only a limited time, and the environment usually reverts rapidly to the preconstruction condition. Short-term effects are often disruptive and obvious. Long-term effects are defined as those that endure more than 5 years.

3.2 No Action Alternative for All Issues

Under the No Action Alternative, the BLM would deny the proposed ROWs, and the existing conditions and trends related to each issue would continue. Potential effects of the Proposed Action would not occur under this alternative, and current land and resource uses would continue. The proposed gen-tie and collector power lines and associated access roads would not be built. Solar energy would not be transported to the existing power grid to replace the coal-fired electricity generated by SJGS or to meet the state mandates for noncarbon electricity generation under the Renewable Energy Act.

3.3 Past Actions and Reasonably Foreseeable Environmental Trends

The San Juan Basin has been a producing oil and natural gas field since the early to middle 1900s and is characterized by overlapping uses for oil and gas, grazing, and dispersed recreation. Other land uses in the basin include coal mining, electric power generation, agriculture, and urban development, including Farmington, Aztec, Bloomfield, Blanco, Kirtland, Gobernador, Nageezi, Lindrith, and Counselor. There are 10,500 acres of active coal mines in the analysis area. Agricultural use is present along the Animas and San Juan Rivers; south of the Farmington-Aztec-Bloomfield tri-city area, the Navajo Indian Irrigation Project currently irrigates approximately 64,000 acres of agricultural land (BLM 2015b). There are also 167 permitted livestock grazing allotments in the BLM FFO planning area (BLM 2003a).

This section describes the reasonably foreseeable environmental trends considered in this affects analysis. Table 3-1 summarizes quantifiable estimated surface disturbance associated with past, present, and reasonably foreseeable environmental trends and planned actions in the New Mexico portion of the San Juan Basin.

Table 3-1. Estimated Disturbance from Past, Present, and Reasonably Foreseeable Future Actions in the Planning Area

Past, Present, and Reasonably Foreseeable Future Actions	Approximate Disturbance (acres)
Past oil and gas development	56,500

Past, Present, and Reasonably Foreseeable Future Actions	Approximate Disturbance (acres)
Past and present other development	74,500
Reasonably foreseeable oil and gas development	18,500
Other reasonably foreseeable development (roads, transmission lines, and urban expansion)	5,000
Total	154,500

Energy Generation

- Reclamation activities at the La Plata Mine (1,650 acres) were completed in 2009, and reclamation activities at the San Juan Mine (2,700 acres) are ongoing (BLM 2020). No additional coal leases are expected to be issued for the La Plata or San Juan Mines. The BLM assumes approximately 5,000 acres to be disturbed for planned actions at these coal mines. San Juan Mine, which supplies coal to SJGS, is scheduled to cease mining in 2021; coal stockpiles will continue to supply SJGS until it shuts down in 2022. The San Juan Mine and SJGS closure plans are subject to change.
- In its 2017 Integrated Resource Plan, PNM announced its intent to close the SJGS in 2022; however, the City of Farmington recently teamed with Enchant Energy to repurpose the SJGS into a commercial-scale carbon-capture utilization and sequestration facility and wholesale power generator (US Department of Energy 2020). A July 2019 pre-feasibility study recommended the development of a more in-depth front-end engineering and design study. The Los Alamos National Laboratory found the proposed plan to be technically viable and concluded that there was sufficient demand for the project (Los Alamos National Laboratory 2019). However, given the uncertainties around this project, it is not included in Table 3-1.
- The Shiprock Solar Project is a proposed 360-MW solar plant encompassing approximately 2,535 acres (555 on private land and 1,980 on BLM land) that would tie into the Western Area Power Administration substation near the SJGS.
- The Rockmont-San Juan Satellite Transmission Project would be a 100-MW solar generation facility with a 30-MW energy storage system located on State of New Mexico land encompassing approximately 1,500 acres south of the Proposed Action. This project is currently on hold and is not included in Table 3-1.
- Navajo Transitional Energy Company (NTEC) is proposing a 200-MW photovoltaic solar array facility with the flexibility to be coupled to a 100-MW battery storage system on about 1,160 acres in San Juan County, New Mexico, next to the Four Corners Power Plant. The solar facility would be located on reclaimed land, formerly mined for coal in NTEC's Navajo Mine lease area.
- San Juan Solar 2 Project encompassing about 1,600 acres on private land near SJGS.

Other Ongoing or Planned Actions

Oil and Gas: The Mancos-Gallup reasonably foreseeable development scenario (Crocker and Glover 2018) projects 3,200 new oil and gas wells in the San Juan Basin over the next 20 years (2018–2037); of these, 2,300 are predicted to be horizontally drilled. In this scenario, new surface disturbance from potential wells is estimated at approximately 18,500 acres (Crocker and Glover 2018).

Transmission Lines and Pipelines / Associated Infrastructure: The planning area includes portions of the Navajo-Gallup Water Supply Project, projected to deliver water to more than 43 Navajo chapters through a 280-mile-long pipeline and two water treatment plants (US Bureau of Reclamation 2009).

Urban Expansion: Future expansion is expected in Farmington, Aztec, and Bloomfield, including development for roads, utilities, and communication lines.

Livestock Grazing: Grazing in the planning area is expected to continue at current rates.

The BLM FFO planning area consists of portions of San Juan, Rio Arriba, McKinley, and Sandoval Counties. It encompasses 4,189,460 acres, including lands managed by the BLM, Bureau of Indian Affairs, State of New Mexico, US Forest Service, National Park Service, Bureau of Reclamation, and New Mexico Game and Fish; it also includes private property and Navajo tribal fee lands.

The Proposed Action would comprise approximately 0.04 percent of reasonably foreseeable environmental trends and planned actions in the BLM FFO planning area.

3.4 Issues Analyzed in Brief

The BLM IDT identified resources that would be impacted but not to the degree that detailed analysis is required. To fully disclose the potential effects of the Proposed Action, the following are issues analyzed in brief (see Table 1-3).

3.4.1 What Are the Potential Effects on Air Quality from Fugitive Dust and Emissions during Construction and Operation?

3.4.1.1 Proposed Action

All areas in San Juan County, New Mexico, are in attainment with National Ambient Air Quality Standards (NAAQS). The US Environmental Protection Agency (USEPA) has the primary responsibility for regulating atmospheric emissions, including six nationally regulated air pollutants defined in the Clean Air Act. These pollutants, referred to as "criteria pollutants," include carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). The Clean Air Act charges the USEPA with establishing and periodically reviewing NAAQS for each criteria pollutant. Table 3-2 shows the current NAAQS for each pollutant. Regulation and enforcement of the NAAQS have been delegated to the states by the USEPA. New Mexico Ambient Air Quality Standards (NMAAQS) are also shown.

Table 3-2. Design Values for Counties within the Analysis Area

Pollutant	2018 Design Concentrations	Averaging Time	NAAQS	NMAAQS# **††
O_3	Rio Arriba County: 0.067 ppm Sandoval County: 0.068 ppm San Juan County: 0.070 ppm, 3 stations; Bloomfield at 0.069 ppm, Navajo Dam at 0.070 ppm, Shiprock at 0.069 ppm	8-hour	0.070 ppm*	–
NO_2	San Juan County: 3 stations; Bloomfield at 10 ppb, Navajo Dam at 6 ppb, Shiprock at 3 ppb	Annual	53 ppb†	50 ppb

Pollutant	2018 Design Concentrations	Averaging Time	NAAQS	NMAAQS# **††
NO_2	San Juan County: Bloomfield at 34 ppb	1-hour	100 ppb‡	–
SO_2	San Juan County: 2 ppb	1-hour	75 ppb¶	–
$PM_{2.5}$	San Juan County: Invalid monitor data#	Annual	60 µg/m^3 ‡§	–
PM_{10}	San Juan County: Invalid monitor data#	24-hour	35 µg/m^3 ‡#	–

Source: USEPA 2016, 2019b.

ppm = parts per million; ppb = parts per billion; µg/m3 = micrograms per cubic meter;

* Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years.

† Not to be exceeded during the year.

‡ 98th percentile, averaged over 3 years.

§ Annual mean, averaged over 3 years. 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years.

$PM_{2.5}$ monitor stations currently show installed locations in the planning area (San Juan County); however, the monitor status of these stations shows invalid data and cannot be used to represent design values.

** The NMAAQS standard for total suspended particulates, which was used to compare PM_{10} and $PM_{2.5}$, was repealed as of November 30, 2018.

†† While there are no NAAQS for hydrogen sulfide (H_2S), New Mexico has set a 1-hour standard for H_2S at 0.010 ppm for all areas of the state outside of the area within 5 miles of the Pecos-Permian Air Quality Control Region (BLM 2019a).

(8) To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

During construction, air quality would temporarily be directly impacted by pollution from exhaust emissions and fugitive dust. Air pollution from the motorized construction equipment and dust dissemination would discontinue after the construction phase (approximately 3 to 6 months). Construction equipment emission factors were estimated using the USEPA's Motor Vehicle Emission Simulator, version 3 (MOVES3; USEPA 2020) for San Juan County, New Mexico. Construction equipment fleet population by type were assumed equivalent to the Athos Renewable Energy Project construction fleet (BLM 2019b). Construction was assumed to occur over six months with overlapping activities across three construction phases: three months of site preparation, two months of grading, and four months of electrical installation. Estimated emissions from truck/equipment operations during construction are presented in Table 3.3.

Table 3-3. Estimated Emissions from Construction of the Proposed Action

	Emissions (tons per year)[a]		
	NOx	CO	$PM_{2.5}$
Human-caused emissions (San Juan, Sandoval, Rio Arriba, and McKinley Counties)	54,803	180,126	14,181
Emissions from operation of construction equipment	4.17	2.34	0.38
Emissions from vehicles used during construction	1.95	5.71	0.07
Total emissions from construction equipment and vehicles	6.12	8.05	0.45

	Emissions (tons per year)[a]		
Percent increase	<0.0112	0.0045	0.0031

Note: NO_x = nitrogen oxides; CO = carbon monoxide; $PM_{2.5}$ = particulate matter 2.5 micrometers or less in diameter.

[a] Emissions quantified in this table include exhaust emissions from equipment and vehicles

In addition to the exhaust emissions quantified above, the Proposed Action would also result in short-term intermittent fugitive dust emissions and consequent increases in particulate ($PM_{2.5}$ and PM_{10}) concentrations. The minor increase in exhaust and fugitive dust emissions from short-term construction activity would not be expected to exceed the ambient air quality standards for any criteria pollutants in the project area or San Juan County. Section 3.4.2 addresses greenhouse gas (GHG) emissions during the construction and operation of the Proposed Action. Fugitive dust from construction activities and traffic would be controlled on the access roads and other locations, as necessary, using water as part of San Juan Solar's Dust Abatement Plan. Water quantity used and the source of the water are discussed in Section 3.4.3.

3.4.2 What Are the Potential Effects on Greenhouse Gas Emissions during Construction and Operation?

3.4.2.1 Proposed Action

Climate change is a global process that is impacted by the sum of GHGs throughout the atmosphere. The incremental contribution to global GHGs from a proposed action cannot be translated into effects on climate change globally or in any site-specific action. It is currently not feasible to predict with certainty the net impacts from a proposed action on global or regional climate. That is, while BLM actions may contribute to climate change, the specific effects of those actions on global or regional climate are not quantifiable (BLM 2019a).

During construction, exhaust emissions from vehicles and equipment would incrementally contribute to greenhouse gases. Construction equipment and vehicle emissions factors were estimated with the USEPA's MOVES3 for San Juan County, New Mexico. Vehicle activity during construction was estimated to be 900 round trips per day for light duty vehicles and 64 round trips per day for heavy duty vehicles, with a conservative (i.e., high) estimate of average miles (20) traveled per round trip in the project area. Approximately 947 metric tons of CO_2-equivalent (CO2-e) emissions would be generated over the 90 days of construction. Approximately 2,298 metric tons of CO2-e would be generated from equipment during construction. Together, construction equipment and vehicle emissions would generate 3,245 metric tons of CO2-e.

For context, the 3,245 additional metric tons of CO2-e would be a negligible fraction of annual GHG emissions across the US (0.00054 percent of 6,457 million metric tons [MMT]), and of New Mexico emissions (0.00322 percent of 101.7 MMT) (USEPA 2019a; NMED 2006); therefore, detailed analysis is not warranted. These emissions would contribute to documented ongoing and reasonably foreseeable climate-related effects. However, emissions would decrease once the Proposed Action has been constructed. Vehicle emissions during operation would be minimal, estimated at 292 metric tons/year (USEPA 2014).

3.4.3 How Would Water Quality and Quantity be Affected during Construction and Operation?

3.4.3.1 Proposed Action

BMPs (e.g., SWPPP, Dust Abatement Plan, proper handling of waste materials) would be implemented to protect surface water quality during construction of the gen-tie, collector lines, and access roads. Construction would comply with the USEPA and specific requirements of the National Pollutant Discharge Elimination System program. A SWPPP has been developed and would be implemented during and after construction to prevent sediment in stormwater runoff from reaching drainages. Permanent stabilization and stormwater management BMPs (e.g., reseeding, water bars, and surface hardening) would be implemented after construction. Areas not needed for permanent infrastructure would be reclaimed following construction.

The project would require approximately 0.87 acre-feet of water over the 3 to 6-month construction period for construction purposes and dust abatement. This water is planned to be sourced from either the Kirtland or City of Farmington municipal public systems and would be trucked to the project area via existing access roads. Both municipal systems are sourced from Farmington Lake that is filled by surface

water from the Animas and San Juan rivers. Neither water storage tanks nor holding ponds are expected to be needed or placed on the ROW. Basin-wide water usage is 486,660 acre-feet/year, of which the Proposed Action would use 0.0000017 percent. Solar projects will be included within the mining category for water use, because the intent of the project is to produce energy. BLM's 2020 water support document discloses 11,658 acre-feet of surface water uses within the mining category. The project proposes to use 0.87 acre-feet of surface water; therefore, the proposed project would increase the surface water use within the FFO boundaries by 0.0075%. The project would adhere to the Clean Water Act at the federal and state level.

No groundwater use is planned, and consequently, no effects on groundwater quality are expected to occur.

3.4.4 What Are the Potential Effects on Paleontology from Ground Disturbance?

3.4.4.1 Proposed Action

The Proposed Action is located within the Pinon Mesa Fossil Area, an SDA identified in the 2003 FFO RMP. The area has a Potential Fossil Yield Classification of 5, meaning the geologic formation exposed at the surface has a high potential to contain paleontological resources. The proposed project would use a combination of existing disturbance and project design features to minimize surface disturbance to the extent possible, so no effects on paleontological resources are expected. No known paleo locales are located near the new disturbance area within the Pinon Mesa Fossil SDA. The following Condition of Approval/stipulation will be required to mitigate any accidental discoveries: Any paleontological resource discovered by the Operator, or any person working on his behalf, on public or federal land shall be immediately reported to the Authorized Officer. The Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The Authorized Officer will evaluate the discovery to determine appropriate actions to prevent the loss of significant scientific values. The Holder will be responsible for the cost of evaluation, and the Authorized Officer will make any decision as to proper mitigation measures after consulting with the Holder.

3.4.5 What Are the Effects on Soils from Ground Disturbance?

3.4.5.1 Proposed Action

The proposed gen-tie and collector #1 ROWs, new access roads, and TUAs would include approximately 185 acres; however, the actual amount of soil disturbance is estimated to be approximately 67 acres (refer to Table 2-5). Within the power line ROWs, the disturbance would be limited to areas where structures would be located and to facilitate vehicle and equipment access. Disturbance would also occur within the proposed new access roads. The Proposed Action would affect soils that have been classified as having moderate to severe erosion potential. Construction would result in temporary displacement, compaction, and mixing of soils. Soils are most susceptible to erosion during construction when strong winds or precipitation events could mobilize soils. The impact on soils would be localized and short to long term. The new access roads and maintenance road (approximately 12.8 acres) would remain as bare, compacted soil for the life of the project (about 50 years) and would be subject to an undetermined amount of wind and water erosion until fully reclaimed. Temporary use areas would be reclaimed following the completion of Barker Dome upgrades as outlined in the project-specific Surface Reclamation Plan. Compaction of the soils during construction and operation of the Proposed Action, coupled with

implementing BMPs as outlined in the SWPPP, would limit soil impacts from erosion. The SWPPP is included as an attachment to the POD.

3.4.6 What are the Effects on Cultural Resources?

The proposed undertaking, for the purposes of NHPA Section 106, include not only the gen-tie, collector power lines, and access roads that are considered in this EA but also the solar array which is to be built entirely on private property. The undertaking is in an area that has had overlapping cultural resource inventories by a variety of past undertakings. These include, but are not limited to, New Mexico Cultural Resources Information System (NMCRIS) activities 4691, 4810, 4936, 5542, 5548, 5980, 7200, 10515, 19971, 44686, 46894, 89612, 89624, 89625, 90753, 91962, 112520, 115024, 123539, 125671, 125996, and 147156. Three additional Class III archaeological inventories (NMCRIS No. 146866/BLM Report No. 2021(IV)008F; NMCRIS No. 148346/BLM Report No. 2021(IV)008.2F; and NMCRIS No. 148167/BLM Report No. 2021(IV)008.1F) and a viewshed analysis (BLM Report No. 2021(IV)008.3F) were required for the proposed undertaking.

The three Class III archaeological inventories documented 30 previously recorded sites, 41 newly recorded sites, two historic cultural properties (HCP), and 143 isolated manifestations. Of the 71 recorded cultural properties, 49 are considered National Register of Historic Places (NRHP)-eligible under Criterion D (LA 16744, LA 16745, LA 16749, LA 16752, LA 16755, LA 21984, LA 22041, LA 33359, LA 34845, LA 38518, LA 47033, LA 49651, LA 106347, LA 119270, LA 139197, LA 141258, LA 141260, LA 145819, LA 174887, LA 197725, LA 197726, LA 197729, LA 197730, LA 198895, LA 198896, LA 199173, LA 199175, LA 199176, LA 199177, LA 199178, LA 199180, LA 199181, LA 199183, LA 199184, LA 199185, LA 199186, LA 199187, LA 199188, LA 199189, LA 199191, LA 199192, LA 199193, LA 199194, LA 199195, LA 199197, LA 199198, LA 199383, LA 199384, and HCPI 51202), 16 are recommended NRHP-undetermined (LA 52261, LA 53657, LA 106348, LA 146836, LA 174870, LA 174871, LA 174872, LA 174873, LA 174876, LA 174877, LA 197724, LA 197727, LA 197728, LA 197731, LA 197732, LA 197733, LA 199174, LA 198594, LA 199182, LA 199190, and LA 199196), and one is considered NRHP-ineligible (HCPI 36540). The isolated manifestations are not considered eligible for inclusion in the NRHP due to their limited remains and lack of significant data potential. The isolates have been adequately characterized in archival form, and no further work is recommended for them.

All sites recommended either NRHP-eligible or NRHP-undetermined have stipulations to be avoided, and mitigation measures such as restrictive fencing and archaeological monitoring during construction would be implemented. Therefore, the Proposed Action has a No Historic Properties Affected determination.

3.5 Issues Analyzed in Detail

3.5.1 Socioeconomics

3.5.1.1 Affected Environment

The Proposed Action is in San Juan County, New Mexico. Table 3-4 provides demographic and economic data for the county compared to the state.

Table 3-4. San Juan County and New Mexico 2021 Demographic and Economic Data

	San Juan County	New Mexico
2019 Population	123,958	2,096,829
2010 Population	130,045	2,059,199
Median Income	$50,518	$49,754
Persons in Poverty	19.9%	18.2%
Unemployment Rate[1]	8.9%	7.6%

[1] April 2021; Source New Mexico Workforce Connection 2021.

Source: US Census Bureau 2019.

Between 2010 and 2019, San Juan County's population decreased by nearly 5 percent. With the closure of SJGS and San Juan Mine, local job losses could total 1,600 or more and area earnings would be reduced by about $120 million annually. There would also be a loss of an estimated $50 million in revenues from gross receipts and property taxes (US Department of Energy 2020). Between 2008 and 2018, jobs in mining, including gas extraction, declined by 15 percent in the county (Santa Fe New Mexican 2018).

3.5.1.2 Proposed Action Environmental Effects

The Impact Analysis for Planning (IMPLAN) modeling approach was used to quantify economic effects from the Proposed Action. The IMPLAN model was originally developed by the US Forest Service and is commonly used by the BLM and many other government and private sector organizations to estimate the total economic impacts of various activities, actions, and policies (BLM 2019c). IMPLAN modeling also allows for project effects to be evaluated in the context of the regional economy. While the Proposed Action is the construction and operation of the gen-tie and collector lines, the 200-MW solar plant on private lands is related; therefore, economic effects are summarized and include energy transportation and generation. The gen-tie and collector power lines account for approximately 12 percent of the total economic outputs. All estimates for construction are in 2022 dollars. Estimates for operation are in 2023 dollars.

Employment: Table 3-5 summarizes the estimated jobs created by the Proposed Action during construction and operation. Indirect jobs are those created by the project's spending on goods and services from local companies. Induced jobs are a result of the economic impact of direct and indirect employees spending their earnings.

Table 3-5. Estimated Jobs Created by the Proposed Action and Related Planned Actions

Type	Construction	Annual Operation
Direct Jobs	450	15
Indirect Jobs	62	8
Induced Jobs	125	8
Total	637	31

The number of jobs created by the Proposed Action would be small compared to the overall employment in San Juan County. However, the impact on personal income would be larger since the average wage would be higher than the county's median wage. San Juan Solar would hire locally, though some

construction jobs may require specific expertise, and employees would be regionally sourced (e.g., from Albuquerque).

Direct Spending: Direct spending would impact the local economy through wages, the purchase of goods and equipment, property taxes, etc. Table 3-6 summarizes the labor income, intermediate expenditures, other property income, and taxes on production and imports for 1 operation year. Intermediate expenditures are the cost of buying tools, equipment, and supplies. Other property income includes profits; capital consumption allowance; and payments for rent, royalties, and interest income. Taxes on production and imports include sales tax, property tax, motor vehicle taxes, severance, excise tax, assessments, custom duties, and other taxes and fees, less government subsidies. In Table 3-6, total labor income includes direct, indirect, and induced employment.

Table 3-6. Estimated Annual Direct Spending during Operation

Type	Construction	Annual Operation
Average Direct Job Income	$57,994	$85,348
Total Labor Income	$34,039,540	$2,194,426
Intermediate Expenditures	$37,744,268	$6,456,532
Other Property Income/Taxes on Production and Imports	$26,856,385	$3,792,586
Total	$98,640,194	$12,443,544

Over the estimated 50-year life of the project, the total direct spending in San Juan County is estimated at $622 million, based on 2023 dollars; therefore, the future impacts are expected to be greater when adjusted for inflation. Therefore, the Proposed Action would have long-term positive impacts on the local economy from wages and other direct spending.

Taxes: Taxes include those paid to the county, sub-county districts (incorporated areas such as Kirtland, New Mexico), school districts, and the state and federal government. The total estimated taxes that would be paid are summarized in Table 3-7. The total lifetime tax impacts from the Proposed Action are estimated at $82 million, based on 2023 dollars; therefore, the anticipated future impacts are expected to be greater when adjusted for inflation. The Proposed Action would have long-term impacts on the local and state economies from tax revenue.

Table 3-7. Estimated Tax Effects during Construction and Annual Operation

Type	Construction	Annual Operation
San Juan County	$188,153	$64,711
Sub-county	$309,356	$107,012
School Districts	$469,688	$161,590
State Government	$2,769,721	$801,776
State and Local Total	$3,736,918	$1,135,090
Federal Government	$6,796,452	$541,438
Grand Total	$10,533,369	$1,676,527

3.5.2 Environmental Justice

3.5.2.1 Affected Environment

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, requires that federal agencies identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Impacts from the proposed projects could occur if described impacts disproportionately affect a nearby environmental justice population. Impacts are measured by determining if qualifying minority or low-income populations, as defined in environmental justice terminology developed by the President's Council on Environmental Quality (CEQ 1997), would be subject to disproportionately high and adverse human health or environmental effects from the proposed project.

The Proposed Action is located within Census Tract 5.04 in San Juan County, New Mexico. The tract has a population of 1,889, of which 51.8 percent are American Indian. Therefore, the Proposed Action would be located in a minority community as defined by the CEQ, and based on these factors, is in an area that meets the demographic criteria of an environmental justice population under EO 12898. The individual poverty rate is 18.4 percent, which does not meet the definition of a low-income population under EO 12898.

US Highway 64 would be used to access the Proposed Action. Vehicles would access the eastern portion of the project area via County Road 6500 in Kirtland, New Mexico, and the western portion via County Road 6800 in Waterflow, New Mexico.

The Waterflow Census Designated Place (CDP) encompasses 8.6 square miles along US Highway 64 south of the Proposed Action. The Waterflow population in 2019 was 1,623, with 49 percent identified as American Indian. In 2019, the CDP reported a poverty rate of 21.4 percent (Census Reporter 2021a). The Kirtland CDP encompasses 1.7 square miles with a 2019 population of 917, of which 33 percent are American Indian. The poverty rate of the Kirtland CDP was 4.1 percent in 2019 (Census Reporter 2021b). Neither the Waterflow or Kirtland CDPs are considered minority or low-income populations.

Traffic volumes on US Highway 64 ebb and flow as vehicles exit onto arterial roads such as County Roads 6100, 6400, 6500, and 6800 between Kirtland and Waterflow. Figure 3-1 shows the NMDOT monitored average annual daily trips (AADT) and AADT for trucks (heavy-duty vehicles) between 2017 and 2019 near Nenahnezad on US Highway 64. At this location over the 3-year period, the average AADT was 18,230 trips, with AADT truck trips averaging 1,290.

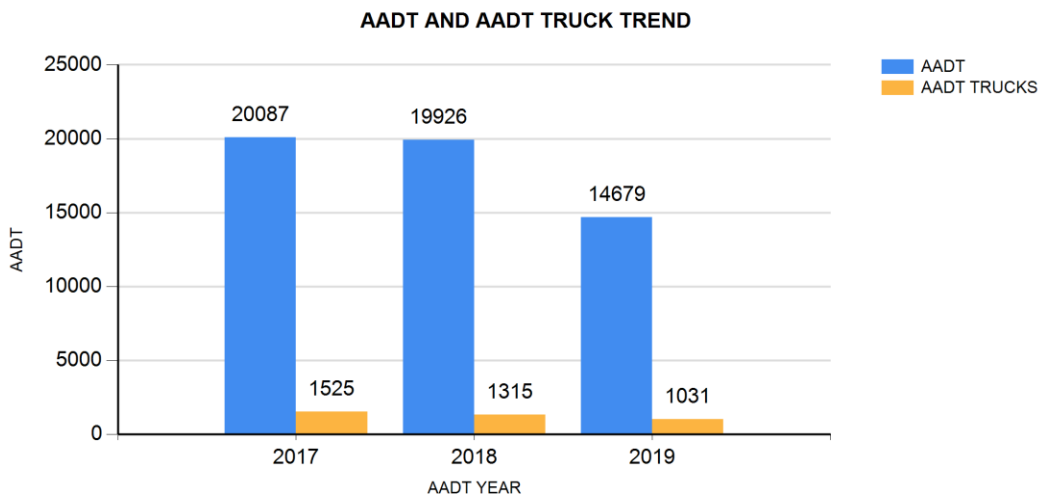

Figure 3-1. Average annual daily trips for vehicles and trucks between 2017 and 2019 near Nenahnezad on US Highway 64

Figure 3-2 shows the NMDOT monitored AADT and AADT for trucks between 2017 and 2019 for location 5576 west of Waterflow on US Highway 64. At this location over the 3 years, the average AADT was 14,807 trips, with truck trips averaging 1,009.

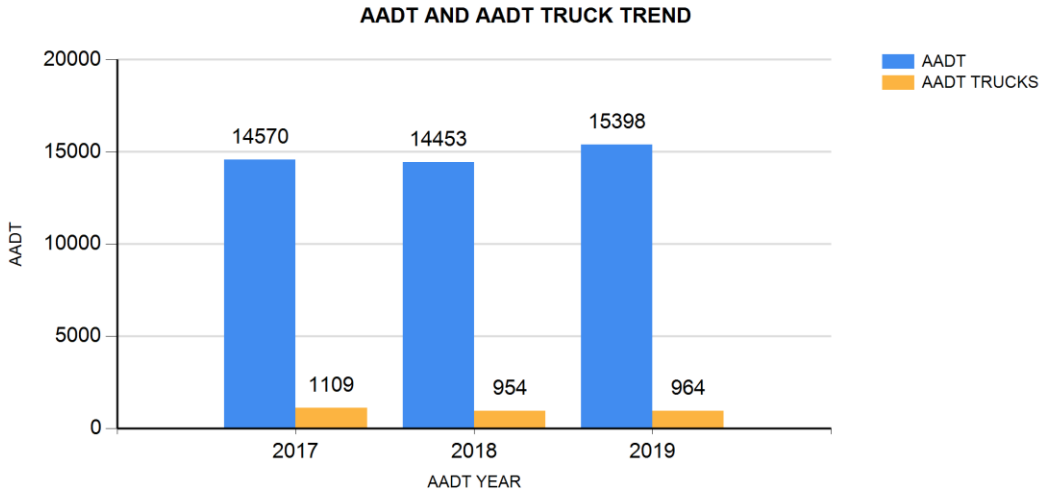

Figure 3-2. Average annual daily trips for vehicles and trucks between 2017 and 2019 west of Waterflow on US Highway 64

There are no traffic data available for County Road 6800; however, NMDOT-monitored AADT data trends for vehicles and trucks on County Road 6500 are shown in Figure 3-3. The 3-year daily average is 1,862 AADT, with truck AADT averaging 65.

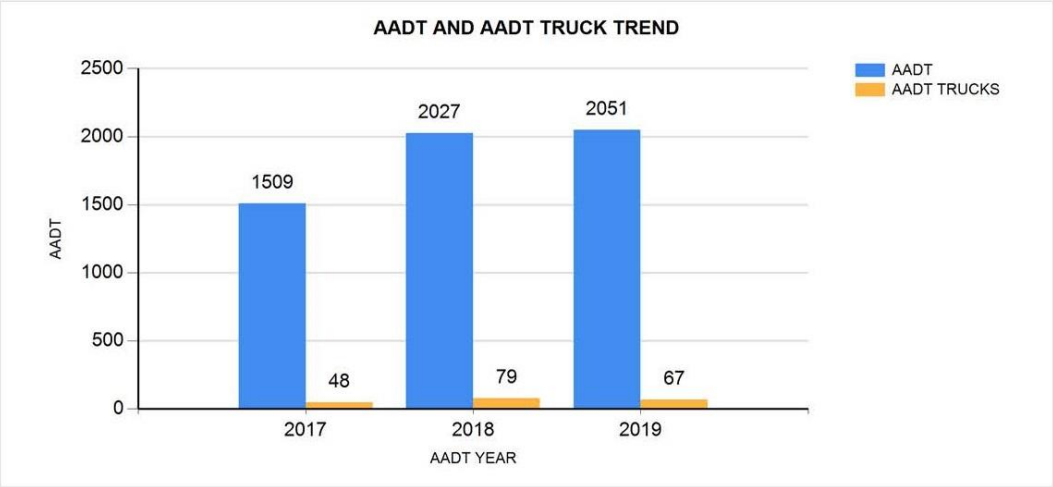

Figure 3-3. Average annual daily trips for vehicles and trucks between 2017 and 2019 on County Road 6500

3.5.2.2 Proposed Action Environmental Effects

There are no low-income populations within the project area. There are no private residences within the project area. Effects on minority populations, which are considered environmental justice populations, living near the Proposed Action are related to air quality and greenhouse gas emissions, socioeconomics, and increased traffic volumes.

Air quality effects are discussed in Section 3.4.1 and GHG effects in Section 3.4.2. Construction of the power lines and access roads would take approximately 3 to 6 months while construction of the solar facility on private land would take approximately 12 months. While the Proposed Action would result in increased emissions and fugitive dust over a 15 to 18-month construction period, these effects would not disproportionally affect minority populations since communities such as Waterflow and Kirtland, which are not considered environmental justice populations, would also be affected. Overall air quality is a regional resource; thus, any adverse impacts to NAAQS would not be disproportionate to environmental justice populations in the project area. Any increase in GHG emissions that could impact climate change as described in the analysis would be regional or global in nature and would not be disproportionately borne by environmental justice populations in the region.

Socioeconomic effects are discussed in Section 3.5.1. The Proposed Action would have no negative socioeconomic effects.

During the 90-day construction peak, increased traffic volumes would create noise, emissions, traffic-related collision risks, and wear and tear on local roads. Based on the 3-year average, the Proposed Action would increase the AADT on US Highway 64 from approximately 5.3 to 6.5 percent and the truck AADT from 5.0 to 6.5 percent. Any impacts associated with truck traffic on US Highway 64 would be regional in nature and impacts would not be disproportionate to environmental justice populations in the region.

On arterial roads, such as County Road 6500 located in Kirtland, the AADT would increase approximately 52 percent, with truck AADT increasing 100 percent. These impacts would be short term for the duration of construction (15 to 18 months) peaking for about 3 months. The increase in traffic

volume and resulting impacts would not disproportionately affect environmental justice populations since communities such as Waterflow and Kirtland, would also be affected. Design features such as adhering to speed limits and state transportation regulations would be implemented to mitigate impacts.

4. Consultation and Coordination

4.1 Endangered Species Act Consultation

In April 2021, a biological survey was completed of the proposed project area plus a 100-foot buffer. Both active and inactive prairie dog colonies were identified in the project area and standard wildlife design features would mitigate impacts. In addition, three populations of San Juan milkweed, a BLM special status plant species, were recorded in the project area. These plant populations will be avoided during the construction of Collector #1. The biological survey report is included in Appendix C.

BLM FFO biologists have reviewed the Proposed Action and determined it would comply with threatened and endangered species management guidelines outlined in the 2002 Biological Assessment for the 2003 Farmington RMP Consultation #2-22-01-I-389 (BLM 2002).

In 2014, the yellow-billed cuckoo was listed as threatened with proposed critical habitat. The Proposed Action would have a "no effect" determination for this species due to a lack of riparian habitat in the proposed project area, which is important for yellow-billed cuckoo nesting habitat in and adjacent to the Proposed Action.

In 2014, the New Mexico meadow jumping mouse was listed as endangered with critical habitat. The Proposed Action would have a "no effect" determination for this species due to a lack of riparian habitat for the New Mexico meadow jumping mouse. There is no designated critical habitat within 50 miles of the proposed project area.

4.2 Tribal 106 and Government to Government Consultation

Tribal consultation for the proposed San Juan Solar gen-tie and collector power lines project was initiated on Section 106 and government-to-government basis by the BLM FFO to various pueblos and tribes of New Mexico and southern Colorado. A letter and map describing the Proposed Action and inviting consultation with the BLM FFO were sent via certified mail to each of the pueblos and tribes listed in Table 4-1 on March 25, 2021, with a request for a response within 30 days of receipt.

Table 4-1. Pueblos and Tribes Sent Consultation Requests from the Bureau of Land Management Farmington Field Office

Tribe	Name
All Pueblos Council of Governors	Governors
Eight Northern Indian Pueblos Council	Governors
Five Sandoval Indian Pueblos	Governors
Jicarilla Apache Tribal Council	President Edward Velarde
Kewa Pueblo (Pueblo of Santo Domingo)	Governor Sidelio Tenorio, Sr.
Huerfano Chapter House	President Ben Woody, Jr.
Navajo Nation	President Jonathan Nez
Ohkay Owingeh	Governor Patrick Aguino
Pueblo of Acoma	Governor Brian Vallo

Tribe	Name
Pueblo of Cochiti	Governor Joseph L. Herrera
Pueblo of Isleta	Governor Vernon B. Abeita
Pueblo of Isleta, Tribal Historic Preservation Office	Dr. Henry Walt
Pueblo of Jemez	Governor Michael Toledo Jr.
Pueblo of Laguna	Governor John E. Antonio
Pueblo of Nambe	Governor Phillip A. Perez
Pueblo of Nambe, Tribal Historic Preservation Office	Director
Pueblo of Picuris	Governor Craig Quanchello
Pueblo of Pojoaque	Governor Jenelle Roybal
Pueblo of San Felipe	Governor Anthony Ortiz
Pueblo of San Felipe Department of Natural Resources	Pinu'u Stout, Director
Pueblo of San Ildefonso	Governor Christopher Moquino
Pueblo of Sandia	Stuart Paisano
Pueblo of Santa Ana	Governor Ulysses Leon
Pueblo of Santa Ana Tribal Historic Preservation Office	Director Monica Murrell
Pueblo of Santa Clara	Governor J. Michael Chavarria
Pueblo of Taos	Governor Clyde M. Romero, Sr.
Pueblo of Tesuque	Governor Mark Mitchell
Pueblo of Zia	Governor Jerome Lucero
Pueblo of Zuni	Governor Val R. Panteah, Sr.
Southern Ute Indian Tribe	Chairman Melvin J. Baker
Ten Southern Pueblo Governor's Council	Governor
The Hope Tribe	Chairman Timothy L. Nuvangyaoma
Ute Mountain Ute Tribe	Chairman Manuel Heart

Letters were also sent to the following Navajo Nation Chapters:

- Upper Fruitland
- Gadii ahi
- Hogback
- Nenahnezad
- Shiprock
- San Juan
- Newcomb
- Burnham
- Becenti
- Counselor
- Lake Valley
- Nageezi
- Ojo Encino
- Pueblo Pintado
- Torreon/Star Lake
- White Horse Lake
- White Rock
- Beclabito
- Sanostee

The Pueblo de San Ildefonso Tribal Historic Preservation Officer responded via email (April 19, 2021) to the March 25, 2021, invitation to consult in the NHPA Section 106 process, stating that there were no known concerns. He requested that the Pueblo be notified and given additional opportunities to consult if an Adverse Effects to Historic Properties determination was made.

The Navajo Nation Heritage and Historic Preservation Department (NNHHPD) responded via email (April 27, 2021) to the March 25, 2021, invitation to consult in the NHPA Section 106 process stating that there were no known concerns. They also requested that local residents and Navajo Nation Chapters be afforded the opportunity to provide ethnographic information that might be relevant to the undertaking. To meet this request and following COVID-19 safety precautions developed by the BLM in consultation with the NNHHPD, letters and maps describing the undertaking were sent to the Nenahnezad, Hogback, and Upper Fruitland Chapter Houses on June 14, 2021. These letters requested participation with the ethnographic inquiries to ensure that no traditional cultural properties would be impacted. There were no responses to these letters.

4.3 State Historic Preservation Office Consultation

Section 106 of the NHPA and its implementing regulations (36 CFR Part 800) require federal agencies to consider what effect their licensing, permitting, funding, or otherwise authorizing an undertaking, such as ROW, may have on properties in or eligible for listing in the NRHP. Specific definitions for key cultural resource management concepts such as undertakings, impacts, and areas of potential effect are provided in 36 CFR Part 800.16.

The New Mexico BLM has a two-party agreement (protocol) with the New Mexico State Historic Preservation Office (SHPO) that implements an authorized alternative to 36 CFR Part 800 for most undertakings (BLM and SHPO 2014). This agreement offers a streamlined process for reporting and review that expedites consultation with the SHPO. Multiple informal discussions with SHPO staff occurred early in the project. These assisted the BLM in defining an appropriate Area of Potential Effect and in deciding to allow this project to proceed following the protocol. A letter detailing the BLMs interest in providing the SHPO with the various reports from this undertaking in a phased approach was sent on June 15, 2021.

Section 106 consultation for the Proposed Action was formally initiated with the New Mexico SHPO on June 15, 2021. The various reports that relate to the undertaking (NMCRIS No. 146866/BLM Report No. 2021(IV)008F; NMCRIS No. 148346/BLM Report No. 2021(IV)008.2F; NMCRIS No. 148167/BLM Report No. 2021(IV)008.1F, and BLM Report No. 2021(IV)008.3F) and the associated Records of Review/stipulations were provided to the SHPO in a phased approach. After multiple correspondences with the SHPO, minor changes were made regarding some National Register of Historic Places eligibilities and site protective measures.

5. List of Preparers

This EA has been prepared on behalf of the BLM by a contractor (Ecosphere Environmental Services, Inc.) to comply with the requirements and guidelines prescribed by the BLM FFO. Portions of this document may be altered or written by the BLM FFO, as the BLM has the ultimate responsibility for the content of the EA. The table below contains a list of individuals who contributed to or reviewed this EA.

Table 5-1. List of Preparers

Name	Title	Resource Area/Organization
Whitney Thomas	Physical Specialist	Farmington Field Office
Erik Simpson	Archaeologist	Farmington Field Office
Chris Wenman	Geologist	Farmington Field Office
Stan Allison	Outdoor Recreation Planner	Farmington Field Office
Jeff Tafoya	Supervisor Natural Resource Specialist	Farmington Field Office
Monica Tilden	Realty Specialist, Project Lead	Farmington Field Office
Ryan Joyner	Planning & Environmental Specialist	Farmington Field Office
Barbara Witmore	Rangeland Specialist	Farmington Field Office
Heather Perry	Natural Resource Specialist	Farmington Field Office
John Kendall	Threatened & Endangered Species Biologist	Farmington Field Office
Lola Henio	Tribal Program Coordinator	Farmington Field Office
Joey Herring	Project Manager	Ecosphere Environmental Services, Inc.
Schuyler Roskam	Biologist	Ecosphere Environmental Services, Inc.
Jerusha Rawlings	Biologist	Ecosphere Environmental Services, Inc.
John Dodge	Biologist	Ecosphere Environmental Services, Inc.
Anna Riling	GIS Specialist	Ecosphere Environmental Services, Inc.
Cindy Lancaster	Technical Editor	Ecosphere Environmental Services, Inc.
John Grant	Managing Consultant	Ramboll

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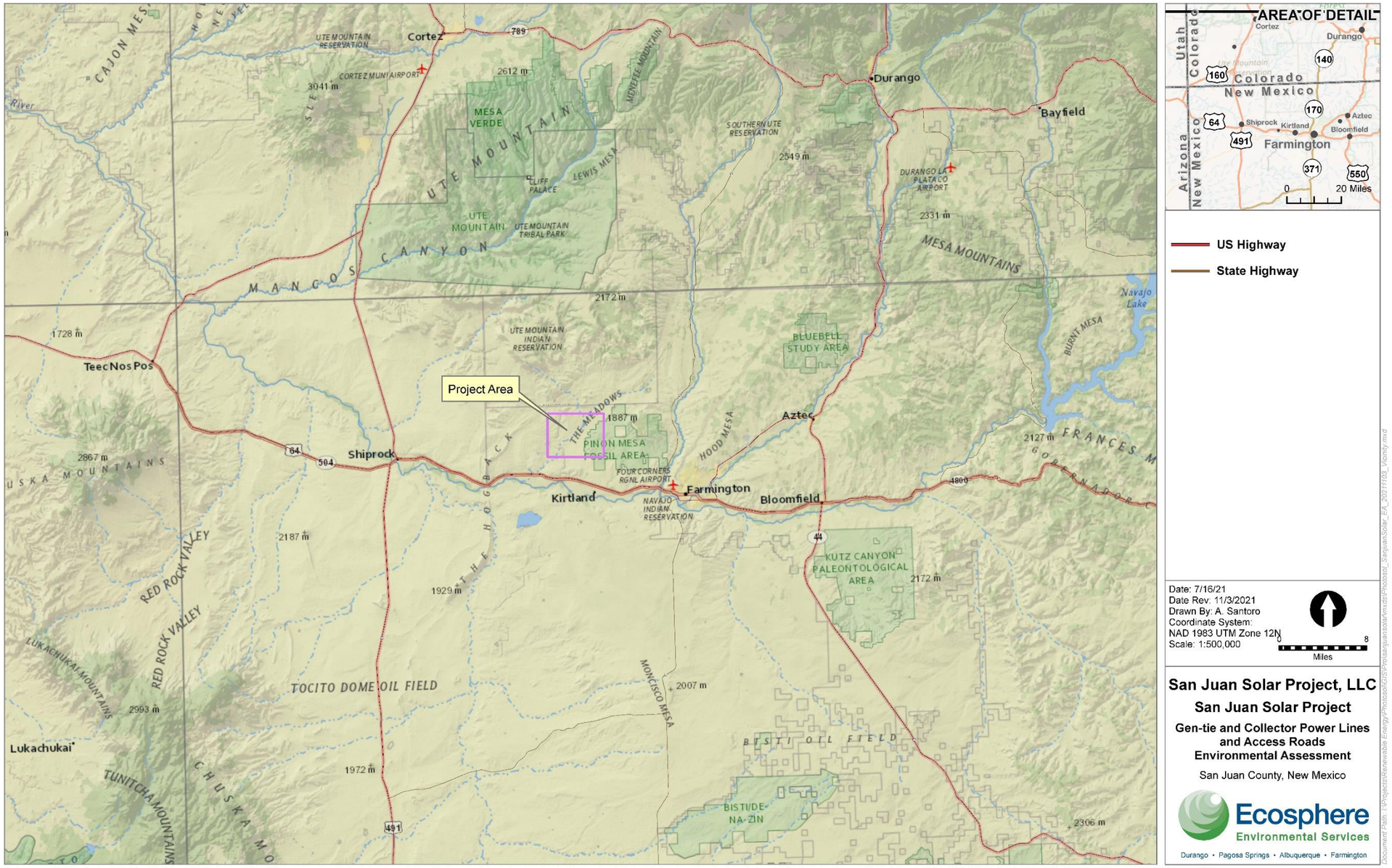
Appendix A – Maps



US Highway

State Highway

Date: 7/16/21
Date Rev: 11/3/2021
Drawn By: A. Santoro
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:500,000

0 8
Miles

San Juan Solar Project, LLC

San Juan Solar Project

Gen-tie and Collector Power Lines and Access Roads Environmental Assessment

San Juan County, New Mexico

Ecosphere Environmental Services

Durango • Pagosa Springs • Albuquerque • Farmington

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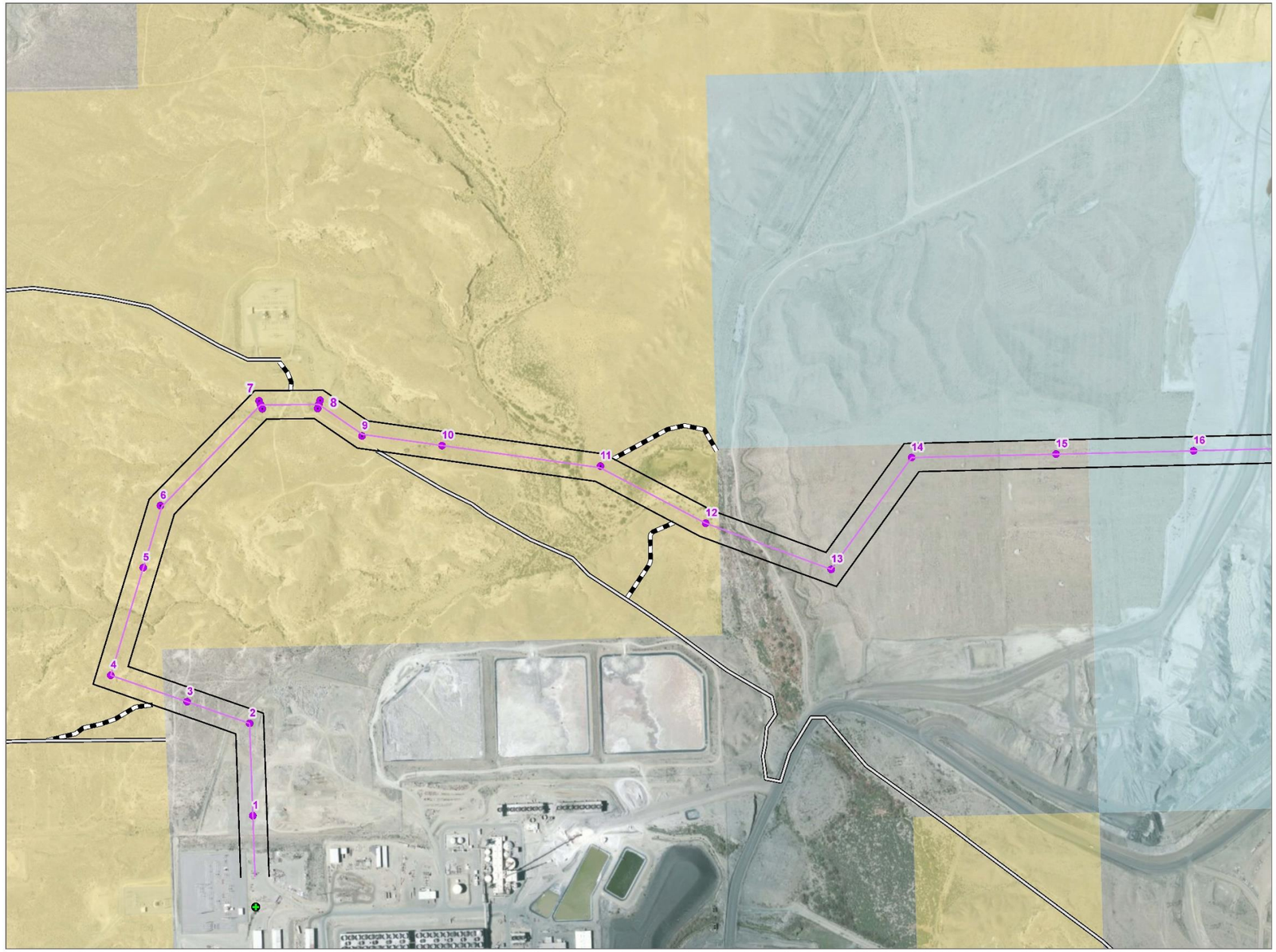
Data sources: BLM Farmington Field Office, US Fish and Wildlife Service National Wetlands Inventory, US Geological Survey National Hydrography Dataset, San Juan County GIS Department, Photosol, © OpenStreetMap (and) contributors, CC-BY-SA, National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Map A-1. San Juan Solar Gen-tie and Collector Power Lines and Access Roads Vicinity



Gen-tie Centerline
Gen-tie Poles
Gen-tie Easement
Existing Access Roads
Proposed Roads (BLM)
Microwave Towers

Surface Ownership

Bureau of Land Management
Private
State

Date: 10/15/21
Date Rev: 11/2/2021
Drawn By: J. Herring
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:8,000
1 in = 0.1 mi

0 0.09
Miles

San Juan Solar Project, LLC

San Juan Solar Project

Gen-tie and Collector #2 Power Lines
Sheet 1 of 4

San Juan County, New Mexico

Ecosphere Environmental Services

Durango • Pagosa Springs • Albuquerque • Farmington

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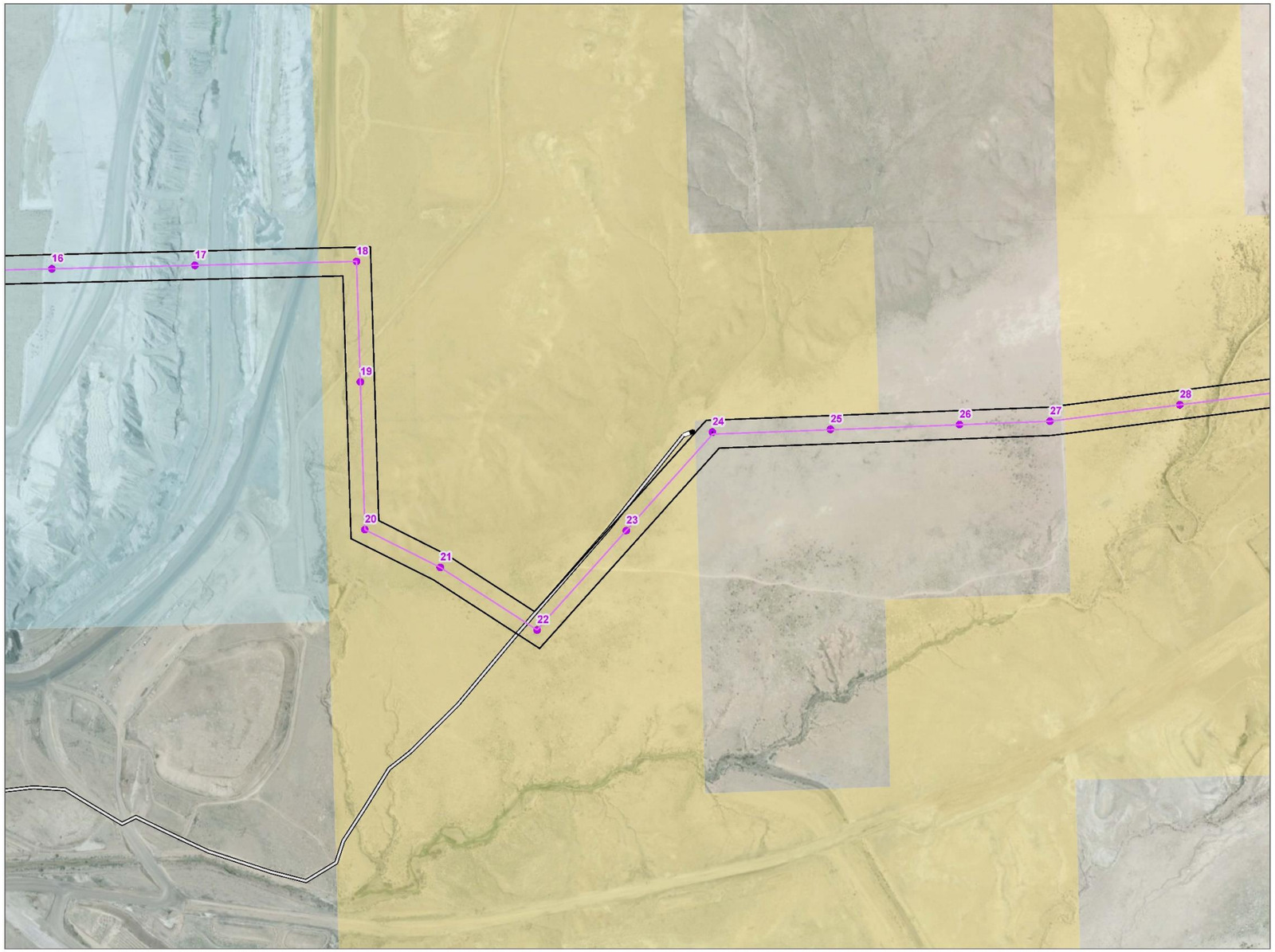
Map A-2. San Juan Solar Gen-tie and Collector Power Lines Site Detail (page 1 of 4)



Gen-tie Centerline
Gen-tie Poles
Gen-tie Easement
Existing Access Roads
Proposed Roads (BLM)

Surface Ownership

Bureau of Land Management
Private
State

Date: 10/15/21
Date Rev: 11/2/2021
Drawn By: J. Herring
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:8,000
1 in = 0.1 mi

0 0.09
Miles

San Juan Solar Project, LLC

San Juan Solar Project

Gen-tie and Collector #2 Power Lines
Sheet 2 of 4

San Juan County, New Mexico

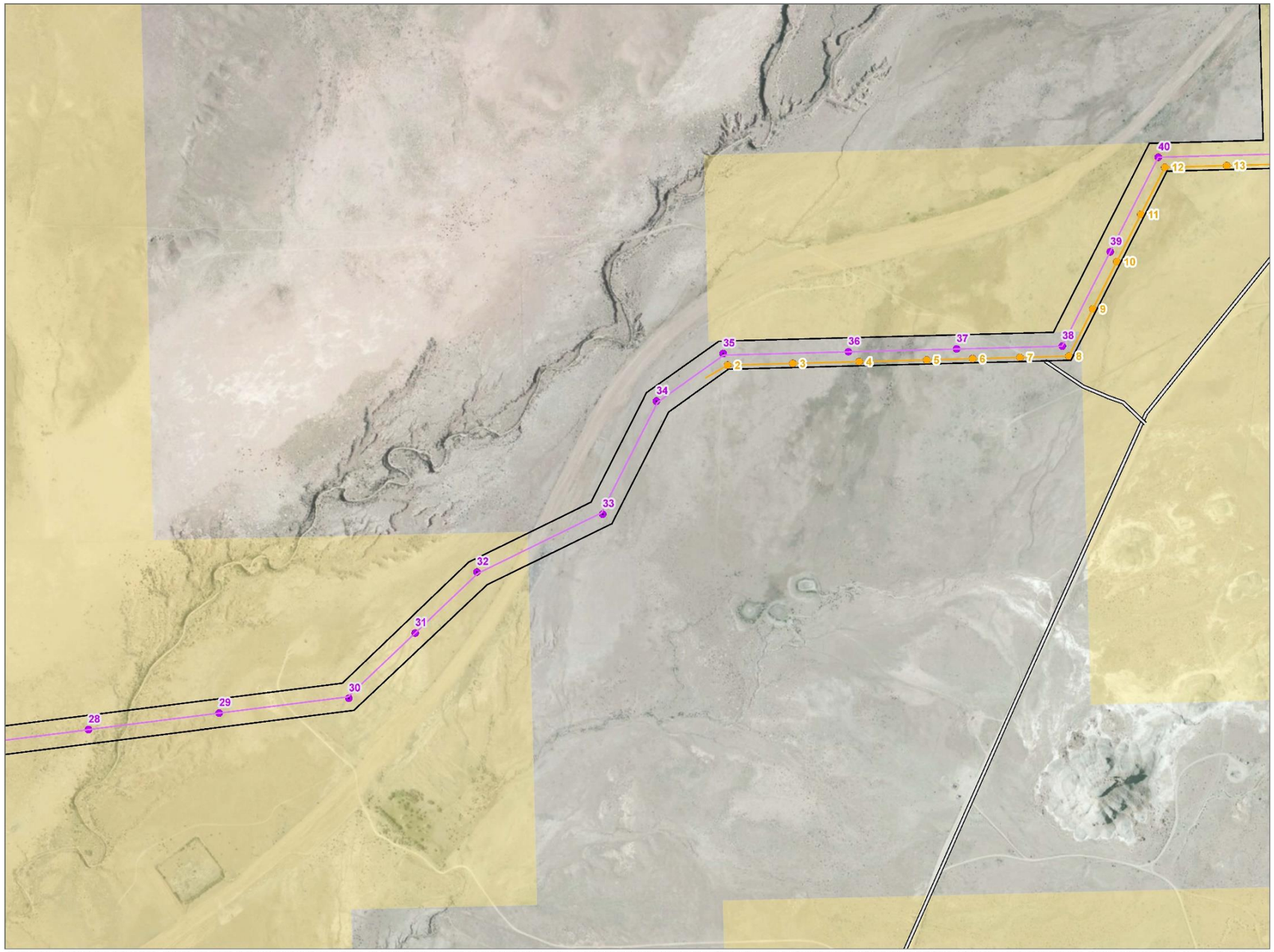
Ecosphere Environmental Services

Durango • Pagosa Springs • Albuquerque • Farmington

Document Path: T:\Projects\Renewable Energy\Photos\GIS\Photos\sanjuansolarmxds\Photos_SanJuanSolar_EA_20211014.mxd

Data sources: BLM Farmington Field Office, US Fish and Wildlife Service National Wetlands Inventory, US Geological Survey National Hydrography Dataset, San Juan County GIS Department, Photosol, © OpenStreetMap (and) contributors, CC-BY-SA, Copyright:© 2013 National Geographic Society, i-cubed, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Map A-3. San Juan Solar Gen-tie and Collector Power Lines Site Detail (page 2 of 4)



Gen-tie Centerline
Gen-tie Poles
Gen-tie Easement
Collector_#2 Centerline
Collector #2 Poles
Existing Access Roads

Surface Ownership

Bureau of Land Management
Private

Date: 10/15/21
Date Rev: 11/2/2021
Drawn By: J. Herring
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:8,000
1 in = 0.1 mi

0 0.09
Miles

San Juan Solar Project, LLC

San Juan Solar Project

Gen-tie and Collector #2 Power Lines
Sheet 3 of 4

San Juan County, New Mexico

Ecosphere Environmental Services

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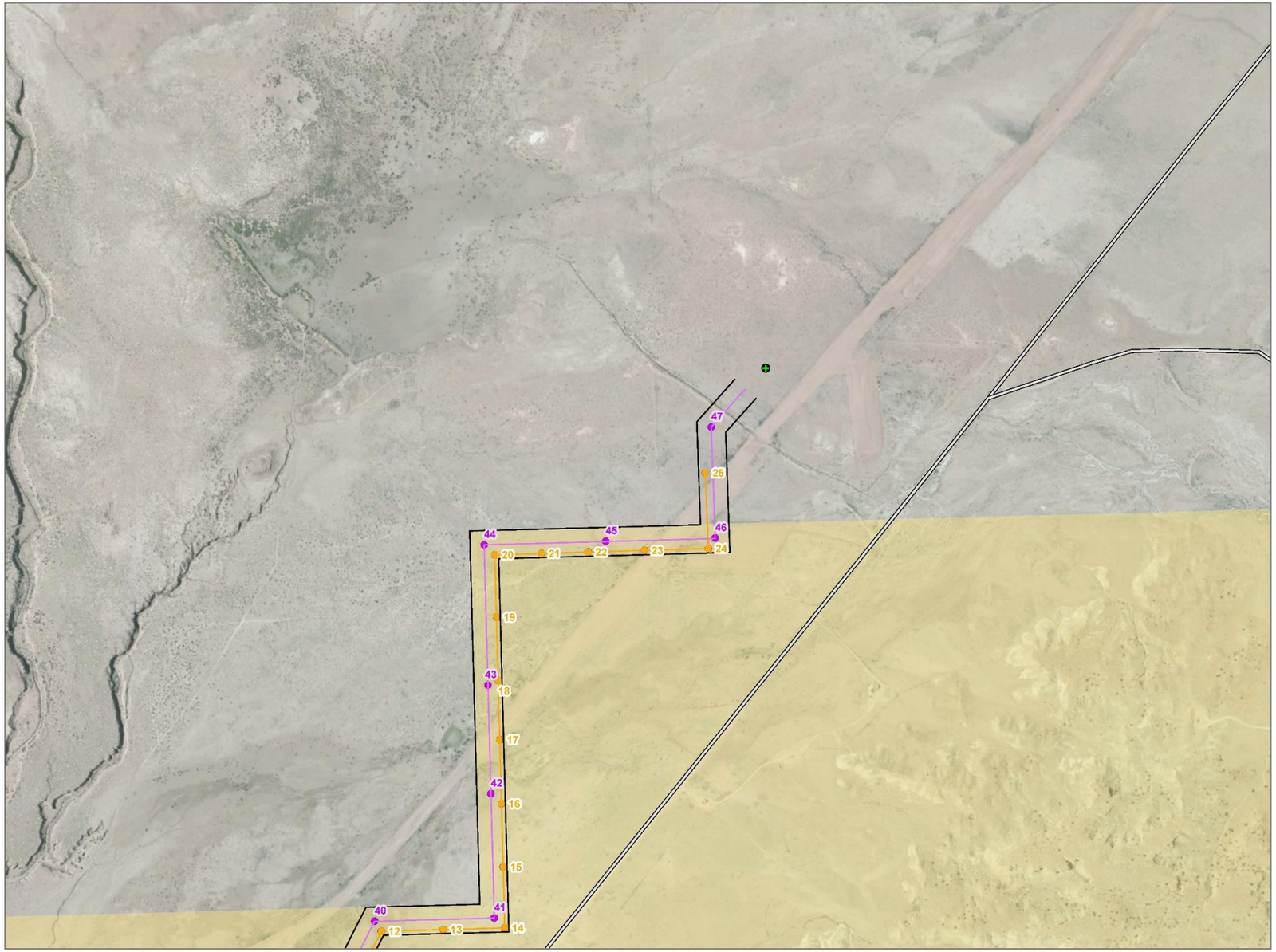
Data sources: BLM Farmington Field Office, US Fish and Wildlife Service National Wetlands Inventory, US Geological Survey National Hydrography Dataset, San Juan County GIS Department, Photosol, © OpenStreetMap (and) contributors, CC-BY-SA, Copyright:© 2013 National Geographic Society, i-cubed, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Map A-4. San Juan Solar Gen-tie and Collector Power Lines Site Detail (page 3 of 4)



Gen-tie Centerline
Gen-tie Poles
Gen-tie Easement
Collector_#2 Centerline
Collector #2 Poles
Existing Access Roads
Microwave Towers

Surface Ownership

Bureau of Land Management
Private

Date: 10/15/21
Date Rev: 11/2/2021
Drawn By: J. Herring
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:8,000
1 in = 0.1 mi

0 0.09
Miles

San Juan Solar Project, LLC

San Juan Solar Project

Gen-tie and Collector #2 Power Lines
Sheet 4 of 4

San Juan County, New Mexico

Ecosphere Environmental Services

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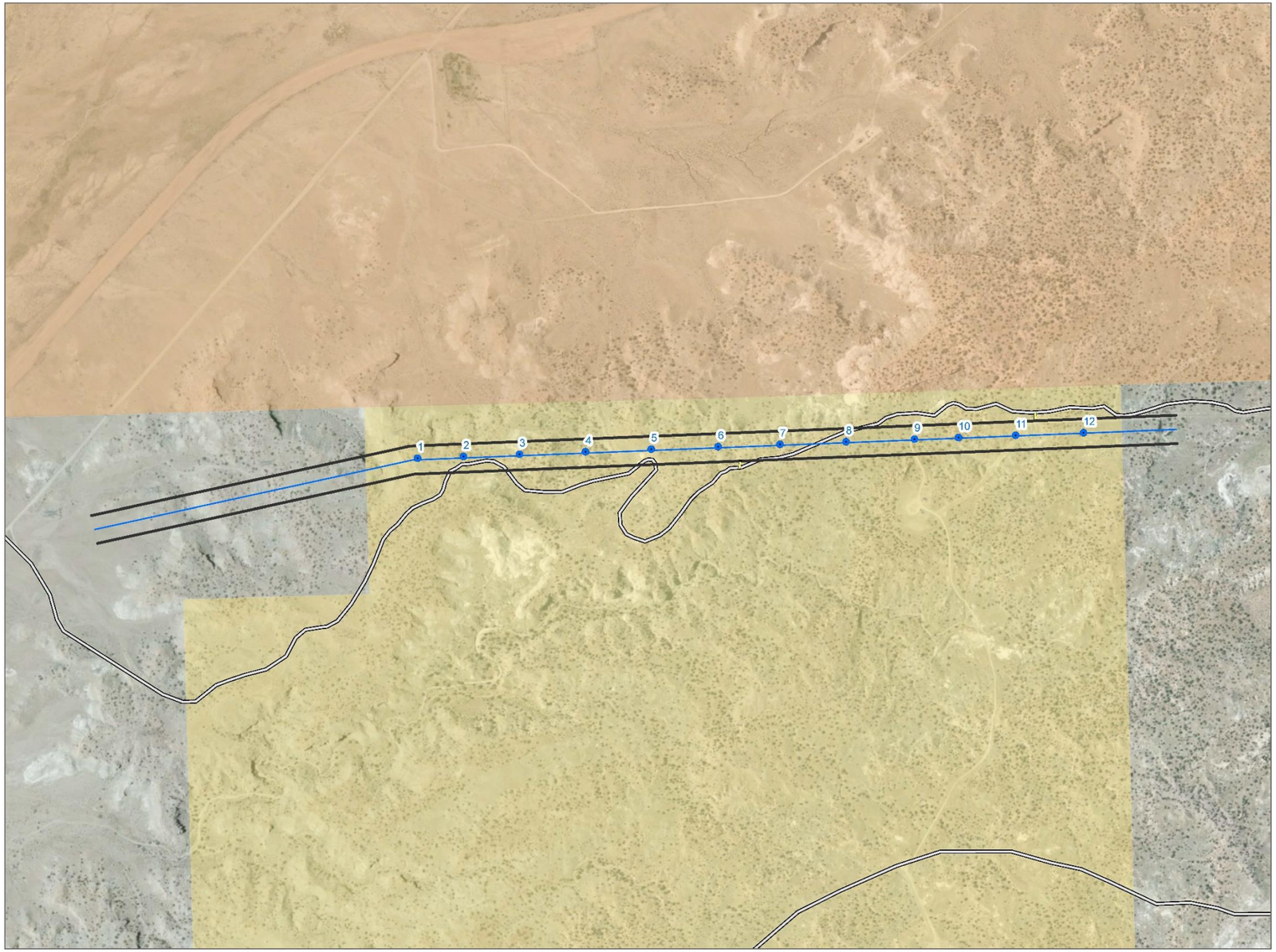
Data sources: BLM Farmington Field Office, US Fish and Wildlife Service National Wetlands Inventory, US Geological Survey National Hydrography Dataset, San Juan County GIS Department, Photosol, © OpenStreetMap (and) contributors, CC-BY-SA, Copyright:© 2013 National Geographic Society, i-cubed, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Map A-5. San Juan Solar Gen-tie and Collector Power Lines Site Detail (page 4 of 4)



AREA OF DETAIL

- Collector #1 Poles
- Proposed New Roads (BLM)
- Collector #1 Easement
- Collector #1 Centerline
- Existing Access Roads

Surface Ownership

- Bureau of Land Management
- Private
- Tribal

Date: 10/15/21
Date Rev: 11/1/2021
Drawn By: J. Herring
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:8,000
1 in = 0.1 mi

0 0.1 Miles

San Juan Solar Project, LLC
San Juan Solar Project

Collector #1 Power Line

San Juan County, New Mexico

Ecosphere Environmental Services
Durango • Pagosa Springs • Albuquerque • Farmington

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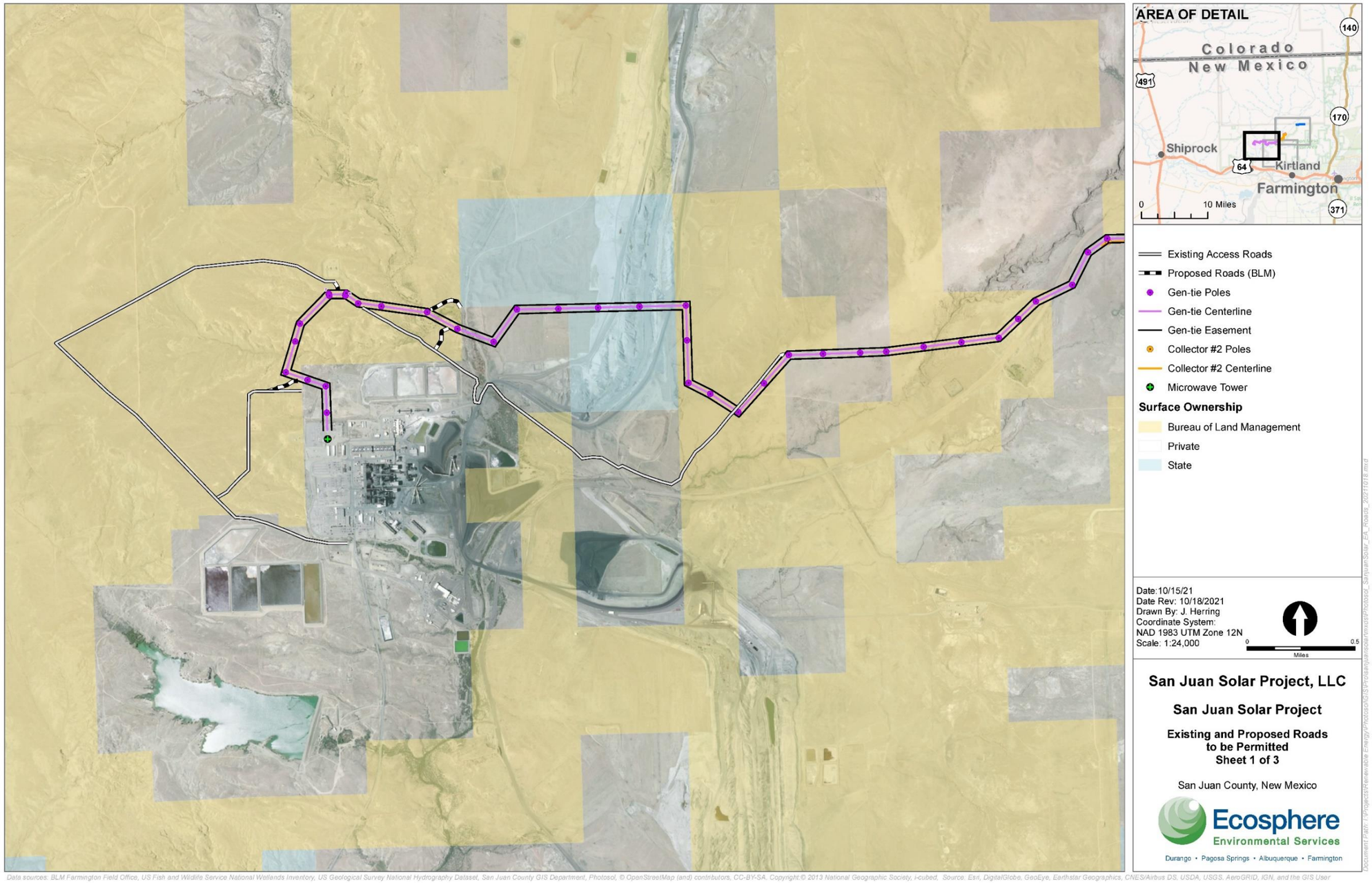
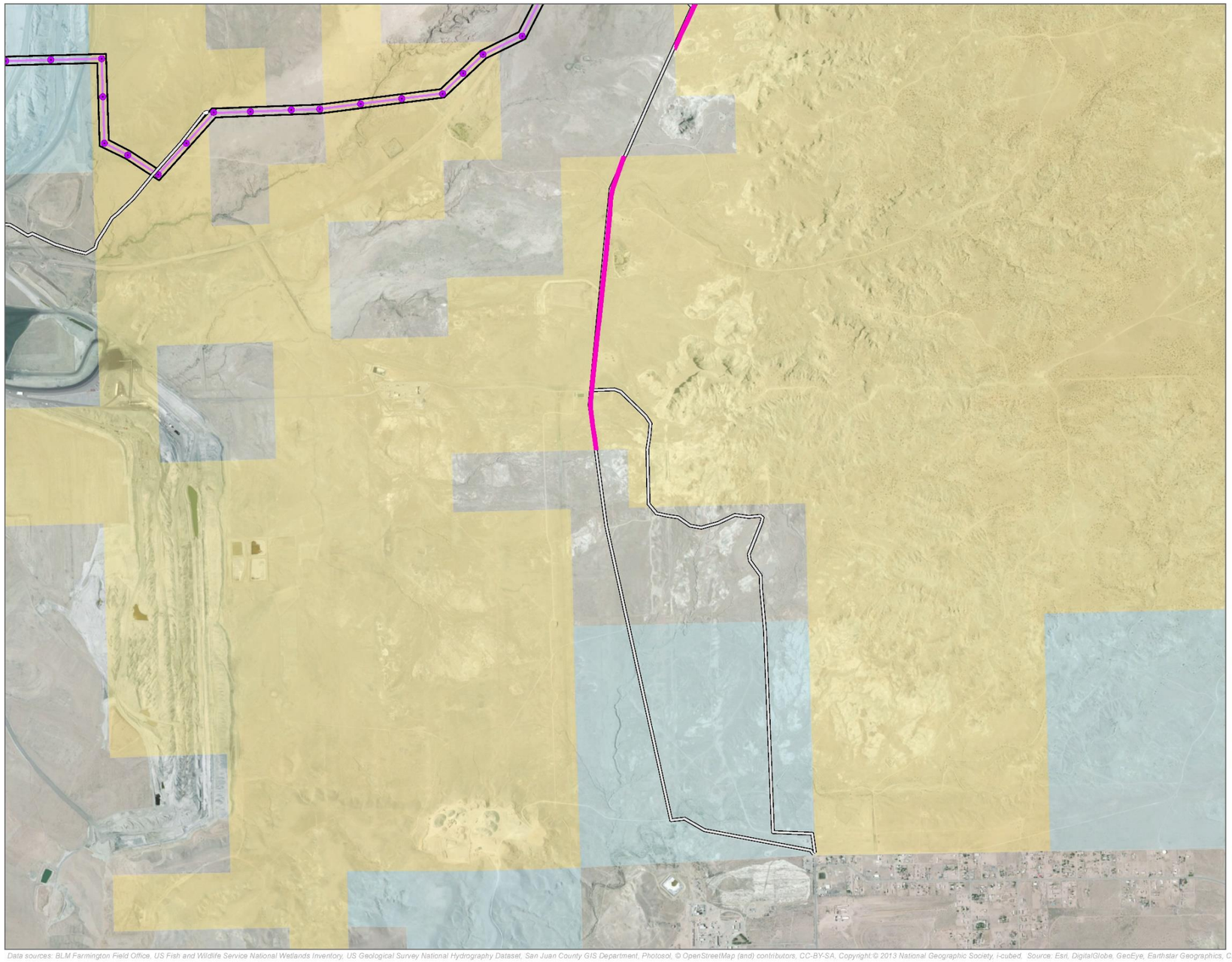
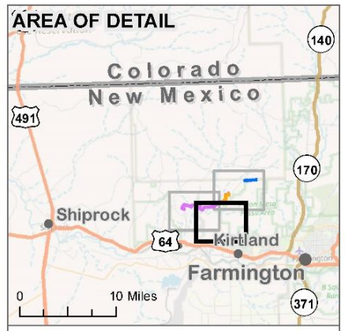
Map A-6. San Juan Solar Collector #1 Power Line Site Detail



Map A-7. San Juan Solar Existing and Proposed Roads to be Permitted (page 1 of 3)





Barker Dome Road Improvements
Existing Access Roads
Proposed Roads (BLM)
Gen-tie Poles
Gen-tie Centerline
Gen-tie Easement

Surface Ownership

Bureau of Land Management
Private
State

Date:10/15/21
Date Rev: 10/18/2021
Drawn By: J. Herring
Coordinate System:
NAD 1983 UTM Zone 12N
Scale: 1:24,000

0 0.5 Miles

San Juan Solar Project, LLC

San Juan Solar Project

Existing and Proposed Roads to be Permitted Sheet 2 of 3

San Juan County, New Mexico

Ecosphere Environmental Services

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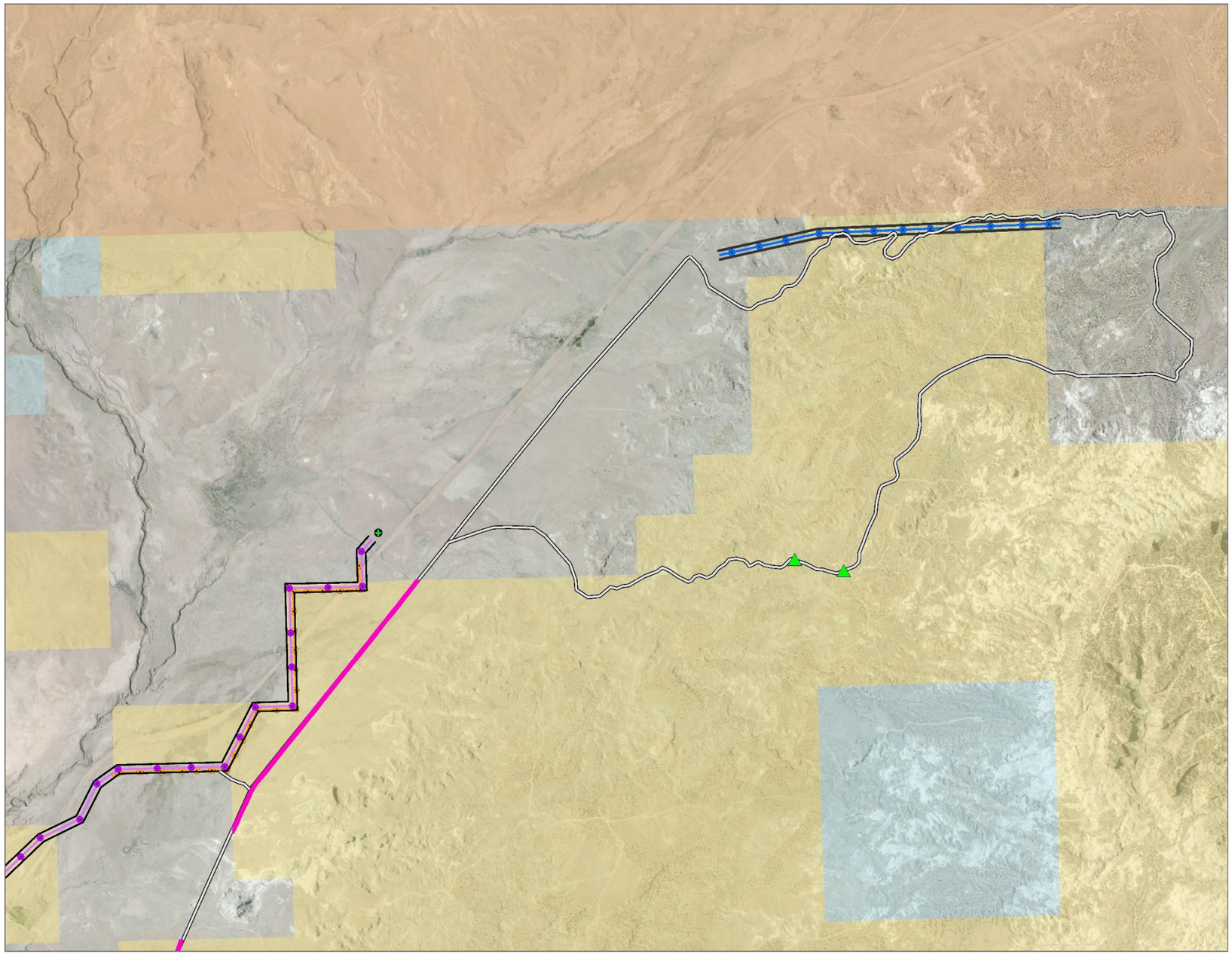
Document Path: I:\Projects\Renewable Energy\Photosol\GIS\Photosol\mxds\Photosol_SanJuanSolar_EA_Roads_20211018.mxd

Map A-8. San Juan Solar Existing and Proposed Roads to be Permitted (page 2 of 3)



Map A-9. San Juan Solar Existing and Proposed Roads to be Permitted (page 3 of 3)

Appendix B – Interdisciplinary Team Checklist

INTERDISCIPLINARY (ID) TEAM CHECKLIST

Farmington Field Office

(EAs & DNAs) - The purpose of this checklist is to document which resource issues need analysis in the NEPA document and to identify the ID team for the NEPA document. Responsible staff will make an initial determination and provide rationale for that determination, which is subject to manager review and concurrence. If warranted, issues or determinations may be changed during the NEPA process (e.g., after external scoping, during review, etc.), but changes must be documented and have Authorized Officer concurrence. All elements need a determination, assigned specialist, rationale, initials, and date. The ID team will include all specialists with a "PI" in the table below, and resources with a "PI" will be addressed in Ch. 3 of the EA.

(CXs) - The purpose of this checklist is to identify the ID team for the categorical exclusion (CX). The ID team will help the project lead develop mitigation measures and determine if extraordinary circumstances apply. DO NOT enter a determination, initials, or date for CX projects. Specialists may provide mitigation measures or extraordinary circumstances in the "Rationale for Determination" column, but it is not necessary at this time.

Project Title: San Juan Solar Gen-Tie, Collector Power Line & Access Roads
NEPA Number: DOI-BLM-NM-F010-2021-0017-EA
File/Serial Number: NMNM 138513 (Gen-Tie/Collector Line) & NMNM 138514 (Access Road)
Project Leader: Monica Tilden

DETERMINATION OF STAFF: ***(Choose one of the following abbreviated options for the left column)***

PI = Present with potential for relevant impacts that need to be analyzed in Ch. 3 in the EA.
NP = Not present in the area impacted by the proposed or alternative actions
NI = Present, but not impacted to a degree that analysis is required in Ch. 3 in the EA.
NC = (DNAs only) Actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

Determ-ination	Resource	Assigned Specialist (X)	Rationale for Determination[1]	Initials[2]	Date[3]
RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)					
NI	Air Quality/	(x)W. Thomas ( )J. Tafoya	Anticipate Analysis in Brief (AIB) for construction related air quality impacts.	WT	2.1.2021
NI	Greenhouse Gas Emissions	(x)W. Thomas ( )J. Tafoya	Anticipate Analysis in Brief (AIB) for construction related emissions.	WT	2.1.2021
NI	Cultural Resources	( )K. Adams (x)E. Simpson ( )G.Haymes	Multiple Class III inventories and a viewshed analyses have been performed. One of the three Class III inventory reports has been accepted to date and stipulations will be issued.	ES	8-27-2021
NI	Native American Religious and other Concerns	( )K. Adams (X)E. Simpson ( )G.Haymes	None were identified through 106 consultation efforts.	ES	8-27-2021
NI	Paleontology	(x)C. Wenman	The Proposed Action is located within the Pinon Mesa Fossil Area, a Specially Designated Area identified in the 2003 FFO RMP. The area has a PFYC of 5, meaning the geologic formation exposed at the surface has high potential to contain paleontological resources. The proposed project would use a combination of existing disturbance and project design minimizes surface disturbance to the extent possible, so no impacts to paleontological resources are expected. No known paleo locales are located near the area of new disturbance that is within the Pinon Mesa Fossil SDA. Please include the following language as a COA/stipulation to mitigate any accidental discoveries: "Any paleontological resource discovered by the Operator, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the	CW	3/16/2021

INTERDISCIPLINARY (ID) TEAM CHECKLIST

Farmington Field Office

Determ-ination	Resource	Assigned Specialist (X)	Rationale for Determination[1]	Initials[2]	Date[3]
			Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant scientific values. The Holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the Holder."		
NP	Areas of Critical Environmental Concern	(X)S. Allison ( )D.McKim ()Project Leads	Not Present	SA	2.1.2021
NP	Lands with Wilderness Characteristics	(X) S. Allison ( ) D. McKim	The proposed project is not near any lands eligible for Lands with Wilderness Characteristics as determined by the 2016 LWC Inventory.	SA	02/04/2021
NP	Wilderness	(X) S. Allison ( ) D. McKim	The proposed project is not near either the Bisti/De-Na-Zin or Ah-shi-sle-pah Wilderness areas.	SA	02/04/2021
NI	Visual Resources	(X) S. Allison ( ) D. McKim	The proposed project is within lands classified as VRM IV & III. The goals of VRM III can be met by performing multiple Visual Contrast Rating Worksheets and implementing best management practices such as non-specular supports and conductors.	SA	02/04/2021
NP	Recreation	(x) D. McKim ( ) S. Allison	Not Present	DM	2.1.2021
NI	Fuels/Fire Management	(x) J Tafoya (x) R. Joyner	General requirements of all projects in the area follow fire preparedness rules and do not require additional analysis.	RJ	2.1.2021
NP	Geology	(x)C. Wenman	The proposed project area does not contain geologic resources managed by the BLM FFO under the 2003 FFO RMP that would be impacted by the construction and associated surface disturbance.	CW	2.1.2021
NI	Solid Mineral Resources	(x)C.Wenman	The proposed project area is near the San Juan Underground Coal Mine owned by Westmoreland. The project proponents are working with the mine during the planning phase of the project, and the coal mine is expected to shut down within the next two years as part of the San Juan Generating Station Closure, so no impacts to mine operations are expected. Please ensure the proponent notifies the mine of any construction occurring near mine operations if the project is approved.	CW	2.1.2021
NI	Oil and Gas / Energy Production	(x)R.Joyner ( ) M.Wrth ( )C. Wenman	Oil and Gas operators in the area will be contacted if the planned surface improvements impact any of their leases or operations. No analysis or mitigation.	RJ	2.1.2021
NI	Lands/Access	( )L. Jaquez (X)M. Tilden ( )T. Faust	The PPA would not interfere with other existing ROWs or Realty actions. Any proposals for future ROW projects within the proposed project area would be reviewed on a site-specific basis. Coordination with existing ROW holders and application of standard operating procedures, design features, BMPs and stipulations would ensure protection of existing ROW corridors. The PPA would be partially situated within existing ROWs, connect to the existing PNM Four Corners Substation and utilize existing access roads.	MT	3/1/2021
NP	Wastes (hazardous or solid)	( )W. Thomas (X)R. Joyner ( )C. Wenman	Not Present	RJ	2.1.2021
NI	Livestock Grazing	(X)B. Witmore ( )J. Tafoya ( )C. Gould	Fencing along active allotments and improvements should be maintained throughout project construction.	BW	2.1.2021

Project Title:

INTERDISCIPLINARY (ID) TEAM CHECKLIST

Farmington Field Office

Determ-ination	Resource	Assigned Specialist (X)	Rationale for Determination[1]	Initials[2]	Date[3]
NI	Public Land Health Standards	(X)B. Witmore ( )J. Tafoya ( ) C.Gould	Not Present	BW	2.1.2021
NP	Invasive Species/ Noxious Weeds	(x)H. Perry	A full weed control plan will be required to mitigate the impacts to the 250+ Acres of BLM surface anticipated for long and short term disturbance.	HP	2.1.2021
NI	Vegetation Excluding USFWS Designated Species	(x)B. Witmore ( )J. Tafoya ( )C. Gould	No issues anticipated.	BW	2.1.2021
NI	Special Status Plant Species and Animal Species	(x)J. Kendall ( )	The proposed project is not within any sensitive species habitat, ground disturbance is limited to existing infrastructure	JK	7.1.2021
NP	Threatened, Endangered or Candidate Plant and Animal Species	(x)J. Kendall ( )	The proposed project area is not located within suitable or potential habitat, as defined by USFWS; within conformance of 2002 Biological Assessment (and associated 2003 RMP). ground disturbance is limited to existing infrastructure See bio-survey results No further consultation necessary	JK	7.1.2021
NP	Migratory Birds	(x)J. Kendall	The proposed project is limited to existing infrastructure. Migratory bird nesting habitat is marginal. Proposed project not likely to impact nesting bird habitat	JK	7.1.2021
NI	Wildlife	(x)J. Kendall	The proposed project is not located within any designated Wildlife Area. Standard design features/BMPs regarding protection of wildlife, will be implemented to mitigate any impacts. With standard design features/BMPs,	JK	7.1.2021
NP	Wildlife-aquatic	( ) (x)J. Kendall	Not Present	JK	7.1.2021
NP	Wetlands/Riparian Zones	( ) (x)J. Kendall	Not Present	JK	7.1.2021
NI	Water Resources/Quality (drinking/surface/ ground)	(x)W. Thomas ( )	Anticipate Analysis in Brief (AIB) for construction uses of water within project area.	WT	2.1.2021
NI	Soils	(x)W. Thomas ( )	Anticipate Analysis in Brief (AIB) for soils and compaction related issues. Determination may change after onsite	WT	2.1.2021
NP	Wild Horses and Burros	( )J. Tafoya (x)B.Witmore	Not Present	BW	2.1.2021
PI	Socio-Economics	(x) L. Henio ( )	Although this project is on BLM and Private lands, I would like to see how this is going to benefit the local economy? Will local people be employed by the company during the construction and lifetime operation of the solar plant? This is a big undertaking that needs to be analysis.	LH	3/1/2021
PI	Environmental Justice	(x)L. Henio	Will the surrounding communities benefit from the energy that will be produced? Is the energy that is produced going to low income and disadvantage community members? This is a big undertaking that needs to be analysis for the area south is a disadvantage population.	LH	3/1/2021

[1] Rationale for Determination is required for all "NIs" and "NPs." Write brief issue statements for "PIs."

Project Title:

[2] The appropriate resource specialist or Authorized Officer or NEPA Coordinator entering the determination should enter their initials. Typically, the assigned specialist should enter initials. If a senior specialist or the Authorized Officer assigns a resource specialist to the NEPA project, the senior specialist or Authorized Officer shall enter their initials in this column after making a determination. If the assigned specialist is making the determination from an off-site location (i.e., state office), the project lead may enter their own initials as long as the determination is documented (i.e., email, conversation record, etc.). DO NOT enter someone else's initials.

[3] The date entered should be the date the determination was made by the assigned specialist, senior specialist, or Authorized Officer.

PROJECT-ASSIGNED SPECIALISTS REVIEW:

Reviewer Title	Initials[4]	Date	Comments
NEPA Coordinator or Supervisor			

[4] Initials in this column indicates that the NEPA Coordinator has reviewed the assigned specialists column and agrees that the specialists that have been assigned or that have entered PIs (for EAs) will be included in the ID Team for the project. This section is typically initialed at the initial project presentation meeting.

INITIAL DETERMINATION REVIEW (*EA or DNA only*):

Reviewer Title	Initials[5]	Date	Comments
NEPA Coordinator or Supervisor			

[5] Initials in this column indicates that the Authorized Officer or NEPA Coordinator has reviewed the completed checklist after the ID Team entered initial determinations, and the project lead may continue the NEPA process. Initials will not be made here for categorical exclusions (CXs).

Appendix C – Biological Survey Report

Appendix D – Gen-tie and Collector Power Line Plan of Development

Appendix E – Access Road Plan of Development

Appendix F – Temporary Use Area Plan of Development